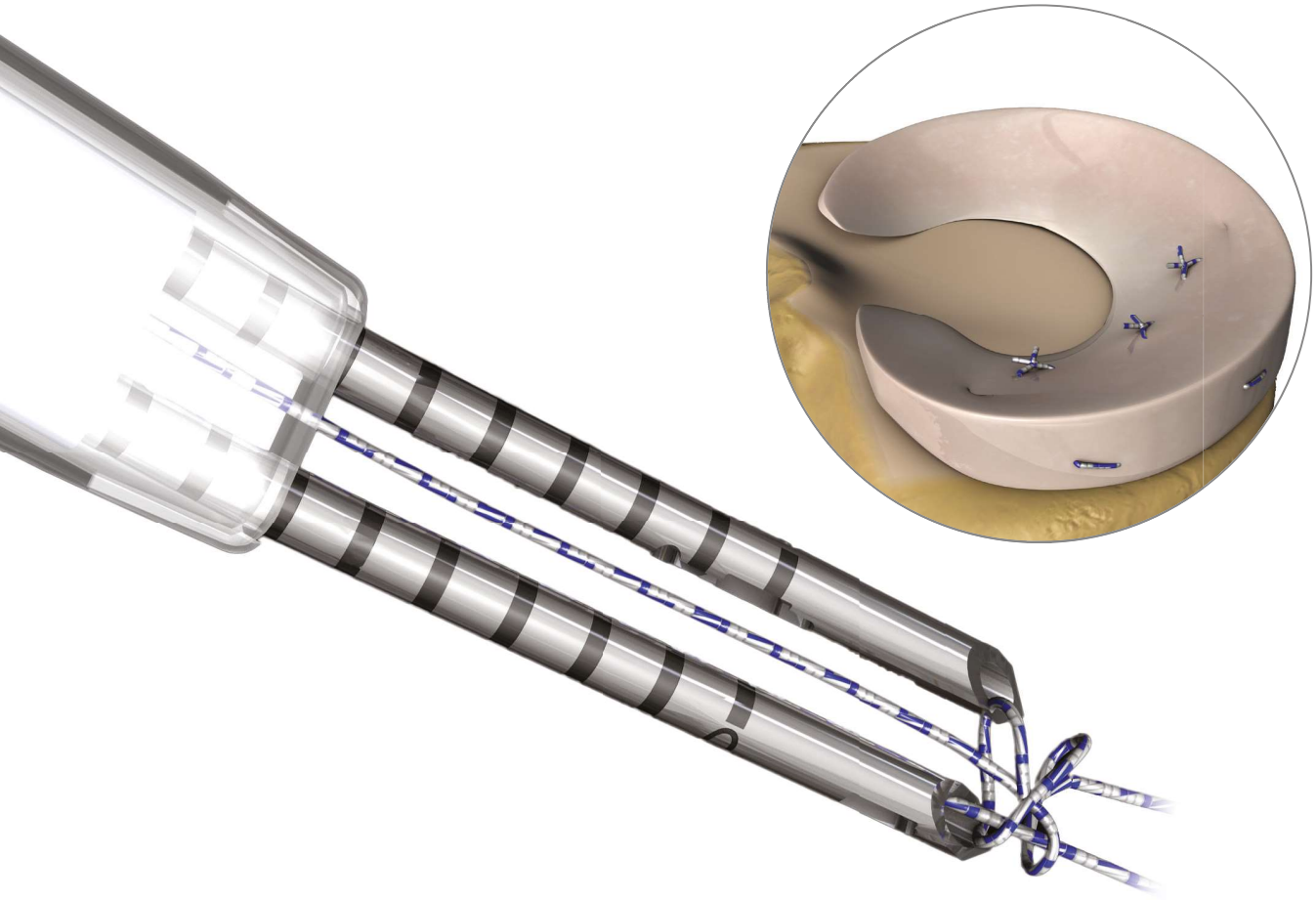
CrossFix® II

All-Suture, All-Inside Meniscal Repair System

Surgical Technique



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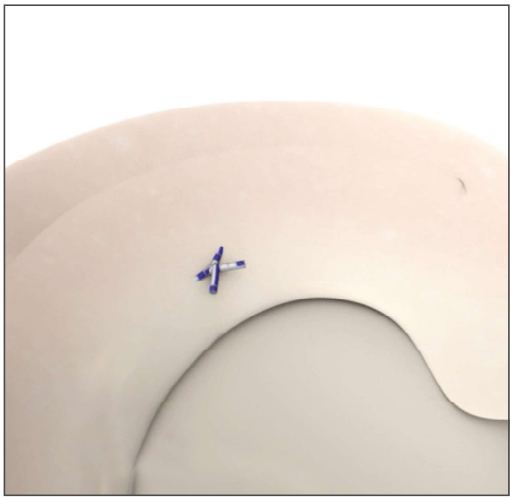
Your progress. Our promise.®

