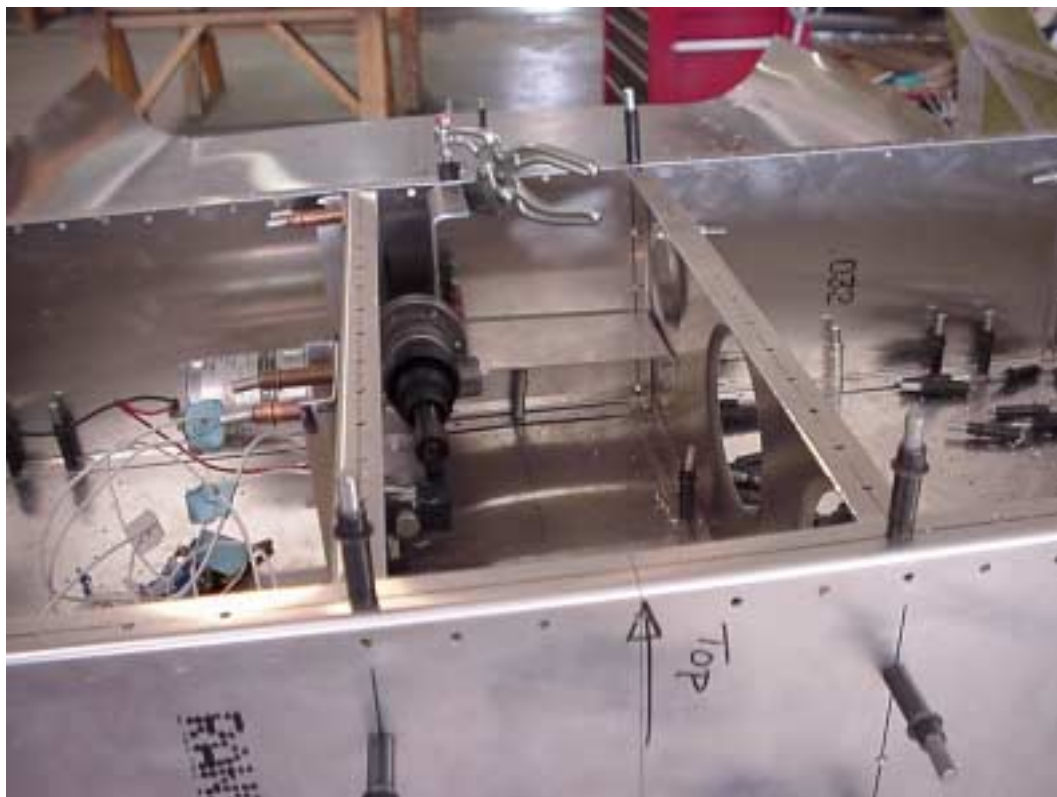


# STOL CH 801 FORWARD FUSELAGE ASSEMBLY

## SECTION 6 Flap Actuator Support

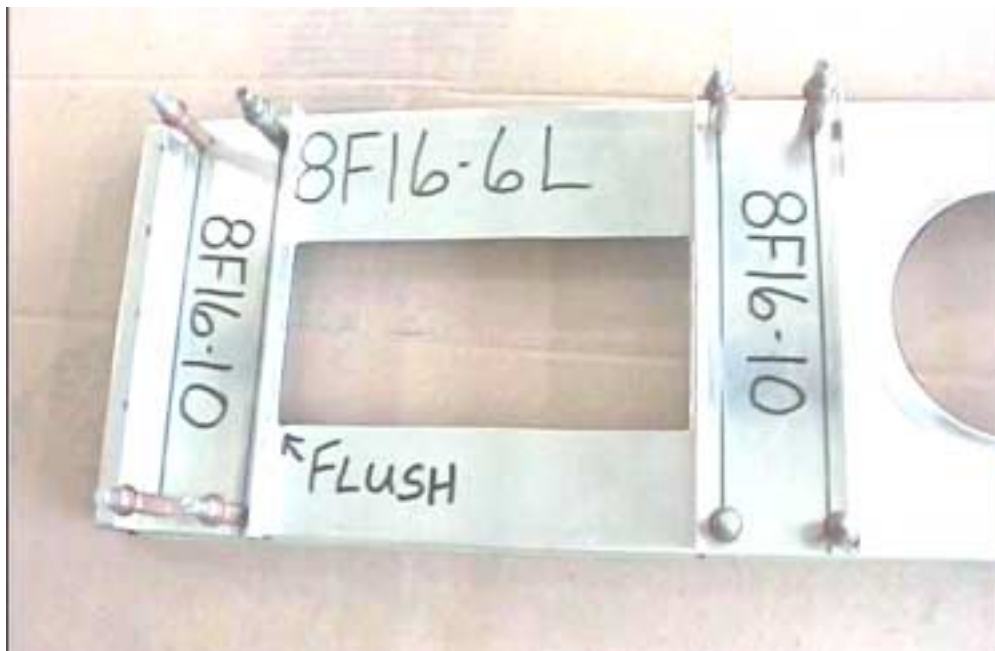


Center stiffeners in the middle of the front seat



Part layout.

The stiffener 8F16-10L and the items to be