

Item Catalogue

NUPCO CODE: 4229660301600 | SN: 639

NUPCO ITEM DESCRIPTION

SET, COMPLETE INSTRUMENTATION FOR PROXIMAL RADIUS PLATING, WITH NECESSARY CASE AND IMPLANT TRAY

VENDOR PRODUCT DESCRIPTION

Locking Radial Head Plate instrumentation

SKU CODES INCLUDED FOR THIS NUPCO CODE

- 80-0248
- HPC-0015
- 80-0362
- 80-0357
- 80-0318
- WS-1406ST
- WS-1106ST
- OW-1200
- 80-0246
- 80-0247
- MS-SS23
- MS-2210
- 80-0249
- 80-0394
- 80-0363

Instrument Overview



Small Plate Tack
(80-0248)



1.5 mm Hex Driver Tip
(HPC-0015)



2.3 mm Bone Tap
(80-0362)



.035" Depth Probe
(80-0357)



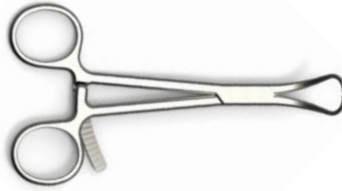
2.0 mm Quick Release Drill
(80-0318)



.054" x 6" Guide Wire
(WS-1406ST)



.045" x 6" Guide Wire
(WS-1106ST)



**Small Pointed Reduction
Forceps**
(OW-1200)



**Locking Radial Head
Targeting Guide**
(80-0246)

Instrument Overview [continued]



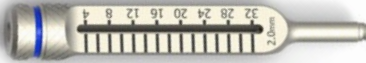
**5-44 Targeting Guide
Locking Bolt**
(80-0247)



2.3 mm Screw Sleeve
(MS-SS23)



Cruciform Driver Handle
(MS-2210)



**2.0 mm Locking Drill Guide
4-32 mm**
(80-0249)



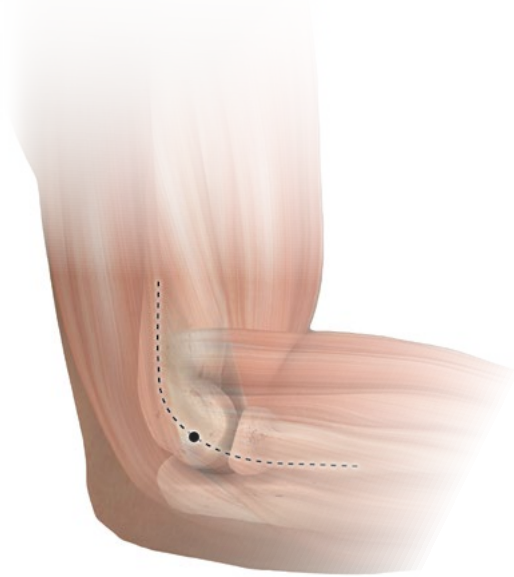
**2.0 mm Nonlocking Drill Guide
Assembly 4-32 mm**
(80-0394)



Small Plate Bender
(80-0363)

