STOL CH 801 CONTROLS

SECTION 6 Rudder Cable Pulley & Fairlead

Ref Dwg 8CF-6

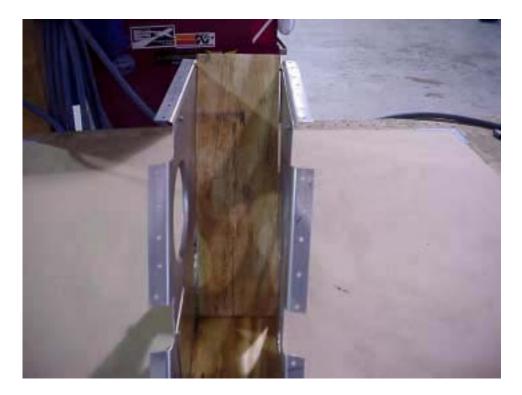


Looking at the rudder and elevator cables through the a back side of the Horizontal Tail Bearing Support Channel 8C1-2



Ref drawing 8-CF-6 for the Location of the hole for the pulley axle (bolt) on the sides of the Horizontal Tail Bearing Support Channel 8C1-2

Cleco both 8C1-2 back in the aircraft with elevator bell crank 8C1-1





Plywood template to fit between the left and right Support Channels 8C1-2

If it is difficult to reach or work from the access panel in the rear fuselage, cut plywood templates to fit in between the Support Channels 8C1-2, remove the assembly from the fuselage to continue the work on the workbench.



REAR FAIRLEAD SUPPORT 8C5-16 Qty=1



REAR FAIRLEAD 8C5-15 Qty=1



Cut the corners to make room for the L angles on the fuselage bottom skin.

Ref drawing 8CF-6

Rear Fairlead 8C5-15

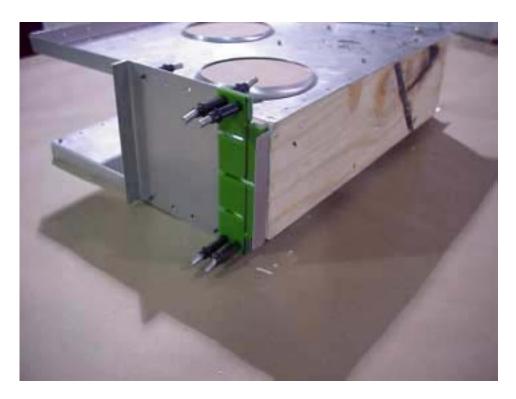


Corner cutout for L angles.

3/4" holes for the rudder cables and bottom elevator cable.

Ref drawing 8CF-6 for the location of the three holes and size of the corner cutouts.

Rear Fairlead Support 8C5-16



Use plywood template if working on the workbench instead of in the fuselage.

Note: line up the middle slot of the Fairlead 8C5-16 on the aircraft centerline.

Assembly turned on its side to show the plywood template.



5 RIVETS A5 8C5-16 to 8C1-2 each side

2 RIVETS A6 8C5-15 to 8C5-16 & 8C1-2 each side

Line up the bottom edge of the Fairlead on the bend tangent line of the bottom flange of the Rear Fairlead Support 8C5-16

Clamp, Drill & Cleco.



Note: the bottom of the slot is below the edge of the hole. The next fairleads are 8C5-5 on Support Channel 8C5-9

The rudder cables will cross between fairleads 8C5-15 and 8C5-5

The cables will rub on the inside edge of the fairlead 8C5-15

Looking back between the Support Channels.



Drill the 5/16" hole for the AN5- 52A bolt

RUDDER CABLE
PULLEY SAFETY
CHANNEL
8F1-5
Qty=2

Ref drawing 8-CF-6 For the location of the hole.





RUDDER CABLE PULLEY INNER BUSHING 8C1-4

Hardware





BOLT AN5-52A

The long 66mm Bushing 8C1-4 fits in between the left and right Rudder Cable Pulley Safety Channels 8C1-5



CHECK: the bottom of the pulley does not touch the channel 8C1-5

IMPORTANT: Check that the 1/8" cable cannot get past the bottom of the pulley.

Short 6mm bushing inside the channel and the pulley



Alternative method with a cotter pin to safety the rudder cables.

Drill the holes for the cotter pin to provide a safety for the retention of the cables in the pulley.

The pin is to be within 1mm of the outer diameter of the pulley.



Refer to drawing 8FF-2 for the location of the holes in Rear Seat Panel 8F11-8

Note: the rudder cable cross over after the Rear Fairlead 8C5-15

Check: the Rudder cables do not touch any edge of the 3/4" hole in 8F11-8



The "top" elevator cable goes through the middle hole in the Rear Fairlead Support 8C5-16

The top elevator cable is connected to the bottom of the Bellcrank 8C1-1