

Item Catalogue

NUPCO CODE: 4224210004900 | SN: 1334

NUPCO ITEM DESCRIPTION

SET, COMPLETE INSTRUMENTATION FOR ANATOMIC VARIABLE ANGLED PROXIMAL HUMERUS TITANIUM PLATING, WITH NECESSARY CASE AND IMPLANT TRAY

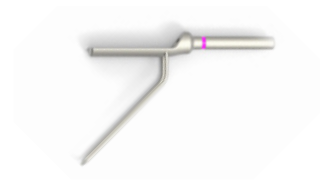
VENDOR PRODUCT DESCRIPTION

Polarus PHP proximal humeral instrument set

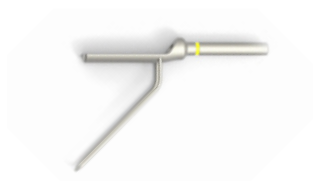
SKU CODES INCLUDED FOR THIS NUPCO CODE

MS-DG46
MS-DG40
MS-DG28
MS-PHGL
MS-PHSL
MS-PHSR
MS-PHGR
MS-PH28
MS-PH46
MS-PH40
MS-DC28
MS-DC35
MS-LTT35
HPC-0035
HPC-0025
MS-PHBCD
PL-PTACK
MS-45210
MS-SS46
MS-SS35
MS-SS57
PL-CLVB
80-0663
MS-3200
MS-46213
MS-1280
PL-2095
PL-2190
MS-47107
MS-9020
WS-1609ST
WS-2009ST
WS-1505ST
MS-LDG35
MS-TGLS

Instrument Overview



4.6 mm Drill Guide Assembly
(MS-DG46)



4.0 mm Drill Guide Assembly
(MS-DG40)



2.8 mm Drill Guide Assembly
(MS-DG28)



Polarus PHP Targeting Guide, Large, Left
(MS-PHGL)



Polarus PHP Targeting Guide, Small, Left
(MS-PHSL)



Polarus PHP Targeting Guide, Small, Right
(MS-PHSR)



Polarus PHP Targeting Guide, Large, Right
(MS-PHGR)



2.8 mm Cancellous Drill
(MS-PH28)



4.0 mm Cancellous Drill
(MS-PH40)



4.6 mm Cancellous Drill
(MS-PH46)



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



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



3.5 mm Cortical Screw Bone Tap
(MS-LTT35)



3.5 mm Quick Release Hex Driver
(HPC-0035)



2.5 mm Quick Release Hex Driver
(HPC-0025)



PHB Screw Clearance Drill
(MS-PHBCD)



Plate Tack
(PL-PTACK)

Instrument Overview [continued]



Large Screw Holding Forceps
(MS-45210)



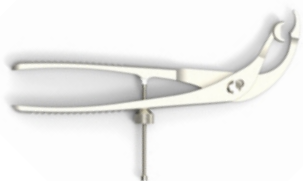
4.5 mm Screw Sleeve
(MS-SS46)



3.5 mm Screw Driver Sleeve
(MS-SS35)



7.0 mm Screw Driver Sleeve
(MS-SS57)



Verbrugge Clamp
(PL-CLVB)



3.5 mm Locking Drill Guide
(MS-LDG35)



Medium Ratching Driver Handle
(80-0663)



Large Cannulated Quick Release Driver Handle
(MS-3200)



8" Bone Reduction Forceps
(MS-1280)



Offset Drill Guide
(PL-2095)



3.5 mm Tap Sleeve Assembly
(PL-2190)



Periosteal Elevator
(MS-46213)



9" Bone Reduction Spanish Forceps
(MS-47107)



.0062" x 9" ST Guide Wire
(WS-1609ST)



2.0 mm x 9" ST Guide Wire
(WS-2009ST)



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



6 mm–70 mm Depth Gauge
(MS-9020)

Polarus Proximal Humeral Plate Surgical Technique

[continued]

