CD103L

Air-Lock 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

CE

CD103L.revA.11122019

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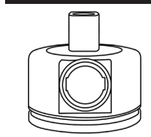
EC REP

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

Parts Included



Modified Deep Housing

Release button

Lock plate

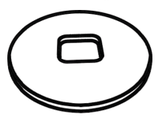
Valve body

Silicone Plug

CD118P Locking Lanyard Pin

Pin spacers (3)

Springs (3)



Spacers Disk (3)

CD118PD Lanyard Disk

Anchor

Fabrication plug

118PC Lanyard Pull Cord

#12 Copper Rivet

#12 Copper Burr

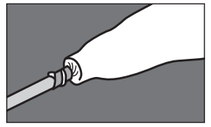
Manufactured by

Coyote Prosthetics & Orthotics

419 N. Curtis Rd., Boise, Idaho 83706
(208) 429-0026 | www.coyotedesign.com

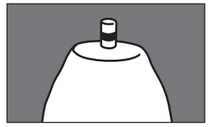
Installing Anchor and Lock on Mold -

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 Coyote lock wrench or 13mm deep well socket. Be careful not to lose springs during removal. **Casting Handle users skip to step 11.**

5 **Place lock on mold. Trace lock.**

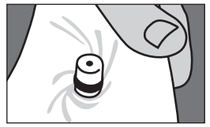
6 Flatten mold to fit to lock. Do not flatten beyond tracing of lock.

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.

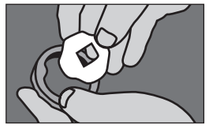
10 Place anchor and lock on mold. When glue sets, remove lock.



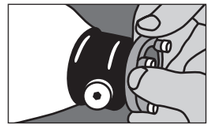
11 Apply nylon over mold. Reflect and twist nylon around tie-off ring of the anchor.

12 Install Fabrication Plug in lock.

13 Place lock on mold. Mark desired location of release button. (See Caution #1)



14 Install insert of choice in Alignable Connector.



15 Place adhesive foam on connector posts. Place connector offset or centered.

Transferring Alignment

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

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

18

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

20 The spacer disks can be helpful for building the correct hight.

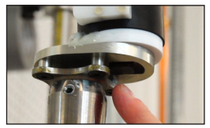
21 The better the access to the post bottom the easier finishing is.

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

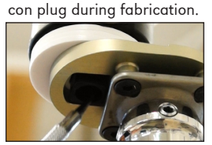
23 Push the lock forward to clear the connector you choose.

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

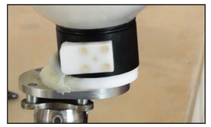
25 Place lock on anchor and ensure release button is in desired location. Smooth out excess adhesive



26 Place mold and lock into connector in desired location.



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



28 Use Coyote Quick Adhesive to attach lock in desired alignment.

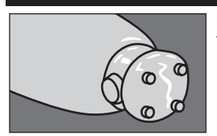
29 Creating a buildup behind the lock can help reinforce in the lamination process.

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

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

Drape Molding Check Socket -

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

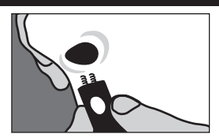


32 For extra strength, fold excess seam on distal end of connector.

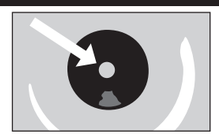
33 Expose and remove small adhesive foam and fabrication plugs. Grind distal end of socket flat. Take care not to sand metal posts.
Foam can be left in place to act as a guide for flattening.

34 Remove socket in traditional fashion or with socket extractor.

35 Carefully smooth inside of hole to allow for easy assembly of lock.

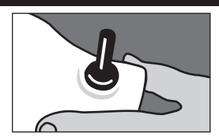


36 Slide lock plate into lock, springs first. It slides easily ONLY one way. Verify orientation first. (See Caution #3)



37 Place lock pin in lock to hold lock plate.

38 Add third spring. Slide release button into valve body.



39 Thread valve body into housing.

40 Hand-tighten valve body with Coyote lock wrench or 13mm deep well socket.

41 Typical Coyote® components use 6x18mm screws provided. Use Loctite® Blue 242 when attaching finish connector. Torque provided connector screws to 10 Nm. (See Caution #2 and #4)

Lamination Lay-up

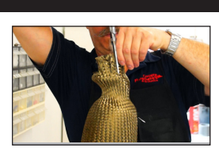
42 Pull nylon stockinette or other materials over connector, lock and mold.

