

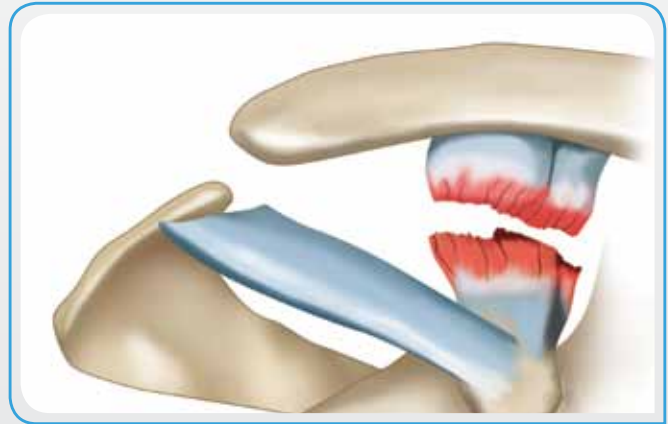
The Clavicle Hook Plates



Indications

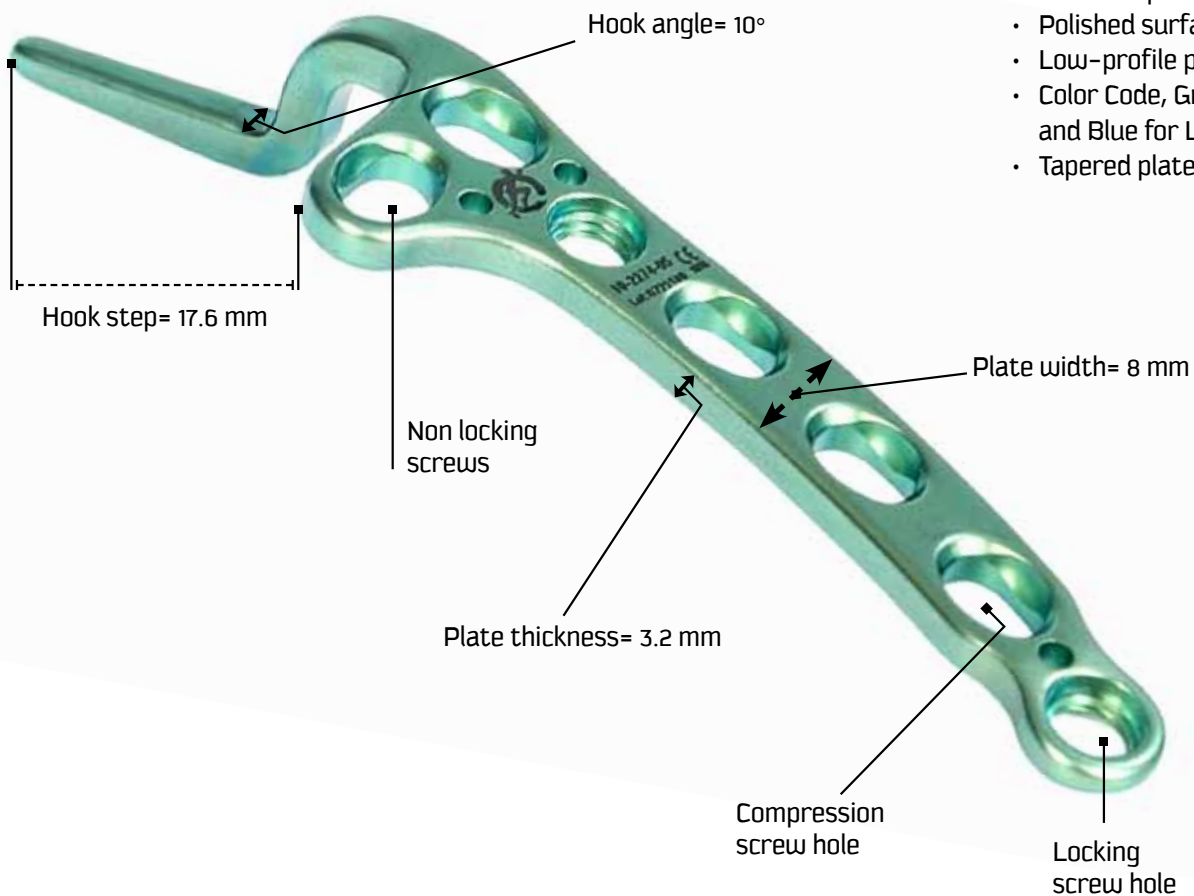
With the Clavicle Hook Plate, we have designed a comprehensive solution for repairing fractures located at the distal portion of the clavicle and Acromioclavicular separations.

