Locked Plate System

ORTHOPEDIC
CATALOGUE

GEOORTHO Locked Plate System

GEOORTHO Distal Radius System 2.4mm

8.1 2.4 mm Locked Screw, Self Tapping

Length (mm)	Titanium
6	**8.1.TI01**
7	**8.1.TI2.**
8	**8.1.TI03**
9	**8.1.TI04**
10	**8.1.TI05**
11	**8.1.TI06**
12	**8.1.TI07**
13	**8.1.TI08**
14	**8.1.TI09**
16	**8.1.TI10**
18	**8.1.TI11**
20	**8.1.TI12**
22	**8.1.TI13**
24	**8.1.TI14**
26	**8.1.TI15**
28	**8.1.TI16**
30	**8.1.TI17**

8.2 2.4 mm Cortical Screw, Self Tapping

Length (mm)	Titanium
6	**8.2.TI01**
7	**8.2.TI2.**
8	**8.2.TI03**
9	**8.2.TI04**
10	**8.2.TI05**
11	**8.2.TI06**
12	**8.2.TI07**
13	**8.2.TI08**
14	**8.2.TI09**
16	**8.2.TI10**
18	**8.2.TI11**
20	**8.2.TI12**
22	**8.2.TI13**
24	**8.2.TI14**
26	**8.2.TI15**
28	**8.2.TI16**
30	**8.2.TI17**

8.3 2.7 mm Cortical Screw, Self Tapping

Length (mm)	Titanium
6	**8.3.TI01**
8	**8.3.TI2.**
10	**8.3.TI03**
12	**8.3.TI04**
14	**8.3.TI05**
16	**8.3.TI06**
18	**8.3.TI07**
20	**8.3.TI08**
22	**8.3.TI09**
24	**8.3.TI10**
26	**8.3.TI11**
28	**8.3.TI12**
30	**8.3.TI13**

GEOORTHO Distal Radius System 2.4mm

8.4 2.4mm Locked Distal Radius Dorsal Plate, Straight

Holes	Titanium
5	**8.4.TI01**
6	**8.4.TI2.**

8.5 2.4mm Locked "T" Distal Radius Dorsal Plate, (Head with 3 Holes)

Shaft Holes	Titanium
3	**8.5.TI01**
4	**8.5.TI2.**

8.6 2.4mm Locked "L" Distal Radius Dorsal Plate, Left Angled (Head with 2 Holes)

Shaft Holes	Titanium
3	**8.6.TI01**
4	**8.6.TI2.**

8.7 2.4mm Locked "L" Distal Radius Dorsal Plate, Right Angled (Head with 2 Holes)

Shaft Holes	Titanium
3	**8.7.TI01**
4	**8.7.TI2.**

8.8 2.4mm Locked "L" Distal Radius Dorsal Plate, Left Angled (Head with 3 Holes)

Shaft Holes	Titanium
3	**8.8.TI01**
4	**8.8.TI2.**

8.9 2.4mm Locked "L" Distal Radius Dorsal Plate, Right Angled (Head with 3 Holes)

Shaft Holes	Titanium
3	**8.9.TI01**
4	**8.9.TI2.**

8.10 2.4mm Locked "L" Distal Radius Dorsal Plate, Oblique Left Angled (Head with 3 Holes)

Shaft Holes	Titanium
3	**8.010.TI01**
4	**8.010.TI2.**

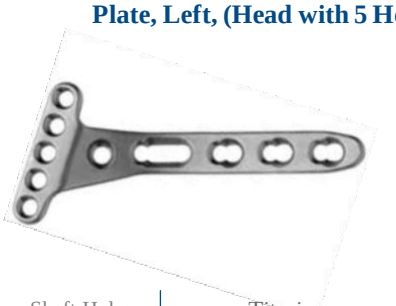
8.11 2.4mm Locked "L" Distal Radius Dorsal Plate, Oblique Right Angled (Head with 3 Holes)

Shaft Holes	Titanium
3	**8.11.TI01**
4	**8.11.TI2.**

GEOORTHO Distal Radius System 2.4mm

Distal Radius Volar Plates

8.14 2.4mm Locked Distal Radius Volar Plate, Left, (Head with 5 Holes)



Shaft Holes	Titanium
3	**8.014.TI01**
5	**8.014.TI2.**

8.15 2.4mm Locked Distal Radius Volar Plate, Right, (Head with 5 Holes)

Shaft Holes	Titanium
3	**8.20.TI01**
5	**8.20.TI2.**

8.16 2.4mm Locked Distal Radius Volar Plate, Extra-articular Left, (Head with 5 Holes)

Shaft Holes	Titanium
3	**8.16.TI01**
5	**8.16.TI2.**

8.17 2.4mm Locked Distal Radius Volar Plate, Extra-articular Right, (Head with 5 Holes)

Shaft Holes	Titanium
3	**8.17.TI01**
5	**8.17.TI2.**

8.18 2.4mm Locked Distal Radius Volar Plate, Extra-articular Left, (Head with 4 Holes)

Shaft Holes	Titanium
3	**8.18.TI01**
5	**8.18.TI2.**

8.19 2.4mm Locked Distal Radius Volar Plate, Extra-articular, Right, (Head with 4 Holes)

Shaft Holes	Titanium
3	**8.19.TI01**
5	**8.19.TI2.**

8.20 2.4mm Locked Distal Radius Volar Plate, Extra-Long (Head with 4 Holes) Extra-articular

Shaft Holes	Titanium
8	**8.20.TI01**
10	**8.20.TI2.**
12	**8.20.TI03**

8.21 2.4mm Locked Volar Buttress Plate, (Head with 5 Holes) Juxta-articular

Shaft Holes	Type	Titanium
3	Left	**8.21.TI01L**
5	Right	**8.21.TI2.R**

GEOORTHO Distal Radius System 2.4mm

8.26 Drill Bit - Quick Coupling End

Codes	Dia (mm)	Length (mm)
8.26.01	1.8	110
8.26.2.	2.4	100
8.26.03	2.0	100
8.26.04	2.7	100

8.27 Tap

Codes	Dia (mm)
8.27.01	2.4mm Screws
8.27.2.	2.7mm Screws

8.28 Double Drill Guide

Codes	Dia (mm)
8.28.01	2.4/1.8
8.28.2.	2.7/2.0

8.29 Threaded Drill Guide 2.4, for Drill Bit Ø 1.8mm

8.30 T-Handle Quick Coupling

8.31 Hexagonal Screw Driver with Holding Sleeve-2.0mm Tip

8.32 Torque Screw Driver - 2.0mm, 0.8Nm

8.33 Depth Gauge

Codes	Description
8.33.01	2.0 and 2.4mm Screws
8.33.2.	2.7mm Screws

GEOORTHO Distal Radius System 2.4mm

8.34 Sharp Hook

8.35 Bending Pliers (Pair)

8.36 Reduction Forceps with Points

8.37 Reduction Forceps, Serrated Jaw

8.38 Periosteal Elevator with Fiber Handle

8.39 Hofmann Retractor, Small 6mm

8.40 Kirschner Wire Trocar Tip at Both End Ø1.8mm x 150mm

Locked Plate System

GEOORTHO - Small Fragment

8.42, 8.43 2.7/3.5mm Locked Dorsolateral Distal Humerus Plate

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
3	**8.42.SS01L**	**8.42.TI01L**	**8.43.SS01R**	**8.43.TI01R**
5	**8.42.SS2.L**	**8.42.TI2.L**	**8.43.SS2.R**	**8.43.TI2.R**
7	**8.42.SS03L**	**8.42.TI03L**	**8.43.SS03R**	**8.43.TI03R**
9	**8.42.SS04L**	**8.42.TI04L**	**8.43.SS04R**	**8.43.TI04R**
14	**8.42.SS05L**	**8.42.TI05L**	**8.43.SS05R**	**8.43.TI05R**

8.44, 8.45 2.7/3.5mm Locked Dorsolateral Distal Humerus Plate, with Lateral Support

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
3	**8.44.SS01L**	**8.44.TI01L**	**8.45.SS01R**	**8.45.TI01R**
5	**8.44.SS2.L**	**8.44.TI2.L**	**8.45.SS2.R**	**8.45.TI2.R**
7	**8.44.SS03L**	**8.44.TI03L**	**8.45.SS03R**	**8.45.TI03R**
9	**8.44.SS04L**	**8.44.TI04L**	**8.45.SS04R**	**8.45.TI04R**
14	**8.44.SS05L**	**8.44.TI05L**	**8.45.SS05R**	**8.45.TI05R**

8.46, 8.47 2.7/3.5mm Locked Medial Distal Humerus Plate

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
3	**8.46.SS01L**	**8.46.TI01L**	**8.47.SS01R**	**8.47.TI01R**
5	**8.46.SS2.L**	**8.46.TI2.L**	**8.47.SS2.R**	**8.47.TI2.R**
7	**8.46.SS03L**	**8.46.TI03L**	**8.47.SS03R**	**8.47.TI03R**
9	**8.46.SS04L**	**8.46.TI04L**	**8.47.SS04R**	**8.47.TI04R**
14	**8.46.SS05L**	**8.46.TI05L**	**8.47.SS05R**	**8.47.TI05R**

8.48, 8.49 3.5mm Locked Olecranon Plate

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
2	**8.48.SS01L**	**8.48.TI01L**	**8.49.SS01R**	**8.49.TI01R**
4	**8.48.SS2.L**	**8.48.TI2.L**	**8.49.SS2.R**	**8.49.TI2.R**
6	**8.48.SS03L**	**8.48.TI03L**	**8.49.SS03R**	**8.49.TI03R**
8	**8.48.SS04L**	**8.48.TI04L**	**8.49.SS04R**	**8.49.TI04R**
10	**8.48.SS05L**	**8.48.TI05L**	**8.49.SS05R**	**8.49.TI05R**
12	**8.48.SS06L**	**8.48.TI06L**	**8.49.SS06R**	**8.49.TI06R**

8.50, 8.51 2.7/3.5mm Locked Medial Distal Tibia Plate

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
4	**8.50.SS01L**	**8.50.TI01L**	**8.51.SS01R**	**8.51.TI01R**
6	**8.50.SS2.L**	**8.50.TI2.L**	**8.51.SS2.R**	**8.51.TI2.R**
8	**8.50.SS03L**	**8.50.TI03L**	**8.51.SS03R**	**8.51.TI03R**
10	**8.50.SS04L**	**8.50.TI04L**	**8.51.SS04R**	**8.51.TI04R**
12	**8.50.SS05L**	**8.50.TI05L**	**8.51.SS05R**	**8.51.TI05R**
14	**8.50.SS06L**	**8.50.TI06L**	**8.51.SS06R**	**8.51.TI06R**

INFO@GEOORTHO.GE

GEOORTHO - Philos

8.52 Philos - 3.5mm Locked Proximal Humerus Plate

Holes	Stainless Steel	Titanium
3	**8.52.SS01**	**8.52.TI01**
4	**8.52.SS2.**	**8.52.TI2.**
5	**8.52.SS03**	**8.52.TI03**

8.53 Philos - 3.5mm Locked Proximal Humerus Plate, Long

Holes	Stainless Steel	Titanium
5	**8.53.SS01**	**8.53.TI01**
6	**8.53.SS2.**	**8.53.TI2.**
8	**8.53.SS03**	**8.53.TI03**
10	**8.53.SS04**	**8.53.TI04**
12	**8.53.SS05**	**8.53.TI05**

