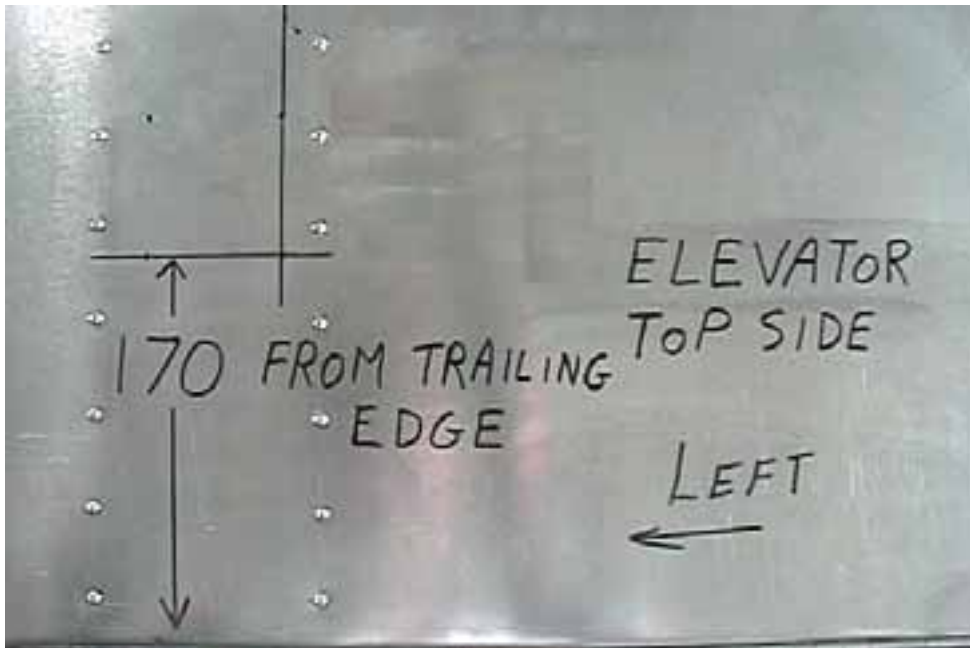


**STOL CH 801 HORIZONTAL TAIL ASSEMBLY – SECTION 4
“ELEVATOR TRIM TAB”**



Time to install the electrical trim system. The trim tab system is positioned on the left side of the elevator assembly.

Remember top left refers to the position when installed on the aircraft.

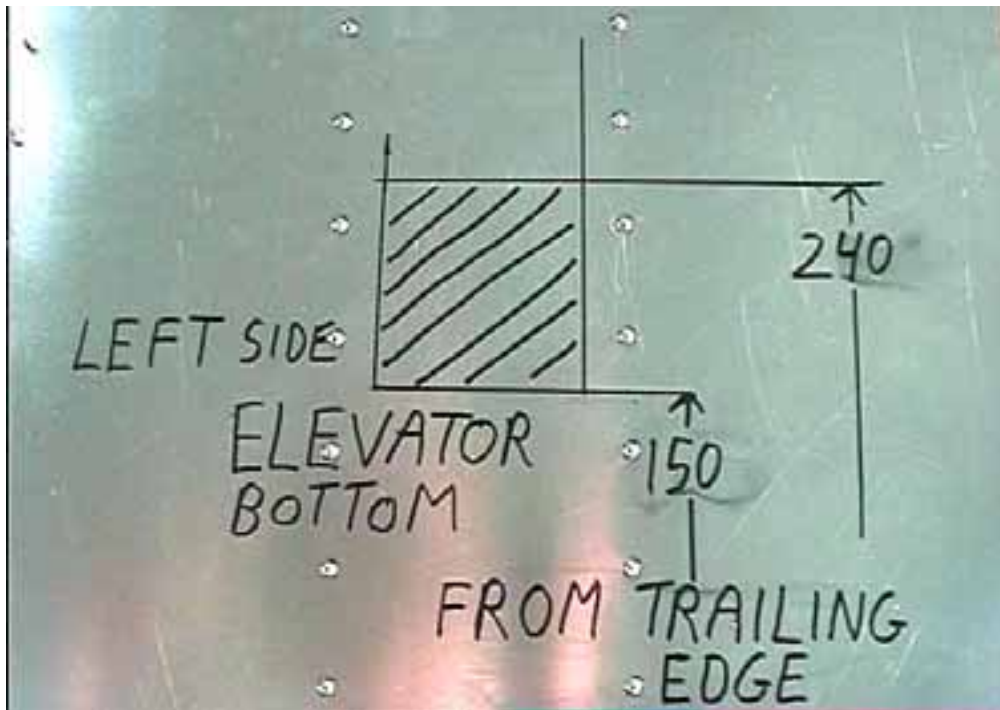
Layout the bolt centerlines for the trim motor on the top left side of the elevator. Positioned approximately between the 2 ribs spaced 120mm apart.



