

ARX ANKLE SYSTEM

Lateral Distal Fibula Plate



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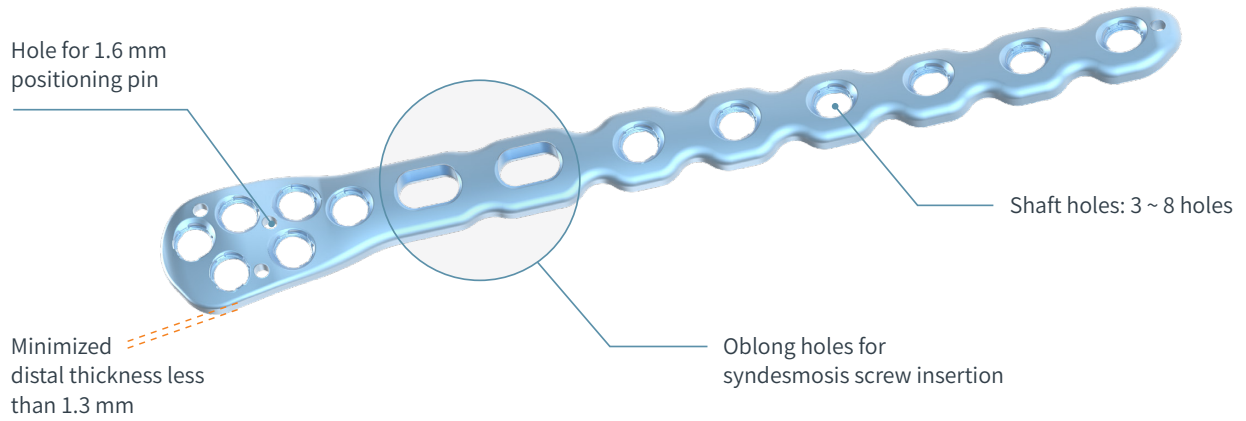
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ARIX Fibula Plate is indicated for the following conditions

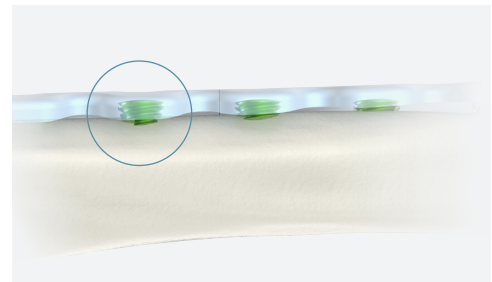
- AO-OTA 44 B (trans-syndesmotic) , C (supra-syndesmotic) lateral malleolar fractures
- Non-unions after lateral malleolar fracture fixation
- Stabilization of osteotomies of the metaphyseal and diaphyseal region of the distal fibula, especially in osteoporotic bone.

Lateral Distal Fibula Plate

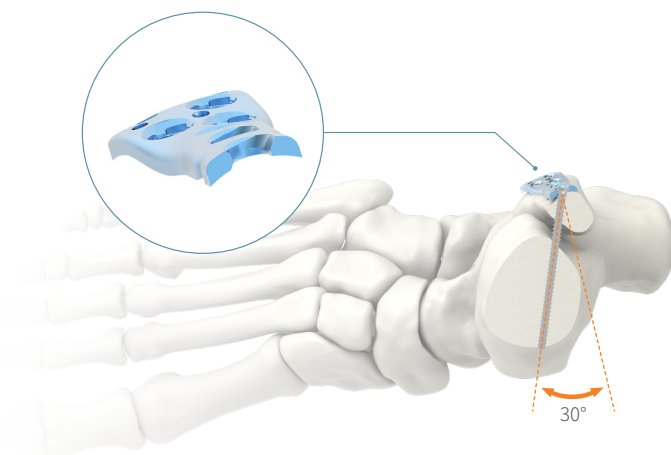


General Features

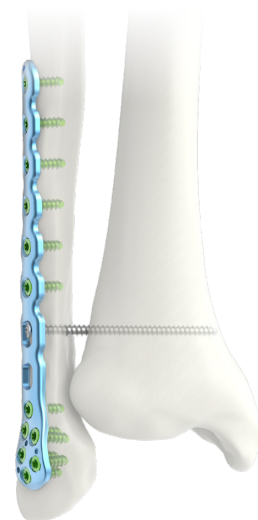
- Anatomically pre-contoured
- Low profile with 2.0 mm thickness
- No screw head overhang avoids irritation
- Four choices in screw types and sizes
 - Locking and cortical screws
 - 2.8 mm or 3.5 mm in screw diameter
- Variable locking up to $\pm 15^\circ$
- Plates length with 3 to 8 shaft screw holes



No screw head protrusion



Tapered screw hole enables surgeons to control appropriate trajectory for syndesmosis screw fixation

