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General Instrumentation

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Spinal Surgery

Surgical Power Equipment

Rehabilitation

Soft Tissue Surgery & Laparoscopy

Head & Neck Surgery

Ophthalmic Surgery

Dental Equipment & Instrumentation

Needles & Biopsy Products

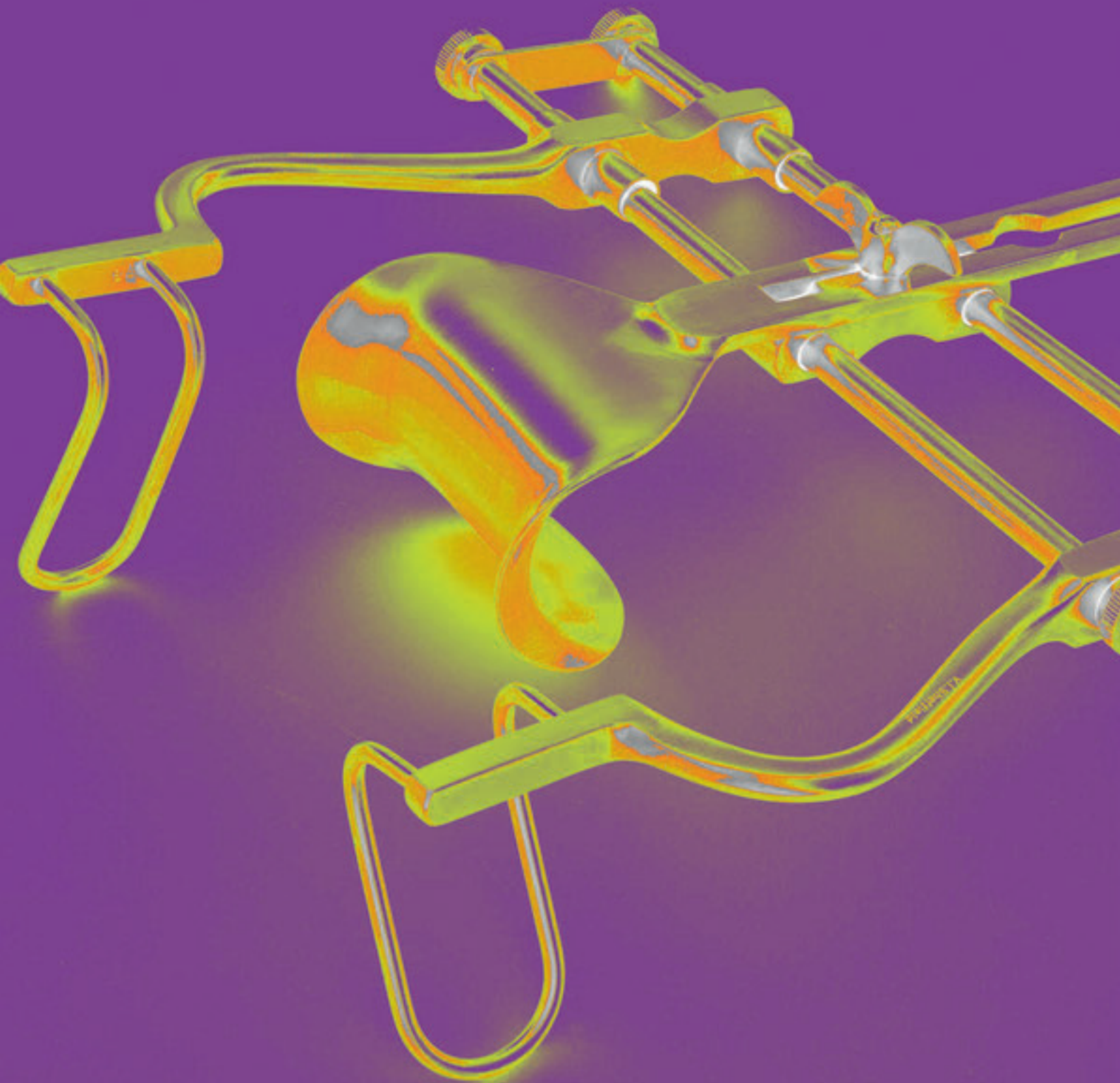
Anaesthesia & Patient Warming

Instrument Care & Maintenance

Clinical Equipment

Plate Profiles

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Vi Surgical Kits

Vi General Surgery Kit



Vi Surgical Instrument kits containing specifically selected high quality instrumentation for your small animal surgical needs.

The Vi General Surgery Kit contains:

- 171566 Jones Cross Action Towel Clips x 4
- 746100 Metzenbaum Scissors - Straight 145mm x1
- 745300 Mayo Scissors Chamf Blades 140mm x1
- 341145 Dissecting Forceps 1/2 Teeth 150mm x 1
- 106625 Spencer Wells Artery Forceps - Curved 125mm x 2
- 106600 Spencer Wells Artery Forceps - Straight 125mm x 2
- 103175 Halstead Mosquito Forceps 125mm x 2
- 342010 Debakey Atraumatic Dissecting Forceps 180mm x 1
- 341200 Adson Serrated Dissecting Forceps 125mm x 1
- 584760 Mayo Needle Holder 140mm x 1
- 0803 Scalpel Handle No 3 x 1

VI GENERAL SURGERY KIT

VIGSKIT Vi General Surgery Kit

Vi Basic Surgery Stitch Up Kit



Vi Basic Surgery Stitch Up Kit containing high quality instrumentation for your stitch up procedures.

The Vi Basic Surgery Stitch Up Kit contains:

- 0803 Scalpel Handle No 3 x 1
- 106600 Spencer Wells Artery Forceps - Straight 125mm x 2
- 346850 Treves 1/2 Teeth Dissecting Forceps 125mm x 1
- 584760 Mayo Needle Holder 140mm x 1
- 745300 Mayo Scissors Chamf Blades 140mm x 1

VI BASIC SURGERY STITCH UP KIT KIT

VIBSSKIT Vi Basic Surgery Stitch Up Kit

Artery Forceps

Crile



Jaw is somewhat lighter than the more popular Spencer Wells Artery Forceps.

CRILE

I01750	Crile Artery Forceps Str 14cm 5.5"
I01755	Crile Artery Forceps Atraumatic Jaws Str 14cm 5.5"
I01765	Crile Artery Forceps Str 16cm 6.5"
I01775	Crile Artery Forceps Str 18cm 7"
I01780	Crile Artery Forceps Cof 14cm 5.5"
I01785	Crile Artery Forceps Atraumatic Jaws Cof 14cm 5.5"
I01795	Crile Artery Forceps Cof 16cm 6.5"
I01800	Crile Artery Forceps Cof 18cm 7"

Halstead Mosquito

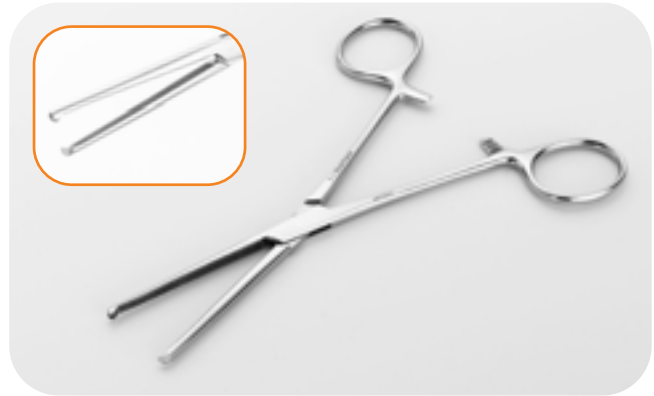


Very light but adequate for routine haemostasis in all but the largest blood vessels.

HALSTEAD MOSQUITO

I03165	Halstead Mosquito Artery Forceps Str 10cm 4"
I03170	Halstead Mosquito Artery Forceps Cof 10 cm 4"
I03175	Halstead Mosquito Artery Forceps Str 12.5cm 5"
I03225	Halstead Mosquito Artery Forceps Cof 12.5cm 5"
I03180	Halstead Mosquito Artery Forceps 1/2 Teeth Str 12.5cm 5"
I03185	Halstead Mosquito Artery Forceps 1/2 Teeth Cof 12.5cm 5"

Kocher



Similar to Rochester Peans, but with a 1/2 toothed tip for added security.

KOCHER

I05521	Kocher Artery Forceps Str 15cm 6"
I05522	Kocher Artery Forceps Cof 15cm 6"

Rochester Pean



Long jaw forceps, useful as a hysterectomy clamp in cats and small-medium breed bitches.

ROCHESTER PEAN

I06225	Rochester Pean Artery Forceps Str 14cm 5.5"
I06230	Rochester Pean Artery Forceps Str 16cm 6.5"
I06235	Rochester Pean Artery Forceps Str 18cm 7"
I06236	Rochester Pean Artery Forceps Str 22cm 8.5"
I06270	Rochester Pean Artery Forceps Cof 14cm 5.5"
I06275	Rochester Pean Artery Forceps Cof 16cm 6.5"
I06280	Rochester Pean Artery Forceps Cof 18cm 7"
I06285	Rochester Pean Artery Forceps Cof 20cm 8"
I06290	Rochester Pean Artery Forceps Cof 22.5cm 9"

Spencer Wells



Standard veterinary artery forceps.

SPENCER WELLS

- 106600** Spencer Wells Artery Forceps Str 12.5cm 5"
- 106605** Spencer Wells Artery Forceps Str 15cm 6"
- 106610** Spencer Wells Artery Forceps Str 18cm 7"
- 106615** Spencer Wells Artery Forceps Str 20cm 8"
- 106620** Spencer Wells Artery Forceps Str 23cm 9"
- 106621** Spencer Wells Artery Forceps Str 30cm 12"
- 106625** Spencer Wells Artery Forceps Cof 12.5cm 5"
- 106630** Spencer Wells Artery Forceps Cof 15cm 6"
- 106635** Spencer Wells Artery Forceps Cof 18cm 7"
- 106640** Spencer Wells Artery Forceps Cof 20cm 8"
- 106645** Spencer Wells Artery Forceps Cof 23cm 9"

Negus Forceps



NEGUS FORCEPS

- 7018/05** Negus Artery Forceps Small Cof 18cm 7"

Dieffenbach (Bulldog) Clamps



Small Cross Action Vascular Clamps. Most commonly used in soft tissue surgery.

DIEFFENBACH (BULLDOG) CLAMPS

- 107708** Dieffenbach (Bulldog) Clamp Str 5cm
- 107710** Dieffenbach (Bulldog) Clamp Cof 5cm

Mayo Safety Pin



Use to organise artery forceps and other similar instruments.

MAYO SAFETY PIN

- 106699** Mayo Safety Pin

Sponge Forceps

Rampleys Sponge Forceps



RAMPLEYS

- 786505** Rampleys Sponge Forceps 250mm

Tissue Forceps

Allis



801150 Allis 2/3 Teeth 15cm 6"



801160 Allis 4/5 Teeth 15cm 6"



801165 Allis 5/6 Teeth 15cm 6"



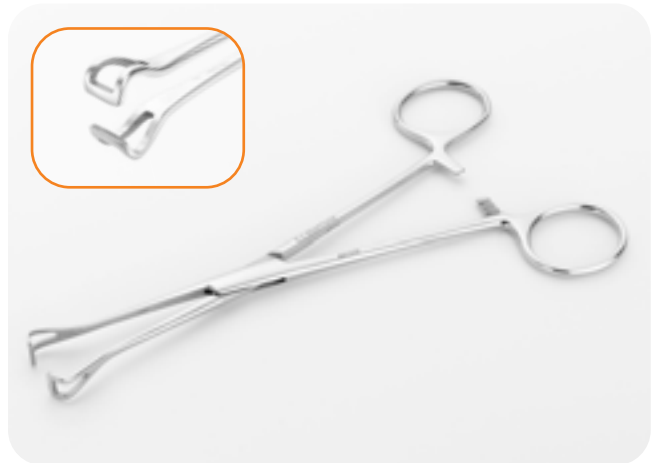
801170 Allis 6/7 Teeth 15cm 6"

General purpose tissue forceps.

ALLIS

- 801150** Allis 2/3 Teeth 15cm 6"
- 801155** Allis 3/4 Teeth 15cm 6"
- 801156** Allis 3/4 Teeth 18cm 7"
- 801160** Allis 4/5 Teeth 15cm 6"
- 801165** Allis 5/6 Teeth 15cm 6"
- 801170** Allis 6/7 Teeth 15cm 6"
- 801175** Baby Allis 4/5 Teeth 13cm 5"

Babcock



An alternative to Allis's. Less traumatic but less grip.

BABCOCK

- 801350** Babcock 16.5cm 6.5"
- 801354** Babcock 18cm 7"
- 801355** Babcock 20cm 8"
- 801360** Babcock 23cm 9"

Youngs Tongue Forceps



YOUNGS TONGUE FORCEPS

- 7853/05** Youngs Tongue Forceps 170mm

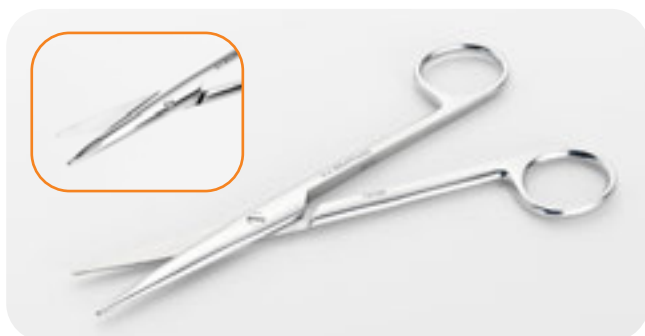
Surgical Scissors

Surgical Scissors are typically either one of two designs. The Mayo is the general purpose Surgical Scissor in which the blade occupies approximately one third of the length of the scissor. The 14cm straight Mayo is the standard veterinary Surgical Scissor. The Metzenbaum is a finer lighter Scissor in which the blade occupies approximately one quarter of the scissor length. Using a 14.5cm Metzenbaum rather than a 14cm Mayo will give you a finer scissor but a similar working distance.

Each style of Scissor is available in four different qualities which vary according to blade construction and cutting characteristics. They can be identified by handle colour.

- Standard Stainless
- Supercut Black
- Tunsten Carbide Gold
- Supercut T.C. Black & Gold

Surgical Scissor - Mayo



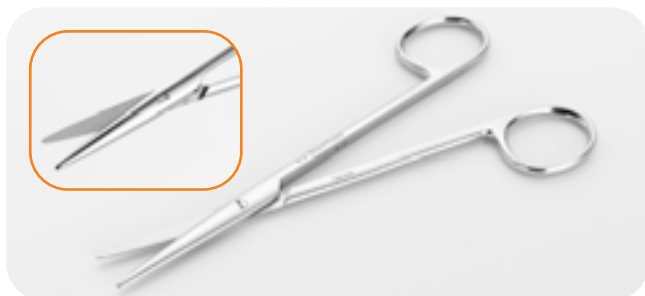
MAYO-STANDARD

- 745300** Mayo Chamf Blades Str 14cm 5.5"
- 745300L** Mayo Chamf Blades Str Left Handed 14cm 5.5"
- 745310** Mayo Chamf Blades Str 16.5cm 6.5"
- 745320** Mayo Chamf Blades Str 19cm 7.5"
- 745330** Mayo Chamf Blades Str 21.5cm 8.5"
- 745400** Mayo Chamf Blades Cof 14cm 5.5"
- 745410** Mayo Chamf Blades Cof 16.5cm 6.5"
- 745420** Mayo Chamf Blades Cof 19cm 7.5"
- 745430** Mayo Chamf Blades Cof 21.5cm 8.5"

Surgical Scissor - Supercut



Surgical Scissor - Metzenbaum



One blade is sharpened to a tapered edge which greatly enhances the ability of the scissor to slice through tissues. The standard scissor has much more of a crushing action. Identified by having black handles.

SURGICAL SCISSORS -SUPERCUT

- 760000** Mayo Supercut Str 14cm 5.5"
- 760002** Mayo Supercut Cof 14cm 5.5"
- 760008** Metzenbaum Supercut Str 14.5cm 5.75"
- 760009** Metzenbaum Supercut Cof 14.5cm 5.75"
- 760010** Metzenbaum Supercut Str 18cm 7"
- 760012** Metzenbaum Supercut Cof 18cm 7"

METZENBAUM-STANDARD

- 746100** Metzenbaum Scissor Str 14.5cm 5.75"
- 746101** Metzenbaum Scissor Str 15cm 6"
- 746110** Metzenbaum Scissor Str 18cm 7"
- 746110L** Metzenbaum Scissor Str Left Handed 18cm 7"
- 746115** Metzenbaum Scissor Str 20.5cm 8"
- 746130** Metzenbaum Scissor Str 23cm 9"
- 746200** Metzenbaum Scissor Cof 14.5cm 5.75"
- 746210** Metzenbaum Scissor Cof 18cm 7"
- 746215** Metzenbaum Scissor Cof 20.5cm 8"
- 746230** Metzenbaum Scissor Cof 23cm 9"

Surgical Scissors - Tungsten Carbide

Tungsten carbide cutting edges give long service life between sharpening. Gold handles distinguish these from standard scissors.

SURGICAL SCISSORS-TUNGSTEN CARBIDE

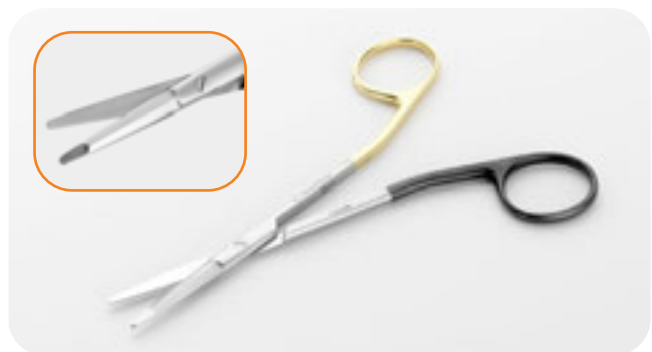
752250	Mayo Clinical Hard Edge Str 15cm 6"
752260	Mayo Clinical Hard Edge Str 18cm 7"
752280	Mayo Clinical Hard Edge Cof 15cm 6"
752290	Mayo Clinical Hard Edge Cof 18cm 7"
754020	Metzenbaum Hard Edge Str 14.5cm 5.75"
754030	Metzenbaum Hard Edge Str 18cm 7"
754060	Metzenbaum Hard Edge Str 23cm 9"
754080	Metzenbaum Hard Edge Cof 14.5cm 5.75"
754090	Metzenbaum Hard Edge Cof 18cm 7"
754120	Metzenbaum Hard Edge Cof 23cm 9"
754095	Metzenbaum Hard Edge Cof 35cm 14"

Surgical Scissor - Supercut T.C.

Combining the hard wearing characteristics of tungsten carbide with supercut tapered edges to provide a very fine cut and long interval between sharpening.

SURGICAL SCISSORS -SUPER CUT TC

76000TC	Mayo Supercut T.C. Str 14cm 5.5"
76002TC	Mayo Supercut T.C. Cof 14cm 5.5"
76008TC	Metzenbaum Supercut T.C. Str 14.5cm 5.75"
76009TC	Metzenbaum Supercut T.C. Cof 14.5cm 5.75"
760010TC	Metzenbaum Supercut T.C. Str 18cm 7"
760012TC	Metzenbaum Supercut T.C. Cof 18cm 7"

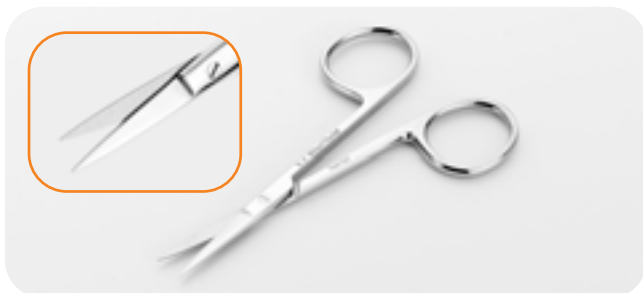
Cosmetic Surgeon Scissors

Favoured by human cosmetic surgeons, these scissors have very fine razor sharp blades with tungsten carbide inserts for long life. They have a beautiful action and a place in veterinary surgery where precise cutting is required, especially for fine skin.

COSMETIC SURGEON SCISSORS WITH 'OPEN' SHANKS

755100	Cosmetic Surgeon Scissors T.C. Str 15cm 6"
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Iris Scissors

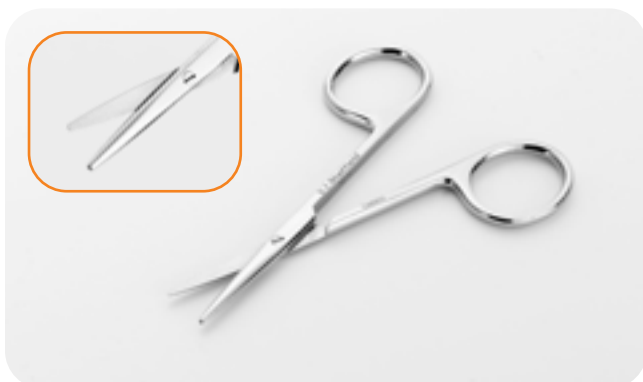


A useful general purpose Ophthalmic Scissor. Lightweight, standard action scissor for conjunctiva and, less satisfactorily, the cornea. Very rarely used on the iris in veterinary ophthalmology.

IRIS

- 744100 Iris Scissors Str 9cm
- 744120 Iris Scissors Cof 9cm
- 744110 Iris Scissors Str 12cm
- 744130 Iris Scissors Cof 12cm
- 744131 Iris Scissors Tungsten Carbide Str 12cm

Strabismus Scissors

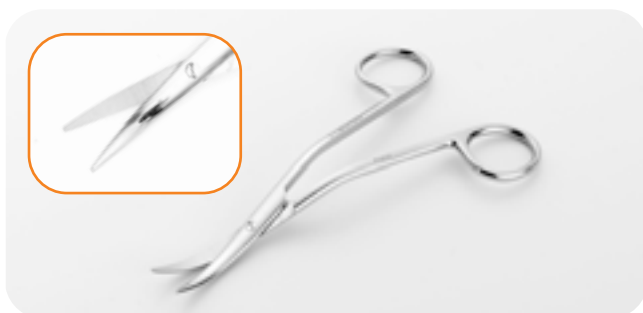


Stronger than corneal and conjunctival scissors, strabismus scissors are suitable for cutting muscles and skin.

STRABISMUS SCISSORS

- 746900 Strabismus Scissors Str 9cm
- 747010 Strabismus Scissors Cof 9cm
- 746910 Strabismus Scissors Str 11cm
- 747020 Strabismus Scissors Cof 11cm

Eye Enucleation Scissors



Standard Curved Surgical Scissors do not match the radius of the eye of dogs and cats. The Eye Enucleation Scissor closely matches required radius and slides easily behind the eyeball to cut the optic nerve and internal ophthalmic artery and vein, without the requirement to apply dangerous traction to the globe. Use in conjunction with Eye Enucleation Clamps.

EYE ENUCLEATION SCISSORS

- 014225 Eye Enucleation Scissors 140mm

General Scissors

Dressing - Blunt/ Blunt



DRESSING - BLUNT/BLUNT

- 742610 Dressing Scissors Blunt Str 12.5cm 5"
- 742620 Dressing Scissors Blunt Str 14cm 5.5"
- 742630 Dressing Scissors Blunt Str 15cm 6"
- 742640 Dressing Scissors Blunt Str 18cm 7"
- 742650 Dressing Scissors Blunt Str 20cm 8"
- 742900 Dressing Scissors Blunt Cof 12.5cm 5"
- 742622 Dressing Scissors Serr. B/B Cof 14cm 5"
- 742910 Dressing Scissors Blunt Cof 14cm 5.5"
- 742910L Dressing Scissors Blunt Cof 14cm 5.5" Left Handed
- 742920 Dressing Scissors Blunt Cof 15cm 6"
- 742930 Dressing Scissors Blunt Cof 18cm 7"
- 742940 Dressing Scissors Blunt Cof 20cm 8"

Dressing - Blunt/ Blunt Coloured Handles



These standard Dressing Scissors are available with different coloured handles for easy identification.

DRESSING - BLUNT/ BLUNT COLOURED HANDLES

- 742622G Dressing Scissors Serr B/B Cof Gold Handles 5"
- 742622B Dressing Scissors Serr B/B Cof Blue Handles 5"
- 742622RB Dressing Scissors Serr B/B Cof Rainbow Handles 5"
- 742622P Dressing Scissors Serr B/B Cof Purple Handles 5"

Dressing - Sharp/ Sharp



DRESSING - SHARP/ SHARP

- 742600 Dressing Scissors Sharp Str 10cm 4"
- 742700 Dressing Scissors Sharp Str 11cm 4.5"
- 742710 Dressing Scissors Sharp Str 12.5cm 5"
- 742720 Dressing Scissors Sharp Str 14cm 5.5"
- 742730 Dressing Scissors Sharp Str 15cm 6"
- 742740 Dressing Scissors Sharp Str 18cm 7"
- 743010 Dressing Scissors Sharp Cof 12.5cm 5"

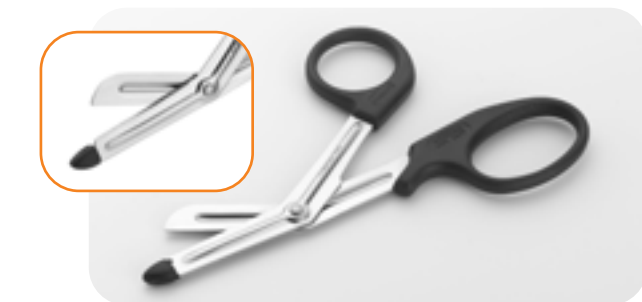
Dressing - Blunt/ Sharp



DRESSING - BLUNT/ SHARP

- 742810 Dressing Scissors Blunt/ Str Sharp 5"
- 742820 Dressing Scissors Blunt/ Str Sharp 6"
- 743100 Dressing Scissors Blunt/ Cof Sharp 5"
- 743120 Dressing Scissors Blunt/ Cof Sharp 6"

General Purpose Dressing Scissors



The comfortable handles and serrated blades make these a useful all round dressing scissor cheap enough for each consulting room.

GENERAL PURPOSE DRESSING SCISSORS

- 744840 General Purpose Dressing Scissors 190mm

Lister Bandage



LISTER BANDAGE

- 744800 Lister Bandage Scissor 14cm 5.5"
- 744810 Lister Bandage Scissor 18cm 7"

Veterinary Bandage Scissors



Lower profile and slightly straighter than standard Lister bandage scissors, to better fit veterinary patients. Listers are often too bulky, as they are designed for larger human patients.

VETERINARY BANDAGE SCISSORS

- 744820 Veterinary Bandage Scissors 14cm 5.5"
- 744830 Veterinary Bandage Scissors 19cm 7.5"

Stitch Cutters

Heath Stitch

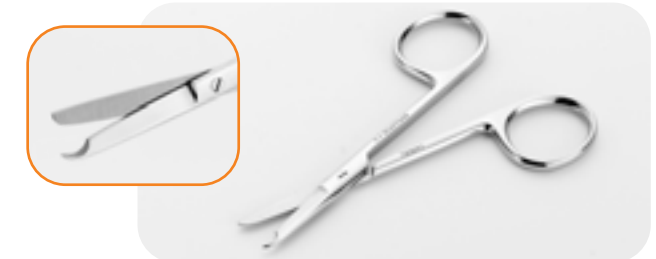


General purpose Stitch Cutter.

HEATH STITCH

- 743800 Heath Stitch Scissors 15cm 6"

Littauer Stitch



Very nice for removal of small awkward sutures.

LITTAUER STITCH

- 745095 Littauer Stitch Scissors 8cm 3.5"
- 745100 Littauer Stitch Scissors 11cm 4.5"
- 745110 Littauer Stitch Scissors 12.5cm 5"

Castroviejo Suture Removal Scissors



Designed for the removal of very fine sutures. The Castroviejo action matches that of the Castroviejo Needle Holders.

CASTROVIEJO SUTURE REMOVAL SCISSORS

- 014185 Castroviejo Suture Removal Scissors 120mm

Needle Holders



Dedicated needleholders grip the best, and dedicated suture scissors cut the best. However combined needleholder/ scissors are very popular for convenience in spite of the functional compromise. Most VI needleholders are available with tungsten carbide jaw inserts. These grip and wear better. Particularly useful for smaller needles. Identified by gold handles.

Castroviejo



Classic ophthalmic needleholder with catch. Infrequent ophthalmic surgeons should also consider Miniature Fosters or Ryders as the squeeze action of Castroviejos requires patience & practice to master. Also available without catch.

CASTROVIEJO

- 014175 Castroviejo Needle Holders with Catch T.C. 150mm
- 014177 Castroviejo Needle Holders without catch T.C. 150mm
- 014179 Castroviejo Needle Holders with Catch T.C. 165mm
- 014178 Castroviejo Needle Holders with Catch T.C. 180mm

Castroviejo Needle Holders/ Scissor



This Instrument functions as a standard Castroviejo needleholder but the jaws incorporate a suture cutting function in the style of Olsen Hegars or Gillies. Jaws are Tungsten Carbide for maximum grip.

CASTROVIEJO NEEDLE HOLDERS/ SCISSOR

- 014181 Castroviejo Needle Holders/ Scissor Str T.C. 150mm
- 014182 Castroviejo Needle Holders/ Scissor Cof T.C.150mm Cof
- 014183 Castroviejo Needle Holders/ Scissor Str 'S'Cut T.C. 150mm
- 014184 Castroviejo Needle Holders/ Scissor Cof 'S'Cut T.C. 150mm

Miniature Foster Gillies



MINIATURE FOSTER GILLIES

- 602710 Miniature Foster Gillies T.C. 100mm 4"

Foster Gillies



Smaller than the standard Gillies this instrument is useful for finer surgery or smaller hands.

FOSTER GILLIES

- 582650 Foster Gillies Needle Holders RH 12.5cm 5"
- 582660 Foster Gillies Needle Holders LH 12.5cm 5"
- 602700 Foster Gillies Needle Holders T.C. Jaws RH 12.5cm 5"
- 602705 Foster Gillies Needle Holders T.C. Jaws LH 12.5cm 5"

Gillies



Combined Scissor/ Needle Holder.

GILLIES

- 582950 Gillies Needle Holders RH 16cm 6.25"
- 582951 Gillies Needle Holders LH 16cm 6.25"
- 602950 Gillies Needle Holders T.C. Jaws RH 16cm 6.25"
- 602951 Gillies Needle Holders T.C. Jaws LH 16cm 6.25"

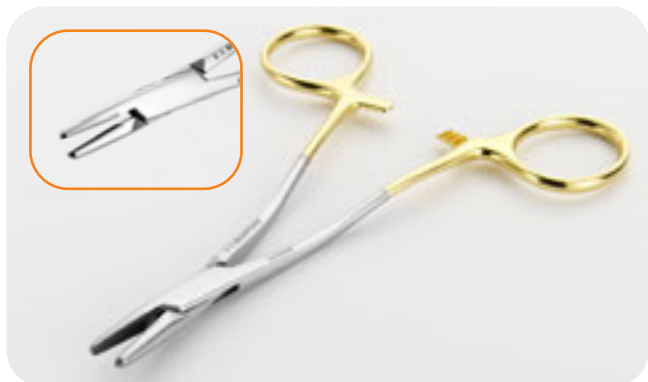
McPhails



The McPhails Needle Holder has one soft copper jaws for extra needle grip, the other is stainless steel. The catch engages with a moderate squeeze on the handles. Further pressure releases the catch and the needle.

MCPHAILS

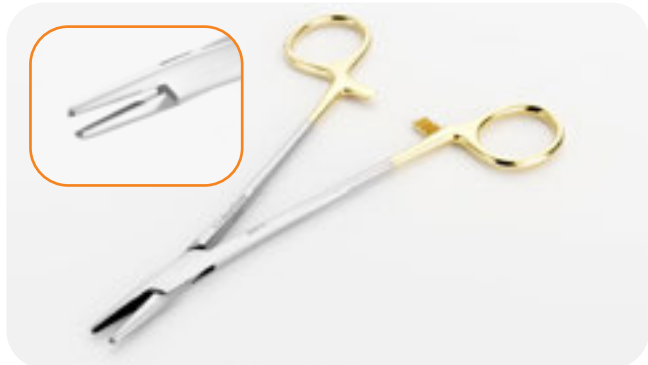
- 584650 McPhails Needle Holders 15cm 6"
- 584660 McPhails Needle Holders 18cm 7"
- 584670 McPhails Needle Holders 20cm 8"

Kilner Needle Holders

Kilner Needle Holders are similar to 140mm Mayos but the arms are cranked, offsetting the jaws from the handles by around 10mm.

KILNER NEEDLE HOLDERS

608000 Kilner Needle Holders 140mm 5.5"

Mayo and Mayo Hegar (T.C.)

Veterinary general purpose needleholder, available in a wide range of sizes with or without tungsten carbide jaw inserts. Mayo Hegar is the TC variant of standard Mayo.

MAYO AND MAYO HEGAR (T.C.)

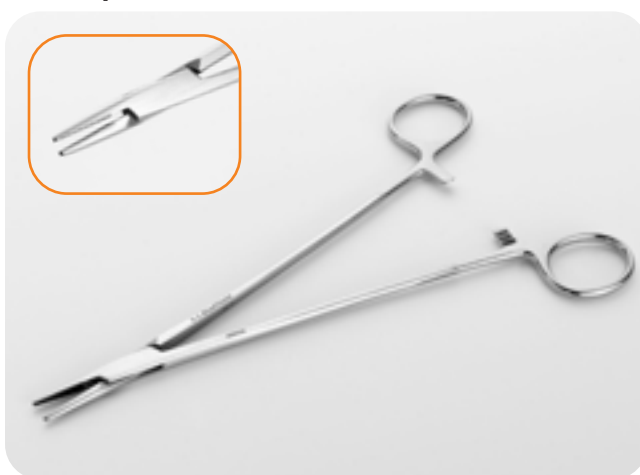
584750 Mayo Needle Holders 12.5cm 5"
584760 Mayo Needle Holders 14cm 5.5"
584780 Mayo Needle Holders 16.5cm 6.5"
584765 Mayo Needle Holders 18cm 7.0"
584820 Mayo Needle Holders 20cm 8"
604700 Mayo Hegar T.C. Jaws 12.5cm 5"
604705 Mayo Hegar T.C. Jaws 14cm 5.5"
604715 Mayo Hegar T.C. Jaws 16cm
604715L Mayo Hegar T.C. Jaws - Left Handed 16cm
604720 Mayo Hegar T.C. Jaws 18.5cm 7"
604730 Mayo Hegar T.C. Jaws 7.5"
604735 Mayo Hegar T.C. Jaws 8"
604740 Mayo Hegar T.C. Jaws 23cm 9"

Olsen Hegar Scissor/ Needle Holder

Olsen Hegar's combine the best features of Gillies and needleholders. They cut stitches but also lock. Highly recommended. Combined Scissor/ Needle Holder. Looser 'feel' will feel more like a scissor than a needleholder in use.

OLSEN HEGAR SCISSOR/ NEEDLE HOLDER

585400 Olsen Hegar Needle Holders 14cm 5.5"
585410 Olsen Hegar Needle Holders 16.5cm 6.5"
585420 Olsen Hegar Needle Holders 7.5"
605340 Olsen Hegar Needle Holders T.C. Jaws 11.5cm 4.5"
605350 Olsen Hegar Needle Holders T.C. Jaws 14cm 5.5"
605350S Olsen Hegar Needle Holders 'S' Cut T.C. Jaws 14.5cm 5.5"
605355 Olsen Hegar Needle Holders T.C. Jaws 16.5cm 6.5"
605355L Olsen Hegar Needle Holders T.C. Jaws L H 16.5cm 6.5"
605380 Olsen Hegar Needle Holders 'S' Cut T.C. Jaws 17cm
605385 Olsen Hegar Needle Holders 'S' Cut T.C. Jaws 18cm
605390 Olsen Hegar Needle Holders 'S' Cut T.C. Jaws 19cm
605360 Olsen Hegar Needle Holders T.C. Jaws 19cm 7.5"
605361 Olsen Hegar Needle Holders Razor Cut 14.5cm 5.5"
605362 Olsen Hegar Needle Holders Razor Cut 17cm 6.5"

DeBakey Needle Holders

Much lighter in construction than the Mayo Hegar. These needleholders are very useful for deep surgical procedures where there is limited space e.g. chest surgery.

DEBAKEY

602005 DeBakey Needle Holders T.C. Jaws 7"
602010 DeBakey Needle Holders T.C. Jaws 20cm 8"
602015 DeBakey Needle Holders T.C. Jaws 23cm 9"
602020 DeBakey Needle Holders T.C. Jaws 10"
602025 DeBakey Needle Holders T.C. Jaws 12"

Ryder Needle Holders

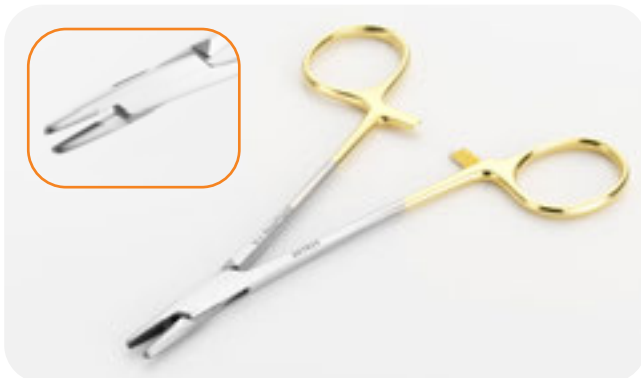


Ideal for small needles. The smaller sizes are an alternative for ophthalmic needleholders.

RYDER

- 606340** Ryder (Micro) T.C. Jaws 12.5cm 5"
- 606305** Ryder (Micro) T.C. Jaws 15cm 6"
- 606345** Ryder (Micro) T.C. Jaws 15cm 6"
- 606350** Ryder (Micro) T.C. Jaws 18cm 7"

Derf Needle Holder



The Derf Needle Holder is a small T.C. needleholder with slightly heavier jaws than the Ryder. More resistant to surgeon abuse!

DERF NEEDLE HOLDER

- 607010** Derf Needle Holder T.C. Jaws 12cm

Galibans Suture Forceps



Use when placing sutures under tension. A good example is the placement of a lateral stabilising suture in the management of anterior cruciate ligament failure or abdominal sutures in an overweight dog. Galibans used by an assistant are used to atraumatically secure the first throw. The Galibans are removed as the second throw is tightened.

GALIBANS SUTURE HOLDING FORCEPS

- 58900** Galibans Suture Holding Forceps

Towel Clips

Backhaus Towel Clip



BACKHAUS

- 841350** Backhaus 9cm 3.5"
- 841355** Backhaus 10cm 4"
- 841360** Backhaus 12.5cm 5"

Cross Action Towel Clips



SHARDEL CROSS ACTION TOWEL CLIP

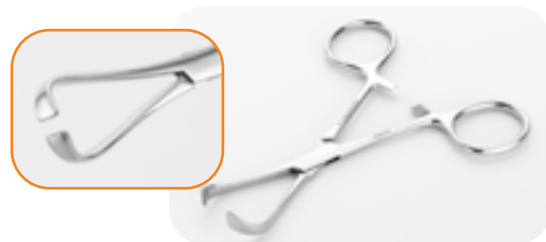
- 846550** Shardel Cross Action 9cm 3.5"



JONES CROSS ACTION TOWEL CLIP

- 171566** Jones Cross Action 9cm 3.5"

Atraumatic Towel Clip

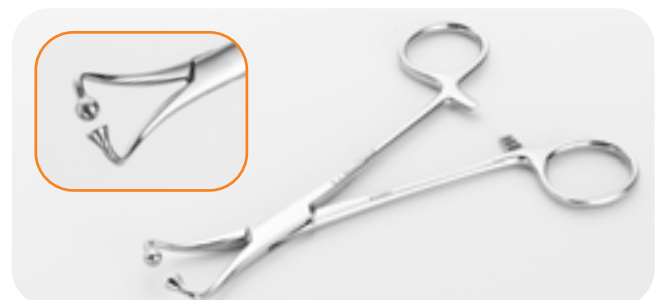


Non puncturing but will bruise if not used with care

ATRAUMATIC TOWEL CLIP

- 841352** Atraumatic Towel Clip 4.5"

Ball and Socket Towel Clamp



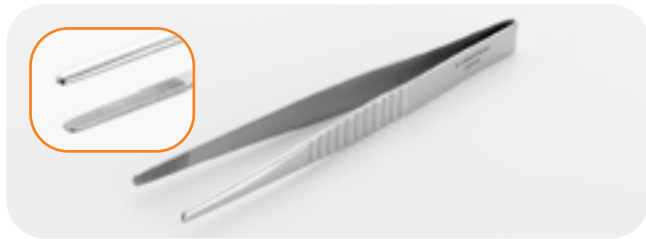
Designed for use on drapes only, for drape to drape anchorage. Less likely to cause tears, particularly with disposable drapes.

BALL AND SOCKET TOWEL CLAMP

- 843005** Ball and Socket Towel Clamp 5"

Dissecting Forceps

Serrated-Block End



General purpose Dressing Forcep.

SERRATED-BLOCK END

341070	Block End Serrated Dissecting Forceps 5" 12.5cm
341075	Block End Serrated Dissecting Forceps 6" 15cm
341080	Block End Serrated Dissecting Forceps 7" 18cm
347655	Dressing Forceps 205mm

Treves Rat Tooth Forceps



General purpose Rat Tooth Dissecting Forceps.

TREVES RAT TOOTH FORCEPS

346850	Treves Dissecting Forceps Teeth 12.5cm 5"
346855	Treves Dissecting Forceps 1/2 Teeth 15cm 6"
346860	Treves Dissecting Forceps Teeth 18cm 7"
347665	Fine Rat Tooth Thumb Forceps 205mm

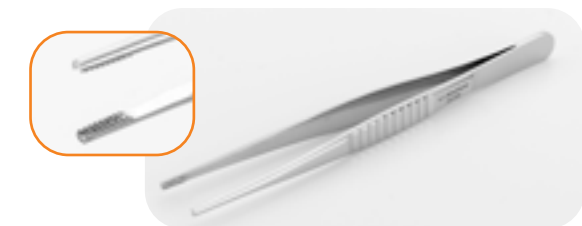
Dissecting Forceps 1/2 Teeth



DISSECTING FORCEPS 1/2 TEETH

341145	Dissecting Forceps 1/2 Teeth 15cm 6"
341160	Dissecting Forceps 1/2 Teeth 18cm 7"
341170	Lanes Dissecting Forceps 1/2 Teeth 6" 15cm
349520	Lanes Dissecting Forceps 2/3 Teeth 7" 18cm

Connective Tissue Forceps



DeBakey style handles with Adson Brown tips, providing excellent grip of connective tissue with minimal trauma.

CONNECTIVE TISSUE FORCEPS

343001	Connective Tissue Forceps 153mm 6"
343002	Connective Tissue Forceps 180mm 7"

Adson



Ideal for fine surgical procedures. Available in a range of jaw designs.

ADSON

341200	Adson Serrated Dissecting Forceps 12.5cm 5"
341201	Adson Serrated Extra Fine 12.5cm 5"
341210	Adson Dissecting Forceps 1/2 Teeth 12.5cm 5"
341212	Adson Brown Dissecting Forceps 12.5cm 5"
341214	Adson Brown Serrated/ Crocodile 15cm 6"
341215	Adson Brown 1/2 Teeth 15cm 6"
341220	Adson DeBakey Dissecting Forceps 125mm 5"

DeBakey - Atraumatic



Originally designed for cardiovascular surgery, these forceps grip firmly with minimal damage to delicate tissue, including bowel and urogenital system.

DEBAKEY - ATRAUMATIC

342005	DeBakey Dissecting Forceps 6"
342010	DeBakey Dissecting Forceps 18cm 7"
342015	DeBakey Dissecting Forceps 8"
342020	DeBakey Dissecting Forceps 20.5cm 8.2"
342030	DeBakey Dissecting Forceps Angled 15cm 6"

Epilation Forceps



EPILATION FORCEPS

342450	Epilation Forceps Square Jaws Plain 9cm 3.5"
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St. Martin Dissecting Forceps



A very fine rat tooth for delicate procedures including corneal surgery.

ST. MARTIN DISSECTING FORCEPS

014160	St. Martin Dissecting Forceps Teeth 90mm 3.25"
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Retractors

Good retraction is the key to success in many procedures, especially surgery on deep structures e.g. the pelvis or the larynx.

Langenbeck



LANGENBECK

- 684375** Langenbeck Retractor 6mm Blade 215mm
- 684395** Langenbeck Retractor Long Reach 6mm x 35mm Blade 220mm
- 684380** Langenbeck Retractor 13mm Blade 215mm
- 684390** Langenbeck Retractor 20mm Blade 215mm
- 684385** Langenbeck Retractor 25mm Blade 215mm

Morris Retractor

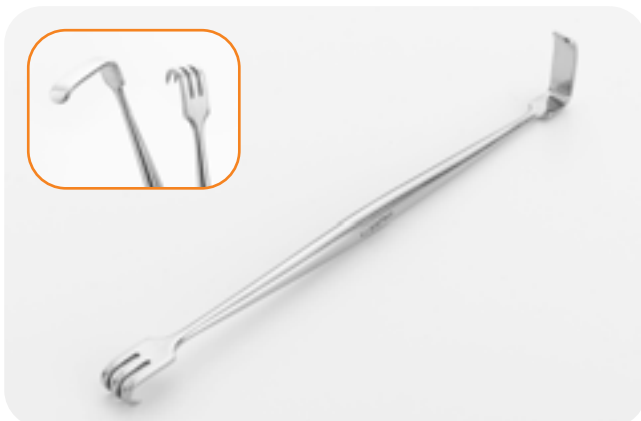


Much wider than the Langenbeck, good for fat abdomens.

MORRIS

- 684750** Morris Retractor 38mm 1.5" 215mm
- 684755** Morris Retractor 50mm 2" 260mm
- 684760** Morris Retractor 65mm 2.5" 220mm

Senn (Cats Paw) Retractor



SENN (CATS PAW)

- 833305** Senn Retractor (Cats Paw) 160mm

Fat Pad Retractor



Visualisation of the medial meniscus is maximised by retraction of the fat pad. Previously this has been achieved by use of a Senn (Cats Paw) retractor. The Fat Pad Retractor has the same clawed foot but has a much more practical means of holding the instrument.

FAT PAD RETRACTOR

- 001114** Fat Pad Retractor 180mm

Malleable (Walton) Retractors



These flat plates of soft stainless steel are bent intra-operatively to retain abdominal structures.

MALLEABLE (WALTON) RETRACTORS

- 687613** Malleable Retractor 13mm 175mm
- 687825** Malleable Retractor 25mm 250mm
- 687651** Malleable Retractor 50mm 330mm

Collins



The two blades swivel as retraction takes place. They self-centre in the incision.

COLLINS

- 703260** Collins Retractor 110mm Spread

Rib Retractor Finnochetto



Finnochetto is the standard rib retractor, available in large and small.

RIB RETRACTOR FINNOCHETTO

- 704000** Rib Retractor Finnochetto Small 95mm Spread
- 704005** Rib Retractor Finnochetto Large 130mm Spread

Gosset Retractor



Good as a rib retractor, laparotomy retractor and for retraction of ventral cervical structures during cervical fenestration.

GOSSET

- 701550** Gosset Retractor Large 185mm Spread
- 710600** Gosset Retractor Small 100mm Spread

Aln Skin Retractor



ALN SKIN RETRACTOR

- 252370** Aln Skin Retractor 7.5cm 3"

Balfour Retractors



The original Balfour has for many years served as the standard large abdominal retractor for canine surgery. However the standard midline canine approach is very different from the standard human approach. Alasdair Hotston Moore has re-visited the original design and has made some significant changes which improve the instrument both in use and sterilisation.



Balfour Locking Ring



The central blade in the Balfour slides freely on the back bar and automatically self centers. If the lesion or organ of interest is off centre this is undesirable.

The Balfour Locking Ring fits onto the back bar and may be locked in any position, holding the blade off centre. The Balfour Locking Ring fits all Vi Balfours.

BALFOUR RETRACTORS

- 25-2375AHM** AHM Balfour Retractor 180mm Spread
- 25-2375** Standard Balfour Retractor 180mm Spread
- 25-2375R** Balfour Locking Ring
- 25-2377** Medium Balfour 115mm Spread
- 25-2376** Baby Balfour Retractor 90mm Spread

Travers



Useful for retraction of skin and superficial soft tissue.

TRAVERS

- 703051** Travers Self Retaining Retractor 70mm Spread 16.5cm 6.5"
- 703050** Travers Self Retaining Retractor 90mm Spread 20cm 8"
- 703053** Travers Self Retaining Retractor Mini 43mm Spread 95mm

Weislander



Arms are flat compared with the Wests. Proportions differ from Travers.

WEISLANDER

- 702150** Weislander Self Retaining Retractor Sharp 60mm Gape 14cm 5.5"
- 702152** Weislander Self Retaining Retractor Blunt 60mm Gape 14cm 5.5"

West Retractors

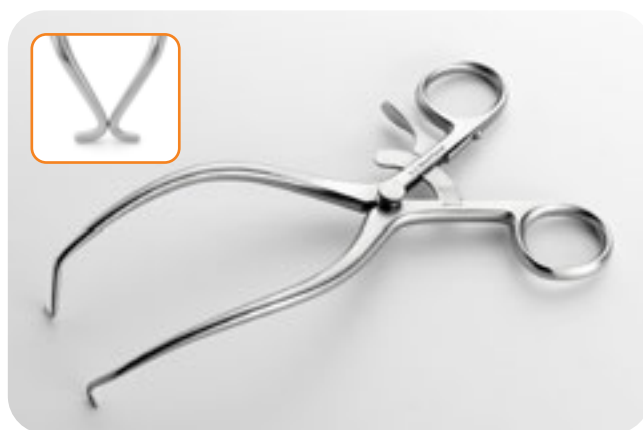


Widely used but sharp points tend to snag tissues. Curved arms sit quite nicely on small veterinary patients.

WEST RETRACTORS

- 703250** West Retractor 50mm Spread 140mm 5.5"
- 703253** Mini West Retractor 40mm Spread 95mm

Gelpi Self Retaining Retractor



The Gelpi is an extremely versatile self retaining retractor useful in almost any orthopaedic procedure. Veterinary Instrumentation Gelpis are different from standard Gelpis in two respects:

1. Short blunt tips give focal retraction for precise exposure of the fracture or lesion.
2. The teeth on the ratchet are smaller than usual giving finer control over the spread of the tips.

Gelpis are virtually an extra pair of hands and are invaluable where the surgeon is working without a scrubbed assistant. The curved shape fits nicely on our patients. Useful in the following procedures and many more:

- Total Femoral Head and Neck Excision
- CrCL repairs
- Meniscal examination
- All arthrotomy procedures
- Fracture repairs
- Wobblers
- Laminectomies
- Rib retractors in small patients



Two pairs of Gelpis placed at right angles to one another may be used to create a window into a joint or fracture site. Gelpis are available in a number of lengths. Measurement 'a' gives the depth of the tips.

Available as singles or sets of two Gelpis

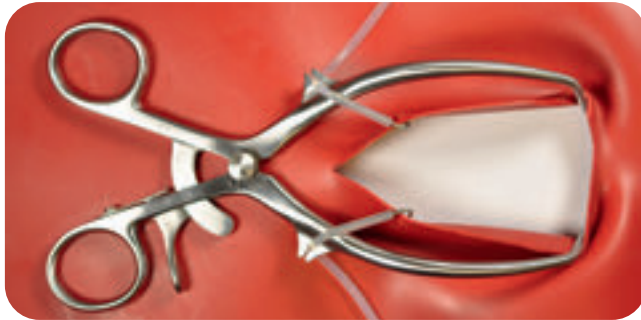
GELPI SELF RETAINING RETRACTOR - SINGLES

- 001330** Gelpi Retractor 120mm Spread (a=20mm) 180mm Long
- 001330SL** Gelpi Retractor with Spinlock (a=20mm) 180mm Long
- 001330S** Gelpi Retractor Sharp Tips (a=20mm) 180mm Long
- 001331** Gelpi Long Reach (a=40mm) 200mm Long
- 001331L** Gelpi Very Long Reach (a=60mm) 200mm Long
- 001332** Gelpi Small 60mm Spread (a=15mm) 135mm Long
- 0013301** Gelpi Mini Flat 45mm Spread (a=15mm) 90mm Long
- 0013302** Gelpi Mini Curved 45mm Spread (a=15mm) 90mm Long
- 0013303** Gelpi Mini Curved 45mm Spread Blunt Tips 90mm Long

GELPI SELF RETAINING RETRACTOR - SET OF TWO

- 001330/2** Gelpi Retractors 120mm Spread (a=20mm) 180m Long Set of 2
- 001330SL/2** Gelpi Retractors with Spinlock(a=20mm) 180mm Long Set of 2
- 001330S/2** Gelpi Retractors Sharp Tips (a=20mm) 180mm Long Set of 2
- 001331/2** Gelpi Long Reach (a=40mm) 200mm Long - Set of 2
- 001331L/2** Gelpi Very Long Reach (a=60mm) 200mm Long - Set of 2
- 001332/2** Gelpi Small 60mm Spread (a=15mm) 135mm Long - Set of 2
- 0013301/2** Gelpi Mini Flat 45mm Spread (a=15mm) 90mm Long - Set of 2
- 0013302/2** Gelpi Mini Curved 45mm Spread (a=15mm) 90mm Long - Set of 2
- 0013303/2** Gelpi Mini Curved 45mm Spread 90mm Long Blunt Tips - Set of 2
- 001333** Odd Leg Gelpi Pair (a=25/40mm) 205mm Long
- 001334** Odd Leg Gelpi Short Pair (a=20/30mm) 130mm Long

Bungee Gelpi Self Retaining Retractors



Based on the Vi standard Gelpi, with added anchor points for elastic stays allowing 4 point retraction from a single two point instrument. Anchor points may be double loaded for 6 point retraction. Accepts Vi Elastic Stays.

Advantages:

- Better retraction with fewer retractors cluttering a wound
- Greater stability of Gelpi's within a wound with four or six point retraction preventing the tips from sliding towards each other. Easier for surgeries which are often performed in a more vertical position, such as perineal hernia repair.
- More useful shape to retracted hole – more rectangular than round, square or diamond, but is very adaptable to suit the situation.
- Multi-layer retraction such as creating deep retraction with tips and improved skin retraction with the elastic stays.

BUNGEE GELPI SELF RETAINING RETRACTOR

- 001330BUNGEE** Gelpi Bungee Retractor
- 701HOOK** Sterile Ring Retractor Hooks Set of 10

Miscellaneous

Probes and Cutting Guides



Use the blunt probe to track fistulae. The butterfly cutting guide has a groove along its length to allow a scalpel to be run down without fear of damaging deeper tissues, the vulnerable tissues being protected by the guide. The notched spade end is useful for isolating vessels before ligating.

PROBES

- 901010** Blunt Dissection Probe 140mm
- 901015** Winged Director 130mm

Killian Bitch Speculum



Essentially a human nasal speculum, this 6.5cm bladed instrument is the standard bitch speculum. Adding a focal light source improves visualisation enormously.

KILLIAN BITCH SPECULUM

- 546455** Killian Bitch Speculum Blade Length 6.5cm 2.5"

Cheatle Steriliser Forceps



For manipulation of instruments during setting up.

CHEATLE

- 787655** Cheatle Steriliser Forceps B/J 26.5cm 10.5"

Scalpel Blades & Handles

Swann Morton Scalpel Blades

Swann Morton Blades are world famous and still made in Sheffield. These blades are the result of experience and the very best modern production methods. Sterile packed.



Actual size

SWANN MORTON BLADES - CARBON STEEL

- 0201** 100 Blades individually packed Size 10
- 0203** 100 Blades individually packed Size 11
- 0204** 100 Blades individually packed Size 12
- 0205** 100 Blades individually packed Size 15
- 0207** 100 Blades individually packed Size 21
- 0208** 100 Blades individually packed Size 22
- 0210** 100 Blades individually packed Size 23
- 0211** 100 Blades individually packed Size 24

SWANN MORTON SCALPEL BLADE REMOVER

- 240109** Scalpel Blade Remover Forceps
- 5525** Scalpel Blade Remover Disposable (Box 10)

Swann Morton Fine Blades (Beaver Type)



Fine blades are designed for fine work, eg. ophthalmic surgery, meniscus surgery.



Swann Morton Fine Blades

SWANN MORTON FINE BLADES - BEAVER TYPE

- 05901** 25 Blades individually packed SM61
- 05902** 25 Blades individually packed SM62
- 05903** 25 Blades individually packed SM63
- 05904** 25 Blades individually packed SM64
- 05905** 25 Blades individually packed SM65
- 05906** 25 Blades individually packed SM65a
- 05907** 25 Blades individually packed SM67
- 05908** 25 Blades individually packed SM68
- 05909** 25 Blades individually packed SM69
- 02551** PM40 standard Blade (box 10)

Swann Morton Scalpel Handles



0804



0807

SWANN MORTON HANDLES

- 0803** No 3 Handle with Scale
- 0923** No B3 Handle
- 0804** No 4 Handle
- 0814** No 4 Long Handle
- 0807** No 7 Handle
- 0909** No 9 Handle
- 02652** PM40 Standard Handle
- 0805** No 5(b) Scalpel Handle

SWANN MORTON FINE STAINLESS HANDLE BEAVER TYPE

- 06051** Fine Stainless Handle Beaver Type 130mm
- 06052** Fine Stainless Handle Beaver Type 100mm
- 06053** Fine Stainless Handle Beaver Type 80mm

Vi Scalpel Handles

VI FINE STAINLESS HANDLE - BEAVER TYPE

- 06054** Vi Beaver Blade Handle 130mm

Scalpel handles and blades			
CODE	Scalpel Size	Handle Length	Blade Size
0803	No 3 Handle with Scale	12cm	10,11,12,15
0923	No B3 Handle	12.8cm	10,11,12,15
0804	No 4 Handle	13cm	21,22,23,24
0814	No 4 Long Handle	21cm	21,22,23,24
0807	No 7 Handle	16cm	10,11,12,15
0909	No 9 Handle	11.6cm	10,11,12,15
0805	No 5(B) Scalpel Handle	13cm	10,11,12,15

Left Handed Instruments

Vi offers a wide selection of Left Handed Instruments, of which some is shown below. If the instrument you are looking for is not shown, please contact us and we will get it for you.

Left Handed Instrument Starter Kit



Kit contains:

- 1 x Mayo Scissors Str 5.5" - Left Handed
- 1 x Metzenbaum Scissors Str 5.75" - Left Handed
- 1 x Metzenbaum Scissors Cof 5.75" - Left Handed
- 2 x Halstead Forceps Str 5" - Left Handed
- 2 x Halstead Forceps Cof 5" - Left Handed
- 4 x Crile Forceps Cof 5.5" - Left Handed
- 4 x Backhaus Towel Clips - Left Handed
- 1 x Olsen Hegar Needle Holders - Left Handed

Plus:

- 1 x Debaquey Forceps 6"
- 1 x Adsons Forceps
- 1 x Scalpel Handle No.3

The Instruments are all contained in a Stainless Steel Instrument Box.

Kit discounted by over 10%+.

LEFT HANDED INSTRUMENT STARTER KIT

LHKIT Left Handed Instrument Starter Kit

Left Handed Scissors



LEFT HANDED SCISSORS

- 745300L** Mayo Scissor Blunt/Blunt Straight LH 14cm 5.5"
- 745400L** Mayo Scissor Blunt/Blunt Curved LH 14cm 5.5"
- 745310L** Mayo Scissor Blunt/Blunt Straight LH 16.5cm 6.5"
- 745410L** Mayo Scissor Blunt/Blunt Curved LH 16.5cm 6.5"
- 746100L** Metzenbaum Scissor Blunt/Blunt Straight LH 14.5cm 5.75"
- 746200L** Metzenbaum Scissor Blunt/Blunt Curved LH 14.5cm 5.75"
- 746110L** Metzenbaum Scissor Blunt/Blunt Straight LH 18cm 7"
- 746115L** Metzenbaum Scissor Blunt/Blunt Straight LH 20cm 8"
- 744800L** Lister Bandage Scissor LH 14cm 5.5"
- 744810L** Lister Bandage Scissor LH 18cm 7"
- 744110L** Iris Scissor Round Straight LH 11cm 4.25"
- 744130L** Iris Scissor Round Curved LH 11cm 4.25"

Left Handed Forceps



LEFT HANDED FORCEPS

- 103175L** Halsted Mosquito Artery Forcep Straight LH 12.5cm 5"
- 103225L** Halsted Mosquito Artery Forcep Curved LH 12.5cm 5"
- 101750L** Crile Artery Forcep Straight LH 14cm 5.5"
- 101780L** Crile Artery Forcep Curved LH 14cm 5.5"
- 106230L** Rochester Pean Artery Forcep Straight LH 16cm 6.5"
- 106275L** Rochester Pean Artery Forcep Curved LH 16cm 6.5"
- 841350L** Backhaus Towel Forcep LH 9cm 3.5"

Left Handed Needle Holders



LEFT HANDED NEEDLEHOLDERS

- 604715L** Mayo Hegar Needle Holder LH 16.5cm
- 604720L** Mayo Hegar Needle Holder LH 18.5cm 7"
- 585400L** Olsen Hegar Needle Holder LH 14cm 5.5"
- 605355L** Olsen Hegar Needle Holder LH 16.5cm 6.5"

Instrument Boxes & Accessories

Premium Instrument Boxes



Vi's range of Premium Instrument Boxes are made from lightweight anodised aluminium. Both lid and base are perforated, but protected by replaceable paper filters in the lid and reusable filters in the base which allow steam penetration but not micro-organisms. The clip on lid incorporates a silicone seal which is impervious to micro-organisms. Paper labels to identify kits and safety padlocks add to peace of mind. A fingered silicone mat will prevent instruments damaging each other.

Premium Instrument Box sizes

BX301410P	Box External 300mm x 140mm x 95mm Box Internal 275mm x 128mm x 80mm
BX301470P	Box External 300mm x 140mm x 62mm Box Internal 275mm x 128mm x 52mm
BX301440P	Box External 300mm x 140mm x 40mm Box Internal 275mm x 128mm x 25mm

PREMIUM INSTRUMENT BOXES

BX301410P	Box External 300mm x 140mm x 95mm
BX301470P	Box External 300mm x 140mm x 62mm
BX301440P	Box External 300mm x 140mm x 40mm

PREMIUM INSTRUMENT BOX FILTERS & LABELS

BXPFILTER	Replacement Paper Filters with Indicators (x 100)
BXREUSE	Reusable Filters (1,000 Cycles)
BXPFIND	Paper Labels with Indicators (x 100)

Premium Box Baskets with Lid & Accessories

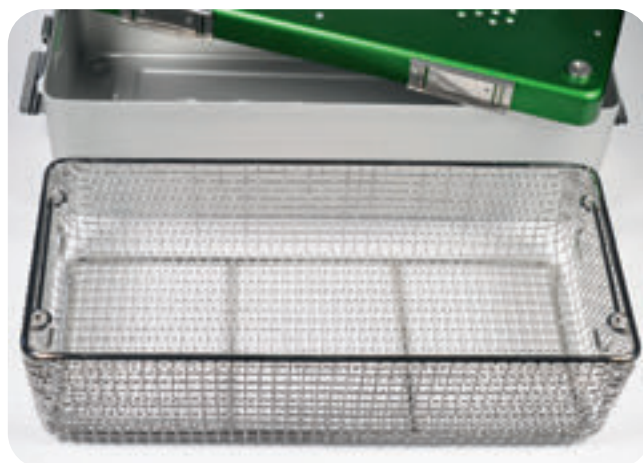


Premium Box Baskets with Lids fit neatly inside the Premium Box. This means that the instruments to be sterilised may be placed inside the basket inside the box which is sealed with paper filters. The Box with sterile contents is stored. When required the assistant opens the Box and the surgeon lifts out the Basket of sterile instruments.

PREMIUM BOX BASKETS WITH LIDS & ACCESSORIES

PBBXCAGE70	260 x 115 x 70mm with Lid for BX301410P
PBBXCAGE40	260 x 115 x 40mm with Lid for BX301470P + BX301410P
PBBX13011550	130 x 115 x 50 (Two fit side by side in BX301410P & BX301470P)

Premium Box Baskets without Lid & Accessories



Premium Box Baskets without Lids fit neatly inside the Premium Box. This means that the instruments to be sterilised may be placed inside the basket inside the box which is sealed with paper filters. The Box with sterile contents is stored. When required the assistant opens the Box and the surgeon lifts out the Basket of sterile instruments.

PREMIUM BOX BASKETS WITHOUT LIDS & ACCESSORIES

PBBX26011570	260 x 115 x 70mm for BX301410P
PBBX26011550	260 x 115 x 50mm for BX301410P
PBBX26011540	260 x 115 x 40mm for BX301470P + BX301410P

Instrument Boxes & Filters



Stainless Steel in construction with a bacterial filter in the base. The Filter allows steam to enter and water vapour to leave but excludes bacteria. Available in a range of sizes to suit most instrument sets and autoclaves. Some sizes are available without Filter. Replace Filters annually.

INSTRUMENT BOXES

BX201040	Box 200mm x 100mm x 40mm
BX201040NF	Box 200mm x 100mm x 40mm No Filter
BX221250	Box 220mm x 120mm x 50mm
BX221250NF	Box 220mm x 120mm x 50mm No Filter
BX221550	Box 220mm x 150mm x 50mm
BX281450	Box 280mm x 140mm x 50mm
BX281410NF	Box 280mm x 140mm x 100mm No Filter
BX341650	Box 340mm x 165mm x 50mm
BX341670	Box 340mm x 165mm x 70mm
BX402070	Box 400mm x 200mm x 70mm

INSTRUMENT BOX FILTERS

FILBX201040	Filter for Box BX201040
FILBX221250	Filter for Box BX221250
FILBX221550	Filter for Box BX221550
FILBX281450	Filter for Box BX281450
FILBX341650	Filter for Box BX341650
FILBX402070	Filter for Box BX402070

Fingered Silicone Insert



Autoclavable Silicone Insert fits the base of the Stainless Box to prevent instruments contacting and damaging each other. There is an insert to fit each of our Standard Boxes. Other sizes are available extra to listed below.

FINGERED SILICONE INSERT

BXSIL201040	Silicone Insert for Box 200 x 100mm
BXSIL2540	Silicone Insert for Box 250 x 150mm
BXSIL2212	Silicone Insert for Box 220 x 120mm
BXSIL2215	Silicone Insert for Box 220 x 150mm
BXSIL2814	Silicone Insert for Box 280 x 140mm
BXSIL3416	Silicone Insert for Box 340 x 160mm
BXSIL4020	Silicone Insert for Box 400 x 200mm

Instrument Box Padlock Security Tags with Indicator



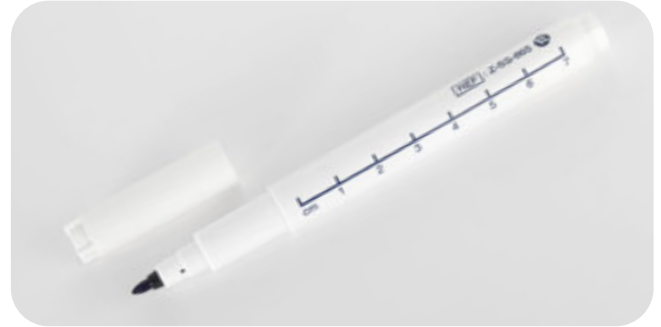
Anti-tamper Security Padlock with Steam Sterilisation Indicator Spot. Spot colour changes from pale blue to brown. Single use only. Padlock has to be broken to be removed. Supplied in packs of 20 and 100.

INSTRUMENT BOX PADLOCK SECURITY TAGS WITH INDICATOR

- PSL20** Security Padlocks with Sterilisation Indicator (x 20)
- PSL100** Security Padlocks with Sterilisation Indicator (x 100)

Skin Markers

Sterile Surgical Skin Marker



Supplied in a sterile peel pouch the surgical marker allows the surgeon to demarcate selected sites prior to or during surgery. The Marker is scrub resistant, non toxic and highly visible. Especially useful around the eyes and ears where accurate reconstruction is vital. Also useful for large skin reconstruction procedures.

STERILE SURGICAL SKIN MARKER

- 001487** Surgical Skin Marker Single
- 001488** Surgical Skin Marker Single (Pack of 6)

Disposable Security Padlocks - No Indicator



Anti-tamper security padlock. Useful for marking instrument boxes. Single use only. Padlock has to be broken to be removed. Good value. Supplied in packs of 100

DISPOSABLE SECURITY PADLOCKS- NO INDICATOR

- PSS100** Disposable Security Padlocks No Indicator (x 100)

Disposable Padlocks - Instrument Repair



Useful for marking instruments which should be sent for repair. Single use only. Padlock has to be broken to be removed.

Supplied in packs of 10

DISPOSABLE PADLOCKS - INSTRUMENT REPAIR

- PSTR10** Disposable Padlocks - Instrument Repair (x 10)



Vi Orthopaedic Starter Kits and Practice Set up service

As all practices are different, we have incorporated flexibility into our start-up options, allowing surgeons to customise their purchases to their personal preferences and case-load.

These kits offer big discounts over purchase of the individual components. We assist many practices in setting up for orthopaedics every year. Please contact our dedicated and experienced Vet Tech Team to see how we can help you further. You will be allocated a named contact to personally guide, assist and support you.

Vi Orthopaedic Starter Kit - Standard

Offered at a 20+% discount on the components price, this is a basic kit providing all of the necessary orthopaedic equipment, including power-drill to allow the surgeon to perform:

- **CrCL repair using the nylon lateral suture system**
- **Meniscal surgery in patients c. 15-50kg**
- **Basic patella luxation surgery (wedge sulcoplasty and tibial tuberosity transposition)**
- **FHNEA on smaller patients**
- **Basic fracture repairs using pins and wires**



List configuration whilst stocks last. Check with the Vet Tech Team for current content.

The Standard Kit contents:

001000	Adjustable Bone Saw With 5 Blades	X	1	090003	Bone Pin Trochar 7/64 2.8mm Diam 300mm Long	X	1
001004	Orthopaedic Stainless Steel Hard Back Saw 0.4mm Cut	X	1	090004	Bone Pin Trochar 1/8 3.2mm Diam 300mm Long	X	1
001010	Excision Arthroplasty Rasp	X	1	090005	Bone Pin Trochar (9/64) Ø3.50mm x 300mm Long	X	1
001048	Mini Hohman Retractor 8mm Short Tip	X	1	090006	Bone Pin Trochar 5/32 4.0mm Diam 300mm Long	X	1
001090	Disarticulator Small	X	1	090007	Bone Pin Trochar 3/16" 4.8mm Diam 300mm Long	X	1
001116	Meniscus Surgery Kit	X	1	090008	Bone Pin Trochar 1/4 6.35mm Diam 300mm Long	X	1
001221	Standard Jacobs Chuck & Handle 1/4" (6mm) Capacity	X	1	090021	1.1mm Arthrodesis Wire 125mm Long (Pack Of 10)	X	1
001234	Implant Cutter S/Steel Cuts To 4.0mm (370mm Long) TC Inserts	X	1	090022	1.6mm Arthrodesis Wire 125mm Long (Pack Of 10)	X	1
001237/1	Implant Cutter S/Steel Simple Action 2.0mm Max (255mm Long)	X	1	090023	2.0mm Arthrodesis Wire 125mm Long (Pack Of 10)	X	1
001250	Wire Passer Double Ended (145mm)	X	1	090024	1.4mm Arthrodesis Wire 125mm Long (Pack Of 10)	X	1
001260	Wire Twister & Shear Cutter (165mm)	X	1	090038	Bone Pin Roll	X	1
001271	Periosteal Elevator CVD AO Type 180mm 6mm End PTFE Handle	X	1	090039E	K/A Wire Storage Tube & Dispenser 125mm 0.9/1.1/1.6/2.0	X	1
001300	Small Curved Rongeurs 4mm Bite	X	1	091151	CCL Kit - Crimpers H/Duty Needleholders & 2 Of Each Nylon	X	1
001310	Small Angled Cutter (15mm Blade)	X	1	623850	15mm Osteotome Swedish Pattern (205mm)	X	1
001320	Mallet 300g	X	1	782600	Volkman Scoop Double Ended 4mm & 6mm (200mm Long)	X	1
001362	Kirschner & Arthrodesis Wire Bender 140mm	X	1	H090104	2.7Mm Round Shank Drill Hard	X	1
001600	Variable Speed Orthopaedic Drill Kit	X	1	H090106S	3.5Mm Round Shank Drill Hard	X	1
090000	Bone Pin Trochar 1/16 1.6mm Diam 300mm Long	X	1	OW0810	Reel Of Orthopaedic Wire 0.8mm/21g Diameter	X	1
090001	Bone Pin Trochar 5/64 2.0mm Diam 300mm Long	X	1	OW1010	Reel Of Orthopaedic Wire 1.0mm/20g Diameter	X	1
090002	Bone Pin Trochar 3/32 2.4mm Diam 300mm Long	X	1	XRAYMARK1	Left And Right Hand X-Ray Markers	X	1

VI ORTHOPAEDIC STARTER KIT STANDARD

ORTHOKIT I Vi Orthopaedic Starter Kit Standard

Vi Orthopaedic Starter Kit - Enhanced

Offered at a 20+% discount on the components price, this kit provides greater range and refinement of instruments and implants to cover a greater range of patients over those of ORTHOKITONE, including the choice of power tools specifically designed for orthopaedics (either a Black Series electric drill and saw kit or a mini-driver air power kit). ORTHOKIT TWO provides a firm basis of the necessary orthopaedic equipment to allow the surgeon to perform many orthopaedic procedures, including, but not limited to:

- **CrCL repair using the nylon lateral suture and lateral button suture systems**
- **Power tooling for corrective osteotomies and CrCL surgery by osteotomy (eg TTA, TTA Rapid, TTO or crCWO)**
- **Meniscal surgery in a range of patient sizes c.5-50 kg**
- **Patella luxation surgery (wedge sulcoplasty, block sulcoplasty and tibial tuberosity transposition)**
- **FHNEA on both small and larger patients**
- **Hip toggling**
- **Other ligamentous repairs**
- **Basic fracture repairs using pins and wires**



List configuration whilst stocks last. Check with the Vet Tech Team for current content.

The Enhanced Kit contents:

001000	Adjustable Bone Saw With 5 Blades	X 1	090021	1.1mm Arthrodesis Wire 125mm Long (Pack Of 10)	X 1
001004	Orthopaedic Stainless Steel Hard Back Saw 0.4mm Cut	X 1	090022	1.6mm Arthrodesis Wire 125mm Long (Pack Of 10)	X 1
001010	Excision Arthroplasty Rasp	X 1	090023	2.0mm Arthrodesis Wire 125mm Long (Pack Of 10)	X 1
001021	Universal Sulcoplasty Rasp 210mm Long	X 1	090024	1.4mm Arthrodesis Wire 125mm Long (Pack Of 10)	X 1
001041	Hohman Retractor 18mm Short Narrow Tip	X 2	090039E	K/A Wire Storage Tube & Dispenser 125mm 0.9/1.1/1.6/2.0	X 1
001042	Hohman Retractor 12mm Short Narrow Tip	X 2	623850	15mm Osteotome Swedish Pattern (205mm)	X 1
00109SET	Hatt Spoon Set (Set Of 3)	X 1	782600	Volkman Scoop Double Ended 4mm & 6mm (200mm Long)	X 1
001117	Meniscus Surgery Set - Enhanced	X 1	AR-17-02	Stifle Lever PTFE Handle 280mm VSTL	X 1
001221	Standard Jacobs Chuck & Handle 1/4" (6mm) Capacity	X 1	H090102	2.0mm Round Shank Drill Hard	X 1
001234	Implant Cutter S/Steel Cuts To 4.0mm (370mm Long) TC Inserts	X 1	H090104	2.7mm Round Shank Drill Hard	X 1
001237/1	Implant Cutter S/Steel Simple Action 2.0mm Max (255mm Long)	X 1	H090106S	3.5mm Round Shank Drill Hard	X 1
001250	Wire Passer Double Ended (145mm)	X 1	H090112	2.5mm Round Shank Drill Hard	X 1
001260	Wire Twister & Shear Cutter (165mm)	X 1	HIPTOGKITL250lb	LigaFiba 3.0mm Tog Introducer 3.5 & 4.5mm Drills & Guide	X 1
001271	Periosteal Elevator CVD AO Type 180mm 6mm End PTFE Handle	X 1	IMPBOXTRO	IM Pin Box Complete With Steinman Pins Trochar Tips 30 Total	X 1
001300	Small Curved Rongeurs 4mm Bite	X 1	LFLSCRSTARTER	LigaFiba Lateral Suture + Crimp Starter Kit	X 1
001310	Small Angled Cutter (15mm Blade)	X 1	OW0710	Reel Of Orthopaedic Wire 0.71mm/ 22g Diameter	X 1
001311	Large Angled Cutters 19Mmm Blade 23cm Long	X 1	OW0810	Reel Of Orthopaedic Wire 0.8mm/ 21g Diameter	X 1
001320	Mallet 300g	X 1	OW0910	Reel Of Orthopaedic Wire 0.9mmmm/ 20.5g Diameter	X 1
001323	TTA Mallet 140g	X 1	OW1010	Reel Of Orthopaedic Wire 1.0mm/ 20g Diameter	X 2
001343	10mm Osteotome Light (140mm)	X 1	SAP2.5	Suture Anchor Pin 2.5mm Diameter 1.0mm Hole	X 1
001362	Kirschner & Arthrodesis Wire Bender 140mm	X 1	SAP3	Suture Anchor Pin 3mm Diameter 1.0mm Hole	X 1
001363	Stubby Punch 50mm	X 1	SAP4	Suture Anchor Pin 4mm Diameter 2.0mm Hole	X 1
001380	Modular Osteotome With Seven Blades - 4,6,8,10,12,15 & 20mm	X 1	XRAYMARK I	Left And Right Hand X-Ray Markers	X 2

VI ORTHOPAEDIC STARTER KITS ENHANCED

ORTHOKIT TWO VI Orthopaedic Starter Kit Enhanced with Electric Power

Contains list above plus Black Series equipment:

BLACKKIT	Vi Black Series Drill/ Saw Set	X 1
BLACKSW451207B	Vi Black Saw Blade 45mm x 12mm Thick 0.7mm Set 0.95mm	X 1
BLACKSW451607B	Vi Black Saw Blade 45mm x 16mm Thick 0.7mm Set 0.95mm	X 1

ORTHOKIT THREE VI Orthopaedic Starter Kit Enhanced with Air Power

Contains list above plus MiniDriver equipment:

VIMDB2	MiniDriver Basic Set Including Mk 2 Saw	X 1
K154	Sagittal Saw Blade 0.4 x 42.7 x 9.5mm (For K220 Sag Saw)	X 1
K155	Sagittal Saw Blade 0.4 x 42.7 x 14.0mm (For K220 Sag Saw)	X 1

Fragment Forceps

Pointed Reduction Forceps

Ideal for fragment reduction, these forceps gently hold fragments in position whilst permanent fixation is being applied. Particularly useful in the repair of fractures of the distal femur, acetabulum and distal tibia.

The smaller sizes are useful in the repair of the long bones of the miniature dog and cat as well as the smaller bones of the distal limbs in large patients.



FRAGMENT FORCEPS

- 001200** Fragment Forceps 160mm Long
- 001201** Small Fragment Forceps 135mm Long
- 001208** Very Small Fragment Forceps 100mm Long
- 001208M** Miniature Fragment Forceps 135mm Long
- 001200SET** Fragment Forceps Set of 4 (as above)

Pointed Reduction Forceps with Spinlock

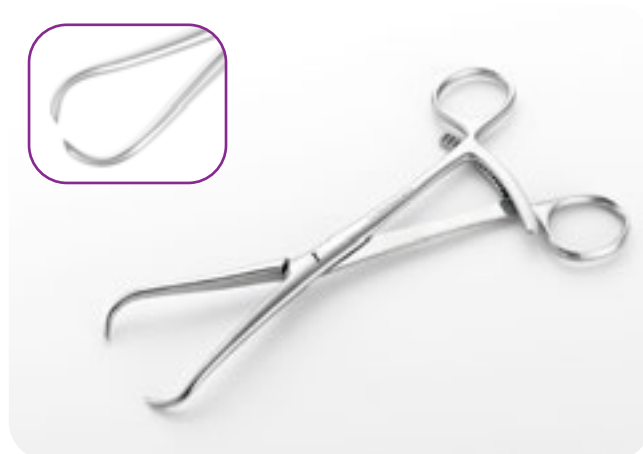


Useful for delicate reduction of fragments. Initial reduction is performed with the spinlock flipped out, to give maximum control. Once placed, the spinlock is flipped back in & gently tightened.

POINTED REDUCTION FORCEPS WITH SPINLOCK

- 001201SL** Small Fragment Forceps with Spinlock 135mm Long
- 001245SL** Large Fragment Forceps with Spinlock 180mm Long

Very Large Fragment Forceps

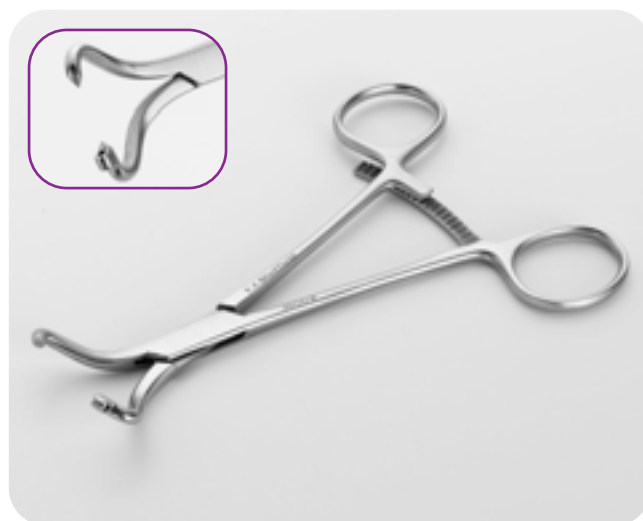


Use where a wide gape is required or where the instrument needs to be further out of the surgical field. Spinlock version is very useful during CrCl surgery for repositioning the stifle prior to placement of a lateral suture, or holding osteotomies during closing wedge type procedures.

VERY LARGE FRAGMENT FORCEPS

- 001202** Very Large Fragment Forceps 205mm Long
- 001203** Very Large Fragment Forceps with Spinlock 215mm Long

Reduction Forceps with Hard Wire Guide



Standard pattern fragment forceps with an added wire guide, to allow placement of a temporary or permanent wire as close as possible to the point of reduction.

Guide capacity up to 1.6mm

REDUCTION FORCEPS WITH WIRE GUIDE

- 001201W** Reduction Forceps with Wire Guide 140mm Long Gape 10-25mm
- 001200W** Reduction Forceps with Wire Guide 170mm Long Gape 15-40mm
- 001202W** Reduction Forceps with Wire Guide 200mm Long Gape 25-65mm

Twin Point Fragment Forceps

Twin point fragment forceps hold securely while allowing placement of implants such as screws at the point of maximum reduction between the points.

Particularly useful for humeral condyle repairs, and repairs in the small bones distal to carpus and tarsus.

TWIN POINT FRAGMENT FORCEPS

- 001205** Twin Point Fragment Forceps Straight 170mm Long
001206 Twin Point Fragment Forceps Curved 165mm Long

Ikuta Bone Clamps

Ikuta slotted clamps are designed to allow the passage of wires or screws at the point of maximum pressure. For bones up to 20mm in diameter. The smaller sizes are for wires, the larger for small screws. Consider Twin Point Fragment Forceps above for larger screws, or a 001219 Long Ratchet Schroeder, a vusellum forcep, for more spring.

IKUTA BONE CLAMPS

- 001207A** Straight for Wires to 2.0mm 125mm Long
001207B Curved for Wires to 2.0mm 125mm Long
001207C Straight for Screws & Wires to 3.0mm 125mm Long
001207D Curved for Screws & Wires to 3.0mm 125mm Long
001207SET Ikuta Bone Forceps Set of 4 (as above)

Long Ratchet Schroeder Tenaculum

A larger, springier version of the straight Twin Point Forceps. Useful for reduction of small fragments prior to drilling and screwing. Longer ratchet than a standard Schroeder increases usefulness.

LONG RATCHET SCHROEDER TENACULUM

- 001219** Long Ratchet Schroeder Tenaculum Str 240mm Long

Large Twin Point Reduction Forceps with Spinlock

Accessing the point of maximum compression to insert a screw is made easier by the use of twin point forceps. This size is useful for most elbows where accuracy of placement is essential, including Spaniels which are most likely to be affected by IOHC.

TWIN POINT REDUCTION FORCEPS WITH SPINLOCK

- 001204** Twin Point Reduction Forceps with Spinlock 215mm Long

Bone Holding Forceps

There is no one universal bone holder. Both the dimensions of the bones involved and the degree of force needed to manipulate or clamp the bone vary immensely. Select the most appropriate forcep for the procedure.

Vi Bone Holding Forceps



Useful general purpose bone holder for maintaining reduction during I/M pinning. Can also be used during plating procedures, passing drills & screws through the jaw centre.

VI BONE HOLDING FORCEPS

001210 Bone Holding Forceps 155mm Long

Reduction Forceps Serrated Jaws



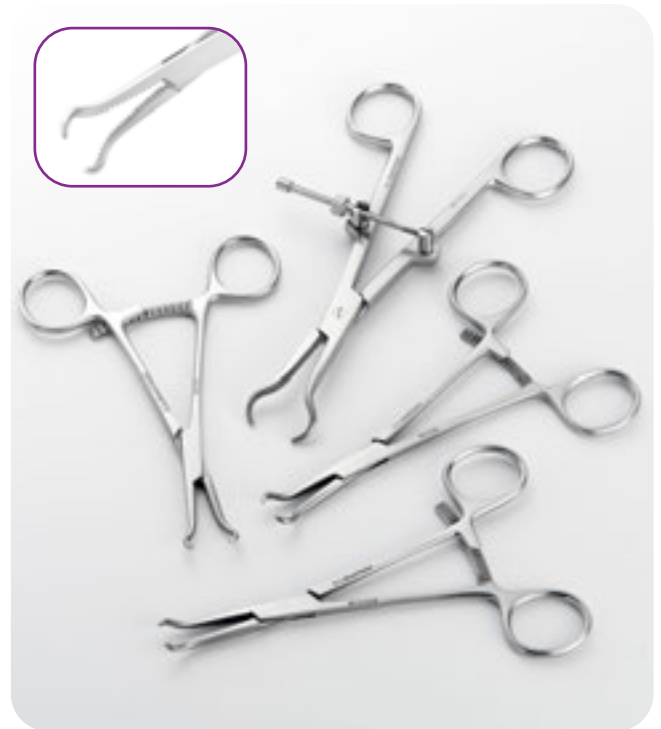
These reduction forceps have serrated jaws and spinlock which provides secure incremental control.

REDUCTION FORCEPS SERRATED JAWS

001217 Reduction Forceps Serrated Jaws Spinlock 190mm Long

001217/L Reduction Forceps Serrated Jaws Spinlock 240mm Long

Small Serrated Bone Holding Forceps



Manipulation of the long bones of cats and small dogs is difficult without crushing. The serrated jaws of this forcep are contoured to maximise grip and support. The tips are sharp. They may be used as small fragment forceps.

SMALL SERRATED BONE HOLDING FORCEPS

001218L Large Serrated Bone Holding Forceps Ratchet 12mm Grasp 180mm

001218 Small Serrated Bone Holding Forceps 7mm Grasp 140mm

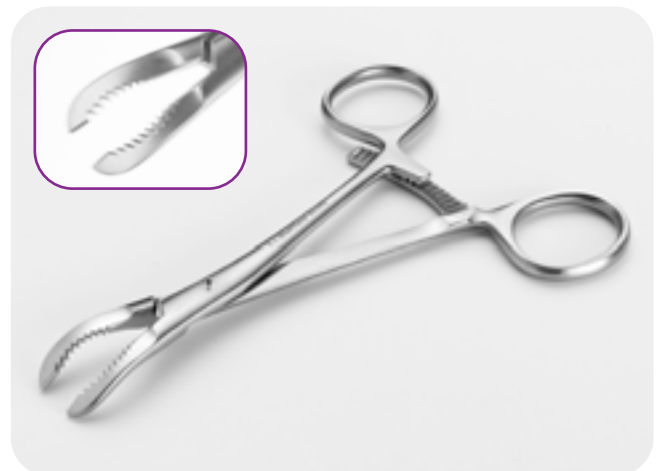
001218S X Small Serrated Bone Holding Forceps 5mm Grasp 140mm

001218XS X Small Serrated Bone Holding Forceps 3mm Grasp 140mm

001218SET Serrated Bone Holding Forceps Set of 4 (as above)

001218LG Small Serrated Bone Holding Forceps Spinlock 12mm Grasp 180mm

Small Curved Serrated Reduction Forceps



A nice forcep for the manipulation of small bones or small bone fragments. You cannot have too many bone holding forceps!

SMALL CURVED SERRATED REDUCTION FORCEPS

001996 Small Curved Serrated Reduction Forceps 145mm Long

Dingmans Forceps



Useful for manipulation of bone fragments.

DINGMANS FORCEPS (LONG RATCHET)

001470 Dingmans Forceps Long Ratchet 215mm Long

Lowman Bone Clamp Veterinary Pattern Small Dog/ Cat Size



Re-worked traditional human clamp, in sizes suitable for cats and small dogs

- Lightweight
- Requires minimal exposure
- Use to reduce oblique fractures
- Secures plate to fracture prior to screw placement

LOWMAN BONE CLAMP VETERINARY PATTERN

001991 Lowman Bone Clamp Veterinary Pattern 60mm Long

001993 Lowman Bone Clamp Large <30mm 220mm Long

Kern Bone Holding Forceps



Kerns give a very firm controllable grip, aiding manipulation and reduction of fragments. A quick release ratchet locks the jaws. Useful in general orthopaedics and for surgery around the hip, in particular:

- femoral shaft fractures
- triple pelvic osteotomy
- hip toggle
- fractures of the acetabulum

KERN BONE HOLDING FORCEPS

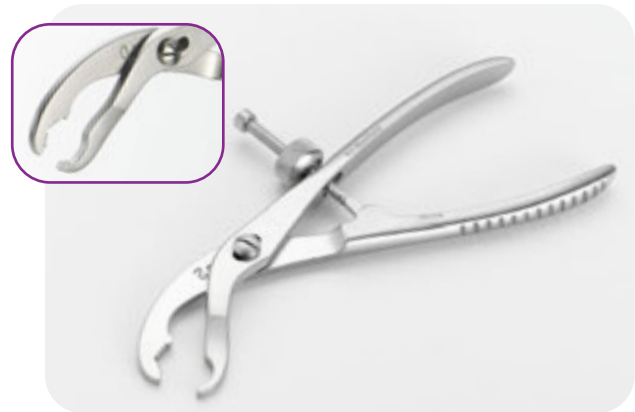
001216 Kern Bone Holding Forceps Mini 4.75" 125mm Long

001213 Kern Bone Holding Forceps Small 6.75" 170mm Long

001214 Kern Bone Holding Forceps Large 8.5" 215mm Long

001213SET Kern Bone Holding Forceps Set of 3 (as above)

Self Centering Bone Holding Forceps



Some fracture reductions require that the bone forceps jaws be angled from the handles. Such forceps require:

1. A sophisticated hinge mechanism to allow the jaws to maintain alignment as they open and close.
2. A special locking device which can cope with the laxity at the hinge.

The spinlock and the special jaw make the instrument very nice to use but very expensive.

The veterinary pattern stands up from the bone in use, where the human pattern sits down and falls away which is generally less use in veterinary patients.

SELF CENTERING BONE HOLDING FORCEPS

001209 Self Centering Bone Holding Forceps Very Small 150mm Long

001211 Self Centering Bone Holding Forceps Small 190mm Long

001212 Self Centering Bone Holding Forceps Large 240mm Long

001209V Self Centering Bone Holding Forceps Very Small 150mm Vet Pattern

001211V Self Centering Forceps Bone Holding Small 190mm Vet Pattern

001212V Self Centering Forceps Bone Holding Large 240mm Vet Pattern

Plate Holding/ Drill Guide Forceps

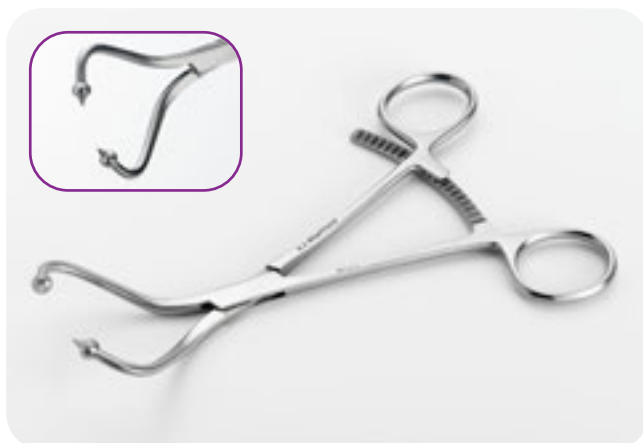


Combination bone holder and drill guide. Allows temporary fixation of the plate to the bone whilst a hole is drilled. The ball shape of the tip engages the plate hole, while the tip of the drill guide engages the bone. Tips are offset slightly to avoid the drill bit hitting the opposite bone holder tip.

PLATE HOLDING/ DRILL GUIDE FORCEPS

- 001225 1.5/2.0 Plate Holding/ Drill Guide Forceps 140mm Long
- 001226 2.4/2.7 Plate Holding/ Drill Guide Forceps 145mm Long
- 001227 3.5 Plate Holding/ Drill Guide Forceps 150mm Long
- 0012SET Plate Holding/ Drill Guide Forceps Set (one of each size)

Plate Holding Forceps



Use to hold a plate in position on the bone. Ball tips engage the plate holes. Also useful as a fragment forcep in young, soft bone, as the balls prevent over penetration.

PLATE HOLDING FORCEPS

- 001215 Plate Holding Forceps 160mm Long

Left Handed Orthopaedic Instruments

Left Handed Orthopaedic Instruments



Left handed bone holders and fragment forceps are designs modified specifically to make use easier, along with our range of left handed general surgical instruments.

A limited range of the most popular instruments are available. If you have any suggestions for additions to the range, let Vi know!

One black handle identifies left handed instruments.

LEFT HANDED ORTHOPAEDIC INSTRUMENTS

- 001201SL-L Small Fragment Forceps with Spinlock - Left Handed
- 001203-L Very Large Fragment Forceps with Spinlock - Left Handed

Plaster Cutting

Engels Plaster Saw



A simple cast saw for removal of plaster casts. Quiet and inexpensive.

ENGELS PLASTER SAW

001510 Engels Plaster Saw 145mm Long

Plaster Shears Stille



Very powerful compound action.

PLASTER SHEARS (STILLE)

161406 Plaster Shears Stille 245mm Long

Plaster Shears Bruns / Bohler



Simple action serrated jaw. Very robust and comfortable to use. Very efficient for removing bandages.

PLASTER SHEARS BRUNS/ BOHLER

161405 Plaster Shears Bruns/ Bohler 245mm Long

Plaster Spreaders



Cast spreader scaled to veterinary patients, to expand the initial cut made to remove a cast.

PLASTER SPREADERS

161410 Plaster Spreaders 230mm

Implant Cutters

Select implant cutters to suit the type and size of implant to be cut, and the position of the implant. Using hacksaws is best avoided as far as possible – due to the work hardening characteristic of stainless steel and titanium, the harder you work the harder it is to cut. Intramedullary pins and K /A wires are already hardened during production so are even tougher.

Designs and finish of cutter:

Surgical finish stainless steel with TC inserts – suitable for appropriate sizes of hard wires. Can be used for appropriate sizes of cuttable plate.

Also for cutting fish hooks!

Industrial finish – strong and cheaper than surgical finish, but not long lasting due to corrosion.

Side cutting – standard pattern straight cutters

Close cut – end cutting. For smaller pins only. Harder to cut long sections but allow cutting close to the bone.

Safety cutters – leave a blunt end with no snags, but leave a longer stub. Best for ex fix pins

Compound action – more expensive but make cutting pins easier

Prolong the life of your pin cutter by not cutting at the tip – as tungsten carbide is brittle, it is prone to break when cutting at the very tip, where it is less well supported by the stainless jaw.

Implant Cutter Selection Chart

Maximum Pin Size	Code	Description	Page
1.5mm	001230	Implant Cutter to 1.5mm	34
	001238	Implant Cutter to 1.5mm close cut	34
1.6mm	001247	Safety Shear Cutter to 1.6mm close cut	34
	001237/2	Implant Cutter to 1.6mm	34
2.0mm	001235	Industrial Finish Implant Cutter to 2.0mm	34
	001237/1	Implant Cutter to 2.0mm 255mm	34
2.2mm	001246	Implant Cutter to 2.2mm Oblique Jaw	33
	001237	Implant Cutter to 2.2mm	33
2.5mm	001236	Implant Cutter to 2.5mm close cut	33
3.0mm	001228	Implant Cutter to 3.0mm	33
4.0mm	001234	Implant Cutter to 4.0mm	33
	001231/A	Implant Cutter to 4.0mm detachable handles	32
	001233	Implant Cutter to 4.0mm Industrial Finish	35
	001231	Implant Cutter to 4.0mm compound action	33
	001229	Safety Cutter to 4.0mm	35
6.0mm	001232	Implant Cutter to 6.0mm Industrial Finish	35
	001231VL	Implant Cutter to 6.0mm compound	32

Implant Cutter Surgical Finish to 6mm Capacity

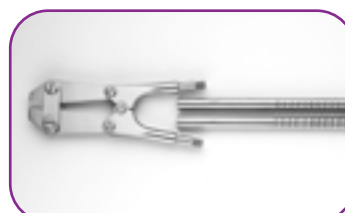


Highest capacity implant cutter stocked. Will not fit most autoclaves as they are 560mm long – suggested to use chemical sterilant on the ends and operate by an unscrubbed assistant.

IMPLANT CUTTERS SURGICAL FINISH

001231VL Implant Cutter Stainless to 1/4" 6mm Capacity TC Jaws Compound Action 560mm Long

Implant Cutter Surgical Finish to 4mm Capacity Detachable Handles



Overall length with handles in situ is 485mm. Strips down to 270mm long when handles are detached to fit many smaller autoclaves such as Little Sister Type.

IMPLANT CUTTERS SURGICAL FINISH DETACHABLE HANDLES

001231/A Implant Cutter Stainless to 4mm Capacity Detachable Handles

Implant Cutter Surgical Finish to 4mm Capacity



Implant Cutter Surgical Finish to 4mm Capacity, TC Jaws, Compound Action, 490mm Long.

Suitable for long chamber autoclaves.

IMPLANT CUTTER SURGICAL FINISH TO 4MM CAPACITY

001231 Implant Cutter Surgical Finish to 4mm Capacity
TC Jaws Compound Action 490mm Long

Implant Cutter Surgical Finish to 4mm Capacity



Implant Cutter Surgical Finish to 4mm Capacity, TC Jaws, Compound Action, 370mm Long.

IMPLANT CUTTERS SURGICAL FINISH TO 4MM CAPACITY

001234 Implant Cutter Stainless Steel cuts to 4mm Capacity
TC Jaws Compound Action 370mm Long

Implant Cutter Surgical Finish to 3mm Capacity



Implant Cutter Surgical Finish to 3mm Capacity, TC Jaws, Sprung Compound Action, 255mm Long.

IMPLANT CUTTERS SURGICAL FINISH TO 3MM CAPACITY

001228 Implant Cutter Stainless to 3mm Capacity 255mm Long

Implant Cutter Surgical Finish to 2.5mm Capacity

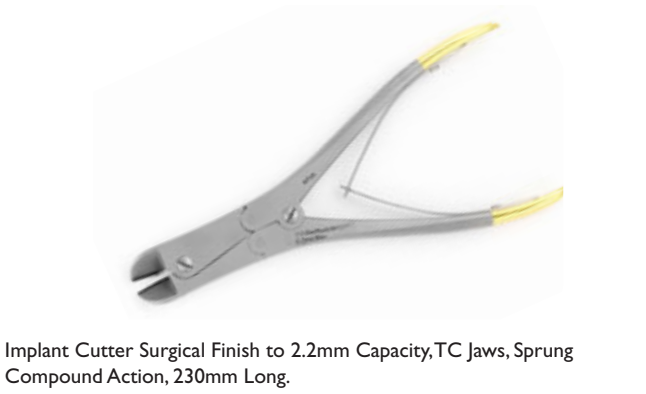


Implant Cutter Surgical Finish to 2.5mm Capacity, TC Jaws End Cut, Sprung Compound Action, 230mm Long.

IMPLANT CUTTERS SURGICAL FINISH TO 2.5MM CAPACITY

001236 Implant Cutter Stainless Steel Close Cut Cuts to 2.5mm Capacity
230mm Long

Implant Cutter Surgical Finish to 2.2mm Capacity



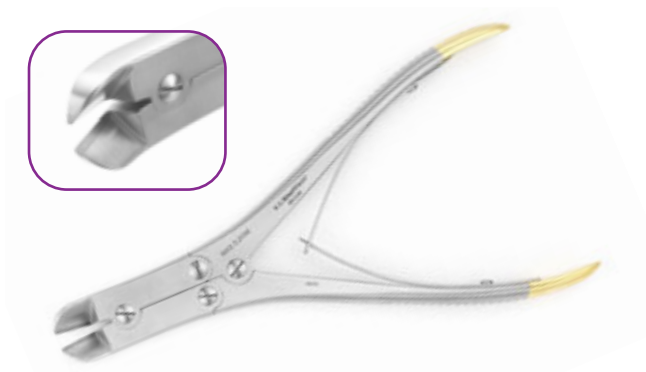
Implant Cutter Surgical Finish to 2.2mm Capacity, TC Jaws, Sprung Compound Action, 230mm Long.

Very useful for A & K wires, and cuttable plates. Recommended.

IMPLANT CUTTERS SURGICAL FINISH TO 2.2MM CAPACITY

001237 Implant Cutter Stainless Steel Cuts to 2.2mm Capacity 230mm Long

Implant Cutter Surgical Finish to 2.2mm Capacity - Oblique Jaws



Similar to 001237, but with oblique jaws favoured by many surgeons. Tungsten Carbide jaws.

IMPLANT CUTTERS SURGICAL FINISH TO 2.2MM CAPACITY OBLIQUE JAWS

001246 Implant Cutter Stainless Steel Cuts to 2.2mm Capacity 170mm Long
Oblique Jaw Stainless Steel

Implant Cutter Surgical Finish to 2.0mm & 1.6mm Capacity



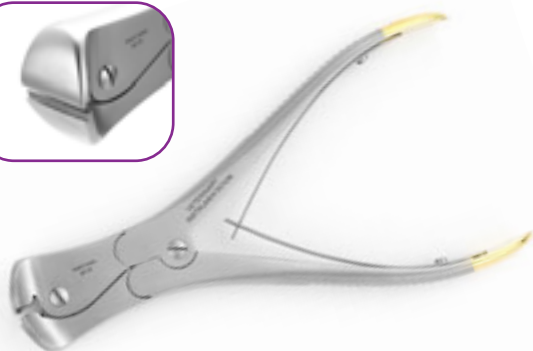
Simple action economical cutters, but requiring more muscle power to use particularly at the upper limits of their capacity. Good, close cut.

IMPLANT CUTTER SURGICAL FINISH TO 2.0MM & 1.6MM CAPACITY

001237/1 Implant Cutter Stainless Steel Simple Action Cuts to 2.0mm Capacity 255mm Long

001237/2 Implant Cutter Stainless Steel Simple Action Cuts to 1.6mm Capacity 215mm Long

Implant Cutter Surgical Finish to 1.6mm Capacity - Shear Action End Cutting

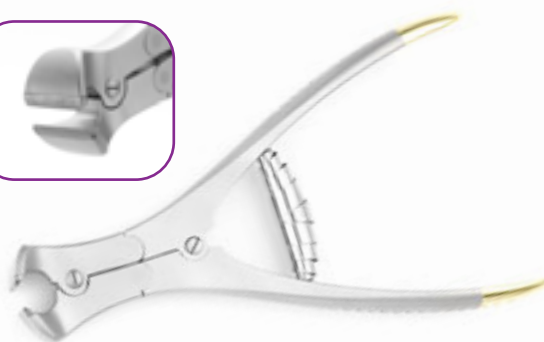


An efficient shearing action that produces a square end to a cut pin rather than the more typical sharp edge. The jaws catch the loose pin end preventing it from flying off. This cutter cuts pins to 1.5mm below the face of the cutter. Also useful for cutting cerclage wire cleanly. TC Jaws.

IMPLANT CUTTERS SURGICAL FINISH TO 1.6MM CAPACITY SHEAR ACTION

001247 Implant Cutter Stainless to 1.6mm Capacity 220mm Long Shear Action End Cutting

Implant Cutter Surgical Finish to 1.5mm Capacity



Implant Cutter Surgical Finish to 1.5mm Capacity, 150mm Long

IMPLANT CUTTERS SURGICAL FINISH TO 1.5MM CAPACITY

001238 Implant Cutter Stainless to 1.5mm Capacity Close Cut 150mm Long

Implant Cutter Surgical Finish to 1.5mm Capacity



Small lightweight implant cutter. Max capacity 1.5mm. Also suitable for 1mm cuttable plate range. For light use only.

IMPLANT CUTTERS SURGICAL FINISH TO 1.5MM CAPACITY

001230 Implant Cutter Stainless to 1.5mm Capacity 170mm Long

Implant Cutter Industrial Finish to 2.0mm Capacity



Implant Cutter Industrial Finish to 2.0mm Capacity, 165mm Long.

IMPLANT CUTTERS INDUSTRIAL FINISH TO 2.0MM CAPACITY

001235 Implant Cutter Stainless to 2mm Capacity 165mm Long

Safety Cutter Surgical Finish to 4mm Capacity

Safety implant cutter which leaves a smoother cut end than a conventional cutter. Very useful for external fixation pins. Cut end is temporarily retained within the head rather than flying off.

Maximum capacity 4mm. Cuts 5mm below the face of the cutter.



Telescopic handles reduce the overall length from 470mm to 340mm to fit most autoclaves. Head strips for cleaning.

SAFETY IMPLANT CUTTERS SURGICAL FINISH TO 4.0MM CAPACITY

001229 Safety Cutter Stainless Steel Cuts to 4.0mm Capacity 340mm Long

Implant Cutter Industrial Finish to 6mm Capacity**IMPLANT CUTTER INDUSTRIAL FINISH TO ¼" 6MM CAPACITY**

001232 Implant Cutter Industrial Finish to ¼" 6mm Capacity 460mm Long

Implant Cutter Industrial Finish to 4mm Capacity**IMPLANT CUTTER INDUSTRIAL FINISH TO 4MM CAPACITY**

001233 Implant Cutter Industrial Finish to 4mm Capacity 350mm Long

Please note - autoclaving of industrial finish implant cutters may cause cosmetic damage to handles.

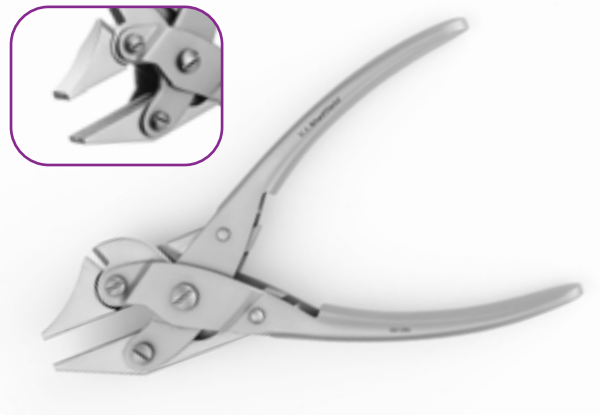
Pin & Wire Extraction**Pin Grip**

For the removal of temporary fixation pins. Narrow jaws allow access via a small incision, with a groove in the jaw to locate the pin. Jaws can be locked in position once the pin is located, to aid removal.

PIN GRIP

001241 Pin Grip (Stainless Steel) Modified Jaw 175mm Long

001242 Pin Grip (Industrial Finish) 165mm Long

Parallel Action Pliers

Useful for bending, holding and cutting small pins and wires. Used in conjunction with bone plate benders for contouring smaller plates. Will cut arthrodesis and 'K' wires to a maximum of 2.0mm with care.

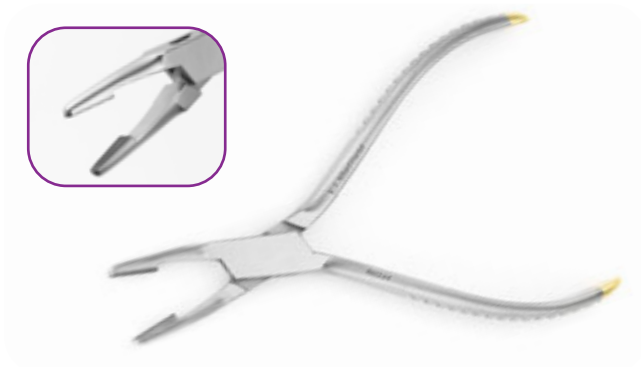
The industrial version will stain and rust with autoclaving – lubricate well to reduce, and store dry.

PARALLEL ACTION PLIERS

001290 Parallel Action Pliers (Stainless Steel) 170mm

001291 Parallel Action Pliers (Industrial Finish) 165mm

'K' Wire/ 'A' Wire Extraction Forceps



Designed to firmly grip wires 0.9mm to 2.0mm. Tungsten Carbide jaws maximise grip, fine nose minimises trauma to surrounding tissue.

'K' WIRE/ 'A' WIRE EXTRACTION FORCEPS

001244 'K' Wire/ 'A' Wire Remover - 140mm Long

Small Pin Vice

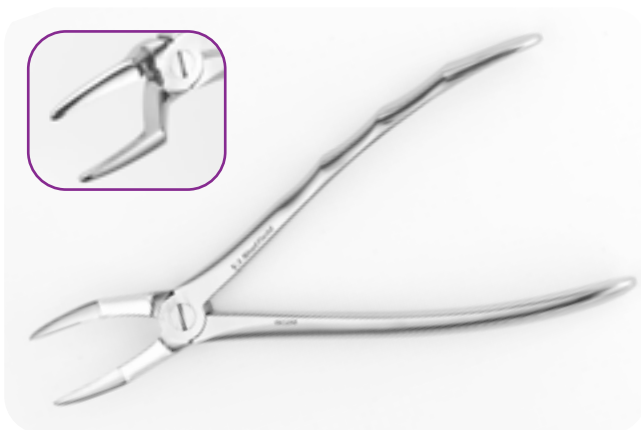


This Small Pin Chuck holds wires and instruments up to a diameter of 1.0mm. Particularly useful for fingertip control over insertion of Arthrodesis and 'K' Wires.

SMALL PIN VICE

001223 Small Pin Vice 100mm Long

Dental Forceps for Pin and Wire Extraction



For pin, wire & screw extraction. Grooved tips come to a point, allowing work in confined spaces and close to bone with a reduced surgical approach. Anatomical handles and cranked jaws for ease of use.

DENTAL FORCEPS FOR PIN AND WIRE EXTRACTION

001248 Dental Forceps for Pin and Wire Extraction

Jacobs Chuck



Standard instrument for intramedullary pin insertion.

Pin capacity Standard Chuck up to 1/4" (6mm)

Small Chuck up to 5/32" (4mm)

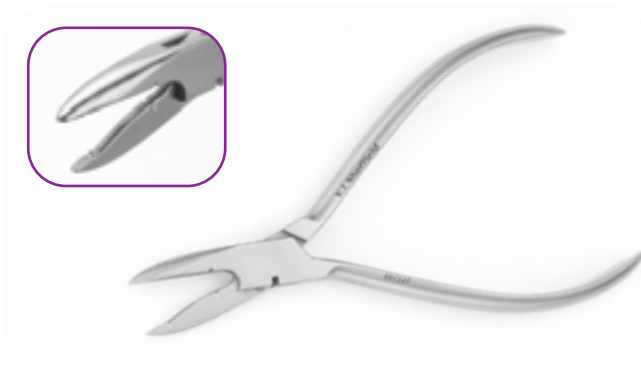
Standard chuck will grip small pins, but is heavier in use.

Clean thoroughly and lubricate well, opening and closing jaws fully during cleaning procedure to maintain in good condition.

JACOBS CHUCK

- 001220 Small Jacobs Chuck with Handle 5/32" Capacity 260mm
- 001605S Replacement 5/32" Chuck (& Key) only - no Handle
- 001606S Spare Key for 5/32" Chuck
- 001221 Standard Jacobs Chuck with Handle 1/4" Capacity
- 001605 Replacement 1/4" Chuck (& Key) only - no Handle
- 001606 Spare Key for 1/4" Chuck

Wire Contouring Pliers



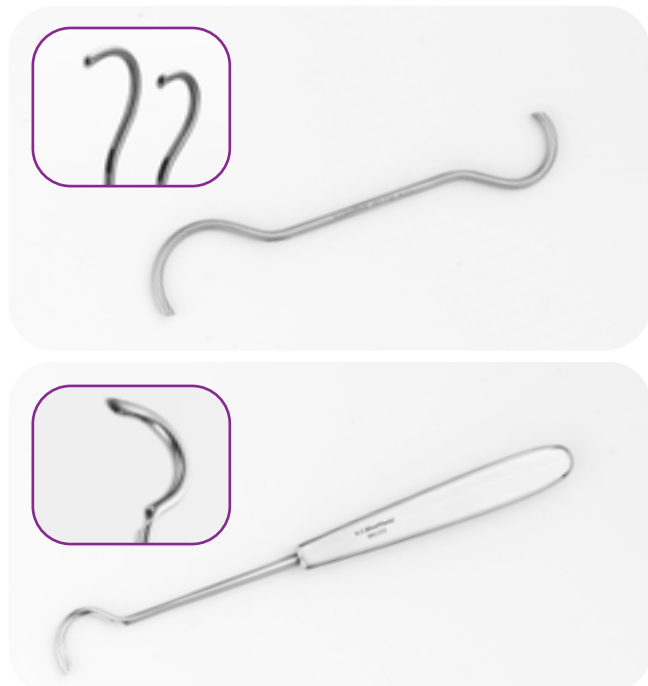
Use to contour both soft and hard wires. The jaw design has multiple anvil shapes and a pair of soft wire cutters.

WIRE CONTOURING PLIERS

001245 Wire Contouring Pliers 150mm Long

Wire Passers

Wire Passers



Wire passers are designed to direct cerclage wire around long bones with minimal trauma, helping reduce devascularisation of fragments. Soft tissue attachments should be preserved as far as possible.

WIRE PASSERS

001250	Wire Passer Double-ended 145mm
001252	Wire Passer Single-ended 20mm Diameter 205mm
001253	Wire Passer Single-ended 30mm Diameter 220mm
001254	Wire Passer Single-ended 40mm Diameter 250mm
001256	Wire Passers Single-ended Set of 3 (as above)
001257	XXL Wire Passer Single-ended 55mm Diameter

Strong Cerclage Wire Passers



Low profile open channel wire passers, designed to allow easier passage around and between bones. Can be left in situ as wire is tightened, reducing risk of slippage. Wire can be passed from tip or handle. With a flat internal tip to assist close passage around the bone.

Designed by David Strong MRCVS.

Sizes: Small 12.5mm/15mm, Medium 20mm/25mm, Large 30mm/40mm.

STRONG CERCLAGE WIRE PASSERS

CWPSM	Strong Cerclage Wire Passer Small
CWPMD	Strong Cerclage Wire Passer Medium
CWPLG	Strong Cerclage Wire Passer Large
CWPSET	Strong Cerclage Wire Passer Set of 3

Lesser Wire Passer/ Retrieval Forceps



Really useful forceps which combine the function of a tissue protector drill guide with a method of capturing the wire on the blind side of the procedure. The open sided guide tube is toothed to minimise drill skate.

Commonest applications include hemi-cerclage and passage of lateral sutures through the tibial crest.

Original design by Arnie Lesser

LESSER WIRE PASSER/ RETRIEVAL FORCEPS

001268	Lesser Wire Passer/ Retrieval Forceps 150mm Long
001269	Lesser Wire Passer/ Retrieval Forceps Large 190mm Long

Cerclage Wire Twisters & Tighteners

Cerclage wire used as part of a fracture repair can be useful, but is challenging and not without issues. Loose or broken wires interfere with fracture healing and can contribute to delayed and non-unions. Loops give a more secure construct with no large knot.

Basics of cerclage:

- only apply to a fracture that is fully reconstructable i.e. no comminution
- only apply to oblique or spiral fractures; the length of the fracture should be at least twice the diameter of the bone
- place a minimum of two cerclage wires, and more if fracture length allows
- cerclage wires should be spaced about 1 cm apart.

Wire Twister/ Shear Cutter



- Jaws lock onto wire to enable easy twisting under tension for kink-free cerclage. The wire must be twisted under tension to create an even spiral.
- Improved design, long life shear action cutter will cut 18 gauge (1.2mm) wire twisted double.
- Serrated jaws grip and turn cut ends. Jaws have fenestration for extra grip.
- Not designed to cut 'A' + 'K' Wires, Pins or fish hooks.
- Available with Tungsten Carbide Jaws for extra grip (not fenestrated).



WIRE TWISTER/ SHEAR CUTTER

- 001260 Wire Twister/ Shear Cutter 165mm Long
- 001261 Wire Twister/ Shear Cutter - Tungsten Carbide Jaws 165mm Long

Twisterz - Wire Twister



Features "J" slots for quick capture and release.
Textured handle for better grip and control.
Bell shaped nut provides better leverage for tightening.
Reduced threads require less turning of the nut for locking at wire and handle.

TWISTERZ - WIRE TWISTER

- 200010.00 Twisterz Wire Twisters 155mm

Wire Twister/ Spinner



A surgical version of a wire twisting plier used by aero mechanics and scaffolders. The spinner is based on the principle of a slow spiral being pulled through a threaded boss to create a rotational moment. The jaws are clamped onto the two strands of wire. Pulling the spinner places tension and twists the wire evenly.

WIRE TWISTER/ SPINNER

- 001265 Wire Twister/ Spinner 250mm Long

Wire Tightener for Eyed Wires

Used to tension eyed wires very tightly. The cerclage is finished by kinking the wire back against the eye.

WIRE TIGHTENER FOR EYED WIRES

001262 Wire Loop Tightener 125mm Long

Wire Tightener with Two Cranks for Double Loop Cerclage and Eyed Wire

Use with single crank for eyelet wires. Use both cranks to tighten double loops.

For a video showing how this product works visit www.vetinst.com/videos

WIRE TIGHTENER WITH TWO CRANKS

001264 Wire Tightener with Two Cranks 285mm Long

Orthopaedic Wire Kit

Cerclage wire can be a very useful means of fragment fixation. Kit containing our most popular cerclage instruments and a roll of wire, discounted over component price.

Kit contains:

- 1 x Wire Twister
- 1 x Set of 3 Single Ended Wire Passers
- 1 x 10m roll of 1.0mm Orthopaedic Wire.

ORTHOPAEDIC WIRE KIT

OWKIT Orthopaedic Wire Kit

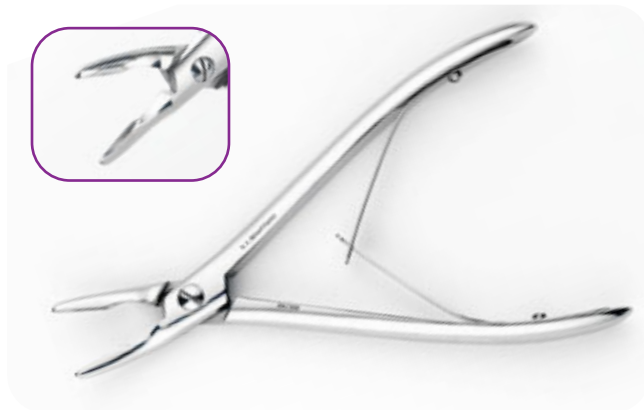
Rongeurs

Rongeurs vary with respect to bite size and jaw angle. Where a rongeur has a specific function it is indicated in the description. Punch type forceps and some smaller rongeurs are described in Chapter 8 Spinal Surgery, along with Duck Billed Rongeurs.

Simple Action Rongeurs

Typically simple action rongeurs offer a wide bite but rely on the physical strength of the surgeon. Most small rongeurs have a simple action.

Vi Small Curved Rongeurs



A good general purpose rongeur for small bone nibbling procedures, e.g. excision arthroplasty, arthrodesis, sequestrum removal.

SMALL CURVED RONGEURS

001300 Small Curved Rongeur 4mm Bite 170mm Long

Mini-Friedman

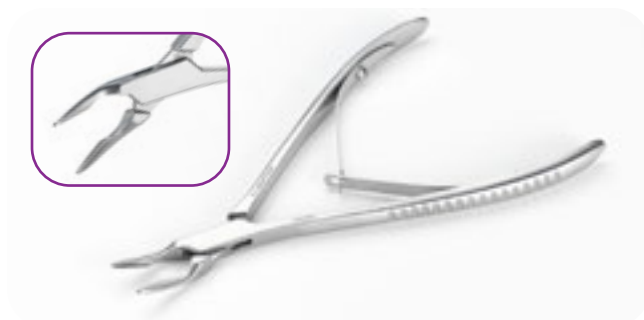


Useful in bulla osteotomy.

MINI-FRIEDMAN

142501 Mini-Friedman Rongeur Curved 3mm Bite 160mm Long

Micro-Friedman

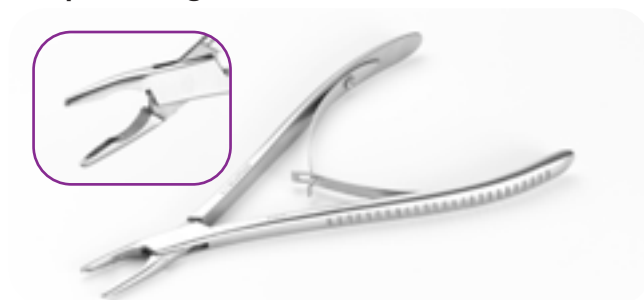


A small spine rongeur.

MICRO-FRIEDMAN

142502 Micro-Friedman Rongeur Curved 2.2mm Bite 155mm Long

Lempert Straight



Useful for spines and bulla osteotomy.

LEMPERT STRAIGHT

6730/10 Lempert Rongeurs Straight 3mm Bite 190mm Long

Compound Action Rongeurs

The compound action give a mechanical advantage to the surgeon but reduces the bite width.

Jansen



Compound action, powerful but small bite.

JANSEN

142200 Jansen Rongeur Curved 4mm Bite 190mm Long

Ruskin



A heavy duty compound action rongeur.

RUSKIN

142270 Ruskin (Liston) Rongeur Compound Action Curved 6mm Bite 230mm Long

Stille-Luer



A very large rongeur.

STILLE-LUER

142305 Stille-Luer Heavy Compound Action Curved 8mm Bite 225mm

Bone Cutters

Simple Action Cutters

Small Angled Cutters

A very useful small cutter. The jaw is angled to allow cutting where access is restricted, e.g. excision arthroplasty in cats and small dogs and tibial crest transplant. The design allows for transection of the tibial crest while retaining distal periosteal attachments. Also useful for articular cartilage removal in arthrodesis, digit and tail amputations.



SMALL ANGLED CUTTERS

001310 Small Angled Cutter 15mm Blade 170mm Long

Large Angled Cutters



Similar style to the Small Angled Cutters, but more powerful and more robust due to their size. The simple action allows a wider jaw opening. The angled jaws, more slender than similar sized Liston's, offer better visibility and access into tight spots. The notch in the jaws serves to improve visibility further and make accurate cuts more achievable.

LARGE ANGLED CUTTERS

001311 Large Angled Cutters 19mm Jaw 230mm Long

Liston



A widely used bone cutter with jaw options: straight & angled.

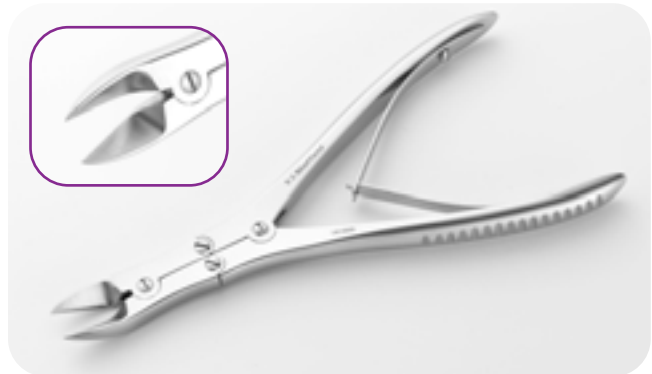
LISTON

I41700 Liston Bone Cutters 23mm Blade Str 140mm Long
I41710 Liston Bone Cutters 20mm Blade Aof 140mm Long
I41730 Liston Bone Cutters 24mm Blade Str 170mm Long
I41740 Liston Bone Cutters 30mm Blade Aof 190mm Long
I41755 Liston Bone Cutters 25mm Blade Str 190mm Long
I41764 Liston Bone Cutters 30mm Blade Aof 200mm Long
I41745 Liston Bone Cutters 32mm Blade Str 220mm Long

Compound Action Bone Cutters

All three following designs are similar but vary according to size of bite.

McIndoe

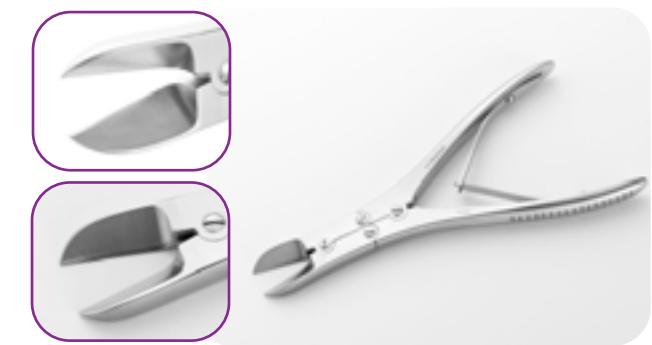


Compound jointed action gives power but reduces bite size.

MCINDOE

I41900 McIndoe Bone Cutter 15mm Blade Aof 170mm Long

Ruskin



Similar in design to McIndoe but larger.

RUSKIN

I41940 Ruskin (Liston) 25mm Blade Str 190mm Long

I41960 Ruskin (Liston) 25mm Blade Aof 190mm Long

Horsley



Heavy duty compound action cutters.

HORSLEY

I41660 Horsley Cutter 35mm Blade Aof 260mm Long

I41660S Horsley Cutter 35mm Blade Str 260mm Long

Periosteal Elevators

Periosteal Elevator/ Bone Lever

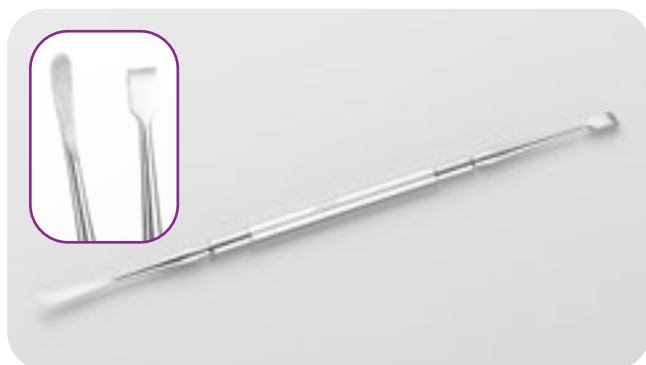


One end of this instrument is bent for use as a hook for retrieving and manipulating bone fragments. The other end is a periosteal elevator useful for clearing soft tissue from bone prior to plating, drilling or burring.

PERIOSTEAL ELEVATOR/ BONE LEVER

001270 Bone Lever/ Periosteal Elevator 4mm/ 7mm 195mm Long

Freer Periosteal Elevator



The Freer Elevator is a fine instrument which is particularly useful in spinal work.

FREER PERIOSTEAL ELEVATOR

7350/05 Freer Periosteal Elevator 5mm 180mm Long

Howarth Dissector (Modified)



Developed by Richard Whitelock specifically to clear soft tissues from the proximal tibia in the TPLO procedure. It is also useful as a general purpose periosteal elevator. One end acts as a curved periosteal elevator and the other end is straight.

HOWARTH DISSECTOR (MODIFIED)

001273 Howarth Dissector (Modified) 225mm Long

AO Type Periosteal Elevator



The AO type instrument is the archetypal 'periosteal elevator'. Available in a curved 6mm tip and a square 6mm tip.

AO TYPE PERIOSTEAL ELEVATORS

001271 AO Type Periosteal Elevator PTFE Handle Curved 6mm 180mm

001274 AO Type Periosteal Elevator PTFE Handle Square Ended Tip 6mm 190mm

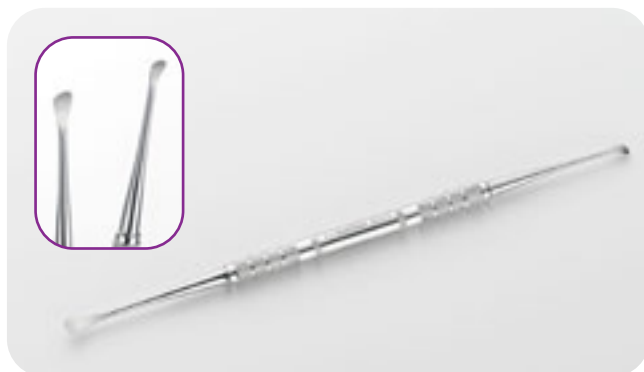
Periosteal Elevator Very Fine



PERIOSTEAL ELEVATOR VERY FINE

001272 Periosteal Elevator Very Fine 2mm/ 3mm 180mm Long

Molt Periosteal Elevator (4mm/6mm)



Molt is a Double Ended Periosteal Elevator. The two tips are round and dished. 4mm and 6mm diameters.

MOLT PERIOSTEAL ELEVATOR (4MM/6MM)

001275 Molt Periosteal Elevator 200mm

MIPO Minimally Invasive Plate Osteosynthesis Elevator



This instrument is not so much a periosteal elevator more a dissecting probe to clear a tunnel under muscle layers for the plate. The periosteum is in fact left intact.

MIPO ELEVATOR

001276 MIPO Elevator 280mm Long

Offset K/A Wire Punch For Bent Pins



The bigger, angled foot of this punch is designed to allow bent-over arthrodesis or K wires to be driven home onto the bone surface. May also be used for Rush pins.

OFFSET K/A WIRE PUNCH FOR BENT PINS

001364 Offset K/A Wire Punch For Bent Pins 135 mm Long

'K'/'A' Wire/ Small Pin Punch



The cut ends of 'K' Wires, Arthrodesis Wires and small pins used for fragment fixation e.g. distal femoral fractures, should be buried beneath the bone or articular surface to minimise soft tissue irritation. The tip of the punch is concave to locate onto the pin end. The other end is struck with a mallet. Use 001360 for Pins and 001361 for Wires.

'K'/'A' WIRE/ SMALL PIN PUNCH

001360 'K'/'A' Wire/ Small Pin Punch 135mm Long

001361 Small Pin Punch 1.6mm Tip 135mm Long

IM Pin Punch

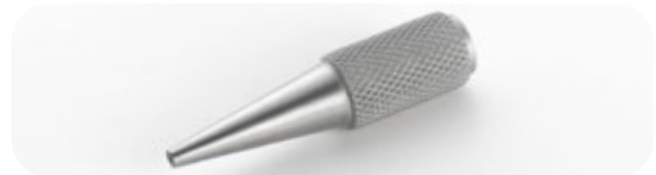


IM Pin Punch with a larger diameter tip (6mm) for driving larger pins.

IM PIN PUNCH

001374 IM Pin Punch 135mm Long 6mm Tip

'Stubby' Punch



The reduced working length allows the stubby punch to be held between thumb and forefinger much closer to the patient for increased control. This is especially useful when working without an assistant. 50mm long.

'STUBBY' PUNCH

001363 'Stubby' Punch 50mm Long

'K' Wire Bender



Used to bend K and A wires prior to rotation and seating onto the bone. This instrument is designed to slip over the wire concentrating all the bending forces at the pin/bone interface. The instrument is double ended, the small end is for 0.9mm and 1.1mm wires, the large end is for 1.4mm, 1.6mm & 2.0mm wires.

'K' WIRE/ SMALL PIN BENDER

001362 'K' Wire/ Small Pin Bender 140mm Long

Offset Wire Bender



A robust design for the accurate and reliable creation of bends close to the bone surface. The three cannulations (1.1mm, 1.6mm and 2.0mm) cater for the full range of our arthrodesis wires. The short length of each cannulation makes these easy to clean.

OFFSET WIRE BENDER

001373 Offset Wire Bender

Osteotomes, Chisels & Gouges

Modular Osteotome with Ultra-thin Interchangeable Blades and Diamond Rasp



PTFE osteotome handle which accepts a good range of blades plus a diamond rasp (not included in set). Blades are very thin (1.1mm) allowing fine cuts and reducing the incidence of braking the block during block sulcoplasty procedures.

Replacement T wrench and retaining screw are also available.

MODULAR OSTEOTOME

- 001380 Modular Osteotome complete with 7 Blades
- 001382 Modular Osteotome Replacement Blade 4mm
- 001390 Modular Osteotome Replacement Blade 5mm
- 001383 Modular Osteotome Replacement Blade 6mm
- 001384 Modular Osteotome Replacement Blade 8mm
- 001385 Modular Osteotome Replacement Blade 10mm
- 001386 Modular Osteotome Replacement Blade 12mm
- 001387 Modular Osteotome Replacement Blade 15mm
- 001388 Modular Osteotome Replacement Blade 20mm
- 001389 Modular Diamond Rasp 6mm
- 001380SCREW Spare Screw for Modular Osteotome Handle

Osteotomes - Swedish Pattern



Use an osteotome to make a precise elective cut, e.g. trochanteric osteotomy, excision arthroplasty.

OSTEOTOMES SWEDISH

- 623880 Osteotome Swedish 30mm 205mm Long
- 623870 Osteotome Swedish 25mm 205mm Long
- 623860 Osteotome Swedish 20mm 205mm Long
- 623850 Osteotome Swedish 15mm 205mm Long
- 623840 Osteotome Swedish 12mm 205mm Long

Osteotomes - Light Pattern



Use an osteotome to make a precise elective cut, e.g. trochanteric osteotomy, excision arthroplasty.

OSTEOTOMES LIGHT

- 001341 Osteotome Light 15mm 140mm Long
- 001342 Osteotome Light 12mm 140mm Long
- 001343 Osteotome Light 10mm 140mm Long
- 001344 Osteotome Light 8mm 140mm Long
- 001345 Osteotome Light 6mm 140mm Long
- 001346 Osteotome Light 4mm 140mm Long

'Stubby' Osteotome



Available from 3mm to 14mm and as a set at a significantly discounted price. 70mm long

'STUBBY' OSTEOTOME

- 001366 'Stubby' Osteotome 3mm 70mm Long
- 001367 'Stubby' Osteotome 4mm 70mm Long
- 001368 'Stubby' Osteotome 6mm 70mm Long
- 001369 'Stubby' Osteotome 8mm 70mm Long
- 001370 'Stubby' Osteotome 10mm 70mm Long
- 001371 'Stubby' Osteotome 12mm 70mm Long
- 001372 'Stubby' Osteotome 14mm 70mm Long
- 0013SET 'Stubby' Osteotome Set (one of each)

Chisels Swedish Pattern



Use a chisel where heavier bone removal is required, e.g. sequestrum removal.

CHISELS SWEDISH PATTERN

- I62340** Chisel Swedish Pattern 12mm 205mm Long
- I62350** Chisel Swedish Pattern 15mm 205mm Long
- I62360** Chisel Swedish Pattern 20mm 205mm Long
- I62370** Chisel Swedish Pattern 25mm 205mm Long

Gouges



Use a gouge where bone contouring is essential.

GOUGES

- 001355S** Gouge 12mm 140mm Long
- 001355** Gouge 12mm 205mm Long
- 001356** Gouge 10mm 140mm Long
- 001357** Gouge 8mm 140mm Long
- 001358** Gouge 6mm 140mm Long
- 001359** Gouge 4mm 140mm Long

Chisels



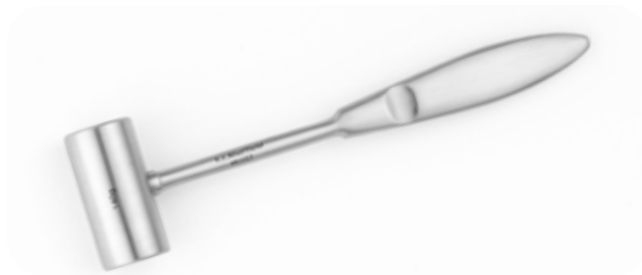
Use a chisel where heavier bone removal is required, e.g. sequestrum removal.

CHISELS

- 001350** Chisel 12mm 140mm Long
- 001351** Chisel 10mm 140mm Long
- 001352** Chisel 8mm 140mm Long
- 001353** Chisel 6mm 140mm Long
- 001354** Chisel 4mm 140mm Long

Mallets

Orthopaedic Mallet



For use with osteotomes, chisels, gouges and staples. Different weights are available according to surgeon preference and patient size.

ORTHOPAEDIC MALLETS

- 001323** Mallet 140g 155mm Long
- 001320** Mallet 300g 220mm Long
- 001321** Heavy Mallet 500g 240mm Long
- 001325** Nylon Faced Mallet 500g 240mm Long
- 001326** Nylon Faced Mallet 300g

Bone Scoop

Volkman Bone Scoop



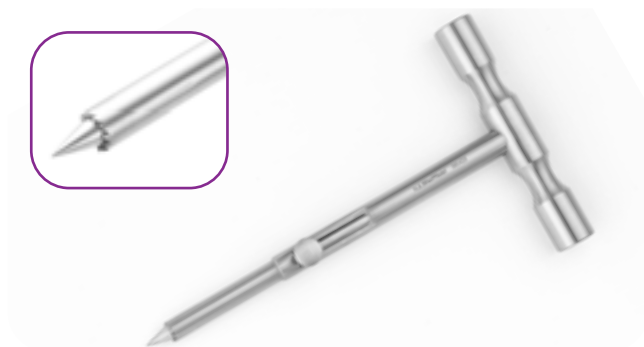
Useful for heavy curettage and collection of cancellous bone grafts.

VOLKMAN BONE SCOOP

782200	Volkman Single Ended Scoop 4mm 170mm Long
782205	Volkman Single Ended Scoop 3mm 170mm Long
782210	Volkman Single Ended Scoop 5mm 170mm Long
782220	Volkman Single Ended Scoop 6mm 170mm Long
782600	Volkman Double Ended Scoop Small 4mm/ 6mm 200mm Long
782610	Volkman Double Ended Scoop Medium 5mm/ 6mm 200mm Long
782620	Volkman Double Ended Scoop Large 6mm/ 8mm 200mm Long

Trephine

Trephine



Stainless steel and re-usable with a retractable stylet. Extend the stylet to provide secure location at the trephine site until trephine teeth bite. Withdraw the stylet to harvest the bone. Push the bone core out using the stylet. Where a very long core is required the stylet may be removed completely.

- Creation of window for bone graft harvest.
- Cortical bone biopsy.

TREPHINES

001425	Trephine 8mm o/d 6mm Core 170mm Long
001426	Trephine 6mm o/d 4mm Core 115mm Long
001427	Trephine 5mm o/d 3mm Core 115mm Long

Orthopaedic Distractors

Vi Pattern Orthopaedic Distractor



Application:

- Overcoming muscle contraction prior to fracture reduction.
- Accurate alignment of bone fragments prior to plating.

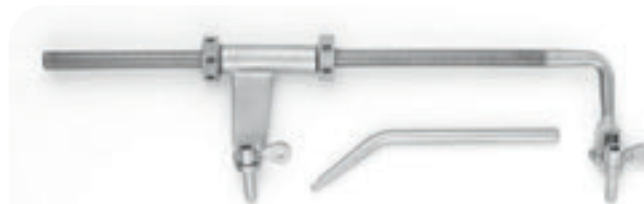
Features:

- Locking wing nuts fix the distractor as a scaffold for the bone fragments to facilitate plating.
- Three joints maximise flexibility.
- Use with external fixation pins 3.2mm to 4.0mm.

VI PATTERN ORTHOPAEDIC DISTRACTOR

001500 Vi Pattern Orthopaedic Distractor 330mm Long

AO Pattern (Human) Orthopaedic Distractor



- Two joints • Heavier • More powerful with tommy bar lever

AO PATTERN (HUMAN) ORTHOPAEDIC DISTRACTOR

001502 Orthopaedic Distractor AO Pattern 410mm Long

Small Distractor with Ratchet



The Small Ratcheted Distractor uses 1.5 or 1.6 'K' or 'A' wires as distraction pins. The pins are driven into place through the tubes on the distractor arm. Threaded pins may be used for additional security. Squeezing the arms of the distractor separates the pins and thus the bone fragments and the ratchet holds them in the new position. Range of distraction 12mm - 60mm.

SMALL DISTRACTOR WITH RATCHET

001503 Small Distractor with Ratchet 185mm Long

Bone Scribe

Bone Scribe



A very sharp marking point with an easy to hold handle enables the surgeon to mark bone prior to cutting or rotating (Slocum procedure). One end is pointed and the other is sharpened as a blade.

BONE SCRIBE

001494 Bone Scribe (Double Ended) 200mm Long

Measuring Devices

Stainless Vernier Caliper



Useful for very accurate measurement of screws, drill bits and bone intra-operatively. Supplied with full instructions for use. Accurate to 0.1mm.

STAINLESS VERNIER CALIPER

001490 Vernier Caliper Stainless Steel
001490D Digital Vernier (Non Autoclavable)

Drill & Screw Gauge



Measures screws up to 60mm and drills from 1.1mm to 3.5mm.

DRILL AND SCREW GAUGE

001496 Drill and Screw Gauge 60mm Long

Vi Metric Ruler



Metric ruler covering commoner drill, screw and wire sizes.

VI METRIC RULER

001504 Metric Ruler - VI

Orthopaedic Ruler



Used to measure pins, wires, drills and screw diameter.

ORTHOPAEDIC RULER

001498 Orthopaedic Ruler Imperial 175mm Long

Radiographic Aids

Xray Marker with Scale



A reliable scale is very important, regardless of the system used, particularly when submitting radiographs for an opinion. Left/right markers are essential. A flexible stand is also available allowing this combined marker to be positioned at the same level as the area of interest to improve accuracy.

XRAY MARKERS WITH SCALE

- XRAYMARKI** Xray Marker with Scale Set Left and Right
- XRAYHOLDI** Xray Marker Stand

Chandler's Gonadal Shield



Exposure of the patient's gonads to radiation is undesirable particularly where repeated imaging is likely. The Gonad Shield uses a similar 'goose neck' arrangement on a solid base as is used in the Reference Ball.

CHANDLER'S GONADAL SHIELD

- GSHSET** Chandler's Gonadal Shield Set of 3 with Base
- GSHSMALL** Chandler's Gonadal Shield 50 x 25 x 1.8mm
- GSHMED** Chandler's Gonadal Shield 75 x 40 x 1.8mm
- GSHLARGE** Chandler's Gonadal Shield 100 x 50 x 1.8mm

Radiographic Reference Ball



Reduce scaling errors when templating for implants or examining structures, using digital or analogue systems. Using a spherical object as a reference eliminates errors created by ruler orientation which might not be quite parallel with the plate.

Supplied on a stable base with a flexible neck, allowing positioning at the same level as the area of interest.

RADIOGRAPHIC REFERENCE BALL

- XRAY25MM** Radiographic Reference Ball 25mm Diameter
- XRAY10MM** Radiographic Reference Ball 10mm Diameter













Implant Selection

Selecting an implant of suitable strength and stiffness is vital. Too weak and an implant will fail, and too stiff an implant may delay bone healing. Templating is an essential part of the selection process and helps to guide implant selection. There may be more than one suitable plate option.

When more than one plate might suit an application, one implant style may be preferable to others. There are a number of different reasons why this might be so; often the final decision will come down to individual surgeon preference, experience, and what equipment the surgeon has available.

It is important that the plate chosen is sufficiently stiff and strong for its intended purpose, but not so stiff as to stress protect the bone potentially contributing to osteopenia or non-union. Stiff implants can also create significant stress risers at the end of the implant that can cause bone fracture. Here we describe a range of plates available and their differences; on the facing page is a guide to selecting an appropriate plate for a specific fracture scenario.

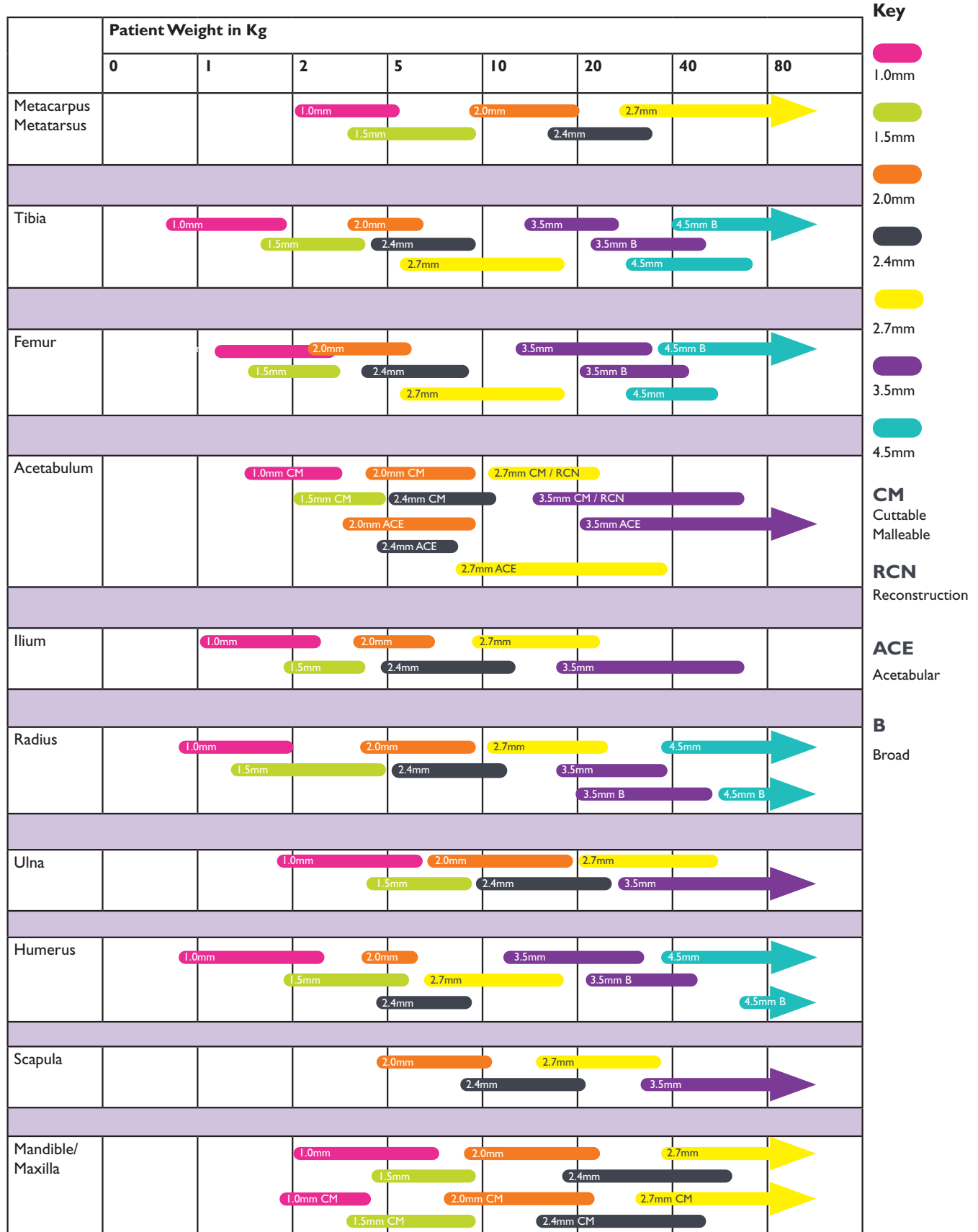
Plate Type	Features
<p>Locking Plates</p> 	<p>Our stacked-hole locking design can be used with locking screws or non-locking screws. No other locking system so far tested and published outperforms ours. Locking screws have a larger core diameter than standard non-locking cortical screws, so are stronger and stiffer than cortical screws. Locking plates have a number of advantages, i.e. excellent bone holding characteristics in poor quality bone. The plate is not compressed onto the bone therefore associated periosteal damage is avoided, accurate plate contouring is not essential, and mono-cortical screws can be used as they are angle stable</p>
<p>Dynamic Locking Plates</p> 	<p>Combining compression and locking technology in one plate. 270° of locking thread engagement in plate for superior security. Compression section of hole allows up to 35° of screw angulation. Suitable for MIPO application - spade end for easier insertion, single full locking hole at opposite end allows drill guide to be used to aid plate manipulation.</p>
<p>Compression Dynamic Compression Plates (DCPs)</p> 	<p>The dynamic compression plate has been the standard setting implant for human and veterinary orthopaedics for decades. It continues to be our most popular plate style. The design of the plate holes allows for a large range of screw insertion angles compared to round holes. Fracture compression permits primary bone healing with minimum callus. Placing a screw at the end of a plate hole furthest from the fracture will compress the fractured bone ends together as the screw is tightened. Compression plates can also be used in neutralisation and bridging modes. Care needs to be taken in bridging mode as the plate is subject to greater bending forces that can cause premature failure.</p>
<p>Limited Contact Compression Plates</p> 	<p>Because of their undercuts, these plates undergo a more complex manufacturing process than regular plates, making them more expensive. However, with the resultant reduced bone contact, they cause less periosteal vascular damage than regular plates, in theory facilitating more rapid bone healing. The undercuts also allow the plates to be contoured evenly, and make failure over a hole less likely. Limited contact plates can be used to create compression in the same way as dynamic compression plates.</p>
<p>Cuttable Plates</p> 	<p>Available in 1.0mm to 3.5mm sizes, the versatility of these plates lies in their close hole spacing and they can be cut to length intra-op. They are not as stiff or as strong as compression plates of the equivalent size so they are often used in conjunction with other fixation methods e.g. in combination with IM pinning, double plating including stacked plating, edge-loaded, or where elastic osteogenesis is considered advantageous.</p>
<p>Cuttable Malleable Plates</p> 	<p>Less stiff and less strong than the cuttable plates, but easy to contour in multiple directions and with close hole spacing that makes them very adaptable for non-load-bearing situations. Typically these plates would be used as neutralisation plates where the surface anatomy of the bone makes it challenging to accurately contour a regular plate e.g. the humeral condyle or the pelvis. Relatively weak plates that should only be used on small bones or in conjunction with other fixation devices.</p>
<p>Reconstruction Plates</p> 	<p>Easy to contour in multiple directions, these are both stronger and stiffer than the cuttable malleable plates, but less strong and stiff than compression plates. Typically these plates are used as neutralisation plates where the surface anatomy of the bone is challenging to accurately contour a regular plate over e.g. the humeral condyle or the pelvis.</p>
<p>ASYM[®] Plates</p> 	<p>Plate design combining the established principles of round hole and compression plates. These are more adaptable than symmetrical compression plates and particularly suit a fracture or osteotomy scenario where one fragment is significantly smaller than the other. The round holes provide greater screw stability in the smaller fragment whilst compression can still be applied from the longer segment.</p>
<p>Biological Healing Plates (BHPs)</p> 	<p>When fractures cannot be re-constructed, compression holes are unnecessary, and round holes are more stable. BHPs have a solid and stiff mid-section, designed to bridge a non-reconstructed fracture in bridging mode.</p>
<p>Round Hole</p> 	<p>Where compression cannot be achieved, round holes provide a more stable screw/plate interface than compression holes. Round holes can be spaced closer together than compression holes, which can be very useful when working with small fragments.</p>

Vi Plate Selection Chart

This chart is for **guidance only** and precise implant selection depends on a number of factors which are to be considered when assessing the fracture healing score and the mechanical behaviour of implants; this should be taken into account when making a definitive selection.

Unless otherwise stated, values apply to Vi compression, limited contact compression, ASYM®. round hole and biological healing plates.

