

### Adjustable Bone Saw



Useful for many bone procedures, this saw comes complete with five, fine chrome plated blades. Blade length is adjustable from 40 mm to 100 mm. Procedures include trochleaplasty, tibial crest transplants, amputations, trochanteric osteotomy and excision arthroplasty. Also useful for splitting multi-rooted teeth prior to extraction.

#### ADJUSTABLE BONE SAW

<b>001000</b>	Adjustable Bone Saw c/w 5 fine blades
<b>001001</b>	Spare Fine Blades. Pack of 5 chrome plated

### 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, eg. radius, ulna and ilium during a TPO.

#### RHINOTOMY/PLASTER SAW BLADE

<b>001003</b>	Rhinotomy/Plaster Saw Blade (single)
---------------	--------------------------------------

### Coarse Stainless Blade



Very useful for larger patients. The tooth pitch is 15 teeth per inch. This blade does not clog easily. Also useful for trochleaplasty.

#### COARSE STAINLESS BLADE

<b>001002</b>	Coarse Stainless Blades (single)
---------------	----------------------------------

### X-Acto Saw



Although not stainless, this hard backed fine saw is ideal for wedge trochleaplasty. Provided the blade is kept absolutely dry apart from the actual procedure you will get several procedures from it before it needs replacing. Handle is aluminium. Consider the Hard Backed Orthopaedic Saw (001004).

#### X-ACTO SAW

<b>XACTOB/H</b>	Xacto Saw Complete
<b>XACTOHANDLE</b>	Xacto Saw Handle only
<b>XACTOBLADE</b>	Xacto Saw Blade 0.3mm cut
<b>XACTOSTERILE</b>	Xacto Saw Blade Sterile 0.3mm cut

### Hard Backed Orthopaedic Saw



**140mm long 23mm deep  
0.4mm cut.**

In the style of the XACTO 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 compared with hack saw type blades which often deviate.

Use for wedge sulcoplasty and osteotomies up to 23mm deep.

#### HARD BACKED ORTHOPAEDIC SAW (stainless)

<b>001004</b>	Orthopaedic Hard Back Saw 0.4mm cut. Stainless steel
---------------	---------------------------------------------------------

### 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

<b>001515</b>	Gigli Saw Handles (pair)
<b>001516</b>	Gigli Saw 30cm
<b>001517</b>	Gigli Saw 50cm

### 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

<b>001010</b>	Excision Arthroplasty Rasp
---------------	----------------------------

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

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 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.

TROCHLEA RASP	
001020	Trochlea Rasp

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	O.C.D. Curette
001032	O.C.D. Curette Small

Hohman Retractors with short tip



A deceptively useful instrument, this style of Hohman is useful in:

1. retraction of facia lata during CCL repair
2. elevation of femoral head and neck
3. muscle retraction during many joint and fracture procedures.

If you intend to buy just one Hohman, the one you need is 001041, 18 mm with a short tip. This is usually the one described in texts as 'Hohman'.

HOHMAN RETRACTORS with short tip	
001041	Hohman Retractor 18mm Short Narrow Tip
001042	Hohman Retractor 12mm Short Narrow Tip

Hohman Retractor with long broad tip



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
001044	Hohman Retractor 18mm Long Broad Tip

Hohman Retractor broad with short narrow tip



The 48 mm Hohman is very useful in the large dog for elevation of the femoral head and neck for excision or toggle. The 24 mm is designed to retract muscles during plating & cerclage procedures

HOHMAN RETRACTOR BROAD with short narrow tip	
001045	Hohman Retractor 48mm Short Narrow Tip
001046	Hohman Retractor 24mm Short Narrow Tip

**Mini Hohman 6mm & 8mm short tip**

Manipulation of small bone fragments during repair requires careful retraction of soft tissues to minimise devascularisation. The blade of the Hohman retracts the soft tissue as the tip effectively elevates and exposes the bone fragment.

Exact anatomical repair of the bones will not result in satisfactory healing without adequate blood supply.

Mini Hohmans allow delicate, precise retraction of the vital soft tissues, allowing placement of screws or wires.

An assistant to hold these instruments is a distinct advantage.

**MINI HOHMAN 6mm and 8mm short tip**

**001047** Mini Hohman Retractor 6mm Short Tip

**001048** Mini Hohman Retractor 8mm Short Tip

**Straight Graft Passer**

Designed to pass through a 2.7 mm hole, the straight graft passer is useful for pulling graft and nylon through bone tunnels.

**STRAIGHT GRAFT PASSER**

**001050** Straight Graft Passer

**Bennett Type Graft Passer & Aneurism Needles**

close-up detail

The sharp tip of the angled graft passer is passed around the fabella by rotating the wrist. The eye is small and accepts all suture materials.

**BENNETT TYPE GRAFT PASSER & ANEURISM NEEDLES**

**001057AL** Aneurism Needle 3cm Angled Left Small Eye

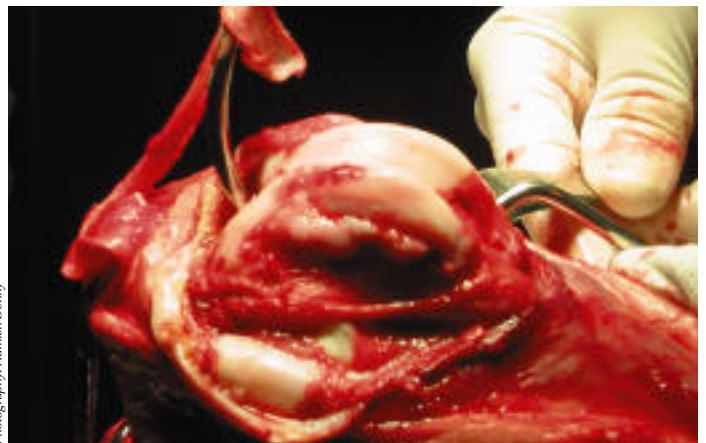
**001057AR** Aneurism Needle 3cm Angled Right Small Eye

**001058AL** Aneurism Needle 4.5cm Angled Left Small Eye

**001058AR** Aneurism Needle 4.5cm Angled Right Small Eye

**001059** Large Bennett graft Passer/Ligature Needle

# Joint Surgery

**Curved Graft Passer**

Photography: Harish Dorny

The repair of the cranial cruciate ligament (CCL) by the 'Over the Top' technique requires a curved graft passer to pull the graft through the stifle joint. This design of graft passer has been developed over many years to:

1. minimise damage to intra-articular structures
2. to feel right in use. The handle is comfortable
3. for graft insertion anterior to posterior or vice versa.

This design is used by most recognised orthopaedic surgeons. Please see our free CD rom 'Surgical Management of Canine Cranial Cruciate Disease' for details and video of the technique.

