

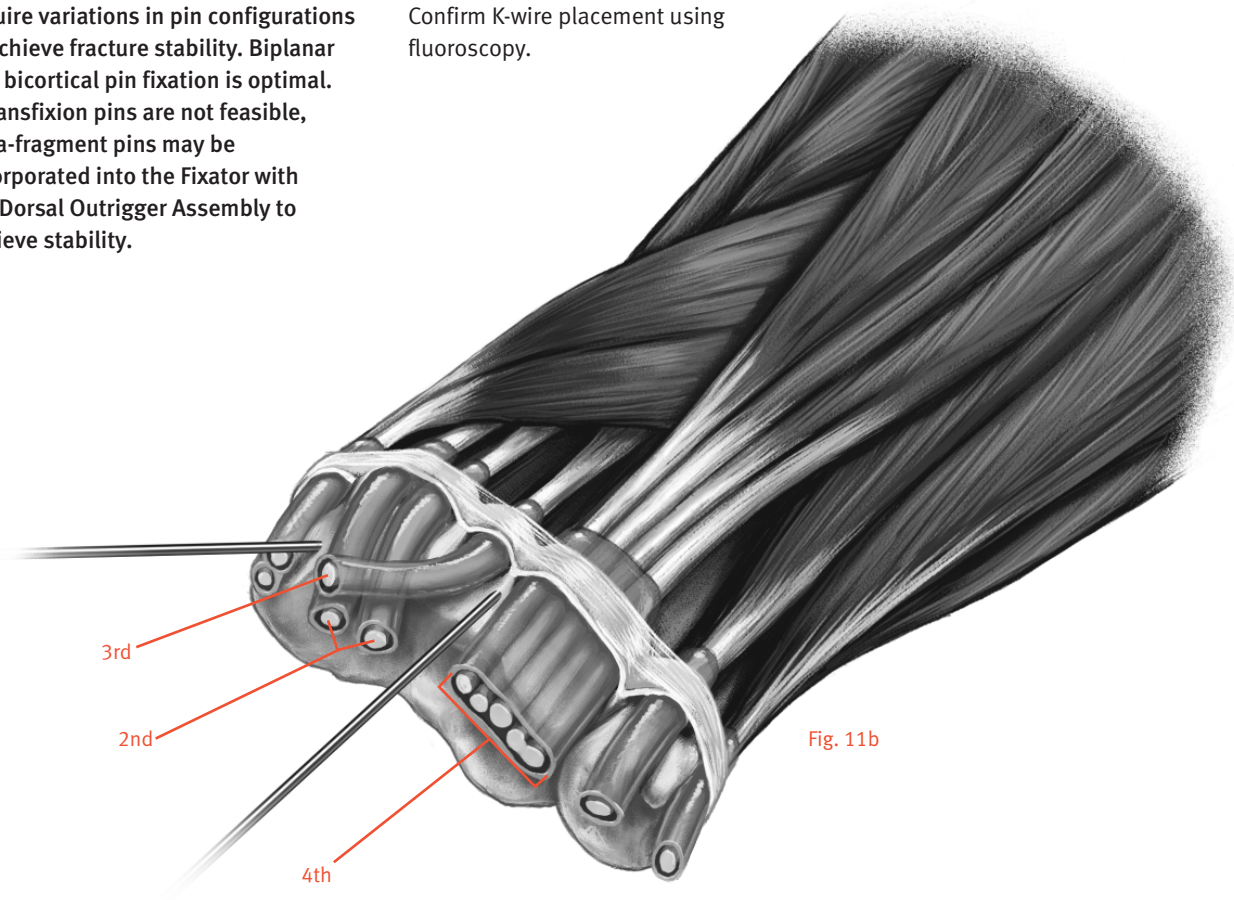


Place another K-wire, dorsal to volar, in the void between the second/third and fourth dorsal extensor compartments (Fig. 11b).

**NOTE:** Intra-articular fractures may require variations in pin configurations to achieve fracture stability. Biplanar and bicortical pin fixation is optimal. If transfixion pins are not feasible, intra-fragment pins may be incorporated into the Fixator with the Dorsal Outrigger Assembly to achieve stability.

