

Item Catalogue

NUPCO CODE: 4224210003400 | SN: 1330

NUPCO ITEM DESCRIPTION

SET, COMPLETE INSTRUMENTATION FOR ANATOMICAL CRONOID PLATING, TITANIUM, WITH NECESSARY CASES

VENDOR PRODUCT DESCRIPTION

Elbow Plating System instruments

SKU CODES INCLUDED FOR THIS NUPCO CODE

- 80-1007
- 80-0654
- 80-0668
- 80-0622
- 80-0621
- PL-2095
- PL-2196
- 80-0628
- 80-0623
- 80-0675
- 80-0663
- 80-0760
- 80-0759
- 80-0318
- 80-0627
- 80-0387
- MS-DC35
- MS-45300
- PL-CL04
- 80-0676
- 80-2164
- PL-28CLAMP
- PL-CLAMP
- 80-0624
- PL-2045
- WS-2009ST
- WS-1607ST
- WS-1106ST
- WT-1606STT
- WT-0906STT
- MS-1280

Olecranon Plate Surgical Technique [continued]



Figure 3

3 Nonlocking Distal Screw Placement

With provisional reduction confirmed, drill with the 2.8 mm Quick Release Drill (80-0387) through a slotted hole, distal to the fracture site and into the ulnar shaft. Use the Depth Gauge 6–65 mm (80-0623) to measure for screw length. Connect the T15 Stick Fit Hexalobe Driver (80-0760) to the Medium Ratcheting Driver Handle (80-0663) and insert the appropriate 3.5 mm Nonlocking Hexalobe Screw (30-02XX) or 3.5 mm Nonlocking Hexalobe CoCr Screw (3063-350XX). Tighten the screw partially to allow for later compression. A 3.5 mm Cortical Screw Bone Tap (MS-LTT35) is available for patients with dense bone.

Note: When implanting the Narrow 5-Hole Olecranon Plates (70-0316 or 70-0317), only the 2.7 mm locking and nonlocking hexalobe screws and associated instrumentation may be used throughout all plate holes.

Note: 3.0 mm or 3.5 mm Nonlocking Hexalobe Screws (30-03XX or 30-02XX) or 3.5 mm Nonlocking Hexalobe CoCr Screws (3063-350XX) can be used in the shaft of the plate.

Screw Diameter	Drill Diameter
2.7 mm	2.0 mm
3.0 mm	2.3 mm
3.5 mm	2.8 mm



Figure 4

4 Proximal Locking Screw Placement

To insert two 2.7 mm Locking Hexalobe Screws (30-03XX) or 2.7 mm Locking Hexalobe CoCr Screws (3060-270XX) into the proximal holes on either side of the 2.0 mm wire, begin by threading the 2.0 mm Locking Drill Guide 4–32 mm (80-0621) through the proximal targeting guide and into the most proximal locking holes. While drilling with the 2.0 mm Quick Release Drill (80-0318), be sure not to exit the bone. Drill depth may be read directly off the laser line on the drill through the locking drill guide or with the 2.0 mm Depth Probe (80-0643). To insert the appropriate 2.7 mm locking hexalobe screw, connect the T8 Stick Fit Hexalobe Driver (80-0759) to the Medium Ratcheting Driver Handle (80-0663).

Note: When using the T8 driver, care should be taken not to overtighten the screw or apply more torque than necessary to seat the locking screw into the plate. Screws should be tightened by hand and not under power.

Distal Humerus Plates Surgical Technique [continued]