attached to it prior to re-installation in the floor assembly.



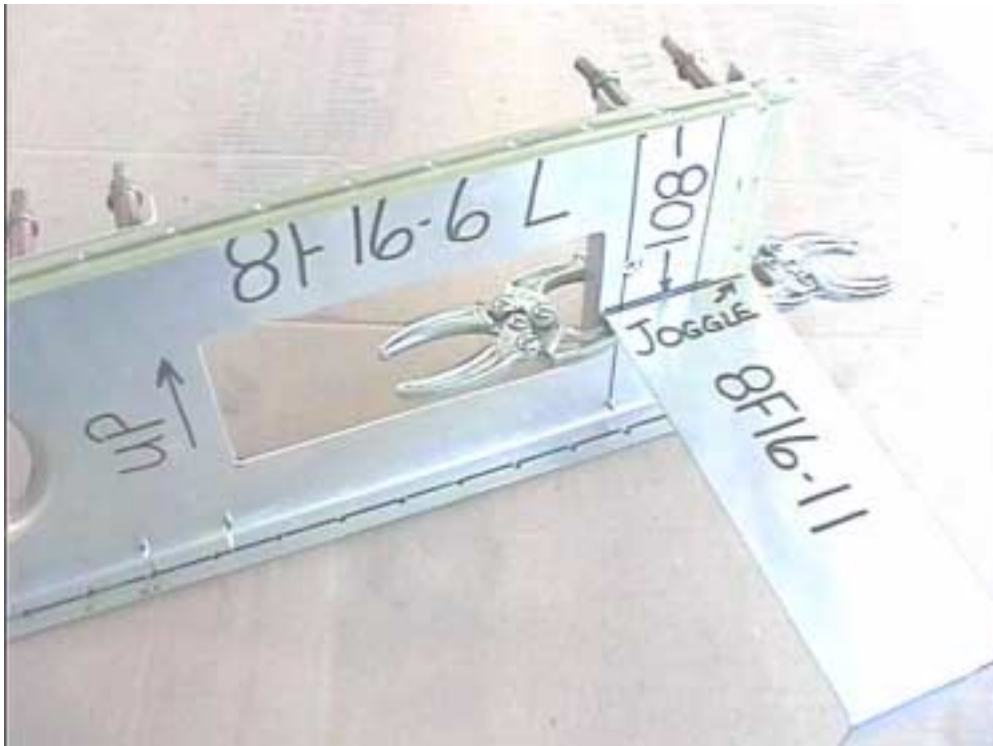
**CHANNEL**  
**8F16-10**

**10 RIVETS A5**  
2 rows of 5 holes each in  
each Channel #20 drill bit.

Lay out 2 rivet lines inside each Channel, 10mm from the side flange.

