COR-KNOT® QUICK LOAD® UNIT

TECHNOLOGY GUIDE

READ PRODUCT INSERT THOROUGHLY BEFORE USE

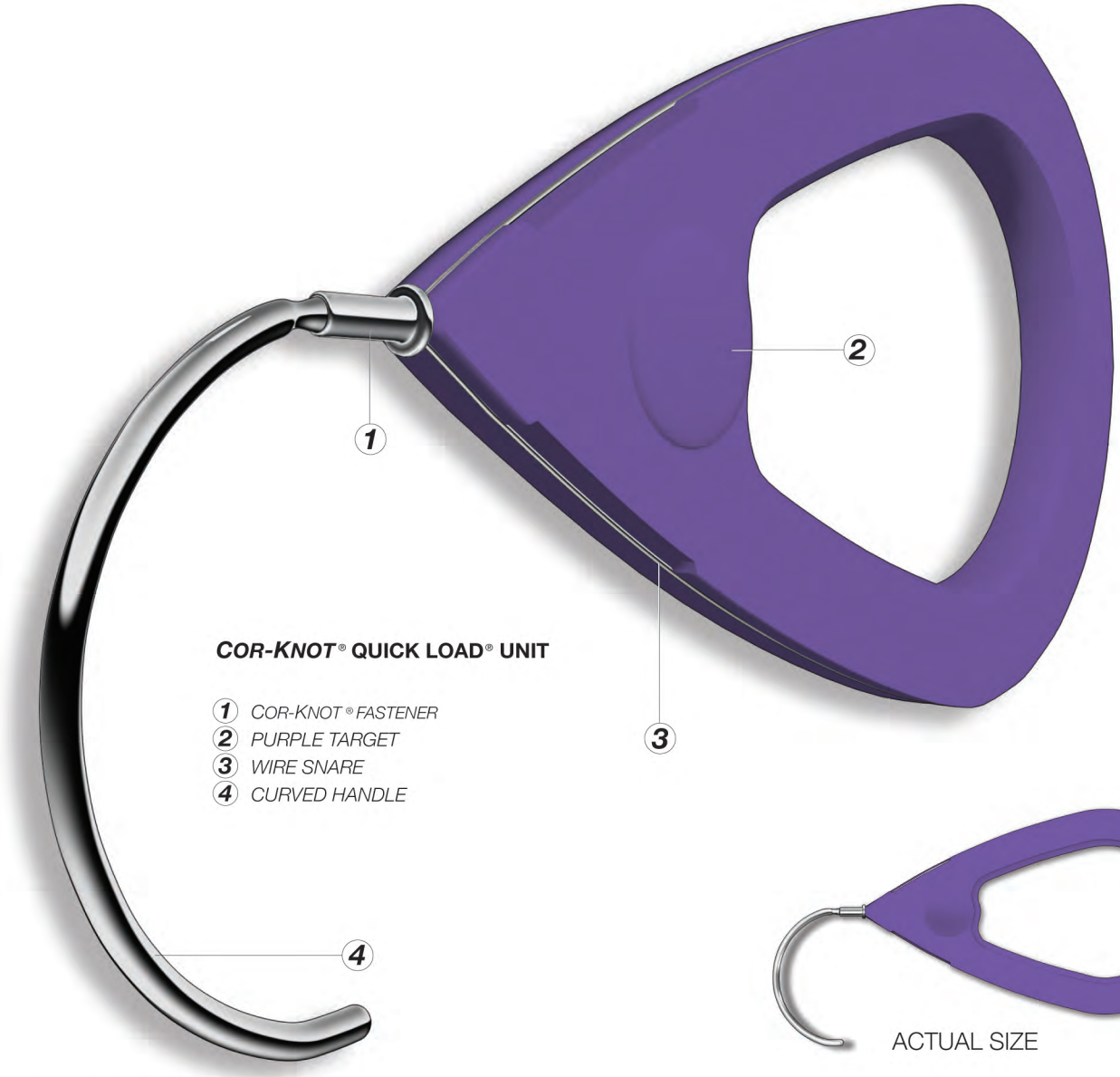
FIG. 1

CRIMPED *COR-KNOT*® *FASTENER*

ACTUAL SIZE

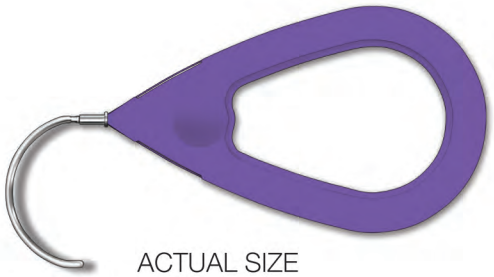
COR-KNOT® QUICK LOAD® UNIT DESCRIPTION

Each *COR-KNOT*® QUICK LOAD® UNIT provides one sterile *COR-KNOT*® *FASTENER* ① held in a customized loading unit consisting of a purple target ②, a wire snare ③, and a blunt curved handle ④. Made from medical grade titanium, a *COR-KNOT*® *FASTENER* is a mushroom-shaped hollow sleeve, which is crimped by the *COR-KNOT*® *DEVICE* to fasten together segments of suture.



***COR-KNOT*® QUICK LOAD® UNIT**

1. *COR-KNOT*® *FASTENER*
2. *PURPLE TARGET*
3. *WIRE SNARE*
4. *CURVED HANDLE*



ACTUAL SIZE

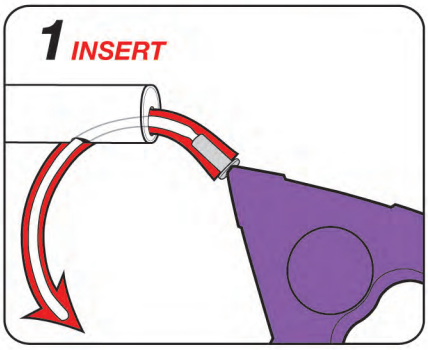
INDICATIONS

