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— ORTHOPEDICS —



Rotator Cuff Repair

ICONN Revolution Knotless Suture Anchor
Double Row Technique (Lateral Row Shown)

Surgical Protocol by
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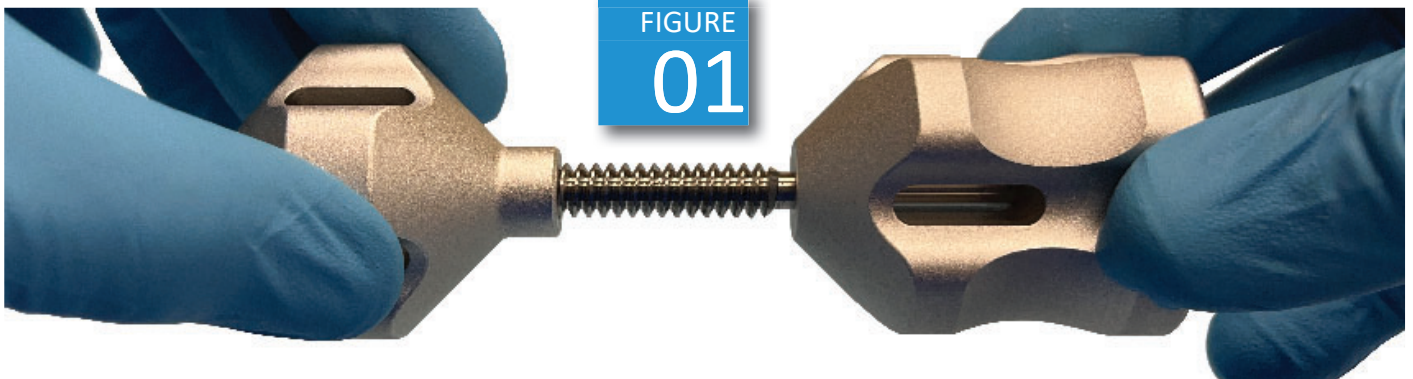
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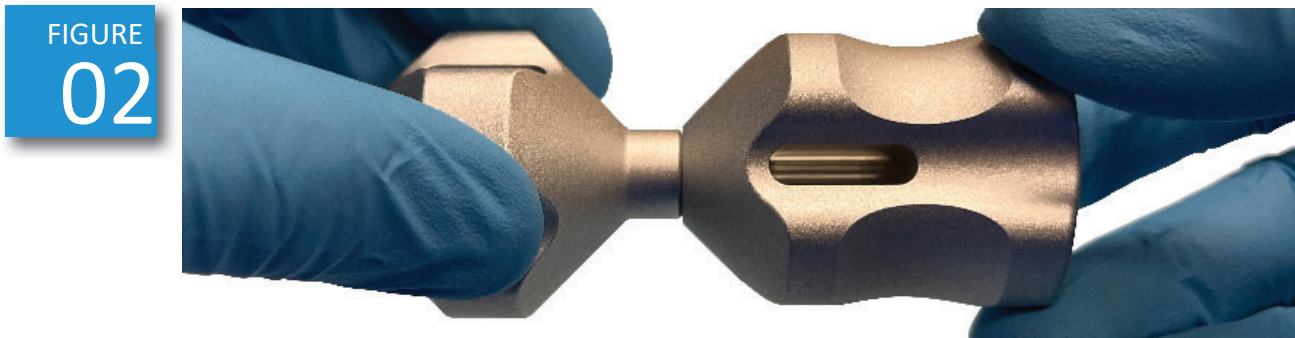
STEP 1 - DRIVER ASSEMBLY

The surgical protocol laid out herein shows lateral row fixation of a double row repair using ICONN Answer II Suture Anchors on the medial row. For implanation of medial row anchors, refer to MKT-004 ICONN Answer II 4.75/5.5MM Suture Anchor Surgical Protocol. The ICONN Revolution Knotless Suture Anchor may be used in a number of different configurations, depending on surgeon preference, including single row knotless repair and double row all-knotless repair.