The small eyed graft passers are appropriate for placement of lateral suture wire or monofilament nylon as described by M. L. Olmstead.

**CURVED GRAFT PASSER**

**001051** Very Small Curved Graft Passer 2cm

**001052** Small Curved Graft Passer 3cm

**001053** Large Curved Graft Passer 4.5cm

**001054** Very Large Curved Graft Passer 6cm

**001055** Extra Large Curved Graft Passer 8cm

**001056** 2cm Graft Passer with small eye

**001057** 3cm Graft Passer with small eye

**001058** 4.5cm Graft Passer with small eye



# 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

The use of monofilament nylon as a lateral suture is accepted as a method of repair of the cranial cruciate ligament. (CCL). Heavy gauge monofilament nylon (100lb, 80lb and 50lb breaking strain) is difficult to tie without making a large knot, which tends to stretch and irritate the soft tissues causing pain and seromas. In addition it is difficult to sterilise. Autoclaving reduces the strength and increases the elasticity of nylon. Veterinary Instrumentation's Lateral Suture System uses nylon sterilized by Ethylene Oxide together with a crimp tube, a method of joining the nylon already well established in other industries. For procedure details see [www.k9ccl.com](http://www.k9ccl.com) or request our free CD rom. 'Surgical Management of Canine Cranial Cruciate Disease'

Some CCL deficient patients benefit from the use of double sutures. This is particularly true of very large dogs and 100lb line. Passing a second needle behind the fabella risks damaging both the first line and the peri-fabellar structures which ultimately will hold the nylon sutures. Double line, swaged on sutures allows the placement of two lines with one pass of the needle. Available as single sterile pack. The double line is available swaged on as a loop without crimps and will, therefore, be of interest to those surgeons using the self-locking McKee/Miller knot (VCOT 1999;12:78-80).

## CRANIAL CRUCIATE LIGAMENT LATERAL SUTURE SYSTEM

**CDROM** Surgical Management of Canine CCL disease  
- covers OTT, Lateral suture & TPLO

**FOC**

## Kits

091154 - Basic Kit

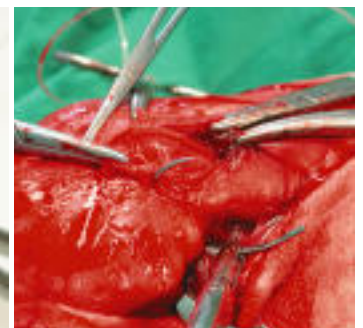
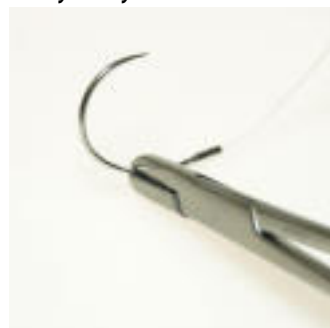


## KITS

- 091154** CCL Suture System (Swaged on) Basic Kit. Forceps, 2 x each size nylon/needle/crimp sterile packs
- 091151** CCL Suture System (Swaged on) Basic Kit Plus. Forceps, 2 x each size nylon/needle/crimp sterile packs plus H/D needleholders
- 091152** CCL Suture System Starter Kit. Forceps, 2 x each size nylon/crimp sterile packs, pack of S/M/L fabella needles + autoclavable needle box. Needles not swaged on.

## Instruments

### Heavy Duty Needle Driver



## HEAVY DUTY NEEDLE DRIVER

- 091153** Heavy Duty Needle Driver with Tungsten jaws



## 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

## 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:

- Partial crimp - see video, does not require additional instrumentation
- Simple tension device requiring a pair of gelpis 091132
- A dedicated loop tensioner 091132A

## CCL Tensioning Device

091132 - Tensioning Device  
(gelpis not included)



### CCL LOOP TENSIONER

**091132** CCL Tensioning Device (pair - gelpis not included)

## CCL Loop Tensioning



091132A-CCL-Loop-Tensioner



detail in use

Does not require use of extra crimps

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!

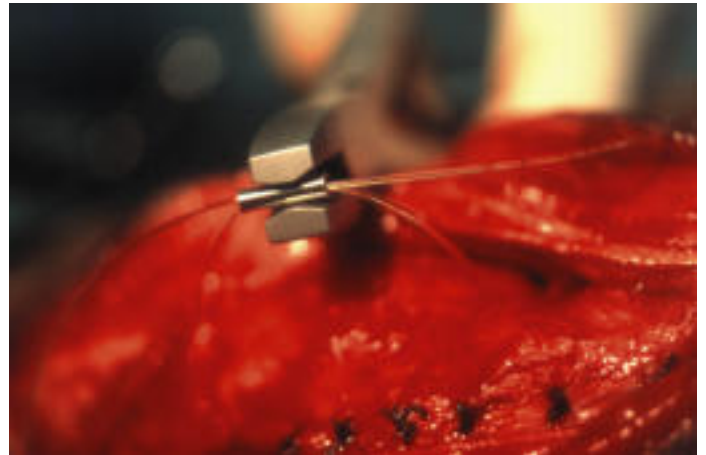
### CCL LOOP TENSIONER

**091132A** CCL Loop Tensioner

**NEW**

# Joint Surgery

## Crimping Forceps



Dedicated crimping forceps are required to avoid over-crimping or under-crimping, both of which will lead to early implant failure.

### CRIMPING FORCEPS

**091135** Crimping Forceps

## Bone Tunnel Borer



Bone tunnels are required in many procedures, e.g. tension wire banding, hip toggling and embrocation techniques. The bone tunnel borer is a simple hand instrument which causes minimal soft tissue damage and minimal fuss in setting up compared with orthopaedic drills. Can be used to predrill for screws and suture screws.

### BONE TUNNEL BORER

<b>001070</b>	Bone Tunnel Borer 2mm
<b>001073</b>	Bone Tunnel Borer 2.5mm
<b>001071</b>	Bone Tunnel Borer 2.7mm
<b>001072</b>	Bone Tunnel Borer 3.5mm

## Countersinking Bone Tunnel Borer



Bone Tunnel Borer



Bone Tunnel Borer - Close Up

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

**001075** Bone Tunnel Borer with Countersink 2.5mm

## Implants

CRIMPS	
<b>091140</b>	10mm Tube Crimp for 50lb line (non sterile)
<b>091136</b>	12mm Tube Crimp for 80lb + 100lb line (non sterile)
<b>091133</b>	14mm Tube Crimp (non sterile) Suitable for nylon over 100lb
<b>091136/S</b>	12mm Half Size Tube Crimp
<b>091140/S</b>	10mm Half Size Tube Crimp
NON STERILE NYLON	
<b>091143</b>	50lb Mono Filament nylon x 50 metre (non sterile)
<b>091138</b>	80lb Mono Filament nylon x 50 metre (non sterile)
<b>091134</b>	100lb Mono Filament nylon x 50 metre (non sterile)

## Sterile CCL Packs

### Sterile Nylon Leader Line

Also useful for other ligament replacement procedures, eg. hip toggle, collateral ligament repair.