Check finger and thumb motion to ensure that all extensor tendons have motion and have not been captured by a K-wire. Replace any K-wires that prohibit tendon motion.

Confirm K-wire placement using fluoroscopy.



### Step Four: Outrigger Application

You will need the following components:

- G) Dorsal Outrigger
- H) Dovetail Slide
- L) Wrench/Driver

Attach the Dovetail Slide to the Fixator Body. (Fig. 12).

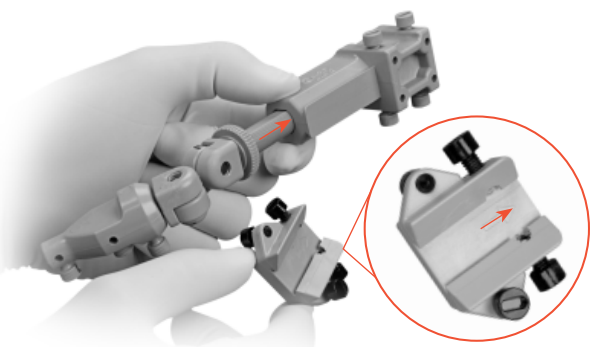


Fig. 12

**NOTE:** The arrow on the Dovetail Slide should be oriented towards the Radial Pins for correct assembly (Fig. 13).

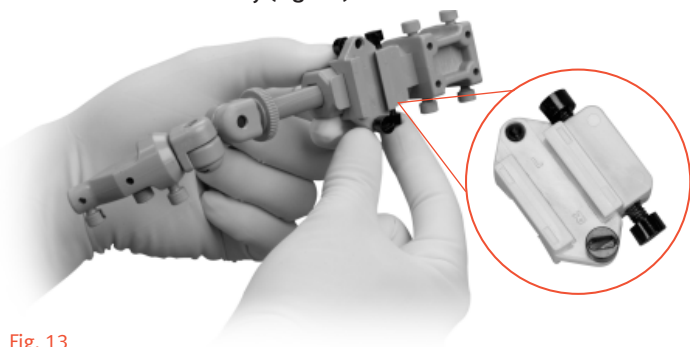


Fig. 13

Attach Dorsal Outrigger to Dovetail Slide (Fig. 14).

