

Locking Plate Cable System



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Warning

- This publication describes the recommended procedures for using Boneunion devices and instruments.

It offers guidance that you should pay attention to. But as with any such technical guide, the guide alone does not provide sufficient background for direct use of the instrument set, each surgeon should also consider the particular needs of each patient and make appropriate adjustments when required. Instruction by experienced surgeon is still highly recommended.

- All non-sterile devices must be cleaned and sterilized before use. Multi-component instruments must be disassembled for cleaning. Please follow the instructions provided in our Reprocessing, Care and Maintenance Guide (RCMG-2012).

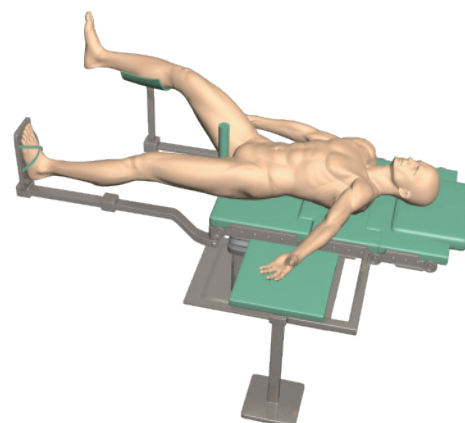
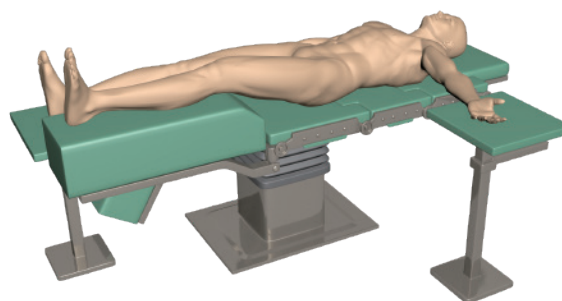
- Please refer to Package Insert for a complete list of potential adverse effects, contraindications, warnings and precautions. The surgeon must discuss all relevant risks, including the finite lifetime of the device, with the patient, when necessary.

Indications

- Trochanteric osteotomy
- Extended trochanteric osteotomy
- Trochanteric fracture
- Periprosthetic long bone fractures

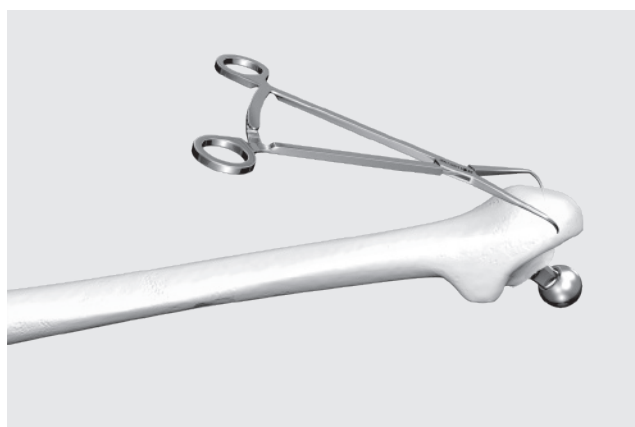
Patient Position

Place the patient in the supine or lateral position on a radiolucent surgical table according to surgeon preference and fracture pattern. If using a fracture table, the foot of the affected limb is placed in a foot holder or a skeletal traction pin is used to achieve traction. The unaffected limb is extended down and away from the affected limb or placed up in a leg holder. Check the affected limb for length and rotation by comparison to the unaffected limb. Rotate the C-Arm to ensure optimal AP and lateral visualization of the proximal femur.



STEP 1: REDUCTION

Obtain gross skeletal alignment using applied traction, reduction forceps, a ball spike pusher, half pins or other conventional methods of reduction. Provisionally secure fracture fragments using 2.0mm K-wires or reduction forceps. Reduction aids should be placed so as not to interfere with final plate placement.



