

STOL CH 801 CONTROLS

SECTION 3 Control Stick Ref Dwg 8CF-3





**CONTROL STICK
8C8-1A**

**CONTROL STICK
UPPER
8C8-1C**

**AIRFRAME BOLT & SL
NUT
AN3-15A**

Drill the 3/16" hole 25mm
from the top of the Stick
8C8-1A

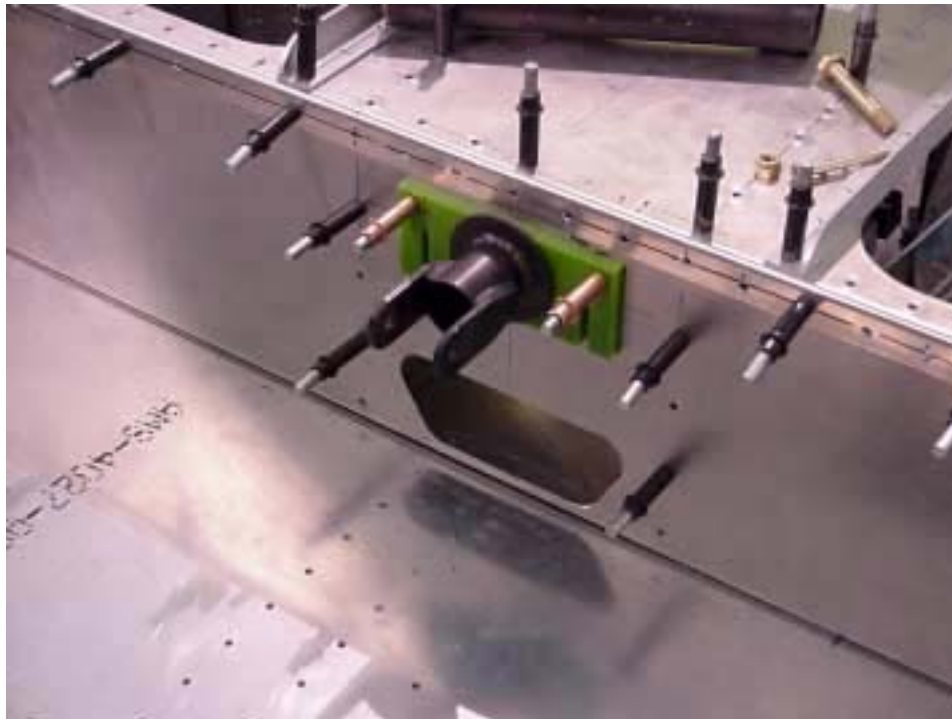
Slide the Control Stick Upper 8C8-1C into the top of the Control Stick 8C8-1, let it bottom out on the stop ring welded on 8C8-1C (check: 60mm from the bottom of the upper stick 8C8-1C to the bottom of the stop ring). Position the stick assembly as shown in the photo (the top of 8C8-1A does not touch the workbench). The 3/16" hole is drilled parallel (horizontally) to the workbench.



**CONTROL STICK
BUSHING
8C8-1B**

Lubrication: Clean
inside the tube welded on
the stick 8C8-1C Add
some lubrication inside
the tube, then slide the
bushing 8C8-1B inside
the tube.

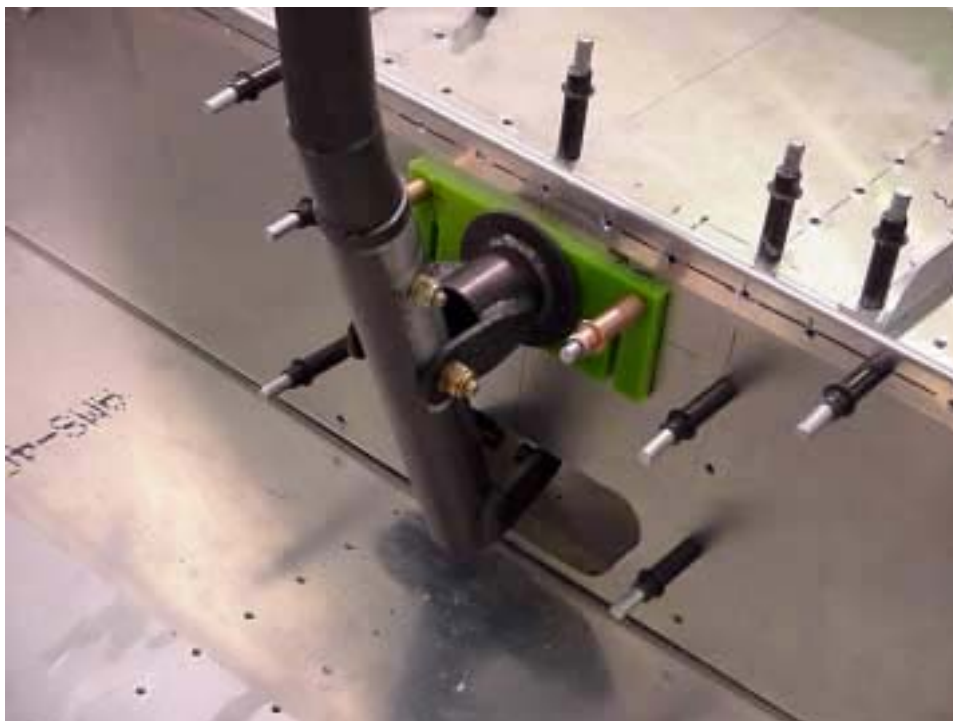
The Bushing fits inside Control Stick 8C8-1A