Philos Instruments

8.54 Philos Aiming Device

8.55 Centering Sleeve, for Philos Aiming Device

8.56 Drill Sleeve, for Philos Aiming Device

8.57 Centering Sleeve, for Kirschner Wire Ø 1.6mm

8.58 Philos Direct Measuring Device

8.59 Kirschner Wire Ø 1.6mm x 300mm with Trocar Tip

8.60 Philos Instruments Set

Codes	Set Consisting of:	Units
8.54	**Philos Aiming Device**	1
8.55	**Centering Sleeve, for Philos Aiming Device**	1
8.56	**Drill Sleeve, for Philos Aiming Device**	1
8.57	**Centering Sleeve, for Kirschner Wire Ø 1.6mm**	1
8.58	**Philos Direct Measuring Device**	1
8.59	**Kirschner Wire Ø 1.6mm x 300mm with Trocar Tip**	5
8.60.01	**Aluminum Box for Philos Instruments Set**	1

Locked Plate System

GEOORTHO - Small Fragment

8.61 3.5mmLocked Small Dynamic Compression Plate with LC under cuts

Holes	Stainless Steel	Titanium
5	**8.61.SS01**	**8.61.TI01**
6	**8.61.SS2.**	**8.61.TI2.**
7	**8.61.SS03**	**8.61.TI03**
8	**8.61.SS04**	**8.61.TI04**
9	**8.61.SS05**	**8.61.TI05**
10	**8.61.SS06**	**8.61.TI06**
11	**8.61.SS07**	**8.61.TI07**
12	**8.61.SS08**	**8.61.TI08**

8.62 3.5mm Locked Proximal Humerus Plate

Holes	Stainless Steel	Titanium
5	**8.62.SS01**	**8.62.TI01**
6	**8.62.SS2.**	**8.62.TI2.**
7	**8.62.SS03**	**8.62.TI03**
8	**8.62.SS04**	**8.62.TI04**

8.63 3.5mm Locked Small 'T' Plate Right Angled

Holes	Stainless Steel	Titanium
3	**8.63.SS01**	**8.63.TI01**
4	**8.63.SS2.**	**8.63.TI2.**
5	**8.63.SS03**	**8.63.TI03**
6	**8.63.SS04**	**8.63.TI04**

8.64 3.5mm Locked Small 'T' Plate, Right Angled (4 Head Holes)

Holes	Stainless Steel	Titanium
3	**8.64.SS01**	**8.64.TI01**
4	**8.64.SS2.**	**8.64.TI2.**
5	**8.64.SS03**	**8.64.TI03**
6	**8.64.SS04**	**8.64.TI04**

8.65, 8.66 3.5mm Locked Small 'T' Plate, Oblique Angled

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
3	**8.65.SS01L**	**8.65.TI01L**	**8.66.SS01R**	**8.66.TI01R**
4	**8.65.SS2.L**	**8.65.TI2.L**	**8.66.SS2.R**	**8.66.TI2.R**
5	**8.65.SS03L**	**8.65.TI03L**	**8.66.SS03R**	**8.66.TI03R**
6	**8.65.SS04L**	**8.65.TI04L**	**8.66.SS04R**	**8.66.TI04R**

GEOORTHO - Small Fragment

8.67, 8.68 3.5mm Locked Proximal Tibia Plate

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
4	**8.67.SS01L**	**8.67.TI01L**	**8.68.SS01R**	**8.68.TI01R**
6	**8.67.SS2.L**	**8.67.TI2.L**	**8.68.SS2.R**	**8.68.TI2.R**
8	**8.67.SS03L**	**8.67.TI03L**	**8.68.SS03R**	**8.68.TI03R**
10	**8.67.SS04L**	**8.67.TI04L**	**8.68.SS04R**	**8.68.TI04R**
12	**8.67.SS05L**	**8.67.TI05L**	**8.68.SS05R**	**8.68.TI05R**
14	**8.67.SS06L**	**8.67.TI06L**	**8.68.SS06R**	**8.68.TI06R**
16	**8.67.SS07L**	**8.67.TI07L**	**8.68.SS07R**	**8.68.TI07R**

8.69 3.5mm Locked Anterolateral Distal Tibia Plates, Left

Holes	Stainless Steel	Titanium
5	**8.69.SS01**	**8.69.TI01**
7	**8.69.SS2.**	**8.69.TI2.**
9	**8.69.SS03**	**8.69.TI03**
11	**8.69.SS04**	**8.69.TI04**
13	**8.69.SS05**	**8.69.TI05**
15	**8.69.SS06**	**8.69.TI06**
17	**8.69.SS07**	**8.69.TI07**
19	**8.69.SS08**	**8.69.TI08**
21	**8.69.SS09**	**8.69.TI09**

8.70 3.5mm Locked Anterolateral Distal Tibia Plates, Right

Holes	Stainless Steel	Titanium
5	**8.70.SS01**	**8.70.TI01**
7	**8.70.SS2.**	**8.70.TI2.**
9	**8.70.SS03**	**8.70.TI03**
11	**8.70.SS04**	**8.70.TI04**
13	**8.70.SS05**	**8.70.TI05**
15	**8.70.SS06**	**8.70.TI06**
17	**8.70.SS07**	**8.70.TI07**
19	**8.70.SS08**	**8.70.TI08**
21	**8.70.SS09**	**8.70.TI09**

8.71.L 3.5mm Locked Medial Distal Tibia Plate, Without Tab, Left

Holes	Stainless Steel	Titanium
4	**8.71.SS01L**	**8.71.TI01L**
6	**8.71.SS2.L**	**8.71.TI2.L**
8	**8.71.SS03L**	**8.71.TI03L**
10	**8.71.SS04L**	**8.71.TI04L**
12	**8.71.SS05L**	**8.71.TI05L**
14	**8.71.SS06L**	**8.71.TI06L**

8.71.R 3.5mm Locked Medial Distal Tibia Plate, Without Tab, Right

Holes	Stainless Steel	Titanium
4	**8.71.SS01R**	**8.71.TI01R**
6	**8.71.SS2.R**	**8.71.TI2.R**
8	**8.71.SS03R**	**8.71.TI03R**
10	**8.71.SS04R**	**8.71.TI04R**
12	**8.71.SS05R**	**8.71.TI05R**
14	**8.71.SS06R**	**8.71.TI06R**

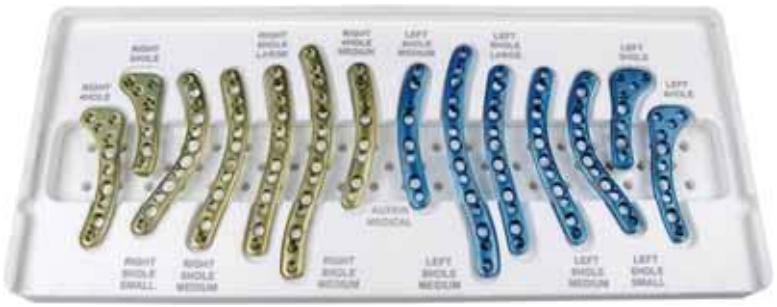
Locked Plate System

Clavicula GEOORTHO System

8.72,8.73 3.5mm Locked Clavicle Hook Plate

		Left Direction		Right Direction	
Holes	Hook Depth	Stainless Steel	Titanium	Stainless Steel	Titanium
4	12 mm	**8.72.SS01L**	**8.72.TI01L**	**8.73.SS01R**	**8.73.TI01R**
4	15 mm	**8.72.SS2.L**	**8.72.TI2.L**	**8.73.SS2.R**	**8.73.TI2.R**
4	18 mm	**8.72.SS03L**	**8.72.TI03L**	**8.73.SS03R**	**8.73.TI03R**
5	12 mm	**8.72.SS04L**	**8.72.TI04L**	**8.73.SS04R**	**8.73.TI04R**
5	15 mm	**8.72.SS05L**	**8.72.TI05L**	**8.73.SS05R**	**8.73.TI05R**
5	18 mm	**8.72.SS06L**	**8.72.TI06L**	**8.73.SS06R**	**8.73.TI06R**
6	12 mm	**8.72.SS07L**	**8.72.TI07L**	**8.73.SS07R**	**8.73.TI07R**
6	15 mm	**8.72.SS08L**	**8.72.TI08L**	**8.73.SS08R**	**8.73.TI08R**
6	18 mm	**8.72.SS09L**	**8.72.TI09L**	**8.73.SS09R**	**8.73.TI09R**
7	12 mm	**8.72.SS10L**	**8.72.TI10L**	**8.73.SS10R**	**8.73.TI10R**
7	15 mm	**8.72.SS11L**	**8.72.TI11L**	**8.73.SS11R**	**8.73.TI11R**
7	18 mm	**8.72.SS12L**	**8.72.TI12L**	**8.73.SS12R**	**8.73.TI12R**

8.74,8.75 S-Clavicle System



Characteristics:
Clavicle Locking Plate was developed for internal fixation in the fractures treatments and non-unions of the clavicle. The plate offers a variety of lengths and curvatures to better accommodate in the anatomy of the clavicle; it is not necessary to shape, which increases efficiency and product safety. The holes in the plate can use both cortical compression screws and Locking screws, promoting angular stability able to resist the angular efforts of the clavicle.

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
3	**8.74.SS01L**	**8.74.TI01L**	**8.75.SS01R**	**8.75.TI01R**
4	**8.74.SS2.L**	**8.74.TI2.L**	**8.75.SS2.R**	**8.75.TI2.R**
4 Medium	**8.74.SS03L**	**8.74.TI03L**	**8.75.SS03R**	**8.75.TI03R**
6 Small	**8.74.SS04L**	**8.74.TI04L**	**8.75.SS04R**	**8.75.TI04R**
6 Medium	**8.74.SS05L**	**8.74.TI05L**	**8.75.SS05R**	**8.75.TI05R**
6 Large	**8.74.SS06L**	**8.74.TI06L**	**8.75.SS06R**	**8.75.TI06R**
8 Medium	**8.74.SS07L**	**8.74.TI07L**	**8.75.SS07R**	**8.75.TI07R**

Indications:
- Fractures or bad consolidation of the lateral clavicle
- Lateral clavicle fractures associated with shaft fractures
- Fractures or bad consolidation of the axis of the clavicle
- Pseudarthrosis of the clavicle fractures

GEOORTHO - Small Fragment

8.76,8.77 3.5mm Locked Metaphyseal Plate For Distal Medial Tibia

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
4 + 4	**8.76.SS01L**	**8.76.TI01L**	**8.77.SS01R**	**8.77.TI01R**
4 + 5	**8.76.SS2.L**	**8.76.TI2.L**	**8.77.SS2.R**	**8.77.TI2.R**
4 + 6	**8.76.SS03L**	**8.76.TI03L**	**8.77.SS03R**	**8.77.TI03R**
4 + 7	**8.76.SS04L**	**8.76.TI04L**	**8.77.SS04R**	**8.77.TI04R**
4 + 8	**8.76.SS05L**	**8.76.TI05L**	**8.77.SS05R**	**8.77.TI05R**
4 + 9	**8.76.SS06L**	**8.76.TI06L**	**8.77.SS06R**	**8.77.TI06R**
4 + 10	**8.76.SS07L**	**8.76.TI07L**	**8.77.SS07R**	**8.77.TI07R**
4 + 12	**8.76.SS08L**	**8.76.TI08L**	**8.77.SS08R**	**8.77.TI08R**
4 + 14	**8.76.SS09L**	**8.76.TI09L**	**8.77.SS09R**	**8.77.TI09R**
4 + 16	**8.76.SS10L**	**8.76.TI10L**	**8.77.SS10R**	**8.77.TI10R**
4 + 18	**8.76.SS11L**	**8.76.TI11L**	**8.77.SS11R**	**8.77.TI11R**
4 + 20	**8.76.SS12L**	**8.76.TI12L**	**8.77.SS12R**	**8.77.TI12R**

8.78 3.5mm Locked Reconstruction Plate

Holes	Stainless Steel	Titanium
5	**8.78.SS01**	**8.78.TI01**
6	**8.78.SS2.**	**8.78.TI2.**
7	**8.78.SS03**	**8.78.TI03**
8	**8.78.SS04**	**8.78.TI04**
9	**8.78.SS05**	**8.78.TI05**
10	**8.78.SS06**	**8.78.TI06**
11	**8.78.SS07**	**8.78.TI07**
12	**8.78.SS08**	**8.78.TI08**
14	**8.78.SS09**	**8.78.TI09**
16	**8.78.SS10**	**8.78.TI10**
18	**8.78.SS11**	**8.78.TI11**
20	**8.78.SS12**	**8.78.TI12**
22	**8.78.SS13**	**8.78.TI13**

