

Item Catalogue

NUPCO CODE: 4229660301400 | SN: 684

NUPCO ITEM DESCRIPTION

SET, COMPLETE INSTRUMENTATION FOR HOOK STAINLESS STEEL CLAVICLE PLATING, WITH NECESSARY CASE AND IMPLANT TRAY

VENDOR PRODUCT DESCRIPTION

Clavicle Hook Plating System instruments

SKU CODES INCLUDED FOR THIS NUPCO CODE

- 80-4007
- 80-4011
- 80-4012
- 80-4010
- 80-0601
- 80-0600
- 80-4020
- 80-4019
- 80-4021

Instrument Overview



Clavicle Hook Plate Length Sizer
(80-4007)



Clavicle Hook Plate Depth Sizer, Hook
(80-4010)



Clavicle Hook Plate Depth Sizer, Left
(80-4011)



Clavicle Hook Plate Depth Sizer, Right
(80-4012)



Depth Gauge 6–65 mm
(80-0623)



.059" x 5" ST Guide Wire
(WS-1505ST)



2.5 mm Easyout, QR
(80-0600)



3.0 mm Easyout, QR
(80-0601)



Plate Bender
(PL-2040)



Plate Bender, Large
(PL-2045)



Clavicle Retractor
(PL-CL03)



Large Cannulated Quick Release Driver Handle
(MS-3200)



2.8 mm/3.5 mm Thin Drill Guide
(PL-2196)



Plate Tack
(PL-PTACK)



2.5 mm Quick Release Hex Driver
(HPC-0025)



3.5 mm Cortical Screw Bone Tap
(MS-LTT35)



2.8 mm Quick Release Drill
(80-0387)



3.5 mm x 5" Quick Release Drill
(MS-DC35)



2.8 mm x 5" Quick Release Drill
(MS-DC28)



T15 Stick Fit Hexalobe Driver
(80-0760)



6 mm–70 mm Depth Gauge, 2 mm Increments
(MS-9022)



2.8 mm Hexalobe Locking Drill Guide 6–65 mm
(80-0668)



3.5 mm Locking Drill Guide
(MS-LDG35)



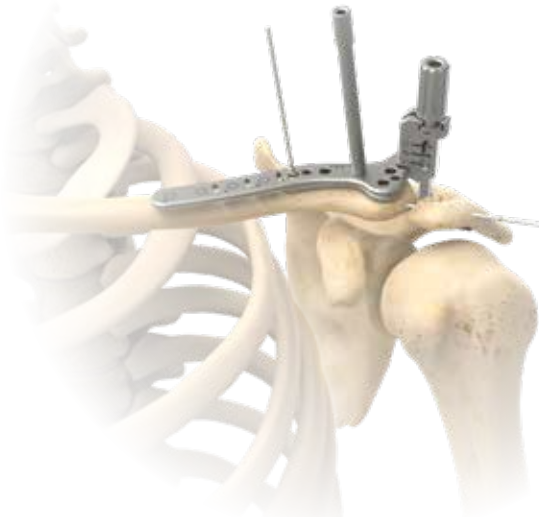
3.5 mm Screw Driver Sleeve
(MS-SS35)



Reduction Forceps w/Serrated Jaw
(PL-CL04)

Clavicle Hook Plate Surgical Technique [continued]

Figure 9



4 Plate Selection

Acumed provides a range of clavicle hook plate options to address the fracture or AC dislocation as needed to accommodate different fracture/dislocation morphology and patient anatomic variations. Select the appropriate size Clavicle Hook Plate (7014-0XXXX) using the Clavicle Hook Plate Length Sizer (80-4007) and the Clavicle Hook Plate Depth Sizer (Left, 80-4011 or Right, 80-4012) (Figure 9).

Hook Depth Measurement

Assemble the Clavicle Hook Plate Depth Sizer, Hook (80-4010) into either the Clavicle Hook Plate Depth Sizer, Left (80-4011) or Right (80-4012) depending on which side the Clavicle Hook Plate will be used (Figure 10).

