# Modular Shuttle Lock with Titanium Pyramid



125460 Shuttle Lock with Titanium Pyramid without Plunger

• Rated to 300 lbs.

## Shuttle Lock Assembly:

Shuttle Lock Assembly.		
Titanium Pyramid Shuttle Lock w/o Plunger		
Titanium Pyramid Housing		
Shuttle Body		
Button Shield		
Guide Screw		
Latch Pin		
Latch Pin Button		
Shuttle Lock		
Compression Spring		
6-32 x 5/16" SOC HD SS		
Pe–Lite™ Washer		

#### Plungers: (sold separately)

124183

J \	1 //
809722	Plunger 1", w/ 1/4-20 Thread
809725	Plunger 1 1/2", w/ 1/4-20 Thread
809727	Plunger 2", w/ 1/4-20 Thread
809722mm	Plunger 1", w/ M10 Metric Thread
809725mm	Plunger 1 1/2", w/ M10 Metric Thread
809727mm	Plunger 2", w/ M10 Metric Thread
809720mm	Plunger 2 1/2", w/ M10 Metric Thread
809721mm	Plunger 3", w/ M10 Metric Thread

**Lamination Cap** 

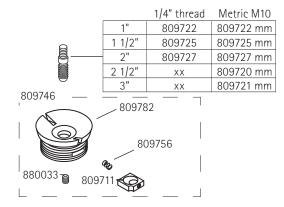
#### Shuttle Lock Sub Assembly:

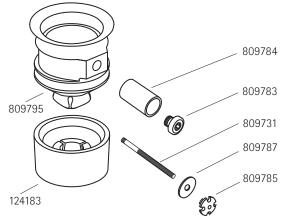
	5
809746	Shuttle Lock Sub Assembly
809782	Shuttle Body
809711	Shuttle Lock
809756	Compression Spring
880033	6-32 x 5/16" SOC HD SS

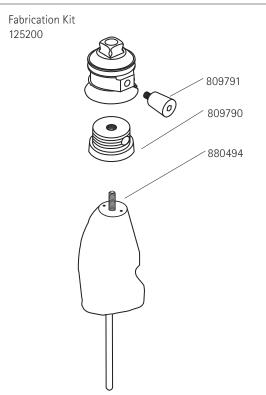
### Fabrication Kit - Thermoforming and Lamination:

	3
125200	Fabrication Kit
809790	Shuttle Body Dummy
809791	<b>Button Shield Dummy</b>
880494	5/16-18 x 3" SOC HD SS

#### Shuttle Lock Assembly and Plungers









## **Mold Preparation For Shuttle Configurations**

### Attach Assembly and Blend

The model should be prepared with a 5/16 - 18 x 3" set screw in the distal end, aligned with the center line of the model with the hex socket\* within the plaster mold, the screw should protrude 1" beyond the end of the model for the housing dummy.

\* Except when using the 4-Hole Housing the Hex Socket must be exposed out of the plaster and should protrude 1 1/4" from bottom of shuttle or 2" out of the plaster.

Screw the housing dummy over the exposed set screw. Blend the distal end of the model to the inner flair of the housing with a plaster slurry.

### **Prepare Model**

- FOAM MODEL
   For foam models, apply a nylon hose and a PVA sleeve, tied off around protruding set screw.
- PLASTER MODEL
   Vacuum holes may be needed with plaster models especially near shuttle housing. If model is wet, use a casting balloon.

#### Fabricating Shuttle Lock with Titanium Pyramid

#### Thermoforming

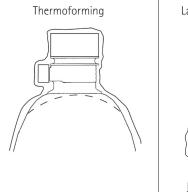
Any customary plastic may be used for definitive or check socket fitting. Standard drape or blister forming techniques may also be used with sufficient vacuum. Drape formed Durr-Plex is commonly used with a clear check socket especially with Socket Evaluation Systems.

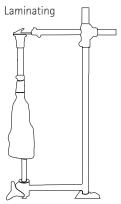
Special care should be taken around the area of the button shield to prevent wrinkles especially when blister forming.

#### Lamination

Add a wax (#990035) coating to the shuttle housing threads before assembling to the shuttle dummy. Button shield dummy must be screwed in the latch pin hole, then fill the hex wrench hole with silicone gel. The suggested fabric lay-up is the inclusion of 1" carbon fiber tape (211144) tied into groove of the housing body and extending up several inches fanning out over the distal socket section. Based on the weight (maximum of 300 lbs) and the activity level of the patient, add appropriate stockinettes and strengthening fabrics tied into the top tie in groove.

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





# 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 unlocking. This risk increases if the prosthesis is fabricated without a button shield.
- Keep the lock clean and free of debris for the best performance 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. ac cidentally disengage, fail to release, etc.), discon tinue use of the lock immediately and contact your Prosthetist.
- Contact your Prosthetist should you have any questions or concerns.

## **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.
- Use of the button shield and guide screw, when provided, is required for safest operation. Failure to use the button shield significantly increases the likelihood of accidental disengagement of the lock.
- A minimum of 3 teeth must enter the shuttle and clutch locks for safest operation.
- This device is intended for single patient use.

Failure to follow these guidelines will void any warranty.