Scaled plate profiles are available in the catalogue or download the profiles from our website www.vetinst.com



Drills & Equipment for Locking Screws

	1.5mm	2.0mm	2.4mm	2.7mm	3.5mm	3.5mm
Pilot Drill	1.1mm	1.5mm	1.8mm	2.0mm	2.8mm	2.8mm
Round Shank	H090100	H090101	H090208	H090102	H090103	H090103
AO Quick Fit	S090100S	S090101S	S090208	S090102S	S090103S	S090103S
Tap						
AO Quick Fit	TSL515-A (Dental fit)	TSL520-A (Dental fit)	TSL524	TSL527	TSL535	TSL535
Screwdriver Type	T4 Star	T6 Star	T8 Star	T8 Star	T15 Star	2.5 Hex
Star Head	SDT415-A & DC20-A	SDT620-A & DC20-A	SDT82427 & QRCH18	SDT82427 & QRCH18	SDT1535 & QRCH18	
Hex Head	N/A	N/A	N/A	N/A		SDHS35POM-C

Drills & Equipment for Cortical Self Tapping Screws

	1.0mm	1.5mm	2.0mm	2.4mm	2.7mm	3.5mm	4.5mm
Pilot Drill	0.7mm	1.1mm	1.5mm	1.8mm	2.0mm	2.5mm	3.2mm
Round Shank	N/A	H090100	H090101	H090208	H090102	H090112	H090105S
AO Quick Fit	10MDB07-A (Dental Fit)	S090100S	S090101S	S090209	S090102S	S090112S	S090105S
Clearance Drill	1.0mm	1.5mm	2.0mm	2.4mm	2.7mm	3.5mm	4.5mm
Round Shank	N/A	H090101	H090102	H090209	H090104	H090106S	H090108S
AO Quick Fit	10MDB10-A (Dental Fit)	S090101s	S090102S	S090209	S090104S	S090106S	S090108S
Screwdriver Type		1.5 Hex	1.5 Hex	1.5 Hex	2.5 Hex	2.5 Hex	3.5 Hex
	Cruciate	1.5 Cruciate	1.5 Cruciate	1.5 Cruciate			
Star Drive	N/A	SDT415-A & DC20-A	SDT620-A & DC20-A	SDT82427 & QRCH18	SDT81427 & QRCH18	SDT1535 & QRCH18	N/A
Hex Head	N/A	SDHS20F-I	SDHS20F-I	SDHS20F-I	SDHS35POM-C	SDHS35POM-C	SDH3500
Cruciate Head	SDIN1.0-A & DC20-A	SDX1520 SDXQRD1520-A & DC20-A	SDX1520 SDXQRD1520-A & DC20-A	SDX24 SDXQR24 & QRCH18	SDH35S & QRCH18 N/A	SDH35S & QRCH18 N/A	N/A

Drills & Equipment for Cortical Non Self Tapping Screws

	1.5mm	2.0mm	2.7mm	3.5mm	4.5mm	5.5mm
Pilot Drill	1.1mm	1.5mm	2.0mm	2.5mm	3.2mm	4.0mm
Round Shank	H090100	H090101	H090102	H090112	H090205S	H090107
AO Quick Fit	S090100S	S090101S	S090102S	S090112S	S090105S	S090107
Tap						
Quick Fit	TD0015	TD0020	TS0027	TS12535	TS00045	TS00055
'T' Bar	TBT015	TBT020	TBT027	TBT12535	N/A	N/A
Clearance Drill	1.5mm	2.0mm	2.7mm	3.5mm	4.5mm	5.5mm
Round Shank	H090101	H090102	H090104	H090106S	H090108S	H090109
AO Quick Fit	S090101S	S090102S	S090104S	S090106S	S090108S	S090109
Screwdriver Type	1.5 Hex	1.5 Hex	2.5 Hex	2.5 Hex	3.5 Hex	3.5 Hex
Hex Head	SDHS20F	SDHS20F	SDHS35POM-C	SDHS35POM-C	SDH3500	SDH3500
Cruciate Head	N/A	N/A	N/A	N/A	N/A	N/A

Drills & Equipment for Cancellous Screws

	Small Cancellous 2.2mm	Small Cancellous 3.0mm	Small Cancellous 3.5mm	Cancellous 4.0mm	Cancellous 6.5mm
Pilot Drill	1.5mm	2.0mm	2.0mm	2.5mm	3.2mm
Round Shank	H090101	H090102	H090102	H090112	H090105S
AO Quick Fit	S090101S	S090102S	S090102S	S090112S	S090105S
Tap					
AO Quick Fit	N/A	N/A	TS17535	TS17535	TS00065
'T' Bar	N/A	N/A	TBT17535	TBT17535	TBT065
Clearance Drill	2.0mm	3.0mm	3.5mm	4.0mm	6.5mm
Round Shank	H090102	H090205	H090106S	H090107	N/A
AO Quick Fit	S090102S	N/A	S090106S	S090107	N/A
Screwdriver Type	1.5 Hex	2.5 Hex	2.5 Hex	2.5 Hex	3.5 Hex
Hex Head	SDHS20F	SDHS35POM-C	SDHS35POM-C	SDHS35POM-C	SDH3500
Cruciate Head	N/A	N/A	N/A	N/A	N/A

Plates

1.0mm Plates

1.0mm Plates

1.0mm implants currently available consist of a range of straight plates, cuttable plates and an extensive range of 'T' plates for radial fractures.

1.0mm Compression Plates

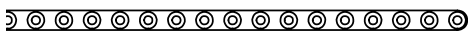
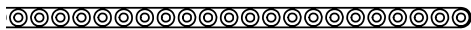


Scaled plate profiles on page 347.

1.0 MM COMPRESSION PLATES

	No. of Holes	Thickness (mm)	Length (mm)
C100210	2	1.0	10
C100314	3	1.0	14
C100418	4	1.0	18
C100522	5	1.0	22
C100626	6	1.0	26
C100730	7	1.0	30
C100834	8	1.0	34
C100938	9	1.0	38
C101042	10	1.0	42

1.0mm Cuttable Plates



The Vi range of Cuttable 1.0mm Plates gives flexibility for new management options for a number of different fracture scenarios. All of our Cuttable Plates have round holes. The range is suited to fractures of the small bones of the pes and manus, such as the metacarpal bones, as well as other fine bones such as the ulna and fibula. They should also find a home in the management of long bone fractures on very small animals as well as jaw and pelvic repairs where space is at a premium.

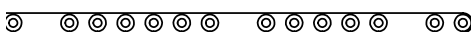
Use the dedicated Compound Action Implant Cutters (001230) to cut plates.

Scaled plate profiles on page 347.

CUTTABLE 1.0MM PLATE

CP10390	Cuttable Plate 1.0mm 30 Holes 90mm Long
CP10491	Cuttable Plate 1.0mm 23 Holes 91mm Long
CM10390	Cuttable Malleable Plate 1.0mm 30 Holes 90mm Long

1.0mm Cuttable Plates with Spaces



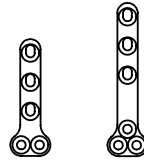
1.0mm Cuttable Plate with Spaces to give the surgeon additional options. Versions are available with either 3mm or 4mm hole spacing.

Scaled plate profiles on page 347.

CUTTABLE 1.0MM PLATE WITH SPACES

CP1039027	Cuttable Plate 1.0mm 27 Holes 90 mm 3mm Spaces
CP1049120	Cuttable Plate 1.0mm 20 Holes 91 mm 4mm Spaces

1.0mm 'T' Plates



The 1.0mm 'T' Plates have been designed by Vi to provide options for the repair of distal radial fractures in very small dogs and in cats. These fractures can be difficult to manage, partly because of the small sizes of the bones involved and partly because the area has relatively poor vascularity resulting in what is often a prolonged healing time.

The spacing between the head holes and the shank holes increases from the A-series to the B-series with two extended options in the C-series to permit fracture repair at different levels of the distal radius. The C-series plates have space for a third head screw. This provides greater repair stability and the C-series are strongly advised when the distal fragment is large enough.

Scaled plate profiles on page 347.

1.0 MM 'T' PLATES

	Series	No. of Holes	Thickness (mm)	Length (mm)
T101016	A	5	1.0	16
T101020	A	6	1.0	20
T101024	A	7	1.0	24
T101018	B	5	1.0	18
T101022	B	6	1.0	22
T101026	B	7	1.0	26
T101021	C	6	1.0	21
T101027	C	7	1.0	27

1.5mm Plates

1.5mm Compression Plates



The increasing popularity of smaller patients has created quite a demand for dedicated 1.5mm compression plates. These are 1.5mm specific implants. Because they do not have screw holes large enough for 2.0mm screws, these can be narrower and lower profile than 1.5/2.0mm implants or 2.0mm implants whilst maintaining sufficient material around the screw holes for strength.

Scaled plate profiles on page 321.

1.5 MM COMPRESSION PLATES

	No. of Holes	Thickness (mm)	Length (mm)
C150420	4	1.0	20
C150525	5	1.0	25
C150629	6	1.0	29
C150734	7	1.3	34
C150838	8	1.3	38
C150943	9	1.3	43
C151047	10	1.3	47
C151152	11	1.3	52
C151256	12	1.3	56
C151465	14	1.3	65
C151674	16	1.3	74

1.5mm Cuttable Plates



Width 4mm
Thickness 1.1mm
Hole Spacing 4mm

Use for fracture stabilisation of very small bones e.g metacarpals and metatarsals. 1.5 mm screws are an exact match but 2.0 will pass through the holes. This plate is cuttable and stackable. The plate profile is convex for added strength.

Scaled plate profiles on page 341.

CUTTABLE 1.5MM PLATES

CP15413030 Cuttable Plate 1.5/2.0 Screws 30 Holes 120 mm Long

CUTTABLE 1.5MM PLATE WITH SPACES

CP15413027 Cuttable Plate with Spaces 1.5/2.0 Screws 27 Holes 120 mm Long

1.5mm Cuttable Malleable Plate



Width 4.3mm
Thickness 1mm
Hole Spacing 4mm

This notched version of the Standard Cuttable 1.5mm Plate enables easy three dimensional contouring.

Scaled plate profiles on page 341.

CUTTABLE MALLEABLE 1.5MM PLATE

CM15413030 Cuttable Malleable 1.5mm Plate 1.5 Screws 30 Holes 121mm Long

1.5mm Cuttable Broad Plate



Width 5.5mm
Thickness 1.8mm
Hole Spacing 4mm

These have exactly the same spacing as the Standard 1.5 Cuttable Plates, but in a significantly more robust profile.

Scaled plate profiles on page 341.

CUTTABLE BROAD 1.5MM PLATE

CP15413030B Cuttable Broad 1.5mm Plate 1.5 Screws 30 Holes 121mm Long

1.5mm Cuttable Broad Plate with Spaces



Width 5.5mm
Thickness 1.8mm
Hole Spacing 4 & 8mm

These have exactly the same spacing as the Standard 1.5 Cuttable Plates with Spaces, but in a significantly more robust profile.

Scaled plate profiles on page 341.

CUTTABLE BROAD WITH SPACES 1.5MM PLATE

CP15413027B Cuttable Broad with Spaces 1.5mm Plate 1.5 Screws 27 Holes 121mm Long

2.0mm Plates

2.0mm Compression Plates



Use with 2.0mm Cortical Screws if compression is required.

Scaled plate profiles on page 321.

2.0MM COMPRESSION PLATES

	No. of Holes	Thickness (mm)	Length (mm)
CP20422	4	1.0	22
CP20527	5	1.0	27
CP20632	6	1.0	32
CP20737	7	1.5	37
CP20842	8	1.5	42
CP201052	10	1.5	52
CP201262	12	1.5	62
CP201472	14	1.5	72
CP201682	16	1.5	82
CP201892	18	1.5	92

2.0mm ASYM® Plates

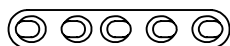


Scaled plate profiles on page 321.

2.0MM ASYM®

CODE	No of. Holes	Length in mm
ASYM20030437	4/3	37
ASYM20030542	5/3	42
ASYM20030647	6/3	47
ASYM20030752	7/3	52
ASYM20040652	6/4	52
ASYM20030857	8/3	57
ASYM20040757	7/4	57
ASYM20030962	9/3	62
ASYM20040862	8/4	62
ASYM20031067	10/3	67
ASYM20040967	9/4	67
ASYM20031172	11/3	72
ASYM20041072	10/4	72

2.0mm Mini Bone Plates



Use with 2mm Cortical Screws if compression is required.

Scaled plate profiles on page 321.

2.0MM MINI BONE PLATES

	3 (Number of Holes)	17 (Length in mm)
MP20317	4	23
MP20423	5	29
MP20529	6	35
MP20635	7	41

2.0mm Cuttable Plate



Width 5.0mm

Thickness 1.4mm

Hole Spacing 5.0mm

This Plate is cuttable and stackable. The holes are round. The plate profile is convex for added strength. Also available in a notched version for easy three dimensional contouring. This is the cuttable malleable plate.

Scaled plate profiles on page 341.

CUTTABLE 2.0MM PLATE

CP205150 Cuttable Plate 2.0 Screws 30 Holes 150 mm Long

CM205150 Cuttable Malleable Plate 2.0 Screws 30 Holes 150mm Long

2.0mm Cuttable Plate with Spaces



Width 5.0mm

Thickness 1.4mm

Hole Spacing 5.0mm

Scaled plate profiles on page 341.

CUTTABLE 2.0MM WITH SPACES PLATE

CP20515027 Cuttable Plate 2.0 Screws 27 Holes 150 mm Long

2.0mm Cuttable Broad Plate



Width 6mm

Thickness 2.0mm

Hole Spacing 5mm

These have exactly the same spacing as the Standard 2.0 Cuttable Plates, but in a significantly more robust profile.

Scaled plate profiles on page 341.

CUTTABLE 2.0MM BROAD PLATE

CP205150B Cuttable Broad 2.0mm Plate 2.0 Screws 30 Holes 150 mm Long

2.0mm Cuttable Broad with Spaces Plate



Width 6mm
 Thickness 2.0mm
 Hole Spacing 5 & 10mm

These have exactly the same spacing as the Standard 2.0 Cuttable Plates with Spaces, but in a significantly more robust profile.

Scaled plate profiles on page 341.

CUTTABLE 2.0MM BROAD WITH SPACES PLATE

CP20515027B Cuttable Broad - Spaces 2.0mm Plate 27 Holes 150 mm Long

2.0mm Double Compression Cuttable Plate



Width 5.5mm
 Thickness 1.5mm
 Hole spacing 6mm

A unique plate design developed by Vi. The Double Compression Cuttable Plate allows compression no matter where the Plate is positioned.

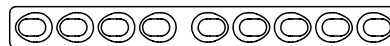
Scaled plate profiles on page 341.

DOUBLE COMPRESSION CUTTABLE 2.0MM PLATE

DCCP206150 Double Comp Cuttable Plate 2.0mm 25 Holes 150mm Long

2.4mm Plates

2.4mm Compression Plates



2.0 DCPs are often too small and 2.7 DCPs are often too large. The 2.4 DCP falls exactly in between the 2.0 and the 2.7 in terms of weight and hole size and spacing.

2.0mm and 2.7mm cortical screws may be used with the 2.4 mm DCP plate. 2.4 DCPs have a matte finish to distinguish them from 2.0 and 2.7 plates.

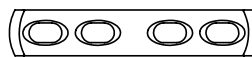
Use LNDG24 Load Neutral Drill Guide to obtain compression with 2.4 cortical screws. Use BX24CS as an equipment box for 2.4mm screws and plates.

Scaled plate profiles on page 322.

2.4MM COMPRESSION PLATES

	No of Holes	Length in mm
C240431	4	31
C240538	5	38
C240645	6	45
C240752	7	52
C240859	8	59
C240966	9	66
C241073	10	73
C241180	11	80
C241287	12	87
C2414101	14	101
C2416115	16	115

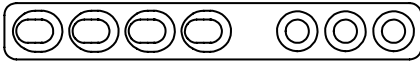
2.4mm Limited Contact (LC) Compression Plate



Scaled plate profiles on page 322.

2.4MM LIMITED CONTACT (LC) COMPRESSION PLATES

	No of Holes	Length in mm
LC2404038	4	38
LC2405046	5	46
LC2406054	6	54
LC2407062	7	62
LC2408070	8	70
LC2409078	9	78
LC2410086	10	86
LC2411094	11	94
LC2412102	12	102

2.4mm ASYM® Plates

Scaled plate profiles on page 322.

2.4MM ASYM® PLATES

CODE	No of Holes	Length in mm
ASYM240304052	4/3	52
ASYM240305059	5/3	59
ASYM240306066	6/3	66
ASYM240307073	7/3	73
ASYM240406073	6/4	73
ASYM240308080	8/3	80
ASYM240407080	7/4	80
ASYM240309087	9/3	87
ASYM240408087	8/4	87
ASYM240310094	10/3	94
ASYM240409094	9/4	94
ASYM240311101	11/3	101
ASYM240410101	10/4	101

2.0/2.4/2.7 Veterinary Cuttable Plate

Width 7.1mm
Thickness 1.2mm
Hole Spacing 6.0mm

This is a familiar plate with a curved 1/4 tubular profile, 300mm long with a hole every 6mm. The following screws 2.0mm, 2.2mm, 2.4mm, 2.7mm, 3.0mm all fit making the plate a very useful implant to have available. For added strength these plates can be stacked.

Scaled plate profiles on page 341.

2.0/2.4/2.7 VETERINARY CUTTABLE PLATE

VCP202427 2/2.4/2.7 Cuttable Plate 300mm 50 Holes

2.0/2.4/2.7 Veterinary Cuttable Broad Plate

Width 7.1mm
Thickness 2mm
Hole Spacing 6mm

These have exactly the same spacing as the standard 2.0/2.4/2.7 VCP but in a significantly more robust profile.

Scaled plate profiles on page 341.

2.0/2.4/2.7 VETERINARY CUTTABLE BROAD PLATE

VCP202427B 2.0/2.4/2.7 CuttableBroad Plate 300mm 50 holes

2.4mm Cuttable Plate

Width 5.5mm
Thickness 1.8mm
Hole Spacing 5.5mm

Scaled plate profiles on page 341.

CUTTABLE 2.4MM PLATE

CP2455150 Cuttable Plate 2.4 Screws 27 Holes 150mm Long
CM2455150 Cuttable, Malleable Plate 2.4 Screws 27 Holes 150mm

2.4mm Cuttable Plate with Spaces

Width 5.5mm
Thickness 1.8mm
Hole Spacing 5.5mm

Scaled plate profiles on page 341.

CUTTABLE 2.4MM PLATE WITH SPACES

CP245515024 Cuttable Plate 2.4 Screws 24 Holes 150 mm Long

2.4mm Double Compression Cuttable Plate

Width 6.5mm
Thickness 1.8mm
Hole Spacing 7mm

A unique Plate design developed by Vi. The Double Compression Cuttable Plate allows compression no matter where the Plate is positioned.

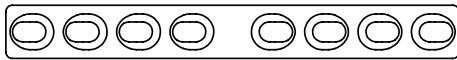
Scaled plate profiles on page 341.

DOUBLE COMPRESSION CUTTABLE 2.4MM PLATE

DCCP247150 Double Comp Cuttable Plate 2.4mm 21 Holes 150mm Long

2.7mm Plates

2.7mm Compression Plates

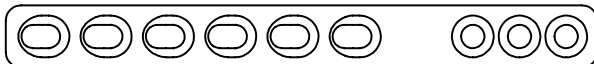


Use with 2.7mm Cortical Screws to produce fracture site compression.
Scaled plate profiles on page 323.

2.7MM COMPRESSION PLATES

	No. of holes	Thickness (mm)	Length (mm)
C2702020	2	2.0	20
C2704036	4	2.0	36
C2705044	5	2.0	44
C2706052	6	2.0	52
C2707060	7	2.5	60
C2708068	8	2.5	68
C2709076	9	2.5	76
C2710084	10	2.5	84
C2712100	12	2.5	100
C2714116	14	2.5	116
C2716132	16	2.5	132
C2718148	18	2.5	148

2.7mm ASYM® Plates

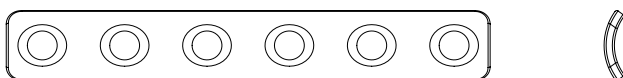


Scaled plate profiles on page 323.

2.7MM ASYM® PLATES

CODE	No. of Holes	Length in mm
ASYM270304060	4/3	60
ASYM270305068	5/3	68
ASYM270306076	6/3	76
ASYM270406076	6/4	76
ASYM270307084	7/3	84
ASYM270407084	7/4	84
ASYM270308092	8/3	92
ASYM270408092	8/4	92
ASYM270309100	9/3	100
ASYM270409100	9/4	100
ASYM270310108	10/3	108
ASYM270410108	10/4	108
ASYM270311118	11/3	118
ASYM270411118	11/4	118

2.7mm Quarter Tubular Plate

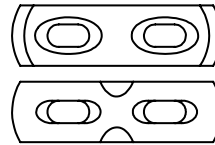


Thin but strong due to the curved profile. Fits the shape of small femurs quite well. Has a wider hole spacing than 2.7mm DCP.

2.7MM 1/4 TUBULAR PLATES

	No of Holes	Length in mm
T2703023	3	23
T2704031	4	31
T2705039	5	39
T2706047	6	47

2.7mm Limited Contact (LC) Compression Plate



Limited Contact (LC) Plates with cutaways.
Scaled plate profiles on page 325.

2.7MM LIMITED CONTACT (LC) COMPRESSION PLATES

	No of Holes	Length in mm
LC2702026	2	26
LC2704044	4	44
LC2705053	5	53
LC2706062	6	62
LC2707071	7	71
LC2708080	8	80
LC2709089	9	89
LC2710098	10	98
LC2712116	12	116
LC2714134	14	134
LC2716152	16	152

2.7mm Cuttable Plate



Width 6.0mm
Thickness 2.0mm
Hole Spacing 6.0mm

This Plate is cuttable and stackable. The cuttable malleable plate profile is convex for added strength. Also available in a notched style for easy 3 dimensional contouring.

Scaled plate profiles on page 341.

CUTTABLE 2.7MM PLATE

CP276150 Cuttable Plate 2.7 Screws 25 Holes 150 mm Long
CM276150 Cuttable Malleable Plate 2.7 Screws 25 Holes 150mm Long

2.7mm Cuttable Plate with Spaces



Width 6.0mm
Thickness 2.0mm
Hole Spacing 6.0mm

Exactly the same profile as our regular cuttable 2.7 but with spaces.

Scaled plate profiles on page 341.

CUTTABLE 2.7MM PLATE

CP27615022 Cuttable Plate with Spaces 2.7 Screws 22 Holes 150 mm Long

2.7mm Cuttable Broad Plate



Width 8mm
 Thickness 2.5mm
 Hole Spacing 6mm

These have exactly the same spacing as the standard 2.7 Cuttable Plates, but in a significantly more robust profile.

Scaled plate profiles on page 341.

CUTTABLE 2.7MM BROAD PLATE

CP276150B Cuttable Broad 2.7 Plate 2.7 Screws 25 Holes 150 mm Long

2.7mm Cuttable Broad Plate with Spaces



Width 8mm
 Thickness 2.5mm
 Hole Spacing 6 & 12mm

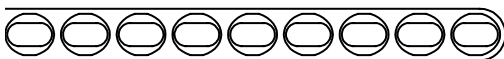
These have exactly the same spacing as the standard 2.7 Cuttable Plates with spaces, but in a significantly more robust profile.

Scaled plate profiles on page 341.

CUTTABLE 2.7MM BROAD PLATE WITH SPACES

CP27615022B Cuttable Plate 2.7 Broad Plate - Spaces 22 Holes 150 mm Long

2.7mm Double Compression Cuttable Plate



Width 7mm
 Thickness 2mm
 Hole spacing 8mm

A unique plate design developed by Vi. The Double Compression Cuttable Plate allows compression no matter where the Plate is positioned.

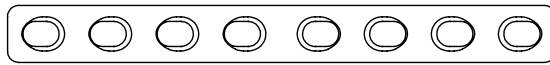
Scaled plate profiles on page 341.

DOUBLE COMPRESSION CUTTABLE 2.7MM PLATE

DCCP278150 Double Comp Cuttable 2.7 Plate 19 Holes 150 mm Long

3.5mm Plates

3.5mm Compression Plate



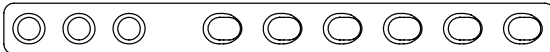
Use with 3.5mm Cortical or 3.5mm or 4.0mm Cancellous Screws to produce fracture compression.

Scaled plate profiles on page 325.

3.5MM COMPRESSION PLATES

	No of Holes	Length in mm
C3502026	2	26
C3503038	3	38
C3504050	4	50
C3505062	5	62
C3506074	6	74
C3507086	7	86
C3508098	8	98
C3509111	9	111
C3510122	10	122
C3512146	12	146
C3514170	14	170
C3516194	16	194
C3518218	18	218
C3520242	20	242

3.5mm ASYM® Plates

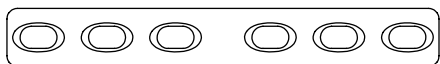


Scaled plate profiles on page 326.

3.5MM ASYM®

CODE	No. of Holes	Length in mm
ASYM350304086	4/3	86
ASYM350305098	5/3	98
ASYM350306110	6/3	110
ASYM350307122	7/3	122
ASYM350406122	6/4	122
ASYM350308134	8/3	134
ASYM350407134	7/4	134
ASYM350309146	9/3	146
ASYM350408146	8/4	146
ASYM350310158	10/3	158
ASYM350409158	9/4	158
ASYM350311170	11/3	170
ASYM350410170	10/4	170
ASYM350312182	12/3	182
ASYM350411182	11/4	182

3.5mm Limited Contact (LC) Compression Plate



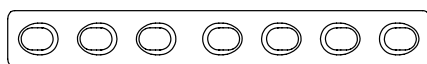
Limited Contact (LC) Plates with cutaways.

Scaled plate profiles on page 330.

3.5MM LIMITED CONTACT (LC) COMPRESSION PLATES

	No of Holes	Length in mm
LC3502030	2	30
LC3503043	3	43
LC3504056	4	56
LC3505069	5	69
LC3506082	6	82
LC3507095	7	95
LC3508108	8	108
LC3509121	9	121
LC3510134	10	134
LC3512160	12	160
LC3514186	14	186
LC3516212	16	212

Broad 3.5mm Compression Plate



This Plate is made from the same plate profile as the Standard 4.5 Narrow Compression Plate but drilled for 3.5 Screws. These Plates are usually impossible to contour without a Bone Plate Press or Roller Type Pliers.

Scaled plate profiles on page 327.

BROAD 3.5MM COMPRESSION PLATES

	No of Holes	Length in mm
BC3504050	4	50
BC3505062	5	62
BC3506074	6	74
BC3507087	7	87
BC3508098	8	98
BC3509110	9	110
BC3510122	10	122
BC3511134	11	134
BC3512146	12	146
BC3513158	13	158
BC3514170	14	170
BC3515182	15	182
BC3516194	16	194
BC3518218	18	218
BC3520242	20	242
BC3522266	22	266

Broad 3.5mm Limited Contact (LC) Compression Plate



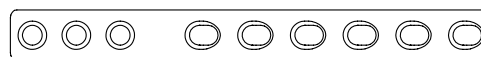
Limited Contact (LC) Plate with cutaways.

Scaled plate profiles on page 330.

BROAD 3.5MM LIMITED CONTACT (LC) COMPRESSION PLATES

	No of Holes	Length in mm
BLC3504056	4	56
BLC3505069	5	69
BLC3506082	6	82
BLC3507095	7	95
BLC3508108	8	108
BLC3509121	9	121
BLC3510134	10	134
BLC3512160	12	160
BLC3514186	14	186
BLC3516212	16	212

Broad 3.5mm ASYM® Plates

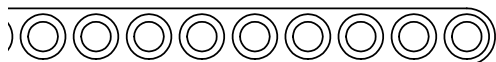


Scaled plate profiles on page 328.

BROAD 3.5MM ASYM® PLATES

CODE	No. of Holes	Length in mm
ASYMB350304086	4/3	86
ASYMB350305098	5/3	98
ASYMB350306110	6/3	110
ASYMB350307122	7/3	122
ASYMB350406122	6/4	122
ASYMB350308134	8/3	134
ASYMB350407134	7/4	134
ASYMB350309146	9/3	146
ASYMB350408146	8/4	146
ASYMB350310158	10/3	158
ASYMB350409158	9/4	158
ASYMB350311170	11/3	170
ASYMB350410170	10/4	170
ASYMB350312182	12/3	182
ASYMB350411182	11/4	182

3.5mm Cuttable Plate



Width 8mm
Thickness 2.5mm
Hole Spacing 7.5mm

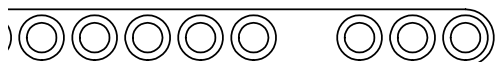
Exclusively available through Vi.

Scaled plate profiles on page 341.

CUTTABLE 3.5MM PLATE

CP3575150 Cuttable Plate 3.5 Screws 20 Holes 150 mm Long

3.5mm Cuttable Plate with Spaces



Width 8mm
Thickness 2.5mm
Hole Spacing 7.5 & 15mm

Exclusively available through Veterinary Instrumentation. Same profile as the Standard 3.5mm Cuttable but with Spaces.

Scaled plate profiles on page 341.

CUTTABLE 3.5MM PLATE WITH SPACES

CP357515018 Cuttable 3.5mm Plate with Spaces 18 Holes 150mm Long

3.5mm Cuttable Malleable Plate



Width 8mm
Thickness 2.5mm
Hole Spacing 7.5

Exclusively available through Vi. The malleable version is notched for easy three dimensional contouring but remember this results in a weaker plate.

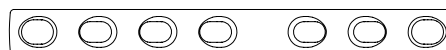
Scaled plate profiles on page 341.

CUTTABLE MALLEABLE 3.5MM PLATE

CM3575150 Cuttable Malleable 3.5mm Plate 20 Holes 150mm Long

4.5mm Plates

Narrow 4.5mm Compression Plate



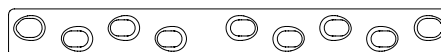
Use with 4.5mm Cortical Screws to produce fracture site compression.

Scaled plate profiles on page 331.

NARROW 4.5MM COMPRESSION PLATES

	No of Holes	Length in mm
C45239	2	39
C45355	3	55
C45471	4	71
C45587	5	87
C456103	6	103
C457119	7	119
C458135	8	135
C459151	9	151
C4510167	10	167
C4511183	11	183
C4512199	12	199
C4513211	13	211
C4514231	14	231
C4515246	15	246
C4516265	16	265
C4518296	18	296
C4520327	20	327

Broad 4.5mm Compression Plate



Strongest plate available for veterinary orthopaedics.

Scaled plate profiles on page 332.

BROAD 4.5MM COMPRESSION PLATES

	No of Holes	Length in mm
B4505087	5	87
B4506103	6	103
B4507119	7	119
B4508135	8	135
B4509151	9	151
B4510167	10	167
B4511183	11	183
B4512199	12	199
B4513215	13	215
B4514231	14	231
B4515247	15	247
B4516263	16	263
B4517279	17	279
B4518295	18	295

ASYM® Plates

When plating fractures in the proximal or distal third of a bone, unless the surgeon resorts to either using a shorter plate than desirable or modifying the plate to remove holes at one end, standard 'off-the-shelf' compression plates can be impossible to apply whilst maintaining the gap between the two sets of screw holes over the fracture line. This is because these plates are essentially symmetrical.

Plate modification to remove holes is time consuming, wasteful and without the right equipment and attention to detail, can leave a sharp or rough end that can hold bacteria and irritate soft tissues or leave contaminants on the plate surface.

ASYM® Plates offer a simple 'off-the shelf' solution to this familiar problem and are available in the same standard thicknesses and widths as standard compression plates, but with an asymmetric hole arrangement that makes them significantly more suitable for these fractures.

The shorter side of ASYM® Plates carry either three or four round holes.

Round holes have some benefits. They can be packed closer together than compression slots – this helps the surgeon to maximise screw count in the smaller fragment and makes ASYM® Plates more adaptable to fragment length. Round holes are also intrinsically more stable than compression slots and where space is at a premium, this may make all of the difference between success and failure.

The longer side carries regular compression holes in standard spacing to permit compression as normal. ASYM® Plates are priced to match the equivalent length of compression plate

There are 70 plates in the ASYM® range, which covers 2.0mm, 2.4mm, 2.7mm, 3.5mm, and 3.5mm broad sizes.

2.0mm ASYM® Plates



Scaled plate profiles on page 321.

2.0MM ASYM®

CODE	No of. Holes	Length in mm
ASYM20030437	4/3	37
ASYM20030542	5/3	42
ASYM20030647	6/3	47
ASYM20030752	7/3	52
ASYM20040652	6/4	52
ASYM20030857	8/3	57
ASYM20040757	7/4	57
ASYM20030962	9/3	62
ASYM20040862	8/4	62
ASYM20031067	10/3	67
ASYM20040967	9/4	67
ASYM20031172	11/3	72
ASYM20041072	10/4	72

2.4mm ASYM® Plates



Scaled plate profiles on page 322.

2.4MM ASYM® PLATES

CODE	No of Holes	Length in mm
ASYM240304052	4/3	52
ASYM240305059	5/3	59
ASYM240306066	6/3	66
ASYM240307073	7/3	73
ASYM240406073	6/4	73
ASYM240308080	8/3	80
ASYM240407080	7/4	80
ASYM240309087	9/3	87
ASYM240408087	8/4	87
ASYM240310094	10/3	94
ASYM240409094	9/4	94
ASYM240311101	11/3	101
ASYM240410101	10/4	101

2.7mm ASYM® Plates



Scaled plate profiles on page 323.

2.7MM ASYM® PLATES

CODE	No. of Holes	Length in mm
ASYM270304060	4/3	60
ASYM270305068	5/3	68
ASYM270306076	6/3	76
ASYM270406076	6/4	76
ASYM270307084	7/3	84
ASYM270407084	7/4	84
ASYM270308092	8/3	92
ASYM270408092	8/4	92
ASYM270309100	9/3	100
ASYM270409100	9/4	100
ASYM270310108	10/3	108
ASYM270410108	10/4	108
ASYM270311118	11/3	118
ASYM270411118	11/4	118

3.5mm ASYM® Plates



Scaled plate profiles on page 326.

3.5MM ASYM®

CODE	No. of Holes	Length in mm
ASYM350304086	4/3	86
ASYM350305098	5/3	98
ASYM350306110	6/3	110
ASYM350307122	7/3	122
ASYM350406122	6/4	122
ASYM350308134	8/3	134
ASYM350407134	7/4	134
ASYM350309146	9/3	146
ASYM350408146	8/4	146
ASYM350310158	10/3	158
ASYM350409158	9/4	158
ASYM350311170	11/3	170
ASYM350410170	10/4	170
ASYM350312182	12/3	182
ASYM350411182	11/4	182

Broad 3.5mm ASYM® Plates



Scaled plate profiles on page 328.

BROAD 3.5MM ASYM® PLATES

CODE	No. of Holes	Length in mm
ASYMB350304086	4/3	86
ASYMB350305098	5/3	98
ASYMB350306110	6/3	110
ASYMB350307122	7/3	122
ASYMB350406122	6/4	122
ASYMB350308134	8/3	134
ASYMB350407134	7/4	134
ASYMB350309146	9/3	146
ASYMB350408146	8/4	146
ASYMB350310158	10/3	158
ASYMB350409158	9/4	158
ASYMB350311170	11/3	170
ASYMB350410170	10/4	170
ASYMB350312182	12/3	182
ASYMB350411182	11/4	182

ASYM® Plate Kits - Boxed



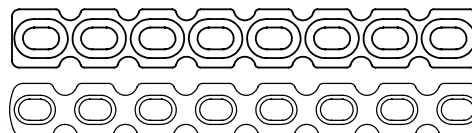
ASYM® plates are available individually, as unboxed sets to include all lengths of a particular size, or as boxed sets to include the complete ASYM® plate range. The unboxed sets attract a 5% discount over the individual components price, the full set, a 7.5+% discount with free steriliser box.

ASYM® PLATE KITS - BOXED

ASYMBOX	ASYM® Plate Kit Box - empty
ASYMKITB	ASYM® Starter Kit - Complete
	One of each plate - all sizes Free box (70 plates in total)

AO Type Reconstruction Plates

Reconstruction Plates 2.7mm & 3.5mm



Reconstruction plates are designed for easy contouring in 3 dimensions. However contouring is not easy without dedicated bending pliers. Notching between holes facilitates multiplanar bending. Useful for reconstruction of non-load bearing bone. Especially useful in the pelvis.

Scaled plate profiles on page 346.

2.7MM RECONSTRUCTION PLATES

	No. of Holes	Length in mm
RC270540	5	40
RC270648	6	48
RC270756	7	56
RC270864	8	64
RC270972	9	72
RC271080	10	80
RC271188	11	88
RC271296	12	96

3.5MM RECONSTRUCTION PLATES

	No. of Holes	Length in mm
RC350558	5	58
RC350670	6	70
RC350782	7	82
RC350894	8	94
RC3509106	9	106
RC3510118	10	118
RC3511130	11	130
RC3512142	12	142

Cutttable and Cuttable Malleable (Reconstruction) Plates

Vi now offers a comprehensive range of Cuttable Plates. They are available either as a standard strip of round holes or as a version with notches between the holes for easy contouring. These are described as Cuttable Malleable or Cuttable Reconstruction Plates.

Using Standard Wire Cutters 001236, 001237, 001228 or 001230 a strip with the desired number of holes can be cut from the length. With care the plate can be cut between holes, although it is easier to cut across a hole. Cuttable Plates may be stacked to double the strength along all or part of the construct.

Plates are available in 1.0, 1.5, 2.0, 2.4, 2.7 and 3.5mm. Hole spacing is smaller than the equivalent DCP which may be useful where bone fragments are small. The smaller sizes are particularly useful in the repair of metacarpals and metatarsals. The Malleable Plates may be twisted and bent using Parallel Action Pliers (001290) and/ or Wire Contouring Pliers (001245).

Scaled plate profiles on page 341.

CUTTABLE PLATE RANGE

CP10390	1.0mm Cuttable 30 Holes 90mm Long 3mm Spacing
CP10491	1.0mm Cuttable 23 Holes 90mm Long 4mm Spacing
CP15413030	1.5mm Cuttable Plate 30 Holes 120mm Long
CP205150	2.0mm Cuttable Plate 30 Holes 150mm Long
CP2455150	2.4mm Cuttable Plate 27 Holes 150mm Long
CP276150	2.7mm Cuttable Plate 25 Holes 150mm Long
CP3575150	3.5mm Cuttable Plate 20 Holes 150mm Long

CUTTABLE WITH SPACES

CP1039027	1.0mm Cuttable Plate with Spaces 27 Holes 90mm Long
CP1049120	1.0mm Cuttable Plate with Spaces 20 Holes 90mm Long
CP15413027	1.5mm Cuttable Plate with Spaces 27 Holes 120mm Long
CP20515027	2.0mm Cuttable Plate with Spaces 27 Holes 150mm
CP245515024	2.4mm Cuttable Plate with Spaces 24 Holes 150mm
CP27615022	2.7mm Cuttable Plate with spaces 22 Holes 150mm
CP357515018	3.5mm Cuttable Plate with spaces 18 Holes 150mm

CUTTABLE BROAD

CP15413030B	1.5mm Cuttable Broad Plate 30 Holes 120mm
CP205150B	2.0mm Cuttable Broad Plate 30 Holes 150mm
CP276150B	2.7mm Cuttable Broad Plate 25 Holes 150mm

CUTTABLE BROAD WITH SPACES

CP15413027B	1.5mm Cuttable Broad Plate with Spaces 27 holes 120mm Long
CP20515027B	2.0mm Cuttable Broad Plate with Spaces 27 Holes 150mm Long
CP27615022B	2.7mm Cuttable Broad Plate with Spaces 22 Holes 150mm Long

CUTTABLE MALLEABLE PLATES

CM10390	1.0mm Cuttable Malleable Plate 30 Holes 90mm Long
CM15413030	1.5mm Cuttable Malleable Plate 30 Holes 120mm Long
CM205150	2.0mm Cuttable Malleable Plate 30 Holes 150mm Long
CM2455150	2.4mm Cuttable Malleable Plate 27 Holes 150mm Long
CM276150	2.7mm Cuttable Malleable Plate 25 Holes 150mm Long
CM3575150	3.5mm Cuttable Malleable Plate 20 Holes 150mm Long

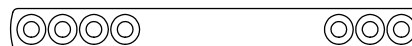
DOUBLE COMPRESSION CUTTABLE PLATES

DCCP206150	2.0 Double Compression Cuttable Plate 25 Holes 150mm
DCCP247150	2.4 Double Compression Cuttable Plate 21 Holes 150mm
DCCP278150	2.7 Double Compression Cuttable Plate 19 Holes 150mm

2.0/2.4/2.7 VETERINARY CUTTABLE

VCP202427	2.0/2.4/2.7 Vet Cuttable Plate 50 Holes 300mm Long
VCP202427B	2.0/2.4/2.7 Vet Cuttable Broad Plate 50 Holes 300mm Long

Biological Healing Plates



Scaled plate profiles on pages 321, 324 & 333.

These Plates are designed to bridge a comminuted section of shattered long bone. It effectively acts as a bridging plate. No attempt is made to reconstruct. The fracture site is not disturbed to minimise de-vitalisation and contamination. The Plate maintains length and permits weight bearing. Use of these plates avoids leaving empty screw holes over the fracture site which significantly weakens the construct. Plates are available in 7 or 8 hole versions. Each type of Plate is available in a range of lengths.

BHP2008065 the Cat Femur Plate is contoured for the average cat femur. Use when proximal and distal sections are intact and the body of the femur is un-reconstructable. If it cannot be reconstructed it is better not to try.

All holes are round as compression is not required and there is better screw/ plate contact with round holes.

BIOLOGICAL HEALING PLATES

BHP2007060	2.0mm 7 Hole 60mm Long
BHP2008065	2.0mm 8 Hole 65mm Long
BHP2008070	2.0mm 8 Hole 70mm Long
BHP2008075	2.0mm 8 Hole 75mm Long
BHP2008080	2.0mm 8 Hole 80mm Long
BHP2706063	2.7mm 6 Hole 63mm Long
BHP2707067	2.7mm 7 Hole 67mm Long
BHP2707073	2.7mm 7 Hole 73mm Long
BHP2707079	2.7mm 7 Hole 79mm Long
BHP2708075	2.7mm 8 Hole 75mm Long
BHP2708081	2.7mm 8 Hole 81mm Long
BHP2708085	2.7mm 8 Hole 85mm Long
BHP3507120	3.5mm 7 Hole 120mm Long
BHP3507130	3.5mm 7 Hole 130mm Long
BHP3507142	3.5mm 7 Hole 142mm Long
BHP3508130	3.5mm 8 Hole 130mm Long
BHP3508142	3.5mm 8 Hole 142mm Long
BHP3508154	3.5mm 8 Hole 154mm Long
BHPB3508130	Broad 3.5mm 8 Hole 130mm Long
BHPB3507130	Broad 3.5mm 7 Hole 130mm Long
BHPB3508142	Broad 3.5mm 8 Hole 142mm Long
BHPB3507142	Broad 3.5mm 7 Hole 142mm Long
BHPB3508154	Broad 3.5mm 8 Hole 154mm Long
BHP4507138	4.5mm 7 Hole 138mm Long
BHP4507151	4.5mm 7 Hole 151mm Long
BHP4507164	4.5mm 7 Hole 164mm Long
BHP4508150	4.5mm 8 Hole 150mm Long
BHP4508163	4.5mm 8 Hole 163mm Long
BHP4508176	4.5mm 8 Hole 176mm Long

'T' Plates

'T' Plates are mainly used for distal radial fractures, but find a number of other uses such as with cranial, pelvic or certain scapula fractures.

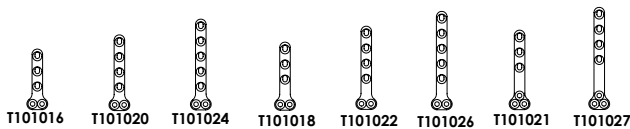
They are especially useful where small fragments are involved. Our 'T' Plates are available in straight patterns with either two or three head holes and as left or right cranked versions.

Despite already having a substantial range of 'T' Plates, we have offered fracture advice on a number of cases over the last year where existing 'T' Plates have appeared to have been a bit of a compromise. We continue to develop our range of 'T' Plates to try and 'fill the gaps' and present the most comprehensive and genuinely useful veterinary T-plate selection available.

Having added a series of 1.0mm 'T' Plates to our range in 2012; the biggest developments for 2013 were our 1.5mm 'T' Plates and our Hybrid Anatomical 'T' Plates. We have also reviewed our more established ranges and interpolated several new and interesting options which we hope should prove useful.

'T' Plates - Compression

1.0mm 'T' Plates - Compression

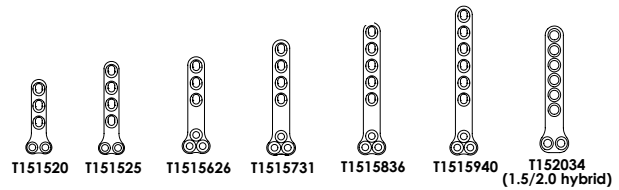


Scaled plate profiles on page 347.

1.0MM 'T' PLATES COMPRESSION

T101016	1.0mm	Series A	5 Hole	Length 16mm
T101020	1.0mm	Series A	6 Hole	Length 20mm
T101024	1.0mm	Series A	7 Hole	Length 24mm
T101018	1.0mm	Series B	5 Hole	Length 18mm
T101022	1.0mm	Series B	6 Hole	Length 22mm
T101026	1.0mm	Series B	7 Hole	Length 26mm
T101021	1.0mm	Series C	6 Hole	Length 21mm
T101027	1.0mm	Series C	7 Hole	Length 27mm

1.5mm 'T' Plates - Compression

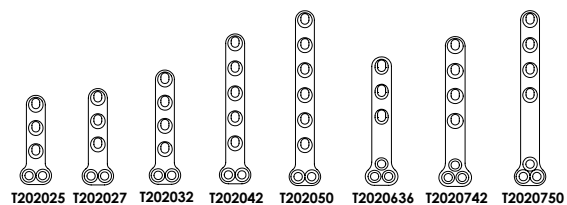


Scaled plate profiles on page 342.

1.5MM 'T' PLATES COMPRESSION

T151520	1.5mm 2 Holes Head 3 Holes Shaft 20mm Long
T151525	1.5mm 2 Holes Head 4 Holes Shaft 25mm Long
T1515626	1.5mm 3 Holes Head 3 Holes Shaft 26mm Long
T1515731	1.5mm 3 Holes Head 4 Holes Shaft 31mm Long
T1515836	1.5mm 3 Holes Head 5 Holes Shaft 36mm Long
T1515940	1.5mm 3 Holes Head 6 Holes Shaft 40mm Long

2.0mm 'T' Plates - Compression

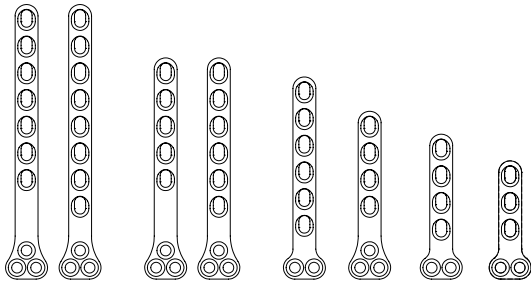


Scaled plate profiles on page 342.

2.0MM 'T' PLATES COMPRESSION

T202025	2.0mm 'T' Plate 1.5 or 2.0mm Head 2.0mm Shaft 25mm Long Shaft Width 5.1mm Shaft Thickness 1.5mm
T202027	2.0mm 'T' Plate 1.5 or 2.0mm Head 2.0mm Shaft 27mm Long Shaft Width 5.1mm Shaft Thickness 1.5mm
T202032	2.0mm 'T' Plate 1.5 or 2.0mm Head 2.0mm Shaft 32mm Long Shaft Width 5.1mm Shaft Thickness 1.5mm
T2020636	2.0mm 'T' Plate 1.5 or 2.0mm Head 2.0mm Shaft 36mm Long Shaft Width 5.1mm Shaft Thickness 1.5mm
T2020742	2.0mm 'T' Plate 1.5 or 2.0mm Head 2.0mm Shaft 42mm Long Shaft Width 5.1mm Shaft Thickness 1.5mm
T202042	2.0mm 'T' Plate 1.5 or 2.0mm Head 2.0mm Shaft 42mm Long 8 Hole Shaft Width 5.1mm Shaft Thickness 1.5mm
T202050	2.0mm 'T' Plate 1.5 or 2.0mm Head 2.0mm Shaft 50mm Long 8 Hole Shaft Width 5.1mm Shaft Thickness 1.5mm
T2020750	2.0mm 'T' Plate 1.5 or 2.0mm Head 2.0mm Shaft 50mm Long 7 Hole Shaft Width 5.1mm Shaft Thickness 1.5mm

2.4mm 'T' Plates - Compression

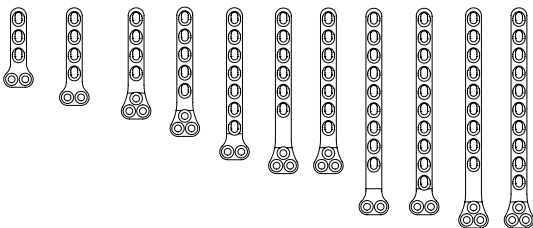


Scaled plate profiles on page 343.

2.4MM 'T' PLATES COMPRESSION

T240531	2.4mm 'T' Plate 5 Holes 31mm Long
T240638	2.4mm 'T' Plate 6 Holes 38mm Long
T240744	2.4mm 'T' Plate 7 Holes 44mm Long
T240853	2.4mm 'T' Plate 8 Holes 53mm Long
T240858	2.4mm 'T' Plate 8 Holes 58mm Long
T240958	2.4mm 'T' Plate 9 Holes 58mm Long
T241072	2.4mm 'T' Plate 10 Holes 72mm Long
T241172	2.4mm 'T' Plate 11 Holes 72mm Long

2.7mm 'T' Plates - Compression



Scaled plate profiles on page 343.

2.7MM 'T' PLATES COMPRESSION

T270535	2.7mm 'T' Plate 5 Holes 35mm Long
T270643	2.7mm 'T' Plate 6 Holes 43mm Long
T270749	2.7mm 'T' Plate 7 Holes 49mm Long
T270857	2.7mm 'T' Plate 8 Holes 57mm Long
T270967	2.7mm 'T' Plate 9 Holes 67mm Long
T270973	2.7mm 'T' Plate 9 Holes 73mm Long
T271073	2.7mm 'T' Plate 10 Holes 73mm Long
T271191	2.7mm 'T' Plate 11 Holes 91mm Long
T271291	2.7mm 'T' Plate 12 Holes 91mm Long
T271297	2.7mm 'T' Plate 12 Holes 97mm Long
T271397	2.7mm 'T' Plate 13 Holes 97mm Long

'T' PLATES CLOVER LEAF STYLE

TPLO202026	2.0mm DCP 26mm Overall Length
TPLO202031	2.0mm DCP 31mm Overall Length
TPLO242434	2.4mm DCP 34mm Overall Length
TPLO242441	2.4mm DCP 41mm Overall Length
TPLO272739	2.7mm DCP 39mm Overall Length
TPLO272745	2.7mm DCP 45mm Overall Length
TPLO273539	2.7/3.5 DCP 39mm Overall Length Allows use of 3.5 Cancellous Screw in head
TPLO273545	2.7/3.5 DCP 45mm Overall Length Allows use of 2.7 and 3.5 Screws in Head 2.5mm Thick
TPLO353555	3.5mm DCP 55mm Overall Length
TPLO353557	3.5mm DCP 57mm Overall Length Heavy Duty
TPLO353559	3.5mm DCP 59mm Overall Length
TPLO353562	3.5mm DCP 62mm Overall Length
TPLO353565	3.5mm DCP 65mm Overall Length
TPLO353577	3.5mm DCP 77mm Overall Length 7 Holes
TPLO353577X	3.5mm DCP 77mm Overall Length 8 Holes
TPLO353579	3.5mm DCP 79mm Overall Length Heavy Duty
TPLO354579	3.5/4.5 DCP 79mm Overall Length Heavy Duty Allows 4.5 Screws in Head
TPLO35456579	3.5/4.5 DCP 79mm Overall Length Heavy Duty Will accept 6.5 Cancellous Screws in Head 4.5mm Thick
TPLO45659030	4.5mm DCP 90mm Overall Length Will accept 6.5 Cancellous Screws in Head 3.0mm Thick
TPLO45659035	4.5/6.5mm DCP 90mm Overall Length Will accept 6.5 Cancellous Screws in Head 3.5mm Thick
TPLO45659045	4.5mm DCP 90mm Overall Length Will accept 6.5 Cancellous Screws in Head 4.5mm Thick

'T' Plates - Round Hole

Scaled plate profiles on page 342 & 344..

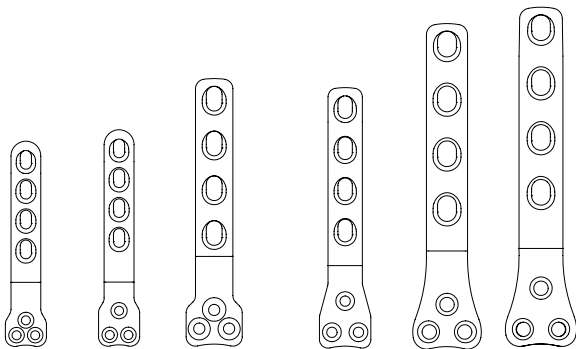
'T' PLATES ROUND HOLE

TC204018	2mm 'T' Plate 4 Hole 18mm 2 Holes Distally
TC205024	2mm 'T' Plate 5 Hole 24mm 2 Holes Distally
TL204018	2mm 'T' Plate 4 Hole Angle L 18mm 2 Holes Distally
TR204018	2mm 'T' Plate 4 Hole Angle R 18mm 2 Holes Distally
OL204018	2mm 'T' Plate 4 Hole 18mm Oblique L 2 Holes Distally
OR204018	2mm 'T' Plate 4 Hole 18mm Oblique R 2 Holes Distally
TC270532	2.7mm 'T' Plate 5 Hole 32mm 2 Holes Distally
TL270532	2.7mm 'T' Plate 5 Hole Angle L 32mm 2 Holes Distally
TR270532	2.7mm 'T' Plate 5 Hole Angle R 32mm 2 Holes Distally
OL270532	2.7mm 'T' Plate 5 Hole 32mm Oblique L 2 Holes Distally
OR270532	2.7mm 'T' Plate 5 Hole 32mm Oblique R 2 Holes Distally
TC270639	2.7mm 'T' Plate 6 Hole 39mm 2 Holes Distally
TC350655	3.5mm 'T' Plate 6 Hole 55mm 2 Holes Distally
TC350662	3.5mm 'T' Plate 6 Hole 62mm 2 Holes Distally
TC350777	3.5mm 'T' Plate 7 Hole 77mm 2 Holes Distally
TC350877	3.5mm 'T' Plate 8 Hole 77mm 2 Holes Distally

Hybrid Anatomical 'T' Plates



Applied to the distal radius, the distal section is thinned to better fit beneath the extensor tendons. The distal section features smaller diameter screw holes than the shaft, helping maximise screw count and facilitate a better fit to a distal fragment. Smaller diameter screws have smaller screw-heads, further minimising extensor tendon impingement.



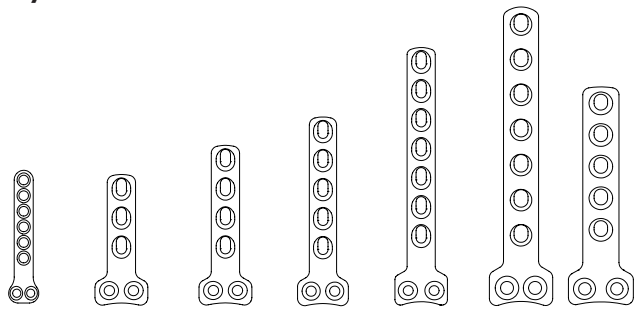
Scaled plate profiles on page 342 & 344.

How well these plates fit is only apparent when you use one; we have had a lot of positive feedback. We have developed three sizes offering the same benefits as the originals, but with slightly wider spread of the distal holes to provide greater rotational stability.

HYBRID ANATOMICAL 'T' PLATES

- T2027755** Hybrid Anatomical 'T' Plate 3 x 2mm Head Screws
4 x 2.7mm Shaft Screws 55mm Long
- T2027758** Hybrid Anatomical 'T' Plate 3 x 2mm Head Screws
4 x 2.7mm Shaft Screws 58mm Long
- T273572** Hybrid Anatomical 'T' Plate 3 x 2.7mm Head Screws
4 x 3.5mm Shaft Screws 72mm Long
- T273576** Hybrid Anatomical 'T' Plate 3 x 2.7mm Head Screws
4 x 3.5mm Shaft Screws 76mm Long
- T3545795** Hybrid Anatomical 'T' Plate 3 x 3.5mm Head Screws
4 x 4.5mm Shaft Screws 95mm Long
- T3545799** Hybrid Anatomical 'T' Plate 3 x 3.5mm Head Screws
4 x 4.5mm Shaft Screws 99mm Long

Hybrid 'T' Plates



Scaled plate profiles on pages 342 & 344.

The problem with many distal radius fractures is that the distal segment is so small that it is difficult to place sufficient screws. 'T' Plates help but often the head portion is too bulky. Hybrid 'T' Plates provide a solution. The screwholes in the head are smaller and closer together than those in the shaft. Three sizes are available; 1.5/2.0, 2.0/2.4/2.7, and 2.7/3.5.

Hybrid 'T' Plates will accept the same screw in the head as in the shaft but with reduced range of screw angle. The longer plate is useful for complex distal radius fractures and corrective osteotomies.

Use the smallest size Load/ Neutral Drill Guide for hole placement.

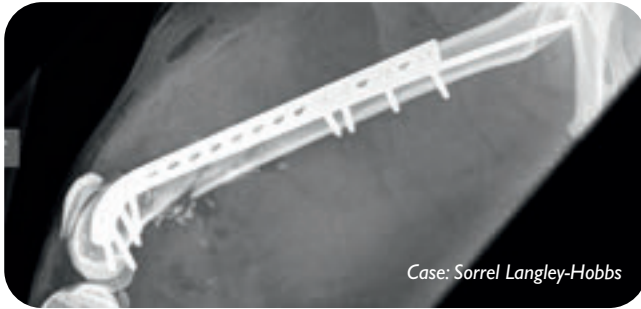
HYBRID 'T' PLATES

- T152034** Hybrid 'T' Plate - 1.5 or 2.0mm Head
2.0mm Shaft 34mm Long Cuttable
Shaft Width 4.5mm Shaft Thickness 1.1mm
- T20242736** Hybrid 'T' Plate - 2.0, 2.4 or 2.7mm Head
2.0 2.4 or 2.7mm Shaft 36mm Long
Shaft Width 7.4mm Shaft Thickness 2mm
- T20242744** Hybrid 'T' Plate - 2.0, 2.4 or 2.7mm Head
2.0, 2.4 or 2.7mm Shaft 44mm Long
Shaft Width 7.4mm Shaft Thickness 2mm
- T20242752** Hybrid 'T' Plate - 2.0, 2.4 or 2.7mm Head
2.0 2.4 or 2.7mm Shaft 52mm Long
Shaft Width 7.4mm Shaft Thickness 2mm
- T20242771** Hybrid 'T' Plate - 2.0, 2.4 or 2.7mm Head
2.0 2.4 or 2.7mm Shaft 71mm Long
Shaft Width 7.4mm Shaft Thickness 2mm
- T273562** Hybrid 'T' Plate - 2.7 or 3.5mm Head
3.5mm Shaft 62mm Long
Shaft Width 9.5mm Shaft Thickness 2mm
- T273585** Hybrid 'T' Plate - 2.7 or 3.5mm Head
3.5mm Shaft 85mm Long
Shaft Width 9.5mm Shaft Thickness 2mm

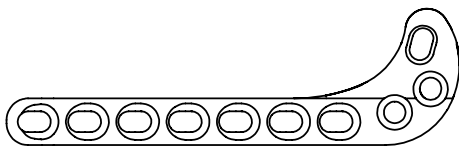
Supracondylar Plates

Supracondylar femoral fractures in mature animals can be very difficult to repair. Small distal fragment size makes placement of sufficient implants a challenge. In medium and large dogs there are often multiple small fragments in the supracondylar area. The forces acting on the distal femur are complex requiring a special plate to neutralise them. The 2.7 and 3.5mm plates were developed by Mark Glyde using finite element analysis. Available in a range of sizes and lengths. 2.0, 2.4, 2.7, 3.5 narrow and 3.5 broad (two lengths). Use Bending Templates to pre-contour plates.

An extra long version for cats has been developed in conjunction with Sorrel Langley-Hobbs.



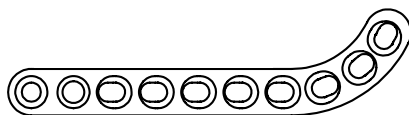
Case: Sorrel Langley-Hobbs



Scaled plate profiles on page 352.

SUPRACONDYLAR PLATES

- 15271 IR** Supracondylar Plate 2.4mm 62mm Long Right
Shaft Width 6.5mm Shaft Thickness 2mm
- 15271 IL** Supracondylar Plate 2.4mm 62mm Long Left
Shaft Width 6.5mm Shaft Thickness 2mm
- 15271 IR-XL** Supracondylar Plate 2.4mm 112mm Extra Long Right
Shaft Width 6.5mm Shaft Thickness 2mm
- 15271 IL-XL** Supracondylar Plate 2.4mm 112mm Extra Long Left
Shaft Width 6.5mm Shaft Thickness 2mm
- 152712** Supracondylar Plate 2.7mm Left 69mm Long
- 152714** Supracondylar Plate 2.7mm Right 69mm Long
- 152715N** Supracondylar Plate 3.5 Narrow Left 135mm Long
- 152717N** Supracondylar Plate 3.5 Narrow Right 135mm Long
- 152715** Supracondylar Plate 3.5mm Broad Left 135mm Long
- 152717** Supracondylar Plate 3.5mm Broad Right 135mm Long
- 152716** Supracondylar Femur 3.5mm Broad Left 173mm Long
- 152718** Supracondylar Femur 3.5mm Broad Right 173mm Long



Scaled plate profiles on page 352.

SUPRACONDYLAR PLATES

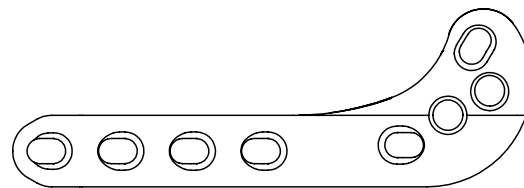
- 152701** Supracondylar Plate 2.0mm - short distal end - Right
- 152709** Supracondylar Plate 2.0mm - short distal end - Left
- 152700** Supracondylar Plate 2.0mm 50mm Long Right
Shaft Width 5.5mm Shaft Thickness 2mm
- 152710** Supracondylar Plate 2.0mm 50mm Long Left
Shaft Width 5.5mm Shaft Thickness 2mm
- 152700XL** Supracondylar Plate 2.0mm 120mm Extra Long
Cutttable Right Shaft Width 5.5mm Shaft Thickness 2mm
- 152710XL** Supracondylar Plate 2.0mm 120mm Extra Long
Cutttable Left Shaft Width 5.5mm Shaft Thickness 2mm

Supracondylar Osteotomy Plates (SCOP)

Angular correction of the distal femur by means of a supra-condylar osteotomy (aka distal femoral osteotomy/DFO) is an accepted technique for correction of patella luxation in medium and large dogs with a limb alignment deformity.

The distal femur is a difficult area over which to appropriately contour a plate and place sufficient screws. Using finite element analysis (FEA), Mark Glyde designed a preformed plate specifically for this area. Screw hole placement allows for a good bone grab when performing a closing wedge osteotomy. Available in 2.0mm, 2.4mm, 2.7mm, 4.5mm narrow and 4.5mm broad sizes.

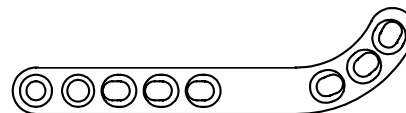
Where there is space to do so, all new production of our SCOP plates features thinning to the proximal end and smoothing to cranio-distal edge over which there is high motion during stifle flexion/extension.



Scaled plate profiles on page 352.

SUPRACONDYLAR OSTEOTOMY PLATES

- 152608** 2.0 Supracondylar Osteotomy Plate Right
- 152609** 2.0 Supracondylar Osteotomy Plate Left
- 152606** 2.4 Supracondylar Osteotomy Plate Right
- 152607** 2.4 Supracondylar Osteotomy Plate Left
- 152600** 2.7 Supracondylar Osteotomy Plate Right
- 152605** 2.7 Supracondylar Osteotomy Plate Left
- 152610** 3.5 Supracondylar Osteotomy Plate Right
- 152615** 3.5 Supracondylar Osteotomy Plate Left
- 152620** 3.5 Broad Supracondylar Osteotomy Plate Right
- 152625** 3.5 Broad Supracondylar Osteotomy Plate Left



Scaled plate profiles on page 352.

SUPRACONDYLAR OSTEOTOMY PLATES

- 152612** 2.0 Supracondylar Osteotomy Plate short distal end - Right
- 152613** 2.0 Supracondylar Osteotomy Plate short distal end - Left
- 152602** 2.0 Supracondylar Osteotomy Plate Right
- 152603** 2.0 Supracondylar Osteotomy Plate Left

BENDING TEMPLATES

- BT152700** Bending Template for 2.0 Supracondylar Plate
- BT152711** Bending Template for 2.4 Supracondylar Plate
- BT152714** Bending Template for 2.7 Supracondylar Plate
- BT152717** Bending Template for 3.5 Supracondylar Plate

Acetabular Plates

Accurate repair of fractures of the acetabulum is essential if full function is to be restored and long term arthritic changes are to be avoided. Ten sizes are available, singly or as a set. The plates are pre-contoured three dimensionally to ensure a good fit. Holes are round.

Acetabular Plates



Scaled plate profiles on page 346.

ACETABULAR PLATES

AP200400XS	2.0mm Acetabular Plate 4 Hole Extra Small
AP200400	2.0mm Acetabular Plate 4 Hole Size 0
AP200401	2.0mm Acetabular Plate 4 Hole Size 1
AP200401L	2.0mm Acetabular Plate 4 Hole Large
AP240406	2.4mm Acetabular Plate 4 Hole
AP270602	2.7mm Acetabular Plate 6 Hole Size 2
AP270603	2.7mm Acetabular Plate 6 Hole Size 3
AP350604	3.5mm Acetabular Plate 6 Hole Size 4
AP350605	3.5mm Acetabular Plate 6 Hole Size 5
AP350607	3.5mm Acetabular Plate 6 Hole Extra Large
APSET	Set of Acetabular Plates Set of 10

Butterfly Plates



Scaled plate profiles on page 346.

Our range of Butterfly Plates has been developed with the express purpose of being used in our small animal species. They are better suited to most of our fracture and osteotomy scenarios than the equivalent human plates and should prove useful for numerous procedures including revision and embrocation of TTA repairs and their analogues as well as cranial and pelvic surgery, especially where small fragments are involved.

Pelvic stenosis is not an uncommon finding after conservative management of pelvic fractures in cats. Pelvic splitting is becoming a more common procedure for addressing this problem. Our butterfly plate range offers new plating options for stabilising the pelvis following symphyseal distraction.

The six hole versions are particularly interesting as they have surprising versatility. They are thin enough to be cuttable, such that one hole can be removed from either one or both ends to provide six different hole configurations.

As yet an unexplored area is to investigate their potential for placement across the pelvic symphysis, following similar principles to trans-epiphyseal stapling as an alternative technique for Juvenile Pelvic Symphysiodesis in the treatment of Hip Dysplasia. Placement in a similar manner may also be beneficial to patient comfort in a convalescent period following symphyseal fracture.

BUTTERFLY PLATES

BTFP15414	1.5mm Butterfly Plate 4 Hole 14mm Length
BTFP15415	1.5mm Butterfly Plate 4 Hole Wide Head 15mm Length
BTFP15619	1.5mm Butterfly Plate 6 Hole 19mm Length
BTFP20416	2.0mm Butterfly Plate 4 Hole 16mm Length
BTFP20417	2.0mm Butterfly Plate 4 Hole Wide Head 17mm Length
BTFP20623	2.0mm Butterfly Plate 6 Hole 23mm Length
BTFP24418	2.4mm Butterfly Plate 4 Hole 18mm Length
BTFP24420	2.4mm Butterfly Plate 4 Hole 14mm Wide Head 20mm Length
BTFP24626	2.4mm Butterfly Plate 6 Hole 26mm Length
BTFP27421	2.7mm Butterfly Plate 4 Hole 21mm Length
BTFP27425	2.7mm Butterfly Plate 4 Hole Wide Head 25mm Length
BTFP27630	2.7mm Butterfly Plate 6 Hole 30mm Length

Locking Butterfly Plates



Scaled plate profiles on page 346.

Following surgeon feedback, we are pleased to offer a selection of our Butterfly Plates with locking holes.

LOCKING BUTTERFLY PLATES

BTFP20417LOCK	2.0mm Locking Butterfly Plate 4 Hole 17mm Long
BTFP24418LOCK	2.4mm Locking Butterfly Plate 4 Hole 18mm Long
BTFP24420LOCK	2.4mm Locking Butterfly Plate 4 Hole 20mm Long
BTFP27425LOCK	2.7mm Locking Butterfly Plate 4 Hole 25mm Long

Arthrodesis Plates

Pancarpal Arthrodesis Plates

Pancarpal arthrodesis is a common salvage procedure in veterinary orthopaedics following hyper-extension injuries.

Pancarpal arthrodesis plates achieve both appropriate screw hole spacing and appropriate screw size for the radius, radio-carpal bone and metacarpus (typically the third metacarpal bone). Most of these plates are hybrids with smaller screw holes for the metacarpus and larger screw holes for the radius and radio-carpal bone.

Standard plates that are small enough to fit the metacarpus will not normally have the strength to bridge the carpus. Standard plates which are sufficiently strong may be too stiff in the metatarsal region and predispose to fracture at the end of the plate; they may also be excessively bulky making skin closure more challenging.

Despite being the compression side of the carpus, a dorsal approach is significantly less invasive than a plantar approach. VI pancarpal arthrodesis plates are designed for dorsal application.

Our pancarpal arthrodesis plates take all of these considerations into account creating a plate with:

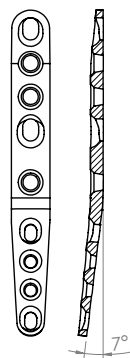
- Appropriately sized and spaced screw-holes proximally
- Appropriately sized and spaced screw-holes distally
- Sufficient strength through the mid-portion
- Thinning to the distal portion reducing stress riser effects and aiding skin closure

Many of our plates now also feature proximal thinning to remove the large step at the proximal end of the plate and reduce the magnitude of the stress riser effect that may contribute to radial fracture.

At Vi, we have the most comprehensive range of pancarpal arthrodesis plates on the market, providing solutions to suit nearly every cat and dog.

Current advice is to achieve at least 50% coverage of the metacarpal segment with up to 75% being preferable.

Locking Pancarpal Arthrodesis Plates

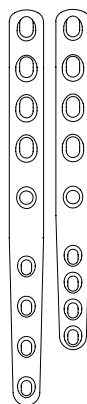


Scaled plate profiles on page 349.

LOCKING PANCARPAL ARTHRODESIS

- PCALK1520** 1.5/2.0mm Locking Pancarpal Arthrodesis Plate
- PCALK1520L** 1.5/2.0mm Locking Pancarpal Arthrodesis Plate - Long
- PCALK2024** 2.0/2.4mm Locking Pancarpal Arthrodesis Plate
- PCALK2024L** 2.0/2.4mm Locking Pancarpal Arthrodesis Plate - Long
- PCALK2027** 2.0/2.7mm Locking Pancarpal Arthrodesis Plate
- PCALK2027L** 2.0/2.7mm Locking Pancarpal Arthrodesis Plate - Long
- PCALK2735** 2.7/3.5mm Locking Pancarpal Arthrodesis Plate
- PCALK2735L** 2.7/3.5mm Locking Pancarpal Arthrodesis Plate - Long
- PCALK2735XL** 2.7/3.5mm Locking Pancarpal Arthrodesis Plate - Extra Long

DCP Style Pancarpal Arthrodesis Plates



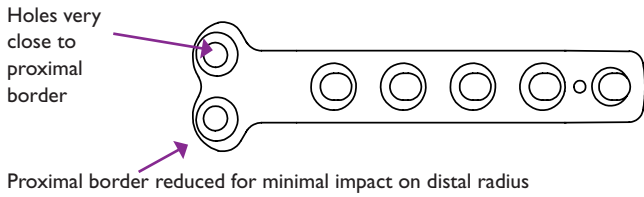
1.0mm/1.5mm hybrid size (152970) for patients around the 1kg mark and a 2.0/2.7 size (152902) which should suit many slender boned patients around 10-15kg in weight. 152902 is a slightly thicker profile than the shorter 2.0/2.7mm plates to compensate for the greater span. The top surface is sculpted to facilitate easier closure of soft tissues in patients that typically have very little additional skin to spare.

Scaled plate profiles on page 350.

PANCARPAL ARTHRODESIS PLATES DCP STYLE

- 152970** 1.0/1.5mm Compression Arthrodesis Plate
- 152911** 1.5/2.0mm Compression Arthrodesis Plate
- 152911XL** 1.5/2.0mm Compression Extended Length
- 152902** 2.0/2.7mm Compression Arthrodesis Plate
- 152912** 2.0/2.0mm Compression Arthrodesis Plate
- 152912XL** 2.0/2.0mm Compression Extended Length
- 152905** 2.0/2.7mm Compression Arthrodesis Plate
- 152905XL** 2.0/2.7mm Compression Extended Length
- 152903** 2.7/3.5mm Compression Arthrodesis Plate
- 152903XL** 2.7/3.5mm Compression Extended Length
- 152907** 3.5/3.5mm Compression Arthrodesis Plate
- 152907XL** 3.5/3.5mm Compression Extended Length
- 152909** 3.5/4.5mm Pancarpal Arthrodesis Plate 185mm

Partial Carpal Arthrodesis Plates



Where instability lies in the intercarpal or carpometacarpal joints and the radiocarpal joint is undamaged, partial carpal arthrodesis offers an outcome with a relatively normal range of movement.

The problem is that the normal radiocarpal joint is capable of such a degree of extension that the distal radius tends to impinge on any implant placed onto the radial carpal bone. The image above shows a greyhound in full carpal extension illustrating the point very well. VI Partial Carpal Arthrodesis Plates have been engineered to have an extremely low profile. Additionally the proximal screw holes are very close to the proximal border of the plate thereby minimising the implant profile on the radial carpal bone.

The proximal plate is precontoured for best possible fit and to allow best position and angles of screws.

The largest plate accepts 2.7 and 3.5mm screws. Using 3.5 screws a smaller degree of screw angulation is possible. The medium plate takes 2.7, 2.4 and 2.0 screws. The smallest plate takes 1.5 and 2.0mm screws.

Our TTO/TWO plates have also been used successfully for partial carpal arthrodesis.

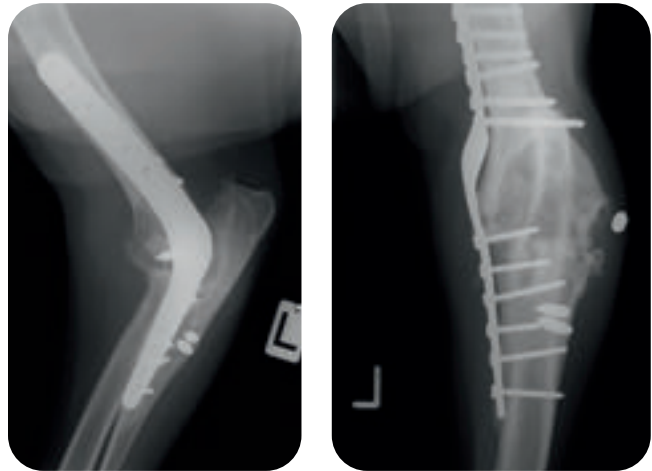
Scaled plate profiles on page 350.

PARTIAL CARPAL ARTHRODESIS PLATE

- 152930** Partial Carpal Arthrodesis Plate 2.7/3.5mm 65mm
- 152931** Partial Carpal Arthrodesis Plate 2.0/2.4/2.7mm 50mm
- 152932** Partial Carpal Arthrodesis Plate 1.5/2.0mm

Elbow Arthrodesis Plates

Elbow Arthrodesis Plates



Severe elbow DJD is difficult to manage. Despite advances in elbow replacement, outcomes are not entirely predictable and even when pain free, dogs rarely have a normal gait.

Where funds are limited or elbow replacement has failed, arthrodesis may present a realistic option. The results are a pain free limb, albeit with an abnormal gait.

The single size elbow arthrodesis plate currently available will fit most Labradors and is available either as a non-locking plate or as a non-locking and locking hybrid.

Applied medially with an inbuilt 110° bend, the distal segment engages with the ulna.

For patients of different sizes, please contact our offices with patient details and we will explore possible solutions for you.

Scaled plate profiles on page 347.

ELBOW ARTHRODESIS PLATES

- 152950** Elbow Arthrodesis Plate 3.5/2.7 Right
- 152951** Elbow Arthrodesis Plate 3.5/2.7 Left
- 152950LOCK** Elbow Arthrodesis Plate 3.5/2.7 Right - Locking
- 152951LOCK** Elbow Arthrodesis Plate 3.5/2.7 Left - Locking

Limb Salvage Plates

Canine Forelimb Salvage Plates

Orthogonal plating is often employed to increase stability. A number of options are available to fill the void created:

- An ulna roll-up technique is proving popular
- Bone blocks are available in a range of sizes from the Veterinary Tissue Bank (VTB)

To better serve prospective forelimb salvage patients, we would like to invite surgeon feedback on these plates and ideas to develop this range further. Imaging from patients that do not go to surgery due to the lack of implants are a particular area that we would like to focus on.

Elective forelimb shortening may be a consideration if even these plates prove too short in very long legged patients, but we are not aware of any study into the long term effects of doing so.

2.7/3.5mm Canine Limb Salvage Plate

A 2.7/3.5mm DCP style forelimb salvage plate using the same profile as 3.5mm broad DCPs. 262mm long.

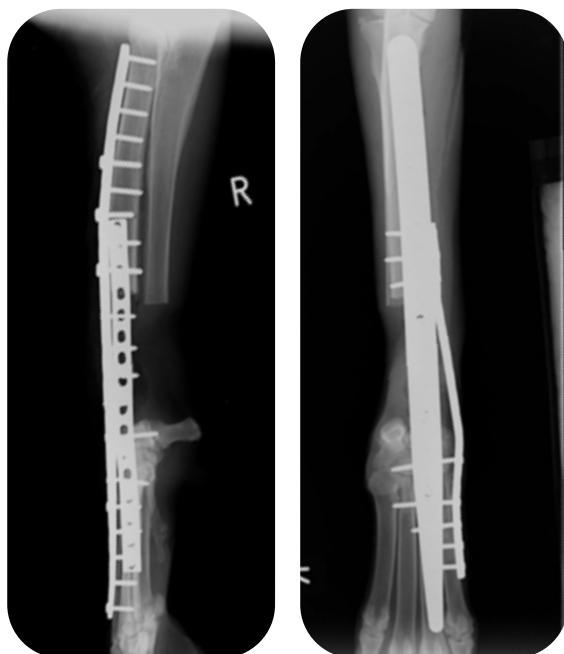
1:2 scaled plate profiles on page 351.

CANINE LIMB SALVAGE PLATE

152903XXL 2.7/3.5mm Canine Limb Salvage Plate 262mm Long

Super XXL Forelimb Salvage Plate

At 320mm long, this is currently our largest forelimb salvage plate. It features a combination of 3.5mm and 4.5mm standard cortical screw holes with a number of 3.5mm stacked locking holes. This is a big implant with the same profile as a 4.5mm broad DCP. The plate was originally commissioned by Bill Oxley at Willows Specialist Referral Hospital.



Photographs: Bill Oxley

1:2 scaled plate profiles on page 351.

SUPER XXL FORELIMB SALVAGE PLATE

152980 Super XXL Forelimb Salvage Plate

Forelimb Salvage Plate



Photographs: Simon Roch

Carpal injuries can be so severe that reconstruction is impossible and salvage is indicated. When the distal radius is involved, a simple pancarpal arthrodesis may not be enough. The forelimb salvage plate is designed for such injuries. The length and screw positions allow some reconstruction of the distal radius together with arthrodesis of the carpus. Also useful for small dogs.

Scaled plate profiles on page 350.

FORELIMB SALVAGE PLATE 1.5/2.0MM

152910 Forelimb Salvage Plate 1.5/2.0mm

Hindlimb Salvage Plates

From time to time we receive enquiries for pantarsal arthrodesis plates with an extended proximal arm for managing trauma or tumors. The images below show a custom pantarsal arthrodesis plate we created for Toby Gemmill and incorporating a trabecular tantalum block.



Site specific implants for these challenging cases have not been available off the shelf and turn-around times have often been too great for interim management whilst custom implants are manufactured.

Alternative solutions are often less than ideal and include complicated external fixation frames, elective limb shortening to use standard implants or double plating. Our hindlimb salvage plates aim to provide more eloquent and functional solutions for these patients.

1:2 & 1:1 scaled plate profiles on page 351.

HINDLIMB SALVAGE PLATES

152917-T4XL Feline (120°) hindlimb salvage plate 2.0/2.7 left

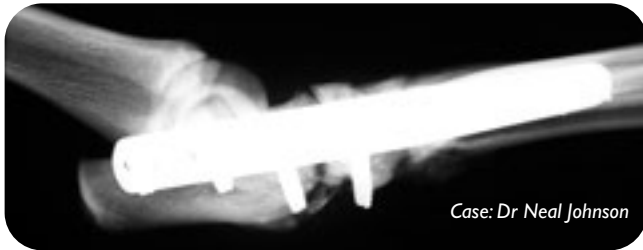
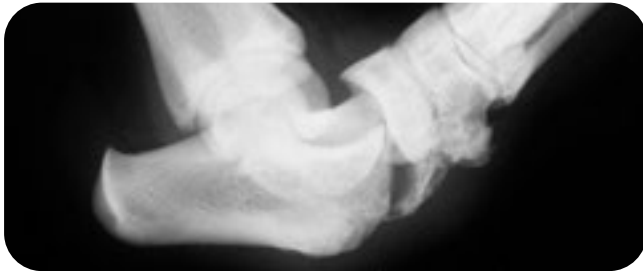
152918-T4XL Feline (120°) hindlimb salvage plate 2.0/2.7 right

152913-T4XL Canine (140°) hindlimb salvage plate 2.7/3.5 left

152914-T4XL Canine (140°) hindlimb salvage plate 2.7/3.5 right

Partial Tarsal Arthrodesis Plates

Partial Tarsal Arthrodesis Plates

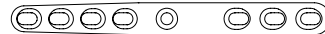
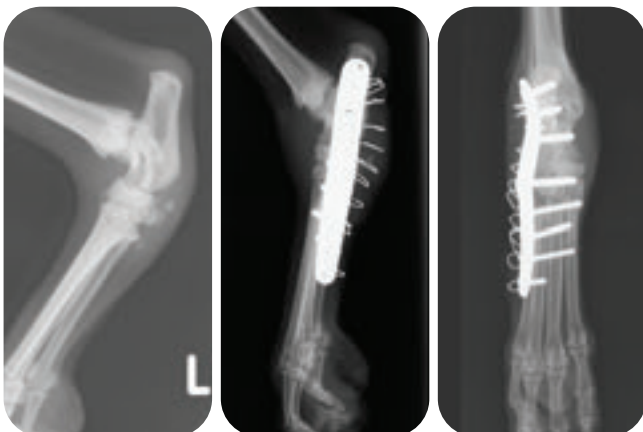


Where the tibio-tarsal joint can be preserved, partial tarsal arthrodesis is preferred to pantarsal arthrodesis, allowing a near normal range of motion to be maintained.

Hybrid plates are very helpful in permitting larger diameter screws to be used in the calcaneus and smaller diameter screws to be used in the metatarsals. Hybridisation is also helpful for thinning the plates distally, aiding closure of soft tissues. Many of the early intertarsal arthrodesis plates were modified pancarpal plates with length adjustments made to squeeze them onto the lateral aspect of the limb.

For most patients, the use of modified pancarpal plates results in sub-optimal screw placement with the biggest criticism being that the spacing of the holes for engaging the fourth tarsal bone and the proximal metatarsal bone was too great. Site specific plates provide a very much better fit. Our partial tarsal plates all now have a rounded proximal end to limit damage to overlying soft tissues.

Occasionally we still find surgeons with patients where current sizes do not fit. If you are one of these surgeons please follow the lead of Alex Li and get in touch with us. The 152920SC (the SC stands for 'short calcaneus') came about as an answer to his direct clinical requirement and is now a stock item and ready for immediate dispatch for other patients.



Scaled plate profiles on page 347.

PARTIAL TARSAL ARTHRODESIS PLATES

152924	Partial Tarsal Arthrodesis Plate 1.5/2.0mm
152923	Partial Tarsal Arthrodesis Plate 2.0/2.0mm
152920	Partial Tarsal Arthrodesis Plate 2.0/2.7mm
152922	Partial Tarsal Arthrodesis Plate 2.7/2.7mm
152921	Partial Tarsal Arthrodesis Plate 2.7/3.5mm
152925	Partial Tarsal Arthrodesis Plate 2.7/3.5mm
152920SC	Partial Tarsal Arthrodesis Plate 2.0/2.7mm Short Calcaneus

Pantarsal Arthrodesis Plates

Pantarsal Arthrodesis Plate (Medial)

Our original pantarsal arthrodesis plates were derived from a series of custom implants we created for Malcolm McKee (McKee, W.M., May, C., Macias, C. & Lapish, J.P. (2004) Pantarsal Arthrodesis with a Customised Medial or Lateral Bone Plate in 13 Dogs. Veterinary Record 154, 165-170).

These plates are designed for medial application avoiding the need to either displace or resect the fibula. Lateral application is possible and may be necessary as situations dictate. For lateral application, the distal fibula will need to be managed.

The original custom plates featured a round hole to engage with the fourth tarsal bone. Due to the variable position of the fourth tarsal bone, we dropped these holes from production versions having viewed them as non-essential.

Plate angulation is set to match the normal standing angles of the target patient population.

Occasionally we do manufacture custom/semi-custom pantarsal arthrodesis plates at other angles to meet particular patients' needs. Please contact the office with patient details should you need to explore custom solutions. If we feel there is sufficient demand, we will often perform full production runs.

Please note that the left and right description for the pantarsal plates applies when the plate is applied medially.

Scaled plate profiles on page 348.

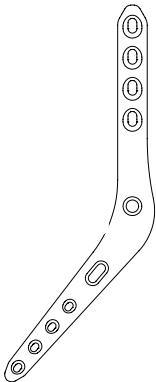
PANTARSAL ARTHRODESIS PLATE

152918	2.0/2.7 Pantarsal Plate Right Cat 120°
152917	2.0/2.7 Pantarsal Plate Left Cat 120°
152916	2.0/2.7 Pantarsal Plate Right Dog 140°
152915	2.0/2.7 Pantarsal Plate Left Dog 140°
152914	2.7/3.5mm Pantarsal Plate Right Short.
152913	2.7/3.5mm Pantarsal Plate Left Short

Medial Pantarsal Arthrodesis Plates with T4 Slots

Although we are unaware of any arthrodesis failures using plates omitting a fourth tarsal bone screw, cadaveric studies by Loic Dejardin have shown that the additional screw adds significantly to construct stiffness. Surgeons requesting custom plates also tend to prefer them with the extra hole. We therefore also offer a range of pantarsal plates with T4 slot. The slot provides flexibility over screw position and angulation enabling good engagement with the fourth tarsal bone in almost all cases.

Canine Pantarsal Plate with T4 Slot



Scaled plate profiles on page 348.

Canine Pantarsal Plate with T4 Slot - Titanium

Titanium is far more biocompatible than stainless steel. It is also more resistant to infection, so these plates would be the plate of choice if there is any infection or potential infection at the arthrodesis site.

Scaled plate profiles on page 348.

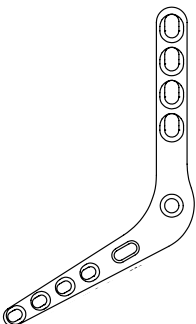
CANINE PANTARSAL ARTHRODESIS PLATE T4 SLOT - TITANIUM

- I52913-T4TI** 2.7/3.5 Canine Pantarsal Arthrodesis T4 Slot Left Titanium
- I52914-T4TI** 2.7/3.5 Canine Pantarsal Arthrodesis T4 Slot Right Titanium

CANINE PANTARSAL ARTHRODESIS PLATES WITH SLOT FOR T4 (MEDIAL)

- I52969-T4** 1.5/2.0 Canine Pantarsal Plate with T4 Slot - 135° Right
- I52968-T4** 1.5/2.0 Canine Pantarsal Plate with T4 Slot - 135° Left
- I52916-T4** 2.0/2.7 Canine (Small) Pantarsal Plate with T4 Slot - 140° Right
- I52915-T4** 2.0/2.7 Canine (Small) Pantarsal Plate with T4 Slot - 140° Left
- I52964-T4** 2.0/2.7 Canine Pantarsal Plate with T4 slot – 140° Left
- I52965-T4** 2.0/2.7 Canine Pantarsal Plate with T4 slot – 140° Right
- I52962-T4** 2.0/2.7/3.5mm Medial Pantarsal Arthrodesis Plate Left With T4
- I52963-T4** 2.0/2.7/3.5mm Medial Pantarsal Arthrodesis Plate Right With T4
- I52914-T4S** 2.7/3.5 Canine Pantarsal Plate with T4 Slot - Right Short
- I52913-T4S** 2.7/3.5 Canine Pantarsal Plate with T4 Slot - Left Short
- I52914-T4** 2.7/3.5 Canine Pantarsal Plate with T4 Slot - Right Hand
- I52913-T4** 2.7/3.5 Canine Pantarsal Plate with T4 Slot - Left Hand
- I52960-T4** 2.7/3.5/4.5 Canine Pantarsal Plate with T4 Slot - Left Hand
- I52961-T4** 2.7/3.5/4.5 Canine Pantarsal Plate with T4 Slot - Right Hand

Feline Pantarsal Plate with T4 Slot



Scaled plate profiles on page 348.

FELINE PANTARSAL ARTHRODESIS PLATES WITH SLOT FOR T4 (MEDIAL)

- I52918-T4** 2.0/2.7 Feline Pantarsal Plate with T4 Slot - 120° Right
- I52917-T4** 2.0/2.7 Feline Pantarsal Plate with T4 Slot - 120° Left
- I52967-T4** 1.5/2.0 Feline Pantarsal Plate with T4 Slot - 120° Right
- I52966-T4** 1.5/2.0 Feline Pantarsal Plate with T4 Slot - 120° Left

Pantarsal Arthrodesis by Dorsal Hybrid Plate

The concept of a dorsal plate is not new. Contoured DCPs have been used with success for pantarsal arthrodesis for some time. However, there is a fundamental problem with the use of DCPs. The plate loading takes place across the weakest plane of the plate on the compression side of the joint resulting in a relatively weak construct which leads to cycling and plate failure usually at the hole closest to the bend. In addition use of the same diameter screw in both metatarsals and the tibia can result in a mismatch. A large screw in the distal metatarsal makes the metatarsal involved very vulnerable to fracture.

Although requiring more initial dissection than the medial approach, the dorsal plate makes alignment easier and does not involve screwing metatarsals to each other. Stability across the talocrural joint is achieved by a screw which passes through the plate and crosses the joint into the calcaneus.

Noel Fitzpatrick and VI have revisited the dorsal plate and developed a range of plates which allow the surgeon to benefit from the advantages of dorsal plating whilst minimising the risks of failure. The Plates are hybrid in nature and taper distally to reduce the stress riser at the end of the plate. The vulnerable area on either side of the bend is substantially thicker and stronger than the plate proximally and distally to reduce stress at the joint. For maximum stability it is essential that a screw is placed across the talocrural joint. To facilitate this the holes on either side of the bend are extended into slots to increase the range of screw angles possible.

The shape of the cranial plate lends itself to being placed by minimally invasive plate osteosynthesis (MIPO) to preserve as much soft tissue as possible.

Feline Dorsal Pantarsal Arthrodesis Plate



Case: Noel Fitzpatrick

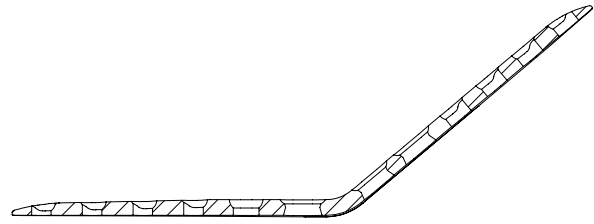
Developed in collaboration with Noel Fitzpatrick we offer a dedicated feline dorsal plate with holes placed in exactly the correct positions and machined to allow appropriate screw angulation to secure the talus. The plate is a hybrid having smaller holes distally in a range of sizes. The plate tapers distally to reduce the stress riser effect on the metatarsals.

Scaled plate profiles on page 348.

FELINE DORSAL PANTARSAL PLATE

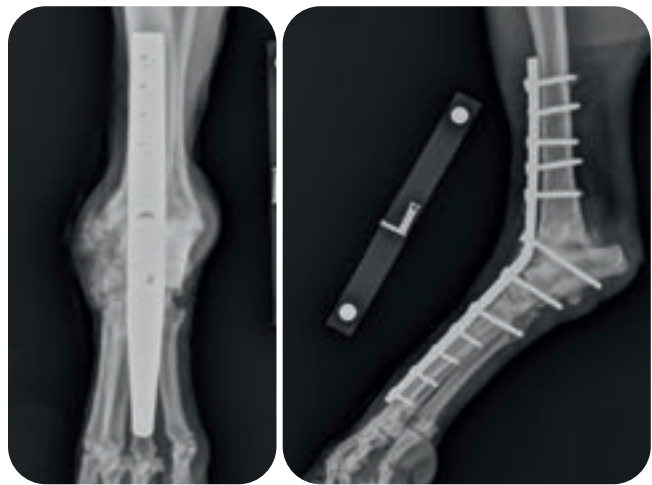
152941 Feline Dorsal Pantarsal Arthrodesis Plate 2.0/2.0mm
Calcaneal Holes accept 2.0 or 2.4mm Screws

Canine Dorsal Pantarsal Arthrodesis Plate



The Canine Dorsal Pantarsal plate has the following features:

- Plate is much stronger around the bend to transfer stress away from vulnerable areas.
- Plate tapers distally to minimise stress riser on metatarsal at the end of the plate.
- Full hybrid. Metatarsal holes smaller than tibia holes.
- Slots above and below the bend to maximise screw angle options.



Scaled plate profiles on page 348.

CANINE DORSAL PANTARSAL ARTHRODESIS PLATE

152946 Canine Dorsal Pantarsal Arthrodesis Plate 2.4/2.7/3.5mm

Round Hole Plates

2.0mm Round Hole Plates



Available in a wide range of sizes, the 2mm Plates used with either 2mm Self Tapping Screws or 2mm AO Cortical Screws, provides the secure repair of the small bones of the dog and cat.

Scaled plate profiles on page 321.

2MM ROUND HOLE PLATE

	No. of holes	Length in mm
PR200213	2	13
PR200420	4	20
PR200423	4	23
PR200525	5	25
PR200528	5	28
PR200630	6	30
PR200633	6	33
PR200735	7	35
PR200738	7	38
PR200840	8	40
PR200843	8	43

2.7mm Round Hole Plates

Bone Plates for 2.7mm or 7/64" Screws usually have too few holes in the wrong places. The 2.7mm Round Hole Plate has holes at 6mm intervals in a range of lengths.

Scaled plate profiles on page 324.

2.7MM / 7/64" ROUND HOLE PLATE (6MM WIDE)

	No. of holes	Length in mm
PR270215	2	15
PR270424	4	24
PR270427	4	27
PR270530	5	30
PR270533	5	33
PR270636	6	36
PR270639	6	39
PR270742	7	42
PR270745	7	45
PR270848	8	48
PR270851	8	51

2.7mm Heavy Duty Round Hole Plate

Slightly wider than the Standard 2.7 Round Hole Plate and available in longer sections. This Plate is suitable for applications where extra strength is required, e.g. neutralisation or buttress fixation of long bones.

Scaled plate profiles on page 324.

HEAVY DUTY 2.7MM / 7/64" ROUND HOLE PLATE (8MM WIDE)

	No. of holes	Length in mm
HPR270744	7	44
HPR270750	7	50
HPR270850	8	50
HPR270856	8	56
HPR270956	9	56
HPR270962	9	62
HPR271062	10	62
HPR271068	10	68
HPR271168	11	68
HPR271174	11	74
HPR271274	12	74
HPR271280	12	80

Please note that a range of 2.0mm, 2.7mm, & 3.5mm Self Tapping Screws are still available.
Please call our Vet Tech Team on 0345 130 9596 for further details.

3.5mm Round Hole Plates

A cheaper alternative to 3.5mm Compression Plates. If compression is unnecessary or undesirable use a Round Hole Plate.

Scaled plate profiles on page 329.

3.5MM / 9/64" ROUND HOLE PLATE

	2 (number of holes)	22 (length in mm)
P3502022	2	22
P3504046	4	46
P3504052	4	52
P3505058	5	58
P3505064	5	64
P3506070	6	70
P3506076	6	76
P3507082	7	82
P3507088	7	88
P3508094	8	94
P3508100	8	100
P3509106	9	106
P3509118	9	118
P3510118	10	118
P3510130	10	130

3.5mm Heavy Duty Round Hole Plates

The Heavy Duty Plate is stronger than either 3.5mm Compression Plate or our 3.5mm Standard Round Hole Plate. Use of this Plate makes 3.5mm Cortical or 9/64" Sherman Screws appropriate in even the largest canine breed. The plate profile is the same as a 3.5mm Broad DCP.

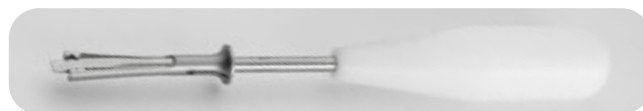
Scaled plate profiles on page 329.

HEAVY DUTY 3.5MM / 9/64" ROUND HOLE PLATE

	No. of holes	Length in mm
H3508104	8	104
H3509117	9	117
H3510130	10	130
H3511143	11	143
H3512156	12	156
H3513169	13	169
H3514180	14	180
H3515195	15	195

Screwdrivers & Sleeves for Slotted Screws (Sherman Type)

Flat End Screwdriver

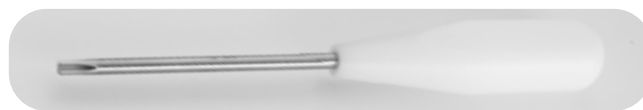


Self Tapping Screws can be somewhat fiddly to start, particularly the smaller ones. Screwdrivers with Screwholding Sleeves hold the Screw in place until the threads are engaged. Once the self tapping process has started the Sleeve is pulled back, releasing the Screw. Available for 2.0, 2.7 and 3.5mm Slotted Screws.

SCREWDRIVER FLAT END

SDF200	For 2mm Screws + Sleeve 130mm
SDF270	For 7/64" / 2.7mm Screws + Sleeve 200mm
SDF350	For 9/64" / 3.5mm Screws + Sleeve 230mm

Cruciate Screwdriver



Designed to fit the 3.5mm Cruciate Head. And offers a more secure drive however it will not fit the 2.7mm Self Tapping Screw. Screw Holding Sleeves do not work with the Cruciate Screwdriver. 230mm length.

SCREWDRIVER CRUCIATE TIP

SDC350	Screwdriver Cruciate Tip for 3.5mm Screws
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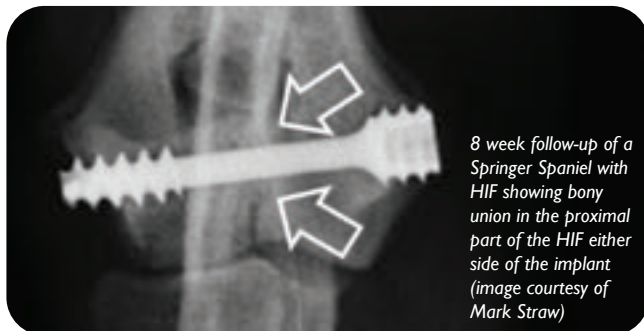
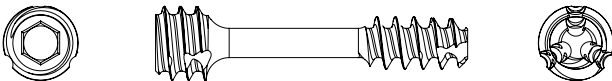
HIF - Humeral Intracondylar Fissure (IOHC)

Humeral intracondylar fissure (HIF) is most commonly seen in English Springer Spaniels, and occasionally other breeds. The condition is characterised by a fissure in the centre of the humeral condyle, which has been hypothesised to be either failure of the ossification centres to fuse, or a stress fracture. Reported healing rates for the fissure vary, with techniques that employ bone grafting appearing to be superior in this regard.

Humeral Intracondylar Repair System (HIRS)

The HIRS was developed by Ben Walton and John Innes, in partnership with the Veterinary Tissue Bank, to optimise healing and minimise complications for cases of HIF and humeral condylar fractures. Specifically, to allow application of DBM putty to the site of the fissure, to provide compression (improving stability), to ensure bone-holding either side of the fissure (to minimise the risk of screw loosening), and to be low-profile (headless) to minimise soft-tissue irritation.

The screw is titanium alloy, self-tapping, headless, and self-compressing. The drill-bit is designed to drill a hole of varying diameter; simplifying the procedure and creating a void around the central section that is packed with DBM putty.



Surgical Planning

Accurate placement is key to success with this implant. Ben Walton has created a video describing planning of the transcondylar tunnel, and how to execute this plan during surgery.

It is available to view at <https://youtu.be/GHH9Mm7Umy8>

Surgical Technique Summary

- A 2.0mm pilot hole is drilled across the humeral condyle.
- The developers advise medial and lateral approaches are made to the humeral epicondyles, and the entry-exit points of the transcondylar tunnel are marked.
- A 2.0mm pilot hole is drilled using an aiming device, and measured for depth.
- The HIRS stepped drill bit is used to prepare the hole for the implant, using the laser-etched depth markers as guides, and drilling in a medial-to-lateral direction.
- The HIRS implant is placed in the tunnel, and the trans-thread is engaged.
- DBM putty is injected around the screw, using a 16g IV catheter or needle.

- The screw is driven until it is tight, creating compression at the fissure site
- A surgical demonstration video is available at <https://youtu.be/nMhBNBpadXs>

Surgeons can contact Ben Walton (ben.walton@cvsvets.com) or John Innes (john.innes@cvsvets.com) for advice or to provide feedback on the HIRS.

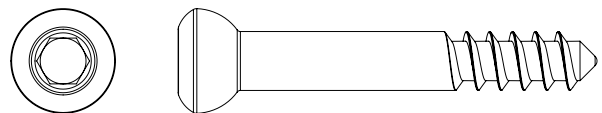
HIRS - HUMERAL INTRACONDYLAR REPAIR SYSTEM

HIRSSC32	HIRS Screw 32mm Long Titanium
HIRSDRILL	HIRS Step Drill
DBMPUTC1101	VTB DBM Putty 1cc (Premixed)
H090102	2.0mm (Pilot) Drill Round Shank
S090102S	2.0mm (Pilot) Drill AO Quick Release
SDH3500	3.5mm Hex Screwdriver
ADJDG2035	Adjustable Drill Guide for 2.0/2.5/3.5mm Drills

Please note a chuck with minimum capacity 6mm will be required.

Shaft Screws

4.5mm Shaft Screws for HIF



We offer a range of 4.5mm shaft screws specifically designed to be used as trans-condylar stabilising screws. Note that the 4.5mm shaft screws are significantly stronger than a standard 4.5mm cortical screw.

4.5 SHAFT SCREWS

SHSC4532	Shaft Screw	32mm	
SHSC4534	Shaft Screw	34mm	
SHSC4536	Shaft Screw	36mm	
SHSC4538	Shaft Screw	38mm	
SHSC4540	Shaft Screw	40mm	
SHSC4542	Shaft Screw	42mm	
SHSC4544	Shaft Screw	44mm	
SHSC4534TI	Shaft Screw	34mm	Titanium
SHSC4536TI	Shaft Screw	36mm	Titanium

Please note that a tap is required for the shaft screws. It is also recommended that an insert sleeve is used to centre the pilot hole in the far condyle.

4.5MM SHAFT SCREWS EQUIPMENT

N45	4.5mm Cortical Nut Stainless Steel Non Sterile
CN45-A	4.5mm Cortical Nut UHMPWE - Sterile
COU4565QR	Quick Release Countersink for 4.5/6.5 Screws AO Fit
COU4565T-A	T Bar Countersink for 4.5/6.5 Screws
DRILLSTOP	Drill Stop Set in Stainless Case
SDH3500	3.5mm Hex Screwdriver for 4.5/5.5/6.5mm Screws
H090205S	3.2mm (Pilot) Drill Round Shank
S090105S	3.2mm (Pilot) Drill AO Quick Release
H090108S	4.5mm (Clearance) Drill Round Shank
S090108S	4.5mm (Clearance) Drill AO Quick Release
TS00045	4.5mm Cortical Tap Quick Release - Handle required
ADJDG45	Adjustable Drill Guide for 4.5mm Drills

Interdental Wiring and the use of Dental Acrylic

Maxillary and mandibular fractures can be repaired to great effect using various techniques including plating, external fixation and direct inter-fragmentary wiring. However, with limited 'safe corridors' these techniques all have the potential to cause iatrogenic damage to the tooth roots, nerves and blood vessels if the surgeon is not familiar with the local anatomy.



Acrylic splint applied over interdental wiring.
Image courtesy of Norman Johnston, DentalVets

Where fractures of the jaw bones are fully reconstructable, interdental wiring and splinting perhaps offers a safer and more versatile solution. It can be particularly useful where there are very few safe corridors within the bone itself, such as when the tooth roots are tightly packed together. Using interdental wiring techniques, a repair can often be achieved from an oral approach with very little or no dissection.

Intra-oral acrylic splinting is a very useful, but much underused technique. Initial reduction is normally achieved first by intra-oral wiring and then the repair is reinforced using a cold cure, temporary crown style, dental acrylic. Note that traditional methylmethacrylate acrylics are too exothermic to be used in the mouth.

There are a number of different techniques for interdental wiring; these include the Ivy Loop, Essig, Risdon, Stout's Multiple Loop and Modified Stout's Multiple Loop patterns. It is useful to know more than one different pattern as some are easier to use and indeed more effective in some parts of the mouth and for differing anatomies than others.

The initial security of interdental wires depends largely on the wire's ability to contour to the shape of the teeth, although in some cases it may be necessary to place the wire through small bone tunnels between the teeth to improve security further. 0.8mm/20g wire may be useful in large dogs, but relatively fine wires (typically 0.5mm/24g to 0.65mm/22g) are more easily worked and are suitable for most patients. These fine wires contour to the shape of the teeth better and with less force, so as well as providing greater security loss of reduction and having the wire flip out of position are both less likely to occur as the wire is tightened.

Wiring techniques do take patience to perfect and where possible, practice is strongly advised before use with a clinical patient.

Dental acrylic deposited over the top of the wired repair will help to keep the wire in place and add to the mechanical strength and stiffness of the repair.

For proper adherence of dental acrylic, acid-etching of the teeth is required. Dental acrylic is surprisingly user-friendly to apply. It has a consistency that allows it to flow under gravity in a controlled manner over the teeth filling the gaps and leaving a nice smooth surface finish. It can be used to cover any sharp and exposed wire twists and can be used as a refinement in this way for wiring of the mandibular symphysis.

There are two main types of dental acrylic, cold-cure and light cure. Both are available in dual barrelled cartridges which are loaded into a re-usable applicator gun. As the trigger of the gun is depressed, the two components are mixed in disposable nozzles. These guns allow for very accurate deposition of the acrylic, reducing mess considerably. The volume of acrylic in each cartridge is normally sufficient for multiple uses.

It is critical to ensure that the mouth can close without teeth in the opposite jaw making contact with the splint. This is uncomfortable and destabilises the splint. For mandibular fractures no splinting material should be placed on the buccal aspect of the teeth caudal to the lower

carnassials. For both mandibular and maxillary splints relief should be provided to the occlusion of the canine and incisor teeth.

'Cold-cure' temporary crown acrylic sets without an exothermic polymerisation reaction and is not odorous. The material flows very well and sets in around one minute. It can be contoured with a gloved finger as it sets.

Light-cure acrylics set with the use of a UV light cure 'gun', which provides a little more control over the speed of polymerisation and takes around 30 seconds under the light to set. The main disadvantages of this type are the cost of the light cure unit and the need to build up the splint in 2mm increments of depth. This can be time consuming in a large splint. UV glasses should be worn for protection when using light-cure guns.

Rough edges and surfaces in contact with soft tissues must be removed with a high speed fine diamond or white stone bur and the surface coated with dentine bonding material to render it smooth. Enhanced oral hygiene using chlorhexidine rinse or gel should be used twice daily. Frequent monitoring of the mouth while the splint is in place is advised as lingual or mucosal contact ulcers can form over edges.

Dental acrylic is radio-lucent allowing assessment of fracture healing before removal. Removal is achieved through a combination of burring and simply cracking the acrylic away using calculus forceps.

The wire is removed by untwisting or snipping with small implant cutters. Once one section is loose, the rest normally comes away pretty easily.



DENTAL ACRYLIC STARTER KIT

ETCHGEL	Etching Compound - Etchgel Phosphoric 40% Syringe 5g plus 3 Tips
MT2	MaxiTemp HP 'Cold Cure' Acrylic 2 x 50ml Cartridges
MTMT50	MaxiTemp Mixing Tips - Single Use x 50
MTPACK	MaxiTemp HP Pack 1 x 50ml Cartridge plus 6 Mixing Tips
MTG	MaxiTemp HP Re-useable Applicator Gun
MTSET	Dental Acrylic Starter Kit - 2 x Etchgel 1 x MT2 1 x MTMT50 1 x MTG

ORTHOPAEDIC WIRE - 10M ROLLS

OW0410	Orthopaedic Wire	0.4mm (Diameter)	26g
OW0510	Orthopaedic Wire	0.5mm	25g
OW0610	Orthopaedic Wire	0.6mm	23g
OW0710	Orthopaedic Wire	0.71mm	21g
OW0810	Orthopaedic Wire	0.8mm	20g
001260	Wire Twister/ Shear Cutters		

Step by Step Guide to Interdental Wiring

For a free Step by Step Guide on Interdental Wiring, please call our Vet Tech Team on 0345 130 9596 or email info@vetinst.com

Titanium Mesh

Titanium Mesh System



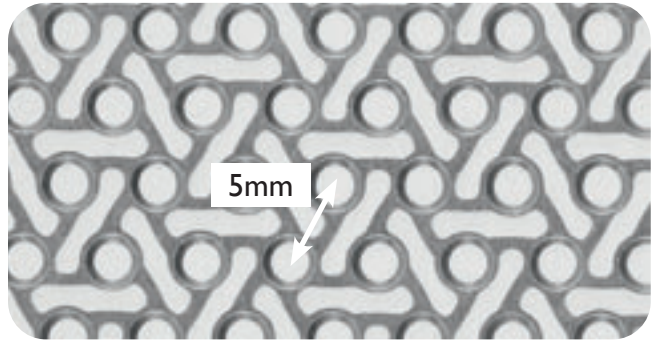
For the first time, we are making Titanium Mesh available directly to vets. Based on a human product, our Titanium Mesh is cuttable and is mouldable in three-dimensions, making it very adaptable and ideal for cranial fractures and in the management of fractures of other flat bones that are not load bearing. The mesh has also been used to augment bone cement in joint replacement surgery.



Moulded ready for acetabulum augmentation during total hip replacement surgery.

Images courtesy of Guenter Schwarz.

The triangular pattern allows 5mm between screw-hole centres. The mesh is 0.6mm thick and becomes more rigid as it is bent into a three-dimensional form.



Close-up of mesh, showing pattern – including hole spacing measurement.

The Screws are tapered, making them self-drilling and self-tapping, however, a drill of 1mm diameter or less may be used to start the screws and may help reduce the chances of cracks forming if used close to the fracture lines. The Screws are made of titanium to avoid any problems arising from mixed metallurgy and feature a low profile cruciate head designed for use with the Cruciate Screwdriver with AO Quick Release fitting shown. A 5mm or 7mm length appears to be the most useful for our species, but more sizes are likely to become available depending on demand.



Screwdriver Insert



Titanium Mesh Cutter

TITANIUM MESH SYSTEM

- TIMESH405006** Titanium Mesh 40mm x 50mm 0.6mm Thick
- TIMESH506006** Titanium Mesh 50mm x 60mm 0.6mm Thick
- TIMESH607006** Titanium Mesh 60mm x 70mm 0.6mm Thick
- TIMESHSCREW2005** Titanium Mesh Screws Tapered 2.0mm x 5.0mm Length
Cruciate Head
- TIMESHSCREW2007** Titanium Mesh Screws Tapered 2.0mm x 7.0mm Length
Cruciate Head
- TIMESHSDI** Screwdriver Insert for 2mm Cruciate Titanium Mesh Screws.
AO Quick Release
- TIMESHSCUT** Titanium Mesh Cutters
- TIMESHPLI** Titanium Mesh Contouring Pliers

Vi Dynamic Locking Plates

Combining compression & locking technology in one plate

- 270° of locking thread engagement in plate for superior security.
- Compression section of hole allows up to 35° of screw angulation.
- Suitable for MIPO application - spade end for easier insertion, single full locking hole at opposite end allows drill guide to be used to aid plate manipulation.



DLP Plate codes relate to the plate size, number of slotted holes, number of round holes and length of the plate e.g. DLP3518241

DLP35 = 3.5mm DLP

18 = 17 Slotted Holes & 1 Round Hole

237 = 237mm Long

1.5mm Vi Dynamic Locking Plates

Scaled plate profiles on page 336.

VI DYNAMIC LOCKING PLATE 1.5MM

DLP1504024	1.5mm Dynamic Locking Plate 4 Hole 24mm Long
DLP1505030	1.5mm Dynamic Locking Plate 5 Hole 30mm Long
DLP1506036	1.5mm Dynamic Locking Plate 6 Hole 36mm Long
DLP1507042	1.5mm Dynamic Locking Plate 7 Hole 42mm Long
DLP1508048	1.5mm Dynamic Locking Plate 8 Hole 48mm Long
DLP1509054	1.5mm Dynamic Locking Plate 9 Hole 54mm Long
DLP1510060	1.5mm Dynamic Locking Plate 10 Hole 60mm Long
DLP1511066	1.5mm Dynamic Locking Plate 11 Hole 66mm Long
DLP1512072	1.5mm Dynamic Locking Plate 12 Hole 72mm Long

2.0mm Vi Dynamic Locking Plates

Scaled plate profiles on page 336.

VI DYNAMIC LOCKING PLATE 2.0MM

DLP2004031	Dynamic Locking Plate 2.0mm 4 Hole 31mm Long
DLP2005038	Dynamic Locking Plate 2.0mm 5 Hole 38mm Long
DLP2006045	Dynamic Locking Plate 2.0mm 6 Hole 45mm Long
DLP2007052	Dynamic Locking Plate 2.0mm 7 Hole 52mm Long
DLP2008059	Dynamic Locking Plate 2.0mm 8 Hole 59mm Long
DLP2009066	Dynamic Locking Plate 2.0mm 9 Hole 66mm Long
DLP2010073	Dynamic Locking Plate 2.0mm 10 Hole 73mm Long
DLP2011080	Dynamic Locking Plate 2.0mm 11 Hole 80mm Long
DLP2012087	Dynamic Locking Plate 2.0mm 12 Hole 87mm Long
DLP2013094	Dynamic Locking Plate 2.0mm 13 Hole 94mm Long
DLP2014101	Dynamic Locking Plate 2.0mm 14 Hole 101mm Long

2.4mm Vi Dynamic Locking Plates

Available in two thicknesses - 1.7mm (thin) and 2.0mm (thick).

Scaled plate profiles on page 337.

VI DYNAMIC LOCKING PLATE 2.4MM THIN (1.7MM)

DLP2404038N	Dynamic Locking Plate 2.4mm Thin 4 Holes 38mm Long
DLP2405047N	Dynamic Locking Plate 2.4mm Thin 5 Holes 47mm Long
DLP2406056N	Dynamic Locking Plate 2.4mm Thin 6 Holes 56mm Long
DLP2407065N	Dynamic Locking Plate 2.4mm Thin 7 Holes 65mm Long
DLP2408074N	Dynamic Locking Plate 2.4mm Thin 8 Holes 74mm Long

VI DYNAMIC LOCKING PLATE 2.4MM THICK (2.0MM)

DLP2408074K	Dynamic Locking Plate 2.4mm Thick 8 Holes 74mm Long
DLP2409083K	Dynamic Locking Plate 2.4mm Thick 9 Holes 83mm Long
DLP2410092K	Dynamic Locking Plate 2.4mm Thick 10 Holes 92mm Long
DLP2411101K	Dynamic Locking Plate 2.4mm Thick 11 Holes 101mm Long
DLP2412110K	Dynamic Locking Plate 2.4mm Thick 12 Holes 110mm Long
DLP2413119K	Dynamic Locking Plate 2.4mm Thick 13 Holes 119mm Long
DLP2414128K	Dynamic Locking Plate 2.4mm Thick 14 Holes 128mm Long
DLP2415137K	Dynamic Locking Plate 2.4mm Thick 15 Holes 137mm Long
DLP2416146K	Dynamic Locking Plate 2.4mm Thick 16 Holes 146mm Long
DLP2417155K	Dynamic Locking Plate 2.4mm Thick 17 Holes 155mm Long
DLP2418164K	Dynamic Locking Plate 2.4mm Thick 18 Holes 164mm Long

Please note that further sizes of the 2.4mm plate may be available, contact our Vet Tech Team on 0345 130 9596 to check availability.

2.7mm Vi Dynamic Locking Plates

Scaled plate profiles on page 338.

VI DYNAMIC LOCKING PLATE 2.7MM

DLP2704038	Dynamic Locking Plate 2.7mm 4 Holes 38mm Long
DLP2705047	Dynamic Locking Plate 2.7mm 5 Holes 47mm Long
DLP2706056	Dynamic Locking Plate 2.7mm 6 Holes 56mm Long
DLP2707065	Dynamic Locking Plate 2.7mm 7 Holes 65mm Long
DLP2708074	Dynamic Locking Plate 2.7mm 8 Holes 74mm Long
DLP2709083	Dynamic Locking Plate 2.7mm 9 Holes 83mm Long
DLP2710092	Dynamic Locking Plate 2.7mm 10 Holes 92mm Long
DLP2711101	Dynamic Locking Plate 2.7mm 11 Holes 101mm Long
DLP2712110	Dynamic Locking Plate 2.7mm 12 Holes 110mm Long
DLP2713119	Dynamic Locking Plate 2.7mm 13 Holes 119mm Long
DLP2714128	Dynamic Locking Plate 2.7mm 14 Holes 128mm Long
DLP2715137	Dynamic Locking Plate 2.7mm 15 Holes 137mm Long
DLP2716146	Dynamic Locking Plate 2.7mm 16 Holes 146mm Long
DLP2717155	Dynamic Locking Plate 2.7mm 17 Holes 155mm Long
DLP2718164	Dynamic Locking Plate 2.7mm 18 Holes 164mm Long

3.5mm Vi Dynamic Locking Plates

Scaled plate profiles on page 339.

VI DYNAMIC LOCKING PLATE 3.5MM

DLP3504055	Dynamic Locking Plate 3.5mm 4 Holes 55mm Long
DLP3505068	Dynamic Locking Plate 3.5mm 5 Holes 68mm Long
DLP3506081	Dynamic Locking Plate 3.5mm 6 Holes 81mm Long
DLP3507094	Dynamic Locking Plate 3.5mm 7 Holes 94mm Long
DLP3508107	Dynamic Locking Plate 3.5mm 8 Holes 107mm Long
DLP3509120	Dynamic Locking Plate 3.5mm 9 Holes 120mm Long
DLP3510133	Dynamic Locking Plate 3.5mm 10 Holes 133mm Long
DLP3511146	Dynamic Locking Plate 3.5mm 11 Holes 146mm Long
DLP3512159	Dynamic Locking Plate 3.5mm 12 Holes 159mm Long
DLP3513172	Dynamic Locking Plate 3.5mm 13 Holes 172mm Long
DLP3514185	Dynamic Locking Plate 3.5mm 14 Holes 185mm Long
DLP3515198	Dynamic Locking Plate 3.5mm 15 Holes 198mm Long
DLP3516211	Dynamic Locking Plate 3.5mm 16 Holes 211mm Long
DLP3517224	Dynamic Locking Plate 3.5mm 17 Holes 224mm Long
DLP3518237	Dynamic Locking Plate 3.5mm 18 Holes 237mm Long

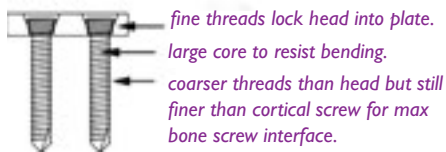
3.5mm Vi Dynamic Locking Plates Broad

Scaled plate profiles on page 340.

VI DYNAMIC LOCKING PLATE 3.5MM BROAD

DLP35B07095	3.5mm Broad Dynamic Locking Plate 7 Holes, 95mm Long
DLP35B08108	3.5mm Broad Dynamic Locking Plate 8 Hole, 108mm Long
DLP35B09121	3.5mm Broad Dynamic Locking Plate 9 Hole, 121mm Long
DLP35B10134	3.5mm Broad Dynamic Locking Plate 10 Hole, 134mm Long
DLP35B11147	3.5mm Broad Dynamic Locking Plate 11 Hole, 147mm Long
DLP35B12160	3.5mm Broad Dynamic Locking Plate 12 Hole, 160mm Long
DLP35B13173	3.5mm Broad Dynamic Locking Plate 13 Hole, 173mm Long
DLP35B14186	3.5mm Broad Dynamic Locking Plate 14 Hole, 186mm Long
DLP35B15199	3.5mm Broad Dynamic Locking Plate 15 Hole, 199mm Long
DLP35B16212	3.5mm Broad Dynamic Locking Plate 16 Hole, 212mm Long
DLP35B18238	3.5mm Broad Dynamic Locking Plate 18 Hole, 238mm Long
DLP35B20264	3.5mm Broad Dynamic Locking Plate 20 Hole, 264mm Long

Locking Plates



Standard DCP or Round Hole Plates are held into position by being trapped between the head of the screw and the bone. Tightening the screw pulls the bone up to the plate. When the screw is tight the threads of the screw pull against the bone holding the plate in position. The situation with locking screws and plates is very different. Although the threads of the screw shaft engage the bone, the interface between bone and screw is not related to attachment of the plate. In locking plates and screws it is the interface between the screw head and the plate which attaches the plate to the screw. As the screw is tightened the bone maintains its position relative to the plate, it is not drawn up to it. The screw head engages with the plate. This has a number of implications:

Contouring of Plates

With standard DCPs the plate must be contoured exactly. When the screws are tightened the bone fragments will be pulled towards the plate and assume the contour of the plate. If the plate is not contoured correctly the screws will pull the fragments out of alignment. Using a locking plate and screws once the plate is applied the bone fragments will be held in position relative to one another as is the case with external fixation. Indeed locking plates are sometimes referred to as 'internal, external fixation'. Locking plates do not therefore require contouring in the same way as DCP type plates. This has particular relevance in the TPLO procedure where contouring the plate is very important and very time consuming. If a Standard Locking TPLO Plate fits all TPLO osteotomies there are significant savings in terms of time and morbidity.

Screw Angulation and Numbers

In order to fit and lock into the plate the screw must be inserted at a fixed angle relative to the hole in the plate. Drill Guides are provided which screw into the locking holes to ensure that this happens. It is not always desirable that the screws are at 90 degrees to the plate, particularly close to joints. The angle of the screw is dictated by the plate not the surgeon. The rigid attachment of the screw to the plate gives any locking construct a high degree of angular rigidity compared to a DCP construct where a spherical screw head in an oval hole results in a relatively flexible construct. This means in any given situation that to achieve the same rigidity as a DCP construct a locking construct needs fewer screws. Again this has particular implications in terms of time and morbidity. It also offsets, to a degree, the higher costs of locking screws and plates.

Screw Diameter and Strength

The increased angular rigidity places greater stresses onto the screw. Because we are not relying on the threads of the screw in the bone to pull the plate to the bone they do not need to be as coarse as standard Cortical Screws. They need, only, to hold their position in the bone. Thus for the same outside diameter of screw we can increase the core diameter without increasing the likelihood of bone/ screw interface failure. Increasing the diameter of the core hugely affects the AMI (resistance to bending) of the screw. The AMI of standard 3.5 cortical screws as used in SOP™ is 1.6, the AMI of standard locking screw is 2.6. A SOP™ screw is far more likely to fail than is a standard locking screw. Screw failure is the typical mode of failure of SOP™ constructs. Standard Cortical Screws are not designed for use as Locking Screws.

Minimally Invasive Plate Osteosynthesis (MIPO)

MIPO aims to interfere with the patient's natural response to fracture as little as possible while establishing and maintaining stabilisation of the fracture. Locking plates do not need close contouring to the bone, indeed it is not necessary to have contact between the plate and the bone. The periosteum is therefore preserved and the fracture is not disturbed. Additionally the angular stability of locking screws coupled with the need for fewer screws are desirable features in any MIPO procedure. Locking Screws were developed for osteoporotic bone where Standard DCPs and Screws tend to strip out. The bone screw interface is under far less stress using locking technology. This is an important quality in juvenile bone also. Veterinary MIPO candidates tend to be young.

ViLock 2.0 Plates with Stacked Locking Holes



Our 2.0mm stacked hole locking plates can be used either with our 2.0mm locking screws or with 2.0mm cortical/cortical self-tap screws. In common with all locking plate constructs, when used with locking screws, precise contouring to the bone surface is not required. Leaving a small gap between plate and bone helps minimise damage to the periosteal blood supply. Closely positioned holes (6mm between centres) makes these plates very useful for smaller fragments.

Scaled plate profiles on page 333.

LOCKING 2.0 PLATES

LPSH200425	2.0mm Locking Plate 4 Hole 25mm Long
LPSH200531	2.0mm Locking Plate 5 Hole 32mm Long
LPSH200637	2.0mm Locking Plate 6 Hole 37mm Long
LPSH200743	2.0mm Locking Plate 7 Hole 43mm Long
LPSH200849	2.0mm Locking Plate 8 Hole 49mm Long
LPSH200955	2.0mm Locking Plate 9 Hole 55mm Long
LPSH201061	2.0mm Locking Plate 10 Hole 61mm Long
LPSH201167	2.0mm Locking Plate 11 Hole 67mm Long
LPSH201273	2.0mm Locking Plate 12 Hole 73mm Long
LPSH201379	2.0mm Locking Plate 13 Hole 79mm Long
LPSH201485	2.0mm Locking Plate 14 Hole 85mm Long
LS20PSET	2.0mm Locking Plate Set

ViLock 2.4 Plates with Stacked Locking Holes



Vi 2.4 locking plates have stacked locking holes as is the case with our 2.7 plates. The twin start hole in the plate is the same size as the 2.7 locking plate. The following screws may be used, locking 2.4 (LS2424**), locking 2.7 screws (LS2724**), cortical 2.4 and cortical 2.7.

Hole spacing is 7mm, the same as the 2.4 DCP.

Scaled plate profiles on page 334.

LOCKING 2.4 PLATES

LPSH240431	2.4mm Locking Plate 4 Hole 31mm Long
LPSH240538	2.4mm Locking Plate 5 Hole 38mm Long
LPSH240645	2.4mm Locking Plate 6 Hole 45mm Long
LPSH240752	2.4mm Locking Plate 7 Hole 52mm Long
LPSH240859	2.4mm Locking Plate 8 Hole 59mm Long
LPSH240966	2.4mm Locking Plate 9 Hole 66mm Long
LPSH241073	2.4mm Locking Plate 10 Hole 73mm Long
LPSH241180	2.4mm Locking Plate 11 Hole 80mm Long
LPSH241287	2.4mm Locking Plate 12 Hole 87mm Long
LPSH241394	2.4mm Locking Plate 13 Hole 94mm Long
LPSH2414101	2.4mm Locking Plate 14 Hole 101mm Long
LPSH2415108	2.4mm Locking Plate 15 Hole 108mm Long
LPSH2416115	2.4mm Locking Plate 16 Hole 115mm Long
LPSH2417122	2.4mm Locking Plate 17 Hole 122mm Long
LPSH2418129	2.4mm Locking Plate 18 Hole 129mm Long
LS24PSET	2.4mm Locking Plate Set

ViLock 2.7 Plates with Stacked Locking Holes



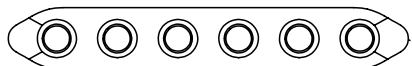
The twin start hole in the plate is the same as the size 2.4 locking plate. The following screws may be used: Locking 2.7 (LS2724**), locking 2.4 (LS2424**), cortical 2.7 and cortical 2.4. The hole spacing is the same as that of a standard 2.7mm DCP.

Scaled plate profiles on page 334.

LOCKING 2.7 PLATES

LPSH2704034	2.7mm Locking Plate 4 Hole 34mm Long
LPSH2705042	2.7mm Locking Plate 5 Hole 42mm Long
LPSH2706050	2.7mm Locking Plate 6 Hole 50mm Long
LPSH2707058	2.7mm Locking Plate 7 Hole 58mm Long
LPSH2708066	2.7mm Locking Plate 8 Hole 66mm Long
LPSH2709074	2.7mm Locking Plate 9 Hole 74mm Long
LPSH2710082	2.7mm Locking Plate 10 Hole 82mm Long
LPSH2711090	2.7mm Locking Plate 11 Hole 90mm Long
LPSH2712098	2.7mm Locking Plate 12 Hole 98mm Long
LPSH2713106	2.7mm Locking Plate 13 Hole 106mm Long
LPSH2714114	2.7mm Locking Plate 14 Hole 114mm Long
LPSH2715122	2.7mm Locking Plate 15 Hole 122mm Long
LPSH2716130	2.7mm Locking Plate 16 Hole 130mm Long
LPSH2717138	2.7mm Locking Plate 17 Hole 138mm Long
LPSH2718146	2.7mm Locking Plate 18 Hole 146mm Long
LS27PSET	2.7mm Locking Plate Set

ViLock 3.5 Plates with Stacked Locking Holes



The Stacked Locking Hole allows the use of both 3.5 Cortical Screws with limited angulation (7 degrees) and Standard Locking Screws having full angle security through the same round hole. While the mixing of locking and non locking screws in the same fragment is rarely indicated, it can be useful to place a screw outside the angular limitations of the locking hole.

The cutaways underneath the plate are designed to offer low contact between plate and bone when using regular cortical screws. In addition they help create an even resistance to bending for easier contouring and reduced stress concentration at the screw holes.

Scaled plate profiles on page 335.

3.5MM LOCKING PLATES

LPSH3504046	3.5mm Locking Plate	46mm 4 Hole
LPSH3505056	3.5mm Locking Plate	56mm 5 Hole
LPSH3506066	3.5mm Locking Plate	66mm 6 Hole
LPSH3507076	3.5mm Locking Plate	76mm 7 Hole
LPSH3508086	3.5mm Locking Plate	86mm 8 Hole
LPSH3508126	3.5mm Locking Plate	126mm 8 Hole
LPSH3509096	3.5mm Locking Plate	96mm 9 Hole
LPSH3510106	3.5mm Locking Plate	106mm 10 Hole
LPSH3511116	3.5mm Locking Plate	116mm 11 Hole
LPSH3512126	3.5mm Locking Plate	126mm 12 Hole
LPSH3513136	3.5mm Locking Plate	136mm 13 Hole
LPSH3514146	3.5mm Locking Plate	146mm 14 Hole
LPSH3515156	3.5mm Locking Plate	156mm 15 Hole
LPSH3516166	3.5mm Locking Plate	166mm 16 Hole
LPSH3517176	3.5mm Locking Plate	176mm 17 Hole
LPSH3518186	3.5mm Locking Plate	186mm 18 Hole
LS35PSET	3.5mm Locking Plate Set	

Locking Pancarpal Arthrodesis

At the 2009 BVOA scientific meeting there was a lengthy discussion regarding the value of incorporating Locking Screws into pancarpal constructs. Locking Screws add angular security which was generally regarded to be a good thing. The presence of compression holes was also considered to be desirable.

Aaron Moles (Perth) considers that once the cartilage has been removed the carpus effectively becomes a comminuted fracture and questions whether placing a single screw in a small fragment (the radial carpal bone) is appropriate. All good fun! All radial carpal bone holes are locking.

The range is due to be extended - we welcome surgeon feedback on preferred hole configurations.



152907XLL - this Plate is as above but includes two DCP holes above and below the radial carpal bone hole. The above two plates have the same dimensions and hole spacing as 152907XL.



152903XLL - this Plate is effectively a double hybrid in that it includes both locking and DCP holes of two different sizes. Proximal holes are 3.5mm and distal holes are 2.7mm.

Scaled plate profiles on page 350.

LOCKING PANCARPAL ARTHRODESIS PLATES

152907XLL	3.5mm Locking & DCP Hybrid Pancarpal Arthrodesis Plate 153mm Long
152903XLL	2.7/3.5mm Locking & DCP Hybrid Pancarpal Arthrodesis Plate

Locking T-Plates

Locking constructs offer inherently better angular stability than non-locking constructs. This can be useful when managing small fragments where only a low screw count is possible, such as with distal radial fractures, and corrective osteotomies or wedge osteotomies positioned towards the end of a bone.

Precise contouring is less important compared with non-locking implants as the underside of the plate does not need to sit flat on the surface of the bone. This can help save significant time in theatre.

Stepping the plate off from the bone surface or positioning it at a slight angle to the bone surface can be used to good advantage when correcting angular limb deformities; the cortices do not re-align into an undesired position as screws are tightened.



Locking screws fully seated into Vi locking T-plates sit completely flat, minimising interference with over-lying tissues.

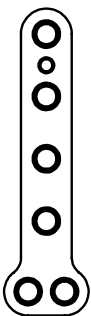
All of our locking T-plates feature a small hole between the proximal screw holes. This permits the engagement of positional aids such as an A-wire or the tips of pointy reduction forceps.

1.5mm Locking T-Plate

1.5MM LOCKING T-PLATE

T1515836LOCK 1.5mm Locking T-Plate 8 Holes 36mm Long

2.0mm Locking T-Plates



Vi low profile 2.0mm locking T-plates do not have the stacked locking feature of our larger locking implants and should only be used with locking screws.

Limited contact undercuts reduce the impact of these plates on underlying periosteal blood supply and reduce stress concentration at the screw-holes. The additional reduction hole at the proximal end of these plates will accept A-wires up to 1.2mm in diameter.

Scaled plate profiles on page 345.

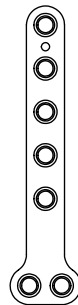
2.0MM LOCKING T-PLATES

T2020532LOCK 2.0mm Locking T-Plate 5 Holes 32mm Long

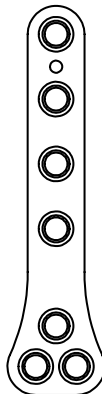
T2020632LOCK 2.0mm Locking T-Plate 6 Holes 32mm Long

T2020850LOCK 2.0mm Locking T-Plate 8 Holes 50mm Long

2.4/ 2.7mm Locking T-Plates



Vi 2.4mm and 2.7mm Locking Screws have the same size head, so these plates will accept either. Where necessary, the shallow stacked locking feature will also support the use of standard cortical or cortical self-tapping screws. Limited contact undercuts reduce the impact of these plates on underlying periosteal blood supply and reduce stress concentration at the screw-holes. The additional reduction hole at the proximal end of these plates will accept A-wires up to 1.5mm in diameter.



T2427748LOCK is similar to T2427647LOCK featured above, but has three locking screw holes in the head section and four locking screw holes in the shaft.

Scaled plate profiles on page 345.

2.4/ 2.7MM LOCKING T-PLATES

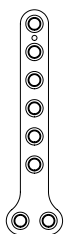
T2427537LOCK 2.4/ 2.7mm Locking T-Plate 5 Holes 37mm Long

T2427647LOCK 2.4/ 2.7mm Locking T-Plate 6 Holes 47mm Long

T2427755LOCK 2.4/ 2.7mm Locking T-Plate 7 Holes 55mm Long

T2427748LOCK 2.4/ 2.7mm Locking T-Plate 3 Head 4 Shaft 48mm Long

3.5mm Locking T-Plates



Designed for use with our 3.5mm locking screws, these plates also have a stacked feature, allowing the use of standard cortical or cortical self-tapping screws. Our T350766LOCK features three screw holes in the head section and four screw holes in the shaft section.

Limited contact undercuts reduce the impact of these plates on underlying periosteal blood supply and reduce stress concentration at the screw-holes.

The additional reduction hole at the proximal end of these plates will accept A-wires up to 1.8mm in diameter.

Scaled plate profiles on page 345.

3.5MM LOCKING T-PLATES

T350660LOCK	3.5mm Locking T-Plate 6 Holes 66mm Long
T350766LOCK	3.5mm Locking T-Plate 3 Head 4 Shaft 60mm
T350880LOCK	3.5mm Locking T-Plate 8 Holes 80mm Long
T3510100LOCK	3.5mm Locking T-Plate 10 Holes 100mm Long
T3512120LOCK	3.5mm Locking T-Plate 12 Holes 120mm Long

Cuttible Malleable Locking Plates

Cuttible Malleable Locking Plates



Vi Cuttable Malleable Locking Plates come into their own when pronounced contouring is necessary. They are well suited to situations where bone thickness or bone quality makes application of more conventional implants challenging, such as with many more complicated pelvic fractures as well as situations where mono-cortical application is desirable. As locking implants, intimate bone contact, though desirable, is not essential.

The low profile makes these implants useful for craniomaxillofacial surgery and for other areas with limited soft tissue coverage. Manufactured from stainless steel grade 316LVM, they are stiffer than titanium implants of similar dimensions, but are still cuttable with standard implant cutters offering good versatility.

Use should ideally be reserved for when low load applications or when load sharing is possible between these and other implants such as with double plating techniques or when load sharing is possible with the bone. Use to span large defects is not recommended.

1.5mm Locking Cuttable Malleable Plates

1.5MM LOCKING CUTTABLE MALLEABLE PLATES

CM15LOCK	1.5mm Cuttable Malleable Locking Plate
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2.0mm Cuttable Malleable Locking Plate



With a low profile of only 1.3mm, holes are for use with locking screws only. Contouring can be achieved with standard small bending irons such as those used for the Vi 1.0mm system. For side contouring, the small Vi roller style bending pliers are useful. Only very heavy contouring necessitates the use of locking plugs. Implant cutters such as 001237 make easy work of these implants. 7.0mm between hole centres.

Scaled plate profiles on page 333.

2.0MM CUTTABLE MALLEABLE LOCKING PLATES

CM20LOCK	2.0mm Cuttable Malleable Locking Plate 15 Holes 103mm Long
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2.4mm Locking Cuttable Malleable Plates



With a low profile of only 1.8mm, these plates offer a shallow stacked locking feature for use with cortical/ cortical self-tapping screws, but are much better suited for use with locking screws. Contouring can be achieved with standard small bending irons designed for plates of 2.4mm and up. For side contouring, the small Vi roller style bending pliers are useful. Only heavy contouring necessitates the use of locking plugs. Implant cutters such as 001237 work well for cutting these plates. 8.5mm between hole centres.

Scaled plate profiles on page 333.

2.4MM LOCKING CUTTABLE MALLEABLE PLATES

CM24LOCK	2.4mm Cuttable Malleable Locking Plate 15 Holes 125mm Long
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2.7mm Locking Cuttable Malleable Plates



With a low profile of only 2.5mm, these plates offer a shallow stacked locking feature for use with cortical/cortical self-tapping screws, but are better suited for use with locking screws. Contouring can be achieved with standard small bending irons designed for plates of 2.7mm and up. For side contouring, the Vi roller style bending pliers or reconstruction plate pliers are useful. Only heavy contouring necessitates the use of locking plugs. Implant cutters such as 001237 can be used to cut these plates. 10.0mm between hole centres.

Scaled plate profiles on page 333.

2.7MM LOCKING CUTTABLE MALLEABLE PLATES

CM27LOCK	2.7mm Cuttable Malleable Locking Plate 15 Holes 148mm Long
-----------------	--

3.5mm Locking Cuttable Malleable Plates



With a low profile of 3.5mm, these plates offer a full stacked locking feature for use with cortical/cortical self-tapping screws or locking screws. Contouring can be achieved with bending irons designed for plates of 3.5mm and up. For side contouring, the small Vi roller style bending pliers or reconstruction plate pliers are useful. Heavy contouring necessitates the use of locking plugs. Heavy duty implant cutters rated to cut 3.0mm or more are recommended to cut these plates. 14.0mm between hole centres.

Scaled plate profiles on page 333.

3.5MM LOCKING CUTTABLE MALLEABLE PLATES

CM35LOCK	3.5mm Cuttable Malleable Locking Plate 15 Holes 205mm Long
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LokRod™ Plating System

LokRod™ Plates are new devices conceived and designed by David Strong MRCVS.

LokRod™ Plates should prove useful as an alternative for more traditional fixation modalities, particularly in the management of comminuted long-bone fractures with only small proximal and distal fragments. In some cases, these new implants even may prove to be the only practical choice.

The first sizes to be made available are designed for stabilisation of the feline femur and tibia. These are bones that represent a high proportion of many practices' fracture caseload and often show a high degree of comminution.

Application

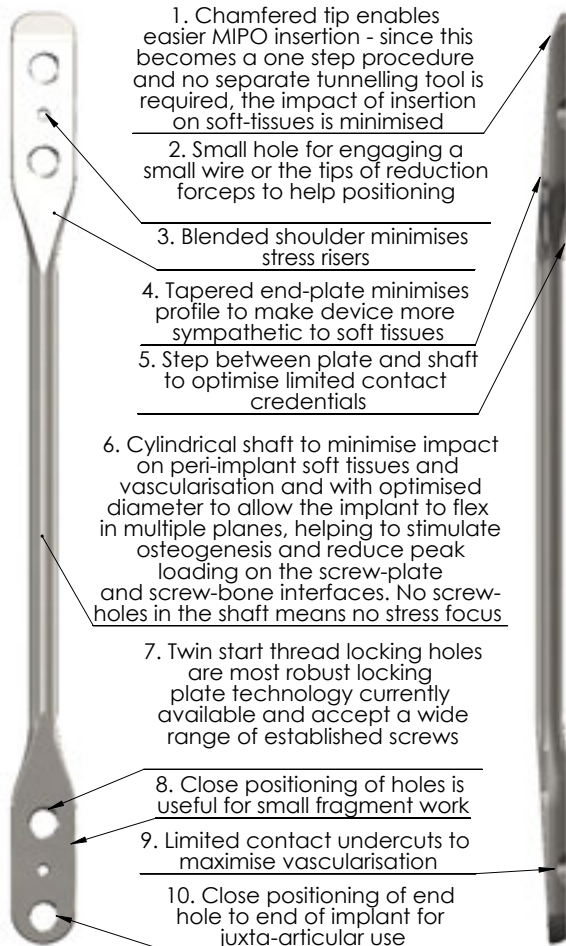
LokRod™ Plates must be used with standard locking screws with a twin start thread. Locking Implant Drill Guides are required for the use of any twin thread locking screw-holes.

At least four cortices must be engaged in each fragment and preferably six in the larger versions.

It is mechanically stronger to place the implant as close to the functional axis of the bone as possible, so it is advised to have the underside of the plate holes snugged up to the bone as close as possible. Reduction forceps or a device such as the Copenhagen Plate Assistants will help.

Spanning of the whole bone reduces adverse screw loading and will improve implant life as well as reduce the chances of bone splitting at these sites.

Anatomy of a LokRod™ Plate



Scaled plate profiles on page 345.

LOKROD™ PLATES

LRP24270470	LokRod™ Plate 4 Hole 70mm Long
LRP24270480	LokRod™ Plate 4 Hole 80mm Long
LRP24270490	LokRod™ Plate 4 Hole 90mm Long
LRP242704100	LokRod™ Plate 4 Hole 100mm Long
LRP242704110	LokRod™ Plate 4 Hole 110mm Long

ACCESSORIES FOR LOKROD™ PLATES

 LSDG2724 	Locking Screw Guide for small 2.7 (2.4 Head)
 LSDG2424 	Locking Screw Guide for 2.4
 COPENSET 	Copenhagen Plate Assistant Set
 001201 	Reduction Forceps 135mm
 001283SMALL 	Plate Bending Pliers Roller Type

Loan LokRod™ Plating Set

The Set consists of a 2.4mm Locking Plating Kit and 3 x LokRod™ Plates (80mm, 90mm & 100mm Length)

Shorter & longer length LokRod™ Plates available to purchase separately

A 2.7mm LokRod™ Plating Set is also available upon request

The charge is for rental of the Set including delivery and return collection by courier. The Set will be supplied non-sterile with a full set of implants. Implants used will be charged for separately upon return of the Set. (UK only)

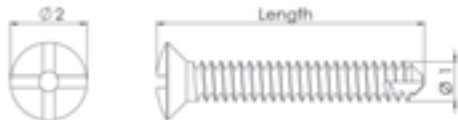
Please call a member of our Vet Tech Team on 0345 130 9596 for further details and availability

Screws

Strict attention to design, materials, manufacturing and quality control is essential to achieving optimal screw performance. Screws often present the weakest link in a construct and selecting the best screws affordable should be a major consideration when making any screw purchases.

1.0mm Screws

1.0mm Cortical Self Tapping Screws



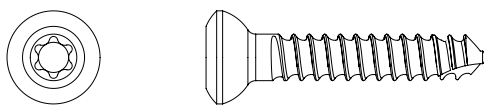
Available 4mm to 15mm length. Use 0.7mm pilot drill and 1.0mm cruciate screwdriver. The threads on the screws are very fine. Caution must be exercised at the final tightening.

1.0MM CORTICAL SELF TAPPING SCREWS-CRUCIATE HEAD (USE 0.7MM PILOT)

CSST1004	4mm
CSST1005	5mm
CSST1006	6mm
CSST1007	7mm
CSST1008	8mm
CSST1009	9mm
CSST1010	10mm
CSST1011	11mm
CSST1012	12mm
CSST1013	13mm
CSST1014	14mm
CSST1015	15mm

1.5mm Screws

1.5mm Cortical Self Tapping Screws Star Drive



1.5MM CORTICAL SELF TAPPING SCREWS - STAR DRIVE

SDCSI506	Cortical Screw Star Drive 1.5mm Length 06mm Self-Tap
SDCSI507	Cortical Screw Star Drive 1.5mm Length 07mm Self-Tap
SDCSI508	Cortical Screw Star Drive 1.5mm Length 08mm Self-Tap
SDCSI509	Cortical Screw Star Drive 1.5mm Length 06mm Self-Tap
SDCSI510	Cortical Screw Star Drive 1.5mm Length 10mm Self-Tap
SDCSI511	Cortical Screw Star Drive 1.5mm Length 11mm Self-Tap
SDCSI512	Cortical Screw Star Drive 1.5mm Length 12mm Self-Tap
SDCSI514	Cortical Screw Star Drive 1.5mm Length 14mm Self-Tap
SDCSI516	Cortical Screw Star Drive 1.5mm Length 16mm Self-Tap
SDCSI518	Cortical Screw Star Drive 1.5mm Length 18mm Self-Tap
SDCSI520	Cortical Screw Star Drive 1.5mm Length 20mm Self-Tap
SDCSI522	Cortical Screw Star Drive 1.5mm Length 22mm Self-Tap
SDCSI524	Cortical Screw Star Drive 1.5mm Length 24mm Self-Tap

1.5mm Cortical Self Tapping Screws Hex Head



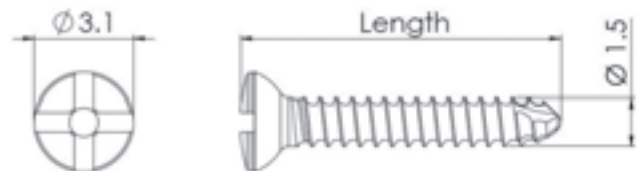
Use of Self Tapping Screws can save considerable time and trauma. Pull out strength is not affected provided the self tapping flutes lie outside of the cortex.

Self Tapping Screws are less effective in dense cortical bone. e.g. calcaneus. It is advised that an appropriate tap be available should the need arise. Drill data: Pilot Drill 1.1mm, Clearance Drill 1.5mm.

1.5MM CORTICAL SELF TAPPING SCREWS - HEX HEAD 1.5MM USE 1.1MM PILOT

CSST1506	6mm
CSST1507	7mm
CSST1508	8mm
CSST1509	9mm
CSST1510	10mm
CSST1511	11mm
CSST1512	12mm
CSST1514	14mm
CSST1516	16mm
CSST1518	18mm
CSST1520	20mm
CSST1522	22mm
CSST1524	24mm

1.5mm Cortical Self Tapping Screws Cruciate Head



Following surgeon requests we have now added 1.5mm Cortical Self Tapping Screws with cruciate head to our range.

1.5MM CORTICAL SELF TAPPING SCREWS - CRUCIATE HEAD USE 1.1MM PILOT

CSXT1506	6mm
CSXT1507	7mm
CSXT1508	8mm
CSXT1509	9mm
CSXT1510	10mm
CSXT1511	11mm
CSXT1512	12mm
CSXT1514	14mm
CSXT1516	16mm
CSXT1518	18mm
CSXT1520	20mm
CSXT1522	22mm
CSXT1524	24mm

1.5mm Cortical Screws Hex Head



Available 6mm to 34mm length. Use 1.1mm Pilot Drill and 1.5mm Hex screwdriver. Use extreme care when tightening as the threads have a very fine pitch. Use in combination with 1.5/2.0 Plates. The head is slightly smaller than the 2.0 Cortical Screw.

1.5MM CORTICAL SCREWS - HEX HEAD 1.5MM (USE 1.1MM PILOT)

CS1506	6mm
CS1507	7mm
CS1508	8mm
CS1509	9mm
CS1510	10mm
CS1511	11mm
CS1512	12mm
CS1514	14mm
CS1516	16mm
CS1518	18mm
CS1520	20mm
CS1522	22mm
CS1524	24mm
CS1526	26mm
CS1528	28mm
CS1530	30mm
CS1532	32mm
CS1534	34mm

2.0mm Cortical SelfTapping Screws Hex Head



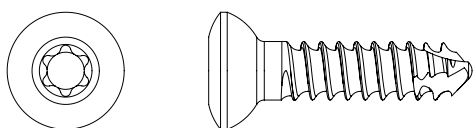
This type of Screw is becoming increasingly popular in both human and veterinary orthopaedics. Self tapping flutes at the tip obviate the need for pre-tapping which saves time and reduces time related complications. Pull out strength is not affected provided the self-tapping flutes lie outside the bone cortex. Drill data: Pilot Drill 1.5mm, Clearance Drill 2.0mm.

2.0MM CORTICAL SELF TAPPING SCREWS - HEX HEAD 1.5MM (USE 1.5MM PILOT)

CSST2006	6mm
CSST2007	7mm
CSST2008	8mm
CSST2009	9mm
CSST2010	10mm
CSST2011	11mm
CSST2012	12mm
CSST2014	14mm
CSST2016	16mm
CSST2018	18mm
CSST2020	20mm
CSST2022	22mm
CSST2024	24mm
CSST2026	26mm
CSST2028	28mm
CSST2030	30mm
CSST2032	32mm
CSST2034	34mm
CSST2036	36mm
CSST2038	38mm
CSST2040	40mm

2.0mm Screws

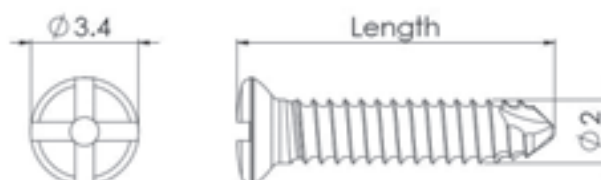
2.0mm Cortical SelfTapping Screws Star Drive



2.0MM CORTICAL SELF TAPPING SCREWS - STAR DRIVE

SDCS2006	Cortical Screw Star Drive 2.0mm Length 06mm Self-Tap
SDCS2007	Cortical Screw Star Drive 2.0mm Length 07mm Self-Tap
SDCS2008	Cortical Screw Star Drive 2.0mm Length 08mm Self-Tap
SDCS2009	Cortical Screw Star Drive 2.0mm Length 09mm Self-Tap
SDCS2010	Cortical Screw Star Drive 2.0mm Length 10mm Self-Tap
SDCS2011	Cortical Screw Star Drive 2.0mm Length 11mm Self-Tap
SDCS2012	Cortical Screw Star Drive 2.0mm Length 12mm Self-Tap
SDCS2014	Cortical Screw Star Drive 2.0mm Length 14mm Self-Tap
SDCS2016	Cortical Screw Star Drive 2.0mm Length 16mm Self-Tap
SDCS2018	Cortical Screw Star Drive 2.0mm Length 18mm Self-Tap
SDCS2020	Cortical Screw Star Drive 2.0mm Length 20mm Self-Tap
SDCS2022	Cortical Screw Star Drive 2.0mm Length 22mm Self-Tap
SDCS2024	Cortical Screw Star Drive 2.0mm Length 24mm Self-Tap
SDCS2026	Cortical Screw Star Drive 2.0mm Length 26mm Self-Tap
SDCS2028	Cortical Screw Star Drive 2.0mm Length 28mm Self-Tap
SDCS2030	Cortical Screw Star Drive 2.0mm Length 30mm Self-Tap
SDCS2032	Cortical Screw Star Drive 2.0mm Length 32mm Self-Tap
SDCS2034	Cortical Screw Star Drive 2.0mm Length 34mm Self-Tap
SDCS2036	Cortical Screw Star Drive 2.0mm Length 36mm Self-Tap
SDCS2038	Cortical Screw Star Drive 2.0mm Length 38mm Self-Tap
SDCS2040	Cortical Screw Star Drive 2.0mm Length 40mm Self-Tap

2.0mm Cortical SelfTapping Screws Cruciate Head



2.0MM CORTICAL SELF TAPPING SCREWS - CRUCIATE HEAD (USE 1.5MM PILOT)

CSXT2006	6mm
CSXT2007	7mm
CSXT2008	8mm
CSXT2009	9mm
CSXT2010	10mm
CSXT2011	11mm
CSXT2012	12mm
CSXT2014	14mm
CSXT2016	16mm
CSXT2018	18mm
CSXT2020	20mm
CSXT2022	22mm
CSXT2024	24mm
CSXT2026	26mm
CSXT2028	28mm
CSXT2030	30mm
CSXT2032	32mm
CSXT2034	34mm
CSXT2036	36mm
CSXT2038	38mm
CSXT2040	40mm

2.0mm Cortical Screws Hex Head



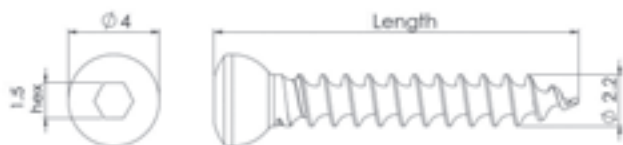
Available 6mm to 34mm length, the spherical head of these Screws provides for compression when used in association with 2.0mm Compression Plates.