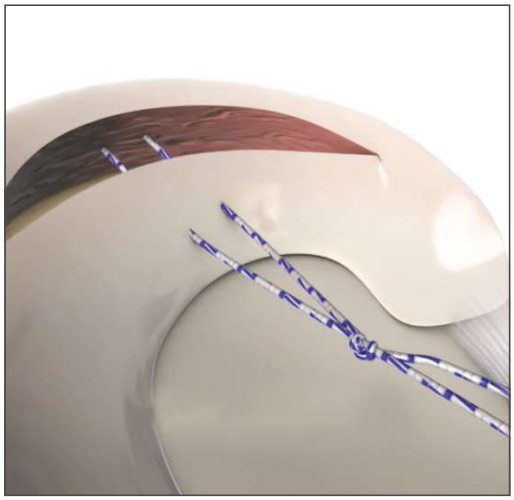
All-Inside Repair with **Inside-Out Results**

The CrossFix II Meniscal Repair System is a suture only device that creates an instantaneous mattress stitch for a **fast, strong, and reliable** all-inside meniscal repair.



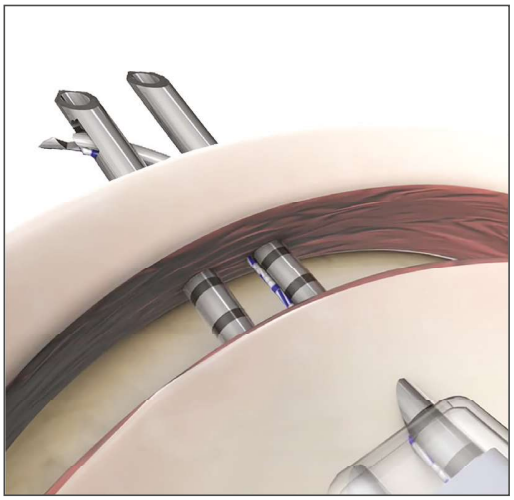
Fast

Single insertion of device into meniscus with pre-tied sliding knot creates an instantaneous 3 mm mattress stitch.



Strong

Biomechanically strong fixation with pull - out forces analogous to open suture techniques.*



Reliable

Consistent deployment of suture in both straight and curved dilating needle options. Reproducible technique without fiddle factor.

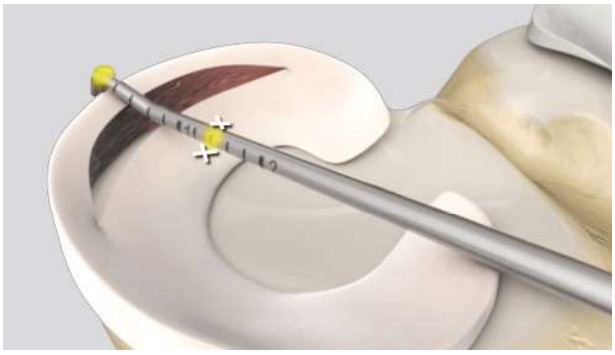


Figure 1

Figure 3

Figure 2

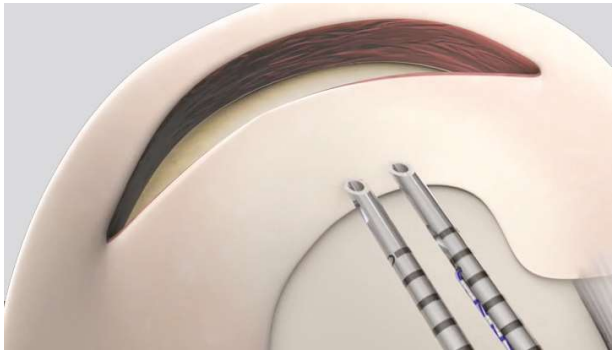


Figure 4

Step 1

Access the location of the meniscal tear and determine the repairability. If the tear is repairable, determine appropriate portal placement for instrumentation. Using the Probe in the CrossFix II Disposable Kit, measure the tear (Figure 1).

Note: The tip of the Probe can be bent to the desired angle by using hemostats or other instrumentation.

Step 2

Set the depth limiter to the desired distance by pulling the black lever on the handle of the CrossFix II device backwards (Figure 2).

