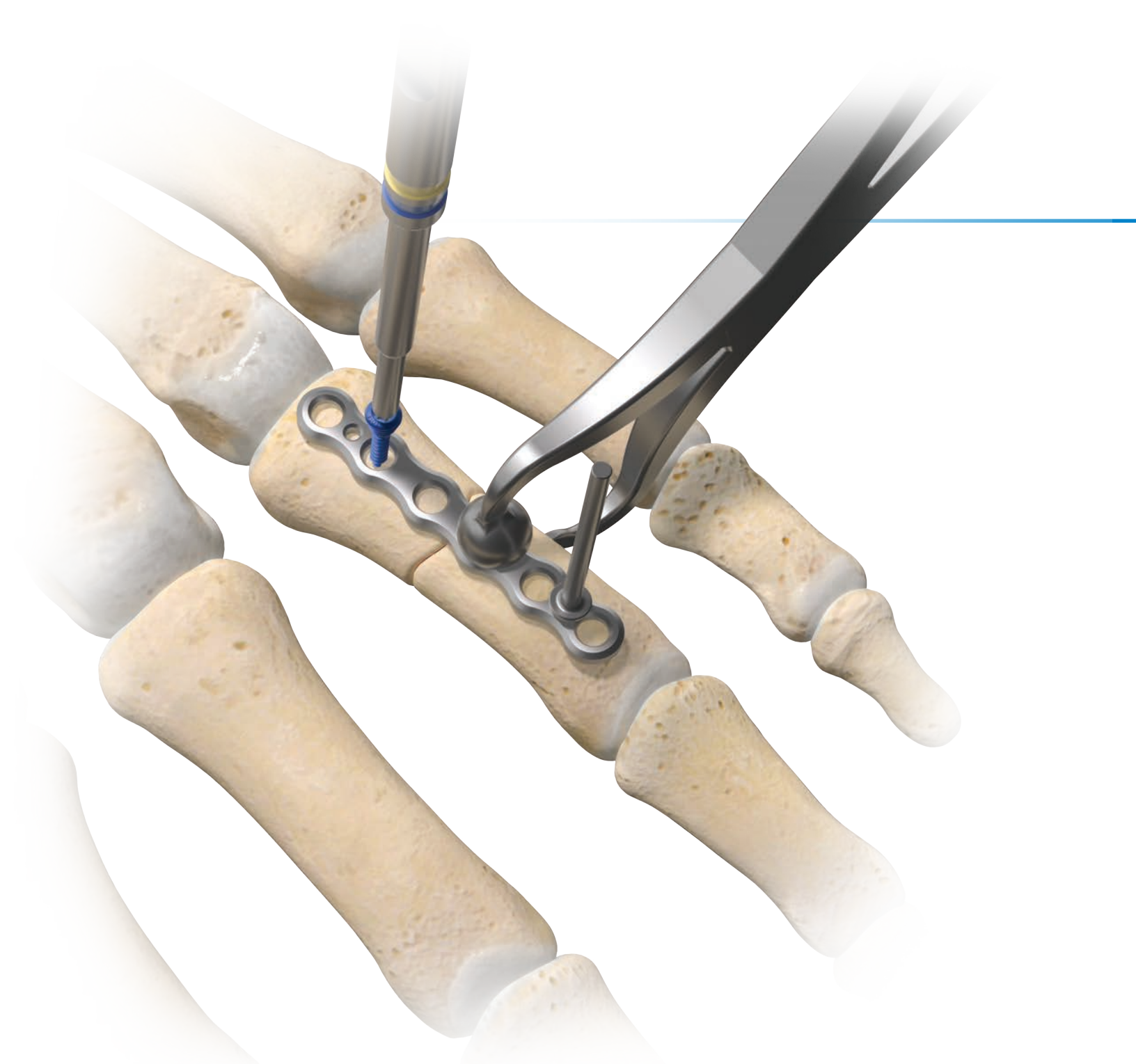
ZIMMER BIOMET
Moving You Forward.™



# A.L.P.S. mvX® Hand System

## Surgical Technique



# A.L.P.S. mvX™ Hand System

## Technique Guide

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# Indications and Contraindications

## Intended Use

The Zimmer Biomet A.L.P.S. mvX Mini-Fragment System is intended to bridge or otherwise stabilize bone fragments to facilitate healing.

## Plates

### Indications (Excluding CE Mark Countries)

#### Plates

The A.L.P.S. mvX Mini-Fragment System is indicated for fixation of fractures, osteotomies, non-unions, malunions, replantations, and fusions of short bones and small fragments of bone including, but not limited to the hand, wrist, foot, and ankle. The A.L.P.S. mvX Mini-Fragment System is also intended for reduction and stabilization of non-load bearing long bone fragments. The A.L.P.S. mvX Mini-Fragment System is not for Spinal Use.[1]

1.LBL-ZB202317

**NOTE:** This Surgical Technique alone does not provide sufficient background for direct use of the instrument and implant set. Instruction by a surgeon experienced in handling these instruments is highly recommended.

For safe and effective use of this implant system, the surgeon should be familiar with this recommended surgical technique for the device that has been chosen from the system.

In every case, accepted surgical practice should be followed in postoperative care and the patient should be made aware about the devices and the allowed activities with these implants.

### Indications (For CE Mark Countries)

The A.L.P.S. mvX Mini-Fragment System is indicated for fixation of fractures, osteotomies, non-unions, malunions, replantations, and fusions of short bones and small fragments of bone including, the hand, wrist, foot, and ankle. The A.L.P.S. mvX Mini-Fragment System is also intended for reduction and stabilization of non-load bearing long bone fragments. The A.L.P.S. mvX Mini-Fragment System is not for Spinal Use.[2]

2. LBL-ZB202605

### Contraindications (Excluding CE Mark Countries)

Contraindications include:

Infection.

Patient conditions including blood supply limitations, obesity and insufficient quantity or quality of bone.

Patients with mental or neurologic conditions who are unwilling or incapable of following postoperative care instructions.

Foreign body sensitivity. If material sensitivity is suspected, testing is required prior to implanting the device.

# Indications and Contraindications

## Plates (cont)

### Contraindications (For CE Mark Countries)

The Zimmer Biomet A.L.P.S. mvX Mini-Fragment System should not be used in a patient who has current, or who has a history of:

Active infection or inflammation.

Patient conditions including blood supply limitations, obesity and insufficient quantity or quality of bone.

Patients with mental or neurologic conditions who are unwilling or incapable of following postoperative care instructions.

Foreign body sensitivity. If material sensitivity is suspected, testing is required prior to implanting the device.

## Intramedullary Nails

### Indications

#### Intramedullary Nails

The Zimmer Biomet A.L.P.S. mvX IM Threaded Screws are indicated for use in bone reconstruction, osteotomy, arthrodesis, joint fusion, fracture repair, and fracture fixation of bones appropriate for the size of the device. Screws are intended for single use only.

### Contraindications

#### Intramedullary Nails

The implant should not be used in a patient who has current, or who has a history of:

Local or systemic acute or chronic inflammation.

Active infection or inflammation.

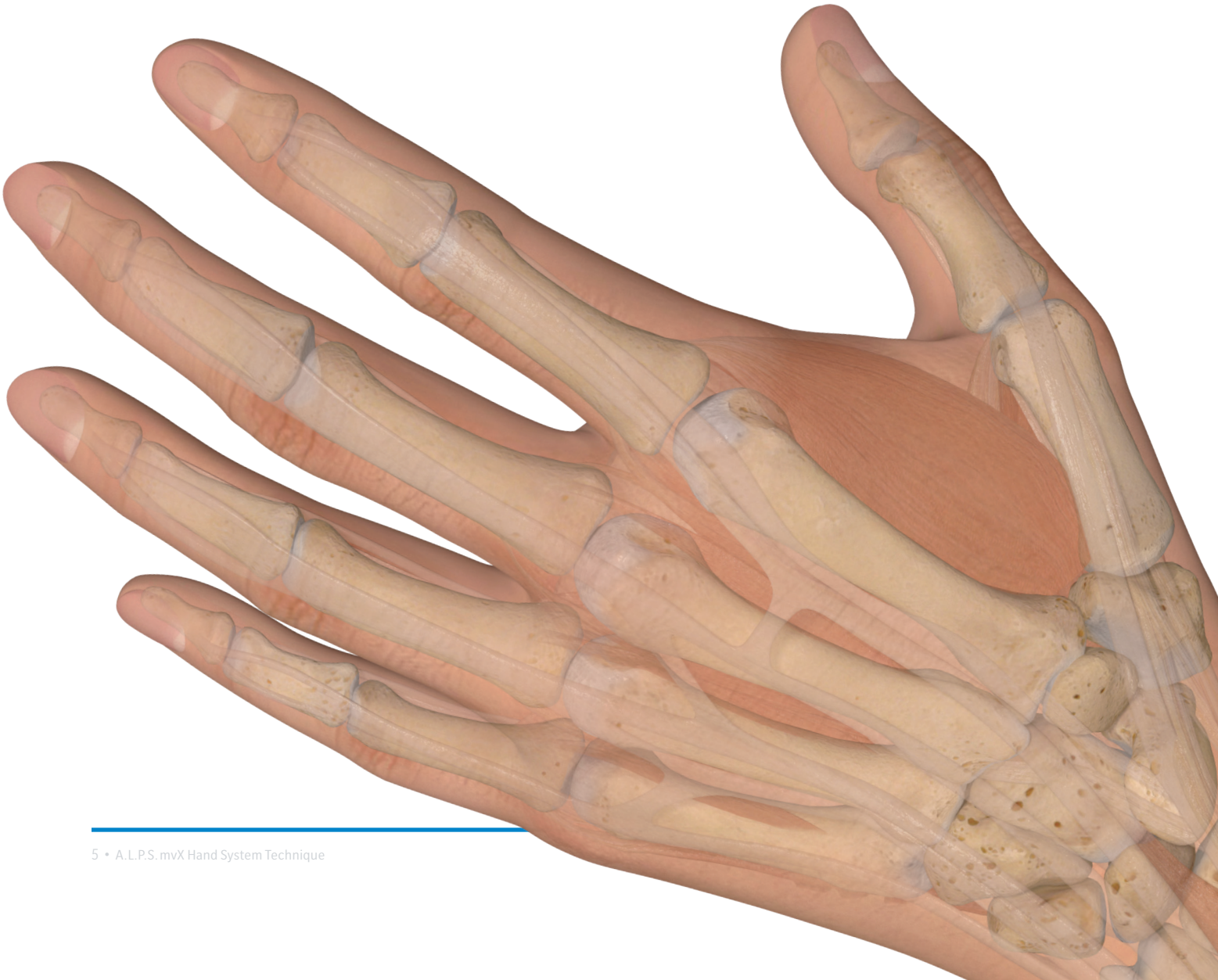
Suspected or documented metal allergy or intolerance.



Indications (For CE mark Countries):

# Portfolio of Hand

The A.L.P.S. mvX Hand System was designed with hand surgeons in mind, to provide an expansive and comprehensive set of solutions for fracture management and deformity correction of the hand. This expands Zimmer Biomet's portfolio of hand and wrist solutions. Other hand and wrist solutions include the DVR Crosslock System and the A.L.P.S. mvX Mini Fragment System.



# and Wrist Solutions

## DVR® Crosslock System:

- Crosslock Plates • Wrist Plates • Volar Rim Plates • Wrist Spanning Plate



## A.L.P.S. mvX Mini Fragment System:

- 2.7mm Straight Plate - Designed to bridge the gap between mini fragment and small fragment fixation. Applicable in forearm fractures.



# Comprehensive Hand Fracture Care in One System

The A.L.P.S. mvX Hand System is designed to provide a comprehensive offering of implant solutions for fractures, osteotomies, fusions, mal-unions and non-unions of the hand. The system includes anatomic specialty plates as well as non-anatomic plates of various sizes and lengths that utilize variable angle locking technology to meet the varying clinical needs of the patient and surgeon.
This system includes:

| Fracture plates | Specialty Plates | Intramedullary Nails |
|---|---|---|

Anatomic specialty plates are procedure specific. The system features non-compressive intramedullary nails for fractures of the metacarpals. Specific components of the system are:

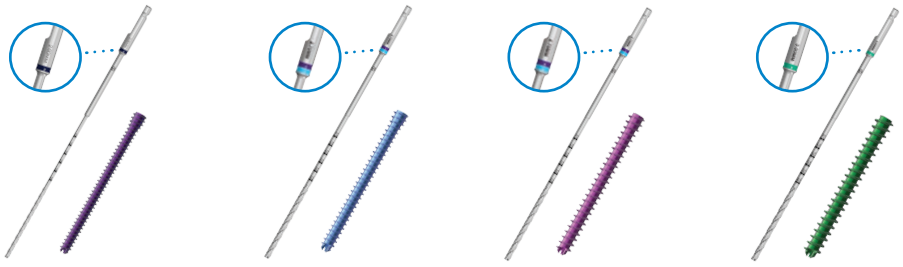
| | | |
|---|---|---|
| 3 families of plates<br>1.3mm, 1.5/2.0mm, and 2.4mm | 4 families of intramedullary nails<br>3.0mm, 3.5mm, 4.0mm, and 4.5mm | Non-locking and locking screws with variable angle capability with a cone of angulation of up to 30° |

# Intramedullary Nails

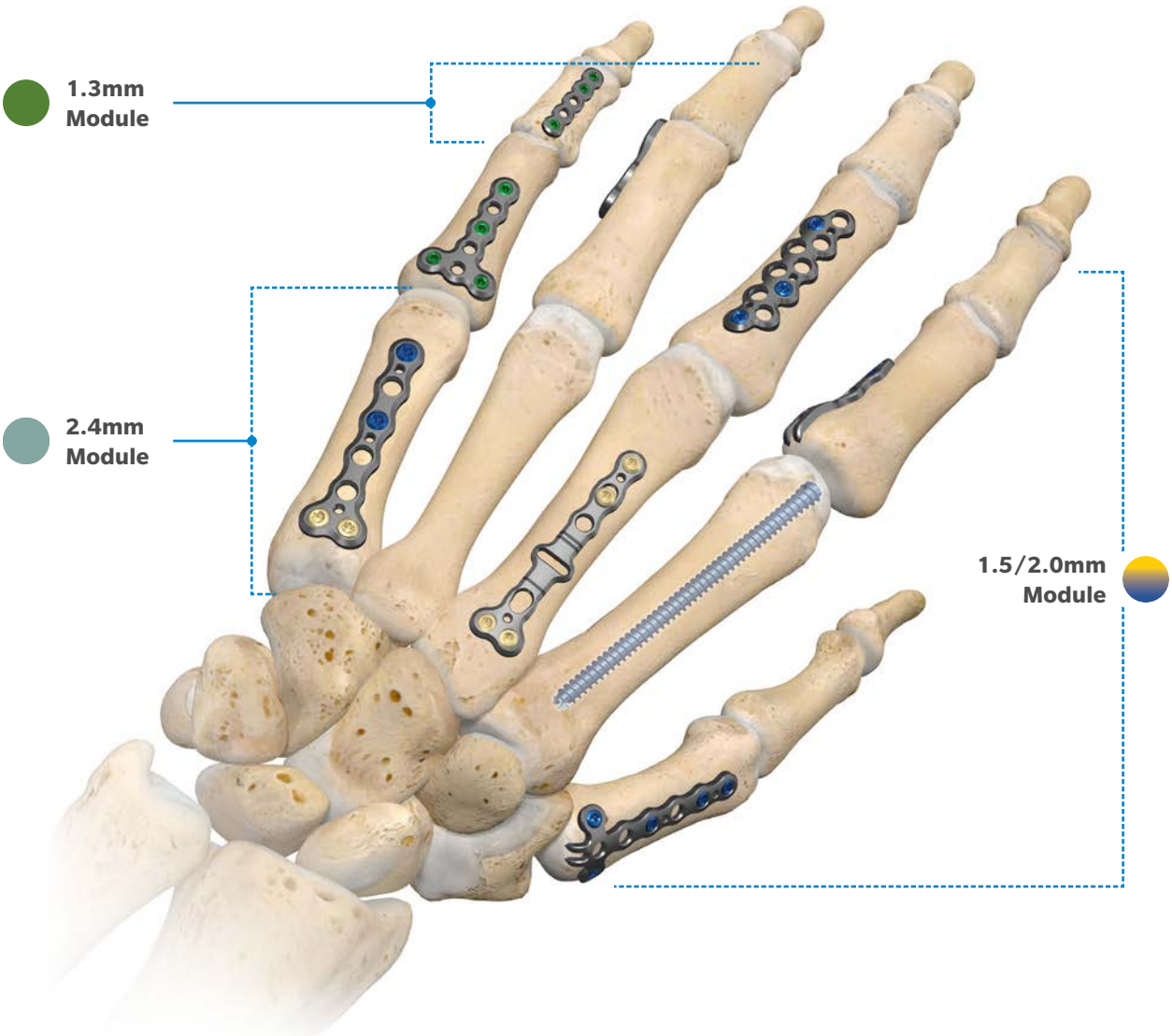
The A.L.P.S. mvX Intramedullary Nails are non-compressive nails designed to aid in the reduction of metacarpal fractures. Simple, easy-to-use instrumentation, including a unique depth gauge with the ability to measure for both nail length and nail diameter, allows for a streamlined surgical experience. The depth gauge can be used to template the nail diameter by placing it over the fracture and using fluoroscopy to visualize the various nail diameter options on the bone.

| | NAIL DIAMETER (mm) | | | |
|---|---|---|---|---|
| **THREAD DIAMETER** | **3.0mm** | **3.5mm** | **4.0mm** | **4.5mm** |
| **BOX STICKER COLOR** | | | | |
| **THREAD LENGTH** | Fully Threaded | Fully Threaded | Fully Threaded | Fully Threaded |
| **NAIL LENGTH** | 30mm, 40mm, 45mm, 50mm, 55mm, 60mm, 70mm | | 40mm, 45mm, 50mm, 55mm, 60mm, 70mm | |
| **DRIVER** | T8 | T8 | T8 | T8 |

| | DRILL BIT DIAMETERS (mm) | | | |
|---|---|---|---|---|
| **DRILL BIT** | 2.0mm | 2.7mm | 2.7mm | 3.0mm |