Locate the Channels flush to the edge of the cutout in the Seat Stiffener 8F16-6L on the O/B side of the Stiffeners (opposite to flange).

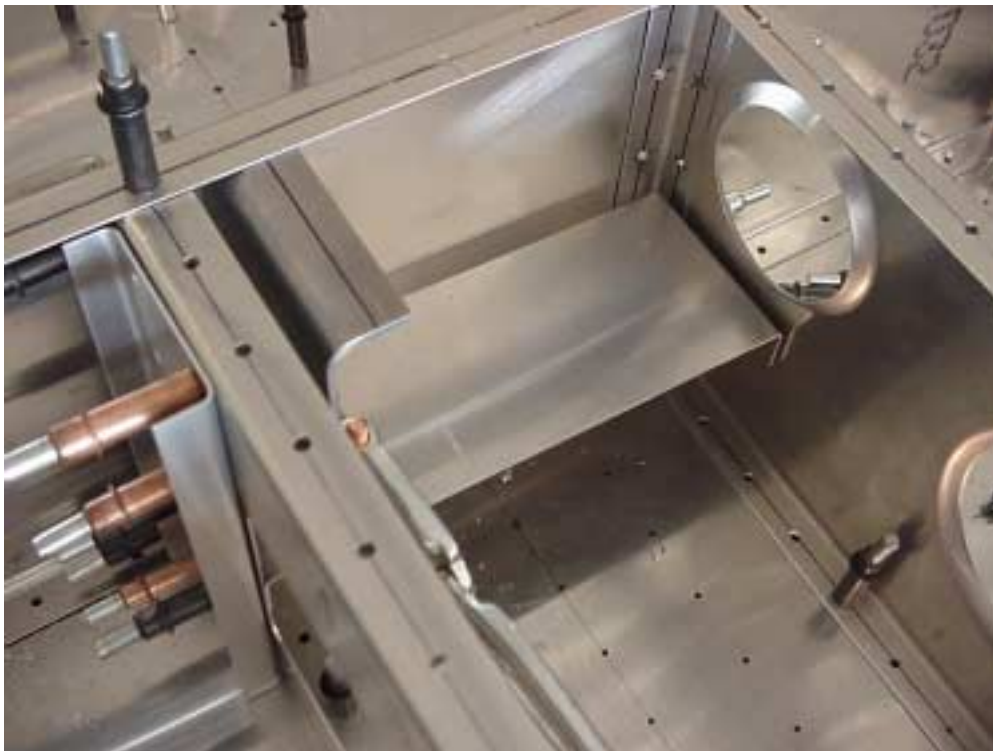
For now only drill and cleco the end holes of each rivet line: the two top and bottom holes in each Channel.



