

STOL CH 801 FORWARD FUSELAGE ASSEMBLY

SECTION 4 Seat Panel and Seat Attachment



COMMENT: The middle cutout is not required; it can always be added later for better access to the fuel selector if it is installed between the front seats.



Clamp 8F7-7 at the front of the cabin side longerons (30mm flange points down, 8F7-7 overlaps on top of the Longerons).

The firewall can be positioned for a trial fit.

The distance across the front cabin side longerons is determined by the width of the firewall. Instead of clamping the Longerons to the firewall, it may be more convenient to clamp 8F7-7 to the Longerons to maintain the width.



**FRONT SEAT FRONT PANEL
8F11-1**

8F11-1 Front Channel (front seat) is already supplied with the ends cut on an angle, no additional trimming is required. Distance across the top is 1020 and 1035 along the bottom.

5 RIVETS A5

CHECK:
The width across the Cabins sides along the front of the seat panel = 1060mm

Clamp the front seat panel to the front side of the cabin side assemblies.

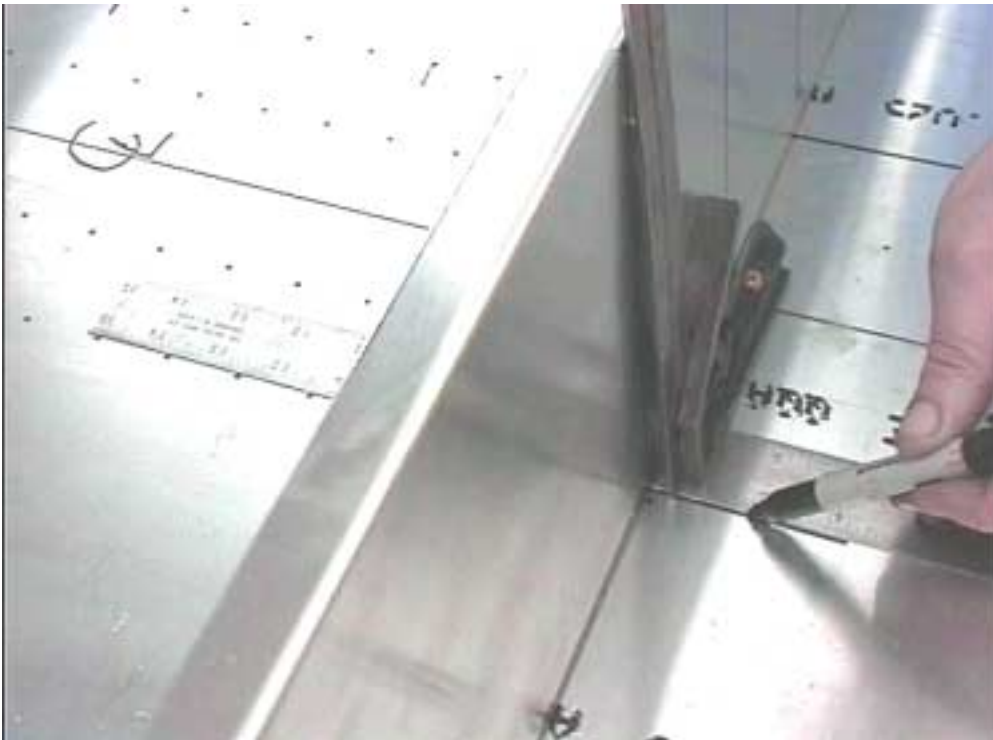
Layout five evenly spaced holes to attach either end to the cabin sides, however drill only the lower four holes (the top hole is drilled to maintain edge distance through the flange of the Front Seat Top Panel 8F16-1)



Use a hole finder to locate and transfer six evenly spaced holes along the lower flange of both seat panels. Cleco the floor skin to the panels.

Cleco only enough holes to hold the assembly together. The drilling can be completed later when the assembly is turned on its side.

CHECK: Edge distance = 10mm from the center of the pre-drilled holes in the skin to the edge of the flange at the bottom of the panel.



Extend the rivet lines from the floor skin to the top of the Panel 8F11-11

The left and right center seat stiffeners (8F16-6L and 8F16-6R) go on the second rivet line from the aircraft center line.



