

CD122E

Easy-Off Drop-In 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

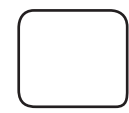
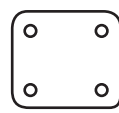
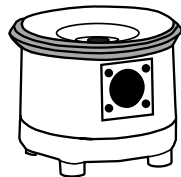


Advena Limited
Tower Business Centre
2nd Flr, Tower Street
Swatar, BKR 4013
Malta



CD122E.revA.11192019

Parts Included



4-hole plug

Foam rectangle

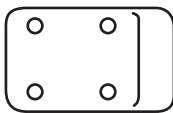
Housing with attached Connector
(*Do not remove 4 hole connector from lock)



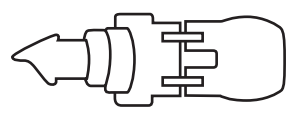
Socket Head Cap Screw (2)
(Already installed)



Extra spring (1)



Lamination dummy



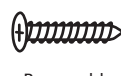
Lever assembly



Small Foam Circles (4)



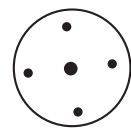
Anchor



Removable screw



Screws (4)

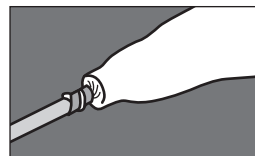


Five Hole Plate

Manufactured by
**Coyote
Prosthetics
& Orthotics**

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

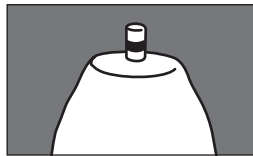
Installing Lock on Mold



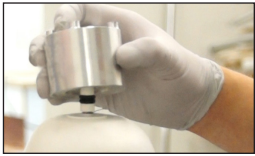
1 Cast limb with casting handle in place to create shape of lock in mold.



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



3 Mold and anchor are now ready for fabrication.



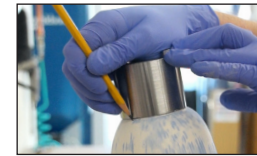
9 Place anchor in lock dummy or use threaded stud from dummy kit.



10 Place anchor and dummy on mold. Ensure release lever is in desired location.

If using casting handle, begin with Step 1.
If NOT using casting handle, skip to Step 5.

4 Casting Handle users skip to step 10.



5 Place lock dummy on mold. Trace lock dummy.



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



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

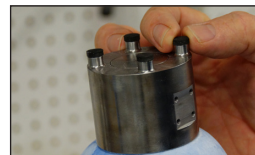


8 Fill hole with Coyote Quik Glue, fast-setting epoxy or plaster mix.

Need more help?

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

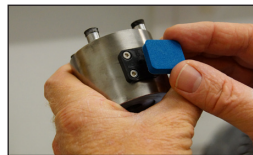
Test Socket Fabrication



11 Install small foam circles on connector posts



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.

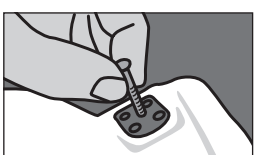


15 Drape mold and blister molding instructional videos are available at www.coyotedesign.com.

16 **Blister forming:** use a piece of flat plastic to compress distal end to reduce grinding at finishing.

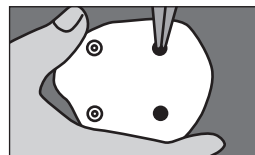


Drape forming: push in excess plastic on distal end for extra strength and to reduce grinding at finishing.

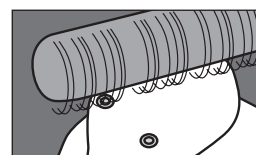


17 Expose foam rectangle and remove it.

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



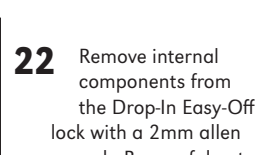
19 Expose foam, using care not to hit posts. Remove socket with socket extractor or traditional methods.



20 Flatten distal end and polish.



21 Use the Threaded Bolt and 3/4" socket wrench to push the dummy out.



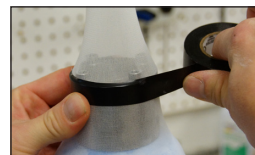
22 Remove internal components from the Drop-In Easy-Off lock with a 2mm allen wrench. Be careful not to lose springs during removal.



23 Press lock into place. Use 6x18mm screws provided and Loctite® Blue 242 when attaching pyramid.

24 Torque provided connector screws to 10 Nm. (See Caution #2 and #4)

Preparation for Lamination



25 Pull vacuum nylon over socket and lock dummy. Add one layer of Electrical tape at edge of lock dummy and cut off excess nylon at distal end of dummy.