STERILE NYLON LEADER LINE	
<b>091141</b>	500mm x 50lb nylon (sterile pack)
<b>091139</b>	800mm x 80lb nylon (sterile pack)
<b>091148</b>	800mm x 100lb nylon (sterile pack)

### Sterile Leader Line & Crimp

For use with separate Fabella (cruciate) needles

STERILE LEADER LINE & CRIMP	
<b>091142</b>	10mm Tube Crimp + 500mm x 50lb nylon (sterile pack)
<b>091137</b>	12mm Tube Crimp + 800mm x 80lb nylon (sterile pack)
<b>091147</b>	12mm Tube Crimp + 800mm x 100lb nylon (sterile pack)

### Sterile Leader Line & Crimp + Needle

This pack contains everything required for a single procedure.

STERILE LEADER LINE & CRIMP + NEEDLE	
<b>091155</b>	50lb nylon line x 500mm on swaged-on v.small fabella needle + 10mm crimp (sterile)
<b>091156</b>	80lb nylon line x 800mm on swaged-on small fabella needle + 12mm crimp (sterile)
<b>091157</b>	100lb nylon line x 800mm on swaged-on medium fabella needle + 12mm crimp (sterile)

### Double Leader Line Loop on Needle

For use with McKee/Miller knot

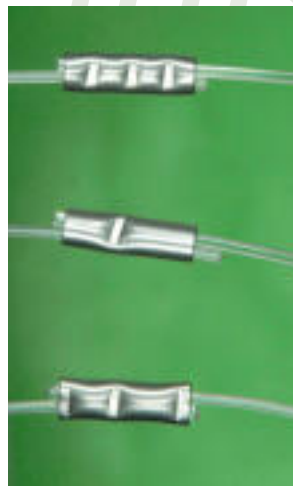
STERILE LEADER LINE & CRIMP ON NEEDLE	
<b>091160</b>	50lb Double line (500mm x 2 as loop) on v small needle
<b>091161</b>	80lb Double line (800mm x 2 as loop) on sm needle
<b>091162</b>	100lb Double line (800mm x 2 as loop) on med needle

### Double Leader Line + Needle + Crimps

For the application of double lines with the single pass of a needle

DOUBLE LEADER LINE + NEEDLE + CRIMPS	
<b>091165</b>	50lb Double line (500mm x 2 as loop) on v small needle plus 2 x 10mm crimps
<b>091166</b>	80lb Double line (800mm x 2 as loop) on sm needle plus 2 x 12mm crimps
<b>091167</b>	100lb Double line (800mm x 2 as loop) on med needle plus 2 x 12mm crimps

### Correct Crimping



Correct. Three evenly spaced crimps

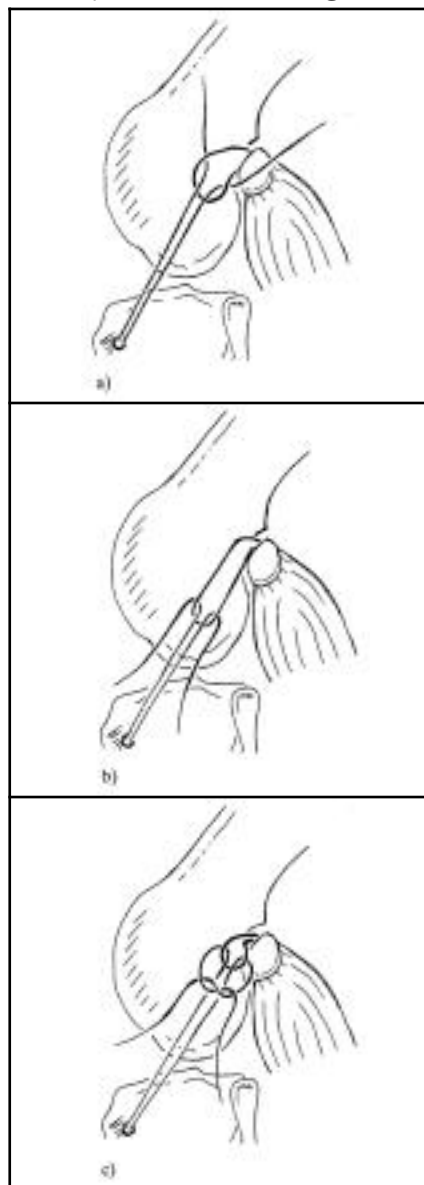


Incorrect. Not enough crimps



Incorrect. Crimps too close to end of tube

### McKee/Miller Self Locking Knot





## Tibial Plateau Levelling Operation by Wedge Osteotomy



The tibial plateau levelling operation (TPLO) alters the anatomy of the stifle to moderate the effect of the loss of the cranial cruciate ligament (CCL). The stifle remains unstable to manipulation but is stable as the dog bears weight. It is claimed that following TPLO, degenerative joint disease changes are minimal compared with other CCL procedures. These plates are widely used to repair the tibia following removal of the bone wedge. The shaft holes are compression. The holes in the head are round but large to give a good range of screw angulation. Particularly useful in large dogs and dogs with tibial plateau deformation. See page 212 for TPLO plate profiles. Our free CD rom illustrates and describes the technique.

### WEDGE ANGLE FINDER OVERLAY - FREE

A simple acetate overlay to help you calculate the tibial plateau angle, from which you can easily calculate the size of the wedge to remove. Includes lines to indicate the normal tibial plateau angle and a 5 degree line which is regarded as the most appropriate post-op angle. Also included on the acetate are actual size outlines of our range of TPLO plates to help you select the most appropriate plate. See page 212 for actual size profiles

See our website [www.k9tplo.com](http://www.k9tplo.com) for further info & a step by step guide to the procedure.

