



# C10A

## Air-Lock Drop-In

### Fabrication Instructions



Weight limit: 350 lbs.

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

Patent No. 6334876  
External Prosthetic Components



EC REP  
Advena Limited  
Tower Business Centre  
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Swatar, BKR 4013  
Malta



CD122A.revA.04162024

### Basic 3D Printing Instructions

- 1 Prepare final digital medium for lock attachment with your standard modifications.
- 2 Place anchor dummy on distal end of socket in accordance with standard procedure for mounting anchor. This will help insure proper lock alignment and depth.
- 3 Create cavity for drop-in 49 mm inner height and 61.5 mm diameter. We recommend at least 5 mm socket thickness depending on your printer and materials used. (.stl file is available from Coyote, call 208-429-0026)
- 4 Print your socket as required. Printing instructions are helpful hints on how to work with the lock and connector. Actual printing thickness and materials are responsibility of the technician and/or practitioner.

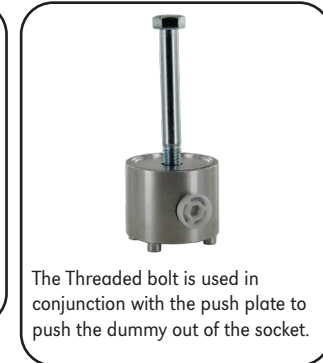
**Need assistance?**  
Call us, we would love to help.  
(208) 429-0026

### Installing Dummy 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 Install Fabrication Plug and push plate into Air-Lock Drop-in Dummy.
- 5 Casting Handle users skip to step 10.
- 6 Place lock dummy on mold. Trace lock. Do not use lock as fabrication dummy.
- 7 Flatten mold to fit to lock dummy. Do not flatten beyond tracing of dummy.
- 8 Drill 1/2" diameter hole. Angle hole to help anchor adhesive.
- 9 Place anchor in lock dummy or use threaded stud from dummy kit.
- 10 Fill hole in cast with Coyote Quik Glue, fast-setting epoxy, or a wet plaster mix.
- 11 Place Fabrication Dummy on mold.
- 12 When glue sets mark desired location of release button. (See Caution #1)

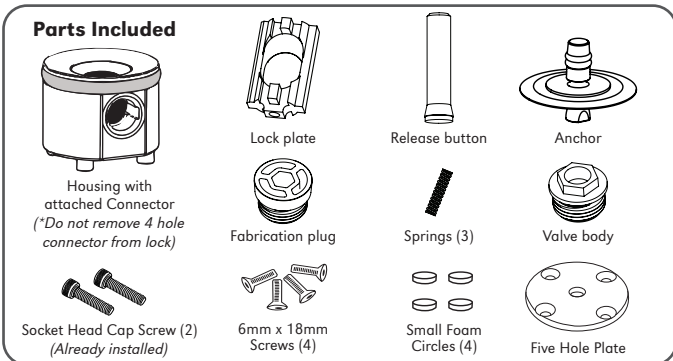


When attaching the dummy to the cast. The Air-Lock Anchor or Threaded Stud can be used with the Drop-In Air-Lock Dummy.



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

### Parts Included



### Drape Molding Check Socket

- 13 Apply nylon over mold. Reflect and twist nylon around lock dummy.
- 14 Use a hot awl or scissors to expose connector posts.
- 15 Place adhesive foam on connector posts.
- 16 Drape mold and blister molding instructional videos are available at [www.coyote.us/air-lock](http://www.coyote.us/air-lock).
- 17 For extra strength, fold excess seam on distal end of connector.
- 18 Expose and remove small adhesive foam and fabrication plug. 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.
- 19 Remove socket in traditional fashion or with socket extractor.
- 20 Use the Threaded Bolt and 3/4" socket wrench to push the dummy out.
- 21 Press lock into place and attach pyramid with supplied 6mm x 18mm screws.
- 22 Typical Coyote® components use 6x18mm screws provided and Loctite® Blue 242 when attaching pyramid. Torque provided connector screws to 10 Nm. (See Caution #2 and #4)
- 23 Carefully smooth inside of hole to allow for easy assembly of lock.
- 24 Slide lock plate into lock, springs first. It slides easily ONLY one way. Verify orientation first. (See Caution #3)
- 25 Place lock pin in lock to hold lock plate.
- 26 Add third spring. Slide release button into valve body.
- 27 Thread valve body into housing.
- 28 Hand-tighten valve body with Coyote lock wrench or 13mm deep well socket.
- 29 Use Coyote alignment coupler CD106 for alignment during fitting.

