CD117 Easy-Off™ Lock Fabrication Instructions

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.
4. Remove internal components from lock with a 2mm Allen wrench. Be careful not to lose springs during removal. Coating Handle users skip to step 12.
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” wide 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 in mold. When glue sets, remove lock.
11. Apply nylon over mold. Reflect and twist nylon around tie-off ring of the anchor.

Test Socket Fabrication

12. Install 4-hole fab plug. Snug tighten screws only DO NOT overtighten.
13. Place rectangle foam on fab plug.
14. Place lock on mold. Mark desired location of release lever.
15. Install insert of choice in Coyote alignable connector.
16. Place adhesive foam on connector posts. Place connector offset or centered.
17. Blister forming: use a piece of flat plastic to compress distal end to reduce grinding at finishing.
18. Expose foam rectangle and remove it.
19. Expose yellow foam, using care not to hit posts. Remove socket with socket extractor or traditional methods.
20. Remove 4-hole plug with screw, smooth and polish area.
21. Flatten distal end and polish.

Preparation for Lamination

22. Use #18mm screws provided and Loctite® Blue 242 when attaching pyramid. Torque provided connector screws to 10 Nm. (See Caution 42 and 44)
23. Use Coyote alignment coupler CD106 for alignment during fitting.

Transferring Alignment

24. Lube and install glue plate on alignable connector.
25. Attach a pyramid to alignable connector.
26. Install pyramid on adapter.
27. Install lock in mold in desired location. Mark release lever location.
28. Best mold and lock on alignable connector. Place test socket next to mold and compare alignments. Measure to compare accurately.
29. Separate lock from connector. Fill connector with Coyote Quick Adhesive or fast-setting epoxy.
30. Place mold and lock back into connector in desired location. Let set.
31. Remove pyramid from tube clamp then remove pyramid and glue plate.

NOTES FOR TRANSFERRING ALIGNMENT: We recommend using a new lock/lock housing in the definitive socket. The lock in the test socket can be removed when time permits and reused in another test socket. This also allows you to duplicate the alignment established in the test socket in the definitive.

If using transfer fixture, place anchor inside lock prior to filling in alignment. Remove as normal and proceed from step 23.

NOTES FOR FLEXIBLE INNER SOCKET: If you are using a flexible inner socket, visit our video gallery at coyotedesign.com for tutorials and instructions.

Lay-up

32. Make sure O-ring is in place on lamination dummy insert.
33. Install lamination dummy and insert in the desired direction of lever.
34. Tighten screws. Do not overtighten.
35. Lubricate screw heads with petroleum jelly or clean clay.
37. Trim excess PVA bag from tie-off ring and o-rings. Keep o-rings clean.
38. Run bead of Coyote Quick Adhesive or 5-minute epoxy around inner funnel of lock.
39. Place lock on anchor and ensure release lever is in desired location. Smooth out excess adhesive with finger.
40. Reflect nylon stocking or other material over connector, lock and mask.
41. Test and reflect material to leave a small open circle in center of connector.
42. Ensure holes of connector are exposed. A hot nail or awl can be used.
43. Pull first compromise layer over mold. Cut top edges to fold around posts.

Need more help? Fabrication videos can also be viewed at www.coyotedesign.com/video

Continued on back...
Lay-up continued

44 reinforce with carbon strap between posts. Avoid dislodging by applying around fabrication plug for easier removal.

Finish

50 Expose edge and remove excess lamination.
51 Remove 5-hole plate.
52 Expose lamination dummy and remove screws.
53 Extract lamination dummy and remove screw.
54 Smooth out edges and bottom of socket.

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

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.

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.
• Lock will be sure there is no play.
• Pull bag and laminate initially restrict flow to force lamination through center hole on plate to force out on sockets.
• Toward end of lamination, place tape over 5-hole plate to squish access resin out of lamination.
• String can be tied between fabrication plug and top of lock to ensure seal (see caution #6).

Parts Sold Separately

Connector Parts
• Alignable Connector CD103AF
• Five-Hole Plate
• Glue Plate
• 6mm x 18mm Screws
• Small foam circles (4)
• Long Pin CD103P11 65.5 long, includes 3 pin spacers.

Related Parts
• Multi-Direction Insert CD103MDI
• Single-Direction Insert CD103SDI
• One-Shot Connector CD111
• Lever Assembly WITHOUT o-rings will be needed. This allows airflow while the amputee sits.
• The suction feature of the lock can be demonstrated and documented very simply.

Easy-Off Lock with P8 Pin

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

- Alignable Connector CD103AF
- Five-Hole Plate
- Glue Plate
- 6mm x 18mm Screws
- Small foam circles (4)

4. Always use screws provided during lamination to secure. Use screws class 10.9 or better.
5. 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.
6. Always use screws provided during lamination to ensure proper depth is created for attachment.
7. Never exceed 3 pin spacers.
8. 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.

Fabrication dummy CD103FD (for flexible inner liner, NOT for drop-in system)
Fitting Lock (for pin spacing) CD103FL

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.

Patient name: __________________________

Patient name: __________________________

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

1. Lever and lock do not lock automatically.
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.

Fabrication dummy CD103FD (for flexible inner liner, NOT for drop-in system)
Fitting Lock (for pin spacing) CD103FL