

### ❖ 3.5mm LCP Anterolateral Distal Tibia Plate:

The LCP Anterolateral Distal Tibia Plate 3.5 is part of the Small Fragment LCP System that merges locking screw technology with conventional plating techniques. The combi-holes in the LCP limited contact plate shaft combine a dynamic hole with a locking screw hole. Combi-holes provide the flexibility of axial compression and locking capability throughout the length of the plate shaft. Locking screws provide the ability to create a fixed-angle construct while using standard techniques. Locking capability is important for fixed-angle constructs in osteopenic bone or multi-fragment fractures where screw purchase is compromised. These screws do not rely on plate-to-bone compression to resist patient load but function similarly to multiple, small, angled blade plates.



#### □ Design

- Tapered tip for sub-muscular insertion
- Distal locking screws provide support for the articular surface
- The head of the plate is designed to provide a low profile construct when using locking screws or cortex screws
- The twist in the shaft is contoured for the distal tibia anatomy so that less plate contouring is required.
- Anatomically shaped
- Two different plate designs to fit the right or left tibia
- Screw heads are recessed in the plate to minimize screw prominence
- The head of the plate features four locking holes that accept 3.5mm locking screws & shaft contains a 3.5mm cortex screw or else 4.0mm cancellous screws.
- Anatomic plate profile and four parallel screws near the joint assist reduction of metaphysis to diaphysis to restore alignment and functional anatomy.
- The combination of conventional and locking screws offers optimum fixation regardless of bone density.
- Limited-contact plate design reduces plate-to-bone contact and helps to preserve the periosteal blood supply
- Early mobilization
- The low-profile anatomic fixation system with optimal plate placement and angular stability.

#### □ Indications

The LCP Anterolateral Distal Tibia Plate 3.5 is indicated for:

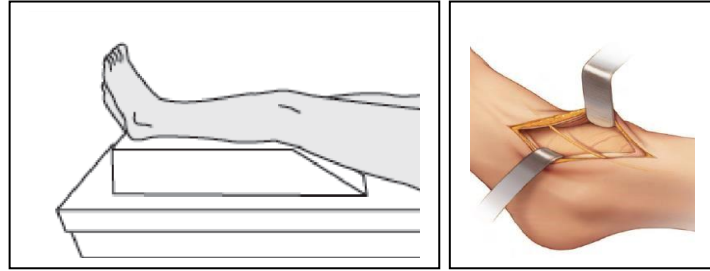
- Extra-articular and simple intra-articular distal tibia fractures
- Distal tibia fracture, percutaneous or reducible by limited arthrotomes
- Distal tibia fracture extending into the diaphysis area

#### □ Surgical Steps:

##### • Patient Position:

Position the patient supine on a radiolucent operating table. Visualization of the distal tibia under fluoroscopy in both the lateral and AP views is recommended. Elevate the leg on a padded rest with the knee moderately flexed to placement in a neutral position. Place the opposite leg level on the table top.

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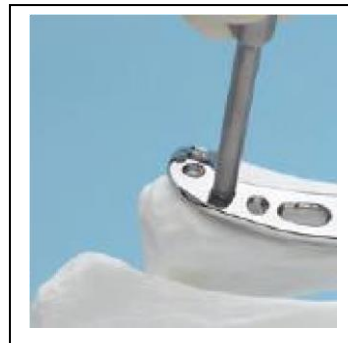


- **Approach:**

A longitudinal and straight incision should be centred at the ankle joint, parallel to the fourth metatarsal distally, and between the tibia and fibula proximally. Proximal extension of the incision should end seven or eight centimetres above the joint. Distally the incision can be extended to the level of the talonavicular joint, allowing exposure of the neck. The joint can be exposed using an arthrotomes

- **Position plate and insertion of plate**

Guide wires can be placed through the distal end of the plate to assist with temporary maintenance of the reduction and for plate placement.



