Clutch Lock with Titanium Pyramid and Air Expulsion



140010 Pyramid Housing Clutch Lock Kit w/o Plunger

Rated to 300 lbs

Clutch Lock Kit:

140010 Pyramid Clutch Lock Kit w/o Plunger
140150 Clutch Lock w/ Air Expulsion
140065 Fabrication Kit for Clutch Lock
140013 Pyramid Housing Kit for Clutch Lock

124183 Lamination Cap

Plungers: (sold separately)

 140040
 2" Clutch Lock Plunger, 1/4-20 Thread

 140041
 1 1/2" Clutch Lock Plunger, 1/4-20 Thread

 140043
 2" Clutch Lock Plunger, M10 Metric Thread

 140044
 1 1/2" Clutch Lock Plunger, M10 Metric Thread

Clutch Lock Cartridge:

140150 Clutch Lock w/ Air Expulsion

140116 Latch Button140113 Air Expulsion Filter

Fabrication Kit - Thermoforming and Lamination:

140065 Fabrication Kit

140060 Wrench

140061 Clutch Housing Dummy 140062 Distal Attachment Dummy

880488 1/4-20x2" Socket Head Set Screw

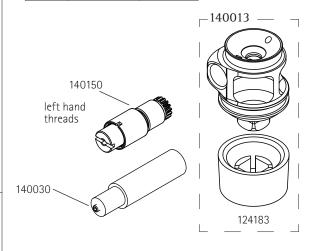
881351 Brass Nail

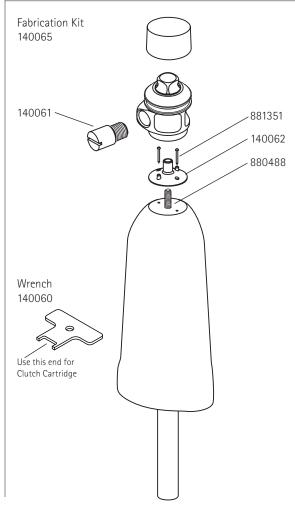
Push Button Extension:

140030 Push Button Extension (sold separately)

Clutch Lock Assembly and Plungers

	1/4" Thread	Metric M10
2"	140040	140043
1 1/2"	140041	140044







Mold Preparation For All Clutch Lock Configurations

Attach Assembly and Blend

The model should be prepared with a $1/4-20 \times 2$ " set screw (P/N 880488) protruding 3/4" from the distal end with the hex socket inside the plaster.

EXCEPTION: When using the 4-Hole Cylindrical Dummy (P/N 140070) a 5/16 - 18x3" set screw (P/N 880494, included in kit) should be used with 1" of the set screw protruding and the hex socket exposed. Align the set screw with the centerline of the model as shown in Figure 1 and 2 for proper alignment.

Prepare Model

Foam Model

For foam models, apply a nylon hose and a PVA sleeve, tied off around the protruding set screw.

• Plaster Model

Vacuum holes may be needed with plaster models especially near the clutch housing. If the model is wet, use a casting halloon.

Once the model has been prepared, slide the Distal Attachment Dummy (P/N 140062) over the exposed set screw and line up the two alignment posts to the medial/lateral plane. Use the two brass nails (P/N 881351, included in kit) to affix the Dummy to the model to stop rotation. Blend the distal end of the model to the inner flair of the Dummy with a plaster slurry.

Fabricating Clutch Lock with Titanium Pyramid

Thermoforming

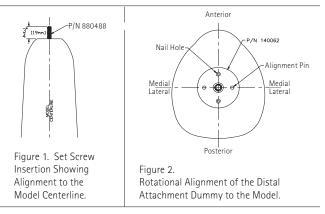
Any customary plastic may be used for definitive or check socket fitting. Standard drape or blister forming techniques may also be used with sufficient vacuum. Drape formed Durr-Plex is commonly used with a clear socket especially with the Socket Evaluation System. Special Care should be taken around the area of the clutch housing to prevent wrinkles especially when blister forming.

Lamination

Pack the Pyramid Housing (P/N 140013) with stick wax (P/N 990035), add a wax coating to the Clutch Housing Dummy (P/N 140061) and screw it into the clutch hole in the Pyramid Adapter Housing (dummy and clutch lock housing have a left hand thread), then fill the slot with either wax or silicone gel and slide the Lamination Dummy (P/N 124183) over the pyramid. Make an "O-Ring" out of silicone gel (P/N 741214) and add to the distal attachment dummy as shown in Figure 3 before sliding the Pyramid Adapter Housing onto the Distal Attachment Dummy.

The suggested fabric lay-up includes 1" carbon fiber tape (P/N 211144) tied into the groove of the housing body and extending up several inches fanning out over the distal end of the socket. Based on the patients weight (maximum of 300 lbs) and activity level, add appropriate stockinettes and strengthening fabrics tied into the distal tie in groove.

The selected resin should be prepared and poured into the outer PVA sleeve and thoroughly saturated around the Pyramid Housing body. After the resin has hardened, remove any excess from around the pyramid dome.



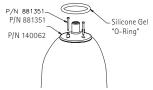


Figure 3. Attaching the Distal Attachment dummy with Brass Nails. Silicone Gel "O-Ring" (#741214) Used to Seal Resin from entering the Clutch Lock Body.

Fabrication Guidelines

- A trained technician must perform fabrication of the prosthesis.
- Do not modify the housing or the locking mechanism in any way.
- Use a thread locker to secure all threaded fasteners.
- A minimum of 3 serrations or rings must be engaged in the shuttle and clutch locks for safest operation.
- This device is intended for single patient use.

Daily Care and Maintenance

The Prosthetist should discuss the following inspection procedures and quidelines with the patient.

- Check the locking mechanism for proper operation before each use. Discontinue use of prosthesis and contact your Prosthetist if locking mechanism is not performing as expected.
- Avoid bumping the button to prevent accidental un locking. This risk increases if the prosthesis is fabricated without a button shield.
- Keep the lock clean and free of debris for the best perfor mance and proper lock engagement.
- Avoid humid or wet environments and always dry the components should they get wet. Prolonged exposure to moisture can cause metal components to corrode and fail prematurely.
- Should the lock malfunction in any way (e.g. accidentally disengage, fail to release, etc.), discontinue use of the lock immediately and contact your Prosthetist.
- Contact your Prosthetist should you have any questions or concerns.

Failure to follow these guidelines will void any warranty.