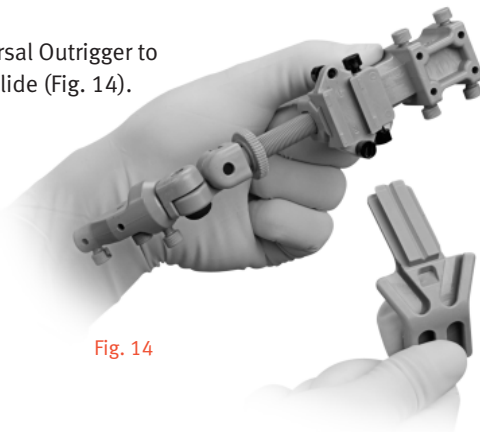
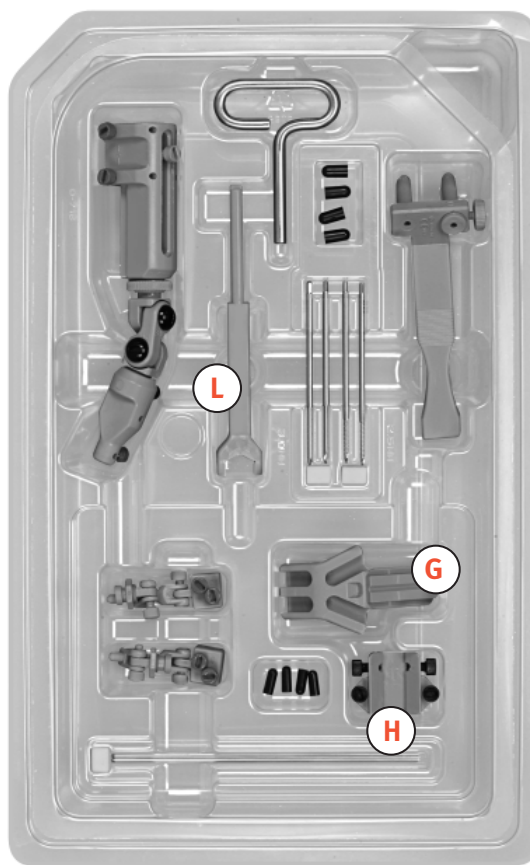
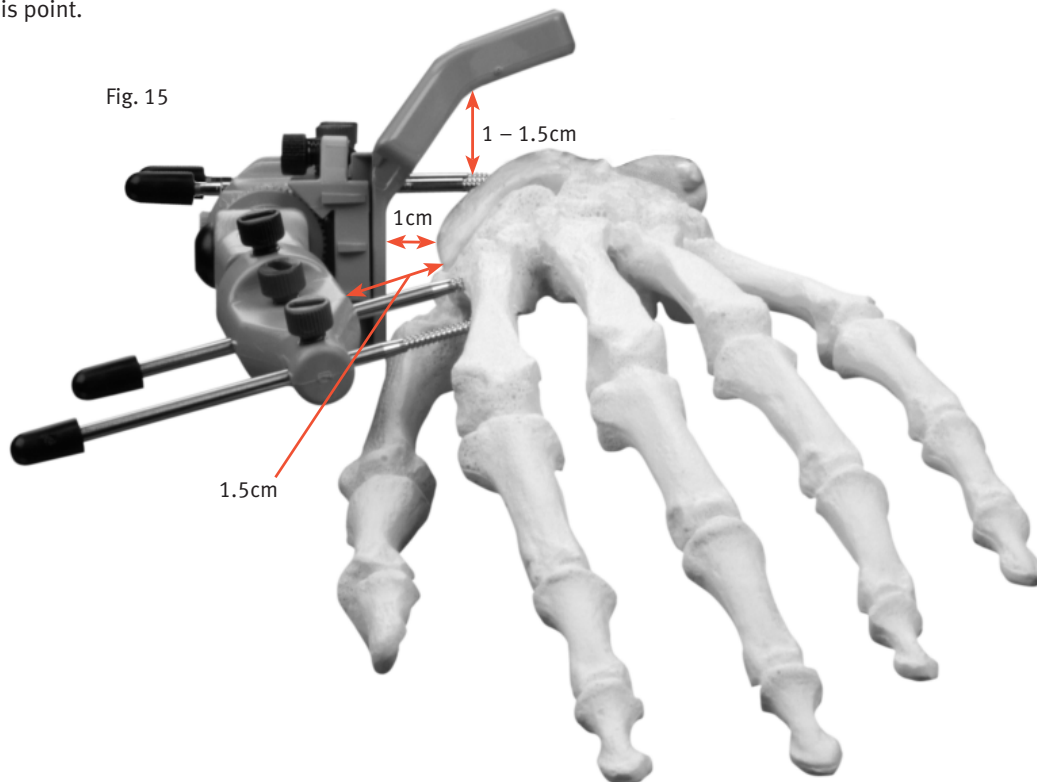


Fig. 14



Adjust the position of the Dorsal Outrigger within the Dovetail Slide (for dorsal/volar position), or by moving the Dovetail Slide (proximal/distal position). The Outrigger should be positioned within 1cm of the radiocarpal joint with 1 to 1.5cm of dorsal clearance (Fig. 15).

Do not tighten screws in the Dovetail Slide at this point.



### Step Five: K-Wire Incorporation

You will need the following components:

- K) Wire arm assemblies (2 ea.)
- L) Wrench/Driver

The Universal Wire Arms connect the K-wires to the Outrigger.

To facilitate K-wire incorporation, disassemble the stem from the tower, and loosen all locking screws on the Universal Wire Arm (Fig. 16). Slide the wire holder over the K-wire(s) and align the stem over the Outrigger. Slide the attachment base into the appropriate slot on the Outrigger, and reintroduce the stem into the tower without placing tension on the K-wire(s) (Fig. 17).