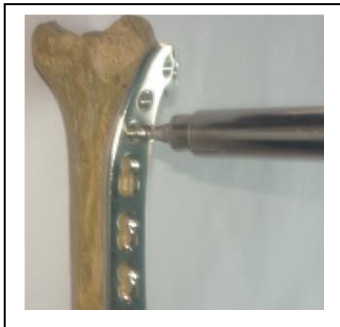
These also prevent plate rotation while inserting the first locking screw. To adjust the plate into final position, insert a guide wire or partially insert LCP Drill Sleeve. After plate insertion, check alignment on the bone using fluoroscopy. Ensure proper reduction before inserting the first locking screw. Once locking screws are inserted, further reduction is not possible without loosening the locking screws.

- **Locking screw insertion**

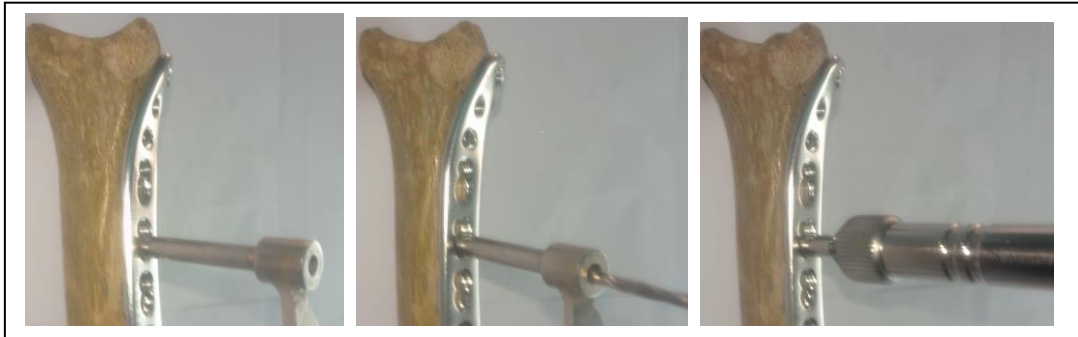
Determine the combination of screws to be used for fixation. If a combination of locking and cortex screws is used, cortex screws should be inserted first to pull the plate to the bone. If a locking screw is used as the first screw, be sure the fracture is reduced and the plate is held securely to the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

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### 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.



- **Check the Position the of Screw tip:**

Check the screw lengths under image intensifier control in the full range of glen-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.

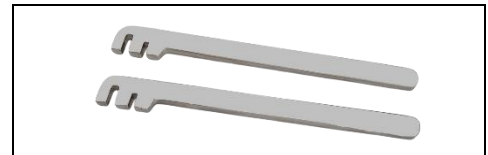


- **Implant Removal**

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.

### □ Instruments

- **Code:** BO.0207.01.I  
**Name:** Plate Bender Per Small



- **Code:** BO.0201.09.I  
**Name:** Torque Screw Driver 2.5mm For 3.5/4.0mm Lcp Screw



- **Code:** BO.0201.02.I  
**Name:** Hexagonal Screw Driver 2.5mm Tip For 3.5mm Screw



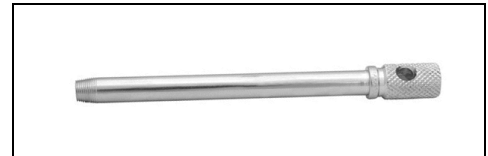
- **Code:** BO.0211.13.I  
**Name:** Hohmann Retractor Medium



- **Code:** BO.0201.12.I  
**Name:** Small Depth Gauge



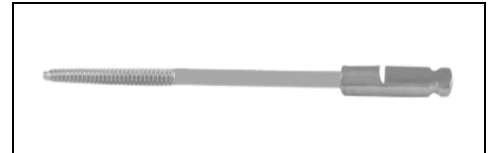
➤ **Code:** BO.0201.16.I  
**Name:** Lcp Drill Sleeve 2.7mm For 3.5mm Screw



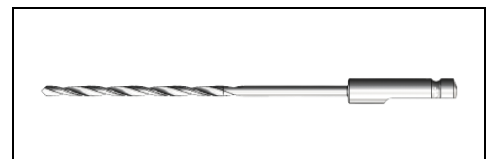
➤ **Code:** BO.0201.06.I  
**Name:** Slef Holding Hexagonal Screw Driver 2.5tip For 3.5mm Screw



➤ **Code:** BO.0201.80.I  
**Name:** Qc End Tap 3.5mm



➤ **Code:** BO.0201.69.I  
**Name:** Qc End Drill Bit 2.8mm Dia.



