The SpeedWhip rip-stop technique eliminates the weak link in graft preparation by reinforcing the suture/tissue interface with a FiberTag tape. The FiberTag tape is incorporated into the end of the FiberLoop construct to allow and enable the incorporation of both graft and the tape. This construct has been shown to increase the strength over standard stitching alone.

**Graft Preparation with FiberTag Tape**

FiberTag tape can be placed on any tendon or graft to be whipstitched and cut to length of needed length.

**ACL TightRope® Fixation with FiberTag Tape**

FiberTag tape can be placed onto a graft end to facilitate attachment of the ACL TightRope implant.

**Ordering Information**

| FiberLoop with FiberTag Suture: AR-7264 |
| FiberLoop with FiberTag Suture with swaged-on needle: AR-7266 |
Mark the tendon at the desired length of the whipstitch. Pass the needle through the graft at the marked line. Pull the FiberLoop® suture through the graft until the FiberTag® tape portion of the construct enters the tissue. Note: A clamp may be used to hold the FiberTag tape against the graft (as shown).

The graft is now stitched using the standard technique of passing the graft between the limbs of the FiberLoop® suture then passing the needle through the graft and FiberTag® tape (as shown).

Continue to use the SpeedWhip™ technique distally along the graft by passing the FiberLoop® suture over the graft end and piercing the needle through the center of the graft making sure to capture the FiberTag® tape on the other side of the graft.

Tension the FiberTag tape until it is tight against the tissue on either side of the graft. Insure that the ACL TightRope® implant is held firmly against the graft to avoid any gapping once the construct is complete.

Continue stitching to the distal end of the graft. The last stitch may be passed proximal to the previous stitch to lock the construct.
Mark the tendon at the desired length of the whipstitch. Pass the needle through the graft at the marked line.

Pull the FiberLoop® suture through the graft until the FiberTag® tape portion of the construct enters the tissue. Note: A clamp may be used to hold the FiberTag tape against the graft (as shown).

The graft is now stitched using the standard technique of passing the graft between the limbs of the FiberLoop® suture, then passing the needle through the graft and FiberTag® tape (as shown).

Continue stitching to the distal end of the graft. The last stitch may be passed proximal to the previous stitch to lock the construct.

The FiberLoop® suture is now passed through the loop of an ACL TightRope® implant.

The needle is then passed back through the graft and the FiberTag® tape at the starting point.

Tension the FiberTag® tape until it is taut against the tissue on either side of the graft. Insure that the ACL TightRope® implant is held firmly against the graft to avoid any gapping once the construct is complete.

Continue to use the SpeedWhip™ technique distally along the graft by passing the FiberLoop® suture over the graft end, piercing the needle through the center of the graft, making sure to capture the FiberTag® tape on either side of the graft.

Continue the stitches to the end of the graft. Spacing the stitches enough for a second row of stitches in between.

The FiberLoop® suture can now be passed through the ACL TightRope® loop and stitched back up the graft proximally. Pass stitches between rows of the previous stitches to create a locking pattern. After the last stitch, the suture can then be cut, tied, and the knot buried into the tissue.
Mark the tendon at the desired length of the whipstitch. Pass the needle through the graft at the marked line.

Pull the FiberLoop® suture through the graft until the FiberTag® tape portion of the construct enters the tissue. Note: A clamp may be used to hold the FiberTag tape against the graft (as shown).

The graft is now stitched using the standard technique of passing the graft between the limbs of the FiberLoop® suture then passing the needle through the graft and FiberTag® tape (as shown).

The needle is passed through the graft at the desired proximal limit of the stitches. The FiberLoop® suture with FiberTag® tape is pulled through the graft until a small tail of the tape remains on one side.

Pass the needle through the graft again near the distal end.

The needle is then passed back through the graft and the FiberTag tape at the starting point.

Tension the FiberTag tape until it is taut against the tissue on either side of the graft. Insure that the ACL TightRope implant is held firmly against the graft to avoid any gaping once the construct is complete.

Continue stitching to the distal end of the graft. The last stitch may be passed proximal to the previous stitch to lock the construct.