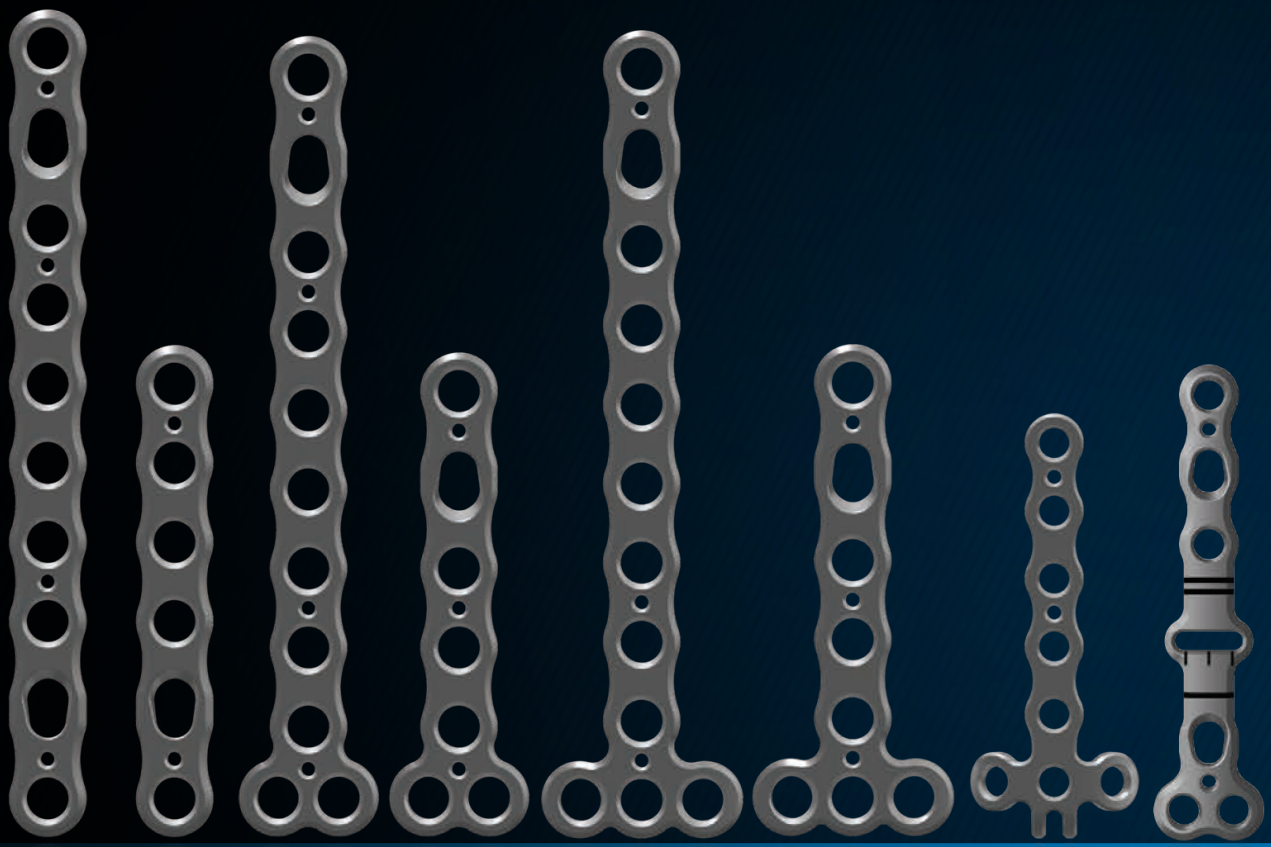


# Plate Families



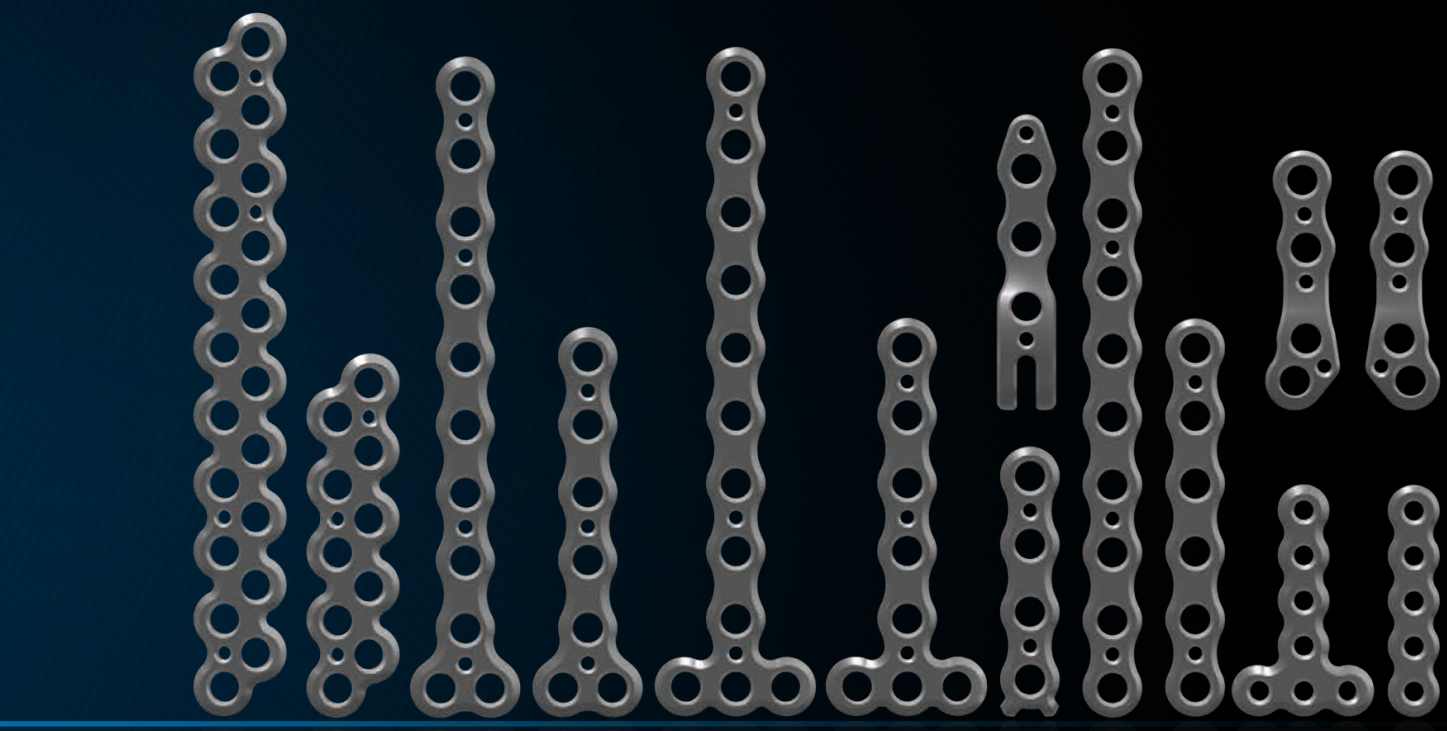

The A.L.P.S. mvX Plates are available in three size modules: 1.3mm, 1.5/2.0mm, and 2.4mm. With the ability to use both 1.5 and 2.0mm screws within the same plates in the 1.5/2.0mm plate module, A.L.P.S. mvX provides surgeons with versatility and options.

| PLATE FAMILY MODULE | MIDDLE PHALANGES | PROXIMAL PHALANGES | METACARPALS |
|---|---|---|---|
| 1.3MM | ● | | |
| 1.5/2.0MM | ● | ● | ● |
| 2.4MM | | | ● |

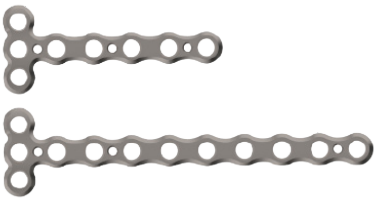


## A.L.P.S. mvX™ Hand System

# Fracture and Specialty Plates



# Fractures Plates

| | Plate Family Size | Plate Family Name | Offerings |
|---|---|---|---|
|  | 1.3mm | Straight Plate | Offered in a 5-hole plate |
|  | 1.3mm | T-Plate | Offered in a 4-hole plate |
|  | 1.5/2.0mm | Straight Plate | Offered in a 6 and 10-hole plate |
|  | 1.5/2.0mm | T-Plate | Offered in a 5 and 9-hole plate |
|  | 1.5/2.0mm | Narrow Y-Plate | Offered in a 5 and 9-hole plate |

# Fractures Plates

| | Plate Family Size | Plate Family Name | Offerings |
|---|---|---|---|
|  | | Straight Tine Plate | Offered in a 4-hole plate |
|  | | Offset Plate | Offered in a 10 and 20-hole plate |
|  | 2.4mm | Straight Plate | Offered in a 6 and 10-hole plate |
|  | 2.4mm | T-Plate | Offered in a 5 and 9-hole plate |
|  | 2.4mm | Narrow Y-Plate | Offered in a 5 and 9-hole plate |

# Specialty Plates

**All specialty plates are available in the 1.5/2.0mm module.**



### Condylar Plate

The Condylar Plate is designed to assist in fixation of fractures involving the phalangeal head/neck. Offered in left and right side specific plates.



### Avulsion Hook Plate

The Avulsion Hook Plate is designed to reduce fractures involving the phalangeal base at the collateral ligament insertion. The plate is designed with a small tine to reduce the collateral ligament and fragment with distal shaft fixation.



### Bennett/Rolando Plate

The Bennett/Rolando Plate is designed to aid in reduction of fractures involving the base of the first metacarpal. The plate is designed to contour to the anatomy while providing multiple points of variable angle locking screw fixation into basilar fragments. The plate is also designed with a small hook to allow for reduction of smaller avulsion fragments.



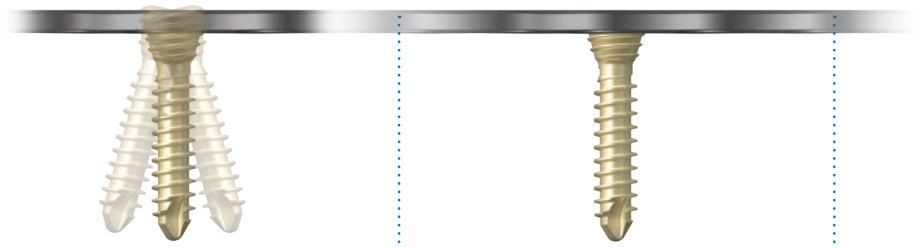
### Rotational Correction Plate

The Rotational Correction Plate is designed to provide rotational correction through two different osteotomy locations, distally and proximally.

# Screw Options

The A.L.P.S. mvX Hand System utilizes low-profile, non-locking screws along with variable and fixed angle locking screws.

- Variable angle locking screws (available in 1.5, 2.0, and 2.4mm) provide a 30° cone of angulation allowing for flexibility in achieving optimal screw placement while maintaining a low screw head prominence.
- Locking screws are designed to withstand up to three insertions without damaging the integrity of the locking mechanism, giving surgeons peace of mind and intraoperative adaptability.
- 1.5 and 2.0mm screws are interchangeable within the same plates in the 1.5/2.0mm plate module.



**30°**
**Variable Angle Locking**

**Low Screw Head Prominence**

**Multiple Screw Insertions**




| | 1.3mm Screws | 1.5mm Screws | 2.0mm Screws | 2.4mm Screws |
|---|---|---|---|---|
| **THREAD DIAMETER** | 1.3mm | 1.5mm | 2.0mm | 2.4mm |
| **DRILL** | 0.9mm | 1.0mm | 1.5mm | 1.8mm |
| **DRIVER** | T4 | T6 | T6 | T8 |
| **SCREW LENGTH** | 6mm - 16mm | 6mm - 24mm | 6mm - 24mm | 6mm - 24mm |
| **SCREW LENGTH INCREMENTS** | 1mm | 1mm | 1mm | 1mm |

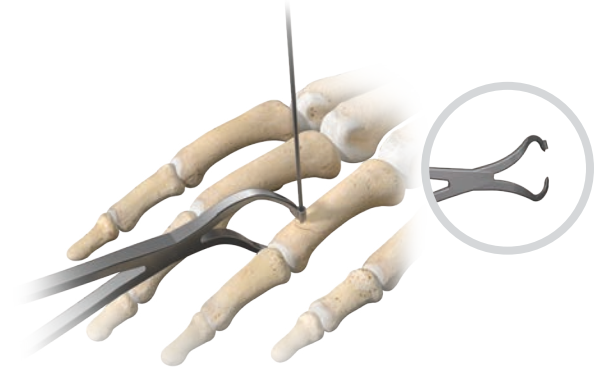
# Featured System Instrumentation

A.L.P.S. mvX offers simple, intuitive instrumentation designed to create efficiencies in the operating room for a streamlined surgical workflow.



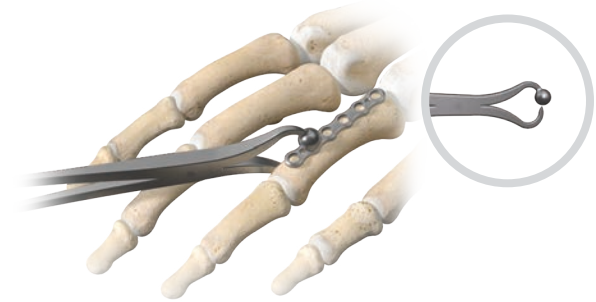
### Small Spin Down Forceps

These forceps are designed to securely grip and position implants to the bone during plate placement and fracture reduction. The finely tipped ends allow for precise engagement with the plate screw holes. The forceps can then be locked in place using the spin down feature once positioned in the desired location.



### Plate Holder with K-Wire Slot

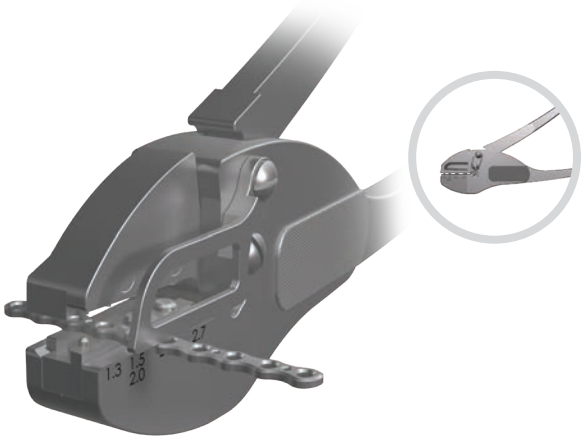
The Plate Holder with a K-Wire Slot allows for the insertion of a K-Wire through the holder and plate hole, directly into the bone, providing additional stabilization during complex procedures.



### Plate Holder with Ball End

The Plate Holder with Ball End is uniquely designed for stable and precise positioning of surgical plates onto the bone using the screw holes in the plate. The ball end provides versatile angulation, allowing for optimal alignment on bone surfaces while not harming the screw hole locking mechanism.

# Featured System Instrumentation




### Plate Cutting Pliers

Designed for efficiency and precision, these Plate Cutting Pliers allow surgeons to quickly and accurately trim orthopedic plates to the desired size with high-strength cutting and a comfortable grip.



### Plate Bending Pliers

The Plate Bending Pliers are designed for contouring the plates with precision for customizing per surgeon needs. Additionally, their design is mindful of preserving the integrity of the plate's screw hole locking

# Screw Instrumentation

A.L.P.S. mvX screw instrumentation is designed to be user-friendly.