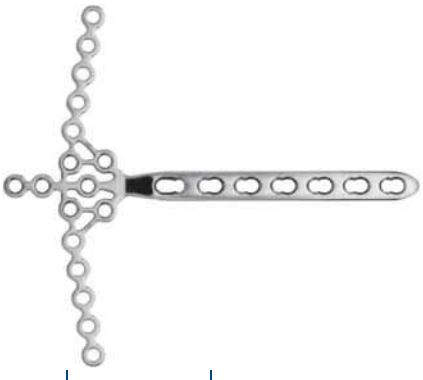
8.79 3.5mm Locked Calcaneal Plate

Direction	Length (mm)	Stainless Steel	Titanium
Left	69	**8.79.SS01**	**8.79.TI01**
Left	76	**8.79.SS2.**	**8.79.TI2.**
Right	69	**8.79.SS03**	**8.79.TI03**
Right	76	**8.79.SS04**	**8.79.TI04**

8.80 3.5mm Locked Pilon Plate, Cruciform

Holes	Stainless Steel	Titanium
7	**8.80.SS01**	**8.80.TI01**
9	**8.80.SS2.**	**8.80.TI2.**

8.81 3.5mm Locked Pilon Plate



Holes	Stainless Steel	Titanium
7	**8.81.SS01**	**8.81.TI01**
9	**8.81.SS2.**	**8.81.TI2.**

GEOORTHO - Small Fragment

8.82 3.5mm Locked Cloverleaf Plate

Holes	Stainless Steel	Titanium
3	8.82.SS01	8.82.TI01
4	8.82.SS2.	8.82.TI2.
5	8.82.SS03	8.82.TI03
6	8.82.SS04	8.82.TI04

8.83 3.5mm Locked Metaphysical Plate for Distal Medial Humerus

Holes	Stainless Steel	Titanium
7	8.83.SS01	8.83.TI01
9	8.83.SS2.	8.83.TI2.
11	8.83.SS03	8.83.TI03
13	8.83.SS04	8.83.TI04
15	8.83.SS05	8.83.TI05

8.84 3.5mm Locked Metaphysical Plate

Holes	Stainless Steel	Titanium
6	8.84.SS01	8.84.TI01
7	8.84.SS2.	8.84.TI2.
8	8.84.SS03	8.84.TI03
9	8.84.SS04	8.84.TI04
10	8.84.SS05	8.84.TI05
11	8.84.SS06	8.84.TI06
12	8.84.SS07	8.84.TI07
14	8.84.SS08	8.84.TI08
16	8.84.SS09	8.84.TI09
18	8.84.SS10	8.84.TI10

8.85 3.5/4.5mm Locked Metaphysical Plate

Holes	Stainless Steel	Titanium
3/5	8.85.SS01	8.85.TI01
4/5	8.85.SS2.	8.85.TI2.
5/5	8.85.SS03	8.85.TI03
6/5	8.85.SS04	8.85.TI04
7/5	8.85.SS05	8.85.TI05
8/5	8.85.SS06	8.85.TI06
9/5	8.85.SS07	8.85.TI07
11/5	8.85.SS08	8.85.TI08
13/5	8.85.SS09	8.85.TI09
15/5	8.85.SS10	8.85.TI10

8.86 Ø 2.7mm Locked Screw, Self Tapping

Length (mm)	Stainless Steel	Titanium
10	8.86.SS01	8.86.TI01
12	8.86.SS2.	8.86.TI2.
14	8.86.SS03	8.86.TI03
16	8.86.SS04	8.86.TI04
18	8.86.SS05	8.86.TI05
20	8.86.SS06	8.86.TI06
22	8.86.SS07	8.86.TI07
24	8.86.SS08	8.86.TI08
26	8.86.SS09	8.86.TI09
28	8.86.SS10	8.86.TI10
30	8.86.SS11	8.86.TI11
32	8.86.SS12	8.86.TI12
34	8.86.SS13	8.86.TI13
36	8.86.SS14	8.86.TI14
38	8.86.SS15	8.86.TI15
40	8.86.SS16	8.86.TI16
42	8.86.SS17	8.86.TI17
44	8.86.SS18	8.86.TI18
46	8.86.SS19	8.86.TI19
48	8.86.SS20	8.86.TI20
50	8.86.SS21	8.86.TI21
52	8.86.SS22	8.86.TI22
54	8.86.SS23	8.86.TI23
56	8.86.SS24	8.86.TI24
58	8.86.SS25	8.86.TI25
60	8.86.SS26	8.86.TI26

info@geoortho.ge

GEOORTHO - Small Fragment

8.87 Ø 3.5mm Locked Screw, Self Tapping

Length (mm)	Stainless Steel	Titanium
10	8.87.SS01	8.87.TI01
12	8.87.SS2.	8.87.TI2.
14	8.87.SS03	8.87.TI03
16	8.87.SS04	8.87.TI04
18	8.87.SS05	8.87.TI05
20	8.87.SS06	8.87.TI06
22	8.87.SS07	8.87.TI07
24	8.87.SS08	8.87.TI08
26	8.87.SS09	8.87.TI09
28	8.87.SS10	8.87.TI10
30	8.87.SS11	8.87.TI11
32	8.87.SS12	8.87.TI12
34	8.87.SS13	8.87.TI13
36	8.87.SS14	8.87.TI14
38	8.87.SS15	8.87.TI15
40	8.87.SS16	8.87.TI16
42	8.87.SS17	8.87.TI17
44	8.87.SS18	8.87.TI18
46	8.87.SS19	8.87.TI19
48	8.87.SS20	8.87.TI20
50	8.87.SS21	8.87.TI21
52	8.87.SS22	8.87.TI22
54	8.87.SS23	8.87.TI23
56	8.87.SS24	8.87.TI24
58	8.87.SS25	8.87.TI25
60	8.87.SS26	8.87.TI26

8.88 Ø 3.5mm Locked Screw, Self Drilling

Length (mm)	Stainless Steel	Titanium
10	8.88.SS01	8.88.TI01
12	8.88.SS2.	8.88.TI2.
14	8.88.SS03	8.88.TI03
16	8.88.SS04	8.88.TI04
18	8.88.SS05	8.88.TI05
20	8.88.SS06	8.88.TI06
22	8.88.SS07	8.88.TI07
24	8.88.SS08	8.88.TI08
26	8.88.SS09	8.88.TI09
28	8.88.SS10	8.88.TI10
30	8.88.SS11	8.88.TI11
32	8.88.SS12	8.88.TI12
34	8.88.SS13	8.88.TI13
36	8.88.SS14	8.88.TI14
38	8.88.SS15	8.88.TI15
40	8.88.SS16	8.88.TI16
42	8.88.SS17	8.88.TI17
44	8.88.SS18	8.88.TI18
46	8.88.SS19	8.88.TI19
48	8.88.SS20	8.88.TI20
50	8.88.SS21	8.88.TI21
52	8.88.SS22	8.88.TI22
54	8.88.SS23	8.88.TI23
56	8.88.SS24	8.88.TI24
58	8.88.SS25	8.88.TI25
60	8.88.SS26	8.88.TI26

GEOORTHO - Small Fragment

8.90 Drill Bit - Quick Coupling End

Codes	Dia (mm)	Length (mm)
8.90.01	2.5	115
8.90.2.	3.5	130

8.91 Tap

Codes	Dia (mm)
8.91.01	3.5mm Cortical Screws
8.91.2.	4.0mm Cancellous Screws

8.92 Drill Bit Ø 2.8mm x 165mm, with Stopper, Quick Coupling

8.93 Drill Sleeve Insert 3.5/2.5

8.94 Countersink, for Ø 3.5/4.0mm Screws, Quick Coupling

8.95 T-Handle, Quick Coupling Tip

8.96 Universal Drill Guide 3.5

8.97 Drill Guide 3.5, for Neutral and Loaded Position

GEOORTHO Locked Plate System

GEOORTHO - Small Fragment

8.98 Double Drill Guide 3.5/2.5

8.99 Threaded Drill Guide 3.5, for Drill Bit Ø 2.8mm

8.100 Hexagonal Screw Driver Shaft - 2.5mm Tip, Quick Coupling

8.101 Hexagonal Screw Driver with Holding Sleeve 2.5mm Tip

8.012. Torque Screw Driver - 2.5mm Tip, 1.5Nm

8.103 Depth Gauge, measuring range upto 60mm

8.104 Allen Key for Dill Bit Stopper

8.105 Bending Iron

GEOORTHO - Small Fragment

8.106 Sharp Hook

8.107 Reduction Forceps, Serrated Jaws, Ratchet Lock -140mm

8.108 Reduction Forceps, Pointed, Ratchet Lock 140mm

8.109 Self Centering Bone Holding Forceps Speed Lock 190mm

8.110 Guide Sleeve for Ø 1.2mm K. Wires

8.111 Screw Driver, Self Retaining (for Screw Removal)

8.112 Extraction Screw, 3.5

8.113 Trephine

GEOORTHO Locked Plate System

GEOORTHO - Small Fragment

8.114 HSS Drill Bit 2.5, Metal

8.115 Guide Wire Ø 1.2mm x 280mm, with Threaded Trocar Tip

8.116 Instrument Set for Small Fragment Locked Plate System

	Set Consisting of:	Units
8.90.01	Drill Bit Ø 2.5mm x 115mm, Quick Coupling	1
8.90.01	Drill Bit Ø 3.5mm x 130mm, Quick Coupling	1
8.92	Drill Bit Ø 2.8mm x 165mm, with Stopper, Quick Coupling	2
8.91.01	Tap for Ø 3.5mm Cortical Screws, Quick Coupling	1
8.91.01	Tap for Ø 4.0mm Cancellous Screws, Quick Coupling	1
8.93	Drill Sleeve Insert 3.5/2.5	1
8.94	Countersink, for Ø 3.5/4.0mm Screws, Quick Coupling	1
8.95	T-Handle, Quick Coupling	1
8.96	Universal Drill Guide 3.5	1
8.97	Drill Guide 3.5, for Neutral and Loaded Position	1
8.98	Double Drill Guide 3.5/2.5	1
8.99	Threaded Drill Guide 3.5, for Drill Bit Ø 2.8mm	3
8.100	Hexagonal Screw Driver Shaft - 2.5mm Tip, Quick Coupling	1
8.101	Hexagonal Screw Driver with Holding Sleeve - 2.5mm Tip	1
8.012.	Torque Screw Driver - 2.5mm Tip, 1.5Nm	1
8.103	Depth Gauge, measuring range upto 60mm	1
8.104	Allen Key for Dill Bit Stopper	1
8.105	Bending Iron	1 Pair
8.106	Sharp Hook	1
8.107	Reduction Forceps, Serrated Jaws, Ratchet Lock -140mm	1
8.108	Reduction Forceps, Pointed, Ratchet Lock -140mm	1
8.109	Self Centering Bone Holding Forceps, Speed Lock-190mm	2
8.110	Guide Sleeve for Ø 1.2mm K. Wires	1
8.111	Screw Driver, Self Retaining (for Screw Removal)	1
8.112	Extraction Screw, 3.5	1
8.113	Trephine	1
8.114	HSS Drill Bit 2.5, Metal	1
8.115	Guide Wire Ø 1.2mm x 280mm, with Threaded Trocar Tip	5
8.116.01	Aluminum Box for Small Fragment Locked System	1

Indications

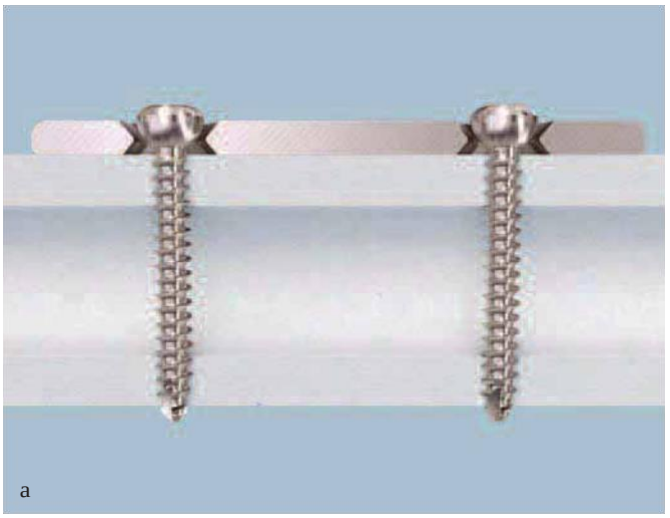
GEOORTHO solutions Small Fragment Locking Plate System are intended for fixation of fractures, osteotomies and nonunions of the clavicle, scapula, olecranon, humerus, radius, ulna, pelvis, distal tibia, and fibula, particularly in osteopenic bone.