**FLAP MOTOR HORZ  
DIAPHRAGM  
8F16-11**

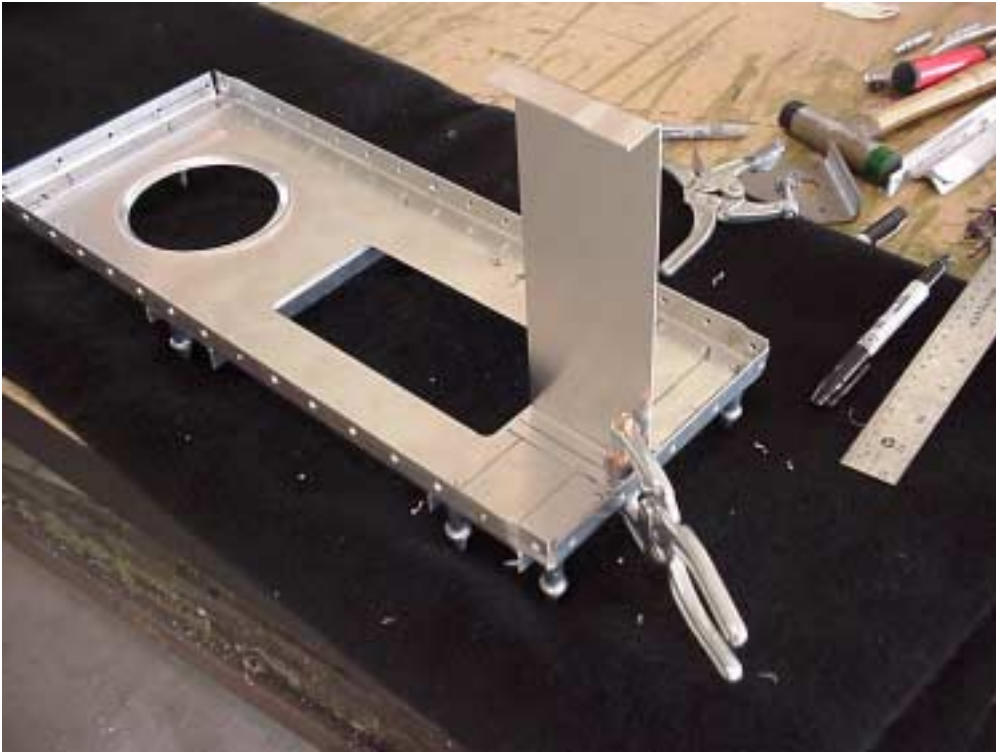
The joggle in goes towards the front where it overlaps the vertical L angles

Turn the assembly over and extend the rivet lines from the clecos in the stiffener 8F16-10.  
Lay out the position of bracket 8F16-11 from the top edge of 8F16-6-L and clamp: 108mm down.



**CHECK:** Use 8C8-13 as a template to check the 108mm distance to the top of 8F16-11.

The diaphragm fits in between the left and right stiffeners 8F16-6



Drill and Cleco the 2 intersection holes.





**MOTOR VERT MOUNT  
BRACKET  
8C8-13**

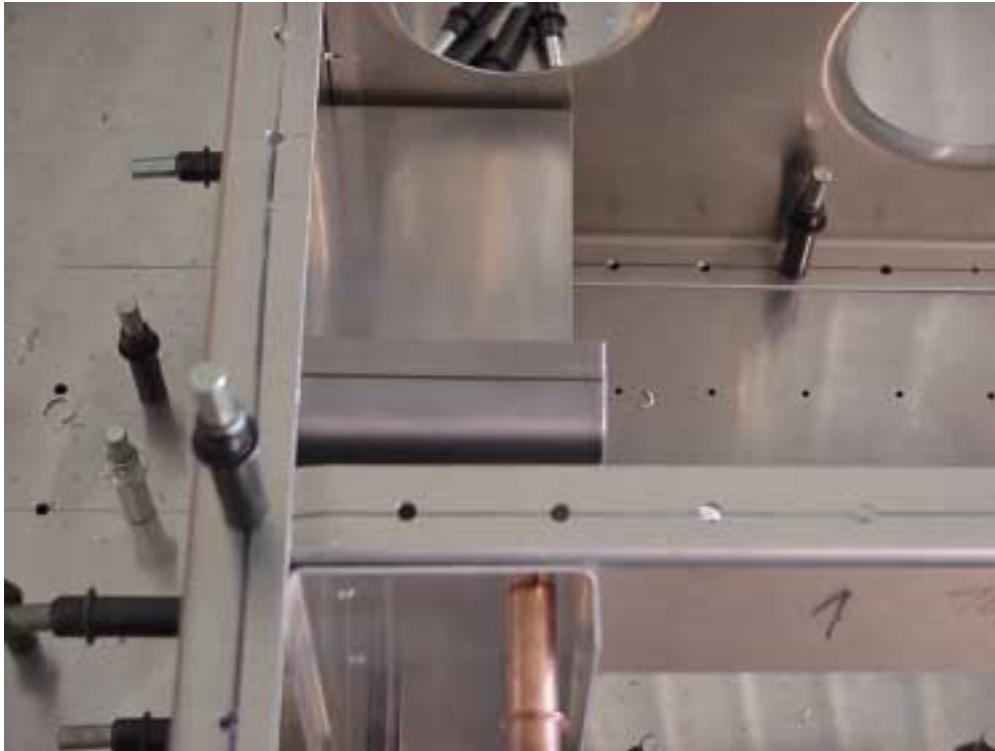
Supplied bracket with one pilot hole 20mm up from the bottom 10mm in from the aft edge.