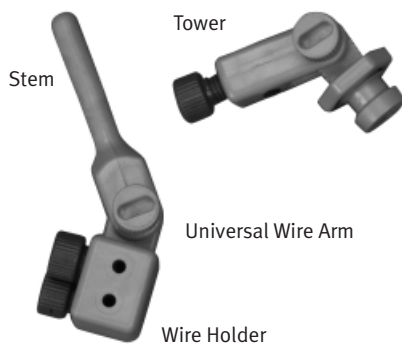
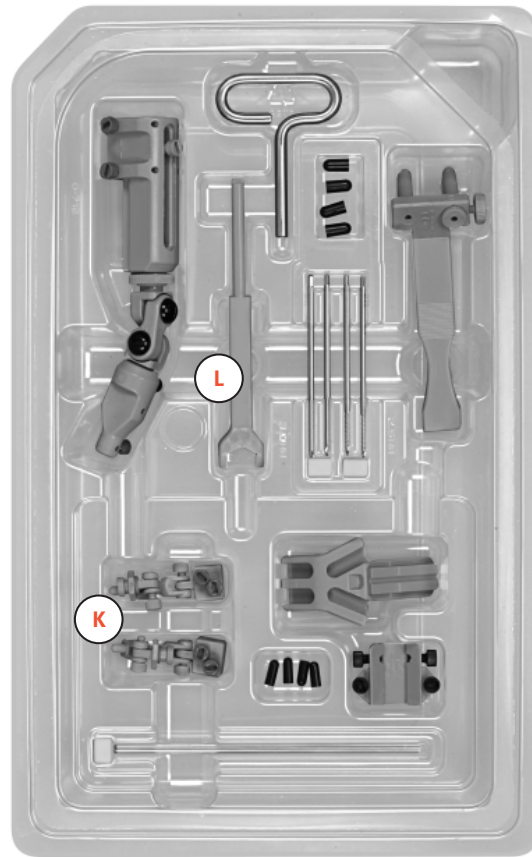


Fig. 16



Fig. 17

After assembly, use the blade tip end of the Wrench/Driver to tighten the locking screws that secure the wire holder to the K-wires (Fig. 18).

**NOTE:** Be sure that the wire holder does not touch the skin before it is secured to the K-wire(s). If the wire holder cannot be positioned off the skin, bend the K-wire(s) to move the device away from the skin. A 20°- 40° bend is usually adequate.