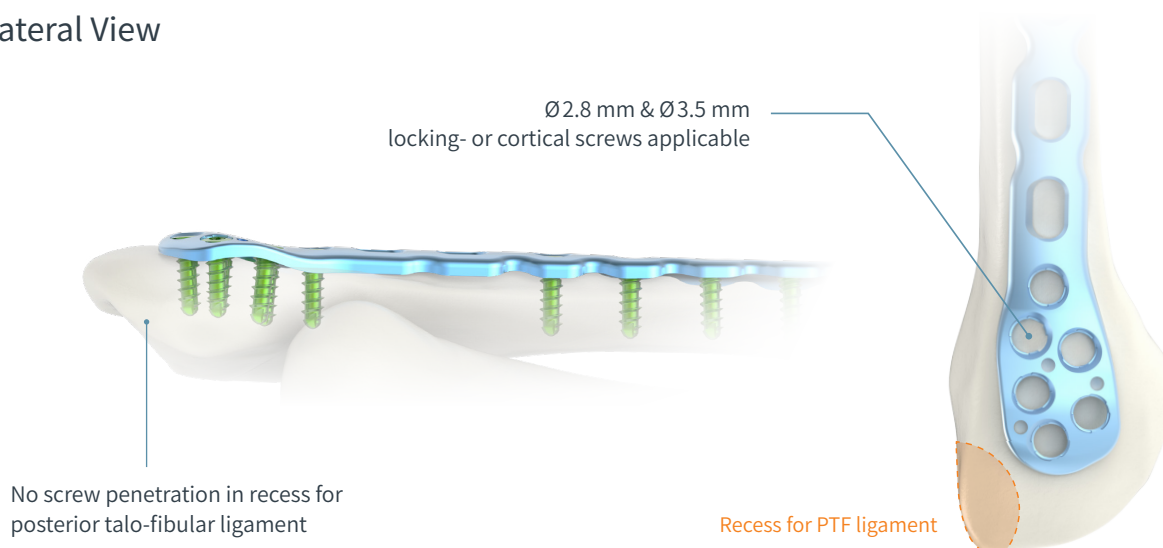


Lateral approach with syndesmosis screw

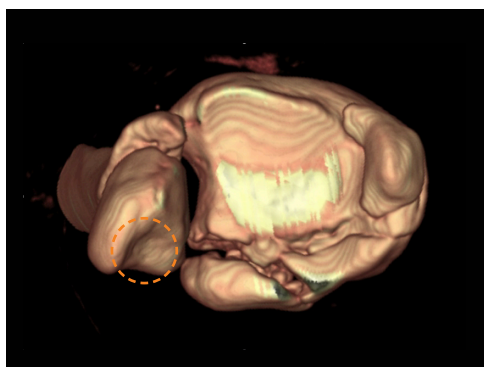
Refined shape of the plate head is based on the bone anatomy

- Posteroinferior end of distal fibula corresponds to the recess for the posterior talo-fibular ligament(PTFL).
- Screw holes over posterior talo-fibular ligament(PTFL) is redundant due to its thickness which only allows placement of very short screws.
- No screw penetration in the recess for PTF ligament minimizes soft tissue irritation & potential articular cartilage damage.

Lateral View



Inferior View

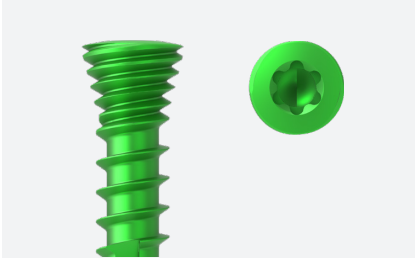


Posterior talo-fibular ligament recess

Clinical Outcome

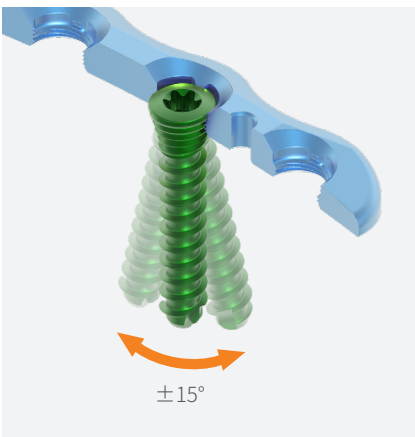


Lateral Distal Fibula Plate - continued



STARIX Screw with self-retaining function

- Internal recess T10 according to international standard
- Minimizes the risk of cam-out and recess breakage
- Allows higher torque transmission
- Optimal self-retaining function achieved through precision machining



Variable Locking Interface with Locking Screw

- Poly-axial screw insertion
- Angle range: $\pm 15^\circ$
- Plate-screw locking interface

Screw Options

with STARIX Pick-up(T10)