Standard ORIF procedures including pinning, reconstruction and DC plating are not appropriate for preserving Acromioclavicular joint function.

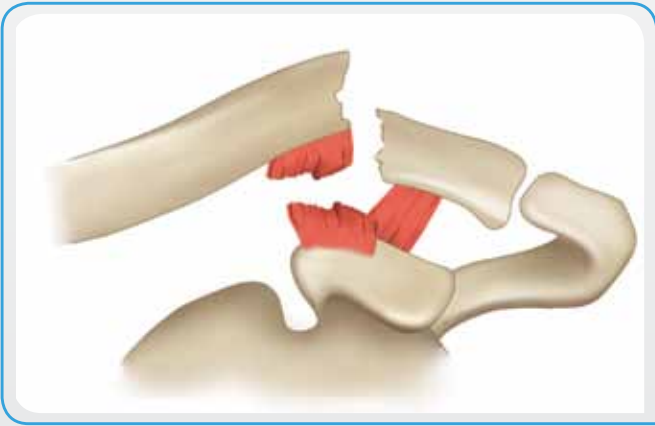


Acromioclavicular Separation

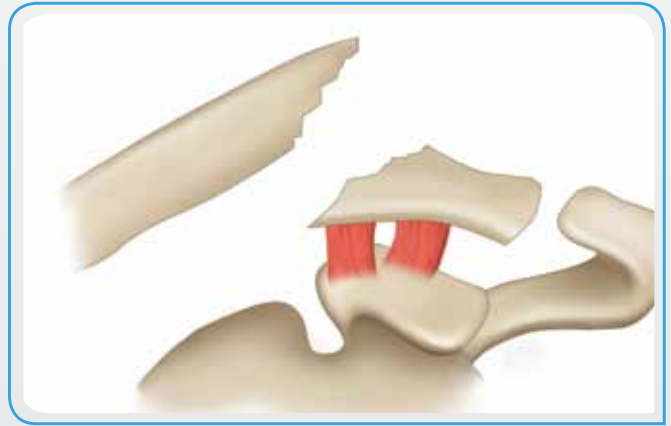
Product Specifications



- Limited contact surface
- Rounded plate edges
- Polished surface
- Low-profile plate
- Color Code, Green for Right and Blue for Left
- Tapered plate end



Fractures Medial to CC Ligaments (Type II)



Articular Surface Fractures (Type III)



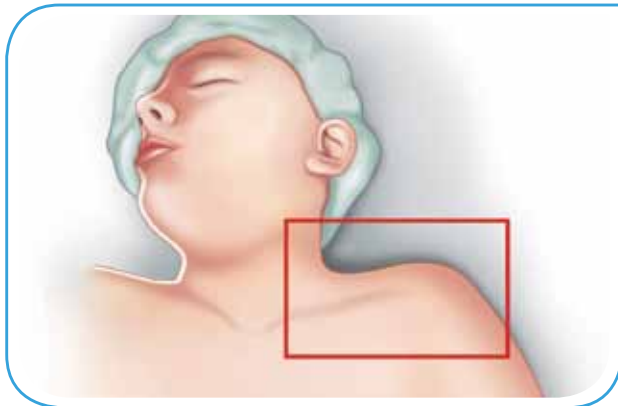
Clavicle Hook Plates

Features

Clavicle hook plate enhances healing capacity resulting in several ways:

Clavicle Hook Plate offers a low profile solution for superior distal plating of the clavicle.