- One driver is used for the screws in each plate module:
  - T4 driver for 1.3mm screws
  - T6 driver for 1.5/2.0mm screws
  - T8 driver for 2.4mm screws
- Color-coded instrumentation to match the screws for each screw size allows for easy identification

## **1.3mm Screw Instruments -** Color-coded in Green

| | | |
|---|---|---|
|  | 770130010 | 1.3mm Non-Locking Screw |
|  | 770131010 | 1.3mm Locking Screw |
|  | 770002090 | 0.9mm Drill |
|  | 770004130 | Thread in/Fixed 0.9mm Drill Guide |
|  | 770006130 | 0.9mm Fixed Angle Drill Guide |
|  | 770009130 | 1.3/1.5mm Depth Gauge (26mm) |
|  | 770001040 | T4 Retention Driver |

# Screw Instrumentation

## **1.5mm Screw Instruments -** Color-coded in Dark Blue

| | | |
|---|---|---|
|  | 770150010 | 1.5mm Non-Locking Screw |
|  | 770151010 | 1.5mm Locking MDS |
|  | 770002100 | 1.0mm Drill |
|  | 770004150 | Thread in/Fixed 1.0mm Drill Guide |
|  | 770006150 | 1.0mm Fixed Angle/VA Double Drill Guide |
|  | 770009130 | 1.3/1.5mm Depth Gauge (26mm) |
|  | 770001060 | T6 Retention Driver |

# Screw Instrumentation

## **2.0mm Screw Instruments -** Color-coded in Gold

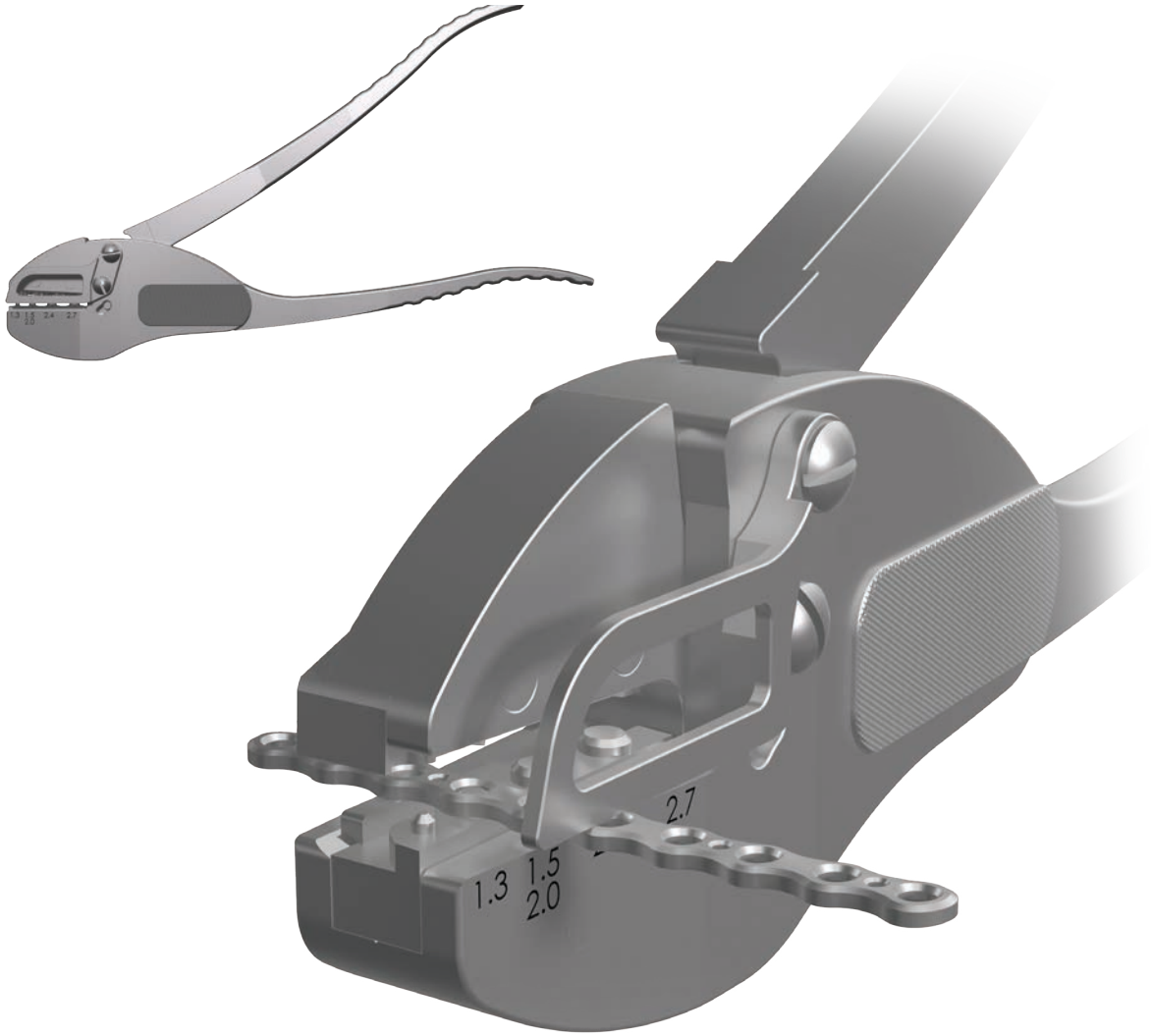
| | | |
|---|---|---|
|  | 770200010 | 2.0mm Non-Locking Screw |
|  | 770201010 | 2.0mm Locking MDS |
|  | 770008200 | 2.0mm Countersink |
|  | 770002150 | 1.5mm Drill, Short |
|  | 770003200 | 2.0 mm Overdrill |
|  | 770004200 | Thread in/Fixed 1.5mm Drill Guide, Short |
|  | 770010200 | 1.5/1.8mm Compression Slot Drill Guide |
|  | 770006200 | 1.5mm Fixed Angle/VA Double Drill Guide |
|  | 770009240 | 2.0/2.4mm Depth Gauge (26mm) |
|  | 770001060 | T6 Retention Driver |

# Screw Instrumentation

## **2.4mm Screw Instruments -** Color-coded in Turquoise

| | | |
|---|---|---|
|  | 770240010 | 2.4mm Non-Locking Screw |
|  | 770241010 | 2.4mm Locking MDS |
|  | 770008240 | 2.4mm Countersink |
|  | 770002180 | 1.8mm Drill, Short |
|  | 770003240 | 2.4mm Overdrill |
|  | 770004240 | Thread in/Fixed 1.8mm Drill Guide, Short |
|  | 770010200 | 1.5/1.8mm Compression Slot Drill Guide |
|  | 770006240 | 1.8mm Fixed Angle/VA Double Drill Guide |
|  | 770009240 | 2.0/2.4mm Depth Gauge (26mm) |
|  | 770001080 | T8 Retention Driver |

# Plate Cutting




Plates may be cut to the desired length using the Plate Cutting Pliers (770020010).

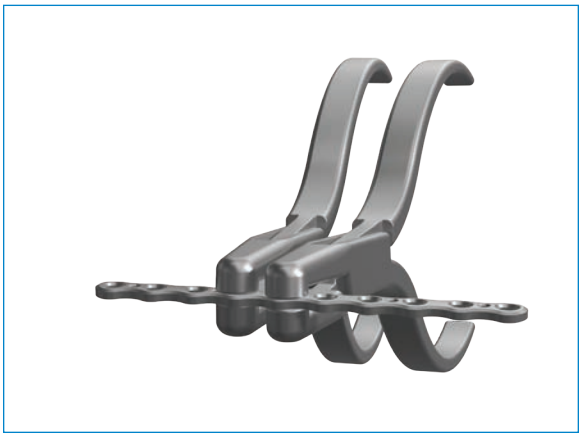
The Plate Cutting Pliers are equipped with slots to accommodate 1.3mm, 1.5/2.0mm, and 2.4mm plates. These slots not only safeguard the screw holes but also enable the user to create a rounded edge on the plate. To use it, position the plate marking-side up in the plate cutter, ensuring that the final screw hole aligns with the relevant slot. Place the section of the plate you wish to retain towards the guarded side of the cutter.

Squeeze the handle of the cutter to cut a rounded edge into the plate.

The plate cutter leaves a rounded edge. Use the file on the side of the cutter to remove any sharp edges that remain after cutting.

# Plate Bending









Plates may be bent if desired using the Plate Bending Pliers (770024010). Place bending pliers into adjacent screw holes.

**Note**: Never bend the plate across screw holes.

Bend plate to match patient anatomy.

**Warning:** Repeated bending of the plate in alternating directions can compromise its strength or lead to breakage. Avoid bending, straightening, and then re-bending the plate more than once.

## Intramedullary Nail Technique

# › Metacarpal Fixation

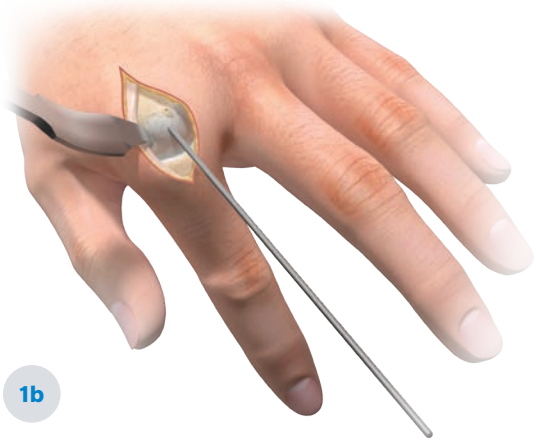
# Intramedullary Nail Technique **- Metacarpal Fixation**



1a

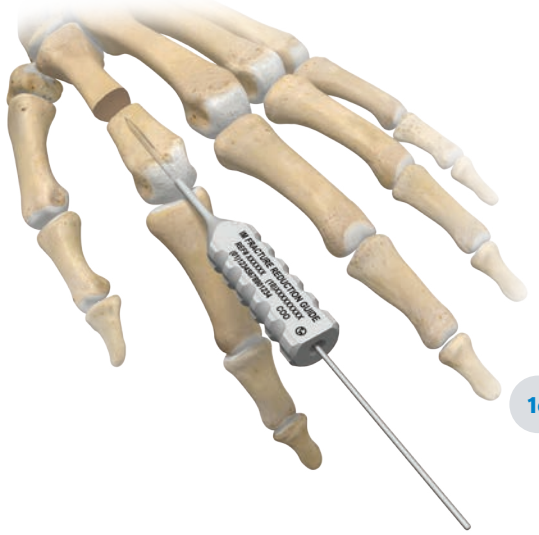
### Exposure and K-Wire Insertion

Position the patient to allow for exposure of the fracture site. Make an incision per surgeon preference and carefully dissect soft tissue to expose the fracture (Figure 1a).

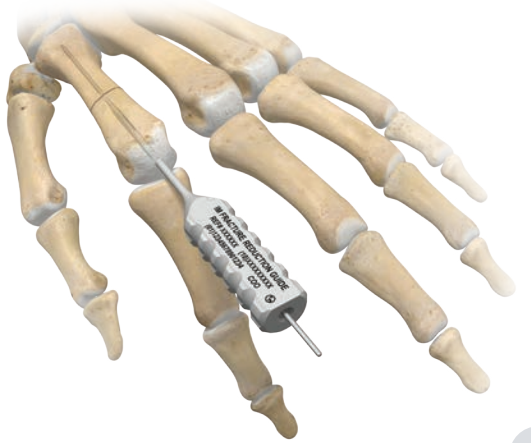


1b

Insert the K-Wire into the metacarpal head and continue in a retrograde fashion until the K-Wire tip reaches the proximal cortex (Figure 1b).



1c

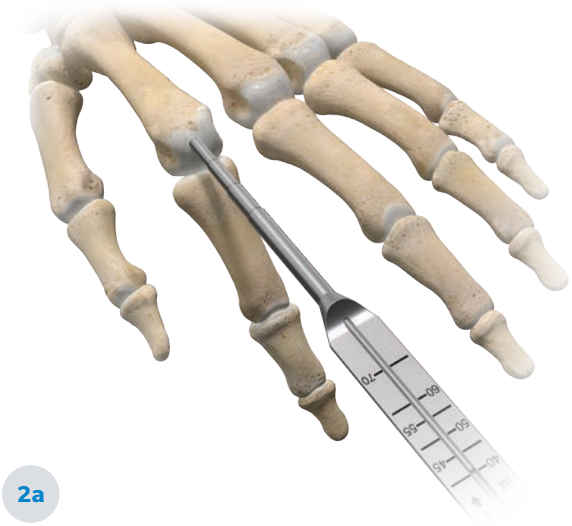


1d

### IM Fracture Reduction Guide

If desired, the IM Fracture Reduction Guide can be used to assist with fracture reduction. Insert the K-Wire into to the distal segment of the fracture and pre-drill the distal segment over the K-Wire. Pass the IM Fracture Reduction Guide over the K-Wire into the distal segment. Using fluoroscopy, align the K-Wire to the proximal segment of the fracture after reduction. Pass the K-Wire into the proximal segment. Deflection will always be toward the handle flat (Figure 1c, 1d). Remove the guide.

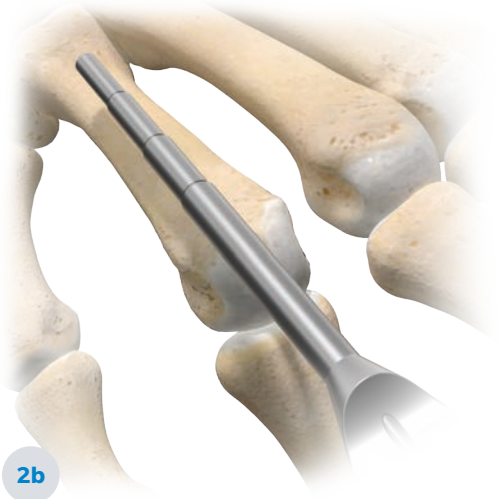
# Intramedullary Nail Technique **- Metacarpal Fixation**



2a

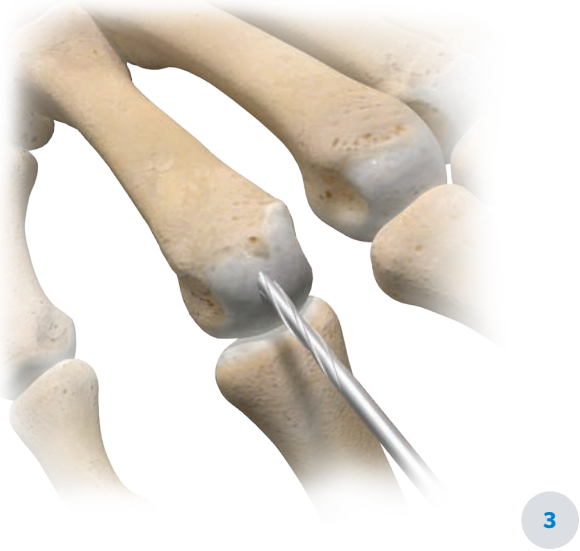
### Measure for Nail Diameter and Length

Use the Depth Gauge (770900001) to measure both the diameter and length of the intended nail site. Slide the Depth Gauge over the K-Wire to measure for nail length (Figure 2a).



2b

To measure for diameter, lay the Depth Gauge along the top of the metacarpal. The distal end of the Depth Gauge has four diameters that correlate to each size intramedullary nail and can be used with fluoroscopy to determine the correct intramedullary nail diameter (Figure 2b).

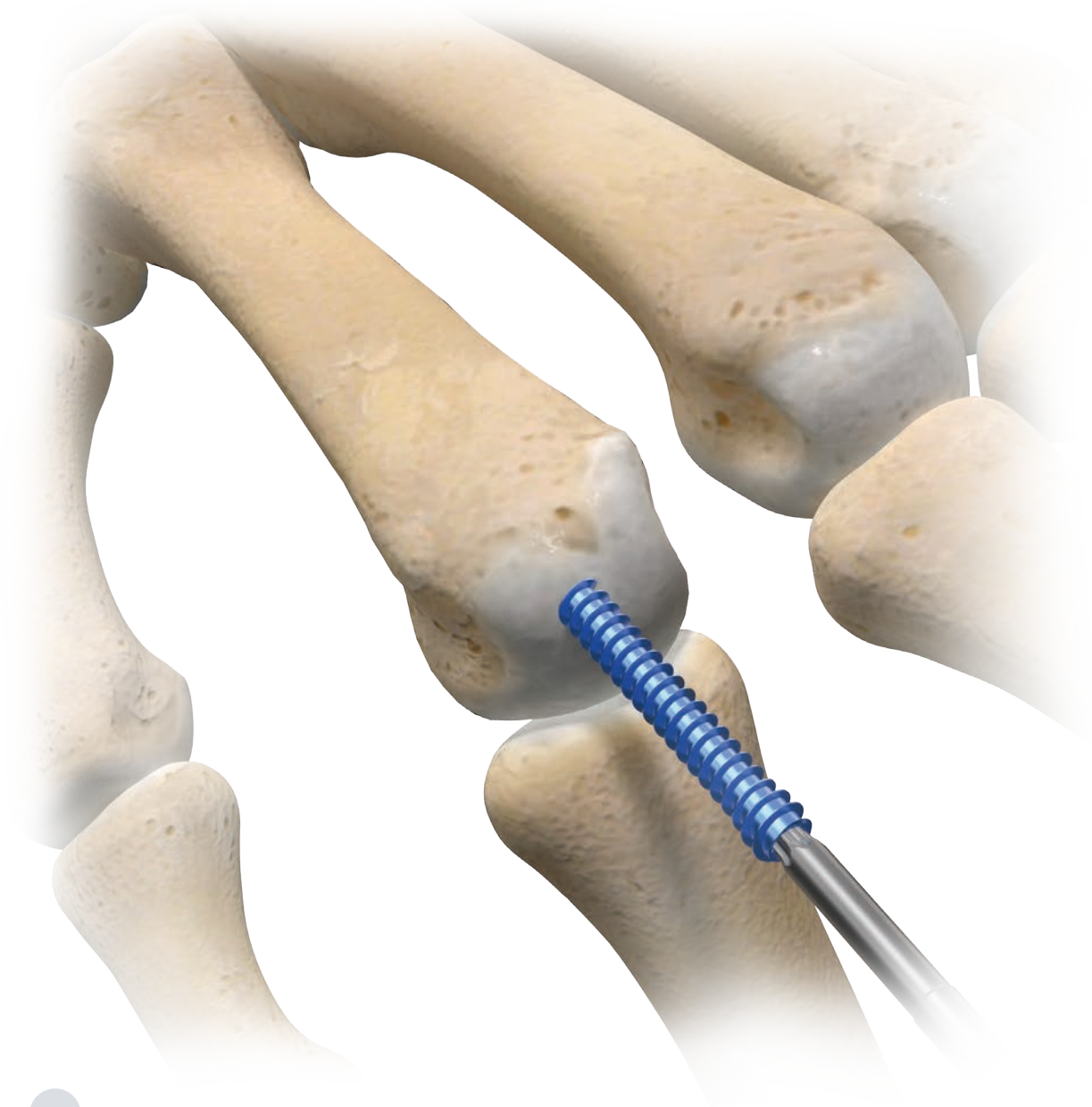


3

### Drill for Intramedullary Nail

Select the correct cannulated drill per table on page 7. Pass the drill over the K-Wire and drill to the required depth, ensuring to cross the fracture site (Figure 3). If the IM Fracture Reduction Guide was used, complete the pre-drill of the bone. Do not remove the K-Wire at this time.

