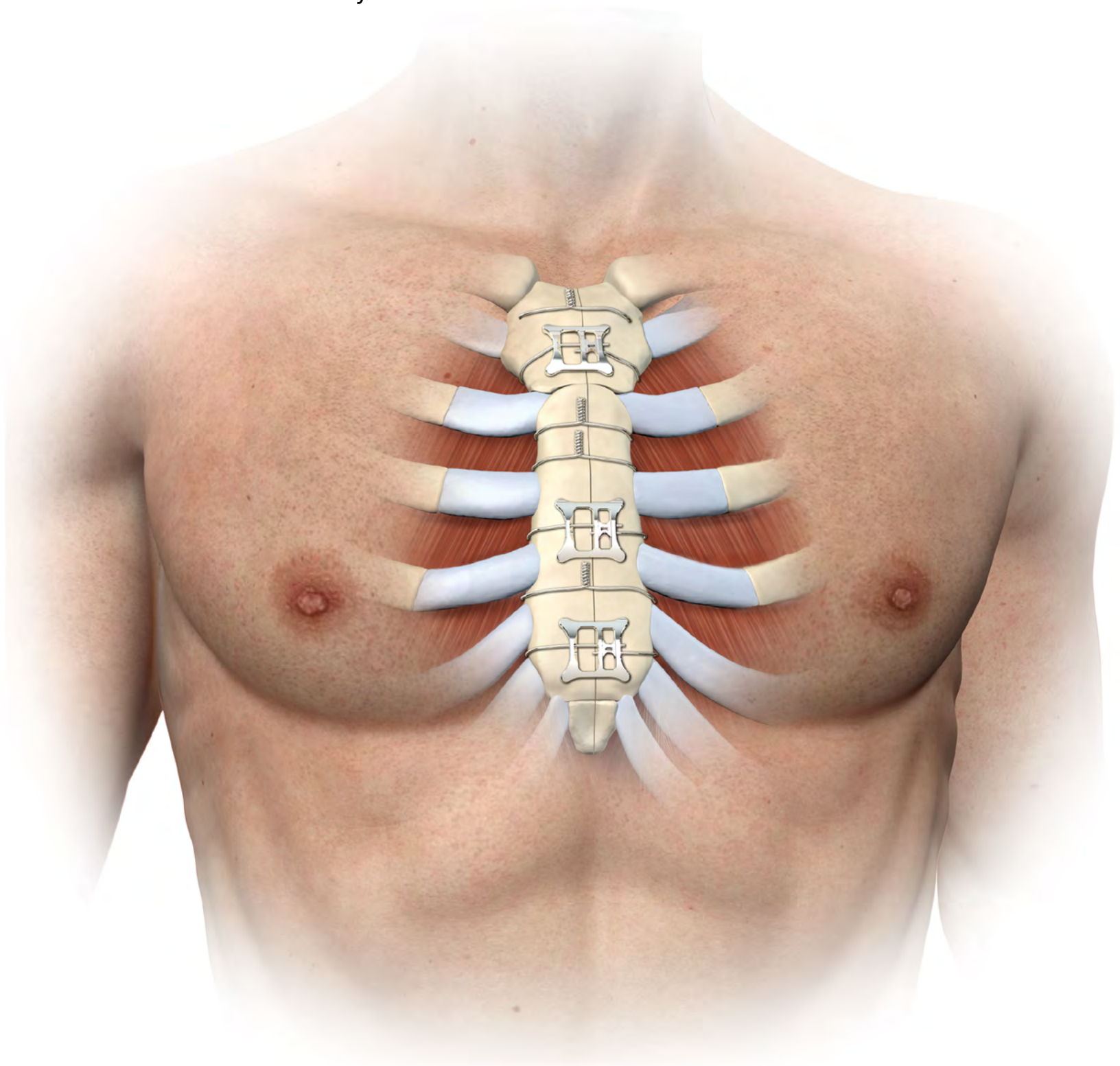


**AcuTie® II**

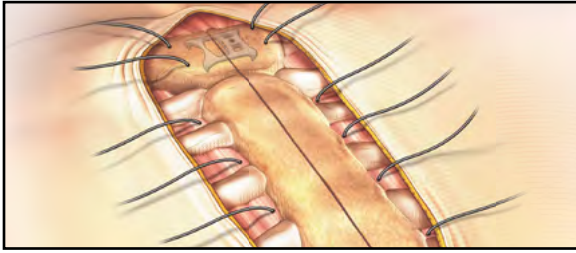
The Next Generation  
Sternum Closure System