Note: This is done outside of the knee joint.

Step 3

Insert the Introducer (from the Disposable Kit) through the portal first, and then slide the exposed CrossFix II needles along the Introducer into the joint space (Figure 3).

Note: This helps the CrossFix II pass through the tissue and into the joint space without torquing the needles.

Step 4

Once the needles are in the joint space, remove the Introducer from the knee (Figure 4).

Figure 6

Figure 7

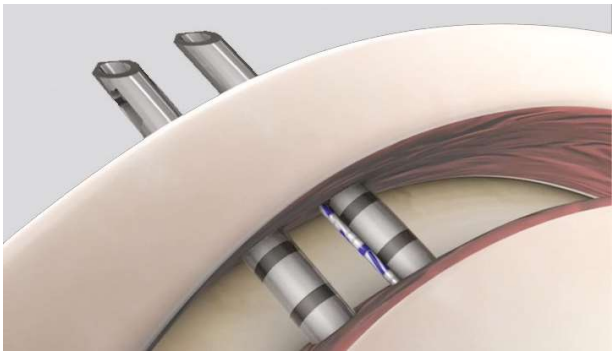


Figure 5

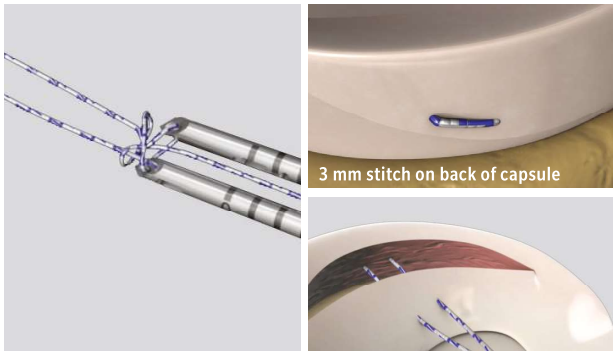


Figure 8

Step 5

Insert the needles into meniscus capturing the tear. The needles will be in position when the depth limiter pushes against the meniscal surface, limiting advancement (Figure 5).

- **OR Tip:** To avoid needle torque, let go of the CrossFix II device after insertion through the meniscal tissue to allow the needles to re-align.
- **OR Tip:** Lightly mallet CrossFix II into the knee space to ensure needles enter evenly.

Step 6

With the needles in position, squeeze the device trigger, deploying the needle and passing the suture. The trigger can be released after hearing an audible click (Figure 6 and 7).

- **Note:** A 20° oblique stitch is biomechanically equivalent to a vertical stitch.

Step 7

Remove the needles from the knee and gently pull the device out of the joint allowing the pre-tied sliding knot to advance into position (Figure 8).

- **Note:** You will feel tension as the knot slides off the needles.