# Intramedullary Nail Technique **- Metacarpal Fixation**

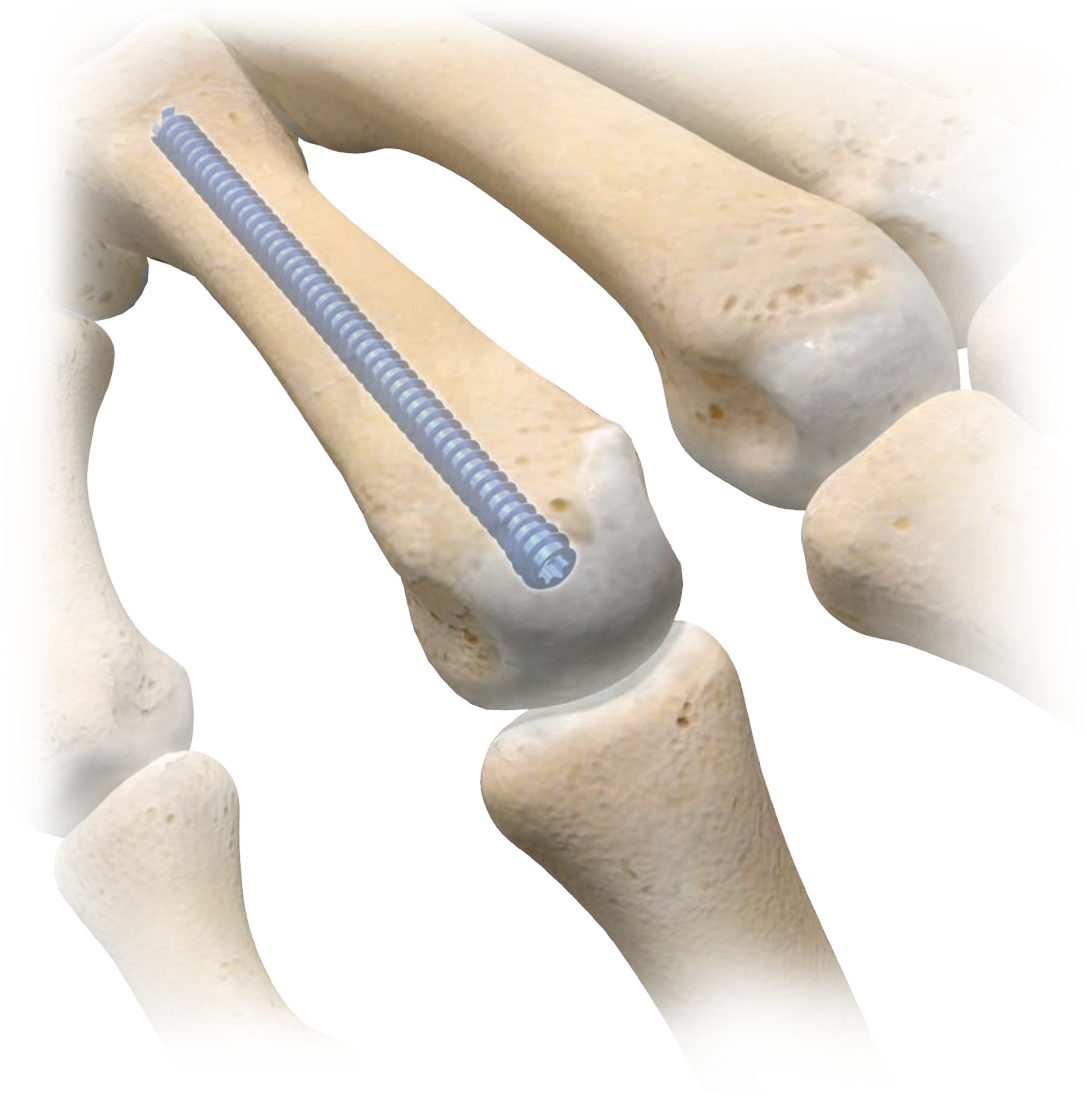


4

**Place Intramedullary Nail**

Insert the selected intramedullary nail over the K-Wire and to the desired depth using the corresponding hexalobe driver (Figure 4).

# Intramedullary Nail Technique **- Metacarpal Fixation**



### Closure

Confirm the reduction and intramedullary nail placement using an intraoperative radiograph. Note that the head of the nail should be below the articular surface (Figure 5). Irrigate the wound. Close the subcutaneous tissue and musculature in separate layers. Close the skin and dress the wound.

5

### Implant Removal

Intramedullary nail removal should always be started manually. Once started, the nail may be removed either with power or manually.

## Intramedullary Nail Technique

# › Ulna Fixation

# Intramedullary Nail Technique - **Ulna Fixation**

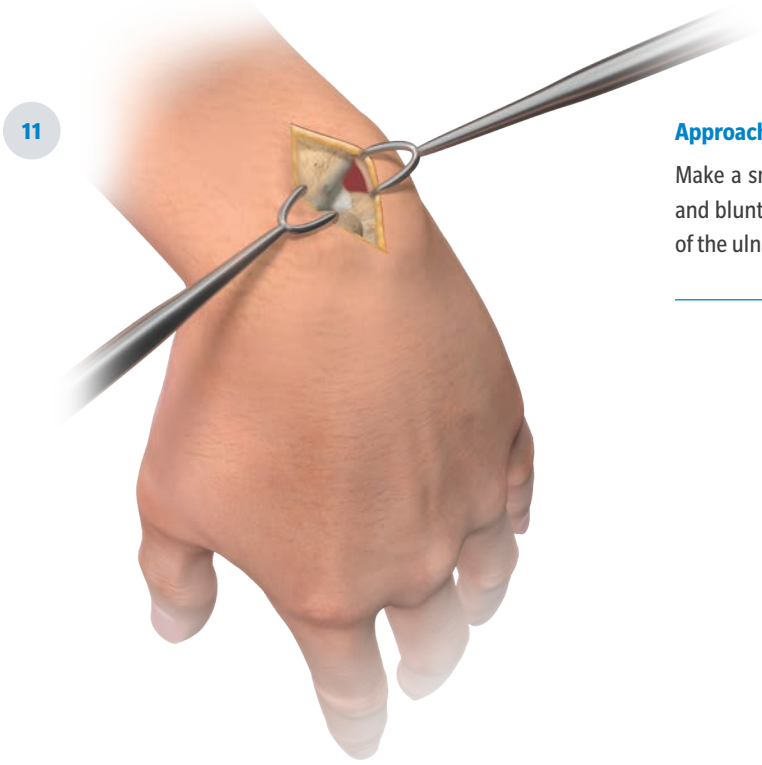



### Position the Forearm

Place the wrist supine on the operating table using an external hand table attachment to allow visualization of the distal ulna starting point (Figure 10).

### Identify the Entry Site

Two entry points may be utilized, either ulnar or radial to the ECU tendon. The wrist should be placed in maximal radial deviation to facilitate palpation of the ulnar styloid. Mark the ulnar styloid, ECU, and fifth compartment tendons. The percutaneous entry portal should be located at the dorsal aspect of the wrist, with the entry point positioned to provide access to the concave portion of the ulnar head without obstruction from the carpal bones.




### Approach

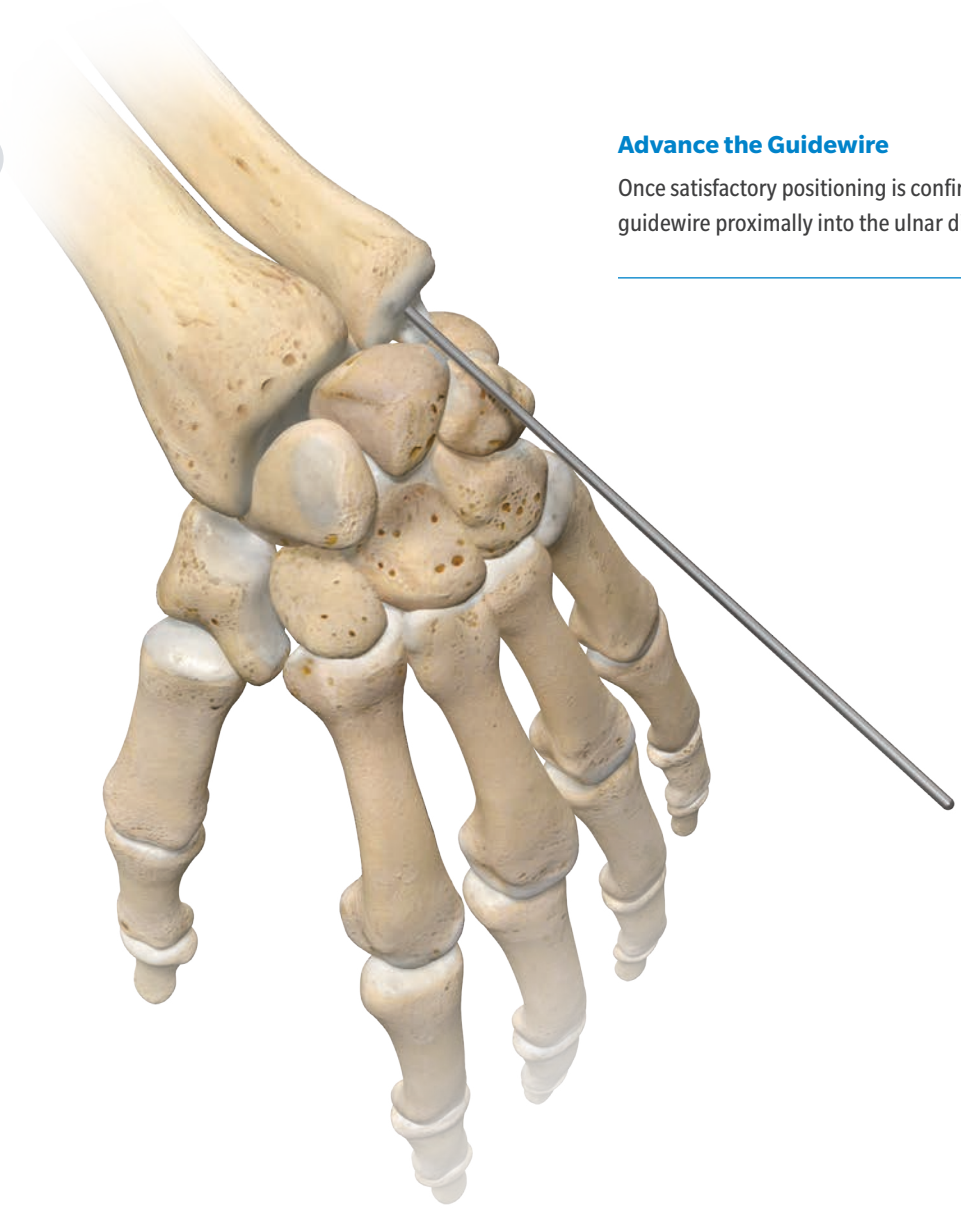
Make a small 1 cm incision at the entry site for the guidewire and bluntly dissect to avoid injury to the dorsal sensory branch of the ulnar nerve (Figure 11).

# Intramedullary Nail Technique **- Ulna Fixation**

### Insert Guidewire

Insert the K-wire in retrograde fashion into the concave portion of the ulnar head. Ensure the insertion site is at the central disc of the TFCC to avoid damage to the foveal insertion. Confirm the start point using orthogonal fluoroscopic views (Figure 12).

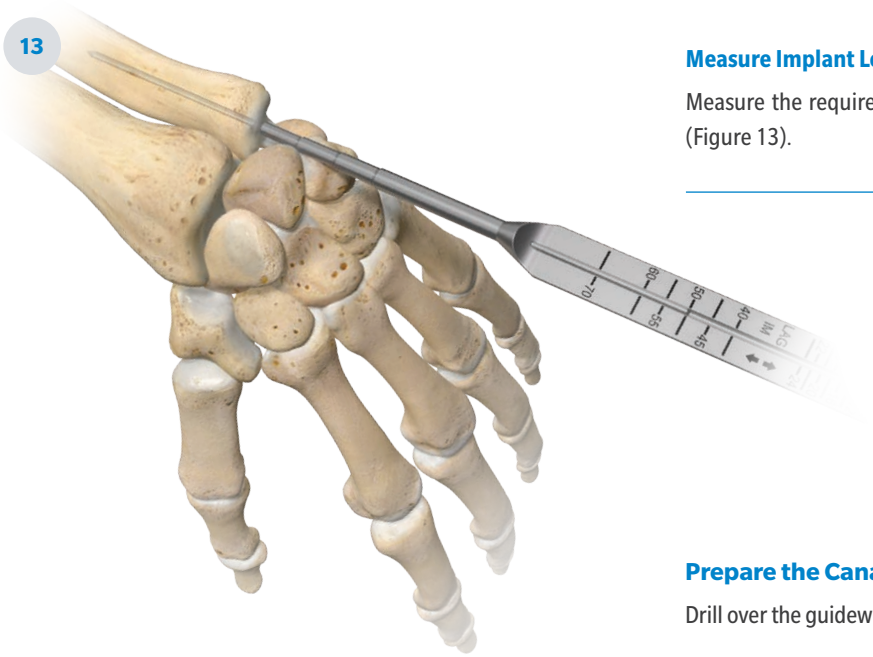
12



### Advance the Guidewire

Once satisfactory positioning is confirmed, advance the guidewire proximally into the ulnar diaphysis.

# Intramedullary Nail Technique - **Ulna Fixation**

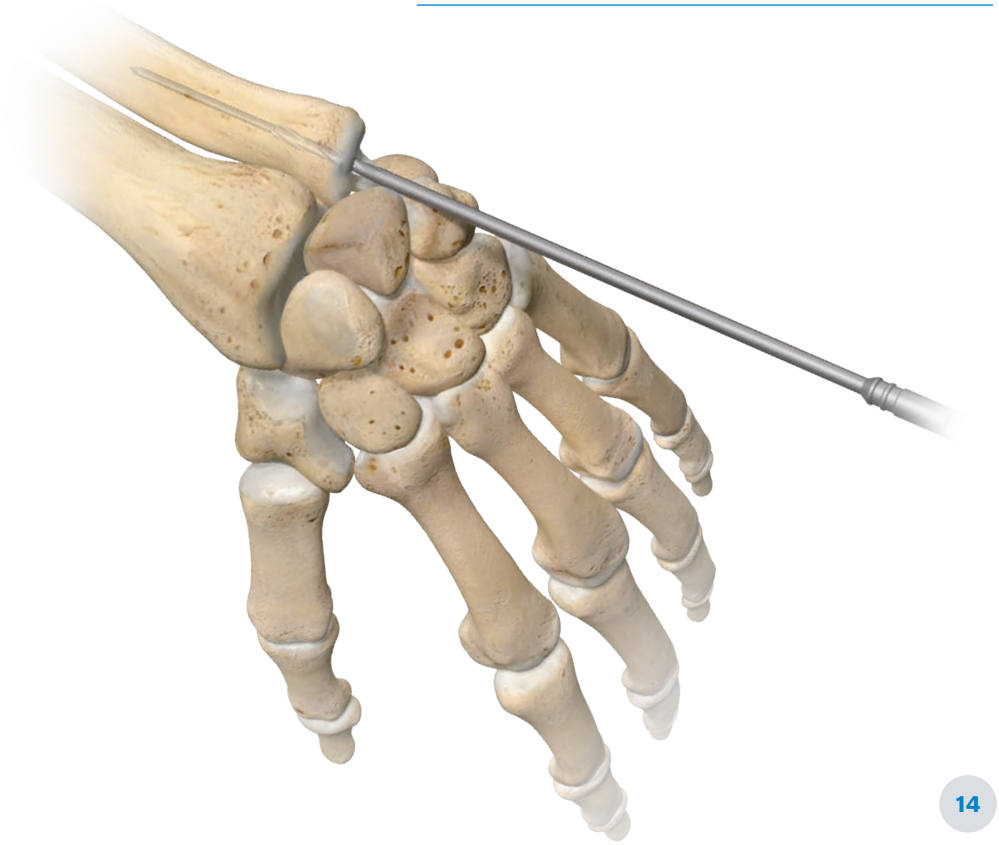



### Measure Implant Length

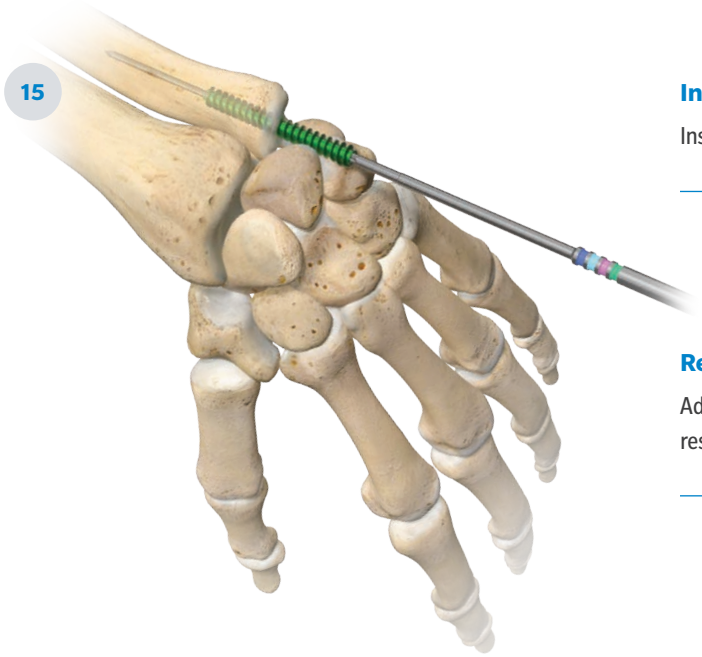
Measure the required nail length using the measuring guide. (Figure 13).

### Prepare the Canal

Drill over the guidewire in standard fashion (Figure 14).