Figure 6

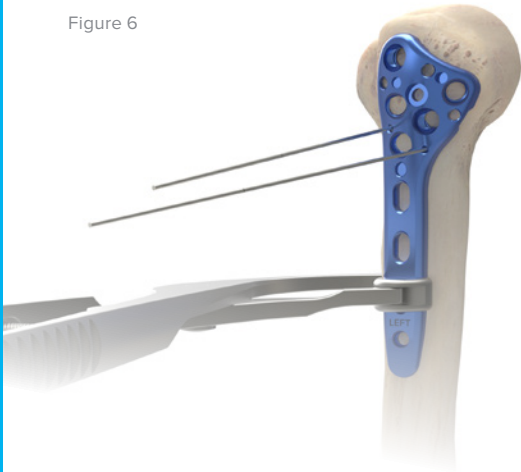


Figure 7

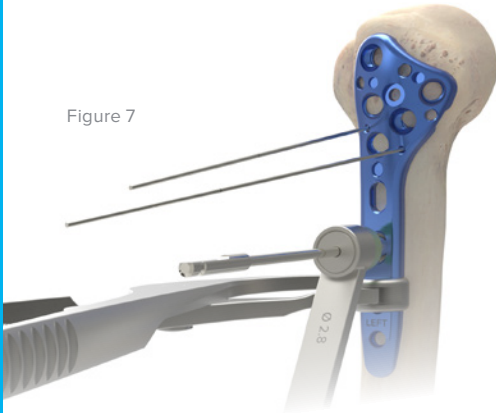
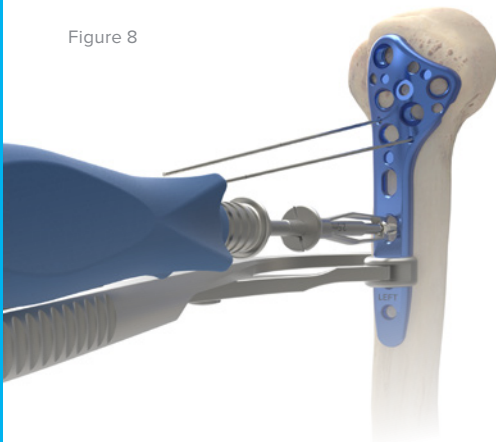


Figure 8



5 Plate Placement

Place the Polarus PHP 3 to 5 mm posterior to the bicipital groove and approximately 5 mm inferior to the top of the greater tuberosity. Confirm fracture reduction and plate height fluoroscopically. When proper reduction and positioning are obtained, provisionally secure the plate to the bone with K-wires (WS-2009ST or WS-1505ST) or Plate Tacks (PL-PTACK).

Note: Sutures are commonly used and may be utilized at this time to improve construct stability. The plate construct features suture holes to better address greater tuberosity fragments in three- and four-part fractures. These aid in achieving construct stability of these types of fractures. Due to the design of the three suture holes, the sutures may also be added upon completion of plate application.

6 Nonlocking Screw Insertion—Humeral Shaft

Secure the plate to the humeral shaft with a 3.5 mm Cortical Screw (CO-3XXX). The screw may be inserted in any slot in the plate distal to the fracture.

Use the 2.8 mm Offset Drill Guide (PL-2095), the 2.8 mm x 5" Quick Release Drill (MS-DC28), and the Standard Depth Gauge (MS-9020) to determine the length of screw needed. With the 2.5 mm Quick Release Hex Driver (HPC-0025), insert a 3.5 mm Cortical Screw of the appropriate length. The provisional fixation hardware can now be removed.



2.0 mm x 9" ST
Guide Wire
(WS-2009ST)
Also used as a K-wire



.059 x 5" ST Guide
Wire
(WS-1505ST)
Also used as a K-wire



Plate Tack
(PL-PTACK)



3.5 mm Cortical
Screw
(CO-3XXX)



2.8 mm x 5" Offset
Drill Guide
(PL-2095)



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



Standard Depth
Gauge
(MS-9020)



2.5 mm Quick
Release Hex
Driver
(HPC-0025)

Polarus Proximal Humeral Plate Surgical Technique

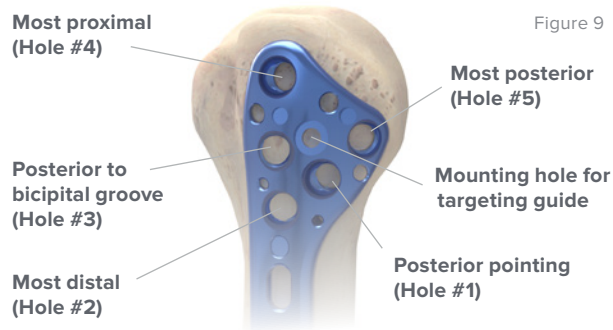
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7 Nonlocking Screw Insertion— Humeral Head