➤ **Code:** BO.0212.06.I  
**Name:** Periosteal Elevator Flat



➤ **Code:** BO.0211.04.I  
**Name:** Self Centering Bone Holding Forceps



➤ **Code:** BO.0211.10.I  
**Name:** Reduction Forcep Pointed



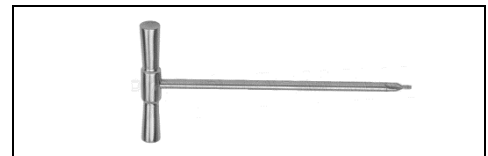
➤ **Code:** BO.0207.14.I  
**Name:** SF Removal For Screw



➤ **Code:** BO.0211.17.I  
**Name:** Reduction Forcep Serrated



➤ **Code:** BO.0212.25.I  
**Name:** Counter Sink 4.0mm



➤ **Code:** BO.0212.01.I  
**Name:** Screw Holding Forceps



- **Code:** BO.0201.65.I  
**Name:** Qc End Drill Bit 2.5mm Dia.



- **Code:** BO.0201.82.I  
**Name:** Qc End Tap 4.0mm



- **Code:** BO.0201.88.I  
**Name:** Drill & Tap Sleeve 2.5mm X 3.5mm



- **Code:** BO.0208.02.I  
**Name:** Neutral & Loaded Drill Guide



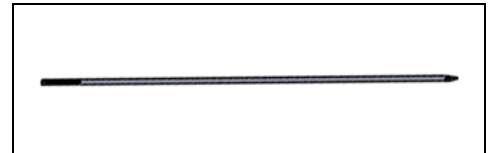
- **Code:** BO.0208.13.I  
**Name:** Hollow Mill



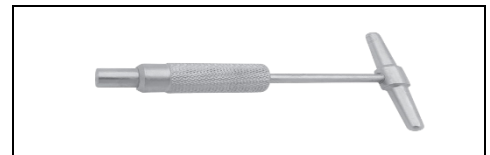
- **Code:** BO.0201.85.I  
**Name:** Qc End Shaft 3.5mm Screw Driver



- **Code:** BO.253.1.5.L  
**Name:** SS Guide Wire Plain Dia. 1.5mm, Length 225mm



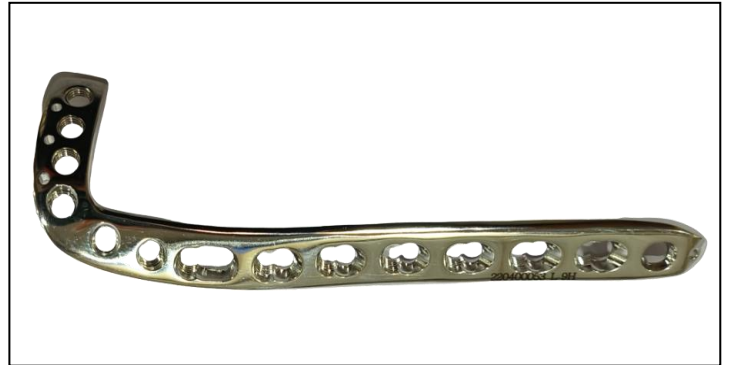
- **Code:** BO.0101.23.I  
**Name:** Quick Coupling T Handle