# Intramedullary Nail Technique **- Ulna Fixation**



15

### Insert the Nail

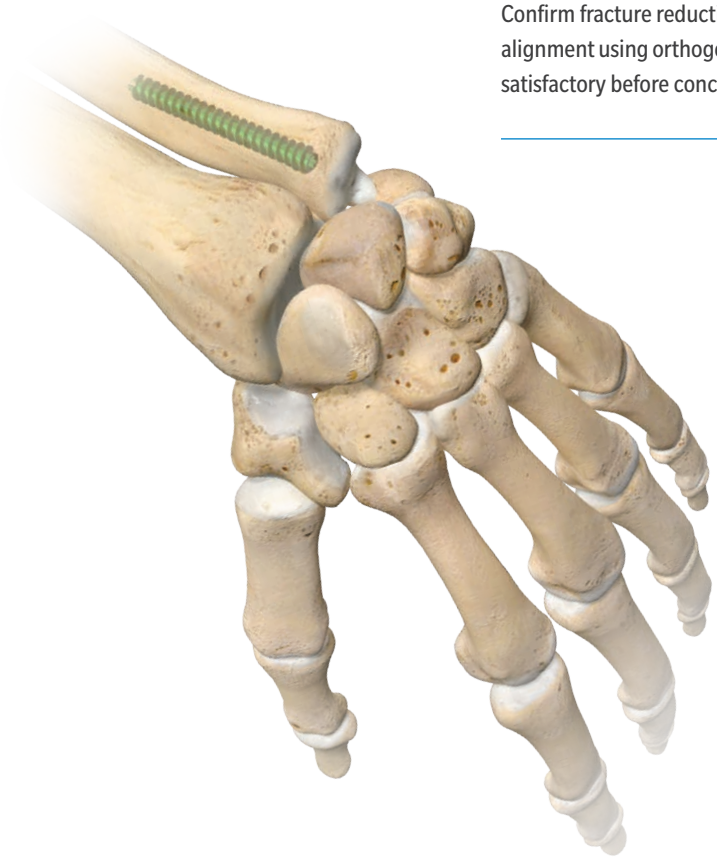
Insert the selected implant over the guidewire (Figure 15).

### Reduce and Stabilize the Fracture

Advance the nail to achieve fracture reduction, fixation, and restoration of the ulnar shaft fracture (Figure 16).

### Final Fluoroscopic Assessment

Confirm fracture reduction, implant position, and DRUJ alignment using orthogonal fluoroscopic views. Verify fixation is satisfactory before concluding the procedure.

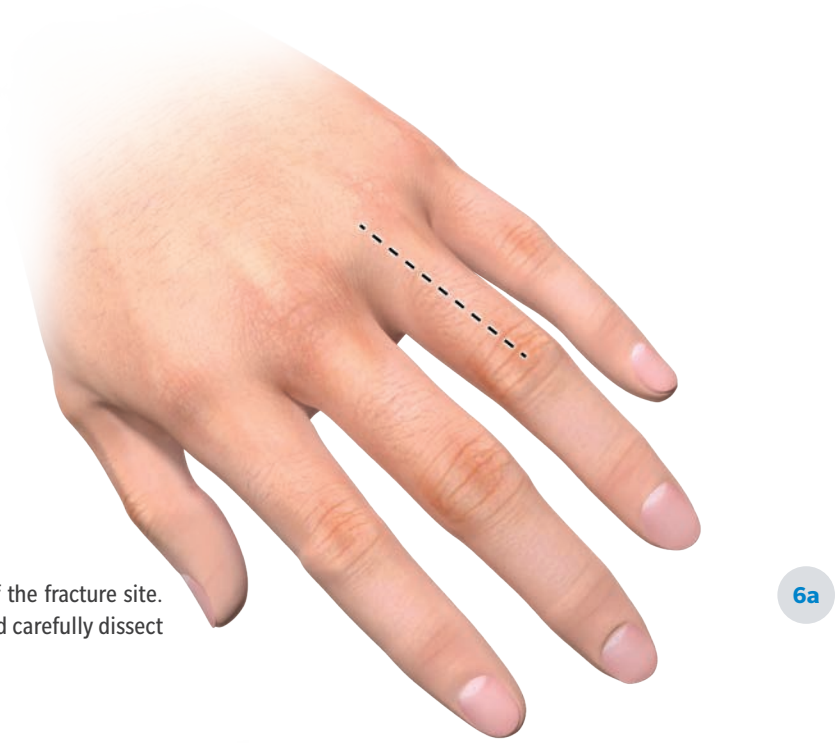


16

Plating Technique

# › Fracture Plate Technique

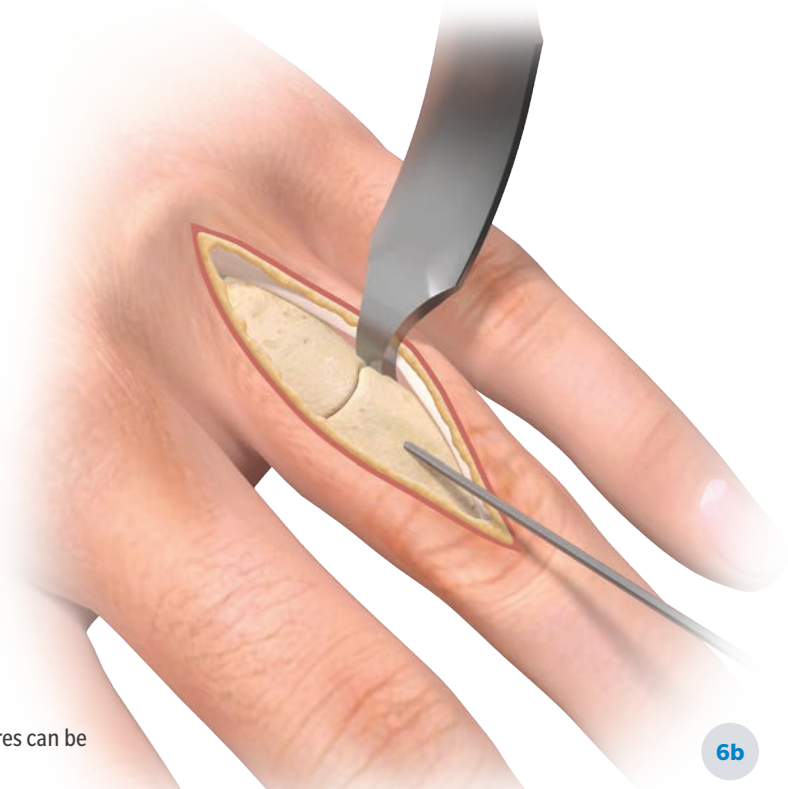
# Plating Technique - **Fracture Plate Technique**



6a

### Exposure and Fracture Reduction

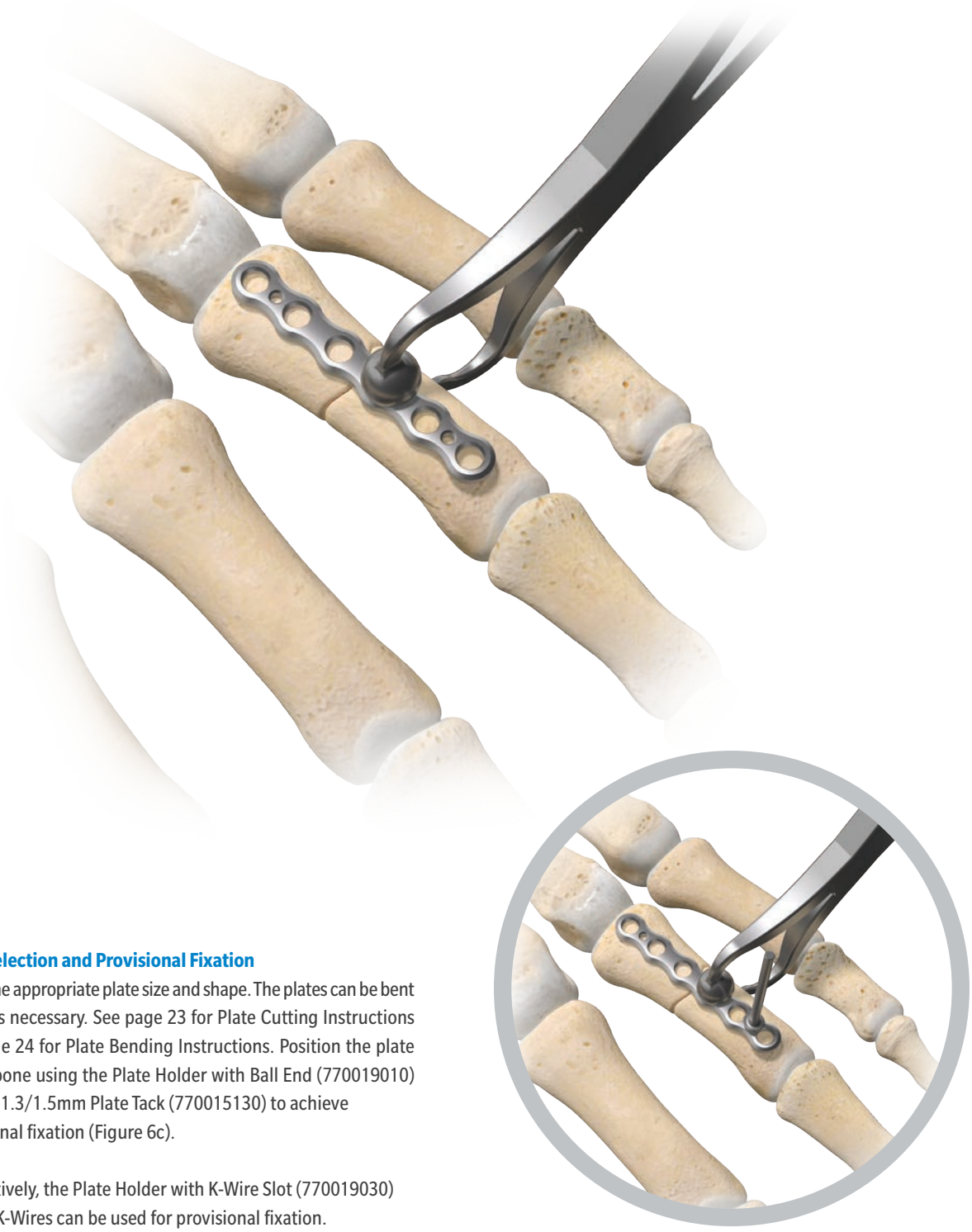
Position the patient to allow for exposure of the fracture site. Make an incision per surgeon preference and carefully dissect soft tissue to expose the fracture (Figure 6a).



6b

Reduce the fracture using standard techniques; K-Wires can be used to achieve temporary stabilization (Figure 6b).

# Plating Technique - **Fracture Plate Technique**



6c

### Plate Selection and Provisional Fixation

Select the appropriate plate size and shape. The plates can be bent or cut as necessary. See page 23 for Plate Cutting Instructions and page 24 for Plate Bending Instructions. Position the plate on the bone using the Plate Holder with Ball End (770019010) and the 1.3/1.5mm Plate Tack (770015130) to achieve provisional fixation (Figure 6c).

Alternatively, the Plate Holder with K-Wire Slot (770019030) and/or K-Wires can be used for provisional fixation.

# Plating Technique - **Fracture Plate Technique**



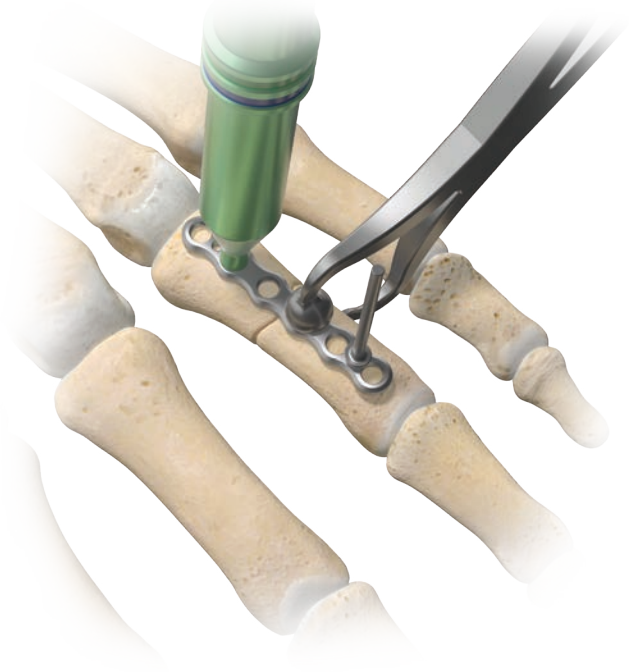
7

### Drill Screw Holes

Drill using the appropriately sized drill and drill guide for the selected screw (Figure 7). See Table 1 (pg. 28) for drill and drill guide sizing.

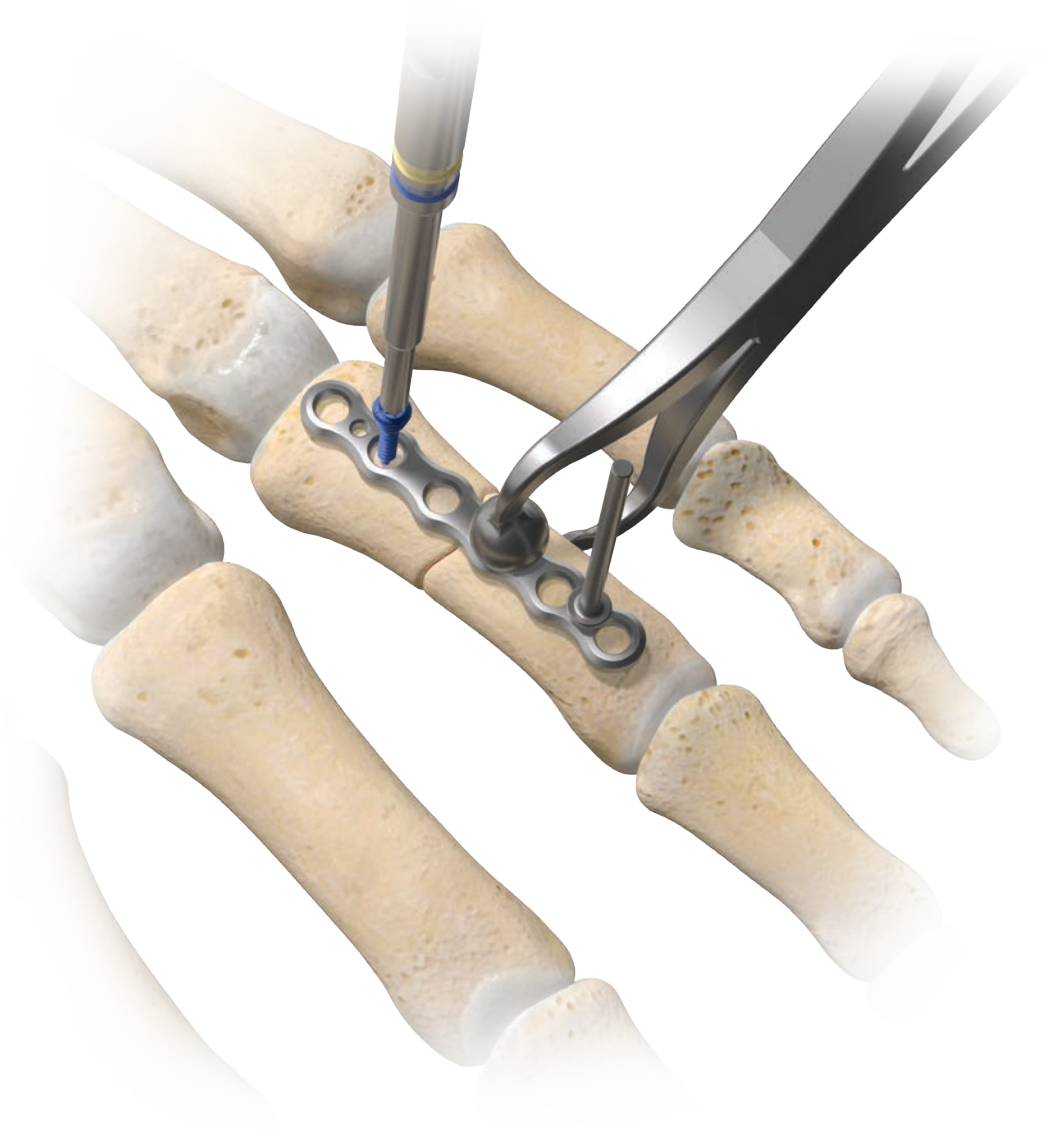
### Measure for Screw Length

Measure to determine the necessary screw length using the appropriately sized Depth Gauge (Figure 8), or Thread in/Fixed Drill Guide. See Table 1 for depth gauge sizing.



8

# Plating Technique - **Fracture Plate Technique**



9

### Insert Screws

Select and insert the appropriate length screws using the corresponding driver (Figure 9). See Table 1 (pg. 28) for driver sizing. Utilize the necessary number of screws to secure the plate to the bone. Locking and Non-Locking Screws are available in 1.3, 1.5, 2.0, and 2.4mm sizes. See page 14 for screw options. The 1.5, 2.0, and 2.4mm Locking Screws are multidirectional, allowing for placement in a cone of angulation up to 30°.

### Using the Compression Slot

For plates that have a compression slot, if desired, once the first screw is fully inserted, the compression slot may be used to achieve compression of the fracture. If compression is desired, use the 2.0/2.4 Compression Slot Drill Guide (770010200) to drill using the "C" side of the drill guide. Place the screw at the small end of the slot. If neutralization is desired, drill using the "N" side of the drill guide. Place the screw at the large end of the slot. Compression is always achieved from the small end of the slot to the large end.