TIBIAL PLATEAU LEVELLING OPERATION BY WEDGE OSTEOTOMY		
<b>CDROM</b>	Surgical Management of Canine CCL disease - covers OTT, Lateral suture & TPLO	<b>FOC</b>
<b>TPLO202026</b>	2.0mm DCP 26mm overall length	
<b>TPLO272739</b>	2.7mm DCP 39mm overall length	
<b>TPLO273539</b>	2.7/3.5 DCP 39mm overall length Allows use of 3.5 cancellous screw in head	
<b>TPLO273545</b>	2.7/3.5 DCP 45mm overall length 2.5mm thick - <b>NEW for 2006</b>	
<b>TPLO353555</b>	3.5mm DCP 55mm overall length	
<b>TPLO353557</b>	3.5mm DCP 57mm overall length Heavy Duty	
<b>TPLO353577</b>	3.5mm DCP 77mm overall length	
<b>TPLO353579</b>	3.5mm DCP 79mm overall length Heavy Duty	
<b>TPLO354579</b>	3.5/4.5 DCP 79mm overall length Heavy Duty Allows 4.5 screws in head	
<b>TPLO 45659030</b>	4.5m DCP 90mm overall length Will accept 6.5 cancellous screws in head 3.0mm thick	
<b>TPLO 45659045</b>	4.5mm DCP 90mm overall length Will accept 6.5 cancellous screws in head 4.5mm thick	
<b>TPLOO</b>	Angle Finder & Plate Overlay	

## Joint Surgery

### TPLO Kit



Kit includes; multisaw, stainless converter, shroud, blade 70mm x 12mm, blade 70mm x 25mm. 1 x TPLO272739, 1 x TPLO353555, 1 x TPLO353579 and CD rom on the technique. Gives a 10% discount over individual purchases. (You will also need 2.7/3.5mm AO type bone plate benders).

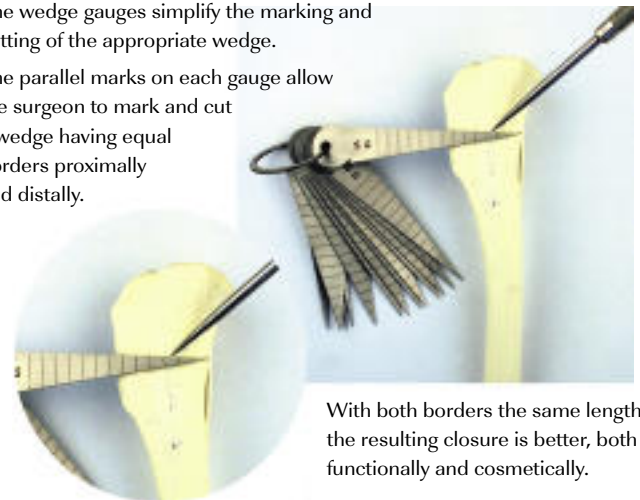
### TPLO KIT

<b>TPLOKIT</b>	TPLO (closing wedge) Start up kit
<b>001287</b>	2.7/3.5 AO Type bone plate benders (pair)

### Wedge Osteotomy Gauge Set 9 degrees to 23 degrees

The wedge gauges simplify the marking and cutting of the appropriate wedge.

The parallel marks on each gauge allow the surgeon to mark and cut a wedge having equal borders proximally and distally.



With both borders the same length the resulting closure is better, both functionally and cosmetically.

### WEDGE OSTEOTOMY GAUGE SET - 9 degrees to 23 degrees

<b>001493</b>	Wedge osteotomy gauge set
---------------	---------------------------

### 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).

### BONE SCRIBE

<b>001494</b>	Bone scribe
---------------	-------------

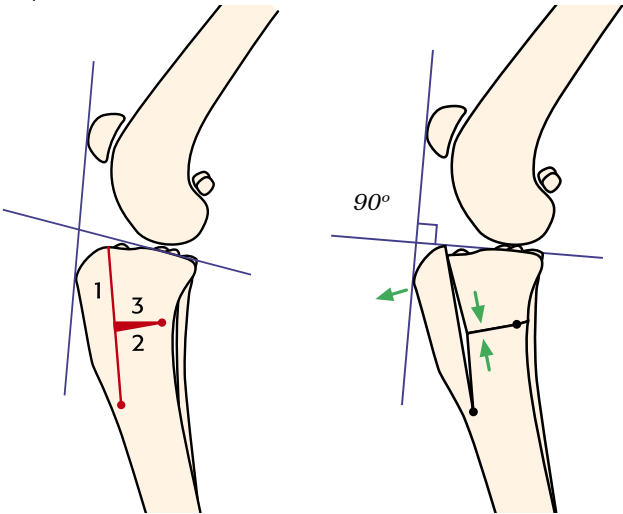
# Triple Tibial Osteotomy

*A new cruciate management technique combining tibial plateau levelling and tibial tubercle advancement.*

## FREE INSTRUCTIONAL DVD

Phone **0845 130 9596** or email **info@vetinst.com**

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.

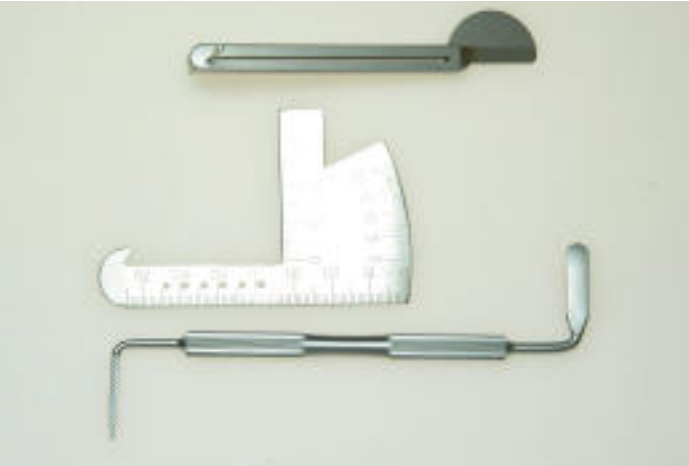
The closing wedge TPLO shortens the tibia and creates a defect in the tibia which has to be protected from the pull of the straight patella ligament by a figure of eight wire.

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. A free instructional DVD is available which fully describes and explains the procedure through video, stills and text files. The DVD also includes an instrument check list.

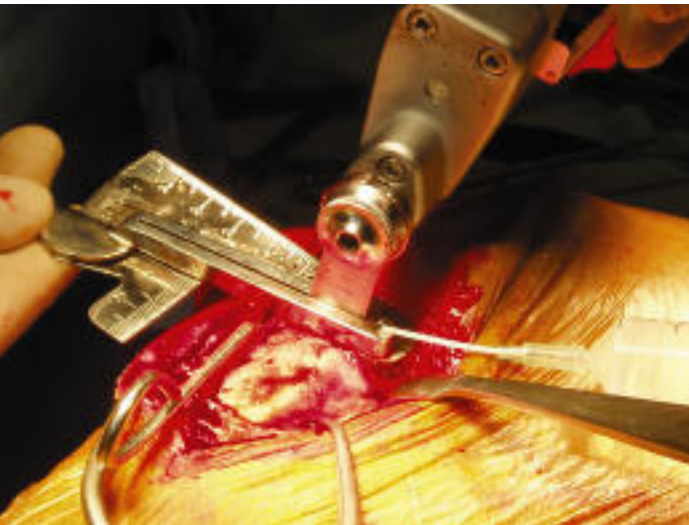
## Triple Tibial Osteotomy

Some instrumentation is required to make the procedure easier and to minimise errors. The set comprises a saw guide, measuring/marketing 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 5.