- 3D pre-contoured design matches the natural S-shape of the clavicle.
- Screw positioning that precisely targets distal fragments and provides secure, stable fixation for multiple fracture patterns, especially when disruption of the ligaments is evident
- The locking and compression holes of the plate eases the fixation and fracture reduction capability.
- High grade titanium plate offers increased strength.
- Highly polished surface and rounded plate edges minimize the soft tissue irritation.
- The interface between plate and both of locking and non-locking screws eliminates the soft tissue irritation and provides patient comfort after the surgery.
- The low-contact design under the plate reduces the compression on the periosteum and improves the blood supply to the healing zone
- The tapered end of the plate is designed to lessen the risk of refracture below the plate due to excess stress concentration.
- The design of the hook is not only for optimum fit to subacromial space but also minimizes soft-tissue irritation for the patient.
- Clavicle Hook Plate utilizes K-wire and suture holes to verify plate and screw placement allowing the surgeon to address the most lateral fracture patterns.

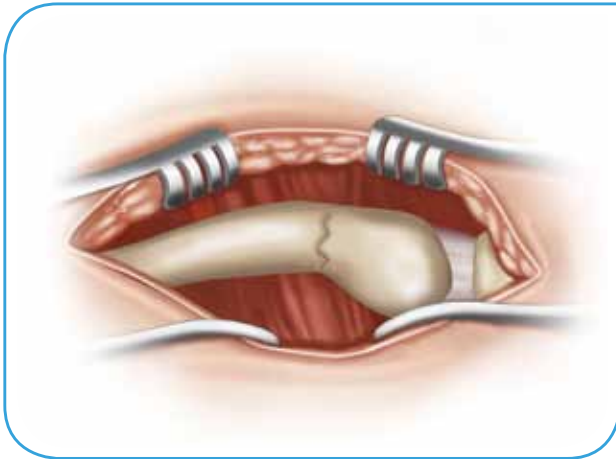


Fractures Fixation

Surgical Technique

The patient is initially placed in the beach chair position. A bolster is placed between the shoulder blades to help facilitate reduction of the fracture during the case.

The patient's involved upper extremity is prepped and draped in a sterile fashion allowing the arm to be manipulated to help further reduce the fracture if required.



Approach

Approximately a six centimeters transverse (medial to lateral) incision is made over the palpable fracture of the clavicle at the lateral third.

Dissection is carried down to the fascia and the skin flaps are elevated. The cutaneous nerves are protected. The musculature is then subperiosteally elevated off the bone fragments. It is important to keep soft tissue attachments to the bone fragments in an attempt to maintain vascularity.

The fracture/dislocation is reduced.

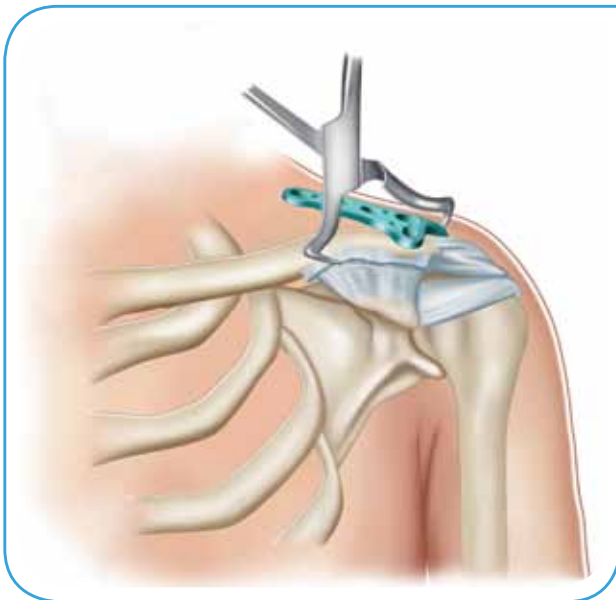
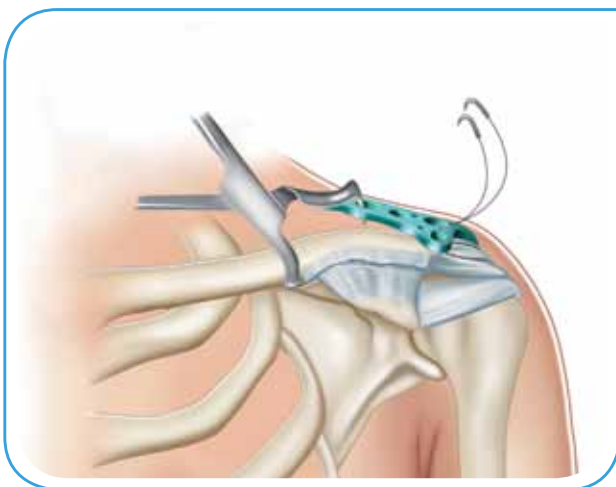