Locking Ø2.8 mm



Locking Ø3.5 mm



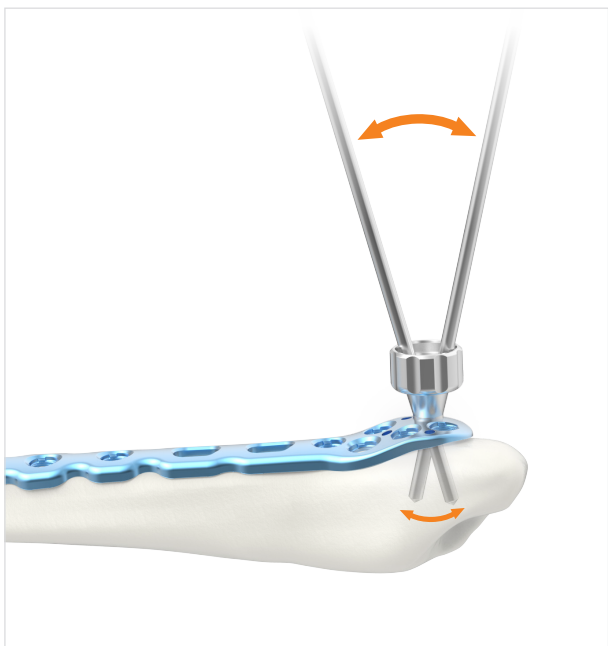
Cortical Ø3.5 mm

Self-retaining function of STARIX screw

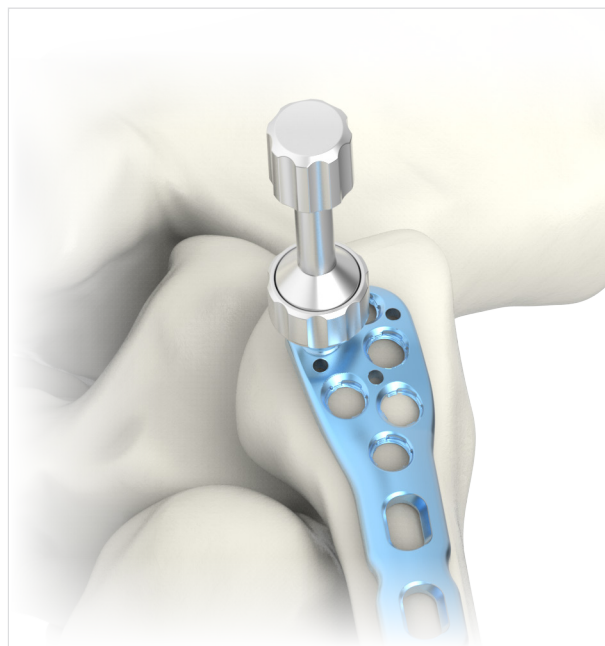
Allows easy screw pick up from the box and prevents screw fall out



Instrument – Variable Angle Drill Sleeve

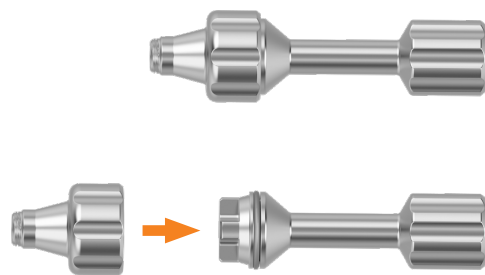


1 The variable angle drill sleeve enables the surgeons to insert locking screws with preferred angle in range of +/- 15°.



2 The drill sleeve handle facilitates engaging the drill sleeve into the screw holes. Assemble the sleeve handle to the drill sleeve. Once the drill guide is engaged to the screw hole by turning it clockwise, disconnect the drill sleeve handle by simply pulling it out.

C-Arm View



Variable angle drill sleeve
111-172

Variable angle drill sleeve handle
111-157

1. Patient Positioning and Exposure

Position the patient in supine and make a straight lateral or posterolateral surgical incision to expose the fracture of the fibula based upon the fracture pattern and surgical planning.

When posterior malleolar fragment is planned to be stabilized via posterolateral approach, a floppy lateral position with posterolateral incision can be considered.

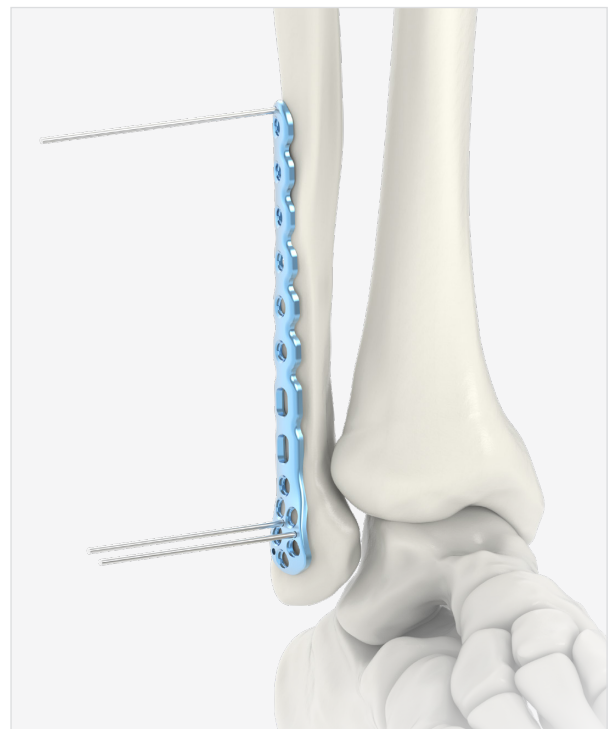


2. Fracture Reduction

Most AO 44 B simple spiral lateral malleolar fractures can be reduced directly with a Weber or lion jaw clamp.

Once anatomical reduction is verified with c arm images a lag screw can be placed across the fracture site.