Radial Head Plating System Surgical Technique

Figure 1

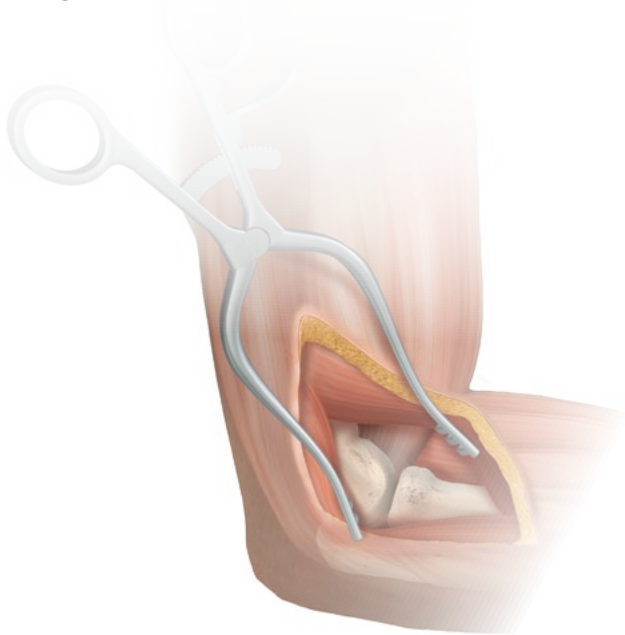


1 Exposure and Dissection

The most common approach is made with the forearm in neutral rotation, followed by exposing the radial head through the Kaplan interval in a line from the lateral epicondyle toward Lister's tubercle. Split the tendon for 3 to 4 cm distal to the epicondyle, with the distal extent limited by the posterior interosseous nerve.

Proximally release the extensor carpi radialis longus (ECRL) origin with the anterior capsule to permit direct access to the front of the radial head.

Figure 2



2 Articular Reduction and Plate Selection

Articular reduction is obtained with the Small Pointed Reduction Forceps (OW-1200) and provisionally held with .045" x 6" K-wires (WS-1106ST) placed to avoid interference with plate and screw placement in subsequent steps.

There are four plates in the system to choose from: 3-hole and 5-hole lengths, each with two different curvatures. The standard curvature plates are colored gold. The plates with the small curvature are for patients with a smaller radial head and are colored silver. Select the plate with the best fit for the patient and that best addresses the fracture pattern.



Small Pointed
Reduction
Forceps
(OW-1200)



.045" x 6" ST
Guide Wire
(WS-1106ST)
Also used as a K-wire



Locking Radial
Head Plate
3-Hole, Standard
Curvature (31 mm)
(70-0097)



Locking Radial
Head Plate
3-Hole, Small
Curvature (31 mm)
(70-0099)



Locking Radial
Head Plate
5-Hole, Standard
Curvature (46 mm)
(70-0098)



Locking Radial
Head Plate
5-Hole, Small
Curvature (46 mm)
(70-0100)

Radial Head Plating System Surgical Technique

[continued]

3 Plate Placement

Attach the Targeting Guide (80-0246) to the plate with the Locking Bolt (80-0247). Place the plate in the “safe zone” of the radial head. With the forearm in neutral rotation, the safe zone includes a 90° angle centered laterally, plus 20° anterior to this. For simplification, place the plate directly lateral with the forearm in 10° supination. The plate is designed to sit approximately half way onto the radial head’s annular surface. This may avoid screw penetration of the head that would occur with more proximal placement. Small Plate Benders (80-0363) are included in the system if an adjustment to the plate’s contour is needed.

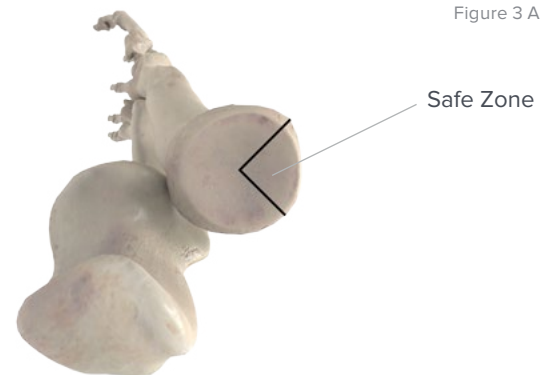


Figure 3 A



Figure 3 B



Figure 3 C

4 Provisional Plate Fixation

After placing the plate on the radius, it is provisionally held with the Small Plate Tack (80-0248) by inserting it through one of the proximal holes, or by placing a .054" x 6" K-wire (WS-1406ST) through the K-wire hole in the plate. The 5–44 Targeting Guide Locking Bolt (80-0247) is also cannulated to accept a .054" x 6" K-wire for provisional fixation.

