

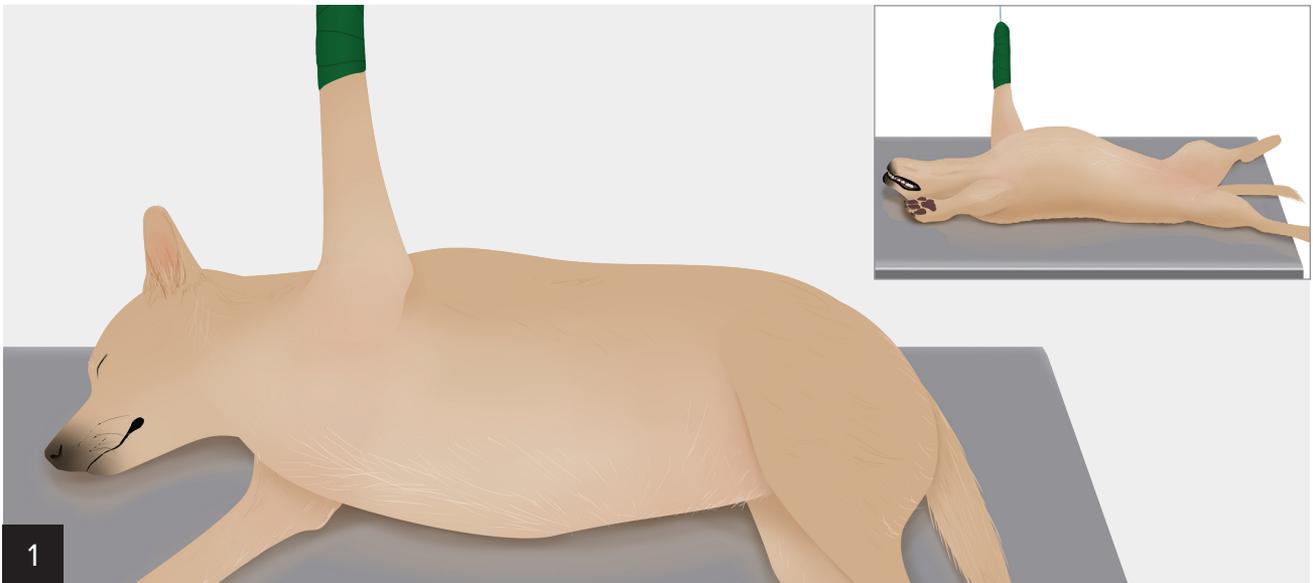
Minimally Invasive Humeral Condylar Fracture Repair

