

SURGICAL TECHNIQUE



ARMADA

Anterior Thoracolumbar Plate System



ARMADA

Anterior Thoracolumbar
Plate System

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ARMADA

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INTRODUCTION

ARMADA Features

Straight Locking Plate;

- The straight plate allows more freedom to surgeons when inserting universal-locking screw to vertebrae that ease subsequent plate-screw assembly
- The straight plate inherits a 21° cross-sectional bent toward the column to match the anatomic curvature of the vertebrae
- The internal thread of round shaped hole incorporates with the self-locking screw, which provides strong stability once the screw is inserted perpendicular to the plate and is firmly engaged
- Firm anchoring fixation is achieved when universal-locking screw and self-locking screw are locked to the plate in the vertebral body

Narrow Locking Plate;

- The narrow locking plate inherits a 15° cross-sectional bent to match the vertebrae of the thoracic spine
- The posterior aspect of the plate is recessed to better accommodate the fused vertebrae
- Three rounded holes with internal thread on each end of the plate provide options of receiving two self-locking screws perpendicular fixing firmly in the vertebral body
- Optional cancellous-locking screw is provided when self-locking screw become inadequate for the round holes

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INTRODUCTION



Indications

The ARMADA plates can be used through an anterolateral or lateral approach in the area of T3 to L5 for:

Instability of the spinal column from

- Fractures
- Tumors, and
- Degenerative intervertebral disc diseases that are suitable for ventral treatment, and where sufficient ventral support is ensured.

Contraindications

The ARMADA plates are contraindicated for:

- Scoliosis
- Severe osteoporosis, especially osteoporotic fractures
- Spondylolisthesis

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1

Patient positioning



Place patient in a right or left lateral decubitus position. Positioning is dependent upon preoperative planning and image review. (Figure 1a)



Figure 1a

2

Exposure



Place the Landmark Identifier Crosshair over the surgical level, centered over the indicated disc space under fluoroscopy. (Figure 2a)



Figure 2a

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3-Sample Plate: Straight Locking Plate

Plate Placement



Approximate the plate size using an X-ray, and select a plate that bridges the destroyed vertebrae including the inter-vertebral disc and bone graft or vertebral body replacement. Attach a **Plate Holder (LP007)** to the plate. The screw holes for fixation should lie under the outside endplates. (Figure 3a)

Plate Holder

Figure 3a

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4-Sample Plate: Straight Locking Plate

Drilling for ARMADA Universal Locking Screw



Mount the **T-Handle (LP011)** on the **Ø5.5 Drill (LP014)**, and drill the screw hole. **Ø5.5 Drill (LP014)** must be used for the ARMADA universal locking screw. (Figure 4a)