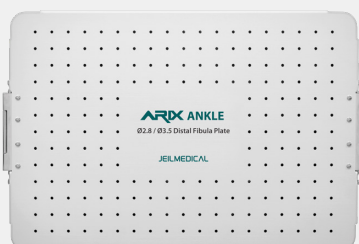
The plate fixation can be followed afterward. AO 44C suprasyndesmotoc fractures can be multifragmentory. In order to avoid too much periosteal stripping of the wedge fragments, bridge plating concept can be used with open surgical approach. Accurate restoration of fibular length, alignment, and rotation is critically verified with an image intensifier.



3. Plate Positioning

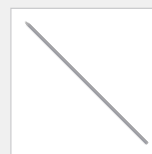
Position the fibula plate (35V-DLF2-XXX-X) such that the curvature of the plate nestles smoothly over the lateral surface of the fibula. The plate is then provisionally held with 1.6 mm pins (111-068-3), one through the most proximal pin hole and one or preferably two pins through distal pin holes. Position of the plate carefully evaluated with c-arm images.

Required Set



Lateral Distal
Fibula Full Kit
112-146

Required Instruments

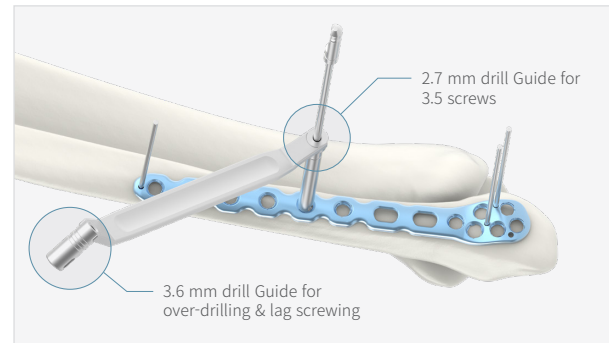


Guide Pin
111-068-3

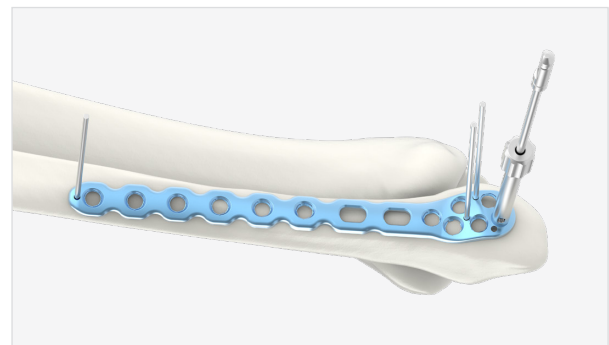
4. Distal Screw Placement

All distal plate holes can accept either $\varnothing 2.8$ mm or $\varnothing 3.5$ mm locking screws. To insert screws into the distal cluster of holes, drill 2.7 mm drill bit (112-35-703) for 3.5 mm screws through the drill guide (111-260 for $\varnothing 3.5$ mm screw) to the desired depth.

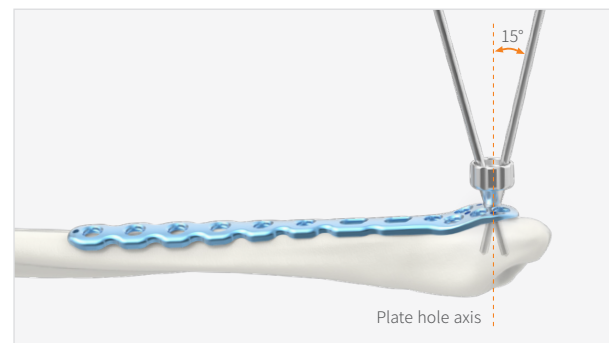
*Instruments for $\varnothing 2.8$ mm screw are provided separately.



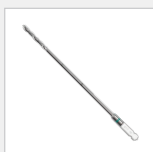
With fixed angle drill sleeve (111-173), the locking screw can be inserted only in predefined or nominal angle.



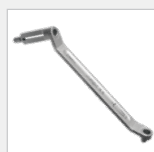
With variable angle drill sleeve (111-172), the screw can be inserted at desired angle within 30 degrees range.



Required Instruments



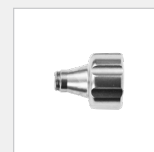
Drill Bit
112-35-703



Drill Guide
112-260



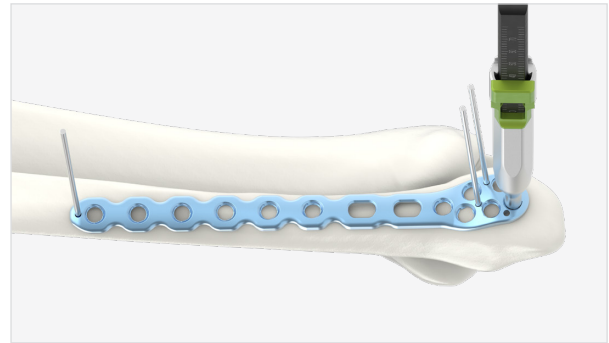
Drill Sleeve
111-173



Drill Sleeve
111-172

4. Distal Screw Placement - continued

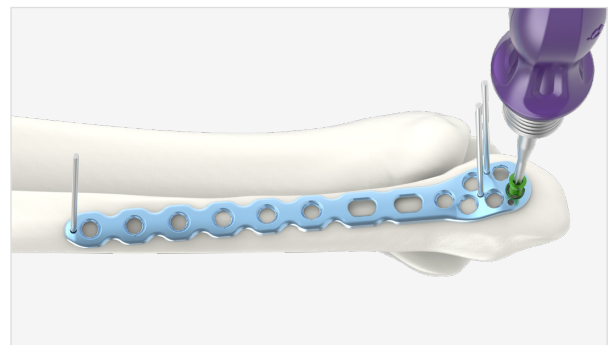
Measure the screw length by using the depth gauge (111-266).



