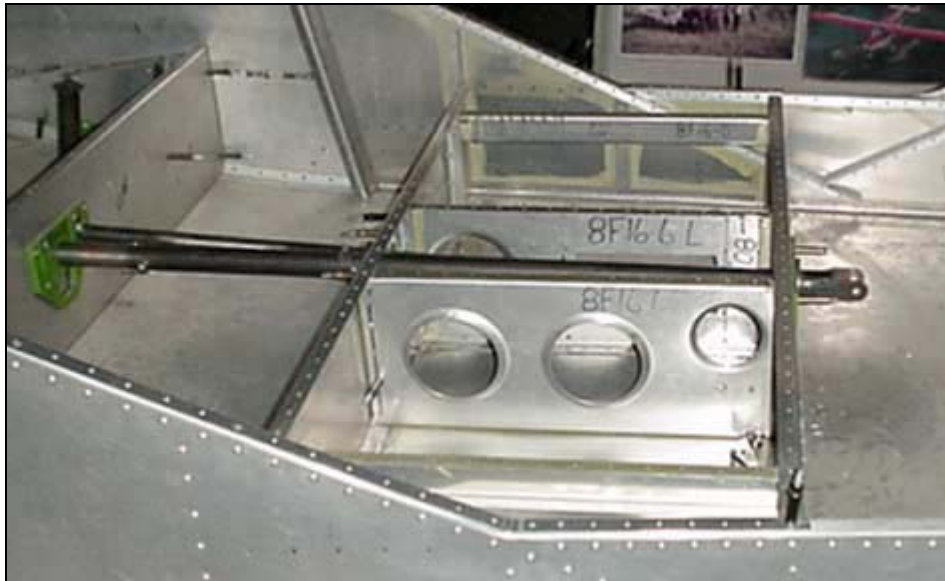


# STOL CH 801 CONTROLS

## SECTION 2 Forward Torque Tube Ref Dwg 8CF-2



8F8-17 is bolted to 8C8-2 to keep the torque tube from moving forward:  
Front Seat Front Panel: 8C8-2 bearing surface with is 8F11-2  
Front Seat Rear Panel: 8C8-17 bearing surface with 8F11-3  
Rear Seat front panel: 8C8-3 through 8F11-4



**Forward torque tube  
8C8-2**

File a notch in the top of the torque tube (between the welded plates) to make room for aft stick deflection.



Note: The location of the bearing is shown on Drawing 8FF-2

Slide the forward torque tube 8C8-2 through bearings 8F11-2 and 8F11-3



Rear Thrust Bearing  
8C8-17

The welded washer is towards the front.



Suggestion: work with the  
Front Seat Panel 8F16-1  
in place.

Slide the rear thrust bearing 8C8-17 into position on the forward torque tube 8C8-2. Then slide the Rear Torque tube 8C8-3 inside the end of the Forward torque tube 8C8-2



**Rear Torque Tube  
8C8-3**

Slide the rear torque tube 8C8-3 from the backside of the Rear Seat Forward Channel 8F11-7 and through the bearing 8F11-4 into the Forward Torque Tube.



The forward torque tube and rear torque tube are used to align the center bearing 8F11-3

Check for alignment and clearance of the torque tube at the center bearing 8F11-3.

File the top edge of the Bearing to make room for the side flange of the Seat Top Panel 8F16-1

**7 RIVETS A6**

Ref. 8FF-2

Drill and Cleco the Bearing 8F11-3 to the Front Seat Rear Channel 8F11-11



Orientation of 8C8-3  
The bolts are towards the top.

Before drilling any holes make sure the stick and the lever on 8C8-3 are in a vertical position.



The rear surface of the lever on 8C8-3 is positioned in line with the aft edge of the top flange of the rear seat panel 8F11-7. After drilling two cross boltholes remove all the control parts.



Make sure that the forward thrust bearing is snug against the forward bearing.

Push the rear thrust bearing against the rear bearing leaving 010 - 105" clearance between it and bearing 8F11-3.



