The Fragment Targeting Jig has been developed to aid the surgeon in consistently defining the trajectory of K-wires through the central portion of the distal radius periarticular region. The device is used only temporarily in the fracture fixation procedure and is a simple jig placed on the outside of the patient’s hand.

The device operates by utilizing an articulating arm that is maneuvered to define a trajectory which ensures the K-wire passes through the central portion of the periarticular region of the distal radius. A bone screw (i.e., compression, cannulated) is then placed over the targeted K-wire and used to permanently secure the bone fragment. The device will be supplied non-sterile, is reusable, and consists of materials with long histories of biocompatible performance.

USE WITH CONVENTUS CAGE™ - DR

To use the Fragment Targeting Jig with the Conventus CAGE™ - DR, implantation of the Cage should first be performed as described in steps 1 through 7 of the Distal Radius Surgical Technique (Ref. 1699). In Step 7, the holes for the proximal plate are drilled as described; however, application of the proximal plate and screws is deferred until fragment screw targeting is complete and the jig is removed.

1 JIG TAIL PLACEMENT

With the implant deployed and locked (Step 6 of the DR Surgical Technique), the Jig Tail is slid over the proximal end/tail of the implant. The holes in the distal end of the Jig Tail should align with the eyelet in the proximal end of the implant (i.e., distal hole for the proximal plate). **Note: the Jig Tail should be oriented such that the laser marking faces away from the bone.** The Olive Wire is then advanced through the hole in the distal end of the Jig Tail and drilled perpendicular to the long axis of the radius through the far cortex to secure the position of the Jig Tail.
With the Trunnion and Trunnion Block positioned to provide the desired entry point, a small skin incision is made and dissection of subcutaneous tissue performed to allow positioning of the Guide Tube against the surface of the bone. A 0.045” (1.1 mm) K-wire is then inserted through the Guide Tube and driven into the bone and across the fracture line. The Guide Tube Grip can be used to stabilize the Guide Tube as needed during K-wire insertion.

If the K-wire cannot be advanced through the far cortex (i.e., drill chuck contacts the upper end of the Guide Tube), release the Clasp and remove the Main Arm assembly. The K-wire can then continue to be advanced. Reference Step 8 in the DR Surgical Technique for additional guidance and suggestions regarding guide wire placement.

Using the spring activated Clasp, the Main Arm of the Targeting Jig is attached to the Jig Tail as shown to the right. The Trunnion and Trunnion Block attached to the distal end of the Main Arm can be maneuvered to any desired entry point, where it will define trajectories which ensure K-wires pass through the central portion of the periarticular region of the distal radius. To avoid skiving of the K-wire, selection of entry points along the rim of the articular surface is recommended.

Caution: Do not distort or overpower the Jig. Maneuvering the Trunnion and Trunnion Block should be done carefully to ensure that a viable entry point and the correct trajectory are attained.

After releasing the Clasp and removing the Main Arm assembly, a 2.0 mm cannulated drill is placed over the guide wire and used to drill the near and far cortices. The drill should rotate forward/clockwise while drilling the near and far cortices, but should travel through the implant in oscillation or reverse mode.

A 2.7 mm cannulated screw (tapered-head or headed, per surgeon discretion) is then inserted over the guide wire. Reference Step 9 in the DR Surgical Technique for additional guidance.

Distal screws should be placed sequentially. For additional wires/screws, the Main Arm assembly is reattached to the Jig Tail and steps 3 and 4 are repeated.