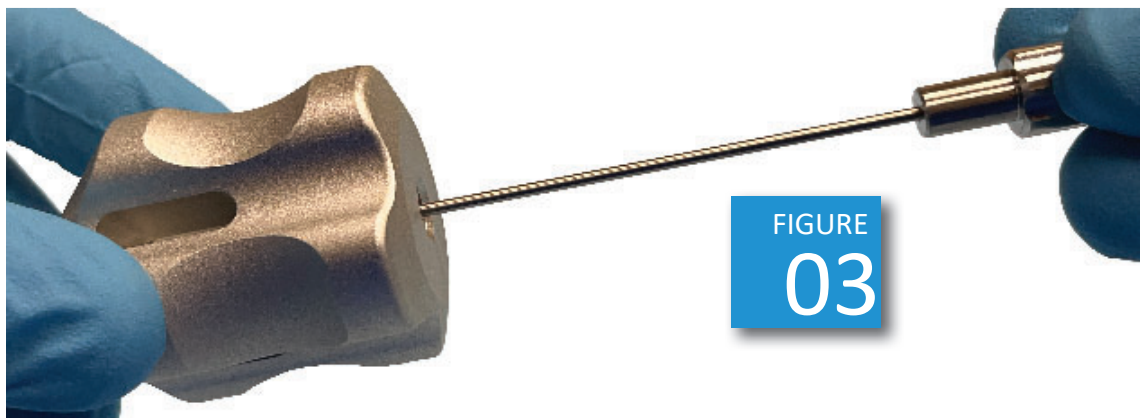
Assemble Driver

Insert threaded driver part of ICONN Revolution Knotless Suture Anchor Driver (P/N 351001) into smaller handle until thread meets handle as seen in Figure 1 above. To engage threads rotate larger handle **counter-clockwise**. Continue rotating larger handle until fully inserted as seen in Figure 2 below.

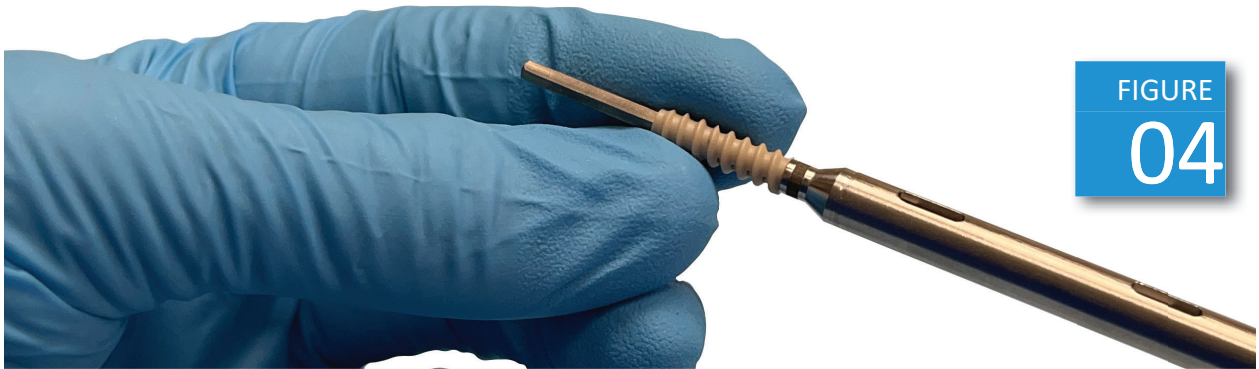


Insert Pin

Insert eyelet attachment pin into back of driver handle and slide into place until pin handle meets back of driver handle as seen below in Figure 3.



STEP 2 - ANCHOR / DRIVER ASSEMBLY



Attach Anchor and Eyelet

Open desired size and number of ICONN Revolution Knotless Suture Anchor(s) (4.75mm - P/N 350000 or 5.5mm - P/N 355000) depending on surgeon preference. The anchor includes anchor body and eyelet.

Slide anchor body over the driver shaft until back of anchor meets outer shaft (portion of driver with laser marking) as seen in Figure 4 above. This may require some slight rotation in order to orient the hex appropriately. Note - if the anchor body is backwards, the anchor will not slide all the way to meet the outer shaft of the driver. If this occurs, remove anchor body, flip 180 degrees and reattach.