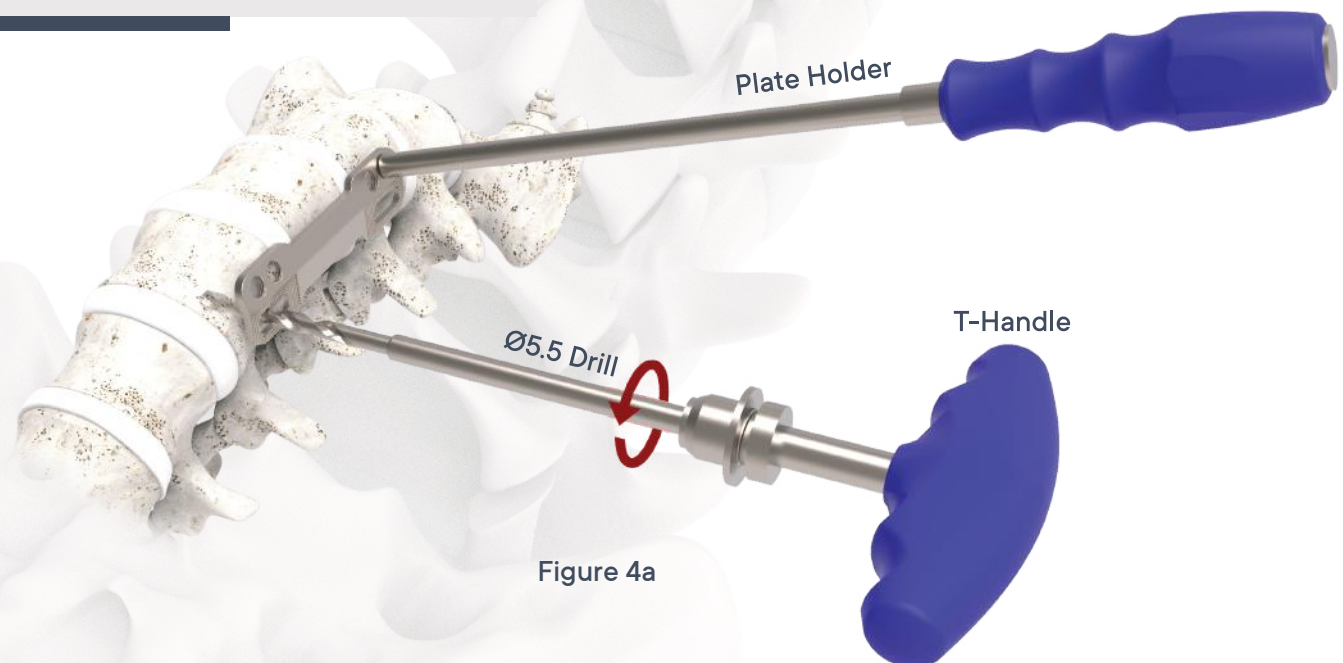


Figure 4a

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5-Sample Plate: Straight Locking Plate

Tapping for ARMADA Universal Locking Screw



The appropriate diameter tap is inserted through the vertebral body. Mount the **T-Handle (LP011)** on the **Ø7 Tap (LP015)**, and tap the screw hole. **Ø7 Tap (LP015)** must be used for the ARMADA universal locking screw. (Figure 5a)