**Forward torque tube
8C8-2**

CHECK: The bushing 8C8-1B fits in between the two plates welded on the sides of the torque tube 8C8-2

Refer to drawing 8FF-2 for the cutout in the Front Seat Panel 8F11-1



**AIRFRAME BOLT & SL
NUT + 2 WASHERS
AN4-20A**

Note: The bolt clamp down on the bushing (the bushing does not turn). The Bearing surface is between the outer wall of the bushing 8C8-1B and the inner wall of the welded tube on 8C8-1A

CHECK: That the bottom of the control stick does not interfere with the rivets in the floor skin.

2 washers: One washer under the head the other under the nut.



Location of the cutout in the bottom skin between the left and right Horizontal Tail Support Channels 8C1-2

Cutout in the rear fuselage bottom skin to make room for the aft end of the Elevator control Rod 8C8-16

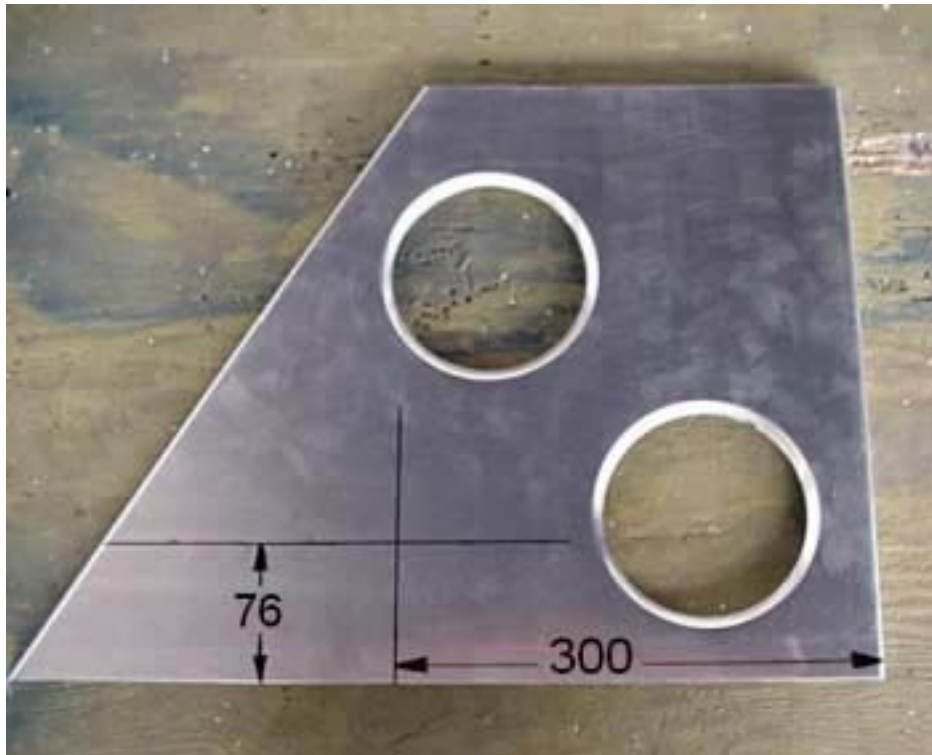


Cutout in the Fuselage Bottom Skin 8F2-3A (centered on the aircraft center line)

Cutout: 55x350mm

If you haven't already done so, remove the rear seat back panel and layout the clearance hole for the elevator control rod and bell crank on the bottom skin.

Cut the hole to size; note the radius at all four corners of the hole. The forward edge of the hole is 75mm aft of the rear seat support channel 8F11-8.



**HORIZONTAL TAIL
BEARING SUPPORT
CHANNEL
8C1-2**

Note: Also locate and drill the hole for the pulley bolt axle, see Section 6-
Page 7 of the controls.



**HORIZONTAL TAIL
BELLCRANK
8C1-3**

**HORIZONTAL TAIL
BEARING
8C1-3**

Open the hole in the
aluminum an additional
2 - 3mm then rivet the
bearings in place.

Drill the center hole in 8C1-2 to $\frac{3}{4}$ inch diameter.
Fit the bearing 8C1-3 on the inboard side of 8C1-2 and drill four, $\frac{3}{16}$ holes
in each.



Rivet the Bearing 8C1-3
to the Support 8C1-2

4 RIVETS A6

Re-install the Supports and the Bellcrank to the fuselage.



CHECK: That the
underside of the elevator
Control Rod 8C8-16 does
not touch the top of the
Flap Torque Tube 8C8-5
(Rotate the Bellcrank to
check the clearance at
the low point of the
swing).

Airframe bolt
AN5-12A

Attach the elevator push rod to the bottom of the Bellcrank. Work the stick and check all areas along length for any interference and for freedom of movement.



Photo with the seat back installed



**FIBERGLASS BELLY
CHEEK
8-BC**

Fit the belly cheek 8B-C but do not rivet. Forward position in this illustration is to the right side of the photo.