26 Pull PVA Bag over socket and lock dummy. Heat shrink it for tight fit.



27 Tie off PVA bag and apply vacuum. Apply one layer of electrical tape over distal end of lock dummy.



28 Cut away PVA Bag from distal end against electrical tape and lock dummy edge. Apply another layer of electrical tape to make sure the edge of the nylon is covered.



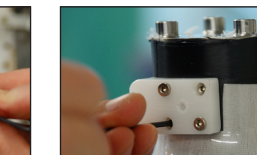
29 Fill circular crack of push plate with clay or putty. Cover bottom of dummy with compound 4.



30 Put electrical tape over the 4 holes and use a hot awl to make holes for screws to attach lamination dummy.



31 Lubricate screws and attach lamination dummy. Orient in the desired direction of the lever.



32 Tighten screws. Do not over-torque. Lubricate screw heads with petroleum jelly or clean clay.

Lay-up



33 Reflect nylon stockinette or other material over connector, lock dummy and mold.



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



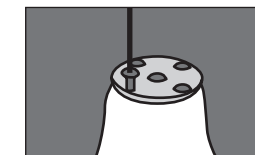
35 Ensure holes of connector are exposed. A hot nail or awl can be used.



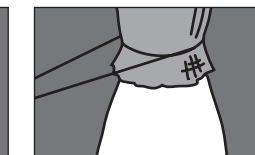
36 Pull first composite layer over mold. Cut top edges to fold around posts.



37 Reinforce with carbon tape between posts. Avoid extra material around Lamination Dummy for easier removal.



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



39 Tie second layer of composite under 5-hole plate, and reflect down over mold.



40 Pull bag and laminate. Initially restrict flow to force lamination through center hole on plate to force out air pockets.

Continued on back

Lay-up Continued



41 Toward end of lamination, place tape over 5-hole plate to squeeze excess resin out of lamination.



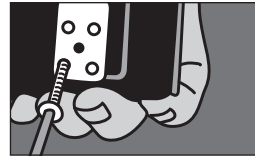
42 String can be tied between fabrication plug and top of lock to ensure seal (see Caution #6).



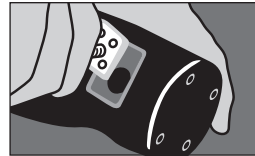
43 Expose edge and remove excess lamination.



44 Remove 5-hole plate.



45 Expose lamination dummy and remove screws.



46 Extract lamination dummy with removal screw.



47 Smooth out edges and bottom of socket. Remove socket in traditional fashion or with socket extractor.

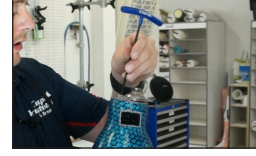


48 Use the Threaded Bolt and 3/4" socket wrench to push the dummy out.

49 Do not remove connector from Drop-In Easy-Off Lock.

50 Remove internal components from the Drop-In Easy-Off Lock with a 2mm allen wrench. Be careful not to lose springs during removal.

51 Wipe down O-ring on Drop-In lock with alcohol before inserting.

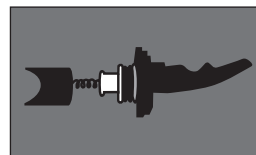


52 Press lock into place and attach pyramid with supplied 6mm x 18 mm screws.

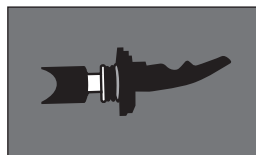
53 Attaching pyramid to connector will draw lock into place.

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

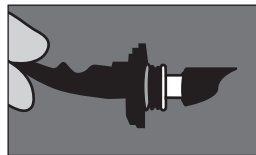
Installing Lever Assembly



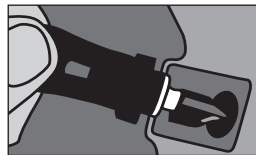
55 Make sure that lock is placed properly, as it may have dislodged during shipping. At right, a properly assembled lever.



56 Line up lever assembly in groove and insert assembly.



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



58 Install 4 screws. DO NOT over-torque.



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

NOTES FOR FLEXIBLE INNER SOCKET:

If you are using a flexible inner socket, visit our video gallery at coyotedesign.com for tutorials and instructions.



The Threaded bolt is used in conjunction with the push plate to push the dummy out of the socket.