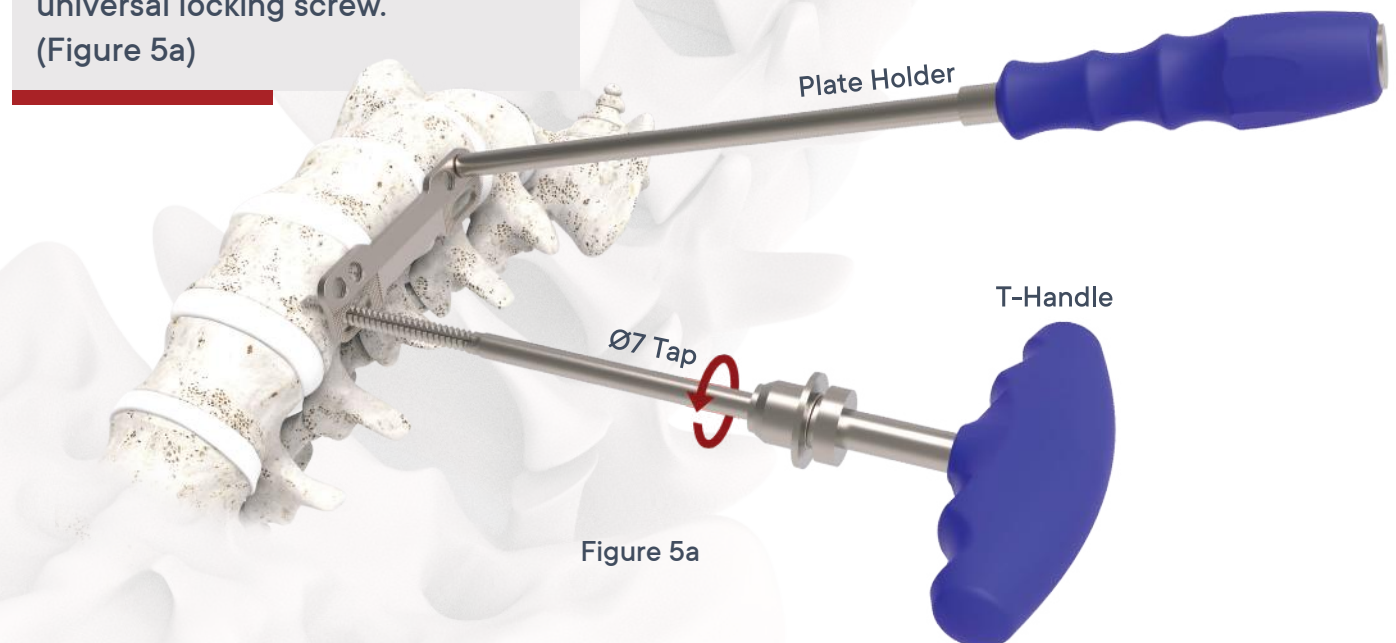


Figure 5a

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6-Sample Plate: Straight Locking Plate

Insert the ARMADA Universal Locking Screw



Place the **T-Handle (LP011)** on the **Screw Holder (LP005)**. Select a **ARMADA Universal Locking Screw** of the appropriate length, and screw it into the prepared plate hole. Insert the screw up to 3/4 its length. Then pull the **Screw Holder (LP005)** upward, and secure the screw using a **Universal-Locking Screw Driver (LP006)** until the screw head is seated in the plate. (Figure 6a, 6b)



Figure 6a



Figure 6b

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7-Sample Plate: Straight Locking Plate

Secure Nut



Place the T-Handle (LP011) on the Universal-Locking Screw Nut Driver (LP009). Secure the nut using a Universal-Locking Screw Nut Driver (LP009). (Figure 7a)