2.0MM CORTICAL SCREWS - HEX HEAD 1.5MM (USE 1.5MM PILOT)

CS2006	6mm
CS2007	7mm
CS2008	8mm
CS2009	9mm
CS2010	10mm
CS2011	11mm
CS2012	12mm
CS2014	14mm
CS2016	16mm
CS2018	18mm
CS2020	20mm
CS2022	22mm
CS2024	24mm
CS2026	26mm
CS2028	28mm
CS2030	30mm
CS2032	32mm
CS2034	34mm

2.2mm Screws

2.2mm Cancellous Screws



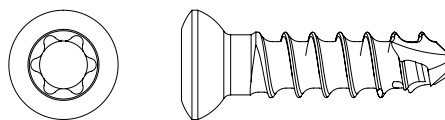
Available from 8mm to 24mm length. Self tapping. Do not use in cortical bone unless using as a salvage screw for a stripped 2.0mm Cortical Screw.

2.2MM CANCELLOUS SELF TAPPING SCREWS - HEX HEAD 1.5MM (USE 1.5MM PILOT)

CAN2208	8mm
CAN2210	10mm
CAN2212	12mm
CAN2214	14mm
CAN2216	16mm
CAN2218	18mm
CAN2220	20mm
CAN2222	22mm
CAN2224	24mm

2.4mm Screws

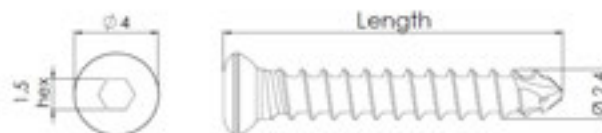
2.4mm Cortical Self Tapping Screws Star Drive



2.4 CORTICAL SELF TAPPING SCREWS - STAR DRIVE

SDCS2406	Cortical Screw Star Drive 2.4mm Length 06mm Self-Tap
SDCS2407	Cortical Screw Star Drive 2.4mm Length 07mm Self-Tap
SDCS2408	Cortical Screw Star Drive 2.4mm Length 08mm Self-Tap
SDCS2409	Cortical Screw Star Drive 2.4mm Length 09mm Self-Tap
SDCS2410	Cortical Screw Star Drive 2.4mm Length 10mm Self-Tap
SDCS2411	Cortical Screw Star Drive 2.4mm Length 11mm Self-Tap
SDCS2412	Cortical Screw Star Drive 2.4mm Length 12mm Self-Tap
SDCS2414	Cortical Screw Star Drive 2.4mm Length 14mm Self-Tap
SDCS2416	Cortical Screw Star Drive 2.4mm Length 16mm Self-Tap
SDCS2418	Cortical Screw Star Drive 2.4mm Length 18mm Self-Tap
SDCS2420	Cortical Screw Star Drive 2.4mm Length 20mm Self-Tap
SDCS2422	Cortical Screw Star Drive 2.4mm Length 22mm Self-Tap
SDCS2424	Cortical Screw Star Drive 2.4mm Length 24mm Self-Tap
SDCS2426	Cortical Screw Star Drive 2.4mm Length 26mm Self-Tap
SDCS2428	Cortical Screw Star Drive 2.4mm Length 28mm Self-Tap
SDCS2430	Cortical Screw Star Drive 2.4mm Length 30mm Self-Tap
SDCS2432	Cortical Screw Star Drive 2.4mm Length 32mm Self-Tap
SDCS2434	Cortical Screw Star Drive 2.4mm Length 34mm Self-Tap
SDCS2436	Cortical Screw Star Drive 2.4mm Length 36mm Self-Tap
SDCS2438	Cortical Screw Star Drive 2.4mm Length 38mm Self-Tap
SDCS2440	Cortical Screw Star Drive 2.4mm Length 40mm Self-Tap

2.4mm Cortical Self Tapping Screws Hex Head



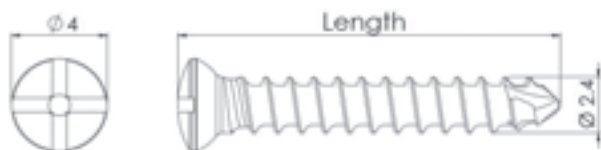
Currently only available in the self tapping format. A quick fit tap is also available.

The screwdriver required is the same as 1.5 & 2.0 screws (SDHS20F).

2.4 CORTICAL SELF TAPPING SCREWS - HEX HEAD 1.5 (USE 1.8MM PILOT)

CSST2406	6mm
CSST2407	7mm
CSST2408	8mm
CSST2409	9mm
CSST2410	10mm
CSST2411	11mm
CSST2412	12mm
CSST2414	14mm
CSST2416	16mm
CSST2418	18mm
CSST2420	20mm
CSST2422	22mm
CSST2424	24mm
CSST2426	26mm
CSST2428	28mm
CSST2430	30mm
CSST2432	32mm
CSST2434	34mm
CSST2436	36mm
CSST2438	38mm
CSST2440	40mm

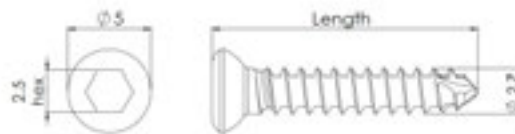
2.4mm Cortical SelfTapping Screws Cruciate Head



2.4MM CORTICAL SELF TAPPING SCREWS - CRUCIATE HEAD (USE 1.8MM PILOT)

CSXT2406	6mm
CSXT2407	7mm
CSXT2408	8mm
CSXT2409	9mm
CSXT2410	10mm
CSXT2411	11mm
CSXT2412	12mm
CSXT2414	14mm
CSXT2416	16mm
CSXT2418	18mm
CSXT2420	20mm
CSXT2422	22mm
CSXT2424	24mm
CSXT2426	26mm
CSXT2428	28mm
CSXT2430	30mm
CSXT2432	32mm
CSXT2434	34mm
CSXT2436	36mm
CSXT2438	38mm
CSXT2440	40mm

2.7mm Cortical SelfTapping Screws Hex Head



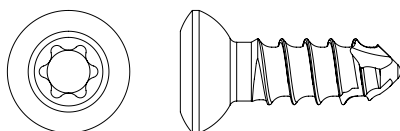
This type of Screw is becoming increasingly popular in both human and veterinary orthopaedics. Self tapping flutes at the tip obviate the need for pre-tapping which saves time and reduces time related complications. Pull out strength is not affected.

2.7MM CORTICAL SELF TAPPING SCREWS - HEX HEAD 2.5MM (USE 2MM PILOT)

CSST2706	6mm
CSST2707	7mm
CSST2708	8mm
CSST2709	9mm
CSST2710	10mm
CSST2711	11mm
CSST2712	12mm
CSST2713	13mm
CSST2714	14mm
CSST2716	16mm
CSST2718	18mm
CSST2720	20mm
CSST2722	22mm
CSST2724	24mm
CSST2726	26mm
CSST2728	28mm
CSST2730	30mm
CSST2732	32mm
CSST2734	34mm
CSST2736	36mm
CSST2738	38mm
CSST2740	40mm

2.7mm Screws

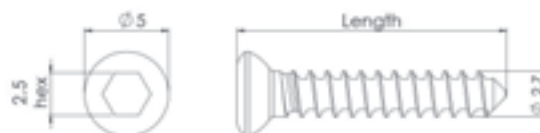
2.7mm Cortical SelfTapping Screws - Star Drive



2.7MM CORTICAL SELF TAPPING SCREWS - STAR DRIVE

SDCS2706	Cortical Screw Star Drive 2.7mm Length 06mm Self-Tap
SDCS2707	Cortical Screw Star Drive 2.7mm Length 07mm Self-Tap
SDCS2708	Cortical Screw Star Drive 2.7mm Length 08mm Self-Tap
SDCS2709	Cortical Screw Star Drive 2.7mm Length 09mm Self-Tap
SDCS2710	Cortical Screw Star Drive 2.7mm Length 10mm Self-Tap
SDCS2711	Cortical Screw Star Drive 2.7mm Length 11mm Self-Tap
SDCS2712	Cortical Screw Star Drive 2.7mm Length 12mm Self-Tap
SDCS2714	Cortical Screw Star Drive 2.7mm Length 14mm Self-Tap
SDCS2716	Cortical Screw Star Drive 2.7mm Length 16mm Self-Tap
SDCS2718	Cortical Screw Star Drive 2.7mm Length 18mm Self-Tap
SDCS2720	Cortical Screw Star Drive 2.7mm Length 20mm Self-Tap
SDCS2722	Cortical Screw Star Drive 2.7mm Length 22mm Self-Tap
SDCS2724	Cortical Screw Star Drive 2.7mm Length 24mm Self-Tap
SDCS2726	Cortical Screw Star Drive 2.7mm Length 26mm Self-Tap
SDCS2728	Cortical Screw Star Drive 2.7mm Length 28mm Self-Tap
SDCS2730	Cortical Screw Star Drive 2.7mm Length 30mm Self-Tap
SDCS2732	Cortical Screw Star Drive 2.7mm Length 32mm Self-Tap
SDCS2734	Cortical Screw Star Drive 2.7mm Length 34mm Self-Tap
SDCS2736	Cortical Screw Star Drive 2.7mm Length 36mm Self-Tap
SDCS2738	Cortical Screw Star Drive 2.7mm Length 38mm Self-Tap
SDCS2740	Cortical Screw Star Drive 2.7mm Length 40mm Self-Tap

2.7mm Cortical Screws Hex Head



Use with 2.7mm compression and 2.7mm reconstruction plates to obtain compression at fracture site.

2.7MM CORTICAL SCREWS - HEX HEAD 2.5MM (USE 2MM PILOT)

CS2706	6mm
CS2707	7mm
CS2708	8mm
CS2709	9mm
CS2710	10mm
CS2711	11mm
CS2712	12mm
CS2713	13mm
CS2714	14mm
CS2716	16mm
CS2718	18mm
CS2720	20mm
CS2722	22mm
CS2724	24mm
CS2726	26mm
CS2728	28mm
CS2730	30mm
CS2732	32mm
CS2734	34mm
CS2736	36mm
CS2738	38mm
CS2740	40mm

3.0mm Screws

3.0mm Cancellous Screws



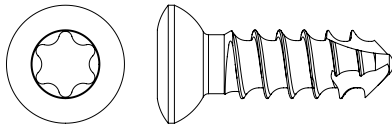
Available from 12mm to 36mm length. Self tapping. Do not use in cortical bone unless using as a salvage screw for a stripped 2.7mm Cortical Screw.

3.0MM CANCELLOUS FULL THREAD SELF TAPPING SCREWS - HEX HEAD 2.5MM (USE 2MM PILOT)

CAN3012	12mm
CAN3014	14mm
CAN3016	16mm
CAN3018	18mm
CAN3020	20mm
CAN3022	22mm
CAN3024	24mm
CAN3026	26mm
CAN3028	28mm
CAN3030	30mm
CAN3032	32mm
CAN3034	34mm
CAN3036	36mm

3.5mm Screws

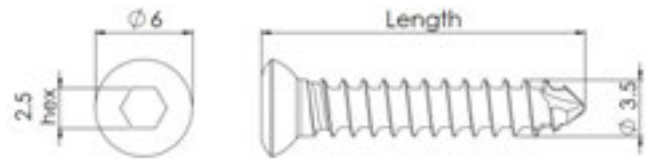
3.5mm Cortical Self Tapping Screws - Star Drive



3.5MM CORTICAL SELF TAPPING SCREWS - STAR DRIVE

SDCS3508	Cortical Screw Star Drive 3.5Mm, Length 08Mm Self-Tap
SDCS3509	Cortical Screw Star Drive 3.5Mm, Length 09Mm Self-Tap
SDCS3510	Cortical Screw Star Drive 3.5Mm, Length 10Mm Self-Tap
SDCS3511	Cortical Screw Star Drive 3.5Mm, Length 11Mm Self-Tap
SDCS3512	Cortical Screw Star Drive 3.5Mm, Length 12Mm Self-Tap
SDCS3513	Cortical Screw Star Drive 3.5Mm, Length 13Mm Self-Tap
SDCS3514	Cortical Screw Star Drive 3.5Mm, Length 14Mm Self-Tap
SDCS3515	Cortical Screw Star Drive 3.5Mm, Length 15Mm Self-Tap
SDCS3516	Cortical Screw Star Drive 3.5Mm, Length 16Mm Self-Tap
SDCS3518	Cortical Screw Star Drive 3.5Mm, Length 18Mm Self-Tap
SDCS3520	Cortical Screw Star Drive 3.5Mm, Length 20Mm Self-Tap
SDCS3522	Cortical Screw Star Drive 3.5Mm, Length 22Mm Self-Tap
SDCS3524	Cortical Screw Star Drive 3.5Mm, Length 24Mm Self-Tap
SDCS3526	Cortical Screw Star Drive 3.5Mm, Length 26Mm Self-Tap
SDCS3528	Cortical Screw Star Drive 3.5Mm, Length 28Mm Self-Tap
SDCS3530	Cortical Screw Star Drive 3.5Mm, Length 30Mm Self-Tap
SDCS3532	Cortical Screw Star Drive 3.5Mm, Length 32Mm Self-Tap
SDCS3534	Cortical Screw Star Drive 3.5Mm, Length 34Mm Self-Tap
SDCS3536	Cortical Screw Star Drive 3.5Mm, Length 36Mm Self-Tap
SDCS3538	Cortical Screw Star Drive 3.5Mm, Length 38Mm Self-Tap
SDCS3540	Cortical Screw Star Drive 3.5Mm, Length 40Mm Self-Tap
SDCS3542	Cortical Screw Star Drive 3.5Mm, Length 42Mm Self-Tap
SDCS3544	Cortical Screw Star Drive 3.5Mm, Length 44Mm Self-Tap
SDCS3545	Cortical Screw Star Drive 3.5Mm, Length 45Mm Self-Tap
SDCS3546	Cortical Screw Star Drive 3.5Mm, Length 46Mm Self-Tap
SDCS3548	Cortical Screw Star Drive 3.5Mm, Length 48Mm Self-Tap
SDCS3550	Cortical Screw Star Drive 3.5Mm, Length 50Mm Self-Tap
SDCS3555	Cortical Screw Star Drive 3.5Mm, Length 55Mm Self-Tap
SDCS3560	Cortical Screw Star Drive 3.5Mm, Length 60Mm Self-Tap

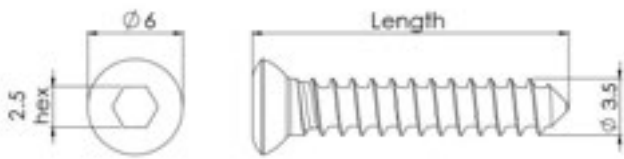
3.5mm Cortical Self Tapping Screws - Hex Head



This type of Screw is becoming increasingly popular in both human and veterinary orthopaedics. Self tapping flutes at the tip obviate the need for pre-tapping which saves time and reduces time related complications. Pull out strength is not affected provided the self tapping flutes are positioned outside the cortex.

3.5MM (1.25 PITCH) CORTICAL SELF TAPPING SCREWS - HEX HEAD 2.5MM (USE 2.5MM PILOT)

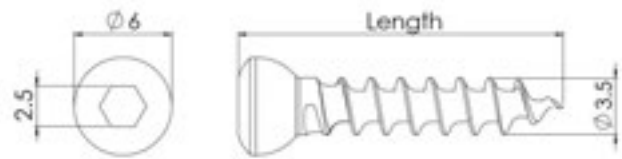
CSST3508	8mm
CSST3510	10mm
CSST3511	11mm
CSST3512	12mm
CSST3513	13mm
CSST3514	14mm
CSST3515	15mm
CSST3516	16mm
CSST3518	18mm
CSST3520	20mm
CSST3522	22mm
CSST3524	24mm
CSST3526	26mm
CSST3528	28mm
CSST3530	30mm
CSST3532	32mm
CSST3534	34mm
CSST3536	36mm
CSST3538	38mm
CSST3540	40mm
CSST3542	42mm
CSST3544	44mm
CSST3545	45mm
CSST3546	46mm
CSST3548	48mm
CSST3550	50mm
CSST3555	55mm
CSST3560	60mm

3.5mm Cortical Screws Hex Head

Use with 3.5mm Compression and 3.5mm Reconstruction Plates to obtain fracture site compression.

3.5MM (1.25 PITCH) CORTICAL SCREWS - HEX HEAD 2.5MM (USE 2.5MM PILOT)

CS3508	8mm
CS3509	9mm
CS3510	10mm
CS3511	11mm
CS3512	12mm
CS3513	13mm
CS3514	14mm
CS3515	15mm
CS3516	16mm
CS3518	18mm
CS3520	20mm
CS3522	22mm
CS3524	24mm
CS3526	26mm
CS3528	28mm
CS3530	30mm
CS3532	32mm
CS3534	34mm
CS3536	36mm
CS3538	38mm
CS3540	40mm
CS3542	42mm
CS3544	44mm
CS3545	45mm
CS3546	46mm
CS3548	48mm
CS3550	50mm
CS3555	55mm
CS3560	60mm
CS3565	65mm
CS3570	70mm
CS3575	75mm
CS3580	80mm
CS3585	85mm
CS3590	90mm
CS3595	95mm
CS35100	100mm
CS35105	105mm
CS35110	110mm

3.5mm Cancellous Screws

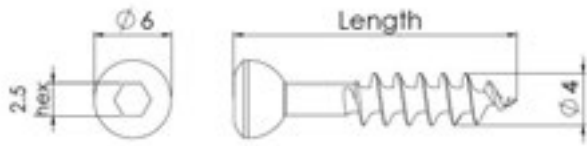
The much coarser thread gives a much bigger "bite" to bone. Use on metaphysis or other cancellous bone.

3.5MM (1.75 PITCH) SMALL CANCELLOUS SCREWS SELF TAPPING - HEX HEAD 2.5MM (USE 2.0MM PILOT)

CAN3510	10mm
CAN3512	12mm
CAN3514	14mm
CAN3516	16mm
CAN3518	18mm
CAN3520	20mm
CAN3522	22mm
CAN3524	24mm
CAN3526	26mm
CAN3528	28mm
CAN3530	30mm
CAN3532	32mm
CAN3534	34mm
CAN3536	36mm
CAN3538	38mm
CAN3540	40mm
CAN3545	45mm
CAN3550	50mm - non self tapping - requires tap
CAN3555	55mm - non self tapping - requires tap
CAN3560	60mm

4.0mm Screws

4.0mm Cancellous Screws Part Threaded Hex Head



4MM CANCELLOUS PART THREAD SELF TAPPING SCREWS - HEX HEAD 2.5MM (USE 2.5MM PILOT)

CNP4010	10mm
CNP4012	12mm
CNP4014	14mm
CNP4016	16mm
CNP4018	18mm
CNP4020	20mm
CNP4022	22mm
CNP4024	24mm
CNP4026	26mm
CNP4028	28mm
CNP4030	30mm
CNP4035	35mm
CNP4040	40mm
CNP4045	45mm
CNP4050	50mm
CNP4055	55mm
CNP4060	60mm

4.0mm Cancellous Screws Full Threaded Hex Head



Use in cancellous bone where greater screw / bone interface is desirable. Self tapping.

4MM CANCELLOUS FULL THREAD SELF TAPPING SCREWS - HEX HEAD 2.5MM (USE 2.5MM PILOT)

CNF4010	10mm
CNF4012	12mm
CNF4014	14mm
CNF4016	16mm
CNF4018	18mm
CNF4020	20mm
CNF4022	22mm
CNF4024	24mm
CNF4026	26mm
CNF4028	28mm
CNF4030	30mm
CNF4032	32mm
CNF4034	34mm
CNF4035	35mm
CNF4036	36mm
CNF4038	38mm
CNF4040	40mm
CNF4045	45mm
CNF4050	50mm
CNF4055	55mm
CNF4060	60mm

4.5mm Screws

4.5mm Cortical Self tapping Screws Hex Head



Use of Self Tapping Screws can save considerable time and trauma. Reducing surgery time will reduce morbidity. Pull out strength is not affected provided the self tapping flutes lie outside of the cortex.

Self Tapping Screws are less effective in dense cortical bone, e.g. calcaneus. It is advised that an appropriate tap be available should the need arise.

Drill data: Pilot Drill 3.2mm Clearance Drill 4.5mm

4.5MM CORTICAL SELF TAPPING SCREWS - HEX HEAD=3.5MM PILOT=3.2MM

CSST4512	12mm
CSST4514	14mm
CSST4516	16mm
CSST4518	18mm
CSST4520	20mm
CSST4522	22mm
CSST4524	24mm
CSST4526	26mm
CSST4528	28mm
CSST4530	30mm
CSST4532	32mm
CSST4534	34mm
CSST4536	36mm
CSST4538	38mm
CSST4540	40mm
CSST4542	42mm
CSST4544	44mm
CSST4546	46mm
CSST4548	48mm
CSST4550	50mm
CSST4552	52mm
CSST4554	54mm
CSST4556	56mm
CSST4558	58mm
CSST4560	60mm
CSST4562	62mm
CSST4564	64mm
CSST4566	66mm
CSST4568	68mm
CSST4570	70mm
CSST4575	75mm
CSST4580	80mm
CSST4585	85mm

4.5mm Cortical Screws Hex Head



The standard human cortical screw is suitable for very large dogs and equines. Because it is a human product made in large numbers, 4.5mm screws are relatively inexpensive.

4.5MM CORTICAL SCREWS - HEX HEAD 3.5MM (USE 3.2MM PILOT)

CS4512	12mm
CS4514	14mm
CS4516	16mm
CS4518	18mm
CS4520	20mm
CS4522	22mm
CS4524	24mm
CS4526	26mm
CS4528	28mm
CS4530	30mm
CS4532	32mm
CS4534	34mm
CS4536	36mm
CS4538	38mm
CS4540	40mm
CS4542	42mm
CS4544	44mm
CS4546	46mm
CS4548	48mm
CS4550	50mm
CS4552	52mm
CS4554	54mm
CS4556	56mm
CS4558	58mm
CS4560	60mm
CS4562	62mm
CS4564	64mm
CS4566	66mm
CS4568	68mm
CS4570	70mm
CS4575	75mm
CS4580	80mm
CS4585	85mm

5.5mm Screws

5.5mm Cortical Screws Hex Head



This Cortical Screw is suitable for equines. Nearly twice as strong as 4.5mm Cortical Screws. Use with 4.5mm plates. Drill data: Pilot Drill 4.0mm, Clearance Drill 5.5mm.

5.5MM CORTICAL SCREWS - HEX HEAD 3.5MM (USE 4.0MM PILOT)

CS5524	24mm
CS5526	26mm
CS5528	28mm
CS5530	30mm
CS5532	32mm
CS5534	34mm
CS5536	36mm
CS5538	38mm
CS5540	40mm
CS5542	42mm
CS5544	44mm
CS5546	46mm
CS5548	48mm
CS5550	50mm
CS5552	52mm
CS5554	54mm
CS5556	56mm
CS5560	60mm
CS5564	64mm
CS5570	70mm
CS5580	80mm
CS5590	90mm
CS55100	100mm

6.5mm Screws

6.5mm Cancellous Screws



This very large Screw has an application in the closing wedge TPLO procedure in very large dogs. Bone stock is poor in the proximal tibia. The 6.5mm self tapping, fully threaded cancellous screw gives maximum pull out resistance. Pilot Drill 3.2mm, Screwdriver SDH3500 and Tap TBT065 or TS00065. Only use the tap for the fibular head screw. Drill data: Pilot Drill 3.2mm, Clearance Drill 6.5mm.

6.5MM CANCELLOUS SCREWS - FULL THREADED - HEX HEAD 3.5MM (USE 3.2MM PILOT)

CNF6525	25mm
CNF6530	30mm
CNF6535	35mm
CNF6540	40mm
CNF6545	45mm
CNF6550	50mm
CNF6555	55mm
CNF6560	60mm
CNF6565	65mm
CNF6570	70mm
CNF6575	75mm

Titanium Screws

Titanium Screws and Plates are very commonly used in man particularly for maxillofacial repairs. The most important benefit in this application is that Titanium does not interfere with MRI scans. Compared to stainless steel Titanium is lighter and much more osteo compatible.

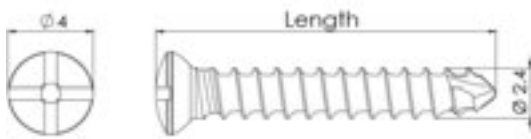
The major application in veterinary orthopaedics is in conjunction with the TTA cruciate procedure. Please note 2.4mm Screws have a Cruciate Head.

1.5mm Titanium Screws - Hexagonal Head

TITANIUM SCREWS 1.5MM HEX HEAD

TICS1506 Titanium 1.5 Self Tapping Cortical Screw 6mm

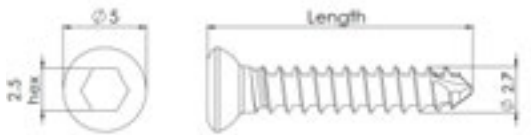
2.4mm Titanium Screws - Cruciate Head



TITANIUM SCREWS 2.4MM CRUCIATE HEAD 1.8MM PILOT

TICS2408	Titanium 2.4 Self Tapping Cortical Screw 8mm
TICS2410	Titanium 2.4 Self Tapping Cortical Screw 10mm
TICS2412	Titanium 2.4 Self Tapping Cortical Screw 12mm
TICS2414	Titanium 2.4 Self Tapping Cortical Screw 14mm
TICS2416	Titanium 2.4 Self Tapping Cortical Screw 16mm
TICS2418	Titanium 2.4 Self Tapping Cortical Screw 18mm
TICS2420	Titanium 2.4 Self Tapping Cortical Screw 20mm
TICS2422	Titanium 2.4 Self Tapping Cortical Screw 22mm
TICS2424	Titanium 2.4 Self Tapping Cortical Screw 24mm
TICS2426	Titanium 2.4 Self Tapping Cortical Screw 26mm
TICS2428	Titanium 2.4 Self Tapping Cortical Screw 28mm
TICS2430	Titanium 2.4 Self Tapping Cortical Screw 30mm
TICS2432	Titanium 2.4 Self Tapping Cortical Screw 32mm
TICS2434	Titanium 2.4 Self Tapping Cortical Screw 34mm
TICS2436	Titanium 2.4 Self Tapping Cortical Screw 36mm
TICS2438	Titanium 2.4 Self Tapping Cortical Screw 38mm
TICS2440	Titanium 2.4 Self Tapping Cortical Screw 40mm

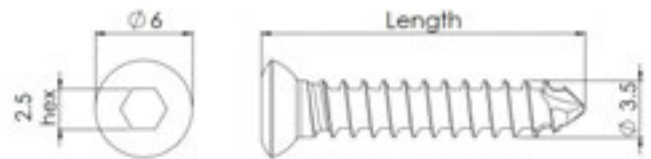
2.7mm Titanium Screws - Hexagonal Head



TITANIUM SCREWS 2.7MM HEX HEAD 2.0MM PILOT

TICS2706	Titanium 2.7 Self Tapping Cortical Screw 6mm
TICS2708	Titanium 2.7 Self Tapping Cortical Screw 8mm
TICS2710	Titanium 2.7 Self Tapping Cortical Screw 10mm
TICS2712	Titanium 2.7 Self Tapping Cortical Screw 12mm
TICS2714	Titanium 2.7 Self Tapping Cortical Screw 14mm
TICS2716	Titanium 2.7 Self Tapping Cortical Screw 16mm
TICS2718	Titanium 2.7 Self Tapping Cortical Screw 18mm
TICS2720	Titanium 2.7 Self Tapping Cortical Screw 20mm
TICS2722	Titanium 2.7 Self Tapping Cortical Screw 22mm
TICS2724	Titanium 2.7 Self Tapping Cortical Screw 24mm
TICS2726	Titanium 2.7 Self Tapping Cortical Screw 26mm
TICS2728	Titanium 2.7 Self Tapping Cortical Screw 28mm
TICS2730	Titanium 2.7 Self Tapping Cortical Screw 30mm
TICS2732	Titanium 2.7 Self Tapping Cortical Screw 32mm
TICS2734	Titanium 2.7 Self Tapping Cortical Screw 34mm
TICS2736	Titanium 2.7 Self Tapping Cortical Screw 36mm
TICS2738	Titanium 2.7 Self Tapping Cortical Screw 38mm
TICS2740	Titanium 2.7 Self Tapping Cortical Screw 40mm

3.5mm Titanium Screws - Hexagonal Head



TITANIUM SCREWS 3.5MM HEX HEAD 2.5MM PILOT

TICS3514	Titanium 3.5 Self Tapping Cortical Screw 14mm
TICS3516	Titanium 3.5 Self Tapping Cortical Screw 16mm
TICS3518	Titanium 3.5 Self Tapping Cortical Screw 18mm
TICS3520	Titanium 3.5 Self Tapping Cortical Screw 20mm
TICS3522	Titanium 3.5 Self Tapping Cortical Screw 22mm
TICS3524	Titanium 3.5 Self Tapping Cortical Screw 24mm
TICS3526	Titanium 3.5 Self Tapping Cortical Screw 26mm
TICS3528	Titanium 3.5 Self Tapping Cortical Screw 28mm
TICS3530	Titanium 3.5 Self Tapping Cortical Screw 30mm
TICS3532	Titanium 3.5 Self Tapping Cortical Screw 32mm
TICS3534	Titanium 3.5 Self Tapping Cortical Screw 34mm
TICS3536	Titanium 3.5 Self Tapping Cortical Screw 36mm
TICS3538	Titanium 3.5 Self Tapping Cortical Screw 38mm
TICS3540	Titanium 3.5 Self Tapping Cortical Screw 40mm

4.5mm Titanium Screws - Hexagonal Head



TITANIUM SCREWS 4.5MM HEX HEAD

TICS4534	Titanium 4.5 Self Tapping Cortical Screw 34mm
TICS4536	Titanium 4.5 Self Tapping Cortical Screw 36mm
TICS4538	Titanium 4.5 Self Tapping Cortical Screw 38mm
TICS4540	Titanium 4.5 Self Tapping Cortical Screw 40mm

Screwbox for Titanium TTA Screws

SCREWBOX FOR TITANIUM TTA SCREWS

SHTTA242735 TTA Screwbox for 2.4, 2.7 & 3.5 Ti Screws

TTA Rapid Star Drive 1.5mm Screw Titanium**TTA RAPID STAR DRIVE 1.5MM SCREW TITANIUM**

TTARI5STAR05	TTA Rapid Star Drive 1.5mm Screw Titanium 5mm
TTARI5STAR06	TTA Rapid Star Drive 1.5mm Screw Titanium 6mm
TTARI5STAR07	TTA Rapid Star Drive 1.5mm Screw Titanium 7mm
TTARI5STAR08	TTA Rapid Star Drive 1.5mm Screw Titanium 8mm
TTARI5STAR09	TTA Rapid Star Drive 1.5mm Screw Titanium 9mm
TTARI5STAR10	TTA Rapid Star Drive 1.5mm Screw Titanium 10mm
TTARI5STAR12	TTA Rapid Star Drive 1.5mm Screw Titanium 12mm
TTARI5STAR14	TTA Rapid Star Drive 1.5mm Screw Titanium 14mm
TTARI5STAR16	TTA Rapid Star Drive 1.5mm Screw Titanium 16mm
TTARI5STAR18	TTA Rapid Star Drive 1.5mm Screw Titanium 18mm
TTARI5STAR20	TTA Rapid Star Drive 1.5mm Screw Titanium 20mm

TTA Rapid Star Drive 2.0mm Screw Titanium**TTA RAPID STAR DRIVE 2.0MM SCREW TITANIUM**

TTAR20STAR05	TTA Rapid Star Drive 2.0mm Screw Titanium 5mm
TTAR20STAR06	TTA Rapid Star Drive 2.0mm Screw Titanium 6mm
TTAR20STAR07	TTA Rapid Star Drive 2.0mm Screw Titanium 7mm
TTAR20STAR08	TTA Rapid Star Drive 2.0mm Screw Titanium 8mm
TTAR20STAR09	TTA Rapid Star Drive 2.0mm Screw Titanium 9mm
TTAR20STAR10	TTA Rapid Star Drive 2.0mm Screw Titanium 10mm
TTAR20STAR12	TTA Rapid Star Drive 2.0mm Screw Titanium 12mm
TTAR20STAR14	TTA Rapid Star Drive 2.0mm Screw Titanium 14mm
TTAR20STAR16	TTA Rapid Star Drive 2.0mm Screw Titanium 16mm
TTAR20STAR18	TTA Rapid Star Drive 2.0mm Screw Titanium 18mm
TTAR20STAR20	TTA Rapid Star Drive 2.0mm Screw Titanium 20mm

TTA Rapid Screws 2.0mm Titanium - Hex Head**TTA RAPID SCREWS 2.0MM TITANIUM WITH 1.5MM HEX HEAD**

TTARSC2006	TTA Rapid 2.0mm Screw Titanium 6mm
TTARSC2008	TTA Rapid 2.0mm Screw Titanium 8mm
TTARSC2010	TTA Rapid 2.0mm Screw Titanium 10mm
TTARSC2012	TTA Rapid 2.0mm Screw Titanium 12mm
TTARSC2014	TTA Rapid 2.0mm Screw Titanium 14mm
TTARSC2016	TTA Rapid 2.0mm Screw Titanium 16mm
TTARSC2018	TTA Rapid 2.0mm Screw Titanium 18mm
TTARSC2020	TTA Rapid 2.0mm Screw Titanium 20mm
TTARSC2022	TTA Rapid 2.0mm Screw Titanium 22mm
TTARSC2024	TTA Rapid 2.0mm Screw Titanium 24mm
TTARSC2026	TTA Rapid 2.0mm Screw Titanium 26mm
TTARSC2028	TTA Rapid 2.0mm Screw Titanium 28mm
TTARSC2030	TTA Rapid 2.0mm Screw Titanium 30mm

TTA Rapid 2.4mm Titanium Screws (2.0 Hex)**TTA RAPID SCREWS 2.4MM TITANIUM HEX HEAD 1.8MM PILOT**

TTARSC2406	TTA Rapid 2.4mm Screw Titanium 6mm
TTARSC2408	TTA Rapid 2.4mm Screw Titanium 8mm
TTARSC2410	TTA Rapid 2.4mm Screw Titanium 10mm
TTARSC2412	TTA Rapid 2.4mm Screw Titanium 12mm
TTARSC2414	TTA Rapid 2.4mm Screw Titanium 14mm
TTARSC2416	TTA Rapid 2.4mm Screw Titanium 16mm
TTARSC2418	TTA Rapid 2.4mm Screw Titanium 18mm
TTARSC2420	TTA Rapid 2.4mm Screw Titanium 20mm
TTARSC2422	TTA Rapid 2.4mm Screw Titanium 22mm
TTARSC2424	TTA Rapid 2.4mm Screw Titanium 24mm
TTARSC2426	TTA Rapid 2.4mm Screw Titanium 26mm
TTARSC2428	TTA Rapid 2.4mm Screw Titanium 28mm
TTARSC2430	TTA Rapid 2.4mm Screw Titanium 30mm
TTARSC2432	TTA Rapid 2.4mm Screw Titanium 32mm
TTARSC2434	TTA Rapid 2.4mm Screw Titanium 34mm
TTARSC2436	TTA Rapid 2.4mm Screw Titanium 36mm
TTARSC2438	TTA Rapid 2.4mm Screw Titanium 38mm
TTARSC2440	TTA Rapid 2.4mm Screw Titanium 40mm

TTA Rapid Screw Rack

TTA Rapid Screw Rack designed for holding TTA Rapid Standard 2.4mm Titanium Screws from 6mm to 40mm in length or TTA Rapid 'Petite' 2.0mm Titanium Screws from 6mm in length.

Please note supplied empty.

TTA RAPID SCREW RACK

TTAR2103624	TTA Rapid Screw Rack - Standard for 2.4mm Screws for 6 - 40mm in length
TTARI500520	TTA Rapid Screw Rack - 'Petite' for 2.0mm Screws for 6mm to 20mm in length

Locking Screws

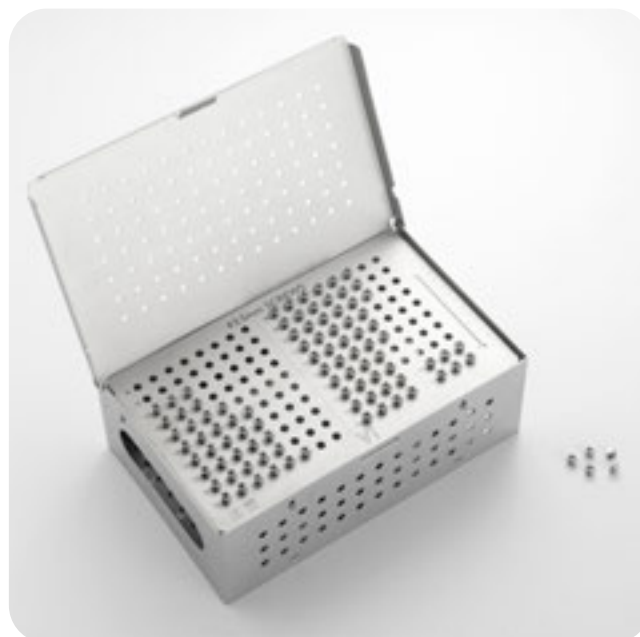
The angular security of locking plate systems depends on a rigid interface between screw and plate. This is achieved by the use of interlocking threads.

The modulus of bone and stainless steel differs greatly and the ideal screw thread for one will not suit the other. Stainless steel demands fine threads whereas bone needs a relatively coarse thread. If we use a fine thread in the plate and a coarse thread in the bone, when the head of screw engages the plate, the screw moving faster through the bone than the plate would have the effect of pulling the plate towards the bone. This is exactly what we do not want. Some systems compromise by using the same thread in both screw head and bone plate.

At Vi and in the industry Standard Locking Screw the problem is solved by some ingenious engineering. The threads on the head of our screws are fine as required but have a twin start. The threads taper down the head as a double helix. The pitch (the distance between the tips of the threads) of each individual fine thread is the same as the threads on the bone screw but because of the double helix the number of threads per millimeter of locking thread is double that of the bone screw giving the fine threads required for metal on metal. The screw moves through the bone at the same rate as it moves through the plate maintaining the relative positions of both bone fragment and plate.

There is an additional benefit of the double helix. As the screw head approaches the plate a single start thread may have to wait 360 degree rotation before the threads start to engage. In the 3.5 screw this might mean that the plate is pushed around one millimeter before the head of the screw engages. With a twin start thread the screw head will engage within 180 degrees of contact.

Locking Screw Sets



Available with either Hex (3.5mm only) or Star Drive Head. Sets discounted by over 5% from component price.

3.5 Hex & Star Drive Locking Screw Sets include:

- 3 x 12-20mm
- 4 x 22-26mm
- 5 x 28-40mm
- 4 x 42-50mm
- 3 x 52-58mm Locking Screws
- 5 x Locking Plugs

2.7 Star Drive Locking Screw Set includes:

- 3 x 6-8mm
- 4 x 10-16mm
- 5 x 18-28mm
- 4 x 30-32mm
- 3 x 34-40mm Locking Screws
- 5 x Locking Plugs

2.4 Star Drive Locking Screw Set includes:

- 3 x 6-8mm
- 4 x 10-16mm
- 5 x 18-28mm
- 4 x 30-32mm
- 3 x 34-40mm Locking Screws
- 5 x Locking Plugs

LOCKING SCREW SETS

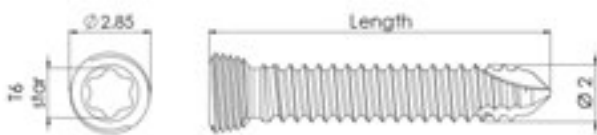
LS35KIT	3.5 Hex Drive Locking Screw Set
LS35STARKIT	3.5 Star Drive Locking Screw Set
LS27STARKIT	2.7 Star Drive Locking Screw Set
LS24STARKIT	2.4 Star Drive Locking Screw Set
LS20STARKIT	2.0 Star Drive Locking Screw Set

Locking Screws - Star Drive

Locking Screw Star Drive 1.5mm

LS15STAR06	Locking Star Screw 1.5mm 6mm Long
LS15STAR07	Locking Star Screw 1.5mm 7mm Long
LS15STAR08	Locking Star Screw 1.5mm 8mm Long
LS15STAR09	Locking Star Screw 1.5mm 9mm Long
LS15STAR10	Locking Star Screw 1.5mm 10mm Long
LS15STAR11	Locking Star Screw 1.5mm 11mm Long
LS15STAR12	Locking Star Screw 1.5mm 12mm Long
LS15STAR14	Locking Star Screw 1.5mm 14mm Long
LS15STAR16	Locking Star Screw 1.5mm 16mm Long
LS15STAR18	Locking Star Screw 1.5mm 18mm Long
LS15STAR20	Locking Star Screw 1.5mm 20mm Long
LS15STAR22	Locking Star Screw 1.5mm 22mm Long
LS15STAR24	Locking Star Screw 1.5mm 24mm Long
LSDG15	Locking Screw Drill Guide for 1.5
H090100	1.1mm Pilot Drill
SH1500	Screwbox for 1.5mm Screws AO Type & Locking all lengths

Locking Screw Star Drive 2.0mm

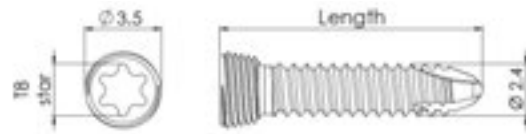


The 2.0 Locking Screw has the standard twin start thread and fits all Plates with the Standard 2.0mm Locking Hole including 2.0mm Locking TPLO Plates. The drive is the T6 Star Drive and the Pilot Drill required is 1.5mm.

LOCKING SCREW STAR DRIVE 2.0MM

LS20STAR06	Locking 2.0 Screw Star Drive 6mm
LS20STAR07	Locking 2.0 Screw Star Drive 7mm
LS20STAR08	Locking 2.0 Screw Star Drive 8mm
LS20STAR10	Locking 2.0 Screw Star Drive 10mm
LS20STAR12	Locking 2.0 Screw Star Drive 12mm
LS20STAR14	Locking 2.0 Screw Star Drive 14mm
LS20STAR16	Locking 2.0 Screw Star Drive 16mm
LS20STAR18	Locking 2.0 Screw Star Drive 18mm
LS20STAR20	Locking 2.0 Screw Star Drive 20mm
LS20STAR22	Locking 2.0 Screw Star Drive 22mm
LS20STAR24	Locking 2.0 Screw Star Drive 24mm
LS20STAR26	Locking 2.0 Screw Star Drive 26mm
LS20STAR28	Locking 2.0 Screw Star Drive 28mm
LS20STAR30	Locking 2.0 Screw Star Drive 30mm
LSDG20	Locking Screw Drill Guide for 2.0
H090101	1.5 Locking Screw Pilot Drill
SH2000	Screwbox for 2.0mm Screws AO Type & Locking all lengths

Locking Screw Star Drive 2.4mm

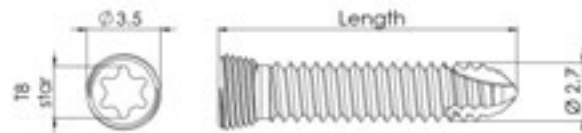


The 2.4 Locking Screw has the same head as the 2.7mm Locking Screw (LS2724** series) and may therefore be used in both 2.4 Locking Plates and 2.7 Locking Plates where desirable. The Pilot Drill is 1.8mm and as with other Locking Screw sizes requires a dedicated drill sleeve.

LOCKING SCREW STAR DRIVE 2.4MM

LS2424STAR06	Locking 2.4 Screw Star Drive 6mm
LS2424STAR08	Locking 2.4 Screw Star Drive 8mm
LS2424STAR10	Locking 2.4 Screw Star Drive 10mm
LS2424STAR12	Locking 2.4 Screw Star Drive 12mm
LS2424STAR14	Locking 2.4 Screw Star Drive 14mm
LS2424STAR16	Locking 2.4 Screw Star Drive 16mm
LS2424STAR18	Locking 2.4 Screw Star Drive 18mm
LS2424STAR20	Locking 2.4 Screw Star Drive 20mm
LS2424STAR22	Locking 2.4 Screw Star Drive 22mm
LS2424STAR24	Locking 2.4 Screw Star Drive 24mm
LS2424STAR26	Locking 2.4 Screw Star Drive 26mm
LS2424STAR28	Locking 2.4 Screw Star Drive 28mm
LS2424STAR30	Locking 2.4 Screw Star Drive 30mm
LS2424STAR32	Locking 2.4 Screw Star Drive 32mm
LS2424STAR34	Locking 2.4 Screw Star Drive 34mm
LS2424STAR36	Locking 2.4 Screw Star Drive 36mm
LS2424STAR38	Locking 2.4 Screw Star Drive 38mm
LS2424STAR40	Locking 2.4 Screw Star Drive 40mm
LSDG2424	Locking Screw Drill Guide for Small 2.4
H090208	1.8mm Pilot Drill
SH2400	Screwbox for 2.4mm Screws AO Type & Locking all lengths

Locking Screw Star Drive 2.7mm



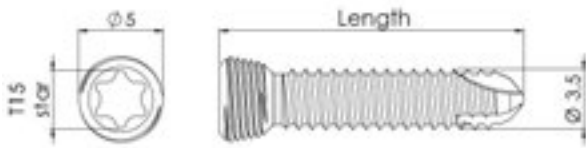
This Screw fits the 2.7mm Locking TPLO Plate. It has the Standard Locking Screw 2.7 cortical bone thread but the head is based on the 2.4mm Locking Screw. This Screw will not fit the 3.5mm Locking TPLO Plate.

Use LS2724 2.7mm Locking Drill Guide Use 2.0mm Pilot Drill.

LOCKING SCREW STAR DRIVE 2.7MM WITH SMALL (2.4MM) HEAD

LS2724STAR06	Locking 2.7mm Screw (2.4 Head) Star Drive 6mm
LS2724STAR08	Locking 2.7mm Screw (2.4 Head) Star Drive 8mm
LS2724STAR10	Locking 2.7mm Screw (2.4 Head) Star Drive 10mm
LS2724STAR12	Locking 2.7mm Screw (2.4 Head) Star Drive 12mm
LS2724STAR14	Locking 2.7mm Screw (2.4 Head) Star Drive 14mm
LS2724STAR16	Locking 2.7mm Screw (2.4 Head) Star Drive 16mm
LS2724STAR18	Locking 2.7mm Screw (2.4 Head) Star Drive 18mm
LS2724STAR20	Locking 2.7mm Screw (2.4 Head) Star Drive 20mm
LS2724STAR22	Locking 2.7mm Screw (2.4 Head) Star Drive 22mm
LS2724STAR24	Locking 2.7mm Screw (2.4 Head) Star Drive 24mm
LS2724STAR26	Locking 2.7mm Screw (2.4 Head) Star Drive 26mm
LS2724STAR28	Locking 2.7mm Screw (2.4 Head) Star Drive 28mm
LS2724STAR30	Locking 2.7mm Screw (2.4 Head) Star Drive 30mm
LS2724STAR32	Locking 2.7mm Screw (2.4 Head) Star Drive 32mm
LS2724STAR34	Locking 2.7mm Screw (2.4 Head) Star Drive 34mm
LS2724STAR36	Locking 2.7mm Screw (2.4 Head) Star Drive 36mm
LS2724STAR38	Locking 2.7mm Screw (2.4 Head) Star Drive 38mm
LS2724STAR40	Locking 2.7mm Screw (2.4 Head) Star Drive 40mm
LSDG2724	Locking Screw Drill Guide for small 2.7
H090102	2.0mm Pilot Drill
SH2700	Screwbox for 2.7mm Screws AO Type & Locking all lengths

Locking Screw Star Drive 3.5mm



3.5mm locking screws with a T15 star drive mechanism. Use 2.8mm Pilot Drill.

LOCKING SCREW STAR DRIVE 3.5MM

LS35STAR10	Locking 3.5 Screw Star Drive 10mm
LS35STAR12	Locking 3.5 Screw Star Drive 12mm
LS35STAR14	Locking 3.5 Screw Star Drive 14mm
LS35STAR16	Locking 3.5 Screw Star Drive 16mm
LS35STAR18	Locking 3.5 Screw Star Drive 18mm
LS35STAR20	Locking 3.5 Screw Star Drive 20mm
LS35STAR22	Locking 3.5 Screw Star Drive 22mm
LS35STAR24	Locking 3.5 Screw Star Drive 24mm
LS35STAR26	Locking 3.5 Screw Star Drive 26mm
LS35STAR28	Locking 3.5 Screw Star Drive 28mm
LS35STAR30	Locking 3.5 Screw Star Drive 30mm
LS35STAR32	Locking 3.5 Screw Star Drive 32mm
LS35STAR34	Locking 3.5 Screw Star Drive 34mm
LS35STAR36	Locking 3.5 Screw Star Drive 36mm
LS35STAR38	Locking 3.5 Screw Star Drive 38mm
LS35STAR40	Locking 3.5 Screw Star Drive 40mm
LS35STAR42	Locking 3.5 Screw Star Drive 42mm
LS35STAR44	Locking 3.5 Screw Star Drive 44mm
LS35STAR45	Locking 3.5 Screw Star Drive 45mm
LS35STAR46	Locking 3.5 Screw Star Drive 46mm
LS35STAR48	Locking 3.5 Screw Star Drive 48mm
LS35STAR50	Locking 3.5 Screw Star Drive 50mm
LS35STAR52	Locking 3.5 Screw Star Drive 52mm
LS35STAR54	Locking 3.5 Screw Star Drive 54mm
LS35STAR56	Locking 3.5 Screw Star Drive 56mm
LS35STAR58	Locking 3.5 Screw Star Drive 58mm
LS35STAR60	Locking 3.5 Screw Star Drive 60mm
LSDG35	Locking Screw Drill Guide for 3.5
H090103	2.8mm Pilot Drill
SH3500	Screwbox for 3.5mm Screws AO Type & Locking up to 50mm

Locking Plug Star Drive



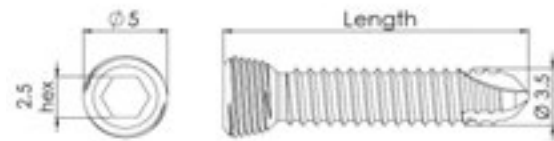
Use to protect locking holes during contouring.

LOCKING PLUG STAR DRIVE

LSP35STAR	Locking Plug for LS35STAR** Screws
LSP24STAR	Locking Plug for LS2724STAR** & LS2424STAR** Screws
LSP20STAR	Locking Plug for LS20STAR** Screws

Locking Screws - Hex Drive

Locking Screw Hex Drive 3.5mm



These screws utilise the conventional Hex Drive rather than a Star Drive. Use 2.8mm Pilot Drill

LOCKING SCREW HEX DRIVE 3.5MM

LS3510	Locking 3.5 Screw Hex Drive 10mm
LS3512	Locking 3.5 Screw Hex Drive 12mm
LS3514	Locking 3.5 Screw Hex Drive 14mm
LS3516	Locking 3.5 Screw Hex Drive 16mm
LS3518	Locking 3.5 Screw Hex Drive 18mm
LS3520	Locking 3.5 Screw Hex Drive 20mm
LS3522	Locking 3.5 Screw Hex Drive 22mm
LS3524	Locking 3.5 Screw Hex Drive 24mm
LS3526	Locking 3.5 Screw Hex Drive 26mm
LS3528	Locking 3.5 Screw Hex Drive 28mm
LS3530	Locking 3.5 Screw Hex Drive 30mm
LS3532	Locking 3.5 Screw Hex Drive 32mm
LS3534	Locking 3.5 Screw Hex Drive 34mm
LS3536	Locking 3.5 Screw Hex Drive 36mm
LS3538	Locking 3.5 Screw Hex Drive 38mm
LS3540	Locking 3.5 Screw Hex Drive 40mm
LS3542	Locking 3.5 Screw Hex Drive 42mm
LS3544	Locking 3.5 Screw Hex Drive 44mm
LS3545	Locking 3.5 Screw Hex Drive 45mm
LS3546	Locking 3.5 Screw Hex Drive 46mm
LS3548	Locking 3.5 Screw Hex Drive 48mm
LS3550	Locking 3.5 Screw Hex Drive 50mm
LS3552	Locking 3.5 Screw Hex Drive 52mm
LS3554	Locking 3.5 Screw Hex Drive 54mm
LS3555	Locking 3.5 Screw Hex Drive 55mm
LS3556	Locking 3.5 Screw Hex Drive 56mm
LS3558	Locking 3.5 Screw Hex Drive 58mm
LS3560	Locking 3.5 Screw Hex Drive 60mm
LSDG35	3.5 Locking Screw Drill Guide
H090103	2.8mm Pilot Drill
SH3500	Screwbox for 3.5mm Screws AO Type & Locking up to 50mm

Locking Plug Hex Drive



Use to protect locking holes during contouring.

LOCKING PLUG HEX DRIVE

LSP35	Locking Plug for LS35** Screws
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Plating Kits

Vi Premium AO Plating Kits

AO Cortical and Cortical Self Tapping Kits in Premium Boxes



Kit featured is CORTSTP152024

The Premium AO boxes were designed with a screw tray, 2 insert trays for implants and the base compartment for instruments. Savings may be made by purchasing pre-assembled kits. The price is typically discounted by 5% compared to the component price. Each kit contains all you need including screws and implants.

Full details of what the kit includes is available, contact our Vet Tech Team on 0345 130 9596 or email info@vetinst.com

Below is an example of the contents of an AO Cortical Non Self Tapping Kit.

The 2.7mm & 3.5mm Cortical Self Tapping Screw Kit In Premium Box Contains:

001287	2.7mm & 3.5mm AO Type Bending Levers (Pair) 140mm	X 1	CSST2718	2.7mm Self Tapping Cortical Screw 18mm Long	X 5
001496	Screw Length & Drill Gauge (Screws 60mm, Drills 1.1-3.5mm)	X 1	CSST2720	2.7mm Self Tapping Cortical Screw 20mm Long	X 5
0900391.1	1.1mm Arthrodesis / Kirschner Wire Storage Dispenser	X 1	CSST2722	2.7mm Self Tapping Cortical Screw 22mm Long	X 3
BT270760	Bending Template 60mm For 2.7mm DCP & Round Hole	X 1	CSST2724	2.7mm Self Tapping Cortical Screw 24mm Long	X 2
BT350786	Bending Template 86mm For 3.5mm DCP & Round Hole	X 1	CSST2726	2.7mm Self Tapping Cortical Screw 26mm Long	X 2
BX301410P	Premium Instrument Box 300mm X 140mm X 100mm & Insert	X 1	CSST2728	2.7mm Self Tapping Cortical Screw 28mm Long	X 1
C2704036	2.7mm DCP 4 Hole 37mm Long	X 1	CSST2730	2.7mm Self Tapping Cortical Screw 30mm Long	X 1
C2705044	2.7mm DCP 5 Hole 45mm Long	X 1	CSST3510	3.5mm Self Tapping Cortical Screw 10mm Long	X 3
C2706052	2.7mm DCP 6 Hole 53mm Long	X 1	CSST3512	3.5mm Self Tapping Cortical Screw 12mm Long	X 4
C2707060	2.7mm DCP 7 Hole 61mm Long	X 1	CSST3514	3.5mm Self Tapping Cortical Screw 14mm Long	X 5
C2708068	2.7mm DCP 8 Hole 69mm Long	X 1	CSST3516	3.5mm Self Tapping Cortical Screw 16mm Long	X 5
C2710084	2.7mm DCP 10 Hole 85mm Long	X 1	CSST3518	3.5mm Self Tapping Cortical Screw 18mm Long	X 5
C3504050	3.5mm DCP 4 Holes 50mm	X 1	CSST3520	3.5mm Self Tapping Cortical Screw 20mm Long	X 5
C3505062	3.5mm DCP 5 Holes 62mm	X 1	CSST3522	3.5mm Self Tapping Cortical Screw 22mm Long	X 5
C3506074	3.5mm DCP 6 Holes 74mm	X 1	CSST3524	3.5mm Self Tapping Cortical Screw 24mm Long	X 5
C3507086	3.5mm DCP 7 Holes 86mm	X 1	CSST3526	3.5mm Self Tapping Cortical Screw 26mm Long	X 5
C3508098	3.5mm DCP 8 Holes 98mm	X 1	CSST3528	3.5mm Self Tapping Cortical Screw 28mm Long	X 4
C3510122	3.5mm DCP 10 Holes 122mm	X 1	CSST3530	3.5mm Self Tapping Cortical Screw 30mm Long	X 3
CDTIS27	Combination Drill, Tap, Insert Sleeve (2.7mm Screws)	X 1	CSST3532	3.5mm Self Tapping Cortical Screw 32mm Long	X 2
CDTIS35	Combination Drill, Tap, Insert Sleeve (3.5mm Screws)	X 1	DG2735	Depth Gauge For 2.7mm & 3.5mm Screws	X 1
CM276150	2.7mm Cuttable Malleable Plate 25 Holes 150mm	X 1	H090102	2.0mm Drill Bit Round Shank	X 1
COU2535T	Small Countersink 'T' Handle - 2.7/3.5/4.0mm Screws	X 1	H090104	2.7mm Drill Bit Round Shank	X 1
CP27615022	2.7mm Cuttable Plate With Spaces 22 Holes 150mm Long	X 1	H090106S	3.5mm Drill Bit Round Shank	X 1
CSST2706	2.7mm Self Tapping Cortical Screw 6mm Long	X 3	H090112	2.5mm Drill Bit Round Shank	X 1
CSST2708	2.7mm Self Tapping Cortical Screw 8mm Long	X 3	LNDG27	Load / Neutral Guide 2.7mm - Use 2.0mm Drill	X 1
CSST2710	2.7mm Self Tapping Cortical Screw 10mm Long	X 4	LNDG35	Load / Neutral Guide 3.5mm - Use 2.5mm Drill	X 1
CSST2712	2.7mm Self Tapping Cortical Screw 12mm Long	X 5	SDH-S35POM-C	2.5mm Hex Screwdriver + Sleeve For 2.7/3.5/4.0mm Screws	X 1
CSST2714	2.7mm Self Tapping Cortical Screw 14mm Long	X 5	SF2055	Screw Holding Forceps 2.0mm - 5.5mm Screws	X 1
CSST2716	2.7mm Self Tapping Cortical Screw 16mm Long	X 5	SLG0020	Triple Drill Guide/Sleeve For 2.0mm Drills	X 1
			SLG0025	Triple Drill Guide/Sleeve 2.5mm Drills	X 1
			TC270532	2.7mm T Plate 5 Hole 32mm Long 2 Holes Distally	X 1

AO CORTICAL SELF TAPPING PLATING KITS IN PREMIUM BOXES

CORTSTP10	1.0mm Cortical Self Tapping Kit in Premium Box
CORTSTP152024	1.5/2.0/2.4mm Cortical Self Tapping Kit in Premium Box
CORTSTP2735	2.7/3.5mm Cortical Self Tapping Kit in Premium Box

Full details of all kit contents are available from our Vet Tech Team on 0345 130 9596 or email info@vetinst.com

1.0mm Plating Set

Management of fractures in dogs such as the Papillon and Chihuahua weighing less than a kilo is very challenging. Even 1.5 and 2.0mm screws are too large. Metacarpals in even some medium size patients require very small implants. To deal with fractures in tiny bones we are introducing our exclusive range of 1.0mm implants and equipment.

The range includes T-plates, compression plates and 5 different cuttable strips. Due to the small size, dedicated instrumentation is required.

Although relatively new, the new 1.0mm Implant System is proving its worth. As well as being useful for distal radial fractures in miniature and sub-miniature breeds, it has also found favour for repairing some of the smaller bones in larger patients.

The largest of these has been a greyhound patient of Alessandro Piras's. Alessandro managed to repair a fragmented type I fracture of accessory carpal bone using two screws. The fragment was too small for any other type of implant.



The 1.0mm Plating Set includes all the 1.0mm Instrumentation and a full set of 1.0mm Implants.

Everything is laid out in an easily accessible format in a Premium Filtered Case. The Plates are housed in a removable tray for easy access and inventory control.

1.0mm Kit Contents:

- 1 x Cruciate Screwdriver Insert
- 1 x Lightweight Screwdriver
- 2 x 0.7mm Drill Bits
- 1 x 1.0mm Drill Bit
- 1 x Plate Holding Forceps
- 1 x Screw Holding Forceps
- 1 x Pair Plate Bending Irons
- 1 x Drill Guide
- 1 x Miniature Pointed Reduction Forceps
- 1 x 3mm Grasp Serrated Bone Holding Forceps
- 1 x 5mm Grasp Serrated Bone Holding Forceps
- 1 x Small Compound Action Implant Cutters
- 1 x each of 'T' Plate T101016 - T101027
- 1 x each of DCP Plate C100210 - C101042
- 1 x each of Cuttable Plate CP10390 - CP1049120
- 8 x each of CSST Screws 4mm - 7mm
- 6 x each of CSST Screws 8mm & 9mm
- 4 x each of CSST Screws 10mm & 11mm
- 2 x each of CSST Screws 12mm - 15mm

1.0MM PLATING SET IN PREMIUM BOX

CORTSTP10 1.0mm Plating Set In Premium Box

1.0mm Loan Plating Kit

The fee is for rental of the Kit including delivery and return collection by courier.

The Set will be supplied non-sterile with a full set of implants.

Implants used will be charged for separately upon return of the Kit (UK only)

Please call a member of our Vet Tech Team for further details and to check availability.

AO Plating Kits

AO Cortical and Cortical Self Tapping Kits



Kit featured is **CORTSTKIT2735**

Savings may be made by purchasing pre-assembled kits. The price is typically discounted by 5% compared to the component price.

The description cortical means that the pilot hole must be pre-tapped prior to screw placement. Cortical Self Tapping means that the screw itself has a self tapping tip and cuts its own thread. Self tappers work very well in all but the hardest cortical bone. It is recommended that surgeons using self tappers keep a tap 'just in case'.

Each Kit contains all you need including screws and implants.

Full details of what the kit includes is available, contact our Vet Tech Team on 0345 130 9596 or email info@vetinst.com

Below is an example of the contents of an AO Cortical Non Self Tapping Kit.

The 1.5mm & 2.0mm Cortical Non Self Tapping Screw Kit in Stainless Steel Box contains:

001286	1.5mm & 2.0mm AO Type Bending Levers (Pair) 125mm	X 1
001496	Screw Length And Drill Gauge (Screws 60mm, Drills 1.1-3.5mm)	X 1
ACETATE1	Acetate Plate Profiles 1.5mm 2.0mm & 2.4mm	X 1
ACETATE4	Acetate Plate Profiles T Plates	X 1
ACETATE6	Acetate Plate Profiles Site Specific Implants	X 1
BPC2	Bone Plate Clip 2mm	X 1
BT200737	Bending Template 37mm For 2.0mm DCP & Round Hole	X 1
BX1520CS	Box Fitted For 1.5 & 2.0mm Cortical Screws & Equipment	X 1
CDTIS20	Combination Drill, Tap, Insert Sleeve (2mm Screws)	X 1
CM205150	2.0mm Cuttable Malleable Plate 30 Holes 150mm	X 1
CP20422	2.0mm Dcp 4 Hole 22mm	X 1
CP205150	2.0mm Cuttable Plate 30 Holes 150mm Long	X 1
CP20527	2.0mm DCP 5 Hole 27mm	X 1
CP20632	2.0mm DCP 6 Hole 32mm	X 1
CP20737	2.0mm DCP 7 Hole 37mm	X 1
CP20842	2.0mm DCP 8 Hole 42mm	X 1
CS1506	1.5mm Cortical Screw X 6mm	X 5
CS1508	1.5mm Cortical Screw X 8mm	X 5
CS1510	1.5mm Cortical Screw X 10mm	X 5
CS1512	1.5mm Cortical Screw X 12mm	X 5
CS1514	1.5mm Cortical Screw X 14mm	X 5
CS1516	1.5mm Cortical Screw X 16mm	X 5
CS1518	1.5mm Cortical Screw X 18mm	X 5
CS1520	1.5mm Cortical Screw X 20mm	X 5
CS2006	2.0mm Cortical Screw 6mm	X 5
CS2008	2.0mm Cortical Screw 8mm	X 5
CS2010	2.0mm Cortical Screw 10mm	X 5
CS2012	2.0mm Cortical Screw 12mm	X 5
CS2014	2.0mm Cortical Screw 14mm	X 5
CS2016	2.0mm Cortical Screw 16mm	X 5
CS2018	2.0mm Cortical Screw 18mm	X 5
CS2020	2.0mm Cortical Screw 20mm	X 5
DC20	Handle For 1.5mm, 2mm & 2.4mm Tap (Dental Fit)	X 1
DGP15	Depth Gauge For 1.5 Screws	X 1
H090100	1.1mm Round Shank Drill Hard	X 1
H090101	1.5mm Round Shank Drill Hard	X 1
H090102	2.0mm Round Shank Drill Hard	X 1
LNDG20	Load/ Neutral Guide 2mm - Use 1.5mm Drill	X 1
SDHS20F	1.5/2.0/2.4mm Hex Screwdriver With Sleeve (PTFE Handle)	X 1
SL2015	Insert Sleeve OD 2.0mm ID 1.5mm	X 1
SLG1115	Double Drill Guide/Sleeve 1.1/1.5mm Drills	X 1
TC204018	2.0mm T Plate 4 Hole 18mm Long 2 Holes Distally	X 1
TC205024	2.0mm T Plate 5 Hole 24mm Long 2 Holes Distally	X 1
TD0015	1.5mm Cortical Tap Dental Fit	X 1
TD0020	2.0mm Cortical Tap Dental Fit	X 1

AO CORTICAL NON SELF TAPPING PLATING KITS

CORTKIT1.5/2	1.5/2.0mm Cortical Kit in Stainless Box
CORTKIT2	2.0mm Cortical Kit in Stainless Box
CORTKIT2.7/3.5	2.7/3.5mm Cortical Kit in Stainless Box
CORTKIT4.5	4.5mm Cortical Kit in Stainless Box
CORTKIT4.5/5.5	4.5/5.5mm Cortical Kit in Stainless Box



Kit featured is **CORTSTKIT1.5**

Below is an example of the contents of an AO Cortical Self Tapping Kit.

The 1.5mm & 2.0mm Cortical Self Tapping Screw Kit in Stainless Steel Box Contains:

001286	1.5mm & 2.0mm AO Type Bending Levers (Pair) 125mm	X 1
001496	Screw Length And Drill Gauge (Screws 60mm, Drills 1.1-3.5mm)	X 1
ACETATE1	Acetate Plate Profiles 1.5mm 2.0mm & 2.4mm	X 1
ACETATE4	Acetate Plate Profiles T Plates	X 1
ACETATE6	Acetate Plate Profiles Site Specific Implants	X 1
BPC2	Bone Plate Clip 2mm	X 1
BT200737	Bending Template 37mm For 2.0mm DCP & Round Hole	X 1
BX1520CS	Box Fitted For 1.5 & 2.0mm Cortical Screws & Equipment	X 1
CDTIS20	Combination Drill, Tap, Insert Sleeve (2Mm Screws)	X 1
CM205150	2.0mm Cuttable Malleable Plate 30 Holes 150mm	X 1
CP20422	2.0mm DCP 4 Hole 22mm	X 1
CP205150	2.0mm Cuttable Plate 30 Holes 150mm Long	X 1
CP20527	2.0mm DCP 5 Hole 27mm	X 1
CP20632	2.0mm DCP 6 Hole 32mm	X 1
CP20737	2.0mm DCP 7 Hole 37mm	X 1
CP20842	2.0mm DCP 8 Hole 42mm	X 1
CSST1506	1.5mm Cortical Self Tapping Screw 6mm Long	X 5
CSST1508	1.5mm Cortical Self Tapping Screw 8mm Long	X 5
CSST1510	1.5mm Cortical Self Tapping Screw 10mm Long	X 5
CSST1512	1.5mm Cortical Self Tapping Screw 12mm Long	X 5
CSST1514	1.5mm Cortical Self Tapping Screw 14mm Long	X 5
CSST1516	1.5mm Cortical Self Tapping Screw 16mm Long	X 5
CSST1518	1.5mm Cortical Self Tapping Screw 18mm Long	X 5
CSST1520	1.5mm Cortical Self Tapping Screw 20mm Long	X 5
CSST2006	2.0mm Cortical Self Tapping Screw 6mm Long	X 5
CSST2008	2.0mm Cortical Self Tapping Screw 8mm Long	X 5
CSST2010	2.0mm Cortical Self Tapping Screw 10mm Long	X 5
CSST2012	2.0mm Cortical Self Tapping Screw 12mm Long	X 5
CSST2014	2.0mm Cortical Self Tapping Screw 14mm Long	X 5
CSST2016	2.0mm Cortical Self Tapping Screw 16mm Long	X 5
CSST2018	2.0mm Cortical Self Tapping Screw 18mm Long	X 5
CSST2020	2.0mm Cortical Self Tapping Screw 20mm Long	X 5
DGP15	Depth Gauge For 1.5mm Screws	X 1
H090100	1.1mm Drill Bit Round Shank	X 1
H090101	1.5mm Drill Bit Round Shank	X 1
H090102	2.0mm Drill Bit Round Shank	X 1
LNDG20	Load/ Neutral Guide 2mm - Use 1.5mm Drill	X 1
SDHS20F	1.5/ 2.0/ 2.4mm Hex Screwdriver With Sleeve (PTFE Handle)	X 1
SL2015	Insert Sleeve OD 2.0mm ID 1.5mm	X 1
SLG1115	Double Drill Guide/ Sleeve 1.1/ 1.5mm Drills	X 1
TC204018	2.0mm T Plate 4 Hole 18mm Long 2 Holes Distally	X 1
TC205024	2.0mm T Plate 5 Hole 24mm Long 2 Holes Distally	X 1

AO CORTICAL SELF TAPPING PLATING KITS

CORTSTKIT1.5	1.5mm Cortical Self Tapping Kit in Stainless Box
CORTSTKIT1.5/2	1.5/2.0mm Cortical Self Tapping Kit in Stainless Box
CORTSTKIT2.0	2.0mm Cortical Self Tapping Kit in Stainless Box
CORTSTKIT24	2.4mm Cortical Self Tapping Kit in Stainless Box
CORTSTKIT2735	2.7/3.5mm Cortical Self Tapping Kit in Stainless Box
CORTSTKIT4.5	4.5mm Cortical Self Tapping Kit in Stainless Box

AO Cortical Self Tapping Kits with Limited Contact (LC) Compression Plates

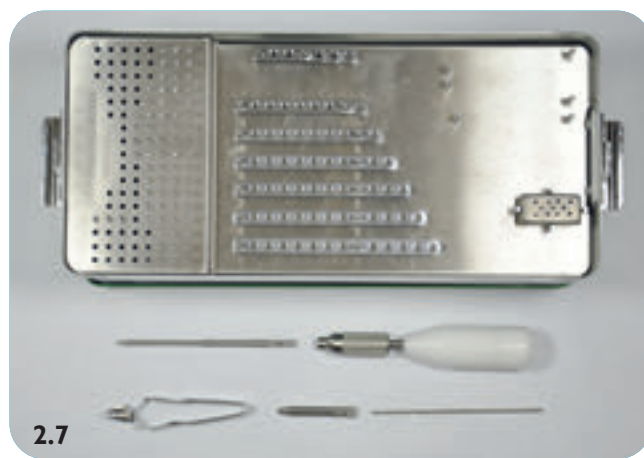
Contains the same implants and instruments except DCPs are replaced with Limited Contact Compression Plates.

AO CORTICAL SELF TAPPING KITS WITH LIMITED CONTACT COMPRESSION PLATES

LCORTSTKIT24	2.4mm Cortical Self Tapping Kit with LC Compression Plates in Stainless Box
LCORTSTKIT2735	2.7/3.5mm Cortical Self Tapping Kit with LC Compression Plates in Stainless Box

Vi Premium Locking Plating Kits

Locking Plate and Screw Set in Premium Box



The Locking Plate and Screw Set contains a wide selection of Locking Plates and Screws as well as all the essential instruments required.

Available with Hex Head Screws in 3.5mm (only) or with Star Drive Head Screws in 3.5mm, 2.7mm, 2.4mm and 2.0mm.

The price is discounted by over 5% compared to the component parts.

Below is an example of the contents of a Vi Premium Locking Kit.

The 2.7mm Locking Plate & Star Drive Screw Kit in Premium Box contains:

BX301410P	Premium Instrument Box 300mm X 140mm X 100mm & Insert	X	1
H090102	2.0mm Round Shank Drill Hard	X	1
LS2724STAR06	Locking Screw 2.7mm With 2.4mm Star Head 6mm Long	X	3
LS2724STAR08	Locking Screw 2.7mm With 2.4mm Star Head 8mm Long	X	3
LS2724STAR10	Locking Screw 2.7mm With 2.4mm Star Head 10mm Long	X	3
LS2724STAR12	Locking Screw 2.7mm With 2.4mm Star Head 12mm Long	X	4
LS2724STAR16	Locking Screw 2.7mm With 2.4mm Star Head 16mm Long	X	5
LS2724STAR18	Locking Screw 2.7mm With 2.4mm Star Head 18mm Long	X	5
LS2724STAR20	Locking Screw 2.7mm With 2.4mm Star Head 20mm Long	X	5
LS2724STAR22	Locking Screw 2.7mm With 2.4mm Star Head 22mm Long	X	5
LS2724STAR24	Locking Screw 2.7mm With 2.4mm Star Head 24mm Long	X	4
LS2724STAR26	Locking Screw 2.7mm With 2.4mm Star Head 26mm Long	X	4
LS2724STAR28	Locking Screw 2.7mm With 2.4mm Star Head 28mm Long	X	4
LS2724STAR30	Locking Screw 2.7mm With 2.4mm Star Head 30mm Long	X	4
LS2724STAR32	Locking Screw 2.7mm With 2.4mm Star Head 32mm Long	X	4
LS2724STAR34	Locking Screw 2.7mm With 2.4mm Star Head 34mm Long	X	3
LS2724STAR36	Locking Screw 2.7mm With 2.4mm Star Head 36mm Long	X	3
LS2724STAR38	Locking Screw 2.7mm With 2.4mm Star Head 38mm Long	X	3
LS2724STAR40	Locking Screw 2.7mm With 2.4mm Star Head 40mm Long	X	3
LSDG2724	Locking Screw Drill Guide For 2.7mm Screws (2.4mm Head)	X	1
LSP24star	2.4mm Locking Plug - Star Head	X	5
LSPBOX	Box For Locking Screw Plugs	X	1
QRCH18	Quick Release Tap Handle PTFE Type	X	1
SDT82427	Star Drive T8 Insert For 2.4 And 2.7 Locking Screws	X	1
SF2055	Screw Holding Forceps 2.0mm - 5.5mm Screws	X	1
LPSH2704034	Stacked Locking Hole Plate 2.7mm 4 Hole 34mm Long	X	1
LPSH2705042	Stacked Locking Hole Plate 2.7mm 5 Hole 42mm Long	X	1
LPSH2706050	Stacked Locking Hole Plate 2.7mm 6 Hole 50mm Long	X	1
LPSH2707058	Stacked Locking Hole Plate 2.7mm 7 Hole 58mm Long	X	1
LPSH2708066	Stacked Locking Hole Plate 2.7mm 8 Hole 66mm Long	X	1
LPSH2709074	Stacked Locking Hole Plate 2.7mm 9 Hole 74mm Long	X	1
LPSH2710082	Stacked Locking Hole Plate 2.7mm 10 Hole 82mm Long	X	1
LPSH2711090	Stacked Locking Hole Plate 2.7mm 11 Hole 90mm Long	X	1
LPSH2712098	Stacked Locking Hole Plate 2.7mm 12 Hole 98mm Long	X	1
LPSH2713106	Stacked Locking Hole Plate 2.7mm 13 Hole 106mm Long	X	1
LPSH2714114	Stacked Locking Hole Plate 2.7mm 14 Hole 114mm Long	X	1
LPSH2715122	Stacked Locking Hole Plate 2.7mm 15 Hole 122mm Long	X	1
LPSH2716130	Stacked Locking Hole Plate 2.7mm 16 Hole 130mm Long	X	1
LPSH2717138	Stacked Locking Hole Plate 2.7mm 17 Hole 138mm Long	X	1
LPSH2718146	Stacked Locking Hole Plate 2.7mm 18 Hole 146mm Long	X	1

LOCKING SCREW & PLATE KITS IN PREMIUM BOXES

LS35KITALL	3.5 Locking Screw (Hex Head) and Plate Kit in Premium Box
LS35STARKITALL	3.5 Locking Screw (Star Head) and Plate Kit in Premium Box
LS27STARKITALL	2.7 Locking Screw (Star Head) and Plate Kit in Premium Box
LS24STARKITALL	2.4 Locking Screw (Star Head) and Plate Kit in Premium Box
LS20STARKITALL	2.0 Locking Screw (Star Head) and Plate Kit in Premium Box

LOCKING SCREW & PLATE KIT PREMIUM BOXES (SUPPLIED EMPTY)

LS35BOX	3.5mm Locking Kit Premium Box with Insert only
LS27BOX	2.7mm Locking Kit Premium Box with Insert only
LS24BOX	2.4mm Locking Kit Premium Box with Insert only
LS20BOX	2.0mm Locking Kit Premium Box with Insert only

Loan Locking Plating Kits with Vi Dynamic Locking Plates

We offer loan 3.5mm, 2.7mm, 2.4mm & 2.0mm Locking Screw (Star Drive) Plating Kits

The charge is for rental of the Kit including delivery and return collection by courier.

The Kit will be supplied non-sterile with a full set of implants. (UK only)

Implants used will be charged for separately upon return of the Set.

Please call a member of our Vet Tech Team for further details and to check availability.

Equipment and Screw Boxes

AO Screw/ Equipment Boxes



Box featured BX20CS
Please note design may vary with size of implant

AO EQUIPMENT/ SCREW BOX

- BX24CS** Box for 2.4 AO Screws and Equipment
BX2735CS Box for 2.7/3.5 AO Screws and Equipment

Screw Boxes for AO Type Screws and/ or Locking Screws

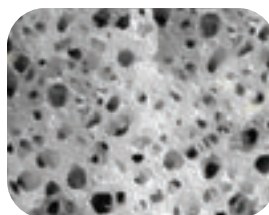


Please note design may vary with size of implant

SCREW BOXES

- SH1500** Screw Box 1.5mm AO Type Screws and/or Locking Screws (all lengths)
SH2000 Screw Box 2.0mm AO Type Screws and/or Locking Screws (all lengths)
SH2400 Screw Box 2.4mm AO Type Screws and/or Locking Screws (all lengths)
SH2700 Screw Box 2.7mm AO Type Screws and/or Locking Screws (all lengths)
SH2735 Screw Box 2.7mm & 3.5mm AO Type Screws and/ or Locking Screws (all lengths of 2.7mm and all lengths of 3.5mm up to 50mm)
SH3500 Screw Box 3.5mm AO Type Screws and/or Locking Screws (up to 50mm)
SH4500 Screw Box for 4.5mm AO Type Screws (Even number lengths from 12-50mm)

ReproBone Granules



ReproBone is also available in a granule formulation which may be used alone or as an extender of natural cancellous bone graft. The mixture of hydroxyapatite and tricalcium phosphate is formulated as an osteoconductive scaffold which is fully resorbed by the body. The lattice work mimics that of cancellous bone (see photo). Available as granules or blocks of various sizes.

CERAMYSIS REPRO BONE

- RBG5** 5cc Granules 1.0 to 4.0mm
RBG10 10cc Granules 1.0 to 4.0mm
RB10D10 Rod 10mm Diameter 10mm Long

Other sizes available, please call 0345 130 9596.

Veterinary Tissue Bank



Veterinary Tissue Bank is Europe's first tissue bank dedicated to helping companion animals.

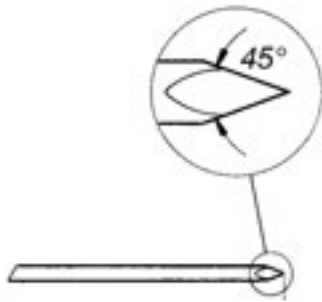
Products are available in various presentations, and have many applications from use during procedures such as TTA and joint arthrodesis to dealing with the difficult non-union case.

Available in either Canine or Feline Powder, or now as DBM Putty (Canine only) see Chapter 5.

Wires & Pins

Wires are simple, but very versatile implants. Our specially selected stainless steel wires are both very hard and very stiff improving their driving characteristics and performance in situ. Cutting with sufficiently robust implant cutters with hard jaws is obligatory. These wires will damage cutters with stainless steel edges, eg: combined wire twisters/ shear cutters.

Arthrodesis Wire 125mm Long



Rather like small Intra-medullary Pins, Arthrodesis Wires have trochar points at each end. They are used for the fixation of small bone fragments, produced either electively or as a result of trauma, e.g. distal femoral fractures, tibial crest transplants and femoral neck fractures. 125mm Long. Supplied in packs of ten.

ARTHRODESIS WIRE TROCHAR POINTED AT BOTH ENDS PACK OF 10 (125MM LENGTH)

090054	0.8mm	
090020	0.9mm	0.035"
090060	1.0mm	
090021	1.1mm	0.045"
090061	1.25mm	
090024	1.4mm	
090062	1.5mm	
090022	1.6mm	0.0625"
090026	1.8mm	0.0715"
090023	2.0mm	0.08"
090025S	Pack of mixed Arthrodesis Wires	

Arthrodesis Wire 178mm Long (Extra Long)

Rather like small Intra-medullary Pins, Arthrodesis Wires have trochar points at each end. They are used for the fixation of small bone fragments, produced either electively or as a result of trauma, e.g. distal femoral fractures, tibial crest transplants and femoral neck fractures. 178mm Long. Extra long. Supplied in packs of ten.

ARTHRODESIS WIRE TROCHAR POINTED AT BOTH ENDS PACK OF 10 (178MM LENGTH)

090064	0.9mm
090065	1.1mm
090066	1.4mm
090067	1.6mm
090068	1.8mm
090069	2.0mm

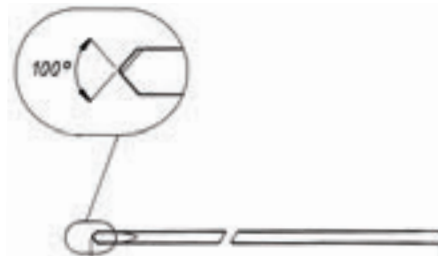
Arthrodesis Wire Extra Fine 70mm Long

Arthrodesis Wires - Extra Fine. 70mm long with one trochar end and one blunt end. Useful for exotics. Supplied in packs of ten.

ARTHRODESIS WIRE EXTRA FINE PACK OF 10 (70MM LENGTH)

090056	0.6mm
090055	0.7mm

Kirschner Wire 125mm Long



One tip bayonet, the other blunt, these Pins are supplied in packs of ten. 125mm Long.

KIRSCHNER WIRE - PACK OF 10 (125MM)

090030	0.9mm	0.035"
090070	1.0mm	
090031	1.1mm	0.045"
090071	1.25mm	
090034	1.4mm	
090072	1.5mm	
090032	1.6mm	0.0625"
090073	1.8mm	0.0715"
090033	2.0mm	0.08"
090030/3M	Pack of mixed Kirschner Wires	

Kirschner Wire 178mm Long (Extra Long)

One tip bayonet, the other blunt, these Pins are supplied in packs of ten. 178mm Long. Extra long.

KIRSCHNER WIRE - PACK OF 10 (178MM)

090074	0.9mm	0.035"
090075	1.1mm	0.045"
090076	1.4mm	
090077	1.6mm	0.0625"
090078	1.8mm	0.0715"
090079	2.0mm	0.08"

Rush Pins

We stock Rush Pins in 2.4mm (3/32") and 3.2(1/8") diameters. Lengths vary from 25mm (1") to 100mm (4").

RUSH PINS 2.4MM (3/32")

090141	Rush Pin 2.4mm (3/32")	1.25" Long
090142	Rush Pin 2.4mm (3/32")	1.5" Long
090143	Rush Pin 2.4mm (3/32")	1.75" Long
090144	Rush Pin 2.4mm (3/32")	2" Long
090145	Rush Pin 2.4mm (3/32")	2.25" Long
090146	Rush Pin 2.4mm (3/32")	2.5" Long
090147	Rush Pin 2.4mm (3/32")	2.75" Long
090148	Rush Pin 2.4mm (3/32")	3" Long
090149	Rush Pin 2.4mm (3/32")	3.25" Long
090150	Rush Pin 2.4mm (3/32")	3.5" Long
090151	Rush Pin 2.4mm (3/32")	3.75" Long
090152	Rush Pin 2.4mm (3/32")	4" Long

RUSH PINS 3.2MM (1/8")

090200	Rush Pin 3.2mm (1/8")	1" Long
090201	Rush Pin 3.2mm (1/8")	1.25" Long
090202	Rush Pin 3.2mm (1/8")	1.5" Long
090203	Rush Pin 3.2mm (1/8")	1.75" Long
090204	Rush Pin 3.2mm (1/8")	2" Long
090205	Rush Pin 3.2mm (1/8")	2.25" Long
090206	Rush Pin 3.2mm (1/8")	2.5" Long
090207	Rush Pin 3.2mm (1/8")	2.75" Long
090208	Rush Pin 3.2mm (1/8")	3" Long
090209	Rush Pin 3.2mm (1/8")	3.25" Long
090210	Rush Pin 3.2mm (1/8")	3.5" Long
090211	Rush Pin 3.2mm (1/8")	3.75" Long
090212	Rush Pin 3.2mm (1/8")	4" Long

Threaded Pins and Wires

Threaded Wires have a much greater pull out resistance than smooth wires. They are very easy to insert using Standard Drills fitted with Jacobs Chucks or Wire Drivers. Although having only trochar tips they will self tap in all but the hardest of cortical bone. Driven across fragments, threaded wires act as mini position screws which can be cut off flush to the bone surface or buried. It may be possible to place several Threaded Wires at angles to each other in a relatively small area.

Available in Coarse or Fine Thread pitches. Use the coarse in cancellous or metaphyseal bone.

Coarse Threaded Small Fragment Pins



Use Threaded Pins where you might use a 2mm fixation screw or 'K' Wire, e.g. tibial crest transplant. Drive in with slow speed drill. Relatively coarse threads. 0.8mm thread pitch.

COARSE THREADED SMALL FRAGMENT PINS - 2.0MM DIAMETER

- 090036 Threaded Pins 5mm Thread Single
- 090037 Threaded Pins 10mm Thread Single
- 090027 Threaded Pins 15mm Thread Single
- 090028 Threaded Pins 20mm Thread Single

Fine Threaded Small Fragment Pins 2.0mm

Use singly to re-attach small bone fragments. Use in multiples to re-attach larger fragments e.g. humeral condyles. (4 x 2.0 Threaded Pins have similar properties to one 3.5 Screw while interfering less with the healing process). Use Threaded Washer to create screw effect. Very easy to insert using an orthopaedic drill.

Thread pitch is 0.4mm for use in cortical bone. Self drilling. Cut off excess pin. For maximum pull out resistance drill through trans cortex and cut off trochar cutting tip.

FINE THREADED FRAGMENT PINS 2.0MM

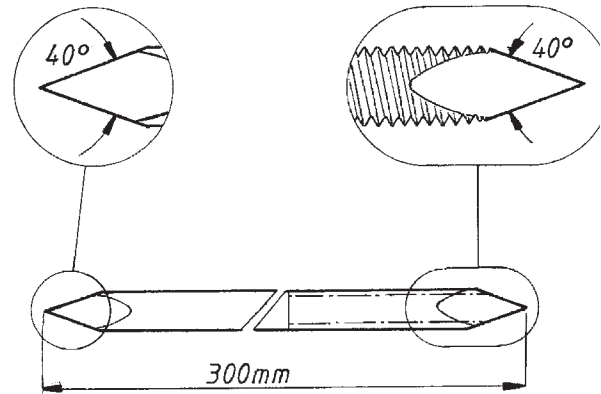
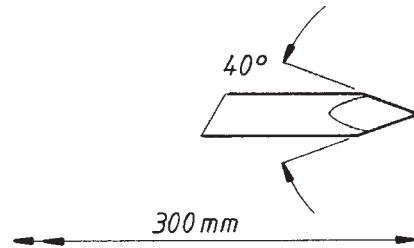
- 090300 Fine Threaded Washer 5.0mm Diameter Single
- 090305 Fine Threaded Pin 5mm Thread Length Single
- 090310 Fine Threaded Pin 10mm Thread Length Single
- 090315 Fine Threaded Pin 15mm Thread Length Single
- 090320 Fine Threaded Pin 20mm Thread Length Single
- 090325 Fine Threaded Pin 25mm Thread Length Single
- 090330 Fine Threaded Pin 30mm Thread Length Single
- 090340 Fine Threaded Pin 40mm Thread Length Single
- 0903111 Fine Threaded Pin Set 5 of each Pin plus 5 Washers in Stainless Case

Fully Threaded Arthrodesis Wires

FULLY THREADED ARTHRODESIS WIRES

- 090092 Fully Threaded Wire Single 1.0
- 090093 Fully Threaded Wire Single 1.5
- 090094 Fully Threaded Wire Single 2.0

Steinman Intra-Medullary Pins



Simple, cheap and often the best technique for the repair of long bones. I/M pinning does not resist compression and rotation very effectively. It may be helpful to add an external fixator for two weeks if in any doubt. Smooth Pins are most likely to migrate. The Threaded Pins are negatively cut and do reduce backing out particularly if the distal fragment is small.

Our Trochar tips are designed to cut bone but care must be exercised to avoid heat necrosis during insertion. Can be cut in half to produce cheap ESF pins. Most Pin Chucks will only take 1/4" pins.* Do not purchase a 5/16" Pin unless you have a Chuck to insert it. Use 1.0mm wire minimum as a cerclage.

STEINMAN INTRA-MEDULLARY PINS TROCHAR TIPS (300MM LENGTH)

090000	1.6mm	1/16"
090001	2.0mm	5/64"
090002	2.4mm	3/32"
090003	2.8mm	7/64"
090004	3.2mm	1/8"
090005	3.5mm	9/64"
090006	4.0mm	5/32"
090007	4.8mm	3/16"
090153	6mm	15/64"
090008	6.35mm	1/4"

STEINMAN INTRA-MEDULLARY PINS SCREW POINT TROCHAR TIPS (300MM LENGTH)

090010	1.6mm	1/16"
090011	2.0mm	5/64"
090012	2.4mm	3/32"
090013	2.8mm	7/64"
090014	3.2mm	1/8"
090015	3.5mm	9/64"
090016	4.0mm	5/32"
090017	4.8mm	3/16"
090154	5.6mm	7/32"
090018	6.35mm	1/4"

Wire & Pin Storage

Arthrodesis Wire Box



Box will store all diameters of Arthrodesis and 'K' Wires in four compartments.

ARTHRODESIS & 'K' WIRE ORGANISER AUTOCLAVABLE

- 001124 Stainless Box for Arthrodesis & 'K' Wires
- 0900200 Arthrodesis & 'K' Wire Organiser Plastic (Autoclavable)

'A' Wire/ 'K' Wire Holders for 5" / 125mm Wires



The simplest solution for storing 'A'/'K' wires is to have a tube dedicated for each size marked clearly with the diameter. There is no possibility for confusion. Each tube is 165mm long and 12mm diameter and will take any wire less than 150mm in length.

K WIRE / A WIRE HOLDERS FOR 5"/125MM WIRES

- 0900390.8 0.8mm Arthrodesis Wire/ 'K' Wire Holder
- 0900390.9 0.9mm Arthrodesis Wire/ 'K' Wire Holder
- 0900391.0 1.0mm Arthrodesis Wire/ 'K' Wire Holder
- 0900391.1 1.1mm Arthrodesis Wire/ 'K' Wire Holder
- 0900391.2 1.25mm Arthrodesis Wire/ 'K' Wire Holder
- 0900391.4 1.4mm Arthrodesis Wire/ 'K' Wire Holder
- 0900391.5 1.5mm Arthrodesis Wire/ 'K' Wire Holder
- 0900391.6 1.6mm Arthrodesis Wire/ 'K' Wire Holder
- 0900391.8 1.8mm Arthrodesis Wire/ 'K' Wire Holder
- 0900392.0 2.0mm Arthrodesis Wire/ 'K' Wire Holder
- 090039SET Arthrodesis Wire/ 'K' Wire Holder Set (10)

'A' Wire/ 'K' Wire Dispenser



The Tube is sub divided into four sections each of which has a window through which the Wires may be viewed. The knurled dispensing tip is rotated until the hole is over the desired wire size and the Wire shaken out. Total length 175mm. For Wires 125mm. Marked with the standard sizes of 0.9, 1.1, 1.6 and 2.0mm.

'A' WIRE/ 'K' WIRE DISPENSER

- 090039E A' Wire/ 'K' Wire Dispenser 0.9, 1.1, 1.6 & 2.0mm

Bone Pin Roll



Bone Pin storage and sterilisation is difficult. Pins are long and sharp. The Bone Pin Roll stores at least one of each Pin.

An added advantage is that the pins do not penetrate sterilisation bags.

BONE PIN ROLL

- 090038 Bone Pin Roll

Bone Pin Tubes



BONE PIN TUBES

- 090039A I/M Pin Storage/ Autoclave Tube 320mm
- 090039C I/M Pin Storage/ Autoclave Tube 255mm

IM Pin Box



Keep all your 300mm IM Pins arranged and in size order safely within our IM pin box. The hard box will reduce the chance of personal injury and the risks of perforating packaging.

The Box is fully autoclavable, but also makes an excellent stock-box. At a glance you can quickly see how many of each size pin it is holding. The box features a platform with a clearly marked metric and imperial pin gauge to make it very user friendly.

Supplied either empty or filled with three Steinmann pins of each size representing a saving of over 10%. The Pin sizes are, 1.6mm, 2.0mm, 2.4mm, 2.8mm, 3.2mm, 3.6mm, 4.0mm, 4.8mm & 6.35mm. Box external dimensions 308 x 138 x 64mm.

IM PIN BOX

- IMPBOX01 IM Pin Box with Insert - Supplied Empty
- IMPBOXTRO IM Pin Box Complete with Steinman Pins Trochar Tips
- IMPBOXSCR IM Pin Box Complete with Steinman Pins Screw Point Tips

Wire/ Pin Punches & Benders

Small Pin Vice



This Small Pin Chuck holds wires and instruments up to a diameter of 1.0mm. Particularly useful for fingertip control over insertion of Arthrodesis and 'K' Wires.

SMALL PIN VICE

001223 Small Pin Vice 100mm Long

IM Pin Punch



IM Pin Punch with a larger diameter tip (6mm) for driving larger pins.

IM PIN PUNCH

001374 IM Pin Punch 135mm Long 6mm Tip

'K' Wire/ Small Pin Punch



The cut ends of 'K' Wires, Arthrodesis Wires and small pins used for fragment fixation e.g. distal femoral fractures, should be buried beneath the bone or articular surface to minimise soft tissue irritation. The tip of the punch is concave to locate onto the pin end. The other end is struck with a mallet. Use 001360 for Pins and 001361 for Wires.

'K' WIRE/ SMALL PIN PUNCH

001360 Pin Punch 135mm Long

001361 Small Pin Punch 1.6mm Tip 135mm Long

Offset K/A Wire Punch For Bent Pins



The bigger, angled foot of this punch is designed to allow bent-over arthrodesis or K wires to be driven home onto the bone surface. May also be used for Rush pins.

OFFSET K/A WIRE PUNCH FOR BENT PINS

001364 Offset K/A Wire Punch For Bent Pins 135 mm Long

'Stubby' Punch



The reduced working length allows the stubby punch to be held between thumb and forefinger much closer to the patient for increased control. This is especially useful when working without an assistant. 50mm long.

'STUBBY' PUNCH

001363 'Stubby' Punch 50mm Long

Dental Forceps for Pin and Wire Extraction



For pin, wire & screw extraction. Grooved tips come to a point, allowing work in confined spaces and close to bone with a reduced surgical approach. Anatomical handles and cranked jaws for ease of use.

DENTAL FORCEPS FOR PIN AND WIRE EXTRACTION

001248 Dental Forceps for Pin and Wire Extraction

'K' Wire Bender



Used to bend K and A wires prior to rotation and seating onto the bone. This instrument is designed to slip over the wire concentrating all the bending forces at the pin/bone interface. The instrument is double ended, the small end is for 0.9mm and 1.1mm wires, the large end is for 1.4mm, 1.6mm & 2.0mm wires.

'K' WIRE/ SMALL PIN BENDER

001362 'K' Wire/ Small Pin Bender 140mm Long

Offset Type Wire Bender



A robust design for the accurate and reliable creation of bends close to the bone surface. The three cannulations (1.1mm, 1.6mm and 2.0 mm) cater for the full range of our arthrodesis wires. The short length of each cannulation makes these easy to clean.

OFFSET TYPE WIRE BENDER

001373 Offset Type Wire Bender

Orthopaedic Wire

Orthopaedic Wire Kit



Cerclage wire can be a very useful means of fragment fixation. Kit containing our most popular cerclage instruments and a roll of wire, discounted over component price.

Kit contains:

- 1 x Wire Twister
- 1 x Set of 3 Single Ended Wire Passers
- 1 x 10m roll of 1.0mm Orthopaedic Wire.

ORTHOPAEDIC WIRE KIT

OWKIT Orthopaedic Wire Kit

Orthopaedic Wire



Cerclage Wire is an extremely useful method of fragment fixation. Use as thick a Wire as seems possible. Twist evenly under tension. The best instrument is our Wire Twister/ Cutter 001260. Minimise wire movement on periosteum. Tension wire banding should be performed where muscular forces must be transferred beyond a fracture or osteotomy, e.g. Tibial crest avulsion or trochanteric osteotomy. 1.0mm Wire is the most useful for mid-sized dogs. All are supplied in 10 metre rolls.

ORTHOPAEDIC WIRE (IN 10M ROLLS)

OW0210	0.2 (diameter in mm)
OW0310	0.3
OW0410	0.4
OW0510	0.5
OW0610	0.6
OW0710	0.71
OW0810	0.8
OW0910	0.9
OW1010	1.0
OW1012	1.2
OW1015	1.5

For convenience and identification rolls of Orthopaedic Wire can be marked with Padlock Security Tags This also has the added advantage of stopping rolls of wire unraveling in the operating theatre.

Wires with Eyelet

The free end of the wire is threaded through the eye. The cerclage is tightened using the special tightener. Requires 001262 Wire Tightener or for Wire Twisting Instruments.

ORTHOPAEDIC WIRE (WITH EYELET)

CWWE22	Orthopaedic Wire with Eyelet 22g x 12" (6 pack)
CWWE20	Orthopaedic Wire with Eyelet 20g x 12" (6 pack)
CWWE18	Orthopaedic Wire with Eyelet 18g x 12" (6 pack)
001262	Wire Loop Tightener for above
200010.00	Twisterz Wire Twisters

Wire Cutters

Wire Twister/ Shear Cutter



- Jaws lock onto wire to enable easy twisting under tension for kink-free cerclage. The wire must be twisted under tension to create an even spiral.
- Improved design, long life shear action cutter will cut 18 gauge (1.2mm) wire twisted double.
- Serrated jaws grip and turn cut ends. Jaws have fenestration for extra grip.
- Not designed to cut 'A' + 'K' Wires, Pins or fish hooks.
- Available with Tungsten Carbide Jaws for extra grip (not fenestrated).

WIRE TWISTER/ SHEAR CUTTER

001260	Wire Twister/ Shear Cutter 165mm Long
001261	Wire Twister/ Shear Cutter - Tungsten Carbide Jaws 165mm Long

Wire Tighteners

Wire Tightener for Eyed Wires



Used to tension eyed wires very tightly. The cerclage is finished by kinking the wire back against the eye.

WIRE TIGHTENER FOR EYED WIRES

001262 Wire Loop Tightener 125mm Long

Wire Tightener with Two Cranks for Double Loop Cerclage and Eyed Wire



Use with single crank for eyelet wires. Use both cranks to tighten double loops.

For a video showing how this product works visit www.vetinst.com/videos

WIRE TIGHTENER WITH TWO CRANKS

001264 Wire Tightener with Two Cranks 285mm Long

Taps & Quick Release Handles

Quick Release Handle Dental Fit



Suitable for Dental Fit 1.5 and 2.0mm Taps. Also accepts Screwdriver and Countersink Attachments for the 1.5/2.0 Systems.

QUICK RELEASE TAP HANDLE DENTAL FIT

- DC20-A** Quick Release Handle - Dental Fit
- TD0015-A** 1.5mm Cortical Tap (Dental Fit)
- TD0020-A** 2.0mm Cortical Tap (Dental Fit)
- SDD1500-A** 1.5/2.0/2.4mm Hex Dental Fit Screwdriver Attachment
- COUDEN-A** Mini Countersink Dental Fit for 1.5/2.0mm Screws 55mm

Quick Release Handle - AO Fit



The working tip of this instrument is a Quick Release Chuck of the Synthes Type which accepts Drills, Taps and Screwdriver Attachments. Inclusion of this handle would mean that you would not require separate tap handles and screwdriver. The rotating cap which sits in the palm allows the tip to be spun with the fingers.

QUICK RELEASE TAP HANDLE WITH PTFE HANDLE AO TYPE

- QRCH18** Quick Release Handle - AO Type 155mm

Quick Release T Bar Handle - AO Fit



A Tap is essentially a cutting tool designed to pre-cut screw threads into the pilot hole prior to screw placement. The profile is similar to the screw in question but has long flutes to allow bone debris to be cleared. Taps are available as stand alone 'T' bar configuration or as a quick release version which require a separate handle. 2.4, 2.7, 3.5, 4.0, 4.5 and 6.5mm Quick Release Taps require Synthes Type Quick Release Handle. 1.5 and 2.0mm Quick Release Taps require a Small Dental Fit Handle. (DC20-A)

QUICK RELEASE T BAR TAP HANDLE AO TYPE

- QRCSOI** Quick Release Handle T Bar AO Type - 2.4 2.7 3.5 4.0 4.5 Taps 75mm

Taps - Quick Release



QUICK RELEASE TAPS

- TD0015-A** 1.5mm Cortical Tap (will only fit DC20-A)
- TD0020-A** 2.0mm Cortical Tap (will only fit DC20-A)
- TS0024** 2.4mm Cortical Tap
- TS00027** 2.7mm Cortical Tap
- TS12535** 3.5mm (1.25 pitch) Cortical Tap
- TS17535** 3.5mm (1.75 pitch) Small Cancellous Tap
- TS00045** 4.5mm Cortical Tap
- TS00045L** 4.5mm Extra Long Tap (195mm Long) 100mm Thread
- TS00045XL** 4.5mm Extra Long Tap (260mm Long) 195mm Thread
- TS00065** 6.5mm Cancellous Tap

Taps - Quick Release Square Fit



QUICK RELEASE TAPS & HANDLE - SQUARE FIT

- TQH55** Handle for 5.5mm Cortical Tap - Square Fit
- TQ00055** 5.5mm Cortical Tap - Square Fit

T Bar Taps



These taps require no additional handle.

T BAR TAPS

- TBT015** T Bar Tap 1.5mm Cortical
- TBT020** T Bar Tap 2.0mm Cortical
- TBT027** T Bar Tap 2.7mm Cortical
- TBT12535** T Bar Tap 3.5 (1.25 pitch) Cortical
- TBT17535** T Bar Tap 3.5 (1.75 pitch) Small Cancellous
- TBT065** T Bar Tap 6.5mm Cancellous

Locking Screw Taps



Handle design may vary from image shown see product code QRCH18

Since the introduction of Locking Screws into veterinary orthopaedics we have had the feedback that the self tapping feature works well in relatively soft bone (e.g. proximal tibia for TPLO) but it is less effective in dense cortical bone where getting the screw started can be a challenge. Starting the screw at any angle other than 90 degrees to the plate will have serious consequences when the locking threads meet the plate. In addition if the screw does not tap the trans cortex efficiently a disc of bone may be punched from the bone surface as the screw exits.

LOCKING SCREW TAP

TLS35	Tap for 3.5 Locking Screws (AO Fit)
TLS27	Tap for 2.7 Locking Screws (AO Fit)
TLS24	Tap for 2.4 Locking Screws (AO Fit)
TLS20-A	Tap for 2.0 Locking Screws (Dental Fit)
QRCH18	Quick Release Handle - AO Type
DC20-A	Quick Release Handle - Dental Fit
TLSSET-A	Handle Quick Release & Dental Fit & Locking Tap Set 2.0 - 3.5

Drill Guides, Sleeves & Drill Stops

Universal Drill Guides



UDG20 – Universal Drill Guide for 2.0mm screws

For Load and Neutral positioning of Ø1.5mm Drills and tissue protector for Ø2.0mm Tap

UDG24 – Universal Drill Guide for 2.4mm screws

For Load and Neutral positioning of Ø1.8mm Drills and tissue protector for Ø2.4mm Tap

UDG27 – Universal Drill Guide for 2.7mm screws

For Load and Neutral positioning of Ø2.0mm Drills and tissue protector for Ø2.7mm Tap

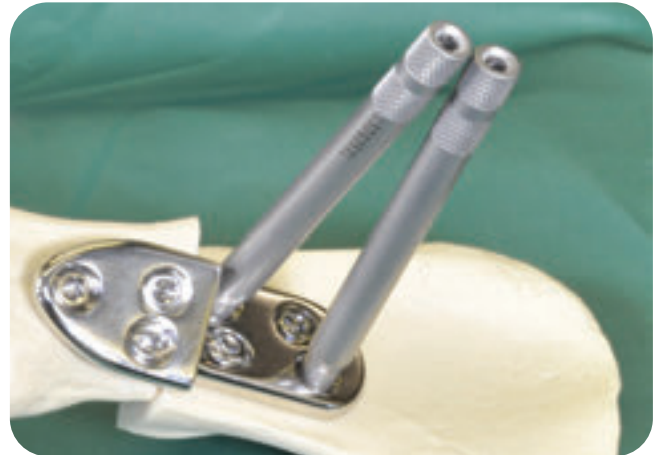
UDG35 – Universal Drill Guide for 3.5mm screws

For Load and Neutral positioning of Ø2.5mm Drills and tissue protector for Ø3.5mm Tap

UNIVERSAL DRILL GUIDE

UDG15	Universal Drill Guide For 1.5mm Screws
UDG20	Universal Drill Guide For 2.0mm Screws
UDG24	Universal Drill Guide For 2.4mm Screws
UDG27	Universal Drill Guide For 2.7mm Screws
UDG35	Universal Drill Guide For 3.5mm Screws

Locking Screw Drill Guides



LOCKING SCREW DRILL GUIDE

LSDG15	Locking Screw Drill Guide for 1.5
LSDG20	Locking Screw Drill Guide for 2.0
LSDG2424	Locking Screw Drill Guide for 2.4
LSDG2724	Locking Screw Drill Guide for 2.7 (2.4 Head)
LSDG35	Locking Screw Drill Guide for 3.5
LSDG2724XL	Locking Screw Drill Guide for 2.7 (2.4 Head) Extra Long
LSDG35XL	Locking Screw Drill Guide for 3.5 Extra Long

Locking Wire Guide



Designed to screw into locking plate facilitating plate manipulation and placement of K-Wire to secure plate position.

LOCKING WIRE GUIDE

L35W20G	Locking 3.5mm Wire 2.0mm Guide
L27W16G	Locking 2.7mm Wire 1.6mm Guide
L24W14G	Locking 2.4mm Wire 1.4mm Guide
L20W11G	Locking 2.0mm Wire 1.1mm Guide

Load Neutral Drill Guides



To exert compression at the fracture site, the cortical screw must be positioned precisely within the slot in the compression plate. The Load/Neutral Drill Guide has two tips, one for compression (load) and one where no compression is exerted (neutral). There is one combination for each screw/plate size. Each guide is marked with the drill size to be used.

LOAD NEUTRAL DRILL GUIDES

LNDG15	For 1.5mm Compression Plates
LNDG20	For 2.0mm Compression Plates
LNDG24	For 2.4mm Compression Plates
LNDG27	For 2.7mm Compression Plates
LNDG35	For 3.5mm Compression Plates
LNDG45	For 4.5mm Compression Plates
LNDG55	For 5.5mm Compression Plates

Drill Guide 0.7mm/1.0mm



Due to the size limitations, this device serves only as a drill guide and cannot be used as an insert sleeve or tap guide.

DRILL GUIDE 0.7MM /1.0MM

CDTIS10 Drill Guide 0.7mm/1.0mm

Adjustable Drill Guide



Our Adjustable Drill Guide allows accurate placement of drill holes by predetermination of drill entry and exit points. Locks onto bone to minimise errors.

- The swivelling point allows use of the guide where access is limited.
- Supplied with 2.0, 2.5 and 3.5 Drill Sleeves. Use the appropriate Sleeve for the Drill in use.
- A scale on the instrument measures hole depth.
- Applications include condyle fractures, femoral neck tunnels, screw holes, and ununited anconeal process.

In our view this design has significant advantages over 'CEG' and 'C' guides.

DRILL GUIDES & INSERTS

ADJDG2035 Adjustable Drill Guide for 2.0/2.5/3.5mm Drills 175mm

ADJDG45 Adjustable Drill Guide 4.5mm Drills 190mm

ADJSL55 Slider to fit 5.5 Cortical (equine) Screws fits ADJDG45 75mm

C Drill Guide



Use of an appropriate sized Drill Guide enables the surgeon to control exactly the entry and exit points of drills. This ability is extremely important in lag screwing.

Various Insert Sleeves are available for each drill size, with an accurate guidance system, and provide exact positioning of holes for lag screwing, (e.g. for a 3.5mm Cortical Screw, Drill 3.5 lag hole in proximal cortex, insert SL3525 and drill through it into the trans cortex. Finally tap and insert Screw.)

C DRILL GUIDE SMALL

CEG2735 Small Drill Guide i/d 3.5mm 'C' Guide 135mm

Triple Drill Guides



Triple Drill Guides are used to accurately position drills and 'K' or arthrodesis wires. The three holes in the head allow for the placement of parallel anti-rotation wires.

TRIPLE DRILL GUIDE/SLEEVES

SLG1115 Double Drill Guide/ Sleeve for 1.1 & 1.5mm Drills 100mm

SLG0020 Triple Drill Guide/ Sleeve for 2.0mm Drills 115mm

SLG0025 Triple Drill Guide/ Sleeve for 2.5mm Drills 115mm

Self-Centring Drill Guides



Whether it be for external fixation or screw application, it is desirable for implants to be positioned fairly centrally into bones. Sized for the most popular drill-bits, these devices will help achieve accurate positioning of pilot holes.

SELF-CENTRING DRILL GUIDES

CDG11 Self-centring Drill-guide for Ø1.1mm Drill 10mm spread

CDG15 Self-centring Drill-guide for Ø1.5mm Drill 12mm spread

CDG20 Self-centring Drill-guide for Ø2.0mm Drill 14mm spread

CDG25 Self-centring Drill-guide for Ø2.5mm Drill 18mm spread

CDG32 Self-centring Drill-guide for Ø3.2mm Drill 23mm spread

CDGSET Set of 5 Self-centring Drill-guides

Combination Drill, Tap and Insert Sleeve



The large end has an internal diameter which matches the clearance drill and tap. The small end has an internal diameter the same as the pilot drill and an external diameter which fits the clearance drill hole, i.e. the same as an insert sleeve. This single instrument contains all the guides and sleeves you need to place a lag screw.

COMBINATION DRILL, TAP & INSERT SLEEVE

CDTIS20 Combination Drill, Tap & Insert Sleeve for 2.0 Screws 100mm

CDTIS24 Combination Drill, Tap & Insert Sleeve for 2.4 Screws 105mm

CDTIS27 Combination Drill, Tap & Insert Sleeve for 2.7 Screws 110mm

CDTIS35 Combination Drill, Tap & Insert Sleeve for 3.5 Screws 115mm

CDTIS45 Combination Drill, Tap & Insert Sleeve for 4.5 Screws 130mm

Insert Sleeves



Drill Sleeves centre smaller drills in the placement of lag screws.

INSERT SLEEVES

SL2015	Insert Sleeve 2.0mm o/d 1.5mm i/d
SL2418	Insert Sleeve 2.4mm o/d 1.8mm i/d
SL2720	Insert Sleeve 2.7mm o/d 2.0mm i/d
SL3520	Insert Sleeve 3.5mm o/d 2.0mm i/d
SL3525	Insert Sleeve 3.5mm o/d 2.5mm i/d
SL3527	Insert Sleeve 3.5mm o/d 2.7mm i/d
SL4532	Insert Sleeve 4.5mm o/d 3.2mm i/d
SL5540	Insert Sleeve 5.5mm o/d 4.0mm i/d
SL6545	Insert Sleeve 6.5mm o/d 4.5mm i/d

Tissue Protection Sleeves



Rotating pins, drills and taps will “pick up” soft tissues, skin, muscle, nerve and blood vessels, causing serious damage. Use of tissue protection sleeves minimises such damage. The teeth at the top of the guide locate on the bone whilst the stainless tube provides a barrier between soft tissue and implant equipment.

TISSUE PROTECTION SLEEVES

TP2020	For Drill/ Taps to 2.0mm 90mm
TP0024	For Drill/ Taps to 2.4mm 90mm
TP0027	For Drill/ Taps to 2.7mm 90mm
TP0035	For Drill/ Taps to 3.5mm 90mm
TP0045	For Drill/ Taps to 4.5mm 90mm

Countersinks

Countersinks - Quick Release



If the screw is destined to screw down onto the surface of the bone without a plate, it is helpful to contour the top of the screw hole to fit the screw head. This procedure is especially important when lag screwing relatively small fragments. Failure to countersink may lead to fracture of the bone fragment.

COUNTERSINKS - QUICK RELEASE

COU1520QRD	Quick Release Countersink For 1.5/2.0mm Screws Dental Fit
COU2427QR	Quick Release Countersink For 2.4/2.7mm Screws AO Fit
COU3540QR	Quick Release Countersink For 3.5/4.0mm Screws AO Fit
COU4565QR	Quick Release Countersink For 4.5/6.5mm Screws AO Fit

Countersinks - Fixed Handle



COUNTERSINKS - FIXED HANDLE - T BAR

COU1520T-A	T Bar Countersink for 1.5/2.0mm Screws
COU2427T-A	T Bar Countersink for 2.4/2.7mm Screws
COU3540T-A	T Bar Countersink for 3.5/4.0mm Screws
COU4565T-A	T Bar Countersink for 4.5 - 6.5mm Screws

Screwdrivers

Cruciate Screwdrivers

Cruciate Screwdriver Handle & Insert for 1.0mm Screws

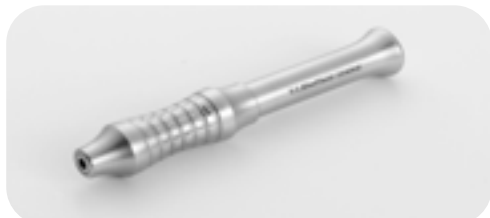


The 1.0mm Screwdriver consists of an Insert and Handle. The Insert is a dedicated crosshead screwdriver tip for use with our 1.0mm screws. The central 'pip' on the end engages with a small recess in the centre of our 1.0mm screwheads.

SCREWDRIVER FOR 1.0MM SCREWS

- SDIN1.0-A** Screwdriver Insert for 1.0mm Screws - Dental Fit
- DC20-A** Quick Release Handle - Dental Fit

Cruciate Screwdriver Inserts & Handle for 1.5/2.0 and 2.4 Screws



CRUCIATE SCREWDRIVER INSERTS & HANDLE FOR 1.5/2.0 AND 2.4 SCREWS

- SDXQRD1520-A** Cruciate Screwdriver Insert for 1.5/2.0 Screws
- DC20-A** Quick Release Handle Dental Fit - fits SDXQRD1520/A Insert
- SDXQR24** Cruciate Screwdriver Insert for 2.4mm Screws
- QRCH18** Quick Release Handle - AO Type - fits SDXQR24 Insert

Cruciate Head Screwdrivers for 1.5/ 2.0 & 2.4 Screws



Cruciate Screwdrivers for 1.5/2.0 and 2.4 Screws

CRUCIATE SCREWDRIVER 1.5/2.0 AND 2.4 SCREWS

- SDX1520** Cruciate Screwdriver for 1.5/2.0 Screws
- SDX24** Cruciate Screwdriver 2.4mm Screws

Hex Screwdrivers

Hex Screwdriver Inserts & Handle for 1.5/ 2.0/ 2.4mm Screws



Hex Screwdriver Insert & Handle for 1.5/2.0/2.4 Screws

HEX SCREWDRIVER INSERTS & HANDLE FOR 1.5/ 2.0/2.4MM SCREWS

- SDD1500-A** Hex Screwdriver Insert for 1.5/2.0/2.4mm Screws
- DC20-A** Quick Release Handle Dental Fit - fits SDD1500 Insert

Screwdrivers with screw holding sleeves hold the screw until it has engaged in the threaded hole. The sleeve is slid back up the shaft to release the screw without disengaging it.

Hex Screwdriver for 1.5, 2.0 & 2.4 Screws



HEX SCREWDRIVER & SCREWHOLDING SLEEVE 1.5/2.0/2.4 SCREWS

SSH2000 Screwholding Sleeve to fit SDHS20F
SDHS20F-I 1.5mm Hex Screwdriver/ Sleeve PTFE Handle for 1.5/2.0/2.4mm Screws 125mm

Hex Screwdriver for 2.7/3.5/4.0 Screws



HEX SCREWDRIVERS & SCREWHOLDING SLEEVES 2.7/3.5/4.0 SCREWS

SSH2741 Screwholding Sleeve to fit SDHS35POM-C
SDHS35POM-C 2.5mm Hex Screwdriver + Sleeve with PTFE Handle for 2.7/3.5/4.0mm Screws, 200mm

Hex Screwdriver Inserts & Handle for 2.7/3.5/4.0mm Screws



HEX SCREWDRIVER INSERTS & HANDLE FOR 2.7/3.5/4.0MM SCREWS

SDH35S Hex Screwdriver Insert for 2.7/3.5/4.0mm Screws
QRCH18 Quick Release Handle - PTFE Type - fits SDH35S Insert

Hex Screwdriver Insert for 4.5/ 5.5/6.5mm Screws



HEX SCREWDRIVERS 4.5/5.5/6.5 SCREWS

SDH45S Synthes Fit Screwdriver Attachment For 4.5+ Screws
QRCH18 Quick Release Handle - PTFE Type - fits SDH45S Insert

Star Drive Screwdrivers

Star Drive Screwdriver Set



Handle design may vary from image shown see product code QRCH18

All ViLock Screws are available with the international 'Torx' Style Star Drive. The interface between the screw head and screwdriver is significantly stronger and the stripping of screw heads consequently much rarer. The tip of the screwdriver is tapered and 'picks up' the screws without the requirement for a screw holding sleeve.

Many surgeons do not possess the relevant Star Drive Screwdrivers so we are pleased to offer modular handles.

The handles and inserts are available separately but are cheaper as the set.

STAR DRIVE SCREWDRIVER INSERT

SDT1535 Star Drive Insert for 3.5 Locking Screws
SDT82427 Star Drive Insert for 2.7 (2.4 head) and 2.4 Locking Screws
SDT620-A Star Drive Insert for 2.0 Locking Screws
SDT415-A Star Drive Insert for 1.5 Locking Screws
QRCH18 Quick Release Handle - AO Type
DC20-A Quick Release Handle - Dental Fit
SDTSET-A Handle Quick Release & Dental Fit & Star Drive Insert Set 2.0 - 3.5

Slotted Flat End Screwdrivers

Slotted Flat End Screwdriver



Self Tapping Screws can be somewhat fiddly to start, particularly the smaller ones. Screwdrivers with Screwholding Sleeves hold the Screw in place until the threads are engaged. Once the self tapping process has started the Sleeve is pulled back, releasing the Screw. Available for 2.0, 2.7 and 3.5mm Slotted Screws.

SCREWDRIVER FLAT END

SDF200 Screwdriver Flat End For 2mm Screws + Sleeve 130mm
SDF270 Screwdriver Flat End For 2.7mm Screws + Sleeve 200mm
SDF350 Screwdriver Flat End For 3.5mm Screws + Sleeve 230mm

Hex Drive Shaft



The battery drills we use as a base for our shrouded orthopaedic drills have adjustable torque settings. While it is advised that the final tightening of the screw is performed by hand, much time and effort can be saved by power driving. Risks are low, particularly in the proximal tibia. To power drive using our drill we have created two hex driver extensions to fit into a standard Jacobs chuck. Use 2.5 hex for 2.7, 3.5 and 4.0mm screws and the 3.5 hex for 4.5 and 5.5 screws.

HEX DRIVE SHAFTS FOR POWER DRIVERS

- DS25HEX** 2.5 Hex Drive Shaft for 2.7, 3.5 & 4.0 Screws
- DS35HEX** 3.5 Hex Drive Shaft for 4.5 & 5.5 Screws

Depth Gauges

Depth Gauge



Accurate measurement of hole depth is essential in order to select the appropriate screw size. A range of Gauges are available for various screw sizes. Hole depth is read from the instrument. Add extra to the measured length to ensure maximal screw thread/bone interface engagement. See chart for additional amount required. Chart supplied with depth gauge or available on request. Use in Self-tapping or Cortical Systems.

DEPTH GAUGE

- DG2027** Depth Gauge For 2.0mm & 2.7mm Screws 135mm
- DG242735** Depth Gauge For 2.4mm, 2.7mm & 3.5mm Screws 180mm
- DG2735** Depth Gauge For 2.7mm & 3.5mm Screws 175mm
- DG4565** Depth Gauge For 4.5mm & 6.5mm Screws 290mm

Premium Depth Gauge



Radius matches screw under-head to replicate screw position in 1.5mm plates/ holes. Improved hook. Contoured comfortable grip for ease of use. Store in fully retracted state to protect the delicate probe section.

DEPTH GAUGE

- DGPI5** Premium Depth Gauge For 1.5mm Screws

Whiting Bone Plate Retractor



Developed by Colin Whiting the Bone Plate Retractor is designed to expose the end hole(s) of the plate for screw placement. It is often the case that a plate is pushed under soft tissues to avoid unnecessarily large exposures only to find that it is very difficult to access the last screw hole. The bone plate lever slides along the plate until the tip drops over the end. The handle is then elevated and the tip of the lever hooks onto the end of the plate. As the retractor is lifted the end hole of the plate is exposed allowing free insertion of drills taps and screws.

WHITING BONE PLATE RETRACTOR

- BPR3535** Whiting Bone Plate Retractor 3.5/3.5 Broad
- BPR2427** Whiting Bone Plate Retractor 2.4/2.7
- BPRSET** Whiting Bone Plate Retractor Set

Screw Holding Forceps



A useful instrument for selecting screws with minimal handling. Can be used with any style of screw.

SCREW HOLDING FORCEPS

- SF2055** Screw Holding Forceps 2.4/2.7/3.5/4.5 Screws
- SF1024** Screw Holding Forceps 1.0/1.5/2.0/2.4 Screws

Plate Holding Clip



A useful little clip for holding plates in sequence. Labeled with size.

PLATE HOLDING CLIP

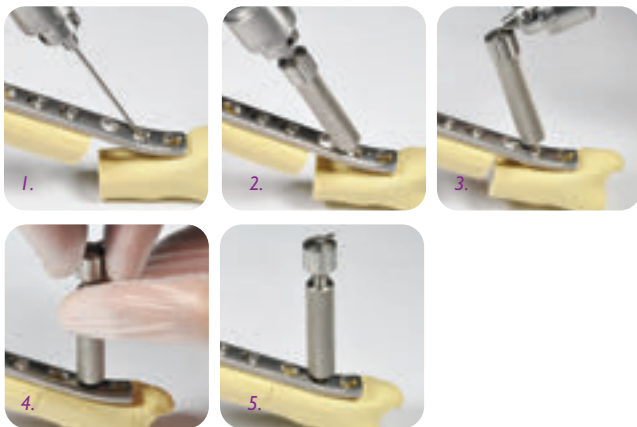
BPC2	Plate Holding Clip 2.0mm
BPC24	Plate Holding Clip 2.4mm
BPC27	Plate Holding Clip 2.7mm
BPC35	Plate Holding Clip 3.5mm

Copenhagen Plate Assistant

This device has developed in association with our Danish Distributor, hence the name.

The device has two functions:

1. Manipulation of bone fragments.
2. Temporary stabilisation of plate fragment constructs prior to screw placement.



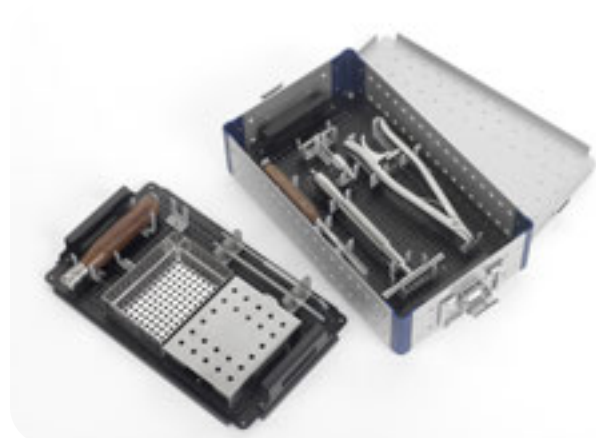
A small diameter threaded wire, smaller than the anticipated pilot hole for the final screw, is placed through the plate hole into the bone fragment. The closed Plate Assistant is slid down the wire and the wire is bent over the end of the Plate Assistant, the bend acting as a location point for distraction. The two parts of the Plate Assistant are then unscrewed and as the two ends of the device separate the bone fragment is pulled up to the plate. Further unscrewing will temporarily fix the plate to the bone allowing screw fixation elsewhere in the Plate.

Removal of the wire and Plate Assistant allows placement of a screw through the hole involved. The small diameter of the wire does not compromise the pilot hole for the Screw.

COPENHAGEN PLATE ASSISTANT

COPENSET	Copenhagen Plate Assistant Set of 2 plus Set of 10 x 1.6mm Part Threaded Wires
COPEN16	Copenhagen Plate Assistant (Single)
COPENPTWIRE	Part Threaded Wires Set of 10 x 1.6mm

Screw Salvage Kit



Removal of embedded screws can be a challenge particularly when fatigue and fracture leaves a headless portion of screw in situ exactly where a replacement is necessary. Ideally the screw should be removed without creating so much damage that a replacement cannot be set. The VI Screw Salvage Set contains all the tools you might need for 3.5, 4.0, 4.5 and 6.5mm screws. 2.7mm can also be extracted but resulting hole is large.

A loan set is also available. The charge is for 7 days rental and includes a return collection by courier. All losses and breakages will be charged accordingly. Mainland UK only.

SCREW SALVAGE KIT

SCSKIT	Full Screw Salvage Kit
LOANSCSKIT	Screw Salvage Set - Loan

Screw Extraction Trepine



Once the head of a screw has become detached the shaft can be very difficult to extract, particularly when the screw has been in situ for some time. The Screw Extraction Trepine is designed to 'core out' the screw shaft either in its entirety or partially to allow the screw to be grasped by extraction forceps. The internal diameter is a little larger than the screw to be extracted. The external diameter is small enough in most cases to allow the replacement of the screw by a larger one. The Trepine fits directly into a Jacobs Chuck.

SCREW EXTRACTION TREPHINES

SCET20	Extraction Trepine for 2.0 Screws o/d 2.7mm
SCET24	Extraction Trepine for 2.4 Screws o/d 3.5mm
SCET27	Extraction Trepine for 2.7 Screws o/d 3.5mm
SCET35	Extraction Trepine for 3.5 Screws o/d 4.5mm
SCET45	Extraction Trepine for 4.5 Screws o/d 5.5mm
SCETSET	Extraction Trepine Set (one of each in a free Steel Case)

Bone Plate Contouring

Bone Plate Bending Levers



Bone plates appropriate for the repair of load bearing long bones are very stiff. Accurate contouring of plates is essential for precise fracture reduction; however marking of plates during the bending process will lead to reduced fatigue strength. Contoured plates should be placed with adequate support to minimise cyclical loading.

Extra length benders 01288L are particularly useful for contouring larger TPLO plates along with 3.5 and 4.5 standard plates.

Bone plate benders used in pairs are the most economic method of plate contouring.

BONE PLATE BENDING LEVERS

- 001280** 1.0 Bending Levers (Pair) 130mm Long
- 001286** AO Type 1.5/2.0 Bending Levers (Pair) 130mm Long
- 001285** AO Type 2.4 Bending Levers (Pair) 140mm Long
- 001287** AO Type 2.7/3.5 Bending Levers (Pair) 175mm Long
- 001288** AO Type 3.5/4.5 Broad Bending Levers (Pair) 200mm Long
- 001288L** 3.5/4.5 Extra Long Bending Levers 240mm Long

Delta TPLO Plate Benders with Curved Slots



Plate benders with slots tend to distort the Delta plate. The curved slots help grip and support the plate during the bending process. In addition the plate is much less likely to end up on the floor.

DELTA TPLO PLATE BENDERS WITH CURVED SLOTS

TPLODELBEND Delta TPLO Plate Benders (Pair) 230mm Long

Reconstruction Plate Pliers



RECONSTRUCTION PLATE PLIERS

- 001284A** Reconstruction Plate Pliers for 2.7 Plates 280mm Long
- 001284** Reconstruction Plate Pliers for 3.5 Plates 290mm Long

Plate Bending Pliers - Roller Type



PLATE BENDING PLIERS - ROLLER TYPE

- 001283SMALL** Plate Bending Pliers Roller Type 230mm Long Suitable for 3.5 mm Plates
- 001283** Plate Bending Pliers Roller Type 15" 380mm Long Suitable for 3.5 and 4.5mm Plates

Bone Plate Press



BONE PLATE PRESS

- 001281** Bone Plate Press Small 285mm Long For Plates Up To And Including 4.5mm Narrow
- 001282** Bone Plate Press Large 16" 410mm Long For All Plates

Tips on the use of the Plate Press

- The press works at maximum efficiency when the handle is approx. parallel with the base. Make sure the press is on a stable firm surface
- Place the plate to be contoured in between the anvils.
- Adjust the gap between the anvils using the screw until the handle is parallel with the base.
- Pressure on the handle will bend the plate.
- Readjust the press using the screw to bring the handle parallel once again.
- Contouring the plate should be accomplished using several small adjustments rather than one big one.

Please check the press selected will fit your autoclave before purchase.



AO Type Plate Bending Pliers



These Pliers will contour 2.7mm and 3.5mm narrow plates. 3.5 DCP's will require multiple small bends. Also useful for bending guide pins in the Slocum TPLO technique.

AO PLATE BENDING PLIERS

- 001289A** AO Plate Bending Pliers 2.0/2.7mm
- 001289B** AO Plate Bending Pliers 2.7/3.5mm

Heavy Duty Bone Plate Pliers to 4.5mm



The largest Bone Plate Pliers in the range, these will contour all plates other than the 4.5 broad. The bending head has 3 interchangeable anvils and the 'hammer' side has 3 different shapes which rotate. This offers the surgeon 6 different contouring options to match different plates and different shapes.

HEAVY DUTY PLATE BENDING PLIERS

- 001289C** Heavy Duty Plate Bending Pliers
- 001289SA** Small Anvil for 2.7 Plates (for existing users)

Tips on the use of the Plate Pliers



- These notes apply to all bone plate pliers.
- The pliers work at maximum efficiency when the handles are approx. parallel with each other.
- Place the plate to be contoured in between the anvils.
- Adjust the gap between the anvils using the screw until the handles are parallel with each other.
- Squeezing the handles together will bend the plate.
- Readjust the pliers using the screw to bring the handles parallel once again.
- Contouring the plate should be accomplished using several small adjustments rather than one big one.

Bending Templates

To avoid repeated entry into the operation site when contouring plates, an 'aluminium' bending template is contoured to the bone. The steel plate is then bent to match the template using irons or a bone plate press.



BENDING TEMPLATES

- BT200737** Bending Template 37mm for 2mm DCPs & Round Hole Plates
- BT240752** Bending Template 52mm for 2.4mm DCPs & Round Hole Plates
- BT270760** Bending Template 60mm for 2.7 DCPs & Round Hole Plates
- BT350786** Bending Template 86mm for 3.5 DCPs & Round Hole Plates
- BT450590** Bending Template 90mm for 4.5 DCPs Broad 3.5 DCPs & HD & Round Hole Plates
- BT4507120** Bending Template 120mm for 4.5 DCPs & Broad 3.5 DCPs & HD & Round Hole Plates
- BT4509150** Bending Template 150mm for 4.5 DCPs Broad 3.5 DCPs & HD & Round Hole Plates
- BT152700** Bending Template for 2.0 Supracondylar Plate
- BT152711** Bending Template for 2.4 Supracondylar Plate
- BT152714** Bending Template for 2.7 Supracondylar Plate
- BT152717** Bending Template for 3.5 Supracondylar Plate

Drill Bits

This year the majority of our drill bits have been significantly improved, achieved through upgrades in material and production quality. The result is a sharper cutting edge, greater ease of use and more accurate drilling. Our drill bits are also now available in an extended range of sizes and lengths for every clinical requirement.

Drill Bits - Round Shank

Round shank multi-use drill bits made from hardened stainless steel, suitable for use with a standard Jacobs chuck.



Standard Length

Suitable for most applications.

DRILL BITS - STANDARD LENGTH - ROUND SHANK

	Diameter (mm)	Total length (mm)	Flute length (mm)
H090100	1.1	70	20
H090101	1.5	90	20
H090208	1.8	110	25
H090202	1.9	110	25
H090102	2.0	110	30
H090203	2.3	120	30
H090209	2.4	120	30
H090112	2.5	120	30
H090104	2.7	130	40
H090103	2.8	130	40
H090205	3.0	130	40
H090105S	3.2	130	40
H090106S	3.5	130	50
H090207	3.8	130	50
H090107S	4.0	130	50
H090108S	4.5	130	50
H090109S	5.5	130	60

Long Length

DRILL BITS - LONG LENGTH - ROUND SHANK

	Diameter (mm)	Total length (mm)	Flute length (mm)
H090101L	1.5	120	20
H090208L	1.8	140	25
H090102L	2.0	140	30
H090209L	2.4	150	30
H090112L	2.5	150	30
H090104L	2.7	170	40
H090103L	2.8	170	40
H090105L	3.2	180	40
H090106L	3.5	180	50
H090107L	4.0	180	50
H090108L	4.5	180	50
H090109L	5.5	180	60

Please note that longer drill bits are more prone to snapping and it is more difficult to control the hole angle and accuracy – therefore standard length drill bits should be used where possible. Where a longer drill bit is required it should be used with particular care and attention; use of a long drill guide may help to minimise problems.

Drill Bits - Quick Release AO Fit

Quick release multi-use drill bits made from hardened stainless steel, suitable for use with an AO style quick release chuck.



Standard Length

Suitable for most applications.

DRILL BITS - QUICK RELEASE AO FIT STANDARD LENGTH

	Diameter (mm)	Total length (mm)	Flute length (mm)
S090100S	1.1	80	20
S090101S	1.5	100	20
S090208	1.8	110	25
S090102S	2.0	110	30
S090209	2.4	120	30
S090112S	2.5	130	30
S090104S	2.7	130	40
S090103S	2.8	140	40
S090105S	3.2	140	40
S090106S	3.5	140	50
S090107	4.0	170	50
S090108S	4.5	140	50
S090109	5.5	170	50

Long Length

DRILL BITS - QUICK RELEASE AO FIT LONG LENGTH

	Diameter (mm)	Total length (mm)	Flute length (mm)
S090100L	1.1	110	20
S090101L	1.5	130	20
S090208L	1.8	140	25
S090102L	2.0	140	30
S090209L	2.4	170	30
S090112L	2.5	180	30
S090104L	2.7	180	40
S090103L	2.8	190	40
S090105L	3.2	190	40
S090106L	3.5	190	50
S090108L	4.5	190	50

Mini Quick Release Drill Bits - Dental Fit

These smaller drill bits are too delicate for use with a power drill, and are designed for use with the DC20-A dental fit handle. This improves control and helps prevent breakages.

DRILL BITS 0.7MM AND 1.0MM - FOR QUICK RELEASE HANDLE DENTAL FIT

I0MDB07-A	0.7mm Drill Bit for DC20-A Quick Release Handle Dental Fit
I0MDB10-A	1.0mm Drill Bit for DC20-A Quick Release Handle Dental Fit

Drill Bits - Anti-Skid - Round Shank



Anti-skid drill bits have a special tip which bites into the bone surface, accurately positioning the hole. Particularly useful for holes which are not perpendicular to the bone surface, and where a drill guide is not used.

Round shank multi-use drill bits made from hardened stainless steel, suitable for use with a standard Jacobs chuck.

ANTI SKID DRILL BITS - ROUND SHANK

	Diameter (mm)	Total length (mm)	Flute length (mm)
H090101AS	1.5	90	20
H090208AS	1.8	110	25
H090102AS	2	110	30
H090209AS	2.4	120	30
H090112AS	2.5	120	30
H090104AS	2.7	130	40
H090105SAS	3.2	130	40
H090106SAS	3.5	130	50
H090106SAS/L	3.5	180	50
H090108SAS	4.5	130	50

Drill Bits - Cannulated - Round Shank & AO Fit



For use with a Ø1.1mm guide wire for accurate placement of holes.

Round Shank

Round shank multi-use cannulated drill bits made from hardened stainless steel, suitable for use with a standard Jacobs chuck.

DRILL BITS - CANNULATED - ROUND SHANK

	Diameter (mm)	Total length (mm)	Flute length (mm)
H090112CAN	2.5	130	25
H090104CAN	2.7	130	30
H090106CAN	3.5	130	35

Quick release AO fit

Quick release multi-use cannulated drill bits made from hardened stainless steel, suitable for use with an AO style quick release chuck.

DRILL BITS - CANNULATED - AO FIT

	Diameter (mm)	Total length (mm)	Flute length (mm)
S090112CAN	2.5	105	25
S090104CAN	2.7	105	30
S090106CAN	3.5	105	35

Drill Stops



Drilling to a pre-measured depth can be a challenge even with a 'C' arm! A more reasonably priced option is to use a drill stop which is tightened onto the drill bit at the required depth. The Set includes 4 Stops to cover all the standard drill sizes. 2.0, 2.5, 2.7, 3.2, 3.5 & 4.5mm. The stop is tightened onto the drill bit using the hex driver provided.

DRILL STOPS

DRILLSTOP Drill Stop Set in Stainless Case

Washers, Buttons, Nuts, Staples and Bolts



Use to spread load or retain wire or sutures. Use with Cortical or Self Tapping Screws. Spikey washers are used to reattach ligaments or secure grafts to the femur in the OTT technique of CrCL repair.

WASHERS

- PW15** Plain Washer 1.5mm Screws Stainless
- PW20** Plain Washer 2.0mm/1.5mm Screws Stainless
- PW20B** Plain Washer 2.0mm Screws Broad 6mm Diameter
- PW24** Plain Washer 2.4mm Screws Stainless
- PW24TI** Plain Washer 2.4mm Screws Titanium
- PW273540** Plain Washer 2.7/ 3.5/4.0mm Screws Stainless 7.0mm Dia
- PW273540B** Plain Washer 2.7/ 3.5/4.0mm Screws Stainless 8.5mm Dia
- PW45** Plain Washer 4.5mm Screws Stainless
- SW15** Spikey Washer 1.5mm Screws Stainless
- SW20** Spikey Washer 2.0mm Screws Stainless
- SW27** Spikey Washer 2.7mm Screws Stainless
- SW3540** Spikey Washer 3.5/4.0mm Screws Stainless
- SW45** Spikey Washer 4.5mm Screws Stainless

Titanium Buttons



Titanium is very biocompatible and our range of Titanium Buttons has been loosely modelled on the familiar six sizes of UHMWPE Ormrod button we have been supplying for some time.

Despite being slightly lower profile, these resist higher peak loading than their UHMWPE equivalents.

Their overall diameters have been maintained to try and limit osteolysis and the subsequent subsidence that is occasionally seen with lower footprint buttons.

Their edges have been made as smooth as possible to reduce suture wear.

The titanium buttons will find use for ligament replacement/ joint embrocation procedures, especially around the hip and stifle.

TITANIUM BUTTONS

- TIBUT6H** Titanium Button 6mm 2 Holes
- TIBUT6S** Titanium Button 6mm 2 Slots
- TIBUT9H** Titanium Button 9mm 2 Holes
- TIBUT9S** Titanium Button 9mm 2 Slots
- TIBUT11H** Titanium Button 11mm 2 Holes
- TIBUT11S** Titanium Button 11mm 2 Slots

Cerclage Buttons



The Cerclage Button occupies a screw hole. The slot retains cerclage wire where screw placement is not possible. Reduces plate weakness due to empty screw holes.

CERCLAGE BUTTON

- CB15** Cerclage Button for use with 1.5mm DCP
- CB20** Cerclage Button for use with 2.0mm DCP
- CB24** Cerclage Button for use with 2.4mm DCP
- CB27** Cerclage Button for use with 2.7mm DCP
- CB35** Cerclage Button for use with 3.5mm DCP.

Cortical Nuts



Occasionally tapped threads strip and a larger screw is appropriate. Lag screws are particularly vulnerable as only one cortex is available.

A Cortical Nut manufactured from implant grade nylon gives the screw purchase allowing normal tightening. The thread form is designed to grip the screw to minimise 'backing out'. Available in 2.0mm, 2.4mm, 2.7mm, 3.5mm and 4.5mm cortical thread forms. Supplied as a single sterile pack. The Cortical Nuts are also available in Stainless Steel.

CORTICAL NUTS

- N20** 2.0mm Cortical Nut Stainless Steel (non sterile)
- N24** 2.4mm Cortical Nut Stainless Steel (non sterile)
- N27** 2.7mm Cortical Nut Stainless Steel (non sterile)
- N35** 3.5mm Cortical Nut Stainless Steel (non sterile)
- N45** 4.5mm Cortical Nut Stainless Steel (non sterile)
- CN20-A** 2.0mm Cortical Nut (sterile)
- CN24-A** 2.4mm Cortical Nut (sterile)
- CN27-A** 2.7mm Cortical Nut (sterile)
- CN35-A** 3.5mm Cortical Nut (sterile)
- CN45-A** 4.5mm Cortical Nut (sterile)

Webb Bolt



Use where a lag screw strips out. Supplied as a Threaded Rod, two Nuts and two Washers.

Pre-measure and cut to length or crop after procedure. Saw cut or bolt cutting will prevent loosening of the nut on the cut side. Run a fine nylon suture through the nut prior to attachment to create a locking effect.

4mm Webb Bolt requires a 7mm Spanner (001566) 5mm Webb Bolt requires a 8mm Spanner (001565)

5mm Webb Bolt use 5.5mm Drill H090109S

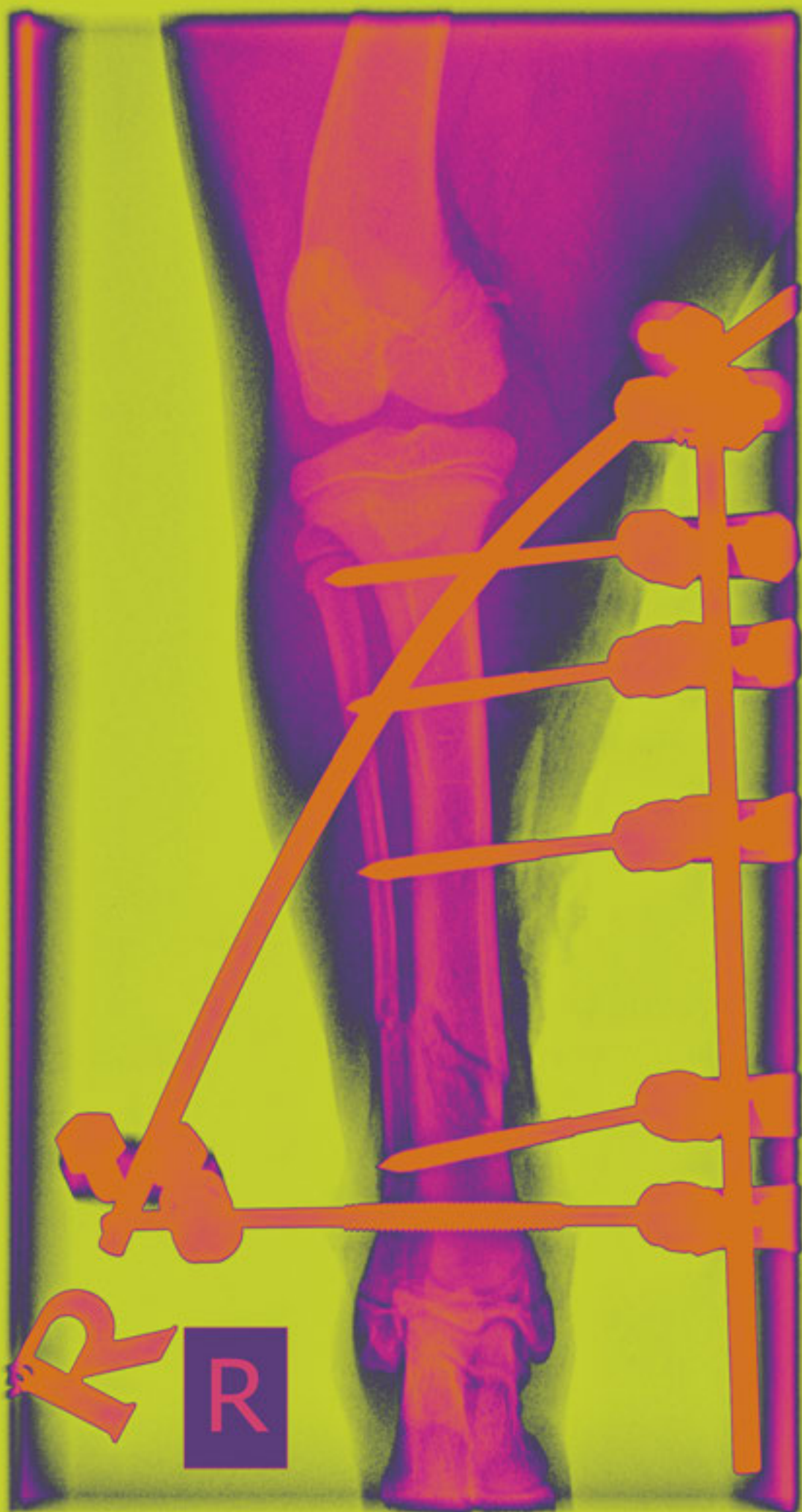
4mm Webb Bolt use 4.0mm Drill H090107S

3mm Webb Bolt use 3.2mm Drill H090105S

2mm Webb Bolt use 2.0mm Drill H090102.

WEBB BOLTS

- 092003** Webb Bolt 5mm/8cm Drill 5.5mm
- 092000** Webb Bolt 4mm/8cm Drill 4.0mm
- 092001** Webb Bolt 3mm/8cm Drill 3.2mm
- 092002** Webb Bolt 2mm/5cm Drill 2.0mm

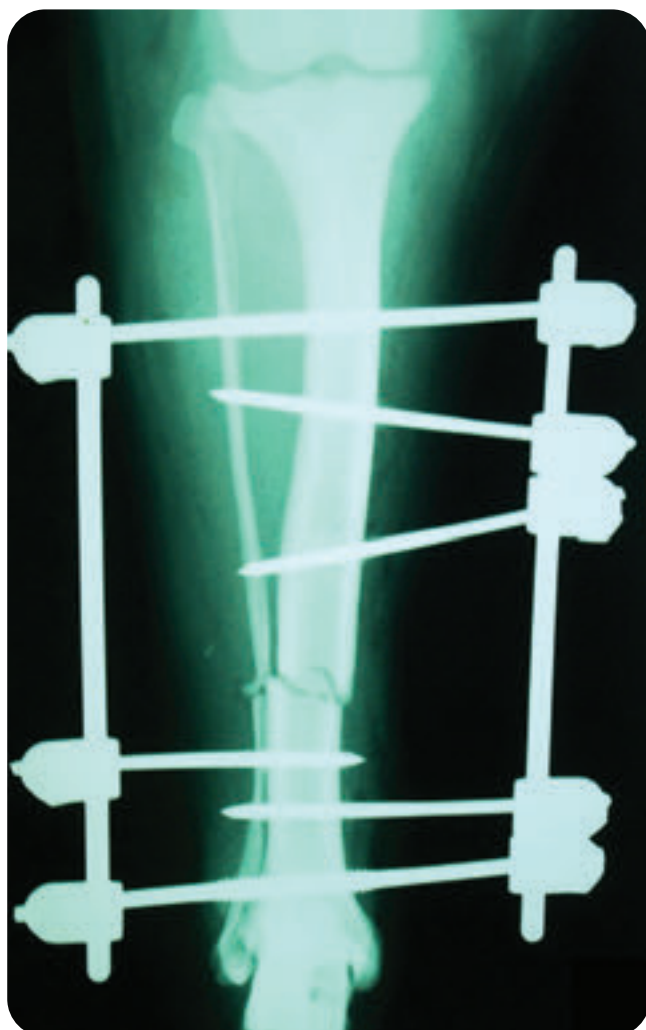


External Fixation

External Skeletal Fixation (ESF) is an excellent technique for fracture and osteotomy stabilisation and repair. It can be used for long bone fractures, spinal fractures and luxations, trans-articular immobilisation for joint instability, arthrodesis, angular limb deformity correction, and limb lengthening (distraction osteogenesis).

ESF has a number of advantages compared to internal fixation, and is applicable in many fracture scenarios. Advantages include:

1. Compared to internal fixation, ESF are more straightforward to apply for the inexperienced surgeon.
2. Limb use and joint mobility are maintained.
3. ESFs are well tolerated by most patients.
4. Compared to internal fixation, there is relatively low set-up and implant costs and many components are re-usable i.e. the connecting bars and clamps.
5. ESFs are modular, versatile and adaptable which makes them applicable and bespoke to a diverse range of applications.
6. ESFs are particularly useful in the management of fracture instabilities when there are open wounds, or in the presence of infection.
7. ESFs can be applied using minimally invasive or closed surgical techniques, which preserves the biology of the fracture site that should optimise bone healing.



There are four types of ESF: linear, free-form, circle, and hybrid.

Linear ESFs have three basic components i.e. the pins, clamps and connecting bars. Internally, the pins penetrate the skin and fixate the bone. Externally, the pins are secured to the connecting bar by clamps. The connecting bars give the ESF frame its length and structural rigidity. Single clamps attach the ESF pins to the connecting bars. Double clamps allow two connecting bars to be attached together; this is useful when building a type IB or type III ESF frame, or a transarticular fixator. Note that two spanners are required when using Double clamps.

Linear ESF is readily available and the most widely used system as it is the simplest and easiest type of ESF to learn to use and apply. Numerous different linear ESF systems exist.

For a full explanation of ESF application including how to plan and perform ESF application correctly, please refer to our step-by-step guide for ESFs. In short, rules of linear ESF application include:

1. **Place 4 pins per bone segment**; absolute minimum is 2 pins per bone segment.
2. **Pin diameter should be about 25% bone diameter** at the point of insertion. Smaller pins are weaker resulting in a less stiff frame, but larger pins make a bigger hole in the bone and increase the risk of bone fracture. Particular care needs to be taken in certain bones such as the radius, where the cranio-caudal thickness is much less than the medio-lateral width.
3. **Use threaded pins.** Threaded pins have pull-out resistance 10 times higher than smooth (trochar) pins. Threaded pins can be placed at any angle relative to the long bone but smooth pins should be placed at diverging angles to increase pull-out resistance; an angle of 70 degrees to the long axis of the bone is recommended for smooth pins.
4. **50% bone diameter** is the minimum distance between a pin and the fracture, or a pin and the end of the bone.
5. **Pre-drill the pin tract** with a drill bit 10% smaller than the pin, prior to pin placement.
6. **Use the far-near-near-far principle** i.e. place pins as near, and as far away, from the fracture as possible.
7. **Place the connecting bar 1 cm or a finger's width away from the skin** to maximise frame stiffness but allow for soft tissue swelling.