File a notch in Motor Vertical Mount Bracket 8C8-13, to avoid interference with the actuator.

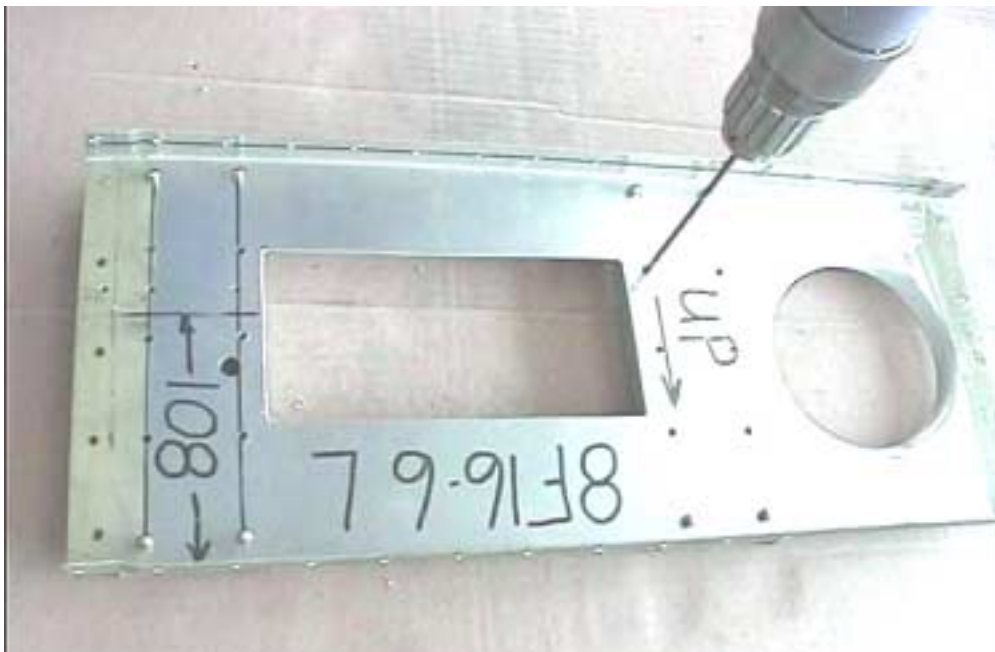
The notch is 30mm up from the pilot hole  
Depth = 10mm,  
Length = 30mm cross along the aft edge.

The Grommet forward of the 5/16" hole is not required (only installed if the fuel selector is installed between the front seats).



The pilot hole is 20mm up from the bottom flange and 10mm back from the aft edge of 8C8-16)

Position 8C8-13 on top of 8F16-11 to drill through the pilot hole in 8C6-13



Turn the assembly over, layout the balance of the rivet centers on both stiffeners, 8F16-10, drill and open with a #20 drill.