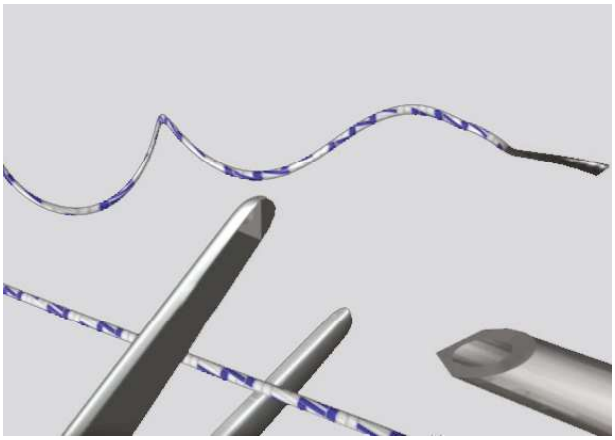


Figure 9

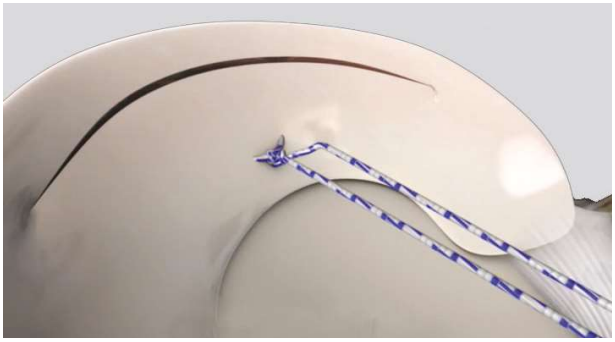


Figure 10

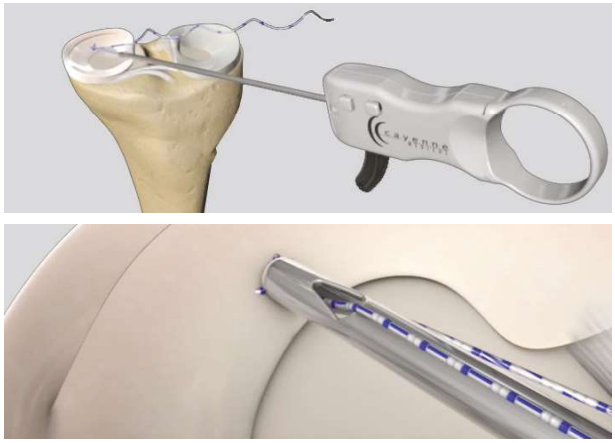


Figure 11

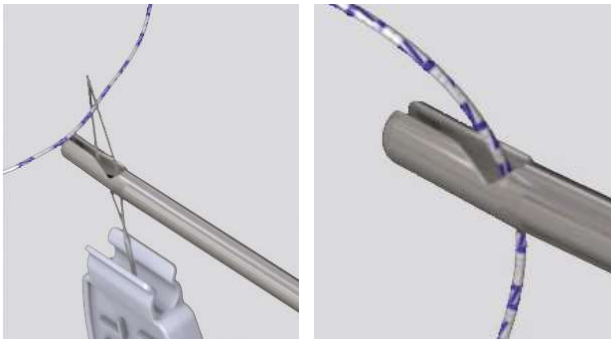


Figure 12

Step 8

The locking curly (black) end will fall off the needle as the device is slowly removed from the knee space. Cut the post (white) end off the needle tip (Figure 9).

Note: Be careful not to cut or prematurely pull the black end of the suture as this results in permanently locking the knot.

Step 9

Pull the post (white) end of the suture to advance the sliding knot to reduce the meniscal tear (Figure 10).

Optional

If not satisfied with the reduction of the meniscal tear, thread the post (white) end of the suture through the CrossFix II Knot Pusher/Suture Cutter and apply tension to the post end (Figure 11).

Note: Suture can be threaded through the Knot Pusher/Suture Cutter with packaged snare or by hand (Figure 12).

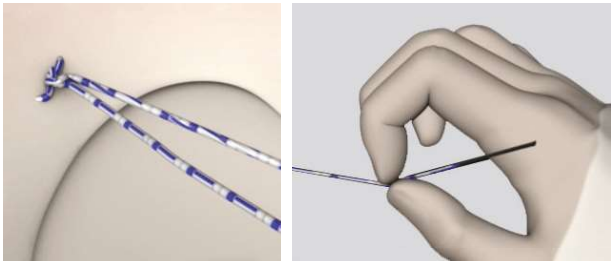


Figure 13

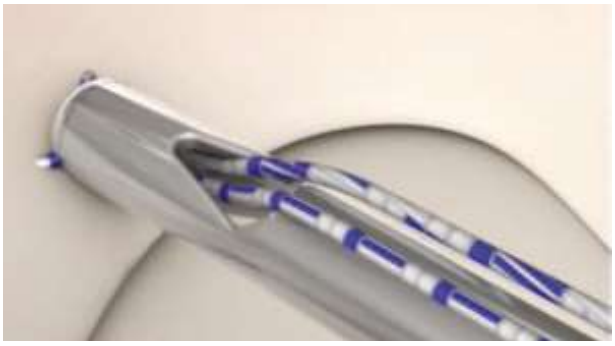


Figure 14

Step 10

With the knot in position, lock the knot by pulling on the curly black end of the suture. Half hitches can be added as needed (Figure 13).

Step 11

Thread both ends of the suture through the CrossFix II Knot Pusher/Suture Cutter. Rest the tip of the Knot Pusher/Suture Cutter on the knot to allow for a 2-3 mm tail (Figure 14).

Figure 15

Figure 16

Step 12

Cut the suture by pulling the black trigger backwards (Figure 15).

Step 13

Assess the fixation and repeat as needed (Figure 16).