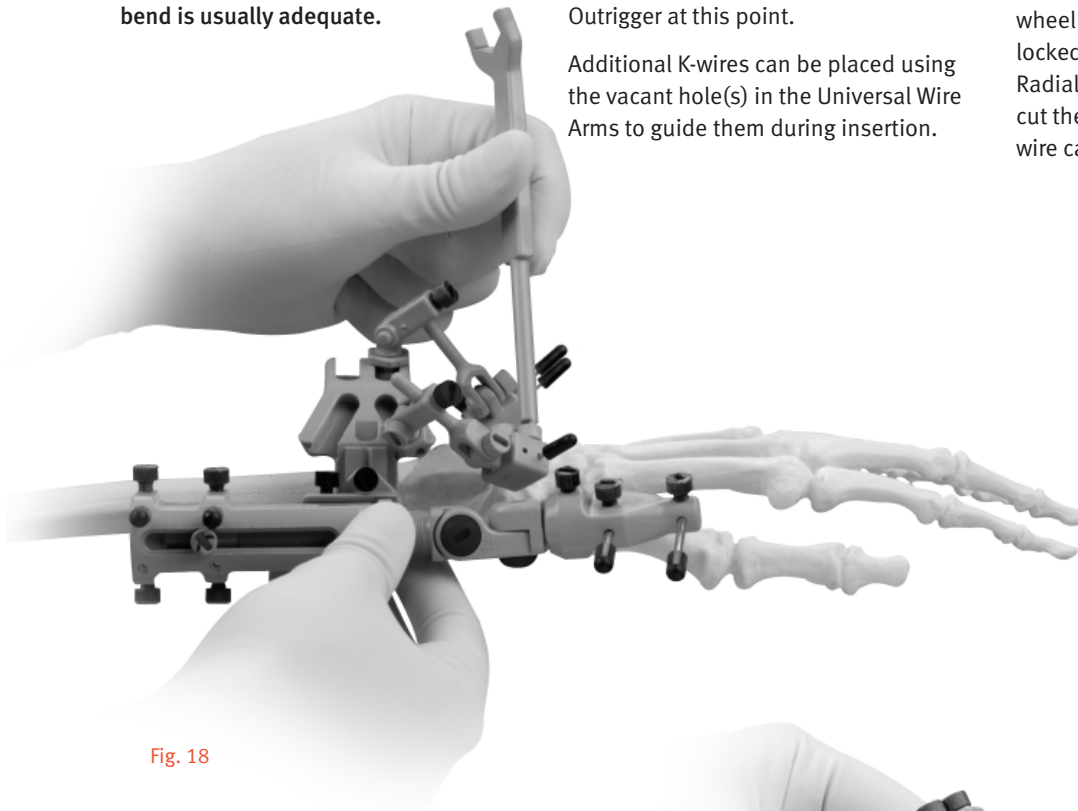


Fig. 18

Tighten all the locking screws of the Universal Wire Arm. Then use the open hex end of the Wrench/Driver to tighten the hex nut on the attachment base, securing the Universal Wire Arm to the Outrigger (Fig. 19).

Repeat the above procedure using the other Universal Wire Arm for the dorsal K-wire(s). Tighten screws, securing Dovetail Slide to the Fixator and Outrigger at this point.

Additional K-wires can be placed using the vacant hole(s) in the Universal Wire Arms to guide them during insertion.

### Step Six: Final Adjustments

When fixation is complete, relax the traction and return the hand to a more neutral position. Ensure that the Interphalangeal and Metacarpal Phalangeal joints can achieve 90° of passive flexion. Then use fluoroscopy to confirm fracture reduction and pin/wire placement.

Confirm all screws, including thumb wheel and main adjusting screw, are locked tight. Insert pin caps over the Radial and Metacarpal Pins. If desired, cut the K-wires off and insert wire caps.

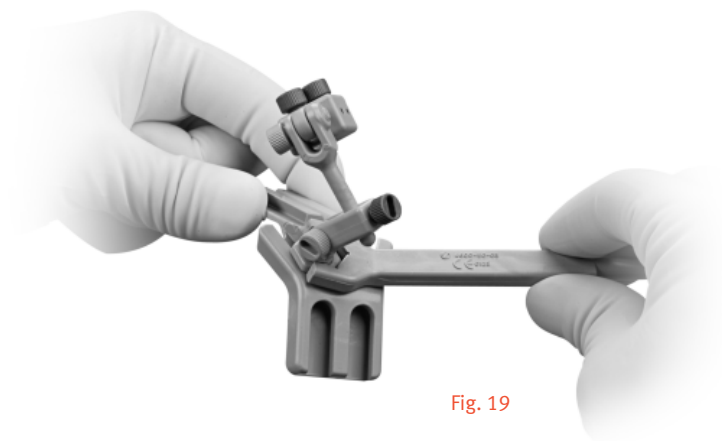


Fig. 19

### Postoperative Protocol

For comminuted, unstable fractures, maintain fixation without distraction, using the metacarpal segment and Universal Wire Arms, for approximately 3-4 weeks. Encourage finger and thumb movement.

As healing progresses, the Metacarpal Segment of the Fixator Body and the Metacarpal Pins may be removed to mobilize the wrist (Fig. 20 & 21). To remove the Metacarpal Segment:

- Loosen the blue pin locking screws in the Metacarpal Segment
- Loosen the black Universal Joint Locking Screws
- Remove the grey main adjusting screw
- Remove the two Metacarpal Pins
- Remove the Metacarpal Segment, Universal Joints and Threaded Bar

Wrist range of motion exercises can be initiated in this non-spanning configuration.