### Laminating

- 30 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.
- 31 Pull PVA Bag over socket and lock dummy. Heat shrink it for tight fit. Do not use lock as fabrication dummy.
- 32 Tie off PVA bag and apply vacuum. Apply one layer of electrical tape over distal end of lock.
- 33 Cut away PVA Bag from distal end against electrical tape and lock edge. Fill circular crack of push plate with clay or putty. Cover bottom of dummy with compound 4.
- 34 Pull nylon stockinette or other materials over connector, lock dummy and mold.
- 35 Twist and reflect material to leave a small open circle in center of connector.
- 36 Ensure holes of connector are exposed. A hot nail or awl can be used.
- 37 Pull first composite layer over mold. Cut top edges to fold around posts.

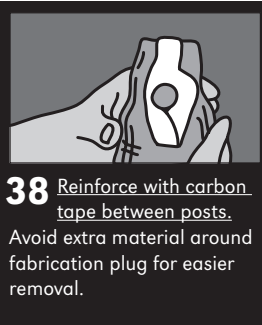
EN | Instructions for Use  
DE | Gebrauchsanweisung  
FR | Notice d'utilisation  
ES | Instrucciones para el uso  
IT | Istruzioni per l'uso  
NO | Bruksanvisning  
DA | Brugsanvisning  
SV | Bruksanvisning  
EL | Οδηγίες Χρήσης  
FI | Käyttöohjeet  
NL | Gebruiksaanwijzing

PT | Instruções de Utilização  
PL | Instrukcja użytkowania  
CS | Návod k použití  
TR | Kullanım Talimatları  
RU | Инструкция по использованию  
JA | 取扱説明書  
ZH | 中文说明书  
KO | 사용 설명서

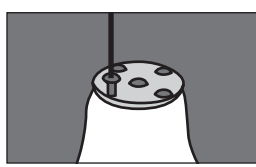


[www.coyote.us/instructions](http://www.coyote.us/instructions)

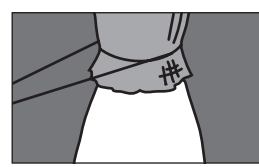




**38** Reinforce with carbon tape between posts. Avoid extra material around fabrication plug for easier removal.



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



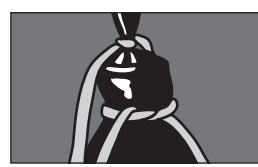
**40** Tie second layer of composite under five hole plate and reflect down over mold.



**41** Pull bag and laminate as usual. Initially restrict flow to force lamination through the center hole on plate, forcing out air pockets.



**42** Toward end of lamination, tape can be placed over five hole plate to squeeze excess resin out of lamination.



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

**Instruction Videos**  
[www.coyote.us/instructions](http://www.coyote.us/instructions)

Detach here and keep everything below with patient records

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

**ATTENTION**

1. Do not position lock with release button pointing posterior or anterior. 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. Make sure screw length fully seats into connector base not just post, longer screws may be needed depending on pyramid thickness.

**Finish**



**44** Expose edge and remove excess lamination.

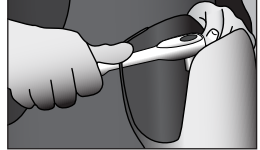


**45** Remove five hole plate.



**46** Expose fabrication plug and remove.

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



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

**50** Do not remove connector from lock.



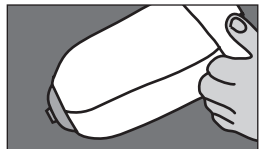
**52** Press lock into place and attach pyramid with supplied 6mm x 18 mm screws.

**53** Attaching pyramid to connector will draw lock into place.

**54**

**Two Part Pin & Solid Pin install and proper seating Instructions** See instruction video called at [www.coyote.us/easyoff](http://www.coyote.us/easyoff)

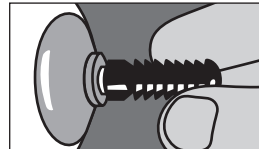
Poor seating leads to premature lock wear. The pin spacers are used to adjust the pin to seat with any liner. There should be no play between the lock and the liner when fully engaged. It is best to check seating using the Fitting Lock (CD103FL) which is reinforced to make pin evaluation fast and easy.



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



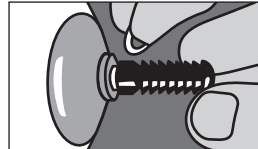
**ii** Install pin on liner. Engage lock to check for play between lock and liner.



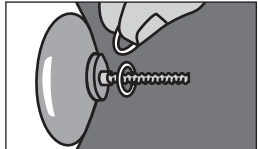
**iii** If there is play, loosen pin away from adaptor screw and liner.



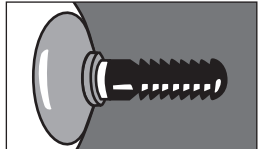
**iv** Reengage lock to check for play. Repeat until lock seats completely.



