

## RevoLock®4-Hole Kit

RL-300-07-01



#### **Advisories**

Tool Form for fabrication is sold separately; Click Part Number: RL-310-00-01

Must be installed by a licensed professional.

Lace will wear:

- Routinely check for wear or damage.
- Look for broken black fibers around areas of high wear.
- Replace lace if a significant amount of black fibers are broken.
- Proactively replace lace every 6 months.
- Loss of suspension can occur if lace fails.
- Keep lace away from open flame and sharp edges.

Secure threaded insert to liner with medium thread lock. Secure snap to threaded insert before tensioning system.

Weight limit: 125 kg

See advisories in other languages: <u>clickmedical.co/advisories</u>



#### WARRANTY

#### **U.S. Customers:**

 ${\color{red} \textbf{Contact}} \ \underline{\textbf{www.clickmedical.co/terms/\#warranty}} \\ \underline{\textbf{Help@ClickMedical.co}}$ 

Tel: +1 970 670 7012

#### **International Customers:**

Please contact your local distributor.

U.S. PATENT: #10918502 EU PATENT: PENDING



#### MDSS GmbH

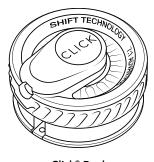
Schiffgraben 41 30175 Hannover, Germany





Click Medical, LLC 1205 Hilltop Parkway, W101 Steamboat Springs, CO, 80487, USA +1-970-670-7012

## Revolock® 4-Hole Kit Contents:



Click® Reel



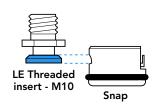
Lamination Collar

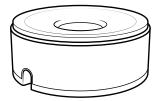


0.5 m Lamination Tube



2.0 m Indicator Lace





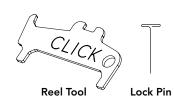
4-Hole Housing



**Tool Form Plug** 



Lace Feeder



## **Overview of Possible Applications:**

## Fabricate a New Socket:

- 1. Determine location of Click® Reel.
- 2. Secure tool form to model.
- 3. Apply PVA bag.
- 4. Apply inner fabric layers.
- 5. Insert tube into distal housing and reel collar.
- 6. Apply outer fabric layers.
- 7. Laminate.
- 8. Remove form and install distal housing.
- **9.** Lace device, then attach lace to the Click® Reel and the snap.
- 10. Install Click® Reel into the collar.
- 11. Test for function.

## Replace a Problem Pin-Lock:

- 1. Remove old pin-lock distal housing.
- 2. Insert and attach RevoLock® distal housing.
- **3.** Route tubing from distal housing slot through old pin-lock hole.
- **4.** Determine Click® Reel location and bond collar to socket frame.
- **5.** Cut tubing to length, insert into collar, bond tubing to socket.
- 6. Remove silicone from collar.
- 7. Feed lace through collar, tubing and distal housing.
- 8. Attach lace to snap.
- 9. Attach the other lace end to the reel and install into collar.
- 10. Attach threaded insert into liner.
- 11. Connect threaded insert to snap.
- **12.** Tighten and release system 3x to test function.

#### **Detailed Fabrication Instructions:**

RevoLock® can be fabricated using a single stage or double stage lamination process:

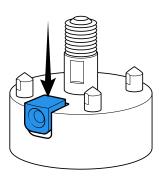


- For single stage: follow steps 1-9, then skip to step 17
- For double stage: follow steps 1-7, then skip to step 10

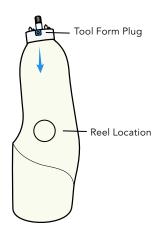
For material suggestions and guidelines, please refer to the Material Data Sheet.

1 Prepare the inner tool form by inserting a tool form plug into the base.

**Note:** Tool form plugs are found in each RevoLock® Kit.



2 Determine desired location of reel and mark on the model.

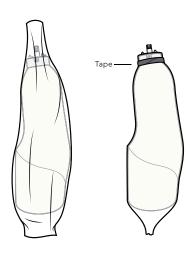


3 Orient the tool form plug with the collar and bond the tool form to the model.



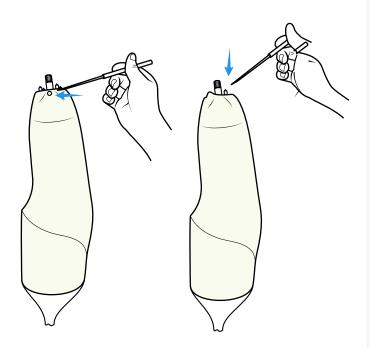
#### Apply inner PVA bag:

- **a.** Tape bag to metal form, remembering to allow access to the plug.
- b. Trim excess.



