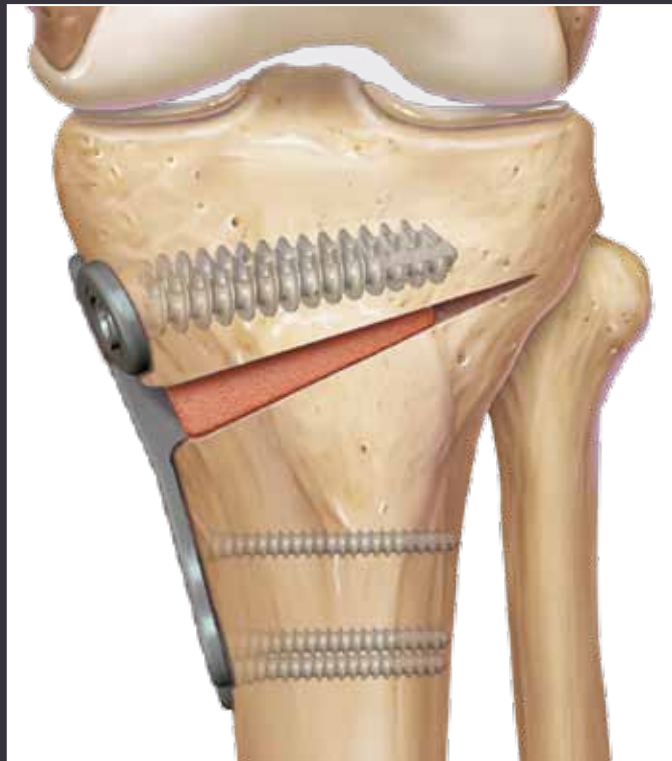




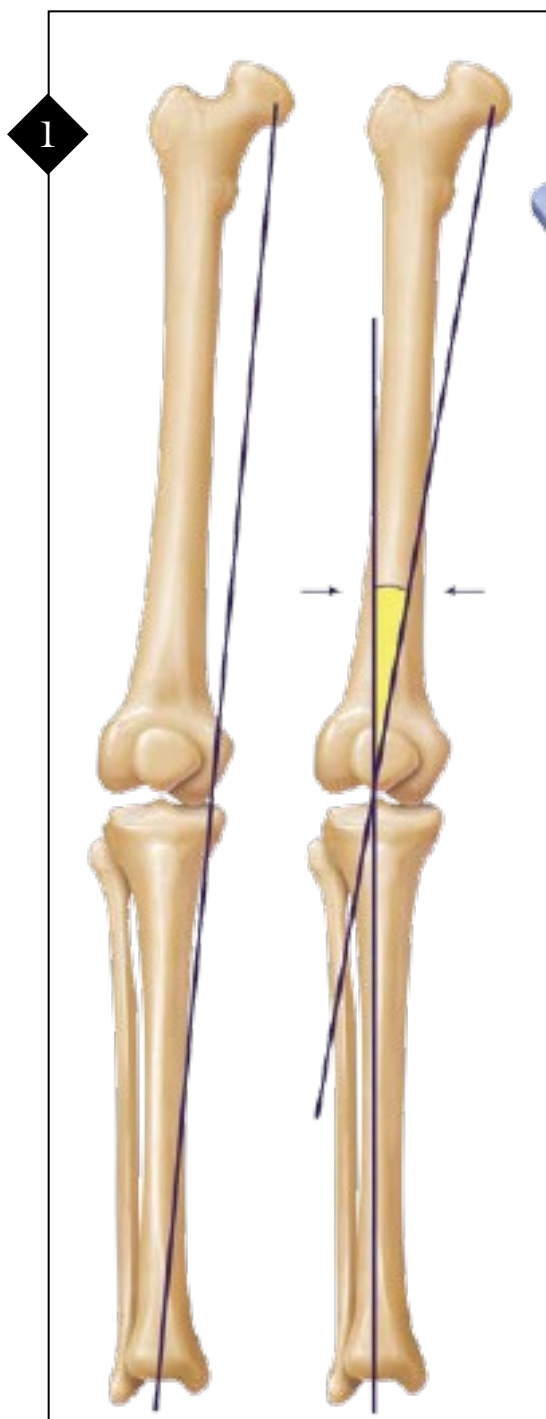
Opening Wedge Osteotomy System  
using ContourLock™ HTO Plates