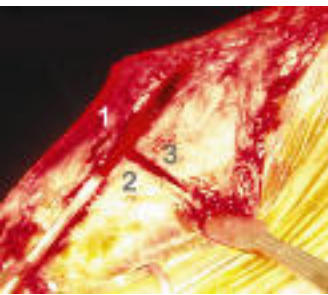


The technique uses the well established range of closing wedge osteotomy plates.

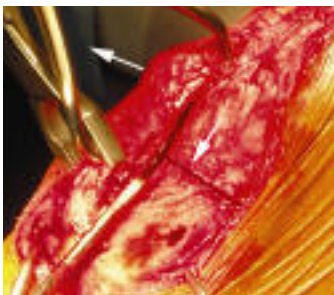
## Triple Tibial Osteotomy



Osteometer and Saw guide



Three Osteotomies



TPLO + TTA

TTO KIT	
TTO008	TTO Instruments (3 items) kit price
DVDTTO	DVD Illustrating the procedure
TPL00	Angle Finder and Plate Overlay



# Tibial Plateau Levelling by Radial Osteotomy

## Slocum

### Slocum Style Plates



TPLOS35 slocum style



TPLOS35L slocum style

The cast Slocum plate meets neither the current metallurgical specification nor the manufacturing process requirements for stainless steel implants. While we are allowed to use our judgement regarding implants it would be relatively hard to defend the use of a non-standard implant should anything go wrong.

In view of the above we have produced a Slocum style plate, machined from 316LVM. The only clear advantage of the cast Slocum plate was its malleability. Our plate has been modified in the head region to make contouring easier while retaining the stiffness of 316LVM elsewhere for stability and rapid healing. The lower profile makes closure easier.

#### SLOCUM STYLE TPLO PLATES

<b>TPLOS35L</b>	TPLO Plate Slocum Style 3.5mm left
<b>TPLOS35R</b>	TPLO Plate Slocum Style 3.5mm right
<b>TPLOS27L</b>	TPLO Plate Slocum Style 2.7mm left
<b>TPLOS27R</b>	TPLO Plate Slocum Style 2.7mm right

### 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. No more fiddling around with rulers.

#### SLOCUM TPLO ROTATION GAUGES 5 to 15mm

<b>001492</b>	Slocum rotation gauges
---------------	------------------------

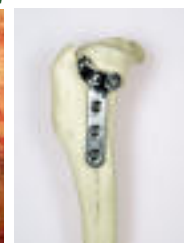
### Slocum TPLO Guide Pin

End threaded negative pin. Drive directly into the tibia for jig attachment.

#### SLOCUM TPLO GUIDE PIN 3.2mm

<b>TPLO32</b>	Slocum guide pin 3.2mm, thread 25mm
---------------	-------------------------------------

## Cadmus Plates and Templates



# Joint Surgery

Calvin Cadmus (Cal) from Oakland California, as an early Slocum user, recognised that when the TPLO osteotomy was centred along the long axis of the tibia several advantages were seen over non-centred osteotomies.

- 1) Increased accuracy in achieving the desired post-op tibial plateau angle
- 2) Significantly fewer tibial tubercle fractures
- 3) Elimination of undesirable angular deformities (genu valgum)
- 4) Decrease in proximal screw pull out
- 5) Lower long term DJD

Calvin has designed a template to ensure that your osteotomy is centred on the long axis, and a range of plates which stabilise the osteotomy along the long axis of the tibia.

Ref. 'Geometrical analysis evaluating the effect of TPLO position on post-operative tibial plateau slope' VCOT Jan 2004. M.P. Kowaleski et al.

### Cadmus Plate

- 1) Surgeon friendly plate fits the contour of the osteotomy.
- 2) Eliminates intra-articular screw placement
- 3) Creates compression along the arc of the osteotomy.
- 4) Hole design provides maximum screw security as well as compression
- 5) Machined, not cast, from 316LVM conforming to ASTM 138
- 6) Easy contour particularly in the proximal tibia

#### CADMUS TPLO

<b>TPLOCAD18L</b>	18mm L
<b>TPLOCAD18R</b>	18mm R
<b>TPLOCAD24L</b>	24mm L
<b>TPLOCAD24R</b>	24mm R
<b>TPLOCAD30L</b>	30mm L
<b>TPLOCAD30R</b>	30mm R
<b>LNDGCAD27</b>	Cadmus load/neutral guide 2.7mm
<b>LNDGCAD35</b>	Cadmus load/neutral guide 3.5mm
<b>DVDTPLOCAD</b>	DVD Illustrating use of Cadmus Plate & Template

Accurate placement of the screws in the head is facilitated by use of a dedicated load and neutral guide which places the pilot hole away from the osteotomy. As the screw is tightened into the hole there is a compressing movement of the screw and bone. The spherical head of the screw then locks into the round hole giving secure full circumferential contact unlike a standard DCP hole. It is easy to create a single compressing movement around the arc of the osteotomy using round holes with the added bonus of extra screw security.

### Cadmus Templates



#### CADMUS TEMPLATES

<b>TPLOTTEM18</b>	Centering Template - 18mm
<b>TPLOTTEM24</b>	Centering Template - 24mm
<b>TPLOTTEM30</b>	Centering Template - 30mm

# Examination and Surgery of the Meniscus

## Meniscectomy Instruments



Damage to the medial meniscus following CCL rupture increases with:

1. time after injury
2. size of the dog.

Removal of severely damaged cartilage is assisted by instruments designed for the purpose. The jaws of the ligament clamp have multiple small teeth for maximum grip in the presence of synovial fluid

MENISCECTOMY INSTRUMENTS	
001100	Meniscectomy Instrument Set
001107	Meniscectomy Knife
001110	Ligament/Cartilage Clamp

## Toothed Halsteads



103185	
TOOTHED HALSTEADS	
103185	Halstead mosquito forceps 1/2 teeth Cof

## 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
833305	Senn cats paw retractor

## Beaver Type Scalpel Handle



Holds Beaver and Swann Morton fine blades. Ideal for delicate control and maximum visualisation.

BEAVER TYPE SCALPEL HANDLE	
06054	Beaver type scalpel handle (VI) 130mm
06052	Beaver type scalpel handle. 100mm
06053	Beaver type scalpel handle. 80mm

## Swann Morton Beaver Type Blades



The 64 blade (best for meniscal release) cuts around the tip as well as the ventral surface. The 65 blade (best for trimming flaps) is essentially a scaled down No. 11 blade. The 65A blade is even smaller. Very useful in restricted areas minimising risk to articular cartilage.