Note: Do not bend the Clavicle Hook Plate Depth Sizer.

Insert the assembled Clavicle Hook Plate Depth Sizer into the subacromial space through the incision created in the extracapsular trapezius fibers on the posterior aspect of the acromion. If desired, provisionally fix the Clavicle Hook Plate Depth Sizer to the superior aspect of the distal clavicle using either Plate Tacks (PL-PTACK) or .059" x 5" ST Guide Wires (WS-1505ST). Adjust the depth of the hook by rotating the knob until the distal end of the clavicle and the acromion are reduced. Using the laser marks on the Clavicle Hook Plate Depth Sizer, identify the optimal hook depth and select the nearest appropriate size (12 mm, 16 mm, or 20 mm) if the measurement is between size offerings (Figure 11).

Hook Plate Length Measurement

Place the Clavicle Hook Plate Length Sizer along the superior aspect of the clavicle so that the lateral end is aligned with the lateral end of the clavicle. Using direct visualization or radiographic assessment, determine appropriate plate length, ensuring three plate holes (six cortices of fixation) will be present medial to the fracture.

Optionally, the Clavicle Hook Plate Length Sizer may be positioned based off the back of the Clavicle Hook Plate Depth Sizer after placement. Place the length sizer over the top of the depth sizer, aligning the notch in the length sizer to the tower of the depth sizer (Figures 10 and 11).

Note: A 3.5 mm Locking Drill Guide (MS-LDG35) may be threaded into the length sizer and used as a handle to maneuver the template.

Note: Do not bend the Clavicle Hook Plate Length Sizer.

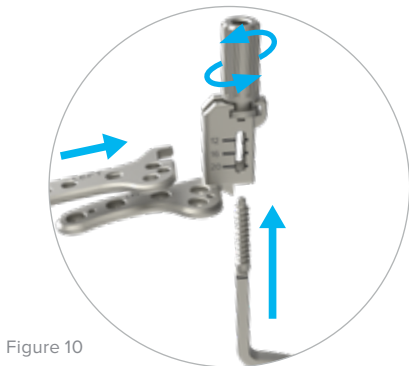


Figure 10



Figure 11



Clavicle Hook Plate
(7014-0XXXX)



Clavicle Hook Plate Depth Sizer, Hook
(80-4010)



Clavicle Hook Plate Length Sizer
(80-4007)



Plate Tacks
(PL-PTACK)



Clavicle Hook Plate Depth Sizer, Left
(80-4011)



.059" x 5" ST Guide Wire
(WS-1505ST)



Clavicle Hook Plate Depth Sizer, Right
(80-4012)



3.5 mm Locking Drill Guide
(MS-LDG35)

Clavicle Hook Plate Surgical Technique [continued]

9 Implant Removal Instructions

Implant removal is typically performed once healing has occurred.

To remove a Clavicle Hook Plate (7014-0XXXX), identify which Acumed 3.5 mm Hexalobe or 3.5 mm Hex Screws are implanted in the plate.

To remove 3.5 mm Locking or Nonlocking Hexalobe Screws (30-02XX), use the T15 Stick Fit Hexalobe Driver (80-0760) and Large Cannulated Quick Release Driver Handle (MS-3200) (Figure 22).

To remove 3.5 mm Locking Hex Screws (COL-3XX0) or Nonlocking Hex Screws (CO-3XX0), place the 3.5 mm Screw Driver Sleeve (MS-SS35) over the 2.5 mm Quick Release Hex Driver (HPC-0025) and connect both to the Large Cannulated Quick Release Driver Handle.

If there is resistance or risk of stripping the drive interface with the screw, an Easyout Driver can be used as an alternative to the drivers.

For the 3.5 mm Locking or Nonlocking Hexalobe Screws, attach the 3.0 mm Easyout (80-0601) to the Large Cannulated Quick Release Driver Handle.

For the 3.5 mm Locking or Nonlocking Hex Screws, attach the 2.5 mm Easyout (80-0600) to the Large Cannulated Quick Release Driver Handle (MS-3200).