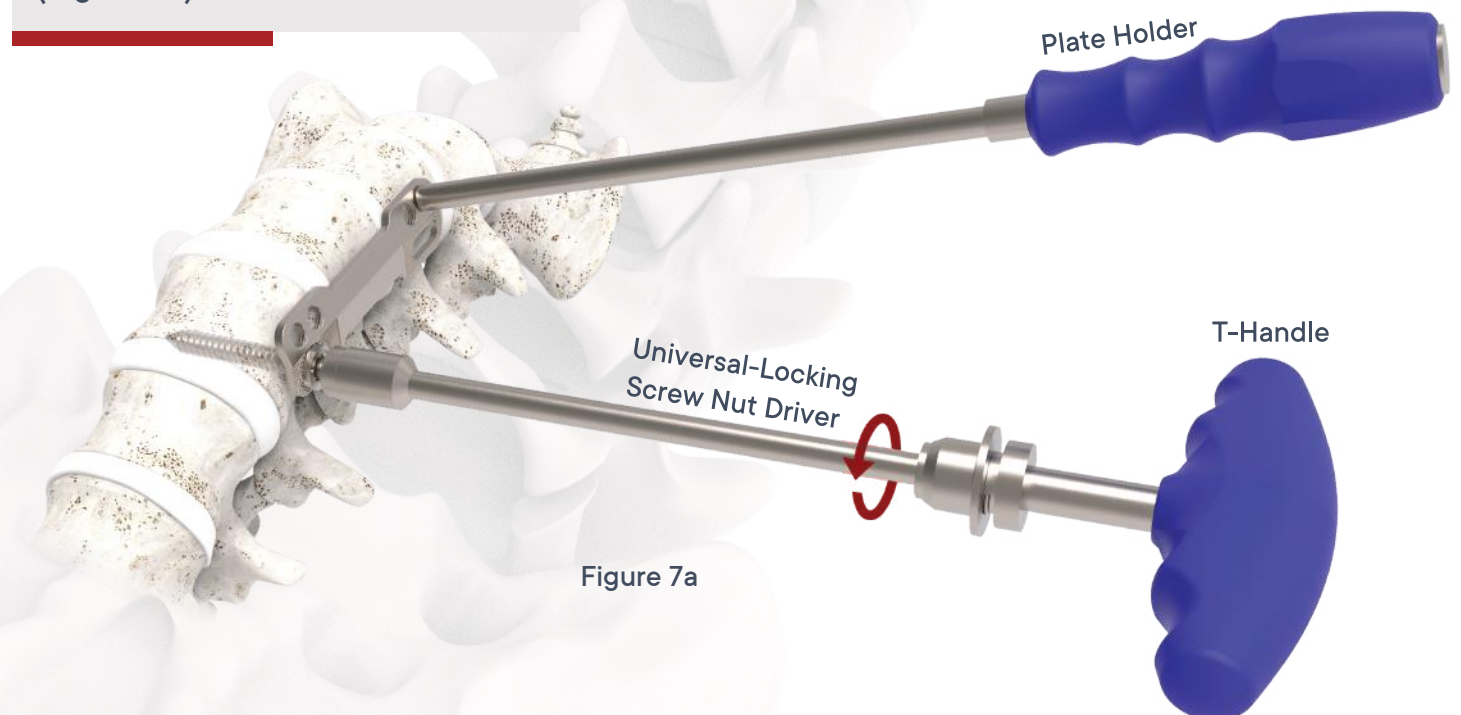


Figure 7a

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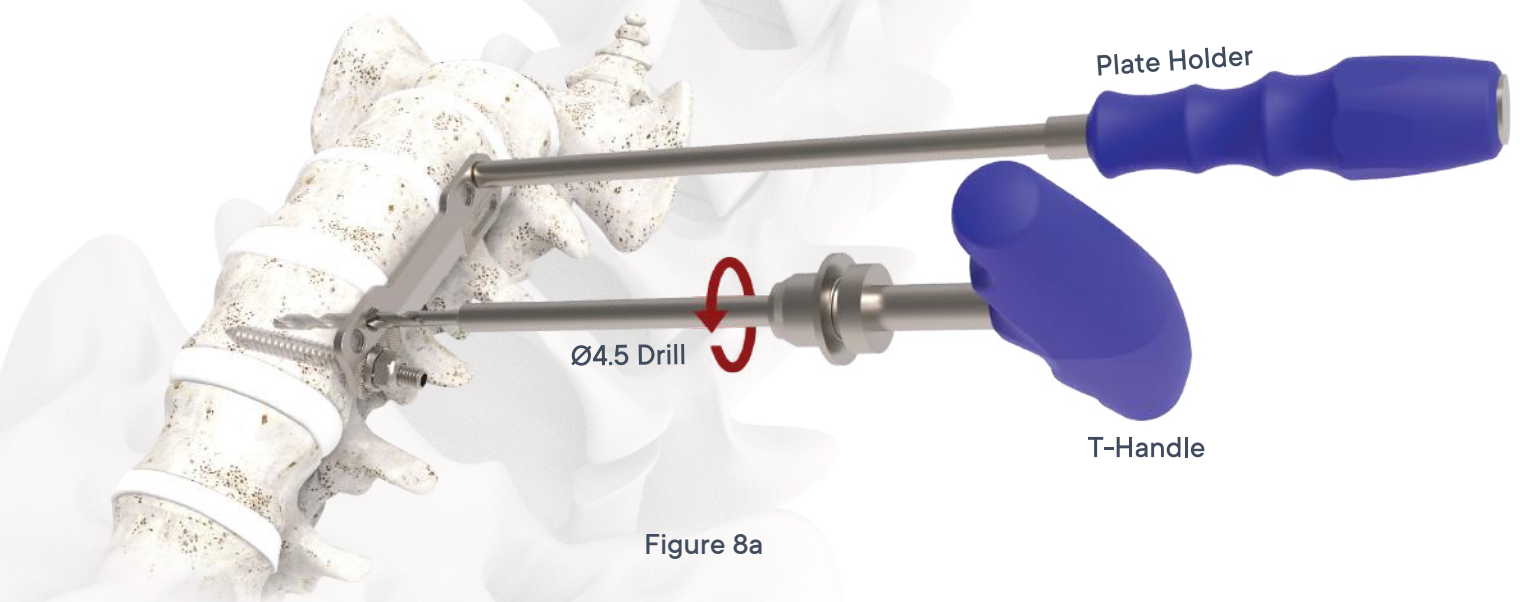
SURGICAL TECHNIQUE