After attaching anchor body to driver, insert extension of eyelet into cannulation in the driver shaft as seen below in Figure 5. Note - hold onto eyelet through the next step in order to avoid it falling out of driver shaft.

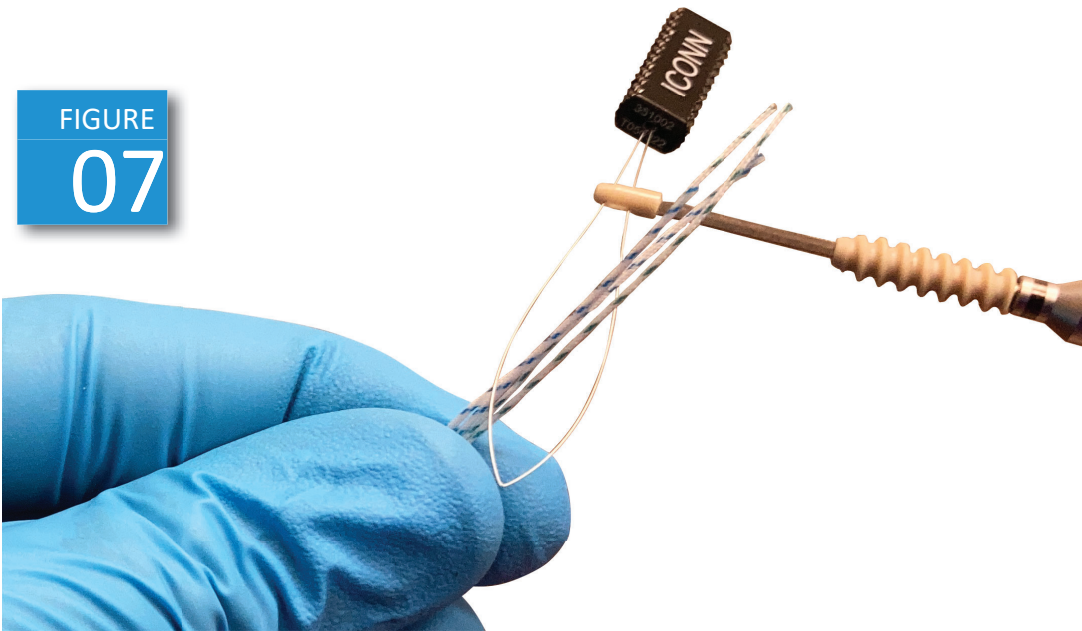


Screw Driver Pin into Eyelet

While holding onto eyelet, screw driver pin into eyelet until securely connected as seen above in Figure 6. Make sure to avoid overtightening.

STEP 3 - SUTURE ATTACHMENT

FIGURE
07



Thread Sutures

Using reusable suture threader, insert nitinol loop through eyelet. Taking up to four suture tails intended to be attached to anchor, place suture tails through exposed nitinol loop at least 1.5" through the loop as seen in Figure 7. It is preferable that each lateral row anchor has sutures from each medial row anchor attached to it. Each anchor can take up to 8 suture tails. To thread sutures through the eyelet, **make sure to support the eyelet/insertor** as seen in Figure 8 below. Pull suture threader until suture tails are completely passed through eyelet. Repeat this step with remaining suture tails if passing more than four tails.

FIGURE
08



STEP 4 - PREPARE PILOT HOLE

FIGURE
09



Select Desired Anchor Position

Place ICONN Revolution Knotless Suture Anchor Awl (P/N 351004) at a 45 degree angle 5-10mm lateral to the edge of the tuberosity as seen in Figure 9 above. Mallet awl into bone until back of laser line meets the cortical surface seen below in Figure 10.

FIGURE
10



STEP 5 - ANCHOR INSERTION



FIGURE
11

Set Tension and Insert Anchor

Advance anchor into shoulder while applying tension to suture tails. Allow for enough slack to advance eyelet into pilot hole until it bottoms out (leading edge of anchor will be flush or slightly above surface of bone). Malleting the back of the driver may be required, but do not mallet the back of the pin. Remove pin prior to malleting. While maintaining downward force on anchor, pull suture tails to individually tension until desired tension is set as seen in Figure 11 above.