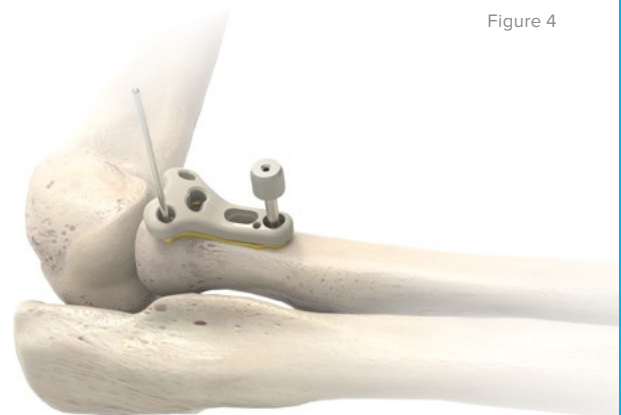


Figure 4



Locking Radial Head Plate Targeting Guide (80-0246)



Small Plate Bender (80-0363)



5–44 Targeting Guide Locking Bolt (80-0247)



Small Plate Tack (80-0248)

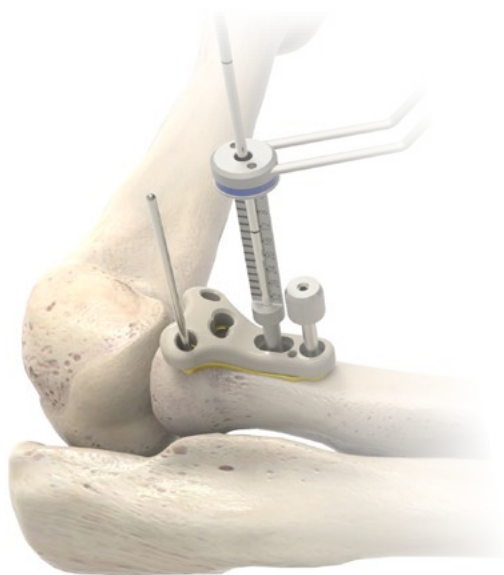


.054" x 6" Guide Wire (WS-1406ST)
Also used as a K-wire

Radial Head Plating System Surgical Technique

[continued]

Figure 5



5 Nonlocking Distal Screw Fixation

Attach the plate to the shaft with a screw through the slotted hole that allows for a slight adjustment of the plate position prior to final tightening of the screw at this step. Using the 2.0 mm Nonlocking Drill Guide Assembly 4–32 mm (80-0394) and the 2.0 mm Quick Release Drill (80-0318), drill bicortically through the slotted hole. Read the drill depth from the laser line on the drill or by inserting the .035" Depth Probe (80-0357) and hooking the far cortex. Insert a nonlocking screw (CO-N23XX) with the 1.5 mm Hex Driver (HPC-0015). A Bone Tap (80-0362) is available for use in patients with dense bone.

Figure 6



6 Insert Locking Screws

Insert the 2.0 mm Locking Drill Guide 4–32 mm (80-0249) into one of the proximal holes and thread it into the plate. Threading the drill guide into the plate will ensure the hole is drilled in the proper trajectory so the locking screw (CO-T23XX) fully seats and locks into the plate. Drill with the 2.0 mm Quick Release Drill (80-0318). Drill depth can be read from the laser line on the drill or determined with the .035" Depth Probe (80-0357).

Repeat this process for inserting all proximal screws through the targeting guide, removing the Plate Tack as necessary.



2.0 mm
Nonlocking Drill
Guide Assembly
4–32 mm
(80-0394)



1.5 mm Hex
Driver Tip
(HPC-0015)



2.0 mm Quick
Release Drill
(80-0318)



2.3 mm Bone Tap
(80-0362)



.035" Depth Probe
(80-0357)



2.0 mm Locking
Drill Guide
4–32 mm
(80-0249)



2.3 mm Nonlocking
Screw
(CO-N23XX)



2.3 mm Locking
Cortical Screw
(CO-T23XX)

Radial Head Plating System Surgical Technique

[continued]

7 Final Screw Placement

After inserting all proximal screws, remove the targeting guide. Then thread the 2.0 mm Locking Drill Guide 4–32 mm (80-0249) into the distal locking hole or holes to drill, measure depth, and insert the locking screw or screws (CO-T23XX).