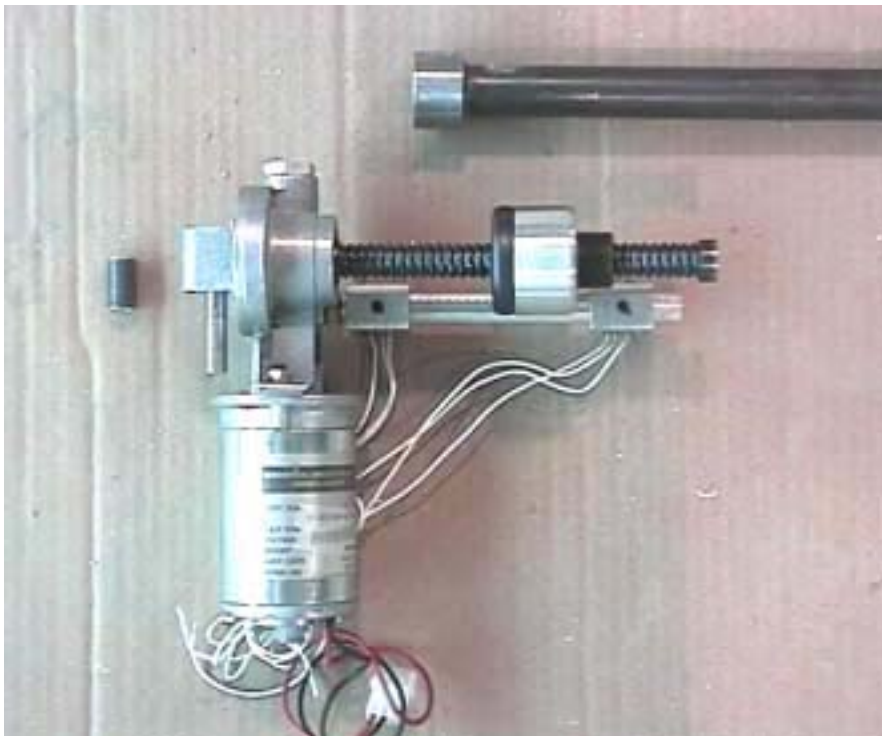
**AN3-15A**  
**Bolt & SL nut**  
**Qty = 2**

Drill two 3/16" cross-holes to secure the rear thrust bearing.



**AN3-16A  
Bolt & SL nut  
Qty = 2**

Bolt 8C8-3 to the forward torque tube.



**FLAP LIMIT SWITCH  
COLLAR  
8C8-10**

If necessary, use a plastic hammer to press fit the collar on the actuator.

**CAUTION:** Handle the micro switches with care; the casing is very brittle.

Wire the micro switches to the toggle switch.

The flap actuator D145-00-36-3 and the flap push / pull rod 8C8-12.  
Note: the supplied unit is not wired as show above.



Rod end and jam nut

Adjust the rod end on the flap actuator rod 8C8-12 until it fits on the flap torque tube rod when the lever is in the vertical position and the motor is set



Also see Section 6 of the Forward Fuselage Assembly

Trial fit the flap motor confirming approx. *2mm* clearance between the mounting bracket and all areas of the motor next to the bracket. File as necessary. Use bushings 8C8-14 and 8C8-15 and bolt AN5-24A.





**IMPORTANT:** tighten the cap screw on the aft end of the Rod 8C8-12

Screw the thread end of the flap push rod 8C8-12 onto the end of the Actuator.

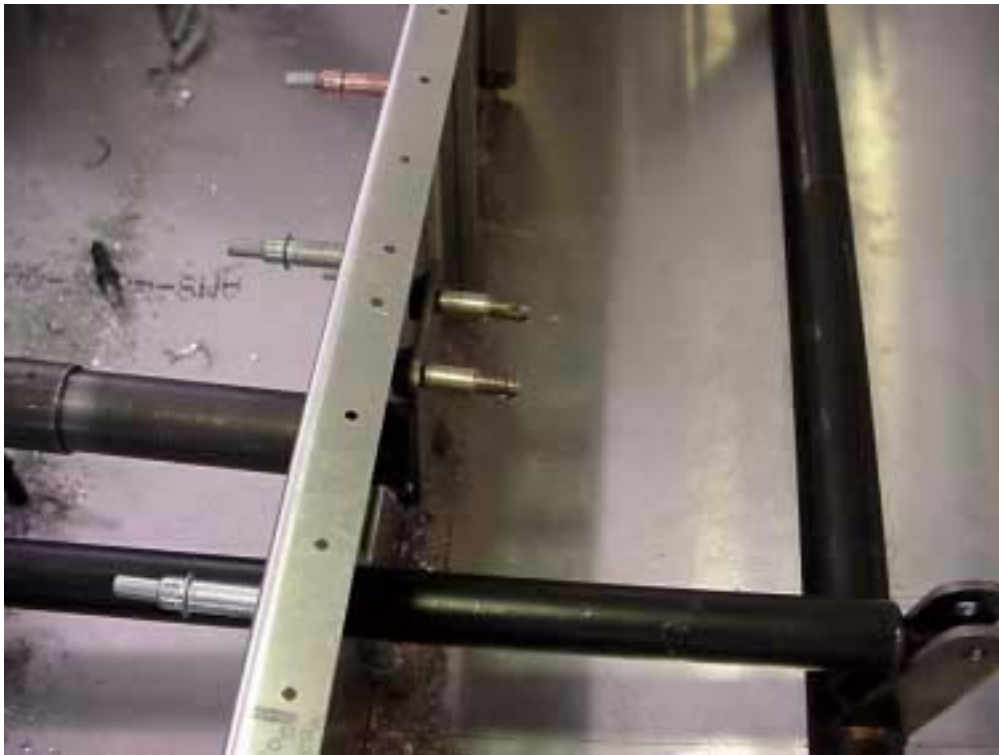
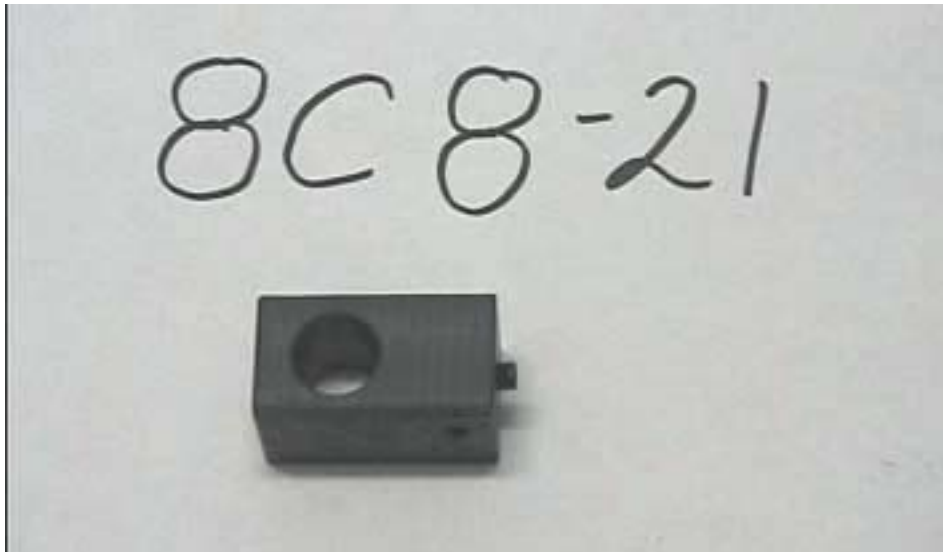


