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AOS™

ADVANCED ORTHOPAEDIC SOLUTIONS

Clavicle

PLATING SYSTEM

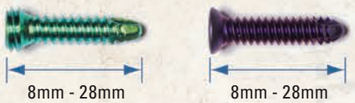
System Overview

Lateral Superior Plates

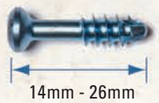
Midshaft Superior Plates

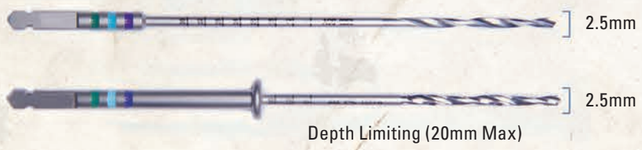
2.7mm Cortical Screws

3.5mm Cortical Screws



4.0mm Cancellous Lag Screw

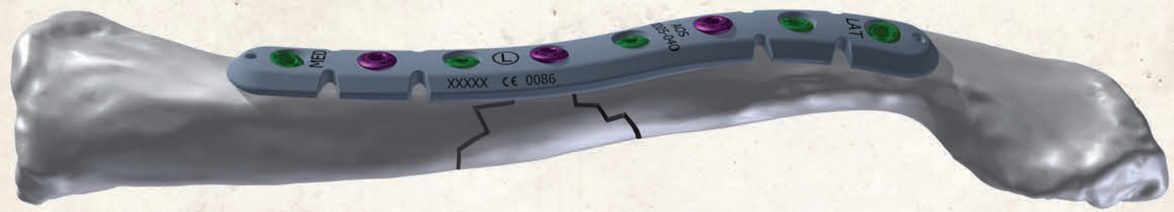




Anterior Plates

Anatomical Fit & Bow

Midshaft Superior Plate



Lateral Superior Plate

Anterior Plate

AOS Clavicle System Surgical Technique

Patient Positioning & Surgical Approach

Position patient in beach/captain's chair position. Place a bolster between shoulder blades and prep limb free to facilitate fracture reduction during case.

Fig. 1a

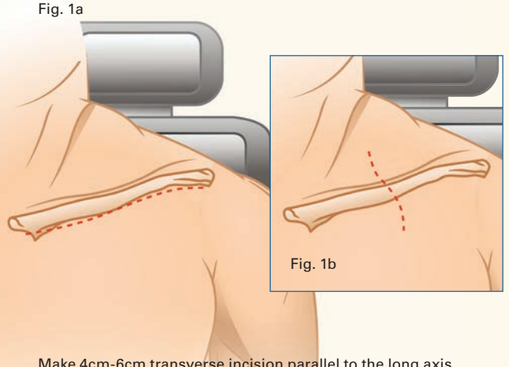


Fig. 1b

Make 4cm-6cm transverse incision parallel to the long axis just beneath the clavicle **(Fig. 1a)** or 2cm-4cm perpendicular incision to the long axis over fracture **(Fig. 1b)**. Create full thickness subcutaneous flaps, taking care to preserve and protect cutaneous nerves. Cut through muscle directly down to clavicle bone and make full-thickness subperosteal flaps. Place soft-tissue friendly self-retaining retractors as needed.

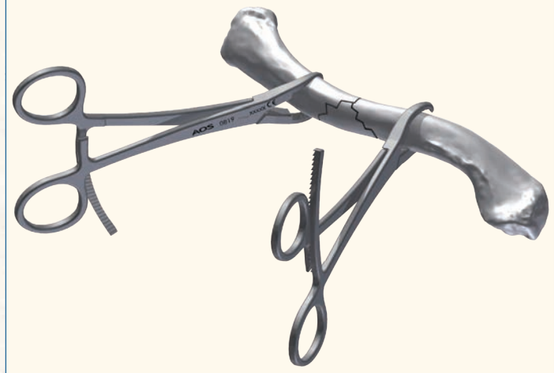
Step 1

Fracture Reduction

Reduce fracture using **Lobster Claw Forceps (0819)** on both the medial and lateral fragments.

Tip: Use **Plate Clamp Forceps (0824)** to secure the plate to both sides of the fracture while reducing.

Tip: Lifting the arm superiorly helps reduce the fracture.



Step 2

Plate Placement/Additional Plate Contouring

Plate Bending

If additional contouring is required **Plate Benders (0823)** are available to achieve an exact fit to the clavicle. Bend only at designated bending notch locations.

