Small Modular Shuttle Lock with Delrin Housing



Plunger Not Pictured

125410 Small Shuttle Lock with Delrin Housing

Rated to 132 lbs.

Shuttle Lock Assembly:

125410	Small Delrin Shuttle Lock Kit, 1" Plunger
125412	Small Delrin Shuttle Lock Kit, 1-1/2" Plunger
125410MM	Small Delrin Shuttle Lock Kit, 1" Plunger
125412MM	Small Delrin Shuttle Lock Kit, 1-1/2" Plunger
809810	Shuttle Lock Body, Small
880033	Socket Head Set Screw, 6/32x5/16"
809760	Compression Spring
809816	Shuttle Lock
809820	Housing
809784	Shield
809729	Latch Pin
809775	Latch Pin Button

Plungers: (sold separately)

809773

809826 Plunger, 1", 1/4-20" 809827 Plunger, 1 1/2", 1/4-20" 809826mm Plunger, 1", M10 809827mm Plunger, 1 1/2", M10

Guide Screw

Shuttle Lock Sub Assembly:

809808 Shuttle Lock Sub Assembly

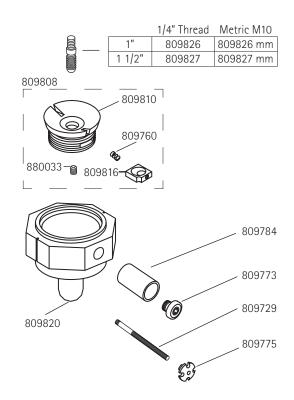
809810 Shuttle Body 809816 Shuttle Lock 809760 Compression Spring 880033 6-32 x 5/16" SOC HD SS

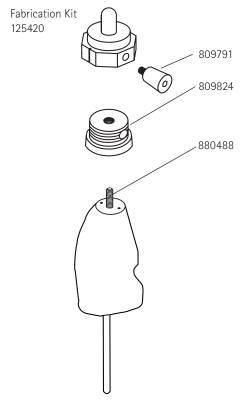
Fabrication Kit - Thermoforming and Lamination:

125420 Fabrication Kit 809824 Housing Dummy

880488 1/4-20 x 2" SOC HD SS 809791 Button Shield Dummy

Shuttle Lock Assembly and Plungers





Fillauer LLC

CE

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.

Fabricating Shuttle Lock with Delrin Housing

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 the Socket Evaluation System.

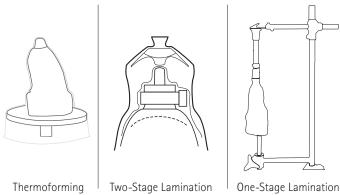
Special care should be taken around the area of the button shield dummy to prevent wrinkles especially when blister forming.

Two-Stage Lamination

Add a stick 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 (Small Delrin spanner wrench hole) with silicone gel. The Delrin Shuttle Housing is normally used in a two-stage lamination technique. In this method the Delrin housing is incorporated in the first lamination. The inner shell consists simply of Dacron and/or Nylon to form the inner socket. The outer lamination is reinforced with carbon or fiberglass taking into consideration the patient's weight and activity level. We suggest that the reinforcement include three 1" strips of carbon tape (#211144) fanned over the distal end of the socket, in addition to normal strengthening materials, tied into the groove of the socket adapter.

One-Stage Lamination

The Delrin Shuttle Housing can also be used in a one-stage lamination techniques using a pyramid socket adapter or 4-hole socket adapter as the distal attachment (refer to the Fillauer One-Stage Lamination Manual for suggested techniques and fixtures). In this method the same reinforcement scheme using carbon, fiberglass, and nylon is tied into the groove of the socket adapter.



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.

Daily Care and Maintenance

The Prosthetist should discuss the following inspection procedures and guidelines 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 com ponents 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.

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.