Insert 3.5 mm locking or cortical screws by connecting the T10 driver (113-HF-616) to the driver handle (111-206).

CAUTION: Use the maximum number of screws based on the indication to get the maximum stability

Confirm screw placement under fluoroscopy.



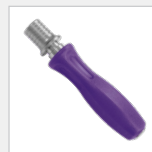
Required Instruments



Depth Gauge
111-266



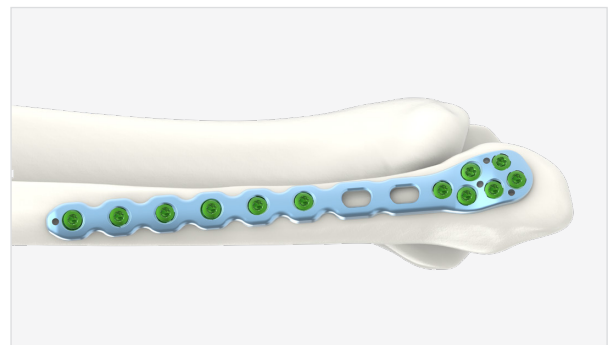
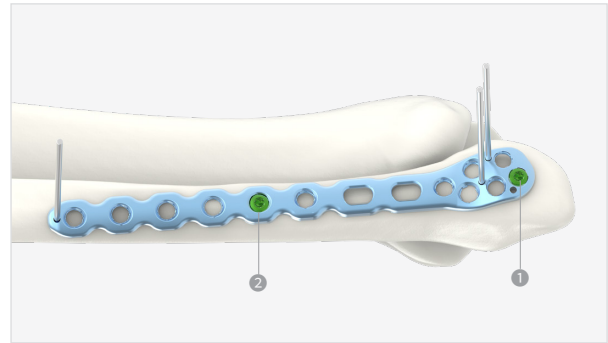
T10 Driver
113-HF-616



Driver Handle
111-206

5. Order of Screw Placement

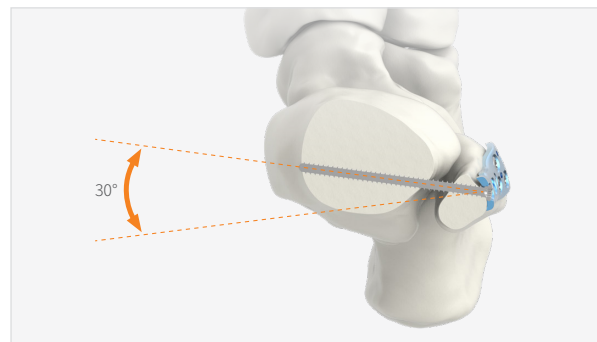
Insert most distal screw (❶) first, then one of proximal screws (❷) to prevent plate rotation. Then insert rest of screws as needed.



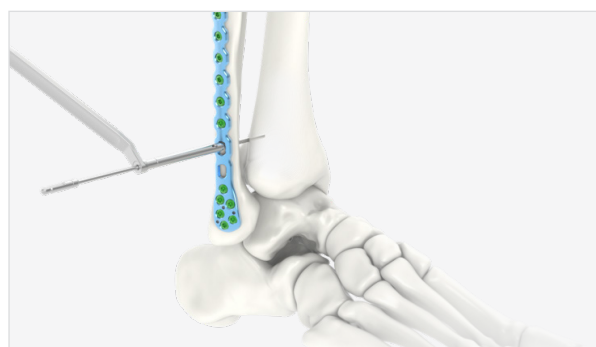
6. Syndesmosis Screw (Optional)

If the surgeon decided to insert syndesmosis screws, a 3.5 mm cortical screws can be utilized through the two oblong holes.

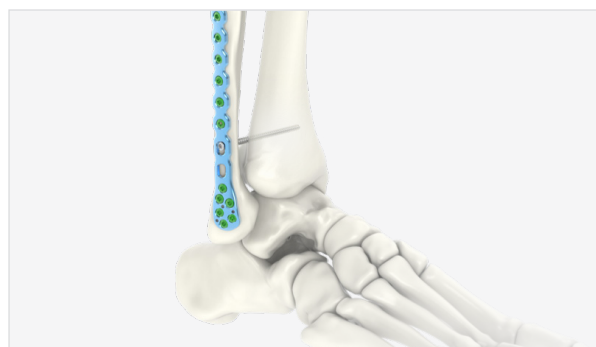
Drill the screw hole with an angle of 30° anterior to target the center of the tibia. Measure the screw length and insert screw according to usual screw insertion steps.