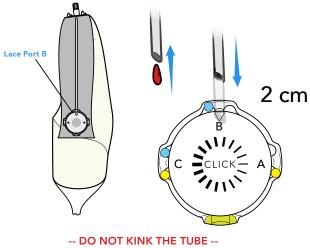
5 Apply inner fabric layers:

Use a hot knife to create access holes for the plug and the 4 pins.



6 Install the tubing:

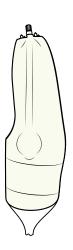
- ${f a.}$  Pack tube end with 1 cm of clay.
- **b.** Fully insert one end into tool form plug.
- **c.** Measure the distance from the plug to the collar, and add 2 cm.
- **d.** Cut tube to length, pack with clay and insert into collar (Lace Port B).



If the tube kinks, you must replace with a new piece.

#### **Detailed Fabrication Instructions** (continued)

7 Apply outer fabric layers.

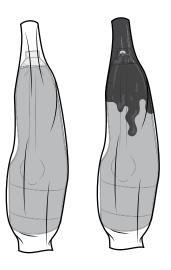








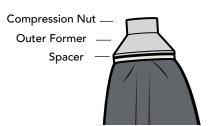
9 Apply outer PVA bag and laminate.



- **! REMINDER**
- For single stage: follow steps 1-9, then skip to step 17
- For double stage: follow steps 1-7, then skip to step 10

10 Add plastic spacer plate to create void for 2nd lamination, then apply outer former and compression nut.

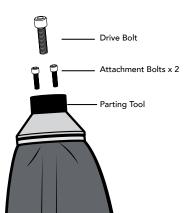
Clay the 2 small holes on top of nut.

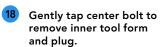


- 11 Apply outer PVA bag.
- 12 Perform 1st lamination.
- 13 Remove compression nut, outer former and spacer plate.
- Apply outer fabric layers.
  Then reapply the outer
  former and compression nut.
- 15 Apply outer PVA bag.
- 16 Perform 2nd lamination.

## For All Laminations, Complete These Final Steps:

- 17 Tool Form removal:
  - a. Remove compression nut.
  - **b.** Place parting tool onto the outer former.
  - **c.** Screw 2 attachment bolts through parting tool and into outer former.
  - **d.** Screw drive bolt into parting tool to remove the outer former.





**Note:** Be careful not to damage threads on the bolt.

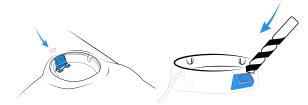


- 19 Prepare collar:
  - a. Grind to silicone and remove.
  - **b.** Continue grinding carbon until flat with top of the collar.
  - **c.** Trim tube end and clear debris.





Note: Drill through lamination into void - Do not damage collar.

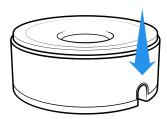


#### **Detailed Fabrication Instructions** (continued)

## 21 Install 4-Hole Housing:

a. Insert distal RevoLock® housing into socket.

Note: Align bottom channel to fit over the tubing.



b. Attach alignment hardware and torque to spec (12 Nm).

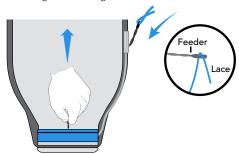


#### Lace the device:

Use the lace feeder to feed the lace through tubing starting at the collar.

**Note:** Crimp end of feeder to help steer it up and through the housing.

Тор

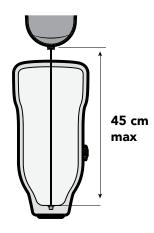


Bottom

## 23 Attach lace to the snap.

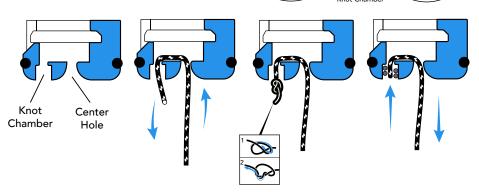
a. Determine lace length for the user to easily connect snap parts, and mark the lace.

Note: Max lace length from distal housing = 45 cm.



#### b. Connect the lace to the snap:

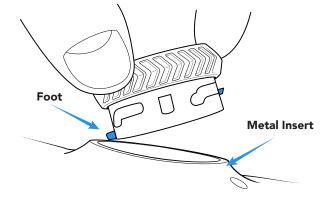
- Thread lace up through the center hole from the bottom of the snap.
- Then thread lace down through the knot chamber.
- Tie a double overhand knot. 3.
- Seat the knot into the knot chamber by pulling on the lace.
- Seal the hole with a drop of glue.

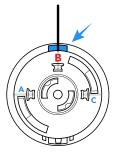


\*\*MAKE SURE THE LACE DOES NOT INTERFERE WITH THE CONNECTION OF THE SNAP\*\*

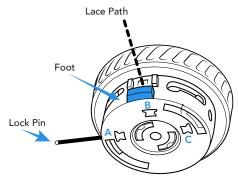
## 24 Attach lace to the Click® Reel.