**FRONT SEAT CENTER STIFFENER (left)
8F16-6L**

Mark the rivet line along the top and along the inside of the bottom flange.

The left side Front Seat Center Stiffener has the rectangular access hole cut out.



Orientation:
The rectangular cutout is towards the front of the aircraft.
The bend (90 degree flange along the top and bottom) is O/B

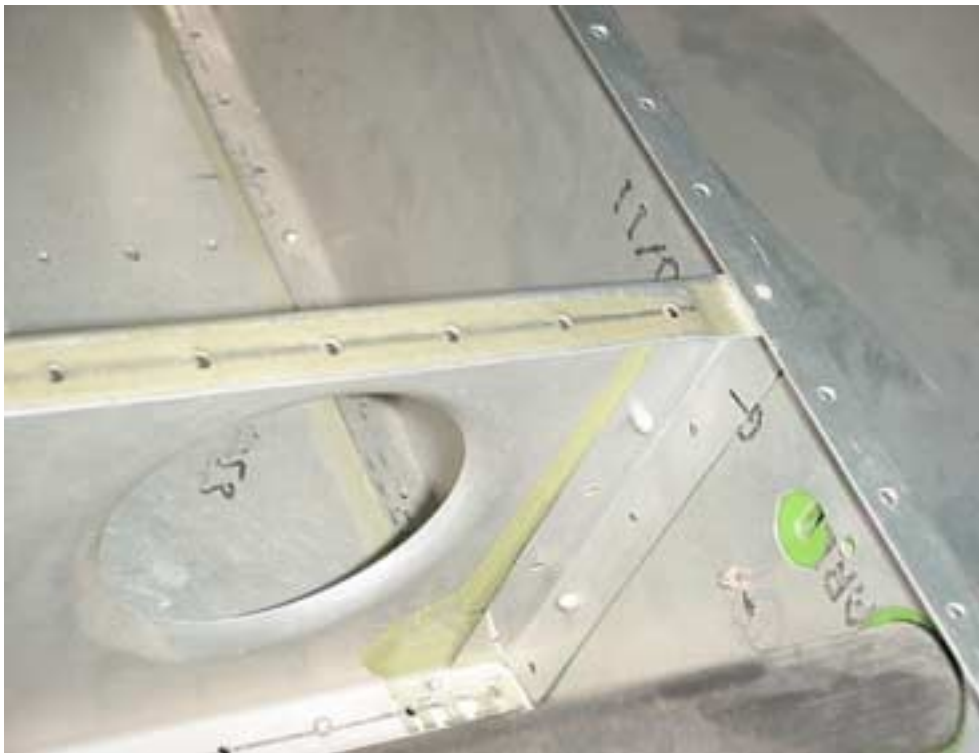
Place the left center seat stiffener part 8F16-6L between the front and rear seat panels.

Use a hole finder to locate four of the predrilled holes. Drill and cleco to the floor skin.



**FRONT SEAT CENTER
STIFFENER (right)
8F16-6R**

Repeat the process for the right side seat stiffener 8F16-6R. The smallest lightening hole is positioned towards the front of the aircraft.



The top and bottom flanges are joggled to fit inside the panels.

Looking towards the back of the right side.

Note: In the next section the corner L angle will be added between the Panel and the Stiffener.