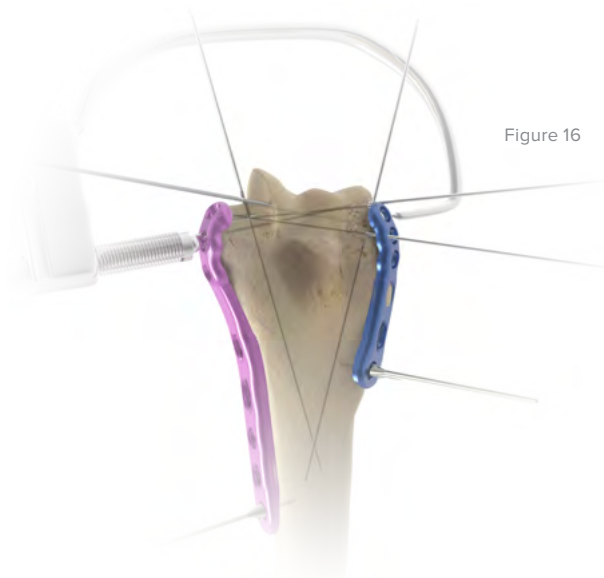


Figure 16

2 Plate Placement and Provisional Fixation

The selected Medial and Lateral Distal Humerus Plates (PL-LEMXX and PL-LELXXX) are placed and held apposed to the distal humerus, while one 2.0 mm x 9" ST Guide Wire (WS-2009ST) is inserted through hole #2 (numbered from distal to proximal) of each plate through the epicondyles and across the distal fragments to maintain provisional fixation. These 2.0 mm wires are left in place until Step 7 to aid in placing the locking screws in the distal fragments.

Note: The Medial and Lateral Distal Humerus Plates are designed to accept 3.0 mm and 3.5 mm hexalobe screws. If using 3.0 mm screws, use the 2.3 mm Quick Release Drill (80-0627) and the 2.3 mm Locking Drill Guide, 6–65 mm (80-0622). If using 3.5 mm screws, use the 2.8 mm Quick Release Drill (80-0387) and the 2.8 mm Hexalobe Locking Drill Guide, 6–65 mm (80-0668).

Note: The 2.7 mm hexalobe screws have a smaller head diameter and should NOT be used with the Medial and Lateral Distal Humerus Plates.

Note: The Medial Plates are not left and right specific and are all fuchsia in color. The Lateral Plates are green for use on a right arm and blue for use on a left arm.

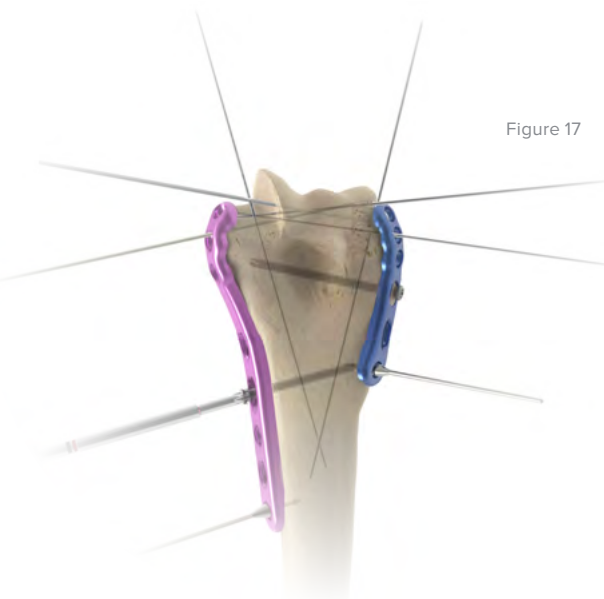


Figure 17

3 Initial Proximal Screw Placement

With provisional reduction confirmed, drill through a proximal slotted hole along the shaft of the plate with the 2.8 mm Quick Release Drill (80-0387) and measure for depth with the Depth Gauge 6–65 mm (80-0623). Connect the T15 Stick Fit Hexalobe Driver (80-0760) to the Medium Ratcheting Driver Handle (80-0663) and insert the appropriate length of 3.5 mm Nonlocking Hexalobe Screw (30-02XX) or 3.5 mm Nonlocking Hexalobe CoCr Screw (3063-350XX). Tighten the screw partially, allowing some freedom for the plate to move proximally during compression in later steps.

The undersurface of each plate is tubular in the metaphyseal and diaphyseal regions, so the screw in the slotted hole only needs to be tightened slightly to provide provisional fixation of the entire distal humerus.

Note: The 3.5 mm Cortical Screw Bone Tap (MS-LTT35) is available for patients with dense bone.