8-Sample Plate: Straight Locking Plate

Drilling for ARMADA Self Locking Screw



Mount the **T-Handle (LP011)** on the **Ø4.5 Drill (LP003)**, and drill the screw hole. **Ø4.5 Drill (LP003)** must be used for the ARMADA self locking screw. (Figure 8a)



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9-Sample Plate: Straight Locking Plate

Tapping for ARMADA Self Locking Screw



The appropriate diameter tap is inserted through the vertebral body. Mount the **T-Handle (LP011)** on the **Ø6 Tap (LP004)**, and tap the screw hole. **Ø6 Tap (LP004)** must be used for the ARMADA self locking screw. (Figure 9a)

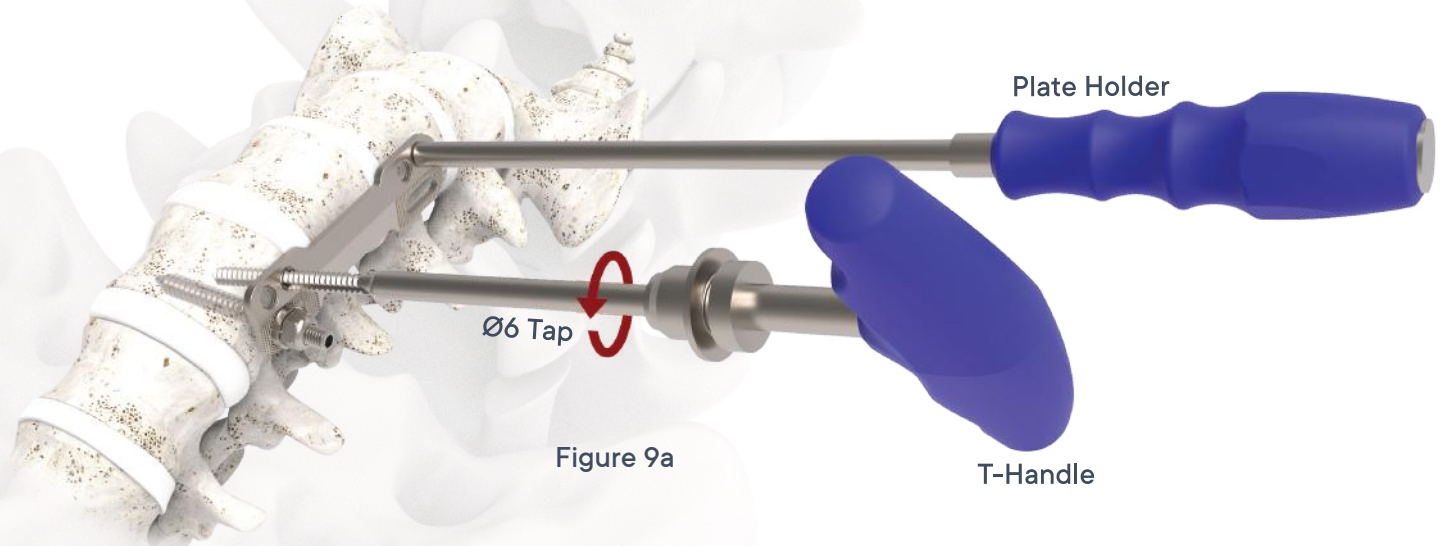


Figure 9a

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10-Sample Plate: Straight Locking Plate

Insert the ARMADA Self Locking Screw



Place the **T-Handle (LP011)** on the **Screw Holder (LP005)**. Select a **ARMADA Self Locking Screw** of the appropriate length, and screw it into the prepared plate hole. Insert the screw up to 3/4 its length. Then pull the **Screw Holder (LP005)** upward, and secure the screw using a **Universal-Locking Screw Driver (LP006)** until the screw head is seated in the plate. (Figure 10a, 10b)