Orient the reel so that the foot of the reel aligns with the void in the Step 1 lamination collar opposite of the metal insert.



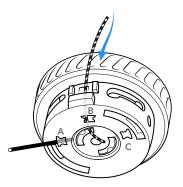






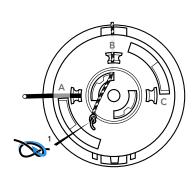
#### Step 2

Insert lace through lace exit and out of u-shaped hole in the bottom-center of the reel.



#### Step 3

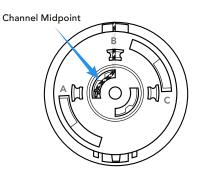
Tie an overhand knot at desired length and trim tail.



#### Step 4

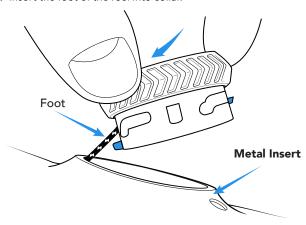
Pull lace to seat knot on far side of the channel midpoint. Push knot into hole with a flathead screwdriver. Then,

#### REMOVE LOCK PIN.

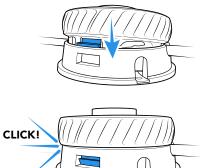


## 25 Install the Click® Reel.

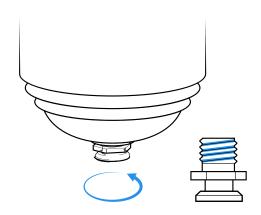
a. Insert the foot of the reel into collar.



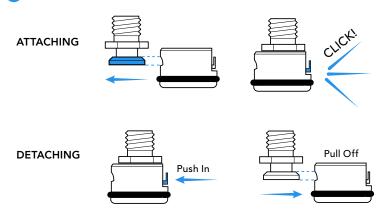
**b.** Press the reel firmly into the collar (you should hear a "CLICK" when secure).



26 Apply medium thread lock to the insert threads and attach to the liner.



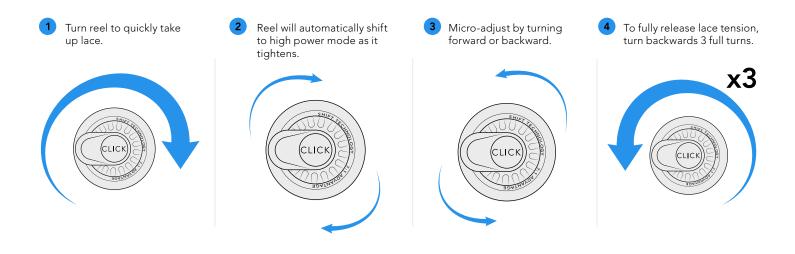
Test the snap connection by attaching and detaching 2-3 times.



8 Test system for proper function:

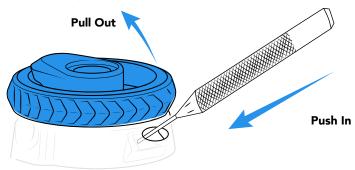
Cycle the system 3 times before delivering to verify proper function of the reel.

## How to use the Click® Reel



#### To remove the Click® Reel:

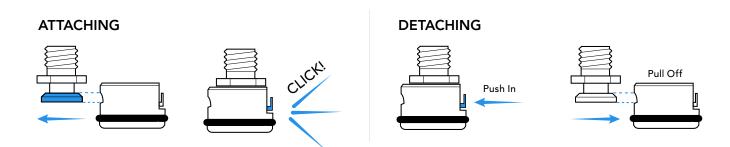
Insert a small tool into pilot hole and push to disengage lock while pulling the dial upwards.



WARNING: DO NOT PRY THE TOOL UPWARDS - DAMAGE TO COLLAR CAN OCCUR!

See <u>clickmedical.co/instructions</u> for detailed instructions for replacing/re-lacing a reel.

# Teach your patients how to operate the snap to connect the liner:



## Teach your patients to care for and maintain their RevoLock® system:

#### Regularly inspect your RevoLock® system.



#### Inspect lace:

- ✓ Check for wear or damage routinely
- ✓ Replace at any sign of wear
- ✓ Replace lace every 6 months



This product is waterproof and submersible. Rinse with fresh water after use in saltwater, sand, or mud.

Have your patient register their RevoLock® device: <a href="https://clickmedical.co/register/">https://clickmedical.co/register/</a>

#### **NEW LACE**



#### WORN LACE

look for broken black fibers



Look for broken black fibers for areas of high wear. If a significant amount of black fibers are broken, then replace the lace.