Surgical Technique



Innovative Solutions for Challenging  
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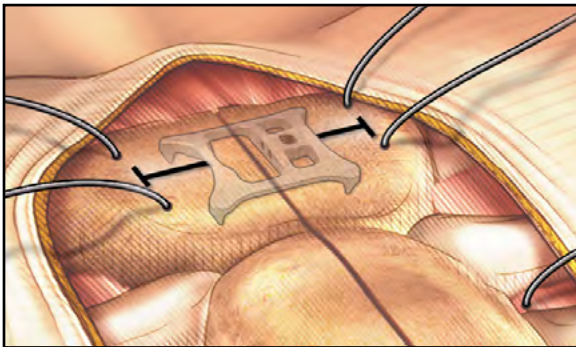
# AcuTie II Surgical Technique



## 1 Install Wire

- a. Feed #5, 6, or 7 wire through or around the sternum using a standard technique.
- b. Ensure the distance between wire penetration is sufficient to allow room for the plate.

**Caution:** For each wire, the distance between penetrations must be greater than the width of the plate (~2 cm) when the sternum is approximated or adequate closure may not be achieved.

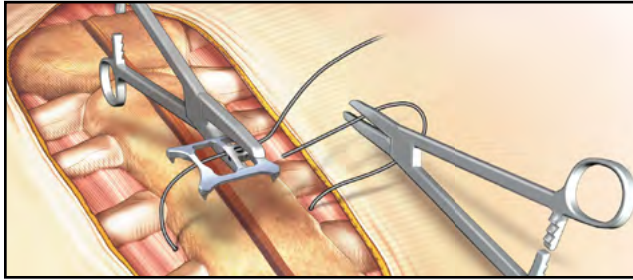


- c. When removing needles and applying needle drivers, leave wires as long and straight as possible.



- d. Approximate the sternum halves by twisting wire where plates will not be used.

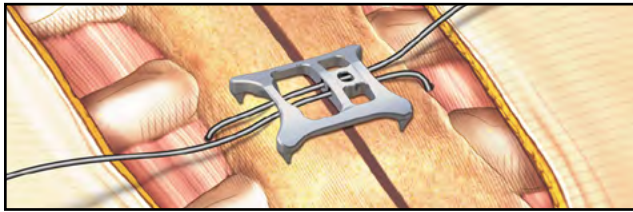
## AcuTie II Surgical Technique [continued]



### 2 Feed Wire

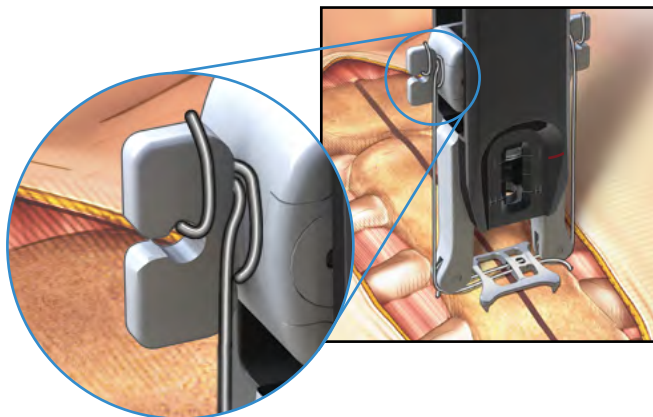
- a. Use needle drivers to handle and feed wire through the plate. If necessary, trim any kinked wire ends, leaving the wire as long as possible to facilitate smooth wire passage.