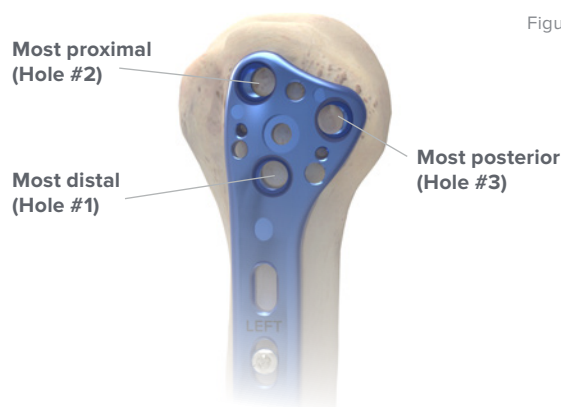
Please see the diagram at right for reference to hole numbers. Select the appropriate Targeting Guide (**MS-PHGL** or **MS-PHGR** for large and extra long plates; **MS-PHSL** or **MS-PHSP** for small plates) and secure it to the plate with the Targeting Guide Locking Screw (**MS-TGLS**), utilizing the 3.5 mm Quick Release Hex Driver (**HPC-0035**). The first proximal head screw placed should be the posterior-pointing (Figure 9, Hole #1) on the large or extra long plate and the most distal (Figure 10, Hole #1) on the small plate.

Drill the hole with the 2.8 mm Drill Guide (**MS-DG28**) and the long 2.8 mm Cancellous Drill (**MS-PH28**). Use the laser mark on the drill with the scale on the back of the drill guide to determine the appropriate screw length. For accurate measurement, be sure that the drill guide is fully seated into the targeting guide.

Remove the drill and drill guide, then insert a 5.0 mm Nonlocking Cancellous Screw (**HCA-51XX**) through the targeting guide and plate. The 5.0 mm nonlocking screw helps draw the plate to the bone, affirm reduction, and ensure a low-profile, plate-to-bone interface.



Proximal Humeral Plate, Large, Left



Proximal Humeral Plate, Small, Left



Figure 11



Figure 12



Polarus PHP
Targeting Guide,
Large
(MS-PHGX)



Polarus PHP
Targeting Guide,
Small
(MS-PHSX)



Polarus PHP
Targeting Guide
Locking Screw
(MS-TGLS)



3.5 mm Quick
Release
Hex Driver
(HPC-0035)



2.8 mm Drill Guide
(MS-DG28)



2.8 mm
Cancellous Drill
(MS-PH28)

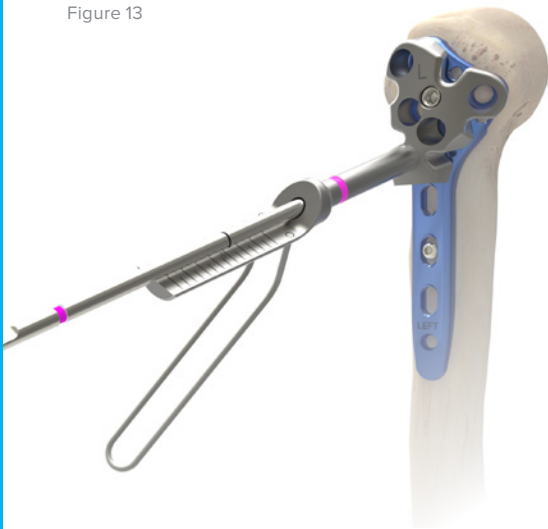


5.0 mm Nonlocking
Cancellous Screw
(HCA-51XX)

Polarus Proximal Humeral Plate Surgical Technique

[continued]

Figure 13



8 Locking Screw Preparation—Humeral Head

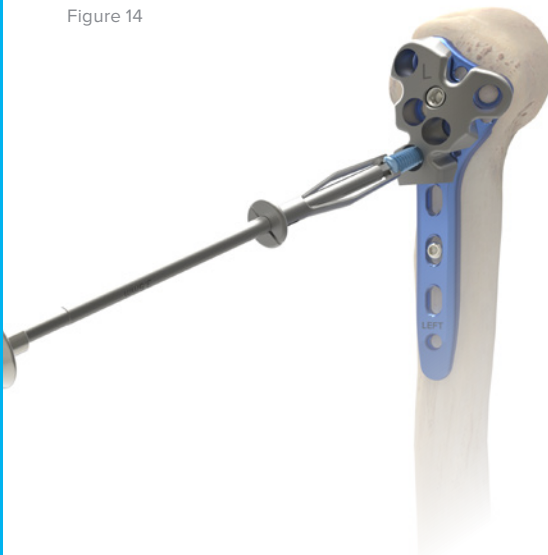
Note: For humeral head screw insertion, insert screws in a clockwise order.

Insert the fuchsia-banded 4.6 mm Drill Guide (MS-DG46) into the #2 (most distal) hole on the large and extralong plate and into the #2 (most proximal) hole on the small plate (see figures 9 and 10 on previous page). (Note that any proximal hole has the ability to accept either the blue 5.7 mm Locking Screws (30-04XX) or the fuchsia 4.5 mm Locking Buttress Screws (CA-PHB25).