Pin Reference Chart		Bar Diameter	Small 3.2mm 1/8"	Medium 4.8mm 3/16"	Large 8mm 5/16"	Mini 3.2mm 1/8"	Small 6.3mm 1/4"	Large 9.5mm 1/3"
		Clamp Style	KE Plus	KE Plus	KE Plus	Standard SF	Standard SF	Standard SF
Code	Shaft Diameter							
Positive Threaded Pins - End Thread								
CET0018	1.6mm Shank 2.0mm Thread Predrill 1.5mm H090101		●	●		●		
CET0019	2.0mm Shank 2.4mm Thread Predrill 1.9mm H090202		●	●		●	●	
CET0020	2.4mm Shank 3.2mm Thread Predrill 2.3mm H090203		●	●	●		●	
CET0020A	2.7mm Shank 3.5mm Thread Predrill 2.5mm H090112		●	●	●		●	
CET0020B	3.0mm Shank 3.8mm Thread Predrill 2.7mm H090104			●	●		●	●
CET0021	3.2mm Shank 4.0mm Thread Predrill 3.0mm H090205			●	●		●	●
CET0024A	3.5mm Shank 4.3mm Thread Predrill 3.2mm H090105			●	●			●
CET0022	4.0mm Shank 4.8mm Thread Predrill 3.8mm H090207			●	●			●
Positive Threaded Pins - Mid Thread								
CMT0018	1.6mm Shank 2.0mm Thread Predrill 1.5mm H090101		●	●		●		
CMT0019	2.0mm Shank 2.4mm Thread Predrill 1.9mm H090202		●	●		●	●	
CMT0023	2.4mm Shank 3.2mm Thread Predrill 2.3mm H090203		●	●	●		●	
CMT0023A	2.7mm Shank 3.5mm Thread Predrill 2.5mm H090112		●	●	●		●	
CMT0023B	3.0mm Shank 3.8mm Thread Predrill 2.7mm H090104			●	●		●	●
CMT0024	3.2mm Shank 4.0mm Thread Predrill 3.0mm H090205			●	●		●	●
CMT0024A	3.5mm Shank 4.3mm Thread Predrill 3.2mm H090105			●	●			●
CMT0025	4.0mm Shank 4.8mm Thread Predrill 3.8mm H090207			●	●			●
Trochar Pins								
001566	Trochar Pin 2.0mm		●	●		●	●	
001577	Trochar Pin 3.0mm		●	●	●		●	●
001558	Trochar Pin 4.0mm			●	●		●	●
Cortical Negative Threaded Pins - Ellis Type								
001528	Ellis Pin 1.1mm		●			●		
001529	Ellis Pin 1.6mm		●			●		
001533	Ellis Pin 1.8mm		●	●		●		
001550	Ellis Pin 2.0mm		●	●		●	●	
001530	Ellis Pin 2.4mm Predrill 1.8mm H090208		●	●	●	●	●	
001550A	Ellis Pin 2.7mm Predrill 2.0mm H090102		●	●	●		●	
001551	Ellis Pin 3.0mm		●	●	●		●	●
001531	Ellis Pin 3.2mm Predrill 2.4mm H090209		●	●	●		●	●
001551A	Ellis Pin 3.5mm		●	●	●		●	●
001552	Ellis Pin 4.0mm		●	●	●		●	●
Bicortical Fine Negative Threaded Pins								
BCNET08	0.8mm							
BCNET10	1.0mm		●			●		
BCNET11	1.1mm		●			●		
BCNET15	1.5mm		●			●		
BCNET16	1.6mm Predrill 1.1mm H090100		●			●		
BCNET18	1.8mm		●	●		●		
BCNET20	2.0mm Predrill 1.5mm H090101		●	●		●	●	
BCNET24	2.4mm		●	●	●	●	●	
BCNET30	3.0mm Predrill 2.3mm H090203		●	●	●		●	●
BCNET35	3.5mm Predrill 2.7mm H090104		●	●	●		●	●
BCNET40	4.0mm Predrill 3.0mm H090205			●	●		●	●
BCNET50	5.0mm Predrill 3.5mm H090106S			●	●			

ESF pin choice and application

Positive Threaded Pins

Positive threaded pins are the pin of choice for ESF application as they have excellent resistance to pull-out, and no inherent point of weakness. End threaded pins are used as half pins (type IA and IB ESF frames), and centre threaded pins as full pins (type II frames).

Positive Threaded Pins - Cortical



End Thread

The fine threads of these pins are proud of the shank eliminating the weak point where the thread ends in other pins. The major benefit of positive pins is that the additional thread diameter creates a larger bone pin interface for a given shaft diameter. This style of pin is useful where a good pull out resistance is required and where it is anticipated that the frames will be left in situ for long periods - 6 weeks plus. Use KE Plus Clamps if available. Place at right angles to the bone.

POSITIVE THREADED PINS - END THREAD

CET0014	0.8mm Shank 1.1mm Threads 60mm Long - End Thread
CET0015	1.2mm Shank 1.5mm Threads 65mm Long - End Thread
CET0016	1.2mm Shank 1.6mm Threads 70mm Long - End Thread
CET0017	1.4mm Shank 1.8mm Threads 70mm Long - End Thread
CET0018	1.6mm Shank 2.0mm Threads 70mm Long - End Thread
CET0026	1.8mm Shank 2.2mm Threads 80mm Long - End Thread
CET0019	2.0mm Shank 2.4mm Threads 85mm Long - End Thread
CET0020	2.4mm Shank 3.2mm Threads 100mm Long - End Thread
CET0020A	2.7mm Shank 3.5mm Threads 110mm Long - End Thread
CET0020B	3.0mm Shank 3.8mm Threads 120mm Long - End Thread
CET0021	3.2mm Shank 4.0mm Threads 130mm Long - End Thread
CET0024A	3.5mm Shank 4.3mm Threads 130mm Long - End Thread
CET0022	4.0mm Shank 4.8mm Threads 150mm Long - End Thread



Mid Thread

The Mid Threaded Pin provides good pull out resistance in frames where the fixation pins are supported on either side of the limb by connecting bars. i.e. Type II frames.

POSITIVE THREADED PINS - MID THREAD

CMT0013	0.98mm Shank 1.1mm Threads 85mm Long - Mid Thread
CMT0014	1.1mm Shank 1.4mm Threads 85mm Long - Mid Thread
CMT0015	1.2mm Shank 1.5mm Threads 85mm Long - Mid Thread
CMT0016	1.4mm Shank 1.8mm Threads 85mm Long - Mid Thread
CMT0017	1.6mm Shank 2.0mm Threads 85mm Long - Mid Thread
CMT0018	1.6mm Shank 2.0mm Threads 85mm Long - Mid Thread
CMT0018A	1.8mm Shank 2.2mm Threads 90mm Long - Mid Thread
CMT0019	2.0mm Shank 2.4mm Threads 105mm Long - Mid Thread
CMT0019A	2.2mm Shank 2.6mm Threads 105mm Long - Mid Thread
CMT0023	2.4mm Shank 3.2mm Threads 105mm Long - Mid Thread
CMT0023A	2.7mm Shank 3.5mm Threads 115mm Long - Mid Thread
CMT0023B	3.0mm Shank 3.8mm Threads 120mm Long - Mid Thread
CMT0024	3.2mm Shank 4.0mm Threads 130mm Long - Mid Thread
CMT0024A	3.5mm Shank 4.3mm Threads 140mm Long - Mid Thread
CMT0025	4.0mm Shank 4.8mm Threads 150mm Long - Mid Thread

CMT0017 has a 16mm thread length.

CMT0018 has a 20mm thread length.

Positive Threaded Pins – Cancellous



The coarser threads of these pins are appropriate for use in metaphyseal bone.

POSITIVE THREADED PINS - CANCELLOUS

CANET0026	2.4mm Shank 3.5mm Threads 115mm Long Cancellous End Thread
CANET0027	3.2mm Shank 4.8mm Threads 150mm Long Cancellous End Thread
CANMT0029	2.4mm Shank 3.5mm Threads 150mm Long Cancellous Mid Thread
CANMT0030	3.2mm Shank 4.8mm Threads 180mm Long Cancellous Mid Thread

Pearson Positive Threaded Pin

PEARSON POSITIVE THREADED PIN

EXL13	6.35mm Pearson Positive Mid Threaded Pin
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Trochar Pins



The smooth shanks of trochar pins provide minimal pull out resistance therefore there is little advantage to their use. When used, trochar pins should be placed at diverging angles to maximise pull-out resistance. 130mm long.

TROCHAR PINS

001556	Trochar Pin 2mm
001557	Trochar Pin 3mm
001558	Trochar Pin 4mm
EXL10	1/4" Trochar Pin
EXL11	5/16" Trochar Pin

Cortical Negative Threaded Pins (Ellis type)



The short fine negative thread engages the trans (far) cortex and the smooth shank engages the cis (near) cortex. The thread/shank junction (the weakest part of the pin) is positioned in the medullary cavity and protected from potential failure. Ellis type pins have better pull out resistance over Trochar pins and the angle of placement is not as critical.

CORTICAL NEGATIVE THREADED PINS (ELLIS TYPE)

		Pin diameter	Overall length
001528	Ellis Pin	1.1mm	76mm
001529	Ellis Pin	1.6mm	85mm
001533	Ellis Pin	1.8mm	127mm
001550	Ellis Pin	2.0mm	127mm
001530	Ellis Pin	2.4mm - (3/32")	127mm
001550A	Ellis Pin	2.7mm - (7/64")	127mm
001551	Ellis Pin	3.0mm	127mm
001531	Ellis Pin	3.2mm - (1/8")	127mm
001551A	Ellis Pin	3.5mm	127mm
001552	Ellis Pin	4.0mm	127mm

Bicortical Negative Threaded Pins



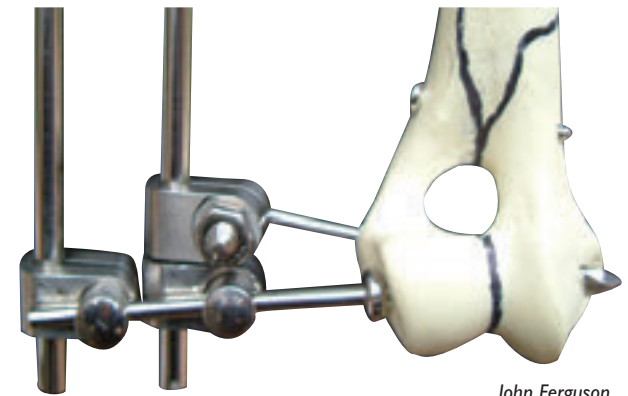
Negative Bicortical Pins have had a bad reputation for early failure at the thread pin junction. Where selection of pin and frame are appropriate failure of negative threaded pins is rare.

The important criterion is thread diameter not shaft diameter. For any given thread diameter both positive and negative threaded pins are equally strong. Virtually all human pins are negative threaded!

BICORTICAL FINE NEGATIVE THREADED PINS

CODE	Shaft Diameter	Thread Diameter	Thread Length	Overall Length
BCNET08	0.8mm	0.8mm	8mm	70mm
BCNET10	1.0mm	1.0mm	10mm	70mm
BCNET11	1.1mm	1.1mm	12mm	70mm
BCNET13	1.4mm	1.4mm	12mm	70mm
BCNET15	1.5mm	1.5mm	12mm	70mm
BCNET16	1.6mm	1.6mm	20mm	70mm
BCNET18	1.8mm	1.8mm	24mm	85mm
BCNET20	2.0mm	2.0mm	24mm	85mm
BCNET24	2.4mm	2.4mm	25mm	100mm
BCNET27	2.7mm	2.7mm	30mm	110mm
BCNET30	3.0mm	3.0mm	35mm	130mm
BCNET35	3.5mm	3.5mm	40mm	130mm
BCNET40	4.0mm	4.0mm	45mm	150mm
BCNET50	5.0mm	5.0mm	50mm	150mm

Threaded ESF Pin with Olive



John Ferguson

Used almost exclusively in the management of complex humeral fractures involving a variant on the 'Y' or 'T' fracture. The olive, positioned at the end of the threaded portion of the pin, acts as the screw head. Bone fragments may be compressed and incorporated into the external fixator frame. The bone fragment involved is usually the lateral condyle.

THREADED ESF PIN WITH OLIVE

001534	Threaded ESF Pin Olive Small 2.4mm Shank 25mm x 3.2mm Thread
001536	Threaded ESF Pin Olive Small 2.4mm Shank 33mm x 3.2mm Thread
001535	Threaded ESF Pin Olive Medium 3.2mm Shank 40mm x 4.0mm Thread
001537	Threaded ESF Pin Olive Large 4mm Shank 55mm x 4.8mm Thread

Pre-drilling ESF Pin Tracts

Pre-drilling a pin tract hole in the bone into which the ESF pin is subsequently inserted is very important as the ESF pins do not have drilling ends. Otherwise insertion of an ESF pin directly into the bone may cause impaction, micro-fracturing of the bone and excessive heat production with bone necrosis, all of which can lead to pin loosening. A drill bit that is about 10% smaller than the shank (core) diameter of the pin, or at least 0.1mm smaller should be used. A slow speed (electric) drill at about 150rpm is advisable, using flush to cool the pin and minimise heat generated in the bone that could cause bone necrosis and pin loosening. An appropriate drill guide is used to protect the soft tissues and minimise drill wobble and skidding. Once the hole is drilled, a K-wire can be used to maintain the pin tract (before the drill guide is removed) so it can be easily re-identified once the ESF pin is ready to be inserted.

PRE-DRILLS

H090202	1.9mm Pre-drill for 2.0mm Shank Positive Pin
H090203	2.3mm Pre-drill for 2.4mm Shank Positive Pin
H090205	3.0mm Pre-drill for 3.2mm Shank Positive Pin
H090207	3.8mm Pre-drill for 4.0mm Shank Positive Pin
H090101	1.5mm Pre-drill for 2.0mm Shank Negative Pin
H090102	2.0mm Pre-drill for 2.4mm Shank Negative Pin
H090104	2.7mm Pre-drill for 3.2mm Shank Negative Pin
H090106L	3.5mm Pre-drill for 4.0mm Shank Negative Pin

Self-Centring Drill-Guides



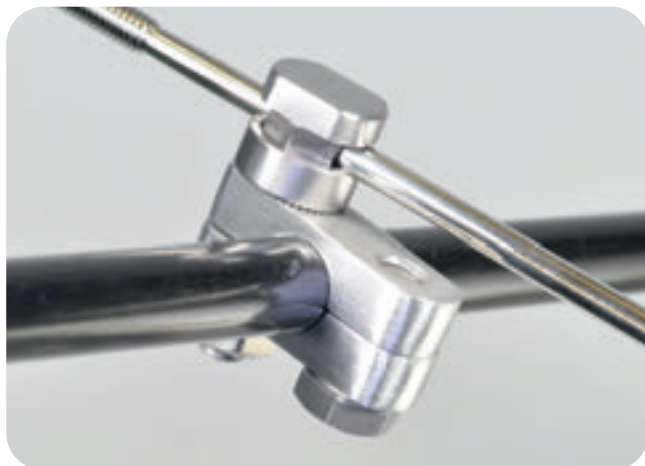
Whether it be for external fixation or screw application, it is desirable for implants to be positioned fairly centrally into bones. Sized for the most popular drill-bits, these devices will help achieve accurate positioning of pilot holes.

SELF-CENTRING DRILL GUIDES

CDG11	Self-centring Drill-guide for Ø1.1mm Drill 10mm spread
CDG15	Self-centring Drill-guide for Ø1.5mm Drill 12mm spread
CDG20	Self-centring Drill-guide for Ø2.0mm Drill 14mm spread
CDG25	Self-centring Drill-guide for Ø2.5mm Drill 18mm spread
CDG32	Self-centring Drill-guide for Ø3.2mm Drill 23mm spread
CDGSET	Set of 5 Self-centring Drill-guides

STANDARD FIXATORS (SF)

SF Clamps

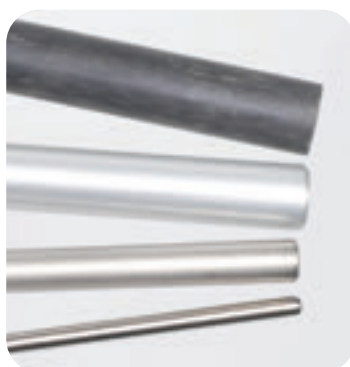


The standard fixator is the most adaptable standard linear ESF fixation system and is the recommended system to use. The ESF clamp design is a 2 part, 2 bolt mechanism body which can be dismantled. This means that ESF clamps can easily be added or removed from an ESF frame at any time, and by using two rather than one bolt to secure the clamp, better stability of the clamp-connecting bar and clamp-ESF pin interface is achieved.

The system is available in three different sizes, Mini, Small, and Large, as shown in the table below.

Clamp	Pin Shaft Dia	Bar Dia	Spanner
Mini	0.9 - 2.5mm	3.2mm	7mm (001566)
Small	2.0 - 3.2mm	6.3mm	8mm (001565)
Large	3.2 - 4.8mm	9.5mm	10mm (001564)

SF Bars



Connecting bars for the mini system are 3.2mm stainless steel. The Small system has Carbon Fibre and Titanium 6.3mm connecting bars, and the Large system has 9.5mm carbon fibre and aluminium connecting bars. Carbon Fibre is radiolucent meaning that the connecting bar does not obscure the image when a radiograph is taken. Considering bending strength, Titanium is stiffer than Carbon Fibre which in turn is stiffer than Aluminium.

As for all linear ESF systems, the size of system chosen is chosen by measuring the size of the bone to be fixed. The craniocaudal and mediolateral dimensions of the bone are measured at the point of intended ESF pin application, and an ESF pin that has a shank diameter approximately 25% the narrowest dimension of the bone is chosen. When the size of ESF pins has been determined, the size of ESF clamp that will accommodate such ESF pins is determined, and therefore the size of connecting bar that is compatible with the clamp. As a generalisation, the mini system is suitable for cats and small dogs, the small for medium sized dogs, and the large for larger dogs.

SF Mini Range

STANDARD FIXATORS (SF) CLAMPS - MINI

- 001740 Mini Single Clamp
001743 Mini Double Clamp

STANDARD FIXATORS (SF) BARS - MINI

- 001595 Mini 1/8" (3.2mm) Bar x 30mm Stainless Steel
001559 Mini 1/8" (3.2mm) Bar x 50mm Stainless Steel
001590 Mini 1/8" (3.2mm) Bar x 75mm Stainless Steel
001596 Mini 1/8" (3.2mm) Bar x 100mm Stainless Steel
001573 Mini 1/8" (3.2mm) Bar x 125mm Stainless Steel
001560 Mini 1/8" (3.2mm) Bar x 150mm Stainless Steel
001574 Mini 1/8" (3.2mm) Bar x 175mm Stainless Steel
001575 Mini 1/8" (3.2mm) Bar x 200mm Stainless Steel

INSERT DRILL SLEEVES - MINI

- SL2015 Insert Drill Sleeve 2.0mm o/d 1.5mm i/d
SL2418 Insert Drill Sleeve 2.4mm o/d 1.8mm i/d

STANDARD FIXATORS (SF) SPANNERS & WRENCHES - MINI

- 001566 Mini Spanner 7mm

SF Small Range

STANDARD FIXATORS (SF) CLAMPS - SMALL

- 001741 Small Single Clamp
001744-A Small Double Clamp

STANDARD FIXATORS (SF) BARS - SMALL

- 001862C Small 1/4" (6.3mm) Bar x 100mm Carbon
001863C Small 1/4" (6.3mm) Bar x 150mm Carbon
001864C Small 1/4" (6.3mm) Bar x 200mm Carbon
001865C Small 1/4" (6.3mm) Bar x 250mm Carbon
001866C Small 1/4" (6.3mm) Bar x 300mm Carbon
001862TI Small 1/4" (6.3mm) Bar x 100mm Ti
001863TI Small 1/4" (6.3mm) Bar x 150mm Ti
001864TI Small 1/4" (6.3mm) Bar x 200mm Ti
001865TI Small 1/4" (6.3mm) Bar x 250mm Ti

INSERT DRILL SLEEVES - SMALL

- SL3525 Insert Drill Sleeve 3.5mm o/d 2.5mm i/d

STANDARD FIXATORS (SF) SPANNERS & WRENCHES - SMALL

- 001565 Medium Spanner 8mm
001565T Medium T Bar Wrench 8mm

SF Large Range

STANDARD FIXATORS (SF) CLAMPS - LARGE

- 001742 Large Single Clamp
001745 Large Double Clamp

STANDARD FIXATORS (SF) BARS - LARGE

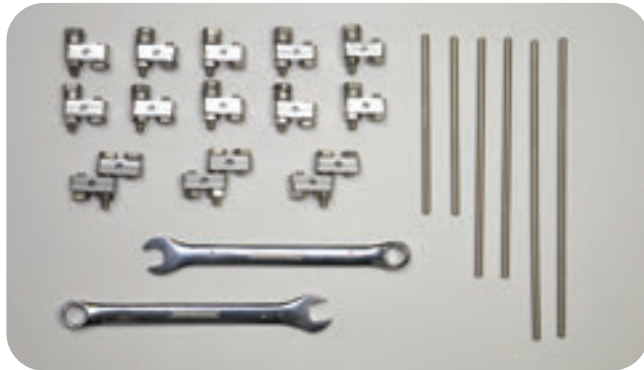
- 001870C Large 3/8" (9.5mm) Bar x 100mm Carbon
001871C Large 3/8" (9.5mm) Bar x 150mm Carbon
001872C Large 3/8" (9.5mm) Bar x 200mm Carbon
001873C Large 3/8" (9.5mm) Bar x 250mm Carbon
001874C Large 3/8" (9.5mm) Bar x 300mm Carbon
001870TI Large 3/8" (9.5mm) Bar x 100mm Aluminium
001871TI Large 3/8" (9.5mm) Bar x 150mm Aluminium
001872TI Large 3/8" (9.5mm) Bar x 200mm Aluminium
001873TI Large 3/8" (9.5mm) Bar x 250mm Aluminium
001874TI Large 3/8" (9.5mm) Bar x 300mm Aluminium

INSERT DRILL SLEEVES - LARGE

SL4532 Insert Drill Sleeve 4.5mm o/d 3.2mm i/d

STANDARD FIXATORS (SF) SPANNERS & WRENCHES - LARGE

001564 Large Spanner 10mm
 86687 Large Angled Wrench 10mm
 001564T Large T Bar Wrench 10mm

SF Kits**Mini SF Starter Kit (Stainless Steel Bars)****Kit contains**

- 10 x Mini Single Clamps
- 3 x Mini Double Clamps
- 2 x 7mm Spanner
- 6 x Ø3.2mm Stainless Steel Connecting Bars; 2 each of length 75mm, 100mm & 125mm.

MINI SF STARTER KIT

001760ISS SF Mini Starter Kit with Stainless Steel Bars

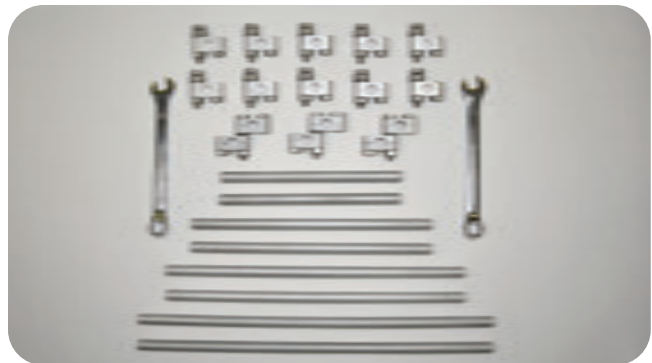
Small SF Starter Kit (Carbon Bars or Titanium Bars)**Kit contains**

- 10 x Small Single Clamps
- 3 x Small Double Clamps
- 6 x Ø6.3mm Carbon connecting bars; 2 each of length 150mm, 200mm & 250mm.
- 2 x 8mm spanner

Titanium kit contains 6 Titanium Connecting Bars of the same lengths.

SMALL SF STARTER KIT

0017602C SF Small Starter Kit with Carbon Bars
 0017603TI SF Small Starter Kit with Titanium Bars

Large SF Starter Kit (Carbon Bars)**Kit contains**

- 10 x Large Single Clamps
- 3 x Large Double Clamps
- 8 x Ø9.5mm Carbon Connecting Bars; 2 each of length 150mm, 200mm, 250mm & 300mm
- 2 x 10mm Spanners

LARGE SF STARTER KIT

0017604C SF Large Starter Kit with Carbon Bars

SF Full Kit**(Includes Pins and Drill Bits - No Double Clamps)****With Stainless Steel/ Titanium/ Aluminium Bars**

- 8 x Mini Single Clamps
- 8 x Small Single Clamps
- 8 x Large Single Clamps
- 4 x 2.0/2.4 End Threaded Pins 85mm long
- 2 x 2.0/2.4 Mid Threaded Pins 105mm long
- 4 x 2.7/3.5 End Threaded Pins 110mm long
- 2 x 2.7/3.5 Mid Threaded Pins 115mm long
- 4 x 3.5/4.3 End Threaded Pins 130mm long
- 2 x 3.5/4.3 Mid Threaded Pins 140mm long
- 2 x Mini 3.2mm Bar 150mm Long Stainless Steel
- 2 x Small 6.3mm Bar 200mm Long Titanium
- 2 x Large 9.5mm Bar 200mm Long Aluminium
- 1 x 1.9mm Drill Bit
- 1 x 2.5mm Drill Bit
- 1 x 3.2mm Drill Bit
- 1 x 7mm Spanner
- 1 x 8mm Spanner
- 1 x 10mm Spanner
- 1 x Tissue Protector
- 1 x Stainless Steel Box
- Also available with Stainless Steel/ Carbon Bars
- Same as above except:
- 2 x Mini 3.2mm Bar 150mm Long Stainless Steel
- 2 x Small 6.3mm Bar 200mm Long Carbon
- 2 x Large 9.5mm Bar 200mm Long Carbon

Kit discounted by over 15% compared to component parts.

SF FULL KIT

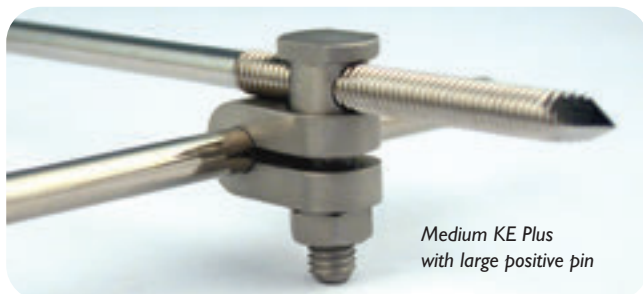
0017690SALT SF Full Kit with Steel/Titanium/Aluminium Bars
 0017695SC SF Full Kit with Steel/Carbon Bars

KE Plus

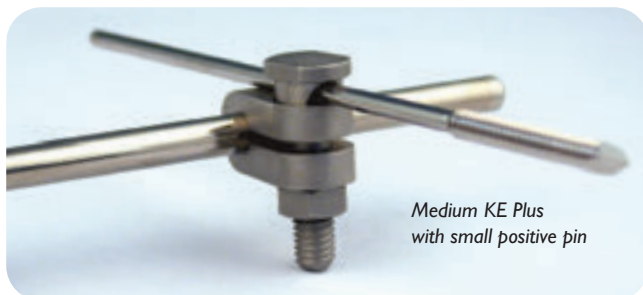
The KE plus linear ESF system is an evolution of the original KE system. Although it is a versatile system that has functioned well over time, it has no advantage over the SF system. The KE plus clamp is designed to allow a wider range of positive threaded pins to be used than the original KE clamp, but clamp stability and security is not as good as the SF system. KE Plus is compatible with existing KE systems and is a useful addition to expand the range of the KE system. KE Plus clamps have a matt finish compared with the polished standard KE clamps. The KE Plus system is available in small, medium and large sizes, as indicated below.

One important limitation of the KE plus system is that once the fixator has been applied to the patient, additional clamps cannot be added or removed from the connecting bar without removing the entire fixator, disassembling, and starting from the beginning. This is because the clamps cannot pass those already present on the connecting bar. This can be overcome by using the split clamp but this clamp is weaker and less secure than the standard KE plus clamp.

Single KE Plus Clamp



Medium KE Plus with large positive pin



Medium KE Plus with small positive pin

Double Clamps



Used to attach a connecting bar to another connecting bar. If possible, the fixation pins in the proximal fragment should be linked to the pins in the distal fragment via single clamps and a single connecting bar. This is not always possible because of the shape of the bones or the angle of placement of the pins.

It may be necessary to connect the pins in the proximal fragment to a short connecting bar and the pins in the distal segment to another short connecting bar. Finally the two short connecting bars are joined by a long connecting bar using double clamps. The frame is not as rigid as the single connecting bar frame. Double clamps may be used to connect long bars proximally and distally, as in type III frames.

Please note that two spanners are required when using Double clamps.

Connecting Bars

Connecting Bars are available in 5/16" for large clamps, 3/16" for medium clamps and 1/8" for small clamps. The thicker the bar, the stronger the frame. The shorter the bar between bone fragments, the stronger the frame. Rigidity is important early in fracture healing. When significant callus is present, it is often helpful to introduce some slight axial motion by either removing some pins or moving the clamps further away from the bone. This is known as staging down or dynamising. Bars are available in a variety of lengths.

Split Clamp



Split Clamp allow the addition of an extra pin to the assembled KE plus frame without the need to dismantle the entire frame. This clamp is not as secure as the KE plus single clamp.

ESF Hinge



Designed specifically to maintain reduction of luxated hips by means of a simple frame on the pelvis, the ESF hinge is also useful in transarticular frames where continued mobility is desirable, e.g. hock and elbow.

Attaches to standard KE equipment. Relatively weak in abduction. Supplied with instructions for use.

Extra Large Clamps and Bars



Standard KE clamps made very much larger. Bars are 7/16" 11mm in diameter.

Clamps will accept up to 5/16" 8mm pins. Suitable for foals and calves.

KE Plus Small Range**CLAMPS - SMALL**

001527	Small Single KE Plus Clamp
001546	Small Single KE Plus Clamp - Pack of 6
001594	Small Double Clamp
001547S	Small Split Clamp Single

CONNECTING BARS - SMALL

001595	Small Connecting Bar 1/8" (3.2mm) x 30mm
001559	Small Connecting Bar 1/8" (3.2mm) x 50mm
001590	Small Connecting Bar 1/8" (3.2mm) x 75mm
001596	Small Connecting Bar 1/8" (3.2mm) x 100mm
001573	Small Connecting Bar 1/8" (3.2mm) x 125mm
001560	Small Connecting Bar 1/8" (3.2mm) x 150mm
001574	Small Connecting Bar 1/8" (3.2mm) x 175mm
001575	Small Connecting Bar 1/8" (3.2mm) x 200mm

ESF HINGE - SMALL

001597	ESF Hinge Joint Small
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SPANNERS & WRENCHES - SMALL

001566	Small Spanner 7mm
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KE Plus Medium Range**CLAMPS - MEDIUM**

001526	Medium Single KE Plus Clamp
001545	Medium Single KE Plus Clamp - Pack of 6
001592	Medium Double Clamp
001547M	Medium Split Clamp Single

CONNECTING BARS - MEDIUM

001588	Medium Connecting Bar 3/16" (4.8mm) x 75mm
001576	Medium Connecting Bar 3/16" (4.8mm) x 100mm
001587	Medium Connecting Bar 3/16" (4.8mm) x 150mm
001589	Medium Connecting Bar 3/16" (4.8mm) x 200mm
001589XL	Medium Connecting Bar 3/16" (4.8mm) x 250mm
001589XXL	Medium Connecting Bar 3/16" (4.8mm) x 300mm

ESF HINGE - MEDIUM

001598	ESF Hinge Joint Medium
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SPANNERS & WRENCHES - MEDIUM

001565	Medium Spanner 8mm
001565T	Medium T Bar Wrench 8mm

KE Plus Large Range**CLAMPS - LARGE**

001525	Large Single KE Plus Clamp
001544	Large Single KE Plus Clamp - Pack of 6
001584	Large Double Clamp
001547L	Large Split Clamp Single

CONNECTING BARS - LARGE

001586	Large Connecting Bar 5/16" (8mm) x 100mm
001563	Large Connecting Bar 5/16" (8mm) x 150mm
001585	Large Connecting Bar 5/16" (8mm) x 240mm
001549	Large Connecting Bar 5/16" (8mm) x 340mm

ESF HINGE - LARGE

001599	ESF Hinge Joint Large
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SPANNERS & WRENCHES - LARGE

001564	Large Spanner 10mm
86687	Large Angled Wrench 10mm
001564T	Large T Bar Wrench 10mm

Extra Large Range**CLAMPS - EXTRA LARGE**

EXL01	Extra Large Single Clamp
EXL02	Extra Large Double Clamp

CONNECTING BARS - EXTRA LARGE

EXL09	Extra Large Connecting Bar 100mm
EXL05	Extra Large Connecting Bar 150mm
EXL06	Extra Large Connecting Bar 200mm
EXL07	Extra Large Connecting Bar 300mm
EXL08	Extra Large Connecting Bar 400mm

SPANNER - EXTRA LARGE

001562	Extra Large Spanner 13mm
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Boxed KE+ ESF Kits (Spanners included)

The full kit comprises one of each "standard kit" (see overleaf) plus a compartmentalised stainless steel box in which to sterilise it. However typically, double clamps weaken frames and are to be avoided if possible. 001579ND is based on single clamps only. For ideal construction use at least 3 pins in each fragment. Kits save 10% on component costs.



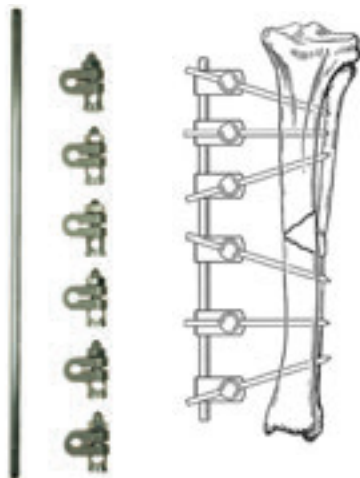
NB: pins are only supplied with Kit 001579NDP which includes positive pins of all appropriate sizes.

BOXED KE+ ESF KITS (SPANNERS INCLUDED)

001579	Boxed Full KE+ Kit (including doubles) in Stainless Box S/ M/ L Std Kits + Spanners
001579ND	Boxed Full KE+ Kit No Doubles As above but with no double clamps
001579NDP	Full KE+ Kit in Stainless Steel Box Includes for each of the 3 sizes: 8 Single Clamps, 2 Long Bars, Spanner, 2 Mid Thread Positive Pins, 4 End Thread Positive Pins, the correct Predrill and ESF Tissue Protector

KE Plus Kits

KE+ Type One Kit (Ia)



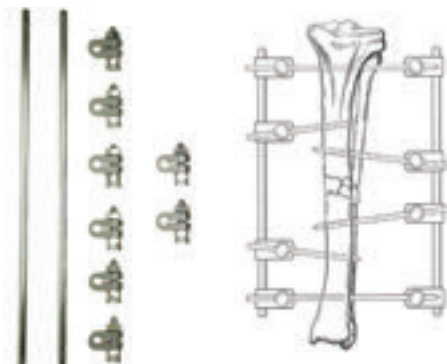
Contains a long bar and 4 or 6 KE Plus single clamps. Pins and spanners are not included. This is the minimum frame you should try to use. Two pins only in the distal fragment is more acceptable than 2 pins proximally. Pin complications are usually fewer in the distal fragment.

TYPE ONE KE+ KIT

- 001570** Unilateral KE+ Kit Large 4 Clamps 1 Bar 240mm
- 001571** Unilateral KE+ Kit Medium 4 Clamps 1 Bar 150mm
- 001572** Unilateral KE+ Kit Small 4 Clamps 1 Bar 100mm
- 001570P** Unilateral KE+ Kit Large 6 Clamps 1 Bar 240mm
- 001571P** Unilateral KE+ Kit Medium 6 Clamps 1 Bar 200mm
- 001572P** Unilateral KE+ Kit Small 6 Clamps 1 Bar 150mm

NB: No pins or spanners are supplied with these kits.

KE+ Type Two Kit - Modified (IIb)



Contains two long bars and 6 or 8 KE Plus clamps. Pins and spanners are not included. Use to create a bilateral frame using a long (preferably mid-threaded) pin proximally and distally.

TYPE TWO KE+ KIT (MODIFIED)

- 001520** Bilateral KE+ Kit Large 6 Clamps 2 Bars, 240mm
- 001521** Bilateral KE+ Kit Medium 6 Clamps 2 Bars, 200mm
- 001522** Bilateral KE+ Kit Small 6 Clamps 2 Bars, 100mm
- 001520P** Bilateral KE+ Kit Large 8 Clamps 2 Bars, 240mm
- 001521P** Bilateral KE+ Kit Medium 8 Clamps 2 Bars, 200mm
- 001522P** Bilateral KE+ Kit Small 8 Clamps 2 Bars, 100mm

NB: No pins or spanners are supplied with these kits.

KE+ Standard Kit



Consists of 8 Single KE Plus Clamps, 2 Double Clamps, 2 Long Bars, 2 Short Bars. Some fractures and some patients require more elaborate frames using either more clamps or more connecting bars. The Standard Kit will enable you to deal with most situations.

STANDARD KE+ KIT

- 001580** Large Standard KE+ Kit 4mm
8 Single + 2 Double Clamps & Bars 2 x Long 5/16" 240mm Long & 2 x Short 5/16" 100mm Long
- 001581** Medium Standard KE+ Kit 3mm
8 Single + 2 Double Clamps & Bars 2 x Long 3/16" 200mm Long & 2 x Short 3/16" 75mm Long
- 001582** Small Standard KE+ Kit 2mm
8 Single + 2 Double Clamps & Bars 2 x Long 1/8" 100mm Long & 2 x Short 1/8" 30mm Long
- 001578** Stainless Box with Partitions

NB: No pins or spanners are supplied with these kits.

Spanner Size and Clamp Type Reference Chart

Clamp Type	Clamp Size	Clamp Code	Spanner Size	Spanner Code
KE+	Small	001527	7mm	001566
	Medium	001526	8mm	001565
	Large	001525	10mm	001564
KE+ Double Clamps	Small	001594	7mm	001566
	Medium	001592	8mm	001565
	Large	001584	10mm	001564
KE+ Extra Large Clamps	Single	EXL01	13mm	001562
	Double	EXL02	13mm	001562
KE+ Split Clamps	Small	001547S	7mm	001566
	Medium	001547M	8mm	001565
	Large	001547L	10mm	001564
KE+ ESF Hinge Joints	Small	001597	7mm	001566
	Medium	001598	8mm	001565
	Large	001599	10mm	001564
SF Clamps Single	Mini	001740	7mm	001566
	Small	001741	8mm	001565
	Large	001742	10mm	001564
SF Clamps Double	Mini	001743	7mm	001566
	Small	001744	8mm	001565
	Large	001745	10mm	001564

FESSA External Fixation

FESSA External Fixation - Stainless Steel

Developed for use in the French army FESSA is a lightweight tubular fixator with a number of interesting features.

- The tube incorporates the pin clamping mechanism and is thus very strong and has extremely good angular pin rigidity.
- Available in 6 and 8mm & 12mm diameter Tubes.
- 6mm Tube accepts pins of shaft diameter 0.9mm to 1.8mm making it extremely useful in the management of fractures in cats and exotics.
- 8mm Tube accepts pins of shaft diameter 1.6mm to 3.2mm.
- 12mm Tube accepts pins of shaft diameter up to 4mm and M5 Grub Screws.
- Design allows placement of multiple parallel pins close together in small fragments.
- Pins can be placed at right angles to tube or angled through adjacent holes. Pins are locked into position by hex driven grub screws.



The FESSA Stainless Steel Starter Kit contains the following:

One of each 6mm tube and one of each 8mm tube (6 in total)

- 1 x 6mm Hinge and one 8mm Hinge
- 1 x 1.5mm Hex Screwdriver
- 1 x 2.0mm Hex Screwdriver
- 10 x 1.5 Locking Screws
- 10 x 2.0 Locking Screws
- All contained in a Stainless Steel Box with Silicone Insert.

FESSA EXTERNAL FIXATION

015500	FESSA Starter Set in Stainless Box
015502	FESSA Tube 6mm x 30mm
015504	FESSA Tube 6mm x 45mm
015506	FESSA Tube 6mm x 65mm
SDHS20F-I	1.5/2.0/2.4mm Hex Screwdriver with Sleeve (PTFE Handle)
015508	FESSA Hex Driver Allen Key Type 1.5mm
015509	FESSA 6mm (1.5 Hex) Locking Screws (10)
015534	FESSA 6mm Hinge
015510	FESSA Tube 8mm x 100mm
015512	FESSA Tube 8mm x 150mm
015514	FESSA Tube 8mm x 200mm
SDHS24F	2.0mm Hex Screwdriver with PTFE Handle
015517	FESSA Hex Driver Allen Key Type 2.0mm
015520	FESSA 8mm (2.0 Hex) Locking Screws (10)
015536	FESSA 8mm Hinge
015540	FESSA Tube 12mm x 125mm
015542	FESSA Tube 12mm x 175mm
015544	FESSA Tube 12mm x 225mm
015545	FESSA 12mm (2.5 Hex) Locking Screws (10)
SDHS35POM-C	2.5mm Hex Screwdriver + Sleeve with PTFE Handle

FESSA Ultra-Lightweight Titanium FESSA



Actual Size

Standard Stainless Steel FESSA is already very light. The tubular structure acts as both clamp and bar. Birds, small furrries and exotics demand even lighter constructs.

Using Titanium tube of 5.0mm in diameter enables the surgeon to apply FESSA constructs weighing from as little as 1.5 grams.

Titanium Fessa tubes (015521 & 015522) are both supplied with 6 x M3 grub screws. Suitable for pins 0.8mm to 1.6mm.. Uses 1.5 hex drivers, the same as 6.0mm FESSA



The FESSA Titanium Starter Kit contains:

- 2 x 5mm x 30mm Ti Fessa Tubes
- 2 x 5mm x 45mm Ti Fessa Tubes
- 1 x 1.5 Hex Screwdriver
- 1 x Small Pin Vice
- 10 x M3 Grub Screws
- 6 x 0.8 Bicortical Negative Pins
- 6 x 1.0 Bicortical Negative Pins
- 6 x 1.5 Bicortical Negative Pins
- All contained in a Stainless Steel Box with Silicone Insert.

Discounted by more than 20%

TITANIUM FESSA

015530	Titanium FESSA Set in Stainless Steel Box
015521	5mm x 30mm Titanium FESSA
015522	5mm x 45mm Titanium FESSA
015509	FESSA 5mm (1.5 Hex) Locking Screws (10)
015508	1.5 Hex Allen Key
BCNET08	0.8mm Bicortical Negative Pins
BCNET10	1.0mm Bicortical Negative Pins
BCNET15	1.5mm Bicortical Negative Pins

Linear Distractors

Uniplanar Dynamic Distractor

Uniplanar external fixator distraction devices are most frequently used for:

- Restoration of lost bone length from trauma or growth plate anomalies
- Restoration of joint congruity (most commonly the elbow)
- Incremental correction of uncomplicated angular limb deformities

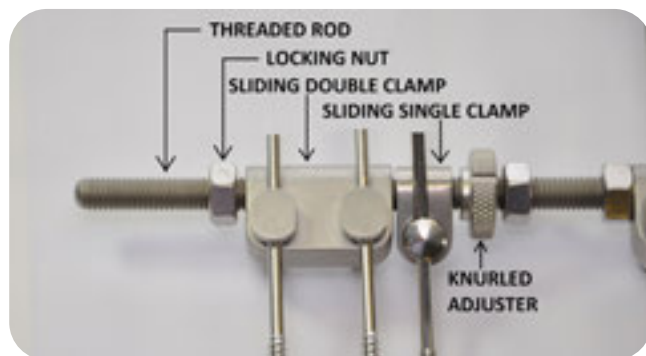
Application of linear frames is more straight-forward than for ring fixators, but application is restricted to a single plane and larger pin diameters are normally required to create a rigid enough construct.

Frames will typically be constructed with one or more full pins towards the ends of the bone, with further pins in the mid-section. Straight bones may allow these additional pins to also be through pins, but in bones with significant bowing (such as the radius on many patients), half pins may be necessary.

We offer two linear distraction systems. KE Plus and Vumex.

KE Plus Linear Distractors

These use the nuts and bolts of the familiar KE Plus design coupled to sliders running freely on threaded bar connecting rods. The addition of locking nuts to the threaded bar holds either the proximal or distal sliders in position. Distraction is created by turning a knurled adjuster to force proximal and distal sliders apart. A typical assembly is shown below.



Sliding Single Clamps



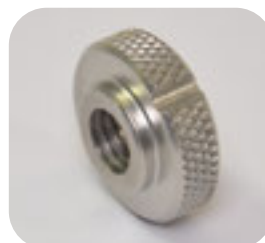
Comprising a slider holding a single KE Plus Bolt with associated nut. These offer some flexibility over pin angulation, but at the expense of construct rigidity compared with sliding double clamps

Sliding Double Clamps



Comprising a slider holding two KE Plus Bolts with associated nuts. These offer less flexibility over pin angulation and create a more rigid construct than sliding single clamps.

Knurled Adjusters



Small – one full rotation = 0.75mm movement
 Medium – one full rotation = 1.0mm movement
 Large – one full rotation = 1.25mm movement

It is advised that these are used in combination with lock-nuts to prevent loosening.

Wire Insert Guide



Used for the accurate placement of parallel pins across a frame.

WIRE INSERT GUIDE

- 0019722 Wire Insert Guide for M4 Rings and Wires
- 001819 Wire Insert Guide for M6 Rings and Wires

Small M4 0.75mm per rotation - use pins up to 3/32"/2.4mm diameter

UNIPLANAR DYNAMIC DISTRACTOR - SMALL

001910	Sliding Single Clamp 3/32" Pins
001911	Sliding Double Clamp 3/32" Pins
001951	Knurled Adjuster - Small
001960	Locking Nut - Small
001920	Threaded Rod - Small 50mm Pitch 0.75mm
001921	Threaded Rod - Small 75mm Pitch 0.75mm
001922	Threaded Rod - Small 100mm Pitch 0.75mm
001923	Threaded Rod - Small 150mm Pitch 0.75mm
0019722	Wire Insert Guide - M4
001566	Small Spanner
001900	Radius Assembly - Small 3/32" Does not include pins

Medium M6 1.0mm per rotation - use pins up to 3/16"/4.8mm diameter

UNIPLANAR DYNAMIC DISTRACTOR - MEDIUM

001912	Sliding Single Clamp 1/8" Pins
001913	Sliding Double Clamp 1/8" Pins
001952	Knurled Adjuster - Medium
001961	Locking Nut - Medium
001930	Threaded Rod - Medium 75mm Pitch 1.0mm
001931	Threaded Rod - Medium 150mm Pitch 1.0mm
001932	Threaded Rod - Medium 200mm Pitch 1.0mm
001819	Wire Insert Guide - M6
001565	Medium Spanner
001901	Radius Assembly - Medium 1/8" Does not include pins

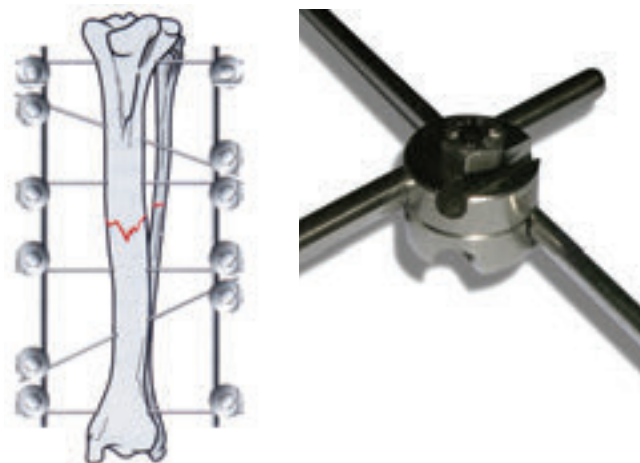
Large M8 1.25mm per rotation - use pins up to 5/32"/4.0mm with singles or 1/4"/6.3mm with doubles

UNIPLANAR DYNAMIC DISTRACTOR - LARGE

001914	Sliding Single Clamp 5/32" Pins
001915	Sliding Double Clamp 5/32" Pins
001953	Knurled Adjuster - Large
001962	Locking Nut - Large
001940	Threaded Rod - Large 100mm Pitch 1.25mm
001941	Threaded Rod - Large 200mm Pitch 1.25mm
001564	Large Spanner
001902	Radius Assembly - Large 5/32" Does not include pins

Linear Fixators

Meynard Fixation Clamps



Stainless Steel External Fixators. Very simple, very inexpensive ESF system widely used with success in France and Spain. The clamps split allowing placement of pins, (both positive threaded and negative threaded) mid frame. Not as strong as KE or KE Plus type so more clamps are needed. Bars are available in all sizes. There are now Meynard clamps available which fit standard KE bars. Very useful for mid frame and positive threaded pins. Clamps which work with KE bars carry a KE suffix. Uses a 7mm spanner.

MEYNARD CLAMPS

	Clamp diameter	Fixation Pin diameter	Bar diameter
260002	12	1.0	2
260003	12	1.2	2
260004	12	1.6	2
260005	14	1.5	3
260005KE	14	1.5	3
260006	14	2.0	3
260007	16	2.0	4
260013	16	2.4	4
260008	16	3.0	4
260014KE	24	3.0-3.2	4.8
260015KE	24	4.0	6.3
260009	24	4.0	6

MEYNARD CONNECTING BARS

260030	3mm for 14mm Clamps. 50mm Long
260040	4mm for 16mm Clamps. 100mm Long
260042	4mm for 16mm Clamps. 200mm Long
260060	2mm for 12mm Clamps. 500mm Long cut to length
260062	3mm for 14mm Clamps. 500mm Long cut to length
260064	4mm for 16mm Clamps. 500mm Long cut to length
260068	6mm for 24mm Clamps. 500mm Long cut to length

SPANNERS

001566	Spanner Small 7mm
86104	Small Socket 7mm

Small Linear Fixator (SLF)

We have a limited range of Small Linear Fixator (SLF) components available to order.

For full details and to check availability please contact our Vet Tech Team on 0345 160 9596 or email info@vetinst.com

Circular ESF

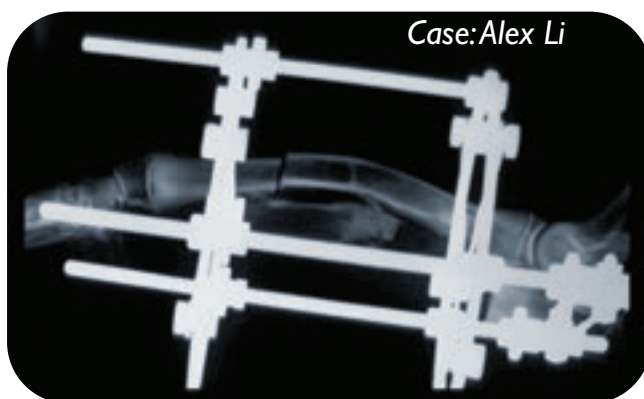
The use of circular, or ring fixators requires patience and experience, but offers additional versatility over other systems.

By maintaining wire tension across a ring, similar construct stiffness can be achieved using smaller diameter wires than linear or free-form external fixation. Coupled with good flexibility over the direction of pin placement, circular ESF can be particularly useful when managing small fragments.

Frames are often constructed to allow adjustment of the spacing and angular relationship between the rings; this is very useful for adjusting bone length (capitalising on the phenomenon of distraction osteogenesis) and in the management of angular limb deformities.

In veterinary patients, true circular frames are reserved exclusively for the lower limb as full 360° access is required for positioning of the components. When frames are applied close to joints, full rings may restrict full joint movement and impinge on soft tissues. In these circumstances, part rings are normally substituted. Part rings are not as stiff as full rings.

Circular style frames are sometimes used in locations where anatomical constraints completely prevent the use of full rings. All rings in an assembly of this type will be part rings or 'arches'. The same anatomical restrictions will often prevent the use of full wires and half pins of a slightly greater diameter will often be required to achieve a similar stiffness; application to the axial skeleton an infrequent, but perhaps the most obvious example.

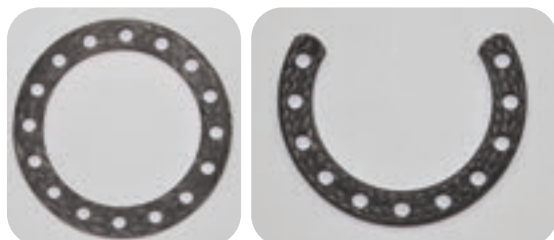


We have a limited range of circular ESF components available to order.

For full details and to check availability please contact our Vet Tech Team on 0345 130 9596 or email info@vetinst.com

Rings and Connection Plates

Full Rings & 5/8 Rings



FULL RINGS AND 5/8 RINGS

- 001809 50mm Carbon Full Ring M6
- 001812 50mm Carbon 5/8 Ring M6
- 001810 70mm Carbon Full Ring M6
- 001840 70mm Aluminium Full Ring M6
- 001815 70mm Carbon 5/8 Ring M6
- 001811 100mm Carbon Full Ring M6
- 001843 100mm Aluminium Full Ring M6
- 001816 100mm Carbon 5/8 Ring M6
- 001847 120mm Stainless Steel 5/8 Ring M6
- 001849 160mm Stainless Steel 5/8 Ring M6

Wire Bolts

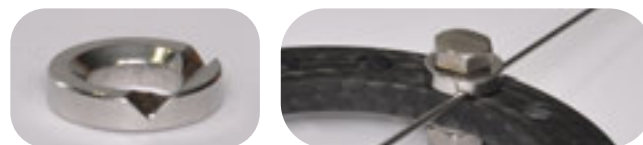


Wires are attached to rings using bolts. The wire either passes through the cannulation or is placed alongside. Now supplied in pairs as bolt, nut and standard washer (6 components).

WIRE BOLTS

- 0019710 Cannulated Wire Bolt Assembly M6
- 0019711 Offset Wire Bolt Assembly M6

Slotted Washers

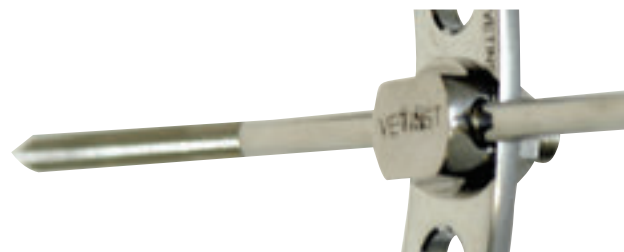


An alternative fixation method for wires with incorporated offset. Supplied in pairs. Use with connecting bolts.

SLOTTED WASHERS

- 001852S/2 M6 Slotted Washer (x 2)

Bolt for Linear Fixator Pin



Permits the use of a linear half pin in place of a wire. Comes complete with washer and standard nut.

BOLT FOR LINEAR FIXATOR PIN

- 001853 M6 Bolt for Linear Fixator Pin – 4mm

Wire Guide



The guide is used to improve the accuracy of wire placement and incorporates a thumb-screw to clamp it to the ring.

WIRE GUIDE

- 001819 Wire Guide For M6 rings and wires

Post for Offset Wire



Used with wire bolts to place wires standing off from a ring. Female fitting posts can be attached to threaded rods. Supplied in pairs (posts x 2, bolts x 2 and washers x 2).

POST FOR OFFSET WIRE

0019717	Male Post 2 Holes M6
0019718	Male Post 3 Holes M6
0019719	Male Post 4 Holes M6
0019720	Female Post 2 Holes M6
0019721	Female Post 4 Holes M6

Combination Wire/ Pin Post

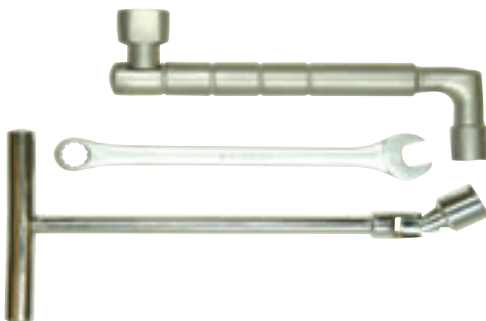


Creates a 20mm stand-off from a ring for clamping an additional pins or wires.

COMBINATION POST

001857	Combination Wire/Pin Post M6
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Wrenches and Spanners



WRENCHES AND SPANNERS

001817	10mm Open Ended Spanner (for use with M6)
001838	10mm Angled Wrench (for use with M6)

Combined with a female to female hinge with or without a triangulation bar, hybrid bars can be used to create simple but effective trans-articular linear frames.

Hybrid Bars

Combine the best features of ring and linear fixators using hybrid bars. Also used with female/female hinges to create hinged linear frames.



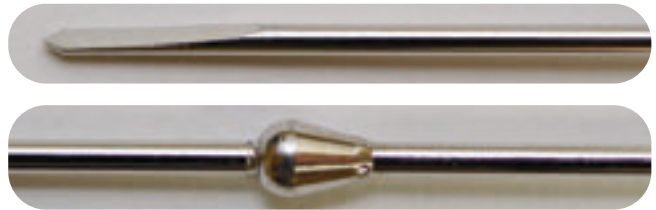
M6 KE+ HYBRID BAR

001837A	Medium KE+ 100mm
001837B	Medium KE+ 150mm
001837C	Medium KE+ 200mm
001837F	Large KE+ 150mm
001837G	Large KE+ 200mm
001937H	Large KE+ 250mm

M6 SF HYBRID BAR

001862SS	Small SF x 100mm
001863SS	Small SF x 150mm
001864SS	Small SF x 200mm
001871SS	Large SF x 150mm
001872SS	Large SF x 200mm
001873SS	Large SF x 250mm

Ilizarov Wires



Quick cutting fine wires for use with circular external fixators. Olive wires prevent bone segments from sliding back and forth.

ILIZAROV WIRES

001881	1.5mm Ilizarov Wire For Use With M6 System (pack 5)
001882	1.8mm Ilizarov Wire For Use With M6 System (pack 5)
001883	1.5mm Ilizarov Olive Wire For Use With M6 System (pack 5)
001884	1.8mm Ilizarov Olive Wire For Use With M6 System (pack 5)

Threaded Rod - Stainless Steel



THREADED ROD

001930	Threaded Rod – M6 x 75mm Long
001934	Threaded Rod – M6 x 100mm Long
001931	Threaded Rod – M6 x 150mm Long
001932	Threaded Rod – M6 x 200mm Long

Circular ESF Spares Components

CIRCULAR ESF SPARES COMPONENTS

001855/10	Standard M6 Nut (Pack of 10)
001852/10	Standard M6 Washer (Pack of 10)
001828/10	Standard M6 Connecting Bolt (pack of 10)
001851	M6 Cannulated Wire Bolt
001854	M6 Offset Wire Bolt
0019808	Small SF M6 Post

Epoxy

Epoxy ESF Putty

Epoxy ESF Putty is a simple to use, quick and convenient alternative to the standard bar and clamp system. The putty, once mixed, stiffens in 5 minutes and within 1 hour is fully cured. The putty can be applied and then the fracture reduced allowing precise manipulation of the fracture site. The versatility of the system allows the putty to be used in place of clamps, to cover sharp ends of cut pins, and many other applications.

There are two pack sizes in a bar format with the premeasured catalyst in the centre of the bar ready for mixing. The product is clean and has a long shelf life. Only mix the quantity you need, cutting the required amount off the end of the bar. If you find you don't have enough, more can be prepared in a matter of seconds. ESF putty sticks to itself very well and may be used for repairs and corrections. Particularly useful in fractures in small furries where proximal and distal fragments may be attached together with 'blobs' of putty in place of clamps regardless of fixation pin site.

Typical Applications

- ESF applications requiring multiple pins of various sizes placed at various angles.
- ESF applications in rabbits and guinea pigs
- Fractures of the jaw
- Protecting sharp ends of cut pins
- Joining non-standard pins and bars
- Use to add a pin mid frame

EPOXY ESF PUTTY

- EPOXY1** Epoxy ESF Putty 55G
- EPOXY2** Epoxy ESF Putty 110G

ESF Tissue Protector



Protection of soft tissue is very important when placing an ESF frame. Protection prevents tissues from getting wrapped around the drill bit, and helps to maintain access to the pin tract in the bone. Once a connecting bar with clamps is in position, pin placement through a drill guide presents a specific problem because standard drill guide tissue protectors cannot be removed once the pin is in position. The ESF Tissue Protector splits along its length to allow removal. The tip has small serrations to encourage grip on the bone surface.

ESF TISSUE PROTECTOR

- 001548** ESF Tissue Protector

Spanners & Wrenches



Standard spanners, sockets or combination spanners are available for all clamp sizes see reference chart.

SPANNERS

- 001565** Spanner Medium 8mm
- 001564** Spanner Large 10mm
- 86012** Socket Drive Handle
- 86104** Small Socket 7mm
- 86105** Medium Socket 8mm
- 86107** Large Socket 10mm
- 86687** Angled Wrench Large 10mm

Quick Ratchet Spanner



Use of our quick ratchet spanner will save time tightening clamps. Unlike conventional ratchet handles and socket sets the quick ratchet is not thicker than a regular spanner and can be used in very confined spaces.

QUICK RATCHET SPANNER

- 001565QR** Quick Ratchet Spanner 8mm (Medium)

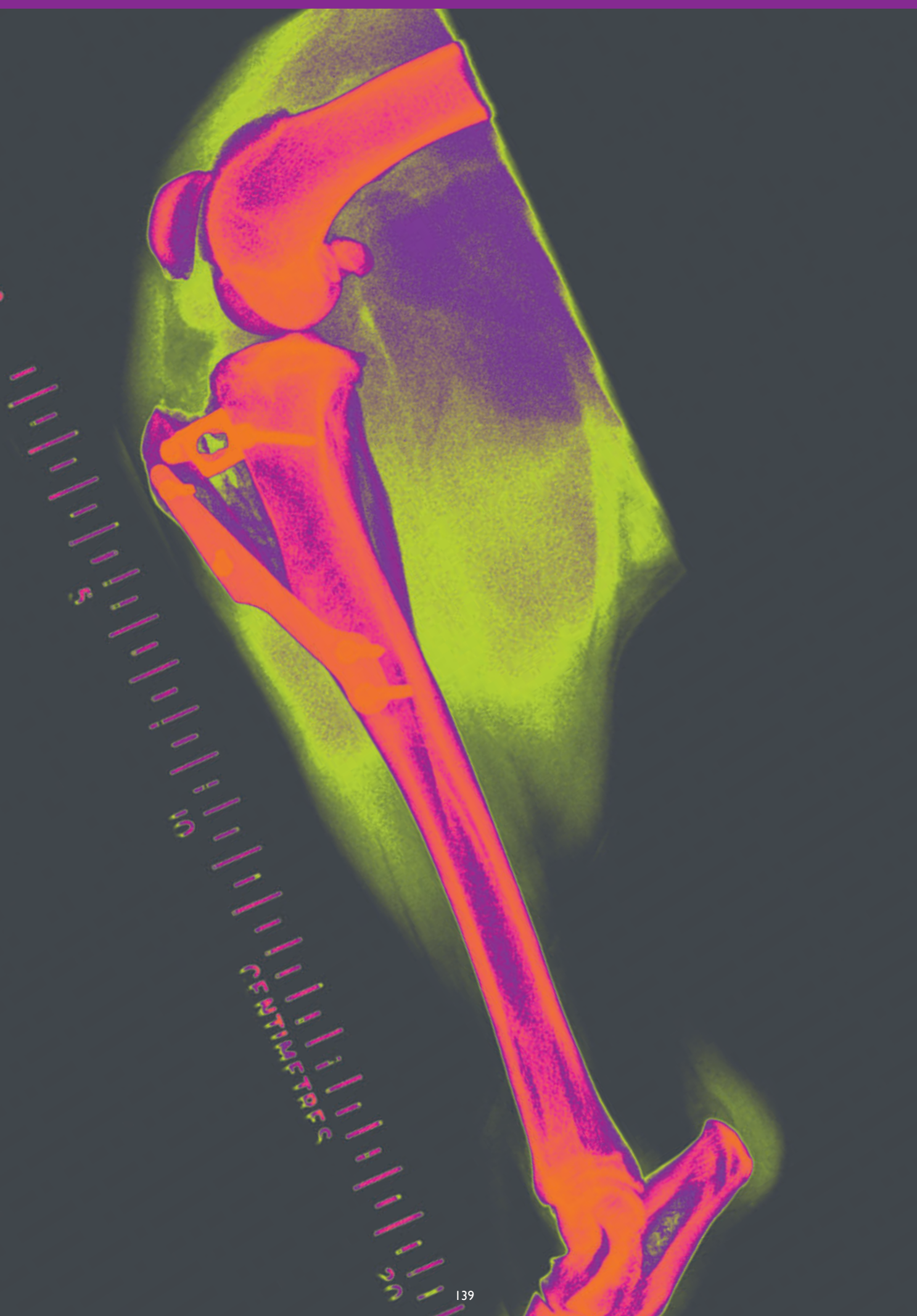
'T' Bar Wrenches



Useful for speedy tightening of clamps in that the wrench can be 'spun' using the shaft.

'T' BAR WRENCHES

- 001565T** Medium 'T' Wrench - 8mm
- 001564T** Large 'T' Wrench - 10mm



TPLO Plates with Locking Screw Holes

Since the beginning of the millennium, locking plate technology has revolutionised TPLO surgery, more than any other surgical procedure.

Locking TPLO plates have made the procedure quicker and simpler with less dissection, less biological trauma, and osteotomy stability is much better. The risk of tibial tuberosity fracture and tibial plateau rock-back is much reduced.



TPLO locking plates use locking screws in the proximal tibial plateau segment and the plate is pre-contoured to match the shape of the proximal tibia. This means that the plate does not need to be contoured by the surgeon to the shape of the proximal tibia during surgery. This, saves time and avoids possible plate weakening caused by contouring.

The plate is designed so that the position and direction of the locking screws in the tibial plateau are angled distally away from the joint, and away from the osteotomy. This means that so long as the plate is placed correctly,

intra-articular screw placement should be impossible. This is a major advantage as the potential for intra-articular screw placement is almost completely eliminated. To ensure this guarantee against intra-articular screw placement, the plate should not be contoured.

As locking plates do not rely on friction generated between the plate and the bone for stability, it is no longer necessary to elevate the soft tissues beneath the locking part of the plate (i.e. the medial buttress).

This is beneficial as removing the medial buttress involves unnecessary dissection, can be time consuming, causes bleeding, and could damage the medial collateral ligament damage with over-exuberant buttress removal.

As locking screws are angle stable, placement of locking screws in the tibial plateau segment means maximal stability of the tibial plateau. The chances of post-operative instability of the tibial plateau segment developing are minimised which is good as instability can lead to loss of osteotomy reduction, and increase in tibial plateau angle, known as "rock-back", or tibial tuberosity fracture.

Locking screws are very stable because of locking of the thread of the screw head into the thread of the plate hole i.e. metal to metal for these locking screws, the risk of stripping a screw in the soft cancellous bone of the tibial plateau is now impossible.

To use locking plates for TPLO surgery, a slightly expanded inventory of implants and equipment is needed. This includes:

- Locking TPLO plate,
- Locking drill guide,
- Drill bit appropriate to the core diameter of the locking screws (e.g. 2.8mm for a 3.5mm locking screw),
- Locking screws

Thus use of locking plates for TPLO surgery have numerous advantages but no real disadvantage. They are strongly recommended over non-locking plates.

Tips and tricks for locking TPLO plating.

- The TPLO procedure is performed in the normal way, except that soft tissue / medial buttress elevation in the proximal tibial plateau segment is not necessary.
- Once the tibial plateau is rotated and the osteotomy is stabilised, the TPLO locking plate is applied to the tibia and positioned appropriately.
- Use a K-wire or needle to probe and check the position of the joint so ensure that the plate is correctly positioned over the bone of the tibial plateau, just distal to the stifle joint.
- In particular, check that the most proximal locking screw is over tibial plateau bone, just distal to the stifle joint.

Screw placement order:-

In the distal tibial diaphysis segment, a single non-locking screws is placed to secure the plate to the bone

1. Using the locking drill guide, all the proximal locking screws are placed in the tibial plateau segment.
2. In the distal tibial diaphyseal segment, a non-locking screw is placed in axial compression mode using the compression guide to compress the osteotomy.
3. The remaining distal screws are placed; these may be either locking or non-locking screws, and depending on the plate configuration but, locking is more stable.
4. Before placement of locking screws in the distal tibial diaphysis segment, all non-locking screws must be fully tightened.

Vi Locking TPLO Starter Kits

The Vi Locking TPLO system is available as a start up kit offering substantial discounts over regular pricing.

Vi TPLO Starter Kit with No Power Equipment contains:

- 001492 Slocum Type Rotation Gauges 5mm To 15mm x 1
- 001494 Bone Scribe (200mm Long) x 1
- ACETATE7 Acetate Plate Profiles TPLO Plates x 1
- BRTPLO Step By Step Guide To TPLO By Radial Cut x 1
- TPLO32 Slocum Guide 3.2mm (1/8") x 125mm Pins For TPLO 25mm Thread x 10
- TPLOJIG TPLO Basic Jig x 1
- TPLOROT TPLO Rotation Chart x 1
- TPLOVI18 TPLO Blade Vi Pattern 18mm x 1
- TPLOVI21 TPLO Blade Vi Pattern 21mm x 1
- TPLOVI24 TPLO Blade Vi Pattern 24mm x 1
- VILTPLO27L3 Locking TPLO Plate For 2.7mm Screws 3 Holes Proximal Left x 1
- VILTPLO27R3 Locking TPLO Plate For 2.7mm Screws 3 Holes Proximal Right x 1
- VILTPLO35BL4 Locking TPLO Broad Plate For 3.5mm Screws 4 Holes Proximal Left x 1
- VILTPLO35BR4 Locking TPLO Broad Plate For 3.5mm Screws 4 Holes Proximal Right x 1
- VILTPLO35L3 Locking TPLO Plate For 3.5mm Screws 3 Holes Proximal Left x 2
- VILTPLO35R3 Locking TPLO Plate For 3.5mm Screws 3 Holes Proximal Right x 2

Vi TPLO Starter Kit with Vi Air Powered TPLO Saw contains:

- 001492 Slocum Type Rotation Gauges 5mm To 15mm x 1
- 001494 Bone Scribe (200mm Long) x 1
- ACETATE7 Acetate Plate Profiles TPLO Plates x 1
- BRTPLO Step By Step Guide To TPLO By Radial Cut x 1
- TPLO32 Slocum Guide 3.2mm (1/8") x 125mm Pins For TPLO 25mm Thread x 10
- TPLOJIG TPLO Basic Jig x 1
- TPLOROT TPLO Rotation Chart x 1
- TPLOVI18 TPLO Blade Vi Pattern 18mm x 1
- TPLOVI21 TPLO Blade Vi Pattern 21mm x 1
- TPLOVI24 TPLO Blade Vi Pattern 24mm x 1
- VILTPLO27L3 Locking TPLO Plate For 2.7mm Screws 3 Holes Proximal Left x 1
- VILTPLO27R3 Locking TPLO Plate For 2.7mm Screws 3 Holes Proximal Right x 1
- VILTPLO35BL4 Locking TPLO Broad Plate For 3.5mm Screws 4 Holes Proximal Left x 1
- VILTPLO35BR4 Locking TPLO Broad Plate For 3.5mm Screws 4 Holes Proximal Right x 1
- VILTPLO35L3 Locking TPLO Plate For 3.5mm Screws 3 Holes Proximal Left x 2
- VILTPLO35R3 Locking TPLO Plate For 3.5mm Screws 3 Holes Proximal Right x 2
- HALLHOSEVI Halls Style Air Hose x 1
- TPLOSW Vi TPLO Saw

Vi TPLO Starter Kit with Vi Battery Powered TPLO Saw contains:

- 001492 Slocum Type Rotation Gauges 5mm To 15mm x 1
- 001494 Bone Scribe (200mm Long) x 1
- ACETATE7 Acetate Plate Profiles TPLO Plates x 1
- BRTPLO Step By Step Guide To TPLO By Radial Cut x 1
- TPLO32 Slocum Guide 3.2mm (1/8") x 125mm Pins For TPLO 25mm Thread x 10
- TPLOJIG TPLO Basic Jig x 1
- TPLOROT TPLO Rotation Chart x 1
- TPLOVI18 TPLO Blade Vi Pattern 18mm x 1
- TPLOVI21 TPLO Blade Vi Pattern 21mm x 1
- TPLOVI24 TPLO Blade Vi Pattern 24mm x 1
- VILTPLO27L3 Locking TPLO Plate For 2.7mm Screws 3 Holes Proximal Left x 1
- VILTPLO27R3 Locking TPLO Plate For 2.7mm Screws 3 Holes Proximal Right x 1
- VILTPLO35BL4 Locking TPLO Broad Plate For 3.5mm Screws 4 Holes Proximal Left x 1
- VILTPLO35BR4 Locking TPLO Broad Plate For 3.5mm Screws 4 Holes Proximal Right x 1
- VILTPLO35L3 Locking TPLO Plate For 3.5mm Screws 3 Holes Proximal Left x 2
- VILTPLO35R3 Locking TPLO Plate For 3.5mm Screws 3 Holes Proximal Right x 2
- VITPLOSAW Vi Battery Powered TPLO Saw C/W Charger & Batteries x 1

VI TPLO LOCKING STARTER KITS

VILTPLOKITAIR Vi TPLO Locking Starter Kit With Air Saw Power

VILTPLOKITBAT Vi TPLO Locking Starter Kit With Battery Saw Power

VILTPLOKITNP Vi TPLO Locking Starter Kit With No Power Equipment

ViL Locking TPLO Plates**Design features / advantages:**

- Contoured to the shape of the post TPLO proximal tibia.
- The most proximal screw is placed just below the stifle joint but the locking hole is angled distally by 3° for the 3.5mm plate, 2.0° for the 3.5mm broad plate, 1.5° for the 2.7mm plate and 2.3° for the 2.4mm & 2.0mm plate, avoiding intra-articular placement.
- 3-4 proximal locking screws provide maximal screw security in soft cancellous bone of the tibial plateau.
- Medial buttress removal is not necessary because of the anatomic contour of the plate and locking screws proximally.
- Distal segment allows placement of:
 - 2 non-locking screws including 1 for axial compression and maximal osteotomy stability.
 - then choice of 1 to 2 locking/ non-locking compression screws per plate hole.
- Full range of plate sizes.
- Fully compatible with Vi / AO style twin-start screw locking thread profile.

Plate dimensions are available upon request.

Please contact our Vet Tech Team on 0345 130 9596 or email info@vetinst.com

VIL LOCKING TPLO PLATES - 2.0MM

VILTPLO20L	ViL Locking TPLO Plate For 2.0mm Screws 3 Holes Left
VILTPLO20R	ViL Locking TPLO Plate For 2.0mm Screws 3 Holes Right

VIL LOCKING TPLO PLATES - 2.4MM

VILTPLO24L	ViL Locking TPLO Plate For 2.4mm Screws 3 Holes Left
VILTPLO24R	ViL Locking TPLO Plate For 2.4mm Screws 3 Holes Right

VIL LOCKING TPLO PLATES - 2.7MM

VILTPLO27L3	ViL Locking TPLO Plate For 2.7mm Screws 3 Holes Left
VILTPLO27R3	ViL Locking TPLO Plate For 2.7mm Screws 3 Holes Right

VIL LOCKING TPLO PLATES - SMALL 3.5MM

VILTPLO35SL3	ViL Locking TPLO Plate Small For 3.5mm Screws 3 Holes Left
VILTPLO35SR3	ViL Locking TPLO Plate Small For 3.5mm Screws 3 Holes Right

VIL LOCKING TPLO PLATES - 3.5MM

VILTPLO35L3	ViL Locking TPLO Plate For 3.5mm 3 Holes Left
VILTPLO35R3	ViL Locking TPLO Plate For 3.5mm 3 Holes Right

VIL LOCKING TPLO PLATES - BROAD 3.5MM

VILTPLO35BL4	ViL Locking TPLO Plate Broad For 3.5mm Screws 4 Holes Left
VILTPLO35BR4	ViL Locking TPLO Plate Broad For 3.5mm Screws 4 Holes Right

Vi Locking TPLO Plates

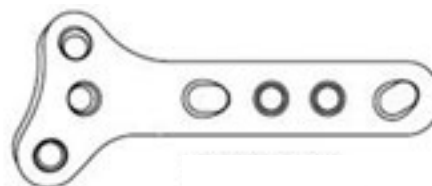
Locking TPLO Plate showing both converging and diverging Locking Screws

ViLock TPLO plates are available in 2.7mm, 3.5mm and 3.5mm broad, covering the vast majority of TPLO patients. The head section is both wider and shallower than any other locking design maximising the area of bone spanned to give very even force distribution across the whole of the proximal segment whilst also permitting a very proximal osteotomy. The locking holes are both convergent and divergent to maximise pull-out resistance and angled to avoid articular surfaces.

Scaled plate profiles on page 354.

TPLO PLATES WITH LOCKING SCREW TECHNOLOGY

TPLO27LPCL	TPLO Plate Locking 2.7 Left
TPLO27LPCR	TPLO Plate Locking 2.7 Right
TPLO35LPCL	TPLO Plate Locking 3.5 Left
TPLO35LPCR	TPLO Plate Locking 3.5 Right
TPLO35BLPCL	TPLO Plate Broad Locking 3.5 Left
TPLO35BLPCR	TPLO Plate Broad Locking 3.5 Right
LSDG2724	Locking Screw Drill Guide for small 2.7
LSDG35	3.5 Locking Screw Drill Guide

TPLO Narrow Head Broad Locking Plate

Intermediate 3.5mm locking TPLO plate. This plate has similar strength in the shaft and midsection to the 3.5mm broad, but only three screw-holes in the head section for use with smaller proximal segments

Scaled plate profiles on page 354.

TPLO NARROW HEAD BROAD 3.5 LOCKING PLATES

TPLO35MLPCR	TPLO Narrow Head Broad Locking Plate Right 3.5
TPLO35MLPCL	TPLO Narrow Head Broad Locking Plate Left 3.5

TPLO353555 Locking Plates

Right and left pre-contoured locking versions of the original TPLO353555 clover leaf plate developed by Phil Moses (Brisbane). All the screws are set to avoid the joint space and allow for optimal load sharing. Locking holes are all stacked so will accept a cortical screw if necessary, and there are 2 compression holes in the plate shaft.

Scaled plate profiles on page 353.

TPLO 353555 LOCKING PLATES

TPLO353555RL	3.5mm DCP 55mm Length Locking Right
TPLO353555LL	3.5mm DCP 55mm Length Locking Left

TPLO Saw Blades VI Pattern

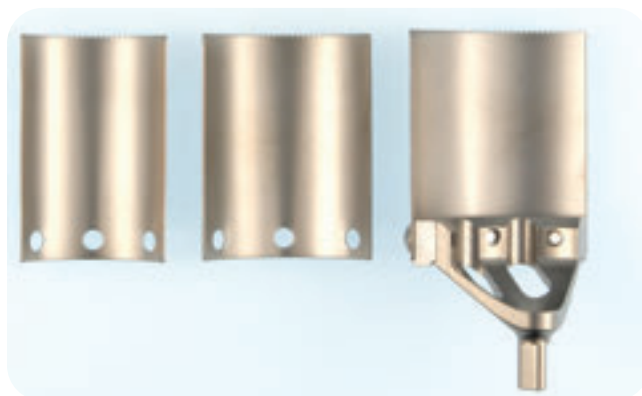


Vi's updated TPLO Blade has been redesigned to further reduce friction and improve cut characteristics in all sizes.

TPLO BLADES VI PATTERN

- TPLOVI12** TPLO Blades VI Pattern 12mm
- TPLOVI15** TPLO Blades VI Pattern 15mm
- TPLOVI18** TPLO Blades VI Pattern 18mm
- TPLOVI21** TPLO Blades VI Pattern 21mm
- TPLOVI24** TPLO Blades VI Pattern 24mm
- TPLOVI27** TPLO Blades VI Pattern 27mm
- TPLOVI30** TPLO Blades VI Pattern 30mm
- TPLOVI34** TPLO Blades VI Pattern 34mm

Modular Stainless TPLO Blades



All the Blades fit the standard hub. The 30mm Blade requires a Collar which is supplied with the hub. The Blades have a 'set' which makes the teeth slighter wider at the tips which reduces friction and heat as the Blade passes through the bone.

For those who purchased our Stainless Steel Hub system taking semi disposable radial cut blades we are pleased to inform you that in addition to the 24mm Blade, 18 and 30mm Blades are now available. The Blades are long lasting with a tooth 'set' to reduce heat generation. When they get dull simply fit a new one.

MODULAR STAINLESS TPLO SAW BLADES

- TPLOBHUB** Hub for 18, 24 & 30mm Blades includes Collar
- TPLOB18** 18mm Radial Cut Stainless Blade
- TPLOB24** 24mm Radial Cut Stainless Blade
- TPLOB30** 30mm Radial Cut Stainless Blade
- TPLOB30COL** Collar for 30mm Blade
- TBHEX32** 3.2mm 'T' Bar Hex Driver (Whittemore/ Vi)

Tibial Plateau Levelling Operation by Wedge Osteotomy

TPLO closing wedge or Closing Wedge Osteotomy Tibial Plateau Levelling Osteotomy (CWO-TPLO) was the original version of TPLO surgery that preceded the curved osteotomy Slocum TPLO procedure; the latter has since gained widespread use worldwide. CWO-TPLO was originally popular in some territories when availability of the Slocum TPLO procedure training courses, equipment and implants was limited and difficult to access. CWO-TPLO surgery offers advantages and disadvantages compared to TPLO surgery.

Advantages of CWO-TPLO surgery compared to TPLO surgery:

- CWO-TPLO is simpler to perform, there is more room for error in terms of osteotomy positioning, it requires less specialised equipment and there is arguably less risk of damage to the popliteal artery.
- CWO-TPLO can be performed in any dog, regardless of Tibial Plateau Angle (TPA). Conversely, for TPLO surgery the higher the TPA, the higher the required rotation of the tibial plateau segment for TPLO surgery therefore the less contact at the osteotomy site post rotation and reduction, and the larger the amount of tibial tuberosity that is left exposed that could potentially fracture. CWO-TPLO is arguably simpler, safer and more appropriate in dogs with high TPAs.



However, disadvantages of CWO-TPLO surgery include:

- Post-reduction, the transverse CWO-TPLO osteotomy appears to be inherently less stable than the curved CWO-TPLO osteotomy.
- CWO-TPLO moves the distal tibia relative to the entire proximal tibia i.e. the plateau is not disassociated from the tibial tuberosity. Therefore with the greater stifle flexion that is assumed following CWO-TPLO, the tibial tuberosity assumes a more distal / flexed position relative to the femoral trochlear sulcus. In turn, the patella seems to have a more distal position in the trochlear sulcus that could approach patella baja, although this does not seem to be a clinically significant problem. Arguably this could be a positive feature as the patella may engage the femoral trochlear sulcus more reliably, making patellar luxation less likely, although this is unproven.
- It is not possible to correct concurrent cruciate ligament disease and patellar luxation with CWO-TPLO surgery as the relationship between the tibial tuberosity and the tibial plateau is not changed. In contrast, TPLO surgery separates the plateau from the tuberosity therefore it is possible to treat concurrent patellar luxation and cranial cruciate disease; the plateau is rotated to reduce the TPA and concurrently the tibial tuberosity is rotated medially, or rarely laterally.

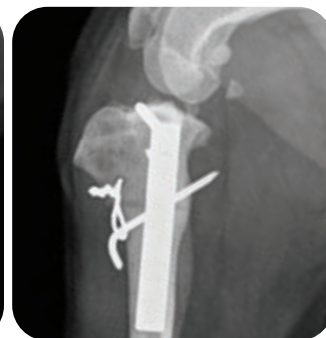
Tips and tricks for CWO-TPLO surgery.

There are many different ways to perform this operation with subtle differences in technique. Here are some tips to make it as straightforward as possible:

- When planning the wedge, the angle of the wedge is calculated from the TPA but the size of the wedge should be smaller than a full cranio-caudal wedge of bone from the proximal tibia. This is to preserve as much bone

stock as possible, and to minimise size discrepancies of the osteotomised surfaces of the proximal and distal tibia.

- Use a cranial K-wire and tension band to make osteotomy reduction easier and more stable.
- Plan and pre-place the holes for the distal K-wire and proximal tension band prior to making the osteotomy. This will make implant placement and osteotomy reduction simpler later.
- Once the osteotomy is complete, place the K-wire in the cranial cortex of the distal fragment, aim into the proximal segment, hold the osteotomy in reduction and drive the K-wire into the proximal segment. This will stabilise the reduction.
- Ensure that reduction and alignment are good, particularly that there is no axial malalignment of the tibia. Then place the cranial tension band, placing it through the hole in the tibial tuberosity proximally and the K-wire distally.
- Place the medial plate; various options are possible including a DCPT, plate, TPLO plate and locking plates. Remember that this is an inherently unstable osteotomy in the cranial to caudal plane. Coupled with a short proximal tibial segment, this makes stable fixation more of a challenge. Using locking screws proximally and/or as long a plate as possible should help to stabilise the osteotomy as good as possible.



CWO-TPLO - 9 Weeks Post-Op.

Images and Case courtesy of Gareth Arthurs.

TPLO Wedge Kit



Image shows some of products contained in the kits. The full contents of the kit is listed below.

The TPLO Wedge Kit includes:

- 001493 TPLO Wedge Templates 9 To 30 Degrees x 1
- 001701 Multi Saw Milwaukee Includes 2 Batteries x 1
- 001702 Stainless Converter (Comes With Spanner) x 1
- 001703 Multisaw Waterproof Shroud x 1
- ACETATE7 Acetate Plate Profiles TPLO Plates x 1
- S82-103 Sagittal Saw Blade 1.2mm x 70 x 12mm x 1
- S82-104 Sagittal Saw Blade 0.8mm x 70mm x 25mm x 1
- TPLO272739 TPLO Plate 2.7mm DCP 39mm Long 6 Holes x 1
- TPLO353555 TPLO Plate 3.5mm DCP 55mm Long 6 Holes x 1
- TPLO353579 TPLO Plate 3.5mm Heavy Duty DCP 79mm Long 7 Holes x 1

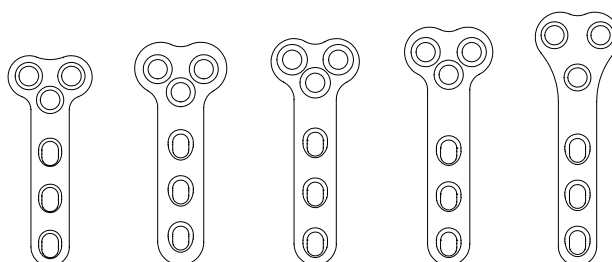
Gives a good discount over individual purchases.

(Also required: 2.7/3.5mm AO Type Bone Plate Benders).

TPLO WEDGE KIT

- TPLOWEDGEKIT** TPLO (closing wedge) Start Up Kit
- 001287** 2.7/3.5 AO Type Bone Plate Benders (pair)

TPLO By Wedge Osteotomy Plates



Scaled plate profiles on page 353

TPLO BY WEDGE OSTEOTOMY PLATES

- TPLO202026** 2.0mm DCP 26mm Overall Length
- TPLO202031** 2.0mm DCP 31mm Overall Length
- TPLO242434** 2.4mm DCP 34mm Overall Length
- TPLO242441** 2.4mm DCP 41mm Overall Length
- TPLO272739** 2.7mm DCP 39mm Overall Length
- TPLO272745** 2.7mm DCP 45mm Overall Length
- TPLO273539** 2.7/3.5 DCP 39mm Overall Length
Allows use of 3.5 cancellous screw in head
- TPLO273545** 2.7/3.5 DCP 45mm Overall Length 2.5mm Thick
- TPLO353555** 3.5mm DCP 55mm Overall Length
- TPLO353557** 3.5mm DCP 57mm Overall Length Heavy Duty
- TPLO353559** 3.5mm DCP 59mm Overall Length
- TPLO353562** 3.5mm DCP 62mm Overall Length
- TPLO353565** 3.5mm DCP 65mm Overall Length
- TPLO353577** 3.5mm DCP 77mm Overall Length
- TPLO353577X** 3.5mm DCP 77mm Overall Length Extra Shaft Hole
- TPLO353579** 3.5mm DCP 79mm Overall Length Heavy Duty
- TPLO354579** 3.5/4.5 DCP 79mm Overall Length Heavy Duty
Allows 4.5 screws in head
- TPLO35456579** 79mm Overall Length Heavy Duty
Allows 4.5/6.5 screws in head
- TPLO45659030** 4.5mm DCP 90mm Overall Length
Will accept 6.5 cancellous screws in head 3.0mm Thick
- TPLO45659035** 4.5mm DCP 90mm Overall Length
Will accept 6.5 cancellous screws in head 3.5mm Thick
- TPLO45659045** 4.5mm DCP 90mm Overall Length
Will accept 6.5 cancellous screws in head 4.5mm Thick
- TPLOO** Angle Finder & Plate Overlay

Tibial Plateau Levelling Osteotomy - Standard

Tibial Plateau Levelling Osteotomy (TPLO) was originally developed by Barclay Slocum in the 1980s. Slocum realised that given the standing angle of the dog's knee, the cranial cruciate ligament deficient stifle had a tendency to subluxate cranially because of the opposing forces generated between the tibial plateau and the femoral condyles. He speculated that making a corrective osteotomy and changing (flattening) the tibial plateau angle should neutralise cranial tibial thrust and therefore the instability resulting from cranial cruciate ligament rupture. The osteotomy was originally designed as a wedge osteotomy, which still exists as a separate procedure for cranial cruciate ligament rupture and has its own advantages and disadvantages; see other section on CWO-TPLO. The wedge osteotomy then evolved into the curved / crescentic osteotomy that differs by separating the tibial plateau from both the tibial metaphysis and the tibial tuberosity. A radial saw blade with a TPLO specific oscillating saw is used that makes the crescentic osteotomy. Once the tibial osteotomy is made, it is rotated by a calculated amount by inserting a rotation pin (tables are available to determine the correct amount of rotation for each blade size). The aim is to achieve a Tibial Plateau Angle (TPA) of 5 to 7 degrees. Once rotated, the tibial plateau segment is temporarily held in position by a single K-wire, or fracture reduction forceps. Then the plate and screws are applied for definitive stabilisation.

TPLO was originally developed with many claims, including complete return of function, re-gaining full muscle mass, and the halting of progression of degenerative joint disease. Nowadays it is accepted that whilst TPLO does not achieve all these goals as it does not restore completely normal stifle biomechanics, it is arguably the best surgical procedure available for addressing the cranial cruciate ligament deficient stifle. For this reason, it is very popular amongst specialist surgeons, and evidence is starting to emerge that it offers the best outcome compared to other surgical techniques, including other osteotomies, to address cranial cruciate ligament rupture such as TTA or extra-capsular stabilisation.

The original TPLO surgical technique was very specific, and surgeons all followed a very similar protocol. With the passage of time, surgeons have evolved individual variations on the original technique. For example, use of a jig is no longer universal, many surgeons have adopted a minimal soft tissue elevation technique as compared to the original extensive soft tissue elevation and packing technique, and stabilisation of the rotated tibial plateau can be achieved using pointed fracture reduction forceps rather than placement of a temporary stabilising K-wire.

The procedure can also be modified to address concurrent patellar luxation with cranial cruciate ligament disease, by axially rotating the tibial tuberosity and diaphysis relative to the tibial plateau, although this may cause a concurrent internal / external rotational deformity of the distal limb.

The TPLO procedure can be performed in almost any dog. For many surgeons, TPLO is the procedure of choice for the majority of patients with cranial cruciate ligament disease. The higher the TPA, the greater the rotation required to achieve a TPA of 5 to 7 degrees. It has been suggested that when the TPA exceeds 30 degrees, the amount of rotation required becomes excessive, and this could lead to fracture of the tibial tuberosity. This has led to some surgeons to choose the CWO-TPLO procedure for such dogs. Also a double osteotomy comprising a combination of wedge osteotomy and crescentic osteotomy has been described, but this is not for the faint hearted.

Reasons not to choose a TPLO would include inexperience or lack of familiarity with the technique, uncontrollable skin disease or pyoderma that increases the risk of surgical site infection, inability of the owner to restrict the patient appropriately post-operatively that could lead to implant failure and failure of reduction, or ability of the owner to accept the list of potential complications associated with an osteotomy procedure, or the associated cost.

TPLO Starter Kit

2 versions of the TPLO Starter Kit are available, with either Slocum Style or Delta Style Plates.

The Delta TPLO Starter Kit includes:

- 001492 Slocum Type Rotation Gauges 5mm To 15mm x 1
- 001494 Bone Scribe (200mm Long) x 1
- HALLHOSEVI Vi Halls Style Hose x 1
- TPLO32 Slocum Guide 3.2mm (1/8") x 125mm Pins For TPLO 25mm Thread x 10
- TPLODEL27L TPLO Delta Plate Left For 2.7mm Screws x 1
- TPLODEL27R TPLO Delta Plate Right For 2.7mm Screws x 1
- TPLODEL35BL TPLO Delta Plate Broad Left For 3.5mm Screws x 1
- TPLODEL35BR TPLO Delta Plate Broad Right For 3.5mm Screws x 1
- TPLODEL35L TPLO Delta Plate Left For 3.5mm Screws x 2
- TPLODEL35R TPLO Delta Plate Right For 3.5mm Screws x 2
- TPLOJIG TPLO Basic Jig x 1
- TPLOROT TPLO Rotation Chart x 1
- TPLOSW TPLO Saw x 1
- TPLOVI18 TPLO Blade Vi Pattern 18mm x 1
- TPLOVI24 TPLO Blade Vi Pattern 24mm x 1
- TPLOVI30 TPLO Blade Vi Pattern 30mm x 1

The Slocum TPLO Starter Kit includes:

- 001492 Slocum Type Rotation Gauges 5mm To 15mm x 1
- 001494 Bone Scribe (200mm Long) x 1
- ACETATE7 Acetate Plate Profiles TPLO Plates x 1
- HALLHOSEVI Vi Halls Style Hose x 1
- TPLO32 Slocum Guide 3.2mm (1/8") x 125mm Pins For TPLO 25mm Thread x 10
- TPLOS27L TPLO Plate Slocum Style 2.7mm Left x 1
- TPLOS27R TPLO Plate Slocum Style 2.7mm Right x 1
- TPLOS35LPC TPLO Slocum Plate 3.5mm Pre-Contoured Left x 2
- TPLOS35RPC TPLO Slocum Plate 3.5mm Pre-Contoured Right x 2
- TPLOJIG TPLO Basic Jig x 1
- TPLOROT TPLO Rotation Chart x 1
- TPLOSW TPLO Saw x 1
- TPLOVI18 TPLO Blade Vi Pattern 18mm x 1
- TPLOVI24 TPLO Blade Vi Pattern 24mm x 1
- TPLOVI30 TPLO Blade Vi Pattern 30mm x 1

All Starter Kits carry a good discount over component prices.

TPLO STARTER KIT

- TPLODKIT** TPLO Starter Kit with Delta Style Plates Air Power
- TPLOSKIT** TPLO Starter Kit with Slocum Style Plates Air Power

Tibial Plateau Levelling by Radial Osteotomy Slocum

Slocum Style Plates



Slocum style TPLO plates. Not pre-contoured.

Scaled plate profiles on page 354.

SLOCUM STYLE TPLO PLATES

TPLOS35BL	TPLO Plate Broad Slocum Style 3.5mm Left
TPLOS35BR	TPLO Plate Broad Slocum Style 3.5mm Right
TPLOS35L	TPLO Plate Slocum Style 3.5mm Left
TPLOS35R	TPLO Plate Slocum Style 3.5mm Right
TPLOS27BL	TPLO Plate Broad Slocum Style 2.7mm Left
TPLOS27BR	TPLO Plate Broad Slocum Style 2.7mm Right
TPLOS27L	TPLO Plate Slocum Style 2.7mm Left
TPLOS27R	TPLO Plate Slocum Style 2.7mm Right
TPLOS24L	TPLO Plate Slocum Style 2.4mm Left
TPLOS24R	TPLO Plate Slocum Style 2.4mm Right
TPLOS20L	TPLO Plate Slocum Style 2.0mm Left
TPLOS20R	TPLO Plate Slocum Style 2.0mm Right
BRTPLO	TPLO Radial Cut Step by Step Guide

Pre-Contoured Slocum Style TPLO plates



Pre-contoured version of the standard 3.5mm Slocum Style plate. Pre-bent and polished to leave no stress riser. May need a final intra-operative tweak in some cases.

Scaled plate profiles on page 354.

PRE-CONTOURED TPLO PLATES

TPLOS35RPC	3.5 Right Slocum Style Pre-contoured Plate
TPLOS35LPC	3.5 Left Slocum Style Pre-contoured Plate

Delta Style TPLO Plates - Contoured

Delta Style Plates



Available in all standard sizes. All supplied pre-contoured as contouring these plates is difficult– may require final clinical 'tweak'.

Scaled plate profiles on page 352.

DELTA STYLE TPLO PLATES

TPLODEL35BL	3.5 Broad Delta Plate Left
TPLODEL35BR	3.5 Broad Delta Plate Right
TPLODEL35L	3.5 Delta Plate Left
TPLODEL35R	3.5 Delta Plate Right
TPLODEL27BL	2.7 Broad Delta Plate Left
TPLODEL27BR	2.7 Broad Delta Plate Right
TPLODEL27L	2.7 Delta Plate Left
TPLODEL27R	2.7 Delta Plate Right
TPLODEL24L	2.4 Delta Plate Left
TPLODEL24R	2.4 Delta Plate Right

TPLO Instrumentation

XSTPLO Jig



Smallest TPLO Jig available from Vi. Design allows greater range of arm movement without causing intra-operative obstruction, with a single hinge to remove bulk. Accepts 1.6 and 2mm pins. 2.0mm Allen key included. Main body 60mm long.

XS TPLO JIG

TPLOJIGXS XS TPLO Jig 60mm

TPLO Jig



TPLO JIG

TPLOJIG TPLO Jig 120mm

TPLO32 Slocum Guide Pin 3.2mm Thread 25mm

Standard Slocum Style TPLO Jig



Standard pattern TPLO Jig. Pair of Alignment Bars and Allen key included. Large Jig takes 3.2 pins, small Jig take 2.4 pins. Pins not included.

SLOCUM STYLE TPLO JIG

- TPLOJIG/S.** Slocum Style Jig Standard (3.2 Pin)
- TPLO32** Slocum Guide Pin 3.2mm Thread 25mm
- TPLOJIG/SS.** Slocum Style Jig Small (2.4 Pin)
- BCNET24** 2.4mm Bicortical Negative End Thread Pin 100mm Long
- TPLOJIG/ROD35** Replacement Alignment Bars (Set of 2) Standard
- TPLOJIG/ROD27** Replacement Alignment Bars (Set of 2) Small

Slocum TPLO Guide Pin

End threaded negative pin. Drive directly into the tibia for jig attachment.

SLOCUM TPLO GUIDE PIN

- TPLO32** Slocum Guide Pin 3.2mm Thread 25mm
- BCNET24** 2.4mm Bicortical Negative End Thread Pin 100mm Long

Bone Scribe



A very sharp marking point with an easy to hold handle enables the surgeon to mark bone prior to cutting or rotating (Slocum procedure). One end is pointed and the other is sharpened as a blade.

BONE SCRIBE

001494 Bone Scribe (Double Ended) 200mm Long

Slocum Rotation Gauges



The Rotation Gauges simplify the rotation procedure. The correct measurement, in millimetres, is read from the table and the appropriate gauge selected. The bone is marked using the scribe or an osteotome.

SLOCUM TPLO ROTATION GAUGES 5 TO 15MM

001492 Slocum Rotation Gauges

TPLO Rotation Gauge Divider Type



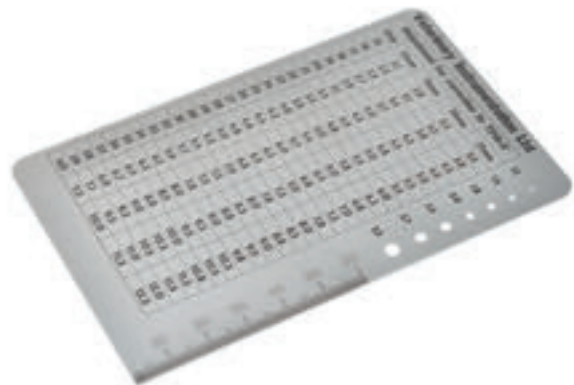
Alternative to the feeler gauge type measuring system. Spring loaded, adjusting the set screw fixes the points at any predetermined distance from 0-20 mm as read from the scale.

The tibial plateau may then be rotated the distance between the points.

TPLO ROTATION GAUGE DIVIDER TYPE

001499 TPLO Rotation Gauge Divider Type 90mm

TPLO Rotation Chart



The rotation data for blades 12mm, 15mm, 18mm, 21mm, 24mm, 27mm, 30mm & 34mm are displayed on this double sided, laser marked, stainless steel gauge.

Incorporates also a drill gauge and a ruler for measuring screws and rotation.

TPLO ROTATION CHART

TPLOROT TPLO Rotation Chart

Wedge Osteotomy Gauge Set 9° to 30°



Wedge gauges simplify the marking and cutting of the appropriate wedge. Using the parallel marking allows the surgeon to mark and cut a wedge with equal length borders, creating a better closure.

WEDGE OSTEOTOMY GAUGE SET - 9° TO 30°

001493 Wedge Osteotomy Gauge Set

TPLO Wire Guide and Reduction Forceps



TPLO reduction forceps are designed to stabilise and compress across the osteotomy site. At the tip is a wire guide tube which allows a stabilising wire to be driven across the osteotomy at exactly the correct position without skidding or slippage at start up.

The action is spinlock allowing the surgeon full flexibility on positioning and compression.

The forceps are handed and significantly cheaper when purchased as a set.

TPLO REDUCTION FORCEPS WITH WIRE GUIDE

TPLORFR TPLO Reduction Forceps with Wire Guide Right 215mm

TPLORFL TPLO Reduction Forceps with Wire Guide Left 215mm

TPLORFSET TPLO Reduction Forceps with Wire Guide Right & Left

Plate Holding/ Drill Guide Forceps



Temporary fixation of the head of TPLO plates aids in positioning, while screws are placed. The spherical ball tip of these forceps seats well in the round holes of the head plate, as well as in conventional DCP holes, whilst allowing drilling through the hole. Also very useful for plate osteosynthesis in fracture repair.

PLATE HOLDING/ DRILL GUIDE FORCEPS

- 001225** 1.5/2.0 Plate Holding/ Drill Guide Forceps 140mm Long
- 001226** 2.4/2.7 Plate Holding/ Drill Guide Forceps 145mm Long
- 001227** 3.5 Plate Holding/ Drill Guide Forceps 150mm Long
- 0012SET** Plate Holding/ Drill Guide Forceps Set (one of each size)

Very Large Fragment Forceps



Use where a wide gape is required or where the instrument needs to be further out of the surgical field. Spinlock version is very useful during CrCl surgery for repositioning the stifle prior to placement of a lateral suture, or holding osteotomies during closing wedge type procedures. Also available in left handed versions.

VERY LARGE FRAGMENT FORCEPS

- 001202 Very Large Fragment Forceps 205mm Long
- 001203 Very Large Fragment Forceps with Spinlock 215mm Long

Delta TPLO Plate Benders with Curved Slots



Plate benders with slots tend to distort the Delta plate. The curved slots help grip and support the the plate during the bending process. In addition the plate is much less likely to end up on the floor.

DELTA TPLO PLATE BENDERS WITH CURVED SLOTS

- TPLODELBEND** Delta TPLO Plate Benders (Pair) 230mm Long

Extra Long Bending Levers



Longer plate benders (240mm) with 4mm and 6mm slots are designed with TPLO plates in mind to make bending and twisting much easier.

EXTRA LONG BONE PLATE BENDING LEVERS

- 001288L 3.5/4.5 Extra Long Bending Levers 240mm Long

LeiLOX CBLO Locking System



Combines the advantages of TPLO and TTA

CBLO (CORA based leveling osteotomy) is a modern osteotomy technique to level the tibia plateau, similar to TPLO. However, CBLO addresses further challenges such as secondary (late) meniscal damage, overload of the caudal cruciate ligament, reduction of proximal anatomic axis shift and the secondary translation as well as misalignment of the joint.

Multiaxial Locking & Titanium

The screws can be locked in 90° angle with a 12° deviation in any direction. This allows you to angle the screws away from vital structures. The robust star-drive screw head can be locked firmly into the plate.

All LeiLOX CBLO Implant are made of Titanium by RITA LEIBINGER for the best biocompatibility.

Anatomically Shaped Limited Contact Dynamic Compression Plates

The LeiLOX CBLO plates are contoured to match the anatomic shape of the bone. This makes it easier to place the plate in an optimal position.

The plate features limited contact dynamic compression to minimize vascular damage to the plated bone segment.

Double Compression

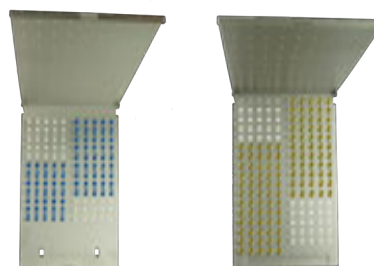
Two precisely designed compression holes enable a very tight compression of the osteotomy. This allows you to use a standard cortical screw as the cranio-caudal holding screw (instead of a headless compression screw).

Interchangeable 2.7 & 3.5mm Screws

Because the screwheads are identical, all CBLO plate sizes work with both the 2.7mm and the 3.5mm titanium CBLO screws. This offers flexibility and saves on inventory cost.

For technical content is available on request. Please contact the Vet Team Team on 0345 130 9596 or email info@vetinst.com

CBLO Implant Set



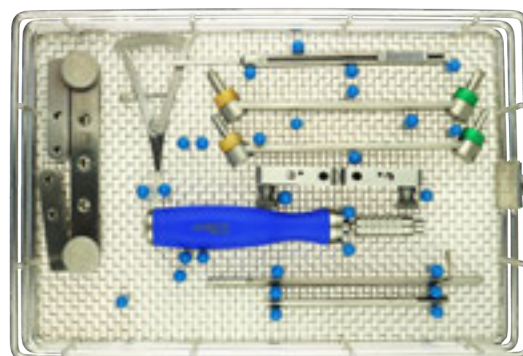
The CBLO Implant Set contains:

- 1 x CBLO Implant Tray
- 1 x Screw rack CBLO 2.7
- 1 x Screw rack CBLO 3.5
- 2 x of each CBLO Plate
- 3 x of each Self Tapping Screw (16-34mm)
- 5 x of each 2.7 Locking Screw (16-46mm)
- 5 x of each 3.5 Locking Screw (16-60mm)

CBLO IMPLANT SET

CBLO142400010 CBLO Implant Set

TPLO/ CBLO Instrument Set



The TPLO/ CBLO Instrument Set contains:

- 1 x CBLO Instrument Tray
- 2 x Drills (2.0 & 2.5mm)
- 3 x 2 K-Wires (1.0, 2.5 & 3.0mm)
- 2 x 2 Locking Drill Guides
- 2 x TPLO Jigs
- 1 x Screwdriver Handle
- 1 x Screwdriver Shaft
- 1 x Depth Gauge
- 1 x Castroviejo Caliper
- 2 x Compression Drill Guides

TPLO/ CBLO INSTRUMENT SET

CBLO142400020 TPLO/ CBLO Instrument Set

CBLO Plates

Titanium. Featuring both locking and compression screw holes.

LEILOX CBLO PLATES

CBLO142232710	LeiLOX CBLO Locking Plate Broad 2.7mm Left 55mm
CBLO142232700	LeiLOX CBLO Locking Plate Broad 2.7mm Right 55mm
CBLO142233510	LeiLOX CBLO Locking Plate Broad 3.5mm Left 70mm
CBLO142233500	LeiLOX CBLO Locking Plate Broad 3.5mm Right 70mm
CBLO142233560	LeiLOX CBLO Locking Plate Broad 3.5mm Left 78mm
CBLO142233550	LeiLOX CBLO Locking Plate Broad 3.5mm Right 78mm

LeiLox Locking Cortical Screws 2.7mm

For LeiLOX Locking System, Star Drive T10 self-holding (T10 Shaft from Rita Leibinger needed). Self-tapping with three flute cutting edge.

LEILOX LOCKING CORTICAL SCREWS 2.7MM

TTAR27STAR16	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 16mm
TTAR27STAR18	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 18mm
TTAR27STAR20	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 20mm
TTAR27STAR22	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 22mm
TTAR27STAR24	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 24mm
TTAR27STAR26	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 26mm
TTAR27STAR28	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 28mm
TTAR27STAR30	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 30mm
TTAR27STAR32	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 32mm
TTAR27STAR34	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 34mm
TTAR27STAR36	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 36mm
TTAR27STAR38	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 38mm
TTAR27STAR40	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 40mm
TTAR27STAR42	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 42mm
TTAR27STAR44	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 44mm
TTAR27STAR46	TTA Rapid Star Drive 2.7mm Locking Cortical Screw Titanium 46mm

LeiLox Locking Cortical Screws 3.5mm

For LeiLOX Locking System, Star Drive T10 self-holding (T10 Shaft from Rita Leibinger needed). Self-tapping with three flute cutting edge.

LEILOX LOCKING CORTICAL SCREWS 3.5MM

TTAR35STAR16	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 16mm
TTAR35STAR18	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 18mm
TTAR35STAR20	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 20mm
TTAR35STAR22	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 22mm
TTAR35STAR24	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 24mm
TTAR35STAR26	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 26mm
TTAR35STAR28	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 28mm
TTAR35STAR30	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 30mm
TTAR35STAR32	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 32mm
TTAR35STAR34	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 34mm
TTAR35STAR36	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 36mm
TTAR35STAR38	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 38mm
TTAR35STAR40	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 40mm
TTAR35STAR42	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 42mm
TTAR35STAR44	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 44mm
TTAR35STAR46	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 46mm
TTAR35STAR48	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 48mm
TTAR35STAR50	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 50mm
TTAR35STAR52	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 52mm
TTAR35STAR54	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 54mm
TTAR35STAR56	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 56mm
TTAR35STAR58	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 58mm
TTAR35STAR60	TTA Rapid Star Drive 3.5mm Locking Cortical Screw Titanium 60mm

LeiLox Non Locking Cortical Screws 2.7mm

Star Drive T10. Self-holding (T10 Shaft from Rita Leibinger needed). Self-tapping with three flute cutting edge.

LEILOX NON LOCKING CORTICAL SCREWS 2.7MM

TTAR27NLSTAR16	TTA Rapid Star Drive 2.7mm Non Locking Cortical Screw Titanium 16mm
TTAR27NLSTAR18	TTA Rapid Star Drive 2.7mm Non Locking Cortical Screw Titanium 18mm
TTAR27NLSTAR20	TTA Rapid Star Drive 2.7mm Non Locking Cortical Screw Titanium 20mm
TTAR27NLSTAR22	TTA Rapid Star Drive 2.7mm Non Locking Cortical Screw Titanium 22mm
TTAR27NLSTAR24	TTA Rapid Star Drive 2.7mm Non Locking Cortical Screw Titanium 24mm
TTAR27NLSTAR26	TTA Rapid Star Drive 2.7mm Non Locking Cortical Screw Titanium 26mm
TTAR27NLSTAR28	TTA Rapid Star Drive 2.7mm Non Locking Cortical Screw Titanium 28mm
TTAR27NLSTAR30	TTA Rapid Star Drive 2.7mm Non Locking Cortical Screw Titanium 30mm
TTAR27NLSTAR32	TTA Rapid Star Drive 2.7mm Non Locking Cortical Screw Titanium 32mm
TTAR27NLSTAR34	TTA Rapid Star Drive 2.7mm Non Locking Cortical Screw Titanium 34mm

LeiLox Non Locking Cortical Screws 3.5mm

Star Drive T10. Self-holding (T10 Shaft from Rita Leibinger needed). Self-tapping with three flute cutting edge.

LEILOX NON LOCKING CORTICAL SCREWS 3.5MM

TTAR35NLSTAR16	TTA Rapid Star Drive 3.5mm Non Locking Cortical Screw Titanium 16mm
TTAR35NLSTAR18	TTA Rapid Star Drive 3.5mm Non Locking Cortical Screw Titanium 18mm
TTAR35NLSTAR20	TTA Rapid Star Drive 3.5mm Non Locking Cortical Screw Titanium 20mm
TTAR35NLSTAR22	TTA Rapid Star Drive 3.5mm Non Locking Cortical Screw Titanium 22mm
TTAR35NLSTAR24	TTA Rapid Star Drive 3.5mm Non Locking Cortical Screw Titanium 24mm
TTAR35NLSTAR26	TTA Rapid Star Drive 3.5mm Non Locking Cortical Screw Titanium 26mm
TTAR35NLSTAR28	TTA Rapid Star Drive 3.5mm Non Locking Cortical Screw Titanium 28mm
TTAR35NLSTAR30	TTA Rapid Star Drive 3.5mm Non Locking Cortical Screw Titanium 30mm
TTAR35NLSTAR32	TTA Rapid Star Drive 3.5mm Non Locking Cortical Screw Titanium 32mm
TTAR35NLSTAR34	TTA Rapid Star Drive 3.5mm Non Locking Cortical Screw Titanium 34mm

Screwdriver Shaft Star Drive T10



Self holding.

SCREWDRIVER SHAFT STAR DRIVE T10

TTARI28273510 Rapid Star Drive Screwdriver Shaft 10

TPLO Jig



TPLO JIG

TTARI28435500 Rapid TPLO Jig Small 2.7mm Screws

TTARI28435600 Rapid TPLO Jig Small 3.5mm Screws

Screwdriver Handle - Silicone



Silicone. Sterilisable up to 134°C

SCREWDRIVER HANDLE - SILICONE

TTAR247010200 Rapid Screwdriver Handle Silicone

Castroviejo Caliper



CASTROVIEJO CALIPER

TTARI7310508 Rapid Castroviejo Caliper

Screwdriver Handle - Torque Limiting

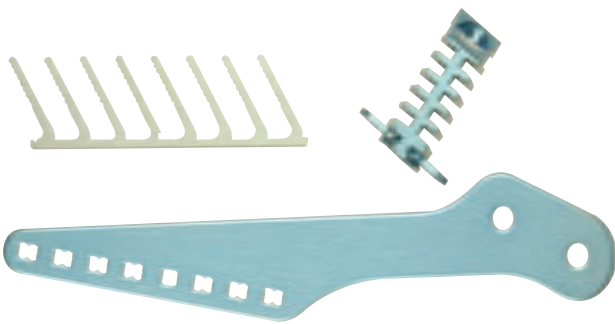


Torque 3Nm. Silicone. Sterilisable up to 134°C

SCREWDRIVER HANDLE - TORQUE LIMITING

TTAR247010400 Rapid Torque Limiting Screwdriver Silicone

Tibial Tuberosity Advancement (TTA)



The TTA procedure developed by Tepic and Montavon is designed to bring the tibial plateau to sit at 90° to the straight patella ligament. This effectively neutralises the shear forces within the stifle under loading, making the stifle stable.

This is achieved by advancing the tibial tubercle and stabilising the created defect using a titanium cage and plate. The cage is selected for both thickness and width. The implants are secured using titanium screws.

Titanium is very osteoconductive resulting in rapid healing. The use of stainless steel implants is not recommended.

TTA Procedure

The TTA procedure is best learnt by attending a recognised training course and Veterinary Instrumentation supports numerous training providers with equipment and implants.

Before attending a course it is useful to review the Veterinary Instrumentation step by step guide.

The free Step by Step guide is a photographic sequence of a TTA case beginning with assessment of the radiographs and following the procedure.

TTA PROCEDURE

BRTTA TTA Step by Step Guide

TTA Starter Kit



The TTA Starter Kit includes

Instruments

- TTA Drill Guide (4 Hole)
- TTA Drill Guide (8 Hole)
- TTA Fork Holder
- TTA Spreader + Inserts
- TTA Plate Bender
- TTA 2.4 Cross Head Screwdriver
- TTA Plate and Fork Overlay
- TTA Mallet
- Depth Gauge
- TTA Cage Forceps
- Block End Serrated Dissecting Forceps
- 2.5 Hex Head Screwdriver and Sleeve
- Premium Equipment Box
- 1.8mm, 2.0mm, 2.5mm Drill Bits - Hard

Implants

- One of each Cage (3, 4.5, 6, 7.5, 9, 10.5 & 12mm)
- One of each Fork
- One of each Plate
- 2.4mm Self Tapping Screws 12mm – 38mm 4 of each
- 2.7mm Self Tapping Screws 12mm – 28mm 3 of each
- 3.5mm Self Tapping Screws 16mm – 36mm 3 of each

The TTA Starter Kit gives a good saving over component price.

TTA STARTER KIT

TTAPREM TTA Starter Kit in a Premium Aluminium Box

TTA Instrumentation



The TTA procedure does require some essential instruments. Positioning of the fork and cage is impossible without the following instruments. The set is less expensive than buying the instruments individually.

TTA INSTRUMENTATION

TTA554	TTA Drill Guide (4 Hole)
TTA555	TTA Drill Guide (8 Hole)
TTA666	TTA Fork Holder
TTA444	TTA Spreader and 3, 6, 9, 12 & 15mm Inserts
TTA445	4.5, 7.5 & 10.5mm Insert Set
TTA333	TTA Plate Bender
TTA777	1.9mm Pins (Set of two)
TTAPFO	TTA Plate and Fork Overlay
TTATAN	Common Tangent TTA/ MMT Advancement Overlay
001323	TTA Mallet (140g)
TTAFCP	TTA Cage Forceps
SDHS35POM-C	2.5mm Hex Screwdriver and Sleeve
H090208	1.8mm Drill Bit Hard
H090102	2.0mm Drill Bit Hard
H090112	2.5mm Drill Bit Hard
DG242735	Depth Gauge for 2.4, 2.7 & 3.5 Screws

Premium TTA Case



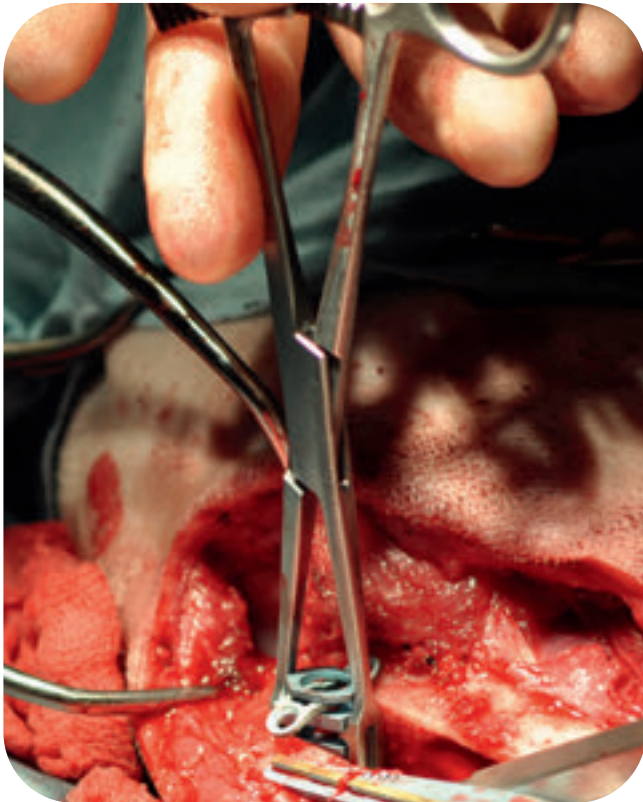
Please note the box is supplied empty – contents for illustration only

Storage and autoclave case for TTA equipment and implants. Dedicated trays fitted for standard TTA equipment, with spaces for other useful items such as a small mallet, implants, and including a screw rack with space for 2.4, 2.7 and 3.5mm screws. The outer box is constructed of aluminium, with removable filters top and bottom. Internal racks are stainless steel. See Premium Boxes accessories in General Surgery for filters.

PREMIUM TTA CASE

TTABOX Premium TTA Case (Box and Insert only)

TTA Cage Forceps



Manipulating the TTA cage into the correct position can be an awkward part of the procedure, particularly the smaller sizes. The TTA Cage Forceps grasp the cage firmly along the spine allowing it to be extracted from the case and placed into the tibial crest osteotomy.

TTA CAGE FORCEPS

TTAFCP TTA Cage Forceps

TTA Mallet



The TTA Fork needs to be gently tapped home for maximum stability. The 140 gram Mallet is the ideal weight.

TTA MALLET

001323 TTA Mallet 140g 155mm

TTA Spinlock Reduction Forceps



Photo Alex Li

Increasing repair stability and reducing healing times can be achieved by compression of the distal tibial tubercle to the tibial shaft. The Spinlock Reduction Forceps are the right size and have the correct degree of spread for most TTA procedures.

TTA SPINLOCK REDUCTION FORCEPS

001245SL TTA Spinlock Reduction Forceps 180mm

TTA Saw Guide



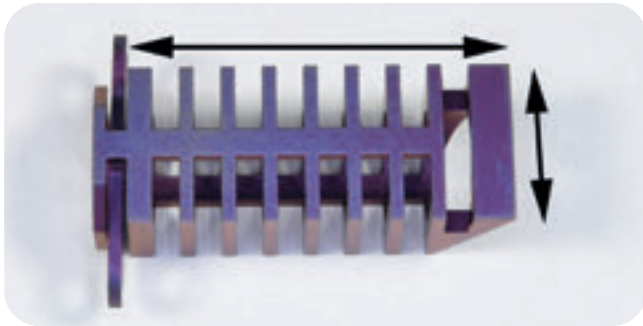
The TTA saw guide is useful where the surgeon would prefer to use a guide which can be positioned correctly to maintain the position and plane of the cut, allowing concentration on the saw. Secured in place with standard fragment forceps, the guide is removed for the final freehand curve at the distal end of the osteotomy. Suitable for both right and left leg.

TTA SAW GUIDE

TTA999 TTA Saw Guide

TTA Implants

TTA Cages



TTA CAGES TITANIUM

- TTAC310** Cage 3 x 10mm Titanium Screw 2.4mm
- TTAC313** Cage 3 x 13mm Titanium Screw 2.4mm
- TTAC316** Cage 3 x 16mm Titanium Screw 2.4mm
- TTAC4512** Cage 4.5 x 12mm Titanium Screw 2.4mm
- TTAC4515** Cage 4.5 x 15mm Titanium Screw 2.4mm
- TTAC4518** Cage 4.5 x 18mm Titanium Screw 2.4mm
- TTAC616** Cage 6 x 16mm Titanium Screw 2.4mm
- TTAC619** Cage 6 x 19mm Titanium Screw 2.4mm
- TTAC622** Cage 6 x 22mm Titanium Screw 2.4mm
- TTAC7513** Cage 7.5 x 13mm Titanium Screw 2.4mm
- TTAC7516** Cage 7.5 x 16mm Titanium Screw 2.4mm
- TTAC7519** Cage 7.5 x 19mm Titanium Screw 2.4mm
- TTAC919** Cage 9 x 19mm Titanium Screw 2.4mm
- TTAC922** Cage 9 x 22mm Titanium Screw 2.4mm
- TTAC925** Cage 9 x 25mm Titanium Screw 2.4mm
- TTAC10519** Cage 10.5 x 19mm Titanium Screw 2.4mm
- TTAC10522** Cage 10.5 x 22mm Titanium Screw 2.4mm
- TTAC10525** Cage 10.5 x 25mm Titanium Screw 2.4mm
- TTAC1222** Cage 12 x 22mm Titanium Screw 2.4mm
- TTAC1225** Cage 12 x 25mm Titanium Screw 2.4mm
- TTAC1228** Cage 12 x 28mm Titanium Screw 2.4mm
- TTAC13522** Cage 13.5 x 22mm Titanium Screw 2.4mm
- TTAC13525** Cage 13.5 x 25mm Titanium Screw 2.4mm
- TTAC13528** Cage 13.5 x 28mm Titanium Screw 2.4mm
- TTAC1522** Cage 15 x 22mm Titanium Screw 2.4mm
- TTAC1525** Cage 15 x 25mm Titanium Screw 2.4mm
- TTAC1528** Cage 15 x 28mm Titanium Screw 2.4mm
- TTAC1531** Cage 15 x 31mm Titanium Screw 2.4mm

TTA Plates



TTA PLATES TITANIUM

- TTAP2** Plate 2 Hole Titanium Screw 2.4mm
- TTAP3** Plate 3 Hole Titanium Screw 2.4 + 2.7mm
- TTAP4** Plate 4 Hole Titanium Screw 2.4 + 2.7mm
- TTAP5** Plate 5 Hole Titanium Screw 2.7mm
- TTAP6** Plate 6 Hole Titanium Screw 2.7 + 3.5mm
- TTAP7** Plate 7 Hole Titanium Screw 3.5mm
- TTAP8** Plate 8 Hole Titanium Screw 3.5mm

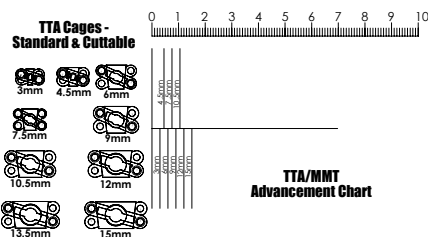
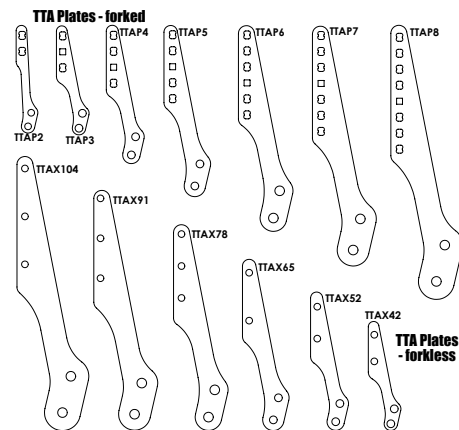
TTA Forks



TTA FORK TITANIUM

- TTAF2** Fork 2 Prong Titanium
- TTAF3** Fork 3 Prong Titanium
- TTAF4** Fork 4 Prong Titanium
- TTAF5** Fork 5 Prong Titanium
- TTAF6** Fork 6 Prong Titanium
- TTAF7** Fork 7 Prong Titanium
- TTAF8** Fork 8 Prong Titanium

TTA Acetate



Scaled profiles on page 355.

TTA ACETATE

- TTAPFO** Traditional TTA/ MMT Advancement Overlay
- TTATAN** Common Tangent TTA/ MMT Advancement Overlay

Forkless TTA Plates



An alternative to the traditional forked plates. Secured using 2.4mm screws in the tibial crest, after the osteotomy and advancement have been made. Distal screws are secured using screws as appropriate. The rest of the technique is as per standard TTA.

Advantages:

- Position of the plate on the tibial crest and tibial diaphysis not fixed until after the osteotomy and advancement have been made – avoids difficult diaphyseal screw placement where the distal screws are too caudal on the tibia. Problem in small breeds and if this is missed in planning.
- Tibial crest screws can be angled if needed
- Screw length of tibial crest screws can be individual selected for better fit
- Less screw holes in tibial crest than fork holes, helping reduce risk of tibial crest fracture

A starter set of forkless plates (one of each) is available at a good discount over component costs.

FORKLESS TTA PLATES

TTAX42	Forkless TTA Plate (same length as TTAP3) 2.4+2.7 screw
TTAX52	Forkless TTA Plate (same length as TTAP4) 2.4+2.7 screw
TTAX65	Forkless TTA Plate (same length as TTAP5) 2.7 screw
TTAX78	Forkless TTA Plate (same length as TTAP6) 2.7+3.5 screw
TTAX91	Forkless TTA Plate (same length as TTAP7) 3.5 screw
TTAX104	Forkless TTA Plate (same length as TTAP8) 3.5 screw
TTAXSET	Forkless TTA Plate Set - one of each size

Forkless Plate Forceps



Variant of the plate holding drill guide forceps design developed for thin TTA plates. Hold the plate in position allowing the pilot hole to be drilled through the guide in the correct position, even after the osteotomy has been made.

FORKLESS TTA PLATE FORCEPS

TTAXFCP	Forkless TTA Plate Forceps (145mm)
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TTA Cuttable Cages



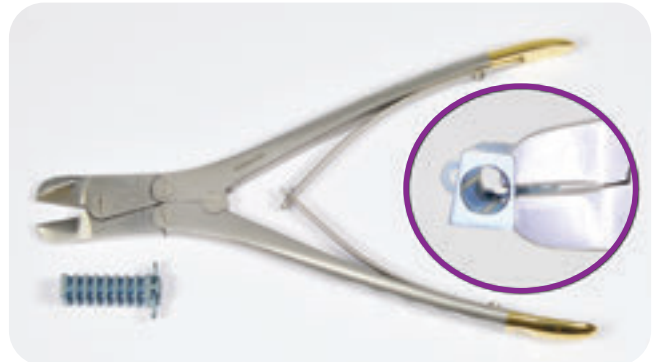
Cuttable cages can be trimmed in 3mm increments, to cover a larger range of patients with a reduced inventory.

Also available as a set of cages (one of each size) with a free cutter.

TTA CUTTABLE CAGES

TTACUT316	Cuttable Cage 3 x 16mm
TTACUT4518	Cuttable Cage 4.5 x 18mm
TTACUT622	Cuttable Cage 6 x 22mm
TTACUT7522	Cuttable Cage 7.5 x 22mm
TTACUT926	Cuttable Cage 9 x 26mm
TTACUT10526	Cuttable Cage 10.5 x 26mm
TTACUT1228	Cuttable Cage 12 x 28mm
TTACUT13528	Cuttable Cage 13.5 x 28mm
TTACUT1532	Cuttable Cage 15 x 32mm
TTACUTI	Cuttable Cage Set (9) with FREE Cage Cutters

TTA Cuttable Cage Cutters

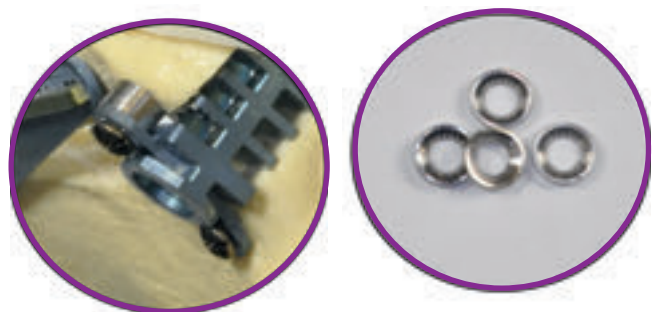


TTA cage cutters, which have narrow jaws designed to fit between the fins of cuttable cages. These cutters are only for TTA cages – not suitable for other implants due to the specially designed slim jaws.

TTA CUTTABLE CAGE CUTTERS

TTACACUT	TTA Cuttable Cage Cutter
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TTA Washers

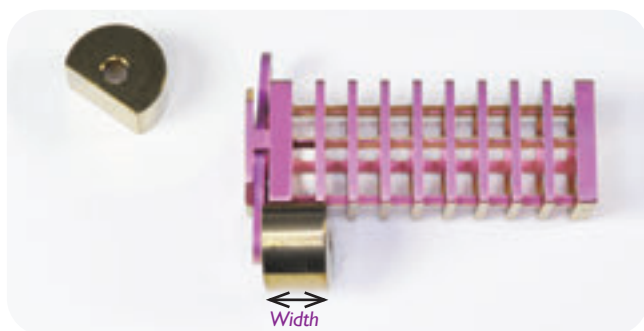


Stackable titanium washers. Permit adjustments in 1mm increments.

TTA WASHERS - TITANIUM

PW24TI	2.4mm TTA Washer - Titanium
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TTA Spacers



Placed under either cranial or caudal cage lugs to help re-align the quadriceps mechanism in cases of concurrent patellar luxation while performing the TTA procedure. Suggested maximum tibial tuberosity movement is 50%.

Although more expensive individually than washers, spacers may result in a more stable construct.

TTA SPACERS TITANIUM

TTASP2	TTA Spacer Titanium 2mm
TTASP4	TTA Spacer Titanium 4mm
TTASP6	TTA Spacer Titanium 6mm
TTASP8	TTA Spacer Titanium 8mm

Drill Bits - Standard Length - Round Shank

DRILL BITS - STANDARD LENGTH - ROUND SHANK

	Diameter	Overall length	Flute length
H090208	1.8mm	110mm	25mm
H090102	2.0mm	110mm	30mm
H090112	2.5mm	120mm	30mm

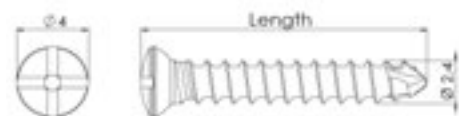
Titanium Screws

Titanium Screws and Plates are very commonly used in man particularly for maxillofacial repairs. The most important benefit in this application is that Titanium does not interfere with MRI scans.

Compared to stainless steel Titanium is lighter and much more osteo compatible. The major application in veterinary orthopaedics is in conjunction with the TTA cruciate procedure.

Please note 2.4mm Screws have a Cruciate Head.

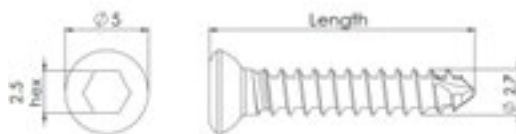
2.4mm Titanium Screws - Cruciate Head



TITANIUM SCREWS 2.4MM CRUCIATE HEAD 1.8MM PILOT

TICS2408	Titanium 2.4 Self Tapping Cortical Screw 8mm
TICS2410	Titanium 2.4 Self Tapping Cortical Screw 10mm
TICS2412	Titanium 2.4 Self Tapping Cortical Screw 12mm
TICS2414	Titanium 2.4 Self Tapping Cortical Screw 14mm
TICS2416	Titanium 2.4 Self Tapping Cortical Screw 16mm
TICS2418	Titanium 2.4 Self Tapping Cortical Screw 18mm
TICS2420	Titanium 2.4 Self Tapping Cortical Screw 20mm
TICS2422	Titanium 2.4 Self Tapping Cortical Screw 22mm
TICS2424	Titanium 2.4 Self Tapping Cortical Screw 24mm
TICS2426	Titanium 2.4 Self Tapping Cortical Screw 26mm
TICS2428	Titanium 2.4 Self Tapping Cortical Screw 28mm
TICS2430	Titanium 2.4 Self Tapping Cortical Screw 30mm
TICS2432	Titanium 2.4 Self Tapping Cortical Screw 32mm
TICS2434	Titanium 2.4 Self Tapping Cortical Screw 34mm
TICS2436	Titanium 2.4 Self Tapping Cortical Screw 36mm
TICS2438	Titanium 2.4 Self Tapping Cortical Screw 38mm
TICS2440	Titanium 2.4 Self Tapping Cortical Screw 40mm

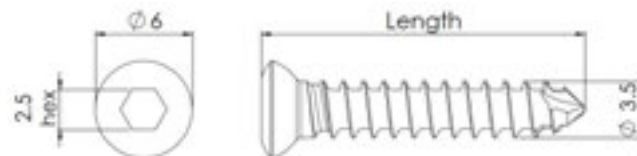
2.7mm Titanium Screws - Hexagonal Head



TITANIUM SCREWS 2.7MM HEX HEAD 2.0MM PILOT

TICS2706	Titanium 2.7 Self Tapping Cortical Screw 6mm
TICS2708	Titanium 2.7 Self Tapping Cortical Screw 8mm
TICS2710	Titanium 2.7 Self Tapping Cortical Screw 10mm
TICS2712	Titanium 2.7 Self Tapping Cortical Screw 12mm
TICS2714	Titanium 2.7 Self Tapping Cortical Screw 14mm
TICS2716	Titanium 2.7 Self Tapping Cortical Screw 16mm
TICS2718	Titanium 2.7 Self Tapping Cortical Screw 18mm
TICS2720	Titanium 2.7 Self Tapping Cortical Screw 20mm
TICS2722	Titanium 2.7 Self Tapping Cortical Screw 22mm
TICS2724	Titanium 2.7 Self Tapping Cortical Screw 24mm
TICS2726	Titanium 2.7 Self Tapping Cortical Screw 26mm
TICS2728	Titanium 2.7 Self Tapping Cortical Screw 28mm
TICS2730	Titanium 2.7 Self Tapping Cortical Screw 30mm
TICS2732	Titanium 2.7 Self Tapping Cortical Screw 32mm
TICS2734	Titanium 2.7 Self Tapping Cortical Screw 34mm
TICS2736	Titanium 2.7 Self Tapping Cortical Screw 36mm
TICS2738	Titanium 2.7 Self Tapping Cortical Screw 38mm
TICS2740	Titanium 2.7 Self Tapping Cortical Screw 40mm

3.5mm Titanium Screws - Hexagonal Head



TITANIUM SCREWS 3.5MM HEX HEAD 2.5MM PILOT

TICS3514	Titanium 3.5 Self Tapping Cortical Screw 14mm
TICS3516	Titanium 3.5 Self Tapping Cortical Screw 16mm
TICS3518	Titanium 3.5 Self Tapping Cortical Screw 18mm
TICS3520	Titanium 3.5 Self Tapping Cortical Screw 20mm
TICS3522	Titanium 3.5 Self Tapping Cortical Screw 22mm
TICS3524	Titanium 3.5 Self Tapping Cortical Screw 24mm
TICS3526	Titanium 3.5 Self Tapping Cortical Screw 26mm
TICS3528	Titanium 3.5 Self Tapping Cortical Screw 28mm
TICS3530	Titanium 3.5 Self Tapping Cortical Screw 30mm
TICS3532	Titanium 3.5 Self Tapping Cortical Screw 32mm
TICS3534	Titanium 3.5 Self Tapping Cortical Screw 34mm
TICS3536	Titanium 3.5 Self Tapping Cortical Screw 36mm
TICS3538	Titanium 3.5 Self Tapping Cortical Screw 38mm
TICS3540	Titanium 3.5 Self Tapping Cortical Screw 40mm

Screwbox for Titanium TTA Screws

SCREWBOX FOR TITANIUM TTA SCREWS

SHTTA242735 TTA Screwbox for 2.4mm, 2.7mm & 3.5mm Titanium Screws

TTA RAPID® (Patented)



Tibial Tuberosity Advancement (TTA) as a technique for the surgical management of cranial cruciate ligament insufficiency has gained increasing acceptance and popularity in recent years. As we learn more, efforts are being made to simplify the technique, to make it more user friendly and overcome some of the pitfalls of the original technique.

Developed in collaboration with Rita Leibinger Medical and Dr Yves Samoy, University of Ghent, TTA Rapid is one of the newer developments in both implant technology and technique.

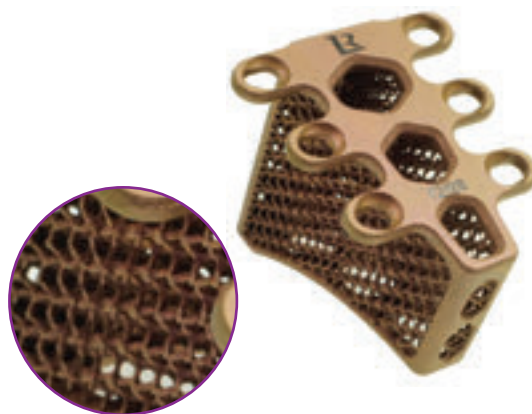
The Implants



The manufacture of TTA Rapid cages has only been made possible with advances in materials and manufacturing technology. The cages are made by an additive manufacturing (AM) 3D printing process known as selective laser sintering (SLS). The process is interesting to watch. Although other materials can be used in the process, TTA Rapid cages start life as a very fine, commercially pure titanium powder. A very thin layer of titanium powder is deposited on the working bed of the SLS machine and a modified print head carrying a high intensity laser is used to selectively melt the powder to bond (sinter) regions together. As further layers of powder are applied and the laser sintering process repeated, a solid three dimensional structure begins to form within the 'sand-pit' of metal powder. Electron beam melting (EBM) is a similar procedure that uses an electron beam instead of a laser.

Once the full structure has been created, the cages are separated from the powder and various chemical and other finishing processes are performed to leave the cages in their final, implantable state.

Through this process, shapes can be created that would either be impossible to produce using more conventional technologies or cost prohibitive. In the case of TTA Rapid, a very porous honeycomb titanium lattice with a modulus similar to that of cancellous bone is generated permitting very rapid bony ingrowth to occur. Titanium is also very biocompatible, MRI compatible and typically needs to be inoculated with 10 times as many infectious units for an implant associated infection to develop when compared to stainless steel.

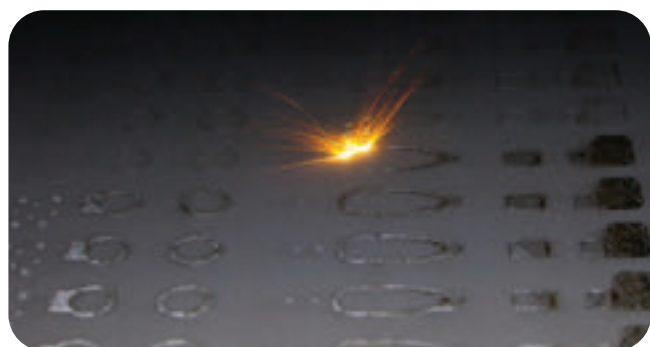


The lattice found in the TTA Rapid cages is bound on 4 sides by an anatomically shaped, rigid shell of the same material with one side carrying lugs with screw holes in them. With the lattice, cage and screw lugs being one piece, the cages are very stable in situ.

The constructs are so stable that auxiliary implants such as plates, wires, forks and staples are rarely indicated. This has a number of benefits:

- Reduced morbidity and biological cost that may be associated with the dissection and placement of additional implants.
- Reduced potential for cold conduction with superficially sited metallic implants.
- Fewer additional holes created in the tibial diaphysis which may contribute to crack propagation and failure of the tibial shaft.
- Metals of different electro-potentials are avoided in the same construct. Theoretically this reduces the potential for galvanic corrosion to occur (all components are titanium).
- Simplified inventory management.
- Potential time savings in the placement of implants.

Caution: TTA Rapid patients are often subjectively more comfortable in their early post-operative recovery than many patients undergoing other osteotomy surgeries. TTA Rapid still involves a major osteotomy and both appropriate patient selection and appropriate client education for post-operative management are indicated.



TTA Rapid Starter Kit

Instrument and selected implant set, supplied in basket type containers with dedicated racks. Implant set contains commonly used sizes as listed below.



The Kit contains:

Instrument Tray - Complete with new L-Shaped Saw guide.

Implant Tray containing

6mm x 16mm Cage x 1	10.5mm x 22mm Cage x 1
7.5mm x 16mm Cage x 1	10.5mm x 25mm Cage x 1
7.5mm x 19mm Cage x 1	12mm x 22mm Cage x 1 (8 cages in total)
9mm x 19mm Cage x 1	
9mm x 22mm Cage x 1	

Screws

1 x 8mm	4 x 22mm	2 x 34mm
2 x 10mm	4 x 24mm	2 x 36mm
4 x 12mm	4 x 26mm	2 x 38mm
4 x 14mm	4 x 28mm	1 x 40mm
4 x 16mm	4 x 30mm	(54 Screws in total)
4 x 20mm	4 x 32mm	

2 x 2.5ml Nanopaste

Starter Kit price is discounted by over 10% compared to component price.

TTA RAPID STARTER KIT

TTARNEWSTARTKIT TTA Rapid Starter Kit

TTA RAPID PREMIUM INSTRUMENT AND IMPLANT KIT

TTARNEWPREMALL TTA Rapid Premium Instrument and Implant Kit
TTARNEWPREMIMP TTA Rapid Premium Implant Kit
TTARNEWPREMINST TTA Rapid Premium Instrument Kit

TTA RAPID INSTRUMENT AND IMPLANT TRAYS

TTARI32500000/A TTA Rapid Implant Tray Supplied Empty
TTARI32500010/A TTA Rapid Instrument Tray Supplied Empty.

TTA Rapid Conversion Kit



Kit contains:

New L Shaped Saw Guide

Drill Guide Pin

TTA Rapid Lever-Spreader Double-ended 3mm and 9mm

TTA Rapid Lever-Spreader Double-ended 6mm and 12mm

TTA RAPID CONVERSION KIT

TTARNEWMIN TTA Rapid Conversion Kit - New Technique

TTA Rapid Screw Rack



TTA Rapid Screw Rack designed for holding TTA Rapid Standard 2.4mm Titanium Screws from 6mm to 40mm in length or TTA Rapid 'Petite' 2.0mm Titanium Screws from 6mm in length.

Please note supplied empty.

TTA RAPID SCREW RACK

TTAR2103624 TTA Rapid Screw Rack - Standard for 2.4mm Screws for 6 - 40mm in length

TTARI500520 TTA Rapid Screw Rack - 'Petite' for 2.0mm Screws for 6mm to 20mm in length

TTA Rapid Accessories

TTA RAPID ACCESSORIES

TTARI44101010 TTA Rapid K Wire Single Trochar Tip 1.2mm x 100mm
TTARI44101510 TTA Rapid K Wire Single Trochar Tip 1.5mm x 100mm
TTARI44102510 TTA Rapid K Wire Single Trochar Tip 2.5mm x 100mm
TTARI48008018 TTA Rapid 1.8mm Twist Drill Bit Round Shaft
TTARI48008020 TTA Rapid 2.0mm Drill Bit Round Shaft
TTARI48008030 TTA Rapid 3.0mm Drill Bit Round Shaft
TTARI48008118 TTA Rapid Twist Drill 1.8mm 125/ 25mm AO Shaft
TTARI48008120 TTA Rapid Twist Drill 2.0mm AO Shaft
TTARI48012030 TTA Rapid Twist Drill 3.0mm 110/ 85mm AO Shaft

TTA Rapid® Implants

TTA Rapid Cages - Standard

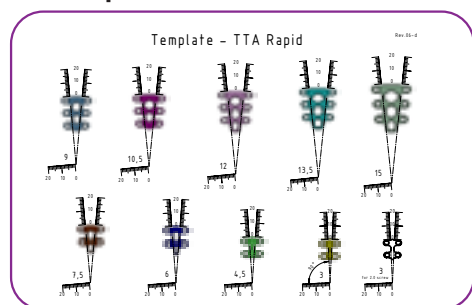


For use with 2.4mm TTA Rapid Screws.

TTA RAPID CAGES TITANIUM

TTAR38	TTA Rapid Cage 3/8 Titanium
TTAR310	TTA Rapid Cage 3/10 Titanium
TTAR313	TTA Rapid Cage 3/13 Titanium
TTAR316	TTA Rapid Cage 3/16 Titanium
TTAR459	TTA Rapid Cage 4.5/9 Titanium
TTAR4512	TTA Rapid Cage 4.5/12 Titanium
TTAR4515	TTA Rapid Cage 4.5/15 Titanium
TTAR4518	TTA Rapid Cage 4.5/18 Titanium
TTAR613	TTA Rapid Cage 6/13 Titanium
TTAR616	TTA Rapid Cage 6/16 Titanium
TTAR619	TTA Rapid Cage 6/19 Titanium
TTAR622	TTA Rapid Cage 6/22 Titanium
TTAR7513	TTA Rapid Cage 7.5/13 Titanium
TTAR7516	TTA Rapid Cage 7.5/16 Titanium
TTAR7519	TTA Rapid Cage 7.5/19 Titanium
TTAR7522	TTA Rapid Cage 7.5/22 Titanium
TTAR916	TTA Rapid Cage 9/16 Titanium
TTAR919	TTA Rapid Cage 9/19 Titanium
TTAR922	TTA Rapid Cage 9/22 Titanium
TTAR925	TTA Rapid Cage 9/25 Titanium
TTARI0516	TTA Rapid Cage 10.5/16 Titanium
TTARI0519	TTA Rapid Cage 10.5/19 Titanium
TTARI0522	TTA Rapid Cage 10.5/22 Titanium
TTARI0525	TTA Rapid Cage 10.5/25 Titanium
TTARI1219	TTA Rapid Cage 12/19 Titanium
TTARI1222	TTA Rapid Cage 12/22 Titanium
TTARI1225	TTA Rapid Cage 12/25 Titanium
TTARI1228	TTA Rapid Cage 12/28 Titanium
TTARI13519	TTA Rapid Cage 13.5/19 Titanium
TTARI13522	TTA Rapid Cage 13.5/22 Titanium
TTARI13525	TTA Rapid Cage 13.5/25 Titanium
TTARI13528	TTA Rapid Cage 13.5/28 Titanium
TTARI1519	TTA Rapid Cage 15/19 Titanium
TTARI1522	TTA Rapid Cage 15/22 Titanium
TTARI1525	TTA Rapid Cage 15/25 Titanium
TTARI1528	TTA Rapid Cage 15/28 Titanium

TTA Rapid Acetate



Scaled profiles on page 356.

TTA RAPID ACETATE

TTARACE	TTA Rapid Acetate
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TTA Rapid 2.4mm Titanium Screws - 2.0mm Hex Head

TTA RAPID SCREWS 2.4MM TITANIUM WITH 2.0MM HEX HEAD

TTARSC2406	TTA Rapid 2.4mm Screw Titanium 6mm
TTARSC2408	TTA Rapid 2.4mm Screw Titanium 8mm
TTARSC2410	TTA Rapid 2.4mm Screw Titanium 10mm
TTARSC2412	TTA Rapid 2.4mm Screw Titanium 12mm
TTARSC2414	TTA Rapid 2.4mm Screw Titanium 14mm
TTARSC2416	TTA Rapid 2.4mm Screw Titanium 16mm
TTARSC2418	TTA Rapid 2.4mm Screw Titanium 18mm
TTARSC2420	TTA Rapid 2.4mm Screw Titanium 20mm
TTARSC2422	TTA Rapid 2.4mm Screw Titanium 22mm
TTARSC2424	TTA Rapid 2.4mm Screw Titanium 24mm
TTARSC2426	TTA Rapid 2.4mm Screw Titanium 26mm
TTARSC2428	TTA Rapid 2.4mm Screw Titanium 28mm
TTARSC2430	TTA Rapid 2.4mm Screw Titanium 30mm
TTARSC2432	TTA Rapid 2.4mm Screw Titanium 32mm
TTARSC2434	TTA Rapid 2.4mm Screw Titanium 34mm
TTARSC2436	TTA Rapid 2.4mm Screw Titanium 36mm
TTARSC2438	TTA Rapid 2.4mm Screw Titanium 38mm
TTARSC2440	TTA Rapid 2.4mm Screw Titanium 40mm

NanoPaste Bone Substitutes

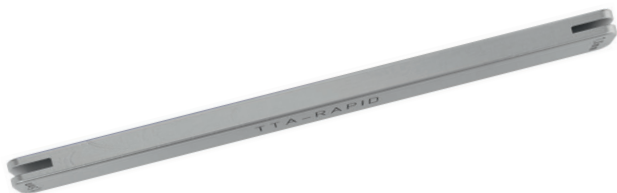


Hydroxyapatite paste. 2.5ml is adequate for cages up to 10.5mm. To completely fill the osteotomy and lattice of larger cages, a 5ml size is also available.

NANOPASTE

PAS2.5	NanoPaste Syringe 2.5ml
PAS5	NanoPaste Syringe 5ml

TTA Rapid Bending Iron



This is used for contouring the cage ears for accurate placement and is common to the original and modified techniques. The use of other devices to create this contour is likely to result in damage to the cage ears.

TTA RAPID BENDING IRON

TTARI32402000 TTA Rapid Bending Iron

TTA Rapid L-Shaped Saw Guide



L shaped saw guide for the TTA Rapid technique.

TTA RAPID L-SHAPED SAW GUIDE

TTARI32404000 TTA Rapid L-shaped Saw Guide

TTARI32403010 TTA Rapid Drill Guide Pin

TTARI32404100 TTA Rapid L-shaped 'Petite' Saw Guide

TTA Rapid Lever Spreader



These are used to open the osteotomy incrementally to the required width. Available in two double-ended sizes. The spreaders measure 1mm wider than their stated size to permit insertion of a cage beneath them.

TTA RAPID LEVER SPREADER

TTARI32400013 TTA Rapid Lever Spreader Double-ended 3mm & 9mm Broad

TTARI32401013 TTA Rapid Lever Spreader Double-ended 6mm & 12mm Broad

TTARI32401513 TTA Rapid Lever Spreader Double-ended 13.5mm & 15mm Broad

TTA Rapid Universal Spreader



Permits incremental opening of the osteotomy in a very controlled manner. 160mm length.