With Headless Compression Screw System

Surgical Technique



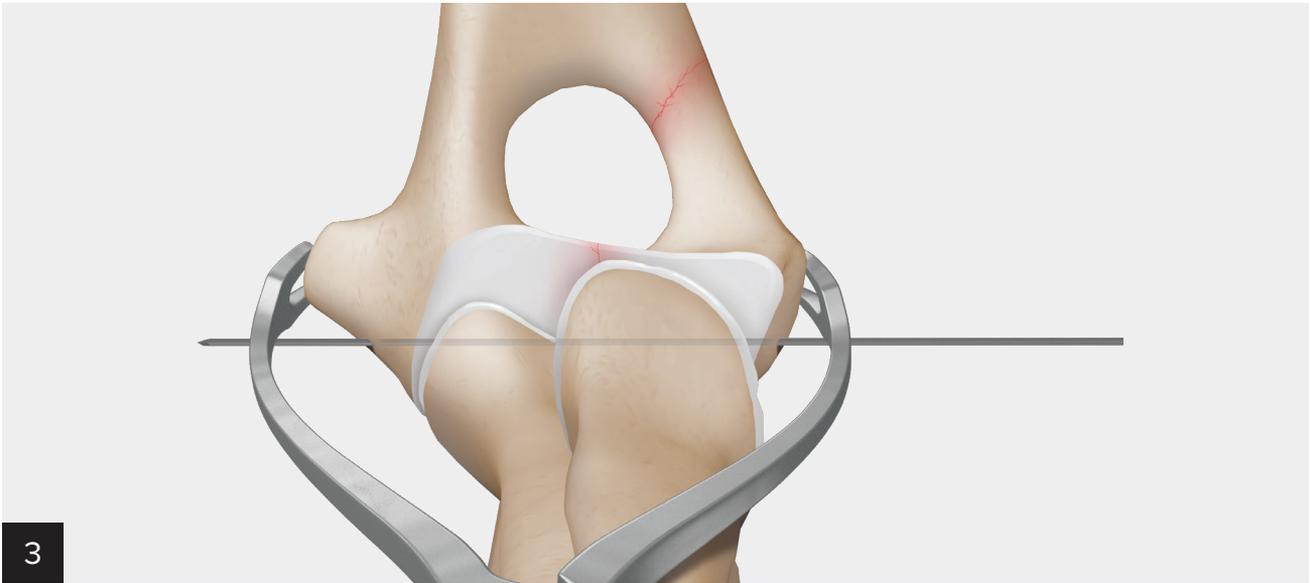
Arthrex[®]
Vet Systems



Place the patient in dorsal or lateral recumbency as desired under general anesthesia. Perform a hanging limb technique with aseptic preparation and appropriate. Do **not** use an adhesive drape or stockinette over the surgery site as this material may bind in the screw threads and could be incidentally implanted with the appliance.

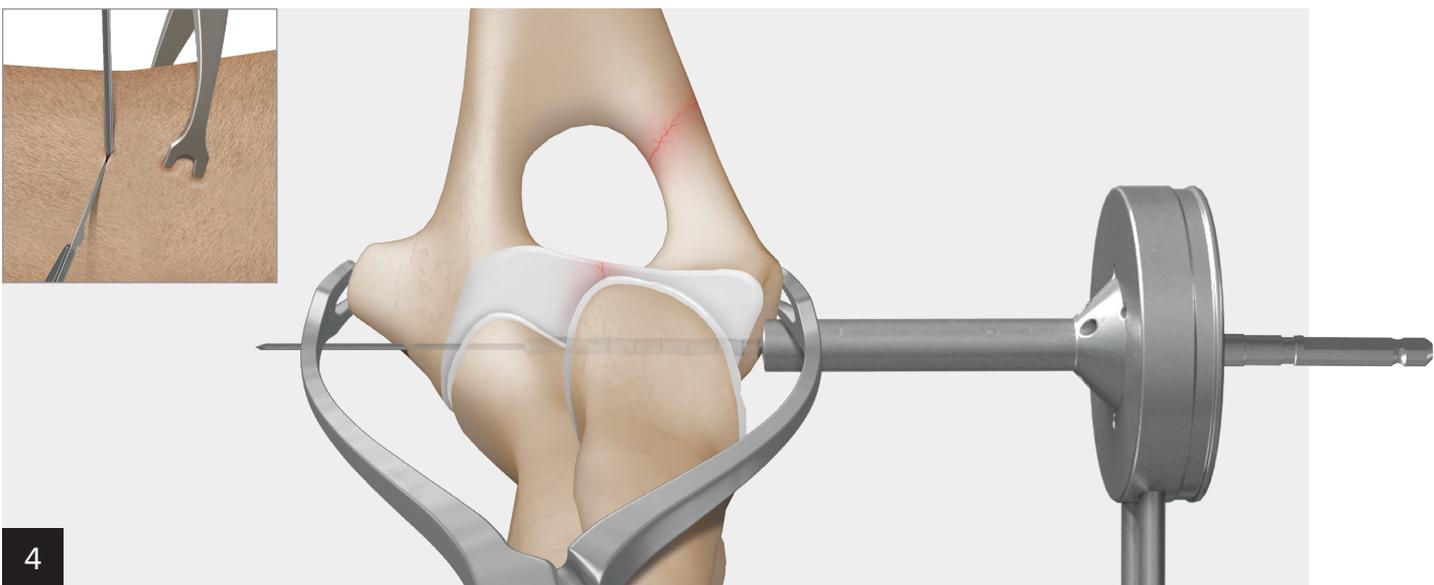


Closed Reduction of Fracture. Manipulate the fracture into reduction with finger pressure, followed by application of pointed-reduction forceps across the epicondylar eminences or a condylar clamp as desired. Confirm reduction arthroscopically, fluoroscopically, or with standard radiographs.