Prior to inserting anchor, remove driver pin by unscrewing from eyelet and pulling out of driver as seen below in Figure 12.

Once tension is confirmed and while maintaining downward force on the anchor, rotate large handle of driver clockwise while holding small handle of driver in place. Continue until anchor is fully seated 1-2mm below the cortical surface as seen below in Figure 13. The leading edge of the laser line is 1mm behind the back of the anchor.

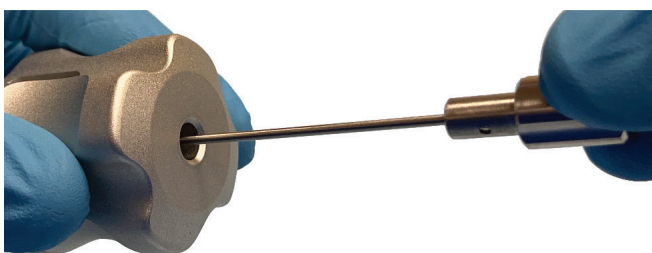


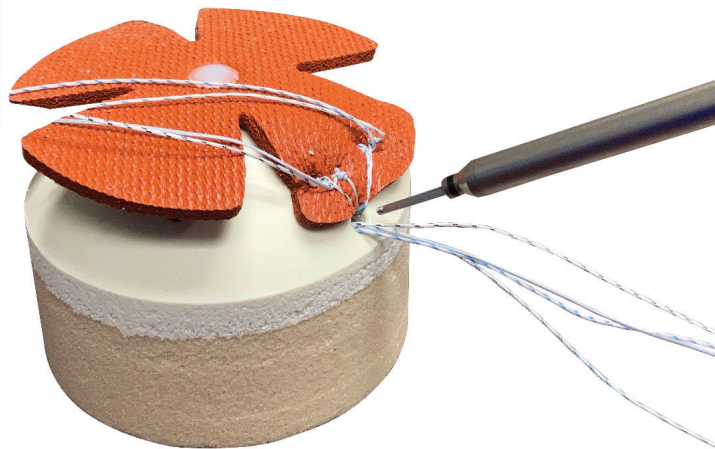
FIGURE
12



FIGURE
13

STEP 6 - REMOVE DRIVER AND CUT SUTURES

FIGURE
14



Remove Driver and Cut Excess Suture

After confirming anchor is fully seated, remove driver by pulling back on driver handle as seen in Figure 14. Light, upward malleting on bottom of driver handle may be required.

After confirming location, depth, and tension of anchor, cut excess suture tails as seen in Figure 15 below.

FIGURE
15



FIGURE
16




Repeat

Repeat steps 1-6 until desired number of anchors are placed and repair is complete as seen in Figure 16 to the left. Upon completion close arthroscopic incisions.

IMPLANT AND INSTRUMENT LIST

PART NUMBER	DESCRIPTION
350000	ICONN Revolution 4.75MM Knotless Suture Anchor
355000	ICONN Revolution 5.5MM Knotless Suture Anchor
351001	ICONN Revolution Knotless Suture Anchor Driver
351004	ICONN Revolution Knotless Suture Anchor Awl
HSe-2C-NN	ICONN HS Fiber White/Blue #2 Suture
HSe-2K-NN	ICONN HS Fiber White/Black #2 Suture
HSe-2G-NN	ICONN HS Fiber White/Green #2 Suture
HSe-2XC-NN	ICONN HS Fiber Blue #2 Suture
HS226	ICONN 1.6mm TetherTape, White/Blue
HS229	ICONN 1.6mm TetherTape, White/Green
HSe-2D-M06	ICONN HS Fiber White #2 Suture w/ 2 M06 Needles
HSe-2CD-M06	ICONN HS Fiber White/Blue #2 Suture w/ 2 M06 Needles
HS180	ICONN HS Fiber White #2 Suture w/ 1 M04 Needle
HS181	ICONN HS Fiber White/Black #2 Suture w/ 1 M04 Needle
HS169	ICONN HS Fiber White/Blue #2 Looped Suture



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a company which is equally as innovative from
a performance standpoint as from a
cost-reduction standpoint.

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