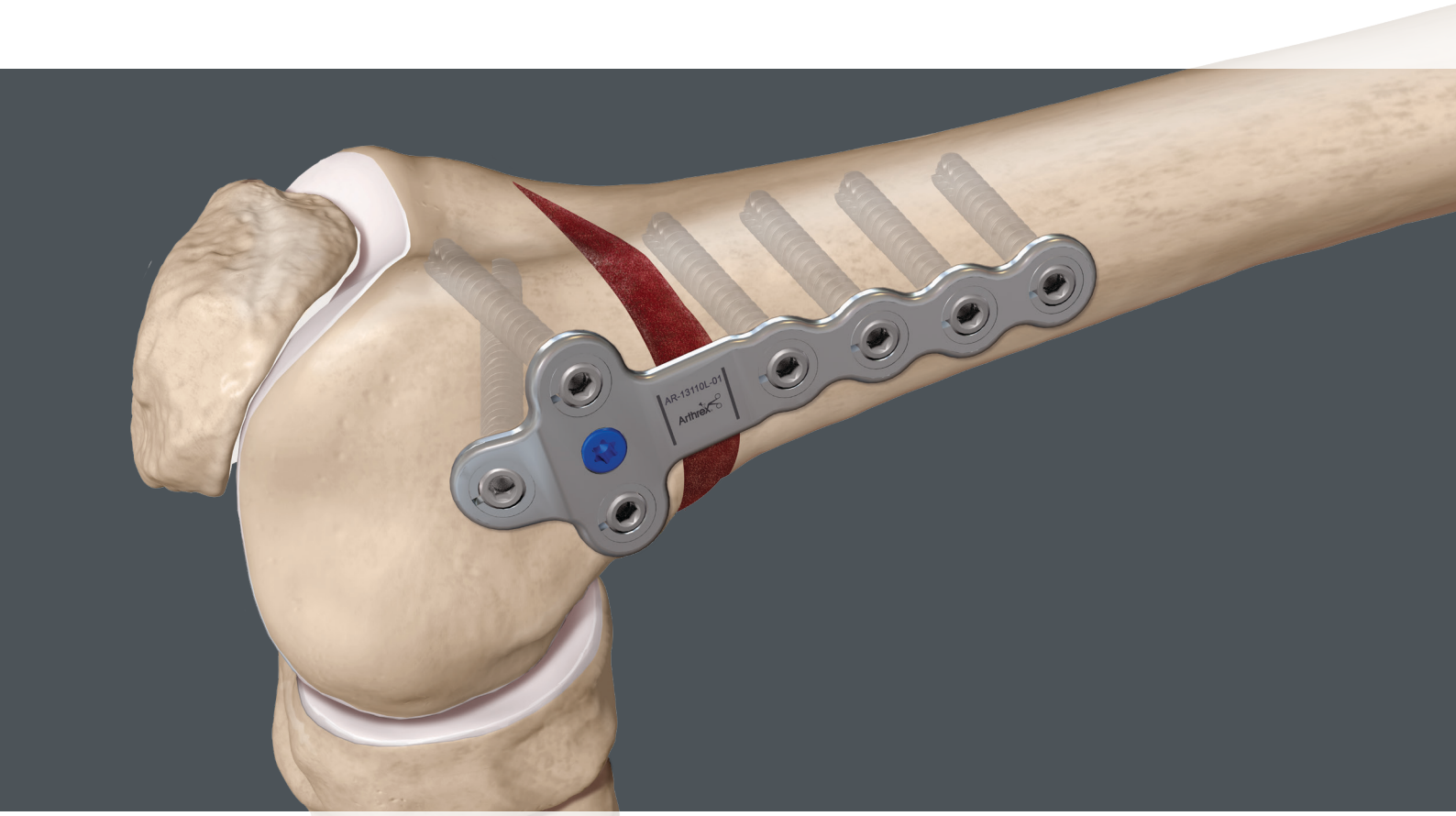
Femoral Opening Wedge Osteotomy With ContourLock™ Plate