The *COR-KNOT*® QUICK LOAD® UNIT, used in conjunction with the *COR-KNOT*® *DEVICE,* is indicated for use in the approximation of soft tissue and prosthetic materials. Refer to the Indications in the *COR-KNOT*® Technology Guide for compatibility with *COR-KNOT*® QUICK LOAD® UNIT.

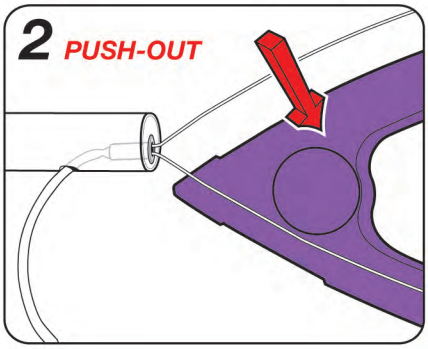
LOADING WITH A *COR-KNOT*® QUICK LOAD® UNIT

Use proper operating room technique to pass the sterile *COR-KNOT*® QUICK LOAD® UNIT from its packaging. While maintaining appropriate sterile technique, follow the steps indicated in the illustrations.

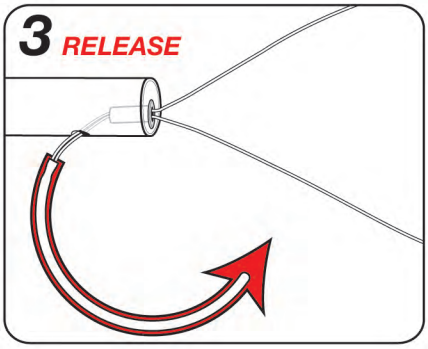
AT SCRUB TABLE



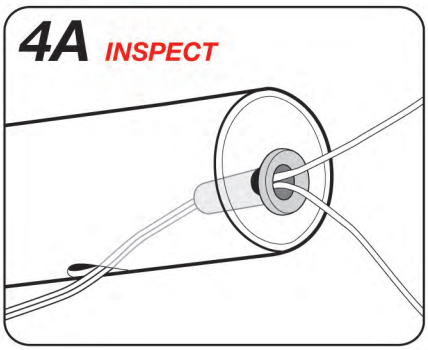
INSERT the blunt tip of the curved handle into the distal slot at the end of the *COR-KNOT*® *DEVICE* shaft. ROTATE the curved handle through the distal slot and out of the suture hole until the *COR-KNOT*® *FASTENER* occupies the shaft's distal slot. Fully ENGAGE the *COR-KNOT*® *FASTENER* within the tip of the *COR-KNOT*® *DEVICE* by pushing on the purple target or by pulling on curved handle.