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

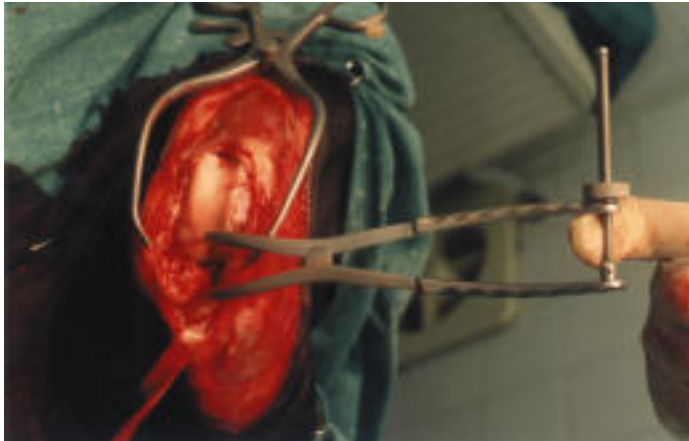
## Meniscus Probes



Visualisation of the caudal horns of the meniscus can be a challenge. Often the process of exposing, the caudal horn can result in distortions. A normal meniscus can look damaged and occasionally a bucket handle tear can sit back and look normal. It is helpful to gently probe the meniscus to establish it's true condition. Dimensions refer to length of tip. Use 1mm in dogs < 30kg and for dogs >30kg use 2mm.

MENISCUS PROBE	
001408	Meniscus Probe 1mm tip
001409	Meniscus Probe 2mm tip

## Stifle Distractors



Damage to the medial meniscus is commonly associated with rupture of the Cranial Cruciate Ligament (C.C.L.). It is most frequently found in larger dogs with a long standing injury. Failure to deal with meniscal damage is a serious omission in C.C.L. repair. Exposure of the medial meniscus for examination and repair is extremely difficult. For further information see our web site or request our free CD rom 'Surgical Management of Canine Cranial Cruciate Disease'.

### WHICH DISTRACTOR?

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



Stifle Distractor Tips  
001112

The stifle distractor is designed to separate the femoral component of the stifle from the tibia. Ideally the two joint surfaces should move away from each other in a parallel fashion so that the meniscus is exposed in its natural state and minimally distorted by the examination. One tip is placed in the intercondylar notch and the other on the cranial intercondylar area. Neither tip should involve articular cartilage. Test distractions (by squeezing the handles) will allow the surgeon to find the exact point at which a full distraction will expose the medial (usually) meniscus. The spin lock is then engaged to powerfully open up the stifle joint. The distractor is self-retaining leaving the surgeon with two free hands to examine the meniscus and deal with any pathology.

When closed the tips overlap making the points atraumatic as they enter the joint. Additionally the overlapping feature reduces the profile of the tips as they enter the joint.

**Money-back guarantee!** If this instrument is not an improvement on whatever you are currently using, we will give you a full refund.

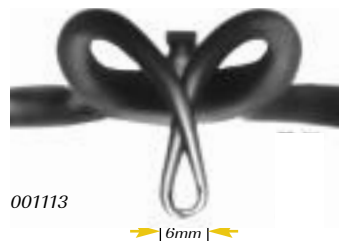
# Joint Surgery

### STIFLE DISTRACTOR

<b>001112/L</b>	Large Stifle Distractor min spread 10mm max 40mm.
<b>001112</b>	Stifle Distractor min spread 8mm max 30mm.



### Small Stifle Joint Distractor



001113

6mm



Small Stifle Distractor - Actual size

The small distractor is also useful as small local muscle and tissue retractors in and around canine joints e.g. elbow exploration.

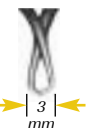
### SMALL JOINT DISTRACTOR / RETRACTOR 6mm wide tips

<b>001113</b>	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.

001113vs



3mm

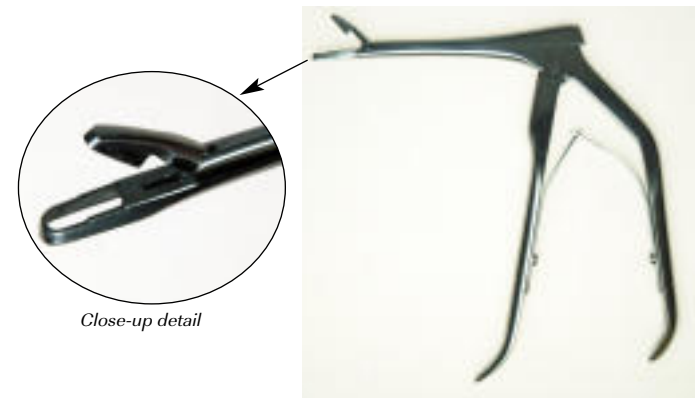
### VERY SMALL JOINT DISTRACTOR / RETRACTOR 3mm wide tips

<b>001113VS</b>	V Small Joint Distractor/Retractor 3mm wide tips
-----------------	--------------------------------------------------



# Miscellaneous Joint Surgery Products

## Coughlan Soft Tissue Mangeurs



Developed by Andrew Coughlan of Northwest Surgeons, the manger is designed to rapidly remove soft tissues eg. fat pad which can obscure the operative field. Also ideal for the removal of the remnants of the ruptured cranial cruciate ligament.

COUGHLAN SOFT TISSUE MANGEURS	
001108	Coughlan Soft Tissue Manger - small
001109	Coughlan Soft Tissue Manger - large

## Plate Bending Pliers



These pliers will contour 2.7mm and 3.5mm narrow plates. 3.5 DCPs are at the absolute limit and will require multiple small bends. Also useful for bending guide pins in the Slocum TPLO technique. Available elsewhere for £1000 or more.

PLATE BENDING PLIERS	
001289	AO type bending pliers 2.7/3.5mm
001289A	AO type bending pliers 2.0/2.7mm

## CCL Staples



## CCL Staples - continued

The attachment of the facia lata graft to the distal femur is the weakest part of the OTT repair. The small spikes under the head of the staple are designed to engage the graft and firmly fix it to the periosteum. Also useful for re-attaching avulsed ligaments and transfixing the biceps tendon. Made from cobalt chrome.

CCL STAPLES	
090125	6mm wide CCL staple
090126	8mm wide CCL staple
090127	11mm wide CCL staple
090128	16mm wide CCL staple

## CCL Staple Introducer



The staple introducer holds the staple to facilitate the initial insertion and alignment whilst being struck by a mallet. In case of difficulty starting the staple, predrill with 2.0mm pin or drill bit. Accepts all sizes of CCL staple.