# Plating Technique - **Fracture Plate Technique**



10

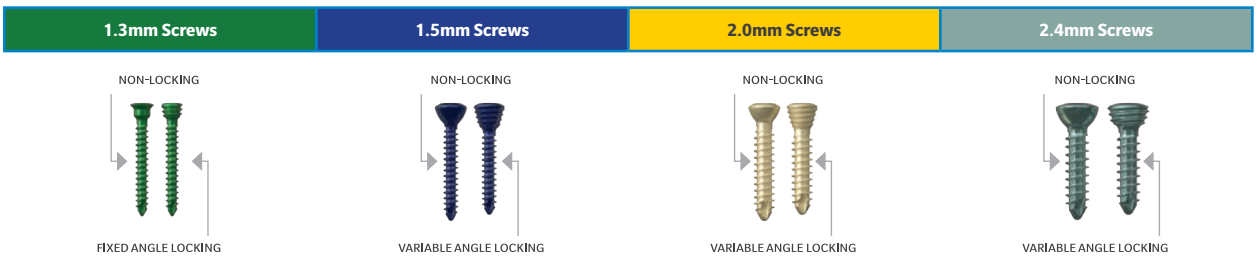
**Closure**

Confirm the reduction and plate and screw placement using an intraoperative radiograph (Figure 10). Irrigate the wound. Close the subcutaneous tissue and musculature in separate layers. Close the skin and dress the wound.

# Plating Technique - **Fracture Plate Technique**

### Table 1: Screw Family Instruments

| SCREW SIZE | DRILL | DRILL GUIDE OPTIONS | DEPTH GAUGE | DRIVER |
|---|---|---|---|---|
| 1.3mm | **0.9mm Drill** (770002090) | **Thread in/Fixed 0.9mm Drill Guide** 770004130<br>**0.9mm Fixed Angle Drill Guide** 770006130 | **1.3/1.5mm Depth Gauge (26mm)** 770009130 | **T4 Retention Driver** 770001040 |
| 1.5mm | 1.0**mm Drill** (770002100) | **Thread in/Fixed 1.0mm Drill Guide** 770004150<br>**1.0mm Fixed Angle/ VA Double Drill Guide** 770006150 | **1.3/1.5mm Depth Gauge (26mm)** 770009130 | **T6 Retention Driver** 770001060 |
| 2.0mm | 1.5**mm Drill Short** (770002150)<br>2.0**mm Overdrill** (770003200) | **Thread in/Fixed 1.5mm Drill Guide, Short** 770004200<br>**1.5mm Fixed Angle/ VA Double Drill Guide** 770006200 | **2.0/2.4mm Depth Gauge (26mm)** 770009240 | **T6 Retention Driver** 770001060 |
| 2.4mm | **1.8mm Drill Short** (770002180)<br>**2.4mm Overdrill** (770003240) | **Thread in/Fixed 1.8mm Drill Guide, Short** 770004240<br>**1.8mm Fixed Angle/ VA Double Drill Guide** 770006240 | **2.0/2.4mm Depth Gauge (26mm)** 770009240 | **T8 Retention Driver** 770001080 |



Plating Technique

# Condylar Plate Technique

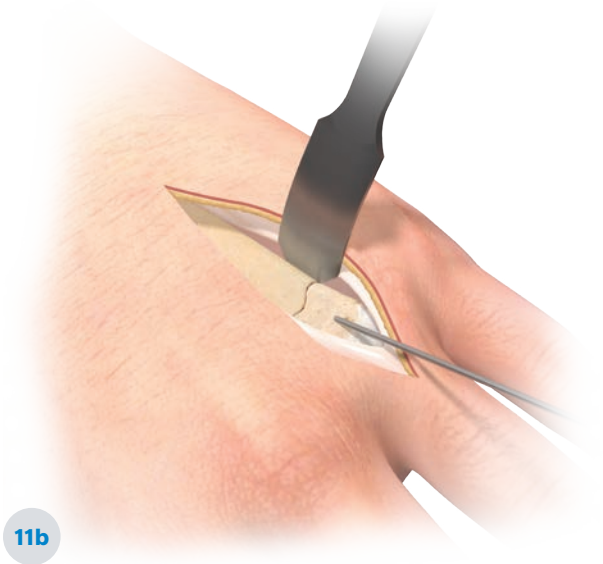
# Plating Technique - **Condylar Plate Technique**



11a

### Exposure and Fracture Reduction

Position the patient with their forearm pronated to allow for exposure of the fracture site. Make an incision per surgeon preference and carefully retract tendons to expose the fracture (Figure 11a).



11b

Reduce the fracture using standard techniques; K-Wires can be used to achieve temporary stabilization (Figure 11b).

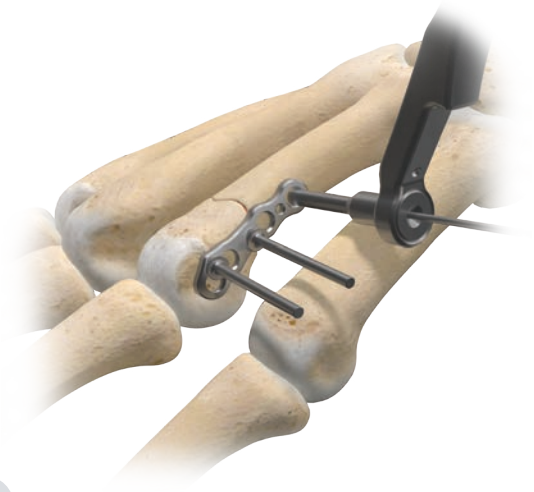


12

### Plate Selection and Provisional Fixation

Position the appropriate plate, either the 1.5/2.0mm Condylar Plate Angle Right (770506021) or 1.5/2.0mm Condylar Plate Angle Left (770506022), on the metacarpal proximal to the ligamentous insertion on the metacarpal head. Position the plate on the bone using the Plate Holder with Ball End (770019010) and the 1.3/1.5mm Plate Tack (770015130) to achieve provisional fixation (Figure 12). Alternatively, the Plate Holder with K-Wire Slot (770019030) and/or K-Wires can be used for provisional fixation.

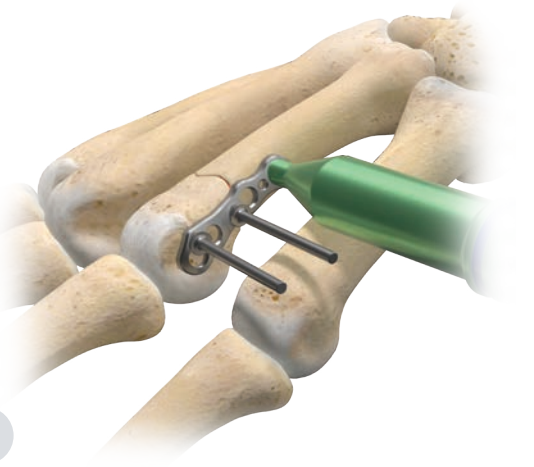
# Plating Technique - **Condylar Plate Technique**



13

**Drill Screw Holes**

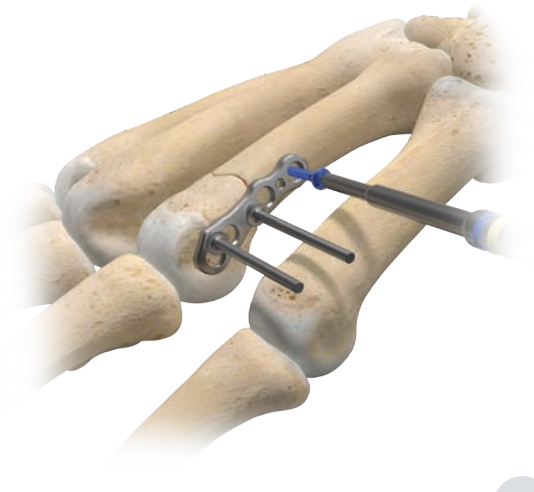
Drill for the proximal screw using the appropriately sized drill and drill guide for the selected screw (Figure 13). See Table 1 (pg. 28) for drill and drill guide sizing.



14

**Measure for Screw Length**

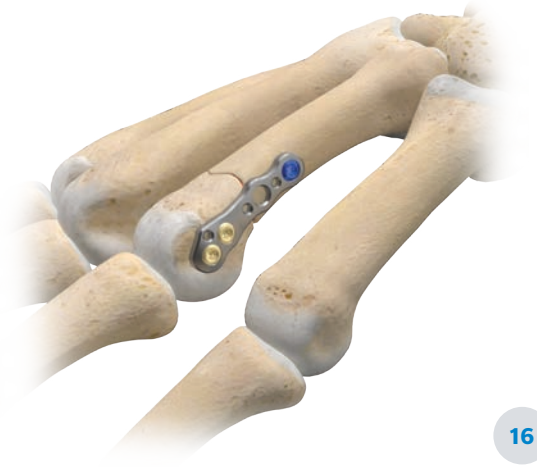
Measure to determine the necessary screw length using the appropriately sized Depth Gauge (Figure 14), or Thread In/ Fixed Drill Guide. See Table 1 for depth gauge sizing.



15

**Insert Screws**

Select and insert the appropriate length screw using the corresponding driver to secure the plate to the bone. See Table 1 for driver sizing. Drill, measure, and insert the distal screws in the same manner (Figure 15).



16

**Closure**

Confirm the reduction and plate and screw placement using an intraoperative radiograph (Figure 16). Irrigate the wound. Close the subcutaneous tissue and musculature in separate layers. Close the skin and dress the wound.

Plating Technique

# › Avulsion Hook Plate Technique

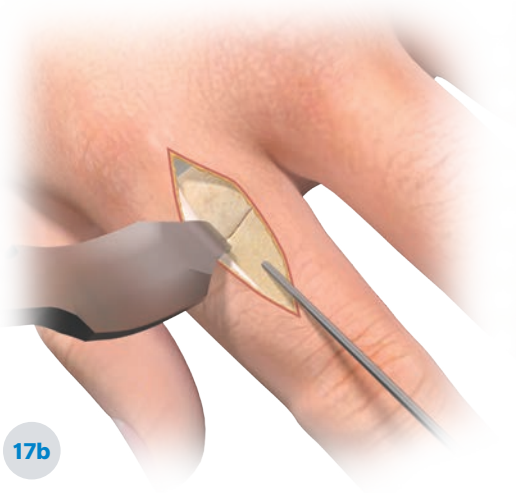
# Plating Technique - **Avulsion Hook Plate Technique**



17a

**Exposure and Fracture Reduction**

Position the patient with their forearm pronated to allow for exposure of the fracture site. Make an incision per surgeon preference and carefully retract tendons to expose the fracture (Figure 17a).



17b

Reduce the fracture using standard techniques; K-Wires can be used to achieve temporary stabilization (Figure 17b).

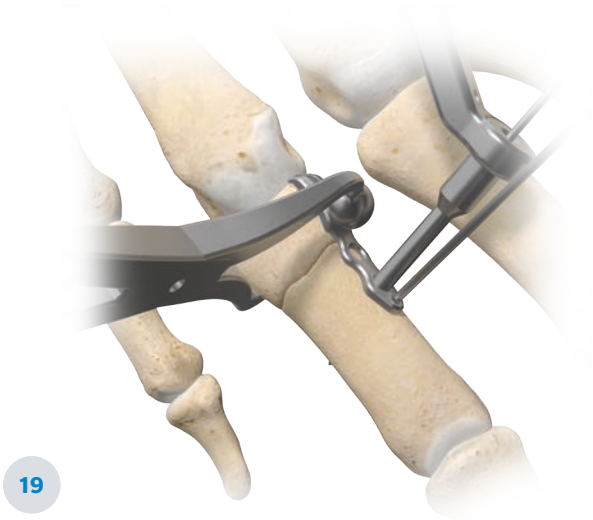


18

**Plate Selection and Provisional Fixation**

Position the 1.5/2.0mm Avulsion Hook Plate (770507030) along the phalangeal base with anatomical location determined by the fracture pattern. Position the plate on the bone using the Plate Holder with Ball End (770019010) and the 1.3/1.5mm Plate Tack (770015130) to achieve provisional fixation (Figure 18). Alternatively, the Plate Holder with K-Wire Slot (770019030) and/or K-Wires can be used for provisional fixation.

# Plating Technique - **Avulsion Hook Plate Technique**



19

**Drill Screw Holes**

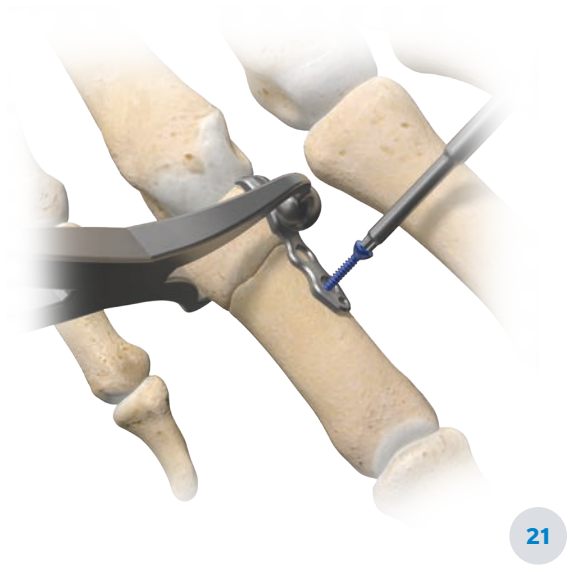
Drill using the appropriately sized drill and drill guide for the selected screw (Figure 19). See Table 1 (pg 28) for drill and drill guide sizing.



20

**Measure for Screw Length**

Measure to determine the necessary screw length for each desired screw hole using the appropriately sized Depth Gauge (Figure 20) or Thread In/Fixed Drill Guide. See Table 1 for drill and drill guide sizing.



21

**Insert Screws**

Select and insert the appropriate length screws in the desired screw holes using the corresponding driver to secure the plate to the bone (Figure 21). See Table 1 for driver sizing.



22

**Closure**

Confirm the reduction and plate and screw placement using an intraoperative radiograph (Figure 22). Irrigate the wound. Close the subcutaneous tissue and musculature in separate layers. Close the skin and dress the wound.

Plating Technique

# Rotation Correction Plate Technique

# Plating Technique - **Rotation Correction Plate Technique**



23

### Exposure

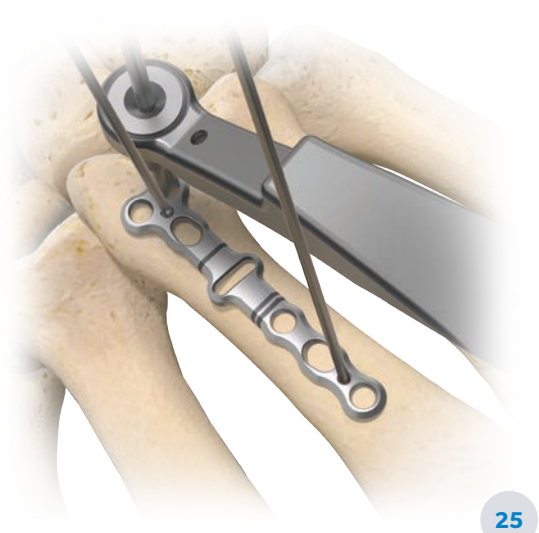
Position the patient with their forearm pronated to allow for exposure of the osteotomy site. Make an incision per surgeon preference and carefully retract tendons to expose the osteotomy location (Figure 23).



24

### Plate Placement and Initial Fixation

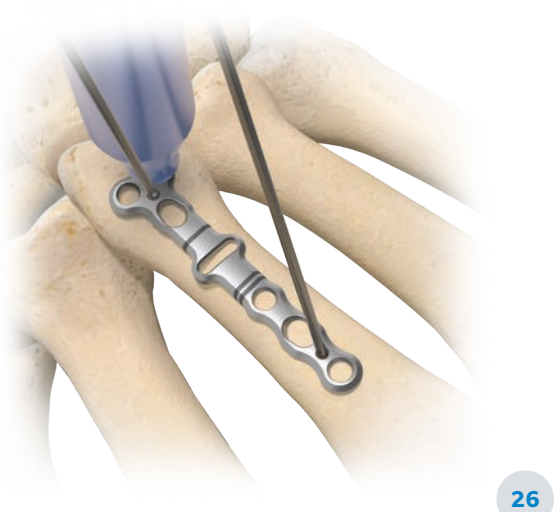
Position the 1.5/2.0mm Rotation Correction Plate (770508040) along the metacarpal. Use the K-Wires for provisional fixation (Figure 24).



25

### Drill Proximal Screw Holes

Drill for the distal screws using the appropriately sized drill and drill guide for the selected screw (Figure 25). See Table 1 (pg. 28) for drill and drill guide sizing.

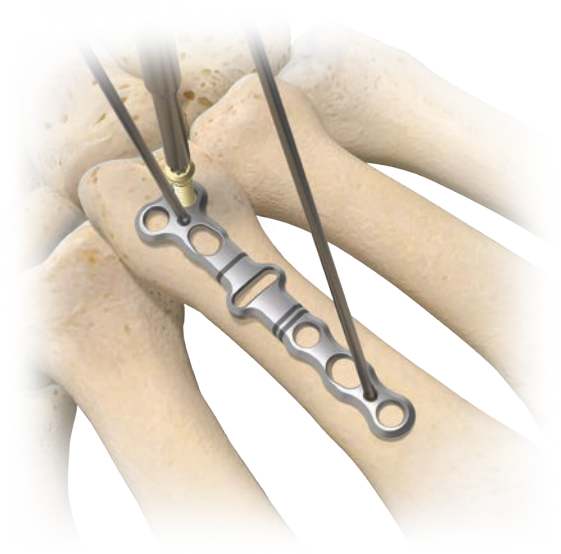


26

### Measure for Screw Length

Measure to determine the necessary screw length for each proximal screw hole using the appropriately sized Depth Gauge (Figure 26). See Table 1 for depth gauge sizing.