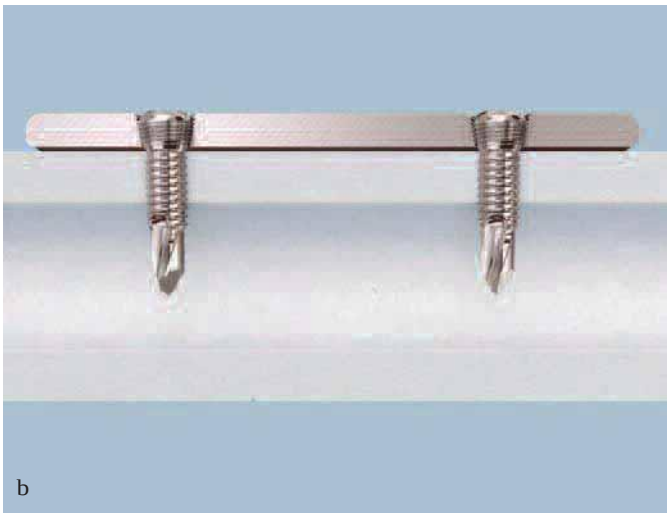
Fixation Principles

The following points distinguish treatment using locking screw technology from conventional plating techniques:

- It enables fracture treatment using compression plating with conventional cortex or cancellous bone screws
- An Locking Compression Plate (LCP) plate can also be used as an internal fixator and permits stable bridging over shattered zones
- The LCP system permits the combination of conventional and locking screws
- Unicortical locking screw permits better vascularity

Note: The LCP system applies to many different plate types and is therefore suitable for a large number of fracture types. For that reason, this technique guide does not deal with any specific fracture type.


a


b

Unicortical screw fixation

Bicortical screw fixation has long been the traditional method of compressing a plate to the bone where friction between the plate and the bone maintains stability. Screw stability and load transfer are accomplished at two points along the screw: the near and far cortices.

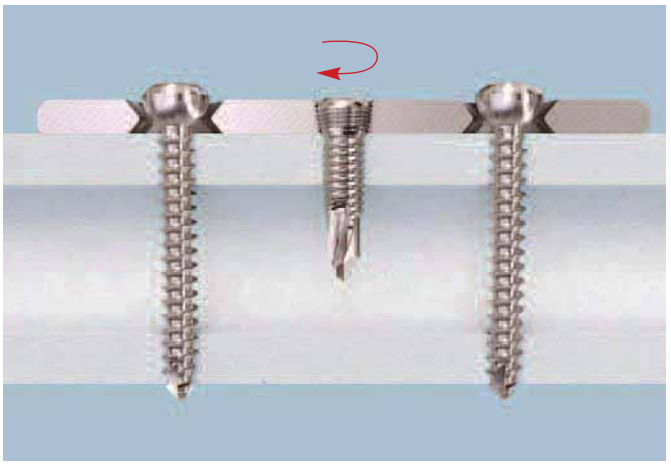
Unicortical locking screws provide stability and load transfer only at the near cortex due to the threaded connection between the plate and the screw. Screw stability and load transfer are accomplished at two points along the screw: the screwhead and near cortex. Because the screw is locked to the plate, fixation does not rely solely on the pullout strength of the screw or on maintaining friction between the plate and the bone.

a. Bicortical screws require two (2) cortices to achieve stability.
b. Unicortical screws utilize the locked screw and the near cortex to achieve stability.

Fixation Principles

Combined internal fixation

The combination of conventional compression plating and locked plating techniques enhances plate. The result is a combination hole or Combi hole that, depending on the indication, allows standard compression plating, locked/ bridge plating or a combination of both.

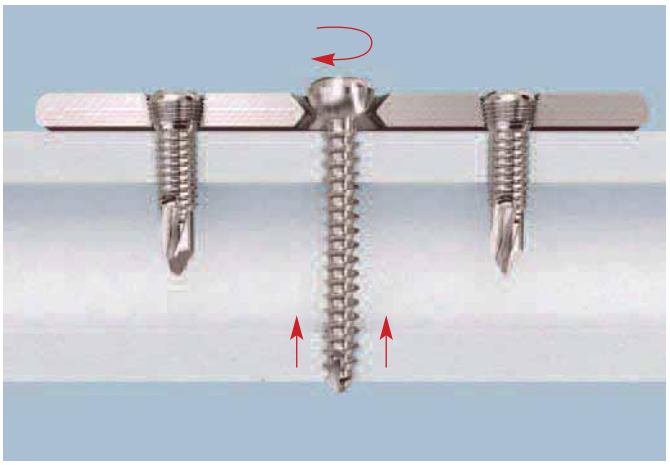


Internal fixation using a combination of locking screws and standard screws

Note: If a combination of cortex and locking screws is used, a cortex screw should be inserted first to pull the plate to the bone.

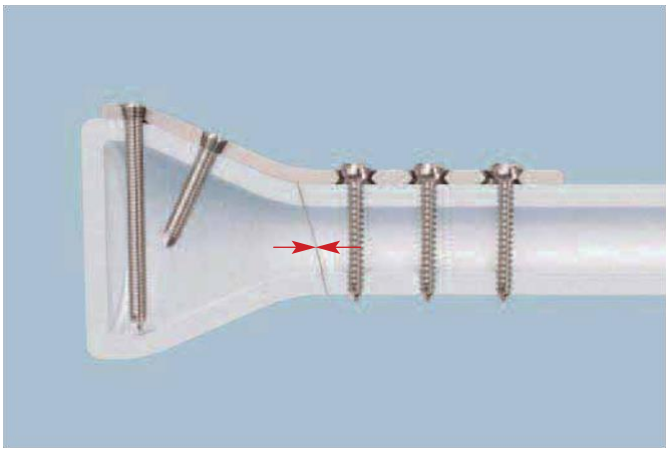
If locking screws (1) have been used to fix a plate to a fragment, subsequent insertion of a standard screw (2) in the same fragment without loosening and retightening the locking screw is NOT RECOMMENDED.

Note: If a locking screw is used first, care should be taken to ensure that the plate is held securely to the bone to avoid spinning of the plate about the bone.



Locked and standard plating techniques

- First, use lag screws to anatomically reconstruct the joint surfaces
- The behavior of a locking screw is not the same as that of a lag screw. With the locked plating technique, the implant locks the bone segments in their relative positions regardless of how they are reduced
- A plate used as a locked/bridge plate does not produce any additional compression between the plate and the bone
- The unicortical insertion of a locking screw causes no loss of stability



Preparation

Contouring

Use the bending instruments to contour the locking compression plate to the anatomy.

Notes: The plate holes have been designed to accept some degree of deformation. When bending the plate, place the bending irons on two consecutive holes. This ensures that the threaded holes will not be distorted. Significant distortion of the locking holes will reduce locking effectiveness.

Reduction and temporary plate placement

A threaded plate holder can also be used as an aid to position the plate on the bone. The plate holder may also function as an insertion handle for use with minimally invasive plating techniques.

Screw insertion

Screw insertion

Determine whether standard 3.5 mm cortex screws, 4.0 mm cancellous screws or 3.5 mm locking screws will be used for fixation. A combination of all may be used.

Important: 2.7 mm cortex screws can only be used in the round holes of the right-angle T-plates, oblique T-plates, and one-third tubular plates.

Note: If a combination of cortex, cancellous and locking screws is used, a standard screw should be used first to pull the plate to the bone.

Warning: If a locking screw is used first, care should be taken to ensure that the plate is held securely to the bone to avoid spinning of the plate about the bone.

Screw insertion

Screw Insertion

Instrument

3.5 mm Universal Drill Guide

Insertion of a cortex or cancellous bone screw
Use the 3.5 mm universal drill guide for an eccentric (compression) or neutral (buttress) insertion of cortex screws.

Note: The 3.5 mm LC-DCP drill guide and the 3.5 mm DCP drill guide are NOT suitable for use with LCP plates.

Neutral insertion of a standard screw
When pressing the universal drill guide into the DCU portion of the LCP plate, it will center itself and allow neutral predrilling.

Dynamic compression, eccentric insertion of a cortex screw
To drill a hole for dynamic compression, place the universal drill guide eccentrically at the edge of the DCU portion of the LCP plate hole, without applying pressure. Tightening of the cortex screws will result in dynamic compression corresponding to that of the LC-DCP.


Neutral position


Dynamic compression

Screw insertion

Instruments

2.8 mm Drill Bit

2.8 mm Threaded Drill Guide

Depth Gauge

Insertion of 3.5 mm locking screws

Reminder: The locking screw is not a lag screw. Use standard screws when requiring a precise anatomical reduction (e.g., joint surfaces) or interfragmentary compression. Before inserting the first locking screw, perform anatomical reduction and fix the fracture with lag screws, if necessary. After the insertion of locking screws, an anatomical reduction will no longer be possible without loosening the locking screw.

Screw the 2.8 mm threaded drill guide into an LCP plate hole until fully seated (Figure 1).

Note: Since the direction of a locking screw is determined by plate design, final screw position may be verified with a K-wire prior to insertion. This becomes especially important when the plate has been contoured or applied in metaphyseal regions around joint surfaces.

Warning: Do not try to bend the plate using the threaded drill guide because damage may occur to the plate hole threads.

Use the 2.8 mm drill bit to drill the desired depth (Figure 2).

Remove the threaded drill guide and use the depth gauge to determine screw length (Figure 3).

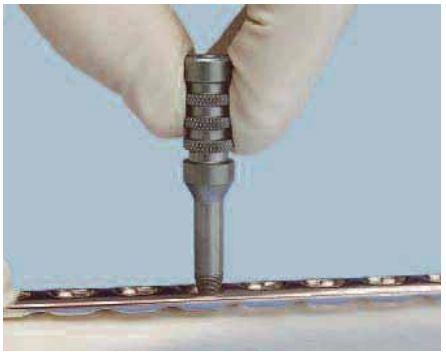


Figure 1

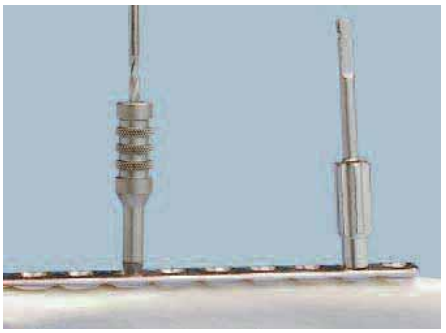


Figure 2

Figure 3

Screw insertion

Screw Insertion

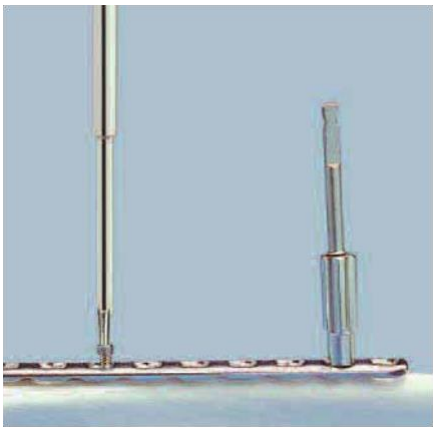
Insert the locking screw under power using a torque limiting attachment and StarDrive screwdriver shaft.

