

# STOL CH 801 FUSELAGE CABIN ASSEMBLY

## SECTION 9 Doublers



Remove and deburr. Re cleco 8F5-4 in place. Do not rivet as you may wish to install the fuel lines inside which is done at a later date.



**DOUBLER STRIP  
8F16-7**

Strip is not supplied bent.



Pointing to the end of the strip in line with the front seat panel.

Line up the front edge of the Strip even with the front edge of the Front Seat Panel 8F16-1.



Bend the strip in 2 places to tie in the cabin sides extrusions to the cabin side Channels 8F5-4

Bend and install the 8F16-7 doublers as shown. Minimum radius is 1/4". Doubler starts at the forward edge of the front seat panel aft to and up 8F5-4. Pitch is the same as that on the cabin side and rear skin.



**4 RIVETS A5**  
The end of the Strip into the Side Channel 8F5-4



**UNDER INSTRUMENT  
STIFFENER  
8F15-1**

The flange with the cutout is towards the rear.

Attach 8F15-1 to the instrument panel by transferring the two holes in the panel to it.



**A4 PITCH 30**

Rivet line in the bottom of the instrument panel and the front flange of 8F15-1

Layout the rivet line along the long flange, pitch 30

Line up the front edge flush with the instrument panel.

Drill and cleco a few holes.

View from behind the firewall



Ref 8XF-4

Either finish drilling the holes with the instrument panel on the fuselage, or remove the instrument panel to finishing drilling the holes.



**5 RIVETS A5**

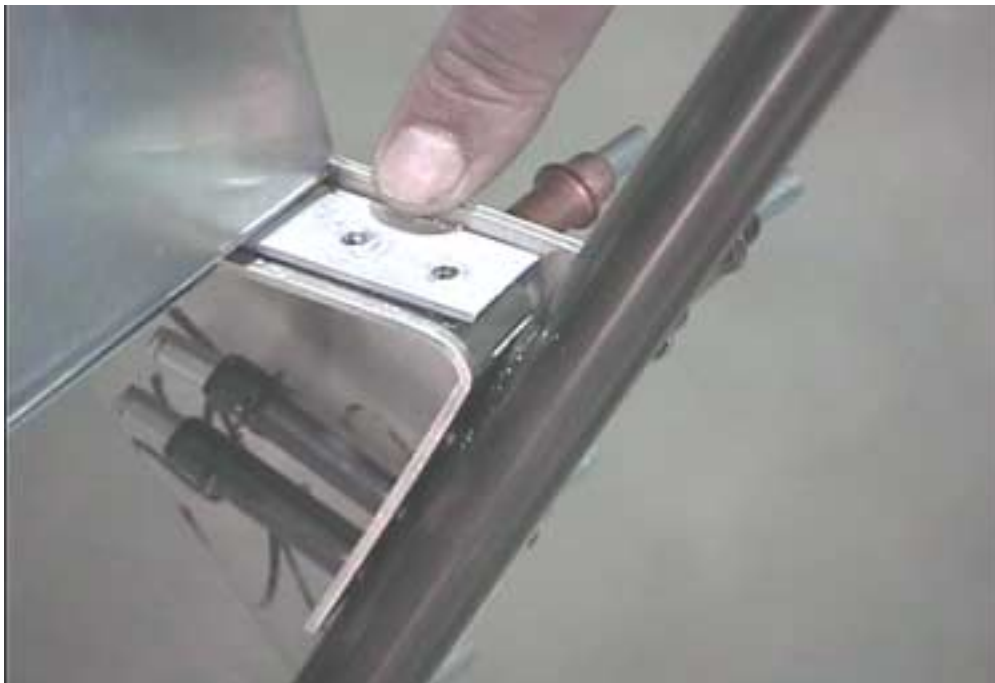
In aft flange of 8F15-1 with 8F15-2

Instrument panel removed to finishing drilling the holes in the gussets and stiffener.



**DOUBLER  
8F16-14**

Positioned behind the side tubes of the cabin frame and the Forward Side Skin Longerons 8F16-14



**4 RIVETS A5**  
In each leg

Drill three 5/32" holes in the down leg and four in the horizontal leg.



**DOOR POST TRIM  
8F5-11**

The short flange overlaps on the inside of the O/B flange of the Side Channel 8F5-4, the Long flange overlaps the fuselage side skin and is flush with the front edge of the fuselage side skin, back drill through the rivet line in the O/B flange of the side Channel 8F5-4



**A5 PITCH 40**

Photo turned on its side:  
Photo of left Side Channel 8F5-4

NOTE: The Rear Support Fuel Line Trim 8E1-1 will overlap the I/B and O/B flange of the side channel 8F5-4

Trim the short flange to make room for the rear cabin side Longeron.



**A5 PITCH 30**

Cabin side Rear Longeron and the fuselage side skin.



Approximately 280 and 375mm from the rivet line through the Side Channel 8F5-4

Leave a no rivet zone for the two rivets lines in the Flaperon Control Rod Cover 8C6-6.





Remove the Rear Seat Forward Channel 8F11-7.

