

3.5mm Long Philos Plate:

Philos Plate include 9 proximal locking holes for 3.5mm LCP Screws enable an angular stable construct to enhance the grip in osteoporotic bone and multi-fragment fracture. 10 guide wire holes for suturing to help maintain fracture reduction.





Design:

- > The locking screw produces an angular stable construction to enhance the grip.
- Screw layout ensures a good distribution of forces across screws.
- > Optimal screw placement and anchorage in the Cancellous bone of humerus head.
- Anatomically contoured, rounded plate.
- Adaptable to the pattern of the proximal humerus fracture.
- Reduced vascular periosteal damage.
- Reduced impairment of periosteal blood supply due to Limited Contact.
- Intra-operative choice between compression and locking with angular stability.

Surgical Steps:

Patient Position and Approach:

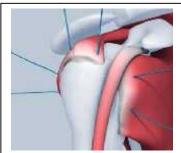
Place the patient in the beach chair position or supine position on a radiolucent table. Ensure the fluoroscope is positioned in a way that allows visualization of the proximal humerus in two axes (AP and lateral/axial).Prepare the patient's arm so that it can be mobilized intra-operatively. A deltopectoral or transdeltoid

approach is recommended.



Temporary FractureReduction:

Proper reduction of the fracture is crucial for good bone healing and function. In some cases closed reduction before preparing the patient is beneficial.Reduce the head fragments and checks the reduction under image intensifier control.Kirschner wires can be used for reduction as joysticks in the fragments as well as for temporary fixation. Ensure that Kirschner wires do not interfere with correct plate placement.



Surgical Technique



Position Plate:

Align the plate properly on humerus shaft. Position the plate in such a way that head portion of the plate match with the proximal part of humerus bone. Placing of plate too high increase the risk of subacrominal impingement and too low cannot achieve optimum distribution of screws in humerus head. Insert two positioning wire passed by guide wire holes in philos plate. Ensure that plate position is 2-4mm posterior to bicipital groove and 5-7mm distal to the top of the greater tubercule.

Fixed Plate temporary:

Fix plate temporary with 3.5mm cortex screw in the combi hole of the shaft of the plate. Use \emptyset 2.5mm drill bit with universal drill guide to drill through both the cortices. Determine the required length of the cortex screw using depth gauge. Insert the appropriate 3.5mm Cortex Screw using screw driver. We can also temporary fixed plate by using guide wire passing by plate.

Instrument:

5700-INS-0027 Ø1.5mm guide wire **5700-INS-0001** Ø2.5mm drill bit quick coupling 5"



Placement of Locking Screws:

Use 3.5mm LCP Drill Sleeve for inserting locking screw. After finding the screw position, 3.5mm LCP Drill Sleeve attached in locking threaded hole of the plate.Ø2.8mm Drill bit is passed through this LCP drill sleeve. Depth of drill is measured by using depth gauge or also it may direct measure by the size marking on drill. Screw is placed in appropriate locking hole of plate with required size by using self-holding or simple screw driver. Torque limiting screw driver is also used to tighten the LCP Screws.

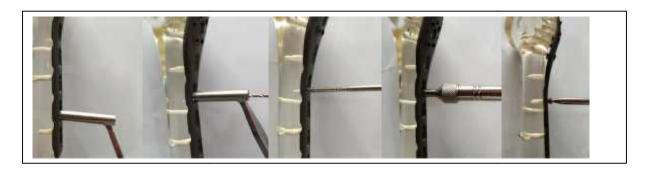


Instrument:
5700-INS-0034 Ø 3.5mm screw driver with holding sleeve x 9"
5700-INS-0012 Ø 3.5mm screw driver fibre handle x 9"
5700-INS-0030 Ø 3.5mm torque limiting screw driver x 9"
5700-INS-0001 Ø 2.5mm drill bit quick coupling 5"
5700-INS-0004 Ø 3.5mm LCP drill sleeve for 2.8mm drill



Placement of Cortex Screws:

Use 3.5mm Universal drill Guide for inserting 3.5mm cortex screw in shaft of the plat. Cortex screw is placed in combi hole for achieve dynamic compression. First, 3.5mm Universal drill guide is located in the dynamic portion of the shaft hole. 2.8mm Drill bit is used to drill the cortices passing through drill guide. With the use of depth gauge, require size of 3.5mm cortex screw is measured. 3.5mm Tap is prefer for reaming the drill and then cortex Screw is inserted with the help of screw driver.