TTA RAPID UNIVERSAL SPREADER

TTARI32408016 TTA Rapid Universal Spreader

TTA Rapid Screwdriver Handle – AO Coupling



A high quality modular screw-driver with a familiar coupling and rotating base-cap.

TTA RAPID SCREWDRIVER HANDLE - AO COUPLING

TTARI0386300 TTA Rapid Screwdriver Handle - AO Coupling

TTA Rapid Screwdriver Inserts



TTA RAPID SCREWDRIVER INSERTS

TTAR20342420 TTA Rapid Screwdriver Insert for 2.4mm Hex Screws AO Fitting 100mm Long

TTAR20346424 TTA Rapid Screw Holding Sleeve for 2.4mm Hex Screws

Instrumentation for the Maquet Hole TTA Rapid technique are still available whilst stocks lasts. Please call our Vet Tech Team on 0345 130 9596 to check availability or email info@vetinst.com

TTA Rapid Cage Holding Forceps - Angled



Used to remove cages from implant trays.

TTA RAPID CAGE HOLDING FORCEPS - ANGLED

TTARI64005016 TTA Rapid Cage Holding Forceps - Angled - 160mm Long

TTA Rapid Depth Gauges



TTA RAPID DEPTH GAUGES

TTARI64242735 TTA Rapid Depth Gauge for 2.4mm Screws 150mm Long - reads to 40mm

TTARI64152020 TTA Rapid 'Petite' Depth Gauge for 2.0mm Screws

TTA Rapid Drill Sleeve Guide for 2.4mm Screws



Used for accurate positioning of pilot holes for 2.4mm screws.

TTA RAPID DRILL SLEEVE GUIDE FOR 2.4MM SCREWS & 2.0MM MAQUET HOLE

TTARI64007024 TTA Rapid Drill Sleeve Guide for 2.4mm Screws

Additional useful instruments for TTA Rapid

Adjustable Bone Saw



Useful for completing/ squaring off the osteotomy, this saw comes complete with five, fine chrome plated blades. Blade length is adjustable from 40mm to 100mm. Handle length 130mm. Blade length 155mm.

ADJUSTABLE BONE SAW

001000 Adjustable Bone Saw c/w 5 Fine Blades

Reduction Forceps with Spinlock



REDUCTION FORCEPS WITH SPINLOCK

001203 Very Large Fragment Forceps with Spinlock 215mm Long

001245SL Large Fragment Forceps with Spinlock 180mm Long

Plate Holding/ Drill Guide Forceps



Used to snug the TTA Rapid cage ears against the medial cortex prior to drilling pilot holes.

PLATE HOLDING/ DRILL GUIDE FORCEPS

001225 1.5/2.0 Plate Holding/ Drill Guide Forceps 140mm Long 'Petite' TTA Rapid

001226 2.4/2.7 Plate Holding/ Drill Guide Forceps 145mm Long Standard TTA Rapid

TTA Rapid® Petite

Petite is aimed at smaller patients such as cats and smaller dogs, where 3mm advancement is sufficient but 2.4 screws in the tibial tubercle are not appropriate. Petite uses 2mm screws, and has dedicated instrumentation including saw guide. Note the saw guide only accepts thin blades.



TTA Rapid Cages - Petite

For use with 2.0mm TTA Rapid Screws.

TTA RAPID CAGES PETITE TITANIUM

- TTARI32002308** TTA Rapid Cage Titanium 3/08
- TTARI32002310** TTA Rapid Cage Titanium 3/10
- TTARI32002313** TTA Rapid Cage Titanium 3/13

TTA Rapid Screws 2.0mm Titanium - Hex Head

TTA RAPID SCREWS 2.0MM TITANIUM WITH 1.5MM HEX HEAD

- TTARSC2006** TTA Rapid 2.0mm Screw Titanium 6mm
- TTARSC2008** TTA Rapid 2.0mm Screw Titanium 8mm
- TTARSC2010** TTA Rapid 2.0mm Screw Titanium 10mm
- TTARSC2012** TTA Rapid 2.0mm Screw Titanium 12mm
- TTARSC2014** TTA Rapid 2.0mm Screw Titanium 14mm
- TTARSC2016** TTA Rapid 2.0mm Screw Titanium 16mm
- TTARSC2018** TTA Rapid 2.0mm Screw Titanium 18mm
- TTARSC2020** TTA Rapid 2.0mm Screw Titanium 20mm
- TTARSC2022** TTA Rapid 2.0mm Screw Titanium 22mm
- TTARSC2024** TTA Rapid 2.0mm Screw Titanium 24mm
- TTARSC2026** TTA Rapid 2.0mm Screw Titanium 26mm
- TTARSC2028** TTA Rapid 2.0mm Screw Titanium 28mm
- TTARSC2030** TTA Rapid 2.0mm Screw Titanium 30mm

TTA Rapid Petite Screwdriver Insert & Sleeve



TTA RAPID PETITE SCREWDRIVER, INSERT & SLEEVE

- TTAR20DRIVER** TTA Rapid 2.0mm Screwdriver, Insert and Sleeve
- TTARI28312181** TTA Rapid Petite Screw Holding Sleeve (replacement)

TTA Rapid Petite Depth Gauge



TTA RAPID PETITE DEPTH GAUGE

- TTARI64152020** TTA Rapid Petite Depth Gauge for 2.0mm Screws

TTA Rapid L-Shaped Petite Saw Guide

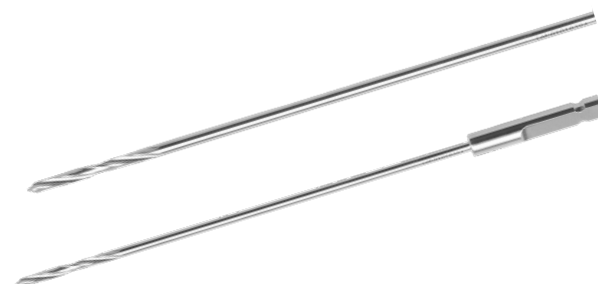


Using the modified technique without a Maquet hole, this guide is used for the TTA Rapid Petite system for advancements of 3mm.

TTA RAPID L-SHAPED PETITE SAW GUIDE

- TTARI32404100.** TTA Rapid L-shaped Petite Saw Guide

TTA Rapid Petite Twist Drill



TTA RAPID PETITE TWIST DRILL

- TTARI48008015** TTA Rapid Twist Drill Bit 1.5mm Round Shaft
- TTARI48008115** TTA Rapid Twist Drill Bit 1.5mm AO Shaft

Tiny TTA Rapid®

Tiny TTA RAPID is designed for tiny animals – especially cats, toy dogs and dogs with short legs needing a wide advancement. The tiny sawguide allows short osteotomies.

Tiny TTA Rapid Set



The Tiny TTA Rapid Tiny contains:

- 1 Sterilisation Tray with Lid
- 1 of each Tiny TTA Rapid Cage (12 total)
- 1 of each 2, 3 & 4mm Patella Spacer (6 total)
- 1 Rapid Luxation Plate Petite
- 5 of each 1.5mm Screw (6-20mm 40 total)
- 5 of each 2.0mm Screw (6-26mm 55 total)
- 1 Tibia Tappet Petite
- 1 Plate Holding Forceps
- 1 Tiny Sawguide with Pin & K-Wire
- 1 Depth Gauge
- 2 Drills (1.1 & 1.5mm)
- 2 Screw Driver Shafts (T6 & T8)
- 1 Screwdriver Handle
- 1 Drill Guide

TINY TTA RAPID SET

TTAR132650000 Tiny TTA Rapid Set

Tiny TTA Rapid Cages



TINY TTA RAPID CAGES

TTAR2/6	Tiny TTA Rapid Cage 2/6 Titanium
TTAR2/8	Tiny TTA Rapid Cage 2/8 Titanium
TTAR2/10	Tiny TTA Rapid Cage 2/10 Titanium
TTAR3/7	Tiny TTA Rapid Cage 3/7 Titanium
TTAR3/9	Tiny TTA Rapid Cage 3/9 Titanium
TTAR3/11	Tiny TTA Rapid Cage 3/11 Titanium
TTAR45/8	Tiny TTA Rapid Cage 4/8 Titanium
TTAR45/10	Tiny TTA Rapid Cage 4/10 Titanium
TTAR45/12	Tiny TTA Rapid Cage 4/12 Titanium
TTAR6/9	Tiny TTA Rapid Cage 6/9 Titanium
TTAR6/11	Tiny TTA Rapid Cage 6/11 Titanium
TTAR6/13	Tiny TTA Rapid Cage 6/13 Titanium

TTA Rapid Star Drive 1.5mm Screw Titanium



TTA RAPID STAR DRIVE 1.5MM SCREW TITANIUM

TTAR15STAR05	TTA Rapid Star Drive 1.5mm Screw Titanium 5mm
TTAR15STAR06	TTA Rapid Star Drive 1.5mm Screw Titanium 6mm
TTAR15STAR07	TTA Rapid Star Drive 1.5mm Screw Titanium 7mm
TTAR15STAR08	TTA Rapid Star Drive 1.5mm Screw Titanium 8mm
TTAR15STAR09	TTA Rapid Star Drive 1.5mm Screw Titanium 9mm
TTAR15STAR10	TTA Rapid Star Drive 1.5mm Screw Titanium 10mm
TTAR15STAR12	TTA Rapid Star Drive 1.5mm Screw Titanium 12mm
TTAR15STAR14	TTA Rapid Star Drive 1.5mm Screw Titanium 14mm
TTAR15STAR16	TTA Rapid Star Drive 1.5mm Screw Titanium 16mm
TTAR15STAR18	TTA Rapid Star Drive 1.5mm Screw Titanium 18mm
TTAR15STAR20	TTA Rapid Star Drive 1.5mm Screw Titanium 20mm

TTA Rapid Star Drive 2.0mm Screw Titanium



TTA RAPID STAR DRIVE 2.0MM SCREW TITANIUM

TTAR20STAR05	TTA Rapid Star Drive 2.0mm Screw Titanium 5mm
TTAR20STAR06	TTA Rapid Star Drive 2.0mm Screw Titanium 6mm
TTAR20STAR07	TTA Rapid Star Drive 2.0mm Screw Titanium 7mm
TTAR20STAR08	TTA Rapid Star Drive 2.0mm Screw Titanium 8mm
TTAR20STAR09	TTA Rapid Star Drive 2.0mm Screw Titanium 9mm
TTAR20STAR10	TTA Rapid Star Drive 2.0mm Screw Titanium 10mm
TTAR20STAR12	TTA Rapid Star Drive 2.0mm Screw Titanium 12mm
TTAR20STAR14	TTA Rapid Star Drive 2.0mm Screw Titanium 14mm
TTAR20STAR16	TTA Rapid Star Drive 2.0mm Screw Titanium 16mm
TTAR20STAR18	TTA Rapid Star Drive 2.0mm Screw Titanium 18mm
TTAR20STAR20	TTA Rapid Star Drive 2.0mm Screw Titanium 20mm

TTA Rapid Screwdriver Shafts for 1.5, 2.0 & 2.4mm



TTA RAPID SCREWDRIVER SHAFTS FOR 1.5, 2.0 & 2.4MM

TTAR128152015	TTA Rapid S/Driver Shaft For 1.5 Star Drive 100mm AO Fitting
TTAR128152020	TTA Rapid S/Driver Shaft For 2.0/2.4 Star Drive 100mm AO Fit

TTA Rapid L Shape Saw Guide for Tiny Cages



TTA RAPID L SHAPE SAW GUIDE FOR TINY CAGES

TTAR132404200	TTA Rapid L Shape Saw Guide For Tiny Cages
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Twist Drills



TWIST DRILLS

TTAR148008111	Twist Drill 1.1mm AO 140/30mm AO-Shaft
TTAR148008011	Twist Drill 1.1mm Standard Straight Shank
TTAR148008115	Twist Drill 1.5mm AO 140/30mm AO-Shaft
TTAR148008015	Twist Drill 1.5mm Standard Straight Shank

Rapid Luxation Plating System



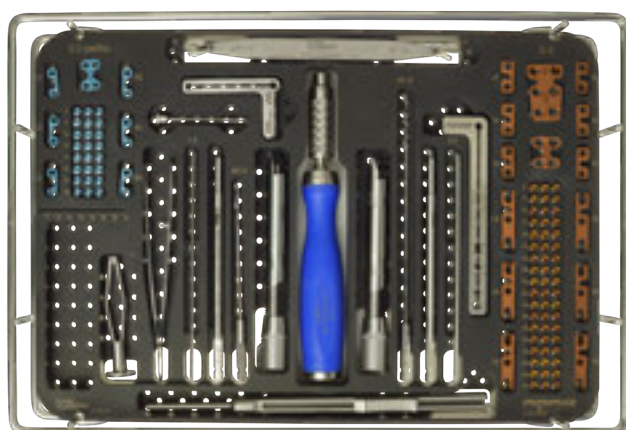
Correction of a patella luxation without TTA operation.

This technique is suitable for dogs which do not have a cruciate ligament rupture but suffer from a patella luxation.

For further information please contact our Vet Tech Team on 0345 130 9596 or email info@vetinst.com



Rapid Luxation Set



The Rapid Luxation Set contains:

- 1 x Sterilisation Tray with Lid
- 3 x of each 2.0mm Screw (6-20mm) (24 in total)
- 3 x of each 2.4mm Screw (6-40mm) (54 in total)
- 1 x of each Rapid Luxation Plate (3 pieces in total)
- 1 x of each Patella Spacers (18 pieces in total)
- 1 x Large Sawguide with Pin & K-Wire
- 1 x Tiny Sawguide with Pin & K-Wire
- 1 x Tibia Tappet - Petite
- 1 x Tibia Tappet - Standard
- 1 x Screwdriver Handle
- 1 x Screw Driver Shaft 2.4 + 2.0 with Holding Sleeve
- 1 x Plate Holding Forceps
- 1 x Depth Gauge
- 1 x Drill Guide
- 1 x Drills 1.5 & 1.8

RAPID LUXATION SET

TTARI32800000 Rapid Luxation Set

Patella Luxation Plate - Titanium



PATELLA LUXATION PLATE - TITANIUM

I32-8200-01 Rapid Luxation Plate 6 Hole Titanium 1.5mm Thick for 2.4mm Screws

I32-8200-02 Rapid Luxation Plate 4 Hole Titanium 1mm Thick for 2.4mm Screws

I32-8200-03 Rapid Luxation Plate Petite 4 Hole Titanium 1mm Thick for 2mm Screws

TTA Rapid® Tibial Tappet & Patellar Luxation Spacers

Patellar Luxation in combination with TTA Rapid

Especially but not only with small dogs patella luxation issues can come along with a cranial cruciate ligament rupture. Even lower grade patella luxation can become more severe with a torn cruciate ligament.

The rotational stability which is provided by the cruciate ligament does not exist any longer. This may result in a luxating patella which did not show any clinical signs before CCL rupture.

With the new Rita Leibinger patella spacers the patella luxation can be corrected when a cruciate ligament repair surgery has to be done anyways.

With the new Tibia Tappet the tibia tuberosity can easily be transposed after the TTA Rapid cage is inserted into the open partial osteotomy. The Patella Spacers can then easily be placed between the screw holes of the cage and the bone.

Cage and Spacer can be fixed with the 2.4mm TTA Rapid screws.

Identical to the TTA Rapid Cage also the Patella Spacers are made of purest Titanium for best biocompatibility.

TTA Rapid Patellar Luxation Spacers



TTA RAPID PATELLAR LUXATION SPACERS 3 HOLES

TTARI32801002L TTA Rapid Patellar Luxation Spacer 3 Holes 2mm Height Left

TTARI32801002R TTA Rapid Patellar Luxation Spacer 3 Holes 2mm Height Right

TTARI32801004L TTA Rapid Patellar Luxation Spacer 3 Holes 4mm Height Left

TTARI32801004R TTA Rapid Patellar Luxation Spacer 3 Holes 4mm Height Right

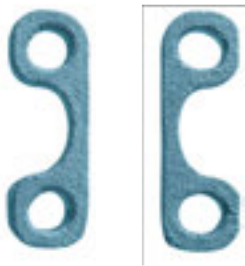
TTARI32801006L TTA Rapid Patellar Luxation Spacer 3 Holes 6mm Height Left

TTARI32801006R TTA Rapid Patellar Luxation Spacer 3 Holes 6mm Height Right



TTA RAPID PATELLAR LUXATION SPACERS 2 HOLES

TTARI32802002L	TTA Rapid Patellar Luxation Spacer 2 Holes 2mm Height Left
TTARI32802002R	TTA Rapid Patellar Luxation Spacer 2 Holes 2mm Height Right
TTARI32802003L	TTA Rapid Patellar Luxation Spacer 2 Holes 3mm Height Left
TTARI32802003R	TTA Rapid Patellar Luxation Spacer 2 Holes 3mm Height Right
TTARI32802004L	TTA Rapid Patellar Luxation Spacer 2 Holes 4mm Height Left
TTARI32802004R	TTA Rapid Patellar Luxation Spacer 2 Holes 4mm Height Right



TTA RAPID PATELLAR LUXATION SPACERS FOR PETITE/ TINY CAGE SIZES

TTARI32803001L	TTA Rapid Petite Tiny Pat Lux Spacer 2 Holes 1mm Height Left
TTARI32803001R	TTA Rapid Petite Tiny Pat Lux Spacer 2 Holes 1mm Height Right
TTARI32803002L	TTA Rapid Petite Tiny Pat Lux Spacer 2 Holes 2mm Height Left
TTARI32803002R	TTA Rapid Petite Tiny Pat Lux Spacer 2 Holes 2mm Height Right
TTARI32803003L	TTA Rapid Petite Tiny Pat Lux Spacer 2 Holes 3mm Height Left
TTARI32803003R	TTA Rapid Petite Tiny Pat Lux Spacer 2 Holes 3mm Height Right
TTARI32803004L	TTA Rapid Petite Tiny Pat Lux Spacer 2 Holes 4mm Height Left
TTARI32803004R	TTA Rapid Petite Tiny Pat Lux Spacer 2 Holes 4mm Height Right

TTA Rapid Tibial Tappet & TTA Rapid Petite Tibial Tappet



The Tappet is to simplify the transposition of the tibia tuberosity and easy application of the patella luxation spacers.



Function

- The Tappet is put into either the cranial or caudal screw holes (top and centre screw hole for the 3-hole cages for size 9 and up) of the TTA Rapid cage depending if there is a medial or lateral patella luxation.
- Then the tappet can be rotated, it fixates itself in the screw holes of the cage and transposes the tibia crest to the medial or lateral side. The scale (in mm) on the top of the instruments shows exactly how far tibia crest is transposed.
- Then the spacer will be placed between the cage and the bone and after this the tappet can be removed.

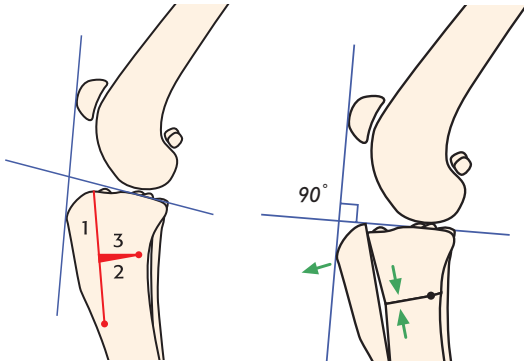
TTA RAPID TIBIAL TAPPET

TTARI32407000	TTA Rapid Tibial Tappet
TTARI32407100	TTA Rapid Petite Tiny Tibial Tappet

Triple Tibial Osteotomy

A cruciate management technique combining tibial plateau levelling and tibial tubercle advancement.

Based on the work of Slocum, Tepic and Montavon, the Triple Tibial Osteotomy has been developed by Dr Warrick Bruce to overcome some of the problems encountered in the Slocum TPLO technique, the Montavon TTA (Tibial Tubercle Advancement) and the closing wedge TPLO technique.



Some of the problems include:

Work by Tepic suggests that the tibial plateau should be perpendicular to the patella ligament to minimise shear strain at the CrCL. The Slocum technique does not always address this issue.

The bi-radial Slocum blade is inefficient and difficult to resharpen resulting in the generation of significant amounts of heat which leads to delayed healing and other complications.

The Montavon TTA technique creates a large defect in the cranial tibia which requires an expensive titanium cage and plate to prevent collapse during the healing phase.

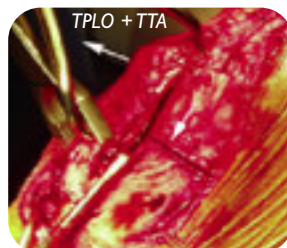
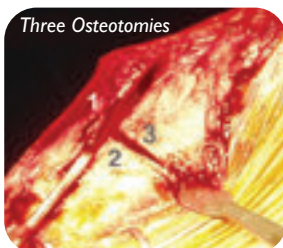
The closing wedge TPLO shortens the tibia and creates a defect in the tibia which has to be protected from the pull of the straight patella ligament by a figure of eight wire.

The TTO technique deals with all of these problems:

A long osteotomy is made in the tibial crest to allow the tibial tubercle to move forward. The angle correction is made by making a small wedge osteotomy in the caudal tibia which, when closed creates a small tibial tubercle advancement.



Case Warrick Bruce



Multi Saw

One of the advantages of the TTO (and TWO) procedure is that it uses simple flat blades which are easily replaced when they become blunt. The TTO uses a saw guide to direct the saw very accurately ensuring a 'good fit' once the osteotomy is complete. Surgical air or battery driven saws are ideal for the procedure but the Multi Saw with a sterile shroud and convertor works very well. Make sure that the blade selected fits through the saw guide (cut thickness less than 1.0mm)

TTO Starter Kits



An Enhanced Kit with the Improved TTO Osteometer and the new Clasper is also available. Both Kits are available with or without the Multi Saw Surgical Kit. All Starter Kits are discounted by at least 10% compared to the component price.

TTO Basic Starter Set plus Multi Saw Kit contains:

- TTO Basic Instrument Set
- Very Large Fragment Forceps
- Tissue Protector 2.0mm
- 10 x TTO Plates (common sizes)
- Arthrodesis Wire (1.6mm x 10)
- Multi Saw Surgical Kit
- 2 x Sagittal Saw Blades
- Plate Overlay Acetate

TTO STARTER KITS

TTOBKIT	TTO Starter Set Basic
TTOAKIT	TTO Starter Set Enhanced
TTOBKITPOW	TTO Starter Set Basic plus Multi Saw Kit
TTOAKITPOW	TTO Starter Set Enhanced plus Multi Saw Kit

Triple Tibial Osteotomy Instrumentation

Some instrumentation is required to make the procedure easier and to minimise errors. Warrick Bruce's original instrument Set comprises a Saw Guide, Measuring/ marking Gauge (Osteometer) and a Bone Manipulation Device (Wedgie). The Saw Guide works with flat oscillating blades with a maximum cut thickness of 1mm (thickness at the teeth). See Chapter 9.

The original set (Code TTO008.) is very reasonably priced and offers the surgeon a very cost effective route to management of CrCL rupture by tibial plateau levelling surgery. Warrick's new, more sophisticated designs are shown below. Available as a Set (Code TTO009).



TTO INSTRUMENTATION

TTO008.	Basic TTO Instruments Kit (contains TTO006 TTO004 TTO002)
TTO006	Basic Osteometer
TTO004	Saw Cutting Guide (Standard 62mm)
TTO002	Wedgie Segment Manipulator
TTO004L	Saw Cutting Guide (Long 76mm)
BRTTO	TTO Step by Step Guide

TTO Instrumentation

Warrick Bruce has designed two new instruments to make the TTO procedure easier and to eliminate some of the practical difficulties encountered using the original instrumentation.

The new combined Osteometer and Saw Guide interlock to become a single instrument which is much easier to manage than the original two separate instruments. The thumbscrew locks the Osteometer onto the Saw Guide for secure accurate osteotomies. The Osteometer still has holes for fixation to the tibia using 1.6 arthrodesis wires.

Alternatively Warrick's second new instrument 'the Clasper' may be used to lock the osteometer onto the tibia prior to cutting. The 'Clasper' has an additional role in that it is used to replace the kern bone holders in the original technique. The 'Clasper' grasps the tibia crest prior to closure and incorporates locating holes for the very large fragment forceps to lock into.

The 'Wedgie', used for manipulating the three osteotomies remains unchanged.

TTO INSTRUMENTATION BY WARRICK BRUCE

TTO011	Combination Osteometer/ Sawguide
TTO014	TTO Clasper
TTO002	Wedgie Segment Manipulator
TTO009	Enhanced TTO Instrument Set (all of above)

TTO Plates

The Standard TTO Plate is a cloverleaf TPLO Plate. Being positioned over the caudal 2/3 of the tibia the plate selected is typically a little smaller than is the case with a wedge TPLO. Use the free plate overlay for the final selection. Thicker plates are harder to contour and a selection of pre-contoured plates are available.

Scaled plate profiles on page 353.

TPLO/ TPLO BY WEDGE OSTEOTOMY PLATES

TPLO202026	2.0mm DCP 26mm Overall Length
TPLO202031	2.0mm DCP 31mm Overall Length
TPLO242434	2.4mm DCP 34mm Overall Length
TPLO242441	2.4mm DCP 41mm Overall Length
TPLO272739	2.7mm DCP 39mm Overall Length
TPLO272745	2.7mm DCP 45mm Overall Length
TPLO273539	2.7/3.5 DCP 39mm Overall Length Allows use of 3.5 cancellous screw in head
TPLO273545	2.7/3.5 DCP 45mm Overall Length 2.5mm Thick
TPLO353555	3.5mm DCP 55mm Overall Length
TPLO353557	3.5mm DCP 57mm Overall Length Heavy Duty
TPLO353559	3.5mm DCP 59mm Overall Length
TPLO353562	3.5mm DCP 62mm Overall Length
TPLO353565	3.5mm DCP 65mm Overall Length
TPLO353577	3.5mm DCP 77mm Overall Length
TPLO353577X	3.5mm DCP 77mm Overall Length Extra Shaft Hole
TPLO353579	3.5mm DCP 79mm Overall Length Heavy Duty
TPLO354579	3.5/4.5 DCP 79mm Overall Length Heavy Duty Allows 4.5 screws in head
TPLO35456579	79mm Overall Length Heavy Duty Allows 4.5/6.5 screws in head
TPLO45659030	4.5mm DCP 90mm Overall Length Will accept 6.5 cancellous screws in head 3.0mm Thick
TPLO45659035	4.5mm DCP 90mm Overall Length Will accept 6.5 cancellous screws in head 3.5mm Thick
TPLO45659045	4.5mm DCP 90mm Overall Length Will accept 6.5 cancellous screws in head 4.5mm Thick
TPLOO	Angle Finder & Plate Overlay

PRE CONTOURED TTO PLATES

TPLO353555PCR	3.5 mm Plate 55mm overall length Right
TPLO353555PCL	3.5 mm Plate 55mm overall length Left
TPLO353557PCR	3.5 mm Plate 57mm overall length Right
TPLO353557PCL	3.5 mm Plate 57mm overall length Left
TPLO353579PCR	3.5 mm Plate 79mm overall length Right
TPLO353579PCL	3.5 mm Plate 79mm overall length Left

TCO Clamp



An alternative to the Kern Bone Holding Clamp the TCO Clamp is lighter with a smaller lever arm. The effect of this is to reduce the likelihood of a TCO fracture. The TCO Clamp incorporates locating holes for the tips of the Very Large Fragment Forceps.

TCO CLAMP

TTO012	TCO Clamp 65mm
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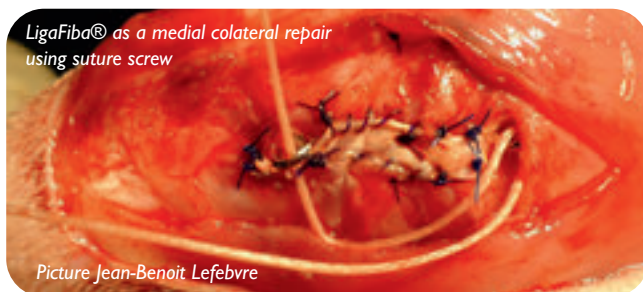
LigaFiba®

LigaFiba® is a new, extremely strong surgical suture material. It is composed entirely of Ultra High Molecular Weight Polyethylene, the same hard wearing material from which we make acetabular cups. Until now it has not been possible to spin it fine enough to produce flexible strands that are easily tied.

Weight for weight it is 15 x stronger than steel and 2.5 x stronger than nylon. It has very good abrasion characteristics which is important when used in hostile environments such as lateral sutures and hip toggles.

LigaFiba® is available in four breaking strains.

75lb (34kg)	<0.5mm in diameter	Dogs and cats <5kg
150lb (70kg)	0.6mm in diameter	Dogs up to 15kg
250lb (113kg)	1.0mm in diameter	Dogs 15 - 30kg
500lb (230kg)	1.6mm in diameter	Dogs over 30kg



Rose et al in Veterinary Surgery 41 (2012) 266-272 found that LigaFiba® out performed Fiber tape, FiberWire, Xgen Orthofiber and Mason Leader Line with respect to tensile strength, stiffness at failure, loading at elongation and resistance to cyclic elongation.

It is our experience that abrasion plays a significant part in most lateral suture failures but we do not have, as yet, comparable data on abrasion resistance.

We are confident that the Ultra High Molecular Weight Polyethylene composition of LigaFiba® gives it excellent abrasion resistance also.



LigaFiba® has a number of applications in veterinary orthopaedics and is available in a range of sterile presentations.

- Ligament and Tendon Repairs
- Cruciate Lateral Sutures
- Bone Tunnel Cruciate Procedures
- Hip Toggle Procedure

As a braided material the use of LigaFiba® requires strict attention to aseptic technique during implantation.

LigaFiba® Lateral Suture with Crimp Starter Kit



The LigaFiba® Lateral Suture With Crimp Starter Kit contains everything needed at a substantial discount.

The Kit contains the following:

- Compound Action Crimpers for LigaFiba®
- Heavy Duty Needle Driver
- 2 x 150lb LigaFiba® Lateral Suture with Crimp
- 2 x 250lb LigaFiba® Lateral Suture with Crimp
- 2 x 500lb LigaFiba® Lateral Suture with Crimp
- LigaFiba® Scissors

LIGAFIBA® LATERAL SUTURE WITH CRIMP STARTER KIT

LFLSCRSTARTER

LigaFiba® Lateral Suture with Crimp Starter Kit

LigaFiba® Lateral Button Suture with Crimp Starter Kit



The LigaFiba® Lateral Button Suture With Crimp Starter Kit contains everything needed at a substantial discount.

The Standard Kit contains:

- Compound Action Crimpers for LigaFiba®
- Heavy Duty Needle Driver
- 2 x 150lb LigaFiba® Lateral Button Suture with Crimp
- 2 x 250lb LigaFiba® Lateral Button Suture with Crimp
- 2 x 500lb LigaFiba® Lateral Suture Button with Crimp
- LigaFiba® Scissors

The Small Kit contains:

- Compound Action Crimpers for LigaFiba®
- Heavy Duty Needle Driver
- 2 x 75lb LigaFiba® Lateral Button Suture with Crimp
- 2 x 150lb LigaFiba® Lateral Button Suture with Crimp
- 2 x 250lb LigaFiba® Lateral Suture Button with Crimp
- LigaFiba® Scissors

LIGAFIBA® LATERAL TITANIUM BUTTON SUTURE WITH CRIMP STARTER KIT

LFLBSSTARTERTI

LigaFiba® Lateral Titanium Button Suture with Crimp Starter Kit - Standard

LFLBSSTARTERTI/S

LigaFiba® Lateral Titanium Button Suture with Crimp Starter Kit - Small

LigaFiba® Lateral Sutures with Crimp

LigaFiba® does knot securely but for maximum security requires 6 throws which creates a rather bulky knot. Crimping creates a secure, low profile, radio-dense join between the free ends of LigaFiba®. To make passing the LigaFiba® through the crimp a simple process the 25mm of LigaFiba® nearest the needle has been processed to minimise fraying. Always cut the lateral suture near the needle. Supplied sterile.

LIGAFIBA® LATERAL SUTURES WITH CRIMP

LFLSCR75	75lb LigaFiba® Lateral Suture (300mm) + Crimp
LFLSCR150	150lb LigaFiba® Lateral Suture (500mm) + Crimp
LFLSCR250	250lb LigaFiba® Lateral Suture (500mm) + Crimp
LFLSCR500	500lb LigaFiba® Lateral Suture (600mm) + Crimp
LFLSCR150/5	150lb LigaFiba® Lateral Suture (500mm) + Crimp Pack of 5
LFLSCR250/5	250lb LigaFiba® Lateral Suture (500mm) + Crimp Pack of 5
LFLSCR500/5	500lb LigaFiba® Lateral Suture (600mm) + Crimp Pack of 5
LFLSCRSET	5 of each LigaFiba® Lateral Suture + Crimp Pack (150, 250, 500lb) 15 in total

Double LigaFiba® Lateral Sutures with Crimp

The 500lb LigaFiba® is quite bulky and it is possible to use a double strand of 250lb LigaFiba® for dogs over 30kg(66lb) if preferred. This is available swaged onto standard straight and curved needles as a double strand, allowing both lines to be placed in one pass of the needle. Supplied sterile with 2 crimps.

DOUBLE LIGAFIBA® LATERAL SUTURES

LFLSCR250D	Double 250lb LigaFiba® Lateral Suture (500mm) with 2 Crimps
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LigaFiba® Lateral Sutures

Extreme strength, minimal stretch and good abrasion characteristics make LigaFiba® an ideal material for lateral sutures. The loop may be either tied or crimped at the end of the procedure. LigaFiba® for any given diameter is more than twice as strong as monofilament nylon. Lateral sutures are supplied sterile with size appropriate cruciate needle on one end and a straight round bodied needle at the other. Supplied Sterile.

LIGAFIBA® LATERAL SUTURES

LFLS75	75lb LigaFiba® Lateral Suture (300mm)
LFLS150	150lb LigaFiba® Lateral Suture (500mm)
LFLS250	250lb LigaFiba® Lateral Suture (500mm)
LFLS500	500lb LigaFiba® Lateral Suture (600mm)
LFLS150/5	150lb LigaFiba® Lateral Suture (500mm) - Pack of 5
LFLS250/5	250lb LigaFiba® Lateral Suture (500mm) - Pack of 5
LFLS500/5	500lb LigaFiba® Lateral Suture (600mm) - Pack of 5

Double LigaFiba® Lateral Suture

Double strand presentation with no crimps. Supplied sterile

DOUBLE LIGAFIBA® LATERAL SUTURES

LFLS250D	Double 250lb LigaFiba® Lateral Suture (500mm)
LFLS250D/5	Double 250lb LigaFiba® Lateral Suture (500mm) - Pack of 5

75lb (34kg) LigaFiba® Lateral Sutures



At less than 0.5mm in diameter the 75lb LigaFiba® is as strong as nylon 2.5 x as thick. Suitable for small dogs and cats weighing less than 5kg. LigaFiba® ties very well with minimal creep and a small soft knot. Alternatively a dedicated crimp may be used with our standard LigaFiba® Crimper 091135M.

75LB (34KG) LIGAFIBA® LATERAL SUTURES

- LFLS75** 75lb LigaFiba® Lateral Suture (300mm)
- LFLSCR75** 75lb LigaFiba® Lateral Suture (300mm) with Crimp
- LFLBS75TI** 75lb LigaFiba® Lateral Button Suture (300mm) with Button & Crimp

LigaFiba® Tendon and Ligament Sutures



LigaFiba® is available in sterile single lengths for use in conjunction with any suitable suture anchor system. LigaFiba® is so tough it is difficult to cut and will damage standard scissors. Use our special T.C. Scissors with a custom cutting edge.

LIGAFIBA®

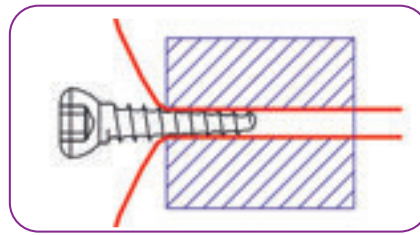
- LF150500** 150lb LigaFiba® x 500mm <15kg
- LF250600** 250lb LigaFiba® x 600mm 15 - 30kg
- LF500600** 500lb LigaFiba® x 600mm >30kg
- LFS140TC** LigaFiba® Scissors T.C. 145mm

A tendon repair suture is also available with a round bodied needle at either end.

LIGAFIBA®

- LFTRS150** 150lb LigaFiba® Tendon Repair Suture
- LFS140TC** LigaFiba® Scissors T.C. 145mm

LigaFiba® IsoToggle Locking Interference Screw



The Iso Toggle suture is an extra-capsular suture placed isometrically through bone tunnels. Placement of the tunnels is illustrated on a free CD. The LigaFiba® knots very well but there is now an alternative.

The Locking Interference Screw offers an alternative to tying over a button. The Screw has a tapered, soft profile thread which jams the LigaFiba® into the bone tunnel. The Screw may be partially introduced as a temporary measure to assess joint stability and range of movement. Once the surgeon is satisfied, the screw is driven home to lock the suture.

LIGAFIBA® ISO TOGGLE INTERFERENCE LOCKING SCREWS

- LFIS253518SS** Interference Screw 3.5 Stainless 18mm
- LFIS253518TI** Interference Screw 3.5 Titanium 18mm
- LFIS354523SS** Interference Screw 4.5 Stainless 23mm
- LFIS354523TI** Interference Screw 4.5 Titanium 23mm

Instruments

Lateral Suture Tension Device



This is the Standard Lateral Suture Tension Device in the USA. Ratchet based, it relies on the jaws pulling against crimps attached to the free ends of the loop. It is simple and effective but does require two extra crimps which are ultimately discarded. Remember, over tensioning loops creates as many problems as under tensioning.

LATERAL SUTURE TENSIONER

- 091158** Lateral Suture Tensioner 170mm

LigaFiba® Scissors



LigaFiba® is so tough it is difficult to cut and will damage standard scissors. Use our special T.C. Scissors with a custom cutting edge.

LIGAFIBA® SCISSORS

- LFS140TC** LigaFiba® Scissors T.C. 145mm

Compound Action Crimpers for LigaFiba®



The Compound Action Crimper delivers a pre-measured crimp with minimal effort. The jaw cut outs prevent over crimping. These Crimpers require the least effort of any VI Crimper available. The Compound Action Crimper is suitable for all crimps apart from the thin walled 10mm crimp for 50lb Nylon which suits the Standard Simple Action Crimper.

LIGAFIBA® COMPOUND ACTION CRIMPERS

091135M LigaFiba® Compound Action Crimpers 245mm

LigaFiba® Accessories

Drill Bits - Cannulated - Round Shank & AO Fit



For use with a Ø1.1mm guide wire for accurate placement of holes.

Round Shank

Round shank multi-use cannulated drill bits made from hardened stainless steel, suitable for use with a standard Jacobs chuck.

DRILL BITS - CANNULATED - ROUND SHANK

	Diameter (mm)	Overall length (mm)	Flute length (mm)
H090112CAN	2.5	130	25
H090104CAN	2.7	130	30
H090106CAN	3.5	130	35
090065	Guide Wire 1.1mm x 178mm - Pack of 10		

Quick release AO fit

Quick release multi-use cannulated drill bits made from hardened stainless steel, suitable for use with an AO style quick release chuck.

DRILL BITS - CANNULATED - AO FIT

	Diameter (mm)	Working length (mm)	Flute length (mm)
S090112CAN	2.5	105	25
S090104CAN	2.7	105	30
S090106CAN	3.5	105	35
090065	Guide Wire 1.1mm x 178mm - Pack of 10		

LigaFiba® Crimps



Spare crimps for LigaFiba®. Please note that only the LigaFiba® Crimper is powerful enough for LigaFiba® Crimps

LIGAFIBA® CRIMPS

- LFCRIMP75** Crimp for 75lb LigaFiba®
- LFCRIMP150** Crimp for 150lb LigaFiba®
- LFCRIMP250** Crimp for 250lb LigaFiba®
- LFCRIMP500** Crimp for 500lb LigaFiba®
- 091135M** LigaFiba® Compound Action Crimpers 245mm

Titanium Buttons



Titanium is very biocompatible and our range of Titanium Buttons has been loosely modelled on the familiar six sizes of UHMWPE Ormrod button we have been supplying for some time.

Despite being slightly lower profile, these resist higher peak loading than their UHMWPE equivalents.

Their overall diameters have been maintained to try and limit osteolysis and the subsequent subsidence that is occasionally seen with lower footprint buttons.

Their edges have been made as smooth as possible to reduce suture wear.

The titanium buttons will find use for ligament replacement/ joint embrocation procedures, especially around the hip and stifle.

TITANIUM BUTTONS

- TIBUT6H** Titanium Button 6mm 2 Holes
- TIBUT6S** Titanium Button 6mm 2 Slots
- TIBUT9H** Titanium Button 9mm 2 Holes
- TIBUT9S** Titanium Button 9mm 2 Slots
- TIBUT11H** Titanium Button 11mm 2 Holes
- TIBUT11S** Titanium Button 11mm 2 Slots

LigaFiba® Lateral Button Suture

LATERAL

MEDIAL

During the placement of standard lateral sutures there is a tendency for the proximal strand of the suture to drift up the straight patella ligament. This reduces the isometry of the suture and the suture can become intra-articular which is undesirable. Use of a toggle button at the proximal tibia bone tunnel keeps both strands of suture at the hole. Application is straight forward. The suture is passed around the fabella using the swaged on curved cruciate needle. The suture is then passed through the hole from lateral to medial and then back through the hole from medial to lateral. The suture is swaged onto a straight needle to facilitate this part of the procedure. The toggle button is placed into the loop on the medial surface and retained into position by pulling the loop tight from the lateral side.

The button prevents the suture from pulling through. The LigaFiba® suture is then tensioned and crimped in the usual way. Each pack includes the lateral suture, the correct number and size of crimp plus an appropriate Titanium button.

LigaFiba® Lateral Titanium Button Suture Starter Kits

The LigaFiba® Lateral Button Suture With Crimp Starter Kit contains everything needed at a substantial discount.

The Standard Kit contains:

- Compound Action Crimpers for LigaFiba®
- Heavy Duty Needle Driver
- 2 x 150lb LigaFiba® Lateral Button Suture with Crimp
- 2 x 250lb LigaFiba® Lateral Button Suture with Crimp
- 2 x 500lb LigaFiba® Lateral Suture Button with Crimp
- LigaFiba® Scissors

The Small Kit contains:

- Compound Action Crimpers for LigaFiba®
- Heavy Duty Needle Driver
- 2 x 75lb LigaFiba® Lateral Button Suture with Crimp
- 2 x 150lb LigaFiba® Lateral Button Suture with Crimp
- 2 x 250lb LigaFiba® Lateral Suture Button with Crimp
- LigaFiba® Scissors

LIGAFIBA® LATERAL TITANIUM BUTTON SUTURE WITH CRIMP STARTER KIT

LFLBSSTARTERTI LigaFiba® Lateral Titanium Button Suture/Crimp Starter Kit **Standard**

LFLBSSTARTERTIS LigaFiba® Lateral Titanium Button Suture/Crimp Starter Kit - Small

LigaFiba® Lateral Titanium Button Suture**LIGAFIBA® LATERAL TITANIUM BUTTON SUTURE**

LFLBS75TI	75lb LigaFiba® Lateral Button Suture Ti Button
LFLBS150TI.	150lb LigaFiba® Lateral Button Suture Ti Button
LFLBS250TI.	250lb LigaFiba® Lateral Button Suture Ti Button
LFLBS250DTI.	250lb LigaFiba® Lateral Button Suture Double/Ti Button
LFLBS500TI.	500lb LigaFiba® Lateral Button Suture Ti Button

LigaFiba® Iso Toggle Sutures

The Iso Toggle suture is placed via bone tunnels across the stifle at isometric points. The use of isometric points maximises the range of movement of the stifle and protects the suture from repeated stretching and abrasion. The suture is anchored over buttons on the medial side.

Available in all three sizes of LigaFiba®

150lb	Dogs up to 15kg
250lb	Dogs 15-30kg
500lb	Dogs over 30kg

The Iso Toggle Starter Kit contains:

- 2 x 250lb sutures
- 2 x 500lb sutures
- 1 x 2.5mm Antiskid Drill Bit
- 1 x 3.5mm Antiskid Drill Bit

LIGAFIBA® ISO TOGGLE SUTURES

LFITS150TI	150lb Iso Toggle Suture Set
LFITS250TI	250lb Iso Toggle Suture Set
LFITS500TI	500lb Iso Toggle Suture Set
LFISOKITTI	Iso Toggle Starter Kit (250 & 500lb) x 2 of each
BRLIGAISO	Step by Step Guide to LigaFiba® Iso Toggle Suture

Iso Toggle Aiming Device - Adjustable Drill Guide

Useful for the placement of the femoral bone tunnel which can be more challenging than the tibial tunnel. Adjustable Drill Guide with an appropriately sized drill slider may be used to pre-determine the line of the tunnel and offer protection of the soft tissues. The arms of the guide have sufficient 'spring' in them so if pre-stressed the guide is self retaining.

ADJUSTABLE DRILL GUIDE

ADJDG2035 Adjustable Drill Guide 175mm

Iso Toggle Consumables**ISO TOGGLE CONSUMABLES**

H090102AS	2.0mm Antiskid Drill (150lb) 100mm
H090112AS	2.5mm Antiskid Drill (250lb) 115mm
H090106SAS/L	3.5mm Antiskid Drill (500lb) 180mm
TIBUT6H	Titanium Button 6mm 2 Holes
TIBUT9H	Titanium Button 9mm 2 Holes
TIBUT9S	Titanium Button 9mm 2 Slots
TIBUT11H	Titanium Button 11mm 2 Holes
TIBUT11S	Titanium Button 11mm 2 Slots

Cranial Cruciate Ligament Lateral Suture System



Which Suture?

(Approx)	
STRENGTH	WEIGHT
50lb	10 - 15kg
80lb	15 - 20kg
100lb	20+kg
100lb x 2	40kg

These are guidelines only

Monofilament line used as a lateral suture (De Angelis style) is an accepted CCL treatment method. Crimping is strongly recommended as the knots formed tend to be large, often causing seroma reactions and pain due to soft tissue irritation.

Packs are supplied sterile. Autoclaving is not recommended as this reduces the strength and increases the elasticity of the material.

Double sutures are supplied swaged on

as a loop for use of the self-locking McKee/Miller knot (VCOT 1999;12:78-80) or with 2 crimps. One needle pass around the fabella allows two lines to be placed with less peri-fabellar damage.

Vi Starter Kits

Vi Lateral Suture Starter Kits

If you are new to the lateral suture system our kits represent the most economical means. All kits include a procedural DVD.



This Vi Starter Kit contains:

- 1 x Crimping Forceps (091135)
- 2 x 50lb Nylon Line with Swaged on Needle and Crimp (091155)
- 2 x 80lb Nylon Line with Swaged on Needle and Crimp (091156)
- 2 x 100lb Nylon Line with Swaged on Needle and Crimp (091157)

VI STARTER KITS

- 091154** CCL Suture System (Swaged on) Basic Kit Crimping Forceps
2 x each size nylon/needle/crimp sterile packs



This Vi Starter Kit contains:

- 1 x Compound Action Crimping Forceps (091135C)
- 2 x 50lb Nylon Line with Swaged on Needle and Crimp (091155)
- 2 x 80lb Nylon Line with Swaged on Needle and Crimp (091156)
- 2 x 100lb Nylon Line with Swaged on Needle and Crimp (091157)

VI STARTER KITS

- 091150** CCL Suture System (Swaged on) Compound Action Kit
2 x each size nylon/needle/crimp sterile packs



This Vi Starter Kit contains:

- 1 x Crimping Forceps (091135)
- 1 x Heavy Duty Needle Driver (091153)
- 2 x 50lb Nylon Line with Swaged on Needle and Crimp (091155)
- 2 x 80lb Nylon Line with Swaged on Needle and Crimp (091156)
- 2 x 100lb Nylon Line with Swaged on Needle and Crimp (091157)

VI STARTER KITS

- 091151** CCL Suture System (Swaged on) Basic Kit Plus
Forceps 2 x each size nylon/needle/crimp sterile packs
plus Heavy Duty Needleholders

Sterile CCL Packs

Sterile Leader Line + Crimp + Needle

Procedure packs containing suture, swaged on needle & crimp. Multipacks offer a good cost saving.

STERILE LEADER LINE + CRIMP + NEEDLE

- 091155 50lb nylon line x 500mm on swaged-on v. small fabella needle + 10mm crimp (sterile)
- 091156 80lb nylon line x 800mm on swaged-on small fabella needle + 12mm crimp (sterile)
- 091157 100lb nylon line x 800mm on swaged-on medium fabella needle + 12mm crimp (sterile)
- 091155/5 50lb nylon line x 500mm on swaged-on v. small fabella needle + 10mm crimp (sterile) 5 Pack
- 091156/5 80lb nylon line x 800mm on swaged-on small fabella needle + 12mm crimp (sterile) 5 Pack
- 091157/5 100lb nylon line x 800mm on swaged-on medium fabella needle + 12mm crimp (sterile) 5 Pack
- 091159 5 of each sterile CCL pack (50lb, 80lb and 100lb.) 15 in total

Double Leader Line + Needle + Crimps

For the application of double lines with the single pass of a needle

DOUBLE LEADER LINE + NEEDLE + CRIMPS

- 091165 50lb Double line (500mm x 2 as loop) on v small fabella needle plus 2 x 10mm crimps (sterile)
- 091166 80lb Double line (800mm x 2 as loop) on small fabella needle plus 2 x 12mm crimps (sterile)
- 091167 100lb Double line (800mm x 2 as loop) on medium fabella needle plus 2 x 12mm crimps (sterile)
- 091165/5 50lb Double line (500mm x 2 as loop) on v small fabella needle plus 2 x 10mm crimps 5 Pack (sterile)
- 091166/5 80lb Double line (800mm x 2 as loop) on small fabella needle plus 2 x 12mm crimps 5 Pack (sterile)
- 091167/5 100lb Double line (800mm x 2 as loop) on medium fabella needle plus 2 x 12mm crimps 5 Pack (sterile)
- 091169 5 of each sterile Double line CCL pack (50lb, 80lb and 100lb.) 15 in total (sterile)

Double Leader Line Loop on Needle



McKee/Miller Self Locking Knot

For use with McKee/Miller knot

DOUBLE LEADER LINE + NEEDLE

- 091160 50lb Double Line (500mm x 2 as loop) on v small fabella needle
- 091161 80lb Double Line (800mm x 2 as loop) on small fabella needle
- 091162 100lb Double Line (800mm x 2 as loop) on medium fabella needle

Sterile Leader Line + Crimp

For use with separate Fabella (Cruciate) Needles

STERILE LEADER LINE + CRIMP

- 091142 10mm Tube Crimp + 500mm x 50lb Nylon (Sterile Pack)
- 091137 12mm Tube Crimp + 800mm x 80lb Nylon (Sterile Pack)
- 091147 12mm Tube Crimp + 800mm x 100lb Nylon (Sterile Pack)

Sterile Nylon Leader Line

Also useful for other ligament replacement procedures, e.g. hip toggle, collateral ligament repair.

STERILE NYLON LEADER LINE

- 091141 500mm x 50lb Nylon (Sterile Pack)
- 091139 800mm x 80lb Nylon (Sterile Pack)
- 091148 800mm x 100lb Nylon (Sterile Pack)

Fabella (Cruciate) Needles

Most surgeons now use our sterile procedure packs which include swaged on needle and appropriate crimps. However, if you wish to sterilise your own nylon we offer appropriate needles. They are shown below approximately actual size. Bear in mind that leader line passed through a regular needle creates more damage as it passes through the femoro-fabella ligament. It is this ligament which is relied on for the holding power of the suture. Cruciate needles will pass through a hole created with a 2.7mm bone tunnel borer into the tibial crest.



FABELLA (CRUCIATE) NEEDLES

- 091144VS Fabella Needle Very Small - Pack of 6 Has Regular Eye
- 091144 Fabella Needle Small - Pack of 6 Has Regular Eye
- 091145 Fabella Needle Medium - Pack of 6 Has Regular Eye
- 091146 Fabella Needle Large - Pack of 6 Has Regular Eye

Crimps

CRIMPS

- 091140 10mm Tube Crimp for 50lb Line (Non Sterile)
- 091136 12mm Tube Crimp for 80lb + 100lb Line (Non Sterile)
- 091133 14mm Tube Crimp (Non Sterile) Suitable for Nylon over 100lb
- 091140/10 10mm Tube Crimp for 50lb Line (Non Sterile) 10 Pack
- 091136/10 12mm Tube Crimp for 80lb+100lb Line (Non Sterile) 10 Pack
- 091133/10 14mm Tube Crimp (Non Sterile) Suitable for Nylon over 100lb 10 Pack

Correct Crimping



✓ **Correct.**
Three evenly spaced crimps

✗ **Incorrect.**
Not enough crimps

✗ **Incorrect.** Crimps too close to end of tube

Instruments

Crimping Forceps



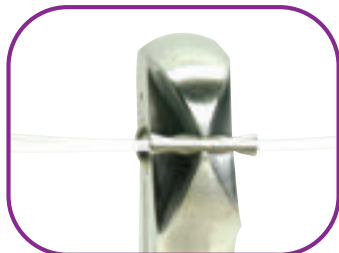
Basic simple action crimper for monofilament line only.

CRIMPING FORCEPS

091135

Crimping Forceps 195mm Long

Compound Action Crimper



Compound action crimper for monofilament line only, for both 10 and 12mm crimps. Delivers a more powerful crimp than the standard crimper. Although the angled head gives better visibility, this reduces the power of the action versus a straight crimper. See Ligafiba products for a straight compound crimper for 12mm crimps.

COMPOUND ACTION CRIMPER

091135C

Compound Action Crimper 230mm Long

Heavy Duty Needle Driver



The large needles used for cruciate lateral suture placement along with the force needed to pass them will damage standard needleholders. A dedicated heavy duty TC needle driver kept with the cruciate kit will prove more cost effective, and improve grip on the needle.

HEAVY DUTY NEEDLE DRIVER

091153

Heavy Duty Needle Driver with Tungsten Jaws 195mm Long

Bone Tunnel Borer



Handle design may vary from image shown see product code QRCH18

Used to create bone tunnels without setting up the power drill. Useful where single holes are required, for example tension band procedures.

BONE TUNNEL BORER

- 001070M** Bone Tunnel Borer 2mm Modular
- 001073M** Bone Tunnel Borer 2.5mm Modular
- 001071M** Bone Tunnel Borer 2.7mm Modular
- 001072M** Bone Tunnel Borer 3.5mm Modular

Countersinking Bone Tunnel Borer - Modular Set



Handle design may vary from image shown see product code QRCH18

In order to minimise the stress and abrasion of the nylon as it passes through the bone tunnel, countersinking the hole is advisable. To reduce time and instrumentation the self-countersinking instrument incorporates a countersink on the shaft.

COUNTERSINKING BONE TUNNEL BORER MODULAR SET

- 001075M** Bone Tunnel Borer with Countersink Modular Set

Loop Tension Devices

Prior to crimping it is suggested that the loop be tensioned sufficiently to eliminate the anterior draw, but not enough to create an outward rotation. This may be achieved by a number of methods:

- a) Partial crimp - see video, does not require additional instrumentation
- b) Simple tension device requiring a pair of gelpis 091132
- c) A dedicated loop tensioner 091132A

CCL Tensioning Device

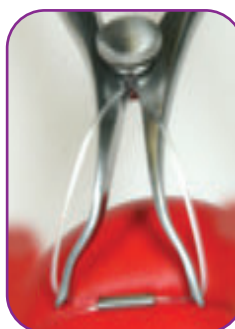
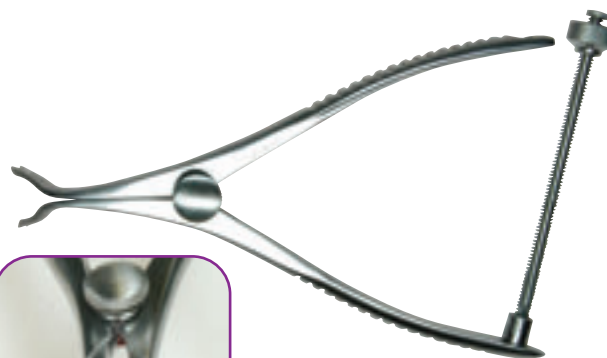


Design may vary slightly to image shown.

CCL LOOP TENSIONER

- 091132P** CCL Tensioning Device (Pair - Gelpis not included)

CCL Loop Tensioning



Leader line gripped by thumbscrew.

Does not require use of extra crimps - less wasteful.

Speed lock type action gives more 'feel' than ratchet type.

Jaws designed specifically for crimping system.

The literature tells us little about the correct tension. We recommend that the anterior draw is eliminated but that an outward rotation of the tibia is not created.

Remember over tensioning is as big a technical error as under tensioning!

Instructions on use on www.vetinst.com

CCL LOOP TENSIONER

- 091132A** CCL Loop Tensioner 175mm

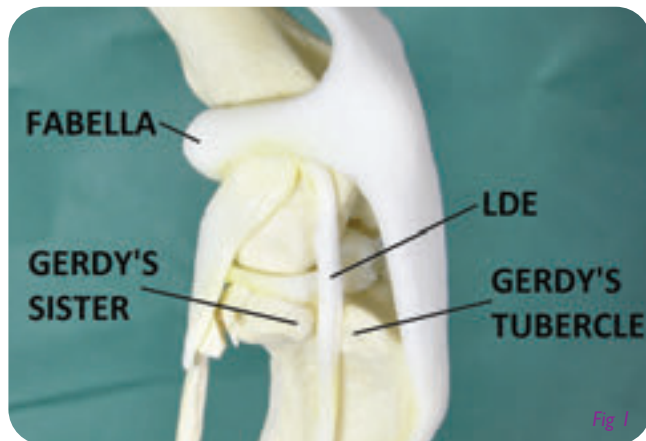
Nylon Lateral Button Suture

Mono-filament nylon remains the most commonly used material for lateral suture techniques.

Although less strong and more prone to premature failure than the braids, many surgeons prefer its handling characteristics. Its mono-filament nature makes it more forgiving to aseptic technique and its ability to stretch allows it to also be more forgiving to isometric placement. These can be very distinct advantages.

Despite this, maximising isometry should always be the aim as it will help limit the joint becoming excessively tight or excessively loose during flexion/extension, prolonging the cycle life of the prosthesis and its attachments as well as providing better mechanical function through a greater range of motion.

Isometry for lateral suture techniques is improved by using tibial anchorage points more caudal and more proximal than originally described. The most isometric anchorage points on the tibia are in the region of the Tubercle of Gerdy or Gerdy's Sister (the two prominences either side of the long digital extensor groove – see fig 1.). Although Gerdy's sister may provide the more isometric anchorage point of the two, the Tubercle of Gerdy itself may provide a more mechanically advantageous anchorage point in resisting cranial tibial thrust.

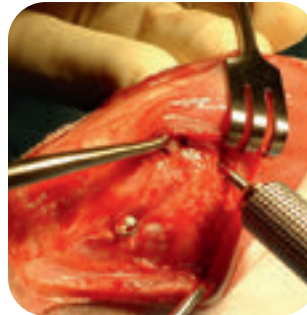


Using the most frequent method whereby the suture is placed through a tibial bone tunnel and then back in a loop under the patella ligament (see lateral suture technique) becomes progressively problematic as the tibial bone tunnel is placed more caudally. The suture assumes a more unpredictable path under the patella ligament on its return loop, which may then start to impinge on intra-articular structures including the lateral femoral condyle. If there are osteophytes present on the margin of the lateral trochlea ridge, the suture may rub over these during flexion/extension resulting in abrasion, bruising and pain.

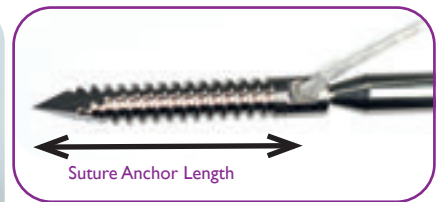
Lateral button techniques solve this problem as both ends of the line pass through the same bone tunnel emerging from the same hole on the lateral aspect of the tibia in the region of the Tubercle of Gerdy. This change in path makes the prosthesis less liable to rub against the lateral femoral condyle and the whole loop is kept more reliably extra-capsular. For a caudally positioned tibial bone tunnel, many surgeons find lateral button techniques easier to perform well compared with the standard lateral suture technique.

As with the more traditional lateral suture techniques, the anchorage position on the femoral aspect of the joint is the lateral fabella/fabello-tibial ligament. Where the lateral fabella/fabello-tibial ligament offers insufficient security, a second bone tunnel (a femoral bone tunnel) or a suture anchor may be used instead, providing a femoral anchorage point just cranial and just distal to the lateral fabella. The LigaFiba® Isotoggle are examples of techniques designed to specifically take advantage of combined tibial and femoral bone tunnels. Because of the increase in suture working length, low stretch braids are recommended for techniques involving two bone tunnels.

Suture anchor pins, suture screws are examples of some of the devices available for achieving suitable anchorage in the femoral condyle. For techniques using any of these anchors, the high strength braided materials are again recommended because of their increased abrasion resistance against the anchor.



Suture Screws



Suture Anchor Pins

Medical grade ultra-high-molecular-weight-polyethylene (UHMWPE) is the material of choice for the lateral buttons, providing excellent biocompatibility, strength and shock absorption, whilst being soft enough to minimise suture wear. These buttons are recommended for use with nylon techniques.

High strength braids such as LigaFiba® is stronger than the UHMWPE buttons and where very high peak or chronic loading is expected, such as with very heavy or active patients, where good isometry cannot be achieved or in select patients with steeper tibial plateau angles, they may fail and the stronger titanium buttons can be used instead (fig 2).

Which Suture?

(Approx)	
STRENGTH	WEIGHT
50lb	4 - 10kg
80lb	10 - 20kg
100lb	20-50kg

These are guidelines only

The Nylon Lateral Titanium Button Starter Kit contains:

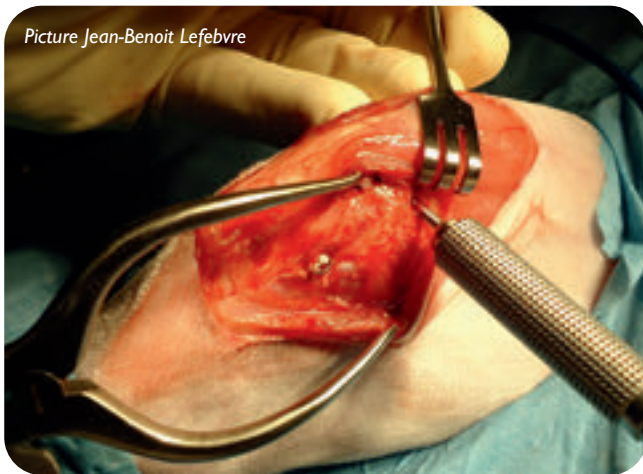
- 2 x 50lb Nylon Lateral Button Suture with Titanium Button
- 2 x 80lb Nylon Lateral Button Suture with Titanium Button
- 2 x 100lb Nylon Lateral Button Suture with Titanium Button
- 1 x Crimping Forceps
- 1 x Heavy Duty Needle Driver
- 1 x Anti-Skid Drill 2.0mm 100mm Long
- 1 x Anti-Skid Drill 2.5mm 115mm Long
- 1 x Anti-Skid Drill 3.5mm 180mm Long

NYLON LATERAL TITANIUM BUTTON SUTURE

- NLBS50TI** 50lb Nylon Lateral Button Suture with Titanium Button
- NLBS80TI** 80lb Nylon Lateral Button Suture with Titanium Button
- NLBS100TI** 100lb Nylon Lateral Button Suture with Titanium Button
- NLBS50TI/5** 50lb Nylon Lateral Button Suture with Titanium Button Pack of 5
- NLBS80TI/5** 80lb Nylon Lateral Button Suture with Titanium Button Pack of 5
- NLBS100TI/5** 100lb Nylon Lateral Button Suture with Titanium Button Pack of 5
- H090102AS** Anti-Skid Drill 2.0mm 100mm Long
- H090112AS** Anti-Skid Drill 2.5mm 115mm Long
- H090106SAS/L** Anti-Skid Drill 3.5mm 180mm Long
- NLBSKITTI** Nylon Lateral Titanium Button Starter Kit

Suture Screws

Suture Screws & Set



Picture Jean-Benoit Lefebvre

Suture screws are a self-tapping screw with an eyed head, designed to be used as a versatile, economic suture anchor. The thread pattern is the same as the equivalent type of cortical or cancellous screw.

Sizes range from 2.0mm cortical to 4.0mm cancellous to cover a wide range of patients.

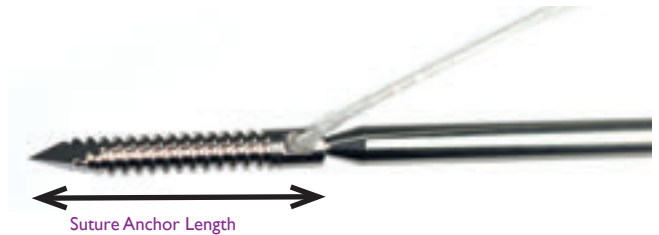
Pre drill with the standard pilot for the screw size selected, screw in with the dedicated insertion tool.

Also available as a boxed kit consisting of a set of 2 of each size screw plus 1 of each of 3 sizes of LigaFiba® in a stainless steel case.

SUTURE SCREWS & SET

SS2006	2.0mm Diameter 6mm Long 1.0mm Hole Cortical
SS2010	2.0mm Diameter 10mm Long 1.0mm Hole Cortical
SS2708	2.7mm Diameter 8mm Long 1.5mm Hole Cortical
SS2714	2.7mm Diameter 14mm Long 1.5mm Hole Cortical
SS3512	3.5mm Diameter 12mm Long 2.0mm Hole Cortical
SS3520	3.5mm Diameter 20mm Long 2.0mm Hole Cortical
SS4016	4.0mm Diameter 16mm Long 2.0mm Hole Cancellous
SS4024	4.0mm Diameter 24mm Long 2.0mm Hole Cancellous
SSITKIT	Suture Screw Set (16 Screws + Introducer + 3 Suture Packs)
SSITUN	Universal Insertion Tool for all Suture Screws

Suture Anchor Pin



A threaded suture anchor is machined into the tip of a trochar pin. Immediately proximal to the suture anchor is a narrow break off point. The construct is stable during axial drilling of the pin into bone. Once in position with the hole of the anchor just above the surface of the bone the shaft of the pin is rocked to and fro. The stainless steel undergoes work hardening and becomes very brittle, ultimately breaking off leaving the anchor in position ready for placement of sutures. The suture anchor pin is extremely easy to position and place without pre-drilling. Length of pin into the bone is (approx) 2.5mm - 12mm, 3.0mm - 14mm and 4.0mm - 20mm.

SUTURE ANCHOR PIN

SAP2.5	Suture Anchor Pin 2.5mm Diameter 1.0mm Hole 17mm Suture Anchor Length 125mm Overall Length
SAP3	Suture Anchor Pin 3mm Diameter 1.0mm Hole 21mm Suture Anchor Length 127mm Overall Length
SAP4	Suture Anchor Pin 4mm Diameter 2.0mm Hole 26mm Suture Anchor Length 136mm Overall Length

Suture Anchor Materials

Ideally the material selected should be strong with a high resistance to abrasion. FiberWire™ and braided polyethylene have these qualities but are braided and must, therefore, be used with care. Monofilament materials cause less problems in infected areas (e.g. shearing injuries). Make sure that the material selected fits the anchor you have in mind.

SUTURE ANCHOR MATERIALS

091141	500mm x 50lb Nylon (Sterile Pack)
091139	800mm x 80lb Nylon (Sterile Pack)
LF150500	LigaFiba® 150lb (68kg) 0.6mm x 600mm
LF250600	LigaFiba® 250lb (113kg) 1mm x 600mm
LF500600	LigaFiba® 500lb (226kg) 1.5mm x 600mm
AR-7201	FiberWire™ No 2 (12)
AR-7210	FiberWire™ No 5 (12)
BRFIBER	FiberWire™ Literature

Meniscus Surgery Set



Management of meniscal injuries has three phases all of which will require special instrumentation.

- Exposure of the meniscus, particularly the caudal horn of the medial meniscus. This will require that the tibia is advanced and distracted relative to the femur.
- Examination of the meniscus for lesions. A visual examination is not enough. The surface of the meniscus should be probed for defects and tears. The circumferential attachments should be checked for security.
- Lesions discovered must be managed by debridement or meniscal release.

The Meniscus Surgery Set includes all the essential instruments for the examination and management of meniscal injuries in a stainless steel autoclave case. Purchased as a set there are significant savings.

- Standard Stifle Distractor
- Hohman Retractor 8mm
- Meniscus Probe 1mm
- MicroToothed Halsteads
- Beaver Type Scalpel Handle
- 25 x No 65 Blade (mini no 11)
- Stainless Case
- Silicone Protective Insert

List configuration whilst stocks last. Check with the Vet Tech Team for current content.

MENISCUS SURGERY SET

001116 Meniscus Surgery Set

Meniscus Surgery Set - Enhanced



The Enhanced Meniscus Surgery Kit contains all the instruments in the standard kit, plus a small Stifle Joint Distractor (001113), a Push Knife (AR-17-11X) and a Pull Knife (AR-17-19X).

The small Stifle Joint Distractor is also useful as small local muscle and tissue retractors in and around canine joints e.g. elbow exploration. Extends the use of the kit to smaller patients.

MENISCUS SURGERY SET - ENHANCED

001117 Meniscus Surgery Set - Enhanced

Stifle Lever



Exposure of the medial meniscus is never easy. Access is limited. The stifle levers are designed to fit the trochlea, while the atraumatic tip hooks behind the caudal tip of the tibial plateau. The levering action spreads the load over the surface of the trochlea, more effectively than a Hohman. Two sizes to cover most cases.

STIFLE LEVER

001115	Stifle Lever	>20kg	225mm
001155	Stifle Lever Small	<20kg	165mm

Arthroscopic Stifle Lever VSTL

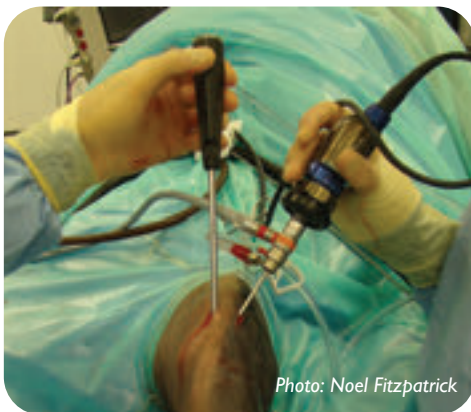


Photo: Noel Fitzpatrick

The arthroscopic stifle is finer and longer than the standard version, making it more suitable for arthroscopic surgery. The good sized white Teflon handle has a useful notch which aligns with the tip orientation of the lever. Not just for arthroscopy – useful in open arthrotomies as well. Developed for stifle surgery by Ian Holsworth.

ARTHROSCOPIC STIFLE LEVER VSTL

AR-17-02	Arthroscopic Stifle Lever VSTL 280mm
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Meniscus Probes



Used to probe the meniscus to check for tears, which may not be seen easily.

1mm – dogs up to 30kgs

2mm – dogs over 30kgs

MENISCUS PROBE

001408	Meniscus Probe 1mm Tip 190mm
001409	Meniscus Probe 2mm Tip 220mm
AR-17-10	Meniscus Probe 2.2mm Black Shaft for Arthroscopy 220mm

Toothed Halsteads



Very useful for grasping the meniscus.

TOOTHED HALSTEADS

- I03185** Halstead Mosquito Forceps 1/2 Teeth Cof 125mm
- I03180** Halstead Mosquito Forceps 1/2 Teeth Str 125mm

Fat Pad Retractor



A more practical alternative to a standard Senn for retracting the fat pad during examination of the medial meniscus. Available in both standard 3 prong and smaller 2 pronged versions

FAT PAD RETRACTOR

- 001114** Fat Pad Retractor 180mm
- 001114S** Fat Pad Retractor Small 180mm
- 833305** Senn Cats Paw Retractor 165mm

Hook Knife and Push Knife



These three hand held knives can deal with most meniscal tears. Their low profile makes them suitable for both open and arthroscopic surgeries.

MENISCUS KNIVES

- AR-17-19XS** Hook Knife 150mm
- AR-17-19X** Hook Knife 225mm
- AR-17-11X** Push Knife 225mm

Beaver Type Scalpel Handle



Holds Beaver and Swann Morton fine blades. Ideal for delicate control without cluttering field of view.

BEAVER TYPE SCALPEL HANDLE

- 06054** Beaver Type Scalpel Handle (VI) 130mm
- 06051** Beaver Type Scalpel Handle 130mm
- 06052** Beaver Type Scalpel Handle 100mm
- 06053** Beaver Type Scalpel Handle 80mm

Swann Morton Beaver Type Blades



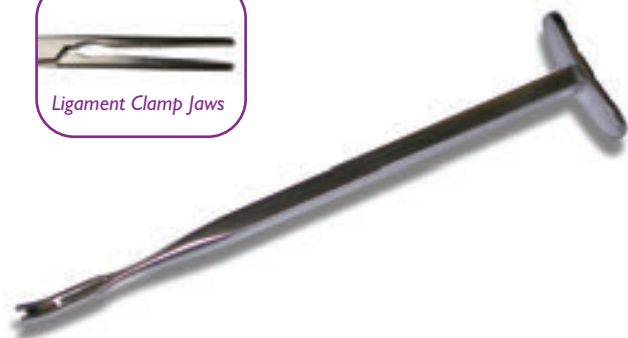
Fine blade suggested uses:

64 blade – meniscal release, cuts around the tip plus on ventral surface. 65 and 65a – pointed blades in 2 sizes. Good for trimming flaps in confined spaces.

SWANN MORTON FINE BEAVER TYPE BLADES

- 05904** No 64 Blades (25) Beaver Type
- 05905** No 65 Blades (25) Beaver Type
- 05906** No 65(a) Blades (25) Beaver Type

Meniscectomy Instruments

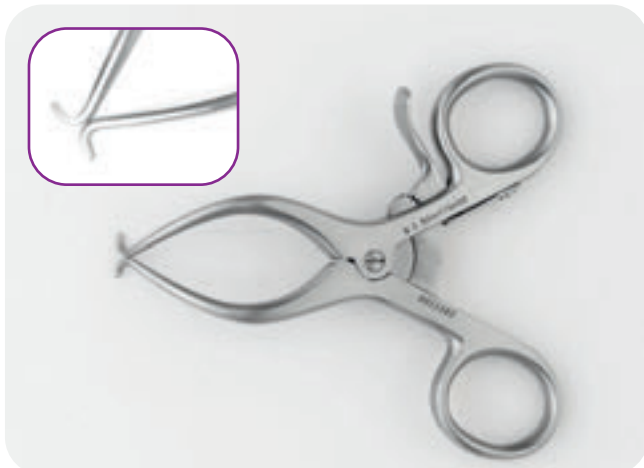


Purpose designed, the jaws of the Ligament Clamp have multiple small gripping teeth to combat synovial fluid slip. The T handle push knife is only sharp on the inner curve, not at the tips. Suitable for larger patients.

MENISCECTOMY INSTRUMENTS

- 001100 Meniscectomy Instrument Set
- 001107 Meniscectomy Knife 165mm
- 001110 Ligament/ Cartilage Clamp 140mm

Small & Mini Gelpi Retractors for Arthrotomy



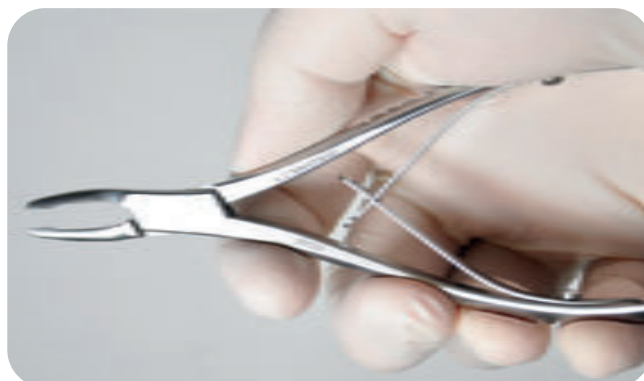
Used with or without orthogonally placed stifle distractors help to improve exposure significantly when working through a mini stifle arthrotomy.

Short sharp tips give easy access and holding power. Alternative blunt tip version is less secure but also less traumatic to tissue.

SMALL & MINI GELPI FOR ARTHROTOMY

- 0013302 Gelpi Mini Curved (45mm Spread) 90mm Long Sharp Tips
- 0013303 Gelpi Mini Curved (45mm Spread) 90mm Long Blunt Tips

Small Stifle Ronguers

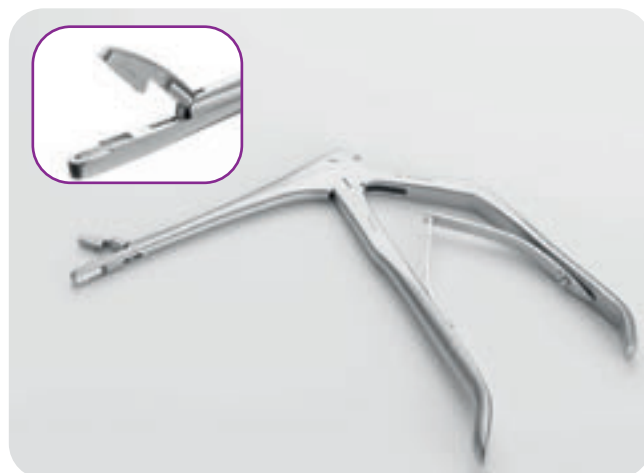


Small rongeurs with angled slim jaws, useful for work within the stifle to remove CrCL remnants or to apply tension to meniscal tissue prior to sharp resection.

SMALL STIFLE RONGUER

- 001301 Small Stifle Ronguer 1.75mm Bite 140mm Long

Coughlan Soft Tissue Mangeurs



Use to rapidly remove soft tissues eg. fat pad which can obscure the operative field. Also suitable for removing remnants of ruptured CrCL. Developed by Andrew Coughlan.

COUGHLAN SOFT TISSUE MANGEURS

- 001108S Coughlan Soft Tissue Mangeur - Very Small
2mm x 8mm Shaft 115mm Long
- 001108 Coughlan Soft Tissue Mangeur - Small
2.5mm x 10mm Shaft 160mm Long
- 001109 Coughlan Soft Tissue Mangeur - Large
5mm x 12mm Shaft 180mm Long

Stifle Distractors

WHICH DISTRACTOR?

>5kg	001113VSX	Miniature
5kg	001113VS	Very Small
5-15kg	001113	Small
15-50kg	001112	Standard
50kg	001112/L	Large

001112 the original stifle distractor remains the most useful

Stifle Distractor



Designed to separate the femoral component of the stifle from the tibia. For the best exposure joint surfaces should move away from each other in a parallel fashion exposing The meniscus in its natural state and minimally distorted by the examination.



Positioning:

- One tip is placed in the intercondylar notch
- The other on the cranial intercondylar area.
- Neither tip should involve articular cartilage.
- Test distractions (by squeezing the handles) to find the exact point at which a full distraction will expose the meniscus.
- Engage the spinlock to open the joint.

Distractor is self-retaining. When closed the tips overlap making the points atraumatic as they enter the joint and reduce their profile for insertion into the joint.

STIFLE DISTRACTOR

- 001112/L Stifle Distractor Large min spread 10mm max spread 40mm 210mm Long
- 001112 Stifle Distractor min spread 8mm max spread 30mm 190mm Long
- 001112S Stifle Distractor Small min spread 6mm max spread 20mm
- 001112XS Stifle Distractor Extra Small

Small Stifle Joint Distractor



The Small Distractor is also useful as small local muscle and tissue retractors in and around canine joints e.g. elbow exploration. Total length 130mm.

SMALL JOINT DISTRACTOR/ RETRACTOR 6MM WIDE TIPS

- 001113 Small Joint Distractor/ Retractor 6mm Wide Tips

Very Small Stifle Joint Distractor



The Very Small Distractor is extremely useful as a small joint retractor during the meniscal release procedure. It is used to open a small window, caudal to the medial collateral. Total length 140mm.

VERY SMALL JOINT DISTRACTOR/ RETRACTOR 3MM WIDE TIPS

- 001113VS V Small Joint Distractor/ Retractor 3mm Wide Tips

Miniature Stifle Distractor



Scaled down version of the Very Small Stifle Distractor for use in small and miniature breeds. Same overlapping tip pattern shown in all Vi stifle distractors.

MINIATURE STIFLE DISTRACTOR

001113VSX Miniature Stifle Distractor 100mm

Spinlock Stifle Distractor



Alternative spinlock version of the ratcheted stifle distractors. Spinlocks avoid the slippage which can occur with ratchets, and allow incremental opening of the joint which is not dependant on the tooth pitch of a ratchet.

SPINLOCK STIFLE DISTRACTORS

001113SL Spinlock Small Stifle Distractor 140mm 6mm Tips
001113VSSL Spinlock Very Small Stifle Distractor 140mm 3mm Tips

Small & Mini Gelpi Retractors for Arthroscopy



Used with or without orthogonally placed stifle distractors help to improve exposure significantly when working through a mini stifle arthroscopy.

Short sharp tips give easy access and holding power. Alternative blunt tip version is less secure but also less traumatic to tissue.

SMALL & MINI GELPI FOR ARTHROTOMY

0013302 Gelpi Mini Curved (45mm Spread) 90mm Long Sharp Tips
0013303 Gelpi Mini Curved (45mm Spread) 90mm Long Blunt Tips

Extra Articular Joint Distraction

External Stifle Distractor



Developed originally for arthroscopic use but also useful in open surgery on very tight osteoarthritic stifles. Improves visibility in the joint by reducing clutter. Pins (2.5mm) placed above and below the stifle in line with the medial collateral ligament. Turn the thumbscrew to distract the joint and expose the medial meniscus. The pins may be twisted relative to one another to bring the tibial plateau forwards.



Version with 3.2mm pins is suitable for use with TPLO jig pins – the proximal pin can then be re-used.

EXTRA ARTICULAR STIFLE DISTRACTOR

AR-17-01 Extra Articular Stifle Distractor 2.5mm Pins 80mm
AR-17-01/TPLO Extra Articular Stifle Distractor 3.2mm Pins 80mm

Surgical Approaches DVD Dr Wing Tip Wong

The University of Sydney's Centre for Veterinary Education produces a range of excellent teaching DVDs. Vi is pleased to have been appointed a distributor.

This DVD includes all the common approaches to the shoulder, elbow, hip, stifle and hock joints as well as the humerus and ilial shaft. Bone models are included to highlight the approach. The DVD is suitable for general practitioners contemplating any surgical procedure involving canine joints.



Procedures include:

- Caudal approach to shoulder
- Distal humerus via olecranon
- Lateral approach to humerus
- Lateral approach to elbow
- Medial approach to elbow
- Dorsal approach to hip
- Lateral approach to stifle
- Medial approach to hock
- Approach to ilial shaft

Duration: 40 minutes

SURGICAL APPROACHES DVD DR WING TIP WONG

DVDSAW Surgical Approaches DVD Dr Wing Tip Wong

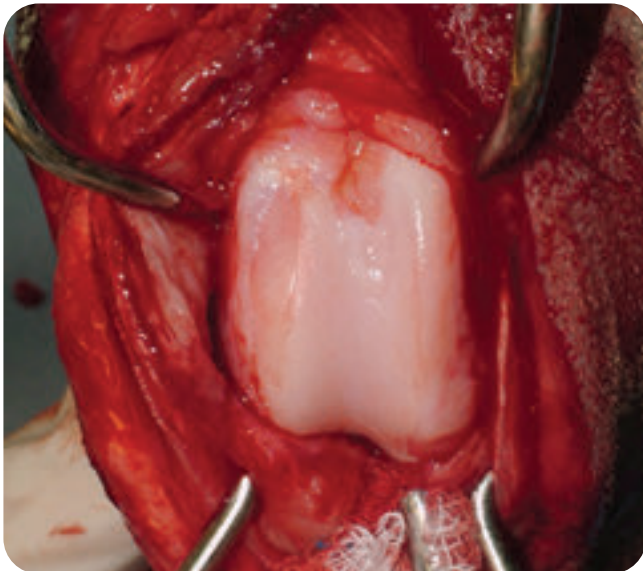
Patellar Luxation

Patellar luxation is a common condition of the canine stifle joint whereas cats are rarely affected. Small dogs are affected more frequently than large dogs and patellar luxation tends to be medial in small dogs and lateral in large dogs, but this is not absolute. Patellar luxation is usually caused by a number of related conformational deformities of the hindlimb that results in a malalignment of the quadriceps mechanism including the patellar relative to the femoral trochlear sulcus. Deformities include bowing of the distal femur and tibia, excessive medialisation or lateralisation and torsional deformities of tibial tuberosity, insufficient depth of the trochlear sulcus and/or inadequate height of the trochlear ridge(s), and (sub)luxation of the hip. Secondary changes include excessive laxity of the joint capsule and retinaculum soft tissues opposite the direction of patellar luxation, and excessive soft tissue tension in the same direction as patellar luxation.

For further details, please ask for a copy of our step-by-step guide for patellar luxation.

PATELLA LUXATION STEP BY STEP GUIDE

BRPAT Step by Step Guide to Patellar Luxation



X-Acto Saw



Fine toothed hard back saw, useful for trochleaplasty. Please note this saw is not stainless steel and will corrode badly. To keep the saw for as long as possible, clean thoroughly immediately after a procedure and store clean, dry and lubricated. Autoclave before use. Optional handle is aluminium.

Alternatively see code 001004 Hard Backed Saw for a stainless version

X-ACTO SAW

XACTOB/H X-Acto Saw Complete 270mm

XACTOHANDLE X-Acto Saw Handle only 140mm

XACTOBLADE X-Acto Saw Blade 0.3mm cut 140mm

XACTOSTERILE-A X-Acto Saw Blade Sterile 0.3mm cut 140mm

Hard Backed Orthopaedic Saw

140mm Long 23mm Deep 0.4mm Cut. In the style of the X-Acto Saw Blade but is stiffer and has slightly bigger teeth, more suitable for bone. It is made from stainless steel and can be autoclaved. The stiff back helps to guide the saw better than with hacksaw type blades which often deviate. Use for wedge sulcoplasty and osteotomies up to 23mm deep.

HARD BACKED ORTHOPAEDIC SAW (STAINLESS)

001004 Orthopaedic Hard Back Saw 0.4mm cut Stainless Steel 145mm

Modular Osteotome with Ultra-thin Interchangeable Blades and Diamond Rasp



PFTE osteotome handle which accepts a good range of blades plus a diamond rasp (not included in set). Blades are very thin (1.1mm) allowing fine cuts and reducing the incidence of braking the block during block sulcoplasty procedures.

Replacement T wrench and retaining screw are also available.

MODULAR OSTEOTOME

- 001380 Modular Osteotome complete with 7 Blades
- 001382 Modular Osteotome Replacement Blade 4mm
- 001390 Modular Osteotome Replacement Blade 5mm
- 001383 Modular Osteotome Replacement Blade 6mm
- 001384 Modular Osteotome Replacement Blade 8mm
- 001385 Modular Osteotome Replacement Blade 10mm
- 001386 Modular Osteotome Replacement Blade 12mm
- 001387 Modular Osteotome Replacement Blade 15mm
- 001388 Modular Osteotome Replacement Blade 20mm
- 001389 Modular Diamond Rasp 6mm
- 001380SCREW Spare Screw for Modular Osteotome

Gordon Coronoid Osteotome



Originally developed for surgery on the medial coronoid, its thin, sharp blade and narrow widths are making this tool increasingly popular amongst surgeons for block sulcoplasty.

GORDON CORONOID OSTEOTOME

- AR-17-30 Gordon Coronoid Osteotome (4mm)
- AR-17-29 Gordon Coronoid Osteotome (2mm)

Universal Sulcoplasty Rasp



Double ended rasp, 210mm long. Rectangular end for adjusting block sulcoplasties, triangular end for adjusting wedge sulcoplasties.

Improved tooth geometry gives more efficiency over standard rasps. Cuts on pull stroke only. The rectangular end has 2 fine and 2 medium surfaces, triangular has 2 fine surfaces.

UNIVERSAL SULCOPLASTY RASP

- 001021 Universal Sulcoplasty Rasp 210mm Long

Rectangular Sulcoplasty Instruments



A rectangular sulcoplasty retains the maximum articular cartilage. Most standard osteotomes are too thick, tending to break up the block. The super slim 8mm osteotome minimises breakup. The rectangular rasp is designed to tidy up the corners of the sulcoplasty to maximise 'fit'.

RECTANGULAR SULCOPLASTY INSTRUMENTS

- 001017 Super Slim Osteotome 8mm 180mm
- 001018 Rectangular Bone Rasp 210mm

Osteophyte Rasp



Most stifles requiring cruciate repair will exhibit some osteophytes. In some cases they may be bulky necessitating removal. The Osteophyte Rasp is a small yet very effective rasp to keep in the cruciate set.

OSTEOPHYTE RASP

001019 Osteophyte Rasp

Trochlea Rasp



Designed for deepening the trochlea groove, the trochlea rasp has a range of diameters to suit breeds from chihuahuas to bull terriers. For larger breeds perform a wedge or block trochleaplasty using a hard backed saw. An accurately contoured trochlea is essential for a successful trochleaplasty. Articular cartilage is removed to be replaced by fibrocartilage. Total length 190mm.

TROCHLEA RASP

001020 Trochlea Rasp 11mm max 5mm min Diameter

001022 Trochlea Rasp Small 8mm max 3mm min Diameter

Corrective Osteotomy Sawguide System

Corrective osteotomy is a recognised procedure in the management of patella luxation particularly in medium and large dogs.

Positioning the osteotomy at the CORA (centre of rotation) can be a challenge.

Creating an accurate osteotomy at the site is a further challenge.

The osteotomy and sawguide system allows the surgeon to create accurate osteotomies positioned at the correct site.



The Osteometer/ Sawguide is used in the TTO technique of cruciate management to create accurate small wedge osteotomies. In the TTO technique the sawguide is located into guide holes drilled into the bone which is not an option in more cylindrical bones. The spinlock saw guide clamp incorporates an appropriate guide hole and can be clamped to virtually any bone. Once the osteotomy angle is determined the sawguide is secured into position using a 1.6mm K wire. The sawguide may then be moved very accurately from proximal to distal cuts to create the precalculated osteotomy.

CORRECTIVE OSTEOTOMY SAWGUIDE SYSTEM

TTO011 Osteometer/ Sawguide

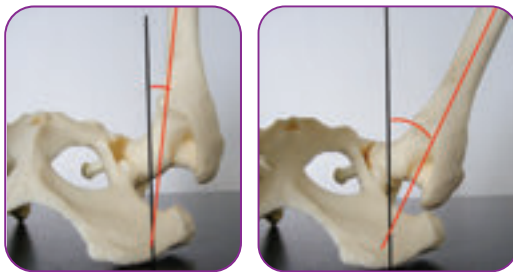
TTO013 Saw Guide Attachment Forceps 9/2" 245mm

TRIPLE AND DOUBLE PELVIC OSTEOTOMY

Triple pelvic osteotomy (TPO) was described by Barclay Slocum in 1986 as a means to improve dorsal acetabular cover of the femoral head, reducing dorsal hip subluxation and damage to the dorsal acetabular rim. Performed early enough, TPO helps to mitigate progression of degenerative joint disease and maximises hip congruity and surgery is typically performed between five to eight months of age.

Different methods can be used to assess the amount of correction required. Candidates should ideally have no evidence of osteo-arthritis and an intact dorsal acetabular rim (DAR). The quality of clunk when performing the Ortalani test gives an impression of the quality of the dorsal acetabular rim. When testing hip instability using the Ortalani test, suitable candidates should have angle of reduction not exceeding 30-35°.

Dorsal Acetabular Rim Skyline radiographs are used by some surgeons to better define the integrity of the DAR and to provide additional information for planning the extent of a correction.



Assessing the angle of subluxation and reduction using the Ortalani Test

TPO involves cutting the ilium, ischium and pubis to free the acetabular segment. The acetabular segment is rotated ventrally and the ilial osteotomy is plated to maintain rotational correction. The pubic osteotomy may be wired to improve stability, though this is not always very effective and has largely been dropped.



TPO had fallen out of favour with many surgeons because of a number of factors including the difficulty in diagnosing dogs early enough that degenerative changes are not already present, that results can be sub-optimal if the envelope is pushed to include dogs that are borderline of the inclusion criteria, plus the improvements in outcome with total hip replacement providing preferable alternative options for many cases.



Recently, the procedure has been refined in an attempt to create a more stable construct with less post-operative implant failure problems. The advent of locking implants including locking TPO plates has improved construct stability and reduced complications such as implant loosening and screw pull-out.

Performing a double pelvic osteotomy (DPO) where only the ilium and pubis are cut, and the ischium remains intact, is less de-stabilising to the pelvis than TPO. The technique was first described at ESVOT in 2006 following in-vitro studies by P. Haudiquet and J. Guillon and was followed by publication of a clinical case series by Aldo Vezzoni et al in VCOT in 2010.

In contrast to TPO, DPO creates quite a lot of tension in the pelvis as the acetabular segment is twisted outwards, and achieving the correct amount of rotation can be challenging. Due to the influence of these torsional forces, it is suggested that a correction of an additional 5° on TPO be performed. Locking implants are particularly helpful in managing the increased forces of DPO.

An intermediate option is to perform a modified TPO or a 2.5 pelvic osteotomy. This is half-way between the DPO and the TPO, whereby an incomplete osteotomy of the ischium (line 3) – only the dorsal ischial cortex is cut. This reduces the torsional forces inherent in DPO without as much destabilisation of the pelvis as TPO.

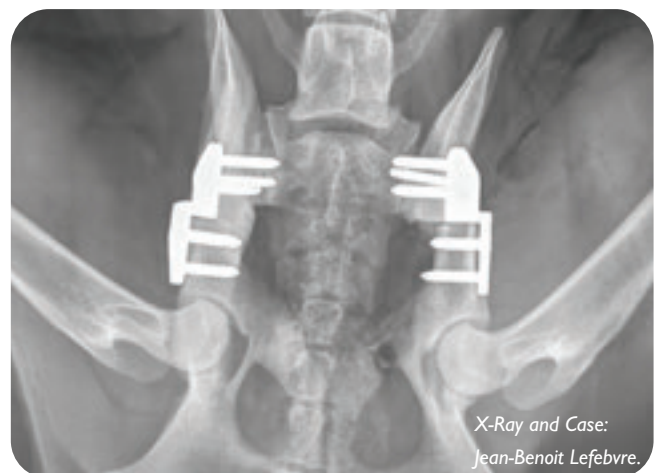
Slocum Style TPO/ DPO Plates – Non-Locking and Locking



Locking

A stepped implant minimising issues relating to pelvic narrowing. The original Slocum plate was designed for 3.5mm non-locking screws with three screw-holes on either side of the iliac osteotomy and a small hole on the caudal part of the plate for the addition of a cerclage wire.

Vi Slocum style TPO/DPO plates have the same lay-out as the original Slocum plate and are available in non-locking and locking variants. The non-locking versions feature round non-locking holes and DCP holes like the original Slocum plate. The locking version features three parallel stacked locking holes caudally (will accept cortical or locking screws), one DCP hole for compression on the cranial segment permitting osteotomy compression and two parallel stacked locking screws cranially. The caudal part of both plate styles has a hole for additional cerclage wire fixation.



X-Ray and Case: Jean-Benoit Lefebvre.

Locking Slocum Style TPO/ DPO Plates

LOCKING SLOCUM STYLE TPO & DPO PLATES 3.5MM

09910320L	Slocum Style TPO/ DPO Plate 20 Left
09910420R	Slocum Style TPO/ DPO Plate 20 Right
09910525L	Slocum Style TPO/ DPO Plate 25 Left
09910625R	Slocum Style TPO/ DPO Plate 25 Right
09910730L	Slocum Style TPO/ DPO Plate 30 Left
09910830R	Slocum Style TPO/ DPO Plate 30 Right
09920320L	Slocum Style TPO/ DPO Plate 20 Left Locking
09920420R	Slocum Style TPO/ DPO Plate 20 Right Locking
09920525L	Slocum Style TPO/ DPO Plate 25 Left Locking
09920625R	Slocum Style TPO/ DPO Plate 25 Right Locking
09920730L	Slocum Style TPO/ DPO Plate 30 Left Locking
09920830R	Slocum Style TPO/ DPO Plate 30 Right Locking
LSDG35XL	3.5 Locking Screw Drill Guide Extra Long

Vi Locking TPO/ DPO Plates



The Vi TPO/DPO plates are similar to, but have larger footprints than the Slocum style plates. They are available in both 2.7mm and 3.5mm sizes. Both feature divergent stacked locking holes on cranial and caudal sections to maximise implant security and a compression hole on the cranial portion.



The 2.7mm plates have three screw holes cranially and caudally.
The 3.5mm plate has four holes cranially and three holes caudally.

VI LOCKING TPO & DPO PLATES

09930320L	3.5 TPO/ DPO Locking Plate 20 Left
09930420R	3.5 TPO/ DPO Locking Plate 20 Right
09930525L	3.5 TPO/ DPO Locking Plate 25 Left
09930625R	3.5 TPO/ DPO Locking Plate 25 Right
09930730L	3.5 TPO/ DPO Locking Plate 30 Left
09930830R	3.5 TPO/ DPO Locking Plate 30 Right
09940320L	2.7 TPO/ DPO Locking Plate 20 Left
09940420R	2.7 TPO/ DPO Locking Plate 20 Right
09940525L	2.7 TPO/ DPO Locking Plate 25 Left
09940625R	2.7 TPO/ DPO Locking Plate 25 Right
09940730L	2.7 TPO/ DPO Locking Plate 30 Left
09940830R	2.7 TPO/ DPO Locking Plate 30 Right
LSDG2724XL	2.7 Locking Screw Drill Guide Extra Long
LSDG35XL	3.5 Locking Screw Drill Guide Extra Long

XL Locking Drill Guides



Extra-long locking drill-guides simplify working in deeper spaces, especially useful for TPO/DPO.

XL LOCKING DRILL GUIDES

LSDG2724XL	2.7mm Locking Screw Drill Guide - Extra Long
LSDG35XL	3.5mm Locking Screw Drill Guide - Extra Long

Vi Twistable TPO/DPO Plates

Supplied flat to be twisted prior to surgery or supplied pre-bent to 30°, these plates offer flexibility over desired rotation and are used with non-locking screws in either 3.5mm or 4mm diameter. Neither addressing pelvic narrowing or featuring locking holes, these are being superseded by other plate designs.

Scaled profiles on page 346.

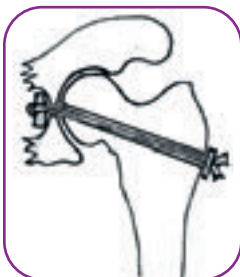
TRIPLE PELVIC OSTEOTOMY PLATE

090167	Large TPO Plate
090167L30	Large TPO Plate Prebent 30° Left
090167R30	Large TPO Plate Prebent 30° Right
090179L30	Small TPO Plate Prebent 30° Left
090179R30	Small TPO Plate Prebent 30° Right
HDTPODVD	TPO Technique DVD Hamish Denny

Hip Toggle Procedure

The hip toggle procedure is a well established technique for the management of traumatic and unstable subluxation of the the coxo-femoral joint. Although somewhat invasive it does have the advantage that by replacing the round ligament the hip has, postoperatively, a full range of movement.

However, the suture is placed into a very hostile abrasive environment and historically had a high failure rate. Newer materials have, to a degree, addressed this problem. LigaFiba® is spun Ultra High Molecular Weight Polyethylene. This is the same high wear material used for acetabular cups in Total Hip Replacement. For any given weight (or diameter) LigaFiba® is 2.5 x stronger than the traditional monofilament nylon. In addition the softer more flexible nature of the material allows a relatively larger implant to be passed along bone tunnels. LigaFiba® has in addition better wear characteristics than nylon.



Veterinary Instrumentation is pleased to offer an updated range of hip toggles based on LigaFiba®. The range includes the new 2.0mm and 2.5mm toggle. Use of a dedicated introducer facilitates the introduction of the toggle through the acetabulum into the pelvis.

Notes on the use the the Hip Toggle system

1. Expose femoral head and floor of acetabulum via a cranio-lateral approach. Perform a trochanteric osteotomy if necessary. The text 'An Atlas of Surgical Approaches to the Bones and Joints of the Dog and Cat' by Piermattei is an almost essential part of any veterinary surgeons library. Code BK02.
2. Clear soft tissues (mostly shredded round ligament) from acetabulum and fovea of femoral head.
3. Drill a hole through the acetabular fossa (effectively the origin of the round ligament). Drill size required
 - 3mm Toggle plus 250lb LigaFiba 4.5mm drill
 - 3mm Toggle plus 80lb Nylon 4.8mm drill
 - 2.5mm Toggle plus 250lb LigaFiba 4mm drill
 - 2mm Toggle plus 150lb LigaFiba 2.7mm drill
4. Load the toggle into the insertion tool. The 'long' end goes into the inserter tip. The suture is retained onto the inserter shaft by sliding the silicone ring over the toggle and inserter.
5. Push projecting toggle into hole in acetabulum.
6. Insert plunger and eject toggle into pelvic canal. Toggle should 'flip' out preventing pull out. Check toggle security.
7. Drill a bone tunnel (2.5-3.5mm) from fovea exiting from proximal lateral femur.
 - a. Use Adjustable Drill Guide for best results. (ADJGD2035)
 - b. 'Eyeball' it
 - c. Drill from fovea to femur (requires severe external rotation of femur)
8. Pass free suture ends down the femoral neck tunnel from fovea to femur. LigaFiba® will require a suture puller or alternatively a folded loop of fine cerclage wire may be passed from lateral to medial to exit at the fovea. Pass the LigaFiba® through the loop and pull back. Check there are no soft tissues (usually joint capsule) interposed between head and acetabulum.
9. Pass ends of the suture through holes in Ormrod button, pull tight and tie temporarily. Check that coxo-femoral joint has a full comma of movement. Tie securely over button. Over-tightening is a technical error and will result in premature failure of the suture.

NOTE: The implant always breaks within a few weeks of placement regardless of technique and material. The toggle provided temporary stability only. If it becomes necessary to remove the suture, locate the Ormrod button and remove both button and suture. It is not possible to retrieve the toggle which, lying extra-articularly, does not cause a problem.

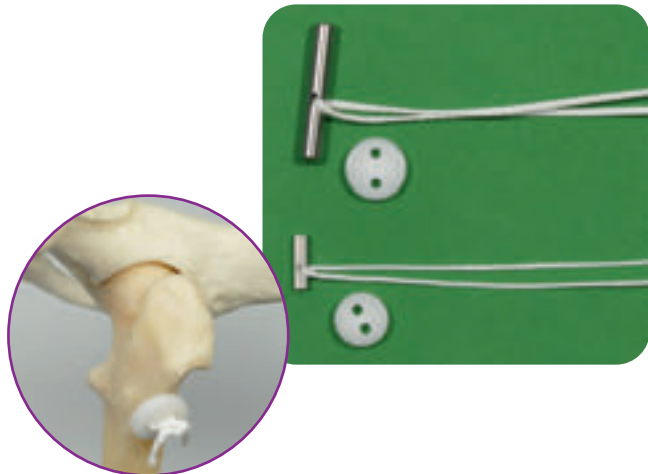
Hip Toggle Introducer

The Hip Toggle has an 'eye' to hold the suture and is made from stainless steel 316LVM. Use the adjustable drill guide to accurately place the hole in the femoral neck.

All sterile packs contain a nylon Ormrod button for secure fixation of the suture. Available with monofilament nylon or braided LigaFiba®. LigaFiba® is easier to work with, is stronger and ties better. However, it is a braided material with higher infection risks.



LigaFiba® Hip Toggles



Braided polyethylene is 2.5 x stronger than monofilament nylon and has the additional benefit of a high resistance to abrasion. These properties are ideal for a hip toggle suture. Additionally the braided material conforms better and will therefore pass through a smaller hole. The new 2mm toggle and 150lb (68kg) will pass through a 2.7mm bone tunnel.

HIP TOGGLES

HIPTOGLF250	Hip Toggle 3.0mm + 250lb LigaFiba® Ormrod Button (Sterile Pack) Dogs over 10kg
HIPTOGLF250M	Hip Toggle 2.5mm + 250lb LigaFiba® Ormrod Button (Sterile Pack) Dogs over 10kg
HIPTOGLF150	Hip Toggle 2.0mm + 150lb LigaFiba® Ormrod Button (Sterile Pack) Dogs under 10kg
HIPTOG-A	Hip Toggle 3.0mm + 80lb Nylon Ormrod Button (Sterile Pack)
HIPINTLF250	Hip Toggle Introducer + Hip Toggle with 250lb LigaFiba® + Ormrod Button (sterile pack)
HIPINT	Hip Toggle Introducer + Hip Toggle with 80lb Nylon + Ormrod Button (sterile pack)
HIPTOGKITLF	Contains Introducer, Hip Toggle with 250lb Drill Guide 3.5 & 4.5mm Drills (discounted)
HIPTOGKIT	Contains Introducer, Hip Toggle with 80lb Nylon, Drill Guide, 3.5 & 4.8mm Drills (discounted)
ADJDG2035	Adjustable Drill Guide 2.0, 2.5, 3.5mm Drills
TOG	Hip Toggle only 3.0mm (non sterile)
TOGM	Hip Toggle only 2.5mm (non sterile)
TOGS	Hip Toggle only 2.0mm (non sterile)
TIBUT6H	Titanium Button 6mm 2 Holes (non sterile)
TIBUT9H	Titanium Button 9mm 2 Holes (non sterile)
TIBUT11H	Titanium Button 11mm 2 Holes (non sterile)

Available with UHMWPE buttons whilst stocks last - please contact our Vet Tech Team on 0345 130 9596 or email info@vetinst.com for availability.

Hip Toggle Break-off Style



Placing a hip toggle has been a popular technique for managing hip luxations for many years. Despite being very intuitive in that it attempts to replace what was broken, the technique was not without problems. Placing the toggle was difficult in that the insertion point through the fovea of the acetabulum was both deep and dark, additionally the toggle itself, even the largest versions were small and difficult to hold and insert.

Another major issue was that the inside of the hip joint is a very hostile environment for the toggle retaining suture which was subject to both tension and abrasion. Early failures were common. The break-off hip toggle combined with LigaFiba addresses these problems. The toggle is supplied as a 150mm pin with a break off point just above the toggle. Positioned into the inserter, the distal half of the toggle may be pushed into the hole in the acetabulum. Rocking the pin against the inserter breaks off the toggle which is then pushed through the hole using the broken off pin as a 'pusher'.

LigaFiba® is very strong (2.5 x as strong as monofilament nylon) with good abrasion resistance. It is easy to handle and requires a smaller acetabular hole for any given diameter of nylon. Despite being braided we have had very few reports of infection.



HIP TOGGLES BREAK OFF

HIPTOG25BOP	2.5mm Break Off Hip Toggle with 150lb LigaFiba®
HIPTOG30BOP	3.0mm Break Off Hip Toggle with 250lb LigaFiba®
HIPTOG25APP	2.5mm Break Off Hip Toggle Applicator
HIPTOG30APP	3.0mm Break Off Hip Toggle Applicator

Femoral Head and Neck Excisional Arthroplasty

Excision Arthroplasty Rasp

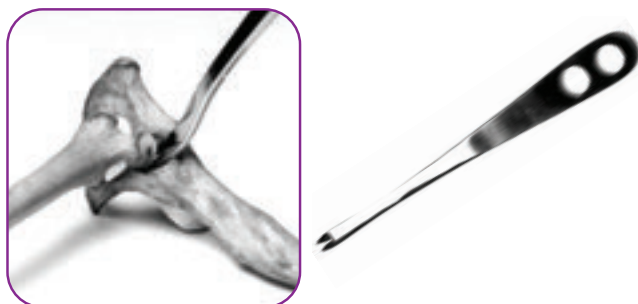


Designed specifically to remove any bone spurs following excision arthroplasty. Failure to remove bone spurs is the most common cause of problems with this procedure. Teeth cut on the back stroke.

EXCISION ARTHROPLASTY RASP

001010 Excision Arthroplasty Rasp 170mm Long

Disarticulator



Disarticulator designed to elevate the femoral head for excision. Notch at the tip of the instrument engages and ruptures the Teres (round) ligament, which can be very difficult. Also useful in manipulation for the humeral head in OCD lesion procedures and investigation of elbow lesions.

DISARTICULATOR

001090 Small Disarticulator 145mm Long

001091 Large Disarticulator 195mm Long

Hatt Spoon



Actual size

Alternative to the 'chip fork' style disarticulator, particularly for larger dogs. Spoon edge is sharp. Good-sized fibre handle with a finer shaft for better balance.

HATT SPOON

001092 Hatt Spoon 230mm (17mm x 30mm Scoop)

001093 Hatt Spoon 230mm (12mm x 18mm Scoop)

001094 Hatt Spoon 230mm (7mm x 12mm Scoop)

001095SET Hatt Spoon Set of 3 (as above)

Hohman Retractors

A simple but multi-function instrument, with a wide number of variations to cover different procedures, patients and surgeons' requirements

Uses include:

- Bone levers as an aid to fracture reduction.
- Bone levers as an aid to elevating the site of interest, examples include exposing the femoral head and the acetabulum during hip surgery and also joint distraction during stifle surgery.
- As soft tissue distractors to improve bone visualisation and access whilst performing many joint and fracture procedures.

A scrubbed assistant to hold the retractor in place is most useful. Frequently more than one Hohman is used during a procedure, and the Hohman often accomplishes multiple functions at once, for example soft tissue retraction and protection while elevating the femoral neck.

Hohman Retractors with Short Tips 18mm & 12mm Blades



These are the archetypal Hohman Retractors often described in text-books as 'Hohman'.

The 'standard' Hohman retractor shape and size.

Larger version at 240mm long is useful in larger dogs over about 20kg where more force is required for manipulation, and there may be more depth of overlying tissue.

Smaller version, 175mm long, is scaled down and useful in slightly smaller dogs or in smaller bones where less force is needed. Good for retracting fascia lata in CrCl procedures.

HOHMAN RETRACTORS WITH SHORT TIP

001041 Hohman Retractor 18mm Short Narrow Tip Total Length 240mm

001042 Hohman Retractor 12mm Short Narrow Tip Total Length 175mm

Mini Hohman 6mm & 8mm Blade and Short Tip

001047



001048

Ideal for careful retraction of soft tissue during the manipulation of smaller bones and fragments, aiding reduction of soft tissue devascularisation. Also allow delicate retraction of soft tissue for screw and wire placement.

8mm version is particularly good for long bones in the cat.

MINI HOHMAN 6MM AND 8MM SHORT TIP

001047 Mini Hohman Retractor 6mm Short Tip 165mm Long

001048 Mini Hohman Retractor 8mm Short Tip 165mm Long

Micro Hohman 4mm with Short Narrow Tip

001049



001049A

The smallest Hohman Vi supply. Useful in very small procedures or patients. Also available in a version with a long narrow shaft to use with arthroscopic portals.

MICRO HOHMAN 4MM SHORT NARROW TIP

001049 Micro Hohman Retractor 4mm Short Tip 160mm Long

001049A Micro Hohman Retractor 4mm Short Tip with narrow shaft for arthroscopy 160mm Long

Hohman Retractor Broad with Short Narrow Tip

001045



001046

Broad blade Hohman provide more effective retraction of large muscle masses than the standard version, with less focal pressure.

Suggested uses:

48mm blade – larger dogs for elevation of femoral head and neck

24mm blade – muscle retraction during plating procedures

HOHMAN RETRACTOR BROAD WITH SHORT NARROW TIP

001045 Hohman Retractor 48mm Short Narrow Tip 260mm Long

001046 Hohman Retractor 24mm Short Narrow Tip 185mm Long

Mini Hohman Broad Blade with Narrow Tip



Suggested uses: Improving visualisation of and access to mid diaphysis of can and small dog bones & displacing ligaments and tendons in carpus/tarsus of larger patients

MINI HOHMAN BROAD BLADE SHORT TIP

001040 Mini Hohman 15mm Broad Blade 120mm Long

Hohman Retractor with Long Broad Tip



001043



001044

Useful in and around the shoulder joint and other retraction situations when a blunt tip is desirable.

HOHMAN RETRACTOR WITH LONG BROAD TIP

001043 Hohman Retractor 24mm Long Broad Tip 280mm Long

001044 Hohman Retractor 18mm Long Broad Tip 175mm Long

Gutter Hohman



The Gutter Hohman is the brain-child of Haralabos Haralabidis, DVM from Athens. The gutter profile of the blade's top surface helps to prevent bones from slipping off sideways until reduction has been achieved. This instrument is most useful for oblique fractures of the long bones of medium size dogs.

GUTTER HOHMAN RETRACTOR

001035 Gutter Hohman Retractor 180mm Long for Oblique Fracture Reduction

Retractors designed specifically for use in and around the Hip Joint

Hohman retractors designed specifically for veterinary hip surgery, to deal with the muscle bulk involved

Swan-Neck Hohman



Used for elevation and exposure of the femoral neck and head in medium/large dogs. Cranked shape keeps the surgeon's hand and the femur out of the surgical field.

SWAN-NECK HOHMAN

001034 Medium Swan-Neck Hohman 11mm Blade Short Tip 220mm Long

Hip Hohman

Developed for use in total hip replacement but useful in any procedure requiring elevation of the femoral head. Multiple small teeth at the end lip of the instrument sit securely on the femoral neck outside the zone of articular cartilage.

Three sizes are available. Approximate guidelines are as follows:

Large	> 30kg
Medium	10 - 30kg
Small	< 10kg

HIP HOHMAN

- 001038** Large Hip Hohman 255mm Long 25mm Wide Blade
001037 Medium Hip Hohman 175mm Long 13mm Wide Blade
001036 Small Hip Hohman 125mm Long 8mm Wide Blade
0010300SET Hip Hohman Set of 3 (as above)

Hohman Retractor 20mm Wide with Short Kinked Tip

Designed for femoral neck retraction for THR after the femoral head has been removed in order to visualise the acetabulum for acetabular reaming. The bent tip of the Hohman is engaged caudoventral to the acetabulum with the osteotomised surface of the femoral neck behind it, and then the Hohman is retracted to pull the femoral neck out of the way of the reamer.

HOHMAN RETRACTOR 20MM WIDE WITH SHORT KINKED TIP

- 001039** Hohman 20mm Wide with Short Kinked Tip 200mm Long

OCD Curette

Loose flaps of cartilage at the OCD lesion must be removed. The double ended OCD curette is designed to perform this task within the limited space available. Healthy fibrocartilage within the lesion should not be disturbed.

OCD CURETTE

- 001030** OCD Curette 215mm Long
001032 OCD Curette Small 180mm Long

Adjustable Bone Saw

Multi-purpose saw, supplied with 5 fine chrome plated blades. Blade length adjustable from 40 to 100mm.

Procedures include:

Trochleoplasty	Tibial Tuberosity transposition
Amputations	Trochanteric osteotomy
Excision arthroplasty	Splitting multi-root teeth for extraction

Handle length 130mm. Blade length 155mm

ADJUSTABLE BONE SAW

001000 Adjustable Bone Saw c/w 5 Fine Blades
001001 Spare Fine Blades Pack of 5 Chrome Plated
001000SS Adjustable Bone Saw Blade (Single) Sterile

Rhinotomy/ Plaster Saw Blade

This is a curved stainless blade with a radius of 15mm. Useful for rhinotomy, plaster cutting and osteotomies where access is limited, e.g. radius, ulna and ilium during a TPO. Total length 85mm.

RHINOTOMY/ PLASTER SAW BLADE

001003 Rhinotomy/ Plaster Saw Blade (single) 85mm Long

Coarse Stainless Blade

Very useful for larger patients. The tooth pitch is 15 teeth per inch. This blade does not clog easily.

COARSE STAINLESS BLADE

001002 Coarse Stainless Blade (single) 140mm Long

Gigli Wire Passer - Nick VanVooren

Minimally invasive passing of Gigli wire around the ischium for TPO/ DPO can be challenging. This device, developed by Nick VanVooren simplifies this process. The wire is simply passed down the tube, where the bend forces it back on itself for easy retrieval. Total length 160mm.

GIGLI WIRE PASSER

001518 Gigli Wire Passer - 160mm Long

Gigli Wire - 10m Spools

Gigli wire with no eyes. Used with the Gigli Wire Passer. Cut to length required, allowing an extra 10-15mm to allow attachment to handles, before autoclaving

GIGLI WIRE - 10M SPOOLS

001519 Gigli Wire - 10m Spool

Vi Handles for Gigli Wire

Attachment of non-eyed wires to these handles is achieved by means of a thumb screw. The wire is gripped more firmly if it is wrapped once around the handles before tightening the screw.

VI HANDLES FOR GIGLI WIRE

001514 Vi Handles for Gigli Wire 110mm (Pair)

Gigli Saw

Essentially a bone cutting wire. More useful in large dogs. Hard to persuade the saw to cut where you want it to. Can be threaded through holes to make inaccessible cuts. e.g. ulna osteotomies.

GIGLI SAW

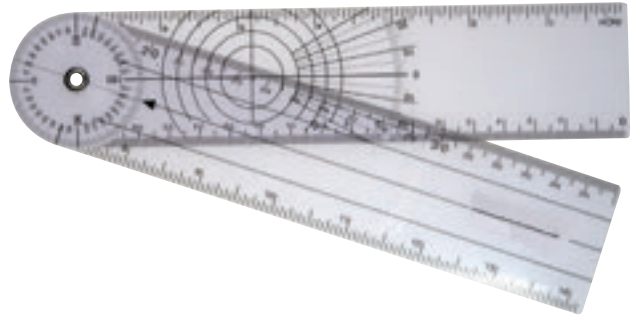
- 001515** Gigli Saw Handles (pair) 75mm
- 001516** Gigli Saw 30cm
- 001517** Gigli Saw 50cm

Combination Bone Rasp Set

The three Interchangeable Rasp Blades offer a range of cutting surfaces, flat, round and 'putti' style. The handle has an ergonomic design which is easy to grip even when wet.

COMBINATION BONE RASP SET

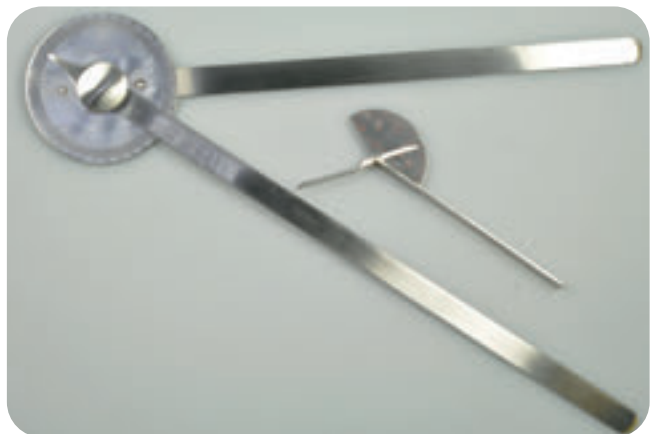
- 001015** Combination Bone Rasp with 3 Interchangeable Heads

Goniometer

The Goniometer may be used for the calculation of tibial plateau angles, wedge resections, angles of anteversion etc. Also used to measure pre and post-op range of motion of joints together with the effect of physiotherapy. Clients may use to measure progress. 360° measurement.

GONIOMETER

- GONIO** Goniometer 6" 150mm (illustrated)
- GONIO2** Goniometer 12" 300mm

Stainless Steel Goniometers

For intra surgery use or where a more robust instrument is required. The Femoral Neck Goniometer is useful for assessing implant size in hip replacement.

STAINLESS STEEL GONIOMETERS

- GONIO3** Stainless Steel Goniometer 340mm Long
- HE-GONIO** Femoral Neck (Stainless Steel) Goniometer 120mm Long

Veterinary Tissue Bank

Veterinary Tissue Bank is Europe's first tissue bank dedicated to helping companion animals.

Products are available in various presentations, and have many applications from use during procedures such as TTA rapid and joint arthrodesis to dealing with the difficult non-union case.



DBM

Demineralised Bone Matrix (DBM) is cortical bone which has been cut, milled into fine particles and washed to remove soft tissues, cells and marrow elements. Further processing removes minerals to leave collagen matrix and endogenous bone growth factors such as bone morphogenic proteins.

DBM is used where osteoinduction is required but the graft does not require any structural properties, for example in small joint arthrodesis.



DBM is rehydrated with saline prior to use.

Packed around a comminuted tibial fracture in a 2 year old German Shepherd Dog.



Available in either Powder, Fibres or now as DBM Putty.

Cancellous Chips



Cancellous Chips offer structure to a graft as well as providing a scaffold for osteoconduction.

This is available in canine and feline variants. Canine is available in 3 chip sizes for closer matching to defect size, and 3 pack sizes. The product consists of morcellised cancellous bone, processed to remove soft tissue, cells and marrow elements, freeze-dried and irradiated after packing for sterility.

Useful in TTA Rapid, filling corrective osteotomies, fracture repair, spinal fusions among other procedures. It is also useful for extending an autograft where harvesting has not produced sufficient material.

DBM Fibres



DBM fibres are made from cortical bone and contain Osteoinductive growth factors such as BMP2 and BMP7.

Unlike DBM particulates the long fibres are entangled to form an effective Osteoconductive scaffold for greater cell migration. In addition, the fibres are easier to handle, forming a putty like texture upon rehydration without needing to add synthetic carriers. The fibres stay in situ resisting disintegration during irrigation.

Key Indications:

- DBM fibres are used in a wide range of orthopaedic procedures where fusion of bone or joint is to be achieved. Some examples are: arthrodesis, spinal fusion, fracture repair, etc.
- DBM fibres may be mixed with cancellous chips as a graft extender in filling large bone defects.
- The unique texture of DBM fibres is ideal for mixing with bone marrow or PRP to enhance performance.

DBM Putty - Premixed

Now supplied premixed. DBM particulates are mixed with nanocrystalline hydroxyapatite aqueous suspension prior to use, in the syringes provided. The addition of hydroxyapatite provides a high surface area for osteoconduction, and allows the putty-like texture to form. The product sticks well to the bone surface and conforms to the defect, improving contact to bone. It can be injected into the surgical site direct from the syringe, e.g. in TTA, and will also pass through a 14g needle for non-invasive surgery such as MIPO

Graft Selection

Osteoinduction	—————→	DBM
Osteoconduction	—————→	Cancellous Chips
Osteoconduction and osteoinduction	—————→	DMB Putty/ Fibres

VETERINARY TISSUE BANK PRODUCTS

DBMPUTC1101	VTB DBM Putty 1cc (Premixed)
C1201	VTB DBM Fibres 1cc
C1203	VTB DBM Fibres 3cc
C1205	VTB DBM Fibres 5cc
C0901	DBM Canine 0.1-0.5mm Granules 1cc
C0903	DBM Canine 0.1-0.5mm Granules 3cc
C0905	DBM Canine 0.1-0.5mm Granules 5cc
C1001	DBM Canine 0.5-1.0mm Granules 1cc
C1003	DBM Canine 0.5-1.0mm Granules 3cc
C1005	DBM Canine 0.5-1.0mm Granules 5cc
C0101	Cancellous Chips Canine 2-4mm Chip Size Coarse 1cc
C0103	Cancellous Chips Canine 2-4mm Chip Size Coarse 3cc
C0105	Cancellous Chips Canine 2-4mm Chip Size Coarse 5cc
C0201	Cancellous Chips Canine 1-2mm Chip Size Medium 1cc
C0203	Cancellous Chips Canine 1-2mm Chip Size Medium 3cc
C0205	Cancellous Chips Canine 1-2mm Chip Size Medium 5cc
C0301	Cancellous Chips Canine <1mm Chip Size Fine 1cc
C0303	Cancellous Chips Canine <1mm Chip Size Fine 3cc
C0305	Cancellous Chips Canine <1mm Chip Size Fine 5cc
FL105	Cancellous Chips Feline <2mm Chip Size Fine 1cc

All products are subject to availability. Feline products are often in short supply.

NanoPaste Bone Substitutes

The sterile presentation is an aqueous paste supplied in a syringe (2.5ml or 5.0ml). The paste may be injected directly into a defect where it conforms to fill the space. The paste is readily colonised by bone cells and acts as a scaffold encouraging penetration of host bone. The putty-like consistency means that the paste may be pressed onto bone where it sticks until resorbed. NanoPaste is very similar to Ostim™ which has an established clinical record.

Applications include: joint arthrodesis, TTA Rapid, non-unions, delayed unions and filling spine cages.



NanoPaste and TTA Rapid

Use to save time harvesting autograft or when the quality of the autograft is poor. NanoPaste will extend autograft.

NanoPaste may be injected directly into the defect where it conforms to the defect shape.

Nano HA paste conforms to ENISO 13779-1:200 and ASTM F1185-88 for medical grade HA.

NanoPaste is also available in a granule formulation 'ReproBone' which may be used alone or as an extender of natural cancellous bone graft.

NANOPASTE

PAS2.5	NanoPaste Syringe 2.5ml
PAS5	NanoPaste Syringe 5ml

Cementless Hip System

Helica

Modular, Cementless, Screw-in Total Hip Replacement.

Available with improved three part stem. (TPS)



Surgeons contemplating use of the Helica system must attend a recognised training course. A full illustrated guide is included.

The Helica System of Total Hip Replacement is unique in a number of respects.

Most cementless systems rely on a 'press fit' for at least one implant component. Creation of the site for the component is critical and technically demanding or the component will not lock into position. In addition, press fit components are vulnerable until osseous integration develops over several weeks (if it happens at all). In man this is less of an issue in that the patient can strictly control the stress placed on the new hip. We have much less control over our canine patients during this critical phase.

Both Helica components screw into position giving post operative security during the phase of osseous integration. The cup is not only fixed very rigidly but can even be re-positioned intra-operatively, should it be required, without losing any security. The Helica cup may be used with all other leading brands of stems to create a hybrid system with maximum cup security.

The stem is a short prosthesis located entirely in the proximal femur. Only the articular surface is removed during implantation retaining the maximum bone stock. The new Three Part Stem (TPS) ensures more accurate positioning of the stem in addition to an increased surface area for load dispersion. A choice of flanges is available to suit individual femoral neck size.



The surface of both acetabular shell and femoral stem are treated to maximise osteointegration of implants.



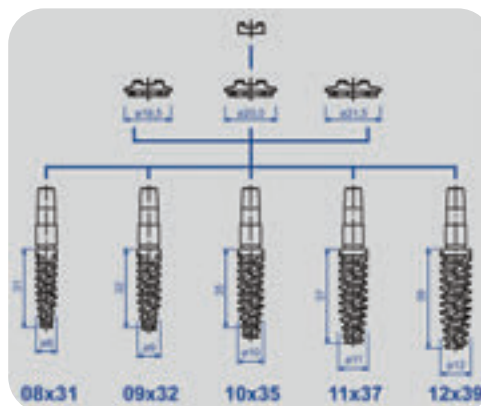
The outer surface of the acetabular cup is threaded for rapid screw-in insertion. Repositioning of cups intraoperatively is straight forward. Revision cups for other systems are available.

Both femoral and acetabular components screw into position allowing immediate loading. The surface finish of the titanium components encourages rapid osteointegration. Flexibility is achieved by:

- 5 Stem sizes
- 6 Neck lengths
- 3 Flanges for the femoral neck
- 6 Acetabular Cup sizes

Once the implantation sites have been prepared the implants self tap into position.

Only the articular surface of the femoral head is removed, retaining the maximum amount of bone stock to support the femoral prosthesis, which screws into place. Although perhaps counter intuitive the small stem in the proximal femur loads at least as well as long stemmed prostheses.



Advantages

- Short surgery time
- Minimally invasive
- Cementless technique
- Screw-in implants
- Immediately loadable
- Cost effective

HELICA Hybrids

The stability of the Helica Cup is such that it may be used in conjunction with press fit cups from other systems either as a revision or as a primary procedure.

Helica Heads are available in various lengths which interface with Stems for the Kyon and BFX Systems. These Heads fit standard Helica cups.

The tray of Acetabular Instruments may be purchased separately after attending an approved training course.

Ancillary Helica Instrumentation



Three instruments, not included in the standard sets, make osteotomy and alignment of the femoral stem significantly easier and are recommended. The Meyerding is a very powerful hand held retractor.

The Helica Hohman has a dished profile and fine teeth along its leading edge to lift the femoral head and neck up from the incision for osteotomy. The goniometer helps the surgeon to establish the correct axis for the femoral stem at an angle of 145 to 147 degrees.

HELICA ANCILLARY INSTRUMENTS

001038	Helica Hohman Large
001037	Helica Hohman Medium
001036	Helica Hohman Small
0010300SET	Helica Hohman Set (Set of 3 as above)
HE-GONIO	Helica Goniometer
150019	Meyerding Retractor

Helica Total Hip Instrumentation



HELICA TOTAL HIP INSTRUMENTATION

HE-KIT Helica Instrument Kit

Helica Total Hip Implants



Helica Screw Acetabular Cups

SCREW ACETABULAR CUPS

HE-HCI-T22	Helica 22mm Acetabular Cup
HE-HCI-T24	Helica 24mm Acetabular Cup
HE-HCI-T26	Helica 26mm Acetabular Cup
HE-HCI-T28	Helica 28mm Acetabular Cup
HE-HCI-T30	Helica 30mm Acetabular Cup
HE-HCI-T32	Helica 32mm Acetabular Cup

Helica TPS Stems

TPS STEMS

HE-HS3-T0831	TPS Helica Stem 8mm x 31mm (2012 Version)
HE-HS3-T0932	TPS Helica Stem 9mm x 32mm (2012 Version)
HE-HS3-T1035	TPS Helica Stem 10mm x 35mm(2012 Version)
HE-HS3-T1137	TPS Helica Stem 11mm x 37mm(2012 Version)
HE-HS3-T1239	TPS Helica Stem 12mm x 39mm(2012 Version)

Helica TPS Flanges

TPS FLANGE

HE-HF3-T18.5	TPS Helica Flange 18.5mm (inc Locking Nut)
HE-HF3-T20	TPS Helica Flange 20.0mm (inc Locking Nut)
HE-HF3-T22	TPS Helica Flange 21.5mm (inc Locking Nut)

Helica TPS Locking Nut

TPS LOCKING NUT

HE-HN3-T08	TPS Helica Locking Nut (for replacement)
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Helica Femoral Heads

FEMORAL HEADS

HE-FHI-18S	Helica 18mm Femoral Head - Short
HE-FHI-18M	Helica 18mm Femoral Head - Medium
HE-FHI-18L	Helica 18mm Femoral Head - Long
HE-FHI-18XL	Helica 18mm Femoral Head - Extra Long
HE-FHI-18XXL	Helica 18mm Femoral Head - XX Long

Helica Inlays - Constrained

INLAYS

HE-ALI-P22	Helica 22mm Inlay
HE-ALI-P24	Helica 24mm Inlay
HE-ALI-P26	Helica 26mm Inlay
HE-ALI-P28	Helica 28mm Inlay
HE-ALI-P30	Helica 30mm Inlay
HE-ALI-P32	Helica 32mm Inlay

Helica Inlay Non Constrained

NON CONSTRAINED INLAYS

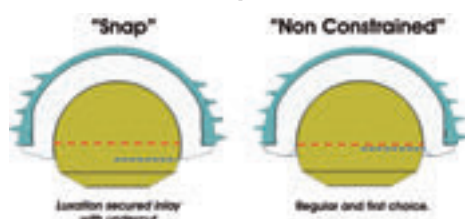
HE-ALI-P24-NC	Helica 24mm Inlay Non Constrained
HE-ALI-P28-NC	Helica 28mm Inlay Non Constrained
HE-ALI-P30-NC	Helica 30mm Inlay Non Constrained

Helica Hybrid Revision Implants

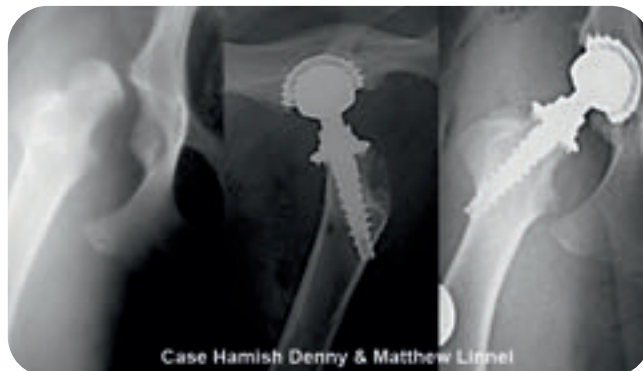
HYBRID REVISION IMPLANTS

HE-FHB-18-0	Helica Hybrid 18mm Femoral Head Biometric Shank + 0
HE-FHB-18-3	Helica Hybrid 18mm Femoral Head Biometric Shank + 3
HE-FHB-18-6	Helica Hybrid 18mm Femoral Head Biometric Shank + 6
HE-FHK-18XS	Helica Hybrid 18mm Femoral Head Kyon Extra Short
HE-FHK-18S	Helica Hybrid 18mm Femoral Head Kyon Short
HE-FHK-18M	Helica Hybrid 18mm Femoral Head Kyon Medium
HE-FHK-18L	Helica Hybrid 18mm Femoral Head Kyon Long
HE-FHK-18XL	Helica Hybrid 18mm Femoral Head Kyon Extra Long

Inlay options for Screw Cup



The standard inlay for the screw cup for use with Helica stems is non-constrained. Certain cases which for reasons of conformation or soft tissue benefit from a 'Snap Inlay' which is retentive.



Helica Total Hip Stem Implants (Original Version)

These Stems are the original design to be used in conjunction with the original instrumentation.

STEMS

HE-HSI-T0826	Helica Stem 8mm x 26mm
HE-HSI-T0928	Helica Stem 9mm x 28mm
HE-HSI-T1028	Helica Stem 10mm x 28mm
HE-HSI-T1132	Helica Stem 11mm x 32mm
HE-HSI-T1232	Helica Stem 12mm x 32mm

3CON Stems

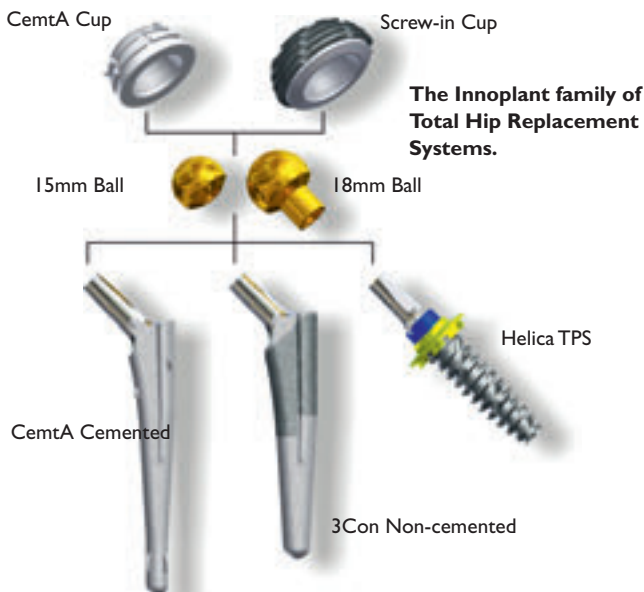
3 CON STEM

TSI-C-04	3CON Stem # 4
TSI-C-05	3CON Stem # 5
TSI-C-06	3CON Stem # 6
HE-TSI-C-07	3CON Stem # 7

Innoplant Total Hip Replacement

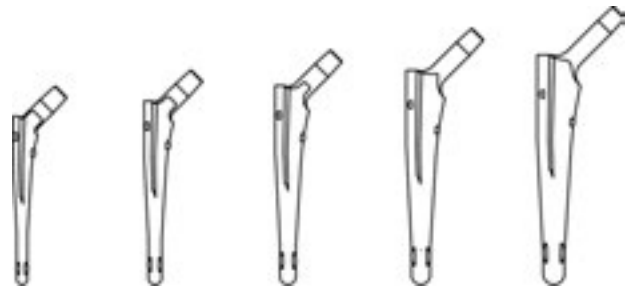
The manufacturer of the well established Helica system has a long history of producing implants and instruments for the human field. Recognising that no one system will suit every case, Innoplant has developed a family of Total Hip Replacement systems which allow the surgeon to deal appropriately with each case. The systems are compatible with each other enabling a 'mix and match' protocol, selecting each component on the merits of the case. It is possible for example to use a screw-in cementless cup together with a cemented long stem. The various options facilitate a straight forward revision should it be required.

Using an Innoplant screw-in cup and revision stem plus ball, a failed Kyon or Biomedtrix cup may be revised.



Available in 5 sizes

Sizes not shown to scale



CemtA Stem Instrumentation



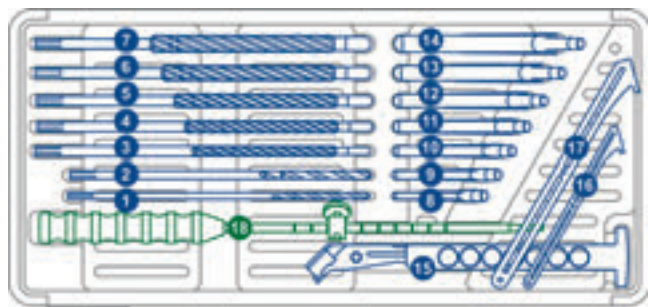
The instrumentation required for the stem is un-complicated. The set includes reamers and trial stems for all sizes. The reamer system is modular in design, all reamer shafts fitting the same ergonomic handle.

CemtA Cemented System

Produced by Innoplant, the manufacturers of the Helica system, the CemtA system both compliments and offers an alternative to Helica and other hip replacement systems. The heads and cups of CemtA are interchangeable with all other Innoplant systems.

One of the features of Helica is that it is possible to easily revise the Helica using a long stemmed system. The CemtA system is ideal due to the compatibility of components with Helica.

CemtA is an ideal stand alone cemented system requiring a minimum of dedicated instrumentation.



Cement Restrictor

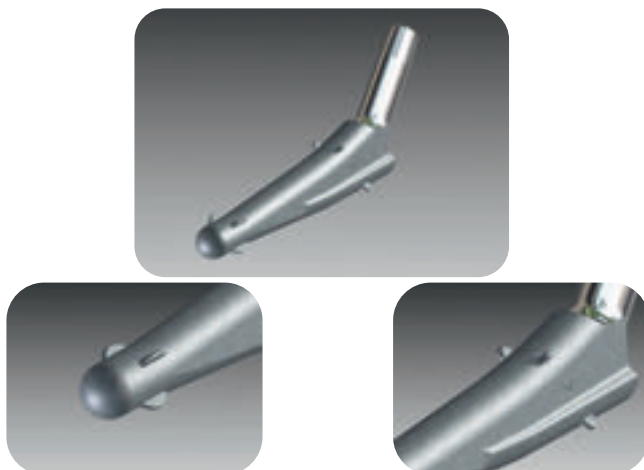


The cement restrictor is placed in the reamed medullary canal distal to the anticipated position of the stem tip. The restrictor prevents extrusion of the cement distally which maintains the cement mantle and minimises displacement of the distal contents of the femur.

Composition

UHMWPE ISO 5834-1

ASTM F648



Composition

Cobalt Chrome Molybdenum alloy (CoCrMo, ISO 5832-4, ASTM F75).

CemtA Cup

The CemtA cup may be used with either the cemented CemtA stems or the familiar Helica stems. Self-centering pegs ensure that the cup is centered in the reamed acetabulum. This ensures an even mantle of cement.

The CemtA cup is available in six sizes to match all stem options.



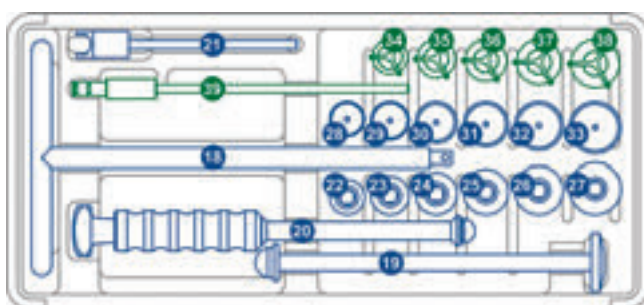
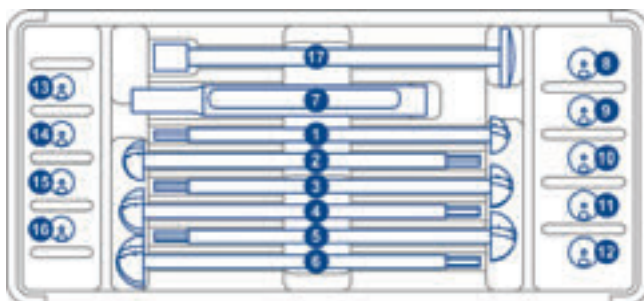
Composition: UHMWPE ISO 5834-1, ASTM F648

Radioluscent ring Stainless 316L ISO 5832-9

CemtA Cup Instrumentation



The full Cup Set comprises two trays including all the instrumentation and trial implants both both the screw cup (familiar from the Helica system) and the new CemtA cemented cup. If required the cup set may be configured for the CemtA cup only.



Clinical case showing both CemtA stem and CemtA cup in situ.
12 month Beagle
CemtA stem 4 plus 21mm cup
Case thanks Gereon Viefhues

CEMTA STEMS

HE-CSI-C-04	CemtA Stem	#4
HE-CSI-C-05	CemtA Stem	#5
HE-CSI-C-06	CemtA Stem	#6
HE-CSI-C-07	CemtA Stem	#7
HE-CSI-C-08	CemtA Stem	#8

CEMTA CUPS

HE-CCI-P-21	CemtA Cup 21mm
HE-CCI-P-23	CemtA Cup 23mm
HE-CCI-P-25	CemtA Cup 25mm
HE-CCI-P-27	CemtA Cup 27mm
HE-CCI-P-29	CemtA Cup 29mm

15MM FEMORAL HEADS

HE-FHI-S-15-S	15mm Femoral Head Small
HE-FHI-S-15-M	15mm Femoral Head Medium
HE-FHI-S-15-L	15mm Femoral Head Large
HE-FHI-S-15-XL	15mm Femoral Head Extra Large
HE-FHI-S15-XXL	15mm Femoral Head Extra Extra Large

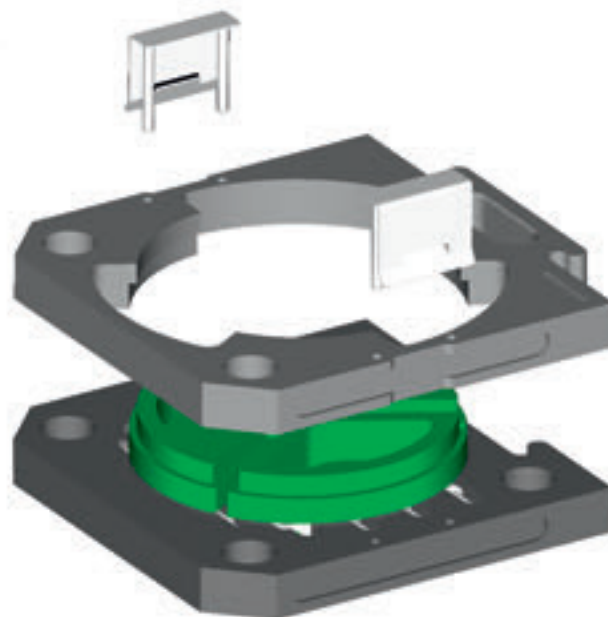
CEMTA INSTRUMENTATION

HE-300-KS-14	Full Instrumentation for Screw Cup/CemtA Cup Set 1 & Set 2
HE-300-KS-12	Full Instrumentation for CemtA stems

CEMENT RESTRICTOR

HE-CRI-P-01	Cement Restrictor Size 1
HE-CRI-P-02	Cement Restrictor Size 2

Hip Fixation and Navigation Device



During Total Hip Replacement procedure, correct placement of the acetabular cup is essential. Navigation Devices have been around for some time, often home-made.

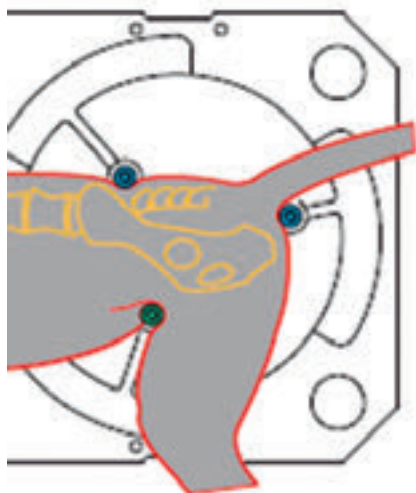
This Navigation Device gently positions the patient in the correct position, and includes an orientation guide to ensure the correct inclination and retroversion angles are maintained.

The blue handle allows easy rotation of the table to aid comfortable positioning, reducing the risk of stress on the spine.

HIP FIXATION AND NAVIGATION DEVICE

HE-HFN-KS-01 Hip Fixation and Navigation Device

Helica Drill Guide



This Drill Guide was modified by Christoph Stork, DipECVS, as an aid to drilling of the femoral neck during the Helica total hip joint replacement. In essence, this is an over-sized soft-tissue protector with a very large bore of 9mm accepting the largest of the drill-bits used in this procedure.

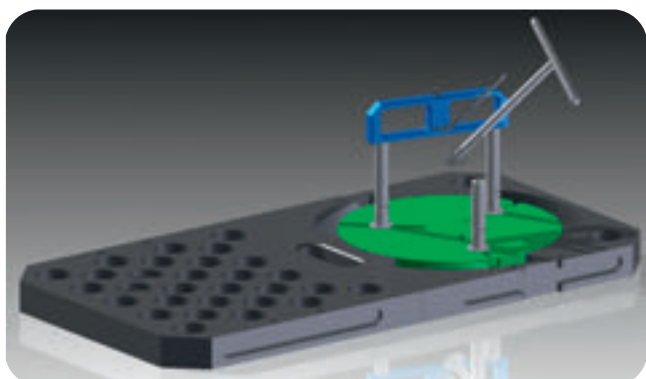
HELICA DRILL GUIDE

HELICADG Helica Drill Guide 9mm Diameter Bore

Construction is of titanium and high-strength aluminium, for easy cleaning and maintenance.

When not in use, the table can be disassembled for storage.

The two halves of the table feature slots for all components, clipping together to for secure storage between uses.



Meyerding Retractor



A heavy duty retractor for use around the hip. Much favoured by Marvin Olmstead.

MEYERDING RETRACTOR

150019 Meyerding Retractor 16mm

Heygroves Femur Grasping Forceps



Powerful clamps to lock onto the femoral shaft. Used to rotate the femoral head outwards for excision.

HEYGROVES FEMUR GRASPING FORCEPS

150017 Heygroves Femur Grasping Forceps 10" Long

Bone Cement

DePuy CMW Bone Cement

Designed for total hip replacement. CMW is the industry standard. Various options are available. Also useful in stabilisation of vertebral fractures/luxations.

CMW1 is a medium/high viscosity cement for digital application

CMW2 is a rapid set cement suitable for the acetabular cup via digital application.

CMW3 is a more fluid cement which is more appropriate for the femoral component. It is usually applied via a 50ml syringe.

CMW cement comes impregnated with Gentamycin which minimises post operative infection, the worst complication of the procedure.



CMW BONE CEMENT

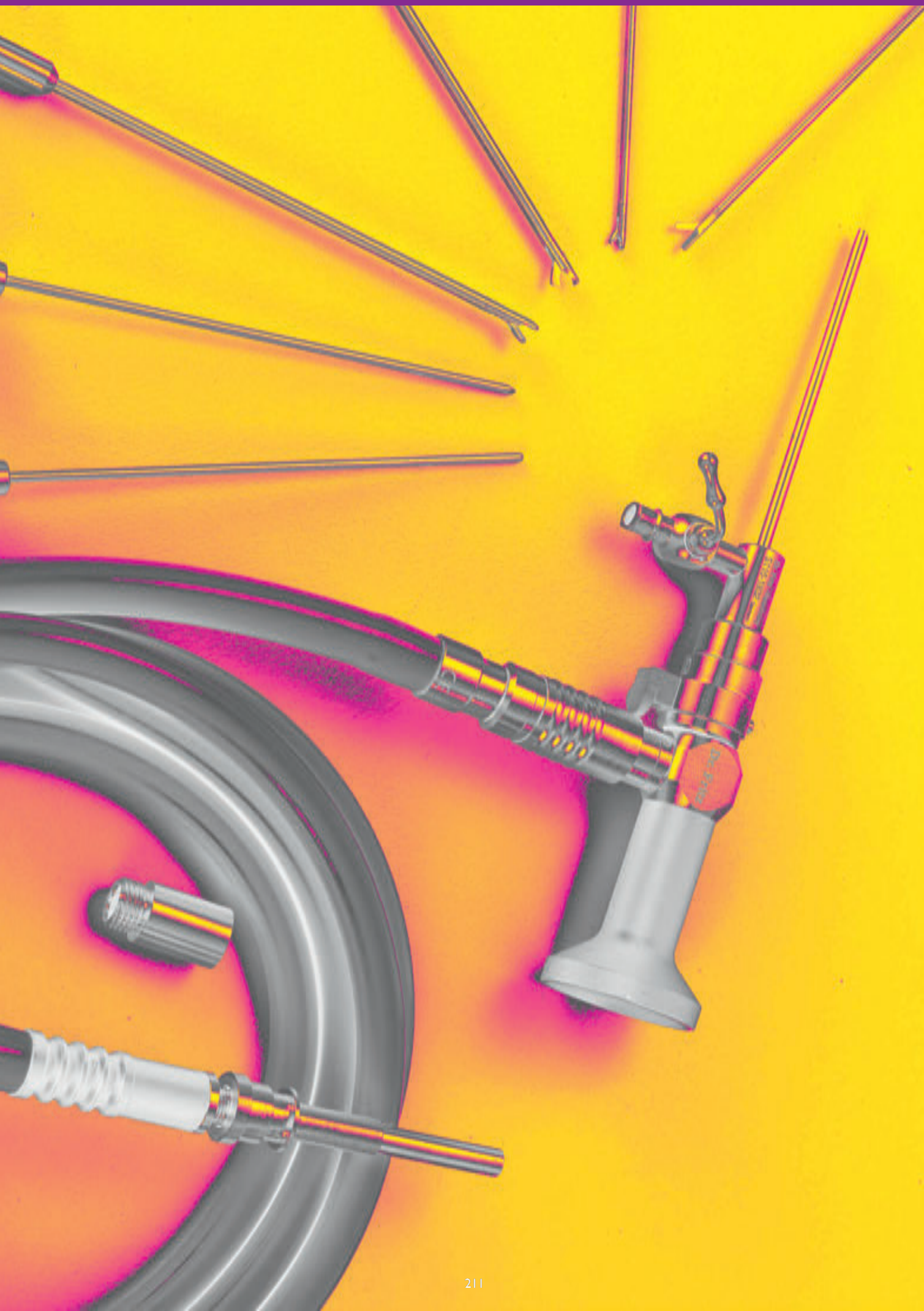
160506 CMW1 no Gentamycin 40g
160500 CMW1 with Gentamycin 20g
160501 CMW2 with Gentamycin 20g
160503 CMW3 with Gentamycin 20g
160504 CMW3 with Gentamycin 40g

Veterinary Instrumentation Bone Cement



VETERINARY INSTRUMENTATION BONE CEMENT VACUUM MIX

BC1 High Viscosity 40g
BC1G High Viscosity 20g with Gentamycin
BC3G Low Viscosity (syringe) 20g with Gentamycin
BOWLSET Set of 3 Mixing Bowls
SPATDISP Disposable Spatula - Non-sterile (100 units)
SYRINGE50 50ml Catheter Mount Syringe Single Sterile
SPATULA Autoclavable Plastic Mixing Spatula



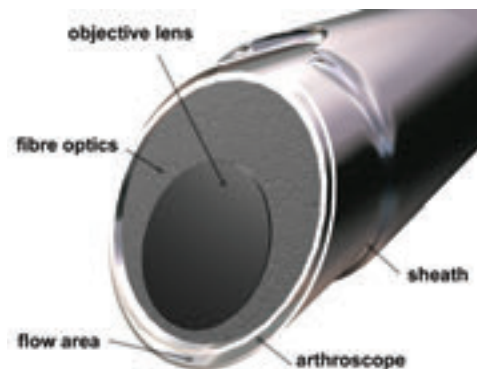
Arthroscopes

An arthroscope is a rigid endoscope consisting of a system of lenses, which collects and transmits an image from the tip of the instrument along the shaft to an eyepiece or camera. A light post close to the eyepiece allows light to be passed into the shaft and down optic fibres surrounding the lens system to illuminate the subject area at the tip.

The diameter refers to the outside diameter of the unsheathed shaft of the telescope. Three sizes are commonly used in small animal arthroscopy: 2.7mm, 2.4mm and 1.9mm. Arthroscopy technology has improved so much that optically the new 2.4mm arthroscope is as good as the older 2.7mm version. The 2.4mm arthroscope is fine for most procedures but can prove a little large in small elbows. As the diameter of the arthroscope becomes smaller, there is less space for optical fibres, which has implications for light transmission and image size. Recent improvements in construction such as the use of rod lens systems as opposed to optic fibres has improved the performance of the smaller arthroscopes. Additionally the smaller arthroscopes are fragile and care must therefore be exercised to avoid damage in use, cleaning and storage.