Note: Recheck each locking screw before closing to verify that the screws are securely locked to the plate. Screwheads must be flush with the plate in the locked position before they can be considered fully seated.

Warning: Always use a torque limiting attachment (TLA) when using power to insert locking screws.

Incorrect

Alternative method of locking screw insertion
Use the StarDrive screwdriver to manually insert the appropriate length locking screw. Carefully tighten the locking screw, as excessive force is not necessary to produce effective screw-to-plate locking.



GEOORTHO Locked Plate System

GEOORTHO - Large Fragment

8.117 4.5/5.0mm Locked Narrow Dynamic Compression Plate with LC under cuts

Holes	Stainless Steel	Titanium
2	8.117.SS01	8.117.TI01
3	8.117.SS2.	8.117.TI2.
4	8.117.SS03	8.117.TI03
5	8.117.SS04	8.117.TI04
6	8.117.SS05	8.117.TI05
7	8.117.SS06	8.117.TI06
8	8.117.SS07	8.117.TI07
9	8.117.SS08	8.117.TI08
10	8.117.SS09	8.117.TI09
11	8.117.SS10	8.117.TI10
12	8.117.SS11	8.117.TI11
14	8.117.SS12	8.117.TI12
16	8.117.SS13	8.117.TI13
18	8.117.SS14	8.117.TI14
20	8.117.SS15	8.117.TI15
22	8.117.SS16	8.117.TI16
24	8.117.SS17	8.117.TI17

8.118 4.5/5.0mm Locked Broad Dynamic Compression Plate with LC under cuts

Holes	Stainless Steel	Titanium
5	8.118.SS01	8.118.TI01
6	8.118.SS2.	8.118.TI2.
7	8.118.SS03	8.118.TI03
8	8.118.SS04	8.118.TI04
9	8.118.SS05	8.118.TI05
10	8.118.SS06	8.118.TI06
11	8.118.SS07	8.118.TI07
12	8.118.SS08	8.118.TI08
13	8.118.SS09	8.118.TI09
14	8.118.SS10	8.118.TI10
15	8.118.SS11	8.118.TI11
16	8.118.SS12	8.118.TI12
18	8.118.SS13	8.118.TI13
20	8.118.SS14	8.118.TI14
22	8.118.SS15	8.118.TI15
24	8.118.SS16	8.118.TI16

8.119 4.5/5.0mm Locked Curved Broad Plate

Holes	Stainless Steel	Titanium
12	8.119.SS01	8.119.TI01
13	8.119.SS2.	8.119.TI2.
14	8.119.SS03	8.119.TI03
15	8.119.SS04	8.119.TI04
16	8.119.SS05	8.119.TI05
17	8.119.SS06	8.119.TI06
18	8.119.SS07	8.119.TI07

8.120 4.5/5.0mm Locked Reconstruction Plate

Holes	Stainless Steel	Titanium
3	8.120.SS01	8.120.TI01
4	8.120.SS2.	8.120.TI2.
5	8.120.SS03	8.120.TI03
6	8.120.SS04	8.120.TI04
7	8.120.SS05	8.120.TI05
8	8.120.SS06	8.120.TI06
9	8.120.SS07	8.120.TI07
10	8.120.SS08	8.120.TI08
11	8.120.SS09	8.120.TI09
12	8.120.SS10	8.120.TI10
13	8.120.SS11	8.120.TI11
14	8.120.SS12	8.120.TI12
15	8.120.SS13	8.120.TI13
16	8.120.SS14	8.120.TI14

8.121, 8.122 4.5/5.0mm Locked 'L' Buttress Plate

	Right Leg		Left Leg	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
3	8.121.SS01R	8.121.TI01R	8.122.SS01L	8.122.TI01L
4	8.121.SS2.R	8.121.TI2.R	8.122.SS2.L	8.122.TI2.L
5	8.121.SS03R	8.121.TI03R	8.122.SS03L	8.122.TI03L
6	8.121.SS04R	8.121.TI04R	8.122.SS04L	8.122.TI04L
7	8.121.SS05R	8.121.TI05R	8.122.SS05L	8.122.TI05L
8	8.121.SS06R	8.121.TI06R	8.122.SS06L	8.122.TI06L
9	8.121.SS07R	8.121.TI07R	8.122.SS07L	8.122.TI07L
10	8.121.SS08R	8.121.TI08R	8.122.SS08L	8.122.TI08L

Locked Plate System

GEOORTHO - Large Fragment

8.123, 8.124 4.5/5.0mm Locked Distal Femur Plate

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
5	**8.123.SS01L**	**8.123.TI01L**	**8.124.SS01R**	**8.124.TI01R**
6	**8.123.SS2.L**	**8.123.TI2.L**	**8.124.SS2.R**	**8.124.TI2.R**
7	**8.123.SS03L**	**8.123.TI03L**	**8.124.SS03R**	**8.124.TI03R**
8	**8.123.SS04L**	**8.123.TI04L**	**8.124.SS04R**	**8.124.TI04R**
9	**8.123.SS05L**	**8.123.TI05L**	**8.124.SS05R**	**8.124.TI05R**
10	**8.123.SS06L**	**8.123.TI06L**	**8.124.SS06R**	**8.124.TI06R**
11	**8.123.SS07L**	**8.123.TI07L**	**8.124.SS07R**	**8.124.TI07R**
12	**8.123.SS08L**	**8.123.TI08L**	**8.124.SS08R**	**8.124.TI08R**
13	**8.123.SS09L**	**8.123.TI09L**	**8.124.SS09R**	**8.124.TI09R**
15	**8.123.SS10L**	**8.123.TI10L**	**8.124.SS10R**	**8.124.TI10R**

8.125, 8.126 4.5/5.0mm Locked Proximal Lateral Tibial Plate

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
5	**8.125.SS01L**	**8.125.TI01L**	**8.126.SS01R**	**8.126.TI01R**
7	**8.125.SS2.L**	**8.125.TI2.L**	**8.126.SS2.R**	**8.126.TI2.R**
9	**8.125.SS2.L**	**8.125.TI03L**	**8.126.SS03R**	**8.126.TI03R**
11	**8.125.SS04L**	**8.125.TI04L**	**8.126.SS04R**	**8.126.TI04R**
13	**8.125.SS05L**	**8.125.TI05L**	**8.126.SS05R**	**8.126.TI05R**

8.127 4.5/5.0mm Locked 'T' Buttress Plates

Holes	Stainless Steel	Titanium
4	**8.127.SS01**	**8.127.TI01**
5	**8.127.SS2.**	**8.127.TI2.**
6	**8.127.SS03**	**8.127.TI03**
7	**8.127.SS04**	**8.127.TI04**
8	**8.127.SS05**	**8.127.TI05**
9	**8.127.SS06**	**8.127.TI06**
10	**8.127.SS07**	**8.127.TI07**
12	**8.127.SS08**	**8.127.TI08**

8.128 4.5/5.0mm Locked 'T' Plate

Holes	Stainless Steel	Titanium
3	**8.128.SS01**	**8.128.TI01**
4	**8.128.SS2.**	**8.128.TI2.**
5	**8.128.SS03**	**8.128.TI03**
6	**8.128.SS04**	**8.128.TI04**
7	**8.128.SS05**	**8.128.TI05**
8	**8.128.SS06**	**8.128.TI06**
9	**8.128.SS07**	**8.128.TI07**
10	**8.128.SS08**	**8.128.TI08**
12	**8.128.SS09**	**8.128.TI09**

GEOORTHO Locked Plate System

GEOORTHO - Large Fragment

8.129, 8.130 4.5/5.0mm Locked Proximal Femoral Plate

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
2	**8.129.SS01L**	**8.129.TI01L**	**8.130.SS01R**	**8.130.TI01R**
4	**8.129.SS2.L**	**8.129.TI2.L**	**8.130.SS2.R**	**8.130.TI2.R**
6	**8.129.SS03L**	**8.129.TI03L**	**8.130.SS03R**	**8.130.TI03R**
8	**8.129.SS04L**	**8.129.TI04L**	**8.130.SS04R**	**8.130.TI04R**
10	**8.129.SS05L**	**8.129.TI05L**	**8.130.SS05R**	**8.130.TI05R**
12	**8.129.SS06L**	**8.129.TI06L**	**8.130.SS06R**	**8.130.TI06R**
14	**8.129.SS07L**	**8.129.TI07L**	**8.130.SS07R**	**8.130.TI07R**
16	**8.129.SS08L**	**8.129.TI08L**	**8.130.SS08R**	**8.130.TI08R**

8.131, 8.132 4.5/5.0mm Locked Condylar Femoral Plates

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
7	**8.131.SS01L**	**8.131.TI01L**	**8.132.SS01R**	**8.132.TI01R**
9	**8.131.SS2.L**	**8.131.TI2.L**	**8.132.SS2.R**	**8.132.TI2.R**
11	**8.131.SS03L**	**8.131.TI03L**	**8.132.SS03R**	**8.132.TI03R**
12	**8.131.SS04L**	**8.131.TI04L**	**8.132.SS04R**	**8.132.TI04R**
13	**8.131.SS05L**	**8.131.TI05L**	**8.132.SS05R**	**8.132.TI05R**
15	**8.131.SS06L**	**8.131.TI06L**	**8.132.SS06R**	**8.132.TI06R**

8.133 Ø 5.0mm Locked Screw - Self Tapping

Length (mm)	Stainless Steel	Titanium
12	**8.133.SS01**	**8.133.TI01**
14	**8.133.SS2.**	**8.133.TI2.**
16	**8.133.SS03**	**8.133.TI03**
18	**8.133.SS04**	**8.133.TI04**
20	**8.133.SS05**	**8.133.TI05**
22	**8.133.SS06**	**8.133.TI06**
24	**8.133.SS07**	**8.133.TI07**
26	**8.133.SS08**	**8.133.TI08**
28	**8.133.SS09**	**8.133.TI09**
30	**8.133.SS10**	**8.133.TI10**
32	**8.133.SS11**	**8.133.TI11**
34	**8.133.SS12**	**8.133.TI12**
36	**8.133.SS13**	**8.133.TI13**
38	**8.133.SS14**	**8.133.TI14**
40	**8.133.SS15**	**8.133.TI15**
42	**8.133.SS16**	**8.133.TI16**
44	**8.133.SS17**	**8.133.TI17**
46	**8.133.SS18**	**8.133.TI18**
48	**8.133.SS19**	**8.133.TI19**
50	**8.133.SS20**	**8.133.TI20**
55	**8.133.SS21**	**8.133.TI21**
60	**8.133.SS22**	**8.133.TI22**
65	**8.133.SS23**	**8.133.TI23**
70	**8.133.SS24**	**8.133.TI24**
75	**8.133.SS25**	**8.133.TI25**
80	**8.133.SS26**	**8.133.TI26**
85	**8.133.SS27**	**8.133.TI27**
90	**8.133.SS28**	**8.133.TI28**

