TriMed Wrist Fixation System™

Radial Column Pin Plate™
Surgical Technique | TriMed Wrist Fixation System™
Exposure (limited volar approach)

• Incise the skin along the radial border of the radial artery.

• Place tip of tenotomy scissors proximally above the sheath of the 1st dorsal compartment, sweep distally to elevate a radial subcutaneous flap. The dorsal sensory nerves are protected in the flap.  
  (See tips on back page for alternate approaches)

• Incise the periosteum and expose the radial styloid between the 1st and 2nd dorsal compartment.

• Open the 1st dorsal compartment proximally, but leave the distal 1cm of the sheath intact.

• Sharply release the bracioradialis from its insertion and continue subperiosteal dissection proximally to expose the radial shaft.

Fracture Reduction and Provisional Fixation

• Reduce the fracture and insert a 1.1mm (0.045”) transtylloid K-wire.

• Drive proximally across the fracture and exit the far cortex at the syndesmosis by 1–2mm.

• Insert bone graft through the radial defect if indicated.

Plate Position and Application

• Slide the Radial Column Pin Plate™ over the K-wire, feeding it proximally under the tendons of the 1st dorsal compartment.

• Check plate position with C-arm. If a gap greater than 2mm exists between plate and bone, then reposition the plate distally, but not beyond the tip of the styloid.

• Seat the plate proximally against bone and fix with a 2.3mm cortical screw (use 1.8mm (blue) drill and tap the near cortex).
Preparing Pin Hook

- Skip a hole and insert a second 1.1mm K-wire.
- To create a pin of proper length, use the banding pattern to note a reference point where the K-wire intersects the plate.
- Withdraw the K-wire at least 1cm* or more to a comfortable working distance.
- Cut the K-wire at least 1cm* above the reference point.

* 1cm = 1 black stripe + 1 silver stripe

Creating Pin Hook

- Place the reference point between the lower two posts of the 3-point Wire Bender.
- Create the hook by simultaneously squeezing and rotating the Wire Bender in the direction of the bend.

Finishing Pin Hook

- Hold the end of the hook with one Pin Clamp and complete the hook with a second Pin Clamp.
- Slightly over-bending the hook will allow it to snap into the plate.
- Predrill a hole with a 1.1mm K-wire to receive the hook, either in an adjacent pin hole or over the edge of the plate.

Final Fixation

- With the Impactor, fully seat the pin against the plate. If needed, a small elevator can be used to slightly separate the hook during impaction.
- Repeat the procedure for the second 1.1mm K-wire.
- Complete fixation with additional 2.3mm cortical screws proximally.
1. The Radial Column Pin Plate™ may also be applied through a dorsal or extended volar approach. With either approach, elevate a radial subcutaneous flap off the deep fascia to expose the interval between the 1st and 2nd dorsal compartment.

2. To assure proper pin length, cease driving the wire once the far cortex is felt. Slide the drill guide over the wire and use it as a drill stop by positioning the end of the driver 5mm above it before penetrating the far cortex.

3. Since the Radial Column Pin Plate™ compresses the distal fragment against the ulna and locks articular fragments in place, it should typically be applied only after articular reduction.

4. If used with the TriMed Volar Bearing Plate™ or TriMed Fixed Angle Plate™, the Radial Column Pin Plate™ should be applied before the volar plate is secured on both sides of the fracture site in order to allow reduction of the DRUJ.

**Radial Column Pin Plate™**
- RCP3  3 Hole
- RCP5  5 Hole
- RCP7  7 Hole

**Wire Bender**
- BNDWIR-1.1

**Cortical Bone Screws**
- TRX2.3-xx
- 10mm to 32mm

**Pin Clamp**
- PINCLAMP

**K-Wire**
- WIRE-1.1/100

**Impactor**
- IMPCT

**XRAYS**
- Pre-Op
- Pre-Op
- Post-Op
- Post-Op