

3.5mm LCP Small Plate:

Locking Compression Plate (LCP) is part of plate and screw system that merges locking screw technology with conventional plating techniques. 3.5mm LCP Small plate have combination of locking and compression hole. The combi hole allow placement of standard cortex screws on one side and threaded conical locking screws.



Plates:

- Threaded hole section for locking screws
- > Dynamic Hole section for cortex screws
- Uniform Hole spacing
- Load (Compression) & neutral screw position
- Holes in straight plates are oriented so that the compression component of hole is always directed towards the middle of plate.
- Stable fixations allows
- > Limited contact plate design reduces plate to bone contact.
- Early mobilization

Locking Screws:

- Conical Head facilitates alignment of locking screws in threaded plate hole to provide secure plate screw construct.
- The larger core diameter improves bending and shear strength and distributes the load over a larger area of bone.
- The shallow thread profile of locking screws result from the larger core diameter, but it acceptable because locking screw do not rely solely on screw threads to create compression between plate & screw to maintain stability.

Surgical Steps:

Patient Position:

Position the patient supine on a radiolucent operating table.Visualization of the bone fluoroscopy in both the lateral and AP views is recommended.

Plate Selection:

Use bending template to determine plate length & bending profile.

Instrument: 5700-INS-0025 bending template





Contouring:

Use bending instrument to contour the locking compression plate to the anatomy. The plate holes have been designed to accept some degree of deformation. When bending the plate, place the bending iron on two consecutive holes. This ensure that threaded holes will not be distorted. Significant distortion of the locking holes will reduce locking effectiveness.

Instrument: 5700-INS-0016 Plate bender small (pair)



Position plate and insertion of plate:

The plate may be temporary held in place with standard bone holding forceps. The middle of the plate should be positioned over fracture side if compression of fracture fragments is desired. A

Instrument:

 5700-INS-0027
 Ø1.5mm guide wire

 700-INS-0004
 3.5mm LCP drill sleeve for 2.8mm drill



Locking screw insertion

Determine the combination of screws to be usedfor fixation. If a combination of locking and cortex screws is used, cortex screws should be insertedfirst to pull the plate to the bone. If a locking screw is used as the first screw, be sure the fracture is reduced and the plate is held securely to bone.

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
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	\emptyset 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 b'one. 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.

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



Instruments:

5700-INS-0025 bending template

5700-INS-0016 Plate bender small (pair)

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

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

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

5700-INS-0014 Ø3.5mm depth gauge

700-INS-0004 3.5mm LCP drill sleeve for 2.8mm drill











130 40 50 60



5700-INS-0008	Ø3.5mm bone tap quick coupling for cortical screw	
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-0019	Self centering bone holding forceps 190 mm (p	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	Celar
	Counter sink for ø 3.5/4.0 mm screws	





5700-INS-0026	Screw 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	
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)	
5700-INS-0038	Ø3.5mm hollow mill for screw removal	Quantum Historie Mild.
5700-INS-0035	Ø3.5 mm screw driver quick coupling x 5"	
5700-INS-0027	Ø1.5mm guide wire	
5700-INS-0028	Ø2.0mm guide wire	

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Surgical Technique



5700-INS-0010 Quick coupling T-handle

Implant Size:

3.5mm LCP Small Plate:

TIT	Size	Length
1301-TT-3502	2H	33
1301-TT-3503	3H	46
1301-TT-3504	4H	59
1301-TT-3505	5H	72
1301-TT-3506	6H	85
1301-TT-3507	7H	98
1301-TT-3508	8H	111
1301-TT-3509	9H	124
1301-TT-3510	10H	137
1301-TT-3511	11H	150
1301-TT-3512	12H	163
	TIT 1301-TT-3502 1301-TT-3503 1301-TT-3504 1301-TT-3505 1301-TT-3506 1301-TT-3507 1301-TT-3508 1301-TT-3509 1301-TT-3510 1301-TT-3511 1301-TT-3512	TITSize1301-TT-35022H1301-TT-35033H1301-TT-35044H1301-TT-35055H1301-TT-35066H1301-TT-35077H1301-TT-35088H1301-TT-35099H1301-TT-351010H1301-TT-351111H1301-TT-351212H



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-3510/80SS10mm to 80 mm				
1111-TT-3510/80TT	10mm to 80 mm			





Address:

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

Plant Office:

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