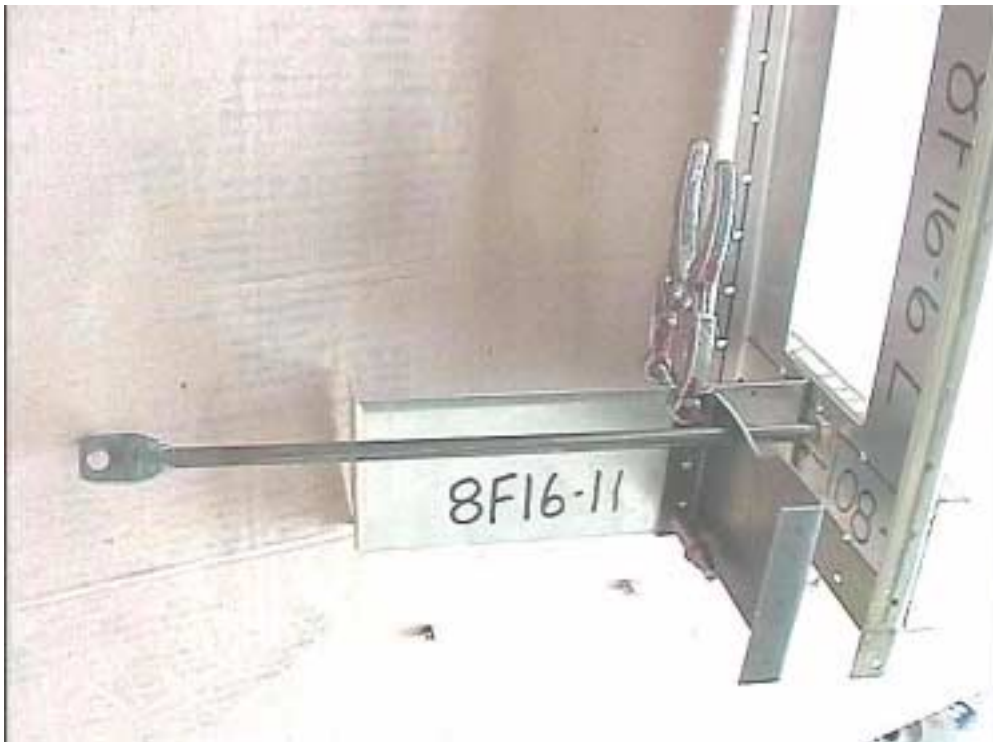


**FLAP MOTOR INNER  
BUSHING  
8C8-14**

Open the pilot hole with a  
5/16" drill bit.

**AN5-24A  
Qty: 1**

Use the bushing 8C8-14 to set the 48mm spacing between 8C8-13 and 8F16-6L. Bolt together with AN5-24A bolt.