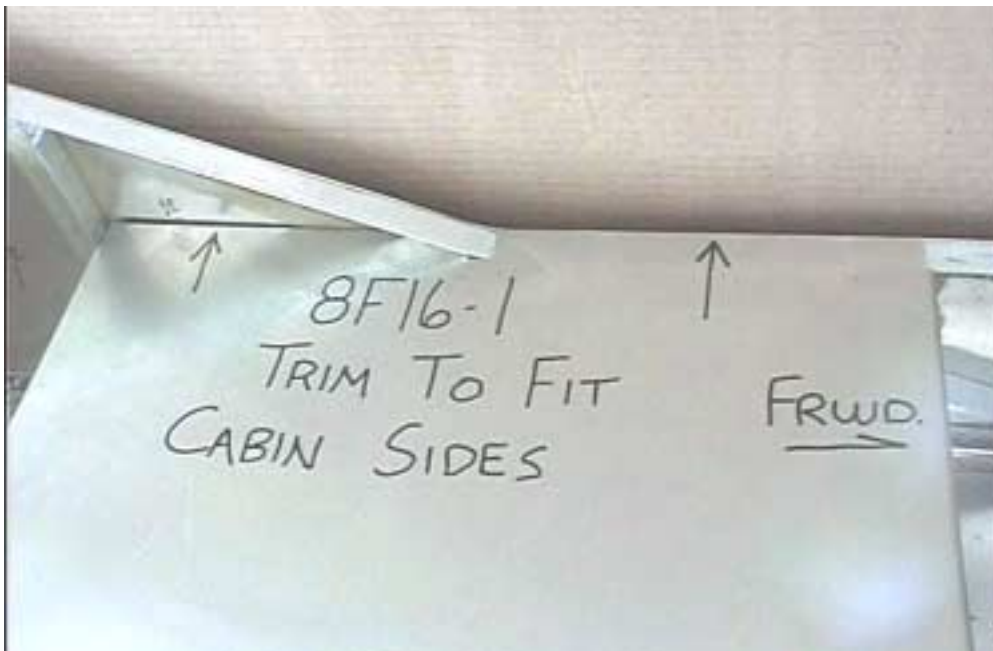
**FRONT SEAT
TOP PANEL
8F16-1**

IMPORTANT:
CHECK THAT THE
SIDES OF THE CUTOUT
ARE SQUARE TO THE
FRONT EDGE OF THE
TOP PANEL

The seat panel part 8F16-1 is supplied with the access holes marked on it. Cut these holes to the inside of the lines.

NOTE: The holes are not of equal size. The larger is placed on the passenger side of the aircraft. Width across the back of the panel is wider than the front.

CHECK: THE WIDTH OF
THE CUTOUT IS THE
SAME AS THE SEAT
LOCK CROSS TUBE
8F10-8 right
8F10-9 left



The top panel overlaps on top of the cabin sides.

Trim the sides of the seat panel to make room for the rear cabin side Longeron.

Leave 1 – 2mm space between the ends of the panel and the skin of the cabin sides.

In this photo, 8F16-does not had the access holes cut in it!



Layout the rivet line on the Seat Panel:
 Connect the rivet line across from the front and rear channels.
 The end holes are 10mm from the ends.