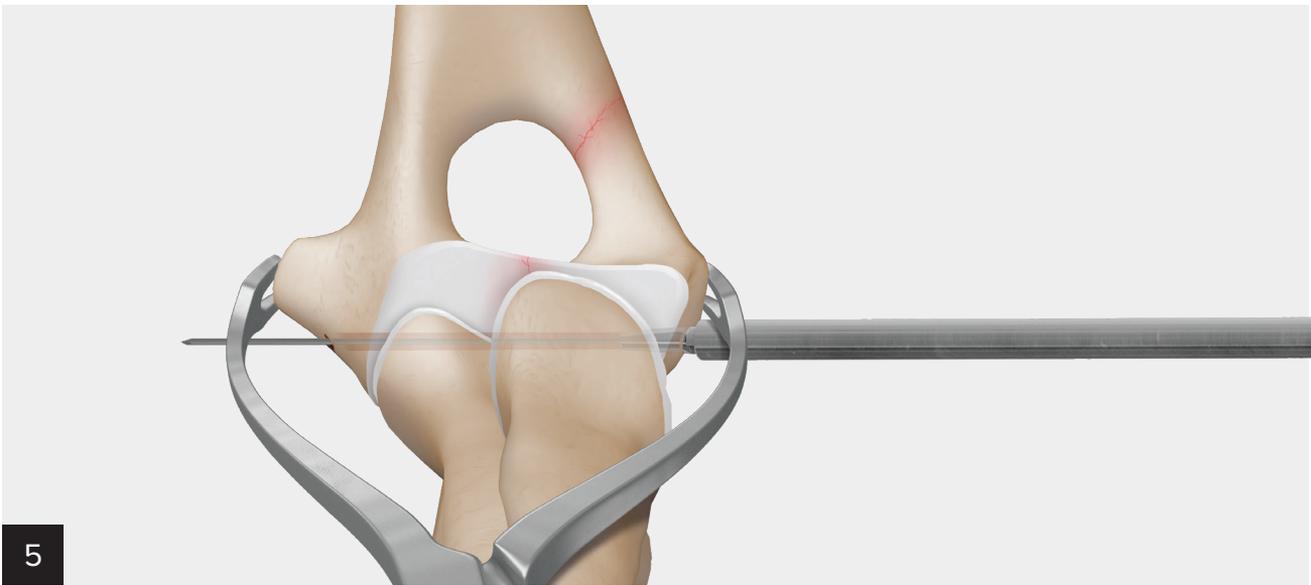
Using a medial or lateral approach as desired, apply firm finger pressure to place a 0.85 mm or 1.1 mm guidewire as appropriate to the selected screw size percutaneously into the center of the humeral condyle so that it is exactly perpendicular to the condyles. This should be confirmed luoroscopically or radiographically

if possible. When the guidewire is satisfactorily positioned, insert it across the humeral condyles until it penetrates the trans-cortex and skin. Recheck positioning, then clamp a hemostat to the guidewire so that it cannot be accidentally withdrawn when drilling.