Surgical Technique

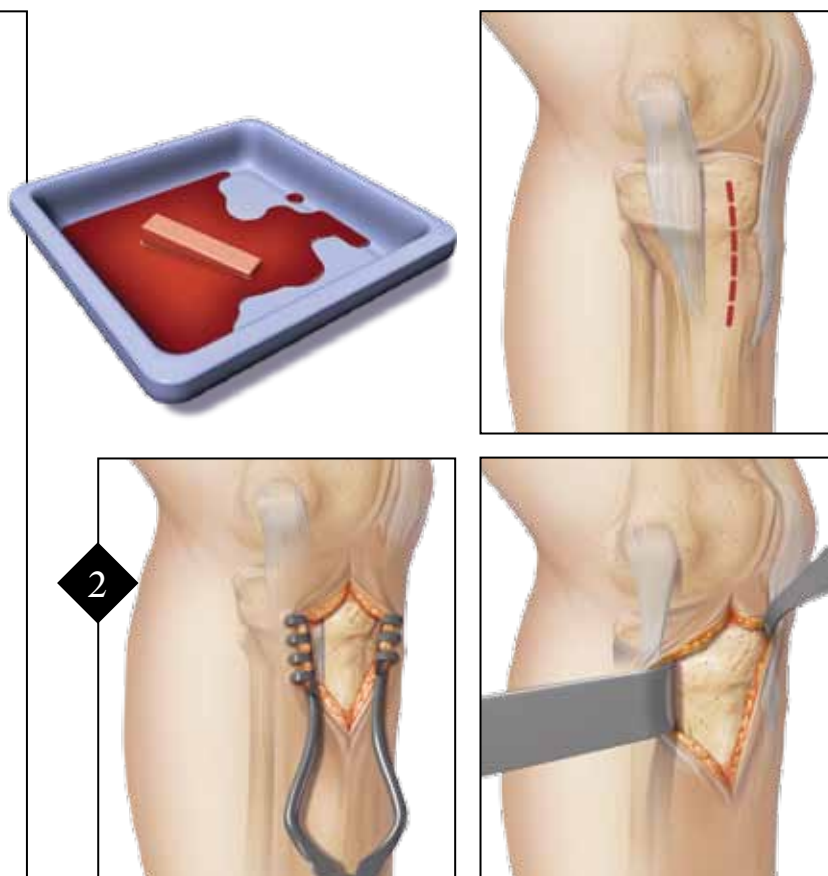


# Opening Wedge Osteotomy

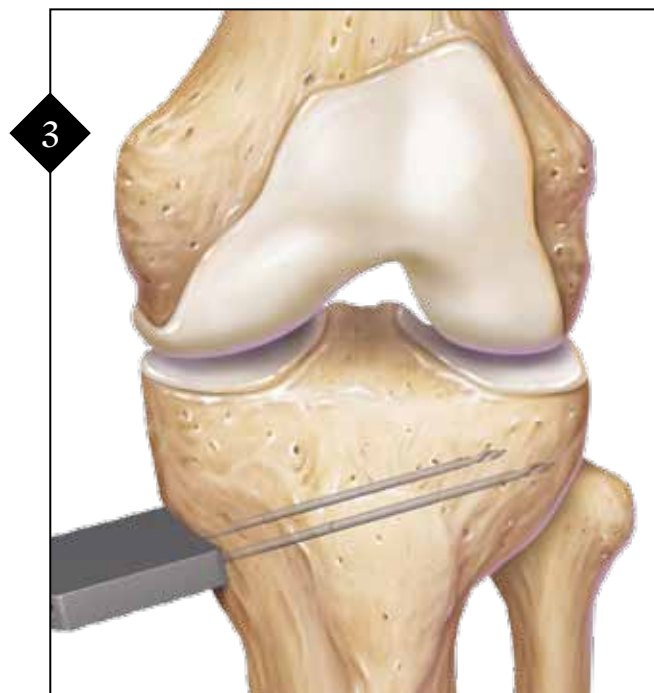
## Opening Wedge Osteotomy System using ContourLock HTO Plates