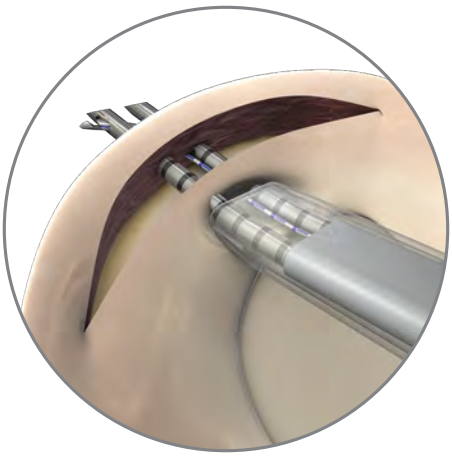
Ordering Information

CrossFix II Meniscal Repair System (Sterile)

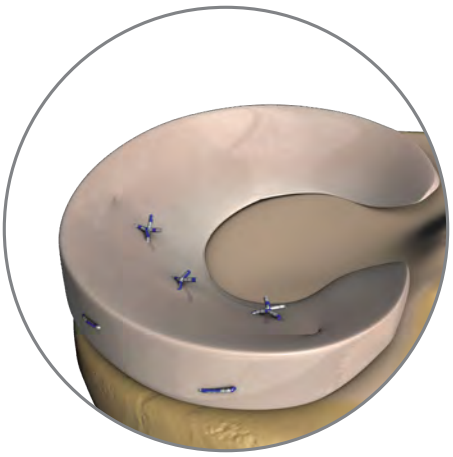
Description	Part Number
CrossFix II Disposable Procedure Kit (Probe, Knot Pusher/Suture Cutter, Introducer)	CM-8000
CrossFix II Meniscal Repair Device, Straight	CM-8001
CrossFix II Meniscal Repair Device, Up Curve	CM-8002

The CrossFix® II System

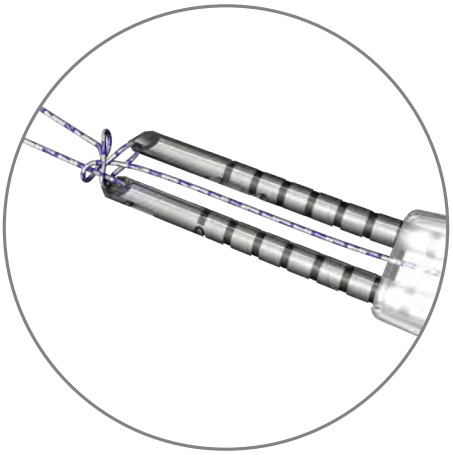
All-Suture, All-Inside, Meniscal Repair



Single Insertion



90N of Pull-Out Strength*



Pre-tied Sliding Hot Knot™

Fast, Easy Reproducible Technique
Stronger, Stiffer Needles**
Improved Suture Strength**
Instantaneous Mattress Stitch

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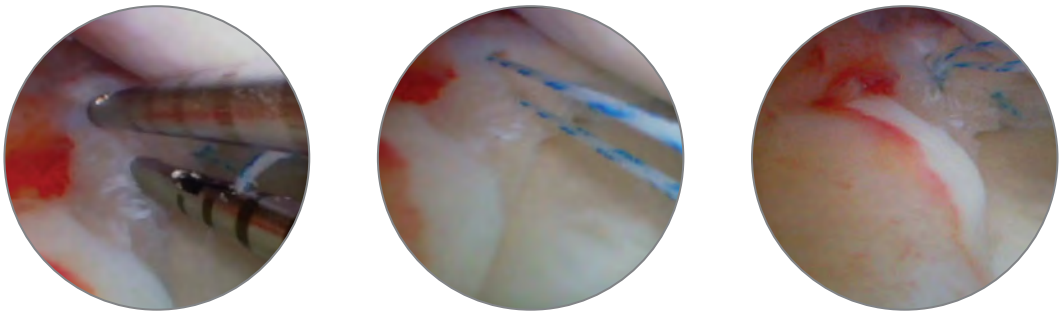
Your progress. Our promise.®

All inside **Technique.** Inside out **Results.**®

CrossFix II Meniscal Repair Device, Up Curve



Suture only device eliminates concerns associated with hard implants
Curved and straight delivery needles allow for access to multiple tear sites
High strength suture for easy knot sliding and high knot breakage strength
Sharper, stiffer needles** improves delivery and consistency
Incorporated depth limiter provides for needle penetration control

CrossFix II Meniscal Repair System

Description	Part Number
CrossFix II Disposable Procedure Kit (Probe, Introducer and Knot Pusher/Suture Cutter)	CM-8000
CrossFix II Meniscal Repair Device, Straight	CM-8001
CrossFix II Meniscal Repair Device, Up Curve	CM-8002

CrossFix II Disposable Procedure Kit

*Barber, FA, et al. "Biomechanical Testing of New Meniscal Repair Techniques Containing Ultra High Molecular Weight Polyethylene Suture." Arthroscopy. 2009; Vol. 25, No 9: pp. 959-967.

**Compared to the original CrossFix iteration; bench testing is not necessarily indicative of clinical performance

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