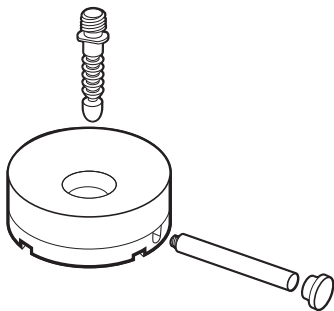


# TECHNICAL INSTRUCTIONS & USER GUIDE

## C100 CYLINDRICAL SHUTTLE LOCK



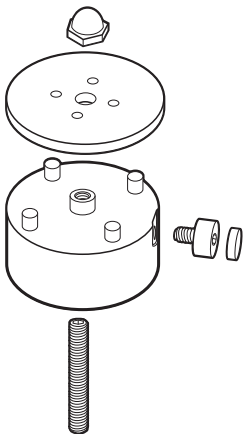
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## C100 Cylindrical Shuttle Lock Kit

- (1) Lock Assembly with adjustable length push pin
- (2) Ratchet Plunger Pins (selected pin size)
- (1) Tube of CA Glue
- (4) M6 x 25mm Fasteners (Not Shown)

*Recommended (not included):*  
Loctite 242  
Fabrication Kit



## C100 Cylindrical Shuttle Lock Fabrication Kit

- (1) Compression Nut
- (1) Lamination Disk
- (1) Fabrication Dummy
- (1) SHSS 5/16-18 x 2.25" set screw
- (1) Button Shield Dummy
- (1) Adhesive Foam Pad
- (4) Post Covers (not shown)

# PLUNGER PIN OPTIONS

Thread Type: Metric M10

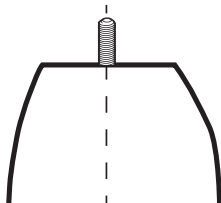
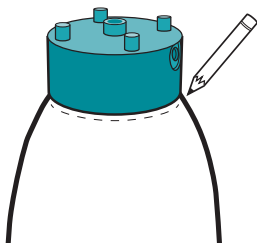
Apply Loctite 242 and install into locking liner. Use a wrench to tighten.

PIN SIZES		
XS	5/8 in	16 mm
S	1 in	25 mm
STD	1.5 in	38 mm
L	2 in	51 mm
XL	2.5 in	64 mm

## INSTRUCTIONS

### PREPARE MODEL

1. Place the fabrication dummy on the distal end of the model, along the mid line and trace the circumference.
2. Create a flat surface on top of cast, to accommodate the size of the dummy.
3. Drill 1/4" (6 mm) hole in center of cast and embed set screw. Hex end of screw should protrude at least 1" (2.5 cm) outside of cast.
4. Continue on with fabrication method of choice:  
Thermoforming or Lamination



## FABRICATION METHOD - THERMOFORMING

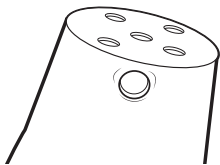
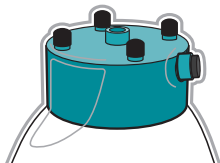
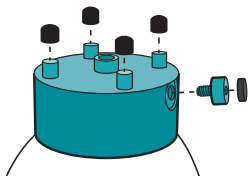
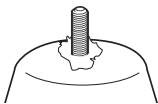
1. Add stockinet over model. Use string to tie off around set screw and remove excess material.
2. Thread fabrication dummy onto set screw, with correct button position.
3. Install button shield dummy and place adhesive foam pad over hex head hole.
4. Cover 4-hole posts with post covers.
5. Heat plastic using standard method. Then, thermoform over fabrication dummy.

*Optional: A 2nd layer of plastic may be applied to the distal end for reinforcement.*

*Optional: The lamination disk may be used to create an even distal surface*

6. Sand distal end of the socket until the heads of the post covers are barely exposed and a flat surface has been created.