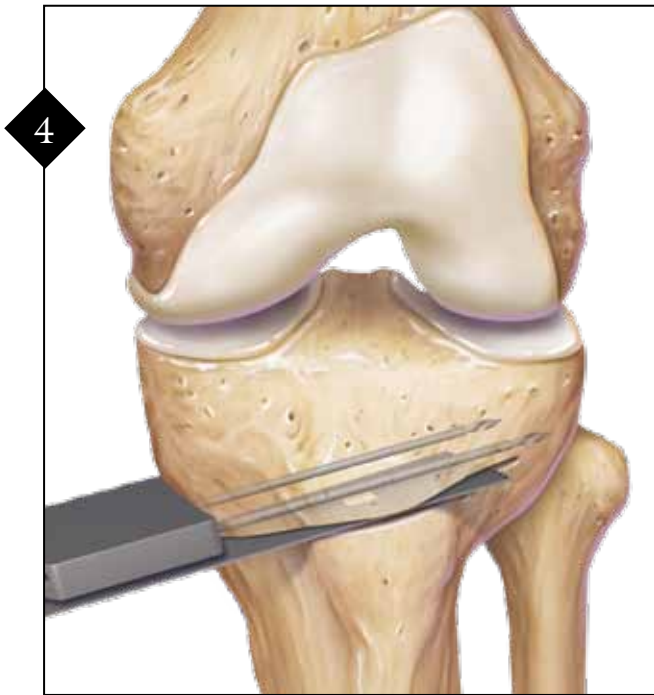
Using the full-length, standing A/P radiograph, a line is drawn from the center of the femoral head to the center of the tibial-talar joint. This demonstrates the patient's mechanical axis. Another line is drawn from the center of the femoral head to a point midway\* in the lateral knee joint. A final line is drawn from the center of the tibial-talar joint to the same point in the lateral knee joint. The 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 on the lateral side. Prior to final fixation, the alignment will be verified by external examination and fluoroscopy.  
*\*This point is located at 62.5% of the width of the proximal tibia (i.e., 80 mm [width of proximal tibia] x .625 = 50 mm)*



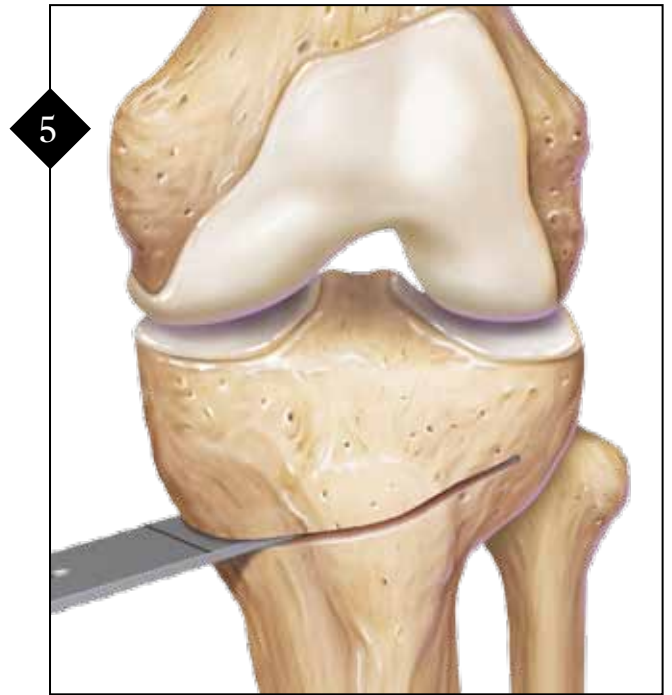
Soak the OSferion wedge in autologous blood or plasma products prior to implantation. An incision is made between the MCL and the patellar tendon and the soft tissue is reflected down to the region of the superficial MCL.