Locked Plate System

GEOORTHO - Large Fragment

8.134 Ø 5.0mm Locked Screw - Self Drilling

Length (mm)	Stainless Steel	Titanium
12	**8.134.SS01**	**8.134.TI01**
14	**8.134.SS2.**	**8.134.TI2.**
16	**8.134.SS03**	**8.134.TI03**
18	**8.134.SS04**	**8.134.TI04**
20	**8.134.SS05**	**8.134.TI05**
22	**8.134.SS06**	**8.134.TI06**
24	**8.134.SS07**	**8.134.TI07**
26	**8.134.SS08**	**8.134.TI08**
28	**8.134.SS09**	**8.134.TI09**
30	**8.134.SS10**	**8.134.TI10**
32	**8.134.SS11**	**8.134.TI11**
34	**8.134.SS12**	**8.134.TI12**
36	**8.134.SS13**	**8.134.TI13**
38	**8.134.SS14**	**8.134.TI14**
40	**8.134.SS15**	**8.134.TI15**
42	**8.134.SS16**	**8.134.TI16**
44	**8.134.SS17**	**8.134.TI17**
46	**8.134.SS18**	**8.134.TI18**
48	**8.134.SS19**	**8.134.TI19**
50	**8.134.SS20**	**8.134.TI20**
55	**8.134.SS21**	**8.134.TI21**
60	**8.134.SS22**	**8.134.TI22**
65	**8.134.SS23**	**8.134.TI23**
70	**8.134.SS24**	**8.134.TI24**
75	**8.134.SS25**	**8.134.TI25**
80	**8.134.SS26**	**8.134.TI26**
85	**8.134.SS27**	**8.134.TI27**
90	**8.134.SS28**	**8.134.TI28**

8.135 Ø 4.0mm Locked Cannulated Screw - Self Tapping

Length (mm)	Stainless Steel	Titanium
20	**8.135.SS01**	**8.135.TI01**
25	**8.135.SS2.**	**8.135.TI2.**
30	**8.135.SS03**	**8.135.TI03**
35	**8.135.SS04**	**8.135.TI04**
40	**8.135.SS05**	**8.135.TI05**
45	**8.135.SS06**	**8.135.TI06**
50	**8.135.SS07**	**8.135.TI07**
55	**8.135.SS08**	**8.135.TI08**
60	**8.135.SS09**	**8.135.TI09**
65	**8.135.SS10**	**8.135.TI10**
70	**8.135.SS11**	**8.135.TI11**
75	**8.135.SS12**	**8.135.TI12**
80	**8.135.SS13**	**8.135.TI13**
85	**8.135.SS14**	**8.135.TI14**
90	**8.135.SS15**	**8.135.TI15**
95	**8.135.SS16**	**8.135.TI16**
100	**8.135.SS17**	**8.135.TI17**
105	**8.135.SS18**	**8.135.TI18**
110	**8.135.SS19**	**8.135.TI19**
115	**8.135.SS20**	**8.135.TI20**
120	**8.135.SS21**	**8.135.TI21**

GEOORTHO Locked Plate System

GEOORTHO - Large Fragment

8.136 Ø 5.0mm Locked Cannulated Screw - Self Tapping, Full Thread

Length (mm)	Stainless Steel	Titanium
20	**8.136.SS01**	**8.136.TI01**
25	**8.136.SS2.**	**8.136.TI2.**
30	**8.136.SS03**	**8.136.TI03**
35	**8.136.SS04**	**8.136.TI04**
40	**8.136.SS05**	**8.136.TI05**
45	**8.136.SS06**	**8.136.TI06**
50	**8.136.SS07**	**8.136.TI07**
55	**8.136.SS08**	**8.136.TI08**
60	**8.136.SS09**	**8.136.TI09**
65	**8.136.SS10**	**8.136.TI10**
70	**8.136.SS11**	**8.136.TI11**
75	**8.136.SS12**	**8.136.TI12**
80	**8.136.SS13**	**8.136.TI13**
85	**8.136.SS14**	**8.136.TI14**
90	**8.136.SS15**	**8.136.TI15**
95	**8.136.SS16**	**8.136.TI16**
100	**8.136.SS17**	**8.136.TI17**
105	**8.136.SS18**	**8.136.TI18**
110	**8.136.SS19**	**8.136.TI19**
115	**8.136.SS20**	**8.136.TI20**
120	**8.136.SS21**	**8.136.TI21**

8.137 Ø 5.0mm Cannulated Conical Screw - Self Tapping, Partial Thread

Length (mm)	Stainless Steel	Titanium
20	**8.137.SS01**	**8.137.TI01**
25	**8.137.SS2.**	**8.137.TI2.**
30	**8.137.SS03**	**8.137.TI03**
35	**8.137.SS04**	**8.137.TI04**
40	**8.137.SS05**	**8.137.TI05**
45	**8.137.SS06**	**8.137.TI06**
50	**8.137.SS07**	**8.137.TI07**
55	**8.137.SS08**	**8.137.TI08**
60	**8.137.SS09**	**8.137.TI09**
65	**8.137.SS10**	**8.137.TI10**
70	**8.137.SS11**	**8.137.TI11**
75	**8.137.SS12**	**8.137.TI12**
80	**8.137.SS13**	**8.137.TI13**
85	**8.137.SS14**	**8.137.TI14**
90	**8.137.SS15**	**8.137.TI15**
95	**8.137.SS16**	**8.137.TI16**
100	**8.137.SS17**	**8.137.TI17**
105	**8.137.SS18**	**8.137.TI18**
110	**8.137.SS19**	**8.137.TI19**
115	**8.137.SS20**	**8.137.TI20**
120	**8.137.SS21**	**8.137.TI21**

Locked Plate System

GEOORTHO - Large Fragment

8.138 Ø 7.3mm Locked Cannulated Screw - Self Tapping, Partial Thread

Length (mm)	Stainless Steel	Titanium
20	**8.138.SS01**	**8.138.TI01**
25	**8.138.SS2.**	**8.138.TI2.**
30	**8.138.SS03**	**8.138.TI03**
35	**8.138.SS04**	**8.138.TI04**
40	**8.138.SS05**	**8.138.TI05**
45	**8.138.SS06**	**8.138.TI06**
50	**8.138.SS07**	**8.138.TI07**
55	**8.138.SS08**	**8.138.TI08**
60	**8.138.SS09**	**8.138.TI09**
65	**8.138.SS10**	**8.138.TI10**
70	**8.138.SS11**	**8.138.TI11**
75	**8.138.SS12**	**8.138.TI12**
80	**8.138.SS13**	**8.138.TI13**
85	**8.138.SS14**	**8.138.TI14**
90	**8.138.SS15**	**8.138.TI15**
95	**8.138.SS16**	**8.138.TI16**
100	**8.138.SS17**	**8.138.TI17**
105	**8.138.SS18**	**8.138.TI18**
110	**8.138.SS19**	**8.138.TI19**
115	**8.138.SS20**	**8.138.TI20**
120	**8.138.SS21**	**8.138.TI21**

8.139 Ø 7.3mm Locked Cannulated Screw - Self Tapping, Full Thread

Length (mm)	Stainless Steel	Titanium
20	**8.139.SS01**	**8.139.TI01**
25	**8.139.SS2.**	**8.139.TI2.**
30	**8.139.SS03**	**8.139.TI03**
35	**8.139.SS04**	**8.139.TI04**
40	**8.139.SS05**	**8.139.TI05**
45	**8.139.SS06**	**8.139.TI06**
50	**8.139.SS07**	**8.139.TI07**
55	**8.139.SS08**	**8.139.TI08**
60	**8.139.SS09**	**8.139.TI09**
65	**8.139.SS10**	**8.139.TI10**
70	**8.139.SS11**	**8.139.TI11**
75	**8.139.SS12**	**8.139.TI12**
80	**8.139.SS13**	**8.139.TI13**
85	**8.139.SS14**	**8.139.TI14**
90	**8.139.SS15**	**8.139.TI15**
95	**8.139.SS16**	**8.139.TI16**
100	**8.139.SS17**	**8.139.TI17**
105	**8.139.SS18**	**8.139.TI18**
110	**8.139.SS19**	**8.139.TI19**
115	**8.139.SS20**	**8.139.TI20**
120	**8.139.SS21**	**8.139.TI21**

GEOORTHO Locked Plate System

GEOORTHO - Large Fragment

8.140 Ø 7.3mm Cannulated Conical Screw - Self Tapping, Partial Thread

Length (mm)	Stainless Steel	Titanium
20	**8.140.SS01**	**8.140.TI01**
25	**8.140.SS2.**	**8.140.TI2.**
30	**8.140.SS03**	**8.140.TI03**
35	**8.140.SS04**	**8.140.TI04**
40	**8.140.SS05**	**8.140.TI05**
45	**8.140.SS06**	**8.140.TI06**
50	**8.140.SS07**	**8.140.TI07**
55	**8.140.SS08**	**8.140.TI08**
60	**8.140.SS09**	**8.140.TI09**
65	**8.140.SS10**	**8.140.TI10**
70	**8.140.SS11**	**8.140.TI11**
75	**8.140.SS12**	**8.140.TI12**
80	**8.140.SS13**	**8.140.TI13**
85	**8.140.SS14**	**8.140.TI14**
90	**8.140.SS15**	**8.140.TI15**
95	**8.140.SS16**	**8.140.TI16**
100	**8.140.SS17**	**8.140.TI17**
105	**8.140.SS18**	**8.140.TI18**
110	**8.140.SS19**	**8.140.TI19**
115	**8.140.SS20**	**8.140.TI20**
120	**8.140.SS21**	**8.140.TI21**

8.141 Ø 7.3mm Cannulated Conical Screw - Self Tapping, Full Thread

Length (mm)	Stainless Steel	Titanium
20	**8.141.SS01**	**8.141.TI01**
25	**8.141.SS2.**	**8.141.TI2.**
30	**8.141.SS03**	**8.141.TI03**
35	**8.141.SS04**	**8.141.TI04**
40	**8.141.SS05**	**8.141.TI05**
45	**8.141.SS06**	**8.141.TI06**
50	**8.141.SS07**	**8.141.TI07**
55	**8.141.SS08**	**8.141.TI08**
60	**8.141.SS09**	**8.141.TI09**
65	**8.141.SS10**	**8.141.TI10**
70	**8.141.SS11**	**8.141.TI11**
75	**8.141.SS12**	**8.141.TI12**
80	**8.141.SS13**	**8.141.TI13**
85	**8.141.SS14**	**8.141.TI14**
90	**8.141.SS15**	**8.141.TI15**
95	**8.141.SS16**	**8.141.TI16**
100	**8.141.SS17**	**8.141.TI17**
105	**8.141.SS18**	**8.141.TI18**
110	**8.141.SS19**	**8.141.TI19**
115	**8.141.SS20**	**8.141.TI20**
120	**8.141.SS21**	**8.141.TI21**

Locked Plate System

GEOORTHO - Large Fragment

8.142 Drill Bit - Quick Coupling End

Codes	Dia (mm)	Length (mm)
8.142.01	3.2	130
8.142.2.	4.5	130

8.143 Tap

Codes	Dia (mm)
8.143.01	4.5mm Cortical Screws
8.143.2.	6.5mm Cancellous Screws

8.144 Drill Bit Ø 4.3mm x 221mm, with Stopper, Quick Coupling

8.145 Double Drill Guide 4.5/3.2

8.146 Double Drill Guide 6.5/3.2

8.147 Drill Guide 4.5, for Neutral and Loaded Position

8.148 Countersink, for Ø 4.5/6.5mm Screws

8.149 T-Handle with Quick Coupling

8.150 Threaded Drill Guide 5.0, for Drill Bit Ø 4.3mm

8.151 Hexagonal Screw Driver Shaft - 3.5mm Tip, Quick Coupling

GEOORTHO - Large Fragment

8.152
Hexagonal Screw Driver with Holding Sleeve, 3.5mm Tip

8.153 Torque Screw Driver - 3.5mm Tip, 4Nm

8.154 Depth Gauge, measuring range upto 110mm

8.155 Allen Key for Dill Bit Stopper

8.156 Bending Iron

8.157 Reduction Forceps, Serrated, Speed Lock

8.158 Reduction Forceps, Pointed, Ratchet Lock

8.159 Self Centering Bone Holding Forceps

8.160 Guide Sleeve for Ø 2.0mm K. Wires

8.161 Screw Driver, Self Retaining (for Screw Removal)

Locked Plate System

GEOORTHO - Large Fragment

8.162 Extraction Screw, 5.0

8.163 Trephine

8.164 HSS Drill Bit 3.5, Metal

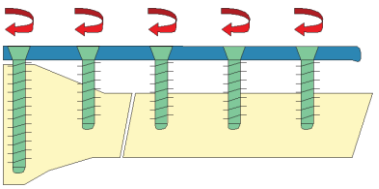
8.165 Guide Wire Ø 2.0mm x 280mm, with Threaded Tip