STEP 2: POSITION GRIP LOCKING PLATE AND TEMPORARY FIXATION

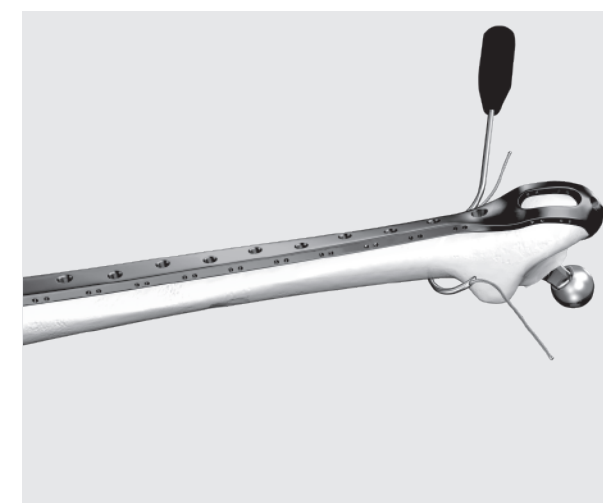
Position the grip locking plate on the bone and place the proximal hooks of the grip into or above the greater trochanter and reduce the assembly into position on the bleeding bone of the femur



STEP 3: POSITION THE CABLE

Select the appropriate cable passer. The size and shape of the cable passer depends upon the circumference of the bone and access to the site. Select a cable passer that will allow the instrument to pass around the bone without causing significant damage to soft tissues or excessive stripping of the periosteum. Pass the cable passer around the bone. Thread the free end of the cable into the end-hole of the cable passer until the cable exits through the proximal holes. Remove the cable passer leaving the cable wrapped around the bone.

Note: The cables should not be passed around a prosthesis.



STEP 4: POSITION CABLE CRIMP

Insert the end of the cable through the free hole of the crimp, and place the crimp in the desired position on the bone. When placing the crimp, ensure that it is covered by soft tissue and securely anchored in the bone. The four points on the underside of the crimp must contact the bone, and the smooth side must face upwards.



STEP 5: INSERT CABLE INTO THE CABLE TENSIONER

Mount the temporary tension holder and the attachment bit on the cable tensioner. To enable the cable to be inserted into the cable tensioner, turn the fluted knob at the end of the tensioner counterclockwise as far as possible. Insert the cable into the cable tensioner, and advance the attachment bit up to the crimp.



STEP 6: TENSION CERCLAGE CABLE

Turn the fluted knob on the cable tensioner until the desired tension is reached. The tension is shown by the markings on the tensioner (20–50 kg). If the cerclage cable is tensioned above the specified level, it may tear out of the crimp or cut through or crush osteoporotic bone.

Note: Take care not to exceed 50 kg of tension. Applying more tension may cause the cable to cut through soft or osteoporotic bone.



STEP 7: SECURE CERCLAGE CABLE WITH CABLE CRIMP

When the desired cable tension is reached, the cerclage cable can be secured with the crimp. Place the jaws of the cable crimper on the crimp, ensuring that the crimp is centred and is correctly held in the crimper jaws. Pull the inner start lever first, then squeeze the outer handles to complete crimping. The toothed mechanism of the cable crimper establishes the appropriate compression pressure for securing the crimp.

Note: Incorrectly placing the cable crimper can lead to crimp failure.



STEP 8: REMOVE CABLE TENSIONER

When the crimp – and thus the cerclage cable – is secured, turn the fluted knob on the cable tensioner as far as possible, and remove the tensioner. If the temporary tension holders are wed, push the lever of the cam lock forward, and pull the holder off the cable.



STEP 9: SCREW FIXATION (OPTIONAL)

Based on the quality of bone and stability of the fracture construct, supplemental fixation may be accomplished with either conventional compression (cortical) screws, locking screws, or a combination of both types.

