



CD117L

Easy-Off Locking Lanyard

Fabrication Instructions



Weight limit: 265 lbs.

2-year warranty against manufacturer defects, excessive wear or breakage.

Patent No. 6334876 Made in U.S.A.
External Prosthetic Components



Advena Limited
Tower Business Centre
2nd Flr, Tower Street
Swatar, BKR 4013
Malta



CD117L-revA.03222021



Installing Anchor and Lock on Mold -

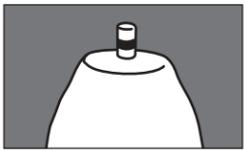
If using casting handle, begin with Step 1. If NOT using casting handle, skip to Step 4.



1 Cast limb with casting handle in place to create shape of lock in mold.



2 Insert anchor in cast handle of mold. Fill mold.



3 Mold and anchor are ready for fabrication.

4 Remove internal components from lock with a 2mm allen wrench. Be careful not to lose springs during removal. **Casting Handle users skip to step 11.**



5 Place lock on mold. Trace lock.



6 Flatten mold to fit to lock. Do not flatten beyond tracing of lock.



7 Drill 1/2" diameter hole. Angle hole to help anchor adhesive.



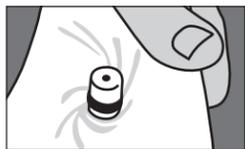
8 Place anchor in lock.



9 Fill hole with Coyote Quick Adhesive or fast-setting epoxy.



10 Place anchor and lock on mold. When glue sets, remove lock.



11 Apply nylon over mold. Reflect and twist nylon around tie-off ring of the anchor.

Drape Molding Check Socket -

Drape mold and blister molding instructional videos are available at www.coyotedesign.com/air-lock.



12 Install 4-hole fab plug. Snug tighten screws only DO NOT over-torque.



13 Place rectangle foam on fab plug.



14 Place lock on mold. Mark desired location of release lever.

15 Refer to transferring Alignment section starting with #23

16 Blister forming: use a piece of flat plastic to compress distal end to reduce grinding at finishing. **Drape forming:** push in excess plastic on distal end for extra strength and to reduce grinding at finishing.



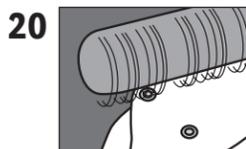
17 Expose foam rectangle and remove it.



18 Expose foam, using care not to hit posts. Remove socket with socket extractor or traditional methods.

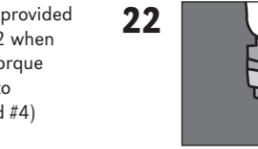


19 Remove 4-hole plug with screw, smooth and polish area.



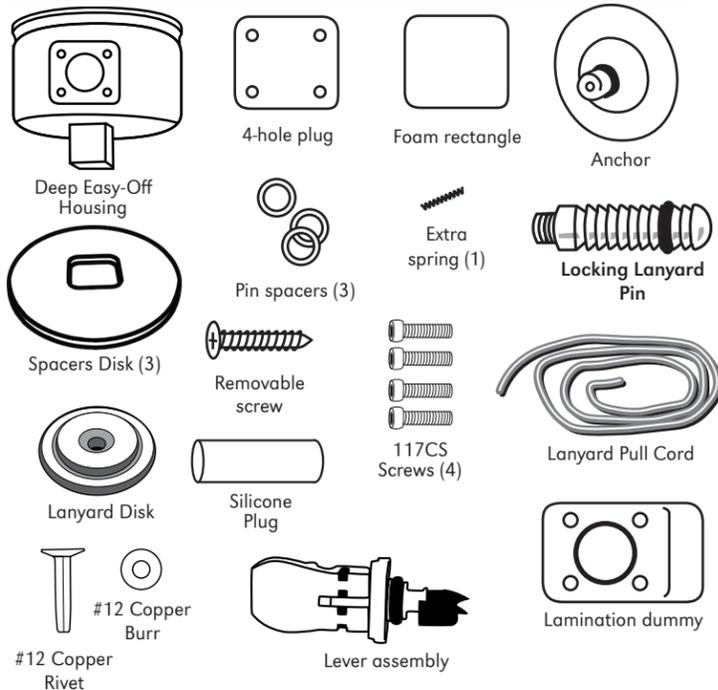
20 Flatten distal end and polish.

21 Use 6x18mm screws provided and Loctite® Blue 242 when attaching pyramid. Torque provided connector screws to 10 Nm. (See Caution #2 and #4)



22 Use Coyote alignment coupler CD106 for alignment during fitting.

Parts Included



Transferring Alignment



23 The hole in the 5 Degree AK Connector is designed for adjusting alignment.



24 Make sure the bottom post of the lock is not blocked by attachment.



25 A hole is pre-drilled in the bottom of the lock to be plugged with the silicon plug during fabrication.



26 The spacer disks can be helpful for building the correct height.



27 The better the access to the post bottom the easier finishing is.



28 If you don't use spacer disks make sure your not resting on the pin post.



29 Push the lock forward to clear the connector you choose.



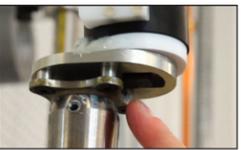
30 Run bead of Coyote Quik Glue or 5 minute epoxy around inner funnel of lock.