**Caution:** Avoid sharp wire ends.



- b. Use needle drivers to pull the wire ends laterally, centering the plate over the sternotomy.

**Note:** Avoid pulling wires anteriorly, which can cause kinks in the wire and make the plate difficult to seat.



### 3 Load Tensioner

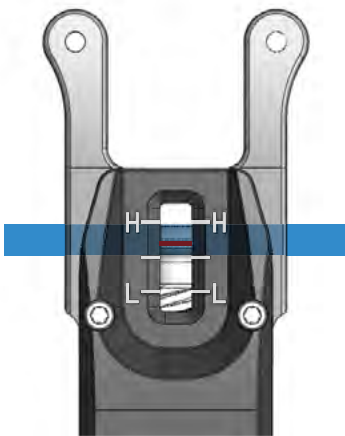
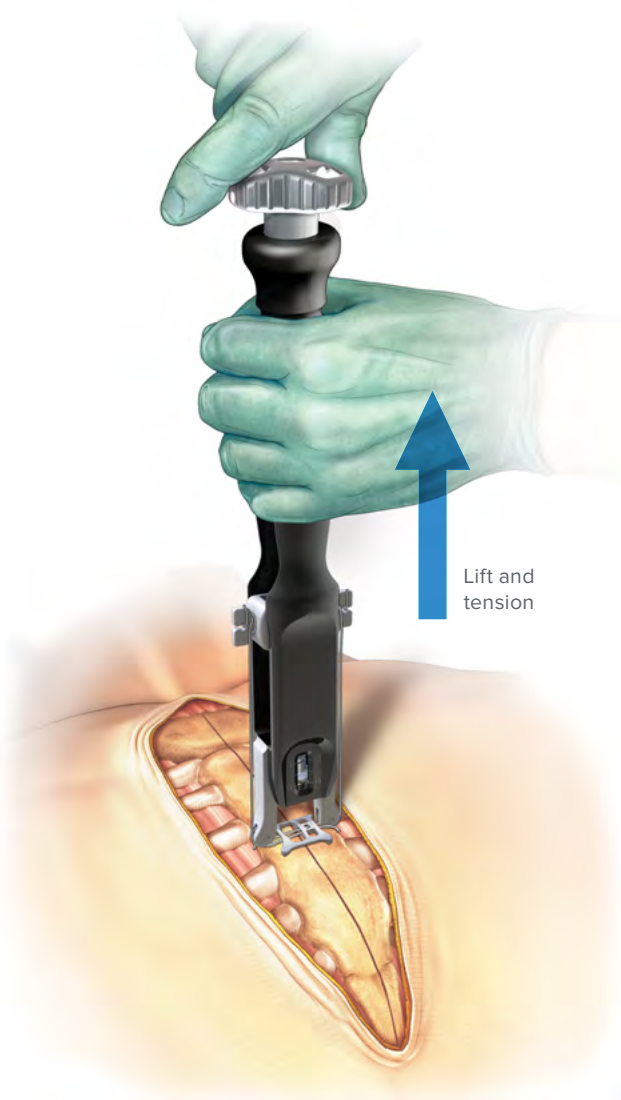
- a. Lower the tensioner shuttle to the distal end by turning the knob. Center the tensioner over the plate.
- b. While keeping the wires contained within the pulleys, wrap the wires fully around the wings.

## AcuTie II Surgical Technique [continued]

### 4 Tension

- a. Lift up on the tensioner grip while tensioning by turning the knob.
- b. Tension until cleats seat into the sternum.

**Tip:** Optimal tension is typically between Medium and High.



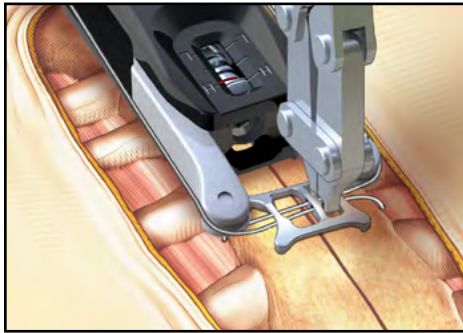
Tension indicator

**Caution:** The torque needed to turn the knob is not an indicator of tension. Wire forces on the sternum can exceed 45 lbs when tensioned above High.