8.166 Instrument Set for Large Fragment Locked System

	Set Consisting of:	Units
8.142.01	Drill Bit Ø 3.2mm x 130mm Quick Coupling	1
8.142.2.	Drill Bit Ø 4.5mm x 130mm Quick Coupling	1
8.144	Drill Bit Ø 4.3mm x 221mm, with Stopper, Quick Coupling	2
8.143.01	Tap for Ø 4.5mm Cortical Screws, Quick Coupling	1
8.143.2.	Tap for Ø 6.5mm Cancellous Screws, Quick Coupling	1
8.145	Double Drill Guide 4.5/3.2	1
8.146	Double Drill Guide 6.5/3.2	1
8.147	Drill Guide 4.5, for Neutral and Loaded Position	1
8.148	Countersink, for Ø 4.5/6.5mm Screws	1
8.149	T-Handle with Quick Coupling	1
8.150	Threaded Drill Guide 5.0, for Drill Bit Ø 4.3mm	3
8.151	Hexagonal Screw Driver Shaft - 3.5mm Tip, Quick Coupling	1
8.152	Hexagonal Screw Driver with Holding Sleeve	1
8.153	Torque Screw Driver - 3.5mm Tip, 4Nm	1
8.154	Depth Gauge, measuring range upto 110mm	1
8.155	Allen Key for Dill Bit Stopper	1
8.156	Bending Iron	1 Pair
8.157	Reduction Forceps, Serrated, Ratchet Lock	1
8.158	Reduction Forceps, Pointed, Ratchet Lock	1
8.159	Self Centering Bone Holding Forceps	2
8.160	Guide Sleeve for Ø 2.0mm K. Wires	1
8.161	Screw Driver, Self Retaining (for Screw Removal)	1
8.162	Extraction Screw, 5.0	1
8.163	Trephine	1
8.164	HSS Drill Bit 3.5, Metal	1
8.165	Guide Wire Ø 2.0mm x 280mm, with Threaded Tip	5
8.166.01	Aluminum Box for Large Fragment Locked System.	1

Fixation Principles — Locked Plating

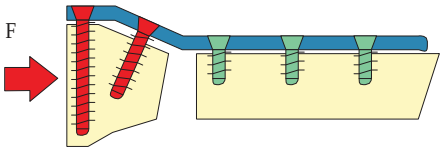
Screws lock to the plate, forming a fixed-angle construct.



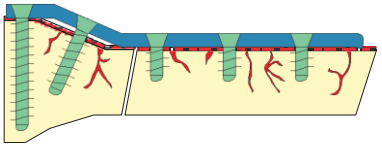
Maintenance of primary reduction
Once the locking screws engage the plate, no further tightening is possible. Therefore, the implant locks the bone segments in their relative positions regardless of degree of reduction.

Precontouring the plate minimizes the gap between the plate and the bone, but an exact fit is not necessary for implant stability. This feature is especially advantageous in minimally or less invasive plating techniques because these techniques do not allow exact contouring of the plate to the bone surface.

Stability under load
By locking the screws to the plate, the axial force is transmit-ted over the length of the plate. The risk of a secondary loss of reduction is reduced.



Blood supply to the bone
Locking the screw into the plate does not generate plate-to-bone compression. Therefore, the periosteum will be protected and the blood supply to the bone preserved.



Combining Conventional and Locked Plating Techniques- The Locking Compression Plate (LCP)

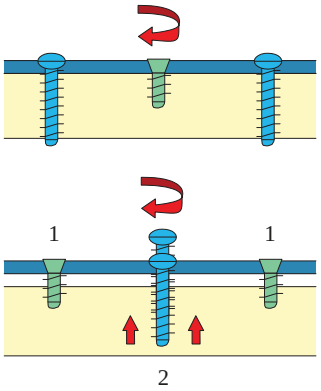
The combination of conventional compression plating and locked plating techniques enhances plate. The result is a Combi hole that, depending on the indication, allows conventional compression plating, locked plating, or a combination of both.

Internal fixation using a combination of locking screws and standard screws

Note: If a combination of cortex and locking screws is used, a cortex screw should be inserted first to pull the plate to the bone.

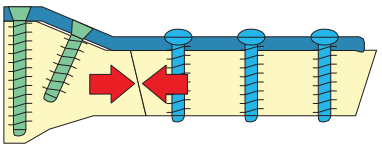
If locking screws (1) have been used to fix a plate to a fragment, subsequent insertion of a conventional screw (2) in the same fragment without loosening and retightening the locking screw is not recommended.

Note: If a locking screw is used first, care should be taken to ensure that the plate is held securely to the bone to avoid spinning of the plate about the bone.



Dynamic compression

In this example, once the metaphyseal fragment has been fixed with locking screws, the fracture can be dynamically compressed using a conventional screw in the DCU portion of the Combi hole.



Locked and conventional plating techniques

– Lag screws can be used to anatomically reduce the fracture and promote absolute stability.
– The behavior of a locking screw is not the same as that of a lag screw. With the locked plating technique, the implant locks the bone segments in their relative positions regardless of how they are reduced. Therefore, anatomical reduction must be achieved prior to implanting any locking screws.
– A plate used as a locked plate does not produce any additional compression between the plate and the bone.
– The uni cortical insertion of locking screws creates a construct that is at least as strong as a construct made with bicortical insertion of conventional screws.

Preparation and Reduction

Contouring

Use the current bending instruments to contour the locking compression plate to the anatomy.

Note: The plate holes have been designed to accept some degree of deformation. When bending the plate, place the bending irons on two consecutive holes. This ensures that the threaded holes will not be distorted. Significant distortion of the locking holes will reduce locking effectiveness.

Preparation and Reduction

Reduction and temporary plate placement

The threaded plate holder can be used as an aid to position the plate on the bone. The plate holder may also function as an insertion handle for use with minimally invasive plating techniques.

Screw Insertion

Screw insertion

Instrument

4.5 mm Universal Drill Guide

Determine whether conventional cortex screws, cancellous bone screws or locking screws will be used for fixation. A combination of all may be used.

Note: If a combination of cortex, cancellous and locking screws is used, a conventional screw should be used first to pull the plate to the bone.

Warning: If a locking screw is used first, care should be taken to ensure that the plate is held securely to the bone to avoid spinning of the plate about the bone as the locking screw is tightened to the plate.

Insertion of a cortex or cancellous bone screw

Use the 4.5 mm universal drill guide for an eccentric (compression) or neutral (buttress) insertion of cortex screws.

Note: NOT suitable for use with LCP plates.

Neutral insertion of a conventional screw

When pressing the universal drill guide into the Dynamic Compression Portion DCU portion of the Combi hole, it will center itself and allow neutral predrilling.

Dynamic compression, eccentric insertion of a cortex screw

To drill a hole for dynamic compression, place the universal drill guide eccentrically at the edge of the Dynamic Compression Portion portion of the Combi hole, without applying pressure. Tightening of the cortex screws will result in dynamic compression corresponding to that of LC-DCP plates.

Neutral position

Dynamic compression

Screw Insertion

Insertion of 4.0 mm and 5.0 mm locking screws

Reminder: The locking screw is not a lag screw. Use nonlocking screws when requiring a precise anatomical reduction (e.g., joint surfaces) or interfragmentary compression. Before inserting the first locking screw, perform anatomical reduction and fix the fracture with lag screws, if necessary. After the insertion of locking screws, an anatomical reduction will no longer be possible without loosening the locking screw.

Screw the appropriate threaded drill guide for 4.0 mm screws and for 5.0 mm screws into an LCP plate hole until fully seated (a). The use of a threaded drill guide is critical to ensure proper mating of the locking screw in the threaded portion of the Combi hole. The drill guide also has internal threads so guides can be assembled in series to increase length for percutaneous use.

Warning: Do not try to bend the plate using the threaded drill guide because damage may occur to the threads.

a

Screw Insertion

Screw insertion

Notes:
Since the direction of a locking screw is determined by plate design, final screw position may be verified with a guide wire before insertion. This is especially important when the plate has been contoured or applied in metaphyseal regions around joint surfaces.

The 5.0 mm cannulated locking screws and 5.0 mm cannulated conical screws for the locking periarticular plating system are compatible with the large fragment LCP plates.

Use the appropriate drill bit (3.2 mm for 4.0 mm screws and 4.3 mm for 5.0 mm screws) to drill to the desired depth (b).

Remove the drill guide.

Use the depth gauge to determine screw length (c).

Insert the locking screw under power using the torque limiting attachment and Star Drive screwdriver shaft (d).

The torque limiting attachment controls the tightening torque to 4 Nm.

- Ensures that enough torque is used to minimize the risk of the locking screw backing out of the plate
- Avoids locking the screw to the plate at full speed and minimizes the risk of cold-welding the screw to the plate
- DO NOT fully insert the locking screws by power without using the torque limiting attachment

Note: The screw is securely locked to the plate when a click is heard.

Warning: Locking screws may be partially inserted using power equipment alone. However, never use power equipment to seat the locking screws into the plate without a torque limiting attachment (TLA).

b

c

d

Alternative method

Screw Placement Verification

Screw placement verification

Since the direction of a locking screw is determined by plate design, final screw position may be verified with a guide wire prior to insertion. This becomes especially important when the plate has been contoured or applied in meta physeal regions around joint surfaces.

With the threaded drill guide in place, thread the 2.0 mm wire sleeve into the threaded drill guide until fully seated (a).

a

b

Insert a 2.0 mm non threaded guide wire through the wire sleeve to the desired depth (b).

Verify guide wire placement under image intensification to determine if final screw placement is acceptable (c).

Important: The guide wire position represents the final position of the locking screw. Confirm that the guide wire does not enter the joint.

c

Measurement may be taken by sliding the tapered end of the direct measuring device over the guide wire down to the wire sleeve (d).

Remove the direct measuring device, guide wire and wire sleeve, leaving the threaded drill guide intact.

Use the appropriate size drill bit to drill the near cortex. Removethe threaded drill guide. Insert the appropriate length locking screw.

d

Postoperative Treatment and Implant Removal

Postoperative treatment

Postoperative treatment with locking compression plates does not differ from conventional internal fixation procedures.

Implant removal

To remove locking screws, unlock all screws from the plate; then remove the screws completely from the bone. This prevents simultaneous rotation of the plate when removing the last locking screw.