A custom thermoplast splint can be worn for comfort and removed for wrist and finger therapy and showering. When the fracture is healed, the Fixator can be removed.

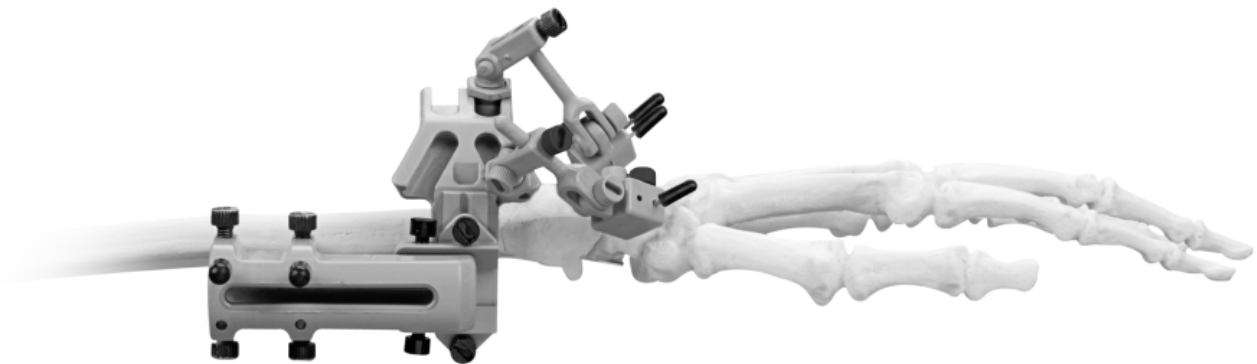
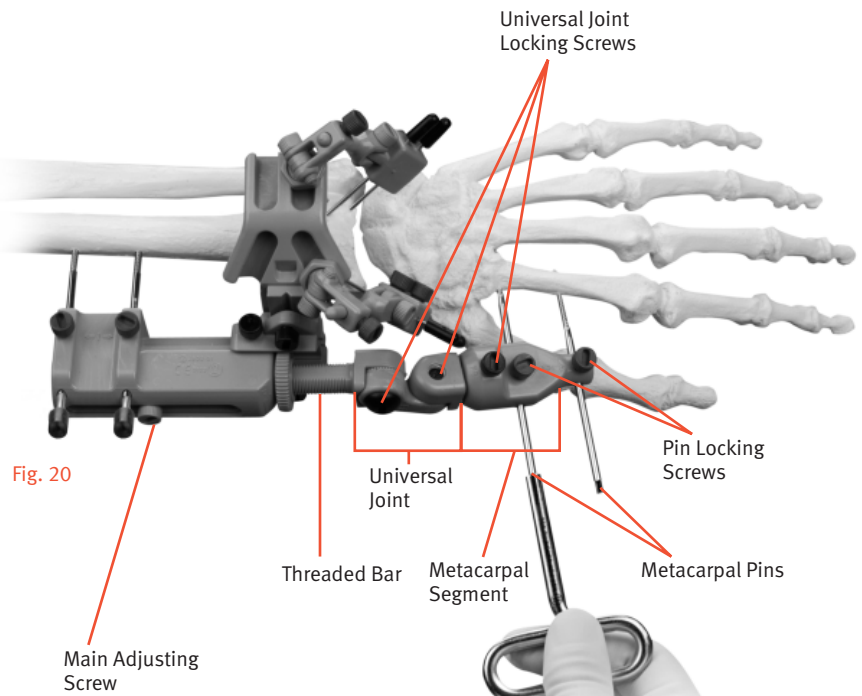


Fig. 21

## Ordering Information

| Prod. No.      | Description                          |
|----------------|--------------------------------------|
| 00-4600-001-00 | <i>Wristore</i> Sterile Pack         |
| 00-4600-050-03 | <i>Wristore</i> Wrench/Driver        |
| 00-4600-052-00 | <i>Wristore</i> Pin Inserter/Remover |

Contact your Zimmer representative or visit us at [www.zimmer.com](http://www.zimmer.com)