Plate Insertion

Temporary fixation of the fracture were performed with using K-wire wires or bone holding forceps. The soft tissue posterior to the acromioclavicular Joint were dissected to prepare a path for the insertion of the hook. The hook of the plate were passed under the acromion.

The shaft of the plate were placed onto the superior aspect of the clavicle. The end of the hook should be in contact with the underside of the acromion. The correct anatomic alignment of the clavicle and acromion has to be restored without impingement of the rotator cuff.

Before screw fixation, plate position and verification of full shoulder motion were checked with using the c-arm particularly in abduction and external rotation.



Fixation

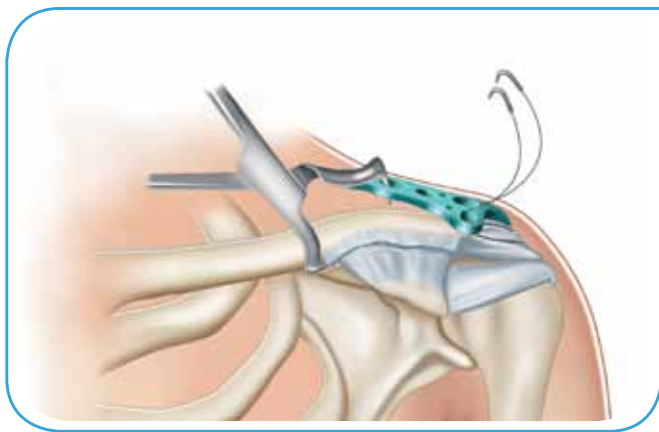
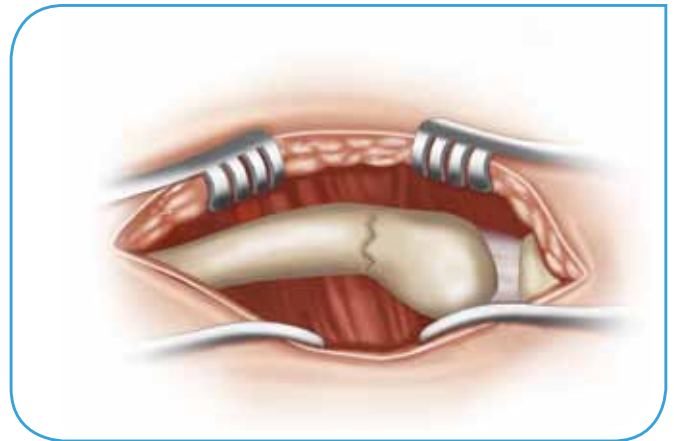
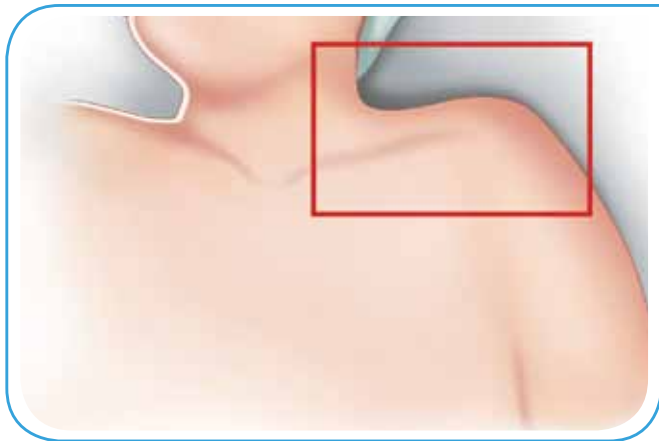
One or two screws (either 3.5 mm cortex or 4.0 mm cancellous bone screws) can be placed in the lateral plate holes. The position and angulation of the screws depends on the fracture configuration.