Surgical Technique



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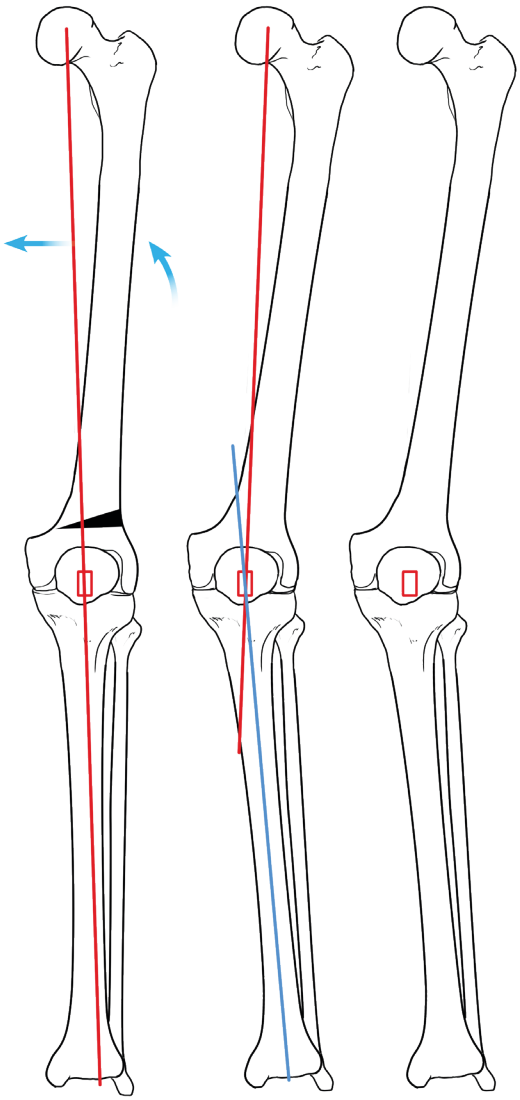
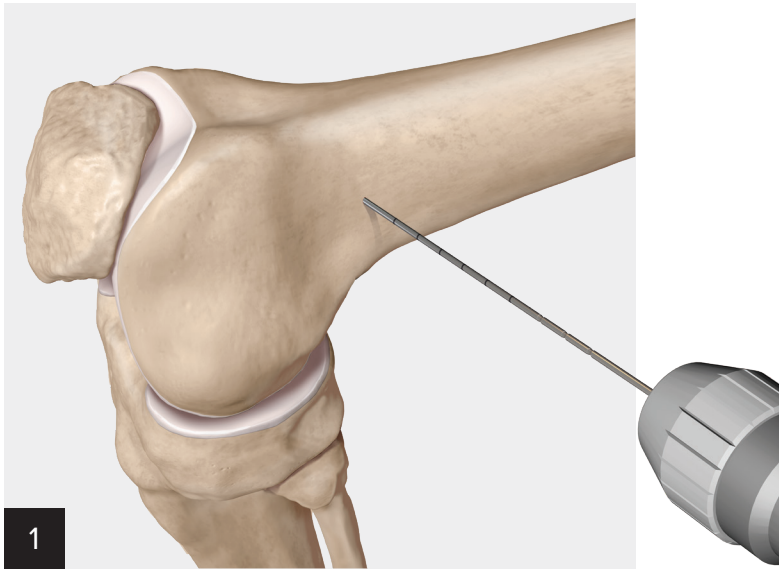
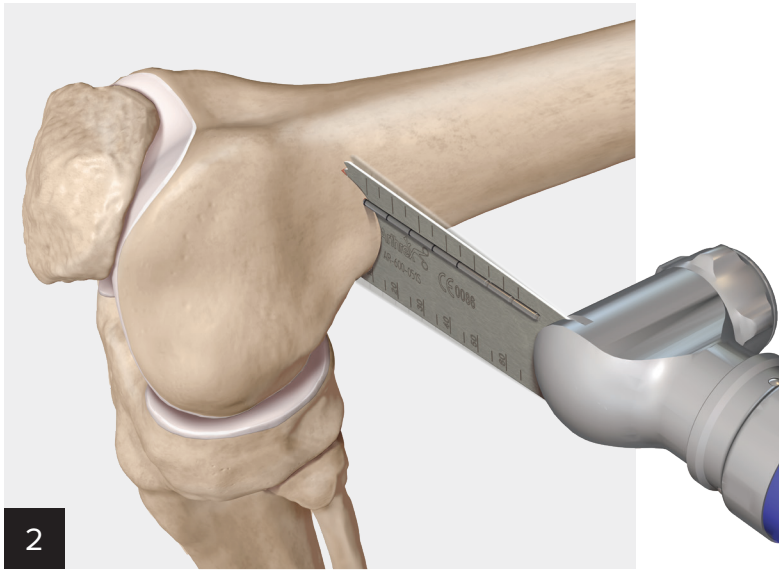
Using the full-length, standing A/P radiograph, select a target alignment point at the center of the knee joint. Draw a line from the center of the femoral head to a point in the center of the knee joint. Draw a second line from the center of the tibial-talar joint to the same point in the center of the knee joint. The proximal angle formed by the intersection of these two lines determines the degree of correction required to return the patient's mechanical axis to the point of intersection. Prior to final fixation, the alignment will be verified by external examination and fluoroscopy.