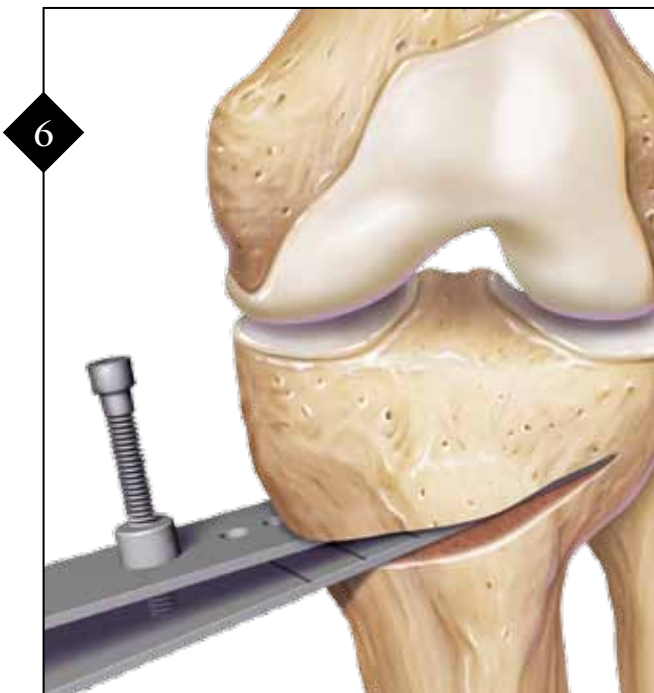
After reflecting back the superficial portion of the medial collateral ligament, the Cutting Guide for HTO is positioned at the medial tibia above the level of the tibial tubercle. Two Osteotomy Guide Pins are drilled through the guide to within 1 cm of the lateral cortex (angled towards the fibular head).



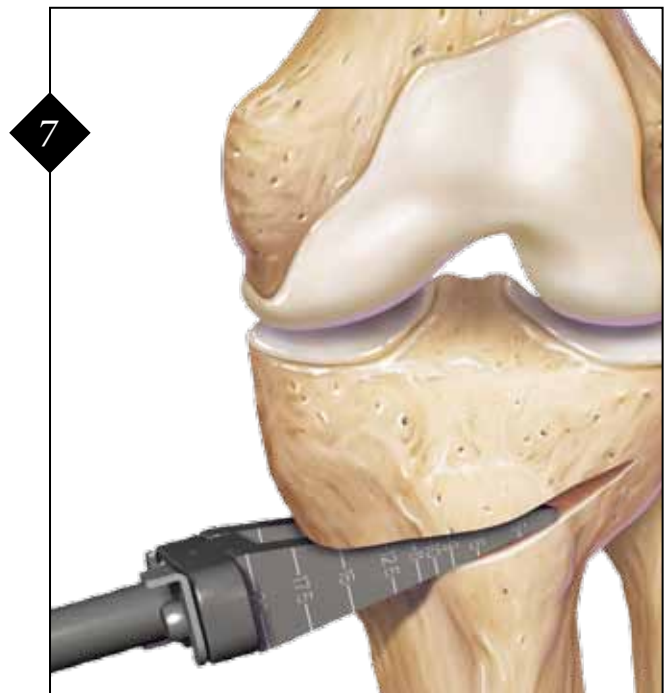
An oscillating saw positioned against the inferior surface of the cutting guide is used to cut the tibial cortex medially, anteriorly and posteriorly.



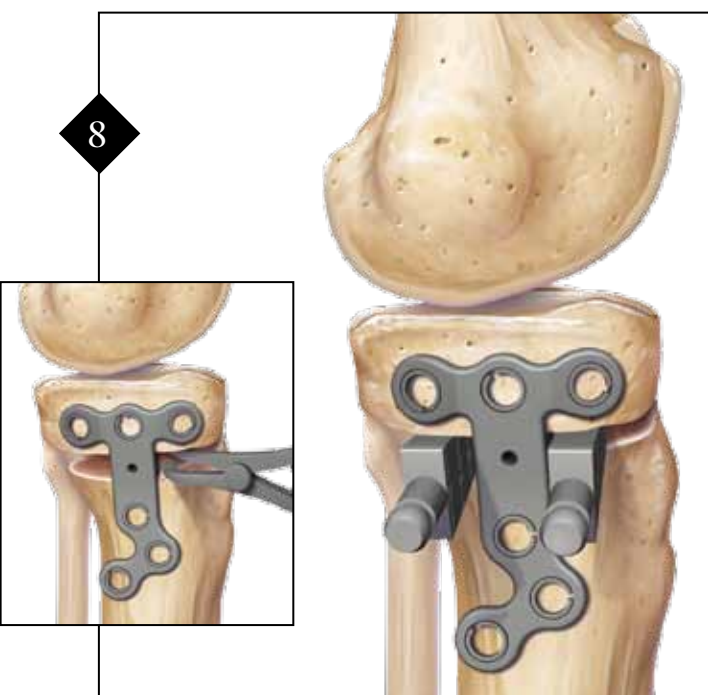
A single blade from the Osteotome Jack may be used to complete the osteotomy. Fluoroscopic confirmation should be checked repeatedly throughout the cutting process.