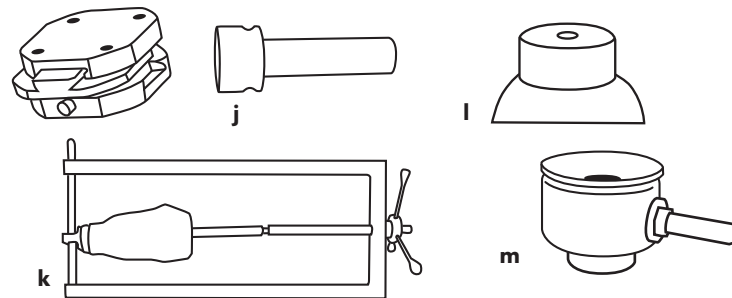
When attaching the dummy to the cast. The Drop-In Anchor or Threaded Stud can be used with the Drop-In Easy-Off Lock Dummy.

Parts Sold Separately

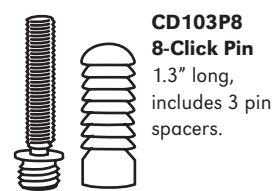
Related Parts

- i** Alignment Coupler CD106
- j** Casting Handle CD316A
- k** Extractor, Socket Removal Tool CD301

- l** Fabrication dummy CD103FD (for flexible inner liners, NOT for drop-in system)
- m** Fitting Lock (for pin spacing) CD103FL



Additional Pins



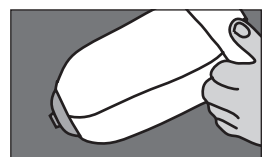
CD103P8
8-Click Pin
1.3" long, includes 3 pin spacers.



CD103P8H
8-Click Brass Pin
1.3" long, includes 3 pin spacers.

Practitioner Instructions

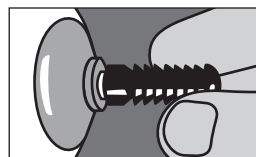
Poor seating leads to premature lock wear. The pin spacers are used to adjust the pin to seat with any liner. There should be no play between the lock and the liner when fully engaged. It is best to check seating using the Fitting Lock (CD103FL) which is reinforced to make pin evaluation fast and easy.



i Roll liner of choice onto patient. Add desired number of sock ply if used.



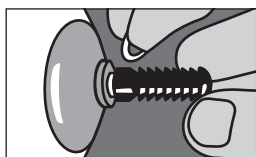
ii Install pin on liner. Engage lock to check for play between lock and liner.



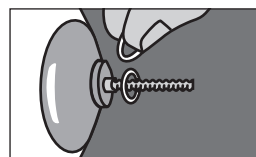
iii If there is play, loosen pin away from adaptor screw and liner.



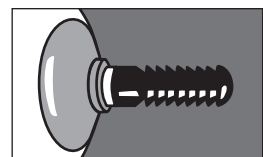
iv Reengage lock to check for play. Repeat until lock seats completely.



v Gap is created between lock and liner. Based on gap created by loosening pin, add spacers. (See Caution #5)



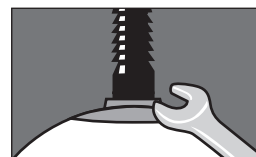
vi Based on the gap created by loosening pin, install appropriate number of pin spacers on adaptor (see Caution #2).



vii Replace pin on adaptor, making sure base fits snugly on pin spacers.



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



ix 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.
- Lever assembly WITHOUT o-rings will be needed. This allows airflow while the patient is locked in, and can then be compared to a lever assembly WITH o-rings.
- Walk the patient normally.
- Amputee may experience a difference in how the socket feels immediately, after some ambulation, or after reinstalling the o-rings. Patient feedback should be documented.

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

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

Easy-Off Lock with P8 Pin

(Chart is a guideline, NOT a guarantee of seating. Verify seating.)

Liner	Size	Spacers used	No. of clicks
Alpha Original	M	1	5
Alpha Select	M	0	5
Ossur	26.5	1	6
Alps	26	1	5

Detach here and keep everything below with patient records

Patient name: _____

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

CAUTION

1. Lever and lock do not lock automatically. Ensure lock is in the closed position; when lever is flush against socket, it is CLOSED (see Step 58.) Practitioner must give instructions on donning and doffing.
2. Use the 6x18mm screws provided with typical components. 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 262 on lock pin threads. If installing into a plastic distal adapter Loctite® Primer 242 should also be used.
10. Do not use the CD103P11 long pin with the Drop-In Easy-Off Lock or the Drop-In Air-Lock. With most liners this longer pin will bottom out in the lock.
11. 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.