



Coyote Grommet Lock Instructions

CD104|CD103PAF|CD103PFF |CD104P6|CD104P6H|CD104PQ|CD104PQH|CD104P10

Fabrication Instructions

Grommet® Lock CD104 | Pediatric Alignable Four Connector CD103PAF | Pediatric Fast Four Connector CD103PFF



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

Manufactured by Coyote®

419 N. Curtis Rd., Boise, Idaho 83706

(208) 429-0026 | www.coyote.us



Grommet.revA.07292021

For instructional translations go to:

www.coyote.us/instructions-grommet

Coyote Grommet® | page 1

Need more product info?

Visit us at www.coyote.us for more information, videos, tips, and instructions.

Table of Contents

Instruction Translation Link	1
Table of Contents	2
Grommet Parts Included	3
Thermoforming Grommet®	5
Laminating Grommet®	5
2 Part Pin Installation	9
Solid Brass Pin Installation	11

Parts included with Connectors and Accessories

CD103AF Alignable Four Connector Parts

Grommet Housing, Anchor, Silicone Plug, Foam Square, Foam Rectangles (2), Lock Plate, Lamination, Tool, Removal Screw, Face Plate Screws, Face Plate, Spring

CD103PAF Pediatric Alignable Four Connector Plate Parts

Pediatric Alignable Four Connector, Pediatric Glue Plate, 8 Hole Plate, Small Foam Circles (4), Silicone Caps (4), 5 x 20 mm Screws (4), 5 x 18 mm Screws (4)

CD103PFF Pediatric Fast Four Connector Plate Parts

Pediatric Fast Four Connector, 8 Hole Plate, Small Foam Circles (4), Silicone Caps (4), 5 x 20 mm Screws (4), 5 x 18 mm Screws (4)

Standard two-part pins

8-click pin (2), Pin adaptor screw (2), Pin spacers (10), (*Grommet two-part pins contain 10 pin spacers CD104P6, CD104P10, CD104PQ, Up to 5 pin spacers can be used on the Grommet two part pin at a time.*)

Solid Brass Pins

8-click Brass pin (2), Pin spacers (6), (*Grommet Solid Brass Pins contain 6 pin spacers CD104P6H, CD104PQH A maximum of 3 pin spacers can be used on the Grommet Solid Brass pin at a time.*)

Additional Pins for Grommet Lock - (Come in two packs)

CD104P6 8 - Click Pin Two Part |1.08" long, includes 5 pin spacers. 6mm thread

CD104P6H - 8-Click Pin Solid Brass |1.07" long, includes 3 pin spacers. 6mm thread

CD104PQ - 8-Click Pin Two Part |1.08" long, includes 5 pin spacers. ¼ x20 thread

CD104P6QH - 8-Click Pin Solid Brass |1.07" long, includes 3 pin spacers. ¼ x20 thread

CD104P10 - 8-Click Pin Two Part |1.3" long, includes 5 pin spacers. 10mm thread

Coyote Grommet® | 4

Thermoforming Grommet® Lock with Pediatric Fast Four Connector

The Grommet® works in conjunction with a four-hole connector of your choice. Connectors are sold separately.

Other lock pin thread options available.

Go to www.coyote.us

Quik Glue is not required for the fabrication of the Grommet® but works very well in this application. Work quickly when using. Quik Glue is sold separately. CD4150*, 4250* or CD4350 50cc cartridge

*Quik Glue requires dispensing gun and mix tips.

1. Remove Lock components from housing. Place housing on mold and trace its location.
2. Flatten mold where outlined to desired depth.

3. Drill a hole in the center of the flattened area to seat the anchor.
4. Fill hole with Coyote® Quik Glue or epoxy and smear a small amount on flattened area.
5. Place anchor screw into hole securing anchor to mold. Fill in any gap with plaster and smooth transition.
6. Install lamination tool using face plate screws.
7. Fit pediatric connector to Grommet®. Place foam rectangle on lamination tool, foam circles on connector posts, and foam square on bottom of lock.
8. Place Grommet® on anchor to mark location of release button. Remove Grommet®. Pull nylon over anchor and mold.
9. Glue lock to anchor with small amount of glue. Place on anchor. Make sure to align lamination tool with release button location.
10. Vacuum form as usual. Press plastic into bottom of connector to reinforce it.
11. Carefully sand socket to expose foam placed on lamination tool, connector posts, and bottom of lock. Remove foam.
12. Install removal screw into lamination tool. Remove Lamination tool.
13. Reinstall lock components.
14. If transitioning between a test socket and a definitive lamination remove lock components from test socket. Install silicone plug in lock housing funnel. Place test socket in alignment fixture and fill as usual. Remove mold. Begin lamination process.