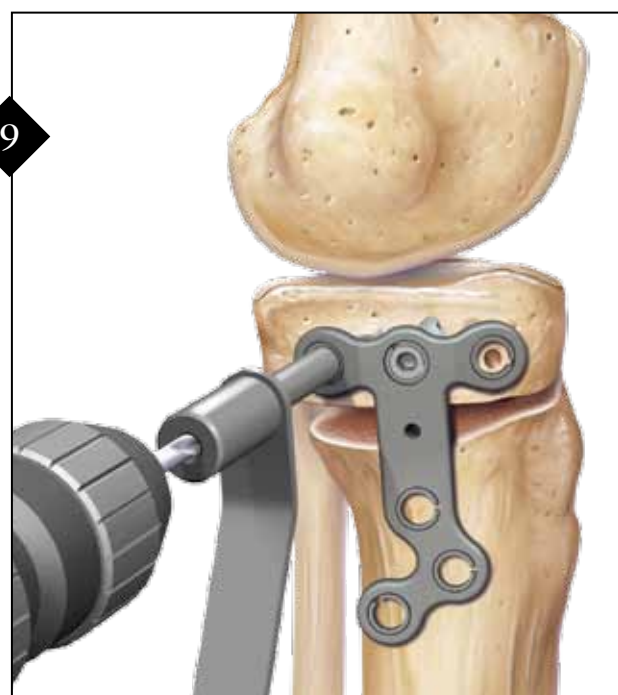
Insert both blades of the Osteotome Jack in the bone cut, aligning both blades to each other. Using the 3.5 mm hex Screwdriver, turn the screw slowly, opening the Osteotome Jack to the desired correction (*the Wedge Trial for HTO may be used to estimate the correction*). Be sure to maintain the lateral tibial cortex hinge.



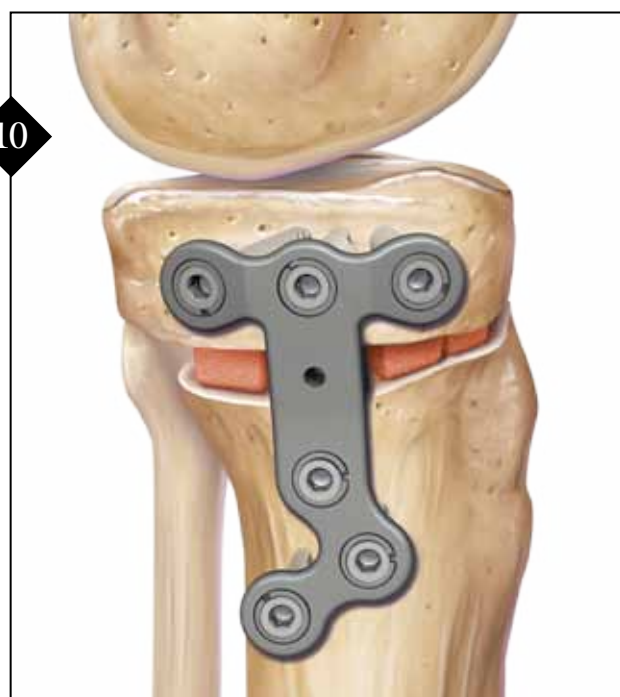
Insert the osteotomy wedge trials into the osteotomy to check the alignment of the extremity, verifying the degree of correction. The amount of opening wedge correction may be read off of the millimeter markings on each wedge tine. Once placed, remove the osteotomy wedge trial handle leaving the wedge trials in place.