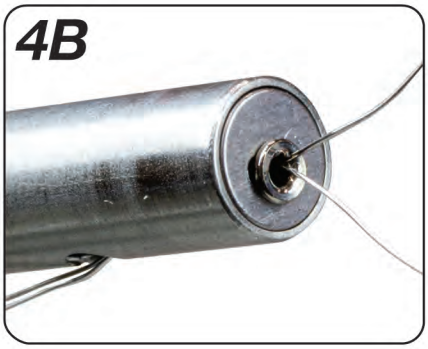
PUSH-OUT and remove the purple target.



RELEASE the curved handle from the distal slot at the end of the *COR-KNOT*® *DEVICE* shaft.



INSPECT to ensure that the *COR-KNOT*® *FASTENER* is well loaded and fully seated.



In the text below, the *COR-KNOT® DEVICE* refers to the LSI SOLUTIONS® *COR-KNOT®* family of suture fastening devices. Refer to *COR-KNOT®* Technology Guide Indications for compatibility with *COR-KNOT®* QUICK LOAD® UNIT.

ACTIONS

When the *COR-KNOT® DEVICE* is loaded with a *COR-KNOT® FASTENER* and appropriately positioned at a suture closure site, squeezing the purple lever can instantly secure and trim the suture. LSI SOLUTIONS® has demonstrated that the *COR-KNOT® DEVICE* and *COR-KNOT® FASTENER* meet USP minimum values for tensile strength when used with USP 2-0 or 3-0 braided polyester suture, USP 3-0 monofilament polypropylene suture and USP 0 braided uncoated polyester suture. The surgical titanium used in a *COR-KNOT® FASTENER* is not absorbed by the body and is generally not associated with significant inflammatory reactions.

CONTRAINDICATIONS

- Endoscopic procedures should only be performed by physicians having adequate training and familiarity with endoscopic techniques. Medical literature should be consulted relative to techniques, complications and hazards prior to the performance of endoscopic procedures.
- The *COR-KNOT®* QUICK LOAD® UNIT is not intended to be used with any device other than the *COR-KNOT MINI® DEVICE* or the *COR-KNOT® MIS DEVICE*. The *COR-KNOT MINI® DEVICE* and the *COR-KNOT® MIS DEVICE* are not intended to be loaded with anything other than a *COR-KNOT®* QUICK LOAD® UNIT or *INTRA-KNOT®* QUICK LOAD® UNIT.
- The *COR-KNOT® FASTENER* is NOT intended for placement into circulating blood unless used with compatible suture under conditions judged by the surgeon to be clinically appropriate.
- The *COR-KNOT®* QUICK LOAD® UNIT is intended for use only with suture specified by LSI SOLUTIONS®.
- Each *COR-KNOT® DEVICE* is not intended to be fired more than 12 times.

WARNINGS

- Federal (U.S.A.) law restricts this device to sale, distribution and use by, or on, the order of a physician.
- Users should be familiar with standard procedures and techniques involving surgical suture and titanium usage before employing the *COR-KNOT® DEVICE* with a *COR-KNOT®* QUICK LOAD® UNIT for fastening and trimming suture.
- Adequate *COR-KNOT® FASTENER* security requires reasonable clinical judgment and appropriate surgical techniques as warranted by surgical circumstances and the experience of the surgeon.
- When securing suture with a *COR-KNOT® DEVICE*, ensure any needle caps or needles are removed from the suture ends to be loaded prior to loading the suture through the *COR-KNOT® DEVICE*.
- Single patient use only. Do not reclean or resterilize. Adequate cleaning or removal of blood and other foreign materials from used *COR-KNOT®* products cannot be guaranteed. Validation of resterilization is not established. Failure to eliminate inflammatory or infectious agents may cause patient harm. Product functional performance may be compromised in reprocessed devices or *COR-KNOT® FASTENERS*.
- Discard any open (unsealed), unused, expired or damaged *COR-KNOT®* product.
- *COR-KNOT®* QUICK LOAD® UNIT components and each *COR-KNOT® DEVICE*, along with packaging, must be inspected, handled and disposed of consistent with standard, accepted medical device disposal procedures.
- Direct contact between sensitive tissue structures (e.g., pulsatile arteries, cardiac valve leaflets, valve chordae, etc.) and foreign materials can lead to tissue injury or damage, such as tissue erosion. Always orient *COR-KNOT® FASTENERS* and remnant suture tails to avoid direct contact between delicate tissue or prosthetic structures.
- As with any foreign body, prolonged contact of any suture with salt solutions, such as those found in the urinary or biliary tracts, may result in calculus formation.
- While the titanium of the *COR-KNOT® FASTENER* is physiologically very inert, routine surgical precautions must be employed whenever foreign materials are left in a patient.