Remove the K-wires that were used for provisional reduction of the fracture. Follow standard techniques for internal fixation procedures to close the wound/repair soft tissue, ensure proper hardware positioning and inspection of the joint.

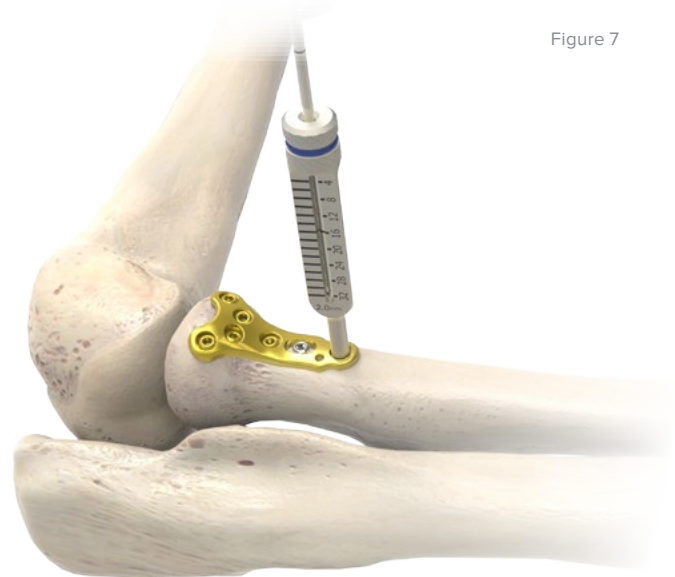


Figure 7

8 Postoperative Protocol

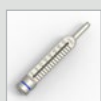
Postoperative treatment typically is achieved by the overall management of the elbow and limb, more so than specifically the radial head. Early motion usually occurs within one to two days of surgery.

9 Optional: Implant Removal Instructions

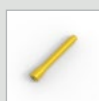
To extract a Locking Radial Head Plate, use the 1.5 mm Hex Driver Tip (HPC-0015) and Cruciform Driver Handle (MS-2210) to remove all the screws in the plate. Referencing the Screw Removal Brochure (SPF10-00) may aid in implant extraction if difficulty is experienced.



Figure 8



2.0 mm Locking
Drill Guide
4–32 mm
(80-0249)



2.3 mm Locking
Cortical Screw
(CO-T23XX)



Cruciform Driver
Handle
(MS-2210)



1.5 mm Hex
Driver Tip
(HPC-0015)

Ordering Information

Tray Components

Implants

1	Locking Radial Head Plate: 5-Hole, Standard Curvature (46 mm)	70-0098	3	Locking Radial Head Plate: 3-Hole, Standard Curvature (31 mm)	70-0097
2	Locking Radial Head Plate: 5-Hole, Small Curvature (46 mm)	70-0100	4	Locking Radial Head Plate: 3-Hole, Small Curvature (31 mm)	70-0099

Instrumentation

5	Small Plate Tack	80-0248	13	Locking Radial Head Plate Targeting Guide	80-0246
6	1.5 mm Hex Driver Tip	HPC-0015	14	5–44 Targeting Guide Locking Bolt	80-0247
7	2.3 mm Bone Tap	80-0362	15	2.3 mm Screw Sleeve	MS-SS23
8	.035" Depth Probe	80-0357	16	Cruciform Driver Handle	MS-2210
9	2.0 mm Quick Release Drill	80-0318	17	2.0 mm Locking Drill Guide 4–32 mm	80-0249
10	.054" x 6" Guide Wire*	WS-1406ST	18	2.0 mm Nonlocking Drill Guide Assembly 4–32 mm	80-0394
11	.045" x 6" ST Guide Wire*	WS-1106ST	19	Small Plate Bender	80-0363
12	Small Pointed Reduction Foreceps	OW-1200			

*Also used as a K-wire