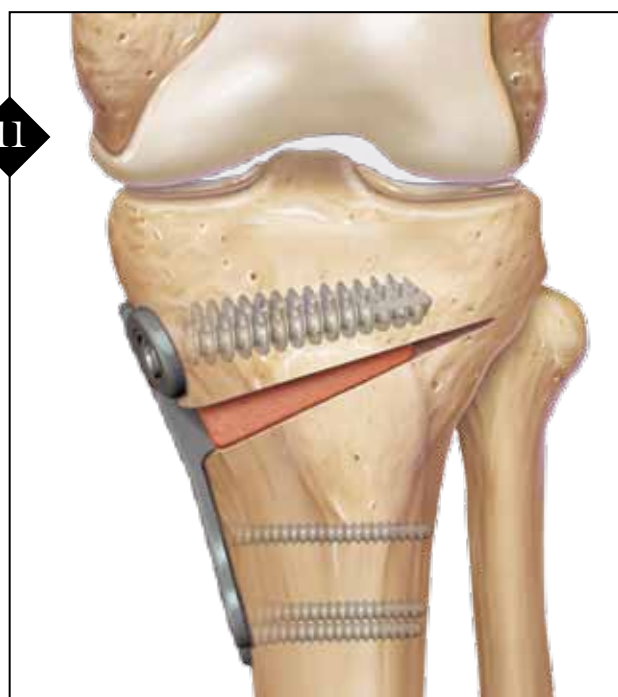
Insert the ContourLock HTO Plate into the osteotomy between the wedge trials with the Application Bar for HTO Plates. Alternately, the osteotomy can be held open with lamina spreaders while the plate is placed. Remove the wedge trials and load the extremity to close the osteotomy onto the tooth of the plate, ensuring optimum bone-to-tooth contact.



Insert the drill guide into the locking bushing and drill a hole to the appropriate screw depth (screw length is determined by visualizing the laser marks on the drill as it exits the drill guide). Install the proximal 6.5 mm cancellous screws first from posterior to anterior. The screws will lock into the bushings when fully seated.



Insert OSferion Osteotomy Wedges treated with ACP or autologous blood products into the osteotomy to fill the void. Load the extremity and insert the distal 4.5 mm cortical screws.



The remainder of the osteotomy can be filled with morselized OSferion bone void filler treated with ACP or autologous blood products.