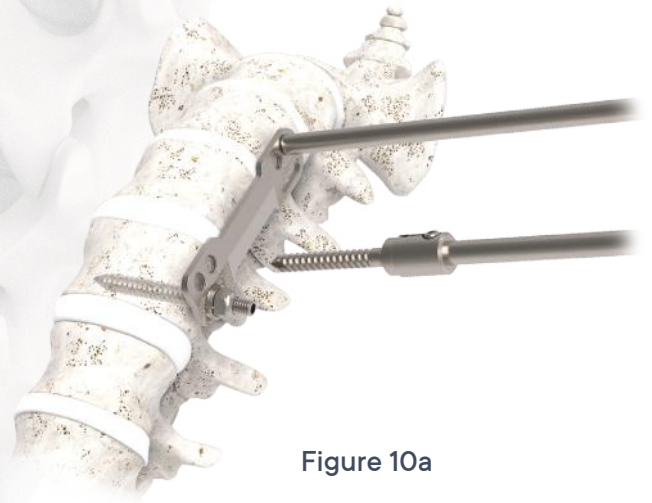


Figure 10a

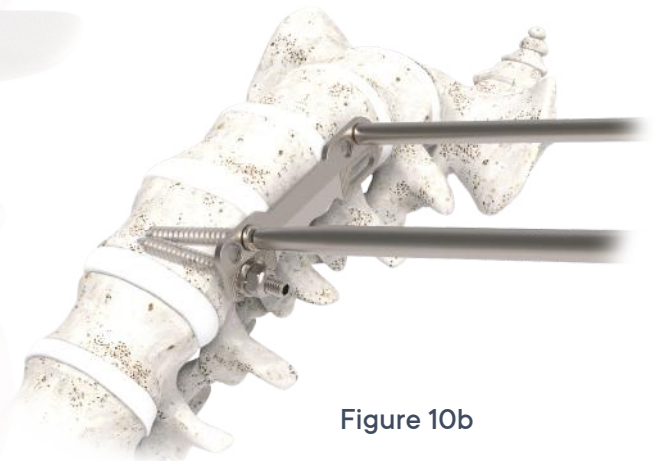


Figure 10b

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11-Sample Plate: Straight Locking Plate

Final Position



Verify the location of the plate relative to the vertebral bodies in the AP and lateral directions under fluoroscopy. (Figure 11a)



Figure 11a

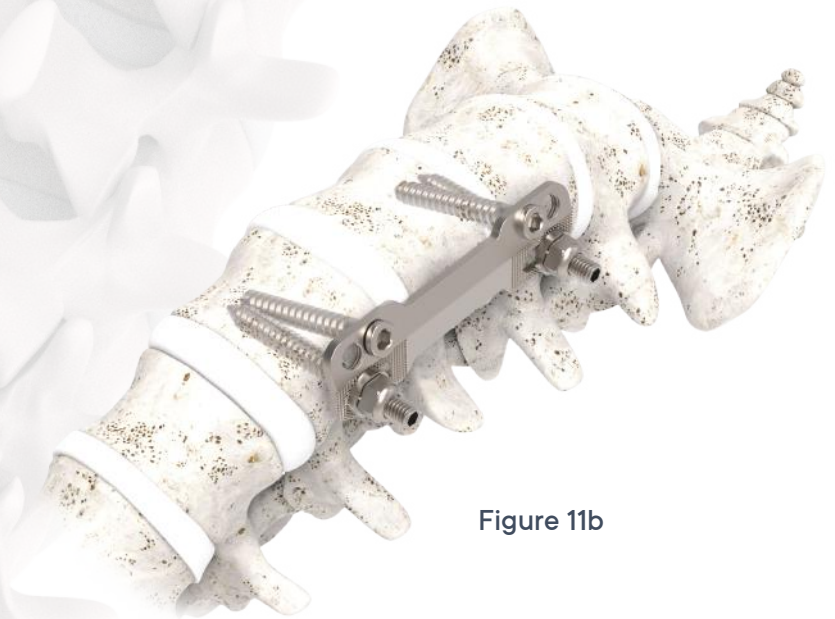


Figure 11b

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IMPLANT TYPES



ARMADA Universal Locking Screw Ø7.0

Catalogue No.