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

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

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

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



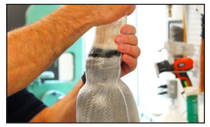
47 Cut top edges of composite to fold around posts.

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

49 Finish layup.

Lay-up - Continued

50 Use your favorite resin for laminating.



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

52 String out rest of lamination as typical.

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

54 Expose edge and remove excess lamination.

Finish

55 Remove five hole plate.

56 Expose fabrication plug and remove.

57 Smooth rough edges of distal end. Hole for valve body can be smoothed for easier install.

58 See steps 36-41 for lock assembly instructions. Use 6x18mm screws provided (see Caution #2 and #4) and Loctite® Blue 242 when attaching pyramid. Torque provided connector screws to 10 Nm.

Making Hole for Lanyard Cord

60 Sand open silicone plug with Trautman.

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

62 Try to make the hole large enough the pin can pass through.

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

64 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.

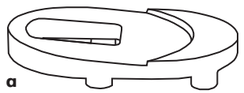
4. Attach the Lanyard Pinch disk to the socket.

Parts Sold Separately

Connector Parts

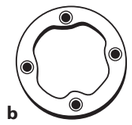
a 5 Degree AK Connector CD115CF5

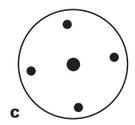
b Alignable Connector CD103AF



c Five Hole Plate

d Glue Plate





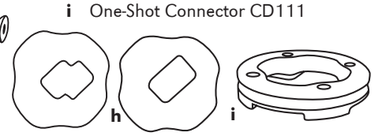
e 6mm x18mm Screws

f Small foam circles (4)

g Multi-Direction Insert CD103MDI

h Single-Direction Insert CD103SDI

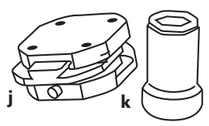
i One-Shot Connector CD111



Related Parts

j Alignment Coupler CD106

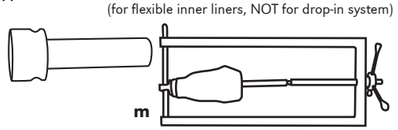
k Lock Wrench CD103WH



l Casting Handle CD316A

m Extractor, Socket Removal Tool CD301

n Fabrication dummy CD103FD
(for flexible inner liners, NOT for drop-in system)

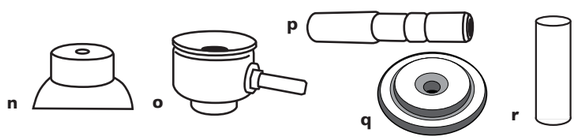


o Fitting Lock (for pin spacing) CD103FL

p Guide Pin CD103GP

q Lanyard Disk CD118PD

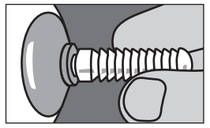
r Silicone Plug CD103SP



Practitioner Instructions

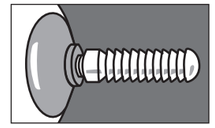
Poor lock pin spacing leads to premature wear. There should be no play between the lock and liner when fully engaged. To ensure this, spacers may need to be added to the pin. It is best to check this with a lock that has not been put into a socket yet.

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

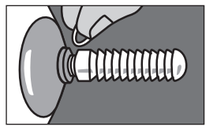


2 If there is play, loosen pin away from adapter screw and liner.

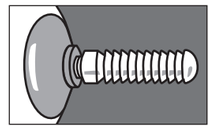
3 Reengage lock to check for play. Repeat until lock seats completely. Remove lock.



4 Gap is created between pin and liner.

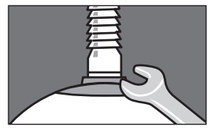


5 Based on the gap created by loosening pin, install appropriate number of pin spacers on threaded end (see Caution #5).



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, even with a wrench, contact Coyote for a replacement.

Need more help?

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