Confirm screw placement under fluoroscopy. Closing and postoperative protocol are at the discretion of the surgeon.



WARNING: Screws placed across the syndesmosis have a higher probability of fatigue failure of screws due to the repetitive motion across the syndesmosis.



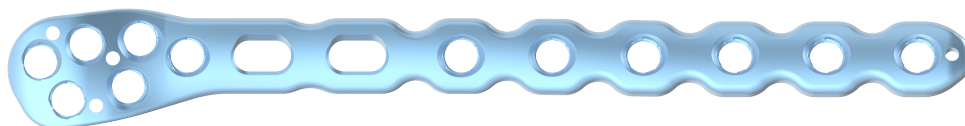
7. Removing Plate and Screws

If the plate and screws need to be removed, make an incision over the fibula. Use the appropriate screwdriver to remove each screw.

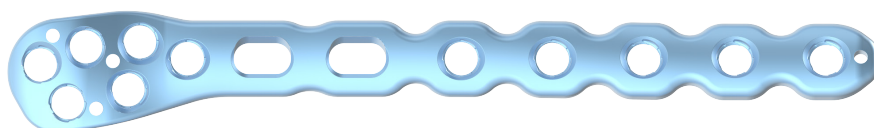
| Ordering information

Lateral Distal Fibula Plates

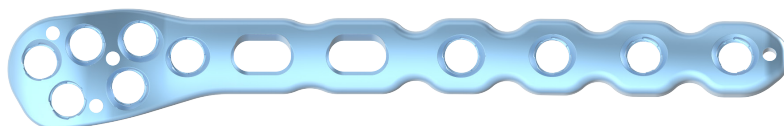
Right



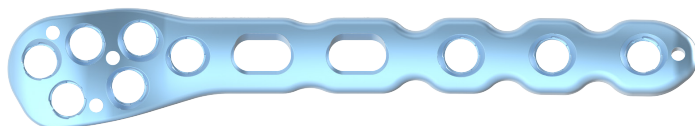
35V-DLF2-008-R



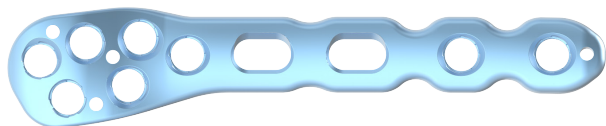
35V-DLF2-007-R



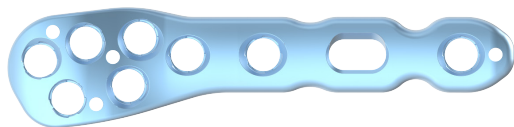
35V-DLF2-006-R



35V-DLF2-005-R



35V-DLF2-004-R

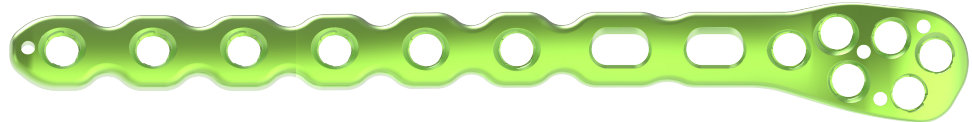


35V-DLF2-003-R

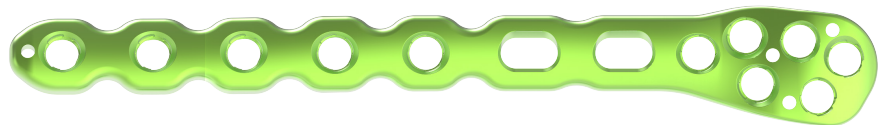
* Illustrated scale 1:1

Code	Holes	Length	Thickness	Color	Set Quantity
35V-DLF2-003-R	3	67 mm	2.0 mm	Light Blue	2
35V-DLF2-004-R	4	79 mm	2.0 mm	Light Blue	2
35V-DLF2-005-R	5	91 mm	2.0 mm	Light Blue	2
35V-DLF2-006-R	6	103 mm	2.0 mm	Light Blue	2
35V-DLF2-007-R	7	115 mm	2.0 mm	Light Blue	2
35V-DLF2-008-R	8	127 mm	2.0 mm	Light Blue	2

Left



35V-DLF2-008-L



35V-DLF2-007-L



35V-DLF2-006-L



35V-DLF2-005-L



35V-DLF2-004-L



35V-DLF2-003-L

* Illustrated scale 1:1

Code	Holes	Length	Thickness	Color	Set Quantity
35V-DLF2-003-L	3	67 mm	2.0 mm	Light Green	2
35V-DLF2-004-L	4	79 mm	2.0 mm	Light Green	2
35V-DLF2-005-L	5	91 mm	2.0 mm	Light Green	2
35V-DLF2-006-L	6	103 mm	2.0 mm	Light Green	2
35V-DLF2-007-L	7	115 mm	2.0 mm	Light Green	2
35V-DLF2-008-L	8	127 mm	2.0 mm	Light Green	2