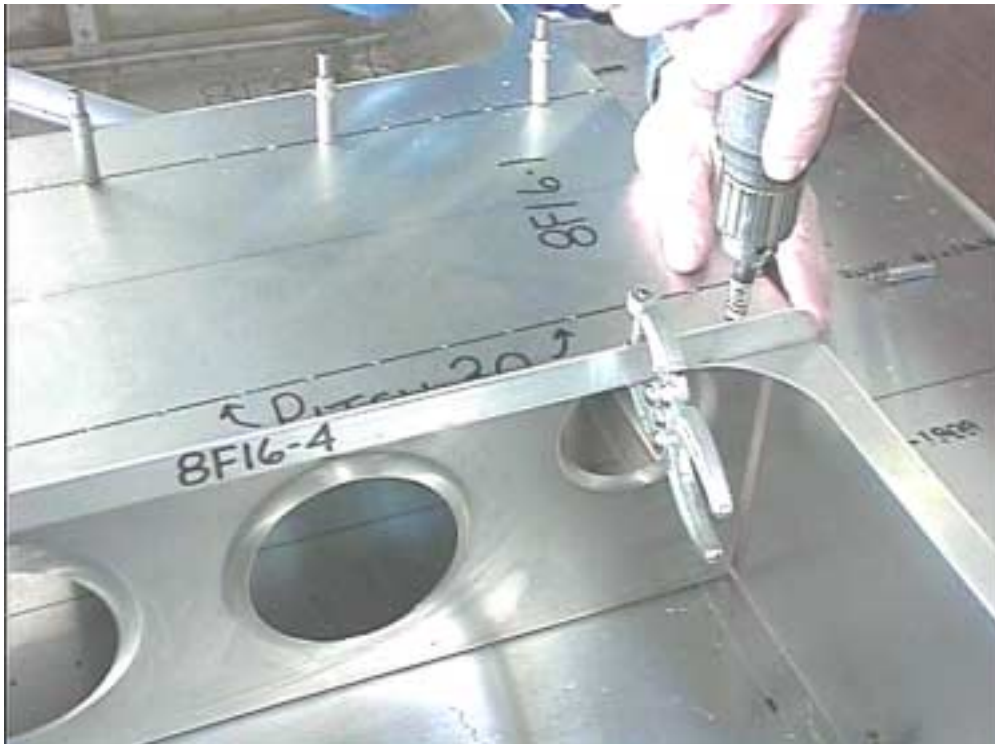
A5 PITCH 30

Pull the center seat stiffeners out of the way and drill the rivet holes 3/32 diameter.



Back drill & Cleco when the flange center line is visible.

Drill & cleco three holes. Repeat for the other seat stiffeners.



**SEAT ATTACHMENT
BRACKETS
8F16-4**

LAYOUT:

Layout the rivet line in the middle of the flange, the end holes are 10mm from the ends.

CHECK: edge distance of the end hole with the top flange of the front and rear panels 8F11-1 and 8F11-11 (the length of 8F16-4 is flush with the front and rear panels).

FILE: Round the corners of the vertical flange.

A5 PITCH 30

Clamp the I/B Seat Attachment Bracket 8F16-4 along the I/B edge of the seat cutout. Drill & Cleco



**SEAT LOCK CROSS
TUBE**

**8F10-8 right
8F10-9 left**

Drill a 3/16" hole in the Bracket (extrusion) 8F16-4 225mm back from the front end (in the middle of the vertical flange for the Seat Lock Rod 8F10-10) in the I/B and O/B bracket.

Insert the 3/16 Seat Lock rod 8F10-10 through the Bracket 8F16-4 and 8F10-9 and out the I/B Bracket 8F16-4.
Clamp each end of 8F10-9 to 8F16-4.
Clamp the O/B seat attachment bracket 8F16-4 to the seat panel.



CHECK:
8F10-9 is parallel to the front edge of the seat

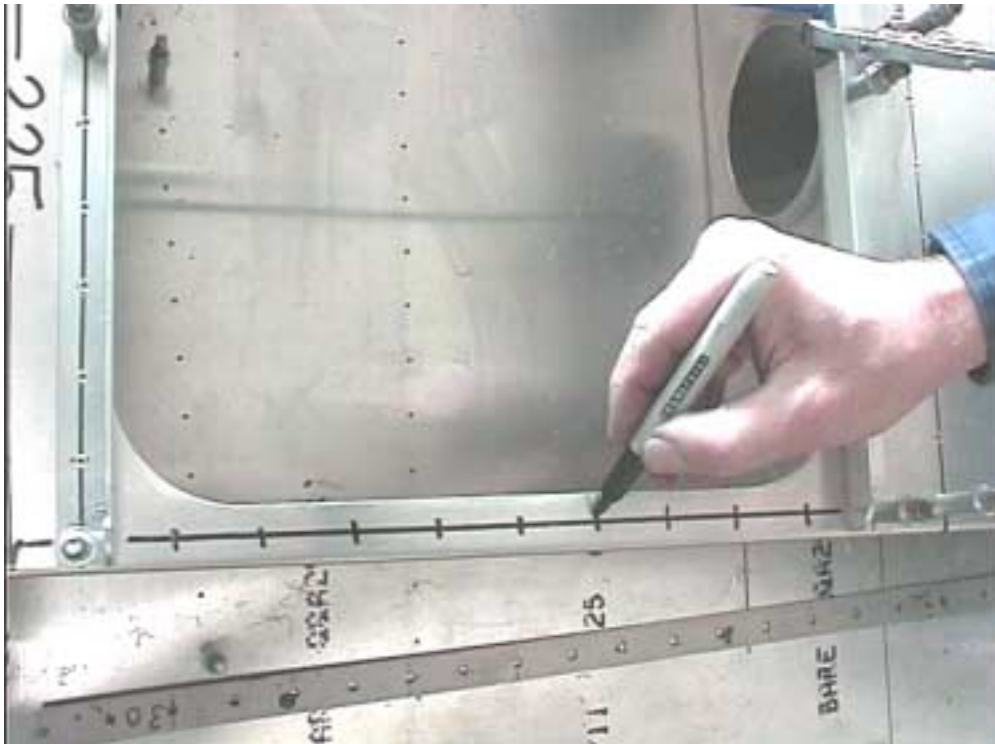
Drill and Cleco 8F10-9 to the I/B and O/B seat attachment brackets 8F16-4 with 2 holes #20 per side. Before the rivets are set, the two holes must be countersunk in the extrusion and the rivet set from the side of the bracket (standard A5 rivets with a flat nose piece on the riveter).