Note: For a varus-producing, lateral opening wedge femoral osteotomy, this point is located between the 50% and 47% intersection of the proximal tibial width from the medial side.

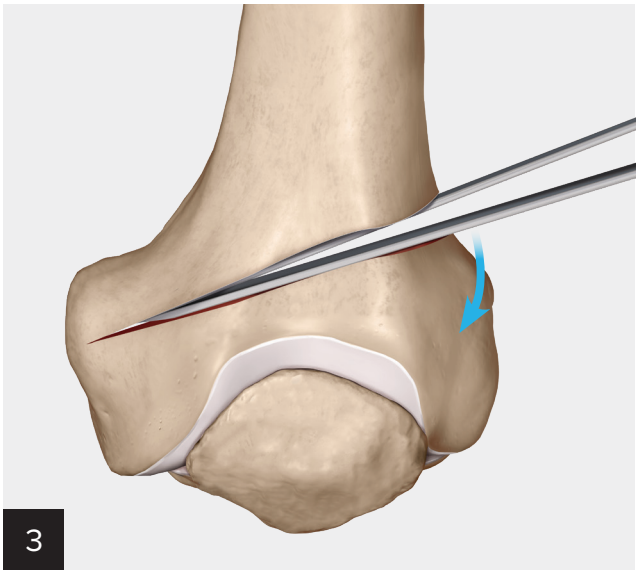




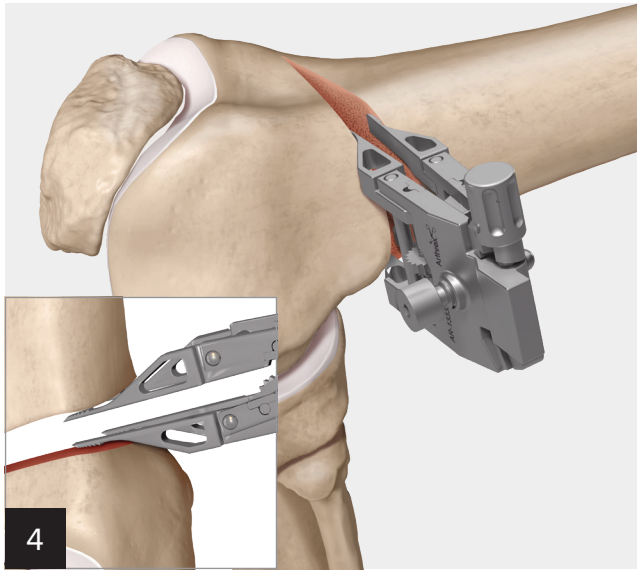
Insert a 2.4 mm breakaway osteotomy guide pin under fluoroscopic control approximately 15 mm proximal to the femoral trochlea angled obliquely toward the medial epicondyle. An optional second pin may be placed parallel to the first under fluoroscopic control to preserve slope.