31 Place lock on anchor and ensure release button is in desired location. Smooth out excess adhesive



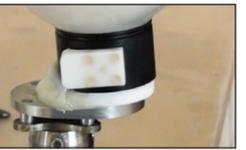
32 Place mold and lock into connector in desired location.



33 Make sure the string exit hole is clear of finish connector for string to exit.



34 Use Coyote Quik Glue to attach lock in desired alignment.



35 Creating a buildup behind the lock can help reinforce in the lamination process.

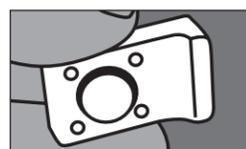


36 Once glue is set remove from jig, place silicone plug and fill gap between lock and 5 Degree Connector with Quik Glue.

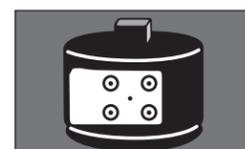


37 If silicone plug is under the 5 Hole Plate trim it to fit at the height of posts on the connector plate.

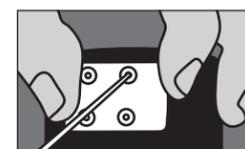
Preparation for Lamination



38 Make sure O-ring is in place on lamination dummy insert.



39 Install lamination dummy and orient in the desired direction of lever.



40 Tighten screws. Do not over-torque.



41 Lubricate screw heads with petroleum jelly or clean clay.



42 Pull inner PVA bag over model. Heat bag to form to distal end. Tie PVA bag to anchor tie-off ring.



43 Trim excess PVA between tie-off ring and o-rings. Keep o-rings clear.



44 Run bead of Coyote Quik Glue or 5-minute epoxy around inner funnel of lock.

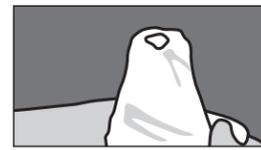


45 Place lock on anchor and ensure release lever is in desired location. Smooth out excess adhesive with finger.



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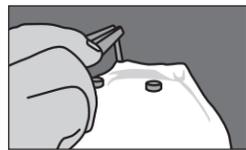
Lamination Lay-up



46 Pull nylon stockinette or other materials over connector, lock and mold.



47 Twist and reflect material to leave a small open circle in center of connector.



48 Ensure holes of connector are exposed. A hot nail or awl can be used.



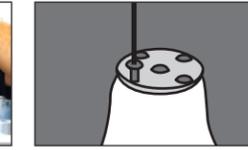
49 Pull first composite layer over mold. Cut top edges to fold around posts.



50 Reinforce offset as needed. It is recommended to use carbon fiber strips for reinforcement.



51 Cut top edges of composite to fold around posts.



52 Lubricate screws and install five hole plate. (See Caution #4)



53 Restrict flow to force lamination resin through the center hole on 5 Hole Plate, forcing out air pockets.



54 Using your favorite resin. String out rest of lamination as typical.



55 Toward end of lamination, tape can be placed over 5 Hole Plate to squeeze excess resin out of lamination.

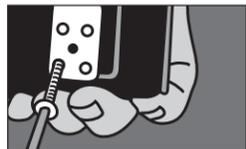
Finish



56 Expose edge and remove excess lamination.



57 Remove 5-hole plate.



58 Expose lamination dummy and remove screws.



59 Extract lamination dummy with removal screw.



60 Smooth out edges and bottom of socket.

Making Hole for Lanyard Cord



61 Sand open silicone plug with Trautman.



62 Remove silicone plug. Smooth out the edges of the hole so it doesn't cut the string.



63 Try to make the hole large enough for the pin to pass through.



64 Attach your finish connector and check for proper string exit.

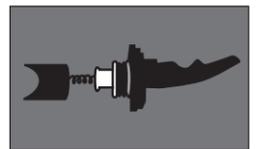


65 The pin should bottom out in the lock. But not against your finish connector.

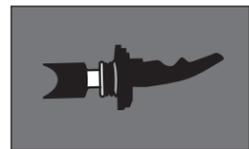
Attaching Pinch Disk

1. Choose the desired location for your Lanyard Pinch Disk.
2. Mark the location.
3. Drill appropriate size hole for #12 copper rivet.
4. Attach the Lanyard Pinch disk to the socket.

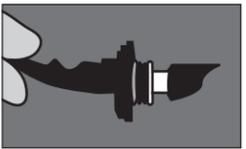
Installing Lever Assembly



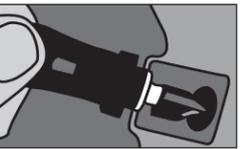
66 Make sure that lock is placed properly, as it may have dislodged during shipping. At right, a properly assembled lever.



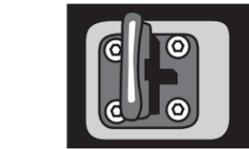
67 Line up lever assembly in groove and insert assembly.