PRECAUTIONS

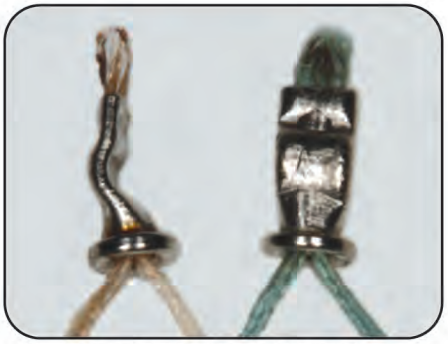
- When handling the *COR-KNOT®* QUICK LOAD® UNIT care should be taken to avoid damage.
- Do not squeeze the purple lever of *COR-KNOT® DEVICE* while loading the *COR-KNOT®* QUICK LOAD® UNIT.
- Irreparable damage to *COR-KNOT® DEVICE* suture cutting blade will occur if the purple lever is squeezed while the *COR-KNOT®* QUICK LOAD® UNIT curved handle is in place at the tip of the instrument.
- Ensure that obstructions do not interfere with the firing of *COR-KNOT® DEVICE.*
- Do not squeeze the purple lever of the loaded *COR-KNOT® DEVICE,* until the *COR-KNOT® FASTENER* has been appropriately positioned directly upon the tissue or prosthetic material and the suture accurately tensioned at the targeted site.
- Always squeeze and hold the purple lever and then fully release it before moving the *COR-KNOT® DEVICE* tip. Failure to appropriately release the purple lever can cause suture breakage. Inspect each *COR-KNOT® FASTENER* and its suture tails.
- Do not squeeze the purple lever on the same *COR-KNOT® FASTENER* more than once.
- Cut suture with scissors if the device fails to trim suture or release *COR-KNOT® FASTENER*.
- Avoid crushing or crimping damage to the *COR-KNOT® FASTENER* due to inappropriate squeezing of *COR-KNOT® DEVICE* purple lever and/or to application of surgical instruments like forceps, needle holders, clamps, etc.
- If *COR-KNOT® FASTENER* falls out of tip or is not properly loaded, retrieve loose fastener, reload with new fastener and start again.
- If the purple lever of the *COR-KNOT® DEVICE* does not return completely forward on its own (i.e., without assistance), manually push the lever forward all the way to release the *COR-KNOT® FASTENER*.
- Check for hemostasis or leakage where appropriate.
- Before endoscopic instruments and accessories from different manufacturers are employed together in a procedure, verify compatibility and ensure that electrical isolation or grounding are not compromised.

ADVERSE REACTIONS

Adverse effects associated with the use of surgical suture and titanium can include, but are not limited to: wound dehiscence, thrombus formation, embolism, calculi formation in urinary and biliary tracts when prolonged contact with salt solutions such as urine and bile occurs, infected wounds, minimal acute inflammatory tissue reaction, and transitory local irritation. Surgical titanium is not absorbed by the body and is generally not associated with inflammatory reactions.

MRI TESTING

Based on MRI testing information, titanium *COR-KNOT® FASTENERS* will not present an additional hazard or risk to a patient undergoing an MRI procedure using a scanner operating with a static magnetic field of 3-Tesla or less and under the MRI-related heating conditions (MRI for 15 min. at an MR system reported whole body averaged specific absorption rate, SAR, value of 3-W/kg).



Courtesy of Scott M. Goldman, M.D.