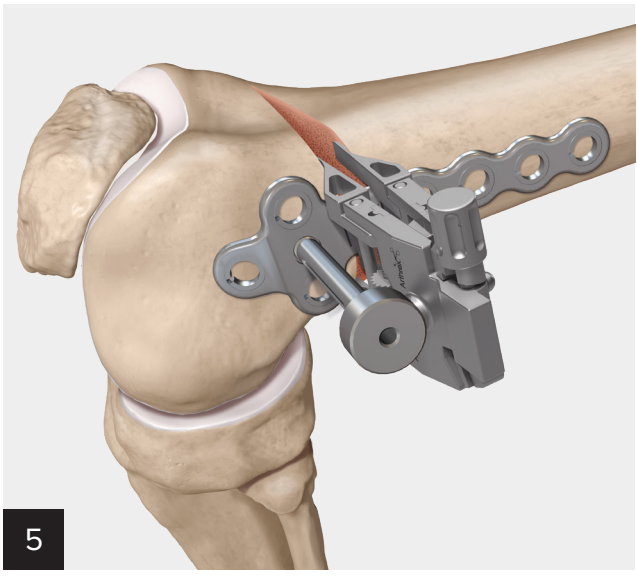
Start the osteotomy by breaching the lateral cortical bone with a sagittal saw. Use flexible osteotome blades (available in various widths) to finish the osteotomy to the appropriate depth. Approximately 1 cm of medial bone should be preserved to minimize the risk of cortical hinge fracture.



Insert the osteotome jack to open the osteotomy to the desired height. This can be measured directly with the wedge trial. The osteotomy should be opened slowly to preserve the medial cortex. Once the desired amount of correction is achieved, the osteotome jack can be removed.



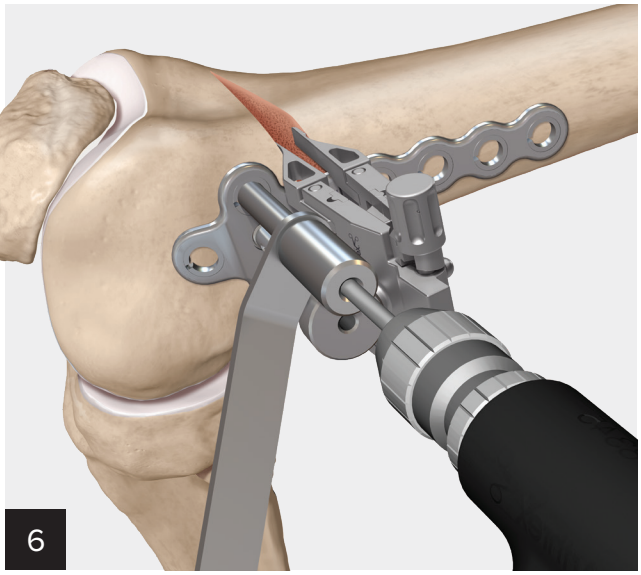
The osteotomy jack can be inserted into the osteotomy to support the correction while optional OSferion osteotomy wedges are inserted and the plate is positioned.



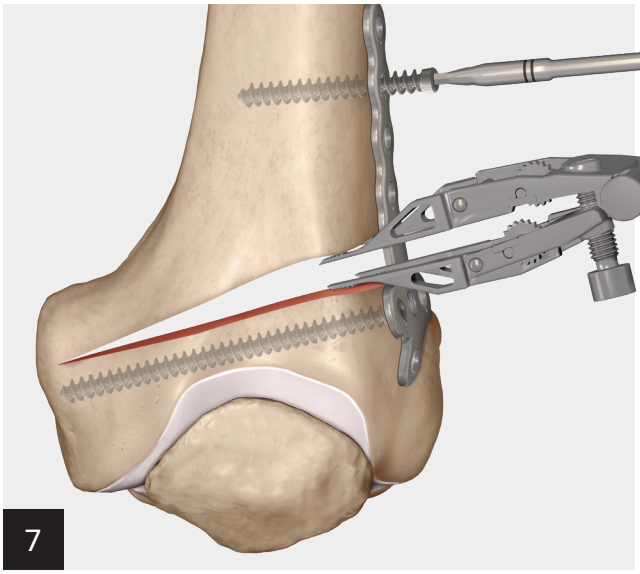
Select the appropriate size ContourLock™ femoral osteotomy plate based on the left or right femur and amount of correction. **S/M** for corrections of 0 mm to 10 mm **(a)** and **L/XL** for corrections of 10 mm to 20 mm **(b)**. Position the plate between the tines of the osteotomy jack in a suitable position.