Screws

Ø3.5 mm Locking Cortical Screws



Code	Length	Color	Set Quantity
35L-SO-L10-TA	10 mm	Green	10
35L-SO-L12-TA	12 mm	Green	15
35L-SO-L14-TA	14 mm	Green	15
35L-SO-L16-TA	16 mm	Green	15
35L-SO-L18-TA	18 mm	Green	10
35L-SO-L20-TA	20 mm	Green	10
35L-SO-L22-TA	22 mm	Green	10
35L-SO-L24-TA	24 mm	Green	10

Ø3.5 mm Non-Locking Cortical Screws



Code	Length	Color	Set Quantity
35-SO-L10-T	10 mm	Silver	4
35-SO-L12-T	12 mm	Silver	4
35-SO-L14-T	14 mm	Silver	4
35-SO-L16-T	16 mm	Silver	4
35-SO-L18-T	18 mm	Silver	4
35-SO-L20-T	20 mm	Silver	4
35-SO-L22-T	22 mm	Silver	4
35-SO-L24-T	24 mm	Silver	4
35-SO-L50-T	50 mm	Silver	4
35-SO-L55-T	55 mm	Silver	4
35-SO-L60-T	60 mm	Silver	4
35-SO-L65-T	65 mm	Silver	4
35-SO-L70-T	70 mm	Silver	4

Ø2.8 mm Locking Cortical Screws (Optional)



Code	Length	Color	Set Quantity
28L-SO-L10-TA	10 mm	Gold	10
28L-SO-L12-TA	12 mm	Gold	10
28L-SO-L14-TA	14 mm	Gold	10
28L-SO-L16-TA	16 mm	Gold	10
28L-SO-L18-TA	18 mm	Gold	10

Instruments

DRIVER SHAFT



Code	Description	Set Quantity
113-HF-616	DRIVER FOR T10 BALL 100 mm	2

DRIVER HANDLE



Code	Description	Set Quantity
111-206	HANDLE FOR DRIVER Ø5.0 BALL	2

DEPTH GAUGE



Code	Description	Set Quantity
111-266	DEPTH GAUGE FOR Ø3.5 1070	1

FORCEPS



Code	Description	Set Quantity
114-009	FORCEPS COMMON PINCETTE	1

Instruments

GUIDE PIN



Code	Description	Set Quantity
111-068-3	GUIDE PIN Ø1.6	10

DISPENSER



Code	Description	Set Quantity
111-096	DISPENSER FOR GUIDE PIN	1

DRILL GUIDE



111-260



111-100



111-204

Code	Description	Set Quantity
111-260	DRILL GUIDE FOR Ø2.7 FIXED Ø2.7 VARIABLE	1
111-100	DRILL GUIDE FOR Ø2.7 COMP Ø3.6 FIXED	1
111-204	DRILL GUIDE FOR Ø2.4 FIXED (Optional)	1

DRILL BITS



112-35-701-L



112-35-703



112-28-702

Code	Description	Set Quantity
112-35-701-L	DRILL BIT FOR Ø3.5 AO LAG	1
112-35-703	DRILL BIT FOR Ø3.5 AO	2
112-28-702	DRILL BIT FOR Ø2.8 AO (Optional)	1

DRILL SLEEVES & DRILL SLEEVE HANDLE



111-172



111-173



111-202



111-201

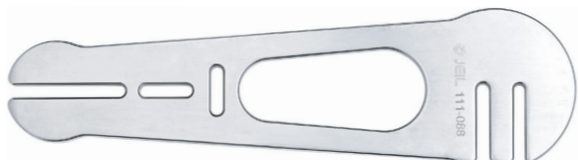


111-157

Code	Description	Set Quantity
111-172	DRILL SLEEVE FOR Ø2.7 VARIABLE	1
111-173	DRILL SLEEVE FOR Ø2.7 FIXED	1
111-202	DRILL SLEEVE FOR Ø2.4 VARIABLE (Optional)	1
111-201	DRILL SLEEVE FOR Ø2.4 FIXED (Optional)	1
111-157	VARIABLE DRILL SLEEVE HANDLE	2

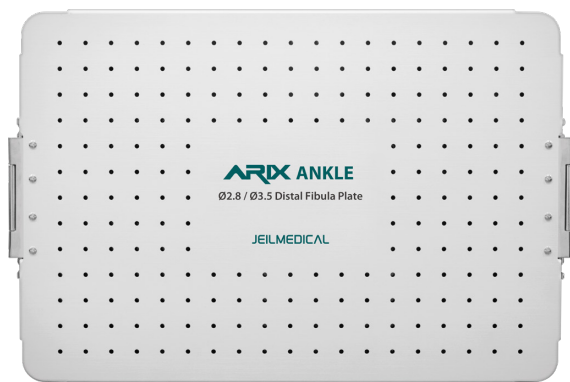
Instruments

BENDER



Code	Description	Set Quantity
111-088	BENDER FLAT 3.0T PLATE	2

KIT



112-146



112-146-05

Code	Description	Set Quantity
112-146	LATERAL DISTAL FIBULA FULL KIT	1
112-146-05	SCREW MODULE ASSEMBLY	1