Note: If the 2.5 mm Easyout (80-0600) is spinning, size up to the 3.0 mm Easyout (80-0601) and repeat removal attempt.

Turn the 2.5 mm or 3.0 mm Easyout with firm constant pressure in line with the screw. If the 2.5 mm or 3.0 mm Easyout does not engage the screw, it may help to slightly angle the Easyout so it wedges into the head of the screw. If the 2.5 mm or 3.0 mm Easyout is spinning, tap it with a mallet to move it further inside the drive feature before turning it again.

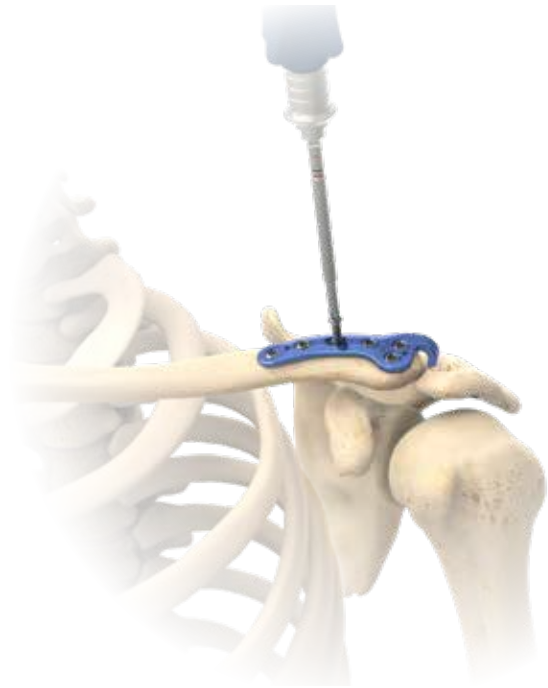


Figure 22



T15 Stick Fit
Hexalobe Driver
(80-0760)



Large Cannulated
Quick Release
Driver Handle
(MS-3200)



3.5 mm Screw
Driver Sleeve
(MS-SS35)



2.5 mm Quick
Release Hex
Driver
(HPC-0025)



3.0 mm Easyout
(80-0601)



2.5 mm Easyout
(80-0600)

Ordering Information

Tray Components

Clavicle Hook Plate Implants

1	Clavicle Hook Plate, 7-Hole 12 mm, Left	7014-0712L	10	Clavicle Hook Plate, 7-Hole 12 mm, Right	7014-0712R
2	Clavicle Hook Plate, 6-Hole 12 mm, Left	7014-0612L	11	Clavicle Hook Plate, 6-Hole 12 mm, Right	7014-0612R
3	Clavicle Hook Plate, 5-Hole 12 mm, Left	7014-0512L*	12	Clavicle Hook Plate, 5-Hole 12 mm, Right	7014-0512R*
4	Clavicle Hook Plate, 7-Hole 16 mm, Left	7014-0716L	13	Clavicle Hook Plate, 7-Hole 16 mm, Right	7014-0716R
5	Clavicle Hook Plate, 6-Hole 16 mm, Left	7014-0616L	14	Clavicle Hook Plate, 6-Hole 16 mm, Right	7014-0616R
6	Clavicle Hook Plate, 5-Hole 16 mm, Left	7014-0516L*	15	Clavicle Hook Plate, 5-Hole 16 mm, Right	7014-0516R*
7	Clavicle Hook Plate, 7-Hole 20 mm, Left	7014-0720L	16	Clavicle Hook Plate, 7-Hole 20 mm, Right	7014-0720R
8	Clavicle Hook Plate, 6-Hole 20 mm, Left	7014-0620L	17	Clavicle Hook Plate, 6-Hole 20 mm, Right	7014-0620R
9	Clavicle Hook Plate, 5-Hole 20 mm, Left	7014-0520L*	18	Clavicle Hook Plate, 5-Hole 20 mm, Right	7014-0520R*