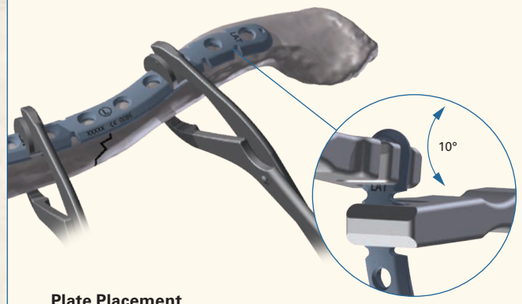


Plate Placement

Use forceps and/or K-wires to stabilize plate placement on bone.

Tip: It is ideal to have 3 holes both medial and lateral to the fracture fragments.

Note: For fractures that are more medial or lateral than the central-third, the plate may be rotated 180° or a plate of the opposite side may be used.

Step 5

3.5mm Non-Locking Screw Insertion

Drills, Drill Guides and Taps are color coded by screw color.

Insert **Drill Guide (0330)** into plate and drill using **2.5mm Calibrated Drill (0253).**

Note: The **Clavicle Elevator (0842)** can be placed under the clavicle to prevent over penetration when drilling. **(Fig. 6a).**

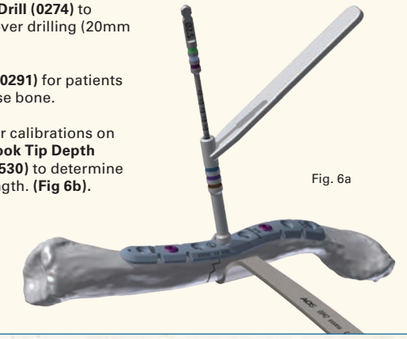
Alternatively, use the **Depth Limiting Drill (0274)** to prevent over drilling (20mm max).

Use **Tap (0291)** for patients with dense bone.

Use either calibrations on drill or **Hook Tip Depth Gauge (0530)** to determine screw length. **(Fig 6b).**

Fig. 6b

Fig. 6a

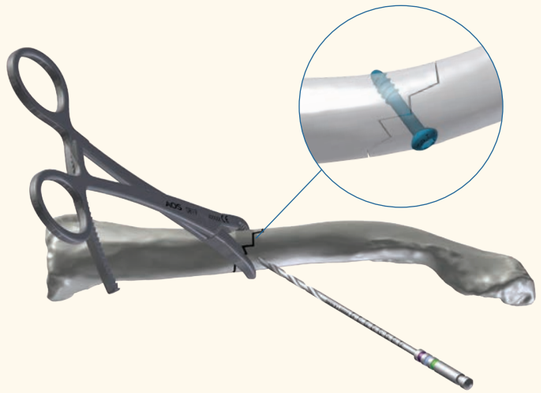


Step 6

Lag Screw Reduction

Lag Screws may be used for interfragmentary fixation by drilling through both cortices with the **2.5mm Drill (0253)**.

A **Countersink (0278)** is available to recess the head of the 4.0mm Lag Screw.



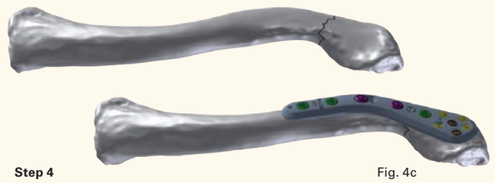
Step 3

Plate Selection

The appropriate sized left or right Superior **(Fig. 4a)**, Anterior **(Fig. 4b)**, or Lateral **(Fig. 4c)** plate is selected. When selecting appropriate Superior plate **(Fig.4a)**, be sure to position it directly superior on the clavicle and avoid inadvertently positioning anteriorly.

Fig. 4a

Fig. 4b



Step 4 Fig. 4c

3.5mm Locking Screw Insertion

Insert **Locking Drill Guide (0324)** in desired plate hole.

Option 1:

Insert **2.5mm Calibrated Drill (0253)** to desired depth and determine screw length from drill calibrations.

Option 2:

Use **Depth Limiting Drill (0274)** in desired plate hole to prevent over drilling (20mm max).

Use **Tap (0291)** for patients with dense bone.

Option 2

Option 1

Step 7

2.7mm Non-Locking and Locking Screws

Locking Screws (Fig. 8a).

Screw the **2.0mm Drill Guide (0325)** into a 2.7mm hole. Use the **2.0mm Calibrated Drill (0252)** to drill to desired depth.

Use either calibrations on drill or **Hook Tip Depth Gauge (0530)** to determine length for locking and non-locking screws.

Non-Locking Scews (Fig. 8b).

Insert **Drill Guide (0330)** into plate and drill using **2.0mm Calibrated Drill (0252).**

Fig. 8a

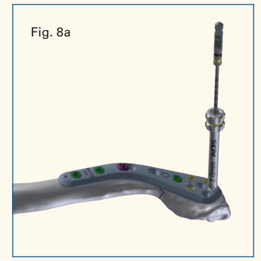


Fig. 8b

Step 8