**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).



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



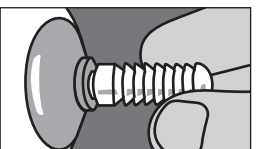
**vii** After installing pin spacers, re-engage lock to be sure there is no play.



Apply Loctite® Blue 242 to threads of lock pin and adaptor screw. Pin needs to be tightened with a 7/16" or 11 mm wrench. (See Caution #4, #5, #12)



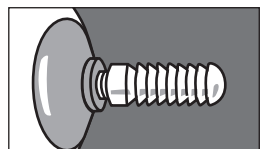
**H1** Install pin on liner. Engage lock to check for play between lock and liner.



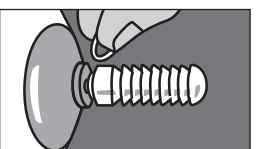
**H2** If there is play, loosen pin away from adaptor screw and liner.



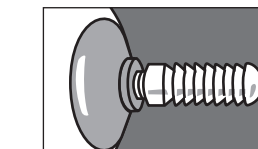
**H3** Reengage lock to check for play. Repeat until lock seats completely. Remove lock.



**H4** If a Gap is created between the pin and liner.



**H5** Based on the size of the gap created by loosening pin, install appropriate number of pin spacers on threaded end (see Attention #5).



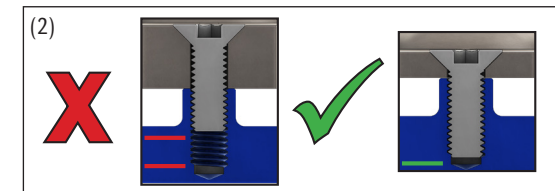
**H6** Replace pin on adaptor, making sure base fits snugly on pin spacers.



**H7** After installing pin spacers, re-engage lock to be sure there is no play.

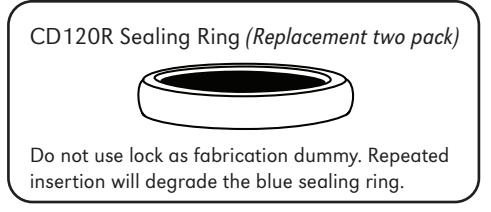
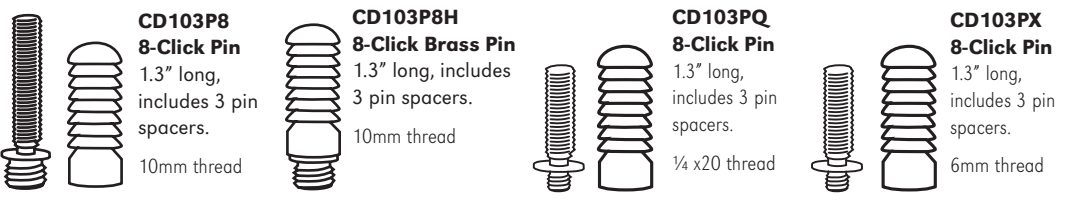


**H8** Apply Loctite® Blue 242 to threads of lock pin. Pin may need to be tightened with a 7/16" or 11 mm wrench. (See Caution #5)

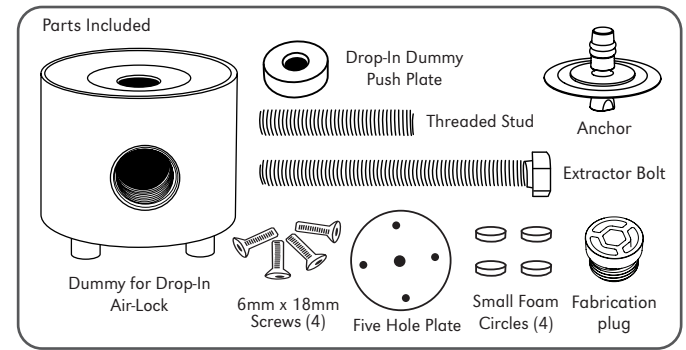


3. Do not lubricate inside of lock, this will attract debris. If you have a noise issue, it is typically due to seating. Call for technical assistance.
4. Always use screws provided during lamination to ensure proper depth is created for attachment.
5. Never exceed 3 pin spacers.
6. Lay-up instructions 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. Follow liner manufacture instructions as they can vary.
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, or visit the video gallery at [www.coyote.us](http://www.coyote.us).
12. If you have a pin you cannot install, even with a wrench, contact Coyote for a replacement.

**Additional Pins**



**C10AD Air-Lock Fabrication Dummy - Parts Sold Separately**



**Air-Lock with P8 Pin**

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

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

**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.