Posterolateral Plate Surgical Technique

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Figure 26



Figure 27

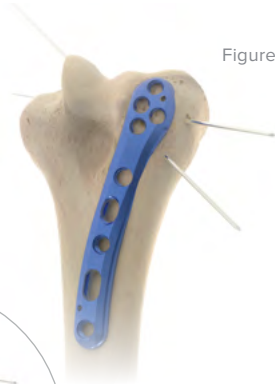


Figure 28



Figure 29

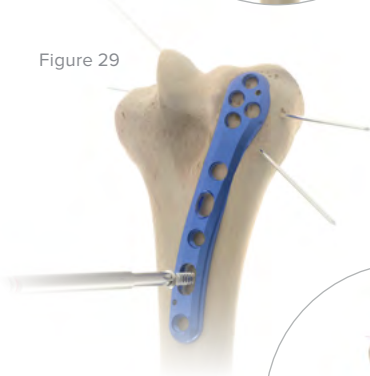


Figure 30



1 Articular Fragment Reduction

Following exposure, the articular fragments are reduced anatomically and provisionally held using .045" x 6" ST Guide Wires (WS-1106ST), functioning as K-wires. The Bone Reduction Forceps, 5.25 (MS-45300) and the 8" Bone Reduction Forceps (MS-1280) are provided in the system to aid in fracture reduction.

Note: Place the wires holding the articular fragments close to the subchondral level to avoid interference with later screw placement, and away from where the plates will be placed on the posterolateral column.

2 Plate Placement and Provisional Fixation

Apply the selected Posterolateral Plate (70-03XX) to the bone. K-wire holes are included on the plate for provisional fixation and accept .062" x 6" Guide Wires (WS-1607ST). Plate Tacks (PL-PTACK) may also be used through the plate holes to aid in provisional fixation.

Note: Plates designed for use on the left arm are blue. Plates designed for use on the right arm are green.

3 Initial Proximal Screw Placement

With provisional reduction confirmed, drill with the 2.8 mm Quick Release Drill (80-0387), measure depth with the Depth Gauge 6–65 mm (80-0623), and insert a 3.5 mm Nonlocking Hexalobe Screw (30-02XX) or 3.5 mm Nonlocking Hexalobe CoCr Screw (3063-350XX) through the slotted hole that is located proximally on the plate. Connect the T15 Stick Fit Hexalobe Driver (80-0760) to the Medium Ratcheting Driver Handle (80-0663) and insert the screw.

Note: Bone taps are provided and recommended for patients with dense bone.

Note: If a 3.0 mm Nonlocking Hexalobe Screw (30-03XX) is preferred, use the 2.3 mm Quick Release Drill (80-0627).

Screw Diameter	Drill Diameter
2.7 mm	2.0 mm
3.0 mm	2.3 mm
3.5 mm	2.8 mm

Coronoid Plates Surgical Technique [continued]

Figure 38



3 Initial Central Nonlocking Screw

The first screw inserted is a 2.7 mm Nonlocking Hexalobe Screw (30-03XX) or 2.7 mm Nonlocking Hexalobe CoCr Screw (3061-270XX) into hole #1, which is the “central” plate hole. Drill using the 2.0 mm Quick Release Drill (80-0318) and measure for the screw length using the Depth Gauge 6–65 mm (80-0623). Connect the T8 Stick Fit Hexalobe Driver (80-0759) to the Medium Ratcheting Driver Handle (80-0663) and insert the screw. When determining the screw lengths, make sure to compensate for any expected plate deformation if the bend does not fully seat the plate against the bone. As the screw is tightened, the plate will flex and contour to the bone. If the outer proximal hole begins to bend outward, tighten this first screw only partially, insert the most proximal screw, then go back to fully seat the central screw. Seating this screw may also cause the prongs on the proximal portion of the plate to buttress the coronoid and further compress the plate to the bone.

Note: Tapping the bone prior to screw insertion with the Bone Tap for 2.7 mm Hexalobe Screws (80-0625) may be needed for patients with dense bone (see Tapping Instructions on page 21).

Figure 39



4 Coronoid Fixation

To fill the proximal 2.7 mm nonlocking hexalobe screw holes (holes #2 and #3), use the same technique as in Step 3. The offset screw hole, #4, is optional and can be filled with a nonlocking screw if the fracture extends to the sublime tubercle. As these nonlocking screws are inserted, the plate will continue to contour to the bone.

Note: If K-wires were inserted for provisional fixation, they should be removed prior to drilling and inserting screws into the proximal portion of the plate.