68 Line up long side of rectangle with anterior posterior aspect of the socket.



69 Install 4 screws. DO NOT over-torque.



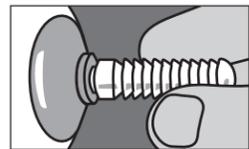
70 Lever is shown open (UNLOCKED). When lever is flush, lock is engaged (CLOSED).

Practitioner Instructions

Poor lock pin spacing leads to premature wear. There should be no play between the lock and liner when fully engaged. To ensure this, spacers may need to be added to the pin. It is best to check this with a lock that has not been put into a socket yet.



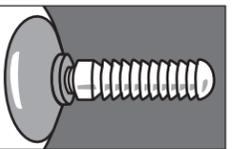
1 Install pin on liner. Engage lock to check for play between lock and liner.



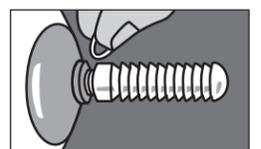
2 If there is play, loosen pin away from adapter screw and liner.



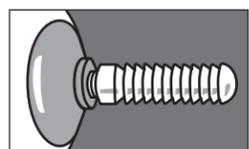
3 Reengage lock to check for play. Repeat until lock seats completely. Remove lock.



4 Gap is created between pin and liner.



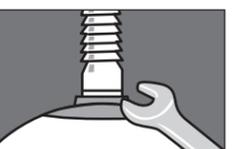
5 Based on the gap created by loosening pin, install appropriate number of pin spacers on threaded end (see Caution #5).



6 Replace pin on adapter, making sure base fits snugly on pin spacers.



7 After installing pin spacers, re-engage lock to be sure there is no play.



8 Apply Loctite® Blue 242 to threads of lock pin. Pin may need to be tightened with a 7/16" or 11 mm wrench. (See Caution #8 and #9)

Documenting Suction

We view suction not as a component or a code, but as a function. Pistoning and milking can be reduced by maintaining a suction socket when using this lock.

- The suction feature of the lock can be demonstrated and documented very simply.
- Have the amputee step into the lock and seat completely.
- Using the lock wrench, remove the valve body, release button, and outer spring from the lock. The amputee is still locked into the socket, but air is now allowed to flow into the bottom of the socket like a traditional pin.
- Walk the patient normally.
- Amputee may experience a difference in how the socket feels immediately, after some ambulation, or after reinstalling the valve body, release button and outer spring. Patient feedback should be documented.

Call for more information on coding of the Air-Lock: (208) 429-0026.

* It is the practitioner's responsibility to demonstrate, document, and select appropriate codes for insurance billing.

Detach here and keep everything below with patient records ✂

For tracking purpose, write LOT number (from funnel of lock) here: _____

CAUTION (page 2)

1. Typically release button is oriented medially.
2. Typical Coyote® components use the 6x18mm screws. In atypical setups, longer screws may be needed. Always use screws class 10.9 or better.
3. Do not lubricate inside of lock, this will attract debris. If you have a noise issue, it is typically due to seating. Call for technical assistance.
4. Always use screws provided during lamination to ensure proper depth is created for attachment.
5. Never exceed 3 pin spacers.
6. Lay-up instructions are helpful hints on how to work with the lock and connector. Actual lay-ups are responsibility of the technician and/or practitioner.
7. Note number of clicks for engagement. There should be at least 2 to 3 clicks engagement prior to any ambulation and more clicks should occur after a few steps. 5 to 6 clicks (depending on liner) are required for full/proper seating and engagement.
8. Liner threads vary. Begin threading pin into liner by hand whenever possible. A wrench will be needed in cases of tight threads.
9. Regardless of threading, always use Loctite® Blue 242 on lock pin threads. If installing into a plastic distal adapter Loctite® Blue 242 should also be used.
10. If using a flexible inner liner, do not leave plastic over lock housing, this can cause air leakage and other issues. You should laminate directly over housing. Contact Coyote for more information, or visit the video gallery at coyotedesign.com, see the video titled "CD103FD Flexible Inner Socket with and without Coyote Design Fabrication Dummy."
11. If you have a pin you cannot install, contact Coyote for a replacement.

Need more help?

Fabrication videos can be viewed at www.coyotedesign.com/video

Parts Sold Separately

Connector Parts

- a 5 Degree AK Connector CD115CF5
- b Alignable Connector CD103AF

Five Hole Plate

- c Five Hole Plate
- d Glue Plate

6mm x18mm Screws

- e 6mm x18mm Screws
- f Small foam circles (4)

Multi-Direction Insert CD103MDI

- g Multi-Direction Insert CD103MDI
- h Single-Direction Insert CD103SDI
- i One-Shot Connector CD111

Related Parts

- j Alignment Coupler CD106
- k Lock Wrench CD103WH

Casting Handle CD316A

- l Casting Handle CD316A
- m Extractor, Socket Removal Tool CD301
- n Fabrication dummy CD103FD (for flexible inner liners, NOT for drop-in system)

Fitting Lock (for pin spacing)

- o Fitting Lock (for pin spacing) CD103FL
- p Guide Pin CD103GP

Lanyard Disk CD118PD

- q Lanyard Disk CD118PD
- r Silicone Plug CD103SP