Instrumentation

19	Clavicle Hook Plate Length Sizer	80-4007
20	Clavicle Hook Plate Depth Sizer, Left	80-4011
21	Clavicle Hook Plate Depth Sizer, Right	80-4012
22	Clavicle Hook Plate Depth Sizer, Hook	80-4010
23	3.0 mm Easyout, QR	80-0601
24	2.5 mm Easyout, QR	80-0600

Trays

25	Clavicle Hook Plate Tray	80-4020
26	Clavicle Hook Plate Essential Tray**	80-4019
27	Clavicle Hook Plate Tray Lid**	80-4021

*5-hole Clavicle Hook Plates are optional

** Not shown

Optional

Sterile Implants

Clavicle Hook Plate, 9-Hole 12 mm, Left	7014-0912L-S	Clavicle Hook Plate, 9-Hole 20 mm, Left	7014-0920L-S
Clavicle Hook Plate, 9-Hole 12 mm, Right	7014-0912R-S	Clavicle Hook Plate, 9-Hole 20 mm, Right	7014-0920R-S
Clavicle Hook Plate, 9-Hole 16 mm, Left	7014-0916L-S		
Clavicle Hook Plate, 9-Hole 16 mm, Right	7014-0916R-S		

Ordering Information [continued]

Sterile Clavicle Hook Plate Implants			
Clavicle Hook Plate, 7-Hole 12 mm, Left	7014-0712L-S	Clavicle Hook Plate, 7-Hole 12 mm, Right	7014-0712R-S
Clavicle Hook Plate, 6-Hole 12 mm, Left	7014-0612L-S	Clavicle Hook Plate, 6-Hole 12 mm, Right	7014-0612R-S
Clavicle Hook Plate, 5-Hole 12 mm, Left	7014-0512L-S	Clavicle Hook Plate, 5-Hole 12 mm, Right	7014-0512R-S
Clavicle Hook Plate, 7-Hole 16 mm, Left	7014-0716L-S	Clavicle Hook Plate, 7-Hole 16 mm, Right	7014-0716R-S
Clavicle Hook Plate, 6-Hole 16 mm, Left	7014-0616L-S	Clavicle Hook Plate, 6-Hole 16 mm, Right	7014-0616R-S
Clavicle Hook Plate, 5-Hole 16 mm, Left	7014-0516L-S	Clavicle Hook Plate, 5-Hole 16 mm, Right	7014-0516R-S
Clavicle Hook Plate, 7-Hole 20 mm, Left	7014-0720L-S	Clavicle Hook Plate, 7-Hole 20 mm, Right	7014-0720R-S
Clavicle Hook Plate, 6-Hole 20 mm, Left	7014-0620L-S	Clavicle Hook Plate, 6-Hole 20 mm, Right	7014-0620R-S
Clavicle Hook Plate, 5-Hole 20 mm, Left	7014-0520L-S	Clavicle Hook Plate, 5-Hole 20 mm, Right	7014-0520R-S

Tray Components			
Instrumentation			
Plate Bender	PL-2040	2.8 mm Quick Release Drill	80-0387
Plate Bender, Large	PL-2045	.059" x 5" ST Guide Wire*	WS-1505ST
Depth Gauge 6–65 mm	80-0623	T15 Stick Fit Hexalobe Driver	80-0760
2.8 mm/3.5 mm Thin Drill Guide	PL-2196	Large Cannulated Quick Release Driver Handle	MS-3200
2.8 mm Hexalobe Locking Drill Guide 6–65 mm	80-0668	6 mm–70 mm Depth Gauge, 2 mm Increments	MS-9022
2.5 mm Quick Release Hex Driver	HPC-0025	Reduction Forceps w/Serrated Jaw	PL-CL04
3.5 mm Cortical Screw Bone Tap	MS-LTT35	3.5 mm Locking Drill Guide	MS-LDG35
Plate Tack	PL-PTACK	3.5 mm Screw Driver Sleeve	MS-SS35
3.5 mm x 5" Quick Release Drill	MS-DC35	Clavicle Retractor	PL-CL03
2.8 mm x 5" Quick Release Drill	MS-DC28		