NULS7035
NULS7040
NULS7045
NULS7050
NULS7055

Length

35 mm
40 mm
45 mm
50 mm
55 mm



⚠ Using with Straight Locking Plate



ARMADA Cancellous Locking Screw Ø6.2

Catalogue No.

NCLS62025
NCLS62030
NCLS62035
NCLS62040

Length

25 mm
30 mm
35 mm
40 mm



⚠ Optional for Narrow Locking Plate



ARMADA Self Locking Screw Ø6.0

Catalogue No.

NSLS6020
NSLS6022
NSLS6025
NSLS6030
NSLS6035
NSLS6040
NSLS6045
NSLS6050
NSLS6055

Length

20 mm
22 mm
25 mm
30 mm
35 mm
40 mm
45 mm
50 mm
55 mm



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IMPLANT TYPES



ARMADA Straight Locking Plate

Catalogue No.

Length

NSLP70U
NSLP80U
NSLP90U
NSLP100U
NSLP110U
NSLP120U

70 mm
80 mm
90 mm
100 mm
110 mm
120 mm



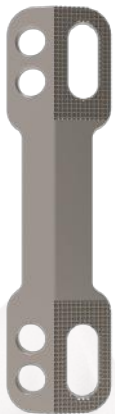
ARMADA Narrow Locking Plate

Catalogue No.

Length

NNLP45U
NNLP50U
NNLP55U
NNLP60U
NNLP65U
NNLP70U
NNLP80U
NNLP90U
NNLP95U
NNLP100U
NNLP110U
NNLP120U

45 mm
50 mm
55 mm
60 mm
65 mm
70 mm
80 mm
90 mm
95 mm
100 mm
110 mm
120 mm



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INSTRUMENT CONTAINER



This container is made of wiremesh stainless steel. It has a high stability, low weight and good sterilization feature.



Container

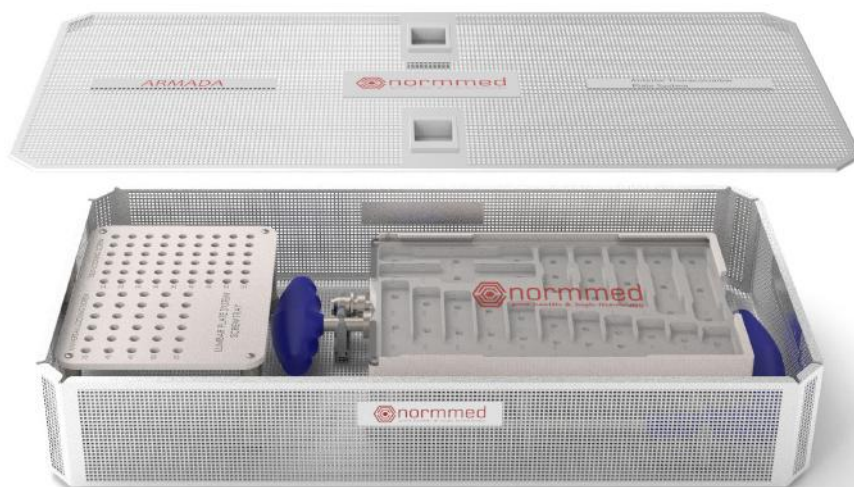
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INSTRUMENT CONTAINER



This container is made of wiremesh stainless steel. It has a high stability, low weight and good sterilization feature.