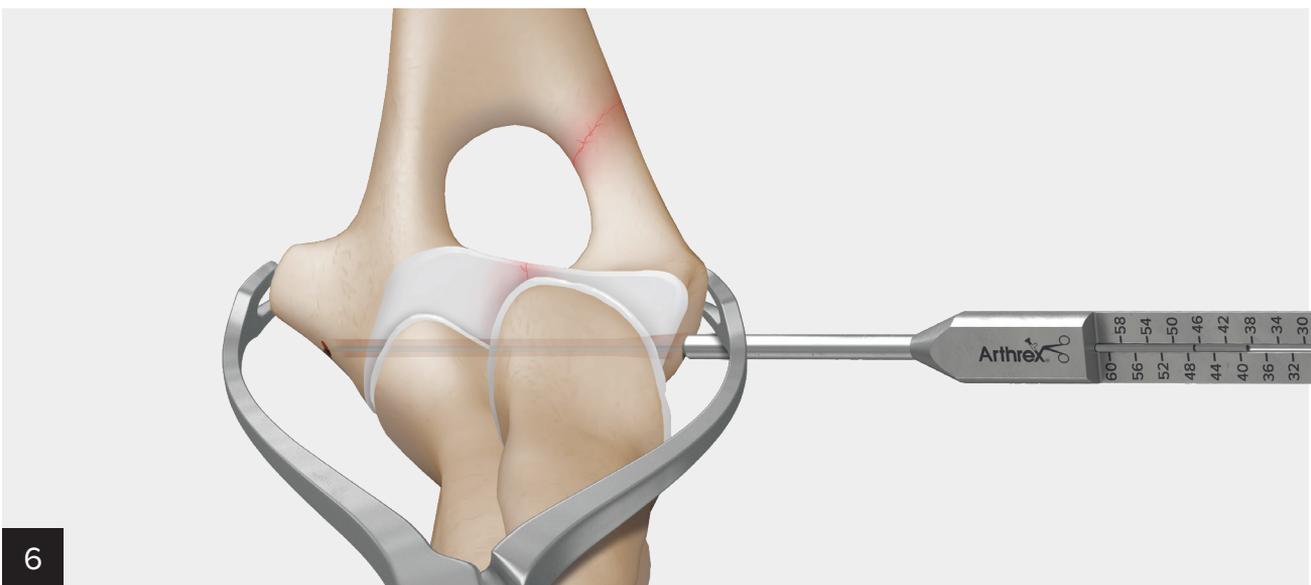
Make a very small skin incision along the guidewire with a #15 scalpel blade. A 3 mm to 4 mm incision is sufficient. Overdrill the guidewire with the appropriately sized cannulated drill bit corresponding to the selected compression screw (2.5 mm, 3.5 mm, or 4.0 mm as appropriate to the patient's size). Use a drill sleeve

to protect the soft tissues. Drilling in reciprocate is recommended as an additional measure to protect soft tissues and to prevent winding of important nerves and other adjacent soft-tissue structures. The drill should penetrate the trans-cortex. Be careful not to dislodge the guidewire when withdrawing the drill.



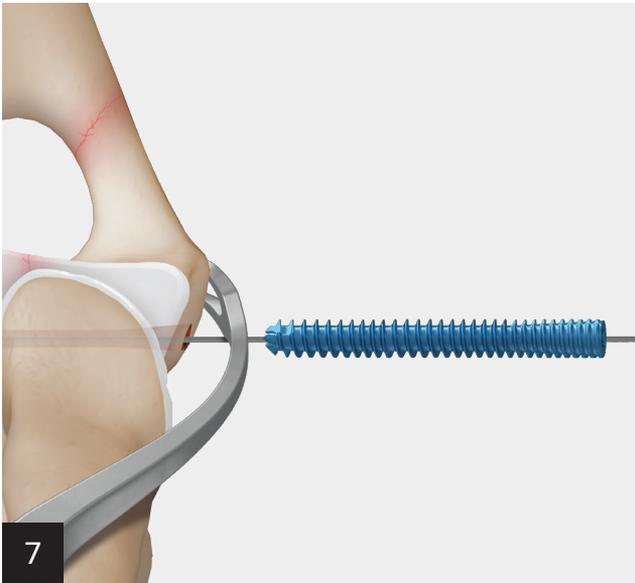
5 If treating a mature dog, load the cannulated profile drill onto the cannulated ratcheted screwdriver handle. In puppies, due to the soft nature of the bone and the thin cortices, this step should be omitted. Load the drill

onto the guidewire and drill the pilot hole until the drill is inserted to the depth stop. Again, use a sleeve to protect adjacent soft tissues and use a reciprocating motion.