*Also used as a K-wire

Anterior Clavicle Plate Surgical Technique [continued]



Figure 8

7 Final Plate and Screw Position

An intraoperative radiograph is recommended to check the final reduction of the fracture and the position of the screws. If the surgeon feels the bone quality of the lateral fragment is poor, sutures may be passed from medial to lateral around the coracoid and the plate to take stress off the lateral fixation. After radiographic evaluation and thorough irrigation, close the clavipectoral fascia over the clavicle and the plate. Follow by closing the subcutaneous tissue and musculature in separate layers.

Finally, close the skin by using interrupted absorbable sutures with a subcuticular stitch and dress the wound.

Postoperative Protocol

Postoperative care is at the discretion of the surgeon. The following protocol is provided as an example:

For the first four weeks, place the patient in either an arm sling or an abduction pillow to bring the arm up and the clavicle down, unloading the AC joint.¹ Initiate passive range of motion exercises during the first four weeks. Exercises may include pendulum, Codman, isometric bicep, and elbow and wrist motion. Emphasize to patients that they must avoid any activity involving heavy lifting, pushing, or pulling. Depending on the amount of comminution and the stability of fixation, start active assisted exercise from four to six weeks, and initiate active strengthening at six to eight weeks postoperatively, once healing is seen radiographically. A full return to activities is permitted once healing has occurred.

8 Optional: Implant Removal Instructions

To remove a clavicle plate, use the T15 Stick Fit Hexalobe Driver (80-0760) or 2.5 mm Hex Driver (HPC-0025) and Large Cannulated Quick Release Driver Handle (MS-3200). Referencing the Screw Removal Brochure (SPF10-00) may aid in implant extraction if difficulty is experienced.

Caution: Due to risk of refracture, implant removal is generally not recommended before one year after ORIF.

Superior Distal Clavicle Plate Surgical Technique [continued]



Figure 4

3 Plate Selection

Select the appropriate-size Superior Distal Clavicle Plate (70-0XXX) from the different lengths and curvatures in the system. The curve of the plate may assist in anatomic reduction of the clavicle, reducing strain on the SC and AC joints.

Note: Surgical technique from this point forward will highlight a Superior Distal Clavicle Plate with 2.3 mm screws.

If a lag screw technique is desired, reference the chart below for instrumentation related to each screw size option. A CO/CA Countersink (PL-2080) is also available if desired.

Note: Prior to placement of the plate, lag screw fixation across the major fracture fragments may be performed. Many Type IIB clavicle fractures have a horizontal cleavage fracture that extends into the AC joint, which may be fixed in this manner. Reduction Forceps With Serrated Jaw (PL-CL04) or K-wires may be used to reduce and stabilize butterfly fragments to the main medial and lateral clavicle fragments.

Screw Size Option	Near Cortex Drill	Far Cortex Drill	Depth Gauge
3.5 mm Nonlocking Hexalobe Screw (30-02XX)	3.5 mm x 5" Quick Release Drill (MS-DC35)	2.8 mm Quick Release Drill (80-0387)	Depth Gauge 6–65 mm (80-0623)
3.0 mm Nonlocking Hexalobe Screw (30-03XX)	3.0 mm x 5" Quick Release Drill (80-1088)	2.3 mm Quick Release Drill (80-0627)	Depth Gauge 6–65 mm (80-0623)
Optional 3.5 mm (Nonlocking) Cortical (Hex) Screw (CO-3XX0)	3.5 mm x 5" Quick Release Drill (MS-DC35)	2.8 mm x 5" Quick Release Drill (MS-DC28)	6–70 mm Depth Gauge, 2 mm Increments (MS-9022)
Optional 2.7 mm (Nonlocking) Cortical (Hex) Screw (CO-27XX)	2.8 mm x 5" Quick Release Drill (MS-DC28)	2.0 mm x 5" Quick Release Drill (MS-DC5020)	6–70 mm Depth Gauge, 2 mm Increments (MS-9022)