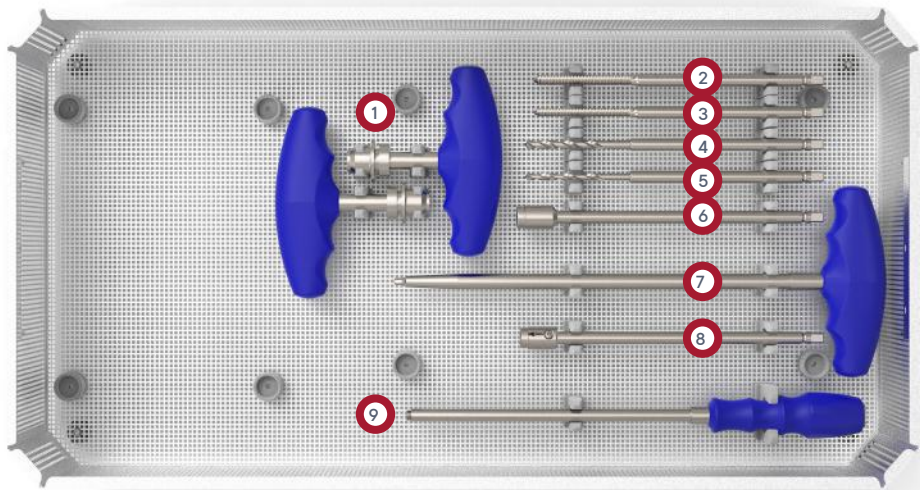
Container

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INSTRUMENT TYPES










Set No.	Catalogue No.	Description	Piece
01	LP011	T-Handle	2

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INSTRUMENT TYPES

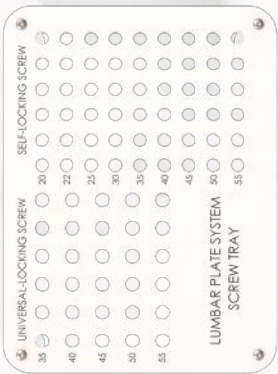
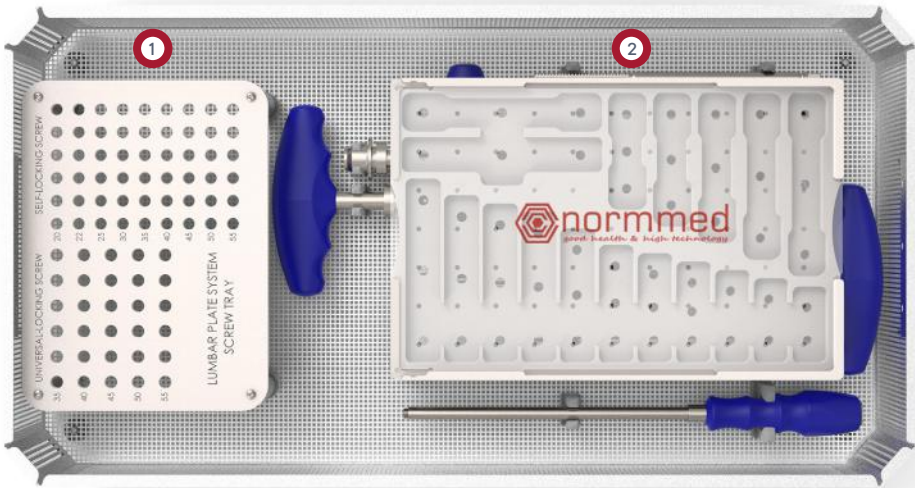
	Set No.	Catalogue No.	Description	Piece
	02	LP015	Ø7 Tap	1
	03	LP004	Ø6 Tap	1
	04	LP014	Ø5.5 Drill	1
	05	LP003	Ø4.5 Drill	1
	06	LP009	Universal-Locking Screw Nut Driver	1
	07	LP006	Universal-Locking ScrewDriver	1
	08	LP005	Screw Holder	1
	09	LP007	Plate Holder	1

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INSTRUMENT TYPES



Set No.	Catalogue No.	Description	Piece
01	LP012	Screw Tray	1

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Set No.	Catalogue No.	Description	Piece
02	LP013	Plate Tray	1

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