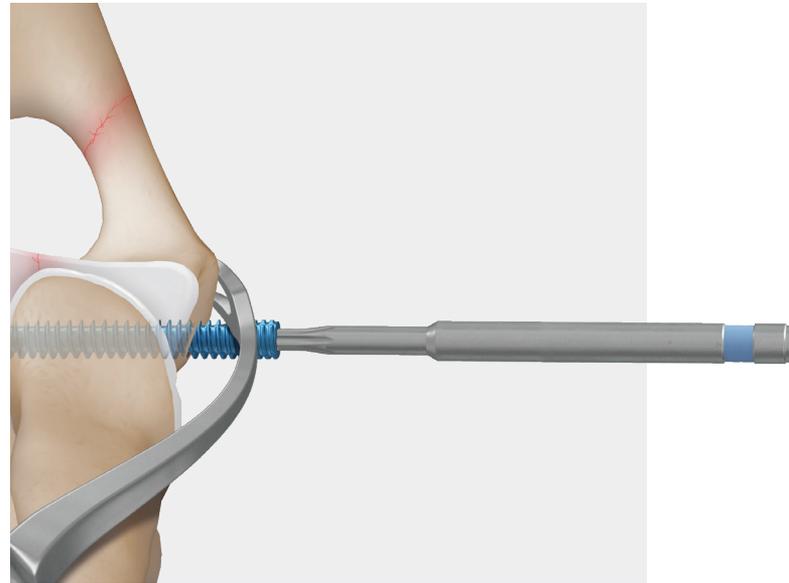


6 Insert a depth gauge into the pilot hole to measure screw length. When using the laser line on the guidewire to measure length with the accompanying depth gauge, ensure that the tip of the guidewire is exactly at the level of the trans-cortex. Alternatively, the appropriate screw length may be obtained from

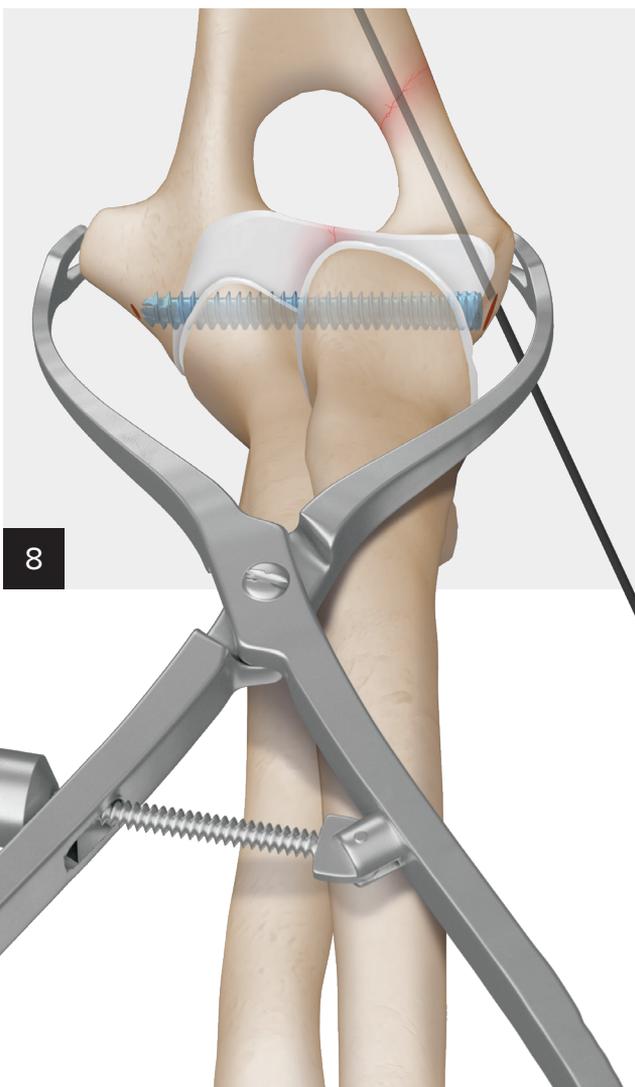
preoperative imaging. Take care to ensure that the correct screw length is chosen as these screws cannot be removed and exchanged without compromising the threads cut into the bone by the screw. This is due to the variable thread pitch design of these implants.