Note: Use of fluoroscopy is recommended to verify the trajectory of the nonlocking screws to ensure they avoid the articular surface.

Coronoid Plates Surgical Technique [continued]



Figure 40

5 Insert Remaining Locking Screws

To insert the 2.7 mm Locking Hexalobe Screws (30-03XX) or 2.7 mm Locking Hexalobe CoCr Screws (3060-270XX), thread the 2.0 mm Locking Drill Guide (80-0621) into each distal plate hole (#5 and #6) and drill with the 2.0 mm Quick Release Drill (80-0318). Insert the locking screws with the T8 Stick Fit Hexalobe Driver (80-0759) and the Medium Ratcheting Driver Handle (80-0663). Nonlocking screws can be used at the surgeon's discretion.

Note: Care should be taken not to overtighten the screws or apply excess torque on the driver.



Figure 41

6 Postoperative Protocol

Note: The following protocol may be replaced with an alternative protocol at the performing surgeon's discretion.

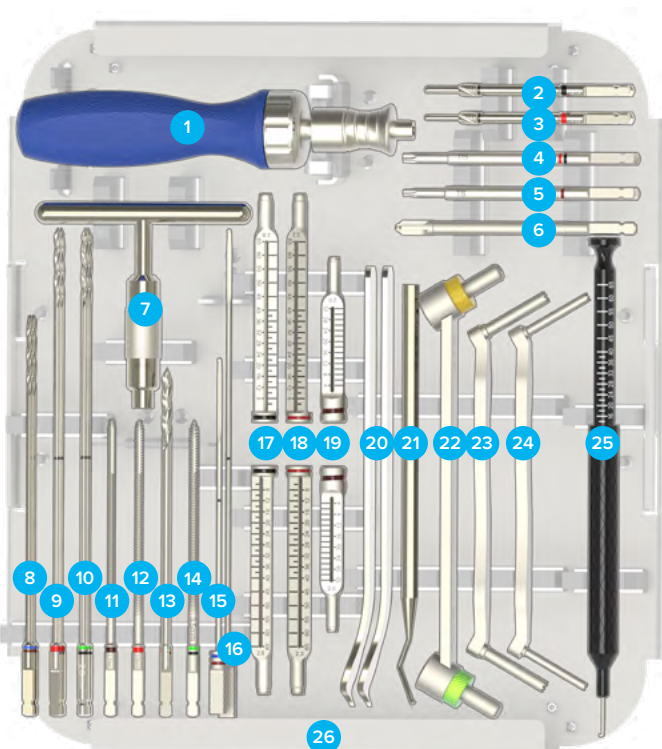
Immediately after closure, the elbow is placed in a bulky noncompressive Jones dressing with an anterior plaster slab to maintain the elbow in a relatively extended position and the upper extremity is kept elevated for three days, bringing it down from the elevated position each hour for 5–10 minutes to permit adequate perfusion. The initial rehabilitation is planned according to the stability of the elbow, the security of fracture fixation, and the extent of soft-tissue damage.

7 Optional: Implant Removal Instructions

To remove a Coronoid Plate, use a T8 Stick Fit Hexalobe Driver (80-0759) and a Quick Release T-Handle (MS-T1212) to remove all screws before extracting the plate. Referencing the Screw Removal Brochure (SPF10-00) may aid in implant extraction if difficulty is experienced.

Caution: 2.7 mm Hexalobe locking & nonlocking CoCr screws (3060-270XX, 3062-350XX); (3061-270XX, 3063-350XX) are not compatible with Acumed Screw Removal system.