The 3.5 mm cortex screws placed in the medial plate holes can be positioned eccentrically depending on the fracture configuration to provide dynamic compression of the fracture fragments.

Dislocation of the Acromioclavicular Joint

Incision

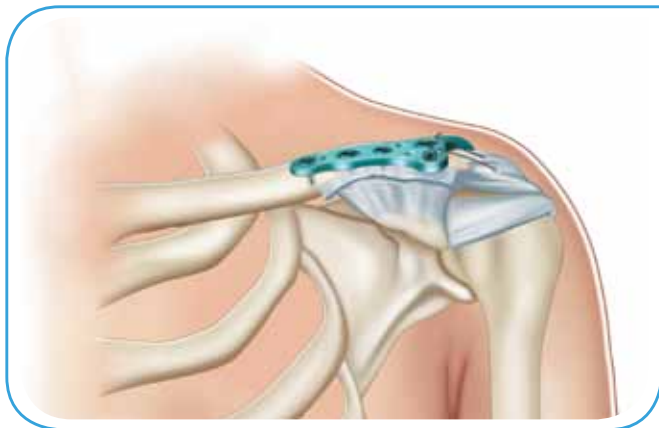
Through the same surgical incision, taking care not to disrupt the soft tissues, expose the acromioclavicular joint and the lateral shaft of the clavicle.



Insertion

The clavicle were pushed down manually to reduce the dislocation of the acromioclavicular joint and provide temporary fixation using K-wire wires. The soft tissue posterior to the acromioclavicular joint were dissected to prepare a path for the insertion of the hook.

All ligament or capsule were repaired. The hook of the plate were passed under the acromion. The shaft of the plate were placed onto the superior aspect of the clavicle. The end of the hook should be in contact with the underside of the acromion. The correct anatomic alignment of the clavicle and acromion has to be restored without impingement of the rotator cuff. Before screw fixation, plate position and verification of full shoulder motion were checked with using the c-arm particularly in abduction and external rotation.



Fixation

If sutures are used to repair the ligaments, the sutures can be passed through the lateral hole(s) of the plate and tied under tension to provide additional stability to the acromioclavicular joint. Place 3.5 mm cortex or 4.0 mm cancellous bone screws in the medial plate holes. Tighten the screws ensuring that the acromioclavicular joint is reduced and stable.

Removal of the Implant

Caution

It is recommended that the Clavicle Hook Plate be removed after healing to prevent potential irritation of the acromion or impingement of the rotator cuff.

Ordering Information

PART NO. DESCRIPTION

10-2273-03	Clavicle Hook Plate, 3 hole, Left
10-2274-03	Clavicle Hook Plate, 3 hole, Right
10-2273-05	Clavicle Hook Plate, 5 hole, Left
10-2274-05	Clavicle Hook Plate, 5 hole, Right
10-2275-03	Clavicle Hook Plate, 3 hole, HS, Left
10-2276-03	Clavicle Hook Plate, 3 hole, HS, Right
10-2275-05	Clavicle Hook Plate, 5 hole, HS, Left
10-2276-05	Clavicle Hook Plate, 5 hole, HS, Right