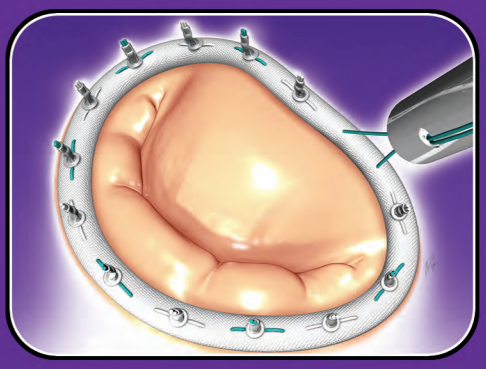
FIG. 2 *COR-KNOT®* QUICK LOAD® UNIT PRODUCT ORDERING

SUPPLIED: STERILE

	REORDER	PRODUCT	DESCRIPTION
x 12	REF 030850	***COR-KNOT®* QUICK LOAD®** SINGLES	*Box of 12 Singles (1 Fastener per Pouch)*
x 12	REF 030874	***COR-KNOT®* QUICK LOAD®** 6-POUCH	*Box of 12 Pouches (6 Fasteners per Pouch)*

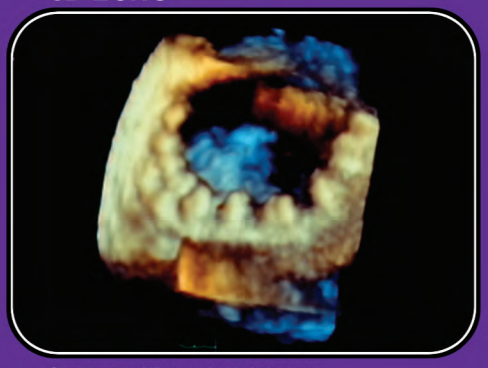
INTRA OP

Courtesy of Peter A. Knight, M.D.

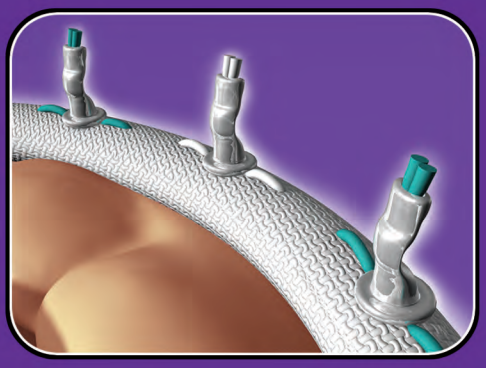


Courtesy of Peter A. Knight, M.D.

3D ECHO



Courtesy of Peter A. Knight, M.D.



LSI SOLUTIONS®
7796 Victor-Mendon Road
Victor, New York 14564 U.S.A.
Phone: 585.869.6600
Customer Service: 866.575.3493
Technical Support: 866.428.9092
Fax: 585.742.8086
www.lsisolutions.com

MADE IN THE USA

This Product Comes with our LSI SOLUTIONS® *Perfect Performance Policy®* Call us at 866.575.3493 any time.

Patents: www.lsisolutions.com/patents

The LSI logo, LSI SOLUTIONS, Cor-Knot, Cor-Knot Mini, Intra-Knot, Quick Load, and Perfect Performance Policy are trademarks and registered trademarks of LSI Solutions, Inc. Copyright © 2010, LSI SOLUTIONS®. All Rights Reserved.

STERILE EO | Rx Only

Symbol Glossary: www.lsisolutions.com/symbols

LSI SOLUTIONS®

COR-KNOT® FASTENER Knot Strength Relative to USP

USP Size	Suture Material	USP Avg. Diameter Range	USP Knot Pull Tensile Strength (minimum)	*COR-KNOT® FASTENER* Knot Pull Tensile Strength Relative to USP Standard
0	Uncoated Polyester	0.350–0.399mm (0.0138–0.0157in)	2.16kgf	>100%
2-0	Polyester or Polypropylene	0.300–0.349mm (0.0118–0.0137in)	1.44kgf	>100%
3-0	Polypropylene	0.200–0.249mm (0.0079–0.0098in)	0.96kgf	>100%

P/N 031023G 10.09.25