The FiberLoop suture can now be passed through the ACL TightRope® loop and stitched back up the graft proximally. Pass stitches between each of the previous stitches to create a locking pattern. After the last stitch, the suture can then be cut, tied and the knot buried into the tissue.
**SpeedWhip® Rip-Stop Technique Using #2 FiberLoop® with FiberTag® Tape**

The SpeedWhip® rip-stop technique eliminates the weak link in graft preparation by reinforcing the suture/tissue interface with a FiberTag® tape. FiberLoop® with FiberTag® tape is incorporated onto the end of the FiberLoop® construct to allow needle-to-needle punctures into the graft and the tape. This construct has been shown to increase the strength over standard stitching alone.

**Graft Preparation with FiberTag Tape**

FiberTag tape can be placed on any tendon or graft to be whipstitched and cut to length of need.

**ACL TightRope® Fixation with FiberTag Tape**

FiberTag tape can be placed onto a graft end to facilitate attachment of the ACL TightRope® implant.

<table>
<thead>
<tr>
<th>Strength Comparison of ACL TightRope Implant Attached With Locking Suture vs FiberTag Tape</th>
<th>Ultimate Load (N)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>FiberTag Tape and ACL TightRope Implant</td>
<td>900</td>
</tr>
<tr>
<td>#2 FiberWire Suture and ACL TightRope Implant</td>
<td>798</td>
</tr>
</tbody>
</table>

*Data on file


**Surgical Technique**

**Graft Preparation with FiberTag Tape**

FiberTag tape can be placed on any tendon or graft to be whipstitched and cut to length of need.

- **Straight needle facilitates passage through graft and FiberTag® tape**
  - With minimal tissue damage.
  - The free floating needle allows recentering of the needle on the suture after each pass.

**FiberTag Tape is a 55 mm FiberTape® suture woven into the FiberLoop® suture**

- **FiberTag Tape Rip-Stop Technique**

**Ordering Information**

- **FiberLoop with FiberTag Suture**
  - AR-7264

- **FiberLoop with FiberTag Suture with swaged-on needle**
  - AR-7266

**Ultimate Load (N)*

- #2 FiberWire Suture and FiberTag Tape
  - 357

- FiberTag Tape and ACL TightRope Implant
  - 798

**Ultimate Load (N)*

- #2 FiberWire Suture and ACL TightRope Implant
  - 357

- FiberTag Tape and ACL TightRope Implant
  - 798

**Cyclic Displacement (mm)*

- #2 FiberWire Suture and ACL TightRope Implant
  - 1.2

- FiberTag Tape and ACL TightRope Implant
  - 3.4

**Strength Comparison of Standard Whipstitching vs FiberTag Tape Rip-Stop**

- #2 FiberWire Suture and FiberTag Tape
  - 276

- FiberTag Tape and ACL TightRope Implant
  - 409

**Ultimate Load (N)*

- #2 FiberWire Suture and ACL TightRope Implant
  - 276

- FiberTag Tape and ACL TightRope Implant
  - 409

**View U.S. patent information at www.arthrex.com/corporate/virtual-patent-marking**

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SpeedWhip® Rip-Stop Technique Using #2 FiberLoop® with FiberTag® Tape

The SpeedWhip® rip-stop technique eliminates the weak link in graft preparation by reinforcing the suture/tissue interface with a FiberTag® tape. FiberLoop® is incorporated into the end of the FiberTag® tape to allow easier passage to incorporate both graft and the tape. The construct has been shown to increase the strength over standard stitching alone.

Graft Preparation with FiberTag Tape
FiberTag tape can be placed on any tendon or graft to be whipstitched and cut to length of needled.

ACL TightRope® Fixation with FiberTag Tape
FiberTag tape can be placed into a graft end to facilitate attachment of the ACL TightRope implant.

Ordering Information
FiberLoop with FiberTag® Tape: AR-7264
FiberLoop with FiberTag® Tape with swaged-on needle: AR-7266

Strength Comparison of Standard Whipstitch vs FiberTag Tape Rip-Stop

FiberTag tape is a 55 mm FiberTape® suture woven into the FiberLoop suture, facilitating SpeedWhip rip-stop technique.

*Data on file