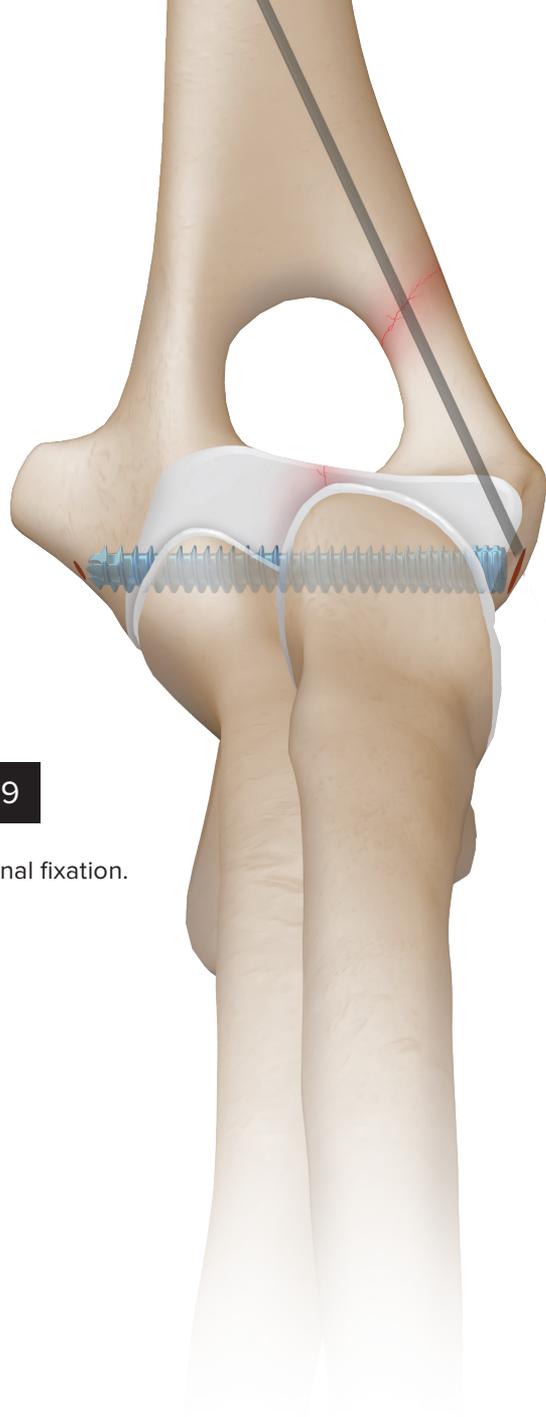
Insert the appropriate cannulated screwdriver bit onto the ratcheted cannulated handle and load an appropriately sized screw onto the guidewire. Use a sleeve to protect soft tissues from winding onto the screw during placement. Tighten the screw until it is firmly snug. **Do not overtighten the screw** as it will



continue to penetrate through and past the cortex. In dense cortical bone, it is advisable to remove the guidewire and switch to a noncannulated driver bit once the screw is started to avoid overtorquing and damaging the cannulated driver bit. Confirm screw placement and length with appropriate imaging.



As with all epicondylar fracture repair techniques, an anti-rotational K-wire is necessary to ensure stability. Insert an appropriately sized K-wire or small pin from the epicondyle, across the fracture into the humeral diaphysis and just penetrating the trans-cortex. Cut the K-wire to an appropriate length and close routinely.



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Final fixation.

Ordering Information

Sets and Cases

Product Description	Item Number
Compression FT Screw Caddy Common	AR-8738C-01
Compression FT Screw Caddy Micro 2.5 mm	AR-8738C-02
Compression FT Screw Caddy Mini 3.5 mm	AR-8738C-03
Compression FT Screw Caddy Standard 4.0 mm	AR-8738C-04
Compression FT Screw Tray	AR-8738C
Compression FT Instrument Set	AR-8738S