■ (a) Left S/M

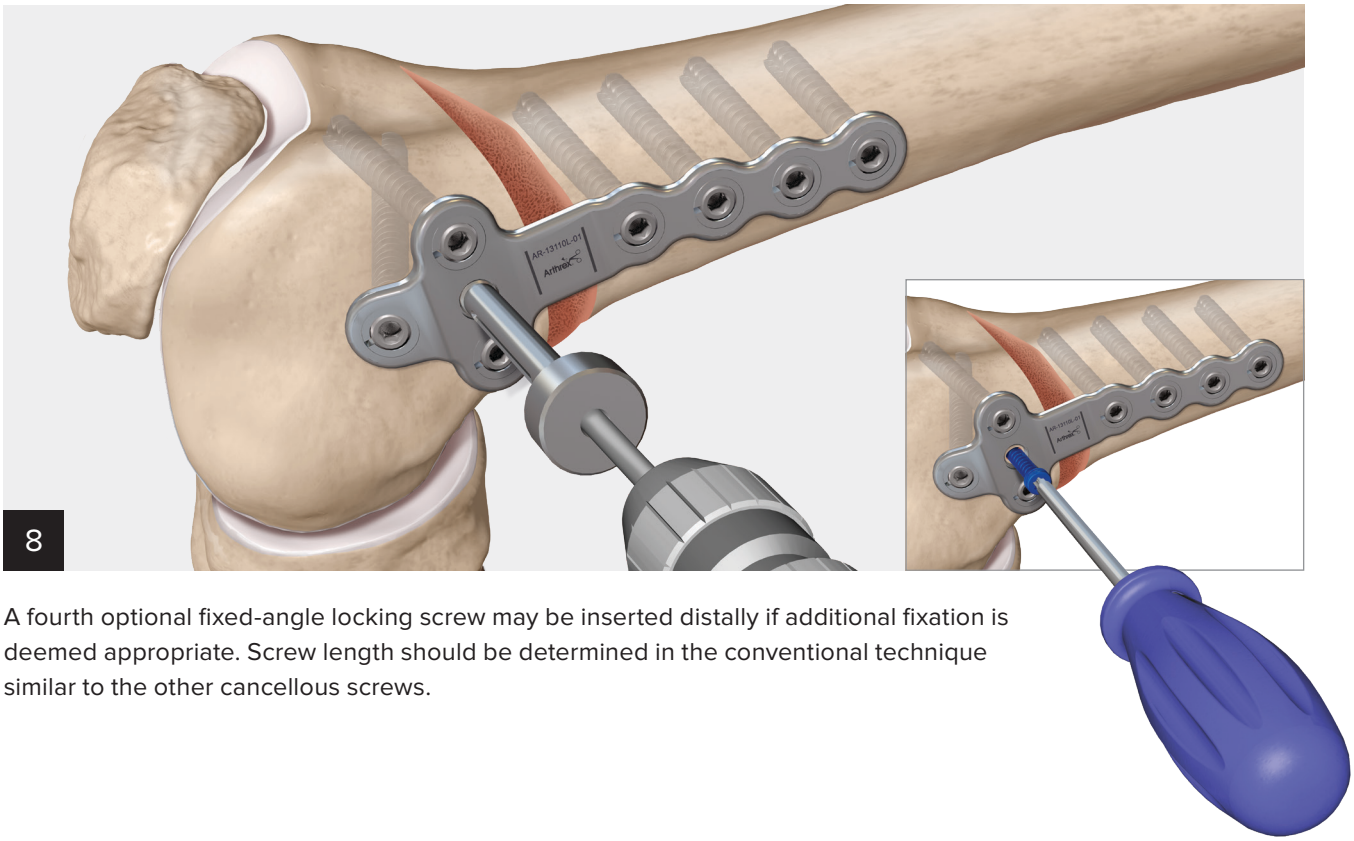
■ (b) Left L/XL



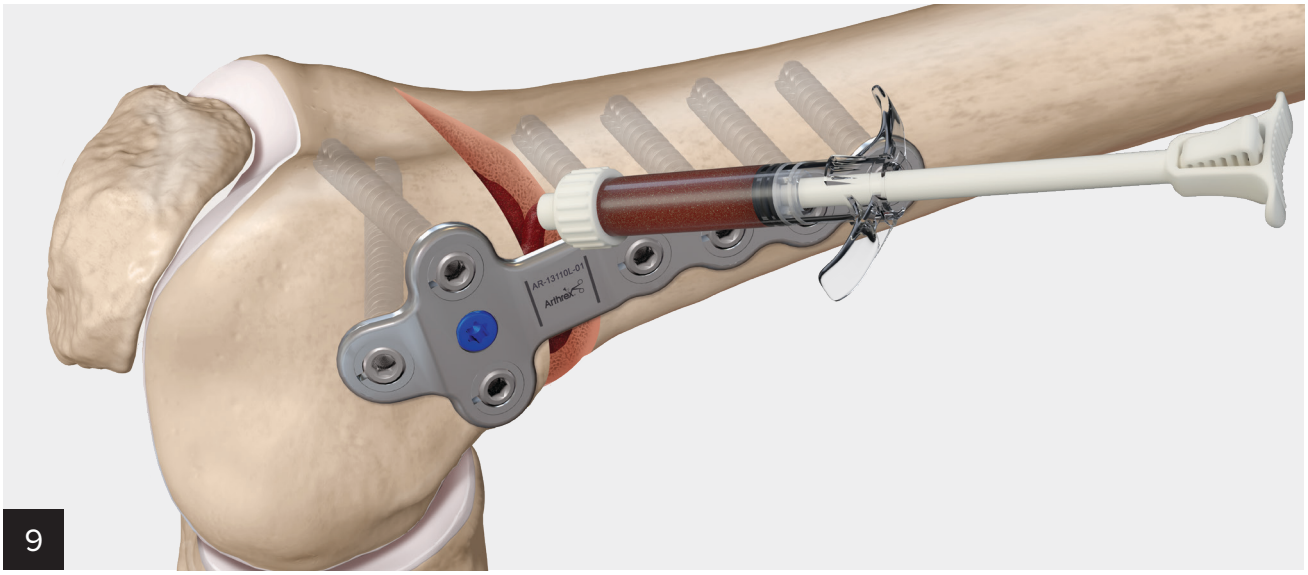
Insert 3 6.5 mm cancellous screws distal to the osteotomy until flush with the plate. Use conventional fluoroscopic technique for predrilling and depth device measurement to determine appropriate length and position.



Follow by inserting up to 4 4.5 mm cortical HTO plate screws proximal to the osteotomy until flush with the plate. Begin with the most distal available fixation hole and move proximally. Remove the osteotomy jack once the plate is securely fixed.



A fourth optional fixed-angle locking screw may be inserted distally if additional fixation is deemed appropriate. Screw length should be determined in the conventional technique similar to the other cancellous screws.