GEOORTHO Locked Plate System

GEOORTHO - DHS & DCS

8.167 Locked DHS Plate

	Degrees					Short Barrel
Holes	130°	135°	140°	145°	150°	135°
2	**8.167.SS01**	**8.167.SS16**	**8.167.SS31**	**8.167.SS46**	**8.167.SS61**	**8.167.SS76**
3	**8.167.SS2.**	**8.167.SS17**	**8.167.SS32**	**8.167.SS47**	**8.167.SS62**	**8.167.SS77**
4	**8.167.SS03**	**8.167.SS18**	**8.167.SS33**	**8.167.SS48**	**8.167.SS63**	**8.167.SS78**
5	**8.167.SS04**	**8.167.SS19**	**8.167.SS34**	**8.167.SS49**	**8.167.SS64**	**8.167.SS79**
6	**8.167.SS05**	**8.167.SS20**	**8.167.SS35**	**8.167.SS50**	**8.167.SS65**	**8.167.SS80**
7	**8.167.SS06**	**8.167.SS21**	**8.167.SS36**	**8.167.SS51**	**8.167.SS66**	**8.167.SS81**
8	**8.167.SS07**	**8.167.SS22**	**8.167.SS37**	**8.167.SS52**	**8.167.SS67**	**8.167.SS82**
9	**8.167.SS08**	**8.167.SS23**	**8.167.SS38**	**8.167.SS53**	**8.167.SS68**	**8.167.SS83**
10	**8.167.SS09**	**8.167.SS24**	**8.167.SS39**	**8.167.SS54**	**8.167.SS69**	**8.167.SS84**
12	**8.167.SS10**	**8.167.SS25**	**8.167.SS40**	**8.167.SS55**	**8.167.SS70**	**8.167.SS85**
14	**8.167.SS11**	**8.167.SS26**	**8.167.SS41**	**8.167.SS56**	**8.167.SS71**	**8.167.SS86**
16	**8.167.SS12**	**8.167.SS27**	**8.167.SS42**	**8.167.SS57**	**8.167.SS72**	**8.167.SS87**
18	**8.167.SS13**	**8.167.SS28**	**8.167.SS43**	**8.167.SS58**	**8.167.S73**	**8.167.SS88**
20	**8.167.SS14**	**8.167.SS29**	**8.167.SS44**	**8.167.SS59**	**8.167.SS74**	**8.167.SS89**
22	**8.167.SS15**	**8.167.SS30**	**8.167.SS45**	**8.167.SS60**	**8.167.SS75**	**8.167.SS90**

	Degrees					Short Barrel
Holes	130°	135°	140°	145°	150°	135°
2	**8.167.TI01**	**8.167.TI16**	**8.167.TI31**	**8.167.TI46**	**8.167.TI61**	**8.167.TI76**
3	**8.167.TI2.**	**8.167.TI17**	**8.167.TI32**	**8.167.TI47**	**8.167.TI62**	**8.167.TI77**
4	**8.167.TI03**	**8.167.TI18**	**8.167.TI33**	**8.167.TI48**	**8.167.TI63**	**8.167.TI78**
5	**8.167.TI04**	**8.167.TI19**	**8.167.TI34**	**8.167.TI49**	**8.167.TI64**	**8.167.TI79**
6	**8.167.TI05**	**8.167.TI20**	**8.167.TI35**	**8.167.TI50**	**8.167.TI65**	**8.167.TI80**
7	**8.167.TI06**	**8.167.TI21**	**8.167.TI36**	**8.167.TI51**	**8.167.TI66**	**8.167.TI81**
8	**8.167.TI07**	**8.167.TI22**	**8.167.TI37**	**8.167.TI52**	**8.167.TI67**	**8.167.TI82**
9	**8.167.TI08**	**8.167.TI23**	**8.167.TI38**	**8.167.TI53**	**8.167.TI68**	**8.167.TI83**
10	**8.167.TI09**	**8.167.TI24**	**8.167.TI39**	**8.167.TI54**	**8.167.TI69**	**8.167.TI84**
12	**8.167.TI10**	**8.167.TI25**	**8.167.TI40**	**8.167.TI55**	**8.167.TI70**	**8.167.TI85**
14	**8.167.TI11**	**8.167.TI26**	**8.167.TI41**	**8.167.TI56**	**8.167.TI71**	**8.167.TI86**
16	**8.167.TI12**	**8.167.TI27**	**8.167.TI42**	**8.167.TI57**	**8.167.TI72**	**8.167.TI87**
18	**8.167.TI13**	**8.167.TI28**	**8.167.TI43**	**8.167.TI58**	**8.167.TI73**	**8.167.TI88**
20	**8.167.TI14**	**8.167.TI29**	**8.167.TI44**	**8.167.TI59**	**8.167.TI74**	**8.167.TI89**
22	**8.167.TI15**	**8.167.TI30**	**8.167.TI45**	**8.167.TI60**	**8.167.TI75**	**8.167.TI90**

GEOORTHO - DHS & DCS

8.168 Locked Trochanter Stabilizing Plate for DHS - Adjustable

Length (mm)	Stainless Steel	Titanium
130	**8.168.SS01**	**8.168.TI01**

8.169 95° Locked DCS Plate

Holes	Stainless Steel	Titanium
6	**8.169.SS01**	**8.169.TI01**
7	**8.169.SS2.**	**8.169.TI2.**
8	**8.169.SS03**	**8.169.TI03**
9	**8.169.SS04**	**8.169.TI04**
10	**8.169.SS05**	**8.169.TI05**
12	**8.169.SS06**	**8.169.TI06**
14	**8.169.SS07**	**8.169.TI07**
16	**8.169.SS08**	**8.169.TI08**
18	**8.169.SS09**	**8.169.TI09**
20	**8.169.SS10**	**8.169.TI10**
22	**8.169.SS11**	**8.169.TI11**

8.170 DHS/DCS Screw, Ø 012.5mm (with Compression Screw)

Length (mm)	Stainless Steel	Titanium
50	**8.170.SS01**	**8.170.TI01**
55	**8.170.SS2.**	**8.170.TI2.**
60	**8.170.SS03**	**8.170.TI03**
65	**8.170.SS04**	**8.170.TI04**
70	**8.170.SS05**	**8.170.TI05**
75	**8.170.SS06**	**8.170.TI06**
80	**8.170.SS07**	**8.170.TI07**
85	**8.170.SS08**	**8.170.TI08**
90	**8.170.SS09**	**8.170.TI09**
95	**8.170.SS10**	**8.170.TI10**
100	**8.170.SS11**	**8.170.TI11**
105	**8.170.SS12**	**8.170.TI12**
110	**8.170.SS13**	**8.170.TI13**
115	**8.170.SS14**	**8.170.TI14**
120	**8.170.SS15**	**8.170.TI15**
125	**8.170.SS16**	**8.170.TI16**
130	**8.170.SS17**	**8.170.TI17**
135	**8.170.SS18**	**8.170.TI18**
140	**8.170.SS19**	**8.170.TI19**
145	**8.170.SS20**	**8.170.TI20**

8.171 DHS Blade Ø 012.5mm

Length (mm)	Shaft (mm)	Blade (mm)	Titanium
65	45	20	**8.171.TI01**
70	50	20	**8.171.TI2.**
75	55	20	**8.171.TI03**
80	60	20	**8.171.TI04**
85	60	25	**8.171.TI05**
90	65	25	**8.171.TI06**
95	70	25	**8.171.TI07**
100	75	25	**8.171.TI08**
105	75	30	**8.171.TI09**
110	80	30	**8.171.TI10**
115	85	30	**8.171.TI11**
120	90	30	**8.171.TI12**
125	95	30	**8.171.TI13**
130	100	30	**8.171.TI14**
135	105	30	**8.171.TI15**
140	110	30	**8.171.TI16**
145	115	30	**8.171.TI17**

GEOORTHO - Blade

8.172 Insertion Instrument for DHS Blade

8.173 DHS Reamer

8.174 Coupling Screw for Insertion of DHS Blade

8.175 Torque Screw Driver, 1.5Nm

8.176 DHS/DCS Guide Wire 2.5 mm with Threaded tip with trocar, length 230 mm

8.177 Combined Hammer 500 g

8.178 Extraction Instrument for DHS Blade

8.179 Connecting Screw for Extraction of DHS Blade

8.180 Reamer for Extraction of DHS Blade

GEOORTHO - LISS System

Less Invasive Stabilization System

Distal Femur & Proximal Lateral Tibia Plates

8.181, 8.182 GEOORTHO Distal Femur Plate (LISS)

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
5	**8.181.SS01L**	**8.181.TI01L**	**8.182.SS01R**	**8.182.TI01R**
7	**8.181.SS2.L**	**8.181.TI2.L**	**8.182.SS2.R**	**8.182.TI2.R**
9	**8.181.SS03L**	**8.181.TI03L**	**8.182.SS03R**	**8.182.TI03R**
11	**8.181.SS04L**	**8.181.TI04L**	**8.182.SS04R**	**8.182.TI04R**
13	**8.181.SS05L**	**8.181.TI05L**	**8.182.SS05R**	**8.182.TI05R**

8.183, 8.184 GEOORTHO Proximal Lateral Tibial Plate (LESS)

	Left Direction		Right Direction	
Holes	Stainless Steel	Titanium	Stainless Steel	Titanium
5	**8.183.SS01L**	**8.183.TI01L**	**8.184.SS01R**	**8.184.TI01R**
7	**8.183.SS2.L**	**8.183.TI2.L**	**8.184.SS2.R**	**8.184.TI2.R**
9	**8.183.SS03L**	**8.183.TI03L**	**8.184.SS03R**	**8.184.TI03R**
11	**8.183.SS04L**	**8.183.TI04L**	**8.184.SS04R**	**8.184.TI04R**
13	**8.183.SS05L**	**8.183.TI05L**	**8.184.SS05R**	**8.184.TI05R**

GEOORTHO - LISS System

8.185 Drill Bit Ø4.3mm with Stopper, Quick Coupling

8.186 Drill Sleeve 4.3mm

8.187 Torque Screw Driver Ø3.5mm Tip

8.188 Screw Driver Shaft 3.5, Hexagonal

8.189 Stopper for LISS Insertion Guide

8.190 Drill Sleeve for LISS Insertion Guide

8.191 Trocar

8.192 Centering Sleeve for Krischner Wire

8.193 Pin Wrench Ø 4.5mm

8.194 Tension Device

8.195 Centering Sleeve for Krischner Wire, Long

8.196 Fixation Bolt for LISS Insertion Guide

GEOORTHO - LISS System

8.197 Stabilization Bolt for LISS Insertion Guide

8.198 Cleaning Instrument for LISS Screw Head

8.199 Aiming Device for Krischner Wire, for LISS Insertion Guide

8.200 X-Ray Calibrator

8.201 LISS Measuring Device for Krischner Wire Ø 2.0mm

8.22. Krischner Wire Ø 2.0mm x 300mm with Threaded Trocar Tip

8.203 LISS Insertion Guide for Proximal Lateral Tibia, RadGEOORTHOucent

Code	Type
8.23.01L	Left
8.23.2.R	Right

8.204 LISS Insertion Guide for Distal Femur, RadGEOORTHOucent

Code	Type
8.24.01L	Left
8.24.2.R	Right

GEOORTHO - LISS System

8.205 Instrument Set for Liss System

Codes	Set Consisting of:	Units
8.185	Drill Bit Ø4.3mm with Stopper, Quick Coupling	1
8.186	Drill Sleeve 4.3mm	1
8.187	Torque Screw Driver Ø 3.5mm Tip	1
8.188	Screw Driver Shaft 3.5, Hexagonal	1
8.189	Stopper for LISS Insertion Guide	10
8.190	Drill Sleeve for LISS Insertion Guide	2
8.191	Trocar	1
8.192	Centering Sleeve for Krischner Wire	1
8.193	Pin Wrench Ø 4.5mm	1
8.194	Tension Device	1
8.195	Centering Sleeve for Krischner Wire, Long	2
8.196	Fixation Bolt for LISS Insertion Guide	1
8.197	Stabilization Bolt for LISS Insertion Guide	1
8.198	Cleaning Instrument for LISS Screw Head	1
8.199	Aiming Device for Krischner Wire, for LISS Insertion Guide	1
8.200	X-Ray Calibrator	1
8.201	LISS Measuring Device for Krischner Wire Ø 2.0mm	1
8.22.	Krischner Wire Ø 2.0mm x 300mm with Threaded Trocar Tip	10
8.23.2.R	LISS Insertion Guide for Proximal Lateral Tibia, Right - RadGEOORTHOucent	1
8.23.01L	LISS Insertion Guide for Proximal Lateral Tibia, Left - RadGEOORTHOucent	1
8.24.2.R	LISS Insertion Guide for Distal Femur, Right - RadGEOORTHOucent	1
8.24.01L	LISS Insertion Guide for Distal Femur, Left - RadGEOORTHOucent	1
8.25.01	Aluminum Box for LISS System Instrument Set	1