***ContourLock HTO Plates:***

ContourLock HTO Plate, straight wedge, left, 3 mm	AR-13710-03.0
ContourLock HTO Plate, straight wedge, left, 5 mm	AR-13710-05.0
ContourLock HTO Plate, straight wedge, left, 7.5 mm	AR-13710-07.5
ContourLock HTO Plate, straight wedge, left, 9 mm	AR-13710-09.0
ContourLock HTO Plate, straight wedge, left, 10 mm	AR-13710-10.0
ContourLock HTO Plate, straight wedge, left, 11 mm	AR-13710-11.0
ContourLock HTO Plate, straight wedge, left, 12.5 mm	AR-13710-12.5
ContourLock HTO Plate, straight wedge, left, 15 mm	AR-13710-15.0
ContourLock HTO Plate, straight wedge, left, 17.5 mm	AR-13710-17.5
ContourLock HTO Plate, straight wedge, right, 3 mm	AR-13715-03.0
ContourLock HTO Plate, straight wedge, right, 5 mm	AR-13715-05.0
ContourLock HTO Plate, straight wedge, right, 7.5 mm	AR-13715-07.5
ContourLock HTO Plate, straight wedge, right, 9 mm	AR-13715-09.0
ContourLock HTO Plate, straight wedge, right, 10 mm	AR-13715-10.0
ContourLock HTO Plate, straight wedge, right, 11 mm	AR-13715-11.0
ContourLock HTO Plate, straight wedge, right, 12.5 mm	AR-13715-12.5
ContourLock HTO Plate, straight wedge, right, 15 mm	AR-13715-15.0
ContourLock HTO Plate, straight wedge, right, 17.5 mm	AR-13715-17.5
ContourLock HTO Plate, A/P sloped wedge, left, 5 mm	AR-13720-05.0
ContourLock HTO Plate, A/P sloped wedge, left, 7.5 mm	AR-13720-07.5
ContourLock HTO Plate, A/P sloped wedge, left, 9 mm	AR-13720-09.0
ContourLock HTO Plate, A/P sloped wedge, left, 10 mm	AR-13720-10.0
ContourLock HTO Plate, A/P sloped wedge, left, 11 mm	AR-13720-11.0
ContourLock HTO Plate, A/P sloped wedge, left, 12.5 mm	AR-13720-12.5
ContourLock HTO Plate, A/P sloped wedge, left, 15 mm	AR-13720-15.0
ContourLock HTO Plate, A/P sloped wedge, left, 17.5 mm	AR-13720-17.5
ContourLock HTO Plate, A/P sloped wedge, right, 5 mm	AR-13725-05.0
ContourLock HTO Plate, A/P sloped wedge, right, 7.5 mm	AR-13725-07.5
ContourLock HTO Plate, A/P sloped wedge, right, 9 mm	AR-13725-09.0
ContourLock HTO Plate, A/P sloped wedge, right, 10 mm	AR-13725-10.0
ContourLock HTO Plate, A/P sloped wedge, right, 11 mm	AR-13725-11.0
ContourLock HTO Plate, A/P sloped wedge, right, 12.5 mm	AR-13725-12.5
ContourLock HTO Plate, A/P sloped wedge, right, 15 mm	AR-13725-15.0
ContourLock HTO Plate, A/P sloped wedge, right, 17.5 mm	AR-13725-17.5
ContourLock HTO Plate, flat, left, 67 mm	AR-13730-01
ContourLock HTO Plate, flat, left, 71 mm	AR-13730-02
ContourLock HTO Plate, flat, left, 84 mm	AR-13730-03
ContourLock HTO Plate, flat, right, 67 mm	AR-13735-01
ContourLock HTO Plate, flat, right, 71 mm	AR-13735-02
ContourLock HTO Plate, flat, right, 84 mm	AR-13735-03

***Screws:***

Cancellous Screw, 6.5 mm x 35 mm	AR-13280-35
Cancellous Screw, 6.5 mm x 40 mm	AR-13280-40
Cancellous Screw, 6.5 mm x 45 mm	AR-13280-45
Cancellous Screw, 6.5 mm x 50 mm	AR-13280-50
Cancellous Screw, 6.5 mm x 55 mm	AR-13280-55
Cancellous Screw, 6.5 mm x 60 mm	AR-13280-60
Cancellous Screw, 6.5 mm x 65 mm	AR-13280-65
Cancellous Screw, 6.5 mm x 70 mm	AR-13280-70
Cortical Screw, 4.5 mm x 34 mm	AR-13380-34
Cortical Screw, 4.5 mm x 36 mm	AR-13380-36
Cortical Screw, 4.5 mm x 38 mm	AR-13380-38
Cortical Screw, 4.5 mm x 40 mm	AR-13380-40
Cortical Screw, 4.5 mm x 42 mm	AR-13380-42
Cortical Screw, 4.5 mm x 44 mm	AR-13380-44
Cortical Screw, 4.5 mm x 46 mm	AR-13380-46
Cortical Screw, 4.5 mm x 48 mm	AR-13380-48
Cortical Screw, 4.5 mm x 50 mm	AR-13380-50
Cortical Screw, 4.5 mm x 52 mm	AR-13380-52
Cortical Screw, 4.5 mm x 54 mm	AR-13380-54
Cortical Screw, 4.5 mm x 56 mm	AR-13380-56
Cortical Screw, 4.5 mm x 58 mm	AR-13380-58

***Bone Graft Substitute:***

OSferion Osteotomy Wedge, 7 mm x 30 mm	AR-13370-1
OSferion Osteotomy Wedge, 10 mm x 30 mm	AR-13370-2
OSferion Osteotomy Wedge, 12 mm x 35 mm	AR-13370-3
OSferion Osteotomy Wedge, 15 mm x 35 mm	AR-13370-4

*This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's Directions For Use.*



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