*Caution: Inner and outer surfaces of distal socket must be flat and parallel in order to prevent lock from binding or breaking!*



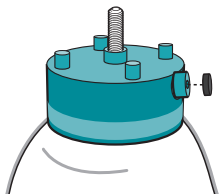
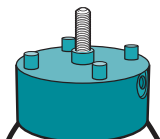
7. Expose push pin shield dummy and remove.
8. Extract model from socket.
9. Carefully sand around push pin hole area to create a smooth opening for push pin.
10. Continue to Lock Assembly.

## FABRICATION METHOD - LAMINATION

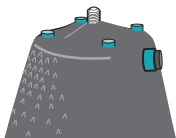
1. Apply resin deterrent to set screw threads. Then screw fabrication dummy onto it, with correct button position.
2. Apply inner PVA bag over dummy and model. Tie off PVA bag.

*Note: Temporarily fitting the lamination disk and retaining nut will protect the PVA bag from the posts and set screw.*

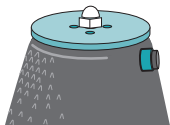
3. Create a seal around the dummy using PVA tape.
4. Trim excess PVA bag below push pin hole. Apply more tape to reinforce the seam.
5. Remove lamination disk and retaining nut.
6. Apply resin deterrent to the threads and hex head hole of button shield dummy and install.
7. Place adhesive foam pad on the button shield dummy.



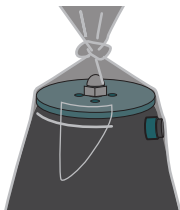
- 8.** Proceed with lay up materials. Ensure that posts and button shield dummy are exposed.



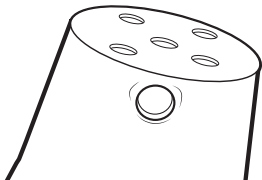
- 9.** Place the lamination disc onto set screw, then tighten with compression nut, compressing disc against 4-hole posts.



- 10.** Apply outer PVA bag and laminate socket. Ensure that the resin saturates all lay up material.
- 11.** Once cured, remove excess resin and PVA bag.

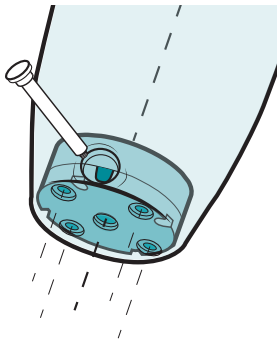


- 12.** Remove compression nut and lamination disc.
- 13.** Expose push pin shield dummy and remove.
- 14.** Remove model from socket.
- 15.** Carefully Sand the distal end of the socket to remove excess material.
- 16.** Sand around push pin hole to create a smooth opening for push pin.



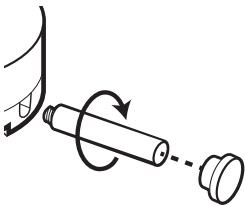
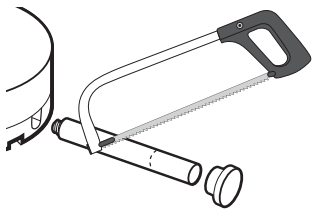
## LOCK ASSEMBLY

1. Insert lock assembly into bottom of socket, aligning push pin hole.
2. Align 4-hole pattern with socket and attach 4-hole adapter of choice.
3. Apply Loctite and torque all screws according to manufacturer's specifications.






## PUSH PIN ASSEMBLY

1. Mark the desired length of the push pin stem and cut off excess material.
2. Use CA glue to attach push pin cap to stem.
3. Apply Loctite 242 and thread push pin into lock assembly.



# CAUTIONS AND WARNINGS

-  Use recommended torque settings to avoid malfunction
-  Do not disassemble housing assembly or lock
-  Do not use lubricant in the locking mechanism, to prevent attraction of dirt and debris

## USER GUIDE

Prosthetists: Instruct your patient on these steps and then give this page to the patient.

## LOCK MAINTENANCE AND CARE

Inspect lock daily for performance and safety

Keep lock clean and dry to ensure smooth operation

Avoid moisture and humidity to prevent corrosion

Report any lock malfunction immediately to your prosthetist



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