Ordering Information [continued]



Tray Components

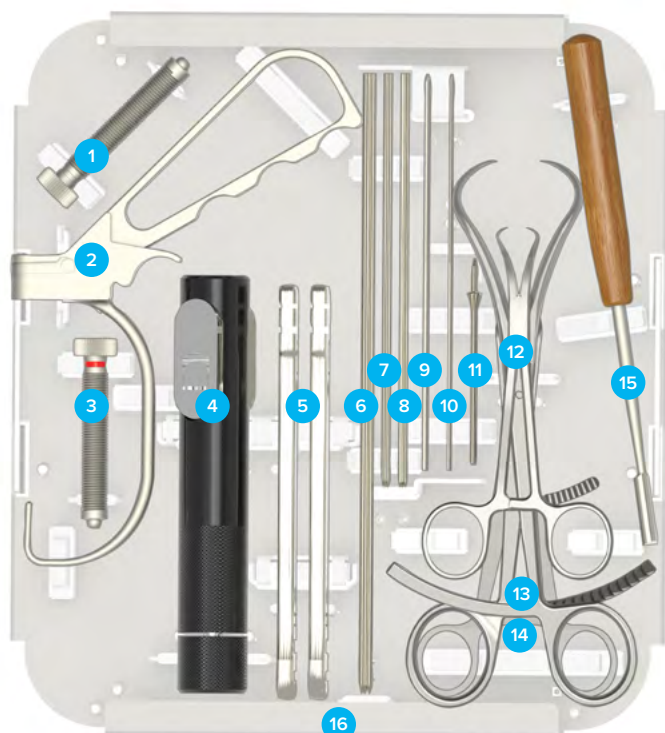
Instrumentation

1	Medium Ratcheting Driver Handle	80-0663
2	Plate Tap for 3.5 mm Screw	80-0661
3	Plate Tap for 3.0 mm Screw	80-0659
4	T15 Stick Fit Hexalobe Driver	80-0760
5	T8 Stick Fit Hexalobe Driver	80-0759
6	CO/CA Countersink	PL-2080
7	Quick Release T-Handle	MS-T1212
8	2.0 mm Quick Release Drill	80-0318
9	2.3 mm Quick Release Drill	80-0627
10	2.8 mm Quick Release Drill	80-0387
11	Bone Tap for 2.7 mm Hexalobe Screws	80-0625
12	Bone Tap for 3.0 mm Nonlocking Screws	80-0626
13	3.5 mm x 5" Quick Release Drill	MS-DC35

Tray Components

14	3.5 mm Cortical Screw Bone Tap	MS-LTT35
15	2.0 mm Depth Probe	80-0643
16	2.3 mm Depth Probe	80-0664
17	2.8 mm Hexalobe Locking Drill Guide 6–65 mm	80-0668
18	2.3 mm Locking Drill Guide 6-65 mm	80-0622
19	2.0 mm Hexalobe Locking Drill Guide 4–32 mm	80-0621
20	15 mm Hohman Retractor	MS-46827
21	Sharp Hook	PL-CL06
22	Offset Drill Guide	PL-2095
23	2.8 mm/3.5 mm Thin Drill Guide	PL-2196
24	2.0 mm/2.3 mm Narrow Drill Guide	80-0628
25	Depth Gauge 6–65 mm	80-0623
26	Hexalobe Screw Instrument Platter	80-0675

Ordering Information [continued]



Tray Components

Instrumentation

1	2.8 mm Drill Guide Cannula	PL-28CLAMP
2	Targeted Drill Guide	PL-CLAMP
3	2.3 mm Drill Guide Cannula	80-0624
4	Plate Holder Assembly	PL-2030
5	Plate Bender, Large	PL-2045
6	2.0 mm x 9" ST Guide Wire*	WS-2009ST
7	.062" x 6" Guide Wire*	WS-1607ST
8	.045" x 6" ST Guide Wire*	WS-1106ST
9	.062 x 5.75 STT Guide Wire, Titanium	WT-1606STT
10	.035 x 5.75 STT Guide Wire, Titanium	WT-0906STT
11	Plate Tack	PL-PTACK
12	8" Bone Reduction Forceps	MS-1280

*Also used as a K-wire

Tray Components

13	Bone Reduction Forceps, 5.25	MS-45300
14	Reduction Forceps With Serrated Jaw	PL-CL04
15	Periosteal Elevator	MS-46212
16	Elbow System Plate Instrument Platter	80-0676

Additional Components

2.0 mm Quick Release Drill	80-0318
Targeting Guide Locking Bolt: 10-32	80-2164

Sterile Parts

Osteotomy Saw Blade Hub Style L*	ZMS-3514
Osteotomy Saw Blade Hub Style S*	SM-3514
Osteotomy Saw Blade Hub Style DS*	SS-3514

*Not available in all markets.