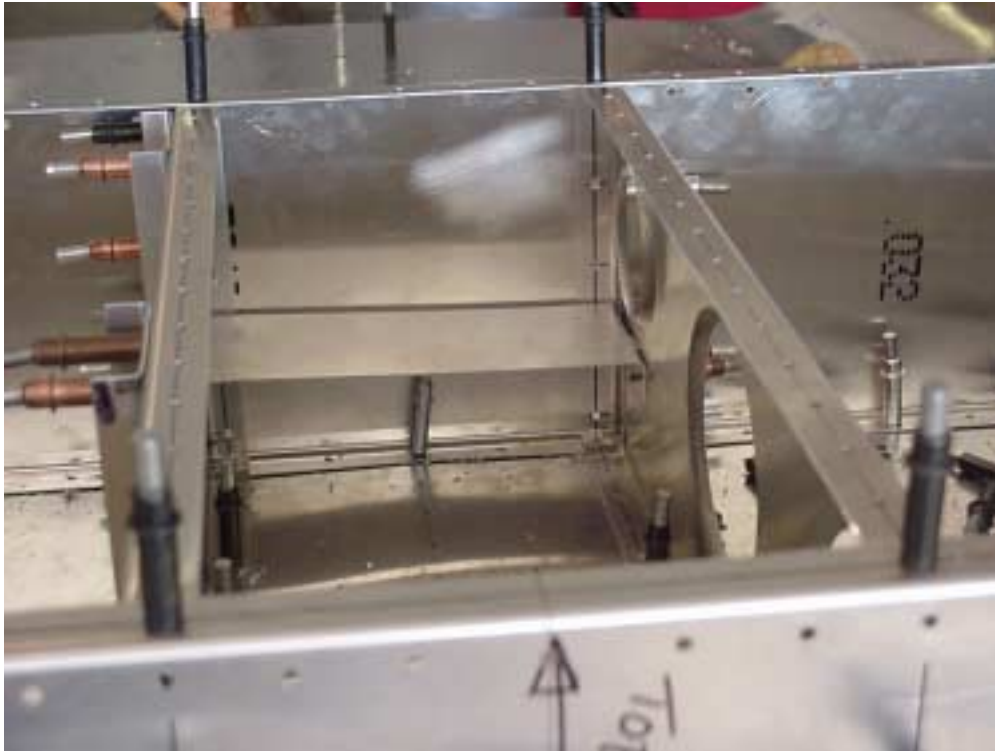


**3 RIVETS A5**

Through the bottom flange  
of 8C8-13 with 8F16-11

Drill 3 pilot holes; then  
open with #20 drill.

Instead of using a 5/16" rod as shown in the photo it is better to use the AN5-24A bolt to align the two holes.



### 3 RIVETS A5

The right flange of  
8F16-11 to 8F16-6R



### FLAP ACTUATOR D145-00-36-3

CHECK: Notch in 8C8-13  
to make room for the  
casing of the flap actuator  
motor housing.

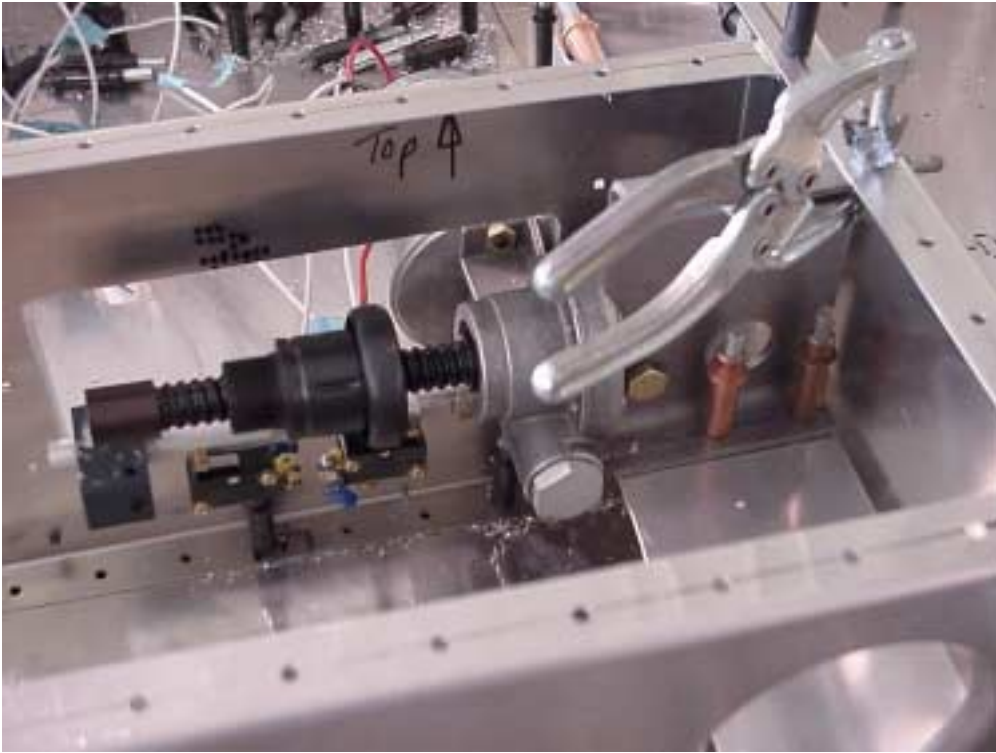
COMMENT: The flap  
actuator and bushings are  
listed under the controls  
kit.