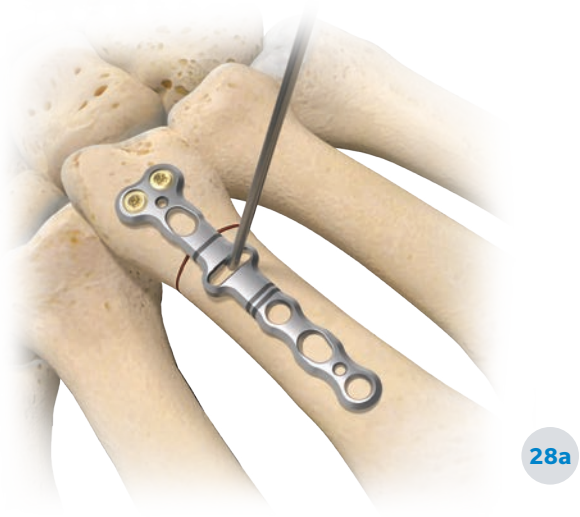
# Plating Technique - **Rotation Correction Plate Technique**



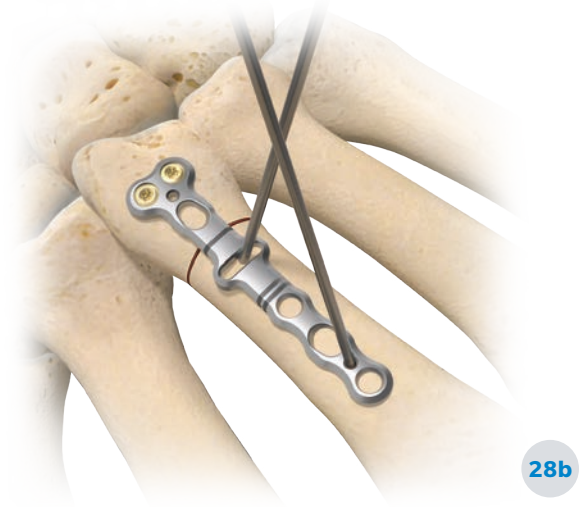
27

### Insert Proximal Screws

Select and insert the appropriate length screws in the proximal screw holes using the corresponding driver to secure the plate to the bone (Figure 27). See Table 1 for driver sizing. Remove K wires.



28a



28b

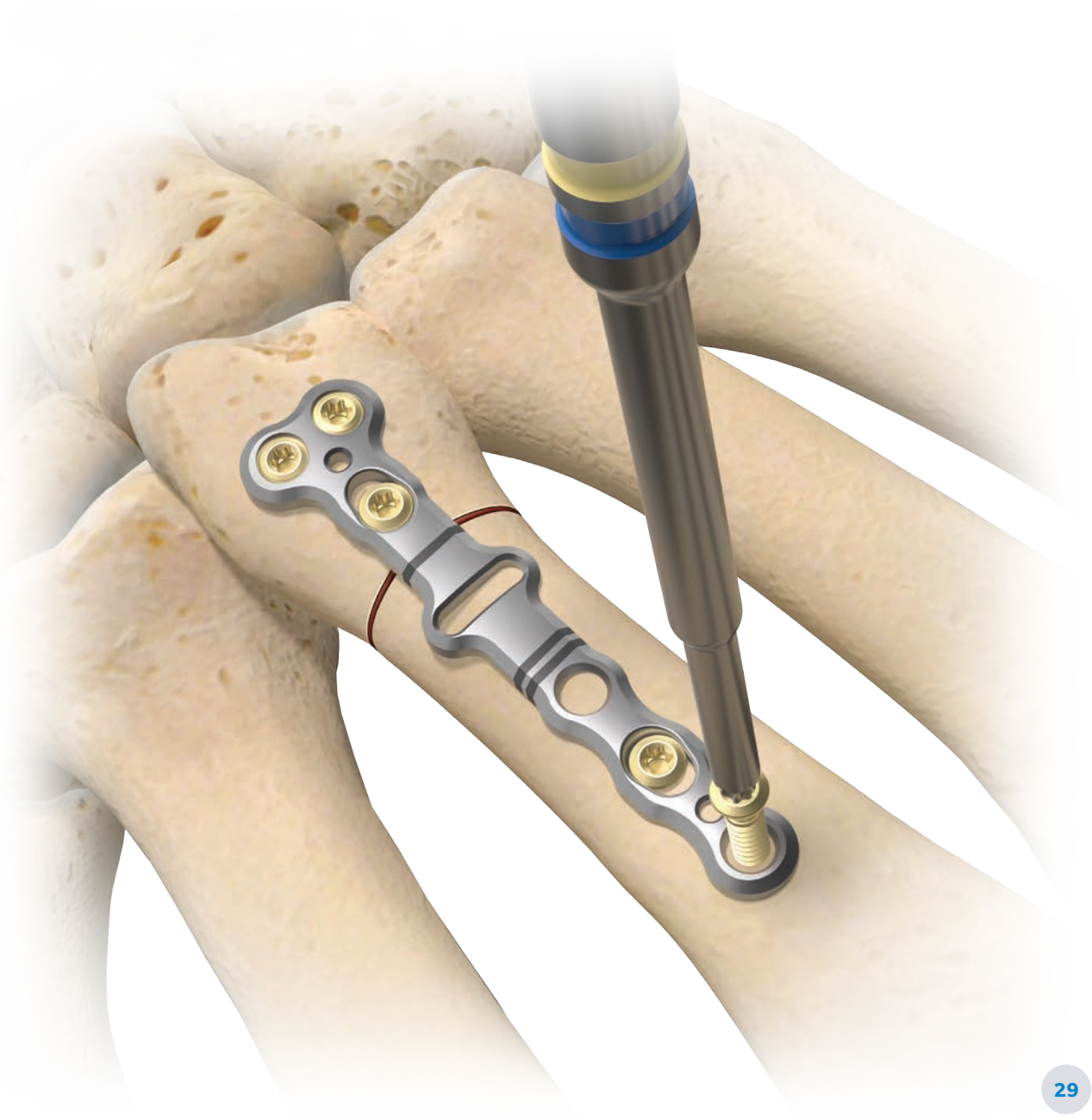
### Osteotomy and Rotational Correction

Create an osteotomy between the proximal screws and the rotation slot. Manually rotate the osteotomy with the rotational K-Wire (Figure 28a) and provisionally reduce and hold in place distally with an additional K-Wire (Figure 28b). Alternatively, the 1.3/1.5mm Plate Tack (770015130) can be used.

### Osteotomy Compression

If desired, manually compress the osteotomy and place a non-locking screw in the compression slot

# Plating Technique - **Rotation Correction Plate Technique**



29

### Drill, Measure, and Insert Distal Screws

Drill using the appropriately sized drill and drill guide for the selected screw. See Table 1(pg. 28) for drill and drill guide sizing. Measure to determine the necessary screw length for each distal screw hole using the appropriately sized Depth Gauge. See Table 1 for drill and drill guide sizing. Alternatively, if the Thread In/Fixed Drill Guide was used, the screw length can be determined by using the calibrations on the drill guide to read the measurement mark on the drill. Select and insert the appropriate length screws in the distal screw holes using the corresponding driver to secure the plate to the bone (Figure 29). See Table 1 for driver sizing.

# Plating Technique - **Rotation Correction Plate Technique**



30

### Closure

Confirm the reduction and plate and screw placement using an intraoperative radiograph (Figure 30). Irrigate the wound. Close the subcutaneous tissue and musculature in separate layers. Close the skin and dress the wound.

**Note:** The Rotation Correction Plate can be used for either a metacarpal head rotation or a metacarpal shaft rotation. Use the appropriate etch line for the osteotomy based on the rotation necessary.

Plating Technique

# › Bennett/Rolando Plate Technique

# Plating Technique - **Bennett/Rolando Plate Technique**

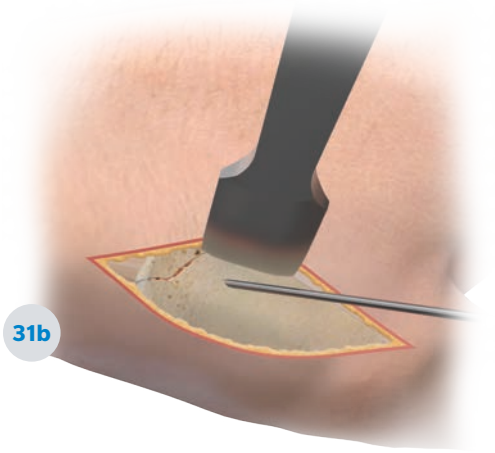


31a

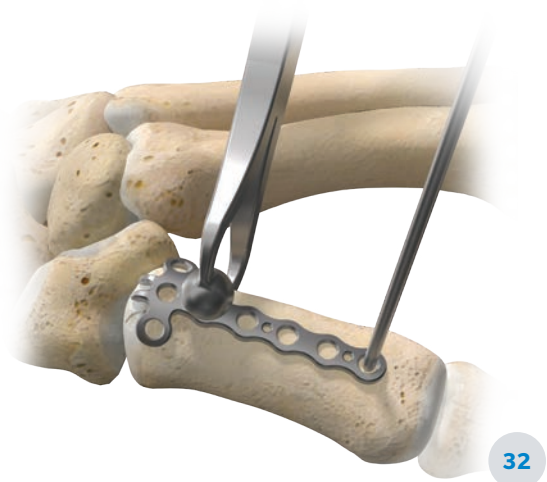
### Exposure and Fracture Reduction

Position the patient with their forearm pronated to allow for exposure of the fracture site. Make an incision per surgeon preference and carefully retract tendons to expose the fracture (Figure 31a).

Reduce the fracture using standard techniques; K-Wires can be used to achieve temporary stabilization (Figure 31b).



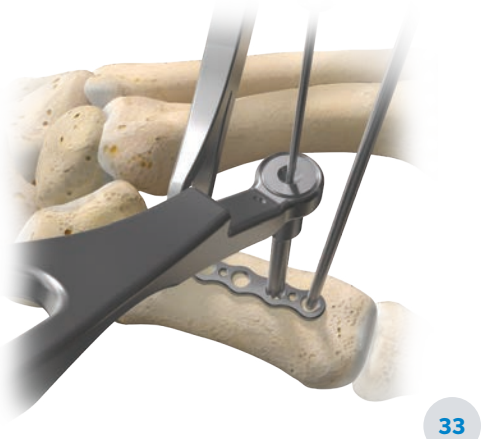
31b



32

### Plate Selection and Provisional Fixation

Position the 1.5/2.0mm Bennett/Rolando Plate (770509050) on the first metacarpal, distal to the ligamentous insertion on the metacarpal base, ensuring that the hooks do not violate the joint space. Position the plate on the bone using the Plate Holder with Ball End (770019010) and the 1.3/1.5mm Plate Tack (770015130) to achieve provisional fixation (Figure 32). Alternatively, the Plate Holder with K-Wire Slot (770019030) and/or K-Wires can be used for provisional fixation.



33

### Drill Distal Screw Holes

Drill for the distal screws using the appropriately sized drill and drill guide for the selected screw (Figure 33). See Table 1 (pg. 28) for drill and drill guide sizing.

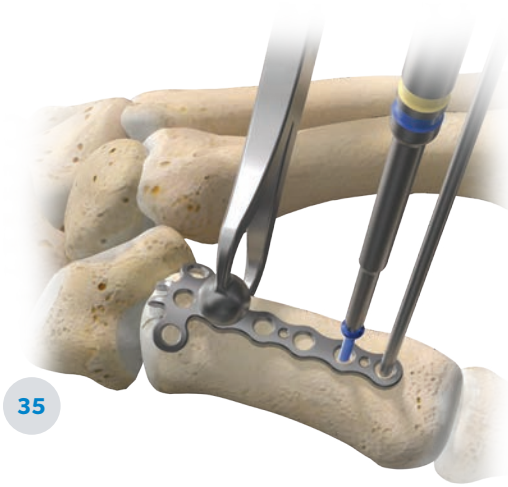
# Plating Technique - **Bennett/Rolando Plate Technique**



34

### Measure for Distal Screw Length

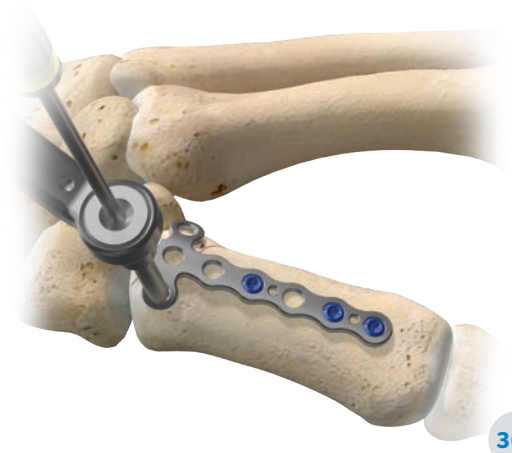
Measure to determine the necessary screw length for each distal screw hole using the appropriately sized Depth Gauge (Figure 34) or Thread In/Fixed Drill Guide. See Table 1 (pg. 28) for depth gauge sizing.



35

### Insert Distal Screws

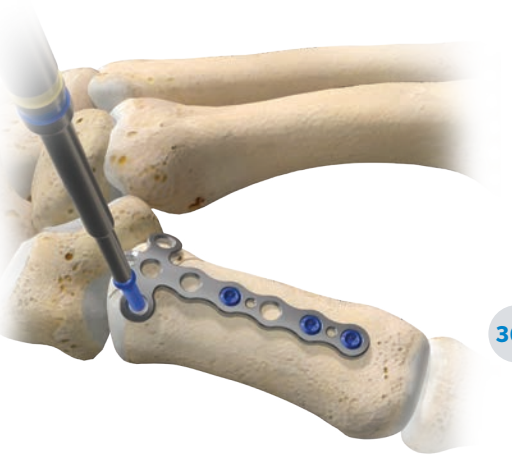
Select and insert the appropriate length screws in the distal screw holes using the corresponding driver to secure the plate to the bone (Figure 35). See Table 1 (pg. 28) for drill and driver sizing.



36a

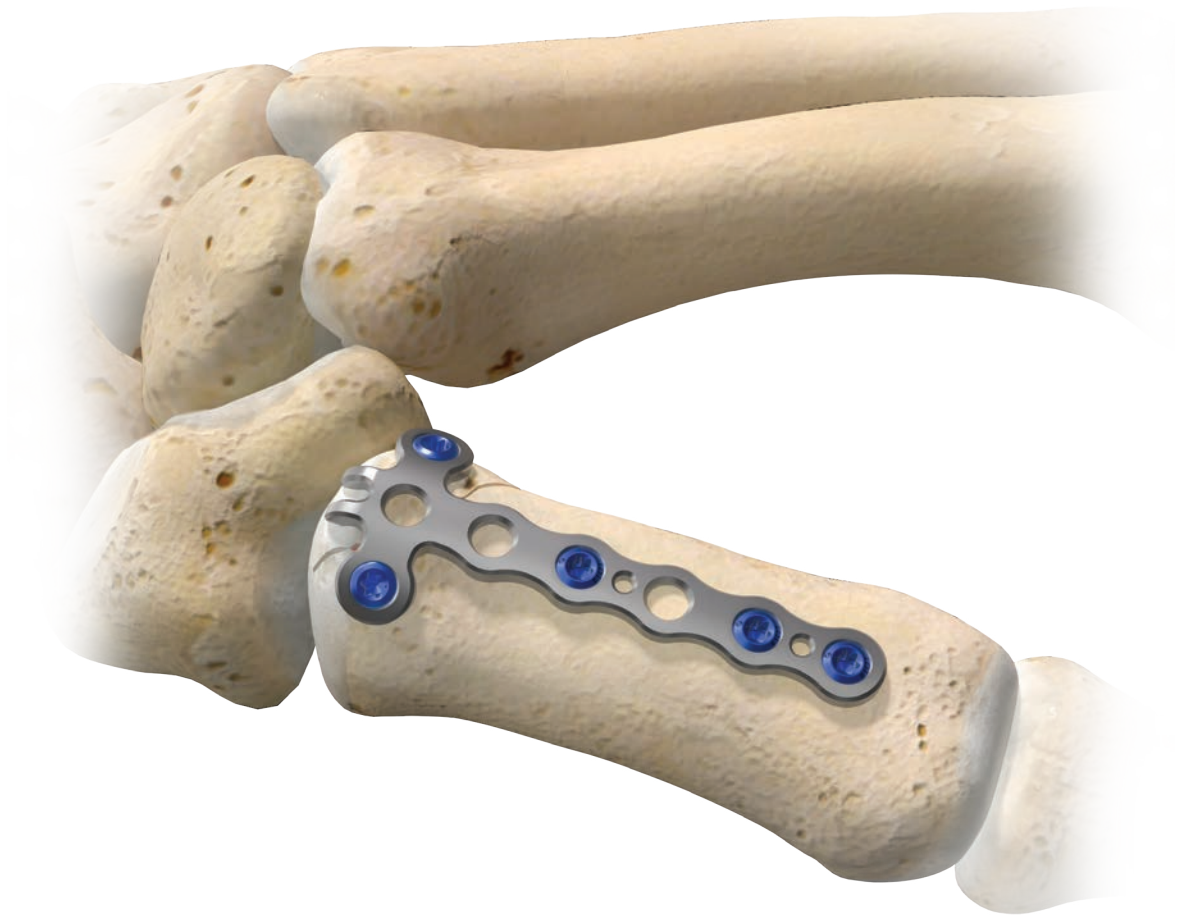
### Drill, Measure, and Insert Proximal Screws

Drill using the appropriately sized drill and drill guide for the selected screw. See Table 1 for drill and drill guide sizing. Measure to determine the necessary screw length for each proximal screw hole using the appropriately sized Depth Gauge (Figure 36a). See Table 1 for depth gauge sizing. Select and insert the appropriate length screws in the proximal screw holes using the corresponding driver to secure the plate to the bone (Figure 36b). See Table 1 for driver sizing.



36b

# Plating Technique - **Bennett/Rolando Plate Technique**



**Closing**

Confirm the reduction and plate and screw placement using an intraoperative radiograph (Figure 37). Irrigate the wound. Close the subcutaneous tissue and musculature in separate layers. Close the skin and dress the wound.

37

# Plate Removal*

To remove any of the plates, use the appropriate driver based on the size of the screws in the plate. When removing a 1.3mm screw, use the T4 driver. When removing a 1.5 or 2.0mm screw, use the T6 driver. When removing a 2.4mm screw, use the T8 driver. Once all screws are removed from the construct, remove the plate from the bone.