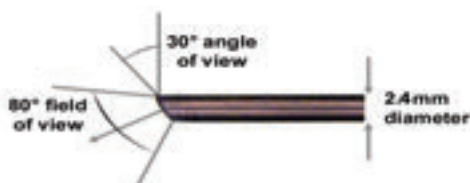
The viewing angle is the angle between the lens face and a line drawn at right angles to the long axis of the arthroscope (see above right). A 0° scope views straight ahead from the front of the lens, while a 90° scope sees an image at right angles to the long axis of the scope. Most veterinary arthroscopes have a viewing angle of 30°, which is a compromise between field of view and distortion. The user needs to be aware which way the lens is pointing. The light post is used as a reference point and is positioned opposite the angle of view. Rotating the scope along its long axis will allow the surgeon to view a large area within the joint with minimal repositioning. An oblique viewing angle does offer the surgeon a limited ability to see 'around corners'.

Each arthroscope will require a dedicated sheath, which protects the arthroscope as well as delivering fluid to the tip. The sheath reduces the effective working length and increases the working diameter of the arthroscope.



Schematic of the tip of a typical arthroscope

All arthroscopes are now available in autoclavable versions. Autoclaving, especially of fine arthroscopes, will significantly reduce the working life of the instrument. Autoclavable arthroscopes may be soaked and we recommend this method of sterilisation to preserve your arthroscope. If your arthroscope is not marked autoclavable, it may only be soaked.



Arthroscopy Starter Kit

Instrument choice is determined by personal choice and patient selection. Our Vet Tech Team are able to offer advice on suitable starter arthroscopic instrumentation.

In addition to arthroscopic hand instrumentation a suitable camera and light source will be required. Several options, including pre-owned units, are available.

Contact our Vet Tech Team on 0345 130 9596 or email info@vetinst.com to discuss options.

Arthroscopic Instrumentation

Irrigation and Working Cannulae, Trochar Changing System designed by Van Bree

Cannulae and portals: In order to fully examine the joint under investigation it may be necessary to manipulate some intra-articular structures. The instruments used must be small and be introduced either directly through the peri-articular soft tissues or via a dedicated cannula. Where serial insertions and withdrawals or a range of instruments are required, particularly through multiple layers of soft tissue, a cannula is preferable to minimize trauma, (trying to re-find a portal can be frustrating). Sets of cannulae dedicated to the most common joints are now available. Initially a small diameter cannula is inserted using a trochar, the portal may then be enlarged by the use of a 'switching stick'. The stick is inserted into the joint through the small cannula which is then withdrawn. Larger cannulae may be slid down the changing stick and introduced into the joint. Exchanging a small cannula for a larger one can be surprisingly difficult without such an aid. The system is colour coded for ease of use.

Cannula Sets



CANNULA SETS

- I-17-755** Working Cannula Set 'shoulder and elbow' designed by VAN BREE D:2.3 / 2.9 / 3.5mm; WL:3.5-5cm and 7-8 cm, includes Sharp Trochar and Changing Rod
- I-17-500** Working Cannula Set 'elbow' designed by VAN BREE consist of 3 Cannulas D:2.3 / 2.9 / 3.5mm; WL:3.5-5cm. includes 1 Sharp Trochar and 1 Changing Rod (2.3mm)
- I-17-700** Working Cannula Set 'shoulder' designed by VAN BREE consist of 2 Cannulas D:2.9 / 3.5mm, WL:7-8cm. includes 1 Sharp Trochar and 1 Changing Rod (2.8mm)



EGRESS CANNULA

- I-18-518** Egress Cannula, with Sharp Trochar Stopcock ID 2.7mm WL 7cm

Hand Instruments

Hand instruments for investigation are designed to move or retract intra-articular structures and usually take the form of blunt probes or grasping forceps. Where intra-articular surgery or sampling is involved additional cutting instruments will be required. Inserts for interchangeable hand instrument (AR-17-00) are available.

Arthroscopic Hand Instruments



HOOK PROBE

AR-17-09S Hook Probe 2.2mm With Silicon Handle



ELEVATOR

AR-17-13 Elevator Heavy 2.7mm With Metal Handle



BAYONET KNIFE

AR-17-03S Bayonet Knife 2.7mm With Silicon Handle



BANANA KNIFE

AR-17-05S Banana Knife 2.7mm, with silicon handle



CURETTE

AR-17-06S Curette 2.7mm Curved With Silicon Handle



RING CURETTE

AR-17-07S Ring Curette 2.7mm Small With Silicon Handle



Hold tear with clamp and push knife against 'handle' to detach from body of meniscus.

MENISCUS KNIFE

AR-17-11S Meniscus Knife Smillie 2.7mm With Silicon Handle



Use to hook under meniscal tears and detach handle from body of meniscus.

HOOK KNIFE

AR-17-19S Hook Knife 2.7mm With Silicon Handle

Milling Drill designed by Van Ryssen & Van Bree



This hand driven bur allows curettage of both cartilage and bone through the smallest working cannula. Much cheaper and easier than shaver systems.

MILLING DRILL

- I-17-822** Milling Drill for Arthroscopy Complete OD: 2.2mm WL: 12cm
- I-17-821** Replacement Bur and Shaft

Arthroscopy Hand Instrument Set

A useful set of three arthroscopy instruments for examination and intra-articular surgery. The two hand held knives can deal with most meniscal tears, whilst the black shaft of the hook probe minimises reflection.



ARTHROSCOPY HAND INSTRUMENT SET

- AR-17-19X** Pull Knife
- AR-17-11X** Push Knife
- AR-17-10** Hook Probe 2.2mm, with Stainless Handle Black Shaft
- AR-17-SET** Arthroscopy Hand Instrument Set

Gordon Coronoid Osteotome



Designed and developed by Ian Holsworth, this narrow osteotome is used for arthroscopic sub-total coronoidectomies.

GORDON CORONOID OSTEOTOME

- AR-17-30** Gordon Coronoid Osteotome (4mm)
- AR-17-29** Gordon Coronoid Osteotome (2mm)

Suture Passing Wire



Passing soft suture material through bone tunnels of soft tissues without causing additional trauma can be a challenge to the surgeon. The Arthrex Suture Passing Wire consists of a Nitinol loop attached to a flexible yet stiff wire. The wire may be pushed through bone tunnels of soft tissues and as the tip emerges the Nitinol loop naturally springs open to receive the suture which may then be pulled back through.

SUTURE PASSING WIRE

- AR-1255-18** Suture Passing Wire 600mm

Crystal Cannula



Clear cannula has a lip at the tip to minimise 'fall out'.

CRYSTAL CANNULA

- AR-6560** Crystal Cannula 5.75mm x 700mm (5 Pack)

Arthroscopic Punches, Biopsy Forceps, Rongeurs and Grasping Forceps

Arthroscopic forceps and rongeurs should be selected according to patient and portal size. A very small pair of grasping or cutting forceps will fit any portal but will be easily damaged if used on large fragments. Various designs are available for grasping cutting, or nibbling intra-articular structures.

2.7mm Instruments

2.7mm Instruments - working length 12cm with overstraining protection.



ALLIGATOR GRASPING FORCEPS

AS-17-662 Alligator Grasping Forceps with Ratchet OD: 2.7mm



UNIVERSAL RONGEUR AND GRASPING FORCEPS

AS-17-632 Universal Rongeur and Grasping Forceps Fenestrated OD: 2.7mm



BIOPSY AND SPOON

AS-17-641 Biopsy and Spoon OD: 2.7mm with overstraining protection

3.4mm Instruments

Fenestrated without Ratchet OD: 3.4mm working length 12cm with overstraining protection.



UNIVERSAL RONGEUR AND GRASPING FORCEPS

AS-17-762 Universal Rongeur & Grasping Forceps

Shoulder Aiming Device

Developed and tested at the Veterinary Faculty of Vienna, Austria by Dr Lehman.



Due to the dense muscle mass in shoulder joints, creating a puncture for a working cannula is often quite difficult. If a clean puncture allowing access directly to the joint is not achieved the first time, the risk of a subsynovial oedema increases greatly.

The shoulder puncture system has been specifically designed to help eliminate this risk. The system allows you to align your arthroscope accurately in the joint space. Simply attach the puncture system to the arthroscopic sheaths and maintain your arthroscopic vision in a parallel direction to the shoulder joint rim. At this point you will find the working triangulation portal in an ideal position. After a puncture is created with the desired trochar, simply replace the trochar with a working cannula and start working with your instruments. Useful for both cranial and caudal approaches.

See VCOT 2004; 17:1-56 for review

SHOULDER AIMING DEVICE

S140-2438F Aiming Device by Dr Lehman for the canine shoulder for 2.4 Scope T140-2432 and Changing Rod I-17-028

S140-1938F Aiming Device by Dr Lehman for the canine shoulder for 1.9 Scope T110-1930 and Changing Puncture Rod I-17-028

DVDLEHMAN DVD on use of Aiming Device

Extra Articular Joint Distraction

Arthroscopic Stifle Lever VSTL



Photo: Noel Fitzpatrick

The arthroscopic stifle is finer and longer than the standard version, making it more suitable for arthroscopic surgery. The good sized white PTFE handle has a useful notch which aligns with the tip orientation of the lever. Not just for arthroscopy – useful in open arthrotomies as well.

Developed for stifle surgery by Ian Holsworth.

ARTHROSCOPIC STIFLE LEVER VSTL

AR-17-02 Arthroscopic Stifle Lever VSTL 280mm

External Stifle Distractor



Developed original for arthroscopic use but also useful in open surgery on very tight osteoarthritic stifles. Improves visibility in the joint by reducing clutter. Pins (2.5mm) placed above and below the stifle in line with the medial collateral ligament. Turn the thumbscrew to distract the joint and expose the medial meniscus. The pins may be twisted relative to one another to bring the tibial plateau forwards.

Version with 3.2mm pins is suitable for use with TPLO jig pins – the proximal pin can then be re-used.

EXTRA ARTICULAR STIFLE DISTRACTOR

AR-17-01 Extra Articular Stifle Distractor 2.5mm Pins 80mm

AR-17-01/TPLO Extra Articular Stifle Distractor 3.2mm Pins 80mm

Hand Pressure Infusion Cuffs

Hand Pressure Infusion Cuffs



HAND PRESSURE INFUSION CUFFS

- AR-08-100 Pressure Infusion Cuff for 500-1000ml complete with Pressure Gauge and Hand Pump Reusable
- AR-08-300 Pressure Infusion Cuff for 3000-5000ml complete with Pressure Gauge and Hand Pump Reusable
- AR-08-110 Pressure Infusion Cuff for 500-1000ml without Pressure Gauge Luer Lock (fem) Reusable
- LLM-1250 Spare Luer-Lock Connector (m) comp. to Silicon Tubes 5 x 1.5mm

Van Ryssen Arthroscopy Instrumentation

Van Ryssen Series

Designed in cooperation with Prof. Dr. Bernadette Van Ryssen.

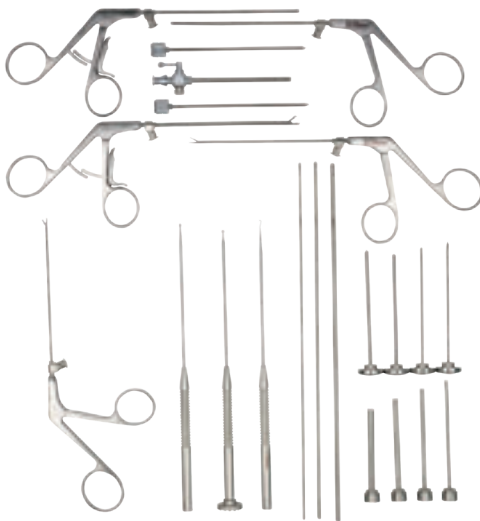
Special Length - Length and diameter were adapted for smaller joints, which provides ideal access to knee, elbow and shoulder.

Flush Port - The shaft of the instrument can be rinsed out easily with the LUER Lock shadow-free flush connection. This will increase the lifetime and accuracy of the instrument.

Special Ratchet - Innovative ratchet mechanism for quick switch between ratchet and ratchet-free working.



Van Ryssen Arthroscopy Set



The Van Ryssen Arthroscopy Set contains:

- Marking Rod 2.1 mm working length 250 mm
- Marking Rod 2.7 mm working length 250 mm
- Marking Rod 3.4 mm working length 250 mm
- Grasping Forcep Alligator Ø 2.0 mm with fine serration with flush port working length 110 mm
- Biopsy Spoon with flush port 110 mm working length sharp Ø 2.0 mm
- Grasping Forcep with spoon 1x2 teeth cross serrated Ø 3.0 mm with flush port working length 110 mm
- Hook Scissors Ø 2.7 mm with flush port working length 110 mm
- Biopsy Spoon sharp Ø 2.7 cross serrated with flush port working length 110mm with ratchet
- Hook Probe 1.5 mm
- Ball Head Burr 2.3 mm
- Spoon Curette small model 1.5 mm
- Rinse Cannula complete with Trocar/Obturator 3.2 mm with Stopcock
- 4 Sheaths 2.2 / 2.8 / 3.5 / 4.2 mm 2 Trocar pyramid tip 2 Obturators round

VAN RYSSSEN ARTHROSCOPY SET

LEI11001600

Van Ryssen Arthroscopy Set

Grasping Forcep Alligator



Fine serration, with flush port 2.0mm. 110mm shaft.

GRASPING FORCEP ALLIGATOR

LEI162011202

2mm Alligator Forceps

Hook Scissors



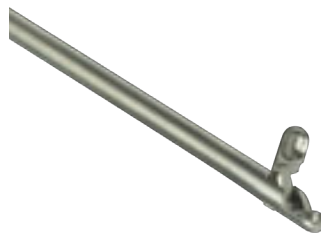
Sharp, with flush port 2.7mm. 110mm shaft.

HOOK SCISSORS

LEI162-0182-27

Hook Scissors Sharp With Flush Fort 2.7mm 110 Shaf

Biopsy Spoon Forceps



Sharp, with flush port, 2.0mm. 110mm shaft.

BIOPSY SPOON FORCEPS

LEI162014602

2mm Biopsy Forceps

Biopsy Grasping Forceps



With spoon, 1x2 teeth, with ratchet, flush port 3.0mm. 110mm shaft.

BIOPSY GRASPING FORCEPS

LEI162016930

3mm Biopsy Grasping Forceps

Biopsy Spoon Forceps



Cross serrated with ratchet, flush port 2.7mm. 105mm shaft.

BIOPSY SPOON FORCEPS

LEI162019727

2.7mm Biopsy Forceps

Van Ryssen Signature Series

Rita Leibinger Medical presents a new ergonomic grip design.

Small Working Ends - The size of the working ends has been reduced. This enables fine working especially in small joints.

New Grip Design - The new anti-slip grip design is ergonomically well balanced and provides an easy control of the working end. This results in a fatigue-free surgery.

Mushroom Handle for Ball Head Burr - With the redesign of the mushroom handle in combination with a new grip design, working with the ball head burr will allow time saving and more accuracy.



Hook Probe



HOOK PROBE

LEI165011010 Hook Probe 1.0mm Tip
LEI165011015 Hook Probe 1.5mm Tip

Ball Head Bur 2.3mm



BALL HEAD BUR

LEI165011023 Ball Head Bur 2.3mm

Spoon Curette



SPOON CURETTE

LEI165012015 Spoon Curette 1.5mm
LEI165012030 Spoon Curette 2.7mm

Banana Knife



BANANA KNIFE

LEI165013000 Banana Knife 2.5mm x 12mm

Hook Knife



HOOK KNIFE

LEI165013022 Hook Knife 2.2mm

Elevator



ELEVATOR

LEI165014000 Elevator (Penfield Style) 2.5mm

Curette



CURETTE

LEI165012028 Curette with Hole 2.7mm

Meniscus Knife



MENISCUS KNIFE

LEI165013025 Meniscus Knife 2.5mm

Arthro Trocar Set

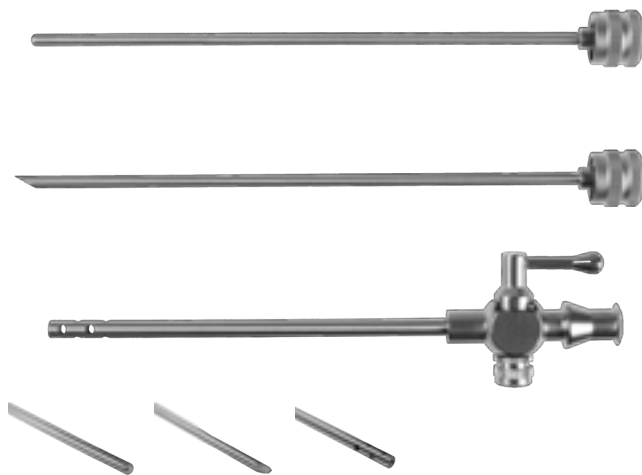


4 Sheaths, 2 Trocar pyramid tip, 2 Obturators, round.

ARTHRO TROCAR SET

LEI165010000 Arthro Trocar Set

Rinse Cannula Set



Complete with Trocar/ Obturator and Stopcock 3.2mm

RINSE CANNULA SET

LEI165015032 Rinse Cannula Set

Marking Rods



MARKING RODS

LEI165010021 Marking Rod 2.1mm

LEI165010027 Marking Rod 2.7mm

LEI165010034 Marking Rod 3.4mm

Mini Lambotte Osteotome



MINI LAMBOTTE OSTEOTOME

LEI23380512 Mini Lambotte Osteotome 3.0mm

LEI23380612 Mini Lambotte Osteotome 4.0mm

LEI23380712 Mini Lambotte Osteotome 6.0mm

Sterilisation Storage System



The Sterilisation Storage System includes:

- Sterilisation Basket Standard
- Sterilisation Rack for Arthroscopy Ringhandle Instrument
- Sterilisation Insert Rack for Arthroscopy Hand Instrument
- Sterilisation Insert Rack for Arthroscopy Flush/Rinse Instrument (instruments not included)

STORAGE STERILISATION SYSTEM

LEI16500300 Storage Sterilisation System

Sterilisation Tray



STERILISATION TRAY

LEI150540130 Sterilisation Tray 310 x 190 x 130mm

Sterility

Care and maintenance of scopes and cameras

Thorough cleaning of the equipment with a suitable proprietary cleaning agent prior to sterilisation is imperative, and must include inspection/cleaning of the three optical surfaces of the scope. Avoid use of any abrasive cleaning agents/cloths on any of the scope surfaces, although occasional use of a proprietary polishing paste may be required on the optical surfaces.

Most modern arthroscopes can be steam sterilised. Most will be marked 'autoclavable' to easily differentiate from those which cannot be subjected to steam sterilisation. Always ensure the scope is secured within an autoclave case or otherwise protected from any force/stress during the autoclave cycle. The optics inside an arthroscope are very delicate and easily damaged. Always refer to the manufacturers specific guidelines for care and maintenance, but as a general rule an autoclavable arthroscope can safely be subjected to a cycle at 132-135°C. Autoclaving a scope that is not designed to be autoclaved will result in permanent damage to the optical components. Do not attempt to accelerate the cooling process after steam sterilisation – the scope must be allowed to cool to room temperature before use. Do not under any circumstances immerse or rinse a scope in cold water to cool it down.

As with scopes, most modern camera heads can be autoclaved, but always follow the manufacturers guidelines for care & maintenance. As a general rule, an autoclavable camera head can be subjected to a 132°C steam cycle quite safely. It is important not to coil the camera cable too tightly for autoclaving, as this can damage/kink the delicate components inside the cable. Ensure the camera is secured within an autoclave case or other appropriate pack to prevent potential damage.

Perasafe



Perasafe is a rapid, instrument compatible, user and environmentally friendly, chemical sterilant. Supplied as a safe, space-saving powder, Perasafe is activated by simply dissolving in luke-warm tap water. Provides rapid sterilisation and re-use of endoscopy instruments. Aldehyde-free formulation gives efficacy without harm to instruments, health risks to nursing staff and avoids the need for special fume extraction or waste disposal systems.

Perasafe is a pale blue/ white powder which, when in solution, sterilises within 10 minutes. Suitable for all surgical instruments and fibrescopes. Formulated not to damage surgical instruments. Supplied in 6 or 24 packs.

PERSAFE

- 100100 Perasafe Cold Sterilant 24 x 81g (5 litres)
- 100101 Perasafe Cold Sterilant 6 x 81g (5 litres)

Rapizyme



Three new enzymes, supplied in an easy to use measured bottle. 2ml per litre dilution. Removes all organic material. Ideal for endoscopes. Low foam for ultrasonics. Complete rinsibility. Biodegradable. Tested by The Royal Institute of Public Health.

RAPIZYME

- RAPIZYME I Rapizyme Bottle 1 Litre

Suction Device

Puddle Vac Floor Suction Device



The Puddle Vac can collect an average of 700ml of fluid per minute. Simply place where required. Connect to standard suction apparatus.

PUDDLE VAC FLOOR SUCTION DEVICE

- PV932I Puddle Vac Pack of 5

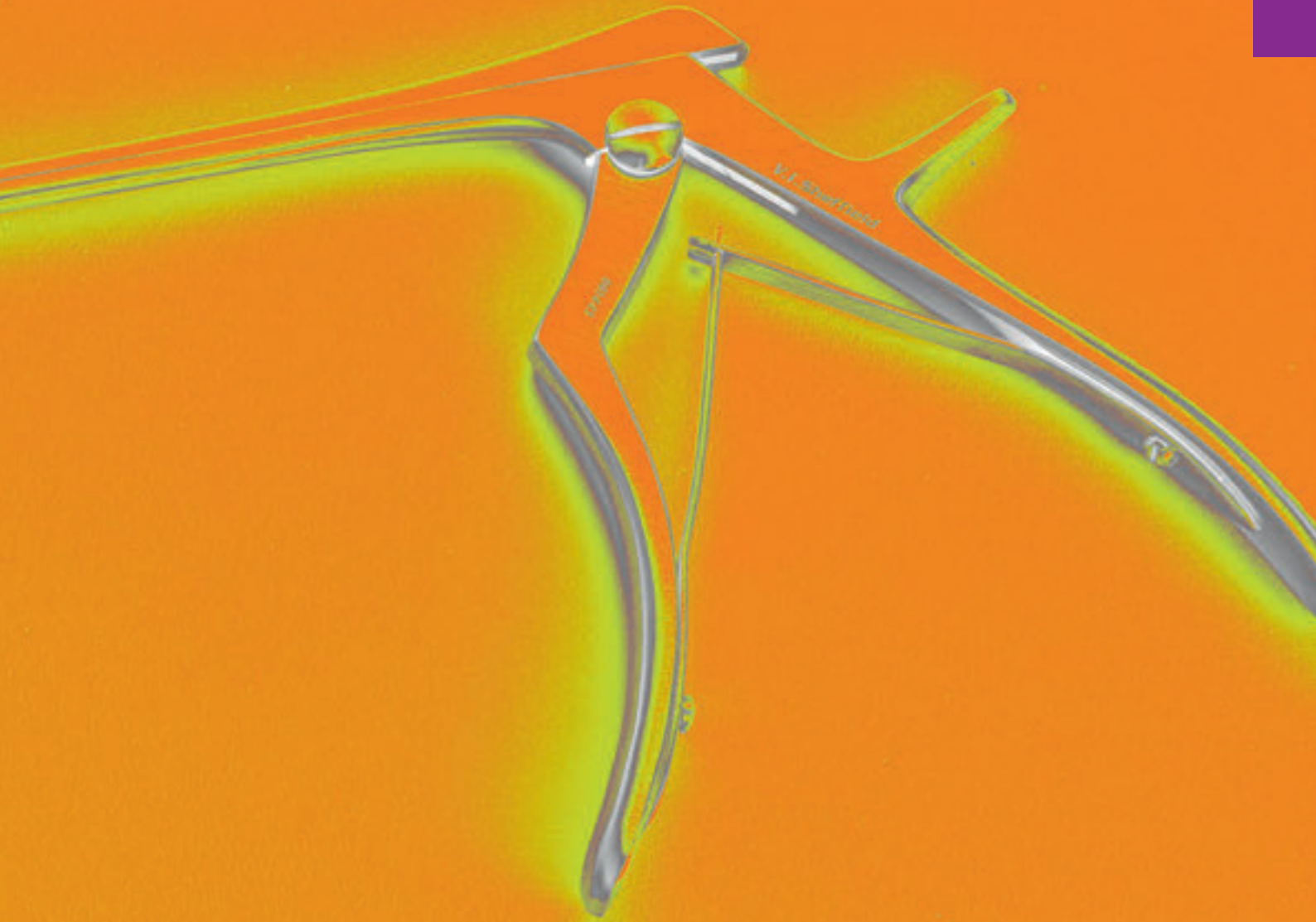
Camera Covers

Camera Covers



CAMERA COVERS

- DE-10-25 Camera Cover Disp Polyethylene 13 x 235cm Sterile Pack of 30
- CAMPT Camera Cover Perforated Tip 250cm x 12.5cm Sterile Pack of 60
- CAMET Camera Cover Elasticised Tip 250cm x 12.5cm Sterile Pack of 60
- DE-10-25-SINGLE Single Camera Cover Disp 13 x 235cm Sterile



Surgery of the Spine

Spinal surgery used to be a common procedure for small animal orthopaedic surgeons in the UK but as time passes and with the availability of more neurologists experienced in spinal surgery with the availability of facilities for on-site advanced imaging, spinal surgery is gradually shifting away from main-stream orthopaedics and into the domain of surgical neurology. Spinal surgery can be very rewarding, and it is still possible to perform it successfully with relatively modest equipment, but there are a number of critical factors to achieving a successful outcome.

Making the correct diagnosis: Patient signalment and neurological examination should lead to gross localisation of the neurological lesion i.e. upper motor neuron vs. lower motor neuron, central vs. peripheral neuropathy, the most likely spinal segment affected i.e. C1-C5, C6-T2, T3-L3 and L4-S3, and left vs. right sided.

Most patients requiring spinal surgery have spinal cord compression caused by intervertebral disc extrusion or protrusion, soft tissue hypertrophy associated with instability, spinal fracture or luxation, or neoplasia. Plain radiographs may indicate the location of a fracture, luxation or neoplasia, but are rarely sufficiently to reliably identify location and lateralisation of intervertebral disc disease.

Myelography can be used for precise lesion localisation and was successfully used for many years, but it comes with a number of drawbacks including risks and side effects associated with cisternal or lumbar puncture, and injection of contrast agents into the subarachnoid space.

Over the last decade, MRI has become established as the technique of choice for imaging the spinal canal and cord, with CT +/-contrast coming a close second. Given the choice, both CT and MRI are preferable to myelography as they are safer, arguably quicker, have far fewer risks or side effects, and are much less likely to result in a false diagnosis. For example, a low volume high velocity (LVHV) disc extrusion or Fibro-Cartilaginous Embolus (FCE) cannot be definitively diagnosed using myelography, but the diagnosis can be made from good quality MR images, particularly a high field unit. This increases diagnostic accuracy, closely guides prognosis, decision making and treatment options, and potentially avoids unnecessary surgery from a misleading myelogram.

Instrumentation

Percussion Mallet



Designed for consistent neurological examination. Much better than whatever you are using at the moment!

PERCUSSION MALLET

001322 Percussion Mallet 180mm Long

Rongeurs & Punches

All rongeurs and spine forceps cut with one part of the jaw inserted into the compromised spinal canal. Our spine instruments are designed to minimise the size of the lower jaw. In many cases this will reduce the cutting strength of the instrument which should only be used on appropriate bone thickness. A selection of rongeurs will be required.

Duck-Billed Daniel Rongeurs



Designed by Simon Wheeler BVSc PhD, these rongeurs can remove full thickness lamina bone in small dogs. They are, however, best used to remove the layer of deep cortical bone overlying the spinal cord once the superficial cortex and cancellous bone have been removed using power tools; this is particularly true of the medium and large dog.

DUCK-BILLED DANIEL RONGEURS

001400 Duck-Billed Daniel Rongeurs 3mm Bite 177mm Long

Daniel Rongeur



The jaws of this instrument are straight and the bite is small. Also suitable for bulla osteotomy.

DANIEL RONGEUR

001402 Daniel Rongeurs AOF 4mm Bite 130mm Long

Lempert Rongeur



A useful rongeur with a small bite favoured by Simon Wheeler for incremental bone nibbling around the spine. A selection of small rongeurs is desirable when operating on the spine.

LEMPERT RONGEUR

6730/10 Lempert Rongeurs Str 3mm Bite 190mm Long

Friedman



Very fine rongeurs for incremental removal of bone overlying the spine.

FRIEDMAN

142501 Mini Friedman Curved 3mm Bite 160mm Long

142502 Micro Friedman Curved 2.2mm Bite 155mm Long

Micro Spine Rongeur Set



Very fine rongeurs with a 1.75mm (width) bite. Available in three variations, straight, curved and angled. Significant savings when purchased as a set of three.

MICRO SPINE RONGEURS

142600 Micro Spine Rongeurs Set of 3

Laminectomy Rongeurs



These rongeurs have been developed specifically for laminectomy in the dog. Features:

- Sigmoid shaped for maximum visualisation of surgical site and ease of grip.
- Lower jaw is very slim, with no cutting edge to minimise trauma to the spinal cord.
- Available in jaw widths of 2, 3 and 4mm. Length 16cm.
- Stronger than Duck-Billed Daniels.

LAMINECTOMY RONGEURS

001432 Laminectomy Rongeurs 2mm 160mm

001433 Laminectomy Rongeurs 3mm 160mm

001434 Laminectomy Rongeurs 4mm 160mm

Compound Action Spinal Rongeurs



Much more powerful than the Daniels, this instrument can nibble through full thickness lamina. The jaws are very fine and angled to allow the surgeon to enlarge the inter-vertebral foramen. Available in 2, 3, 4 and 5mm jaw widths. Length 190mm.

COMPOUND ACTION SPINAL RONGEURS

- 001429 Compound Action Spinal Rongeurs 2mm 190mm
- 001430 Compound Action Spinal Rongeurs 3mm 190mm
- 001431 Compound Action Spinal Rongeurs 4mm 190mm
- 001440 Compound Action Spinal Rongeurs 5mm 190mm

Stille-Luer Rongeurs



STILLE-LUER RONGEURS

- 142305 Stille-Luer Heavy Compound Action Rongeurs Curved 8 mm 225mm Long

Smith-Kerrison Punch Forceps



This is a traditional design with a 40 degree upward cutting jaw. Robust spine forceps. Good quality and excellent value. 185mm shaft.

SMITH-KERRISON PUNCH FORCEPS

- 001445 Smith-Kerrison Punch Forceps 2mm
- 001446 Smith-Kerrison Punch Forceps 3mm

40° Bone Punch Forceps (Low Profile)



This instrument is designed for use with high speed bur systems. The bur is used to remove the outer cortical layer and the underlying cancellous layer, leaving only the inner cortical bone (approximately egg shell thickness). Access to the neural canal is achieved using the bur or a small mobiliser (001420). The powerful nibbling action allows the final layer of bone to be removed in a very controlled manner.

From a surgical standpoint the foot should be as small as possible, for strength the foot needs to be as large as possible. This wedge shape is a good compromise. In addition the foot is polished to minimise friction and trauma to the spine. Overall length 21cm.

40° BONE PUNCH FORCEPS

- 001438 Spine Punch Forceps 2mm 40° Upward Cut
- 001439 Spine Punch Forceps 3mm 40° Upward Cut
- 001441 Spine Punch Forceps 4mm 40° Upward Cut

Spine Punch Forceps (Fine)

SPINE PUNCH FORCEPS (FINE)

- 001436 Spine Punch Forceps 3mm
- 001437 Spine Punch Forceps 4mm

Retractors & Distractors

Gelpi Odd Leg Retractor



These are long established, but frequently overlooked instruments that have proven very popular amongst surgeons who have discovered them. This asymmetric pattern is most typically used for a dorsal approach to the spine where the long arm extends deep to retract the longissimus dorsi muscle as the short arm engages with axial structures. They are supplied in matched, opposite pairs to create a rectangular window of exposure.



GELPI ODD LEG RETRACTORS

- 001333 Gelpi Odd Legs 205mm Long - Pair
- 001334 Gelpi Short Odd Legs 130mm Long - Pair

Spike & Shield Odd Leg Retractor



Operates in a similar fashion to the odd leg Gelpis but the muscle retaining shield creates a wider field of view. Supplied in pairs left and right.

SPIKE & SHIELD ODD LEG RETRACTOR

- 001480 Large 25 x 25mm Shield 180mm Long - Pair
- 001482 Small 12 x 12mm Shield 125mm Long - Pair

Cone Laminectomy Retractor



Similar in size to a Travers retractor but with articulated arms, the cone retractor allows a very flexible field of retraction, with the additional benefit that it can be folded away from the operation site. Maximum retraction, minimum interference.

CONE LAMINECTOMY RETRACTOR

- 001335 Cone Laminectomy Retractor 160mm Long

Caspar Modular Self Retaining Retractor



The Caspar self retaining retractor is a modular retractor which utilises a ratchet rack mechanism to distract a variety of blades and other inserts. Although designed as a spinal retractor the Caspar has many other applications.

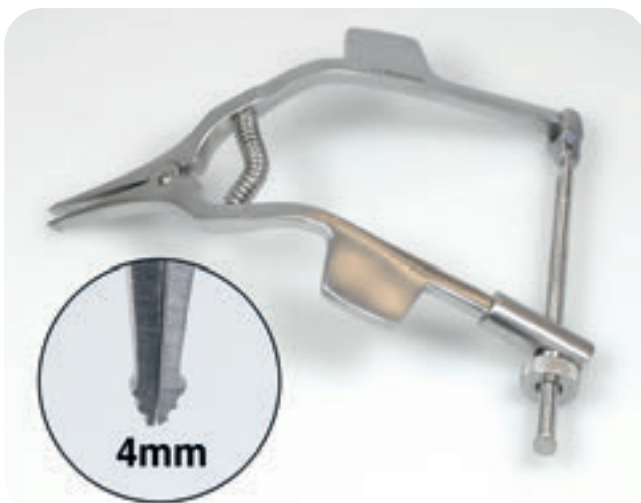
'Not just a one trick pony' Andrew Wills.

Uniquely veterinary inserts include the cervical distraction pins (2.5mm diameter).

CASPAR MODULAR SELF RETAINING RETRACTOR

- 001485** Caspar Retractor with Standard Blades x 6 170mm Long
- 001486** Caspar Cervical Distractor Pins x 2
- 001489** Set Extended Length Blades 8, 10, 12 & 15cm
- 00148SET** Caspar modular Self Retaining Retractor Set (contains 1 x 001485, 1 x 001486 & 1 x 001489)

Small Spine Distractor



The tips of the small distractor are designed to fit into inter-vertebral spaces. The surfaces pushing against the end plates are serrated for maximum grip. Tips when closed 4mm. Overall length 140mm. Tips are staggered for easy introduction.

SMALL SPINE DISTRACTOR

- 001491** Small Spine Distractor

Wobblers



At the present time, distraction fusion techniques seem to offer the best chances of success. The rapid improvement following surgery encourages the owners to persevere to long term stabilisation. The McKee Washer has been shown to give a relatively high success rate for this most difficult condition. Each size washer has its own distractor to facilitate insertion. The Washer is maintained in situ by a 3.5mm position screw.

WOBBLERS

- 090250** 6.0 McKee Wobbler Washer No 2
- 090251** 7.5 McKee Wobbler Washer No 1
- 090255** 6.0 Wobbler Washer Distractor 200mm
- 090256** 7.5 Wobbler Washer Distractor 200mm

Burley Disc Scoop



The Burley Disc Scoop is designed to remove material without repeated insertions into the disc space. As the scoop is moved around, the nuclear material travels along the channel and out.

BURLEY DISC SCOOP

- 001501** Burley Disc Scoop 155mm

McKee Distractor with Speedlock



The odd legs of this dedicated distractor engage the intra vertebral space cranial to and caudal to the space involved. The speedlock opens the disc space leaving it uncluttered by instrumentation. An alternative to washers is fusion using bone cement with or without screws.

MCKEE DISTRACTOR WITH SPEEDLOCK

- 090257** McKee Distractor with Speedlock 240mm

Hand Instruments

Freer Periosteal Elevator

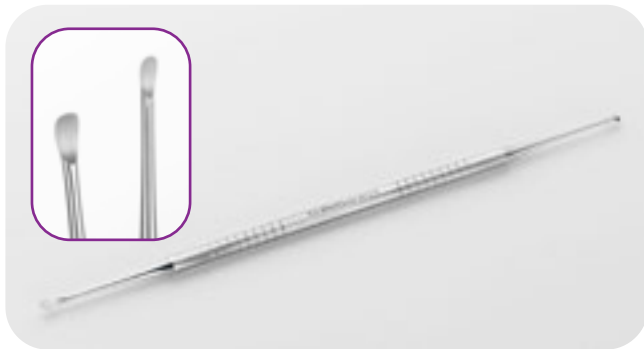


The Freer Elevator is a fine instrument which is particularly useful in spinal work.

FREER PERIOSTEAL ELEVATOR

7350/05 Freer Periosteal Elevator 5mm 180mm Long

Very Fine Periosteal Elevator



VERY FINE PERIOSTEAL ELEVATOR

001272 Very Fine 2mm/ 3mm Periosteal Elevator 180mm Long

Dandy Nerve Hook



The Dandy Nerve Hook is useful for manipulation of nerves and nerve roots. Also useful for manipulation of the medial meniscus during CCL procedures.

DANDY NERVE HOOK

001408 Dandy Nerve Hook 1mm 190mm Long

001409 Dandy Nerve Hook 2mm 220mm Long

Chase Spinal Hook



Based on a suggestion from Damian Chase of Pride Veterinary Centre This probe is useful for manipulation of the spinal cord and nerve roots during certain surgeries.

CHASE SPINAL HOOK

001451 Chase Spinal Hook 8mm 90° Offset 145mm Long

Bone Curette



Following requests for a House Curette with smaller scoops, this set of two bone curettes have been designed with 1mm and 2mm scoops. This is the smallest scoop we can provide whilst still being strong enough to elevate bone.

BONE CURETTE

001412 Bone Curette 2.0mm Scoop 145mm Long

Bone Tamper



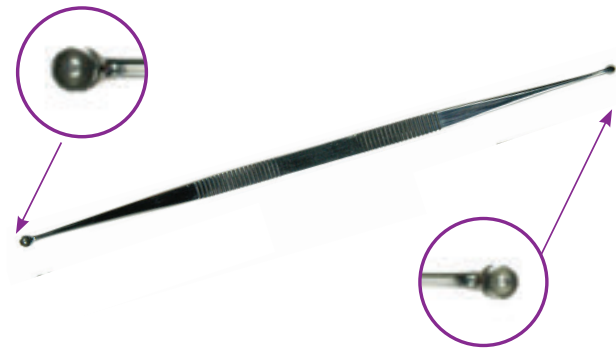
Bone Tamper - also can be used as a bone filling instrument.

BONE TAMPER

001413 Bone Tamper 1.0mm Scoop 150mm

001414 Bone Tamper 2.0mm Scoop 150mm

House Curette



The House Curette is a strong small curette to lift bone from around the spinal cord. Double ended 2.5 and 3.0mm scoops.

HOUSE CURETTE

7262/05 House Curette 2.5 and 3.0mm Scoops 150mm

Rosen Mobiliser



With care, intraneural canal structures can be manipulated. Removal of disc debris is essential to achieve decompression of the cord. The curved tip of this instrument is very useful.

ROSEN MOBILISER

7105/40S Rosen Mobiliser No.8 160mm
7105/45S Rosen Mobiliser No.9 160mm

Sheas Curette

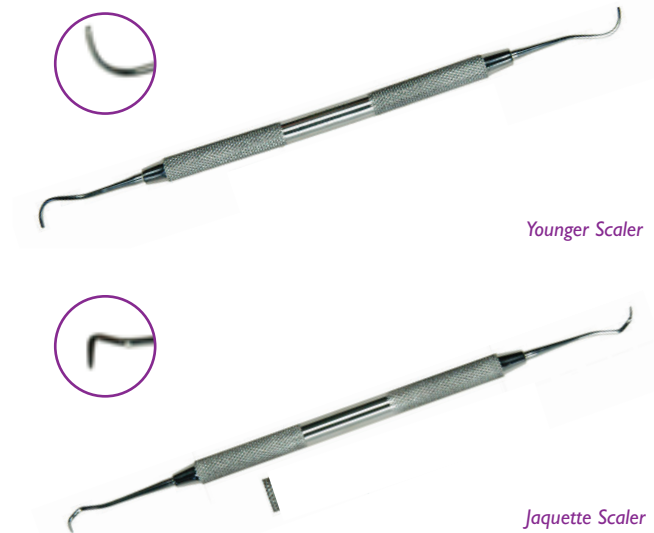


Fenestration of discs, particularly cervical discs, can be a useful procedure. The Sheas Curette is a very small scoop. 2.5mm in diameter.

SHEAS CURETTE

001410 Sheas Disc Curette 2.5mm Diameter 170mm

Younger Good Scaler Jaquette Scaler



Younger Scaler

Jaquette Scaler

Both instruments are recommended by Simon Wheeler for the removal of wafer thin bone overlying the spinal cord during laminectomy. The Younger Good scaler is blunt backed and useful for removal of disc material from both disc spaces and neural canal. This is not a standard scaler in that all the sharp surfaces are softened to minimise spinal trauma. The Jaquette scaler is sharp and best suited to hooking out the final lamina.

YOUNGER GOOD SCALER JAQUETTE SCALER

001422 Younger Good Scaler 175mm
001424 Small Jaquette Scaler 165mm

FitzExcavator Set



Designed and developed by Noel Fitzpatrick this excavator set includes all the necessary hand instruments for surgical management of canine intervertebral disc disease.

The set consists of 5 cutting instruments: one left, one right, plus 3 straight instruments 2.00mm, 1.00mm and 0.5mm.

Set also includes 001275 Molt Periosteal Elevator (4mm/6mm).

The six instruments are supplied in a stainless autoclavable case.

FITZEXCAVATOR SET

001428 FitzExcavator Set

C-LOX

Developed over several years by Rita Leibinger Medical in cooperation with Professor Dr. Franck Forterre, Bern University (Switzerland), C-Lox is gaining quite a following amongst European spinal surgeons for intervertebral distraction fusion.

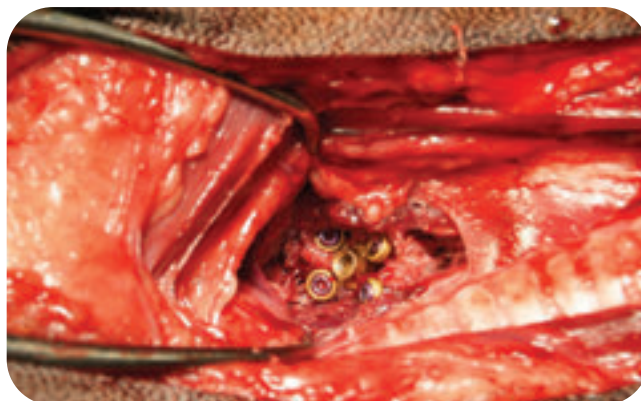


Manufactured in pure titanium using the same advanced selective laser sintering (SLS) 3D printing technology as TTA Rapid cages, a trabecular structure approaching the same Young's modulus as cancellous bone is created. In theory this reduces the risk of subsidence commonly seen with many of the more basic metallic implants. The trabecular structure also encourages early vascularisation and bone through-growth.

C-LOX cages feature integrated spikes that stand proud of the bearing surfaces and engage with adjacent vertebral end-plates. Additional locking screw fixation provides for a secure primary fixation.

Technique Summary

1. Preliminary cage size is selected following imaging
2. From a ventral approach, the affected intervertebral disc space is identified and exposed
3. Drill adjacent vertebral bodies using a 2.5mm drill-bit and distract the intervertebral disc space using the C-LOX Distractor
4. Perform laminectomy
5. Use the C-LOX Spinal Disk Broaching Curette is used to remove all remnants of the nucleus pulposus and to create a bed for a C-LOX cage
6. Use trial cage (template, no spikes) to confirm cage selection
7. Insert final cage
8. Mark start point for screws using dedicated guide and drill-bit
9. Insert special C-LOX self-drilling, self-tapping titanium locking screws



For more information on C-LOX customers are invited to visit the Rita Leibinger spinal website www.spinevet.com

Please note that some C-Lox instruments and implants have been revised. Previous versions of implants and instruments are available whilst stocks last. Please call our Vet Tech Team for further details and to check availability on 0345 130 9596 or email info@vetinst.com

C-LOX Complete Set - New Version



The C-LOX Complete Set - New Version contains:

- C-Lox Tray x 1
- Screwdriver Handle Silicone x 1
- C-LOX Screwdriver Shaft 2.7 Star-Drive 10 self-holding 135mm AO x 1
- Locking Drill Guide 2.7 for 2.0mm drills, for 2.7mm screws 10mm, 12mm 14mm, 16mm, 18mm & 20mm working end x 1 of each size
- C-LOX Implantation Placement Rod 22cm x 2
- C-LOX Spinal Curette 22cm x 1
- Bone Drill AO Shaft Ø 2.0 mm 100/75 mm x 1
- Bone Drill AO Shaft Ø 2.5 mm 110/85 mm x 1
- C-LOX Spinal Cage Titanium, 2,7mm H-Plate with Almond Cage Locking with Spikes x 1 of each size
- C-LOX Sizing Cage for Spinal Cage H-Plate with Almond Cage x 1 of each size
- Star Drive Spinal Cage Locking Screw Titanium x 5 of each length

C-LOX COMPLETE SET - NEW VERSION

CLOX134010001 C-LOX Complete Set - New Version

C-LOX Loan Kit

This kit is available for experienced spinal surgeons only. A charge is applied to cover the courier charges (both delivery and return).

The kit will be supplied non-sterile with a full set of implants. Implants used will be charged for separately upon return of the set. (UK Only).

Please call a member of our Vet Tech Team for further details and availability on 0345 130 9596.

C-LOX Upgrade Set

For existing users of C-LOX with a 2017 original version set.



The C-LOX Upgrade Set contains:

- 1 x C-LOX Upgrade Tray
- 1 x Locking Drill Guide 2.7 for 2.0mm drills for 2.7mm screws 10mm working end
- 1 x Locking Drill Guide 2.7 for 2.0mm drills for 2.7mm screws 12mm working end
- 1 x Locking Drill Guide 2.7 for 2.0mm drills for 2.7mm screws 14mm working end
- 1 x Locking Drill Guide 2.7 for 2.0mm drills for 2.7mm screws 16mm working end
- 1 x Locking Drill Guide 2.7 for 2.0mm drills for 2.7mm screws 18mm working end
- 1 x Locking Drill Guide 2.7 for 2.0mm drills for 2.7mm screws 20mm working end
- 1 x Bone Drill AO Shaft Ø 2.0 mm 100/75 mm
- 1 x C-LOX Spinal Cage Titan 2.7mm H Plate Almond Cage 14mm x 4
- 1 x C-LOX Spinal Cage Titan 2.7mm H Plate Almond Cage 14mm x 6
- 1 x C-LOX Spinal Cage Titan 2.7mm H Plate Almond Cage 16mm x 4
- 1 x C-LOX Spinal Cage Titan 2.7mm H Plate Almond Cage 16mm x 5
- 1 x C-LOX Spinal Cage Titan 2.7mm H Plate Almond Cage 16mm x 6
- 1 x C-LOX Spinal Cage Titan 2.7mm H Plate Almond Cage 16mm x 7
- 1 x C-LOX Spinal Cage Titan 2.7mm H Plate Almond Cage 18mm x 5
- 1 x C-LOX Spinal Cage Titan 2.7mm H Plate Almond Cage 18mm x 7
- 1 x C-LOX Spinal Cage Titan 2.7mm H Plate Almond Cage 20mm x 6
- 1 x C-LOX Spinal Cage Titan 2.7mm H Plate Almond Cage 20mm x 8
- 5 x C-LOX Spinal Cage Locking Screw 12mm (Thread Length 10mm)
- 5 x C-LOX Spinal Cage Locking Screw 14mm (Thread Length 12mm)
- 5 x C-LOX Spinal Cage Locking Screw 16mm (Thread Length 14mm)
- 5 x C-LOX Spinal Cage Locking Screw 18mm (Thread Length 16mm)
- 5 x C-LOX Spinal Cage Locking Screw 20mm (Thread Length 18mm)
- 5 x C-LOX Spinal Cage Locking Screw 22mm (Thread Length 20mm)

C-LOX UPGRADE SET

CLOX134010002 C-LOX Upgrade Set

C-LOX Cages



C-LOX CAGES

- CLOX134-0144-08** CLOX Spinal Cage Titan 2.7mm H Plate Almond Cage 14mm x 4
CLOX134-0146-08 CLOX Spinal Cage Titan 2.7mm H Plate Almond Cage 14mm x 6
CLOX134-0164-08 CLOX Spinal Cage Titan 2.7mm H Plate Almond Cage 16mm x 4
CLOX134-0165-10 CLOX Spinal Cage Titan 2.7mm H Plate Almond Cage 16mm x 5
CLOX134-0166-08 CLOX Spinal Cage Titan 2.7mm H Plate Almond Cage 16mm x 6
CLOX134-0167-10 CLOX Spinal Cage Titan 2.7mm H Plate Almond Cage 16mm x 7
CLOX134-0185-10 CLOX Spinal Cage Titan 2.7mm H Plate Almond Cage 18mm x 5
CLOX134-0187-10 CLOX Spinal Cage Titan 2.7mm H Plate Almond Cage 18mm x 7
CLOX134-0206-12 CLOX Spinal Cage Titan 2.7mm H Plate Almond Cage 20mm x 6
CLOX134-0208-12 CLOX Spinal Cage Titan 2.7mm H Plate Almond Cage 20mm x 8

C-LOX Sizing Templates



Size and colour matched to implantable cages. Smooth sides (no spikes) and a closed structure simplifies insertion, removal and cleaning.

C-LOX SIZING TEMPLATES

- CLOX134914408** C-Lox Sizing Template for 14 x 4 x 8mm
CLOX134914608 C-Lox Sizing Template for 14 x 6 x 8mm
CLOX134916408 C-Lox Sizing Template for 16 x 4 x 8mm
CLOX134916510 C-Lox Sizing Template for 16 x 5 x 10mm
CLOX134916608 C-Lox Sizing Template for 16 x 6 x 8mm
CLOX134916710 C-Lox Sizing Template for 16 x 7 x 10mm
CLOX134918510 C-Lox Sizing Template for 18 x 5 x 10mm
CLOX134918710 C-Lox Sizing Template for 18 x 7 x 10mm
CLOX134920612 C-Lox Sizing Template for 20 x 6 x 12mm
CLOX134920812 C-Lox Sizing Template for 20 x 8 x 12mm

C-LOX Spinal Cage Locking Screws



Self drilling locking titanium cortex screw with star drive head.

C-LOX SPINAL CAGE LOCKING SCREWS

- CLOX245-427-10** CLOX Spinal Cage Locking Screw 12mm (Thread Length 10mm)
CLOX245-427-12 CLOX Spinal Cage Locking Screw 14mm (Thread Length 12mm)
CLOX245-427-14 CLOX Spinal Cage Locking Screw 16mm (Thread Length 14mm)
CLOX245-427-16 CLOX Spinal Cage Locking Screw 18mm (Thread Length 16mm)
CLOX245-427-18 CLOX Spinal Cage Locking Screw 20mm (Thread Length 18mm)
CLOX245-427-20 CLOX Spinal Cage Locking Screw 22mm (Thread Length 20mm)

Please note that some C-Lox instruments and implants have been revised. Previous versions of implants and instruments are available whilst stocks last. Please call our Vet Tech Team for further details and to check availability on 0345 130 9596 or email info@vetinst.com

C-LOX Screwdriver Handles



Silicone handle, sterilisable up to 134°.

C-LOX SCREWDRIVER HANDLE

CLOX247010200 C-LOX Screwdriver Handle



C-LOX TORQUE LIMITING SCREWDRIVER HANDLE

CLOX247010400 C-LOX Torque Limiting Screwdriver Handle

C-LOX Screwdriver Shaft 2.7mm Star Drive I0



C-LOX SCREWDRIVER SHAFT 2.7MM STAR DRIVE I0

CLOX134080027 C-LOX Screwdriver Shaft 2.7mm Star Drive I0 135mm Long

C-LOX Locking Drill Guides



C-LOX Locking Drill Guides 2.7mm for 2.0mm Drills for 2.7mm C-LOX Screws. Various working lengths available.

C-LOX LOCKING DRILL GUIDES 2.7MM FOR 2.0MM DRILLS

CLOX164002710 Locking Drill Guide 2.7mm 10mm Working End
CLOX164002712 Locking Drill Guide 2.7mm 12mm Working End
CLOX164002714 Locking Drill Guide 2.7mm 14mm Working End
CLOX164002716 Locking Drill Guide 2.7mm 16mm Working End
CLOX164002718 Locking Drill Guide 2.7mm 18mm Working End
CLOX164002720 Locking Drill Guide 2.7mm 20mm Working End

C-Lox Spinal Disk Broaching Curette



Used for removing disk material and creating bed for cage. 220mm long.

C-LOX SPINAL DISK BROACHING CURETTE

CLOX134070022 C-LOX Spinal Disk Broaching Curette

C-Lox Implant Placement Rod



Threaded tip engages with trial cages and with implantable cages. 220mm long.

C-LOX IMPLANT PLACEMENT ROD

CLOX134075022 C-LOX Implant Placement Rod

C-LOX Twist Drill



Anti-skid tip and length matched to C-LOX drill sleeve. AO fitment.

C-LOX TWIST DRILL

CLOX148008120 C-Lox AO Coupling Twist Drill Bit 2.0mm

CLOX148008125 C-Lox AO Coupling Twist Drill Bit 2.5mm

C-Lox Distractor

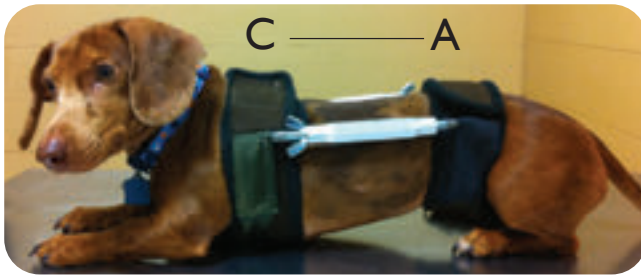


Used to distract the intervertebral disk space. 90mm deep. Drill 2.5mm holes for legs.

C-LOX DISTRACTOR

CLOX134075016 C-LOX Distractor 90mm Deep

MB Spinal Brace



Many cases of disc disease, spinal fractures or instabilities are not amenable to surgical treatment for a variety of reasons, from the right patient signalment (i.e. age, underlying diseases) to economic considerations. The "MB Spinal Brace" (MBSB) developed by Mark Besancon DVM is designed to help support cases of thoracic and lumbar IVDD, vertebral fractures or instabilities. The durable and comfortable neoprene harnesses encircle the patient at the desired locations and are connected by two parallel adjustable metal rods that lay on the lateral aspects of the chest and abdomen. The MBSB supports and restricts the range of motion of the patient in several planes giving the body a better chance of healing. The expandable metal connection rods can be placed in a neutral position strictly for support, or extended to apply minimal to moderate decompressive forces on the spine. These back braces are commonly used in the human medical field and now they are available for veterinary use.



Several indications for use include:

- Medical IVDD treatment
- Medical spinal fracture treatment.
- Pre and post-surgical spine support.

To order the correct size please measure:

1. The circumference of the chest in cm (C)
2. The circumference of the abdomen (A)
3. The length of the back (Distance from C to A)

Available as kits in a range of sizes. The kits come with a range of Harnesses plus one set of Connecting Rods.

Small Kit - suitable for toy breed/ Chihuahuas includes:

- 4 x Neoprene Harnesses - 12"-18"
- 1 x pair of Connecting Rods - 5/16"

Medium Kit - suitable for Dachshunds/ Pugs/ Shih Tzus and Terriers includes:

- 5 x Neoprene Harnesses - 18"-30"
- 1 x pair of Connecting Rods - 3/8"

Large Kit - suitable for Boxers/ Labs/ G.S.Ds/ Huskies and Bassett Hounds includes:

- 6 x Neoprene Harnesses - 28"-38"
- 1 x pair of Connecting Rods - 1/2"

MB SPINAL BRACE

MBSSJ1243A	MB Spinal Brace Small Kit
MBSMJ1243B	MB Spinal Brace Medium Kit
MBSLJ1243C	MB Spinal Brace Large Kit

Lyostypt®

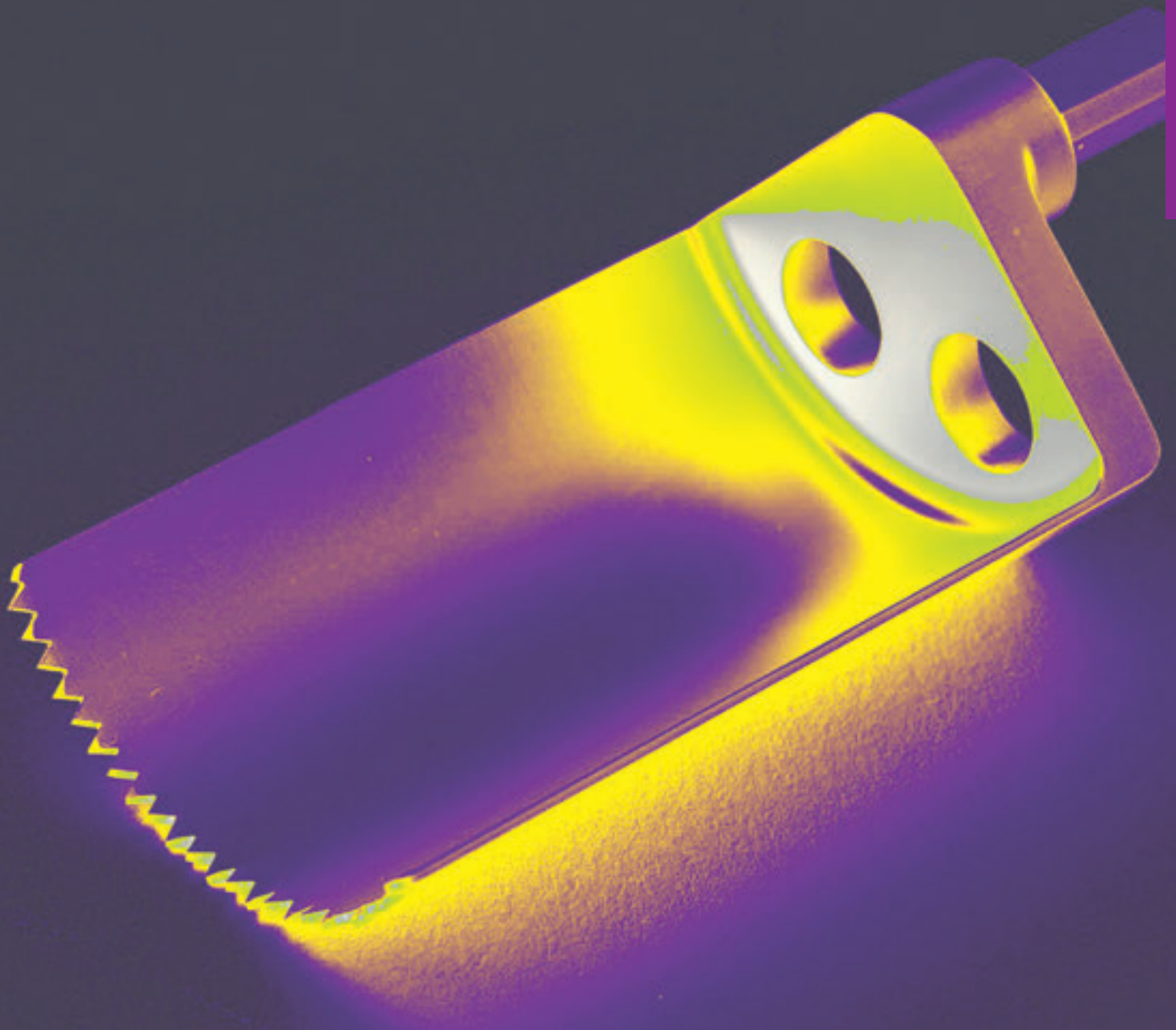


Lyostypt® is a wet-stable collagen haemostat. Collagen leads to thrombocyte adhesion and to activation of coagulation factor XII. Replacement for Gelfoam. Size 30 x 50mm. 12 units per pack.

- Achieves haemostasis very swiftly.
- Is completely absorbable.
- Can be removed easily.
- Can be applied endoscopically.
- Can be combined with fibrin glue and antibiotics.

LYOSTYPT®

I069128 Lyostypt® (12 units)



Vi Battery Powered Surgical Saw & Drill

Vi Black Series Battery Powered Surgical Saws and Drills

Vi Black Series power tools have very robust steel construction and feature German motors making them smoother, quieter and more reliable than many similar battery powered units.

These are based on human hand surgery power tools, so are smaller than the standard human power tools used in more general human orthopaedics, but are ideally suited to most of our smaller patients.

The Vi Black Series range is fully steam autoclavable at 134°C (not batteries) and is small enough to fit inside most autoclaves.

12 months warranty on body & batteries.

Vi Black Series Battery Powered Drill/ Saw Set



List configuration whilst stocks last. Check with the Vet Tech Team for current content.

The Vi Black Series Drill/ Saw Set contains:

- Black Series Drill
- Black Series Saw
- 2 x Battery Chargers
- 2 x Batteries
- 2 x Battery Transfer Sleeves
- 2 x Storage Cases

VI BLACK SERIES BATTERY POWERED SURGICAL DRILL AND SAW

BLACKKIT	Vi Black Series Drill/ Saw Set
BLACKBAT	Vi Black Series Spare Battery
BLACKCHARGE	Vi Black Series Charger Unit (UK)
BLACKCHARGEUSA	Vi Black Series Charger Unit (USA)

Vi Black Series Conditioning Charger



VI BLACK SERIES PREMIUM CONDITIONING CHARGER FOR VI BLACK SERIES BATTERIES

VIBLKCHGUK	Vi Black Series Conditioning Charger (UK)
VIBLKCHGEU	Vi Black Series Conditioning Charger (EU)
VIBLKCHGUSA	Vi Black Series Conditioning Charger (USA)

Vi Black Series Battery Powered Drill



Supplied complete with Battery, Battery Charger, Battery Transfer Sleeve and Aluminium Storage Case.

The drill has a reverse and is fitted with a 4.8mm capacity 3 jaw chuck with 3.0mm through cannulation for driving smaller pins, wires and drill bits.

Drill max speed:	0-1100RPM
Drill max noise:	<40dB
Drill weight:	990g

VI BLACK SERIES BATTERY POWERED SURGICAL DRILL

BLACKDRILL	Vi Black Series Drill Set
BLACKBAT	Vi Black Series Spare Battery
BLACKCHUCKKEY	Vi Black Series Drill Spare Chuck Key

Vi Black Series Battery Powered Saw



Supplied complete with battery, battery charger, aluminium battery transfer sleeve and storage case.

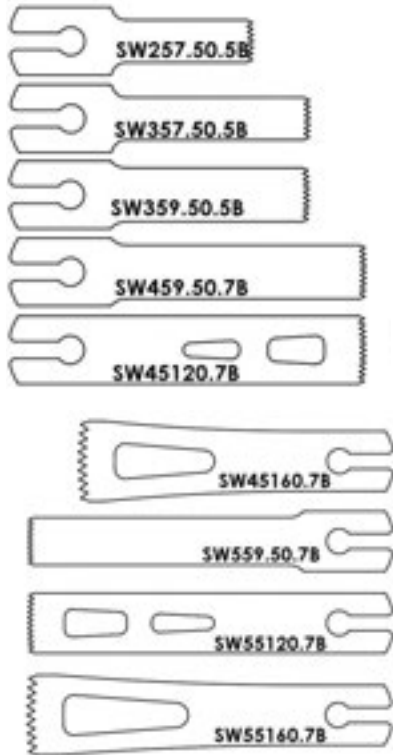
Saw speed:	0-15000 osc/min
Saw max noise:	<50dB
Saw weight:	782g

VI BLACK SERIES BATTERY POWERED SURGICAL SAW

BLACKSAW	Vi Black Series Saw Set
BLACKBAT	Vi Black Series Spare Battery

Vi Black Series Saw Blades

We stock a range of Black Series Saw Blades which have been specifically designed for veterinary patients. Ideal for TTA/TTO style cruciate surgeries, other elective osteotomies and excisional arthroplasty.



Suitable for TTA Rapid

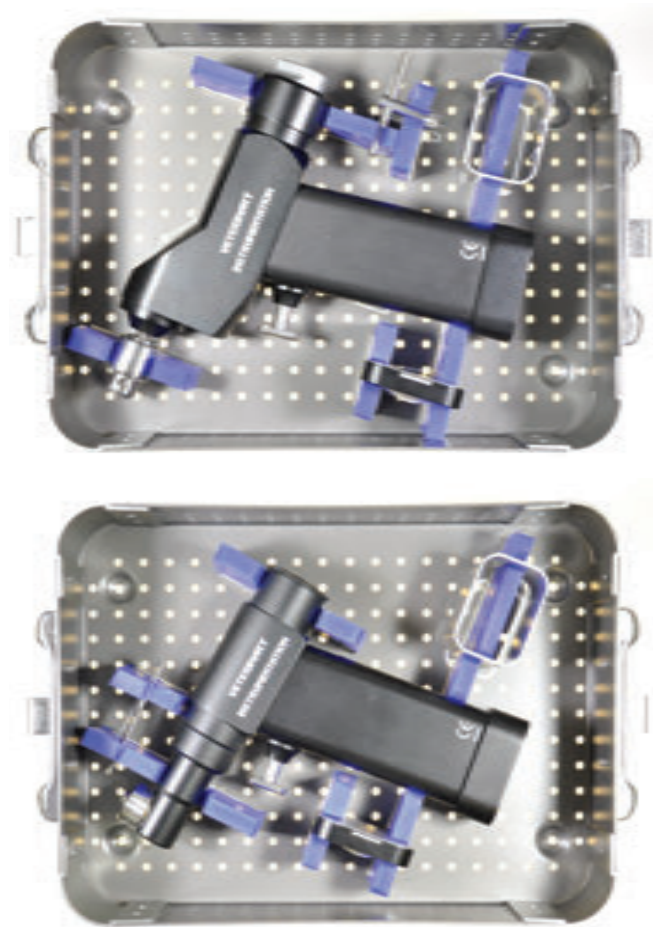
Suitable for TTA Rapid

Blades not to scale

VI BLACK SERIES SAW BLADES

CODE	CUT THICKNESS	WORKING LENGTH	WIDTH
BLACKSW257505B	0.75	20	7.5
BLACKSW357505B	0.75	30	7.5
BLACKSW359505B	0.75	30	9.5
BLACKSW459507B	0.95	40	9.5
BLACKSW451207B	0.95	40	12
BLACKSW451607B	0.95	40	16
BLACKSW559507B	0.95	50	9.5
BLACKSW551207B	0.95	50	12
BLACKSW551607B	0.95	50	16

Black Series Aluminium Steriliser Cases



Designed specifically for the VI Black Series Drill and Saw and suitable for use in larger autoclaves. Cases outer dimensions are 300 x 205 x 70mm.

VI BLACK SERIES ALUMINIUM STERILISER CASES

- BLACKDRILL-SC** Steriliser Case for Black Series Drill
- BLACKSAW-SC** Steriliser Case for Black Series Saw

Vi Air Powered Modular Systems

MaxiDriver Modular System



The MaxiDriver remains the workhorse of very many human and veterinary orthopaedic units. It is extremely reliable and almost infinitely repairable. Its robust construction will tolerate a good deal of abuse.

Veterinary Instrumentation is re-manufacturing the handpieces and attachments and has taken steps to ensure that all spares are available or can be re-made. The New MaxiDriver has a full 1 year

warranty. The handpiece is significantly bigger than the MiniDriver (940g vs 480g). The modular system takes 15 quick release attachments. All attachments also available in new re-manufactured condition. Please phone for details. A huge range of saw blades is available making the MaxiDriver Kit an extremely good value introduction to orthopaedic power.



MAXKITR Basic MaxiDriver Set



MAXL110 Jacobs Chuck



MAXL320 Sagittal Saw



MAXL111 Wire/Pin Driver



MAXL513 AO Quick Release



MAXIDRIVER MODULAR SYSTEM

- MAXL100R** MaxiDriver Handpiece Refurbished to new
- MAXL110** Jacobs Chuck Attachment 6.35mm Capacity
- MAXL111** Wire/Pin Driver 1.6 to 4mm Capacity
- MAXL320** Sagittal Saw Large Attachment
- MAXL140** Reciprocating Saw Attachment
- MAXL513** AO Quick Release Attachment
- MAXIHOSE** 3 Metre MA7 Hose to fit MaxiDriver
- MAXIKITR** MaxiDriver Basic Kit with 'as new' Handpiece

Vi MiniDriver Modular System

3Ms Orthopaedic was sold to Linvatec who killed off the MiniDriver and the MaxiDriver as they competed with their own product range.

The MiniDriver remains in widespread use and in many ways is the ideal small animal orthopaedic power system particularly when used with the Mark II saw.

Vi is pleased to announce that we are having the entire MiniDriver range re-manufactured including the K220 which takes a larger blade than the original Mark I saw. In fact we have improved on some of the accessories.

New MiniDriver Sets are available. Some say the torque on the MiniDriver is too low. OK then buy the high torque chuck which more than triples the torque!

MiniDriver Sets



Illustrated above is the basic MiniDriver set comprising:

- K200 Handpiece Mark II
- K110 4mm Chuck
- K111 Wire Driver
- K114B AO Quick Release Chuck
- K220 Sagittal Saw Mark II
- 3MHOSEVI MiniDriver Hose

When purchased as a set the savings are considerable.

MINIDRIVER SETS

- VIMDB2** MiniDriver Basic Set (inc MkII Saw)

K200 MiniDriver Handpiece



Fully re-furbished to the new K200 standard, the handpiece is the centre of the modular system. Handpiece has forward and reverse button plus locking trigger. Power output with Medical Air @7bar input is 0.78 Newton Meters. Speed variable 0-1100rpm.

K200 MIINIDRIVER HANDPIECE

K200VI K200 Handpiece

K111 Wire Driver



Re-attachment of osteotomies or small bone fragments is often best achieved using 'K' or arthrodesis ('A') wires. Driving a long pin in a chuck often results in bending and kinking making driving difficult. Incrementally advancing the wire through a chuck is fiddly and time consuming. The wire driver allows the easy incremental advancement of the wire through the handpiece via the use of a clutch arrangement.

K111 WIRE DRIVER

K111VI Wire Driver 0.7 to 1.8mm

K211 Pin Driver

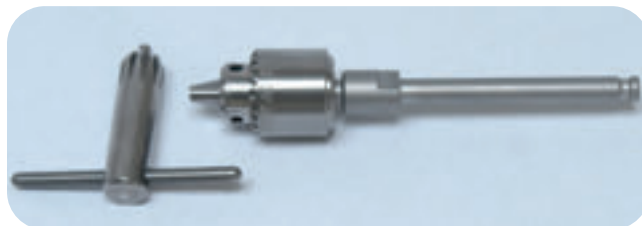


Similar to the Wire Driver in operation the Pin Driver has a larger capacity (1.6 to 4mm).

K211 PIN DRIVER

K211VI K211 Pin Driver 1.6 to 4mm

K110 Small (4mm) Jacobs Chuck



Both Jacobs Chuck Attachments are through cannulated for driving long pins. 4mm Capacity with Key.

K110 SMALL (4MM) CHUCK

K110VI K110 4mm Chuck Attachment

K109 Large (6.25mm) Jacobs Chuck



Both Jacobs Chuck Attachments are through cannulated for driving long pins. 6.25mm Capacity with Key.

K109 LARGE (6.25MM) CHUCK

K109VI K109 6.25mm Chuck Attachment

K210 Hi Torque Large (6.25mm) Jacobs Chuck



Using the standard chucks the MiniDriver has a torque of 0.78 Newton Meters, which makes heavy weather of driving large pins without pre-drilling. By adding a set of gears the chuck speed is reduced but the stall torque is increased to 2.8 Newton Meters ideal for driving pins.

K210 HI TORQUE LARGE (6.25MM) CHUCK

K210VI K210 Hi Torque 6.25mm Chuck Attachment

K107VI & K108VI Keyless Chuck Attachment



Chuck Keys wear quickly, become lost and can be awkward to use in some situations. The Keyless Chuck, as are found on most DIY drills allow the surgeon to quickly switch drills and pins without a key. The distal part of the Chuck is held using fingers and the chuck opened or closed by engaging the drill in either the forward or reverse drive respectively. The downside is that the Chuck is slightly bulkier than the keyed equivalent.

K108VI & K107VI KEYLESS CHUCK ATTACHMENTS

K108VI Keyless Chuck Attachment 0 - 3.2mm

K107VI Keyless Chuck Attachment 0 - 6.3mm

K114B AO Quick Release Attachment

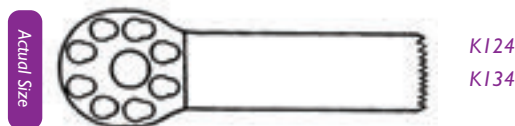


Many drills and taps are available with a quick release fitting, the most common of which is to the Synthes or AO standard. Drills may be changed quickly without the use of a chuck key. The original version was made from relatively soft aluminium. The re-manufactured K114B is made from stainless steel and is easier to use than the original.

K114B AO QUICK RELEASE ATTACHMENT

K114BVI K114B AO Quick Release Attachment

K120 Blades



K120 BLADES

CODE	CUT THICKNESS	LENGTH	WIDTH
K121	1.0mm	15.1mm	6.4mm
K122	1.0mm	31.0mm	6.4mm
K123	1.0mm	15.1mm	10.4mm
K124	1.0mm	31.0mm	10.4mm
K125	1.0mm	15.1mm	16.5mm
K131	0.7mm	15.1mm	6.4mm
K132	0.7mm	31.0mm	6.4mm
K133	0.7mm	15.1mm	10.4mm
K134	0.7mm	31.0mm	10.4mm

Other patterns of blades are available, please contact our Vet Tech Team on 0345 130 9596

K220 Mark II Sagittal Saw



The Mark II Saw is more robust in construction than the K120 Saw. Blade attachment is by use of a Hex Wrench. While this gave a more rigid attachment of the blade to the saw it was also the weak point of the attachment. We have re-engineered the blade holding mechanism to make it stronger and made the whole attachment from stainless steel.

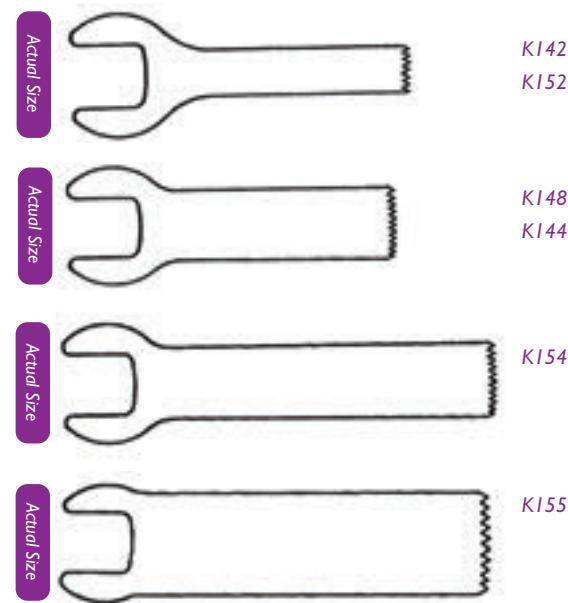
The Mark II Saw drives a larger range of blades including longer ones up to 42mm useful in the TTO and TTA procedures.

K220 MARK II SAGITTAL SAW

K220VI K220 Mark II Sagittal Saw Attachment

K201VI Replacement Wrench for K220K

K220 Blades



K220 BLADES

CODE	CUT THICKNESS	LENGTH	WIDTH
K141	1.0mm	14.2mm	6.4mm
K142	1.0mm	30.0mm	6.4mm
K144	1.0mm	30.0mm	10.2mm
K146	0.65mm	27.4mm	19.0mm
K147	0.65mm	27.4mm	14.0mm
K148	0.65mm	27.4mm	9.5mm
K149	0.65mm	42.7mm	19.1mm
K152	0.65mm	30.0mm	6.4mm
K154	0.65mm	42.7mm	9.5mm
K155	0.65mm	42.7mm	14.0mm

Other patterns of blades are available, please contact our Vet Tech Team on 0345 130 9596

MiniDriver Hose

The Standard Hose is a 3 meter long double hose which vents back at the wall gas outlet or the regulator. In the UK the standard drive gas is bottle sterile Medical Air delivered at 7bar (100psi). Elsewhere in the world Nitrogen may be used.

The Standard Hose supplied is fitted with an MA7 gas probe (Medical Air @ 7bar) which prevents connection to other gases e.g. Oxygen.

MINIDRIVER HOSE

3MHOSEVI MiniDriver Hose

3MHOSEVIUS MiniDriver Hose US Schrader

Air Hoses

What do I need?

To get the correct hose you will need to know 2 things – the make / model of instrument the hose is to fit, and the type of supply outlet you have.

Outlet connectors cause most fitting issues. Most usual outlet – UK MA7. This will only accept UK MA7 probes. If your hose pushes in, but will not click home, the hose usually has a US Schrader fitting. A common symptom of eBay purchases! Hoses sourced outside the UK & USA are very unlikely to be compatible with UK outlets as each country has its own connectors for safety reasons. Hose outlet connectors are shown with the relevant outlet. Schrader hoses can be as shown but can also have no gutter round the probe.

A UK MA7 probe will fit a Schrader socket, but a Schrader probe will NOT fit a UK MA7 outlet without a special adaptor

UK MA7



SCHRADER



Common Instrument Connectors:



3M Connector – fits MiniDriver, MicroDriver & Minos A200.



Halls Connector - fits most Halls Air Tools, Surgairtome Spinal System, Vi air equipment, - TPLO Saw and many others.

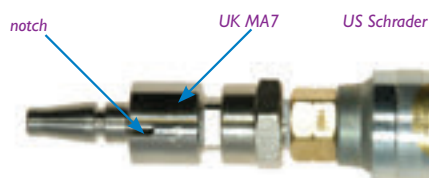


MaxiDriver - fits nothing else!

AIR HOSES

- 3MHOSEVI** VI Hose 3M Fitting UK MA7 (3 metre)
- 3MHOSEVIUS** VI Hose 3M Fitting US Schrader (3 metre)
- HALLHOSEVI** VI Hose Halls Fitting UK MA7 (3 metre)
- MAXIHOSE** MaxiDriver Hose MA7 (3 metre)
- MPZ10900** De Soutter MPZ Hose MA7 (3 metre)
- 001758** MA7 Male to Schrader Female Plug in Adaptor

Air Regulators and Hose Probes



All the air equipment runs on Medical Air at 7 Bar (100PSI). Drills and Saws can be run from compressors as their air requirement is intermittent. High speed drills need bottled gas or a big compressor. A Twin Dial Regulator is best to control gas pressure (001756). One dial gives bottle pressure, the other one gives line pressure (7 Bar).

UK supplied hoses come with an MA7 probe (Medical Air 7 Bar pressure). Schrader fittings on hoses purchased from the USA look similar to UK MA7 probes. Many will however not lock into UK MA7 sockets. The best solution is to change the probe. A cheaper alternative is to use a Schrader/ MA7 Converter (001758).

AIR REGULATORS AND HOSE PROBES

- 001756** Medical Air Regulator MA7 Outlet *
- 001758** Schrader / MA7 Converter (plug in)

*Carriage is extra for all items marked **

Air Instrument Care Products



Orthopaedic Air instruments are expensive to buy and replace. Regular basic maintenance will ensure continuing excellent performance and minimal repair bills. Many instruments which come to us for repair have simply not been lubricated. Follow manufacturer's recommendations exactly.

AIR INSTRUMENT CARE PRODUCTS

- M105** Blitz Spray Cleaner
- M317** Lubricant for MiniDriver and Minos
- M316** VI Air Instrument Oil

TPLO Power Equipment

Vi TPLO Saw - Battery Powered



Battery insertion

- With battery cap removed insert sterilised transfer sleeve into end of handle.
- Non-sterile assistant inserts non-sterile battery and remove transfer sleeve.
- Insert battery end-cap.

For surgeons who prefer the convenience of battery operated surgical powertools to their air-powered counterparts, we have developed our new black series TPLO saw. This has improved mechanical specifications such as improved bearings for higher quality products.

This unit is heavy enough to dampen vibrations and assist with the cut and has plenty of power for use with the largest of our blades.

The popular consensus is that in line TPLO saws are more user friendly than pistol grip units as they are both easier to keep aligned and are more comfortable to operate.

Compatible with standard triangular drive blades.

Supplied with:

- Transportation Case
- Saw
- Batteries x 2
- Charger
- Sterile Battery Transfer Sleeve

A sterilisation case is also available.

VI TPLO SAW - BATTERY POWERED

VITPLOSAW	Vi Battery Powered TPLO Saw
VITPLOCHARGEUK	Vi TPLO Saw Charger (UK)
VITPLOSAW-SC	Vi TPLO Sterilisation Case

VI TPLO SAW CONDITIONING CHARGER

VITPLOCHG	Vi TPLO Saw Conditioning Charger (UK Plug)
VITPLOCHGEU	Vi TPLO Saw Conditioning Charger (EU Plug)
VITPLOCHGUSA	Vi TPLO Saw Conditioning Charger (US Plug)

Vi TPLO Air Saw



The Vi TPLO air driven saw is based on the very robust and reliable Halls Sternum Saw. As such it takes the industry standard Halls Hose, the same as the Surgairtome and the Halls range of saws and drills.

The blade hub rotates back and forth 6 degrees. As the blade diameter increases this 6 degrees will move the teeth on the saw a greater distance. You will find, therefore, that the bigger blades cut more efficiently than the smaller ones. In addition, where the patient is small the tibia has a relatively low inertia and will therefore be moved back and forth by the blade further reducing the cutting efficiency. It is suggested that the tibia be supported by a sandbag to minimise this effect.



TPLOSCREW



TBHEX32

Using the VI TPLO Saw the Blade is tightened into the saw hub using a single Hex Drive Grub Screw. This Grub Screw is larger and more effective than the 3 small Grub Screws on the original Slocum Saw.

Replacement Grub Screws are available. A 'T' Bar Type Wrench is also available for greater comfort and efficiency. The Saw is supplied with an Allen Key Type Wrench.

TPLO SAW

TPLOSAW	TPLO Saw
HALLHOSEVI	Vi Hose – Halls Fitting
TBHEX32	'T' Bar Hex Drive 3.2mm
TPLOSCREW	Slocum TPLO - replacement standard 1/4" x 1.5 Hex Grub Screw Pack of 3

TPLO Saw Blades Vi Pattern

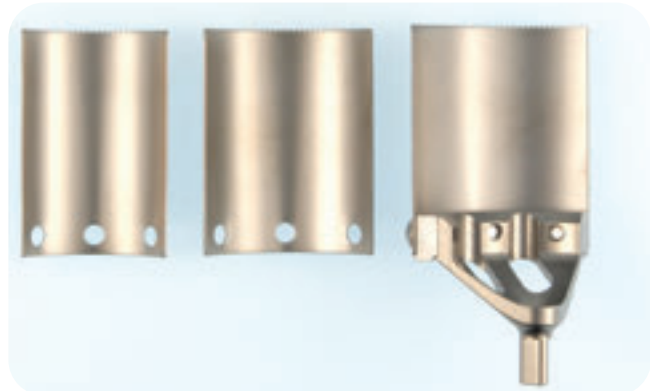


Vi's updated TPLO Blade has been redesigned to further reduce friction and improve cut characteristics in all sizes.

TPLO BLADES VI PATTERN

- TPLOVI12** TPLO Blades Vi Pattern 12mm
- TPLOVI15** TPLO Blades Vi Pattern 15mm
- TPLOVI18** TPLO Blades Vi Pattern 18mm
- TPLOVI21** TPLO Blades Vi Pattern 21mm
- TPLOVI24** TPLO Blades Vi Pattern 24mm
- TPLOVI27** TPLO Blades Vi Pattern 27mm
- TPLOVI30** TPLO Blades Vi Pattern 30mm
- TPLOVI34** TPLO Blades Vi Pattern 34mm

Modular Stainless TPLO Blades



All the Blades fit the standard hub. The 30mm Blade requires a Collar which is supplied with the hub. The Blades have a 'set' which makes the teeth slighter wider at the tips which reduces friction and heat as the Blade passes through the bone.

For those who purchased our Stainless Steel Hub system taking semi disposable radial cut blades we are pleased to inform you that in addition to the 24mm Blade, 18 and 30mm Blades are now available. The Blades are long lasting with a tooth 'set' to reduce heat generation. When they get dull simply fit a new one.

MODULAR STAINLESS TPLO SAW BLADES

- TPLOBHUB** Hub for 18, 24 & 30mm Blades includes Collar
- TPLOB18** 18mm Radial Cut Stainless Blade
- TPLOB24** 24mm Radial Cut Stainless Blade
- TPLOB30** 30mm Radial Cut Stainless Blade
- TPLOB30COL** Collar for 30mm Blade
- TBHEX32** 3.2mm 'T' Bar Hex Driver (Whittemore/ Vi)

TPLO Saw Hex Driver 'T' Bar Type



The fitting on most TPLO Saw Blades is of the triangular Stryker Type. The means of attachment to the saw is by Hex Drive Grub Screws which are notorious for working loose. Our 'T' Bar Hex Drivers allow the surgeon to quickly, easily and firmly attach the blade to the saw.

Available in 2.5mm (Slocum), 3.0mm (Aesculap) and 3.2mm (Whittemore/ Vi).

'T' BAR HEX DRIVERS

- TBHEX25** 2.5mm 'T' Bar Hex Driver (Slocum)
- TBHEX30** 3.0mm 'T' Bar Hex Driver (Aesculap)
- TBHEX32** 3.2mm 'T' Bar Hex Driver (Whittemore/ Vi)

TPLO Saw Blade Protractor



Use to accurately measure the tibial plateau slope. In addition the protractor is marked with blade outline to further assist in the planning of the TPLO procedure.

TPLO PROTRACTOR

TPLOPRO TPLO Protractor

DESCRIPTION	VI CODE	HEX DRIVER	VI CODE
WHITTEMORE SAW GRUB SCREW	TPLOSCREW	1/8"	TBHEX32 (T BAR) TPLOHEX32 (ALLEN KEY)
SLOCUM SAW SCREW	SLOSCREW	2.5MM	TBHEX25 (T BAR)
AESCULAP SAW GRUB SCREW	SPECIAL ORDER FROM AESCULAP	3.0MM	TBHEX30 (T BAR) F07020130 (ALLEN KEY)
TPLO JIGS	JIGSCREW	2.5MM	TBHEX25 (T BAR)
ARTHROSCOPIC DISTRATOR	JIGSCREW	2.5MM	TBHEX25 (T BAR)
FESSA 6MM	015509	1.5MM	015507 (SDRIVER) 015508 (ALLEN KEY)
FESSA 8MM	015520	2.0MM	015516 (SDRIVER) 015517 (ALLEN KEY)

POWER TOOL SERVICE AND REPAIR

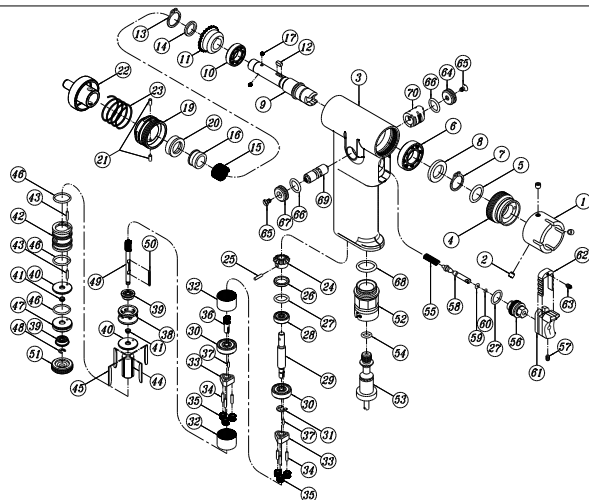
Power tools can transform surgery when working properly but can be very frustrating when working sub-optimally or if they fail mid procedure.

Regular maintenance in the clinic is the key to a long and happy life but periodic service or repair is essential to replace worn parts.

Veterinary Instrumentation offers a full repair service for most power tools and their accessories. We work directly with the manufacturers who are best placed to provide the correct parts for your machine. Botched repairs can be very expensive.

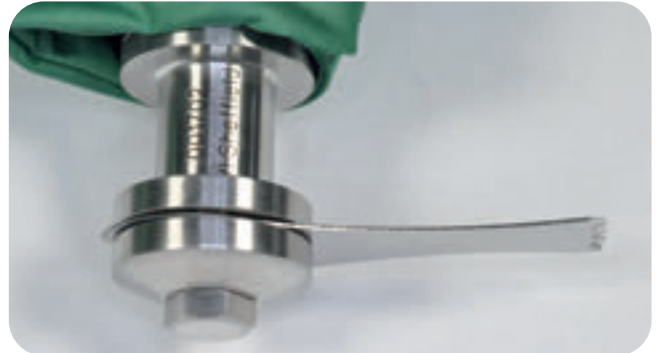
As with any machine, to minimise failure in use, a regular service programme is ideal. Service loaners are available provided we have sufficient notice. We may not be able to offer a loaner for an emergency repair.

Typical service costs for a MiniDriver which will include new rotor vanes, bearings, and o-rings plus set up to new specification is between £250 and £300.



Multi Saw

Multi Saw Battery Powered



The Multi Saw is a multi-function oscillating saw which may be used as a cast cutter and a surgical oscillating saw. The Standard Rechargeable Saw is supplied as a Kit including Charger, Battery (x 2), Titanium Nitride Coated Blade and S82-103 Blade. The Multi Saw has adjustable speed control. The Saw cuts best at full speed but early users may wish to start the osteotomy at a lower setting.

Our Stainless Attachment converts the Multi Saw into a Surgical Saw in a similar fashion to our Orthopaedic Drill. With the Converter and Shroud in place, all exposed surfaces are sterile. Excellent for total femoral head and neck excision, TPLO by Wedge Osteotomy and TTA. A wide range of blades fit the Multi Saw. We recommend either the Desoutter S82 series or the Halls SB5071 series. The latter offers a slimmer cut 0.8mm c.f. 1.2mm.

MULTI SAW BATTERY POWERED

- 001708** Multi Saw Surgical Kit incl Converter, Shroud, Titanium Nitride Coated Blade and S82-103 Blade
- 001708.134** Multi Saw Surgical Kit incl Converter, Shroud, Titanium Nitride Coated Blade and SB5071-134 Blade Suitable for TTO and TTA Rapid
- 001702** Stainless Converter (c/w Spanner)
- 001703** Waterproof Shroud for Multi Saw
- 001705** Multi Saw Diamond Blade
- 001714** Multi Saw Titanium Nitride Coated Blade
- M12B2MIL** Spare Battery for Multi Saw (Milwaukee)
- 001701** Spare Battery for Multi Saw (Bosch)

MULTI SAW MAINS POWERED SHROUD

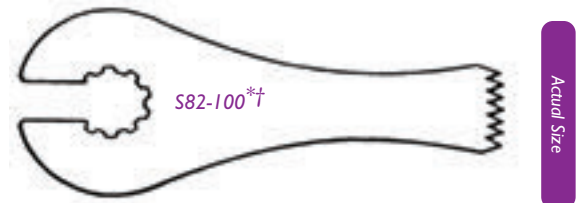
- 001703MAINS** Shroud for Corded Multi Saw

Multi Saw Blades



*Also fits Desoutter M171/M172

† Suitable for use with TTO and TTA Rapid Sawguide



Surgical Blades

Other patterns available - please call the Vet Tech Team for full listing

All blades with a central hole bigger than 6mm will fit the Multi Saw.

MULTI SAW BLADES

CODE	THICKNESS	CUT	LENGTH	WIDTH
S82-100	0.5mm	0.9mm	45mm	12mm
S82-103	0.81mm	1.2mm	70mm	12mm
S82-104	0.81mm	1.2mm	70mm	25mm
SB5071-134	0.38mm	0.6mm	41mm	9.0mm
SB5071-232	0.4mm	0.8mm	41mm	19.5mm
SB5071-135	0.6mm	0.8mm	30mm	5.0mm
SB5071-133	0.38mm	0.6mm	25mm	9.5mm
S85-110	0.4mm	0.7mm	33mm	10.0mm

Cast Blades

CAST BLADES

001705 Diamond Multi Saw Blade 63mm for Resin Casts

Electrical Power

Variable Speed Orthopaedic Drill



Our model has a removable battery pack. This feature makes charging easier and a spare battery pack can be maintained on charge. The battery charges more quickly than you can discharge the one in the drill. This remains the best drill we have found.

All the original features remain.

- Excellent control over speed 0-600rpm via trigger
- Stainless Steel Chuck (6.35mm capacity) and Extension
- 80mm through Chuck cannulation
- Autoclavable Shroud
- Low Speed, High Torque
- Supplied as a Complete Kit including Stainless Chuck, Key, Extension, Autoclavable Shroud, 2 Batteries and a Charger.

VARIABLE SPEED ORTHOPAEDIC DRILL (MILWAUKEE) & ACCESSORIES

- 001600** Variable Speed Orthopaedic Drill (Milwaukee) Kit - Drill, Chuck, Key, Shroud, Extension & 2 x Batteries
- 001605** Spare Chuck (& Key) 1/4" 6.35mm
- 001606** Spare Key for Standard Chuck
- 001607** Drill Extension
- 001661A** Waterproof Shroud
- M12B2MIL** Spare Rechargeable Battery - Milwaukee drill

Accessories for Variable Speed Orthopaedic Drill Makita - Post 2014



Please note that we are only able to supply accessories for this make of drill. Drill body is discontinued.

VARIABLE SPEED ORTHOPAEDIC DRILL & ACCESSORIES

- 001605** Spare Chuck (& Key) 1/4" 6.35mm
- 001606** Spare Key for Standard Chuck
- 001607** Drill Extension
- 001661A** Waterproof Shroud - Makita drill post 2014
- 001613** Spare Rechargeable Battery - Makita drill post 2014
- 001660CH** Battery Charger/ Replacement - Makita drill post 2014

Accessories for Variable Speed Orthopaedic Drill Makita - Pre 2014



Please note that we are only able to supply accessories for this make of drill. Drill body is discontinued.

ACCESSORIES FOR VARIABLE SPEED ORTHOPAEDIC DRILL - PRE 2014

- 001605** Spare Chuck (& Key) 1/4" 6.35mm
- 001606** Spare Key for Standard Chuck
- 001607** Drill Extension
- 001620** Spare Drill Shroud - Makita Pre 2014

Accessories for Mini Re-chargeable Drill - Metabo



Please note that we are only able to supply accessories for this make of drill. Drill body is discontinued.

Due to the new design Variable Speed Orthopaedic Drill (Code 001600), our Mini Drill - Metabo - has been discontinued. However, we are still able to provide accessories for use with these drills.

MINI RECHARGEABLE DRILL ACCESSORIES

- 001661A** Waterproof Shroud for Mini Rechargeable Drill
- 001605S** Spare Chuck with Key 5/32" (4mm)

Halls (Linvatec) Spinal Bur System

Surgairtome II



This is the current replacement for the Minos A200. Similar performance to the Minos but has an air brake, so the bur stops immediately the trigger is released. Not as robust as the Minos as the drive is through gears but preferred by some surgeons e.g. Simon Wheeler.

SURGAIRTOME II

505800	Surgairtome II Kit. Includes Hose Medium Bur Guard & Motor
5058	Surgairtome Motor
5042-35E	Halls UK Hose MA-7
HALLHOSEVI	VI Hose – Halls Fitting

Electric Flexidrive Bur System

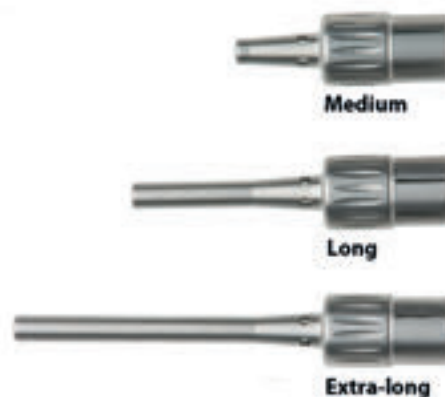


For the occasional spinal surgeon, this budget system performs very well. The burs run at 0 - 15,000 rpm controlled via a foot pedal and the flexidrive is easy to use. Now supplied with removable handpiece. (autoclavable with care). Use sterile autoclavable film to shroud the flexible shaft. Supplied as a complete kit including burs and instructions. When you are cutting more than one back per month think about a Minos/ Surgairtome.

ELECTRIC FLEXIDRIVE BUR SYSTEM

001640A	Mini Drill (Electric Drive) 15,000 rpm ForeDOM Full Kit incl Burs
D235A	Spare Handpiece
D29505 1/2	Spare Inner Drive Flex
D29505 1/3	Spare Outer Drive Flex
001641	Collet for HP Burs
001785	1.6mm Round Short Carbide Bur
HP8	2.3mm Round Short Carbide Bur
M30R	3.0mm Round Short Carbide Bur

Bur Guards



Burs should not be driven without a Bur Guard which supports the shaft of the bur. Without Bur Guards burs vibrate and can bend causing injury to both patient and surgeon.

The shortest guard available is the medium for burs 45-51mm long

VI BUR GUARDS

VIMBG	Medium Bur Guard for Burs 45-51mm Long
VILBG	Long Bur Guard for Burs 70mm Long
VIXBG	Extra Long Bur Guard for Burs 95mm Long

Halls Bur Guards



Burs and Bur Guards are common to both the Minos and the Surgairtome II. A bur guard should always be used when driving burs. Spinning at 100,000 rpm the shaft needs support. These are the original Halls Guards.

HALLS BUR GUARDS

1375-023	Extra Long Halls Bur Guard
1375-011	Long Halls Bur Guard
1375-012	Medium Halls Bur Guard

Bur Brush



When burs stop cutting mid procedure the reason is usually clogging of the cutting flutes. High speeds (100,000 rpm) minimise the problem. Dremel type flexdrive units are particularly prone. Our Bur Brush is used to clean the bur without damaging it. It may be more convenient to change the bur and clean them up afterwards.















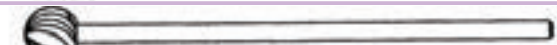
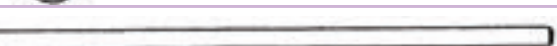




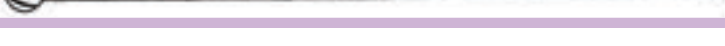

BRUSH

A315	Bur Brush
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Burs

All surgical burs have a 2.36mm shank (HP fitting) and will fit in all high speed surgical bur machines e.g. 3M's Minos, Halls Surgairtome & Foredom. We have selected Komet burs for their high quality. All are single pack and non sterile. In human surgery, burs are regarded as disposable items. In veterinary surgery the cost precludes using burs as disposables. However, use of burs which are less than sharp extends procedure time and creates heat. We do advise that burs are checked and changed on a regular basis.

Diamond burs are sharper and create less heat than carbide equivalents. Adequate irrigation is essential. Please see chart for options.

BURS		HEAD OVERALL BUR			ORDER	ORDER
BUR TYPE	<i>illustrations are actual size</i>	SIZE	LENGTH	GUARD	CODE (Carbide)	CODE (Diamond)
		1.8	51mm	Medium	M18R	-
		2.1	51mm	Medium	-	M20D
		2.1	51mm	Medium	M20R	-
		2.3	51mm	Medium	M23R	-
		2.9	55mm	Medium	-	M30D
		3.0	51mm	Medium	M30R	-
		4.0	51mm	Medium	M40R	M40D
		5.0	51mm	Medium	M50R	-
		6.0	57mm	Medium	-	M60D
		6.0	51mm	Medium	M60R	-
		1.8	70mm	Long	L18R	-
		2.0	70mm	Long	L20R	L20D
		3.0	70mm	Long	L30R	L30D
		4.0	70mm	Long	L40R	L40D
		5.0	70mm	Long	L50R	L50D
		6.0	70mm	Long	L60R	L60D
		6.5	70mm	Long	L65R	-
		2.0	95mm	Extra Long	X20R	X20D
		2.3	95mm	Extra Long	X23R	X23D
		3.0	95mm	Extra Long	X30R	X30D
		4.0	95mm	Extra Long	X40R	X40D
		5.0	95mm	Extra Long	X50R	X50D

Bur Stands



Bur Block x 6

BUR BLOCKS HP BURS (2.36MM SHAFT)

BUR6 Basic Bur Block for 6 Burs (supplied empty)

Dressing & Support

Thera-Paw



Thera-paw acts as a reusable bandage with a protective base.

- The ultra-cushioned sole alleviates pain, reducing lameness and promoting more even weight distribution.
- The use of perforated top-sole material and cut-out design allow the paw to breathe and keeps the injured site free from moisture build-up.
- The rubberized, non-skid base and toe-cap are waterproof, protect the site from further injury, and provide better traction.
- The vertical closure design runs parallel to the carpal/ tarsal bones, dispersing pressure over a wide area.
- Thera-Paw is easily cleaned by rinsing it under warm water. Mild detergent may be used. It air dries in under 1 hour, and is ready for immediate reapplication.
- The front opening and closing mechanism makes it easy to slip Thera-paw into place.
- The outer safety strap provides additional security, to ensure that Thera-paw stays on even the most active dogs.
- The dual closing mechanism reduces the risk that a dog can remove the garment.

THERA-PAW

200002	Thera-paw Small (T/B)
200003	Thera-paw Small/ Medium (T/C)
200003#2	Thera-paw Small/ Medium#2 (T/D)
200004	Thera-paw Medium (T/E)
200005	Thera-paw Medium/ Large (T/F)
200006	Thera-paw Large (T/G)
2000SET	Thera-paw Set of 6 (as above)

Medipaw® Protective Boot

Waterproof, breathable, facilitates compliance, reduces rewraps, saves resources. Available in 8 colour coded sizes.



A professional waterproof but breathable cover for dressings and casts. Available in colour coded sizes, they have a durable no-skid bottom, and elasticised straps with Velcro closures as well as an upper cord lock.



MEDIPAW PROTECTIVE BOOT - HARD SOLE

200015	Medipaw Boot Hard Sole Extra Small Wide - Orange
200020	Medipaw Boot Hard Sole Extra Small - Yellow
200031	Medipaw Boot Hard Sole Extra Small #2 - Pink
200025	Medipaw Boot Hard Sole Small - Blue
200030	Medipaw Boot Hard Sole Medium - Red
200035	Medipaw Boot Hard Sole Large - Green
200037	Medipaw Boot Hard Sole Large Wide - Grey
200040	Medipaw Boot Hard Sole Extra Large - Purple
200091SET	Medipaw Boot Hard Sole Set Of 5 - XS, SH, S, M, L

MEDIPAW PROTECTIVE BOOT - SOFT SOLE

200097	Medipaw Boot Soft Sole Extra Small Wide - Orange
200093	Medipaw Boot Soft Sole Extra Small - Yellow
200092	Medipaw Boot Soft Sole Extra Small #2 - Pink
200094	Medipaw Boot Soft Sole Small - Blue
200095	Medipaw Boot Soft Sole Medium - Red
200096	Medipaw Boot Soft Sole Large - Green
200099	Medipaw Boot Soft Sole Large Wide - Grey
200098	Medipaw Boot Soft Sole Extra Large - Purple
200090SET	Medipaw Boot Soft Sole Set Of 5 - XS, SH, S, M, L

Medipaw® Slim Boot



Superior open-wound healing for dogs and cats. Medipaw® Slim — the protective veterinary boot with a soft, antimicrobial bamboo and silver lining.

Indicated for dog and cat open-wound treatment:

- Burns
- Degloving
- Excessive licking and irritation
- Hot spots
- Lick granulomas
- Punctures

Features:

- Machine washable/ hang dry
- Durable, non-skid, rubber sole
- Upper drawstring closure
- Adjustable elastic/secure Velcro® straps
- Reflective strap
- Waterproof/breathable nylon shell
- Scuff guard

MEDIPAW SLIM BOOT

MDS-XS	Medipaw Slim Boot Extra Small - Yellow
MDS-S	Medipaw Slim Boot Small - Blue
MDS-M	Medipaw Slim Boot Medium - Red
MDS-L	Medipaw Slim Boot Large - Green
MDS-XL	Medipaw Slim Boot Extra Large - Purple
MDS-STR	Medipaw Slim Boot Starter Pack Set of 3 - S, M, L

Medipaw Protective Suit For Dogs and Cats



From the manufacturers of the popular Medipaw protective boot comes a new addition to the patient protection range.

The Medipaw suit is available in a range of sizes to fit dogs and cats. The suit is a 2 piece design, which makes fitting & removing easier. The two parts have an easy Velcro closure. The top gives full coverage of the thorax.

Indications for use are many. This suit can be used as an alternative to an Elizabethan collar to discourage post-operative interference with wounds, to reduce the incidence of tick infestation, to protect drain tube sites, during the treatment of skin conditions etc. An alternative use for the Medipaw Protective Suit is in the management of anxiety in dogs.

Features include a wide opening for litter tray use, a port opening, and internal pockets in both top and bottom parts which can take ice packs to relieve swelling or pads for absorption.

Machine washable, the suit is made of 95% cotton, 5% Lycra

Colour coded stitching and logo indicate size, for easy recognition and re-ordering.



MEDIPAW PROTECTIVE SUIT

SUITPSS-XXS	Two Piece Suit XXS	Pink
SUITPSS-XS	Two Piece Suit XS	Yellow
SUITPSS-S	Two Piece Suit S	Blue
SUITPSS-S+	Two Piece Suit S+	Orange
SUITPSS-M	Two Piece Suit M	Red
SUITPSS-L	Two Piece Suit L	Green
SUITPSS-XL	Two Piece Suit XL	Purple
SUITPSS-S-CAT	Two Piece Suit S Cat	Blue
SUITPSS-M-CAT	Two Piece Suit M Cat	Red
SUITPSS-L-CAT	Two Piece Suit L Cat	Green
SUITSET I	5 Protective Suits Cat M, Dog XXS, S, M, L & Free Display Dog	



Buy a set of 5 suits and receive a display dog for your clinic absolutely free.

T&C's apply.

Carpo-Flex Range

Carpo-Flex are a range of supports designed to stabilise and support the carpus, helping reduce carpal deviation and hyperextension. Made from neoprene, with elastic straps. Available in 3 support grades. For more information visit www.Thera-paw.com

Carpo-Flex Sports Wrap - Light Support



Measurement guide is maximum circumference around the carpus.

CARPO-FLEX SPORTS WRAP (LIGHT)

- 200011L Carpo-Flex Sports Wrap XS - Left - 11.5cm
- 200011R Carpo-Flex Sports Wrap XS - Right - 11.5cm
- 200012L Carpo-Flex Sports Wrap S - Left - 12.5cm
- 200012R Carpo-Flex Sports Wrap S - Right - 12.5cm
- 200013L Carpo-Flex Sports Wrap M - Left - 15cm
- 200013R Carpo-Flex Sports Wrap M - Right - 15cm
- 200014L Carpo-Flex Sports Wrap L - Left - 17.5cm
- 200014R Carpo-Flex Sports Wrap L - Right - 17.5cm

Carpo-Flex Splint Kit - Strong Support to Complete Immobilisation



Measurement guide is maximum circumference around the carpus.

CARPO-FLEX SPLINT KIT (STRONG)

- 200060L Carpo-Flex Splint Kit XS - Left - 9.5cm
- 200060R Carpo-Flex Splint Kit XS - Right - 9.5cm
- 200061L Carpo-Flex Splint Kit S - Left - 10cm
- 200061R Carpo-Flex Splint Kit S - Right - 10cm
- 200062L Carpo-Flex Splint Kit M - Left - 14.5cm
- 200062R Carpo-Flex Splint Kit M - Right - 14.5cm
- 200063L Carpo-Flex Splint Kit L - Left - 19.5cm
- 200063R Carpo-Flex Splint Kit L - Right - 19.5cm

Carpo-Flex X - Moderate Support



Measurement guide is maximum circumference around the carpus.

CARPO-FLEX X (MODERATE)

- 200070L Carpo-Flex X - XS - Left - 9.5cm
- 200070R Carpo-Flex X - XS - Right - 9.5cm
- 200071L Carpo-Flex X - S - Left - 10cm
- 200071R Carpo-Flex X - S - Right - 10cm
- 200072L Carpo-Flex X - M - Left - 14.5cm
- 200072R Carpo-Flex X - M - Right - 14.5cm
- 200073L Carpo-Flex X - L - Left - 19.5cm
- 200073R Carpo-Flex X - L - Right - 19.5cm
- 200074L Carpo-Flex X - XL - Left - 21.5cm
- 200074R Carpo-Flex X - XL - Right - 21.5cm

Dorsi-flex



Dorsi-flex is a physical aid to normal placement of the hind foot which is aimed to help reduce knuckling, assist with tarsal/ hock flexion & digital extension and act as a mobility aid for unstable or weak distal hind limbs. Includes a Thera-paw boot plus adjustable tension straps & tarsal anchor strap. Easily fitted & cleaned

Further information is available on www.therapaw.com

DORSI-FLEX

- 200018 Dorsi-Flex Tiny with Small Thera-paw (T/B)
- 200019 Dorsi-Flex XXS with S/M Thera-paw (T/C)
- 200021 Dorsi-Flex XS with S/M#2 Thera-paw (T/D) Max Tibia 11.5cm
- 200022 Dorsi-Flex S with M Thera-paw (T/E) Max Tibia 14cm
- 200023 Dorsi-Flex M with M/L Thera-paw (T/F) Max Tibia 16.5cm
- 200024 Dorsi-Flex L with L Thera-paw (T/G) Max Tibia 21.5cm

Forelimb Dorsi-flex Assist



This device aids with dorsi-flexion of the forepaw, and also helps stabilise and support the carpus.

It is based on the Thera-paw boot, with the addition of a Velcro strapping mechanism to maintain dorsiflexion.

Useful for dogs affected by brachial plexus avulsion, radial nerve problems and other similar conditions.

For the Forelimb Dorsi-Flex Assist to be most effective the patient should have moderate triceps control and be able to extend the elbow.

Now available in 4 off the shelf sizes.

FORELIMB DORSI-FLEX ASSIST

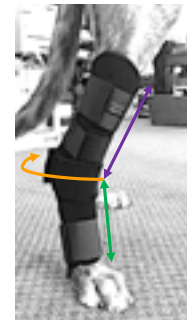
- 200026L Forelimb Dorsi-Flex Assist Small/ Medium T/D - Left
- 200026R Forelimb Dorsi-Flex Assist Small/ Medium T/D - Right
- 200027L Forelimb Dorsi-Flex Assist Medium T/E - Left
- 200027R Forelimb Dorsi-Flex Assist Medium T/E - Right
- 200028L Forelimb Dorsi-Flex Assist Medium/ Large T/F - Left
- 200028R Forelimb Dorsi-Flex Assist Medium/ Large T/F - Right
- 200029L Forelimb Dorsi-Flex Assist Large T/G - Left
- 200029R Forelimb Dorsi-Flex Assist Large T/G - Right

Tarso-Flex X



Tarso-Flex X are a range of supports designed to stabilise and support the tarsal. Thick Tarsal Wrap with versatile support. Neoprene. Velcro closure. Self adhesive foam padding. Nylon support wraps are placed on outer wrap for additional support. Easily fitted & cleaned.

Further information is available on www.therapaw.com



SIZE CHART	← measurement Range (in centimeters)	← measurement Range (in centimeters)	← measurement Range (in centimeters)
Size	Cranial height from tarsal joint to below tibial crest	Cranial height from dorsal paw to tarsal joint	Circumference at tarsal joint
X-Small	4.5 – 6.25	3.75 – 5	8.75 – 14
Small	6.25 – 8.75	4.5 – 6.25	10 – 17.75
Medium	8.75 – 12.70	7 – 10	13.25 – 21
Large	11.40 – 16.50	10 – 13.25	15.80 – 24.75
X-Large	13.25 – 19.00	11.40 – 15.25	17.75 – 30.50

TARSO-FLEX X

- 200100XSL Tarso-Flex X - Extra Small - Left
- 200100XSR Tarso-Flex X - Extra Small - Right
- 200100SL Tarso-Flex X - Small - Left
- 200100SR Tarso-Flex X - Small - Right
- 200100ML Tarso-Flex X - Medium - Left
- 200100MR Tarso-Flex X - Medium - Right
- 200100LL Tarso-Flex X - Large - Left
- 200100LR Tarso-Flex X - Large - Right
- 200100XLL Tarso-Flex X - Extra Large - Left
- 200100XLR Tarso-Flex X - Extra Large - Right

Thermo Plastic Splinting

Marq-Easy Thermo Plastic Splinting Rectangular Sheets



The wide variety of shapes and sizes of animal patients makes splinting a challenge. Thermal plastic, widely used in human medicine, is heated in hot water and moulded to a specific custom shape for the patient. The thermal plastic material is available in a variety of rectangular- sized flat sheets. White.

MARQ-EASY THERMO PLASTIC SPLINTING RECTANGULAR SHEETS

- 940A** Thermo Plastic Splinting Sheet - 1/8" Thick 4" x 9"
For narrow long legs
- 940B** Thermo Plastic Splinting Sheet - 1/8" Thick 6" x 12"
- 940C** Thermo Plastic Splinting Sheet - 1/8" Thick 12" x 24"

Velcro Straps

Use in areas that do not require dressing to help hold the splint in proper position. Kit includes Velcro 1" x 36" strap and 12" hook patch with one side adhesive. Both can be trimmed to customise the splint.

VELCRO STRAPS

- 940V** Velcro Straps

Compact Foam Lining



This special foam padding with one adhesive side can be placed into the splint for patient comfort.

Blue. 16" x 24" x 3/8" thickness.

COMPACT FOAM LINING

- 940X** Compact Foam Lining Blue 16" x 24" x 3/8" thickness
- 940CD** CD illustrating the use of Thermoplastic Splinting

Thermo Plastic Splinting Starter Kit

A useful starter kit containing 1x Thermo Plastic Splinting sheet (940A), 1x Thermo Plastic Splinting Sheet (940B), 1x Velcro straps (940V), 1x Compact Foam Lining (940X) and 1x CD illustrating the use of thermoplastic splinting (940CD).

Discounted by 10+% compared to component price.

THERMO PLASTIC SPLINTING STARTER KIT

- 940KIT** Thermo Plastic Splinting Starter Kit

Splints

Padded Splints



Made from green foam lined plastic, splints provide temporary first aid support until surgery is appropriate.

Alternatively use for longer term support where other forms of fixation are inappropriate.

PADDED SPLINTS

- 090120** Padded Splint Small 210mm Long
- 090121** Padded Splint Medium 310mm Long
- 090122** Padded Splint Large 410mm Long

Adjustable Thomas Splints



Used for temporary stabilisation of fractures, particularly of the proximal limb pending internal/ external fixation.

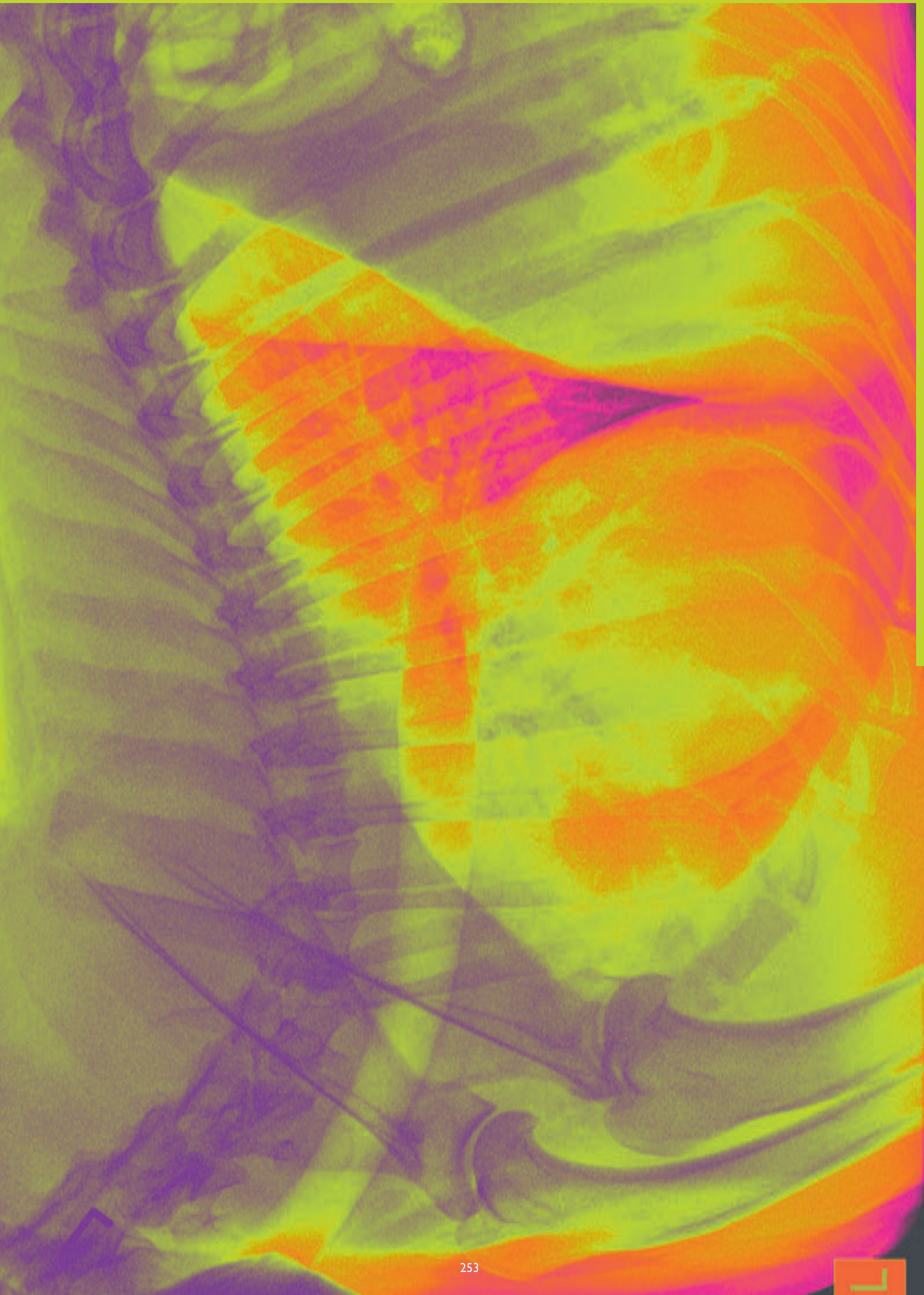
May also be used as sole means of fracture management where severity of fracture or economics preclude a more sophisticated repair.

Take care not to allow distal ring to sit at fracture site.

Stainless steel manufacture. Splint is adjustable for length.

ADJUSTABLE THOMAS SPLINTS

		(diameter of circle mm)
272100	Hind Leg Size 1	100
272110	Hind Leg Size 2	120
272120	Hind Leg Size 3	150
272130	Hind Leg Size 4	160
272140	Fore Leg Size 2	100
272150	Fore Leg Size 3	140
272160	Fore Leg Size 4	180



Vi Surgical Kits

Vi General Surgery Kit



Vi Surgical Instrument kits containing specifically selected high quality instrumentation for your small animal surgical needs.

The Vi General Surgery Kit contains:

- 171566 Jones Cross Action Towel Clips x 4
- 746100 Metzenbaum Scissors - Straight 145mm x 1
- 745300 Mayo Scissors Chamf Blades 140mm x 1
- 341145 Dissecting Forceps 1/2 Teeth 150mm x 1
- 106625 Spencer Wells Artery Forceps - Curved 125mm x 2
- 106600 Spencer Wells Artery Forceps - Straight 125mm x 2
- 103175 Halstead Mosquito Forceps 125mm x 2
- 342010 Debaquey Atraumatic Dissecting Forceps 180mm x 1
- 341200 Adson Serrated Dissecting Forceps 125mm x 1
- 584760 Mayo Needleholder 140mm x 1
- 0803 Scalpel Handle No 3 x 1

VI GENERAL SURGERY KIT

VIGSKIT Vi General Surgery Kit

Vi Basic Surgery Stitch Up Kit



Vi Basic Surgery Stitch Up Kit containing high quality instrumentation for your stitch up procedures.

The Vi Basic Surgery Stitch Up Kit contains:

- 0803 Scalpel Handle No 3 x 1
- 106600 Spencer Wells Artery Forceps - Straight 125mm x 2
- 346850 Treves 1/2 Teeth Dissecting Forceps 125mm x 1
- 584760 Mayo Needleholder 140mm x 1
- 745300 Mayo Scissors Chamf Blades 140mm x 1

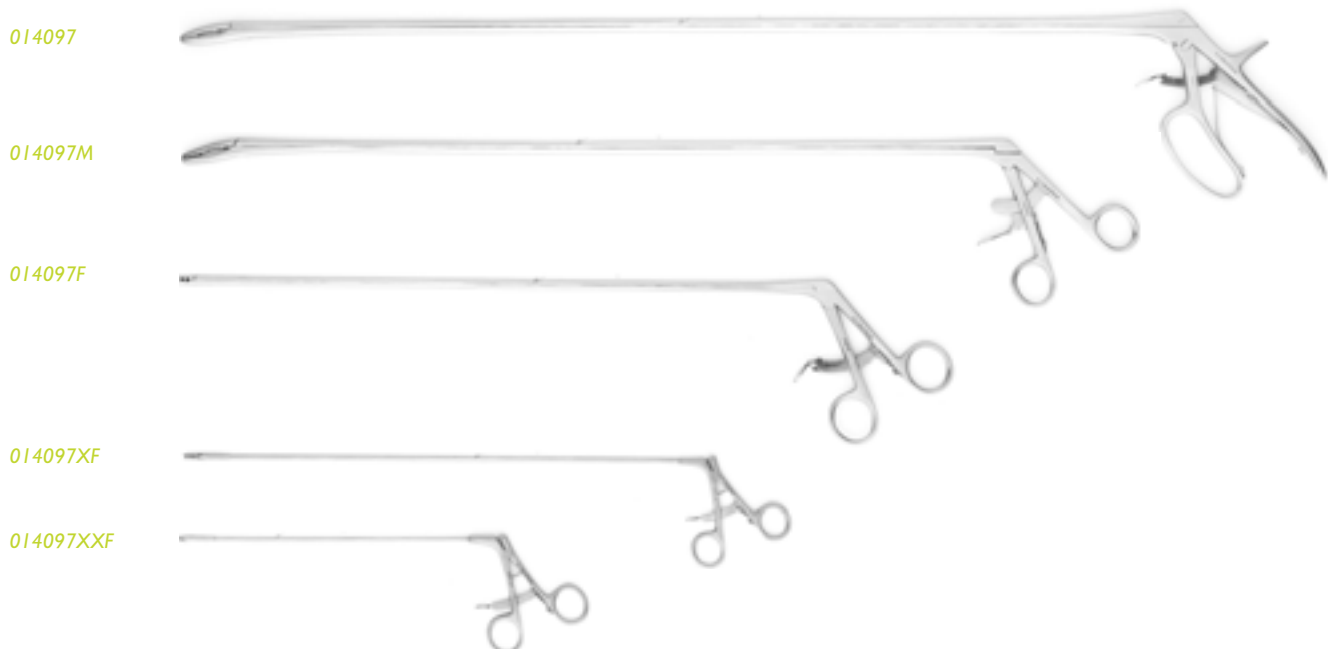
VI BASIC SURGERY STITCH UP KIT KIT

VIBSSKIT Vi Basic Surgery Stitch Up Kit

Thoracic Surgery

Foreign Body Retrieval Forceps

“One day you will need one of these”



We offer a range of forceps to cover every eventuality from a bone in the oesophagus of a large dog to a grass seed in a cat trachea.

The Forceps may be guided by rigid or flexible endoscopes or fluoroscopy. In exceptional cases retrieval may be achieved by ‘feel’. It is helpful to inflate the oesophagus prior to withdrawal of spiky objects. Video of Alasdair Hotson-Moore of Bath Veterinary Referrals locating and retrieving a bone body may be viewed at www.vetinst.com/videos

The teeth face backwards for maximum grip. When closed the jaws are atraumatic for minimal damage to the oesophagus or trachea.

The “One day you will need these” reflects our experience of desperate phone calls which end in us sending a pair of foreign body forceps by same day courier at great expense.

- Backward facing teeth for maximum grip
- Jaws are externally atraumatic
- Shaft diameter as small as possible
- Large Forceps jaws are angled when closed so that when open they sit mid oesophagus.

FOREIGN BODY RETRIEVAL FORCEPS

014097	Foreign Body Retrieval Forceps	640mm Shaft Length
014097M	Foreign Body Retrieval Forceps	500mm Shaft Length
014097F	Foreign Body Retrieval Forceps	400mm Shaft Length
014097XF	Foreign Body Retrieval Forceps	400mm Shaft Length
014097XXF	Foreign Body Retrieval Forceps	220mm Shaft Length

Code		Diameter at Jaws in mm	Length at Jaws in mm	Shaft Diameter in mm	Shaft Length in mm
014097		13 x 9	34	7.5 x 6	640
014097M		11.5 x 6	31	6.5 x 5	500
014097F		5.6 x 4.2	15.5	4 x 3	400
014097XF		4.5	11.5	3.5	400
014097XXF		3.3	8	2.5	220

Thoracic Surgery Kit
- as used by the Cambridge Vet School



Working inside the chest of medium and large dogs will require extended instrumentation. The instruments listed below represent a reasonable kit. When purchased as a kit there is a saving of over 10%. In addition a pair of rib retractors will be required. Other useful instruments include extra long Metzenbaum scissors and right angled forceps (Lahey cholecystectomy clamp and small right angled forceps).

The Thoracic Surgery Kit contains:

- 106205 45 Degree Curved Forceps 220mm x I
- 105415 90 Degree Curved Forceps 245mm x I
- 754060 Metz Scissors Str 235mm T.C. x I
- 754120 Metz Scissors Curved 235mm T.C. x I
- 342020 DeBakey Thumb Forceps 205mm x I
- 347665 Rat Tooth Thumb Forceps 205mm x I
- 602010 DeBakey Needleholders T.C. 200mm x I
- 347655 Dressing Forceps 205mm x I
- 2685/03 Satinsky Clamps 160mm Long 20mm Jaw x I
- 2685/05 Satinsky Clamps 200mm Long 30mm Jaw x I

THORACIC SURGERY KIT

CAMTHORKIT Thoracic Surgery Kit

Curved Forceps - Long



CURVED FORCEPS - LONG

- 106205** 45 Degree Curved Forceps 220mm Long
- 105415** 90 Degree Curved Forceps 245mm Long

Right Angled Clamps



Typically used to dissect around a patent ductus arteriosus and then pull through appropriate ligative material.

RIGHT ANGLED CLAMPS

- 014051** Right Angled Lahey Cholecystectomy Clamps 195mm Long
- 014052** Small Right Angle Clamps 160mm Long
- 014052S** Small Right Angle Clamps without Ratchet 160mm Long

Foreign Body Oesophoscope



FO Oesophoscope with LED Handle



FO Oesophoscope with FO cable Handle

The oesophoscope allows the surgeon to see the foreign body and is large enough to ease the bone back out through the mouth. Without a large tube the bone traumatises the oesophagus as it is withdrawn.

Two versions are available:

Basic. Simply a long tube with an atraumatic lip at the mouth. Using this version either an external light source must be shone down the tube or a fibre optic or LED light source must be passed down to illuminate the foreign body.

Fibre Optic. In this version the lip at the mouth of the oesophoscope includes fibre optics to allow direct illumination of the problem. The oesophoscope may be connected to your existing endoscopic light source by means of a fibre optic cable (Storz or Wolf fitting). Alternatively an LED light handle may be attached making the oesophoscope free of cabling.

Each version of the Oesophoscope is available as a boxed set of three instruments plus a Cleaning Brush.

1. 29mm x 450mm Long
2. 29mm x 300mm Long
3. 20mm x 300mm Long

The LED Light Handle is supplied with a Storz fitting and may also be used to illuminate arthroscopes, laparoscopes and rhinoscopes. Adaptors are available for other light fittings.

OESOPHASCOPE

- OESSETB** Oesophoscope Set Basic No Fibre Optic
- OESSETFO** Oesophoscope Set Basic Fibre Optic Version
- OESLH** LED Light Source Handle

Electrosurgery

GIMA BiPolar Electrosurgery Unit 120 watt



HF 122 is a complete innovation in the electrosurgery field. It is a high frequency-electronic scalpel suitable for microcoagulation, small and medium MonoPolar surgery and BiPolar coagulation. The following MonoPolar modes of operation are available via the control panel: pure cutting (CUT), coagulated cutting (COAG), MonoPolar coagulation and microcoagulation (BLEND). Additionally with BiPolar forceps, bipolar coagulation and microcoagulation are available.

Safety Alarm

Open Circuit (OC) Alarm warns the user that connection into the neutral plate has not been made or that the cable is disconnected. The alarm is signalled with an intermittent beep together with a flashing red light on the front panel. In this condition HF emission for cut and coagulation operation is switched off. Meets all EC standards for this type of equipment

Overheat Alarm

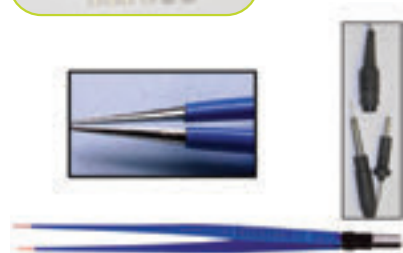
Should the final module in the HF generator overheat, the unit incorporates an internal circuit protection which cuts off operation. In this condition the red OVH warning light illuminates and the user must wait until the generator cools down, about 20 sec, before recommencing. The module will not go into protection mode as long as the instruction for operation as described in the manual are followed.

Kit includes:

- Two button MonoPolar handle (Autoclavable)
- Two button MonoPolar handle (disposable)
- Flat neutral plate
- BiPolar cable and forceps
- Foot control
- 6 Short Mono Polar Electrodes



6 x MonoPolar Tips included in the Kit.
Spare Tips available.



BiPolar Forceps are included in the set.

Other style forceps are available.

EU Forceps have a square fitting into the cable.

GIMA BIPOLAR ELECTROCAUTERY 120 WATT UNIT

- HF122** 120 watt MonoPolar/ BiPolar Electrosurgery Unit
- HF125** Spare Autoclavable MonoPolar Handpiece for HF122
- HF30547** Spare MonoPolar Handle Screw Grip for HF122
- HF123** Spare Standard Bipolar Forceps for HF122
- HF124** Spare Bipolar Cable for HF122 (A Type)
- HF30568** Spare Foot Pedal for HF122
- HF127** Waterproof Foot Pedal for HF122

GIMA BiPolar Electrosurgery Unit 160 watt



This Unit is a higher-powered version of our popular HF 122 Unit.

The additional power availability comes into its own when working with mixed tissue densities such as in orthopaedics, and in more moist situations such as mucous membranes.

Modes of operation are pure cut, coagulated cut, forced coagulation, soft coagulation, and with bipolar forceps bipolar coagulation.

HF160 has the same set of alarms as the 120, including Open Circuit which warns of a disconnected cable or poor patient plate contact and interrupts the HF emission for cut and coagulation.

All the standard accessories shown for the HF120 fit this unit. We can also supply an adaptor which allows standard 2 x 4mm banana plug (Valley Lab type) bipolar cables to be used with HF 160.

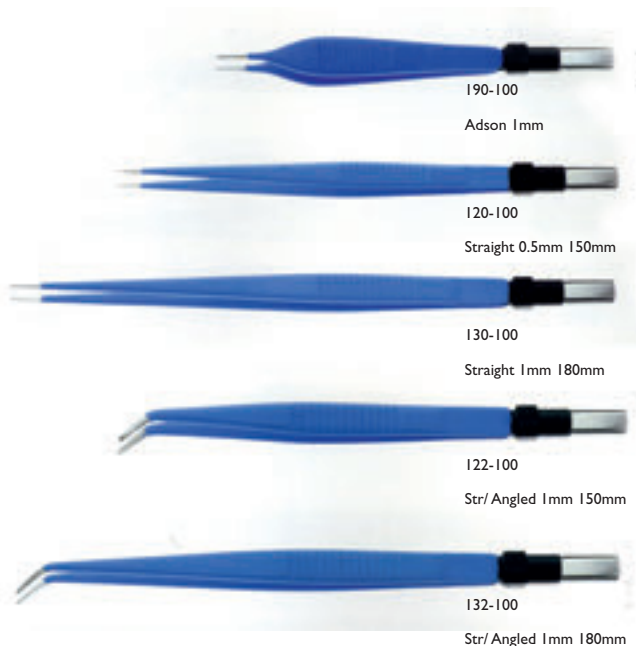
Technical specifications:

Tool	Description	HF 120	HF 160
-	Electrosurgical unit code GIMA	30540	30540
-	Electrosurgical unit code LED	GMA11010.20A	GMA11010.30A
± 0%	Minimum preselectable power	0	0
-	Level step	1	1
-	Digital level display	●	●
± 20%	Maximum output power CUT (W)	120 ± 250Ω	160 ± 250Ω
± 20%	Maximum output power BLEND (W)	80 ± 200Ω	120 ± 200Ω
± 20%	Maximum output power COAG FORCED (W)	80 ± 150Ω	100 ± 150Ω
± 20%	Maximum output power COAG SOFT (W)	80 ± 100Ω	80 ± 100Ω
± 20%	Maximum output power BIPOLAR (W)	80 ± 100Ω	80 ± 100Ω
± 5%	Modulation factor CUT	Pure 100%	Pure 100%
± 5%	Modulation factor BLEND	Pure 100%	Pure 100%
± 5%	Modulation factor COAG FORCED	Mod. 60%	Mod. 60%
± 5%	Modulation factor COAG SOFT	Mod. 90%	Mod. 90%
± 5%	Modulation factor BIPOLAR	Pure 100%	Pure 100%
± 0.2	Crest Factor CUT	1.5	1.5
± 0.3	Crest Factor BLEND	2.1	2.1
± 0.3	Crest Factor COAG FORCED	2.0	2.0
± 0.3	Crest Factor COAG SOFT	1.7	1.7
± 0.2	Crest Factor BIPOLAR	1.5	1.5
± 10%	Working frequency	600 kHz	600 kHz

GIMA BIPOLAR ELECTROCAUTERY 160 WATT UNIT

- HF160** 160 watt MonoPolar/ BiPolar Electrosurgery Unit
- HF30642** BiPolar Cable Adaptor for Gima Unit HF160 to 2 x 4mm Banana Plus

BiPolar Dissecting Forceps



These are the most common types of termination for the generator or machine end of the cable. We can supply cables to fit all machines. If you do not see the right connector here please check the brand and model number of your electrosurgery unit and call or e-mail us.

Our Bipolar Cables and forceps all have an EU fitting square end.

BIPOLAR ACCESSORIES

- HF190-100** Bipolar Forceps Adson 1mm Tip
- HF120-100** Bipolar Forceps Straight 0.5mm Tip 150mm Long
- HF130-100** Bipolar Forceps Straight 1mm Tip 180mm Long
- HF122-100** Bipolar Forceps Straight/ Angled 0.5mm Tip 150mm Long
- HF132-100** Bipolar Forceps Straight/ Angled 1mm Tip 180mm Long

BiPolar Cable Generator Terminations



A
GIMA HF122



B
Storz



D
4mm Banana Plugs
Valley Lab
Eschman
Arthrex OPES

These are the most common types of termination for the generator or machine end of the cable. We can supply cables to fit all machines. If you do not see the right connector here please check the brand and model number of your electrosurgery unit and call or e-mail us.

Our Bipolar Cables and forceps all have an EU fitting square end.

BIPOLAR ACCESSORIES

- HF124** Spare Bipolar Cable A Type EU Fitting Forcep Connector
 - HFU-30** Spare Bipolar Cable B Type EU Fitting Forcep Connector
 - HFS-30** Spare Bipolar Cable D Type EU Fitting Forcep Connector
- Other Bipolar Cable Types available. Phone for details

GIMA MonoPolar Electrosurgery Unit



This HF 106 Electrosurgery Unit is particularly suitable for small procedures. The 50 watt unit offers precision of cut with immediate coagulation. There is a choice of 10 electrodes. The three modes of operation, CUT, COAG and BLEND, can be easily selected through a switch on the front panel. Meets all EC standards for this type of equipment. The package includes HF 106 with all accessories including electrode handle, flat neutral plate, foot switch and a kit of 6 electrodes 5 cm long.

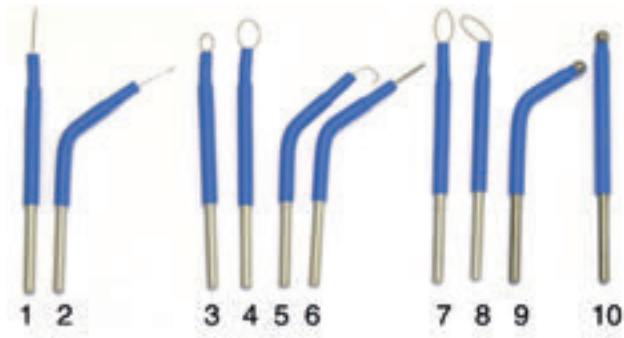


6 x MonoPolar Tips included in the Kit. Spare Tips available.

MONOPOLAR ELECTROSURGERY UNIT

- HF106** 50watt MonoPolar Electrosurgery Unit
- HF107** Spare Autoclavable MonoPolar Handle for HF106

MonoPolar Spares and Accessories



MONOPOLAR ACCESSORIES

- HF1** Electrode
- HF2** Electrode
- HF3** Electrode
- HF4** Electrode
- HF5** Electrode
- HF6** Electrode
- HF7** Electrode
- HF8** Electrode
- HF9** Electrode
- HF10** Electrode
- HF1-10** Electrodes Mixed Set of 10
- HF12** 7cm Blade - Autoclavable
- HF30537** Scratch Pad (supplied sterile) Pack of 10
- HF30563** Spare Cable for Gima Plate
- HF126** Spare Metal Plate for HF122 & HF106

Ethicon Gen II Endosurgery Generator



Combines advanced technology with touchscreen simplicity in one compact, easy-to-operate unit. Supports current and future HARMONIC® Ultrasonic and ENSEAL® Advanced Bipolar Devices.

Adaptive Tissue Technology

Intelligent energy delivery for greater precision and efficiency* Powered by the ETHICON GEN II Generator, Adaptive Tissue Technology continuously delivers energy intelligently and efficiently in both HARMONIC® and ENSEAL® X1 Devices to enhance surgical outcomes.

Simple design, simple setup and simple use

Easy setup and operation via touchscreen display. Simple device connection with automatic instrument recognition. And a compact design that takes up less space in the operating room, supports multiple placement options and allows easy transportation between operating rooms.

The EES Generator for HARMONIC™ and ENSEAL™ now available direct from Vi.

Features:

- Universal connector and automatic instrument recognition
- Touchscreen for easy setup and operation
- High-resolution display with wider viewing angles
- Compact design takes up less space in the operating room
- Software updates available via USB memory stick

Recommended Maintenance

- Periodic calibration is not required
- Electrical safety testing is per facility guidelines for an advanced bipolar or ultrasonic device
- Output verification is per facility guidelines for an advanced bipolar or ultrasonic device

– Output can be measured for both modalities by means of an available verification key and a standard electrosurgical analyser.

ETHICON GEN II ENDOSURGERY GENERATOR

- JJGEN II** Ethicon Gen II Endosurgery Generator



Ethicon Energy

We are pleased to supply the Ethicon Energy range of Harmonic and ENSEAL consumable handpieces. Both are powered by the GEN II console. Non autoclavable handpieces are available singly or in multipacks.



Harmonic® Technology

This is unique in the way it operates. Mechanical energy - a blade vibrating at 55,000 time a second – simultaneously cuts and coagulates tissue. Ultrasonic vibration reduces tissue to a sticky coagulum, sealing vessel walls together.



Energy in Action. Photos courtesy of of Professor Rob White, BSc (Hons) BVet/Med CertVA DSAS (Soft Tissue) DipECVS MRCVS, Willows Veterinary Centre & Referral Service

Harmonic Ace Shears



HARMONIC ACE Shears - can be used for coagulation and transection of vessels up to 5mm and handle multiple surgical jobs with precision including dissection, sealing and transection. They have a balanced, ergonomic grip, two hand controlled power settings and an integral audible/tactile mechanism for controlling full closure. Minimal lateral thermal spread allows dissection near vital structures. Shaft diameter 5mm.

ETHICON HARMONIC ACE HANDPIECES

- JJACE23E/SINGLE** Harmonic Ace 23cm Ergonomic Handle
- JJACE36E/SINGLE** Harmonic Ace 36cm Ergonomic Handle
- JJACE45E/SINGLE** Harmonic Ace 45cm Ergonomic Handle

Harmonic Focus Curved Shears



Available in 2 lengths, these are used for open surgery. Able to cut/coagulate vessels up to 5mm diameter, with more of the feel of a conventional surgical instrument. Two finger activated power levels with a 16mm active-blade length. Ergonomic, symmetrical finger rings maximise comfort and versatility.

ETHICON HARMONIC FOCUS HANDPIECES

- JJFCS17/SINGLE** Harmonic Focus 17cm Curved Shear
- JJHAR9F/SINGLE** Harmonic Focus 9cm Curved Shear

Harmonic Synergy Blades



Available as a curved or hook blades, each consists of a titanium blade with a non-removable sheath. Use these instruments for soft tissue incisions when you want to control bleeding or minimise lateral thermal damage. Procedures include general surgery and exposure to orthopaedic structures.

ETHICON HARMONIC SYNERGY HANDPIECES

- JJSNGCB/SINGLE** Harmonic SYNERGY Curved Blade
- JJSNGHK/SINGLE** Harmonic SYNERGY Hook Blade

Ethicon Harmonic Handpiece Accessories

ETHICON HARMONIC HANDPIECES ACCESSORIES

- JJHP054** Harmonic Grey Handpiece for Harmonic Ace & Laproscope Blades
- JJHPBLUE** Harmonic Blue Handpiece for Harmonic Focus & Synergy Blades

Enseal Advanced Bipolar Devices

Enseal G2 Tissue Sealers



The ENSEAL range are advanced bipolar tissue sealers, sealing vessels up to 7mm. These units are gentle on tissues due to the offset electrode configuration which is designed to minimise thermal spread. There is less sticking over multiple activations, and even pressure along the whole jaw when in use. The jaw design seals, cuts, grasps and dissects. The shaft is 5mm diameter, and is fully rotatable. The ergonomic handle is designed for one handed operation. Available in various lengths with curved or straight jaws.

ETHICON ENSEAL HANDPIECES

JJNSLG2C14/SINGLE	Enseal G2 Tissue Curved Jaw 14cm
JJNSLG2C25/SINGLE	Enseal G2 Tissue Curved Jaw 25cm
JJNSLG2C35/SINGLE	Enseal G2 Tissue Curved Jaw 35cm
JJNSLG2C45/SINGLE	Enseal G2 Tissue Curved Jaw 45cm
JJNSLG2S14/SINGLE	Enseal G2 Tissue Straight Jaw 14cm
JJNSLG2S25/SINGLE	Enseal G2 Tissue Straight Jaw 25cm
JJNSLG2S35/SINGLE	Enseal G2 Tissue Straight Jaw 35cm
JJNSLG2S45/SINGLE	Enseal G2 Tissue Straight Jaw 45cm

Enseal XI Large Jaw Tissue Sealer



ENSEAL™ XI Large Jaw Tissue Sealer instrument is a dedicated bipolar electro-surgical instrument intended for use in open surgical procedures where ligation and division of vessels is desired. It is a bipolar instrument for use with the Ethicon Generator G11 (GEN 11).

ENSEAL® XI Large Jaw is intended for use during open surgery to cut and seal vessels, and to cut, grasp, and dissect tissue.

The devices can be used on vessels (arteries, veins, pulmonary vasculature, lymphatics) up to and including 7 mm, and tissue bundles.

ETHICON ENSEAL SUPERJAW HANDPIECE

JJNSLX120L/S	Enseal Large Jaw Tissue Sealer Single
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Ethicon Stapler Systems

PROXIMATE® TX Reloadable Linear Stapler



Useful in – Gastrointestinal and Thoracic Surgery

Ease of use: This Stapler has 2 levers, one used during placement to position and close the jaws, then a separate lever for firing. A well-sited button can be used to release the jaws if repositioning of the Stapler is required. The Stapler can be operated completely single-handedly. Thin anvil, wide jaw opening and medium closing position of the parallel jaws of the PROXIMATE® TX Staplers are designed to facilitate positioning of the tissues in the jaws. The long thin axis of the PROXIMATE® TX 30mm Staplers aid access to more difficult surgical sites.

Sizing: Suitable for stapling tissue 1-2mm thick. Available in 30 & 60mm width, and 3 staple heights.

White – vascular, 1mm closed height, Blue – standard, 1.5mm closed height, Green – thick tissue, 2mm closed height. Vascular loads are dedicated to the 30mm Vascular stapler, otherwise blue and green loads are interchangeable in the same width.

PROXIMATE® TX Staplers may be reloaded up to 7 times during the same procedure allowing up to 8 stapling operations.

Supplied sterile including 1 load.

Proximate TX Staplers – includes one cartridge

PROXIMATE TX STAPLERS - INCLUDES ONE CARTRIDGE

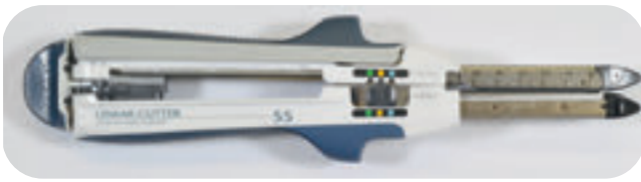
JJTX30B/S	PROXIMATE TX Linear Stapler 30mm BLUE
JJTX30G/S	PROXIMATE TX Linear Stapler 30mm GREEN
JJTX30V/S	PROXIMATE TX Linear Stapler 30mm VASCULAR
JJTX60B/S	PROXIMATE TX Linear Stapler 60mm BLUE
JJTX60G/S	PROXIMATE TX Linear Stapler 60mm GREEN

Proximate TX Reloads

PROXIMATE TX RELOADS

JJXR30V/3	PROXIMATE TX Reloads 30mm Pack of 3 WHITE
JJXR30B/3	PROXIMATE TX Reloads 30mm Pack of 3 BLUE
JJXR30G/3	PROXIMATE TX Reloads 30mm Pack of 3 GREEN
JJXR60B/3	PROXIMATE TX Reloads 60mm Pack of 3 BLUE
JJXR60G/3	PROXIMATE TX Reloads 60mm Pack of 3 GREEN

Ethicon Endo-surgery Linear Cutter



Staples and cuts in one firing. Innovative, 3D, 6 row staple pattern. Selectable staple height using the same reload – select blue, gold or green so no extra re-loads to stock. Spring-loaded intermediate locking mechanism gives easier one-handed tissue manipulation. 2 sided firing, left or right, and non-slip grip gives improved control of the device.

Note This Stapler does NOT come with load - remember to order your chosen pack size.

The JJNTLC Linear Cutter is used to join and open the anastomosis. The JJTX stapler is user to close and seal at right angles to the anastomosis.

ETHICON ENDO-SURGERY LINEAR CUTTER & RELOADS

- JJNTLC55/S** Selectable Linear Cutter 55mm
- JJNTLC75/S** Selectable Linear Cutter 75mm
- JJSR55/3** Reload Linear Cutter 55mm Pack of 3
- JJSR75/3** Reload Linear Cutter 75mm Pack of 3

Ethicon Echelon and Echelon Flex Staplers

Echelon Stapler



Echelon Endopath staplers deliver staples while simultaneously dividing tissue between rows. Cartridge lengths are 45 and 60mm, with handpiece shaft lengths of long or compact.

Staplers deliver six staggered rows of staples with a single cut line in-between. A safety lock-out prevents a used cartridge being re-fired.

Operation is one-handed. Pre-compression helps give a smooth stapling surface, to give a smooth haemostatic stapling line. Knife returns automatically after firing.

Note This Stapler does NOT come with a load – remember to order your chosen pack size.

ECHELON STAPLERS & RELOADS

- JJEC45/SINGLE** Echelon 45mm Endopath Stapler
- JJECR45B/3** Echelon Reload 45 Pack of 3 BLUE
- JJECR45G/3** Echelon Reload 45 Pack of 3 GREEN
- JJECR45W/3** Echelon Reload 45 Pack of 3 WHITE
- JJECR60B/3** Echelon Reload 60 Pack of 3 BLUE
- JJECR60G/3** Echelon Reload 60 Pack of 3 GREEN
- JJECR60W/3** Echelon Reload 60 Pack of 3 WHITE

Echelon Flex



Echelon Flex handpieces offer all the features of the standard Echelon with the added advantage of articulation. The articulation is part of the handpiece shaft, so standard Echelon cartridges can be used.

The natural articulation enables the staple line to be placed where required, while respecting the tissue and giving easier surgeon access.

Note This Stapler does NOT come with a load – remember to order your chosen pack size.

ECHELON FLEX STAPLERS & RELOADS

- JJEC45A/SINGLE** Echelon Flex 45mm Articulating Stapler
- JJSC45A/SINGLE** Echelon Flex 45mm Compact Single
- JJEC60A/SINGLE** Echelon Flex 60mm Articulating Stapler
- JJECR45B/3** Echelon Reload 45 Pack of 3 BLUE
- JJECR45G/3** Echelon Reload 45 Pack of 3 GREEN
- JJECR45W/3** Echelon Reload 45 Pack of 3 WHITE
- JJECR60B/3** Echelon Reload 60 Pack of 3 BLUE
- JJECR60G/3** Echelon Reload 60 Pack of 3 GREEN
- JJECR60W/3** Echelon Reload 60 Pack of 3 WHITE

Colour coding for Staplers – what does it mean?

Colour	Tissue Thickness	Closed Staple Size
White	Vascular/ Thin Tissue	1.0mm
Blue	Standard Tissue	1.5mm
Green	Thick Tissue	2.0mm

Ligaclip System

Ligamax 5 Endoscopic Clip Applier



This clip applier is designed to deliver a Medium/Large ligaclip through a 5mm port. The unit contains 15 clips and is not re-loadable.

LIGAMAX 5 delivers the security you expect with superior clip retention and a proprietary clip design.

An orange indicator shows when the 13th clip has been fired. A safety lock-out prevents an empty jaw from being closed. Direct drive clip feeding mechanism allows the surgeon to control when the clip is fed into the jaws. Long, thin, angled jaws allow the surgeon better visibility. Visual, audible & tactile indicators of clip feeding and forming.

Shaft length 33cm. Clip width 3.6mm. Closed clip length 8.8mm.

LIGAMAX 5 ENDOSCOPIC CLIP APPLIER

- JJEL5ML/I** LIGAMAX 5 Endo Clip Applier

Ligaclip Endoscopic Rotating Multiple Clip Applier

Use with a 10mm trochar. Rotating clip applier containing 20 clips. Last clip lock-out. Closed clip length 8.8mm.

LIGA CLIP ENDOSCOPIC ROTATING MULTIPLE CLIP APPLIER

JJER320/SINGLE LIGA CLIP Endoscopic Rotating Multiple Clip Applier - Single

Ligaclip Multi Patient Clip Appliers

Fully autoclavable colour coded Clip Applier, dedicated to the relevant clip size. Quick and easy to use. The jaws have a groove to hold the clip – once loaded the clip is held securely until it is placed and compressed. Clip closure is maintained by the inherent rigidity of the metal. Designed for tubular ligation, feedback from users has been that it is extremely useful for enucleation (thanks Martin Gabbut!) and to have on hand for unexpected bleeders during orthopaedics as well as major soft tissue surgery.

LIGA CLIP MULTI PATIENT CLIP APPLIERS

JJLX105	LIGA CLIP Applier Small Clips 14.5cm BLUE
JJLX107	LIGA CLIP Applier Small Clips 18.5cm BLUE
JJLX205	LIGA CLIP Applier Medium Clips 14.5cm WHITE
JJLX207	LIGA CLIP Applier Medium Clips 18.5cm WHITE
JJLX210	LIGA CLIP Applier Medium Clips 27.5cm WHITE
JJLX220	LIGA CLIP Applier Medium Clips 27.5cm Angled Jaw WHITE
JJLC307	LIGA CLIP Applier Medium/ Large Clips GREEN
JJLC310	LIGA CLIP Applier Medium/ Large Clips Long GREEN
JJLC320	LIGA CLIP Applier Medium/ Large Clips Long Angled Jaw GREEN
JJLC407	LIGA CLIP Applier Large Clips GOLD
JJLC410	LIGA CLIP Applier Large Clips Long GOLD
JJLC420	LIGA CLIP Applier Large Clips Long Angled Jaw GOLD

Ligaclip MCA Multiple Clip Applier

The Ligaclip Multiple Clip Applier is designed to offer a fast, efficient means of ligation. To use, position the jaws with the clip around the vessel or other tubular structure and fully squeeze the handles of the applier. When the handles are fully released, a new clip automatically advances into the jaws of the instrument. Last clip lockout prevents closure of empty jaws. Distal tip closure helps visualise placement of the clip on the vessel.