Insert bushing 8C8-15 (1/2" O.D .065" wall length=22mm) inside the 1/2" hole  
at the back of the flap actuator.

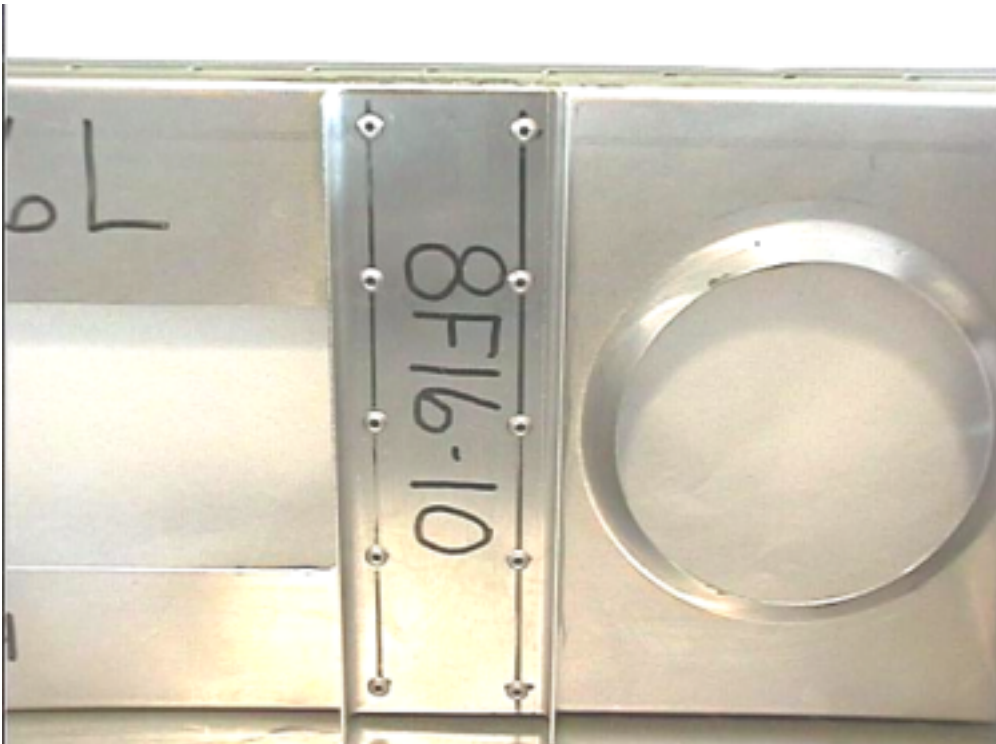
8C8-15 is a spacer between the actuator and the Bracket 8C8-13

Insert the AN5-24A bolt inside bushing 8C8-14





When bolted in place the Actuator should be able to rotate on the bushing.



Deburr and rivet the channels to the stiffeners with A5



Viewed from the left side of the aircraft. The left side of this photo is the forward position of the aircraft.

Re-assemble and cleco all the parts of the floor assembly except the two longerons 8F10-3 and the center stiffener 8F8-1.



Locate the rivet holes on bracket 8C8-13 and extend the rivet line down the face of the front seat panel.



Do not rivet the Front Seat Front Panel 8F11-1, it will have to be removed to install the FORWARD FLAP ACTUATOR ROD 8C8-12

(Once the front fuselage is joined to the rear fuselage it will not be necessary to remove the Seat Panel 8F16-1).

Install the seat panel 8F16-1 and cleco, extend the rivet line for bracket 8C8-13 onto the seat panel 8F16-1 and drill three holes for A5 rivets. Rivet all parts together turn the floor assembly on its side and rivet the cabin sides to the floor skins



Flap actuator under left seat.