Compression FT Screws

Product Description	Item Number
2.5 mm Micro Compression FT™ Screws	
Micro Compression FT Screws, titanium, 2.5 mm × 8 mm–50 mm Sizes: 8, 9, 10, 11, 12, 13, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50 mm	AR-8725-08H to -50H
3.5 mm Mini Compression FT™ Screws	
Mini Compression FT Screws, titanium, 3.0 mm × 12 mm–60 mm Sizes: 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60 mm	AR-8730-12H to -60H
4.0 mm Standard Compression FT Screws	
Standard Compression FT Screws, titanium, 4.0 mm × 16 mm–60 mm Sizes: 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60 mm	AR-8740-16H to -60H

Common Instruments

Product Description	Item Number
Depth Device, micro/mini	AR-8737-51
Percutaneous Drill Guide	AR-8737-43
Obturator	AR-8737-44
Guidewire Plunger	AR-8737-56
Percutaneous Pin Clamp	AR-8737-57
Screw Holding Forcep, self-retaining	AR-8941F
Handle QC Ratcheting, cannulated	AR-8950RH

Instruments

Product Description	Item Number
2.5 mm Instruments	
Driver, cannulated, hexalobe, 1.5 mm	AR-8737-37
Driver, solid, hexalobe, 1.5 mm	AR-8737-45
Parallel Guide, Micro Compression FT screws	AR-8737-48
3.5 mm/4.0 mm Instruments	
Driver, cannulated, T10 hexalobe (AO)	AR-8737-38
Driver, solid, T10 hexalobe (AO)	AR-8950SD-10
Parallel Guide, Mini Compression FT screws	AR-8737-49
Parallel Guide, standard Compression FT screws	AR-8737-55

Disposables and Limited Reusables

Product Description	Item Number
2.5 mm Disposables and Limited Reusables	
Drill Bit, calibrated, cannulated, 2.0 mm (AO)	AR-8737-34
Drill Bit, cannulated, 2.2 mm (AO)	AR-8737-58
Profile Drill, Micro Compression FT screws (AO)	AR-8737-46
Easy Out, Micro Compression FT screws	AR-8737-61
Screw Extractor/Trephine, Micro/Mini Compression FT screws	AR-8737-59
Guidewire w/ Trocar Tip, 0.86 mm (0.034 in)	AR-8737-39
Guidewire w/ Double Trocar Tip, 0.86 mm (0.034 in)	AR-8737-39KD
Guidewire w/ Trocar Tip, threaded, 0.86 mm (0.034 in)	AR-8737-40
3.5 mm Disposables and Limited Reusables	
Drill Bit, calibrated, cannulated, 2.7 mm (AO)	AR-8737-35
Profile Drill, Mini Compression FT screws (AO)	AR-8737-47
Screw Extractor/Trephine, Micro/Mini Compression FT screws	AR-8737-59
Guidewire w/ Trocar Tip, 1.1 mm (0.045 in)	AR-8737-41
Guidewire w/ Double Trocar Tip, 1.1 mm (0.045 in)	AR-8737-41KD
Guidewire w/ Trocar Tip, threaded, 1.1 mm (0.045 in)	AR-8737-42
4.0 mm Disposables and Limited Reusables	
Drill Bit, calibrated, cannulated, 3.2 mm	AR-8737-50
Profile Drill, standard	AR-8737-54
Easy Out Mini/standard Compression FT screws	AR-8737-62
Screw Extractor/Trephine, standard Compression FT screws	AR-8737-60
Guidewire w/ Trocar Tip, 1.1 mm (0.045 in)	AR-8737-41
Guidewire w/ Double Trocar Tip, 1.1 mm (0.045 in)	AR-8737-41KD
Guidewire w/ Trocar Tip, threaded, 1.1 mm (0.045 in)	AR-8737-42



This is not veterinary advice and Arthrex recommends that veterinarians be trained in the use of any particular product before using it in surgery. A veterinarian must always rely on their own professional clinical judgment when deciding whether to use a particular product. A veterinarian must always refer to the package insert, product label and/or directions for use before using any Arthrex product. Products may not be available in all markets because product availability is subject to the regulatory or veterinary practices in individual markets. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes. Please contact your Arthrex representative if you have questions about availability of products in your area.

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