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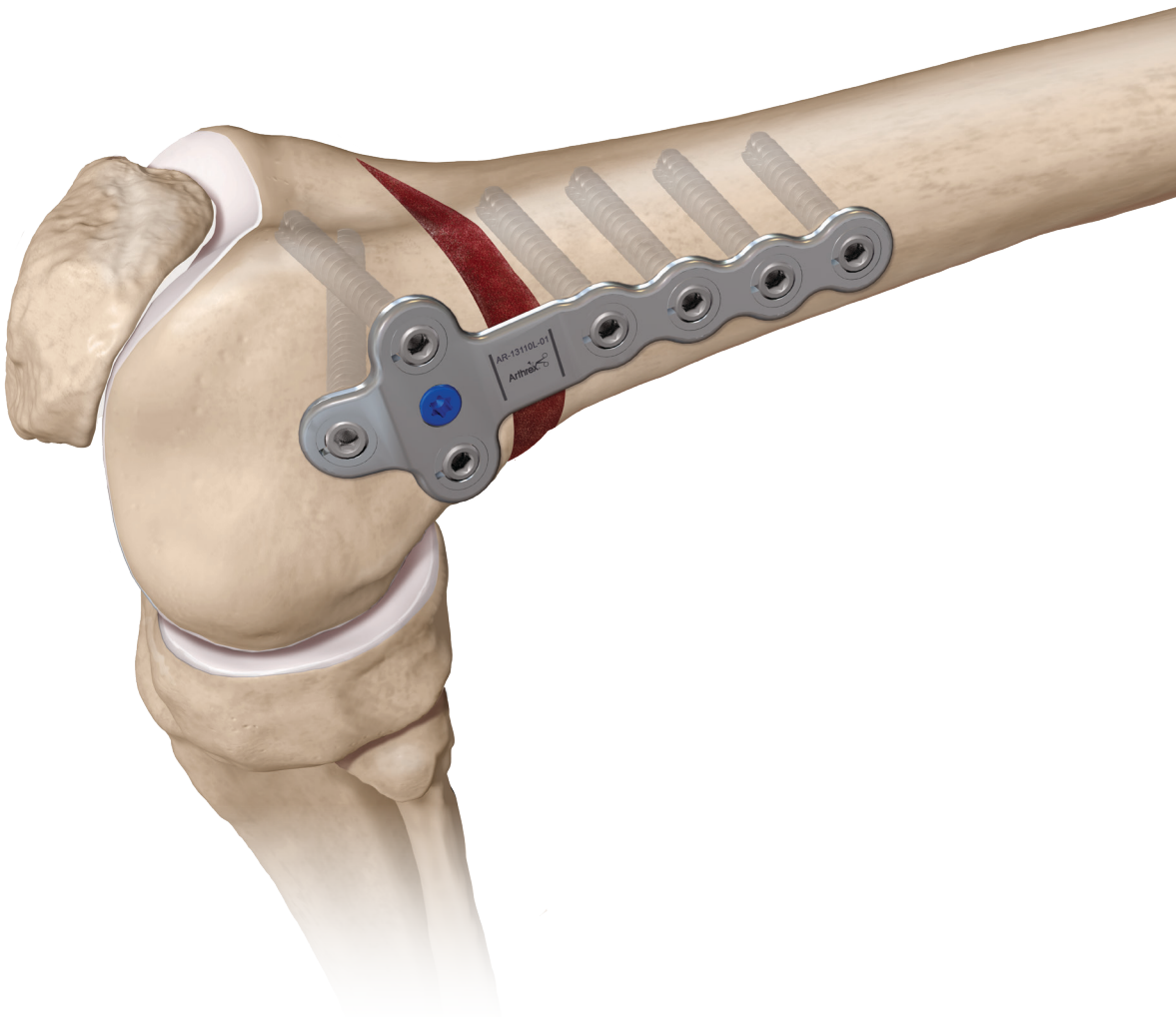
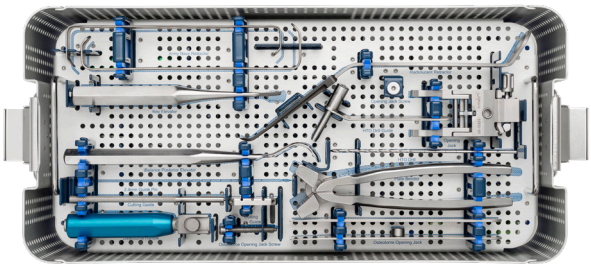
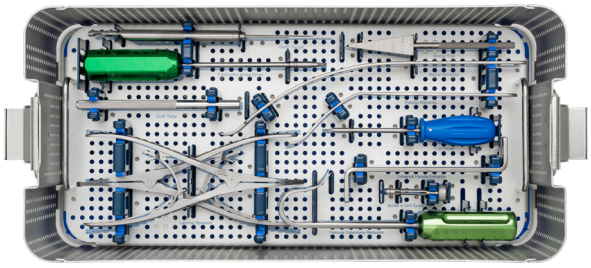
AlloSync™ Pure demineralized bone matrix comprised of 100% human allograft bone, may be used to provide additional stability to the osteotomy site.