□ Implants

**Antrolateral Distal Tibia Locking Plate 3.5mm Left:**

S.S 316L	Titanium	Size
BO.511.L.04.S	BO.511.L.04.T	04 Hole
BO.511.L.05.S	BO.511.L.05.T	05 Hole
BO.511.L.06.S	BO.511.L.06.T	06 Hole
BO.511.L.07.S	BO.511.L.07.T	07 Hole
BO.511.L.08.S	BO.511.L.08.T	08 Hole
BO.511.L.09.S	BO.511.L.09.T	09 Hole
BO.511.L.10.S	BO.511.L.10.T	10 Hole
BO.511.L.11.S	BO.511.L.11.T	11 Hole
BO.511.L.12.S	BO.511.L.12.T	12 Hole
BO.511.L.13.S	BO.511.L.13.T	13 Hole
BO.511.L.14.S	BO.511.L.14.T	14 Hole
BO.511.L.15.S	BO.511.L.15.T	15 Hole
BO.511.L.16.S	BO.511.L.16.T	16 Hole
BO.511.L.17.S	BO.511.L.17.T	17 Hole
BO.511.L.18.S	BO.511.L.18.T	18 Hole
BO.511.L.19.S	BO.511.L.19.T	19 Hole
BO.511.L.20.S	BO.511.L.20.T	20 Hole
BO.511.L.21.S	BO.511.L.21.T	21 Hole
BO.511.L.22.S	BO.511.L.22.T	21 Hole



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### Anterolateral Distal Tibia Locking Plate 3.5mm Right:

S.S 316L	Titanium	Size
BO.511.R.04.S	BO.511.R.04.T	04 Hole
BO.511.R.05.S	BO.511.R.05.T	05 Hole
BO.511.R.06.S	BO.511.R.06.T	06 Hole
BO.511.R.07.S	BO.511.R.07.T	07 Hole
BO.511.R.08.S	BO.511.R.08.T	08 Hole
BO.511.R.09.S	BO.511.R.09.T	09 Hole
BO.511.R.10.S	BO.511.R.10.T	10 Hole
BO.511.R.11.S	BO.511.R.11.T	11 Hole
BO.511.R.12.S	BO.511.R.12.T	12 Hole
BO.511.R.13.S	BO.511.R.13.T	13 Hole
BO.511.R.14.S	BO.511.R.14.T	14 Hole
BO.511.R.15.S	BO.511.R.15.T	15 Hole
BO.511.R.16.S	BO.511.R.16.T	16 Hole
BO.511.R.17.S	BO.511.R.17.T	17 Hole
BO.511.R.18.S	BO.511.R.18.T	18 Hole
BO.511.R.19.S	BO.511.R.19.T	19 Hole
BO.511.R.20.S	BO.511.R.20.T	20 Hole
BO.511.R.21.S	BO.511.R.21.T	21 Hole
BO.511.R.22.S	BO.511.R.22.T	21 Hole

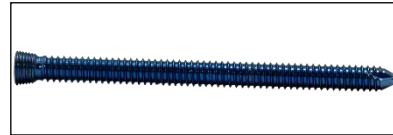
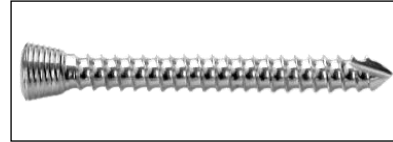




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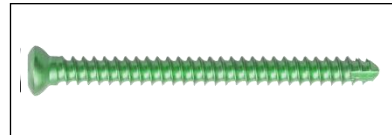
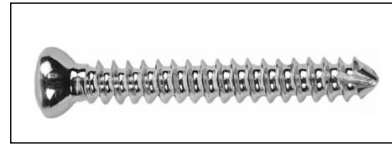
Locking Screw Dia. 3.5mm:

S.S 316L	Titanium	Size
BO.168.08.S	BO.168.08.T	08 mm
BO.168.10.S	BO.168.10.T	10 mm
BO.168.12.S	BO.168.12.T	12 mm
BO.168.14.S	BO.168.14.T	14 mm
BO.168.16.S	BO.168.16.T	16 mm
BO.168.18.S	BO.168.18.T	18 mm
BO.168.20.S	BO.168.20.T	20 mm
BO.168.22.S	BO.168.22.T	22 mm
BO.168.24.S	BO.168.24.T	24 mm
BO.168.26.S	BO.168.26.T	26 mm
BO.168.28.S	BO.168.28.T	28 mm
BO.168.30.S	BO.168.30.T	30 mm
BO.168.32.S	BO.168.32.T	32 mm
BO.168.34.S	BO.168.34.T	34 mm
BO.168.36.S	BO.168.36.T	36 mm
BO.168.38.S	BO.168.38.T	38 mm
BO.168.40.S	BO.168.40.T	40 mm
BO.168.42.S	BO.168.42.T	42 mm
BO.168.44.S	BO.168.44.T	44 mm
BO.168.46.S	BO.168.46.T	46 mm
BO.168.48.S	BO.168.48.T	48 mm
BO.168.50.S	BO.168.50.T	50 mm
BO.168.52.S	BO.168.52.T	52 mm
BO.168.54.S	BO.168.54.T	54 mm
BO.168.55.S	BO.168.55.T	55 mm
BO.168.60.S	BO.168.60.T	60 mm
BO.168.65.S	BO.168.65.T	65 mm
BO.168.70.S	BO.168.70.T	70 mm
BO.168.75.S	BO.168.75.T	75 mm
BO.168.80.S	BO.168.80.T	80 mm
BO.168.85.S	BO.168.85.T	85 mm
BO.168.90.S	BO.168.90.T	90 mm



**Cortical Screw Dia. 3.5mm:**

S.S 316L	Titanium	Size
BOI.01.103.08.S	BOI.01.103.08.T	08 mm
BOI.01.103.10.S	BOI.01.103.10.T	10 mm
BOI.01.103.12.S	BOI.01.103.12.T	12 mm
BOI.01.103.14.S	BOI.01.103.14.T	14 mm
BOI.01.103.16.S	BOI.01.103.16.T	16 mm
BOI.01.103.18.S	BOI.01.103.18.T	18 mm
BOI.01.103.20.S	BOI.01.103.20.T	20 mm
BOI.01.103.22.S	BOI.01.103.22.T	22 mm
BOI.01.103.24.S	BOI.01.103.24.T	24 mm
BOI.01.103.26.S	BOI.01.103.26.T	26 mm
BOI.01.103.28.S	BOI.01.103.28.T	28 mm
BOI.01.103.30.S	BOI.01.103.30.T	30 mm
BOI.01.103.32.S	BOI.01.103.32.T	32 mm
BOI.01.103.34.S	BOI.01.103.34.T	34 mm
BOI.01.103.36.S	BOI.01.103.36.T	36 mm
BOI.01.103.38.S	BOI.01.103.38.T	38 mm
BOI.01.103.40.S	BOI.01.103.40.T	40 mm
BOI.01.103.42.S	BOI.01.103.42.T	42 mm
BOI.01.103.44.S	BOI.01.103.44.T	44 mm
BOI.01.103.46.S	BOI.01.103.46.T	46 mm
BOI.01.103.48.S	BOI.01.103.48.T	48 mm
BOI.01.103.50.S	BOI.01.103.50.T	50 mm
BOI.01.103.52.S	BOI.01.103.52.T	52 mm
BOI.01.103.54.S	BOI.01.103.54.T	54 mm
BOI.01.103.56.S	BOI.01.103.56.T	56 mm
BOI.01.103.58.S	BOI.01.103.58.T	58 mm
BOI.01.103.60.S	BOI.01.103.60.T	60 mm
BOI.01.103.65.S	BOI.01.103.65.T	75 mm
BOI.01.103.70.S	BOI.01.103.70.T	70 mm
BOI.01.103.75.S	BOI.01.103.75.T	75 mm
BOI.01.103.80.S	BOI.01.103.80.T	80 mm
BOI.01.103.85.S	BOI.01.103.85.T	85 mm





## ***3.5mm LCP Anterolateral Distal Tibia Plate***



**Bombay Ortho Industries**

### **Address:**

G/551, Metoda, Lodhika G. I. D. C., Kalawad Road, Gate No. 3, Rajkot – 360021, Gujarat, India.

**Tele/fax No.:** +91-2827-287538 / +91-2827-287541

**Fax No.:** +91-2827-287541

**E – Mail:** [bombayortho@gmail.com](mailto:bombayortho@gmail.com)