**Warning:** Recommended settings are meant to assist the surgeon in optimizing the performance of the system, not to replace the surgeon's judgment. Ideal tension may vary with bone quality or geometry. Reduced bone quality may warrant a lower tension.



## AcuTie II Surgical Technique [continued]



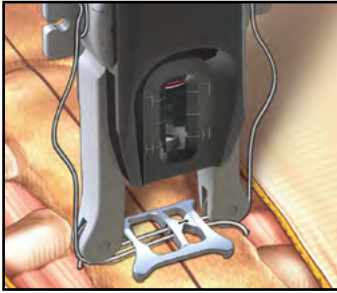
### 5 Crimp

- a. Align the crimper perpendicular to the plate and push down to ensure that the crimper tips fully engage the crimp feature.



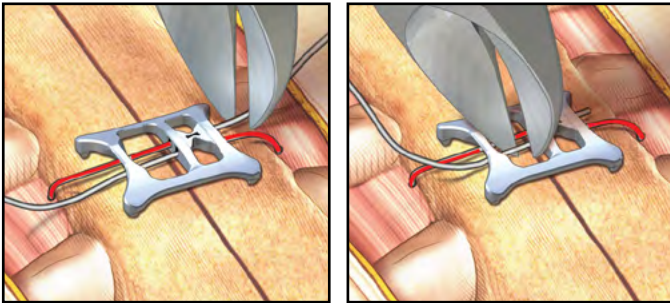
- b. Crimp the plate to lock the wire tension by fully compressing the crimper until the “stops” make contact.

## AcuTie II Surgical Technique [continued]



### 6 Trim Wire

- a. Prior to cutting the wire, fully lower the shuttle to release the wire tension. This resets the tensioner for the next use and prevents snap-back caused by sudden release of tension.



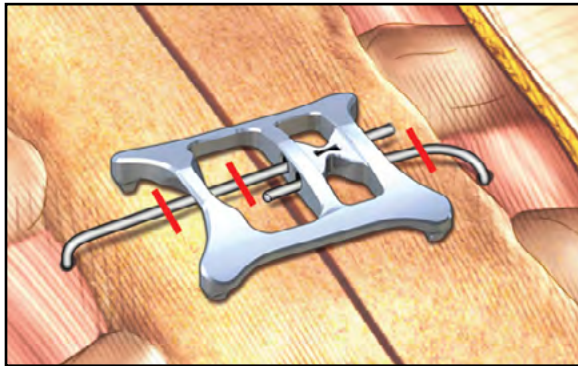
- b. Cut the free ends of the wire with the supplied wire cutters, as pictured. Take care not to cut the tensioned wire loop encircling the sternum (illustrated as red).

**Note:** Cutting the wire end within the window eases plate removal if reentry is required.



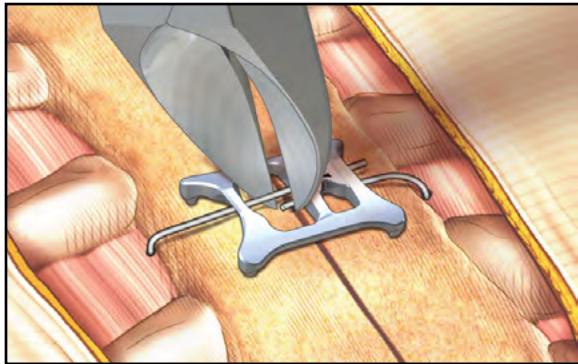
- c. Confirm the closure is secure. Re-twist wires as needed after all the plates are installed.

## AcuTie II Surgical Technique [continued]



### Re-Entry

Cut the encircling wire within the window or at the lateral edge of the plate.



**Note:** If two wires are present in the cutting window, cutting one wire at a time may be easier than cutting both simultaneously.

**Caution:** If cutting both wires, retrieve any wire fragments.



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