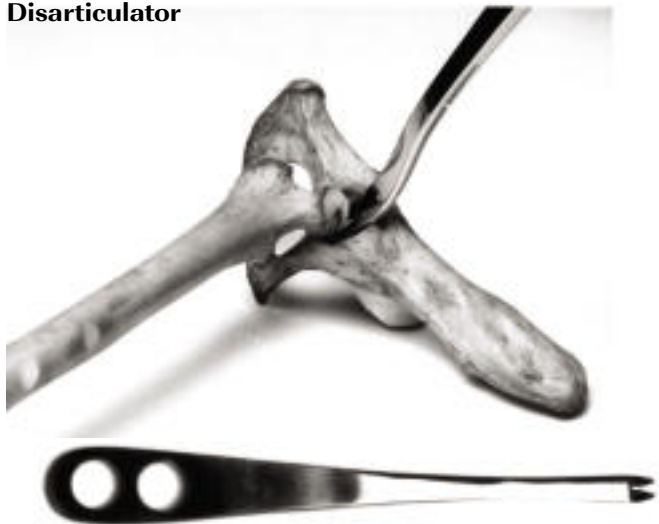
CCL STAPLE INTRODUCER	
090129	Staple Introducer
091130	CCL Kit in stainless box (introducer with 8 staples)

## Condyle Clamp



Fracture of the lateral humeral condyle is a relatively common fracture in young dogs. Reduction and repair is simple using the condyle clamp and damage to periarticular structures is reduced to a minimum. No need to lag screw with this clamp. Pressure should be applied proximo-laterally not purely laterally. See diagram. Reduction may be checked by radiography prior to fixation with a single screw. Use only within 48 hours of the fracture and if the fractured condyle is still mobile.

CONDYLE CLAMP	
001080	Condyle Clamp Stainless Steel

**Disarticulator**

Rupture of the round ligament (Teres) can be extremely difficult. The disarticulator is designed to elevate the femoral head ready for excision. The notch at the tip of the instrument engages and ruptures the round ligament. The disarticulator is also particularly useful in manipulation of the humeral head in OCD lesions, investigation of elbow lesions and as a general tissue retractor. **If you cannot see the cut end of the round ligament you probably have not resected it.**

**DISARTICULATOR**

<b>001090</b>	Small Disarticulator
<b>001091</b>	Large Disarticulator

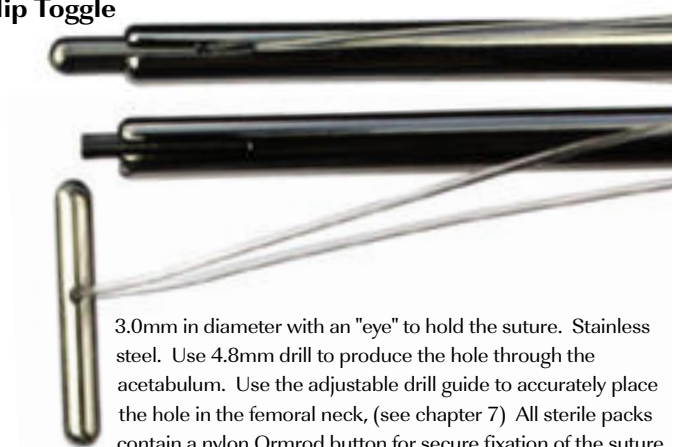
**Hatt Spoon***Actual size*

An alternative to the disarticulator in large dogs. The edge of the spoon is sharp. As used by Martin Olmstead. Our pattern has a fibre handle and a finer shaft for better balance.

**HATT SPOON - NEW**

<b>001092</b>	Hatt Spoon 230mm. (17mm x 30mm scoop)
<b>001093</b>	Hatt Spoon 230mm. (12mm x 18mm scoop)
<b>001094</b>	Hatt Spoon 230mm. (7mm x 12mm scoop)

# Joint Surgery

**Hip Toggle**

3.0mm in diameter with an "eye" to hold the suture. Stainless steel. Use 4.8mm drill to produce the hole through the acetabulum. Use the adjustable drill guide to accurately place the hole in the femoral neck, (see chapter 7) All sterile packs contain a nylon Ormrod button for secure fixation of the suture.

Available with monofilament or braided nylon. The latter ties better.

**HIP TOGGLE**

<b>HIPTOG</b>	Hip Toggle 3.0mm + 80lb nylon, omrod button (sterile pack)
<b>HIPTOGB</b>	Hip Toggle 3.0mm + Metric 7 braided nylon, omrod button, (sterile pack)
<b>HIPINT</b>	Hip Toggle Introducer + hip toggle with nylon + omrod button (sterile pack)
<b>TOG</b>	Hip Toggle only 3.0mm (non sterile)
<b>ADJDCG2035</b>	Adjustable drill guide 2.0, 2.5, 3.5mm drills
<b>HIPTOGKIT</b>	Contains introducer, hip toggle sterile pack as above, drill guide, 3.5 & 4.8mm drills

## Triple Pelvic Osteotomy

### Triple Pelvic Osteotomy Plate



By rotating of the acetabular segment in immature dogs with severe H.D., this technique is designed to prevent onset and progression of degenerative joint disease and thereby avoid the need for a total hip replacement.

The plates are supplied flat to be twisted prior to surgery or pre-bent by ourselves prior to despatch. Please advise angle and side. Thirty degrees rotation is the most widely applied. The plates accept 3.5mm cortical, 3.5mm cancellous, 4mm cancellous and 9/64" Sherman self tapping screws.

TRIPLE PELVIC OSTEOTOMY PLATE	
<b>090167</b>	Large TPO Plate
<b>090179</b>	Small TPO Plate
<b>090167L30</b>	Large TPO Plate Prebent 30 Deg. Left
<b>090167R30</b>	Large TPO Plate Prebent 30 Deg. Right
<b>090179L30</b>	Small TPO Plate Prebent 30 Deg. Left
<b>090179R30</b>	Small TPO Plate Prebent 30 Deg. Right
<b>HDTP0</b>	TPO Technique Video Hamish Denny

### Rasenberg TPO Plate



This plate is more flexible than the VI or the Slocum plate. Less pelvic narrowing than the VI plate. Less screw pull out than Slocum plate. For a free powerpoint presentation on the technique please phone or e-mail us at [info@vetinst.com](mailto:info@vetinst.com). Cutouts on the plate allow the placement of additional screws should they be necessary.