Single use instrument contains 20 or 30 clips depending on clip size.

LIGA CLIP MCA

JJMCM20/SINGLE	LIGA CLIP MCA Medium Clip Applier 20 Clips
JJMCM30/SINGLE	LIGA CLIP MCA Medium Clip Applier Long 30 Clips
JJMCS20/SINGLE	LIGA CLIP MCA Small Clip Applier 20 Clips

Ligaclip Extra Ligating Clips

All Ligaclips are in sterile packs of 6 in an outer box. Quantity per line below indicates the number of 6 packs per box.

LIGA CLIP EXTRA LIGATING CLIPS

JJLT100	LIGA CLIP Titanium Small 36 Packs of 6 BLUE
JJLT200	LIGA CLIP Titanium Medium 36 Packs of 6 WHITE
JJLT300	LIGA CLIP Titanium Medium/ Large 18 Packs of 6 GREEN
JJLT400	LIGA CLIP Titanium Large 18 Packs of 6 GOLD

All consumable Ethicon items are available in multipacks.

Please ask for pricing.

Packs shown are the smallest available.

Unless clearly marked Ethicon items are not autoclavable

Ovariohysterectomy

Because ovariohysterectomy is the procedure most commonly performed in practice there is an expectation that all qualified veterinary surgeons have high level of competency in the technique.

Ovariohysterectomy is not a simple technique and things can go badly wrong despite surgeons following what appears to be a straightforward step by step approach.

Many young surgeons have been badly traumatised by the learning curve involved in becoming adept at this fundamental procedure. 'Cannot even spay a bitch' is a heavy burden. Calling in the senior partner to deal with a bleeder does not add to one's self confidence.

This was confirmed by a paper by Tivers et al (JSAP 46, 430-435) which reported that 50% of graduates no longer used the technique in which they were trained.

The standard 3 clamp technique for tying off the ovarian pedicle is very effective when performed correctly. However it is often the case that the clamps are applied with the ovary under significant tension so that the clamps are placed very close together. Once the central clamp is removed in these circumstances, because of the tension and the limited space, the crushed pedicle cannot be pulled into a tight circle by the ligature. Instead the pedicle is often tied off as an oval. In that the circumference of an oval is greater than that of a circle with similar area, as soon as the outer clamps are released the pedicle reverts to a circle and the once tight ligature becomes loose and the artery bleeds.

This can be managed by reducing the tension on the pedicle by breaking down the round ligament, exteriorising the ovary and applying the clamps slightly further apart. These subtleties are best learnt by practical training. Supervising surgeons have developed the 'knack' but may not be aware of the issues.

Included in this section are two aids which assist in the exposure and ligation of the ovarian pedicle: the new Howard 'B' clamp and the well established Hauptman retractor.

Feline & Canine Spay Kits



It is convenient and cheaper to purchase your spay packs as kits.

List configuration whilst stocks last. Check with the Vet Tech Team for current content.

The Feline Spay Kit contains:

- 014211 Spay Forceps 125mm Long x 1
- 0803 Scalpel Handle No.3 x 1
- 103225 Halstead Mosquito Forceps Curved 125mm Long x 2
- 106625 Spencer Wells Artery Forceps Curved 125mm Long x 2
- 171566 Jones Cross Action Towel Clips 90mm Long x 2
- 341210 Adson Dissecting Forceps 1/2 Teeth 125mm Long x 1
- 585400 Olsen Hegar Needleholders 140mm Long x 1
- 746100 Metzenbaum Scissors Straight 145mm Long x 1
- BX201040 Stainless Steel Instrument Box x 1

The Canine Spay Kit contains:

- 014307 Carmalt Forceps Curved 200mm Long x 2
- 0803 Scalpel Handle No.3 x 1
- 106630 Spencer Wells Artery Forceps Curved 150mm Long x 4
- 171566 Jones Cross Action Towel Clips 90mm Long x 4
- 341145 Dissecting Forceps 1/2 Teeth 150mm Long x 1
- 585410 Olsen Hegar Needleholders 165mm Long x 1
- 745300 Mayo Chamf Blades Straight 140mm Long x 1
- 801155 Allis Tissue Forceps 3/4 Teeth 150mm Long x 2
- BX221550 Stainless Steel Instrument Box x 1

SPAY KITS

- SPAYFEL** Cased Feline Spay Kit
SPAYCAN Cased Canine Spay Kit

Ovariohysterectomy

Spay Hooks



Use to atraumatically lift uterine horns.

SPAY HOOKS

- 014320 Spay Hook Small 130mm Long
- 014325 Spay Hook Large 170mm Long

Spay Forceps



'Sturdy' type. Atraumatic spay forceps-tips have fine toothed DeBakey type form.

SPAY FORCEPS

- 014211 Spay Forceps 5" 125mm Long
- 014218 Spay Forceps (DeBakey Type) 5" 125mm Long

Spay Clamps

Angiotribes



The jaws of this instrument are designed for maximum crushing by serrated longitudinal grooves.

ANGIOTRIBES

- 014304 Angiotribes Straight 6.5" 160mm
- 014305 Angiotribes Curved 6.5" 160mm
- 014301 Angiotribes Straight 8" 200mm
- 014302 Angiotribes Curved 8" 200mm

Hysterectomy Clamps (Carmault)



These Clamps are curved with longitudinal grooves in the jaws to minimise tissue slippage. More reasonably priced than Angiotribes.

HYSTERECTOMY CLAMPS

- 014307 Hysterectomy Clamp (Carmault) 200mm Long
- 014309 Hysterectomy Clamp (Carmault) 160mm Long

Howard 'B' Ovariohysterectomy Clamp

Feline spay showing ovary exteriorised and ovarian pedicle 'collected' ready for ligation.

Designed and developed in practice by Howard Taylor who recognised that ovariohysterectomy was far from straightforward, particularly but not exclusively for recent graduates.

The Clamp has a number of features which assist the surgeon in the exposure and ligation of the ovarian pedicle.

- The ligature material is preloaded onto the forceps which takes it through the broad ligament.
- Longitudinal grooves in the jaw minimise slippage
- As the forceps are rotated the 'B' shaped extension 'collects' and brings together the structures of the pedicle ready for tying.
- The forceps sit outside the incision to exteriorise the pedicle

The ligature is tied without precrushing but is retained by a small haemostat to check for bleeding prior to closure.

HOWARD 'B' OVARIOHYSTERECTOMY CLAMP

- 546470 Howard 'B' Ovariohysterectomy Clamp 160mm Long

Spay Retractors

Hauptman Retractors



This Retractor designed by Joe Hauptman at Michigan maintains distal retraction of the ovary during ligation of the ovarian pedicle. This is the crucial part of the procedure which can be a challenge for even experienced surgeons. This Retractor simplifies the task considerably. For a free CD on the technique phone or e-mail info@vetinst.com

HAUPTMAN RETRACTOR

- 014400** Small Hauptman Retractor 10mm Blade
- 014410** Medium Hauptman Retractor 15mm Blade
- 014420** Large Hauptman Retractor 20mm Blade

Miscellaneous Obstetrical Items



Miss Freakes Whelping Forceps



Hobdays Obstetric Forceps for cats



Killian Bitch Speculum



Vectis Double Ended

MISCELLANEOUS OBSTETRICAL ITEMS

- 014310** Miss Freakes Whelping Forceps 260mm Long
- 546465** Hobdays Obstetric Forceps for Cats 150mm Long
- 546466** Hobdays Obstetric Forceps for Dogs 210mm Long
- 546468** Obstetric Vectis Double-ended 240mm Long
- 546455** Killian Bitch Speculum Blade Length 650mm Long (2½")

Norfolk Vet Products

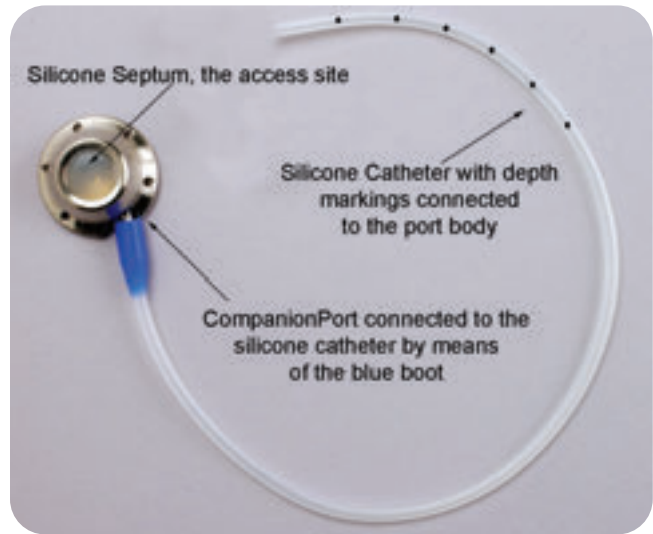


Veterinary Instrumentation is pleased to announce that we are now distributors for Norfolk products alongside DocXS sphincters and occluders. Stock is held in the UK to minimise delays and aid your stock control. As usual these should be available for next day delivery if required.

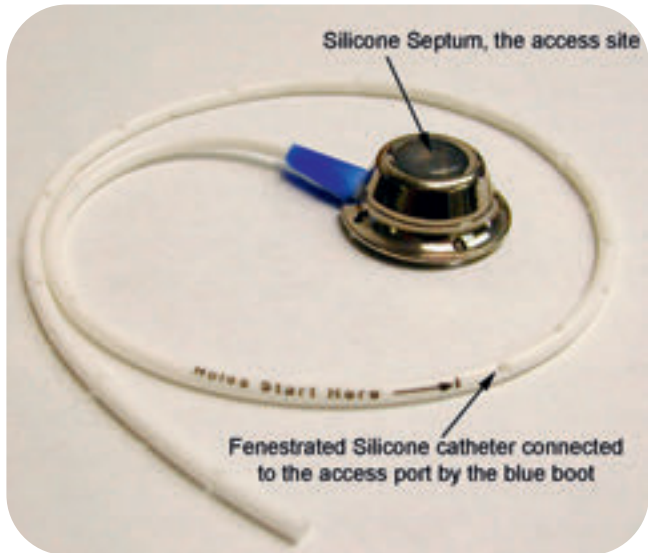
The Norfolk and DocXS products are based around the CompanionPort device. This is a titanium port with a silicone septum which is implanted during a surgical procedure beneath the skin at a suitable site, depending on accessory connection required. The port is then accessed percutaneous using a special non-coring Huber point needle to either withdraw, sample or administer/ flush as required with minimal disturbance and distress to the patient.



CompanionPort for Vascular Access



Pleural Port



A very useful member of the Norfolk family, this version of the Port kit consists of a silicone fenestrated catheter for insertion into the thoracic cavity, with a CompanionPort and 3 sizes of Huber needle. All sizes of Huber needle are available to purchase in boxes of 12, for repeat port access.

Indications for use are repeated aspiration of the thoracic cavity, or intra-cavity chemotherapy.

A surgical procedure under anaesthesia is required to place the catheter initially, but subsequent drainage of the chest can be carried out with no sedation and without struggling with the animal, while they are seated or lying comfortably. This substantially reduces the stress on an animal which usually already has compromised respiration.

A surgical guide and further information is available online at www.norfolkvetproducts.com

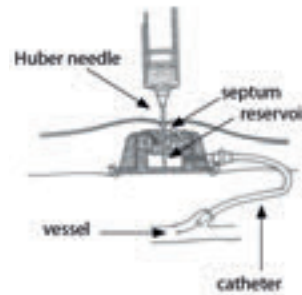
PLEURAL PORT

- NOR-PP-102K** Pleural Port - Dogs
- NOR-PP-202K** Pleural Port - Cats

CompanionPort for Vascular Access has many indications for use, including regular repeat blood sampling, administration of chemotherapeutic agents, long term antibiotic therapy, sedation for radiation therapy etc.

The port is placed in a pocket created level with and immediately lateral to the transverse process of the 3rd or 4th cervical vertebrae. The catheter is placed via an incision into the jugular, using the peel-away introducer provided in the kit. The free end of the catheter is tunneled back to the port and secured. The catheter is flushed with saline, and locked with heparin.

A surgical guide and further information on port access is available online at www.norfolkvetproducts.com



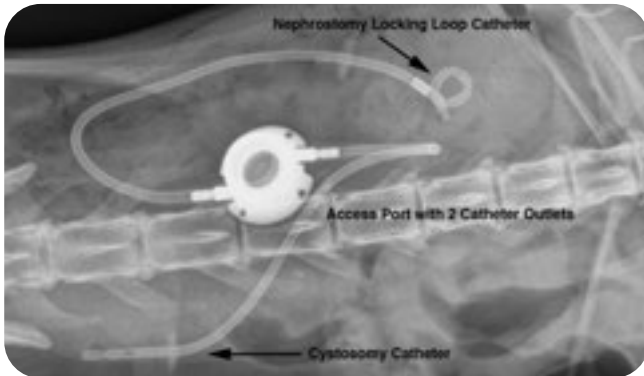
CompanionPort Accessing



COMPANIONPORT FOR VASCULAR ACCESS

- NOR-CP-100K** CompanionPort Vascular Access Le Petite - Small Cats
- NOR-CP202K** CompanionPort Vascular Access Le Port - Cats & Small Dogs
- NOR-CP305K** CompanionPort Vascular Access Le Grande - Larger Dogs

The SUB™ - A Subcutaneous Ureteral ByPass System



The SUB™ is a unique system designed for use in dogs and cats. Components of the device are a locking loop pigtail catheter that is placed in the renal pelvis, a fenestrated and cuffed bladder catheter, and a titanium Shunting Port which is positioned subcutaneously. This allows sampling and flushing to be carried out percutaneously.

The kidney catheter has an 8mm locking pigtail and tapered tip, to allow easier placement. A metal stiffening cannula and trochar stylet is included. The radiopaque medical grade polyurethane catheter has a marker band at the loop heel for visualisation using fluoroscopy during placement. A version for larger dogs is available with a longer locking loop catheter. This is 38cm compared to the 18cm in the standard kits.

The bladder catheter is made of radiopaque silicone, again visible under fluoroscopy. A new addition is a radio-opaque marker on the bladder catheter to allow surgeons to confirm all the fenestrations are in the bladder.

Indications for use include ureteral strictures and ureteral stent reaction or intolerance. It is contraindicated where coagulopathy or mild hydronephrosis are present.

Additional accessories are available to allow 2 kidney catheters to be connected to 1 bladder catheter.

A surgical guide and further information is available, call 0845 130 9596 or at www.norfolkvetproducts.com

THE SUB™

- NOR-SUB2-2001K** Sub Device - Cats & Small Dogs
- NOR-SUB2-2002K** Sub Device - Larger Dogs
- NOR-BC-7** Bladder Catheter 7FR
- NOR-LL6.5** Kidney (Pigtail) Catheter 6.5FR
- NOR-SHU-PP** 3 Way Sub Port only
- NOR-SUB2-3001K** 3 Way PantsPort Sub Kit with Catheter
- NOR-GW-035** J Tipped 0.035" Guide Wire
- DC-7** Metal Male to Male Adaptor for Sub Device
- I050052** Histoacryl Tissue Glue (Pack of 5)

DOCXS Artificial Urethral Sphincter (AUS) Port System



Artificial Urethral Sphincter (AUS) for use in dogs affected by refractory urinary incontinence where traditional medical treatment fails.

100% medical implant grade silicone rubber cuff & actuator tubing. Biocompatible Titanium Companion Port is secured subcutaneously usually at inner thigh for easy access.

Device can be adjusted by adding/ removing sterile saline percutaneously via the silicone septum of the port using aseptic technique and a non-coring Huber point needle. Two widths and a range of lengths are available. Assess the approximate size required pre operatively using ultrasound. Full Kit available includes access Port, one AUS, two Huber Point needles, and one Huber Point Needle Right Angle Infusion Set 22g. Medium Access Port supplied as standard.

Individual components and more sizes on request.

For surgical guide and more information please contact info@vetinst.com, or call 0345 130 9596



DOCXS AUS PORT SYSTEM KITS

- DXAUS-KIT-6X11** AUS Port System Kit 6 x 11mm Cuff
- DXAUS-KIT-10X11** AUS Port System Kit 10 x 11mm Cuff
- DXAUS-KIT-8X14** AUS Port System Kit 8 x 14mm Cuff
- DXAUS-KIT-10X14** AUS Port System Kit 10 x 14mm Cuff
- DXAUS-KIT-12X14** AUS Port System Kit 12 x 14mm Cuff
- DXAUS-KIT-14X14** AUS Port System Kit 14 x 14mm Cuff
- DXVO-CATH45** AUS & HSO Backfill/ Flush Catheter

AUS Port System Kits

All cuff sizes can be supplied as kits. Full list of components available.

DOCXS Hepatic Shunt Occluder (HSO) System



An alternative to cellophane or Ameroid Constrictors, this Device uses incremental hydraulic occlusion via a percutaneous port to progressively control closure of the shunt vessel. The speed of vessel occlusion is under the control of the surgeon and is reversible if necessary without further surgery. The silicone cuff is closed using a suture through 2 eyelets, the actuator tubing fed out to a subcutaneously implanted CompanionPort then gradually closed by injecting saline into the port percutaneously. Cuff width is 7mm. Range of lengths available.

Full kit available includes access port, one HSO, two Huber Point needles, and one Huber Point Needle right angle infusion set 22g. Medium access port supplied as standard

DOCXS HEPATIC SHUNT OCCLUDER SYSTEM

DXHS-KIT-HS-4	Hepatic Shunt Kit 4mm
DXHS-KIT-HS-6	Hepatic Shunt Kit 6mm
DXHS-KIT-HS-8	Hepatic Shunt Kit 8mm
DXHS-KIT-HS-10	Hepatic Shunt Kit 10mm
DXHS-KIT-HS-12	Hepatic Shunt Kit 12mm
DXHS-KIT-HS-14	Hepatic Shunt Kit 14mm
DXHS-KIT-HS-16	Hepatic Shunt Kit 16mm
DXVO-CATH45	AUS & HSO Backfill/ Flush Catheter

Huber Needles



These special non-coring needles are required to access the silicone septum of the CompanionPort without the damage associated with traditional needles. They are also known as deflected-point needles. When withdrawn after use, the septum re-seals itself. 3 diameters, in boxes of 12.

HUBER NEEDLES

NOR-NV-PG22-75	Huber Needle 22g 3/4" Black Box of 12
NOR-NV-PG22-100	Huber Needle 22g 1" Black Box of 12
NOR-NV-PG20-75	Huber Needle 20g 3/4" Yellow Box of 12
NOR-NV-PG20-100	Huber Needle 20g 1" Yellow Box of 12
NOR-NV-PG19-75	Huber Needle 19g 3/4" Brown Box of 12
NOR-NV-RA19-100	Right Angled Huber Needle 19g 1" Black Box of 12
NOR-NV-RA22-75-6	Right Angle Huber 22g 3/4" Black 6" Extension Box of 12

The SkinButton™



This minimally invasive device provides a needleless route for chronic access to the subcutaneous tissue for fluid therapy.

The medical grade silicone disc is implanted during a short procedure which may be carried out under local anaesthetic.

Once in position the SkinButton is inconspicuous and provides easy access to the subcutaneous tissue.

A blunt needle is inserted into the blue tinted accessing site and the fluid is delivered. On removal of the needle, the accessing septim self seals to provide a closed system.

The SkinButton Implantation Kit includes:

- SkinButton - Round Silicone Disc with a self sealing centre
- 6mm Dermal Punch
- 18g Blunt Accessing Needle
- Kit of 5 18g Blunt Accessing Needles
- Surgical and Accessing suggestions.

The SkinButton is available in one size and suitable for use in all sizes of dogs and cats.

SKINBUTTON™

NOR-SB1001K	SkinButton Implantation Kit - Single
NOR-SBN-18	SkinButton Needle Kit - 30 x 18g Blunt Accessing Needle

Vascular Probe Set



A Set of 15 Vascular Probes in a fully Autoclavable Stainless Steel Case. The 25mm long angled working tips are of specified diameter permitting accurate documentation of blood-vessel diameter and marriage of blood-vessel diameters when performing vascular anastomoses. With an overall length of 225mm, these are especially useful in abdominal surgery, in particular for documenting hepatic shunts.



The Set includes Probe diameters of 1.25, 1.5, 1.75, 2, 2.25, 2.5, 2.75, 3, 3.25, 3.5, 3.75, 4, 4.5, 5 and 6mm. Diameters are clearly etched on the handles.

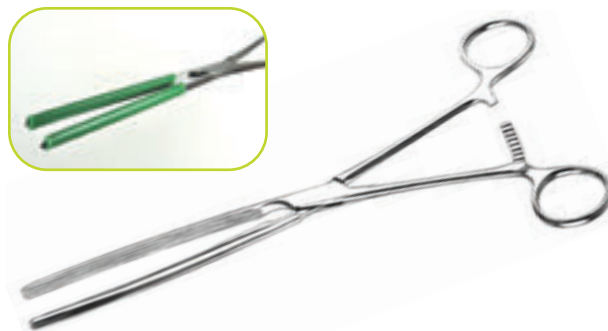
VASCULAR PROBE SET

0014SET Vascular Probe Set

Miscellaneous Soft Tissue Products

Bowel Clamps

Doyen Bowel Clamp & Silicone Shoes

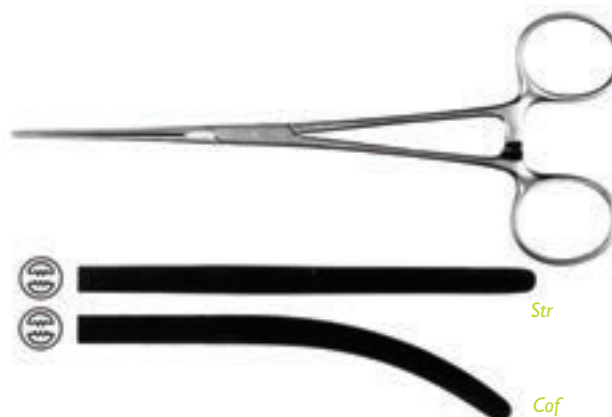


Autoclavable soft Silicone Shoes created to fit the Doyen Bowel Clamps, making the Doyen more atraumatic. Ribs maximise grip.

DOYEN BOWEL CLAMP & SILICONE SHOES

- 201950** Bowel Clamps Doyen Str 9.5" 24cm
- 201955** Bowel Clamps Doyen Cof 9.5" 24cm
- EXTR201950/3** Silicone Shoe for Doyen Bowel Clamps 3 Pairs
- EXTR201950/10** Silicone shoe for Doyen Bowel Clamps 10 pairs
- EXTR201950/20** Silicone shoe for Doyen Bowel Clamps 20 pairs

Atraumatic Small Bowel Clamp



Jaw design gently holds and seals the bowel with a minimum of pressure and trauma. The fine ratchet facilitates gentle yet secure application.

ATRAUMATIC SMALL BOWEL CLAMP

- 222165** Bowel Clamps Small Animal Atraumatic Str 170mm Long
- 222170** Bowel Clamps Small Animal Atraumatic Cof 170mm Long

Resano Bowel Clamp



RESANO BOWEL CLAMP

- 201956** Resano Bowel Clamp 250mm Long

Tissue Forceps

Angled Allis Tissue Forceps



A favourite of Rob White this angled Allis has 4 into 5 teeth at the tip and is angled mid shaft. The kink in the shaft of the Allis allows use in the upper airway and pharynx without obstructing other instrumentation. Note at 200mm the length is longer than the standard Allis.

ANGLED ALLIS TISSUE FORCEPS 4/5 TEETH

801161 Angled Allis Tissue Forceps 4/5 Teeth 200mm Long

Soft Edge Spoon

Soft Edge Surgical Spoon - Faecal/Bladder



Removing calculi from the bladder or impacted faeces from the rectum requires great care to avoid damage. 'Domestic' spoons are typically too sharp and too short for the purpose.

Our Soft Edge Spoons have been designed and manufactured with veterinary procedures in mind.

Available in three sizes:

- XSmall 10 x 14 x 230mm Suitable for faeces and very small bladders (feline/ small canine)
- Small 20 x 25 x 250mm Suitable for faeces and small bladders
- Large 67 x 34 x 270mm Suitable for the bladder

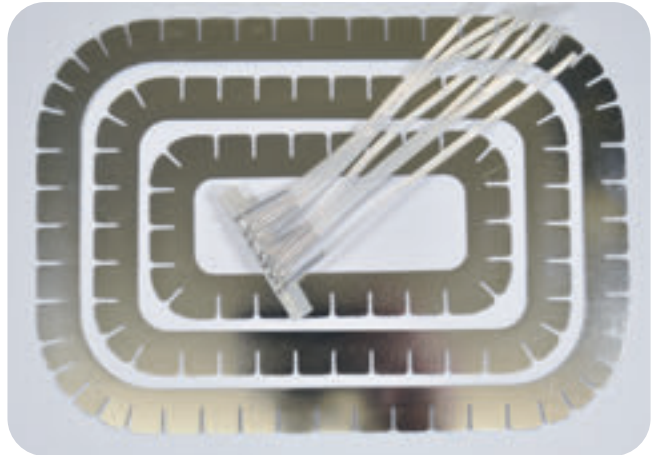
SOFT EDGED SPOON

014703 Soft Edged Spoon - XSmall
014700 Soft Edged Spoon - Small
014701 Soft Edged Spoon - Large
014702 Soft Edged Spoon - Set of 3

Ring Retractors

Ring Retractor

Some abdominal approaches require a more complex retraction system than a simple Balfour or Gossett. The V.I. Ring Retractor allows the surgeon to place hooked retractor strips around the periphery of a surgical incision which may then be tensioned individually and retained around the edge of the ring.



The Ring is laser cut from stainless steel which is thin enough to mould to the profile of the patient. Slots are cut every 15mm around the periphery of the ring into which lock one or more retractor strips.

The Strips are manufactured from silicon with a stainless hook. The strips are autoclavable but will require periodic replacement.



All the Rings fit into a standard 'Little Sister' type autoclave.

An Extra Large Ring (220 x 250mm) which can be folded has been added to the range. Once folded the ring will again fit into a standard 'Little Sister' Autoclave.

Please Note: VI Sterile Hooks are compatible with other retractor systems.

RING RETRACTOR

701700 Basic Set including 3 Standard Rings 200 x 130mm, 160 x 85mm & 110 x 40mm Internal and 10 Sterile Hooks
701701 Large Ring 200 x 130mm Internal
701702 Medium Ring 160 x 85mm Internal
701703 Small Ring 110 x 40mm Internal
701704 X Large Ring 220 x 250mm Internal
701HOOK Set of 10 of Sterile Hooks

V.A.C.[®] Therapy

V.A.C.[®] Therapy



V.A.C.[®] Therapy promotes wound healing through Negative Pressure Wound Therapy (NPWT). By delivering negative pressure (a vacuum) at the wound site through a proprietary dressing, the wound edges are drawn together, infectious materials are removed and granulation tissue is promoted at the cellular level. Use of V.A.C.[®] Therapy has also been shown to help speed the healing of wound grafts.

Used in conjunction with V.A.C.[®] GRANUFOAM™ dressings negative pressure applies mechanical forces to the wound to create an environment which promotes wound healing. Microstrain acting at the cellular level promotes granulation tissue by facilitating cell migration & proliferation, and promotes perfusion, while macrostrain provides good wound bed contact, helps draw the wound together and removes exudate. It also aids reduction of oedema.

The lightweight, portable V.A.C.[®] SIMPLICITY™ Therapy Unit from KCI™ is designed for veterinary use, and is available exclusively via Vi

The V.A.C.[®] Therapy System is comprised of essential components that actively work together to help promote wound healing.

V.A.C.[®] Therapy Unit - Provides negative pressure wound therapy with integrated patient safety features.

SENSATR.A.C.[™] Technology - Regulates pressure at the wound site to provide accurate delivery of prescribed therapy settings.

V.A.C.[®] Canister - Collects exudate.

V.A.C.[®] GRANUFOAM™ Dressing - Help provide the necessary mechanisms to promote granulation tissue formation.

The canister for exudate contains absorbent gel, and is supplied with tubing, clamp and connector.



V.A.C.[®] GRANUFOAM™ dressings are designed to treat a wide variety of wounds, and are available in standard and silver impregnated versions. Both versions of the sterile dressings are open-cell reticulated polyurethane foam with pore size 400-600µm.



This is cut to fit within the wound, and should not overlap onto normal skin. To complete the dressing an adhesive V.A.C.[®] drape is placed over the dressing, adhering to the surrounding skin which has been clipped and dried to improve adhesion.

The SENSATR.A.C.[™] pad is attached to the dressing as per the instructions, and the unit is connected to initiate vacuum therapy. Dressings are changed at 48-72 hours depending on condition being treated and progress. Dressing left without vacuum for more than 2 hours must be changed.

Dressings sizes (unless stated):

- Small = 10 x 7cm
- Medium = 18 x 12cm
- Simplace = 10 x 7cm in a teardrop shaped spiral that you can use in wounds that are a difficult shape to fit the foam to.

For more information on dressing management see the V.A.C.[®] Therapy for Veterinary Use User Manual or the Quick Start Manual, both available to download at <http://kcianimalhealth.com/support/>

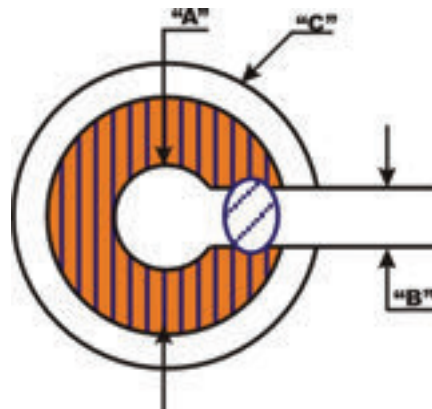
V.A.C.® THERAPY

M8275046/5	V.A.C.® Simplace Ex GRANUFOAM™ Small Dressing x 5
M8275046/1	V.A.C.® Simplace Ex GRANUFOAM™ Small Dressing - Single
KCIM8275051/5	V.A.C.® GRANUFOAM™ Small Dressing Kit - Pack of 5
KCIM8275052/5	V.A.C.® GRANUFOAM™ Medium Dressing Kit - Pack of 5
KCIM8275052/1	V.A.C.® GRANUFOAM™ Medium Dressing - Single
KCIM8275096/5	V.A.C.® GRANUFOAM SILVER™ Medium Dressing Kit x 5
KCIM8275096/1	V.A.C.® GRANUFOAM SILVER™ Medium Dressing Kit Single
KCIM8275098/5	V.A.C.® GRANUFOAM SILVER™ Small Dressing Kit x 5
KCIM8275081/5	V.A.C.® GRANUFOAM™ Thin Dressing - Pack of 5
KCIM8275067/5	V.A.C.® WHITEFOAM™ Large Dressing 10 x 15cm Pack of 5
KCIM6275033/10	V.A.C.® WHITEFOAM™ Small Dressing - Pack of 10
KCIM8275058/5	ACTIV.A.C.™ 300ml Canister with Gel - Pack of 5
KCIM8275058/1	ACTIV.A.C.™ 300ml Canister with Gel - Single
KCIM6275026/10	V.A.C.® Gel Strips - Pack of 10
KCIM6275009/10	V.A.C.® Drape - Pack of 10
KCIM6275009/1	V.A.C.® Drape - Single
KCIM6275066/10	V.A.C.® Y-Connector
KCIM8275057/10	SENSAT.R.A.C.™ Pad - Pack of 10
KCIM8275057/1	SENSAT.R.A.C.™ Pad - Single
SRNG10	Hydrocolloid Ring 2 Diameter use with SNAP & V.A.C.® x 10
KCI340037/5	Exhaust Charcoal Filter for Simplicity Unit - Pack of 5
KCI340037	Exhaust Charcoal Filter for Simplicity Unit - Single
KCIPN320255A	V.A.C.® SIMPLICITY™ Therapy Unit
LOANVAC	V.A.C.® Loan Unit (per week)

V.A.C.® SIMPLICITY™ Therapy Unit

V.A.C.® SIMPLICITY™ Therapy Unit is available for loan.

Please contact a member of our Vet Tech Team to check availability and pricing on 0345 130 9596 or email info@vetinst.com

Ameroid Constrictors**Ameroid Constrictors**

Used exclusively in the surgical treatment of hepatic shunts, the ameroid constrictor gradually occludes the blood vessel in question allowing the circulation to make adjustments.

The Casein (clay-like) layer expands as it absorbs water constricting the blood vessel within. Supplied sterile. Insertion of metal locking key prevents constrictor from slipping from blood vessel.

Colour variation of the Casein material is normal and does not indicate a defect.

Selection of Ameroid Constrictor.

Once the portosystemic shunt has been identified and exposed it is suggested that a constrictor should be selected which initially encloses the vessel but does not constrict it (Tobias 2009).

AMEROID CONSTRICTORS

AC35-A	Ameroid Constrictor 3.5mm Sterile
AC45-A	Ameroid Constrictor 4.5mm Sterile
AC50-A	Ameroid Constrictor 5.0mm Sterile
AC60-A	Ameroid Constrictor 6.0mm Sterile
AC70-A	Ameroid Constrictor 7.0mm Sterile

Kitty Kollars

Kitty Kollar Tube Collar



The placement of oesophagostomy 'E' feeding tubes is a growing modality in small animal medicine. Many 'E' Tubes have been successfully in place for years on some patients. The challenge of the 'E' Tube is its care and maintenance.

The Kitty Kollar was designed as a sensible solution to the everyday patient management of the 'E' Tube. The adjustable collar fits securely around the animal's neck. It has a small hole for the 'E' Tube to pass through. A velcro strap secures or holds the 'E' Tube flat when not in use. Circular cotton pads with a center hole are provided to be placed between the collar and the skin. They protect the wound and absorb drainage eliminating the need for owners to learn bandage techniques or repeated clinic visits for rebandaging. These small animal feeding tubes are useful in longer term nutritional support. Includes 6 protector pads and laminated instruction card.

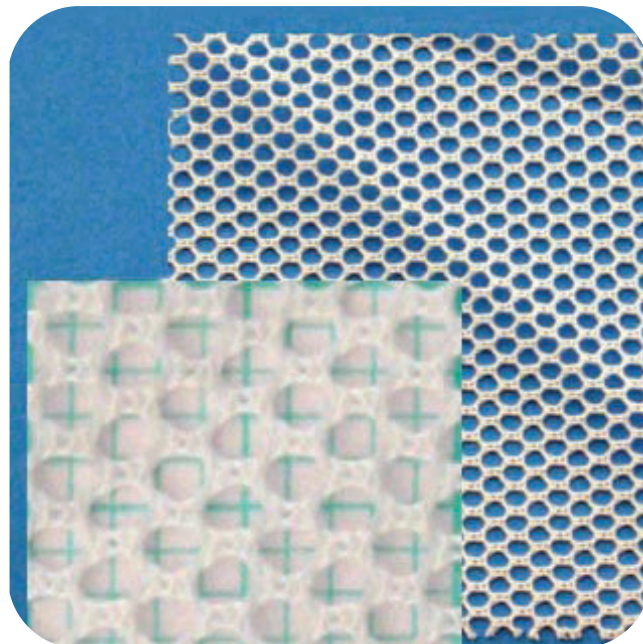
CODE	CIRCUMFERENCE OF NECK IN INCHES	LENGTH OF COLLAR + TAB IN INCHES	SIZE
KTK-XS	4 - 7"	5.5" + 2"	X-SMALL
KTK-PF	8 - 9"	9" + 2"	PETITE
KTK-F	10 - 12"	11" + 2"	SMALL
KTK-M	12 - 16"	13" + 3"	MEDIUM
KTK-L	17 - 19"	18.5" + 3"	LARGE
KTK-XL	20 - 24"	21" + 3.5"	X-LARGE

KITTY KOLLAR

- KTK-XS** Kitty Kollar Tube Collar - X-small
- KTK-PF** Kitty Kollar Tube Collar - Petite
- KTK-F** Kitty Kollar Tube Collar - Small
- KTK-M** Kitty Kollar Tube Collar - Medium
- KTK-L** Kitty Kollar Tube Collar - Large
- KTK-XL** Kitty Kollar Tube Collar - X-large
- KTK-PADS** Spare Replacement Pads - Pack of 24

Polyester Mesh

Polyester Mesh



Use polyester mesh to repair soft tissue defects where alternative autografts are not available. For example perineal hernia (illustrated), umbilical hernia.

Mesh loop diameter 1mm. Sheet size 60mm x 80mm or 60mm x 120mm
Supplied single pack sterile.

POLYESTER MESH

PM60120 Polyester Mesh 60mm x 120mm Single

Penrose Drains

Penrose Drains

Latex rubber. Use to maintain drainage from infected wounds. Also useful to retract soft tissues such as blood vessels and nerves.

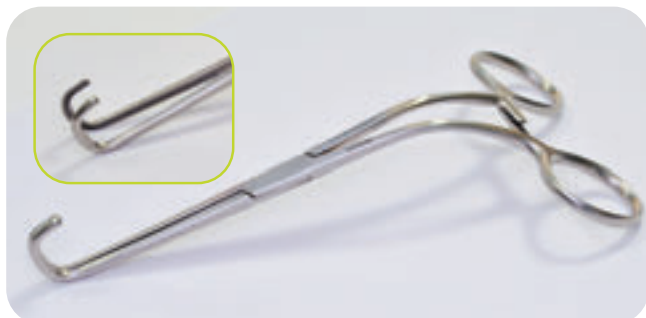
PENROSE DRAINS

- 090168** Penrose Drain 1/4" 40cm 16" Long Sterile
- 090165** Penrose Drain 1/2" 40cm 16" Long Sterile



Airway Surgery

Soft Palate Clamp



An overlong palate is a common cause of dyspnoea in the brachiocephalic dog. Shortening the soft palate in an atraumatic manner provides almost immediate relief.

The Soft Palate Clamp was designed by Geoff Lane FRCVS.

The jaws have a special atraumatic grip to hold the very slippery soft palate.

SOFT PALATE CLAMP

014040 Soft Palate Clamps Large 26 x 12mm 170mm Long

014050 Soft Palate Clamps Small 18 x 7mm 170mm Long

Tonsillectomy Clamp



Actual Size

Right Angled.



Curved.

The standard Negus clamp may be used in pairs for soft palate resection. A right angled version designed by Stephen Baines at the Willows is also available.

TONSILLECTOMY CLAMP

014038 Tonsillectomy Clamp Right Angle 190mm Long

014039 Tonsillectomy Clamp Curved 190mm Long

Satinsky Clamp



Useful for intra-thoracic surgery, trimming soft palates and even ears. Atraumatic design maximises haemostasis and minimises trauma.

SATINSKY CLAMP

2685/03 Satinsky Clamps 20mm Jaw 160mm Long

2685/05 Satinsky Clamps 30mm Jaw 200mm Long

Soft Tissue Biopsy Forceps



Actual Size

8mm x 3.5mm bite

Designed to take samples of soft tissue masses from the ear or via the mouth.

Fits down all usual aural speculae.

Two sizes for most patients.

SOFT TISSUE BIOPSY FORCEPS

014087 Cup Biopsy Forceps 2mm Diameter Shaft 75 x 3.6mm

014087A Cup Biopsy Forceps 2mm Diameter Shaft 100 x 3.6mm

014088 Cup Biopsy Forceps 3.5 x 8mm Shaft 105 x 5.6mm

Aural Surgery

Canine Ear Loop



Removal of hard wax and other debris from the canine horizontal canal without causing trauma is a common problem in veterinary surgery.

It is now accepted that the use of Ear Loops is more effective than cotton tipped products. Most human ear loops are too large and too short for use with the much longer veterinary speculae.

Veterinary Instrumentation's Canine Ear Loop is slimmer and longer to facilitate debris removal without obscuring the visual field. The Flexible Ear Loop is very fine and flexible for added safety. It is not cheap but should last a lifetime.

Also illustrated is the Canine Ear Model, a valuable aid when explaining aural problems and procedures.

CANINE EAR LOOP

- 012526 VI Canine Ear Loop 170mm Long
- 012528 Flexible Ear Loop Cat/ Small Dog Size 160mm Long
- 012529 Flexible Ear Loop Medium/ Large Dog Size 160mm Long

Fine Flexible Grasping Forceps



The Fine Flexible Grasping Forceps have a maximum diameter of 1.7mm and are therefore ideal for small working channels and speculae.

FINE FLEXIBLE GRASPING FORCEPS

- 014067 Fine Flexible Grasping Forceps 160mm Shaft

Malleable Instrument Set



Fully flexible instruments are difficult to control. Malleable instruments allow the tips to be positioned exactly where the surgeon needs them. The forceps are available as graspers or as biopsy forceps. The Malleable Loops are available in two loop diameters 2mm and 4mm. The Instruments may be purchased as a Set in a Stainless Steel Autoclave Case. The Case comes free when purchased as a Set.

MALLEABLE INSTRUMENT SET

- 014098 Malleable Grasping Forceps 145mm Shaft
- 014099 Malleable Biopsy Forceps 2mm Cup 145mm Shaft
- 012528 Malleable Ear Loop Curette 2.0mm Diameter
- 012529 Malleable Ear Loop Curette 4.0mm Diameter
- 014125 Malleable Instrument Set in Stainless Steel Case

Crocodile Forceps



Examination of the external ear is an essential part of any investigation of otitis. For Otoscopes and Optics see chapter 20 Diagnostics. Removal of foreign bodies, particularly grass seeds, is achieved using long crocodile forceps. Available in traditional designs or as a fine tubular shaft design.

CROCODILE FORCEPS

- 014091 Extra Fine Crocodile Forceps Tubular 3" Shaft
- 014092 Extra Fine Crocodile Forceps Tubular 5" Shaft
- 014093 Extra Fine Crocodile Forceps Tubular 7" Shaft
- 014089 Extra Fine Crocodile Forceps Tubular 9" Shaft
- 014094 Aural Crocodile Forceps Standard Jaw 3" Shaft
- 014095 Aural Crocodile Forceps Standard Jaw 5" Shaft
- 014096 Aural Crocodile Forceps Standard Jaw 7" Shaft

TECA Retractor - Pieter Nelissen



Achieving adequate exposure is essential to the proper performance of lateral bulla osteotomy and debridement. Maintaining a dissection as close to the aural cartilages as possible helps avoid iatrogenic damage to the surrounding structures. In most cases, especially in broad headed breeds such as Shar Peis and Staffordshire Bull Terriers, this will mean working down a narrow and surprisingly deep corridor.

Following the suggestion from Pieter Nelissen of Dick White Referrals, we have developed a purpose made TECA Retractor based on our small gelpis. The 40mm long legs are at 80° to the handles to reach deep into the hole created. The cross-over tips are only 3mm across when closed enabling insertion with no edges protruding to snag tissues.

TECA RETRACTOR

001338 TECA Retractor 105mm Long 40mm Cross-over Legs

Mini-Friedman



Useful in bulla osteotomy.

MINI-FRIEDMAN

142501 Mini-Friedman Rongeur Curved 3mm Bite 160mm Long

Implants for Hart Pinna Haematoma System

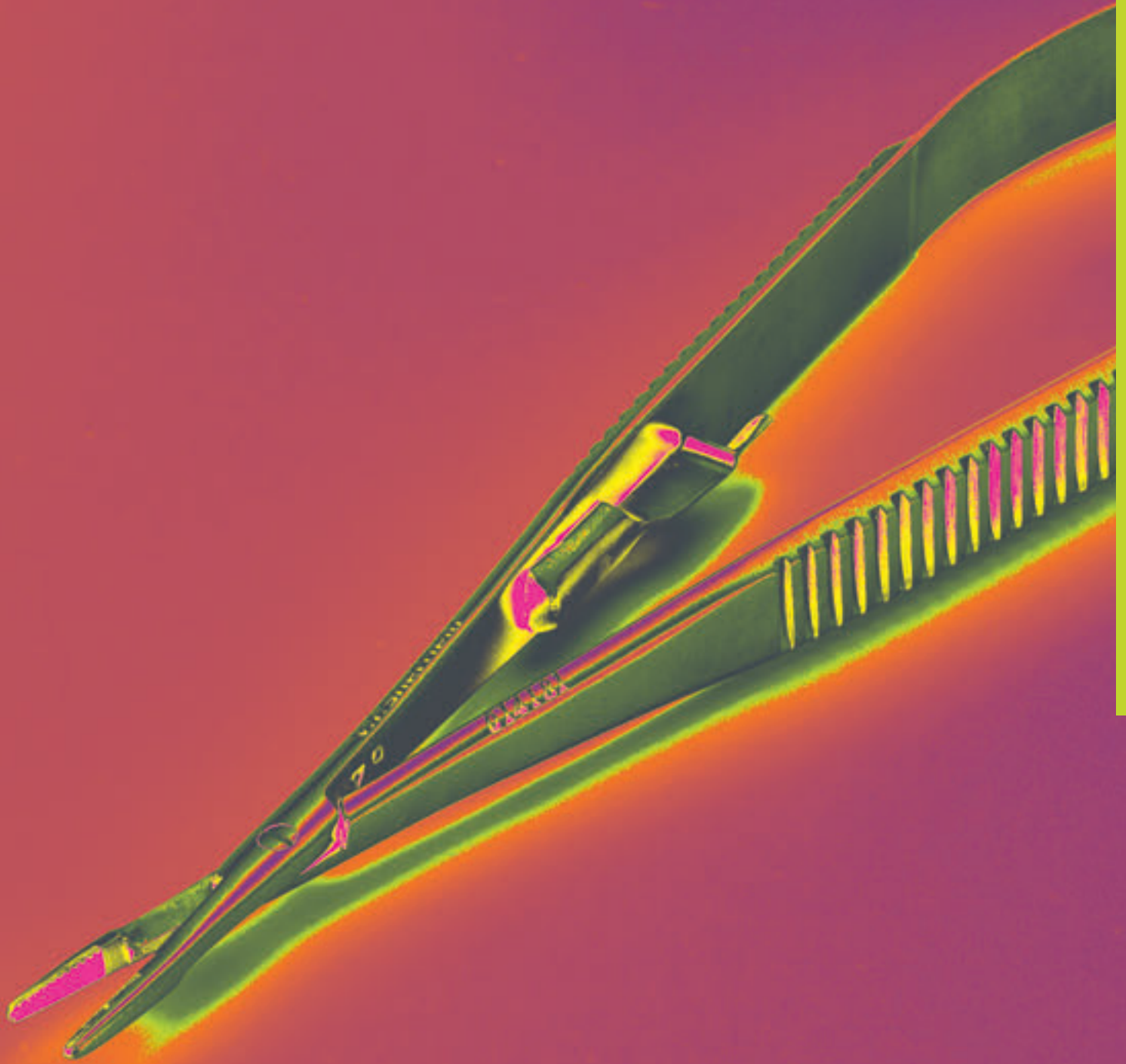
Surgical management of aural haematomas is a common procedure in veterinary practice. Once drained the haematoma must be prevented from filling up again. In addition the layers of skin and cartilage must be supported during the healing phase to prevent the development of a cosmetically unacceptable crumpled ear flap.

Historically the layers are stitched, sometimes alone but also using buttons or xray film to spread the pressure evenly to restore the ear to as normal a state as possible.

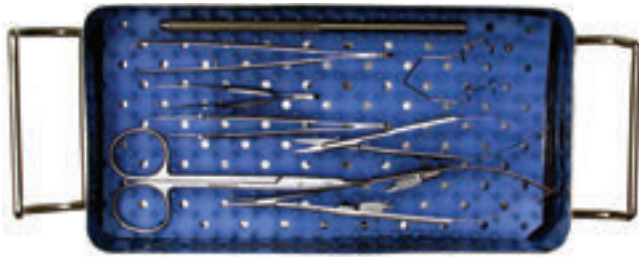
Implants are available for this surgery that have been created by Nick Hart. The suture needle and material of choice is passed through the holes in the pad and tied off in the usual way. The holes are unevenly sized to ease the passage of the needle which enters through the smaller hole and exits the larger hole on the 'blind side'. The pads need to be loaded into the forceps accordingly. The process is repeated as necessary.

HART AURAL HAEMATOMA IMPLANTS

014601U/S Fenestrated Implants Pack of 12 Supplied Unsterile



Ophthalmic Kit



List configuration whilst stocks last. Check with the Vet Tech Team for current content.

The Kit contains 10 instruments. All are contained in a Stainless Steel Case with a Protective Silicone Lining which minimises damage to the delicate instruments. As recommended by David Williams MA VetMB PhD CertVOphthal

Suitable for the following procedures:-

- Hotz-Celsus Entropion Surgery
- Stades Procedure for Entropion with Trichiasis
- Lid Wedge Resection
- Khunt-Szymanowski Entropion Surgery
- Wyman Lateral Canthoplasty for Diamond Eye
- Lateral Canthoplasty
- Parotid Duct Transposition
- Conjunctival Flaps, Pedicle, Fornix Based
- Nictitating Membrane Flap
- Replacement of Prolapsed Nictitans Gland
- Correction of Scrolled Nictitans Cartilage
- Superficial Lamellar Keratectomy
- Primary Reconstruction of Corneal Penetrating Wound
- Corneoscleral Transposition Flap

Choosing ophthalmic instruments is very difficult, every surgeon seems to have their own preference. Follow the advice of a surgeon you respect.

Basic Ophthalmic Surgery Kit contents:

- 1 x Beaver Type Scalpel Handle
- 1 x Castroviejo Needle Holders - Straight with Catch
- 1 x Steven's Tenotomy Scissors
- 1 x Colibri Tissue Forceps
- 1 x Graefe Fixation Forceps
- 1 x Roberts Tying Forceps
- 1 x Castroviejo Corneal Scissors - Straight
- 1 x Halstead Mosquito Forceps - Curved
- 1 x Halstead Mosquito Forceps - Straight
- 1 x Barraquer Speculum
- 1 x Stainless Steel Box 200mm x 100mm with Integrated Bacterial Filter
- 1 x Silicone Fingered Insert

OPHTHALMIC SURGERY KIT

014130 Basic Ophthalmic Surgery Kit



Beaver Type Handle (Swann Morton 'Fine' Series)



Castroviejo Needle Holders Straight with Catch



Steven's Tenotomy Scissors



Colibri Tissue Forceps



Graefe Fixation Forceps 3.5mm



Roberts Tying Forceps



Castroviejo Corneal Scissors Straight



Halstead Mosquito Forceps



Barraquer Wire Eyelid Speculum

Eyelid - Speculae

Desmarres Eyelid Retractor



DESMARRES EYELID RETRACTOR

- 014215-S Small 12mm Wide 140mm
 014215-M Medium 14mm Wide 140mm
 014215-L Large 16mm Wide 140mm

Lister Speculum



This Speculum is adjustable and has a locking facility. The shape is contoured for minimum interference with sutures and instruments.

LISTER SPECULUM

- 014115 Lister Speculum 40mm Gape 80mm Length

Barraquer Speculum



This simple Spring Loaded Speculum is ideal for most procedures which do not require a locking speculum. No protuberances to catch sutures.

BARRAQUER SPECULUM

- 014110 Barraquer Speculum Large 30mm Gape 10mm 'Blade'
 014112 Barraquer Speculum Small 25mm Gape 5mm 'Blade'

Jaeger Eyelid Speculum



Useful during wedge resections of eyelids
 Speculum stretches and retains the eyelid prior to cutting
 The blade cuts down onto the metal of the speculum which protects the eye.

JAEGER EYELID SPECULUM

- 014120 Jaeger Eyelid Speculum (Stainless) 100mm
 014121 Jaeger Eyelid Speculum Insulated 110mm

Corneal Forceps

St. Martin Dissecting Forceps



A very fine rat tooth for delicate procedures including corneal surgery.

ST. MARTIN DISSECTING FORCEPS

- 014160 St. Martin Dissecting Forceps Teeth 90mm 3.25"

Castroviejo's Corneal Forceps



CASTROVIEJO'S CORNEAL FORCEPS

- 014190 Castroviejo's Corneal Forceps 105mm Long

Colibri (Barraquers) Forceps



This is the most well known of Corneal Toothed Forceps. There are many variations. This is the most typical.

COLIBRI (BARRAQUERS) FORCEPS

- 014191 Colibri (Barraquers) Forceps 75mm Long

Iris Forceps

Graefe Iris Forceps



GRAEFE IRIS FORCEPS

- 014195 Graefe Iris Forcep Serrated 105mm Long
 014196 Graefe Iris Forceps Straight 1/2 teeth 105mm Long

Fixation Forceps

Barraquers Fixation Forceps



BARRAQUERS FIXATION FORCEPS

014201 Barraquers Fixation Forceps 105mm Long

Graefe Fixation Forceps



GRAEFE FIXATION FORCEPS

014162 Graefe Fixation Forceps 3.5mm Jaws 105mm Long

Capsule Forceps

Arruga Capsule Forceps



ARRUGA CAPSULE FORCEPS

014150 Arruga Capsule Forceps 100mm Long

Castroviejo's Cross Action Forceps



CASTROVIEJO'S CROSS ACTION

014155 Castroviejo's Aross Action Capsule Forceps 105mm Long

Cilia Forceps

Bennet's Cilia Forceps

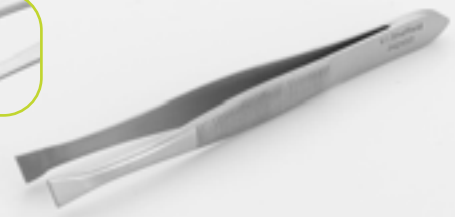


Favoured by some surgeons the circular tips give good focal grip of individual cilia.

BENNET'S CILIA FORCEPS

342460 Bennets Cilia Forceps 80mm Long

Epilation Forceps



EPILATION FORCEPS

342450 Epilation Forceps Square Jaws Plain 9cm 3.5"

Scissors

Pooley's Conjunctival Scissors



POOLEY'S CONJUNCTIVAL SCISSORS

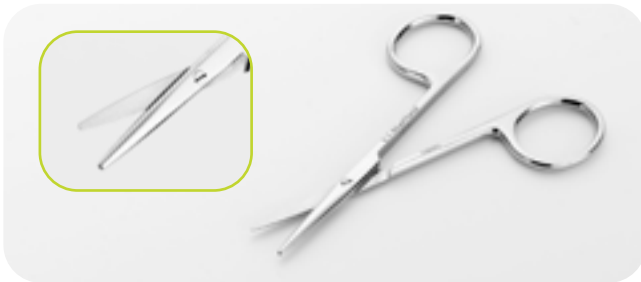
746350 Pooley's Conjunctival Scissors 85mm Long

Castroviejo Corneal Scissors

Squeeze action, very delicate Scissor used to extend the stab corneal incision. Easily damaged.

CASTROVIEJO'S CORNEAL SCISSORS

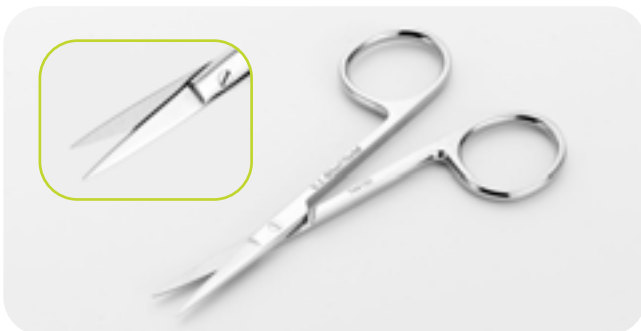
- 014210** Castroviejo Corneal Scissors Cof 115mm Long
014210S Castroviejo Corneal Scissors Str 115mm Long

Strabismus Scissors

Stronger than corneal and conjunctival scissors, strabismus scissors are suitable for cutting muscles and skin.

STRABISMUS SCISSORS

- 746900** Strabismus Scissors Str 9cm
747010 Strabismus Scissors Cof 9cm
746910 Strabismus Scissors Str 11cm
747020 Strabismus Scissors Cof 11cm

Iris Scissors

A useful general purpose Ophthalmic Scissor. Lightweight, standard action scissor for conjunctiva and, less satisfactorily, the cornea. Very rarely used on the iris in veterinary ophthalmology.

IRIS

- 744100** Iris Scissors Str 9cm
744120 Iris Scissors Cof 9cm
744110 Iris Scissors Str 12cm
744130 Iris Scissors Cof 12cm
744131 Iris Scissors Tungsten Carbide Str 12cm

Steven's Tenotomy Scissors**STEVEN'S TENOTOMY SCISSORS**

- 014108** Steven's Tenotomy Scissors Straight 110mm Long
014108CV Steven's Tenotomy Scissors Curved 110mm Long

Eye Enucleation Scissors

Standard Curved Surgical Scissors do not match the radius of the eye of dogs and cats. The Eye Enucleation Scissor closely matches required radius and slides easily behind the eyeball to cut the optic nerve and internal ophthalmic artery and vein, without the requirement to apply dangerous traction to the globe. Use in conjunction with Eye Enucleation Clamps, see page 341.

EYE ENUCLEATION SCISSORS

- 014225** Eye Enucleation Scissors 140mm

Miscellaneous**Eye Enucleation Forceps**

It is very important to clamp and crush the optic nerve and internal ophthalmic artery and vein. The curvature on standard artery forceps is not correct and if used the handles stand up in the way. The Enucleation Forceps are designed to slide around the rear of the globe and capture the blood vessels. The jaws are then levered against the edge of the orbit to elevate the globe for ease of tying. The handles curve out of the way. Use with eye enucleation scissors. The large size is for cattle.

EYE ENUCLEATION FORCEPS

- 014219** Eye Enucleation Forceps 135mm
014219L Eye Enucleation Forceps Large 155mm

Chalazion Forceps (Desmarres)



CHALAZION FORCEPS (DESMARRES)

014216 Chalazion Forceps (Desmarres) 3.5"

Snellen's Vectis



Use to apply pressure to globe to extrude lens rather than 'fishing' for it within the eye.

SNELLEN'S VECTIS

014101 Snellen's Vectis 135mm

Kimura Spatula



Use to apply pressure to globe to extrude lens rather than 'fishing' for it within the eye.

KIMURA SPATULA

014103 Kimura Platinum Spatula 145mm

Distichiasis Clamp



DISTICHIASIS CLAMP

014113 Distichiasis Clamp 170mm

Punctum Dilator



PUNCTUM DILATOR

014116 Nettleship Dilator (Single Ended) 100mm

014117 Castrovejo Double Ended Punctum Dilator 130mm

Harrison Butler Lachrymal Cannula



HARRISON BUTLER LACHRYMAL CANNULA

014221 Harrison Butler Lachrymal Cannula Curved 40mm

Lachrymal Cannula Straight



LACHRYMAL CANNULA STRAIGHT

014224 Lachrymal Cannula Straight Stainless Steel

Rabbit Nasolachrymal Duct Cannulae

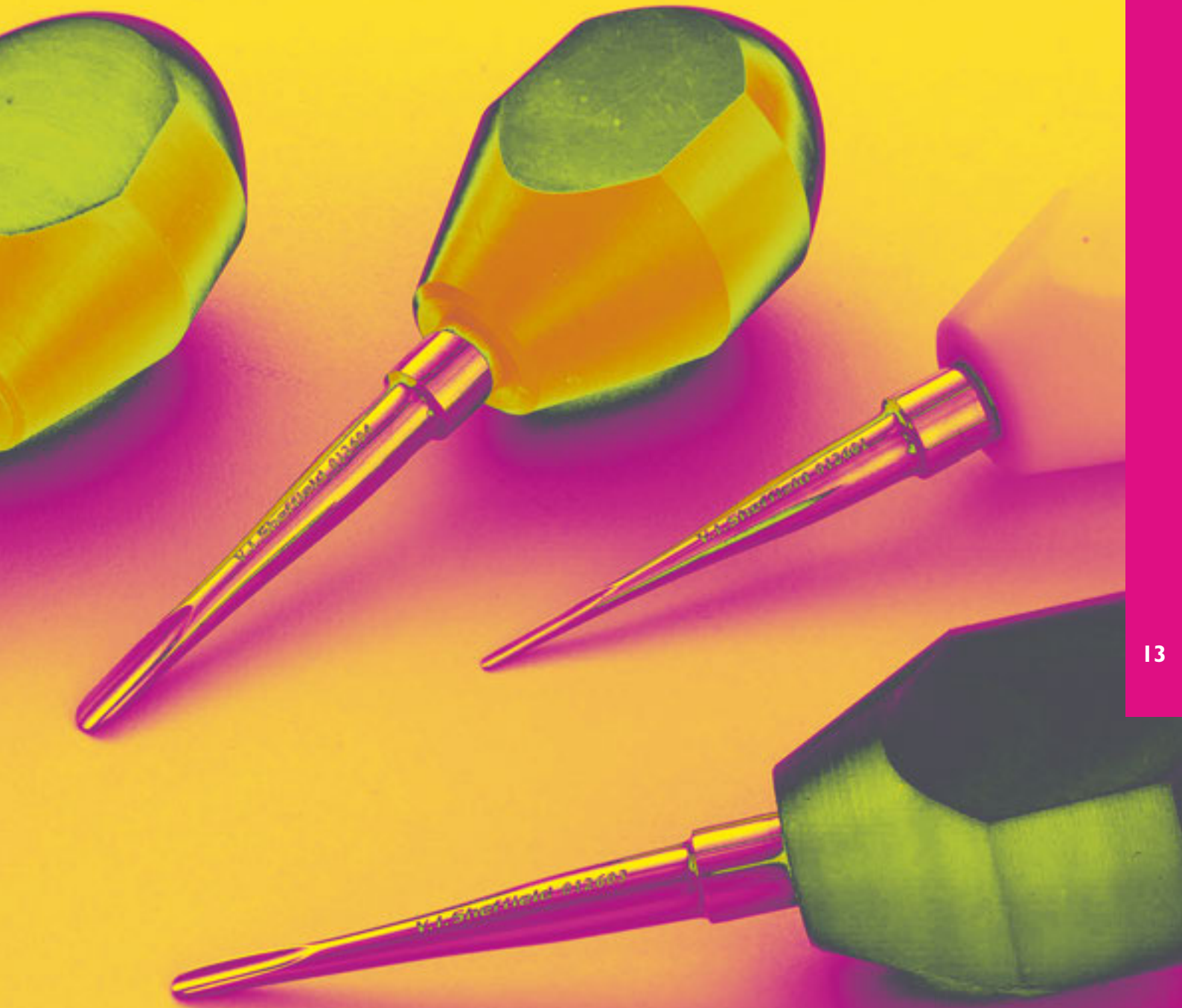


RABBIT NASOLACHRYMAL DUCT CANNULAE

012523 Nasolacrimal Duct Cannula 19 Gauge

012524 Nasolacrimal Duct Cannula 21 Gauge

012525 Nasolacrimal Duct Cannula Set 21 & 19G



Periodontal Instruments

Explorer/ Measuring Probe



A detailed examination of the patient's mouth is the starting point of any dental care programme. This double-ended instrument is all you need. The Shepherd's Crook Explorer is used to test tooth stability and the condition of the gum margins. Tartar and gum disease cause detachment of the gingiva exposing the tooth root. The depth of these sulci are measured using the measuring probe. Details are recorded for subsequent treatment and comparisons.

EXPLORER/ MEASURING PROBE

012100 Shepherd's Crook Explorer/ Measuring Probe 170mm

Subgingival Curette



This Scaler is used to remove subgingival tartar and to plane tooth roots. Unless the root is clean the gum will not re-attach. The back surface of the Scaler is blunt to minimise damage to the sensitive gingiva. The Instrument is double-ended and has a balanced grip for extra comfort in use.

SUBGINGIVAL CURETTE

012130 Subgingival Curette 170mm

Jaquette Supragingival Scaler



This Scaler is used to remove tartar from above the gum margin. The tip and back of the Instrument is sharp to scrape between teeth. Do not use below the gum margin. Double-ended with a balanced grip handle for ease of use and comfort.

JAQUETTE SUPRAGINGIVAL SCALER

012120 Jaquette Supragingival Scaler 170mm

Hoe Scaler

Useful for removal of large areas of tartar and plaque from flat tooth surfaces. Double-ended Scaler.

HOE SCALER

012110 Hoe Scaler 165mm

Double-ended Scraper



The tips of this Instrument are of familiar design mounted in a comfortable handle. One end is a fine hook to remove tartar from between teeth, the other is a shallow scoop to break tartar from flatter surfaces. A simple general purpose Instrument for tartar removal.

DOUBLE-ENDED SCRAPER

012020 Double-Ended Scraper 175mm

Periodontal Hand Instrument Set Boxed



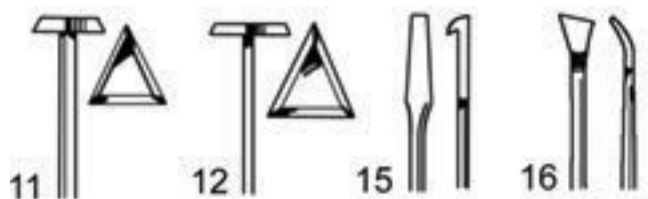
Seven Periodontal Instruments in a Stainless Autoclave Case.

Instruments include: Mirror, Shepherd Hook Explorer/ Measuring Probe, Straight Curette Scaler, Angled Curette Scaler, Angled Jaquette Scaler plus two Fine Probes. Comfortable Silicone Handles.

PERIODONTAL HAND INSTRUMENT SET

012210 Periodontal Instrument Set in Autoclave Case

Tartar Scrapers - Various



Traditional scrapers offering tip design as illustrated.

TARTAR SCRAPERS

- 012021 Single Ended Scraper 11 150mm
- 012022 Single Ended Scraper 12 150mm
- 012023 Single Ended Scraper 15 160mm
- 012024 Single Ended Scraper 16 160mm

Dental Elevators

Elevator or Luxator?

Luxator- thin, sharp blade designed to be pushed into the periodontal ligament space down the long axis of the root. It cuts the periodontal ligament fibres and expands the alveolar plate as it pushes apically. Should not be twisted or lifted (torqued) during use. Must be kept sharp and sterilised after every use.

Elevator – a stocky strong blade used to extract loose teeth using adjacent sound teeth. Not usually meant to go below the gumline. More useful in humans where crown/root ratio is closer to 50:50 and roots are stronger. In animals root ratio is closer to 30:70 and roots taper toward the apex. They will fracture if the periodontal ligament fibres are not loosened or cut before forceps are applied or if the instrument is torqued.

Winged Elevators



Veterinary Elevators designed by Dr Robert Wiggs. They have short winged blades with lateral edges which curve upwards further than traditional elevators, improving conformation to the root structure as well as instrument control. The narrow neck enhances visibility of the root and the shorter shaft improves handling and control, especially if the operator's hands are not large. The design incorporates the best parts of an elevator and a luxator. Aluminium knurled handles are very comfortable in use. Flattened surface prevents rolling off the table. Available as a boxed set.



WINGED ELEVATORS

012389	Winged Elevator 1.0mm (Purple) 145mm
012390	Winged Elevator 2.0mm (Gold) 145mm
012391	Winged Elevator 3.0mm (Blue) 145mm
012392	Winged Elevator 4.0mm (Black) 145mm
012393	Winged Elevators Set of 4 (includes free Stainless Steel Case)
012395	Autoclavable Stainless Steel Case for Winged Elevators

Winged Elevators with Short Handles



Our Short Handled Winged Elevators are designed to fit in the hand, particularly small hands. A palmed instrument is more under control as well as being more comfortable. The stainless case is silicone lined to minimise damage to the elevators yet convenient for autoclaving.

WINGED ELEVATORS SHORT

012401	Rainbow 1.0mm 125mm
012402	Gold 2.0mm 125mm
012403	Slate 3.0mm 125mm
012404	Black 4.0mm 125mm
012405	Set of 4 in Stainless Steel Case

Comfort Handle Elevators



Designed and developed by David Strong MRCVS. The Comfort Pattern Elevators takes a radical new look at elevator handles. A range of new designs was tested by both nurses and veterinary surgeons to find the most comfortable design. The most popular pattern fits into the palm of the hand allowing the fore finger to be positioned along the shaft for added control.

Supplied in fully autoclavable coloured coded PTFE in 1, 2, 3, 4, 5 & 6mm widths. Available singly or as a Set of 4 (1 - 4mm) or Set of 6 (1 - 6mm). When purchased as a Set the Stainless Steel Autoclave Case comes free.

COMFORT HANDLE ELEVATORS

012601	Comfort Elevator 1.0mm (White)
012602	Comfort Elevator 2.0mm (Green)
012603	Comfort Elevator 3.0mm (Blue)
012604	Comfort Elevator 4.0mm (Black)
012600	Comfort Elevators Set of 4 (includes free Stainless Steel Case)
012605	Comfort Elevator 5.0mm (Grey)
012606	Comfort Elevator 6.0mm (Yellow)
012608	Comfort Elevator Set of 6 (includes free Stainless Steel Case)

Comfort Handle Winged Elevators



COMFORT HANDLE WINGED ELEVATORS

012611	Comfort Winged Elevator 1.0mm (White)
012612	Comfort Winged Elevator 2.0mm (Green)
012613	Comfort Winged Elevator 3.0mm (Blue)
012614	Comfort Winged Elevator 4.0mm (Black)
012610	Comfort Winged Elevators Set of 4 (includes free Stainless Steel Case)
012615	Comfort Winged Elevator 5.0mm (Grey)
012616	Comfort Winged Elevator 6.0mm (Yellow)
012618	Comfort Elevator Set of 6 (includes free Stainless Steel Case)

Wedge Elevator



Designed to remove the Upper Premolar IV (the carnassial) without the need to split the tooth. The periodontal ligament fibres are cut in the usual way using suitable luxators. The tip of the wedge is drilled through between rostral and posterior root. The blade of the instrument is then worked under the tooth. As the width of the blade increases the tooth is forced from the alveolus. At a point of resistance, stop and hold for 10 seconds before proceeding. Using excessive force risks root fracture.

WEDGE ELEVATOR

012010 Wedge Elevator 170mm

Carnivore Elevator



Removal of the teeth of dogs and cats requires rupture of the periodontal ligament. In relatively healthy roots rupture is very difficult, requiring great force. Rupture (and therefore extraction) is best achieved by forcing an elevator or luxator into the periodontal space. In the dog and cat the space is very narrow, quite different to the human situation. Our Carnivore Elevators are thin and very sharp.

CARNIVORE ELEVATOR

- 012001 Carnivore Elevator No. 1 (2.5mm) 145mm
- 012002 Carnivore Elevator No. 2 (3.5mm) 150mm
- 012003 Carnivore Elevator No. 3 (4.0mm) 150mm
- 012001/4S Set of Carnivore Elevators Nos. 1, 2, 3 (2.5, 3.5 and 4.0mm) & Wedge Elevator

Small Feline Elevator



The 2mm angled tip on a fine handle allows access to lingual surfaces. Also useful in the extraction of rabbit incisors.

SMALL FELINE ELEVATOR

012018 Small Feline Elevator 165mm

Superfine Elevator Straight



2mm with a comfortable handle.

SUPERFINE ELEVATOR STRAIGHT

012004 Superfine Elevator 2mm Straight 150mm

Double Ended Elevator



The curved tips are designed to follow the concave and convex curvatures of the roots, helping to prevent breaking the roots.

DOUBLE ENDED ELEVATOR

- 012036 Double Ended Elevator 2mm 185mm
- 012038 Double Ended Elevator 4mm 190mm

Apical Elevator



Used to remove tooth root fragments.

APICAL ELEVATOR

012006 Heidbrink Apical Elevator 145mm

Couplands Elevators



This is the standard human elevator. Generally considered too thick for veterinary use.

COUPLANDS ELEVATORS

- 012015 Couplands Chisel No. 1 (3.0mm) 150mm
- 012016 Couplands Chisel No. 2 (4.0mm) 150mm
- 012017 Couplands Chisel No. 3 (5.0mm) 150mm

Dental Luxators

Luxators



Luxators, which are in essence very slim elevators, are favoured by many veterinary dentists for the rupture of the periodontal ligament. They are, in fact, designed for the human tooth but are very good for veterinary use. A Veterinary Set is now available containing the most useful luxators for feline and canine teeth: 1mm straight, 2mm straight, 3mm curved, 3mm straight, 3mm contra angle plus a sharpening tool. Swedish made, these Luxators are very thin and very sharp.

LUXATORS

- 012177 Luxator 1mm Straight 160mm
- 012190 Luxator 2mm Straight 160mm
- 012191 Luxator 3mm Straight 160mm
- 012192 Luxator 3mm Curved 160mm
- 012194 Luxator 5mm Straight 160mm
- 012195 Luxator 5mm Curved 160mm
- 012192/CA Luxator 3mm Contra Angle 160mm
- 012196VET Veterinary Luxator Set (Set of five c/w Stone)
- 012146 Luxator Sharpening Stone

Forte Luxators



Forte Luxators have been specifically designed to withstand the considerable force sometimes needed for controlled and safe tooth elevation. The extra strong cornered lip has been developed to aid grip. The best all round veterinary luxator. Available in 3 sizes.

FORTE LUXATORS

- 012174 Forte Luxator 2.5mm Black/ Green 160mm
- 012175 Forte Luxator 3.2mm Black/ Grey 160mm
- 012176 Forte Luxator 4mm Black/ Brown 160mm
- 012172 Forte Luxator Set of 3

Luxator Autoclave Case



LUXATOR CASE

- FIXUSI Luxator Case

Molt Periosteal Elevator (4mm/6mm)



Molt is a Double Ended Periosteal Elevator. The two tips are round and dished. 4mm and 6mm diameters.

MOLT PERIOSTEAL ELEVATOR (4MM/6MM)

001275 Molt Periosteal Elevator 200mm

Periosteal Elevator



Used for raising full thickness mucogingival flaps before surgical extraction of teeth – bone removal and sectioning.

PERIOSTEAL ELEVATOR

001270 Periosteal Elevator (195mm - 4mm/ 7mm End)
7350/05 Freer Periosteal Elevator 5mm (180mm)
001271 Curved 6mm AO Type (180mm)
001272 Very Fine 2mm/ 3mm Periosteal Elevator (180mm)

Dental Forceps

Tartar Forceps - Spring Loaded



Our Spring Loaded Tartar Forceps are designed to sit comfortably in the hand to enable the veterinary dentist to remove quickly bulky deposits from teeth.

TARTAR FORCEPS

012050 Tartar Forceps Spring Loaded 180mm
012051 Tartar Forceps Cat Size Extraction Forceps/ Small 150mm
01205SET1 Tartar Forceps Set of 2 (as above)

Tartar Forceps

These Tartar Forceps are designed specifically for the removal of bulky tartar prior to scaling and polishing. One jaw is cup shaped to locate onto the tooth tip and act as a fulcrum for the other jaw. The other jaw is a sharp hook to engage the tartar at the gum margin. The jaws are designed to remove tartar from both flat surfaces and between teeth.

TARTAR FORCEPS

012052 Tartar Forceps Cupix Point Style 180mm
012053 Tartar Forceps Cat Size 150mm
01205SET2 Tartar Forceps (as above) Set of 2

Hawksbill Forceps



The multi-rooted teeth of the dog and cat should be loose before extraction by forceps. The loosening may be due to dental disease or careful elevation. As well as firmly gripping the tooth to be extracted appropriate dental forceps should support the tooth structure. None of the several hundred human forceps available suit the teeth of our patients. The Hawksbill Forceps are designed specifically for the extraction of multi-rooted teeth in the dog and cat.

HAWKSBILL FORCEPS

012030 Large Hawksbill Forceps 170mm
012040 Small Hawksbill Forceps 110mm
01204SET Hawksbill Forceps Set of 2 (as above)

Small Incisor Forceps



The tips of these Forceps are ideal for the removal of single rooted, usually incisor teeth. Cross-hatched thumb area for extra control. Tips meet.

SMALL INCISOR FORCEPS

012070 Small Incisor Forceps 150mm

Narrow Tipped Extraction Tooth Forceps



As recommended by many dental lecturers, a narrow tipped extraction forcep which meets at the tip to facilitate holding the tooth. Forceps are only used once the tooth has been loosened correctly – trying to force extract without this will usually result in root breakage. Very useful for cats.

NARROW TIPPED EXTRACTION TOOTH FORCEPS

012072 Narrow Tipped Extraction Tooth Forceps

Root Fragment Set



Removal of fragmented roots can be a challenge particularly if the roots themselves are healthy. A combination of elevation and forcep work is usually required. The Set of 3 Forceps with differing jaw angles covers all situations. The handles are anatomical and ergonomic.

ROOT FRAGMENT SET

012075 Root Fragment Forceps Set of 3

Vi Extraction Forceps



Available either individually or as a set of 3. Vi Extraction Forceps are well suited to extraction of medium to large teeth. The jaws have fine serrations for increased grip.

As with all extractions it is important that the tooth involved is suitably elevated prior to the use of forceps. The teeth of our patients are much more tightly bound to the jaw than are human teeth.

EXTRACTION FORCEPS VI PATTERN

- 012091** Vi Extraction Forceps Straight
- 012092** Vi Extraction Forceps Curved
- 012093** Vi Extraction Forceps Angled
- 012090** Vi Extraction Forceps Set of 3

Miscellaneous

Dental Mirror



DENTAL MIRROR

957900C Dental Mirror 165mm

Lip Retractor



The Lip Retractor solves the problem of retracting the lip for clear access to the teeth. It has a new modified shape to prevent pinching the lip and the tips of the instrument are plastic coated to minimise trauma. It can be adjusted by lightly bending. 6.5" long and autoclavable.

LIP RETRACTOR

010147 Lip Retractor 160mm

Mouth Gags & Wedges

Grays Mouth Gag

Spring Loaded Mouth Gags

Use with care to avoid TMJ damage. Remove every 5 minutes and open/shut the jaw a few times before replacing

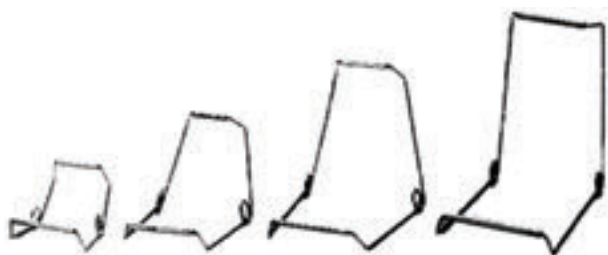


Simple action allows spring to gently open the jaws but does not allow the patient to close its mouth.

GRAYS MOUTH GAG

- 012158 Hamilton Kirk Cat Gag Maximum Gape 40mm
- 012160 Grays Mouth Gag Small Maximum Gape 65mm
- 012170 Grays Mouth Gag Medium Maximum Gape 100mm
- 012180 Grays Mouth Gag Large Maximum Gape 140mm
- 012159 Grays Mouth Gag Set of 3

Smith Baxter Mouth Gag



Spring action maximises access but is less likely to overstretch the TMJ.

SMITH BAXTER MOUTH GAGS

- 012795 Smith Baxter Mouth Gags Spring Bar Type Set of 5
- 012795ES Smith Baxter Mouth Gag Extra Small Max Gape 5.5cm
- 012795S Smith Baxter Mouth Gag Small Max Gape 6.5cm
- 012795M Smith Baxter Mouth Gag Medium Max Gape 10cm
- 012795L Smith Baxter Mouth Gag Large Max Gape 14cm
- 012795EL Smith Baxter Mouth Gag Extra Large Max Gape 15.5cm

Mouth Wedge



The Mouth Wedge provides a simple effective means of holding the mouth open for routine dental procedures.

MOUTH WEDGE

- 012790 Mouth Wedge Small
- 012791 Mouth Wedge Large
- 012795SET Mouth Wedge Set of 2

Dental Equipment

Straight Nose Cone



This accessory pushes directly onto the low speed motor and drives a range of handpiece (HP+ HL) burs and the diamond disc. This combination is used to cut rabbit teeth and drill holes in bone. In addition HP burs may be used in the straight nose in spinal procedures. 6,000rpm is the recommended maximum speed for prophylaxis cups.

If using an air driven unit we advise the 4:1 reduction straight nose cone. If using an electric micromotor the 1:1 may be used but turn the maximum speed down to 6,000rpm.

STRAIGHT NOSE CONE

H262001 Straight Nose Cone 4:1 Reduction for Oscillating Propyl

4:1 Reduction Attachment, Rotating Propyl Heads and Cups



4:1 Handpiece Body



Screw On



Snap On

The 4:1 attachment gears down the low speed motor by 4 times. This should be set to 6000rpm. It has a very high torque which is best for polishing teeth. It usually has a green band and is used to drive propyl heads. Propyl cups are used in conjunction with propyl paste to polish teeth following scaling. Soft propyl cups are best as they create less heat and flare better under the gumline with less pressure. Failure to polish will result in a rapid build up of new plaque.

Screw In Propyl Head

Far fewer problems with hair.

Snap On Propyl Head

Widely used but has some problems in veterinary dentistry. Muzzle hair becomes caught behind the 'button' and when combined with propyl paste quickly degrades the head.

4:1 REDUCTION ATTACHMENT ROTATING PROPYL HEADS & CUPS

- C634001** 4:1 Handpiece Body
- BA002** Propyl Head Screw On (ISO)
- P262** Propyl Cups Screw On x 144
- C188001** Propyl Head Snap On (ISO)
- P465** Contra Angle (Latch) Head Propyl Cup x 36

Oscillating Propyl Head



(Shown on straight nose cone - not included)

Developed for human dentistry to combat the risk of HIV the disposable propyl head is surprisingly cheap and minimises the risk of FeLV and FIV transmission. The oscillating action means there is no heat build-up on the tooth surface and 'snagging' on muzzle hair is minimal. Soft propyl cups as supplied on these heads should be used as they produce less heat and flare better under the gumline with less pressure. The oscillating propyl head fits the straight nose cone. To achieve the correct running speed use the 4:1 reduction with air equipment or the 1:1 with micromotors. Adjust the running speed to 6000rpm on either system.

OSCILLATING PROPYL HEAD SEMI DISPOSABLE

- IM3L7465S** Oscillating Disp Propyl Angle (for 4:1 Reduction) x 25
- IM3L7465L** Oscillating Disp Propyl Angle (for 4:1 Reduction) x 100

Propyl Paste



Propyl Paste is an abrasive polishing compound used in conjunction with propyl cups and brushes to create a highly polished enamel surface which is resistant to tartar buildup. We strongly recommend the use of fine grade propyl paste for general polishing after scaling, as this will produce the smoothest surface and reduce abrasion on the enamel. Medium and coarse are used for heavy staining in human dentistry, and always followed with a final, fine polish to give a good finish. Individual paste cups are recommended to maintain hygiene.

PROPYL PASTE

- P466** Propyl Paste Regular 300g
- P466R/200** Propyl Paste Medium 200 (2g) Individual Pots
- HS5556660** Propyl Paste Fine 200 (2g) Individual Pots

CLS



- Freshens mouth
- Disinfects mouth & machine
- Improves bur cutting
- Minimises cross contamination with FeLV & FIV

Used in the water system of Dental Units CLS freshens and sterilises the mouth. When used as coolant for High Speed Handpieces cutting efficiency is improved. It prevents transfer of FeLV and it can also be flushed through the air turbines to sterilise and lubricate them using the iM3 CLS flushing system.

The unique composition of CLS allows use of Chlorhexidine in all dental equipment. Standard Chlorhexidine crystallises out from solution and will damage your equipment. Do not use regular Chlorhexidine in Dental Units as it will crystallise out in the Handpieces rendering them inoperative.

Purchase of the larger pack sizes gives significant savings.

CLS CONCENTRATE

- CLS1** CLS Solution 250ml
- CLS6** CLS Solution 250ml Pack of 6
- CLS12** CLS Solution 250ml Pack of 12

Plaque Disclosing Solution

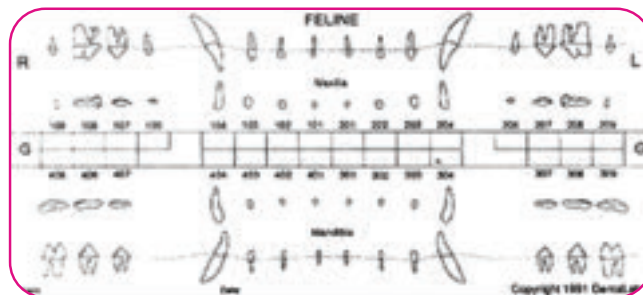


Many owners are very aware of the need for scaling and polishing on a regular basis. However, should any convincing be necessary the 'iC Plaque Disclosure' is ideal for the purpose. Simply swab around the mouth with the convenient dispenser and the plaque shows up as a vivid pink.

PLAQUE DISCLOSING SOLUTION

- ICIM3** iCPlaque (Box of 72)

Dental Chart Stick-on Labels



An essential part of any dental programme is accurate recording. These Stick-on Labels make dental recording a simple process.

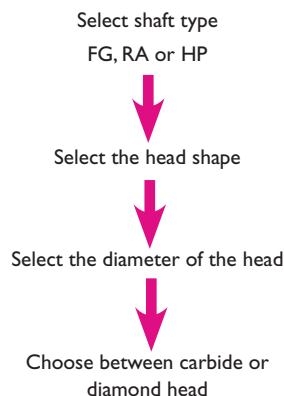
DENTAL CHART STICK-ON LABELS

- 012200** Dental Chart Labels - Dog (50)
- 012201** Dental Chart Labels - Cat (50)
- 012203** Dental Chart Labels Starter Set - Dog & Cat

Burs

Dental Burs

To aid correct bur selection, see chart opposite and use the following steps.



BUR PREFIX	PACK SIZE
5FG	Ten
5RA	Ten
HP	Single
5HP	Ten

Rabbit Bur Kit

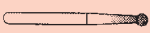
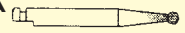









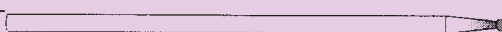
Three burs have been selected by David Crossley as being suitable for the reduction of rabbit and chinchilla molar teeth. Our Rabbit Bur Kit includes two of each bur in a Stainless Steel Autoclavable Block. All are HP fitting to fit into the 1:1 Straight Nose Cone (not included). When using the Long Bur (HL563) use the Soft Tissue Protector to shield tongue and cheek. The diamond version of the very long cross cut bur cuts with less trauma and less heat than the carbide equivalent.

RABBIT BUR KIT

- 001792** Rabbit Bur Kit in Block (6 Burs)
- 001793** Soft Tissue Protector for above fits Straight Nose Cone

Dental Burs

Head Shape	Diameter (approx)	FG 		RA 		HP 			
		Carbide 5 Pack	Diamond 5 Pack	Carbide 5 Pack	Diamond 5 Pack	Carbide Singles	Carbide 5 Pack	Diamond Singles	Diamond 5 Pack
Small Round 	0.5	5FG 1/4	5FG 1/4D						
Medium Round	1.4	5FG4	5FG4D	5RA4	5RA4D	HP4	5HP4	HP4D	5HP4D
Large Round	1.8	5FG6	5FG6D	5RA6		HP6	5HP6	HP6D	5HP6D
Extra Large Round	2.1	5FG8	5FG8D	5RA8	5RA8D	HP8	5HP8	HP8D	5HP8D
Extra Small Taper Fissure 	0.8	5FG698				HP698	5HP698		
Small Taper Fissure	1.2	5FG701				HP701	5HP701		
Medium Taper Fissure	1.6	5FG702	5FG702D			HP702	5HP702		
Medium Taper Long Head	1.6	5FG702L	5FG702LD						
Large Taper Fissure	2.1					HP703	5HP703		
Extra Large Taper Fissure	2.3							HP704D	5HP704D
Extra Small Flat Fissure 	0.9	5FG556		5RA556		HP556	5HP556		
Small Flat Fissure	1	5FG557		5RA557L	5RA557LD	HP557L	5HP557L	HP557D	
Medium Flat Fissure	1.6	5FG560				HP560	5HP560		
Large Flat Fissure	2.3					HP563	5HP563	HP563D	5HP563D
Medium Inverted Cone 	1	5FG35	5FG35D						
Large Inverted Cone	1.4	5FG37		5RA37					
Extra Small Pear 	0.6	5FG329							
Small Pear	0.8	5FG3330		5RA330					
Medium Pear	1	5FG331							
Large Pear	1.2	5FG332				HP332	5HP332		
Medium Domed Fissure 	1	5FG1557							
Large Domed Fissure	1.2	5FG1558	5FG1558D						

Additional Burs	Diameter (approx)	HL 			
		Carbide Singles	Carbide 5 Pack	Diamond Singles	Diamond 5 Pack
Extra Long					
Large Flat Fissure	2.3	HL563*	5HL563	HL563D	5HL563D

Please note all bur sizes are approximate and subject to availability.

* in Rabbit Bur Kit

Rodent Dentistry

Rabbit Dental Kits



ROD2 - Full Hand Kit shown.

If you are setting up or have no rabbit/ rodent equipment you may wish to purchase a Set, which offers considerable savings and is supplied in an Stainless Steel Autoclaveable Case.

Basic Kit (ROD1) contains:

- Rodent Gag
- Long Reach Cheek Dilator
- Incisor Luxator
- Molar Cutter
- Fine Rasp

Full Hand Kit (ROD2) contains:

- Rodent Gag
- Small Cheek Dilator
- Large Cheek Dilator
- Long Reach Dilator
- Incisor Luxator
- Molar Luxator
- Molar Extraction Forceps
- Diamond Rasp
- Rodent Spatula
- Molar Cutter

Hand & Motor Kit (ROD3) contains:

- Full Hand Kit PLUS:
- Rabbit Bur Kit
- Soft Tissue Protector
- Diamond Disc
- Diamond Disc Protector

This Kit also requires a Straight Nose Cone, plus a Micromotor, Air or Electric Drive.

RABBIT DENTAL KITS

- ROD1 Basic Kit
- ROD2 Full Hand Kit
- ROD3 Hand & Motor Kit

Table Top Rabbit Gag



This version of our well known gag now has a white PTFE platform which makes the gag warmer for the anaesthetised small patient and rather cheaper than the original. It is easy to clean and may be autoclaved.

TABLE TOP RABBIT GAG

012207 Table Top Rabbit Gag

012209 Table Top Rabbit Gag and LED Light

DENRODKIT Table Top Rabbit Gag LED Light and Full Hand Kit (Rod2)

LED Light For Table Top Gag



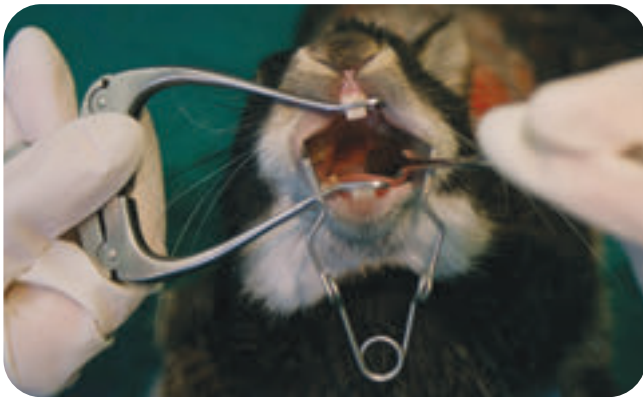
Illumination of the inside of the rabbit mouth is difficult without the hands of the surgeon getting in the way. The Rabbit Gag LED Light simply clips into the retaining mount which screws onto the threaded height adjustment control. The flexible neck of the Light can be adjusted for best effect. The powerful white LED lasts for approximately 100 hours on a set of AAA batteries. Also useful as a focal examination light elsewhere in the clinic.

Fits all table top gags.

LED LIGHT FOR TABLE TOP GAG

012208 LED Light with Flexible Neck (inc clip)

Rodent Mouth Gag



Without this gag examination and treatment of rabbit molars is virtually impossible.

RODENT MOUTH GAG

012185 Rodent Mouth Gag

Lightweight Rodent Mouth Gag

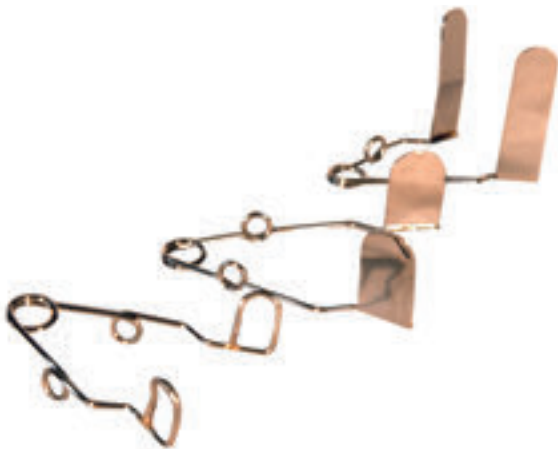
Less bulky and less powerful than the standard Rodent Gag.

LIGHTWEIGHT RODENT MOUTH GAG

012185LW Rodent Mouth Gag Lightweight

012185LWS Rodent Mouth Gag Lightweight and Small

Rodent Cheek Dilators



The Small Dilator is also useful as a small gag for guinea pigs and chinchillas.

RODENT CHEEK DILATORS

012188 Rodent Cheek Dilator Small Max Gape 40mm Blade Length 15mm, Blade Width 10mm

012189 Rodent Cheek Dilator Large Max Gape 60mm Blade Length 22mm, Blade Width 15mm

012189A Rodent Cheek Dilator Long Reach - Blade Length 36mm, Blade Width 11mm Use with Long Burs Max Gape 35mm

Rodent Spatula

Use to deflect tongue and cheek to examine and treat molars.

RODENT SPATULA

012184 Rodent Spatula

Rodent Molar Rasp



The Diamond Coated Rasps are designed to smooth off sharp edges without disturbing the delicate tooth roots. The Small Diamond Rasp is contoured in two directions to enable it to sit nicely on top of the molars. Unsuitable for debulking but good for tidying.

RODENT MOLAR RASP

012187 Rodent Tooth Rasp Large 165mm

012181 Rodent Tooth Rasp Small 180mm

012181A Rodent Molar Rasp Fine - Diamond Small 180mm

012182 Rodent Molar Rasp Fine - Diamond Large 165mm

01218SET Rodent Molar Rasp Set of 4 (as above)

Double Ended Diamond Rasp



One end is concave to sit on and around the molars. The other end is flat. Each blade is 25mm long

DOUBLE ENDED DIAMOND RASP

012173 Double Ended Diamond Rasp 205mm

Rodent Molar Cutter



Use to debulk or for trimming spurs and hooks.

RODENT MOLAR CUTTER

- 012186 Rodent Molar Cutter 180mm
- 012186/S Rodent Molar Cutter 140mm
- 01218CUTSET Rodent Molar Cutter Set of 2 (as above)

Crossley Incisor Luxator



Designed by David Crossley to extract the very large rabbit incisors. Removal avoids the requirement for repeated cutting of overgrown mal-occluded incisors. Shape of Luxator matches tooth shape. A smaller version is available for guinea pigs and rats.

CROSSLEY INCISOR LUXATOR

- 012197CR Crossley Incisor Luxator 195mm
- 012197R Small Crossley for Guinea Pigs and Rats 190mm
- 012197SET Crossley Incisor Luxator Set of 2 (as above)

Crossley Molar Luxator



Designed to facilitate extraction of molars with a minimum of damage to the alveolus and surrounding soft tissue. One cutting blade is for insertion down buccal or lingual surface. The other end of the instrument is set at right angles to penetrate between molars.

CROSSLEY MOLAR LUXATOR

- 012197M Crossley Molar Luxator 160mm

Molar Extraction Forceps

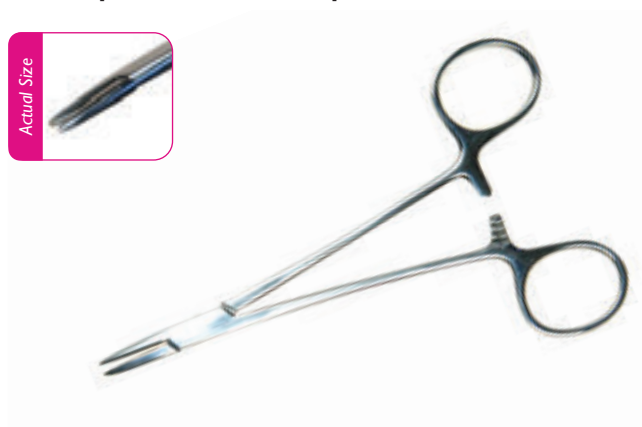


There is very little space inside a rabbit mouth. These forceps are very slim and angled to fit in the mouth without totally obscuring the teeth.

MOLAR EXTRACTION FORCEPS

- 012199 Rabbit/ Guinea Pig Molar Forceps 160mm

Root Tip Extraction Forceps



Most chronic abscesses around the head of a rabbit are related to infected tooth roots. Removal of the offending root is a prerequisite for successful treatment. Designed by Frances Harcourt-Brown these modified needleholders are used to locate and lock onto the root tip via the abscess.

ROOT TIP EXTRACTION FORCEPS

- 012206 Root Tip Extraction Forceps 160mm



Biopsy Needles

Biopsy Needle	Patient Body Weight	Needle Gauge
Bone Marrow	<5kg	18g
	5 - 15kg	15/16g
	15 - 30kg	13g
	30 - 50kg	11g
	>50kg	8g
Cortical Bone	<5kg	11g
	5 - 15kg	8g
	>50kg	Trephine
Soft Tissue (Trucut)	All	14g

Biopsy Needles - Bone

Bone Marrow Biopsy - Jamshidi Type

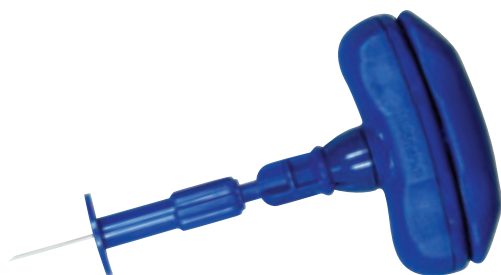


In the Jamshidi Type Needle the integral stylet locks into the lumen of the needle preventing obstruction by debris. When the needle tip is in the desired location the stylet is removed and the sample aspirated.

The 11 gauge needle with the stylet removed may be used to take a 1.5mm approx. core of bone from tumours for typing (see also Bone Trephines).



8 gauge



18 gauge

BONE MARROW BIOPSY JAMSHIDI (DISP) BAXTER

- 012504** Bone Marrow Biopsy Jamshidi 18g (Disp) Baxter Illinois
- DIN1515X** Bone Marrow Biopsy Jamshidi 15g (Disp) Baxter Illinois
- DJ4011** Bone Marrow Biopsy Jamshidi 11g (Disp) Baxter Illinois
- DJ4008** Bone Marrow Biopsy Jamshidi 8g (Disp) Baxter Illinois

Vi Jamshidi Type Range



BMBJV11

Designed as a cost effective version of the Baxter Needles (below left), takes both marrow and core samples. Drive into a suitable site (wing of ilium, tuber ischium, proximal femur), pull back a little, withdraw stylet and aspirate. If there is no aspirate, replace stylet, push in further and repeat. Manufactured to our specification, these needles represent excellent value.

VI JAMSHIDI TYPE RANGE

- BMBJV16** VI Jamshidi Type Disposable 16g
- BMBJV13** VI Jamshidi Type Disposable 13g
- BMBJV11** VI Jamshidi Type Disposable 11g
- BMBJV8** VI Jamshidi Type Disposable 8g

Re-usable Bone Marrow Biopsy Needles



Made entirely from stainless steel these needles are fully autoclavable and can be re-sharpened as necessary.

RE-USABLE BONE MARROW BIOPSY NEEDLES

- 012505** Bone Marrow Biopsy Jamshidi 13g

Bone Marrow Biopsy - Klima Type



The Klima is stainless and re-usable representing good value. The stylet is retained in position by hand. Practically, the use of the needle is not as easy as the Jamshidi Type.

BONE MARROW BIOPSY - KLIMA TYPE

- 012508** Bone Marrow Biopsy Klima 18g x 25mm
- 012507** Bone Marrow Biopsy Klima 16g x 25mm
- 012503** Bone Marrow Biopsy Klima 16g x 37mm
- 012498** Bone Marrow Biopsy Klima 22g x 25mm

Bone Marrow Biopsy - Rosenthal



Similar to Klima. Stylet does not lock into position.

BONE MARROW BIOPSY-ROSENTHAL

- 012509** Bone Marrow Biopsy Rosenthal 16g x 35mm

Cortical Bone Trepine



Stainless Steel and re-usable. Used to take a core of bone for tumour typing. Retractable stylet locates Trepine until teeth begin to cut and then is retracted. Stylet is finally used to push out core. Core size 3, 4 and 6mm. Preserve in formol saline for the lab. Take multiple samples if possible.

CORTICAL BONE TREPHINE

- 001425 Bone Biopsy Trepine 8mm o/d 6mm core
- 001426 Bone Biopsy Trepine 6mm o/d 4mm core
- 001427 Bone Biopsy Trepine 5mm o/d 3mm core

Biopsy Needles - Soft Tissue

Tru-Cut Style



Image shows Super Core style

Used to sample liver, kidney and other soft tissues with minimal trauma. Takes just a small sliver of tissue. Disposable but will withstand boiling. Needle is "locked" and when released spring loaded cutting needle takes the biopsy. 14g has two stop system and can take either 10mm or 20mm samples.

TRU-CUT STYLE SOFT TISSUE BIOPSY

- STB18 VI Trucut Type Supercore Biopsy Needle 14g x 90mm
- STB18B VI Trucut Type Supercore Biopsy Needle 18g x 90mm
- 012521 Trucut Soft Tissue Biopsy Needle Fully Manual 14g x 115mm

Temno Evolution Biopsy Needle



The Standard Soft Tissue Biopsy Needle used by the NHS. 2 different sample sizes can be selected when pulling the plunger. One click equals a 10mm notch exposure, two clicks 20mm. Expensive but best in class.

TEMNO EVOLUTION BIOPSY NEEDLE

- TEM1420/1 Temno Evolution Biopsy Needle 14g x 20cm Single
- TEM1420/5 Temno Evolution Biopsy Needle 14g x 20cm 5 Pack

Disposable Skin Biopsy Punch



Disposable Skin Biopsy Punch with razor sharp Stainless Steel Blade. Light weight, ribbed plastic handle for control and comfort. 4, 6 and 8mm diameters available. Supplied sterile.

DISPOSABLE SKIN BIOPSY PUNCH

- SBP4 Skin Biopsy Punch 4mm Diameter Head
- SBP6 Skin Biopsy Punch 6mm Diameter Head
- SBP8 Skin Biopsy Punch 8mm Diameter Head
- SBPSET Skin Biopsy Punch Set of 3 (4, 6, 8mm)

Interosseus Infusion Needle 18g



Where vascular access is difficult, fluids and most drugs can be administered via this Interosseus Infusion Needle. This process is particularly useful in neonates and birds where blood vessels are very small. The most common site is the proximal femur via the trochanteric fossa. An IV catheter should be placed as soon as practical. Also used as a Small Bone Marrow Aspiration Needle in the Jamshidi Style.

INTEROSSEUS INFUSION NEEDLE

- BMBJV18 Interosseus Infusion Needle 18g

Needle Boxes (Autoclavable)



NEEDLE BOXES (AUTOCLAVABLE)

- 091149 Needle Box - Polypropylene 50mm x 40mm x 8mm
- 091149L Needle Box - Polypropylene 95mm x 70mm x 17mm

Flushing Needles

Flushing Needles have a bead or olive soldered onto the tip to minimise trauma to friable soft tissues.

Ear Flushing Needles - Spreulls



Often referred to as Spreulls Needles these Blunt Beaded Needles are available in 60mm and 100mm lengths with a luer hub.

EAR FLUSHING NEEDLES

- 012510 Ear Flushing Spreulls Needle Short 60mm
- 012511 Ear Flushing Spreulls Needle Long 100mm

Flushing Needle 21 Gauge



Suitable for anal gland ducts of small dogs. Ideal for flushing the urethra in the male cat prior to placement of catheter. Start with the 30mm needle and move to the 50mm and 75mm versions as urethra clears.

FLUSHING NEEDLE 21 GAUGE

- 012512 Flushing Needle 21g Bead Tip 30mm
- 012512L Flushing Needle 21g Bead Tip 50mm
- 012512XL Flushing Needle 21g Bead Tip 75mm

Rabbit Nasolachrymal Duct Cannulae



Treatment of chronic eye infections in the rabbit can be very unrewarding with topical ophthalmic preparations alone. It is now accepted that flushing the large nasolachrymal duct punctum to remove accumulations of pus is an essential adjunct to the topical therapy.

This procedure is usually well tolerated by the rabbit under sedation and local anaesthetic eye drops. The angle and lengths of standard ophthalmic cannula are incorrect for this procedure.

Veterinary Instrumentation's Rabbit Nasolachrymal Duct Cannula is designed especially for this procedure and is available in two sizes, 19 gauge and 21 gauge.

RABBIT NASOLACHRYMAL DUCT CANNULAE

- 012523 Rabbit Nasolachrymal Needle 19g
- 012524 Rabbit Nasolachrymal Needle 21g
- 012525 Rabbit Nasolachrymal Needles Set of 2 (19g & 21g)

Bladder Catheters



Stainless Steel Bladder Catheter for Queens and Bitches. Blunt tip with two lateral eyes. Luer kock hubs.

BLADDER CATHETERS

- 307126 Bladder Catheter Straight (Queen) 170mm
- 307120 Bladder Catheter Curved (Bitch) 180mm
- 307122 Bladder Catheter Curved (Bitch) 250mm
- 307124 Bladder Catheter Curved (Bitch) 300mm

Oral Dosing Needles



Suitable for oral dosing and feeding of birds and reptiles. Available in a range of gauges from 12 to 23. Care should be taken to ensure the needles cannot be swallowed.

ORAL DOSING NEEDLES

- 012513 12g Oral Dosing Needle 200mm Curved
- 012514 14g Oral Dosing Needle 125mm Curved
- 012515 16g Oral Dosing Needle 75mm Straight
- 012515C 16g Oral Dosing Needle 75mm Curved
- 012515STR 16g Oral Dosing Needle 100mm Straight
- 012516 18g Oral Dosing Needle 50mm Straight
- 012516C 18g Oral Dosing Needle 50mm Curved
- 012517 20g Oral Dosing Needle 38mm Straight
- 012517C 20g Oral Dosing Needle 38mm Curved
- 012517CS 20g Oral Dosing Needle 25mm Curved
- 012517S 20g Oral Dosing Needle 25mm Straight
- 012527 22g Oral Dosing Needle 38mm Straight
- 012527C 22g Oral Dosing Needle 38mm Curved
- 012522 23g Oral Dosing Needle 25mm Straight
- 012532 Raptor Crop Tube 7mm Diameter 18cm Long

Spinal Needles



We now strongly recommend the use of disposable needles for spinal procedures. The translucent hub allows good visualisation of the CSF.

SPINAL NEEDLES

- 405255 22g x 3" Spinal Needles Disposable Box of 25
- 405253 20g x 3.5" Spinal Needles Disposable Box of 25
- 405252 20g x 3" Spinal Needles Disposable Box of 25
- 405173 19g x 3" Spinal Needles Disposable Box of 25
- 405248 18g x 3.5" Spinal Needles Disposable Box of 25
- 405247 18g x 3" Spinal Needles Disposable Box of 25
- 012502 Spinal Needle 21g Short Bevel 25mm Reusable
- 012500 Spinal Needle 19g Short Bevel 38mm Reusable



Anaesthesia Pre-Warming™ : a Darvall Solution for hypothermia



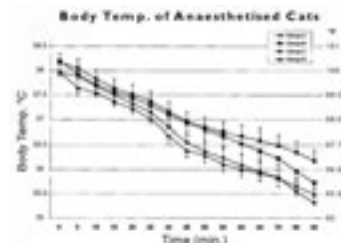
Peri-Anaesthesia Hypothermia

Hypothermia (body temperature below 36°C) occurs in up to 80% of anaesthetized cats and dogs. Causes include small body size relative to body surface area, vasodilation, inhaling cold, dry anaesthetic gases, loss of heat from open body cavities in surgery and lack of shivering during anaesthesia. All of these combine to create the complex and difficult to manage syndrome: peri-anaesthesia hypothermia.

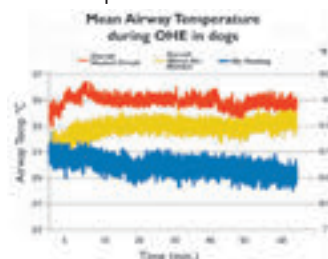
The Pre-Warming Solution

The AAHA Guidelines for Anesthesia include monitoring body temperature and providing thermal support from pre-anaesthetic through to recovery. Providing thermal support before anaesthesia may seem counter-intuitive, but recent research shows that regardless of the premedication drugs used, smaller dogs and cats lose over 1°C before anaesthesia and then rapidly lose twice as much to thirty minutes after induction (Graph 1). Fortunately studies also show that effectively warming patients from the time of premedication to the time of induction (for at least 30 minutes) can prevent that initial drop in body temperature and may slow the early stage rapid heat loss immediately following induction. Heating hypothermic animals during anaesthesia is difficult and time consuming.

Pre-warming small animals is highly beneficial and can easily be done by placing the premedicated patient in a warmed cage. Cage heating devices not specifically designed for sedated or anaesthetized animals such as jugs of warm water or heated wheat bags, can cause burns. The margin of safety for causing significant thermal injury is surprisingly narrow. Forced warm air blanket systems are ideal for use in pre-warming cages because they deliver a large flow of warm air at constant, thermostatically controlled temperatures. However forced warm air systems designed for use in humans are not designed with appropriate blankets or to duct warm air into a cage. Darvall has solved this problem with an innovative kennel Door Adapter* that lets the door open/shut properly with 2 sizes of blankets to fit cages. In addition One Cozy® heater can warm up to 3 cage blankets simultaneously and blankets can be re-used between animals.



Graph 1. Body Temperature of anaesthetised cats using Bair Hugger™ warm air blankets compared to no heating. Trial A (Heat off); Trial B (on/off); Trial C (on/on) and Trial D (off/on). Machon R. et al, Vet Surg 28:301-310;1999 In this study the Bair Hugger Blankets and Heater were unable to raise the body temperature of these anaesthetised cats.



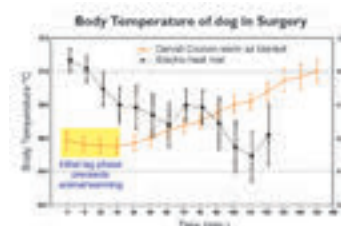
Graph 2. Inspired Gas Temperature with Darvall Heated Circuit, Darvall Forced Warm Air Blanket or no heating. 9 dogs/treatment, 6.2±3.1 (Mean±SD)kg, 20±17 months, surgery time 96±27 min. Lee S. Honours Thesis, University of Sydney, 2013.

Warmed Inspired Anaesthetic Gas

There are many ways to reduce patient heat loss during anaesthesia including minimizing surgical prep. time, insulating an animal's feet, warming IV fluids and use of electric, hot water or forced warm air blankets. However none of these methods adequately address the rapid heat loss occurring in the first fifteen to thirty minutes after induction. Darvall's innovative Heated Smooth Wall Anaesthesia Breathing Circuits* target this critical heat loss from inspiring cold, dry air by warming the inspired gases immediately from the time of intubation (Graph 2).

Next Generation Forced Warm Air Blanket System

Forced warm air blanket systems for humans are most effective during recovery, when the patient's vasomotor function, increased cardiac function and shivering have returned. Studies show these systems don't prevent hypothermia in anaesthesia in cats and small dogs (Graph 1).



Graph 3. Darvall warm air blankets compared to electric heat mat for prevention of hypothermia in dogs 17.3±1.1 (Mean±SD) kg. Lau A. et al, Honours Thesis, University of Sydney, 2008

The Darvall Vet Cozy®* warm air blanket system is designed for cats or dogs either during surgery or in cages before and after anaesthesia. The contact surface is porous, rather than punched with small holes, resulting in low surface air flow. When positioned over or underneath animals, warm air diffuses across the blanket's surface and the patient's hair-coat traps the warmth close to the animal. A recent study in dogs anaesthetised for surgery showed that the Darvall Vet Cozy® system consistently increased body temperature during surgery but there is a lag period of 30-45 min. before the animal's body temperature starts to rise (Graph 3).

Reference 1. Read M. et al Conductive warming prevents the development of hypothermia in anaesthetised dogs (Abst.). Vet Anaesth Analg 41:A22;2014

© 2014 Anaesthesia Pre-Warming, Colin Dunlop & Ken Crump, Advanced Anaesthesia Specialists www.aasmedical.com

For more information see Ken Crump's blog at www.darvallvet.com

Peri-Anaesthesia Thermal Support Selector™

Chart for selecting effective warming treatment options by type and length of procedure.

Procedure	OHE - Young Animal	Long Orthopaedic Surgery	Dental Procedure
Duration of Anaesthesia	30 to 60 min	90 to 150 min	60 to 180 min
Premedication - Start Pre-Warming (>30 min)	Darvall Cozy® Kennel Over-blanket*	Darvall Cozy® Kennel Over-blanket*	Darvall Cozy® Kennel Over-blanket*
Patient Clip, Catheter Placement, Induction	Circulating warm water or insulated electric blanket	Circulating warm water or insulated electric blanket	Circulating warm water or insulated electric blanket
Intubation - Start Heating Inspired Gas	Darvall Heated Smooth-Wall Circuits*	Darvall Heated Smooth-Wall Circuits*	Darvall Heated Smooth-Wall Circuits*
Surgery/ Procedure Table	Circulating warm water or insulated electric blanket	Darvall Cozy® SURGERY Under-blanket*	Darvall Cozy® SURGERY Under-blanket*
Recovery - Warming to < 37°C	Darvall Cozy® Kennel Over-blanket*	Darvall Cozy® Kennel Over-blanket*	Darvall Cozy® Kennel Over-blanket*

For further information please call our Vi Vet Tech Team on 0345 130 9596 or email info@vetinst.com or visit www.vetinst.com

Darvall Heated Smooth-Wall Circuits



Darvall Heated Smooth Wall Circuit heat controller with Temperature display in °C

Inspiring cold, dry air can be a cause of heat loss for animals under anaesthesia. The Darvall heated smooth wall breathing circuit solves this longstanding problem in small animal anaesthesia.

Recent research demonstrates that most temperature loss occurs after induction, during the patient's clip and prep for a procedure.

Darvall heated smooth wall breathing circuits provide warm inspired gas to the patient from the moment of intubation. Darvall's heated smooth wall tubing (SWT) begins to warm patients from the inside, from their very first breath after induction, reducing loss of body temperature prior to surgery.



Warm animals recover better. Our small diameter, low resistance smooth wall circuits are so efficient they allow you to use a circle system on animals as small as 2kg*. The totally new Darvall heated circuits with thermostatic control warm inspired gas which can minimize heat loss in anaesthesia.

- Warms inspired gas: 38.5°C-40°C
- Efficient: internal warming
- Immediate: from the first breath
- Prevents heat loss*
- Airway temperature sensor
- Animal temperature monitoring
- Heats without Harm

Provide immediate and effective warmth from the start of anaesthesia.

Our totally new Darvall heated, smooth-wall anaesthetic circuits and heated ZDS Qubes have a microprocessor with temperature sensor and warm up to 45°C, resulting in inspired air between 38.5°C and 40°C. Optional Separated animal esophageal/rectal temperature probe provides safe warming with close-loop control.

The smooth inner wall of the Y hose sets makes them easier to clean and decreases circuit resistance.



End connectors are moulded on, for additional security. The inner hose diameter is reduced from the standard 22mm down to 12mm on the small and 16mm on the larger set. This significant reduction in circuit volume improves responses to changes in anaesthetic setting. Suggested flow rate is 30ml/kg/min, 60ml/kg for the first 5 minutes. Minimum flow rate with Tec vapourisers is 300ml.

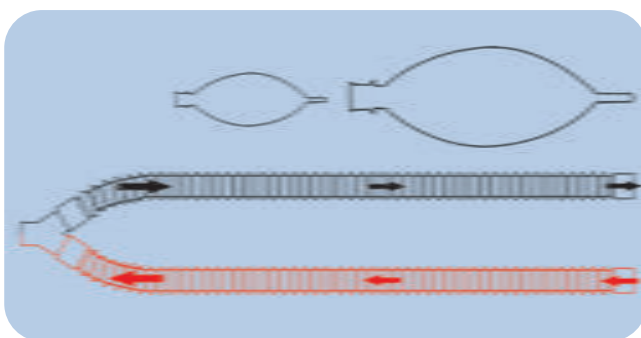
*Darvall's Low-Volume Standard Circle Absorber can be used with animals down to 7kg.

**Want more information on
Patient Warming?
E-mail info@vetinst.com**

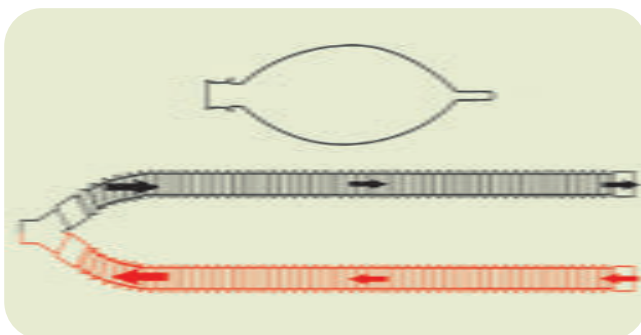
Darvall Heated Anaesthetic Starter Set



AAS Heated Controller Unit



AAS8347 12mm Heated Circle System



AAS8348 16mm Heated Circle System

Darvall Anaesthesia Starter Sets include the Controller Unit plus 1 of each Heated Circle System - AAS8347 & AAS8348 (tubing and rebreathing bag only).

AAS DARVALL STARTER SETS

AAS8531 Starter Kit for Heated Anaesthesia Breathing Circuits

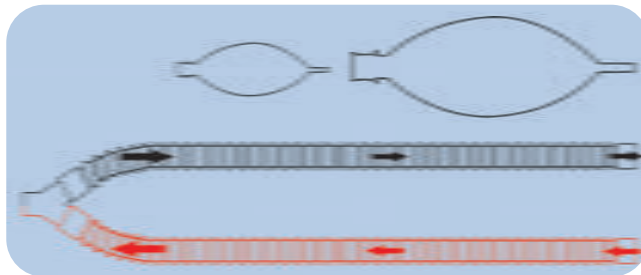
AAS DARVALL TEMPERATURE PROBES

AAS8617 AAS Temperature Probes

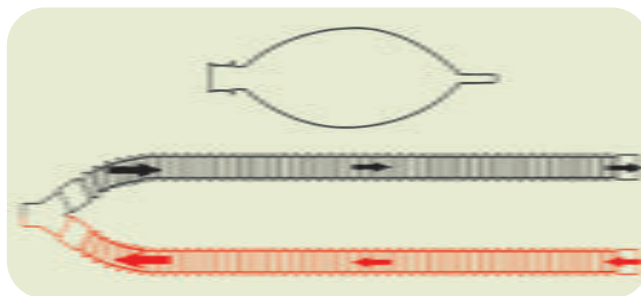
AAS USB PRODUCT INFORMATION

AASUSB USB Stick containing information on AAS Products

Darvall Heated Circle System Anaesthetic Accessories



AAS8347 12mm Heated Circle System



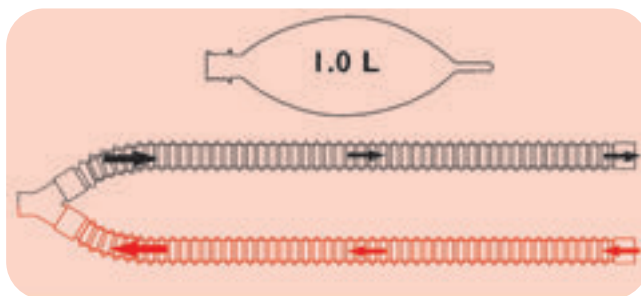
AAS8348 16mm Heated Circle System

AAS DARVALL HEATED CIRCLE SYSTEM & ACCESSORIES

AAS8347 Heated Circle System 12mm Cats & Small Dogs 2-20kg (12mm Tubing & 0.5L & 1L Rebreathing Bag only)

AAS8348 Heated Circle System 16mm Dogs 20-80kg (16mm Tubing & 0.5L & 1L Rebreathing Bag only)

Darvall Heated Mini Lack Anaesthetic Accessories



AAS8689 - Heated Mini Lack Circuit

AAS DARVALL HEATED MINI LACK CIRCUIT & ACCESSORIES

AAS8689 Heated Mini Lack Circuit 2-20kg (contains Tubing & Rebreathing Bag only - Manifold required)

Want more information on Patient Warming?
E-mail info@vetinst.com

Not sure about whether to make the investment in a Heated Anaesthetic Set?

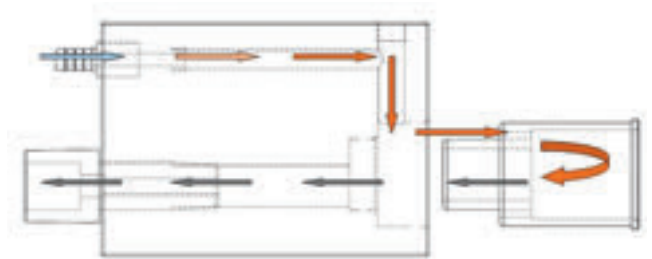
A Heated Anaesthetic Set is available for a free 2 week trial period.
For full details call out Vet Tech Team on 0345 130 9596
or e-mail info@vetinst.com



You will be impressed!

Darvall Heated ZDS Qube

The Darvall Qube is a zero dead space anaesthesia non-rebreathing mask system for exotics, available heated to take all the advantages of inspired gas warming down to the smallest of patients. The exotics mask kit includes small rodent/reptile mask, larger bird/rabbit mask and endotracheal tube connector. Patients can be induced using the sealed masks, reducing the environmental contamination involved in transferring patients from induction chambers. Inspired gas warming is then available throughout the anaesthetic, with the concomitant benefits for the patient.



Direction of flow in Qube showing fresh warm gas to patient



The AAS Darvall ZDS Starter Kit contains:

- 1 x Heated Controller Unit
- 1 x Heated ZDS Qube,
- 2 x Face Masks
- 1 x ET Adaptor,
- 1 x Fresh Gas Tube
- 1 x Exhalation Tube

AAS DARVALL ZDS QUBE & MASKS

AAS8556
AAS8457

Starter Kit for Heated ZDS Qube
Heated ZDS Qube with Mask Set 8407 Controller Unit required

AAS Darvall Warm Air System



The benefits of preventing hypothermia both during and after surgery are well documented, both in terms of improved patient care and more efficient use of resources.

Use of warm air blankets to pre-warm patients, heated anaesthetic circuits for all procedures plus blankets under anaesthetised animals during longer procedures, over 60 minutes, followed by post-op cage blanket use will help optimise patient recovery from anaesthesia. Spend a moment reading the informative article at the start of this section for more information.

AAS Darvall Cozy™ Warm Air Heater

The Darvall Cozy™ Warm Air Heater is easy and straightforward to use. Running quietly, it produces minimal noise pollution in theatres and recovery areas.

The Darvall Cozy™ Starter Kit contains:

- Darvall Cozy™ Warm Air Heater Unit
- Wheel Kit - 4 Push Fit Wheels
- Starter Pack of Blankets (10 Blankets in total)
- Kennel Door Adaptor

AAS DARVALL COZY™ WARM AIR HEATER

AAS9084 AAS Darvall Cozy™ Warm Air Heater Starter Kit



- Pre-Warming prevents heat loss post-induction
- Use Darvall Cozy™ Warm Air Heater
- Twist Connect kennel door connector
- Warm 2 small cages simultaneously with an optional connector
- One Twist to rapidly move between kennels
- Efficient: Pre-Warm for only 40 mins.
- Push-fit hose nozzle into Twist Lock connector
- Can half the time of recovery warming
- Innovative blanket designs for cages
- Safer warming with conscious animals
- Solving peri-anaesthetic hypothermia
- Safe hose-end temperature sensor
- Protective Hose-Cover
- Reliable nozzle-blanket connection
- Hose Clamp secures to surgery table
- Cozy™ is Lightweight & Compact
- Kennel Door Hangers built-in
- IV Pole Clamp rear mounted
- Filter 0.2um HEPA; replace/500 hrs.
- Elevated above floor dust & hair
- Mobile & Stable on 4 dual-wheels

AAS Darvall Warm Air Heater System Accessories



Darvall's Twist-Lock Kennel Door Connector: only 2 part, simple & fast to move from door to door



Heater Hose Clamp



Darvall's Kennel Door Adapter - Cwik



The KDA Kennel Door Adapter (Cwik):

- Connects Darvall Cozy Warm Air Heater to Darvall's Kennel Blankets
- Fits to most warm air heaters using Cozy KDA Heater Hose Adapter
- New Cozy Cwik™ locking system - no nuts or screws
- Twist-Connect system for easy installation
- Allows fast access to patients in kennels
- Rapidly moved between kennel doors
- Fits to most kennel door systems
- Safe warming for patients

The KDA Kennel Door Adapter (Cwik) Kit contains:

- 1 x Cozy Cwik KDA Adapter
- 2 x Cozy Cwik KDA Gaskets (1 spare)
- 1 x Cozy KDA Extension Hose 25cm
- 1 x Cozy KDA Universal Heater Hose Adapter
- 1 x Cozy Blanket x 8 Sample Pack

AAS DARVALL WARM AIR HEATER SYSTEM ACCESSORIES AND SPARES

- AAS9742** AAS Darvall Warm Air Heater Hose Clamp (new style)
- AAS9704** AAS Darvall Cozy™ Filter Replacement Kit
- AAS9707** AAS Darvall Cozy™ Heater Hose Cover (new style)
- AAS9702** AAS Darvall Cozy™ Heater Hose 1.5m With Temp. Sensor
- AAS7882** Darvall Kennel Door Connector - Twist-Lock
- AAS9842** Darvall KDA Kennel Door Adapter Kit - Cwik
- AAS1959** Darvall Two Kennel Y Adaptor (requires 2 x Kennel Door Connectors - not included)

AAS Darvall Cocoon Warm Air System Accessories



Although the AAS Darvall Cocoon Heater has now been superseded by the Darvall Cozy™ Heater we are still able to offer a range of accessories and services for the Cocoon heater.

AAS DARVALL COCOON WARM AIR SYSTEM ACCESSORIES

- AAS7882** Darvall Warm Air Kennel Door Connector
- AAS8100** Darvall Warm Air Heater Crocodile Clip Hose Holder
- AAS02347** Darvall Warm Air Heater Cocoon Hose Complete
- AAS1959** Darvall Two Cage Y Adaptor (requires 2 x Kennel Door Connectors - not included)

AAS DARVALL COCOON FILTER SERVICE

- AASFILTERCH** Filter Replacement including collect & return courier

Not sure about whether to make the investment in a Cozy™ Warm Air Heater?

A Cozy™ Heater is available for a free 2 week trial period, subject to purchase of blankets to use. Call us on 0345 130 9596 or e-mail info@vetinst.com to book your trial now.



You will be impressed!

AAS Darvall Warm Air Blankets - New range

Innovative Warm Air Blankets for surgery, dentistry, exotics & kennels. Use for pre-warming, during anaesthesia & in recovery.

What makes them different from the rest?

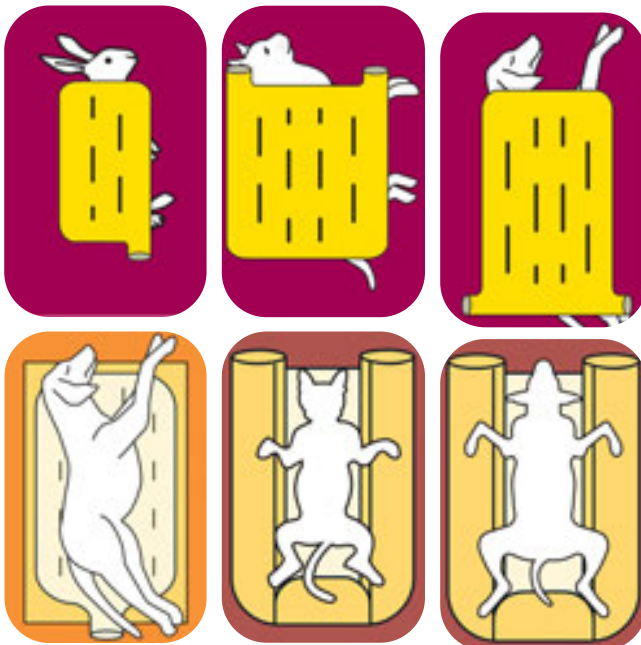
The Darvall series of warm air blankets are specifically designed for veterinary use. The unique blanket surface design is porous polyester which provides low uniformly distributed air flow, providing efficient warming, reducing the 'wind chill' factor and minimising hair contamination. Traditional warm air blankets have a punched out surface allowing a higher rate of air flow out of the blanket. OK for humans, as we are on a very different scale, but much less suitable for veterinary patients.

The blankets are colour coded, the white side always is in contact with the patient.

The new blanket range will have upgraded design features.

A Starter pack will also be available containing 10 blankets from the range featured below.

Starter Pack of Darvall Warm Air Blankets

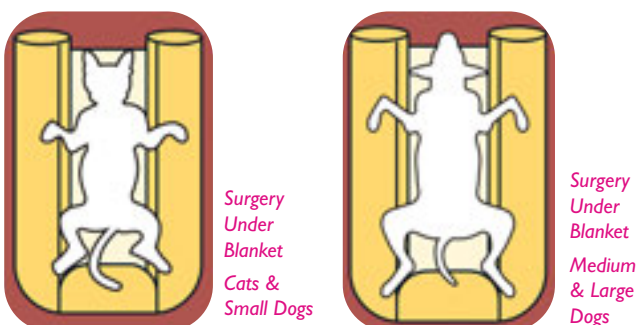


Not sure what you will use? Get a starter pack to try all sizes.

Pack includes:

- 2 x Surgery Under Blankets - Cats & Small Dogs
- 2 x Surgery Under Blankets - Medium & Large Dogs
- 1 x Dentistry Under/ Surgery Over Blanket - Medium & Large Dogs
- 1 x Surgery/ Cage Blanket - Exotics & Small Animal
- 2 x Single Kennel Blankets - Cats & Small Dogs
- 2 x Double Kennel Blankets - Cats & Small Dogs

Surgery Under Blanket



*Surgery Under Blanket
Cats & Small Dogs*

*Surgery Under Blanket
Medium & Large Dogs*

Dentistry Under Blanket/ Surgery Over Blanket



*Dentistry Under Blanket
Surgery Over Blanket*

Surgery/ Cage Blanket for Exotics & Small Animals



*Surgery or Cage Blanket
Exotics & Small Animals*

Single & Double Kennel Blankets



*Single Kennel Blanket
Cats & Small Dogs*



*Double Kennel Blanket
Medium & Large Dogs*

AAS Darvall Warm Air System Blankets

AAS DARVALL WARM AIR SYSTEM BLANKETS

- AAS8460** Darvall Warm Air Sample Assorted Blankets Pack of 10
- AAS02979** Darvall Warm Air Surgery Under Blanket for Cats & Small Dogs - Pack of 10
- AAS02979S** Darvall Warm Air Surgery Under Blanket for Cats & Small Dogs - Single
- AAS02275** Darvall Warm Air Surgery Under Blanket for Medium & Large Dogs - Pack of 10
- AAS02275S** Darvall Warm Air Surgery Under Blanket for Medium & Large Dogs - Single
- AAS05310** Darvall Warm Air Dentistry Under Blanket / Surgery Over Blanket for Medium & Large Dogs - Pack of 10
- AAS05310S** Darvall Warm Air Dentistry Under Blanket / Surgery Over Blanket for Medium & Large Dogs - Single
- AAS02827** Darvall Warm Air Surgery/ Cage Blanket for Exotics & Small Animals - Pack of 10
- AAS02827S** Darvall Warm Air Surgery/ Cage Blanket for Exotics & Small Animals - Single
- AAS05360** Darvall Warm Air Single Kennel Blanket for Cats & Small Dogs - Pack of 10
- AAS05360S** Darvall Warm Air Single Kennel Blanket for Cats & Small Dogs - Single
- AAS05359** Darvall Warm Air Double Kennel Blanket for Medium & Large Dogs - Pack of 10
- AAS05359S** Darvall Warm Air Double Kennel Blanket for Medium & Large Dogs - Single



Instrument Cleaning Agents

Rapidex Cleaner



An effective degreaser and general instrument cleaner. Some users dislike the loose powder format. The new soluble sachets are simply dropped into the ultrasonic bath. No dry powder is released.

- Ideal for Ultrasonic Cleaners
- Also effective as a pre-soak for long standing or difficult residues
- Tested by the Royal Institute of Public Health

RAPIDEX CLEANER

RAPIDEX Rapidex Soluble Sachets (Box of 50)
RAPIDEXBULK Rapidex Bulk Powder 2.25kg

Rapizyme



Three new enzymes. Easy to use measured bottle. 2ml per litre dilution. Removes all organic material. Ideal for endoscopes and low foam for ultrasonics. Completely rinsable and biodegradable. Tested by The Royal Institute of Public Health

RAPIZYME

RAPIZYMEI Rapizyme 1 Litre

Micro 90 Concentrate



Liquid general purpose Instrument Cleaner (dilute 1:100) for Ultrasonics.

MICRO 90 CONCENTRATE

I00300 Micro 90 1 Litre Dilute 1:100

Perasafe



Perasafe is a rapid, instrument compatible, user and environmentally friendly chemical sterilant. Supplied as a safe, space-saving powder Perasafe is activated by simply dissolving in luke-warm tap water. Providing rapid sterilisation and re-use of endoscopy instruments, Perasafe gives confidence to users and patients alike. A unique aldehyde-free formulation gives efficacy without harm to instruments, health risks to nursing staff and avoids the need for special fume extraction or waste disposal systems.

Perasafe is a pale blue/ white powder which, when in solution, sterilises within 10 minutes. Suitable for all surgical instruments and fibrescopes. Formulated not to damage surgical instruments. Prepared solution lasts 24 hours. 81g pack makes 5 litres. May be subdivided to make less.

PERASAFE

I00100 Perasafe Cold Sterilant 24 x 81g (5 litre size)
I00101 Perasafe Cold Sterilant 6 x 81g (5 litre size)

Cleaning Brushes

Instrument Cleaning Brushes and Pipecleaners



Stainless Steel Instruments are protected from corrosion by a very thin layer of chromium oxide. This should not be damaged by regular wire brushes.

Brushes available with Nylon and Stainless Bristles.

Orthopaedic Cleaning Brush is Double Ended with superfine soft Stainless Steel Bristles.

General instrumentation is the same with Nylon Bristles. One end has 3 rows of Bristles, the other has a single row for delicate work.

Pipe Cleaners are 1/8" diameter and 12" long. Absorbant for cleaning and drying. Supplied in packs of 100.

INSTRUMENT CLEANING BRUSH

- CB1** Cleaning Brush Nylon for Gross Contamination
- CB2** Cleaning Brush Stainless for Large Burs & Reamers
- CB3** Cleaning Brush Nylon for General Instrumentation
- CB4** Cleaning Brush Stainless Steel for Orthopaedic
- CBPIPE** Pipe cleaners 1/8" 12" Long (Pack of 100)

Protective Autoclavable Tips

Protective Autoclavable Tips



For Steinman, ESF pins and delicate or sharp instruments. Protect both tips and staff.

PROTECTIVE AUTOCLAVABLE TIPS

- I0001 I-W** Protective Tip White up to 1.6 - 2.0mm Diameter Pack 20
- I0001 I-BL** Protective Tip Blue 2.5 - 3mm Diameter Pack 20
- I0001 I-G** Protective Tip Green up to 3.2 - 4.0mm Diameter Pack 20
- I0001 I-R** Protective Tip Red up to 4.8mm Diameter Pack 20
- I0001 I-Y** Protective Tip Yellow up to 6.0 - 6.5mm Diameter Pack 20
- I0001 I-O** Protective Tip Flat Orange up to 10mm Wide Pack 20
- I0001 I-BR** Protective Tip Flat Brown up to 16mm Diameter Pack 20
- I0001 I-BLK** Protective Tip Flat Black up to 25mm Diameter Pack 20
- I00020** Protective Tips Silicone Multi Pack One pack of each colour 160 (8 x 20)

Instrument Marking

Colour Coded Identity Rings



Strong tear-resistant Silicone Instrument Coding Rings.

COLOUR CODED IDENTITY RINGS

- 300064** Colour Coded Identity Rings - Red x 50
- 300065** Colour Coded Identity Rings - Blue x 50
- 300066** Colour Coded Identity Rings - Green x 50
- 300067** Colour Coded Identity Rings - Black x 50
- 300068** Colour Coded Identity Rings - White x 50

Instrument Marking Tape



Allows rogue instruments to be returned to their kits. Also useful when going on practical courses.

Available as a Kit or in individual rolls.

INSTRUMENT MARKING TAPE

- I00001** Instrument Marking Tape (Box 8 colours) (120cm)
- I00001Y** Instrument Marking Tape Single Yellow (300cm)
- I00001R** Instrument Marking Tape Single Red (300cm)
- I00001BR** Instrument Marking Tape Single Brown (300cm)
- I00001OR** Instrument Marking Tape Single Orange (300cm)
- I00001BLU** Instrument Marking Tape Single Blue (300cm)
- I00001G** Instrument Marking Tape Single Green (300cm)
- I00001W** Instrument Marking Tape Single White (300cm)
- I00001BLK** Instrument Marking Tape Single Black (300cm)

Instrument Lubrication

Cleaning and Lubricating Spray



Convenient sprays for cleaning and lubricating handpieces.
 Applicator nozzle required for use with Pana Spray.

CLEANING AND LUBRICATING SPRAY

- Y900-630** Pana Spray Cleaning and Lubricating Handpiece Spray
- Z019090** Applicator nozzle for Low Speed Motor Attachments
- Z020201** Applicator nozzle for High Speed Handpiece
- BAOIL** B.A. Ultimate Oil for Cleaning and Lubricating Handpieces

Instrument Oil - (Autoclavable)



Regular lubrication will keep your instruments working longer. Failure to lubricate will result in stiff joints and ultimately breakages. Low boiling point oils are quickly lost during the autoclaving process.

INSTRUMENT OIL – AUTOCLAVABLE

- I00003** Instrument Lubricating Oil

Sharpening Accessories

IM3 White Stone Slip



To work effectively both scalers and elevators need to be sharp. Regular sharpening will keep your instruments working correctly.



The Slip Stone has both flat and rounded surfaces to sharpen elevators and curettes. Use baby oil as lubricant.

IM3 WHITE SLIP STONE

- 012150** IM3 White Slip Stone for Curettes and Elevators
- 012146** Luxator Cylindrical Sharpening Stone

Diamond Card - Fine



This credit card sized, Diamond Covered Plate is ideal for sharpening Dental Elevators and Luxators. To work efficiently these instruments must be sharp. The diamond is virtually indestructible. An additional advantage is that the lubricant used is water rather than the oil used with sharpening stones.

DIAMOND CARD - FINE

- 012144** Flat Diamond Sharpening Card (Fine)

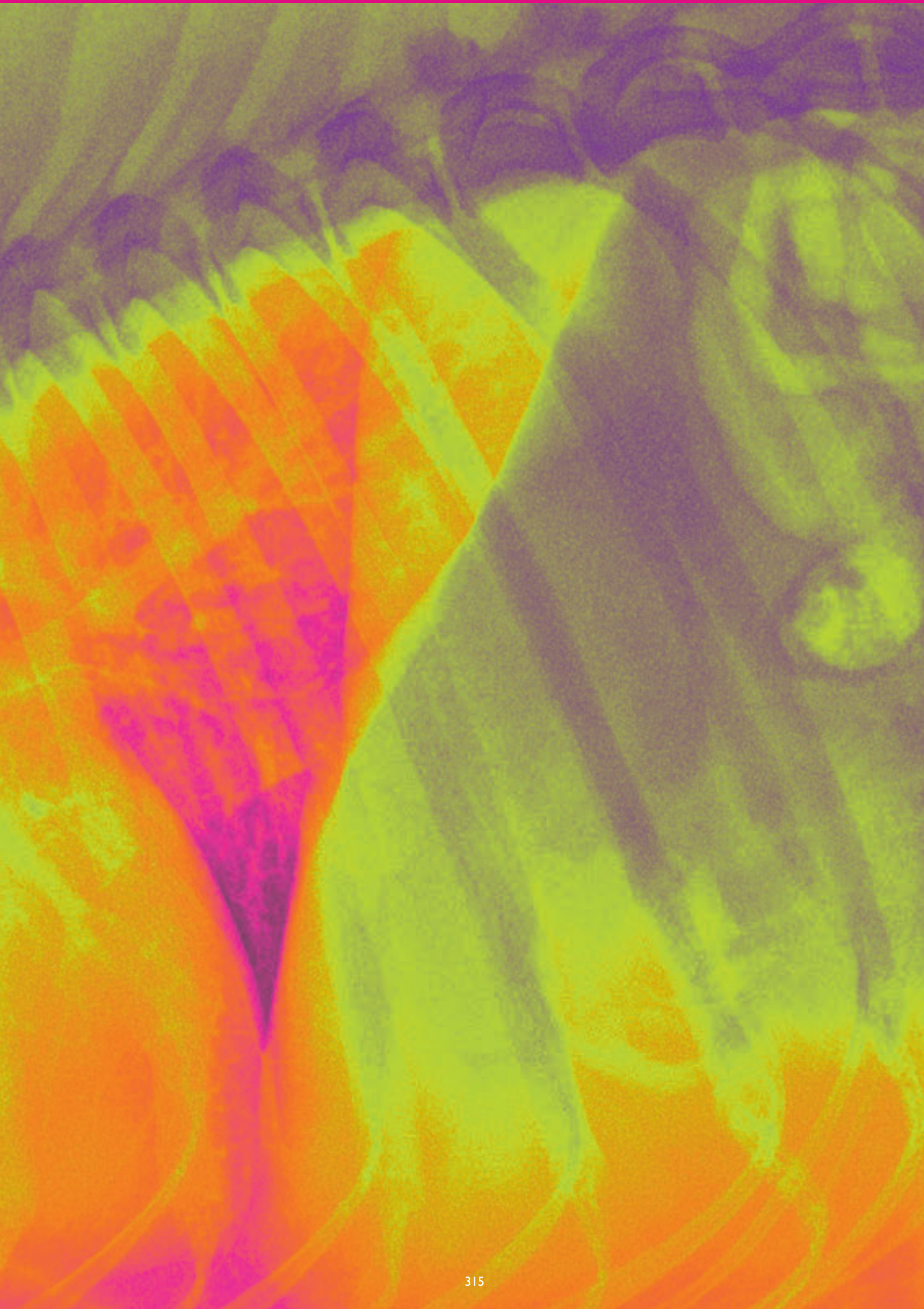
Diamond Cone



Subgingival Curettes must be kept sharp to work efficiently. They should be checked and sharpened at least weekly. The Diamond Cone is indestructible compared with stones which break very easily and uses water rather than oil as a lubricant.

DIAMOND CONE

- 012148** Diamond Cone 205mm



Enema Pumps

Higginsons Enema Pump



The original Higginsons Enema Pump.

HIGGINSONS ENEMA PUMP

G1894 Higginsons Enema Pump

Suction Units

HospiVac 350



The HospiVac 350 has a greater maximum vacuum (-0.9Bar) greater flow rate (60 litres/ min) and a greater capacity (2 x 2 litre bottles) than our standard Suction Unit. It is suitable for hospital situations where greater volumes of fluid might expect to be aspirated. The double bottle facility further increases capacity. Size 600 x 460 x 420mm.

A feature found on the HospiVac 350 which although desirable is not found on base level suction units is the foot control. Without this feature the unit is essentially on or off all of the time.

HOSPIVAC 350

- 185H350 HospiVac 350 Complete with Foot Control *
- 185H210351 Spare Bottle
- 185H210353 Spare Bottle with Lid
- 185HSP033 Spare Tubes
- 185HSP0121 Spare Filters
- 185HSP0032 Spare Tubes and Filters

* Carriage is extra for all items marked.

Askir Suction Machine



This simple Suction Unit is sensibly priced to make it suitable for general practice as well as more specialised centres.

The Suction Tube will fit all Standard Tips.

The Bottle capacity is 1 litre which is adequate for virtually all small animal procedures.

The in-line filtration system minimises biohazards.

Most veterinary dentists now regard suction as being essential.

Suction is controllable and there is a vacuum indicator.

CE marked for peace of mind and quality.

The Suction Machine is ready for the attachment of tubes and tips.

ASKIR SUCTION DEVICE

- 185000 ASKIR 30 Suction Device
- 185003 Filter Only
- 185004 Spare Suction Bottle & Lid
- 185005 Spare Lid from Suction Bottle

Suction Tips

We stock the four most useful styles of tip. Each Tip comes complete with a length of Autoclavable Silicone Tube to connect to the suction unit.

Yankauer



General purpose suction tip for removal of large volumes e.g. from abdomen.

YANKAUER SUCTION TIP

- 1854327 Yankauer Suction Tip

Poole



As Yankauer but more holes for greater volume uptake. With perforated outer sheath removed the Poole functions as a small bore straight suction tip.

POOLE SUCTION TIP

- 1854330 Poole Suction Tip

Adson 4mm



Focal suction tip removes fluid from specific locations e.g.in spinal procedures.Very controllable at the handpiece by single finger over air bypass hole.

ADSON SUCTION TIP

I85212I Adson Suction Tip 4.0mm

Frazier 2.6mm



As the Adson but finer still.

FRAZIER SUCTION TIP

I854328 Frazier Suction Tip 2.6mm

Disposable Suction Tips and Autoclavable Tip Holder



I85DISPH

I85DISPWWide

The Autoclavable Suction Tip Holder fits onto Standard Silicone Suction Tubing. There are a wide range of tips which fit the standard 11mm tapered opening. We offer a choice of two, narrow and wide. The autoclaveable nature means any standard suction unit may be used for both dentistry and sterile surgery.



I85DISP Narrow

DISPOSABLE SUCTION TIP

I85DISP Disposable Tips Narrow Mouth (Pack of 3)
I85DISPW Disposable Tips Wide Mouth (Pack of 100)
I85DISPH Disp Tip Handpiece (Autoclavable) to fit Standard Suction Tubing

Suction Tubing

SUCTION TUBING

I85001 Autoclavable Suction Tubing per Metre

Suction Tubing Connector



SUCTION TUBING CONNECTOR

I85006 Suction Tubing Connector

Cautery Units

Portable Cordless Cautery Kit



This handy Set comprises a Handpiece using two AA batteries (included) and four interchangeable and replaceable Cautery Tips

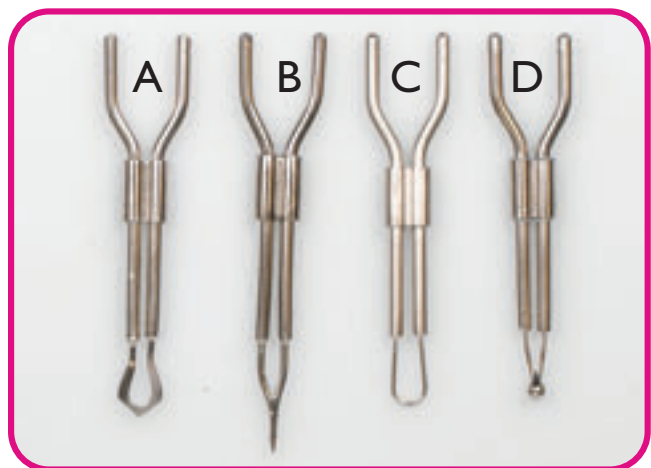
- 1/2"(12mm) Fine general purpose electrode for haemostasis
- 1/2"(12mm) Loop electrode for small skin tumours
- 4"(130mm) Fine electrode for deep areas
- 4"(130mm) Loop electrode

Tip temperature 2200°F/1200°C

PORTABLE CORDLESS CAUTERY KIT

- 02313** Portable Cordless Cautery Kit
- 02313W** Replacement Cautery Tip 1/2" Fine
- 02313X** Replacement Cautery Tip 1/2" Loop
- 02313Y** Replacement Cautery Tip 4" Fine
- 02313Z** Replacement Cautery Tip 4" Loop

Thermocautery Unit Tips



THERMOCAUTERY UNIT TIPS

- SP36** Thermocautery Tip A Knife
- SP34** Thermocautery Tip B Pin
- SP35** Thermocautery Tip C Loop
- SP37** Thermocautery Tip D Ball

Positioning Devices

Redmark Cradles



REDMARK CRADLES

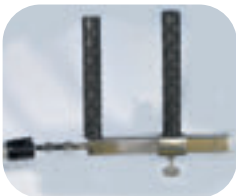
- 026022** Redmark Cradles - Set of 3 (S, M, L)
- 026022L** Redmark Cradle - Large over 32kg
- 026022M** Redmark Cradle - Medium over 13kg - 32kg
- 026022S** Redmark Cradle - Small up to 13kg

Multi Arm With Limb Brace Attachment In Use



Safety need not be compromised to obtain accurately positioned radiographs. The Multi Arm can replace the human hand in the positioning and holding of limbs for both radiography, surgery and arthroscopy. Also useful for hands free positioning of bronchoscopes & gastroscopes.

- Use cohesive bandage to attach limb
- Three joints allow positioning at any angle.
- A single knob locks all three joints rigid.
- Clamp fixes device to virtually any operating or X-ray table
- Double limb support (for hip radiographs) available as an option.
- As described by Kurt Schulz in Veterinary Surgery



020065



026000



020062

MULTI ARM

- 026000** Multi Arm - 'Improved' Version includes Single Limb Support
- 020062** Double Limb Support
- 020065** Limb Brace Attachment for Multi Arm
- MULTIARMSET** Multi Arm Set (as above)

Table Top Stand for Hanging Limb Preparation



Suspension of a limb can provide significant benefits in both arthroscopy and other orthopaedic procedures. The shoulder joint is distracted and 360 degree access becomes available. Height 1.2m (48") Our limb suspension stand was re-designed to give greater table-top stability. A cleat for tying off limb suspension ropes has been added and the shaft can be dismantled for storage.

TABLETOP STAND FOR HANGING LIMB PREPARATION

- R463** Tabletop Stand for Hanging Limb Preparation

Vac Pac Vacuum Positioning Device



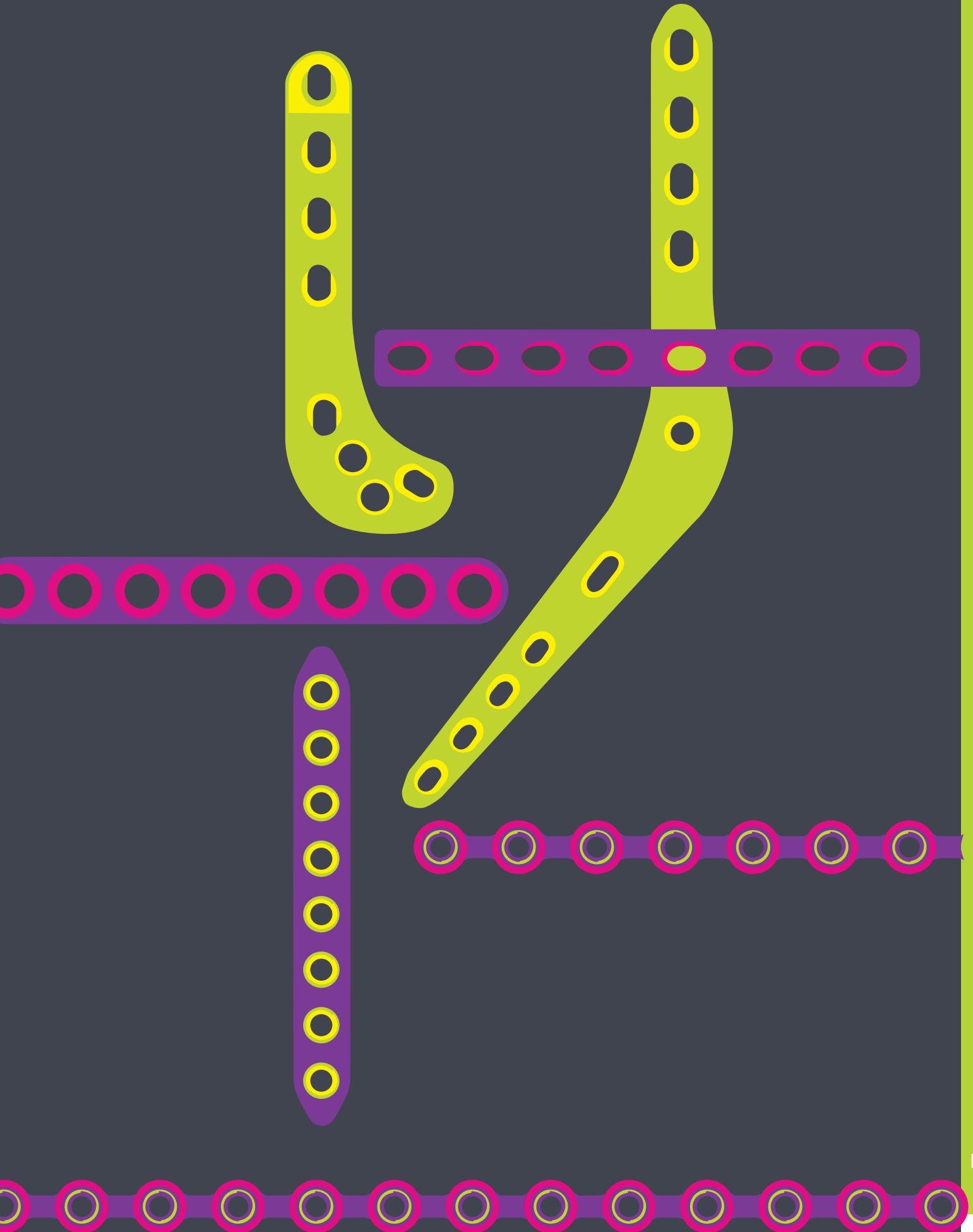
Image courtesy of Pat Ridge

Simply mould the bead filled bag around or under the patient and hook up to any vacuum source, as the air is removed the bag solidifies in the set position. Especially useful for arthroscopy or any surgery requiring secure accurate positioning. The Vac Pac is:

- Re-useable • Repairable
- Radiolucent • Warm

VAC PAC

- VP23** Vac Pac Size 23 45 x 50cm
- VP30** Vac Pac Size 30 72 x 90cm
- VP31** Vac Pac Size 31 98 x 90cm
- VP32** Vac Pac Size 32 118 x 90cm



VETERINARY INSTRUMENTATION

IMPLANT TEMPLATES

The following pages show the profiles of our more popular plates. Where possible, these have been presented using their most useful projections and orientations. Despite making every effort to ensuring accuracy, we reserve the right to amend technical specification as part of a process of continued development.