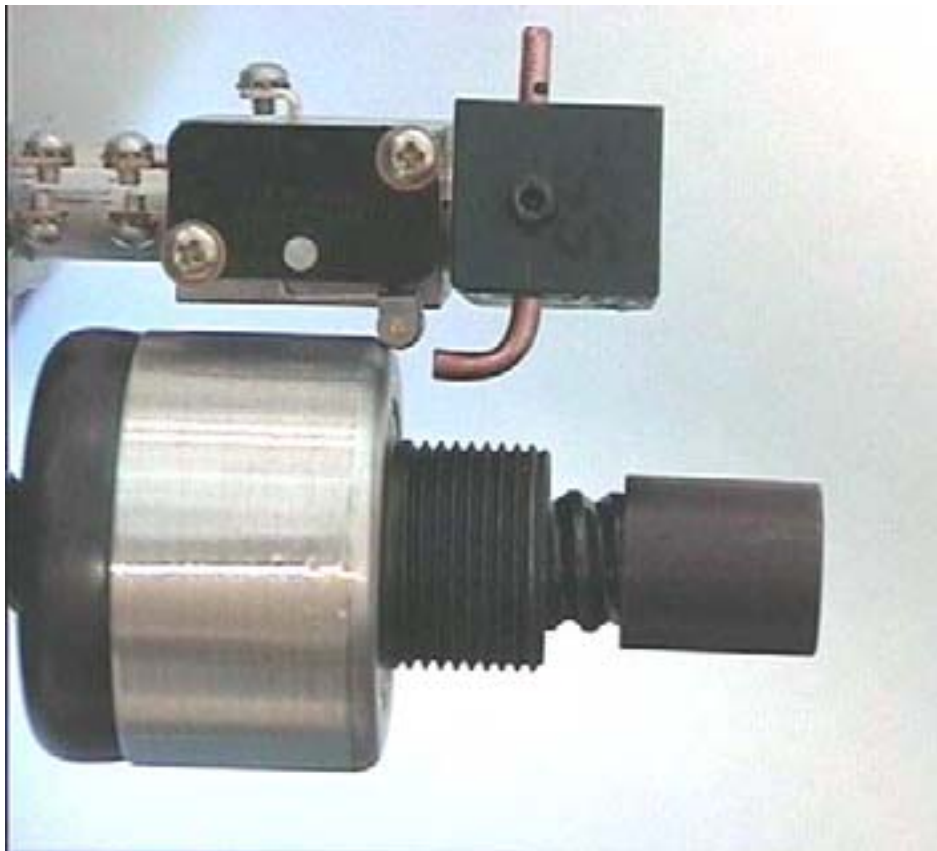
Photo showing the Actuator Rod through the front side of the Rear Seat Forward Bearing 8F11-4

The Rod end and bolt are not shown in the photo to Join 8C8-12 to 8C8-6

Deburr and clean everything. Paint all the steel parts in preparation for the final installation



**FLAP CONTROL  
CONTACT HOLDER  
8C8-21**



When the motor is wired, a hot lead, which is taken after the fuse for the actuator motor, is soldered to the end of the contact. In the unlikely event the micro switch next to the probe fails the contact will short the circuit.

The contact is made from a piece of 1/8 diameter copper that the builder supplies and is bent as illustrated.