Drill using the 4.6 mm Cancellous Drill (MS-PH46) either under power or by hand. Determine the screw length by aligning the laser mark on the drill with the scale on the back of the drill guide. For accurate measurement, be sure the drill is fully seated into the targeting guide. Use fluoroscopy to help confirm accurate screw placement in the humeral head.

Optional: The 4.0 mm Cancellous Drill (MS-PH40) can be used with the fuchsia 4.5 mm Locking Buttress Screws (CA-PHB25).

Figure 14



9 Locking Screw Insertion—Humeral Head

Note: Prior to inserting your choice of locking screws, be sure to confirm that the fracture is reduced anatomically.

Remove the drill and drill guide and insert the selected Locking Screw. Either screw choice should be of the longest length possible across the humeral head, reaching the subchondral bone but without breaking through the articular surface of the head. Both locking screw options can be inserted using the 3.5 mm Hex Driver (HPC-0035) with the Large Cannulated Quick Release Driver Handle (MS-3200).



4.6 mm Drill Guide
(MS-DG46)



5.7 mm Locking Screw
(30-04XX)



4.5 mm Locking Buttress Screw
(CA-PHB25)



4.6 mm Cancellous Drill
(MS-PH46)



4.0 mm Cancellous Drill
(MS-PH40)



3.5 mm Hex Driver
(HPC-0035)



Large Cannulated Quick Release Driver Handle
(MS-3200)

Ordering Information

Tray Components

Proximal Humeral Plates

1	Proximal Humeral Plate, Extra Long, Right	PL-PHXGR
2	Proximal Humeral Plate, Large, Right	PL-PHGR
3	Proximal Humeral Plate, Small, Right	PL-PHSR
4	Proximal Humeral Plate, Small, Left	PL-PHSL
5	Proximal Humeral Plate, Large, Left	PL-PHGL
6	Proximal Humeral Plate, Extra Long, Left	PL-PHXGL

These implants are available nonsterile or sterile-packed. Add –S to the product number to designate sterile products. To order, contact your particular authorized Acumed distributor.

Instruments

7	4.6 mm Drill Guide Assembly	MS-DG46
8	4.0 mm Drill Guide Assembly	MS-DG40
9	2.8 mm Drill Guide Assembly	MS-DG28
10	Polarus PHP Targeting Guide, Large, Left	MS-PHGL
11	Polarus PHP Targeting Guide, Small, Left	MS-PHSL
12	Polarus PHP Targeting Guide, Small, Right	MS-PHSR
13	Polarus PHP Targeting Guide, Large, Right	MS-PHGR

Ordering Information [continued]

Tray Components

Instruments

1	2.8 mm Cancellous Drill	MS-PH28	14	Verbrugge Clamp	PL-CLVB
2	4.6 mm Cancellous Drill	MS-PH46	15	4.0 mm Cancellous Drill	MS-PH40
3	2.8 mm x 5" Quick Release Drill	MS-DC28	16	Medium Ratcheting Driver Handle	80-0663
4	3.5 mm x 5" Quick Release Drill	MS-DC35	16	Large Cannulated Quick Release Driver Handle	MS-3200
5	3.5 mm Cortical Screw Bone Tap	MS-LTT35	17	Periosteal Elevator	MS-46213
6	3.5 mm Quick Release Hex Driver	HPC-0035	18	8" Bone Reduction Forceps	MS-1280
7	2.5 mm Quick Release Hex Driver	HPC-0025	19	Offset Drill Guide	PL-2095
8	PHB Screw Clearance Drill	MS-PHBCD	20	3.5 mm Tap Sleeve Assembly	PL-2190
9	Plate Tack	PL-PTACK	21	9" Bone Reduction Spanish Forceps	MS-47107
10	Large Screw Holding Forceps	MS-45210	22	6 mm–70 mm Depth Gauge	MS-9020
11	4.5 mm Screw Sleeve	MS-SS46	23	062" x 9" ST Guide Wire*	WS-1609ST
12	3.5 mm Locking Drill Guide	MS-SS35	24	2.0 mm x 9" ST Guide Wire*	WS-2009ST
13	7.0 mm Screw Driver Sleeve	MS-SS57			

Additional Instruments

.059 x 5" ST Guide Wire*	WS-1505ST	3.5 mm Locking Drill Guide	MS-LDG35
PHP Targeting Guide Locking Screw	MS-TGLS		

* Also used as a K-wire