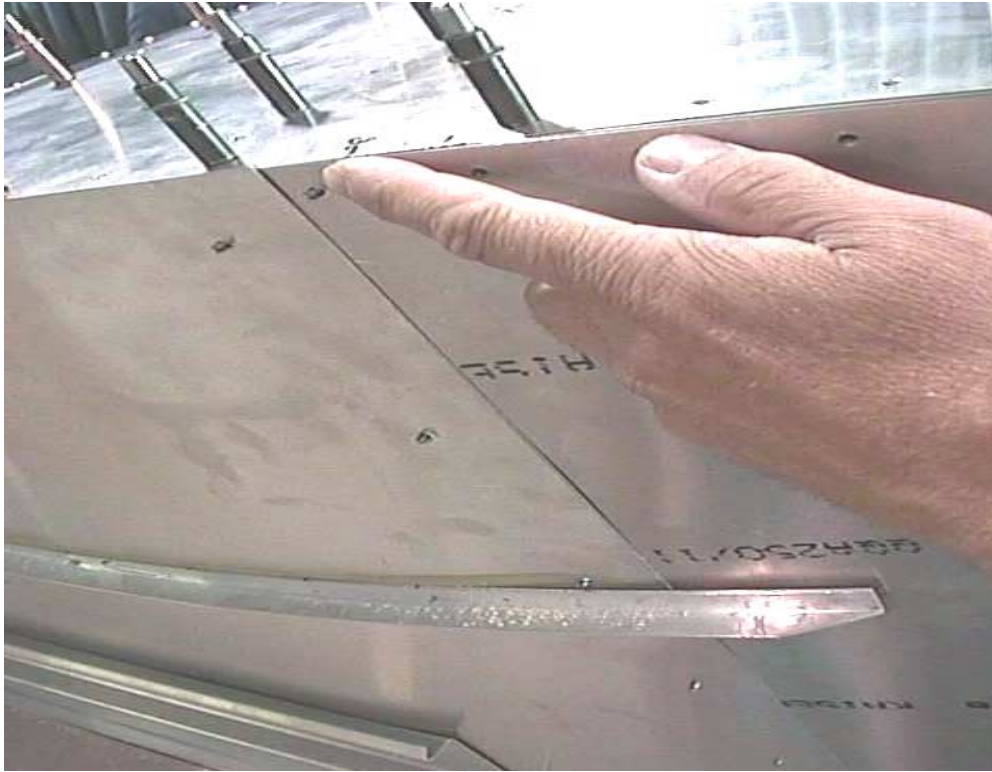
Back drill through the pre-drilled holes along the front edge of the Fuselage Bottom Skin 8F2-3A (rivet line through 8F11-7) into the Cabin Floor 8F8-7

**A5 PITCH 40**

Drill the holes through the lower flange in the rear seat front seat panel, into the rear edge of the forward fuselage floor. Cleco while drilling proceeds.



The helper is holding a wooden block to support the skin while drilling is done from inside the fuselage assembly.



When the fuselage is taken apart for deburring, the aft edge of the cabin floor.

8F8-7 can be trimmed 10mm from the center of the rivet line.



**COMMENT:** with the fuselage support on the saw horses, it may be possible to drill the Longerons without having to turn the fuselage on its side!

**A5 PITCH 30**

Finish drilling the rivet through the Lower Longerons 8F10-3.



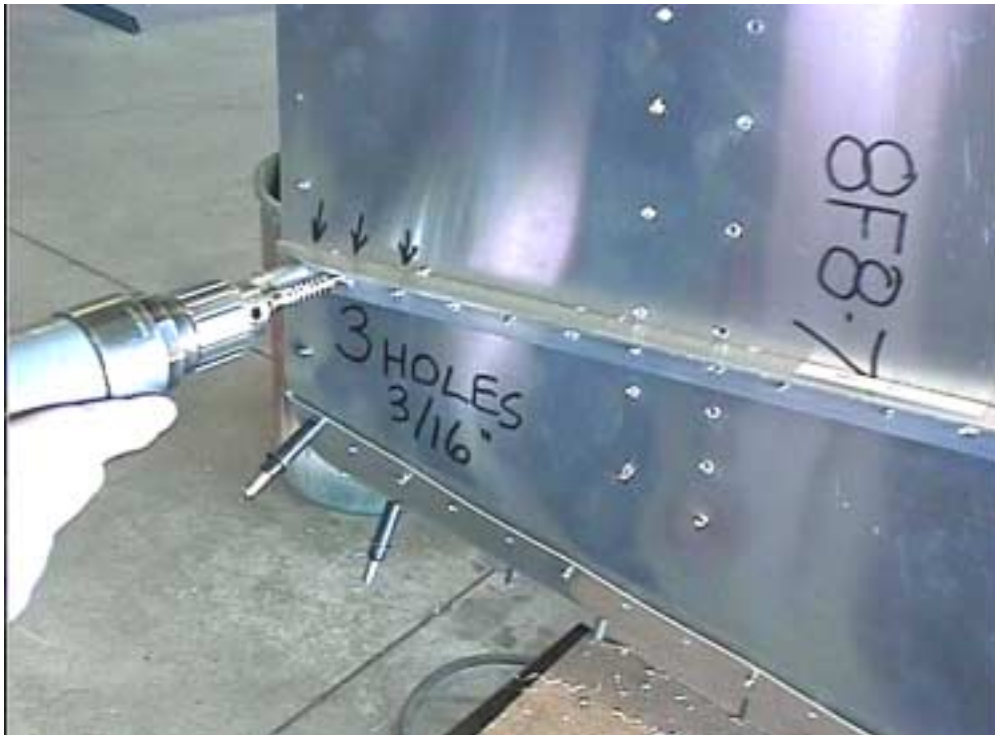
**FRONT BOTTOM  
CENTRE LONGERON  
8F10-4**

Curved to the bottom curvature of the fuselage.



**A5 PITCH 30**

The center Longeron 8F10-4 is installed with its aft end even with the aft end of the other two lower longerons 8F10-3 (draw a connecting line).  
Drill & Cleco.



Open the bolt holes for the lower engine mounts to 3/16" diameter and install the bolts and lock nuts.



Check that all the holes are drilled, left and right side is symmetric; even rivet pitch between the end holes or intersection holes.

Underside of cabin floor with Longerons.