Drill end Cleco the O/B bracket 8F16-4 to the Seat panel.



NOTE: in the next section the Stiffener 8F16-5 is back drilled through the rivet line of the Bracket 8F16-4

Repeat these procedures on the pilot side of the aircraft using 8F10-8 as the gauge.



Rivet line = 8mm back from the front edge.

Check edge distance = 10mm from the aft edge of the flange 8F11-11

A5 PITCH 30

Layout a rivet line along the front of the Top Seat Panel into the top flange of the Front Seat Panel 8F11-1.

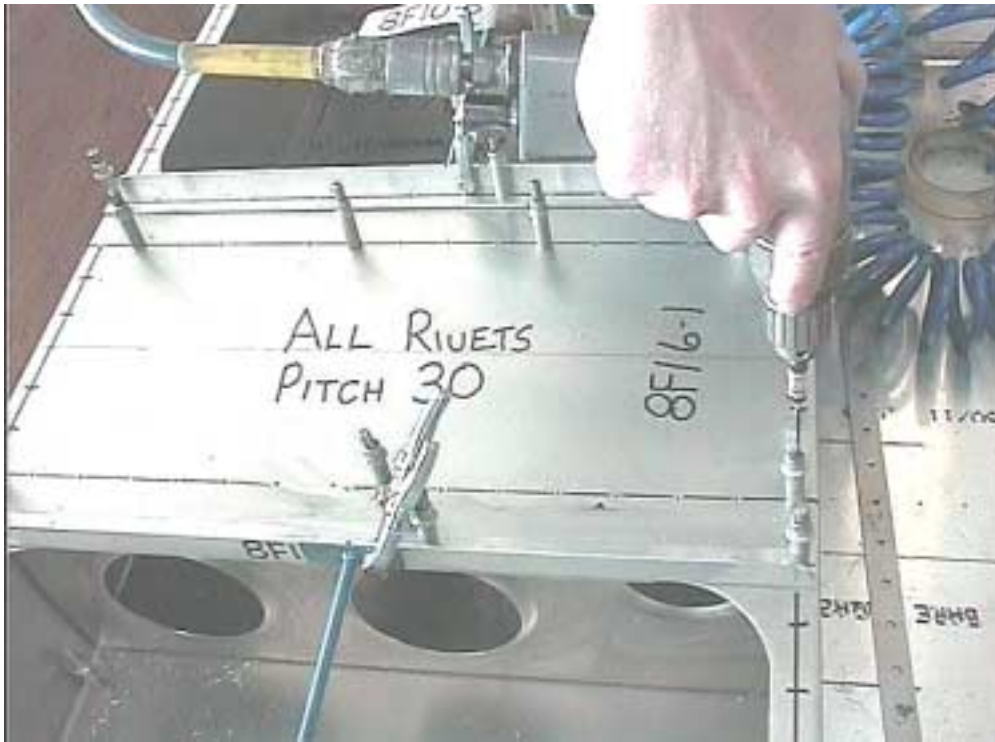


Layout a rivet line along the top of the Seat Top Panel 8F16-1 into the top flange of the Rear Seat Panel 8F11-11

Drill and Cleco except for the 3 middle holes for 8F16-3

A5 PITCH 30

Locate the 3 middle holes for the Center Seat Belt Attachment 8F16-3
Holes are drilled later when 8F16-3 is installed.



A5 PITCH 30

8F16-1 to:
8F11-1
8F11-11
8F16-6L
8F16-6R

Finish drilling the rivet line along the front and back of the Top Seat Panel in Front and Rear Panels between the Stiffeners 8F16-6L and 6R



Steel parts are painted to prevent rusting.

Larger cutout on the passenger side for the battery box.