Vi stocks a large number of implants that do not appear on these pages, such as pins, wire, screws, new implants developed over the course of the year as well as low volume or custom designs. Please contact the Vet Tech Team at info@vetist.com should you fail to find the implant necessary for your clinical application and we can provide you with details of additional implants on a case-by-case basis. Provision of patient details as well as radiographs with a visible scale is most useful in enabling us to provide you with the best quality technical support.

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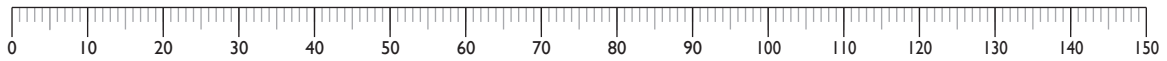


Plate details see pages 54, 55, 62, 64 & 76

1.5mm Compression Plates

- C151674
- C151465
- C151256
- C151152
- C151047
- C150943
- C150838
- C150734
- C150629
- C150525
- C150420

2.0mm Mini Plates

- MP20317
- MP20423
- MP20529
- MP20635
- MP20741

2.0mm Compression

- CP201892
- CP201682
- CP201472
- CP201262
- CP201052
- CP20842
- CP20737
- CP20632
- CP20527
- CP20422

2.0mm Round Hole Plates

- PR200843
- PR200840
- PR200738
- PR200735
- PR200633
- PR200630
- PR200528
- PR200525
- PR200423
- PR200420
- PR200213

2.0mm Biological Healing Plates

- BHP2008080
- BHP2008075
- BHP2008070
- BHP2008065
- BHP2007060

2.0mm ASYM® Plates

- ASYM20030437
- ASYM20030542
- ASYM20030647
- ASYM20030752
- ASYM20040652
- ASYM20030857
- ASYM20040757
- ASYM20030962
- ASYM20040862
- ASYM20031067
- ASYM20040967
- ASYM20031172
- ASYM20041072

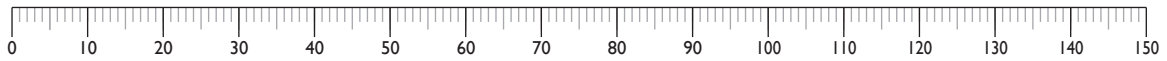
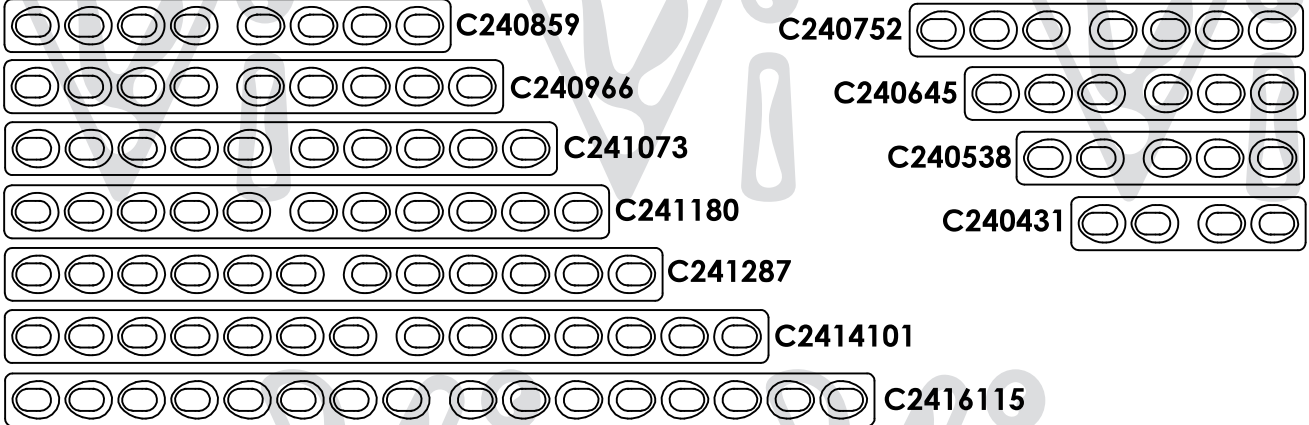
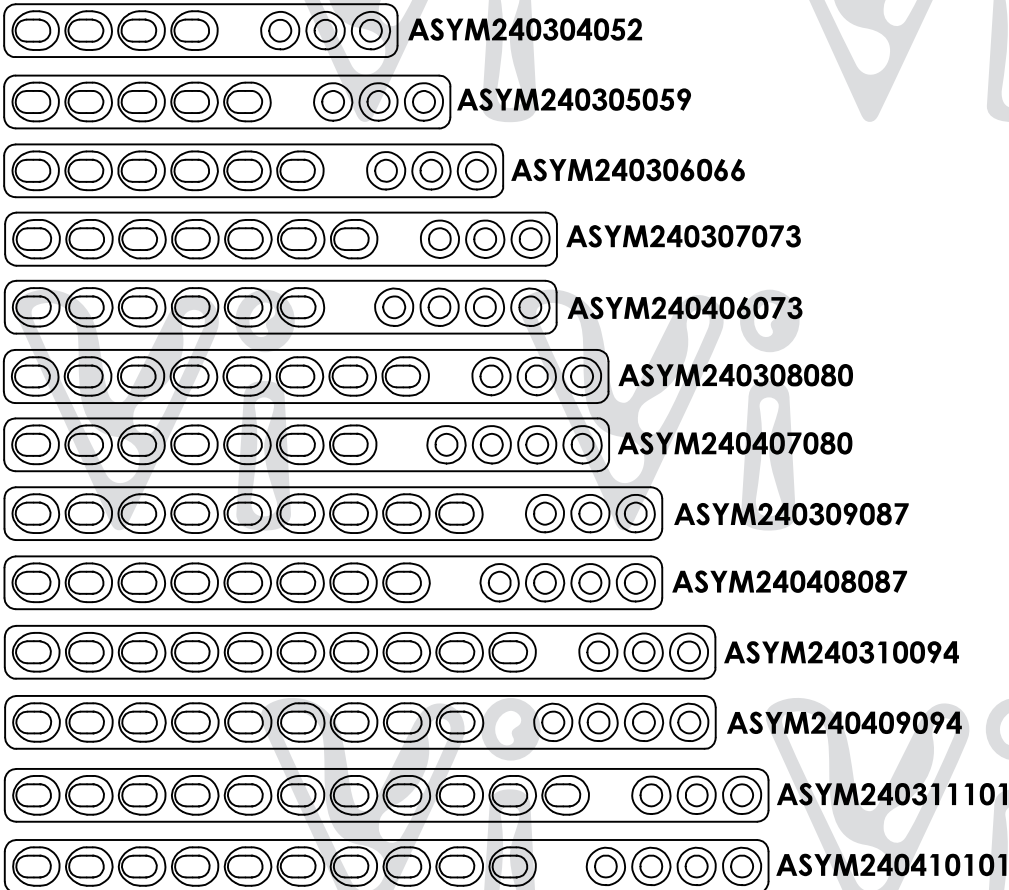


Plate details see pages 56, 57 & 62

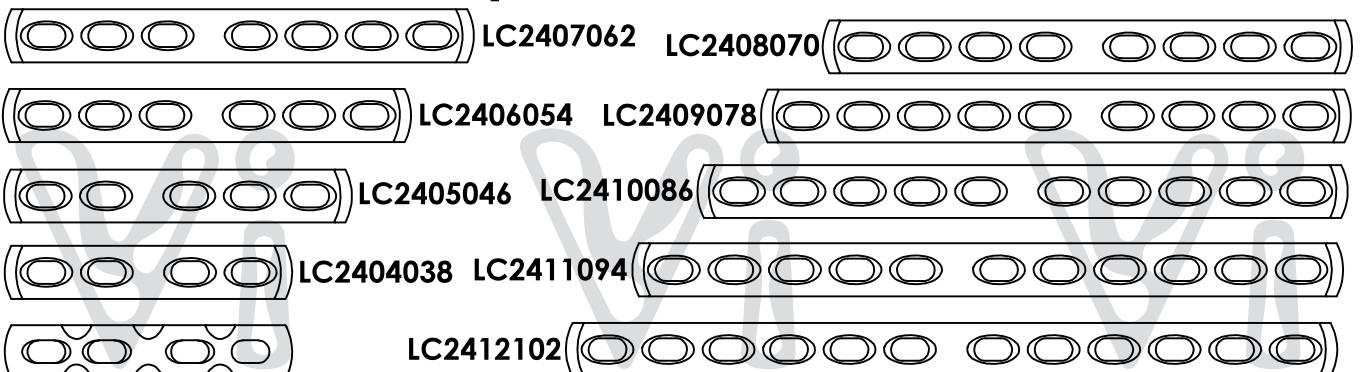
2.4mm Compression Plates



2.4mm ASYM[®] Plates



2.4mm Limited Contact Compression Plates



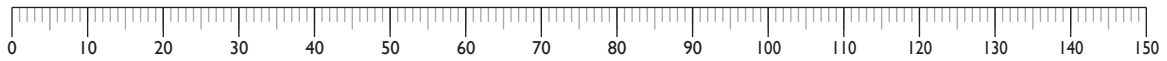
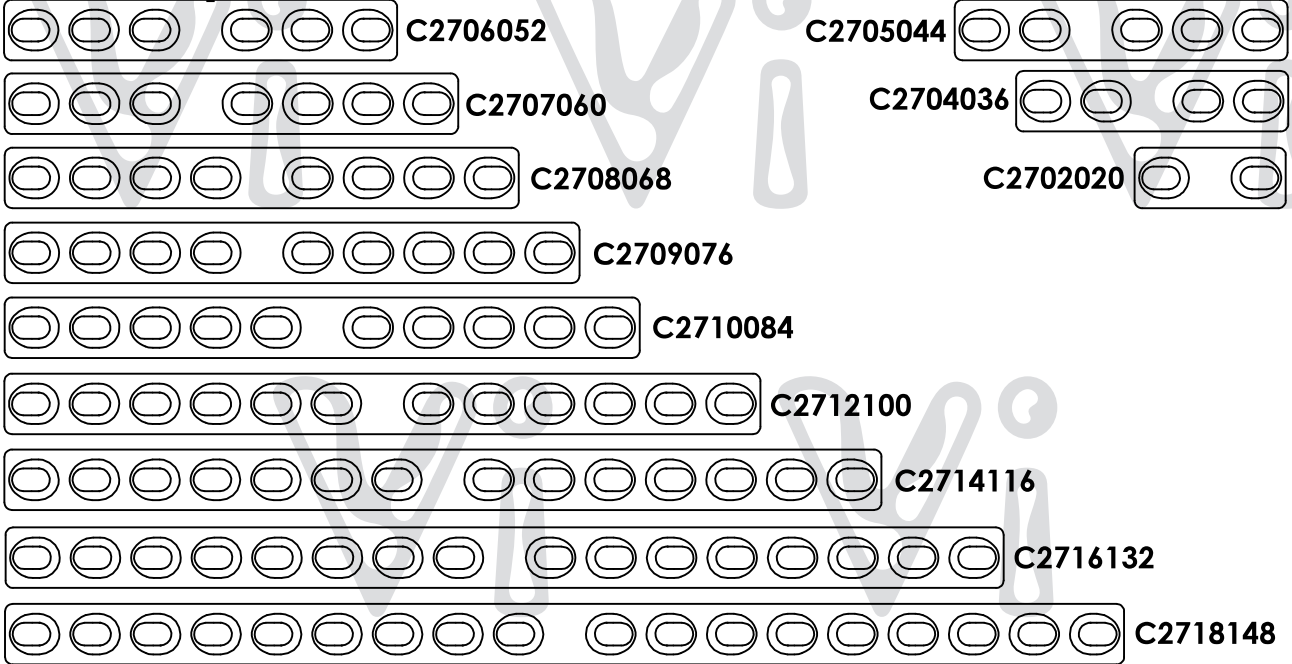


Plate details see pages 58 & 62

2.7mm Compression Plates



2.7mm ASYM[®] Plates

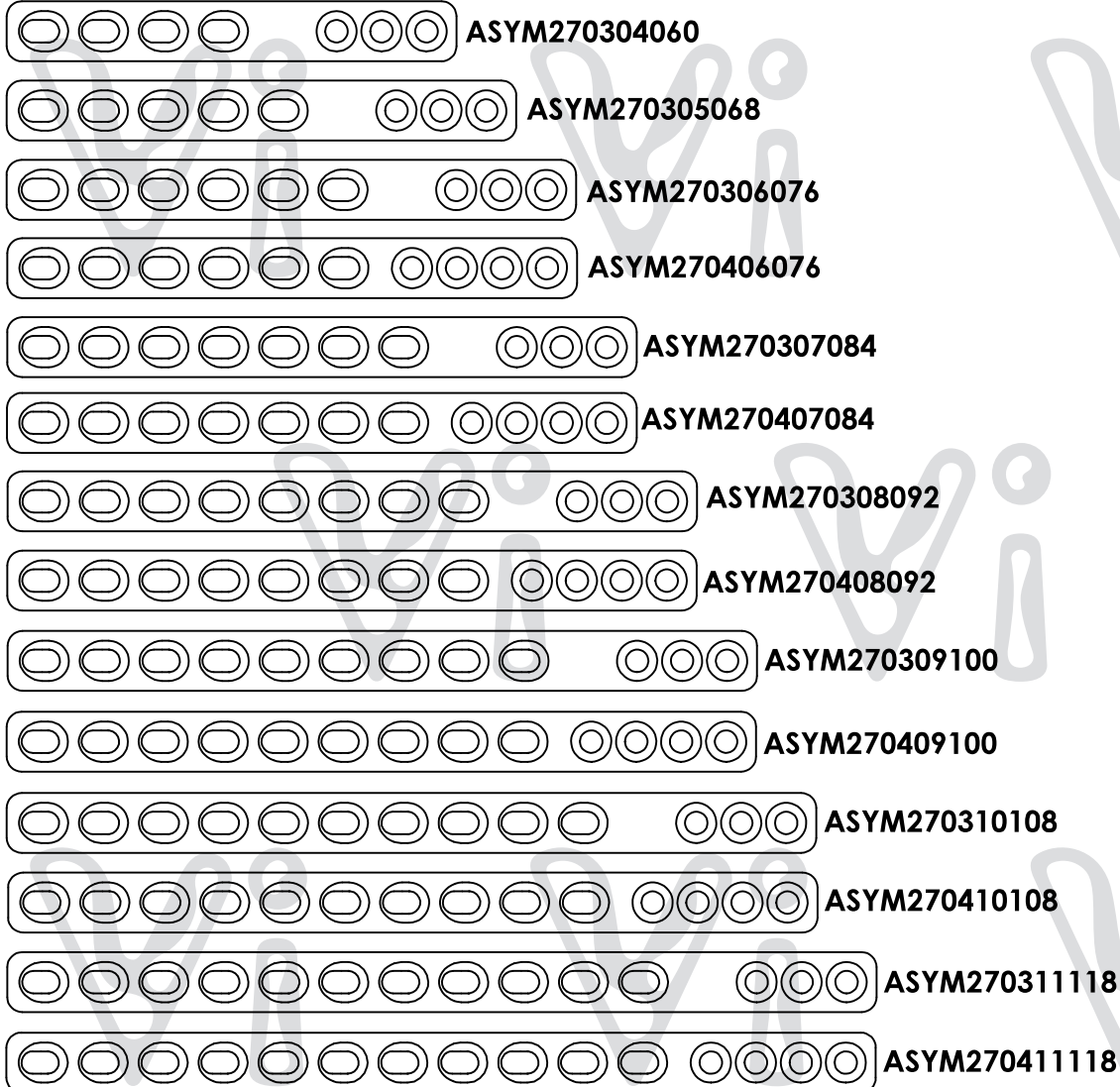




Plate details see pages 64 & 76



PR270851



PR270215



PR270848



PR270424



PR270745



PR270427



PR270742



PR270530



PR270639



PR270533



PR270636

2.7mm Heavy Duty Round Hole Plates



HPR270962

HPR271062



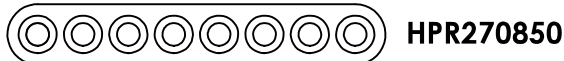
HPR270956

HPR271068



HPR270856

HPR271168



HPR270850

HPR271174



HPR270750

HPR271274

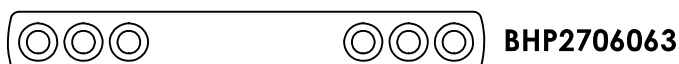


HPR270744

HPR271280



2.7mm Biological Healing Plates



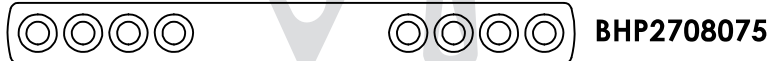
BHP2706063



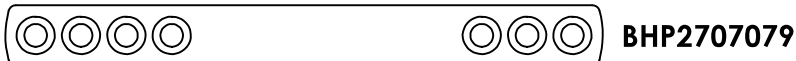
BHP2707067



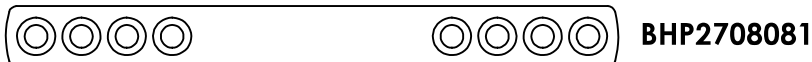
BHP2707073



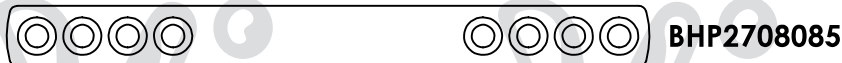
BHP2708075



BHP2707079



BHP2708081



BHP2708085



Plate details see pages 58 & 59

2.7mm Limited Contact Compression Plates

C3520242

C3518218

C3516194

C3514170

C3512146

C3510122

C3509111

C3508098

C3507086

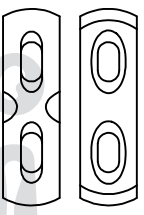
C3506074

C3505062

C3504050

C3503038

C3502026



Reverse Detail

LC2702026



LC2704044



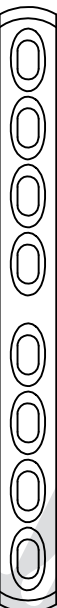
LC2705053



LC2706062



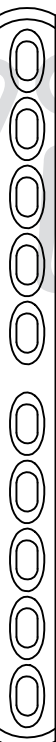
LC2707071



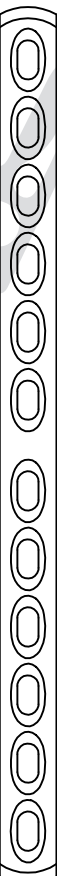
LC2708080



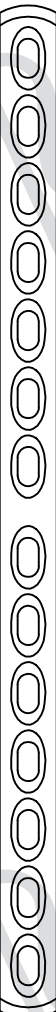
LC2709089



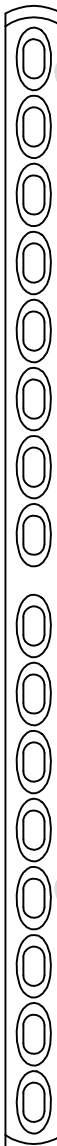
LC2710098



LC2712116



LC2712134



LC2716152

3.5mm Compression Plates

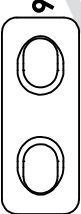
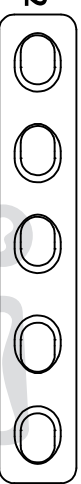
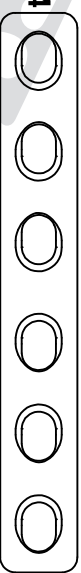
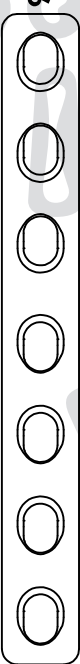
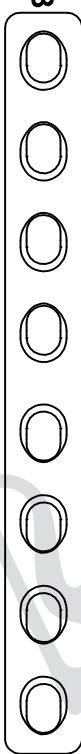
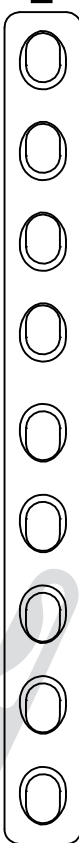
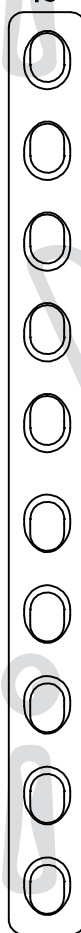
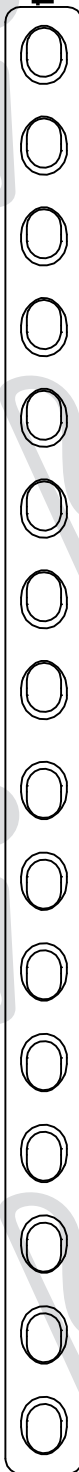
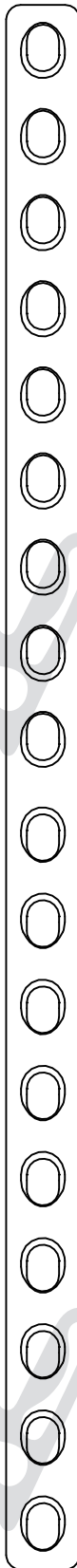
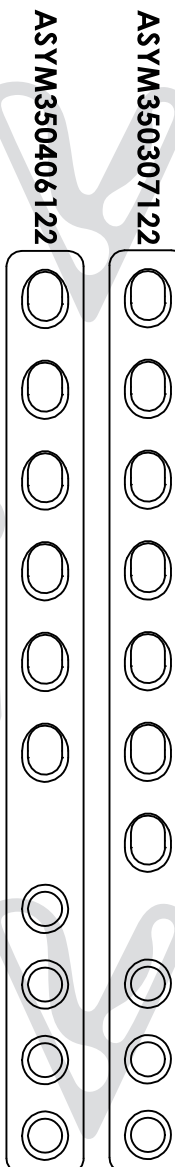
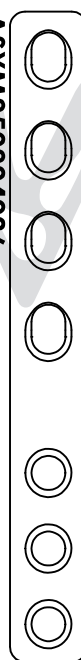
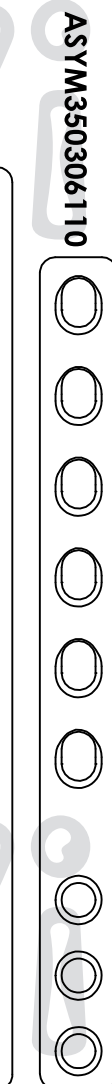
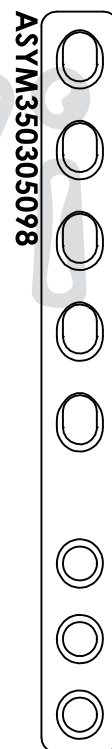
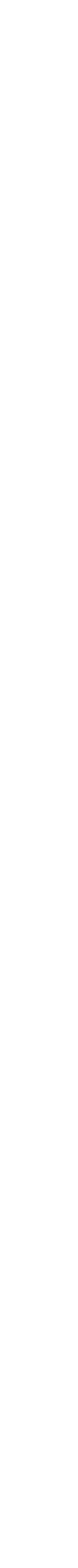
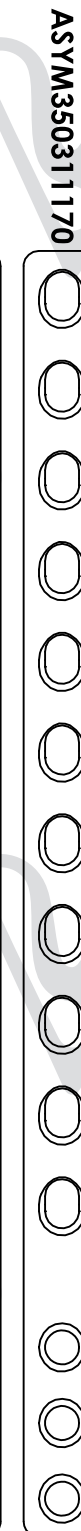
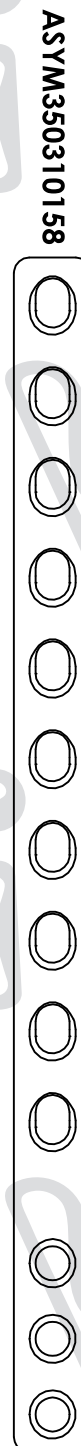
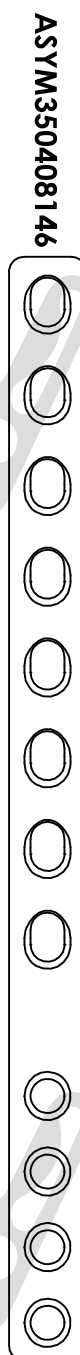
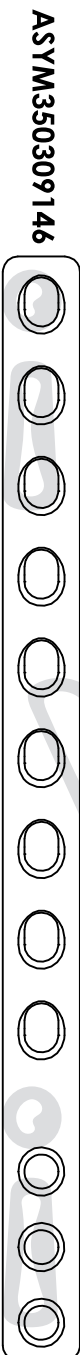




Plate details see pages 59 & 63



3.5mm ASYM® Plates



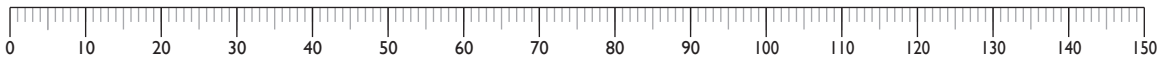
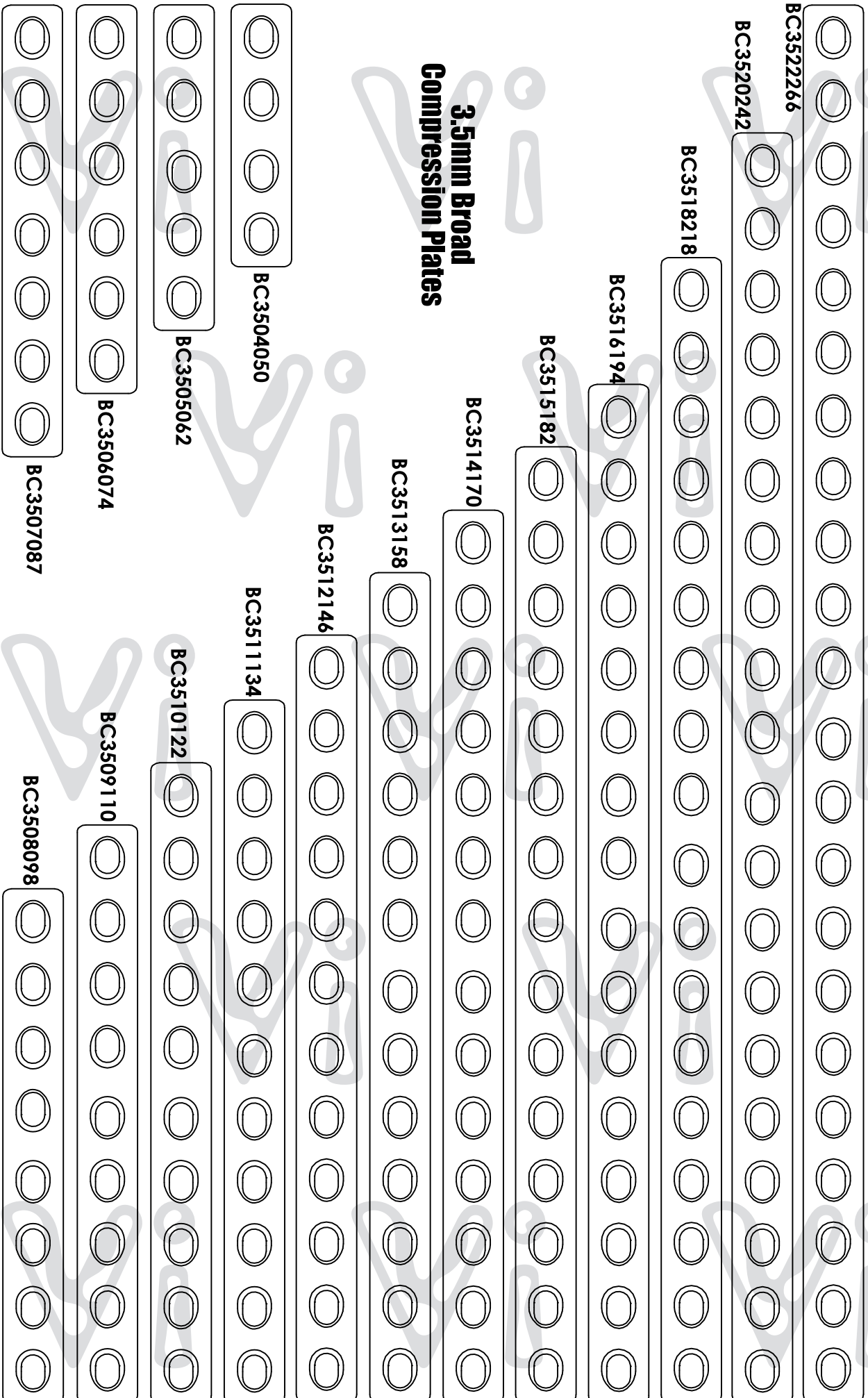


Plate details see page 60

3.5mm Broad Compression Plates



PLEASE NOTE THAT PLATE PROFILES ARE ACTUAL SIZE YOU WILL NEED TO COMPENSATE FOR X-RAY MAGNIFICATION • PROFILES FOR GUIDANCE ONLY PLATES MAY BE AMENDED AT ANY TIME

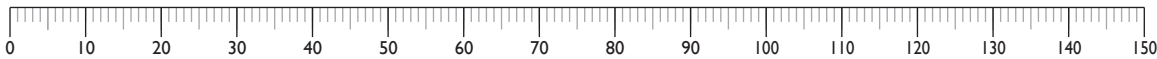
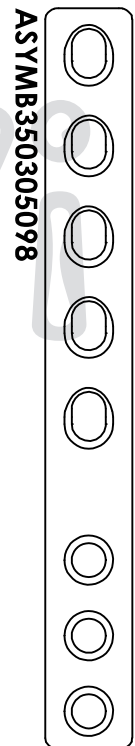
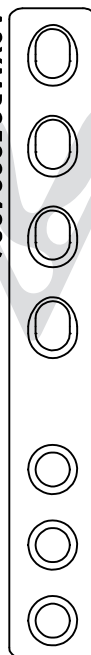


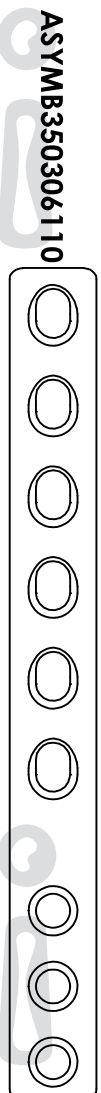
Plate details see pages 60 & 63



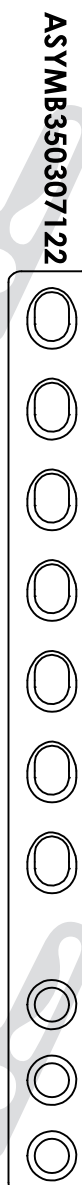
ASYMB350305098



ASYMB350304086



ASYMB350306110



ASYMB350307122



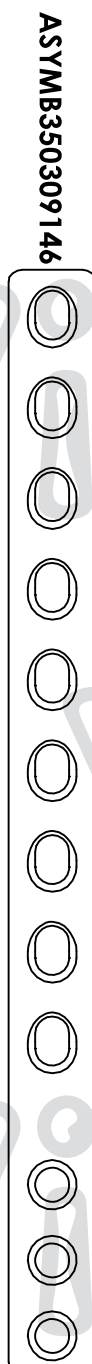
ASYMB350406122



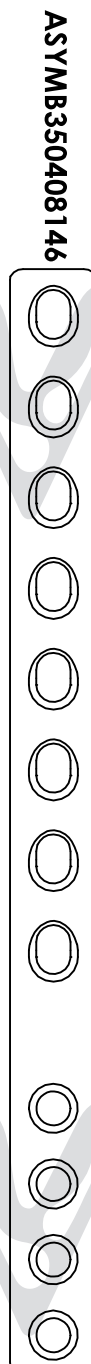
ASYMB350308134



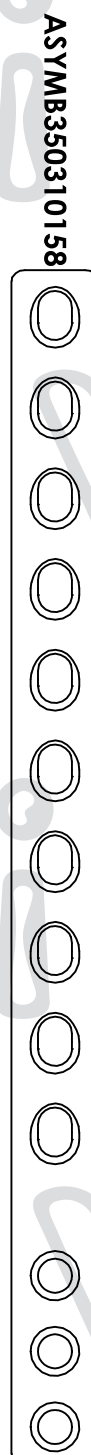
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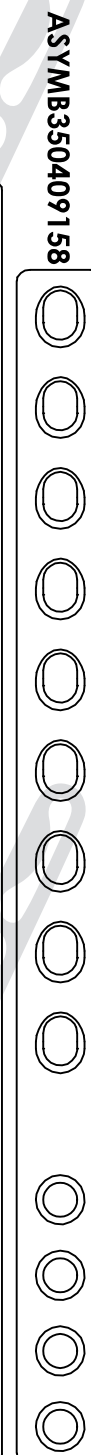
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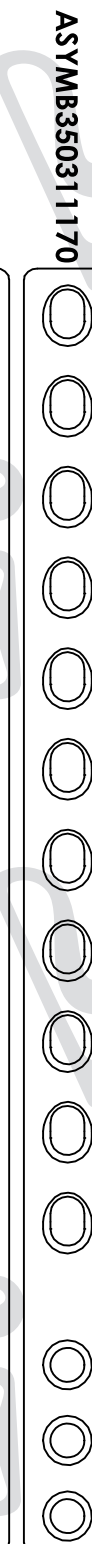
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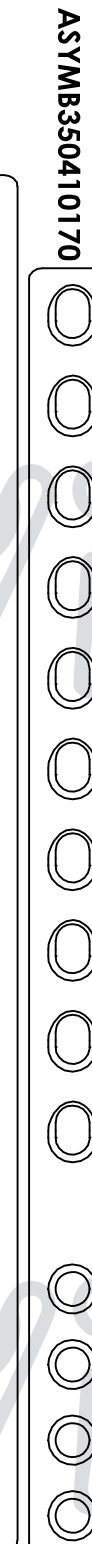
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ASYMB350311170



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ASYMB350312182



ASYMB350411182

3.5mm Broad ASYM® Plates

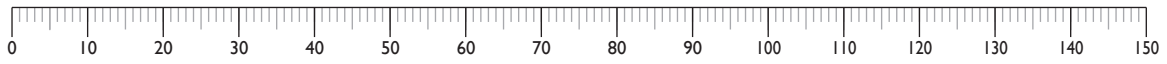
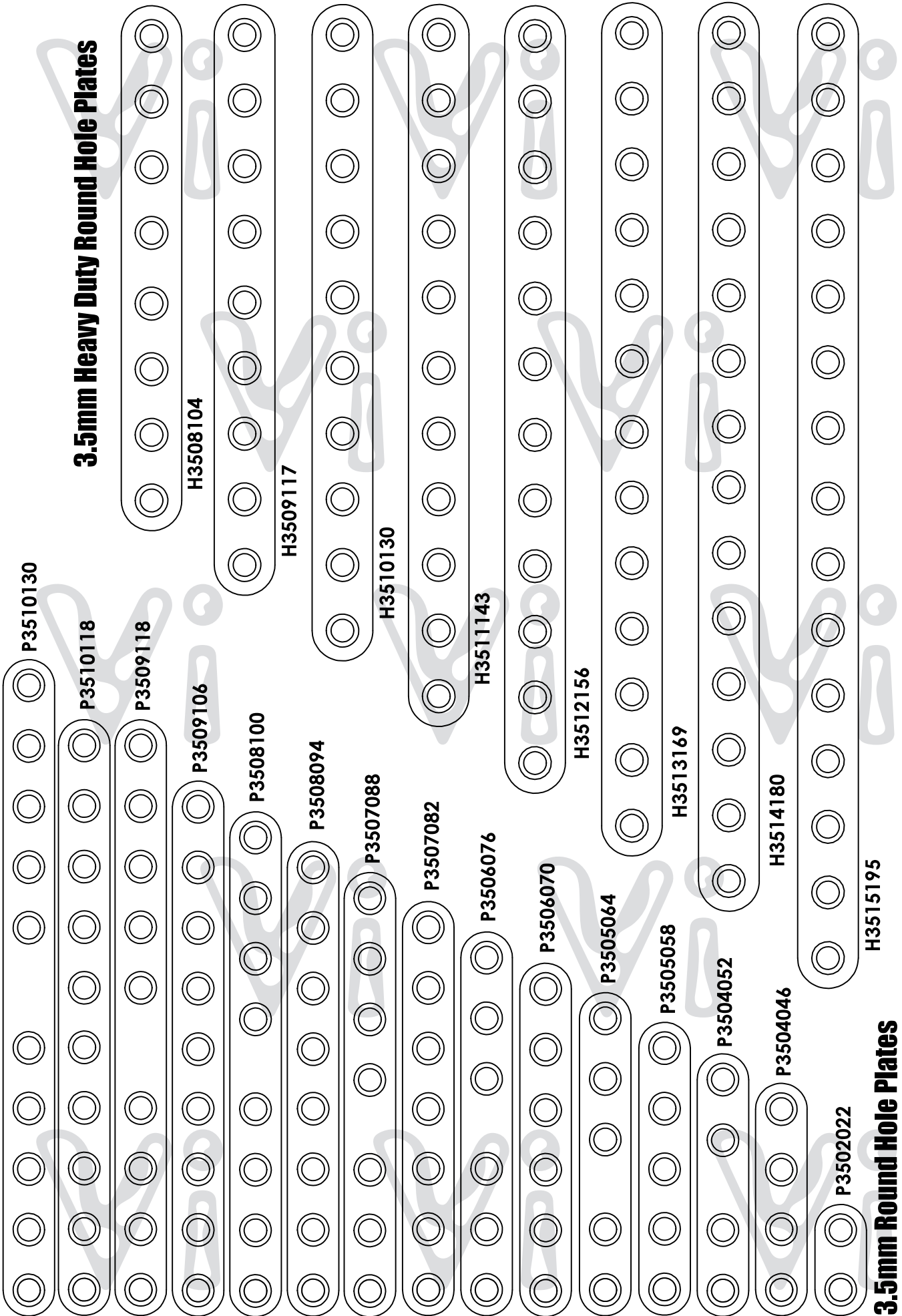


Plate details see page 76

3.5mm Heavy Duty Round Hole Plates



3.5mm Round Hole Plates

PLEASE NOTE THAT PLATE PROFILES ARE ACTUAL SIZE YOU WILL NEED TO COMPENSATE FOR X-RAY MAGNIFICATION • PROFILES FOR GUIDANCE ONLY PLATES MAY BE AMENDED AT ANY TIME

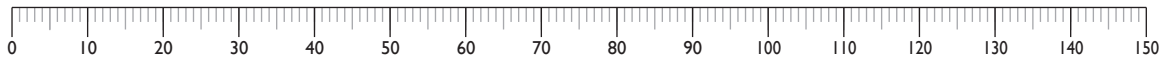


Plate details see pages 60 & 64



BHP3507120

3.5mm Biological Healing Plates



BHP3507130



BHP3508130



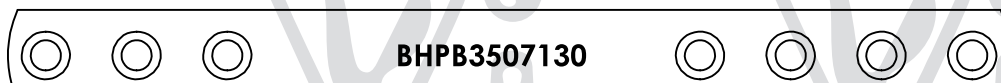
BHP3507142



BHP3508142

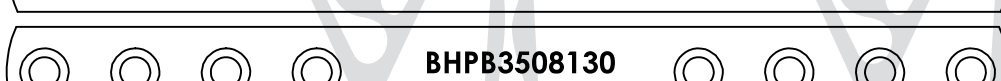


BHP3508154



BHPB3507130

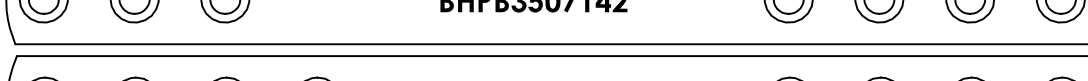
3.5mm Broad Biological Healing Plates



BHPB3508130



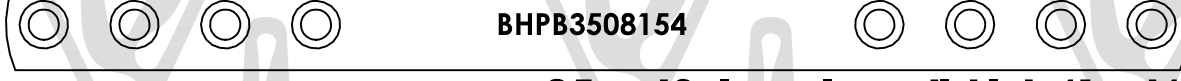
BHPB3507142



BHPB3508142

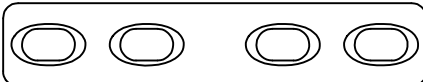


BHPB3508154

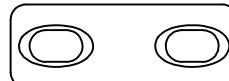


LC3503043

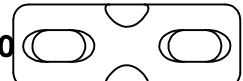
3.5mm LC plates also available in 14 and 16 hole. 3.5mm broad LC plates are available in 4-16 hole with the same hole spacing.



LC3504056



LC3502030



LC3505069

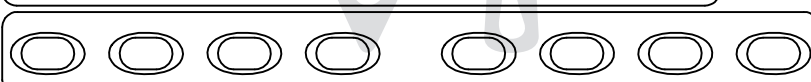


LC3506082

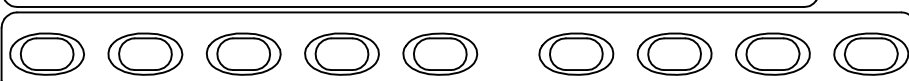


LC3507095

3.5mm Limited Contact Compression Plates



LC3508108



LC3509121

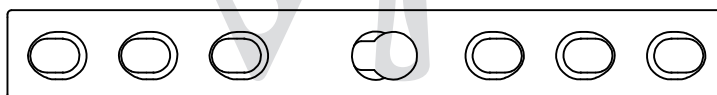


LC3510134



LC3512160

3.5mm IF Compression Plate



IF3507094

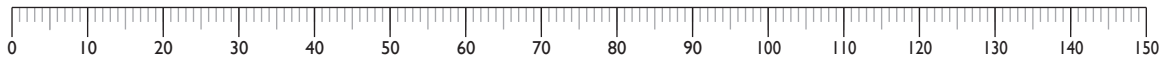
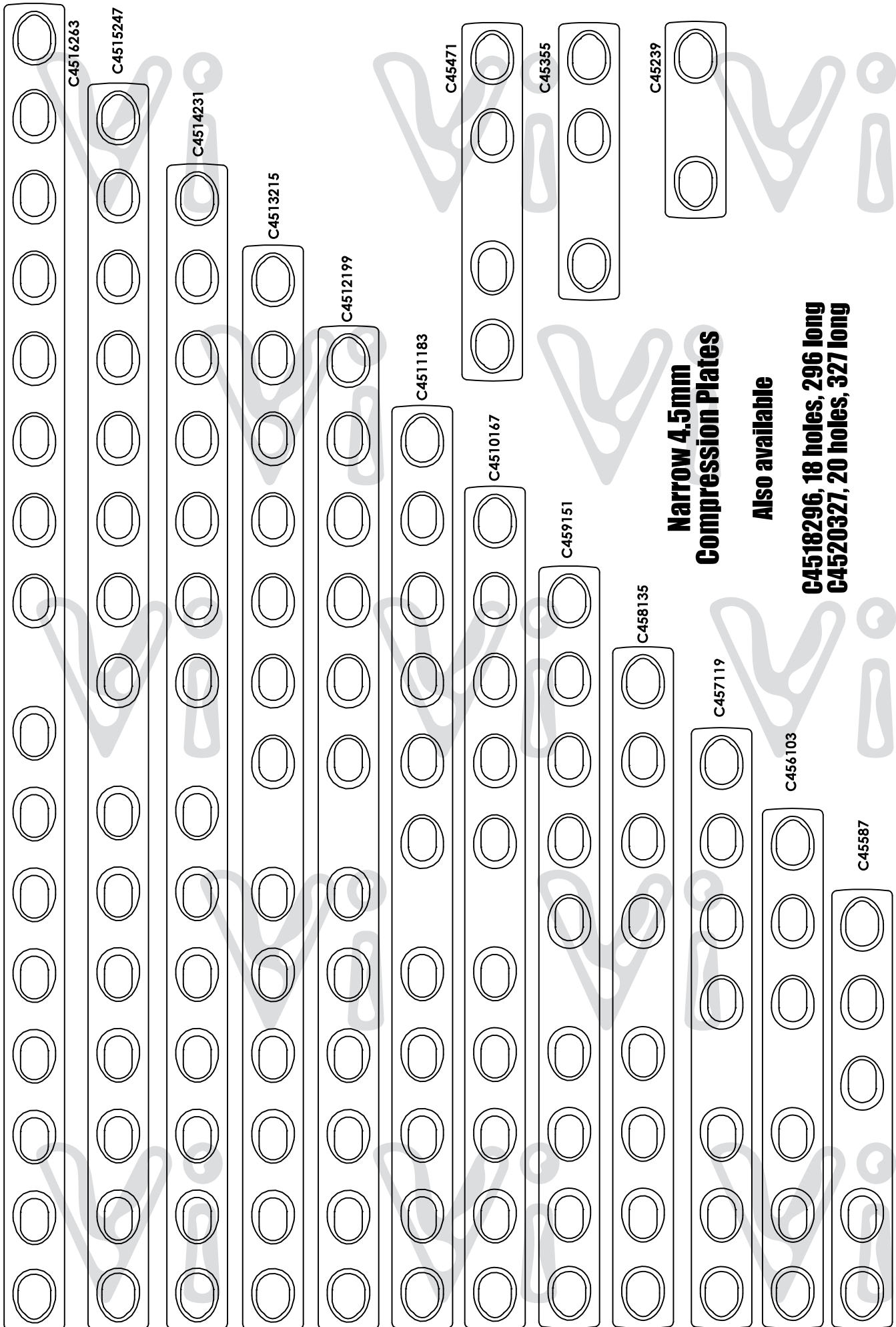


Plate details see page 61



Narrow 4.5mm Compression Plates

Also available

C4518296, 18 holes, 296 long
C4520327, 20 holes, 327 long

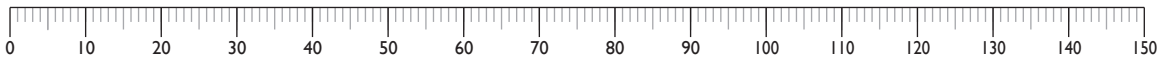
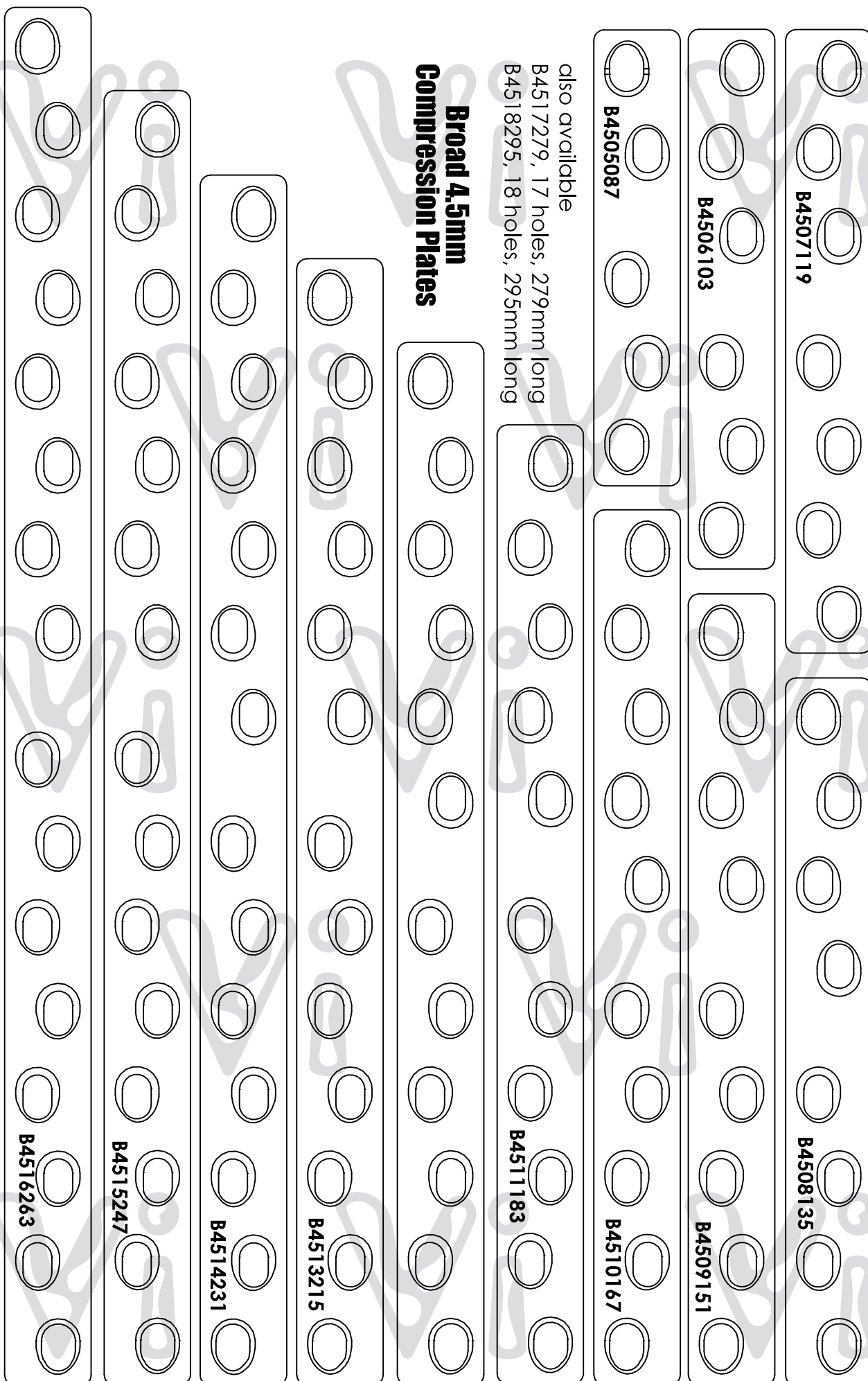


Plate details see page 61



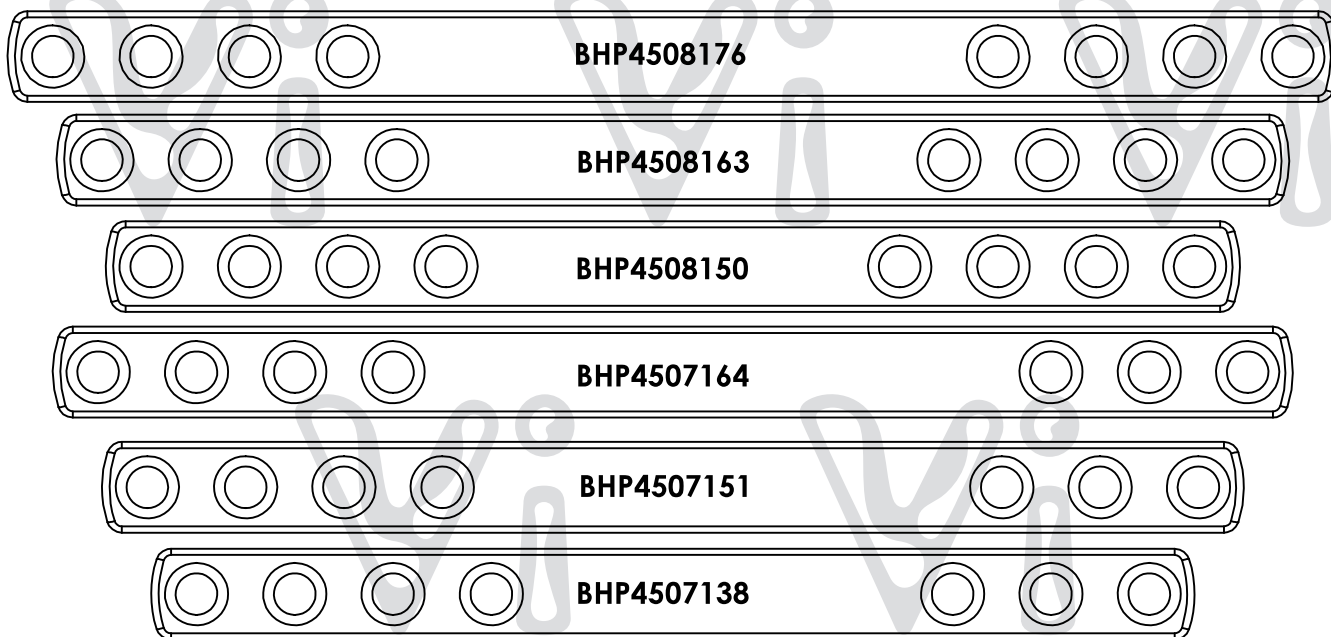
**Broad 4.5mm
Compression Plates**

also available
B4517279, 17 holes, 279mm long
B4518295, 18 holes, 295mm long

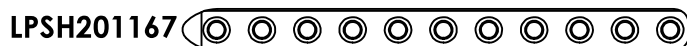
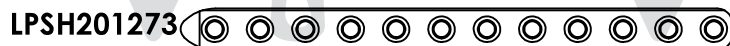
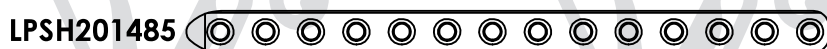


Plate details see pages 64, 81 & 84

4.5mm Biological Healing Plates



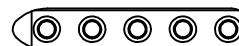
2.0mm Stacked Hole Locking Plates



Reverse Detail



LPSH200425



LPSH200531



LPSH200637



LPSH200743



LPSH200849

Cuttable Malleable Locking Plates



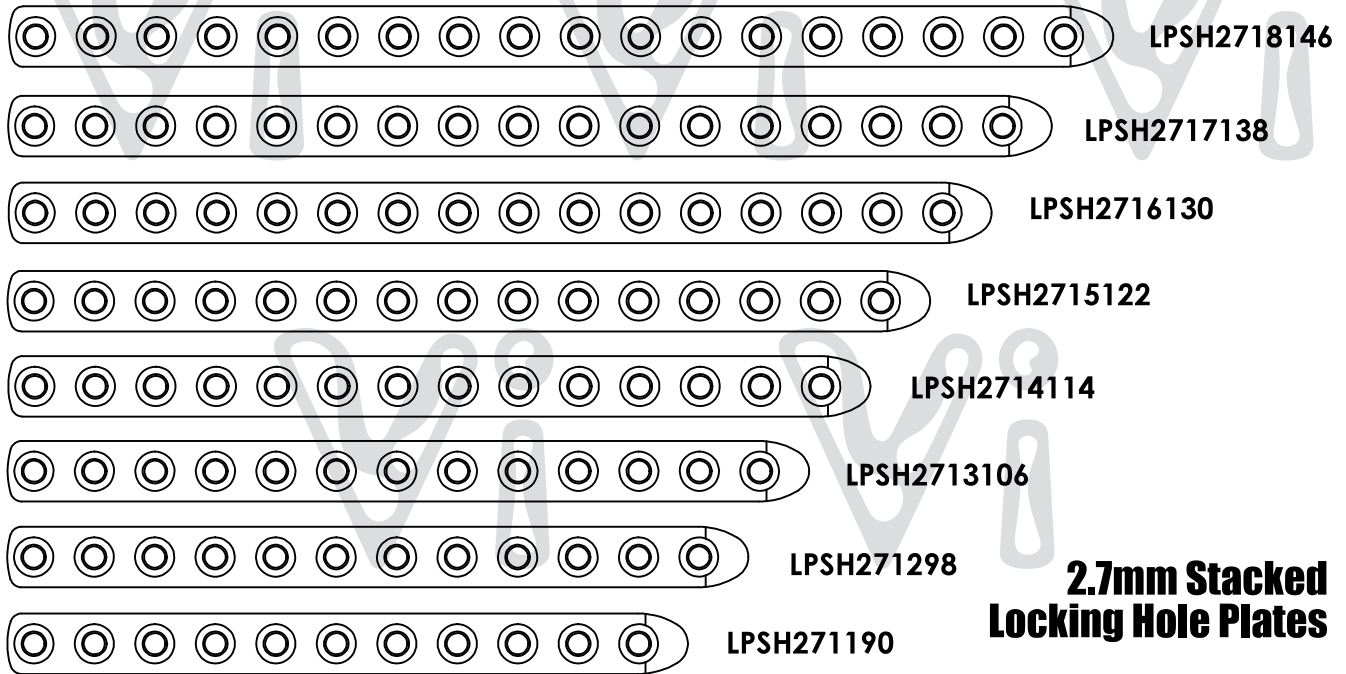
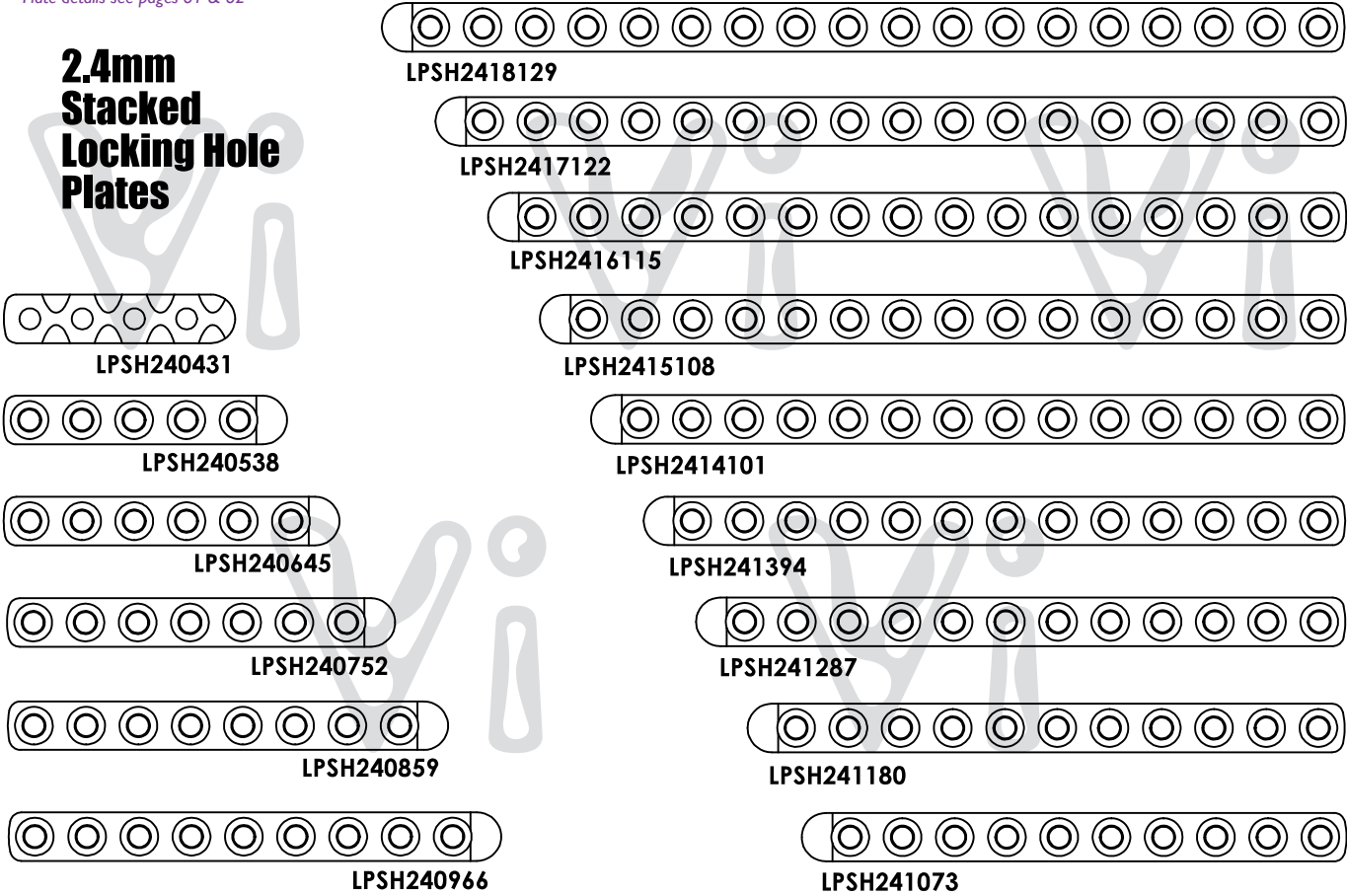
CM35LOCK

PLEASE NOTE THAT PLATE PROFILES ARE ACTUAL SIZE YOU WILL NEED TO COMPENSATE FOR X-RAY MAGNIFICATION • PROFILES FOR GUIDANCE ONLY PLATES MAY BE AMENDED AT ANY TIME

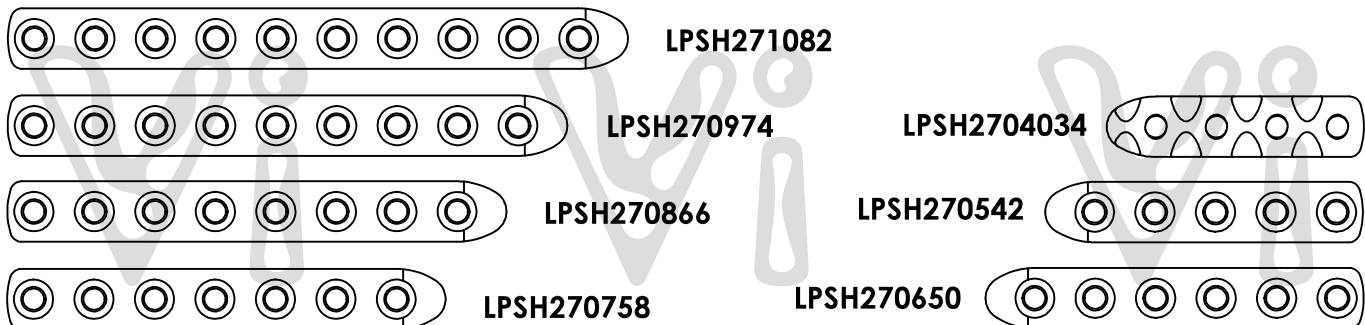


Plate details see pages 81 & 82

2.4mm Stacked Locking Hole Plates



2.7mm Stacked Locking Hole Plates

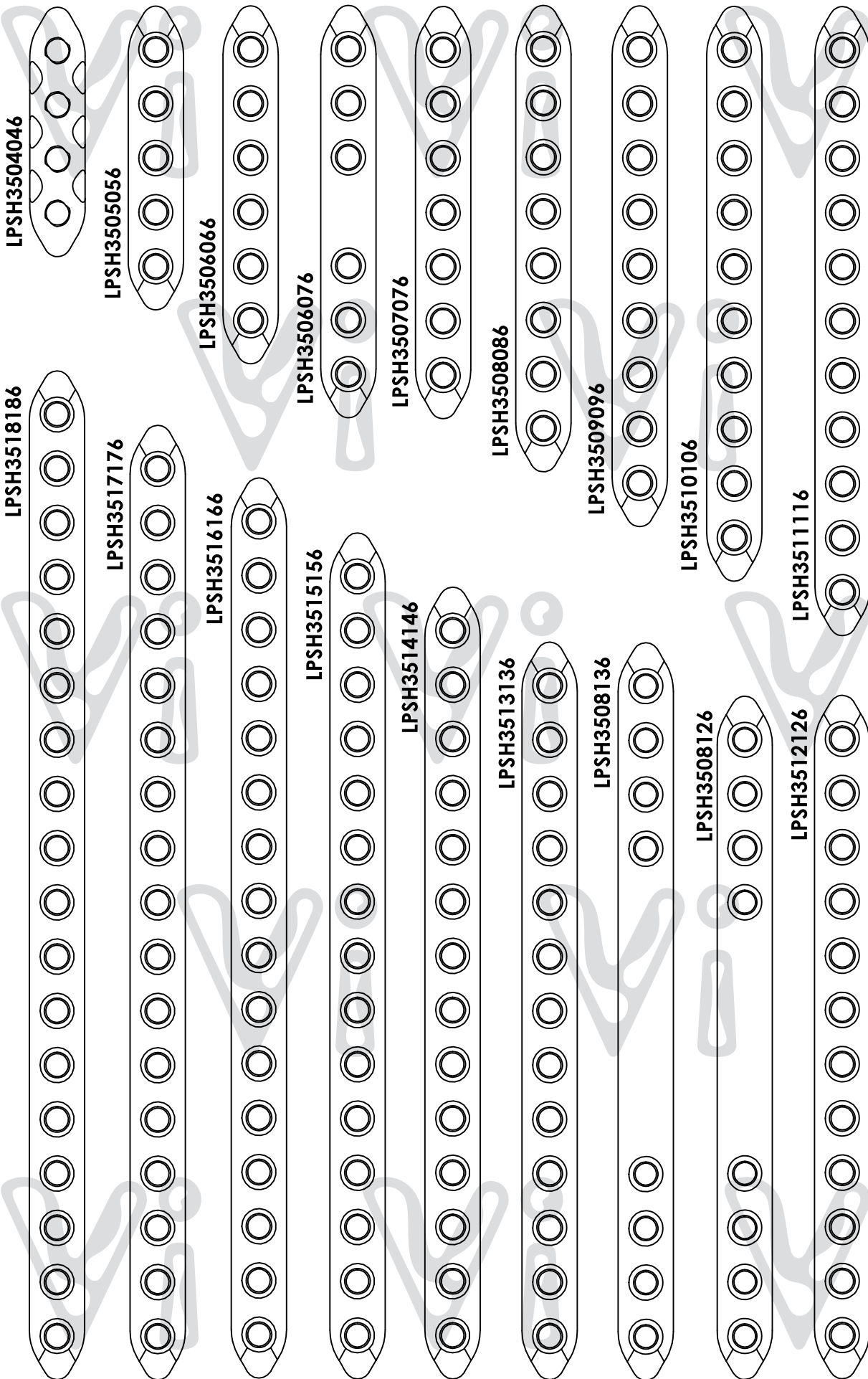


PLEASE NOTE THAT PLATE PROFILES ARE ACTUAL SIZE YOU WILL NEED TO COMPENSATE FOR X-RAY MAGNIFICATION • PROFILES FOR GUIDANCE ONLY PLATES MAY BE AMENDED AT ANY TIME



Plate details see page 82

3.5mm Stacked Locking Hole Plates



PLEASE NOTE THAT PLATE PROFILES ARE ACTUAL SIZE YOU WILL NEED TO COMPENSATE FOR X-RAY MAGNIFICATION • PROFILES FOR GUIDANCE ONLY PLATES MAY BE AMENDED AT ANY TIME

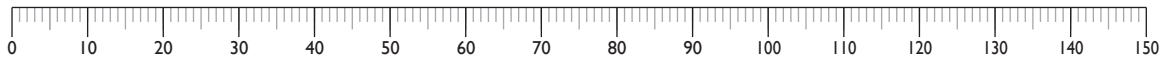
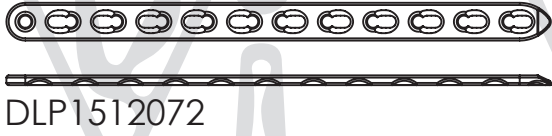


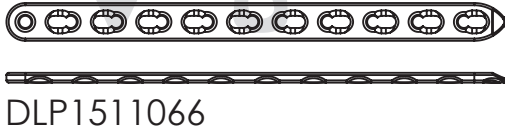
Plate details see page 80

1.5mm Dynamic Locking Plates

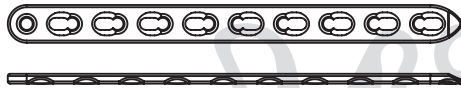
2.0mm Dynamic Locking Plates



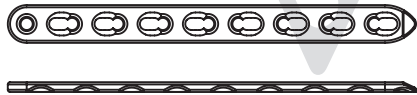
DLP1512072



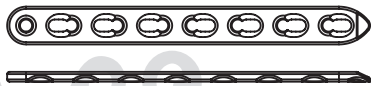
DLP1511066



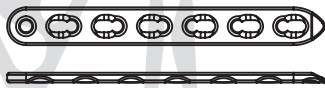
DLP1510060



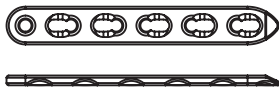
DLP1509054



DLP1508048



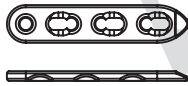
DLP1507042



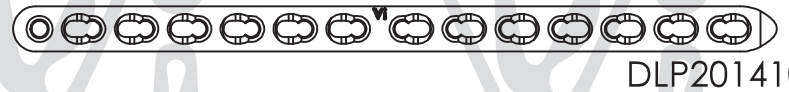
DLP1506036



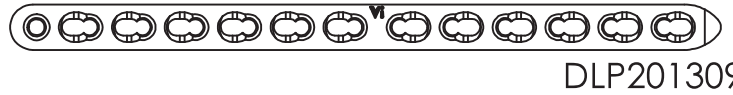
DLP1505030



DLP1504024



DLP2014101



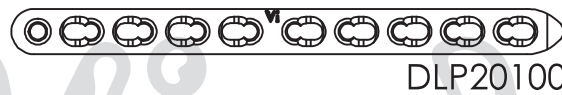
DLP2013094



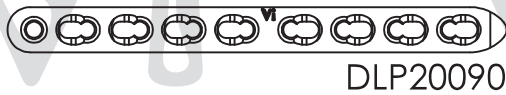
DLP2012087



DLP2011080



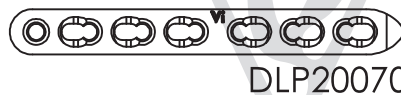
DLP2010073



DLP2009066



DLP2008059



DLP2007052



DLP2006045



DLP2005038



DLP2004031

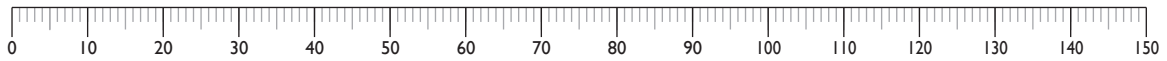


Plate details see page 80



DLP2418164K



DLP2417155K



DLP2416146K



DLP2415137K



DLP2414128K



DLP2413119K



DLP2412110K



DLP2411101K



DLP2410092K or ...N



DLP2409083K or ...N



DLP2408074K or ...N

2.4mm Dynamic Locking Plates



DLP2404038N



DLP2405047N



DLP2406056K or ...N



DLP2407065K or ...N

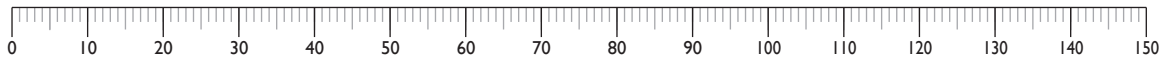


Plate details see page 80

DLP2718164



DLP2717155



DLP2716146



DLP2715137



DLP2714128



DLP2713119



**2.7mm Dynamic
Locking Plates**

DLP2712110



DLP27111101



DLP2704038



DLP2710092



DLP2705047



DLP2709083



DLP2706056



DLP2708074



DLP2707065



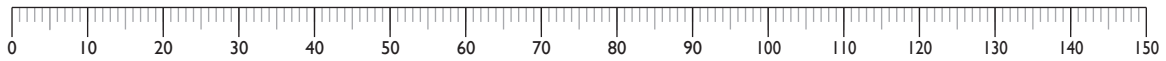


Plate details see page 80

3.5mm Dynamic Locking Plates



DLP3518237



DLP3517224



DLP3516211



DLP3515198



DLP3514185



DLP3513172



DLP3504055



DLP3512159



DLP3505068



DLP3511146



DLP3506081



DLP3510133



DLP3507094



DLP3509120



DLP3508107

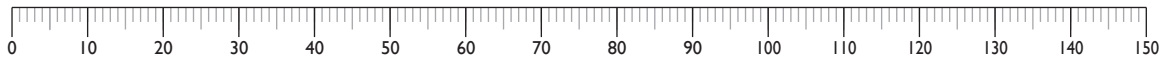
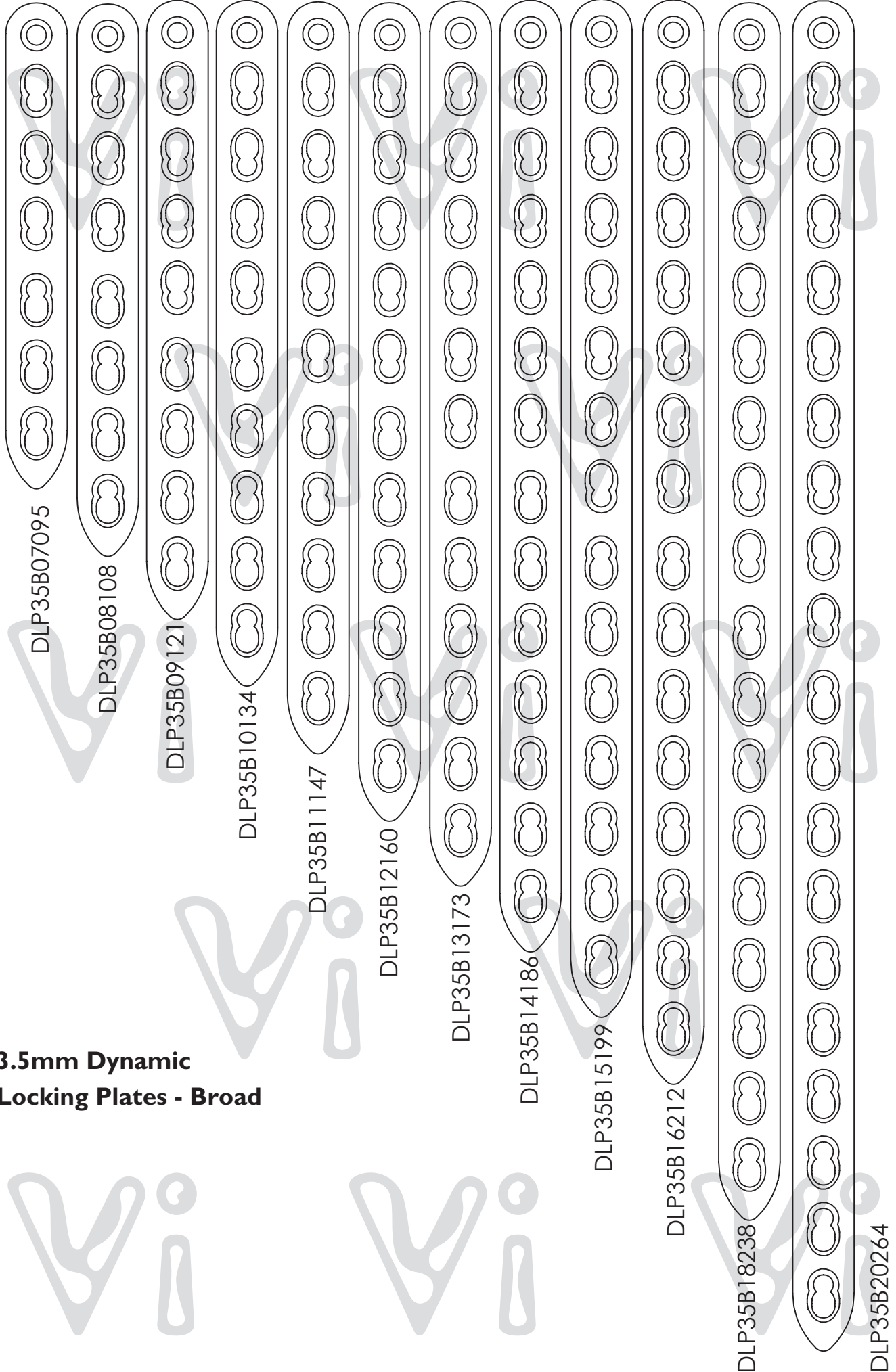


Plate details see page 80



3.5mm Dynamic Locking Plates - Broad

PLEASE NOTE THAT PLATE PROFILES ARE ACTUAL SIZE YOU WILL NEED TO COMPENSATE FOR X-RAY MAGNIFICATION • PROFILES FOR GUIDANCE ONLY PLATES MAY BE AMENDED AT ANY TIME



Plate details see pages 54, 55, 56, 57, 58, 59, 61 & 64

Cutable Plate Range

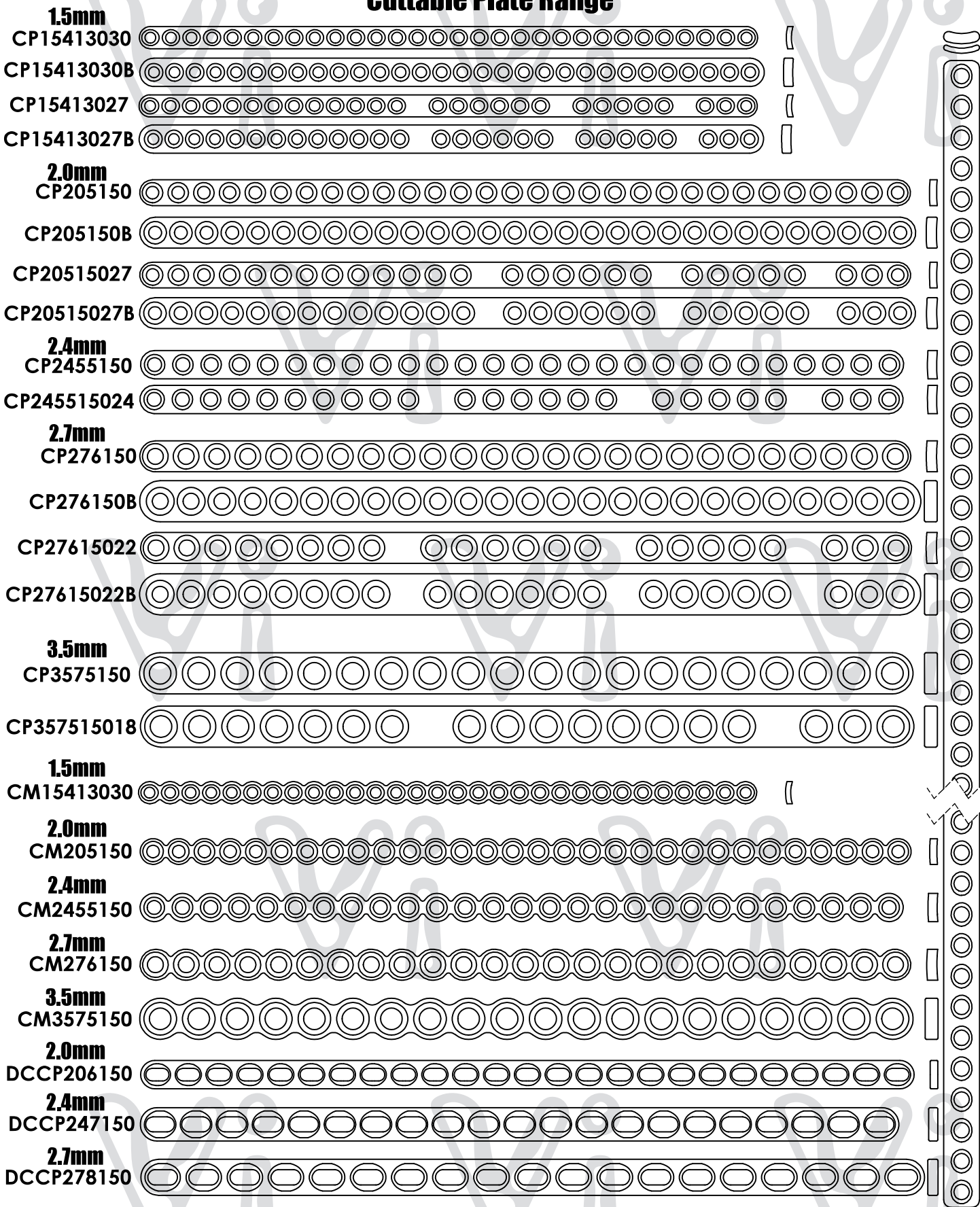
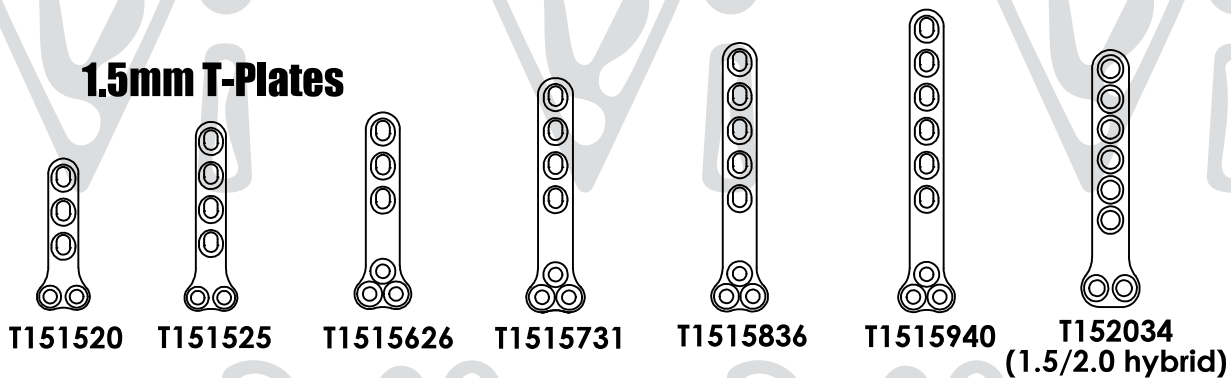


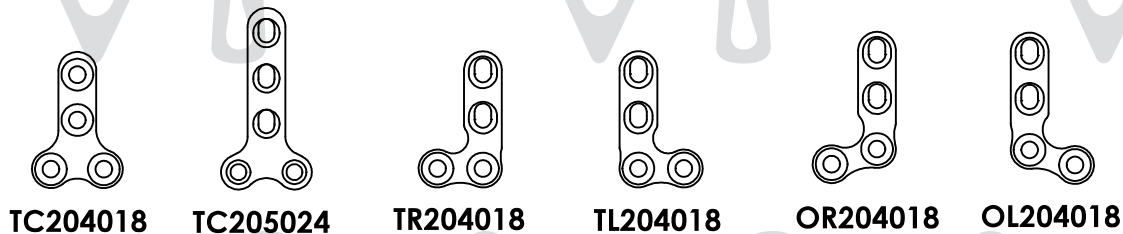
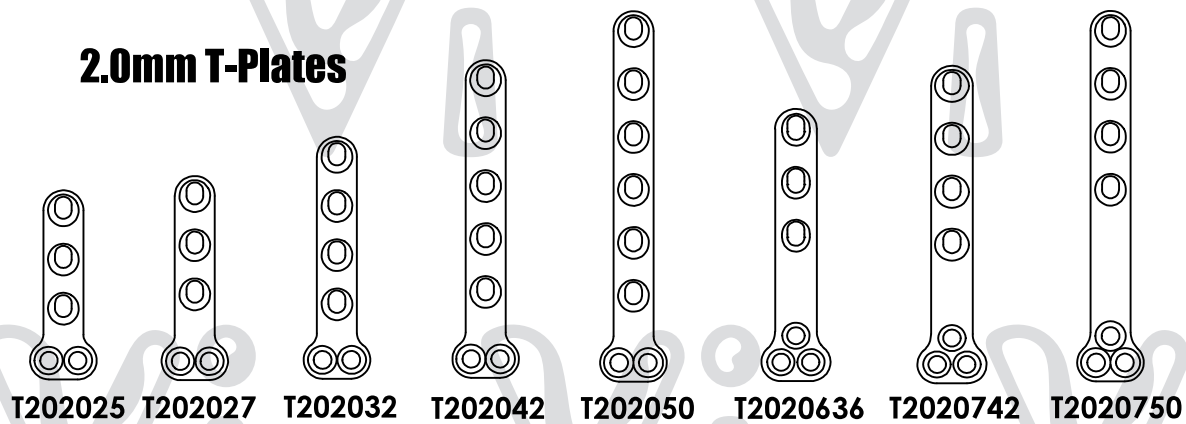


Plate details see pages 65, 66 & 67

1.5mm T-Plates



2.0mm T-Plates



2.0/2.4/2.7mm Hybrid T-Plates

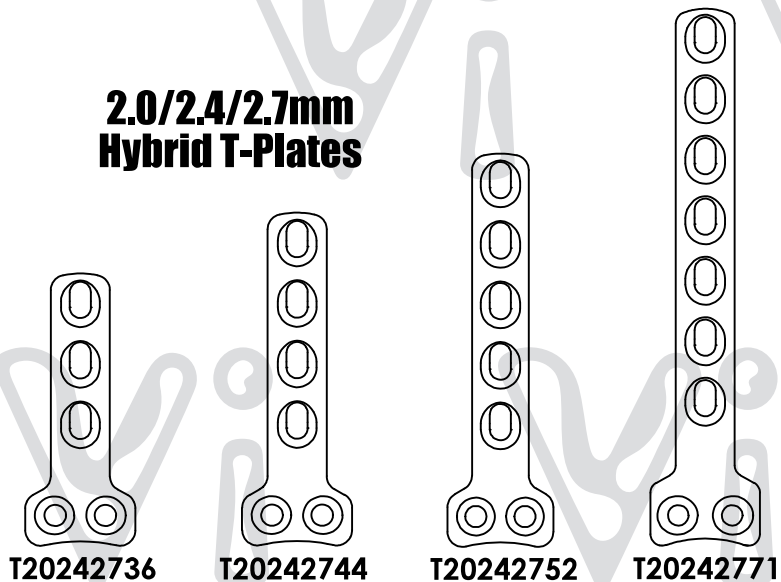
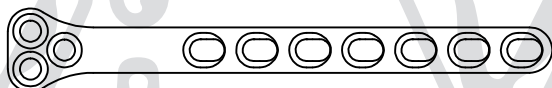


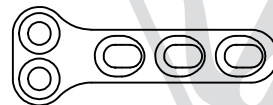


Plate details see page 66

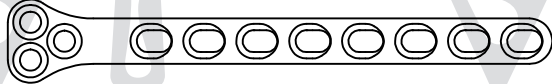
T241072



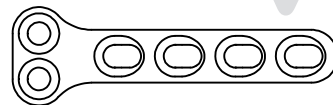
T270535



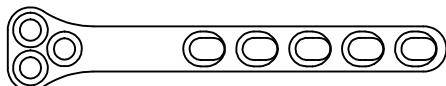
T241172



T270643



T240858



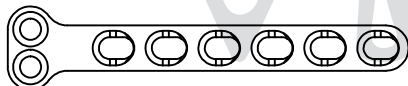
T240958



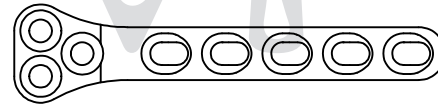
T270749



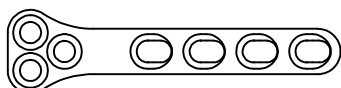
T240853



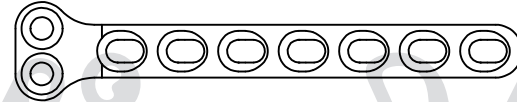
T270857



T240744



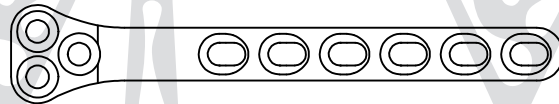
T270967



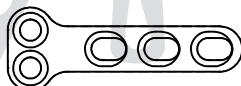
T240638



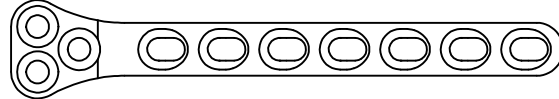
T270973



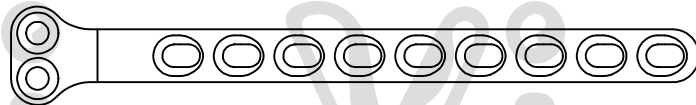
T240531



T271073



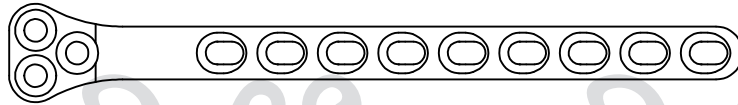
T271191



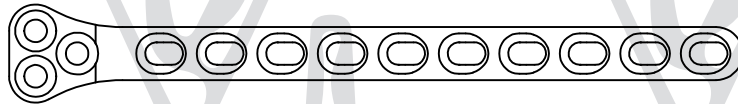
T271291



T271297



T271397



2.4mm and 2.7mm T-Plates

Tapered profile

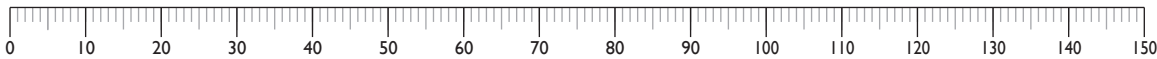
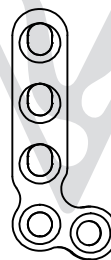
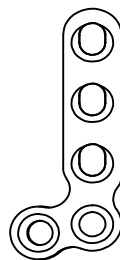
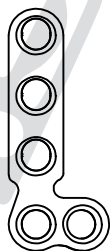
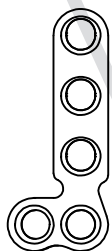
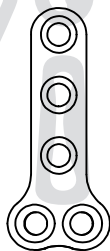
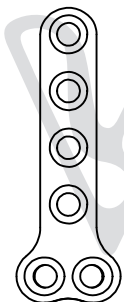


Plate details see pages 66 & 67

2.7mm T-Plates



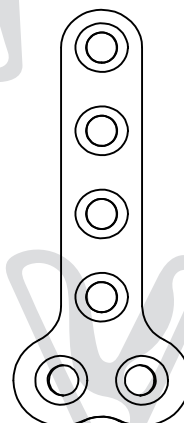
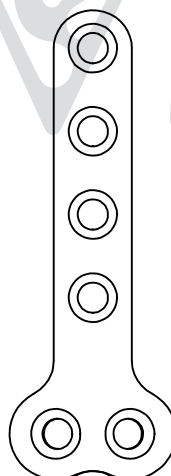
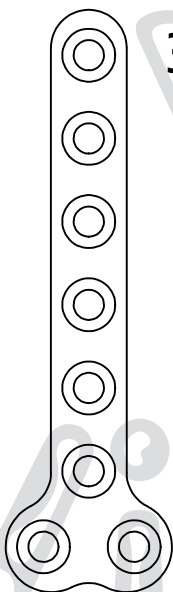
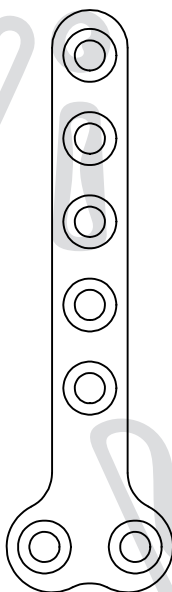
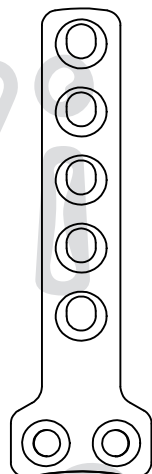
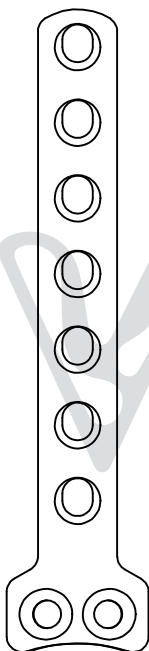
TC270639 TC270532

TR270532 TL270532

OR270532 OL270532

3.5mm T-Plates

2.7/3.5mm Hybrid T-Plates



T273585

T273562

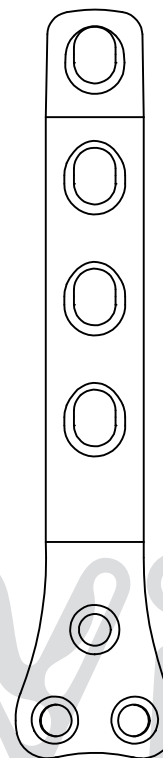
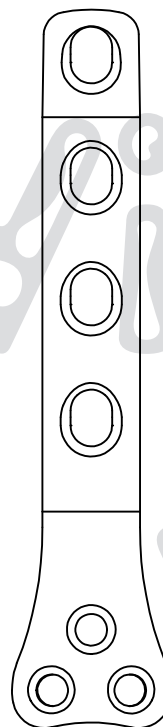
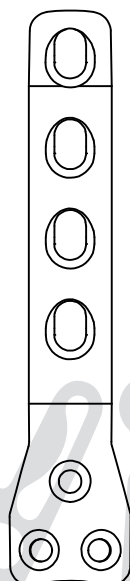
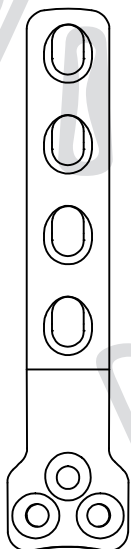
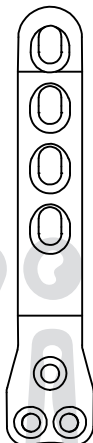
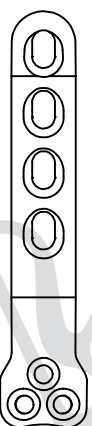
TC350777

TC350877

TC350662

TC350655

Hybrid Anatomical T-Plates



T2027755 T2027758

T273572

T273576

T3545795

T3545799

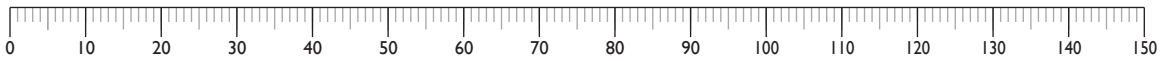
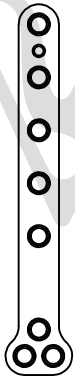
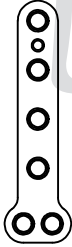


Plate details see pages 83, 84 & 85

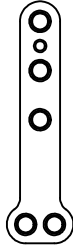
2.0mm Locking T-Plates



T2020850LOCK

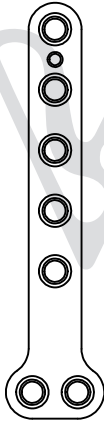


T2020632LOCK

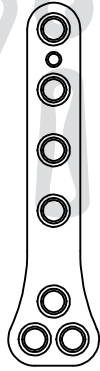


T2020532LOCK

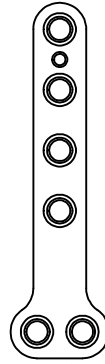
2.4/2.7mm Locking T-Plates



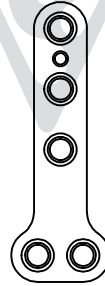
T2427755LOCK



T2427748LOCK

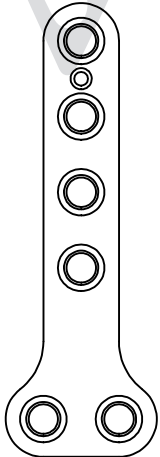


T2427647LOCK

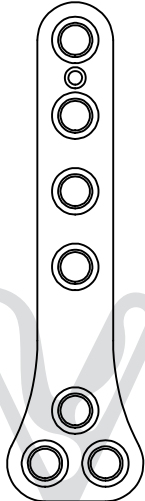


T2427537LOCK

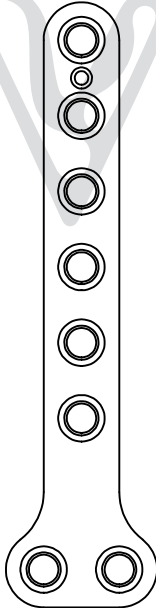
3.5mm Locking T-Plates



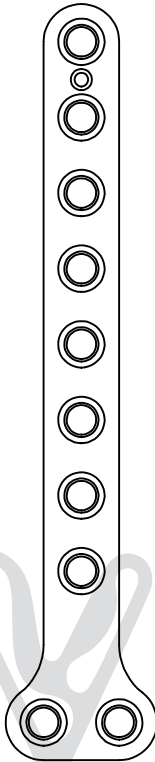
T350660LOCK



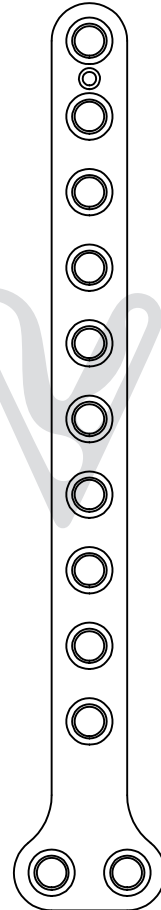
T350766LOCK



T350880LOCK

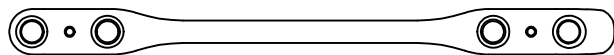


T3510100LOCK

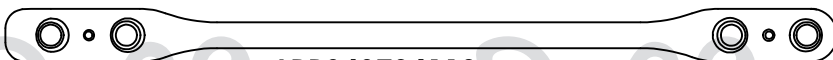


T3512120LOCK

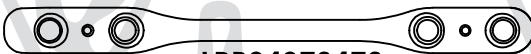
LokRod™ Plates



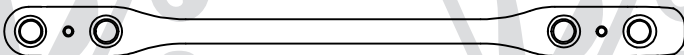
LRP24270480



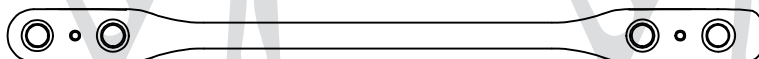
LRP242704110



LRP24270470



LRP24270490



LRP242704100

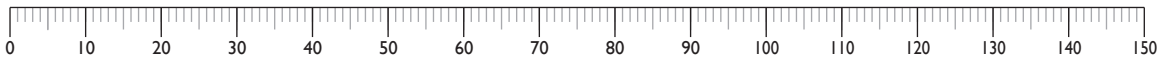


Plate details see pages 63, 69 & 193

Butterfly Plates

1.5mm



BTFP15414

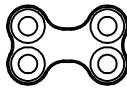


BTFP15415

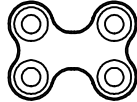


BTFP15619

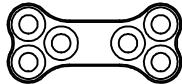
2.0mm



BTFP20416

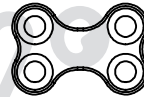


BTFP20417



BTFP20623

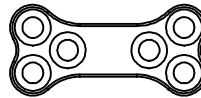
2.4mm



BTFP24418

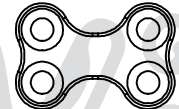


BTFP24420

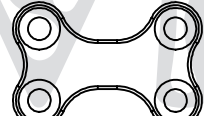


BTFP24626

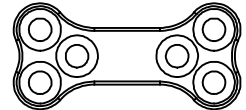
2.7mm



BTFP27421

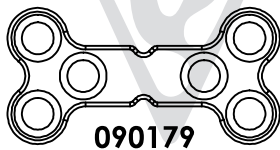


BTFP27425

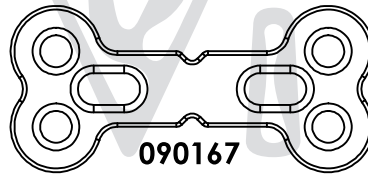


BTFP27630

TPO Plates



090179



090167

Acetabular Plates



AP200400xs (2.0)



AP200401L (2.0)



AP270603 (2.7)



AP350605 (3.5)



AP200400 (2.0)

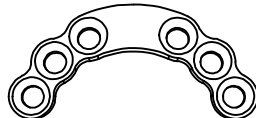


AP240406 (2.4)

Contoured in 3 Dimensions



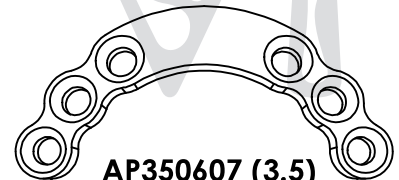
AP200401 (2.0)



AP270602 (2.7)



AP350604 (3.5)



AP350607 (3.5)

2.7mm

Reconstruction Plates

3.5mm

RC270756, RC270972, RC271188. Also available but not shown. RC3509106, RC3511130



RC271296



RC271080



RC270864



RC270648



RC270540

RC350558



RC350670



RC350782



RC350894



RC3510118



RC3512142



PLEASE NOTE THAT PLATE PROFILES ARE ACTUAL SIZE YOU WILL NEED TO COMPENSATE FOR X-RAY MAGNIFICATION • PROFILES FOR GUIDANCE ONLY PLATES MAY BE AMENDED AT ANY TIME



Plate details see pages 53, 65, 71 & 73

1.0mm Series

C100210

CM10390

C100314

C100418

CP10390

C100522

C100626

CP1039027

C100730

C100834

CP10491

C100938

C101042

CP1049120

T101016
 T101020
 T101024
 T101018
 T101022
 T101026
 T101021
 T101027

Partial Tarsal Arthrodesis

152925 (2.7/3.5)

152921 (2.7/3.5)

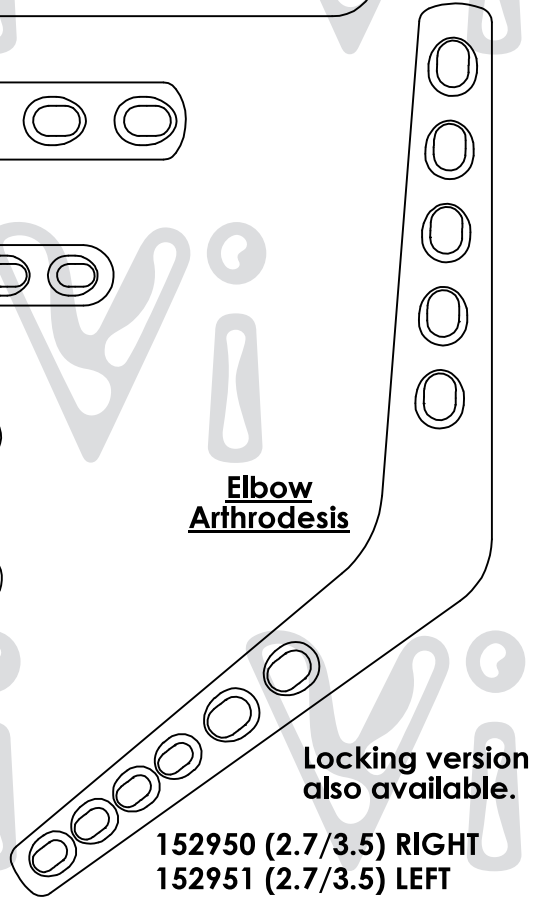
152922 (2.7/2.7)

152920 (2.0/2.7)

152920SC (2.0/2.7)

152923 (2.0/2.0)

152924 (1.5/2.0)



152950 (2.7/3.5) RIGHT
152951 (2.7/3.5) LEFT

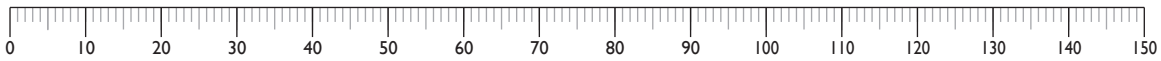
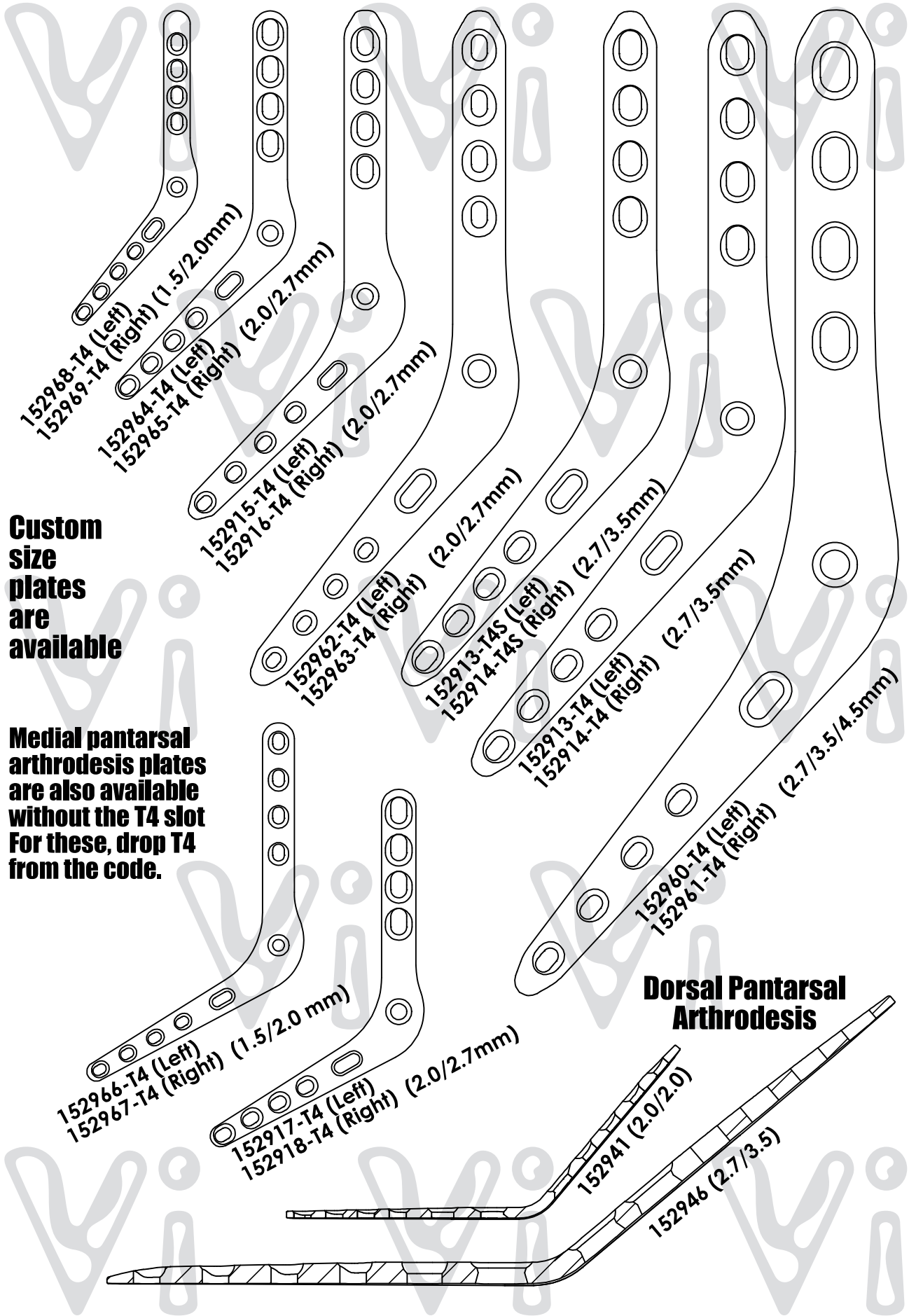


Plate details see pages 73, 74 & 75



Custom size plates are available

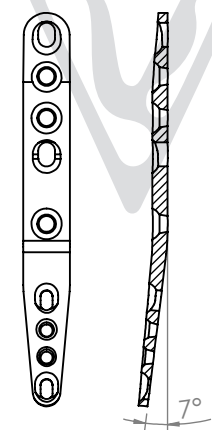
Medial pantarsal arthrodesis plates are also available without the T4 slot For these, drop T4 from the code.

Dorsal Pantarsal Arthrodesis

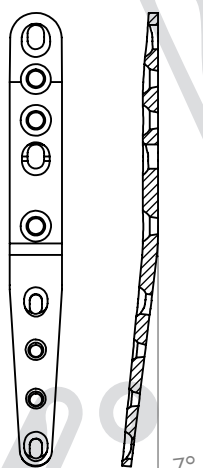


Plate details see page 70

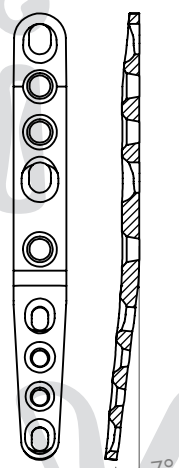
Pancarpal Arthrodesis Plates - Locking



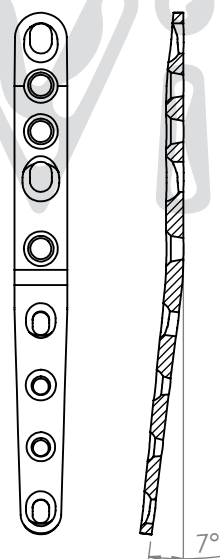
PCALK1520



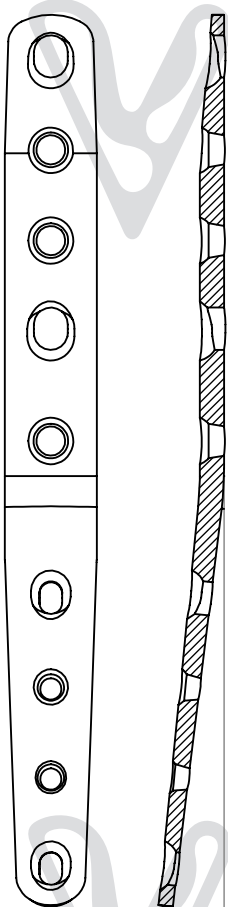
PCALK1520L



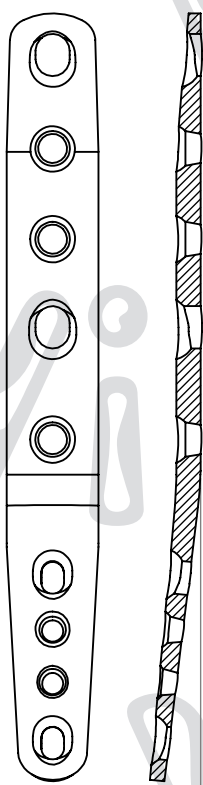
PCALK2024



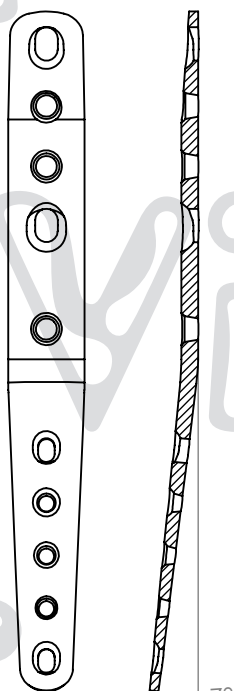
PCALK2024L



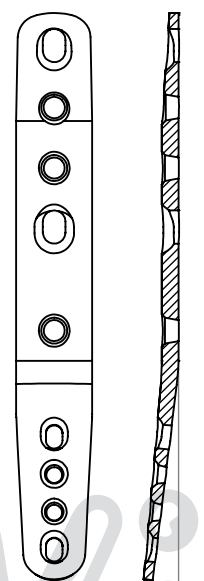
PCALK2735L



PCALK2735



PCALK2027L



PCALK2027

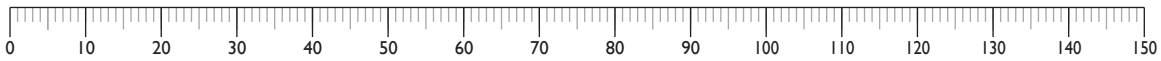
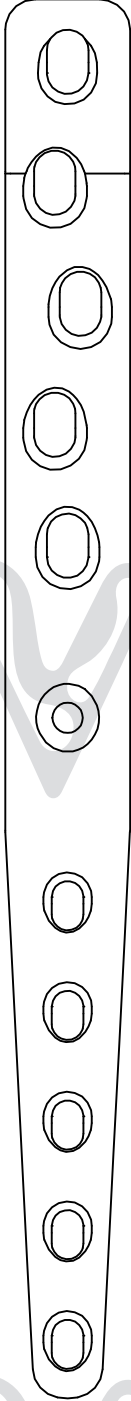


Plate details see pages 70, 71, 72 & 82

152909 (DCP)
(3.5/4.5)

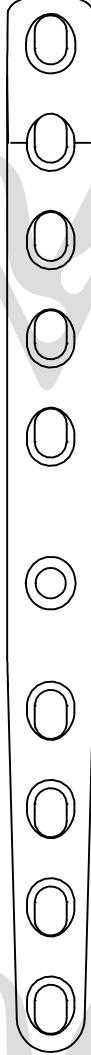


152907XL (DCP)
(3.5/3.5)



Locking versions of select
pancarpal arthrodesis plates
are available.

152907 (DCP)
152908 (ROUND)
(3.5/3.5)

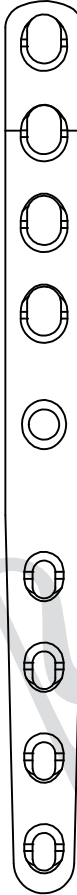


152903 (DCP)
152904 (ROUND)
(2.7/3.5)

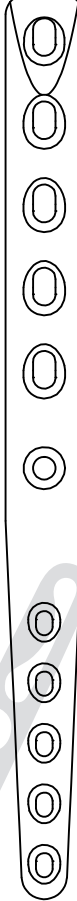


Pancarpal Arthrodesis Plates

152903XL (DCP)
152904 (ROUND)
(2.7/3.5)

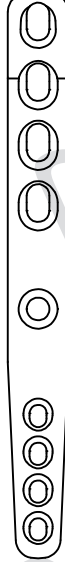


152902 (DCP)
(2.0/2.7)

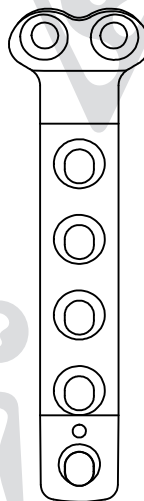


Partial Carpal Arthrodesis Plates

152905 (DCP)
ROUND 152906
(2.0/2.7)



152930
(2.7/3.5)



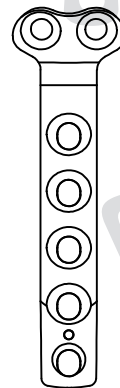
152905XL (DCP)
(2.0/2.7)



152912XL (DCP)
(2.0/2.0)



152931
(2.0/2.4/2.7)



152911XL (DCP)
(1.5/2.0)



152932
(1.5/2.0)



152912 (DCP)
(2.0/2.0)



152911 (DCP)
(1.5/2.0)

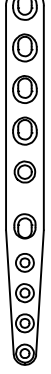


Feline Forelimb Salvage Plate

152910
(1.5/2.0)



152970 (DCP)
(1.0/1.5)



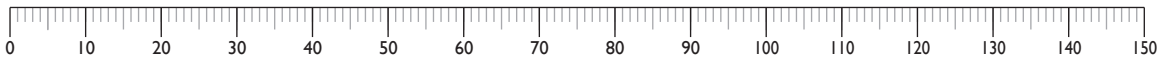


Plate details see page 72

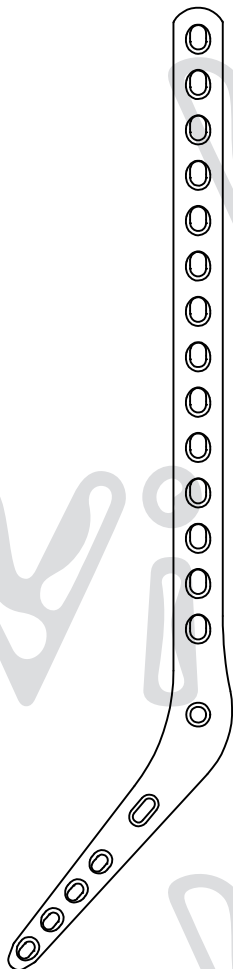


152980 (3.5 locking/2.7/3.5/4.5) NOTE: Scale 1:2

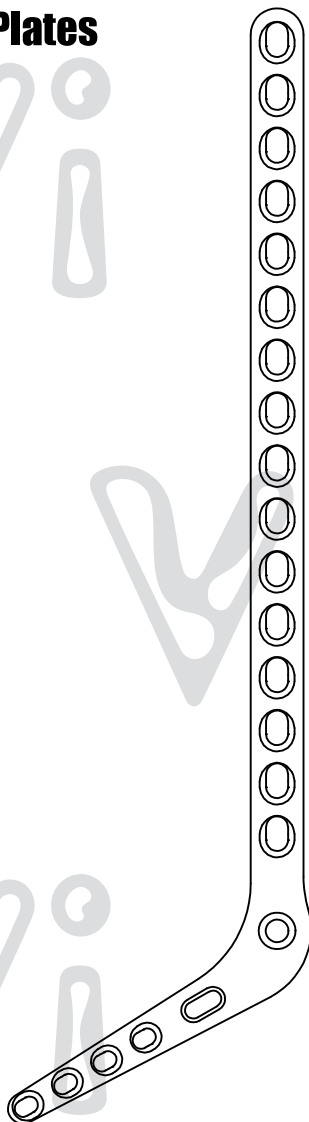


152903XXL (2.7/3.5) NOTE: Scale 1:2

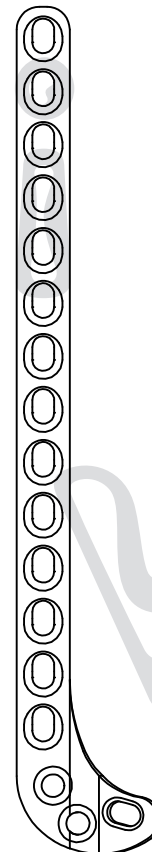
Longer Plates



**152913-T4XL (Left)
152914-T4XL (Right)
2.7/3.5mm
NOTE: Scale:1:2**



**152917-T4XL (Left)
152918-T4XL (Right)
2.0/2.7mm
NOTE: Scale 1:1**



**152711L-XL (Left)
152711R-XL (Right)
2.4mm
NOTE: Scale 1:1**

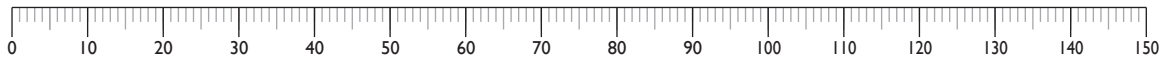
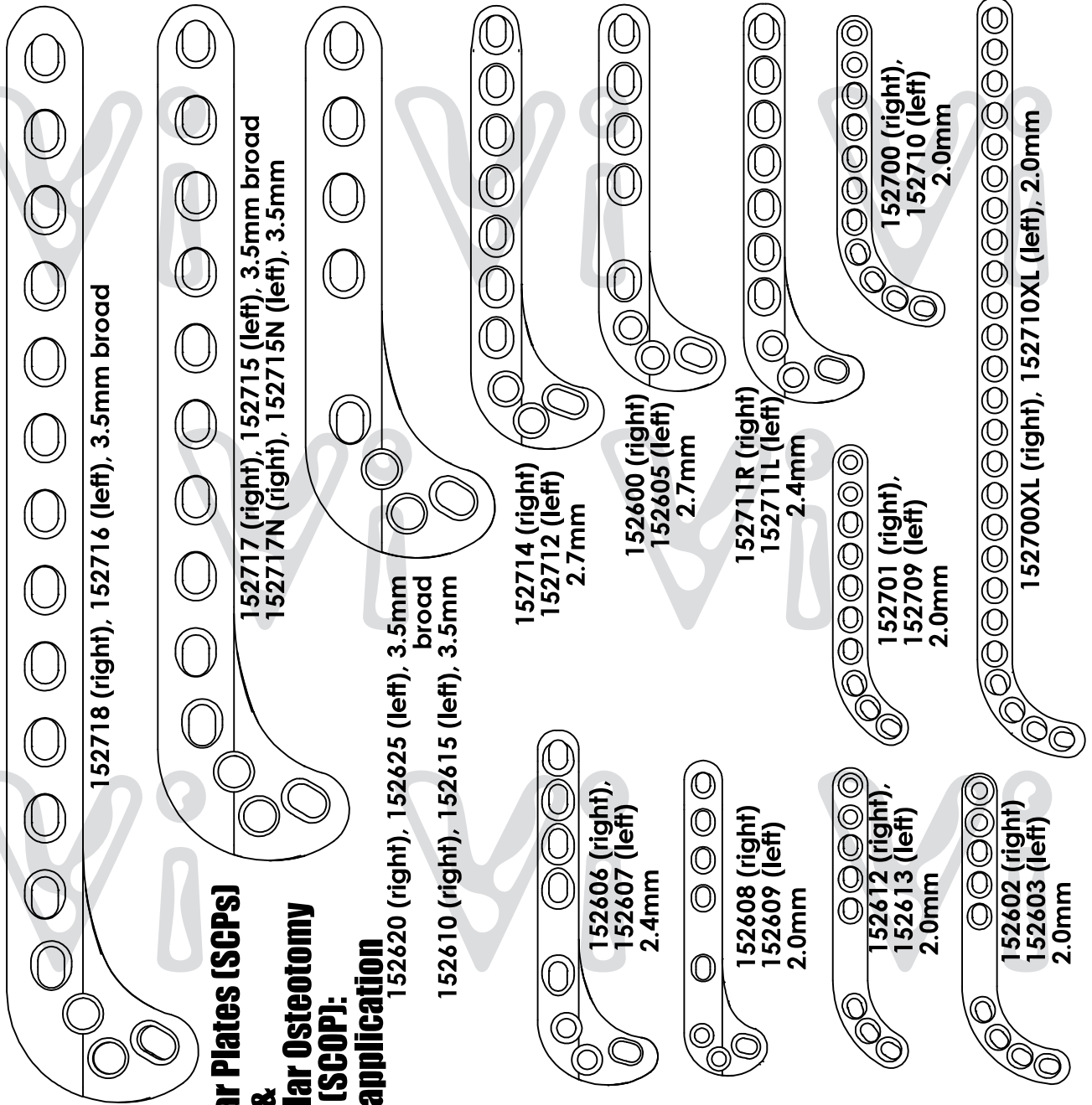
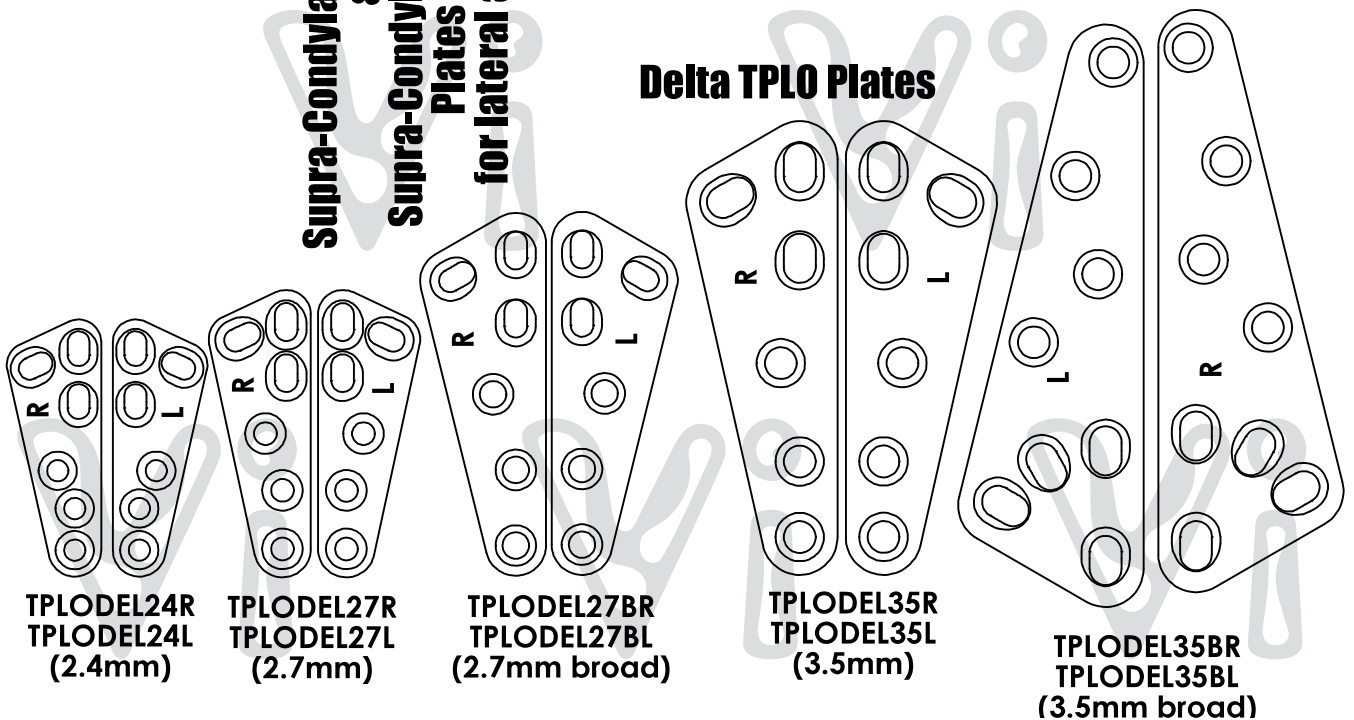


Plate details see pages 68 & 147



**Supra-Condylar Plates (SCPs)
&
Supra-Condylar Osteotomy
Plates (SCOP):
for lateral application**

Delta TPLO Plates



PLEASE NOTE THAT PLATE PROFILES ARE ACTUAL SIZE YOU WILL NEED TO COMPENSATE FOR X-RAY MAGNIFICATION • PROFILES FOR GUIDANCE ONLY PLATES MAY BE AMENDED AT ANY TIME

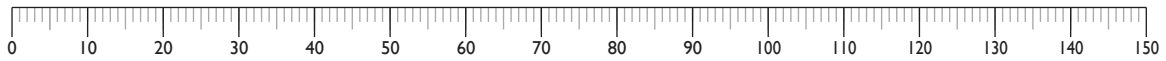
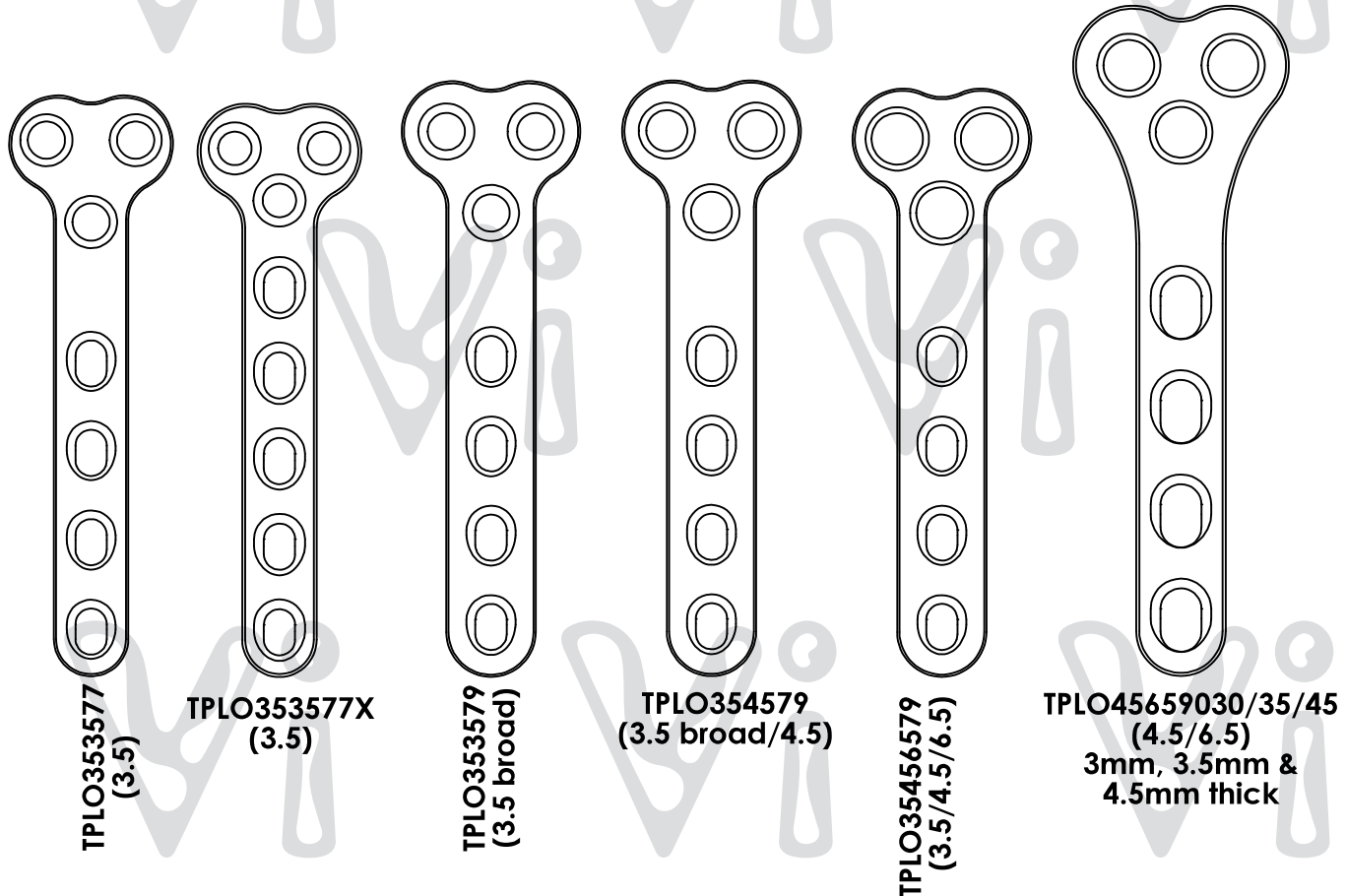
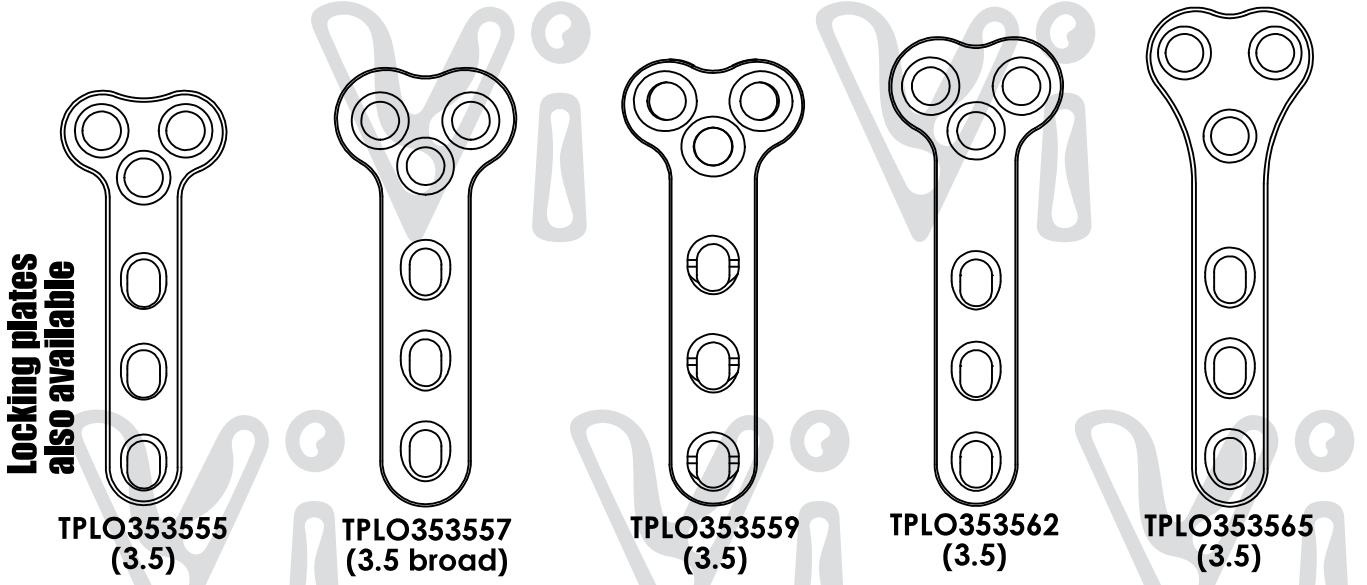
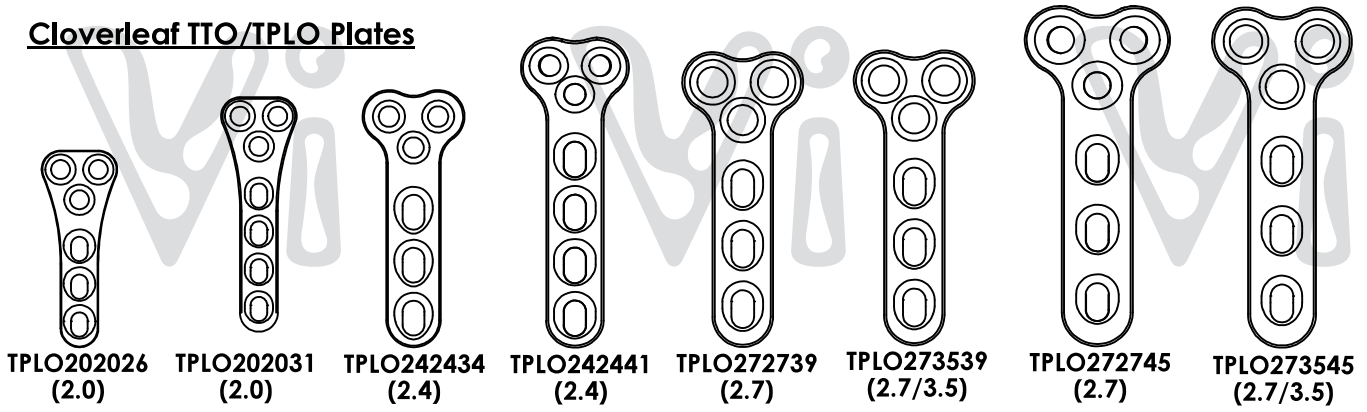


Plate details see pages 142, 145 & 171

Cloverleaf TTO/TPLO Plates



PLEASE NOTE THAT PLATE PROFILES ARE ACTUAL SIZE YOU WILL NEED TO COMPENSATE FOR X-RAY MAGNIFICATION • PROFILES FOR GUIDANCE ONLY PLATES MAY BE AMENDED AT ANY TIME

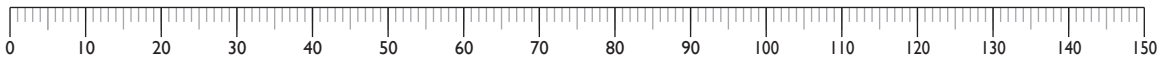
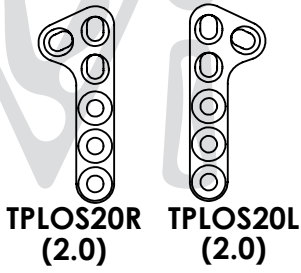
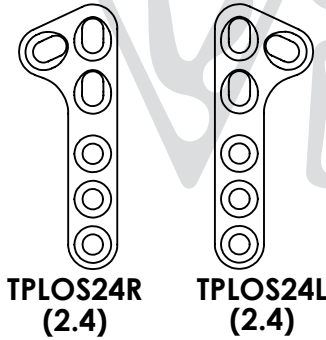


Plate details see pages 142 & 147

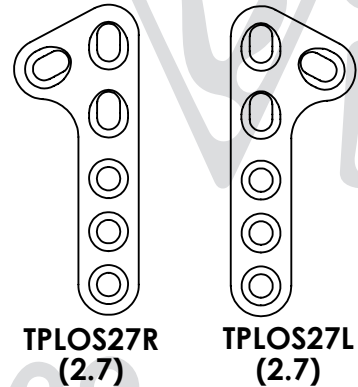
Slocum Style TPLO Plates



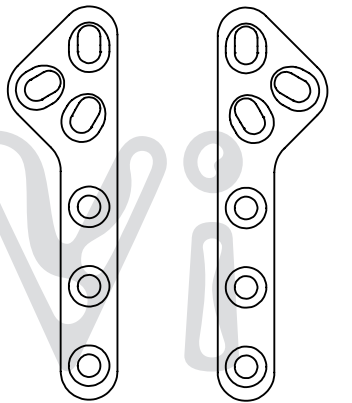
TPLOS20R (2.0) **TPLOS20L (2.0)**



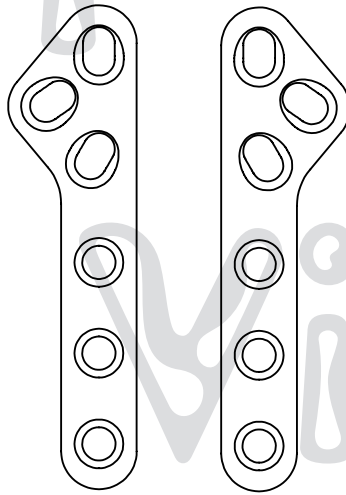
TPLOS24R (2.4) **TPLOS24L (2.4)**



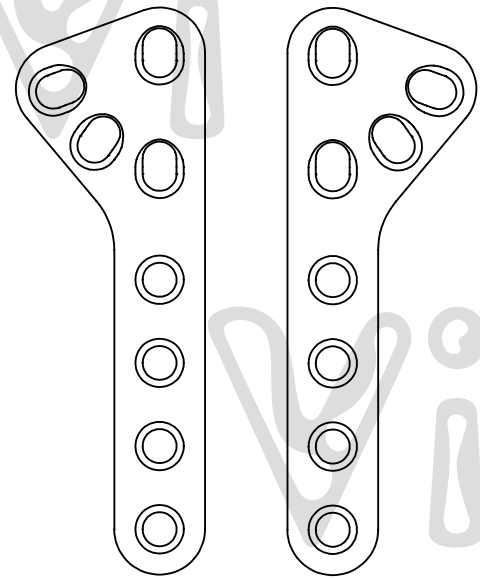
TPLOS27R (2.7) **TPLOS27L (2.7)**



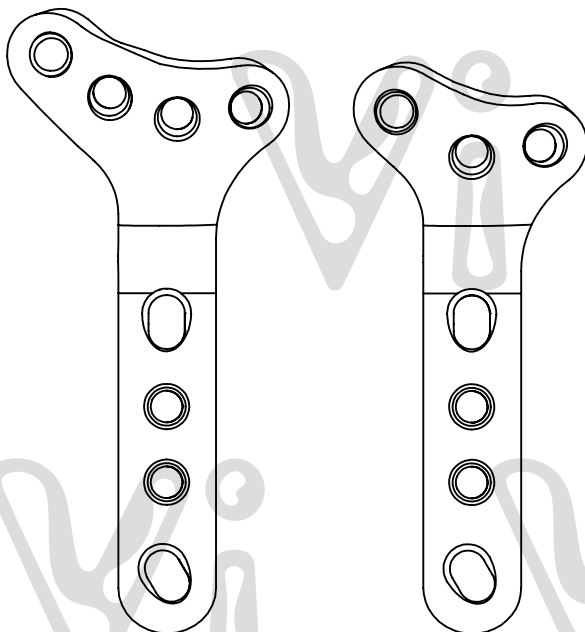
TPLOS27BR (2.7 broad) **TPLOS27BL (2.7 broad)**



TPLOS35R (3.5) **TPLOS35L (3.5)**

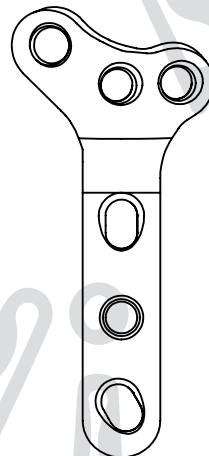


TPLOS35BR (3.5 broad) **TPLOS35BL (3.5 broad)**

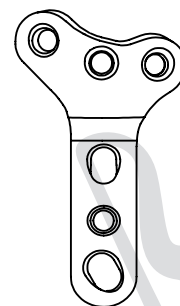


TPLO35BLPCR (3.5 broad) **TPLO35MLPCR (3.5)**

Locking TPLO Plates



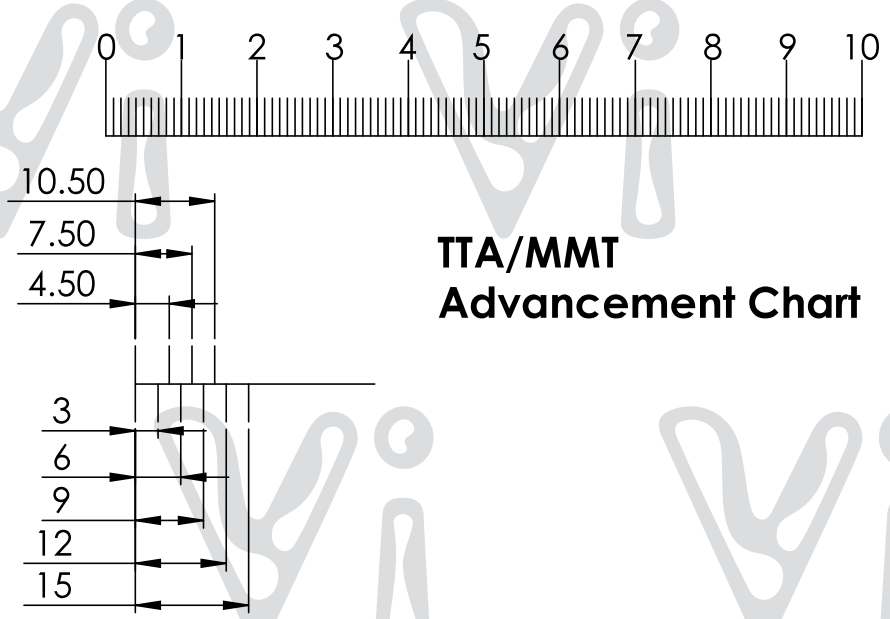
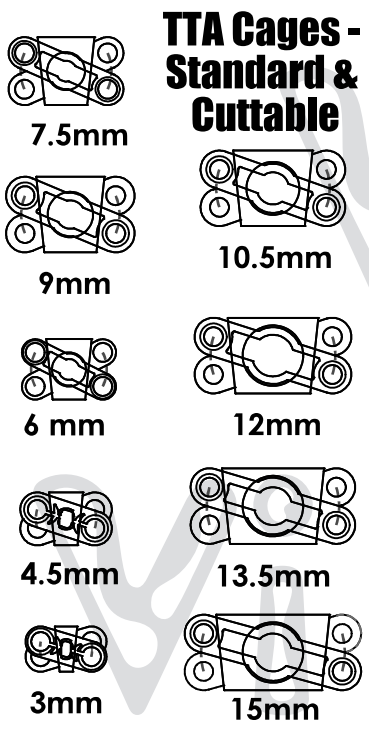
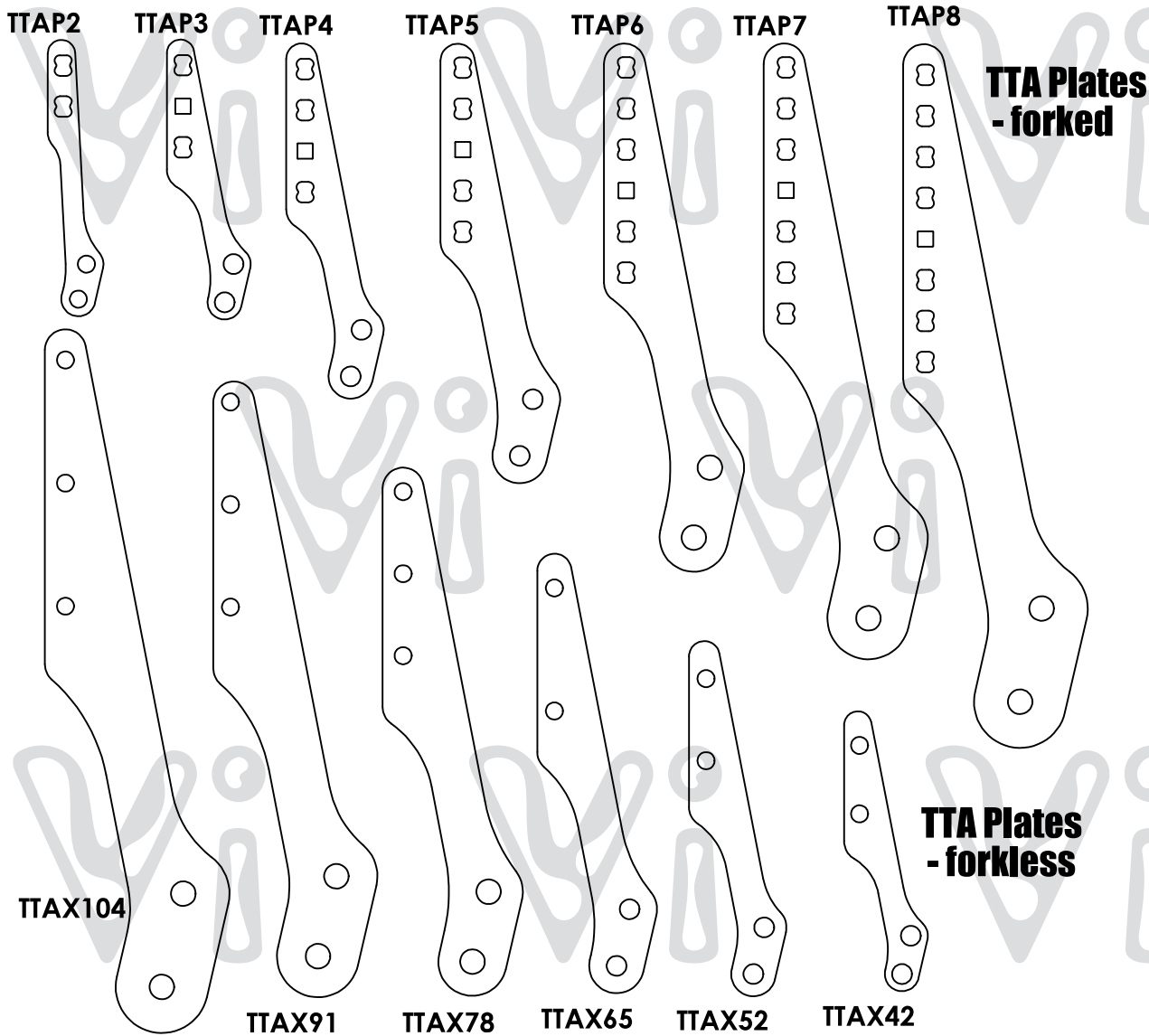
TPLO35LPCR (3.5)



TPLO27LPCR (2.7)



Plate details see page 158



PLEASE NOTE THAT PLATE PROFILES ARE ACTUAL SIZE YOU WILL NEED TO COMPENSATE FOR X-RAY MAGNIFICATION • PROFILES FOR GUIDANCE ONLY PLATES MAY BE AMENDED AT ANY TIME

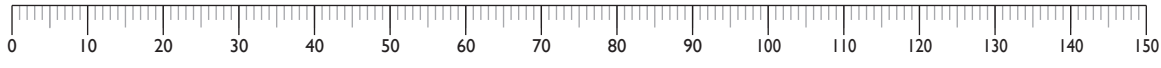
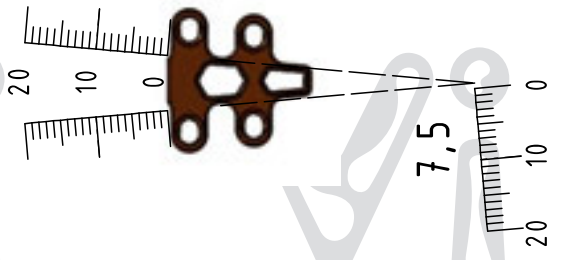
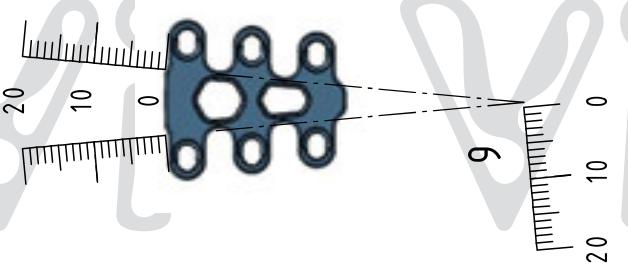
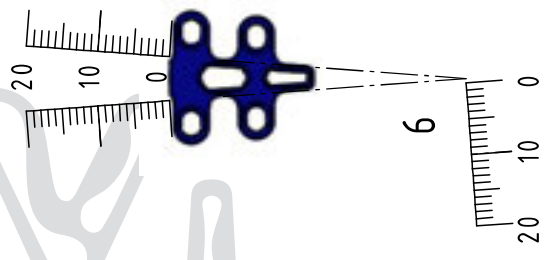
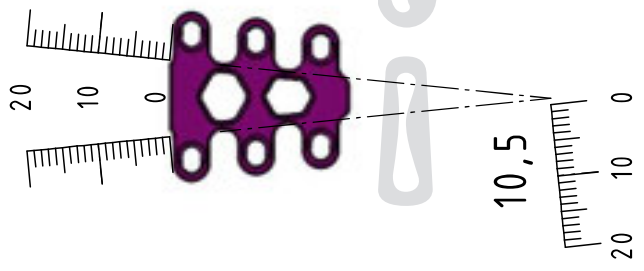
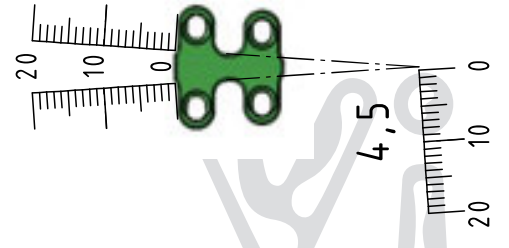
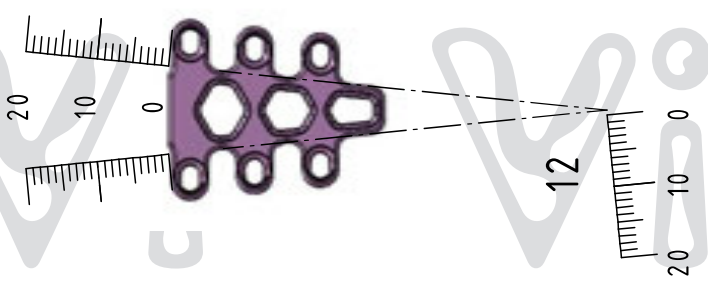
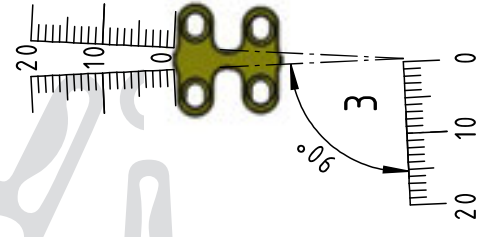
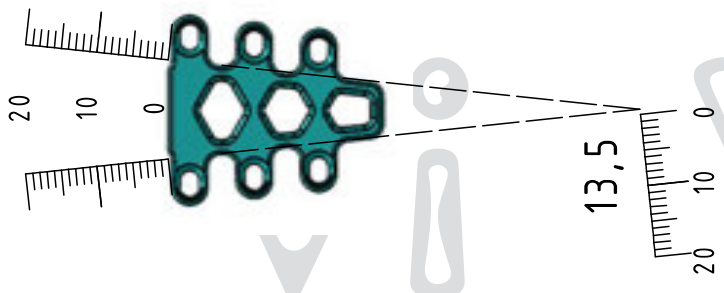
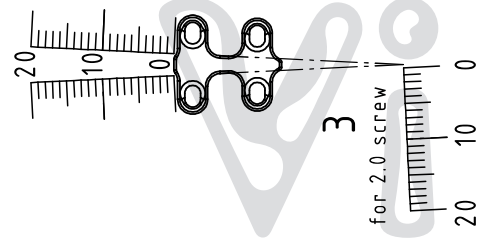
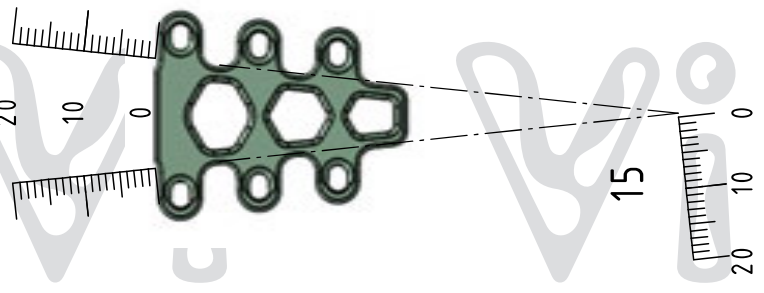


Plate details see page 163

Rev.06-d

Template - TTA Rapid



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Distington House, 26 Atlas Way, Sheffield, S4 7QQ

t: 0345 130 9596

e: info@vetinst.com

www.vetinst.com