RASENBERG TPO PLATE	
<b>090195</b>	Rasenberg 3.5mm TPO Plate 30 degree Right.
<b>090196</b>	Rasenberg 3.5mm TPO Plate 30 degree Left.
<b>CDRAS</b>	Powerpoint Presentation on CD

### Epiphyseal Staples

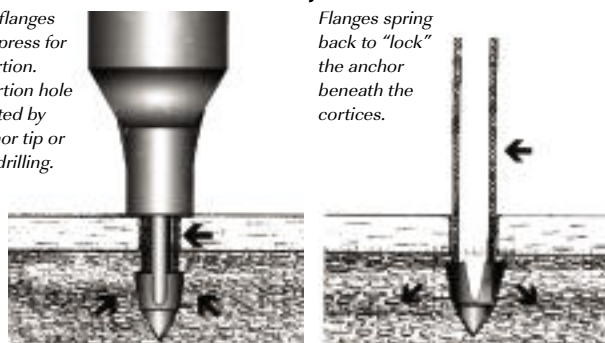
Use to correct angular deformities caused by uneven growth of distal growth plates. Staples will only work if there is growth potential in the plate to be stapled.

#### EPIPHYSEAL STAPLES

	Width	Leg Length	Wire Diameter
<b>090171</b>	12mm wide	10mm wide	1.6mm diameter
<b>090172</b>	15mm wide	12mm wide	2.0mm diameter
<b>090173</b>	20mm wide	15mm wide	3.0mm diameter
<b>090174</b>	30mm wide	25mm wide	3.0mm diameter

### Bone Biter Suture Anchor System

The flanges compress for insertion. Insertion hole created by anchor tip or pre-drilling.



Flanges spring back to "lock" the anchor beneath the cortices.

The Bonebiter Suture Anchor System provides a versatile way for veterinary surgeons to utilize suture in the repair of joint instability. This unique method for quickly and easily anchoring sutures on to bone is based on a patented design in human orthopaedics. By drawing upon previous research and development experience, Androcles Inc. was able to develop a suture anchor system with the needs of the veterinary surgeon in mind. Now available in two sizes the Bonebiter is small, easy to install, and able to resist forces equivalent to the breaking strength of a size 2 and a size 5 braided suture. Also used with monofilament nylon. 50lb for the no.2 anchor and 80lb for the no. 5.

#### BONE BITER SUTURE ANCHOR SYSTEM

<b>100001-00</b>	Bone Biter Suture Anchor Size 2
<b>100002-00</b>	Bone Biter Suture Anchor Size 5
<b>110001-00</b>	Bone Biter Driver Set Size 2 (no anchors)
<b>110002-00</b>	Bone Biter Driver Set Size 5 (no anchors)
<b>110003-10</b>	Bone Biter Combination Driver Set Size 2 & 5 (Size 2 & 5 driver, no anchors)
<b>110003-20</b>	Bone Biter Full Set. Includes Combination driver set, 5 x no. 2 anchors, 5 x no.5 anchors, 1.5mm and 2.5mm hard drill bits, stainless case with silicone insert.
<b>300075-00</b>	Stainless tray with Silicone fingered mat



## Introduction

Using fibre optics the arthroscope is able to deliver light and obtain an image from within the joint thus obviating the need for an extensive surgical approach and keeping surgical trauma to soft tissues at a minimum. However, arthroscopy is not a risk free procedure as it involves placing sharp metal objects into the joint space.

Although arthroscopy may be considered expensive in terms of both the dedicated instrumentation required and the time and money involved in training, it is recommended that sufficient resources are allocated to purchase good quality equipment at the outset. (Equipment failures being very frustrating and ultimately very expensive.)

Dr Fritz, a veterinary surgeon himself, has worked closely with leading authorities in the field of veterinary arthroscopy (e.g. Van Bree, Van Ryssen and Lehman) to develop a range of arthroscopic instruments with our patients in mind.

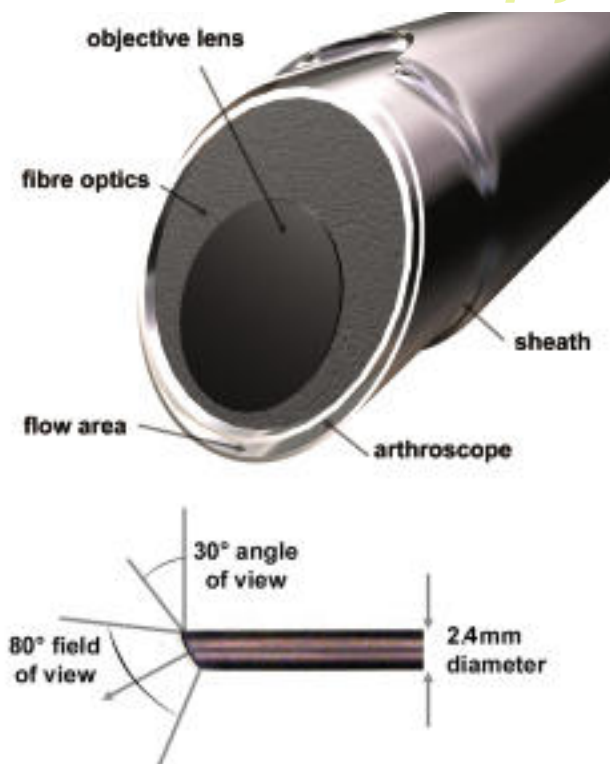
## Arthroscopes

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. An arthroscope may be defined using four different parameters, 1) diameter, 2) viewing angle, 3) field of view and 4) working length. Arthroscopes for small animal use are available in three diameters.

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. For this reason we now only offer 2.4mm and 1.9mm arthroscopes. Patient size and the joint to be investigated will dictate selection of the arthroscope. 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'.

# Arthroscopy



Each arthroscope will require a dedicated sheath, which protects the arthroscope as well as delivering fluid to the tip. Sheaths offering a high rate of flow are preferable. The sheath reduces the effective working length of the 1.9mm scope to approx 8.0cm. Conversely, the sheath will increase the working diameter of the arthroscope. 1.9mm becomes 2.8mm.

Each sheath has a dedicated trochar which, when inserted in place of the arthroscope prevents blocking of the sheath and is used to create a viewing portal into the joint. Sheaths are supplied with both blunt and sharp trochars. Care should be exercised using the sharp trochar when approaching articular surfaces.

Large image technology means the image virtually fills the monitor screen. Exposure control of endoscopic video cameras is much easier, even with a 1.9 mm diameter telescope! All scopes are available in soakable and autoclaveable versions. Autoclaving, especially fine scopes will significantly reduce the working life of the instrument. We advise use of the soakable versions.

### Standard Arthroscope, 2.4 mm with arthroscopic sheath



For elbow, shoulder and knee joint.

<b>T140-2430</b>	Wide angle telescope, 30°, OD:2.4mm, WL: 14cm, large image technology, standard light cable connectors. soakable
<b>T141-2430</b>	Wide angle telescope, 30°, OD:2.4mm, WL: 14cm, large image technology, standard light cable connectors. autoclaveable
<b>S140-2431</b>	Sheath for arthroscopy, OD:3.8mm, WL: 12cm compatible with T140-2430 and T141-2430, stopcock, including blunt & sharp trocar - high flow version