Set Configuration

Plates				Ø3.5 Non-Locking Cortical Screws			
No.	Code	Description	Set Quantity	No.	Code	Description	Set Quantity
1	35V-DLF2-003-R	LATERAL DISTAL FIBULA PLATE RIGHT 3H	2	1	35-SO-L10-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
2	35V-DLF2-004-R	LATERAL DISTAL FIBULA PLATE RIGHT 4H	2	2	35-SO-L12-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
3	35V-DLF2-005-R	LATERAL DISTAL FIBULA PLATE RIGHT 5H	2	3	35-SO-L14-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
4	35V-DLF2-006-R	LATERAL DISTAL FIBULA PLATE RIGHT 6H	2	4	35-SO-L16-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
5	35V-DLF2-007-R	LATERAL DISTAL FIBULA PLATE RIGHT 7H	2	5	35-SO-L18-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
6	35V-DLF2-008-R	LATERAL DISTAL FIBULA PLATE RIGHT 8H	2	6	35-SO-L20-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
7	35V-DLF2-003-L	LATERAL DISTAL FIBULA PLATE LEFT 3H	2	7	35-SO-L22-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
8	35V-DLF2-004-L	LATERAL DISTAL FIBULA PLATE LEFT 4H	2	8	35-SO-L24-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
9	35V-DLF2-005-L	LATERAL DISTAL FIBULA PLATE LEFT 5H	2	9	35-SO-L50-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
10	35V-DLF2-006-L	LATERAL DISTAL FIBULA PLATE LEFT 6H	2	10	35-SO-L55-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
11	35V-DLF2-007-L	LATERAL DISTAL FIBULA PLATE LEFT 7H	2	11	35-SO-L60-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
12	35V-DLF2-008-L	LATERAL DISTAL FIBULA PLATE LEFT 8H	2	12	35-SO-L65-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4
				13	35-SO-L70-T	Ø3.5 NONLOCKING CORTICAL T10 10 mm	4

Instruments				Ø3.5 Locking Cortical Screws			
No.	Code	Description	Set Quantity	No.	Code	Description	Set Quantity
1	111-206	HANDLE FOR DRIVER Ø5.0 BALL	2	1	35-SO-L10-TA	Ø3.5 LOCKING CORTICAL T10 10 mm	10
2	111-266	DEPTH GAUGE FOR Ø3.5 1070	1	2	35-SO-L12-TA	Ø3.5 LOCKING CORTICAL T10 12 mm	15
3	112-35-703	DRILL BIT FOR Ø3.5 AO	2	3	35-SO-L14-TA	Ø3.5 LOCKING CORTICAL T10 14 mm	15
4	111-260	DRILL GUIDE FOR Ø2.7 FIXED Ø2.7 VARIABLE	1	4	35-SO-L16-TA	Ø3.5 LOCKING CORTICAL T10 16 mm	15
5	111-100	DRILL GUIDE FOR Ø2.7 COMP Ø3.6 FIXED	1	5	35-SO-L18-TA	Ø3.5 LOCKING CORTICAL T10 18 mm	10
6	111-173	DRILL SLEEVE FOR Ø2.7 FIXED	2	6	35-SO-L20-TA	Ø3.5 LOCKING CORTICAL T10 20 mm	10
7	111-172	DRILL SLEEVE FOR Ø2.7 VARIABLE	1	7	35-SO-L22-TA	Ø3.5 LOCKING CORTICAL T10 22 mm	10
8	111-157	VARIABLE DRILL SLEEVE HANDLE	2	8	35-SO-L24-TA	Ø3.5 LOCKING CORTICAL T10 24 mm	10
9	114-009	FORCEPS COMMON PINCETTE	1				
10	113-HF-616	DRIVER FOR T10 BALL 100 mm	2	Ø2.8 Locking Cortical Screws			
11	111-068-3	GUIDE PIN Ø1.6	10	No.	Code	Description	Set Quantity
12	111-088	BENDER FLAT 3.0T PLATE	2	1	28L-SO-L10-TA	Ø2.8 LOCKING CORTICAL T10 10 mm (Optional)	10
13	112-35-701-L	DRILL BIT FOR Ø3.5 AO LAG	1	2	28L-SO-L12-TA	Ø2.8 LOCKING CORTICAL T10 12 mm (Optional)	10
14	111-096	DISPENSER FOR GUIDE PIN	1	3	28L-SO-L14-TA	Ø2.8 LOCKING CORTICAL T10 14 mm (Optional)	10
15	112-28-702	DRILL BIT FOR Ø2.8 AO (Optional)	2	4	28L-SO-L16-TA	Ø2.8 LOCKING CORTICAL T10 16 mm (Optional)	10
16	111-201	DRILL SLEEVE FOR Ø2.4 FIXED (Optional)	1	5	28L-SO-L18-TA	Ø2.8 LOCKING CORTICAL T10 18 mm (Optional)	10
17	111-202	DRILL SLEEVE FOR Ø2.4 VARIABLE (Optional)	1				
18	111-204	DRILL GUIDE FOR Ø2.4 FIXED (Optional)	1				
19	112-146	KIT LATERAL DISTAL FIBULA FULL	1				
20	112-146-05	SCREW MODULE ASSEMBLY	1				

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