SCREWS

30-1271-08	2.7mm x 8.0mm Cortical Screw, Self Tapping
30-1271-10	2.7mm x 10.0mm Cortical Screw, Self Tapping
30-1271-12	2.7mm x 12.0mm Cortical Screw, Self Tapping
30-1271-14	2.7mm x 14.0mm Cortical Screw, Self Tapping
30-1271-16	2.7mm x 16.0mm Cortical Screw, Self Tapping
30-1271-18	2.7mm x 18.0mm Cortical Screw, Self Tapping
30-1271-20	2.7mm x 20.0mm Cortical Screw, Self Tapping
30-1271-22	2.7mm x 22.0mm Cortical Screw, Self Tapping
30-1271-24	2.7mm x 24.0mm Cortical Screw, Self Tapping
30-1271-26	2.7mm x 26.0mm Cortical Screw, Self Tapping
30-1271-28	2.7mm x 27.5mm Cortical Screw, Self Tapping
30-1271-30	2.7mm x 30.0mm Cortical Screw, Self Tapping
30-1271-32	2.7mm x 32.0mm Cortical Screw, Self Tapping
30-1271-34	2.7mm x 34.0mm Cortical Screw, Self Tapping
30-1271-36	2.7mm x 36.0mm Cortical Screw, Self Tapping
30-1271-38	2.7mm x 38.0mm Cortical Screw, Self Tapping
30-1271-40	2.7mm x 40.0mm Cortical Screw, Self Tapping
30-1271-45	2.7mm x 45.0mm Cortical Screw, Self Tapping
30-1271-50	2.7mm x 50.0mm Cortical Screw, Self Tapping
30-1271-55	2.7mm x 55.0mm Cortical Screw, Self Tapping
30-1271-60	2.7mm x 60.0mm Cortical Screw, Self Tapping
30-1271-65	2.7mm x 65.0mm Cortical Screw, Self Tapping
30-2271-12	2.7mm x 12.0mm Locking Cortical Screw, Self Tapping
30-2271-14	2.7mm x 14.0mm Locking Cortical Screw, Self Tapping
30-2271-16	2.7mm x 16.0mm Locking Cortical Screw, Self Tapping
30-2271-18	2.7mm x 18.0mm Locking Cortical Screw, Self Tapping
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30-2271-22	2.7mm x 22.0mm Locking Cortical Screw, Self Tapping
30-1351-08	3.5mm x 8.0mm Cortical Screw, Self Tapping
30-1351-10	3.5mm x 10.0mm Cortical Screw, Self Tapping
30-1351-12	3.5mm x 12.0mm Cortical Screw, Self Tapping
30-1351-14	3.5mm x 14.0mm Cortical Screw, Self Tapping
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30-1351-25	3.5mm x 25.0mm Cortical Screw, Self Tapping
30-1351-26	3.5mm x 26.0mm Cortical Screw, Self Tapping
30-1351-28	3.5mm x 27.5mm Cortical Screw, Self Tapping

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30-1351-36	3.5mm x 36.0mm Cortical Screw, Self Tapping
30-1351-38	3.5mm x 38.0mm Cortical Screw, Self Tapping
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30-2351-55	3.5mm x 55.0mm Locking Cortical Screw, Self Tapping
30-2351-60	3.5mm x 60.0mm Locking Cortical Screw, Self Tapping
30-2351-65	3.5mm x 65.0mm Locking Cortical Screw, Self Tapping
30-1401-12	4.0mm x 12.0mm Cancellous Screw, Self Tapping
30-1401-14	4.0mm x 14.0mm Cancellous Screw, Self Tapping
30-1401-16	4.0mm x 16.0mm Cancellous Screw, Self Tapping
30-1401-18	4.0mm x 18.0mm Cancellous Screw, Self Tapping
30-1401-20	4.0mm x 20.0mm Cancellous Screw, Self Tapping
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30-1401-60	4.0mm x 60.0mm Cancellous Screw, Self Tapping

The Clavicle Hook Plates

manufactured by



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