Ordering Information





Opening Wedge Osteotomy Set (AR-**13330S**)

Product Description	Item Number
Radiolucent Army/Navy Retractors, qty. 2	AR-**1330**
Osteotomy Wedge	AR-**13300**
Osteotome Handle	AR-**13301**
Osteotomy Guide Pins, 2.4 mm, qty. 4	AR-**13303-2.4**
Femoral Osteotomy Retractor	AR-**13309**
Patella Tendon Retractor	AR-**13312**
Medial Retractor for HTO	AR-**13313**
Universal Handle Extractor	AR-**13314**
Cutting Guide for HTO	AR-**13315**
Bone Graft Tamp	AR-**13317**
Drill for HTO Titanium Screws, qty. 2	AR-**13319**
Drill Guide for HTO Titanium Plates	AR-**13321**
Osteotome Jack, 25 mm	AR-**13323-25**
Wedge Trial for HTO	AR-**13324**
Radiolucent Retractor, 38˚ blunt tip	AR-**13325**
Screwdriver, 3.5 mm hex	AR-**13326**
Osteotomy Plate Bender	AR-**13331**
Femoral Osteotomy Plate Drill Guide	AR-**13332**
Osteotomy Jack	AR-**13333**
Flexible Osteotome Blade Handle	AR-**13335**
Key Elevator, ¾ in	AR-**13336**
PEEKPower HTO Plate Bone Spreader	AR-**1340T**
Posterior Elevator	AR-**13411-02**
iBalance® TKA, LMR hex driver	AR-**605-8**
Depth Device, large	AR-**4167**
Osteotomy Instrument Case	AR-**13330C**

Disposables

Product Description	Item Number
Flexible Osteotome Blade, 10 mm	AR-**13302F-10**
Flexible Osteotome Blade, 25 mm	AR-**13302F-25**
Flexible Osteotome Blade, 35 mm	AR-**13302F-35**

Osteotomy Plates

Product Description	Item Number
ContourLock™ Femoral Osteotomy Plate, right, S/M	AR-**13110R-01**
ContourLock Femoral Osteotomy Plate, right, L/XL	AR-**13110R-02**
ContourLock Femoral Osteotomy Plate, left, S/M	AR-**13110L-01**
ContourLock Femoral Osteotomy Plate, left, L/XL	AR-**13110L-02**

Titanium Screws

Product Description	Item Number
HTO Plate Screw, 4.5 mm × (26 mm-60 mm), cortical, 2 mm increments	AR-**13380-26–60**
Low-profile Locking Screw, 4.5 mm × (18 mm-75 mm)	AR-**8545L-18–75**
HTO Plate Screw, 6.5 mm × (35 mm-70 mm), cancellous, 5 mm increments	AR-**13280-35–70**

Recommended Bone Graft Substitute

Product Description	Item Number
Quickset™ Cement, 5 cc kit	ABS-**3005**
Quickset Cement, 8 cc kit	ABS-**3008**
Quickset Cement, 16 cc kit	ABS-**3016**
OSferion Osteotomy Wedge, 7 mm × 30 mm	AR-**13370-1**
OSferion Osteotomy Wedge, 10 mm × 30 mm	AR-**13370-2**
OSferion Osteotomy Wedge, 12 mm × 35 mm	AR-**13370-3**
OSferion Osteotomy Wedge, 15 mm × 35 mm	AR-**13370-4**
BoneSync™ Putty	
3 cc Putty	ABS-**3103**
5 cc Putty	ABS-**3105**
10 cc Putty (2 cc × 5 cc Kit)	ABS-**3105-2**
AlloSync™ Putty	
1 cc Putty	ABS-**2012-01**
2.55 cc Putty	ABS-**2012-02**
5 cc Putty	ABS-**2012-05**
10 cc Putty	ABS-**2012-10**

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