Laminating Grommet® Lock with Pediatric Aligned Four Connector

15. As shown in Thermoforming fabrication drill hole large enough for anchor screw. Flatten mold to receive anchor. Seal cast in preferred manner. Install Lamination tool using face plate screws. Place foam rectangle on lamination tool and foam square on bottom of lock.
16. Glue anchor to cast. Fill in any gap with plaster and smooth transition. Mark location of release button.
17. Pull PVA bag over the cast. Use heat to help ensure PVA fits under lock funnel.
18. Apply a bead of glue to housing funnel and glue to anchor with lamination tool aligned with release button location mark.

19. Ensure PVA bag is under lock funnel.

20. Place glue plate on connector. Install pyramid to connector. Do not over tighten screws.
21. Attach pyramid to endo components. All components should be at neutral. Return mold and lock to alignment fixture.
22. Check height measurement to ensure height is identical to test socket. Fill connector with glue.
23. Lower mold and lock onto connector. Allow glue to set.
24. Remove mold (with lock and connector) from fixture.
25. Remove screws from connector.
26. Carefully remove glue plate and begin layup.
27. Fold carbon and other layup materials between connector posts. As layup material is added, ensure the connector posts remain exposed.
28. Lube attachment screws. Install Eight Hole Plate. Do not over tighten screws. Install red silicone caps onto screws. Finish Layup.
29. Pull outer PVA bag over mold. Laminate in customary fashion.
30. Carefully sand to expose the red silicone caps. Expose the foam rectangle over the lamination tool.
31. Remove foam rectangle and red silicone caps. Install removal screw in lamination tool. Remove lamination tool
32. Remove Eight Hole Plate. Finish socket as usual.
33. Slide lock plate into face plate and install spring.
34. Tighten faceplate screws.

Always, Loctite and torque to manufacturer specifications.

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

Two Part Pin install and proper seating Instructions

Poor lock pin spacing leads to premature wear. There should be no play between the lock and liner when fully engaged. You may need to add spacers to the pin to ensure this. Check for proper amount of play before putting lock into socket.

- i. Install pin on liner. Engage lock to check for play between lock and liner.
- ii. If there is play, loosen pin away from adaptor screw and liner.
- iii. Reengage lock to check for play. Repeat until lock seats completely. Remove lock.
- iv. If there is a gap between pin and liner.
- v. Based on the gap size created by loosening pin, install appropriate number of pin spacers on the adaptor (see Attention A5).
- 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.
- viii. Apply Loctite® Blue 242 to threads of lock pin on adaptor screw threads. Screw into liner finger tight.
- ix. After hand tightening, tighten the brass adaptor screw base against the liner a 1/4 turn more with a wrench or pliers.
- x. Place needed number of pin spacers on adaptor screw. Apply Loctite® Blue 242 to threads of lock pin adaptor screw. Screw the 8 click pin finger tight.
- xi. Now tighten pin assembly with pliers or vice grips to insure complete thread engagement of brass into liner and pin into brass. (See Attention A4, A5, A6)

The CD104P6, CD104P6H, CD104PQ, CD104PQH, and CD104P10 pins are for use with the Grommet Lock, these pins are too small to work with the Air-Lock or Easy-Off Lock products. And the Air-Lock and Easy-Off Lock pins are too large to work with the Grommet Lock.

We recommend using the CD103S Small Air-Lock vs. the Grommet Lock when space is available for enhanced suspension and higher weight limit.

Attention

A1. 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.

A2. Do not position lock with release button pointing posterior or anterior. Typically release button is oriented medially.

A3. Use the screws provided with typical components. In atypical setups, longer screws may be needed. Always use screws class 10.9 or better.

A4. Always use screws provided during lamination to ensure proper depth is created for attachment.

A5. 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.

Coyote Grommet® | Page 10

Solid Pin install and proper seating Instructions

See instruction video called “CD103P8H Installing Brass Pin” at www.coyote.us/airlock

Poor lock pin spacing leads to premature wear. There should be no play between the lock and liner when fully engaged. You may need to add spacers to the pin to ensure this. Check for proper amount of play before putting lock into socket.

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 A5).

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 pliers or vice grips. (See Attention A5)