*Applies to all the techniques

# Ordering Information

# Ordering Information

## 1.3mm Plate Family

| Part# | Description |
|---|---|
| 770515050 | 1.3mm Straight Plate, 5H |
| 770516040 | 1.3mm T Plate, 4H |

## 1.5/2.0mm Plate Family

| Part# | Description |
|---|---|
| 770500060 | 1.5mm/2.0mm Straight Plate, 6H |
| 770500100 | 1.5mm/2.0mm Straight Plate, 10H |
| 770503040 | 1.5mm/2.0mm Straight Tine Plate, 4H |
| 770501090 | 1.5mm/2.0mm 3H T Plate, Curved, 9H |
| 770510050 | 1.5mm/2.0mm Narrow Y Plate, 5H |
| 770510090 | 1.5mm/2.0mm Narrow Y Plate, 9H |
| 770511100 | 1.5mm/2.0mm Offset Plate, 10H |
| 770511200 | 1.5mm/2.0mm Offset Plate, 20H |
| 770506021 | 1.5mm/2.0mm Condylar Plate, Angle Left |
| 770506022 | 1.5mm/2.0mm Condylar Plate, Angle Right |
| 770507030 | 1.5mm/2.0mm Avulsion Hook Plate |
| 770501050 | 1.5mm/2.0mm 3H T Plate, Curved, 5H |
| 770508040 | 1.5mm/2.0mm Rotation Correction Plate |
| 770509050 | 1.5mm/2.0mm Bennett/Rolando Plate |

## 2.4mm Plate Family

| Part# | Description |
|---|---|
| 770609050 | 2.4mm 3H T Plate, Curved, 5H |
| 770609090 | 2.4mm 3H T Plate, Curved, 9H |
| 770611050 | 2.4mm Narrow Y Plate, 5H |
| 770611090 | 2.4mm Narrow Y Plate, 9H |
| 770608060 | 2.4mm Straight Plate, Curved, 6H |
| 770608100 | 2.4mm Straight Plate, Curved, 10H |

# Ordering Information

## Intramedullary Nails

| | Part# | Description |
|---|---|---|
|  | 770300040 | 3.0mm IM Nail, 40mm |
| | 770300045 | 3.0mm IM Nail, 45mm |
| | 770300050 | 3.0mm IM Nail, 50mm |
|  | 770300055 | 3.0mm IM Nail, 55mm |
| | 770300060 | 3.0mm IM Nail, 60mm |
| | 770300070 | 3.0mm IM Nail, 70mm |
| | 770352040 | 3.5mm IM Nail, 40mm |
| | 770352045 | 3.5mm IM Nail, 45mm |
| | 770352050 | 3.5mm IM Nail, 50mm |
| | 770352055 | 3.5mm IM Nail, 55mm |
| | 770352060 | 3.5mm IM Nail, 60mm |
| | 770352070 | 3.5mm IM Nail, 70mm |

## Intramedullary Nails

| | Part# | Description |
|---|---|---|
|  | 770300040 | 3.0mm IM Nail, 40mm |
| | 770300045 | 3.0mm IM Nail, 45mm |
| | 770300050 | 3.0mm IM Nail, 50mm |
|  | 770300055 | 3.0mm IM Nail, 55mm |
| | 770300060 | 3.0mm IM Nail, 60mm |
| | 770300070 | 3.0mm IM Nail, 70mm |
| | 770352040 | 3.5mm IM Nail, 40mm |
| | 770352045 | 3.5mm IM Nail, 45mm |
| | 770352050 | 3.5mm IM Nail, 50mm |
| | 770352055 | 3.5mm IM Nail, 55mm |
| | 770352060 | 3.5mm IM Nail, 60mm |
| | 770352070 | 3.5mm IM Nail, 70mm |

# Ordering Information

## 1.3mm Non-Locking Screws

| | Part# | Description |
|---|---|---|
|  | 770130006 | 1.3mm Non-Locking Screw 6mm |
| | 770130007 | 1.3mm Non-Locking Screw 7mm |
| | 770130008 | 1.3mm Non-Locking Screw 8mm |
| | 770130009 | 1.3mm Non-Locking Screw 9mm |
| | 770130010 | 1.3mm Non-Locking Screw 10mm |
| | 770130011 | 1.3mm Non-Locking Screw 11mm |
| | 770130012 | 1.3mm Non-Locking Screw 12mm |
| | 770130013 | 1.3mm Non-Locking Screw 13mm |
| | 770130014 | 1.3mm Non-Locking Screw 14mm |
| | 770130015 | 1.3mm Non-Locking Screw 15mm |
| | 770130016 | 1.3mm Non-Locking Screw 16mm |

## 1.3mm Locking Screws

| | Part# | Description |
|---|---|---|
|  | 770131006 | 1.3mm Locking Screw 6mm |
| | 770131007 | 1.3mm Locking Screw 7mm |
| | 770131008 | 1.3mm Locking Screw 8mm |
| | 770131009 | 1.3mm Locking Screw 9mm |
| | 770131010 | 1.3mm Locking Screw 10mm |
| | 770131011 | 1.3mm Locking Screw 11mm |
| | 770131012 | 1.3mm Locking Screw 12mm |
| | 770131013 | 1.3mm Locking Screw 13mm |
| | 770131014 | 1.3mm Locking Screw 14mm |
| | 770131015 | 1.3mm Locking Screw 15mm |
| | 770131016 | 1.3mm Locking Screw 16mm |

# Ordering Information

## 1.5mm Non-Locking Screws



| Part# | Description |
|---|---|
| 770150006 | 1.5mm Non-Locking Screw 6mm |
| 770150007 | 1.5mm Non-Locking Screw 7mm |
| 770150008 | 1.5mm Non-Locking Screw 8mm |
| 770150009 | 1.5mm Non-Locking Screw 9mm |
| 770150010 | 1.5mm Non-Locking Screw 10mm |
| 770150011 | 1.5mm Non-Locking Screw 11mm |
| 770150012 | 1.5mm Non-Locking Screw 12mm |
| 770150013 | 1.5mm Non-Locking Screw 13mm |
| 770150014 | 1.5mm Non-Locking Screw 14mm |
| 770150015 | 1.5mm Non-Locking Screw 15mm |
| 770150016 | 1.5mm Non-Locking Screw 16mm |
| 770150017 | 1.5mm Non-Locking Screw 17mm |
| 770150018 | 1.5mm Non-Locking Screw 18mm |
| 770150019 | 1.5mm Non-Locking Screw 19mm |
| 770150020 | 1.5mm Non-Locking Screw 20mm |
| 770150021 | 1.5mm Non-Locking Screw 21mm |
| 770150022 | 1.5mm Non-Locking Screw 22mm |
| 770150023 | 1.5mm Non-Locking Screw 23mm |
| 770150024 | 1.5mm Non-Locking Screw 24mm |

## 1.5mm Locking Multi-Directional Screws



| Part# | Description |
|---|---|
| 770151006 | 1.5mm Locking MDS 6mm |
| 770151007 | 1.5mm Locking MDS 7mm |
| 770151008 | 1.5mm Locking MDS 8mm |
| 770151009 | 1.5mm Locking MDS 9mm |
| 770151010 | 1.5mm Locking MDS 10mm |
| 770151011 | 1.5mm Locking MDS 11mm |
| 770151012 | 1.5mm Locking MDS 12mm |
| 770151013 | 1.5mm Locking MDS 13mm |
| 770151014 | 1.5mm Locking MDS 14mm |
| 770151015 | 1.5mm Locking MDS 15mm |
| 770151016 | 1.5mm Locking MDS 16mm |
| 770151017 | 1.5mm Locking MDS 17mm |
| 770151018 | 1.5mm Locking MDS 18mm |
| 770151019 | 1.5mm Locking MDS 19mm |
| 770151020 | 1.5mm Locking MDS 20mm |
| 770151021 | 1.5mm Locking MDS 21mm |
| 770151022 | 1.5mm Locking MDS 22mm |
| 770151023 | 1.5mm Locking MDS 23mm |
| 770151024 | 1.5mm Locking MDS 24mm |

# Ordering Information

## 2.0mm Non-Locking Screws

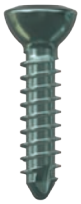
| | Part# | Description |
|---|---|---|
|  | 770200006 | 2.0mm Non-Locking Screw 6mm |
| | 770200007 | 2.0mm Non-Locking Screw 7mm |
| | 770200008 | 2.0mm Non-Locking Screw 8mm |
| | 770200009 | 2.0mm Non-Locking Screw 9mm |
| | 770200010 | 2.0mm Non-Locking Screw 10mm |
| | 770200011 | 2.0mm Non-Locking Screw 11mm |
| | 770200012 | 2.0mm Non-Locking Screw 12mm |
| | 770200013 | 2.0mm Non-Locking Screw 13mm |
| | 770200014 | 2.0mm Non-Locking Screw 14mm |
| | 770200015 | 2.0mm Non-Locking Screw 15mm |
| | 770200016 | 2.0mm Non-Locking Screw 16mm |
| | 770200017 | 2.0mm Non-Locking Screw 17mm |
| | 770200018 | 2.0mm Non-Locking Screw 18mm |
| | 770200019 | 2.0mm Non-Locking Screw 19mm |
| | 770200020 | 2.0mm Non-Locking Screw 20mm |
| | 770200021 | 2.0mm Non-Locking Screw 21mm |
| | 770200022 | 2.0mm Non-Locking Screw 22mm |
| | 770200023 | 2.0mm Non-Locking Screw 23mm |
| | 770200024 | 2.0mm Non-Locking Screw 24mm |

## 2.0mm Locking Multi-Directional Screws

| | Part# | Description |
|---|---|---|
|  | 770201006 | 2.0mm Locking MDS 6mm |
| | 770201007 | 2.0mm Locking MDS 7mm |
| | 770201008 | 2.0mm Locking MDS 8mm |
| | 770201009 | 2.0mm Locking MDS 9mm |
| | 770201010 | 2.0mm Locking MDS 10mm |
| | 770201011 | 2.0mm Locking MDS 11mm |
| | 770201012 | 2.0mm Locking MDS 12mm |
| | 770201013 | 2.0mm Locking MDS 13mm |
| | 770201014 | 2.0mm Locking MDS 14mm |
| | 770201015 | 2.0mm Locking MDS 15mm |
| | 770201016 | 2.0mm Locking MDS 16mm |
| | 770201017 | 2.0mm Locking MDS 17mm |
| | 770201018 | 2.0mm Locking MDS 18mm |
| | 770201019 | 2.0mm Locking MDS 19mm |
| | 770201020 | 2.0mm Locking MDS 20mm |
| | 770201021 | 2.0mm Locking MDS 21mm |
| | 770201022 | 2.0mm Locking MDS 22mm |
| | 770201023 | 2.0mm Locking MDS 23mm |
| | 770201024 | 2.0mm Locking MDS 24mm |

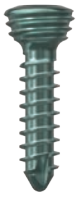
# Ordering Information

## 2.4mm Non-Locking Screws



| Part# | Description |
|---|---|
| 770240006 | 2.4mm Non-Locking Screw 6mm |
| 770240007 | 2.4mm Non-Locking Screw 7mm |
| 770240008 | 2.4mm Non-Locking Screw 8mm |
| 770240009 | 2.4mm Non-Locking Screw 9mm |
| 770240010 | 2.4mm Non-Locking Screw 10mm |
| 770240011 | 2.4mm Non-Locking Screw 11mm |
| 770240012 | 2.4mm Non-Locking Screw 12mm |
| 770240013 | 2.4mm Non-Locking Screw 13mm |
| 770240014 | 2.4mm Non-Locking Screw 14mm |
| 770240015 | 2.4mm Non-Locking Screw 15mm |
| 770240016 | 2.4mm Non-Locking Screw 16mm |
| 770240017 | 2.4mm Non-Locking Screw 17mm |
| 770240018 | 2.4mm Non-Locking Screw 18mm |
| 770240019 | 2.4mm Non-Locking Screw 19mm |
| 770240020 | 2.4mm Non-Locking Screw 20mm |
| 770240021 | 2.4mm Non-Locking Screw 21mm |
| 770240022 | 2.4mm Non-Locking Screw 22mm |
| 770240023 | 2.4mm Non-Locking Screw 23mm |
| 770240024 | 2.4mm Non-Locking Screw 24mm |

## 2.4mm Locking Multi-Directional Screws



| Part# | Description |
|---|---|
| 770241006 | 2.4mm Locking MDS 6mm |
| 770241007 | 2.4mm Locking MDS 7mm |
| 770241008 | 2.4mm Locking MDS 8mm |
| 770241009 | 2.4mm Locking MDS 9mm |
| 770241010 | 2.4mm Locking MDS 10mm |
| 770241011 | 2.4mm Locking MDS 11mm |
| 770241012 | 2.4mm Locking MDS 12mm |
| 770241013 | 2.4mm Locking MDS 13mm |
| 770241014 | 2.4mm Locking MDS 14mm |
| 770241015 | 2.4mm Locking MDS 15mm |
| 770241016 | 2.4mm Locking MDS 16mm |
| 770241017 | 2.4mm Locking MDS 17mm |
| 770241018 | 2.4mm Locking MDS 18mm |
| 770241019 | 2.4mm Locking MDS 19mm |
| 770241020 | 2.4mm Locking MDS 20mm |
| 770241021 | 2.4mm Locking MDS 21mm |
| 770241022 | 2.4mm Locking MDS 22mm |
| 770241023 | 2.4mm Locking MDS 23mm |
| 770241024 | 2.4mm Locking MDS 24mm |

# Ordering Information

## Instruments

| Part# | Description |
|---|---|
| 770004130 | Thread in/Fixed 0.9mm Drill Guide |
| 770004150 | Thread in/Fixed 1.0mm Drill Guide |
| 770004200 | Thread in/Fixed 1.5mm Drill Guide, Short |
| 770004240 | Thread in/Fixed 1.8mm Drill Guide, Short |
| 770007200 | 2.0mm Overdrill Guide |
| 770007240 | 2.4mm Overdrill Guide |
| 770019021 | Point To Point Forceps Large |
| 00-4816-001-00 | Reduction Forceps, Ratcheting, Narrow |
| 13573 | Reduction Forceps, Serrated |
| 13572 | Sharp Hook |
| MHR | Mini Hohman Retractor |
| 110017406 | Mini Ratchet Handle AO |

## Instruments

| Part# | Description |
|---|---|
| 770010200 | 2.0/2.4 Compression Slot Drill Guide |
| 770006130 | 0.9mm Fixed Angle Drill Guide |
| 770006150 | 1.0mm Fixed Angle/VA Double Drill Guide |
| 770006200 | 1.5mm Fixed Angle/VA Double Drill Guide |
| 770006240 | 1.8mm Fixed Angle/VA Double Drill Guide |
| 770019030 | Plate Holder w/ K-Wire Slot |
| 770019010 | Plate Holder w/ Ball End |
| 770020010 | Plate Cutting Pliers |
| 770024010 | Plate Bending Pliers |
| 770009130 | 1.3/1.5mm Depth Gauge (26mm) |
| 770009240 | 2.0/2.4mm Depth Gauge (26mm) |
| 770009200 | 2.0/2.4mm Depth Gauge (80mm) |
| 770900001 | Depth Gauge |

## Washers

| Part# | Description |
|---|---|
| 770800020 | 2.0mm Screw Washer |
| 770800024 | 2.4mm Screw Washer |

# Ordering Information

## A.L.P.S. mvX Instruments

| Part# | Description |
|---|---|
| 770018090 | 0.9mm K-Wire 6 In |
| 770900103 | 1.1mm K-Wire 6 In |
| 770018160 | 1.6mm K-Wire 6 In |
| 770002090 | 0.9mm Drill |
| 770002100 | 1.0mm Drill |
| 770002150 | 1.5mm Drill, Short |
| 770002180 | 1.8mm Drill, Short |
| 770008200 | 2.0mm Countersink |
| 770008240 | 2.4mm Countersink |
| 770003200 | 2.0mm Overdrill |
| 770003240 | 2.4mm Overdrill |
| 770001040 | T4 Retention Driver |
| 770001060 | T6 Retention Driver |
| 770001080 | T8 Retention Driver |
| 770015130 | 1.3/1.5mm Plate Tack |
| 770015240 | 2.0/2.4/2.7/3.5/4.0mm Plate Tack |
| 770021200 | 2.0mm Fast Guides |
| 770021240 | 2.4mm Fast Guides |
| 770900004 | 2.0mm Drill |
| 770900005 | 2.7mm Drill |
| 770900006 | 3.0mm Drill |
| 770900002 | T8 Cannulated Driver |
| 770900007 | IM Fracture Reduction Guide |

## A.L.P.S. mvX Instruments

| Part# | Description |
|---|---|
| 770001060A | T6 Retention Drive R |
| 770001080A | T8 Retention Drive R |
| 770001040A | T4 Retention Drive R |
| 770002090A | 0.9mm Drill R |
| 770002100A | 1.0mm Drill R |
| 770002150A | 1.5mm Drill Short R |
| 770002180A | 1.8mm Drill Short R |
| 770003200A | 2.0MM Overdrill R |
| 770003240A | 2.4MM Overdrill R |
| 770900002A | T8 Cannulated Driver R |
| 770900004A | 2.0mm Drill R |
| 770900005A | 2.7mm Drill R |
| 770900006A | 3.0mm Drill R |

# Ordering Information

## Cases and Trays

| Part# | Description |
|---|---|
| 770101010 | Hand Outer Case |
| 00-5900-099-00 | Generic Stackable Lid |
| 770103010 | Hand Screw Rack |
| 770102020 | Hand Screw Rack Lid |
| 770104010 | Hand Instrument Tray |
| 770106010 | Hand Fast Guide Caddy |
| 770104030 | Hand Plate/Instrument Tray |

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