5700-INS-0006 Ø 2.5 /3.5 mm drill & tap sleeve combined
5700-INS-0030 Ø 3.5 mm torque limiting screw driver x 9"
5700-INS-0003 Ø 2.8 mm drill bit quick coupling 8"
5700-INS-0008 Ø 3.5mm bone tap quick coupling for cortical screw
5700-INS-0014 Ø 3.5mm depth gauge

Check Position of Screw tip:

Check the screw lengths under image intensifier control in the full range of gleno-humeral-motion and ensure that they do not penetrate the articular surface. It is important to check the screw

lengths in all planes as their angulation and direction may be difficult to visualize.



Implant Removal:

Unlock all screws from the plate, and then remove the screws completely from the bone. This prevents simultaneous rotation of the plate when unlocking the last lock screw. If a screw cannot be removed with the screwdriver, use the T-Handle with Quick Coupling to insert the Extraction Screw

into the screw head, and unscrew the screw in a counter clock direction.

5700-INS-0038 Ø3.5mm hollow mill for screw removal
5700-INS-0036 Ø3.5mm broken screw removal forceps
5700-INS-0035 Ø3.5mm screw driver quick coupling x 5"



Surgical Technique



Instruments:

5700-INS-0025 bending template

5700-INS-0016 Plate bender small (pair)

5700-INS-0030Ø3.5mm torque limiting screw driver x 9"

5700-INS-0012Ø3.5mm screw driver fibre handle x 9"

5700-INS-0020Hohman retractors small 9mm wide 160mm **5700-INS-0021**Hohman retractors small 15mm wide 160mm

5700-INS-0014Ø3.5mm depth gauge

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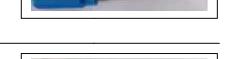
700-INS-00043.5mm LCP drill sleeve for 2.8mm drill

5700-INS-0034Ø3.5mm screw driver with holding sleeve x 9"



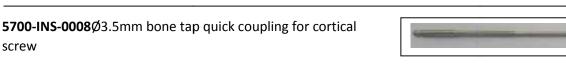












5700-INS-0003 Ø2.8mm drill bit quick coupling 8"

5700-INS-0032 Periosteal elevator curved 9 mm

5700-INS-0033 Periosteal elevator curved 12 mm

5700-INS-0019Self centering bone holding forceps 190 mm (pair)

5700-INS-0023 Reduction forceps, pointed 140 mm

5700-INS-0036 Ø3.5mm broken screw removal forceps

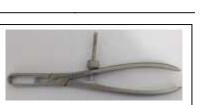
5700-INS-0022 Reduction forceps, serrated 140 mm

5700-INS-0011Counter sink for Ø 3.5/4.0 mm screws









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5700-INS-0026Screw holding forceps 3.5mm	
5700-INS-0001 Ø2.5mm drill bit quick coupling 5"	
5700-INS-0009 Ø4.0mm bone tap quick coupling for Cancellous screw	
5700-INS-0007 Ø2.0 /4.0 mm drill & tap sleeve combined	1
5700-INS-0006 Ø2.5/3.5 mm drill & tap sleeve combined	
5700-INS-0024 Ø2.5/3.5 mm neutral and loaded drill guide (Small)	1
5700-INS-0038 Ø3.5mm hollow mill for screw removal	
5700-INS-0035 Ø3.5 mm screw driver quick coupling x 5"	



5700-INS-0027Ø1.5mm guide wire

5700-INS-0028Ø2.0mm guide wire

5700-INS-0010Quick coupling T-handle

Implant Size:

PhilosLong :

SS	ТІТ	Size	Length
1315-SS-3503	1315-TT-3503	3	106
1315-SS-3504	1315-TT-3504	4	124
1315-SS-3505	1315-TT-3505	5	142
1315-SS-3506	1315-TT-3506	6	160
1315-SS-3507	1315-TT-3507	7	178
1315-SS-3508	1315-TT-3508	8	196
1315-SS-3509	1315-TT-3509	9	214
1315-SS-3510	1315-TT-3510	10	232
1315-SS-3511	1315-TT-3511	11	250
1315-SS-3512	1315-TT-3512	12	268
1315-SS-3513	1315-TT-3513	13	286

3.5mm LCP Screws Self Tapping:

1414-SS-3510/90	SS	10mm to 90 mm
1414-TT-3510/90	TT	10mm to 90mm

3.5mm Cortex Screws Self Tapping:

1111-SS-3510/80SS	10mm to 80 mm
1111-TT-3510/80TT	10mm to 80 mm

Address:

Corporate Office

310, Sanket Avenue, Opp. AmbeVidhyalaya, Sama-savli road Vadodara-390024

Plant Office:

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