For positioning purposes, the motor is placed on the top of the assembly to establish the drill pattern.

Position the motor square to the trailing edge of the elevator.

Place the motor over the centerline and drill all four mounting holes.



CUTOUT: 65 wide
90 long

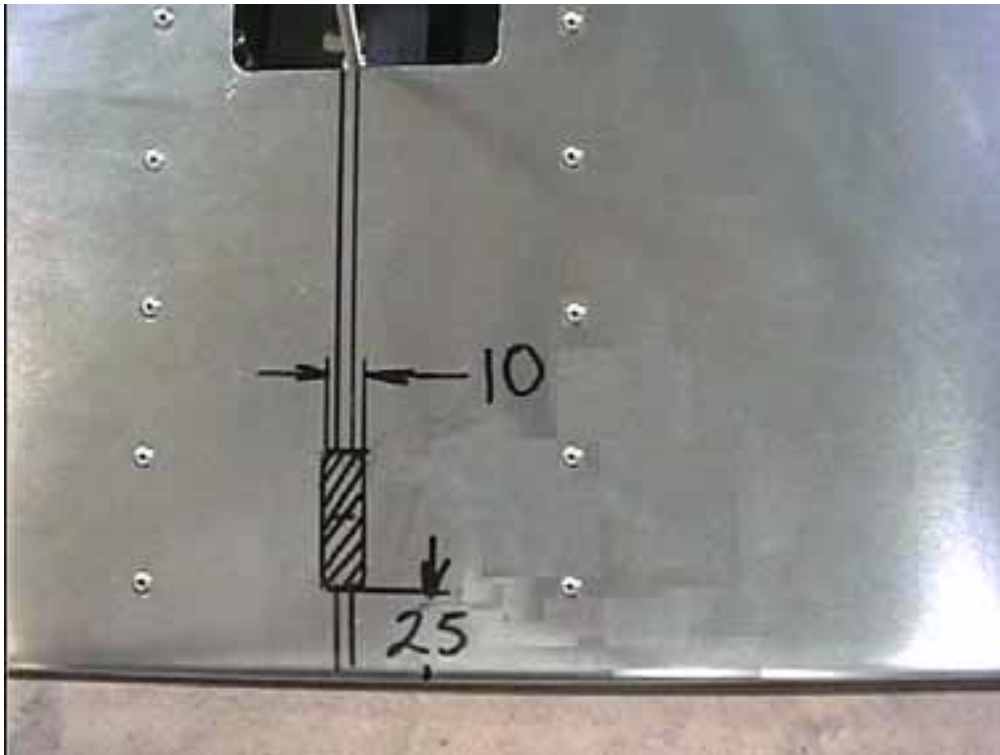
CHECK: Position the trim motor cover plate 8H4-6 (95x110mm) between the two ribs, the cutout is approximately 15mm along the ribs and 20mm front and rear.

Double Check: Are you laying this out on the correct side!

Turn the elevator over and lay out the cutout required for the motor installation (bottom side of elevator).
Drill the pilot holes at the corners, but inside the lines of the cutout and cut the hole to size.



Place the motor in the elevator and cleco it underneath the top surface of elevator skin.

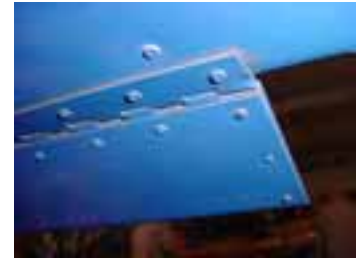


CUTOUT: 10mm wide
25mm from aft
trailing edge
40mm long

Extend a line from either side of the motor push rod, at 90 degree's to the elevator trailing edge and layout the second cut out.



After completing the cutout install the motor push rod.



Now – let's prepare the trim tab.

Layout the 30 mm. pitch for the hinge.



Shorten the trim tab hinge pin rod 4 mm (2 mm. per side). Position the rod 2 mm back from each end of the hinge.



Safety the hinge pin by crimping the ends of the hinge.



Locate the hinge and drill the rivet holes - 3/32"
Drill the bottom of the trim tab, but not through to the top.
Slide the hinge into the tab – you may need to use a rubber mallet to tap it into position.



A3 PITCH 40
(through bottom skin,
hinge and trim tab flange)

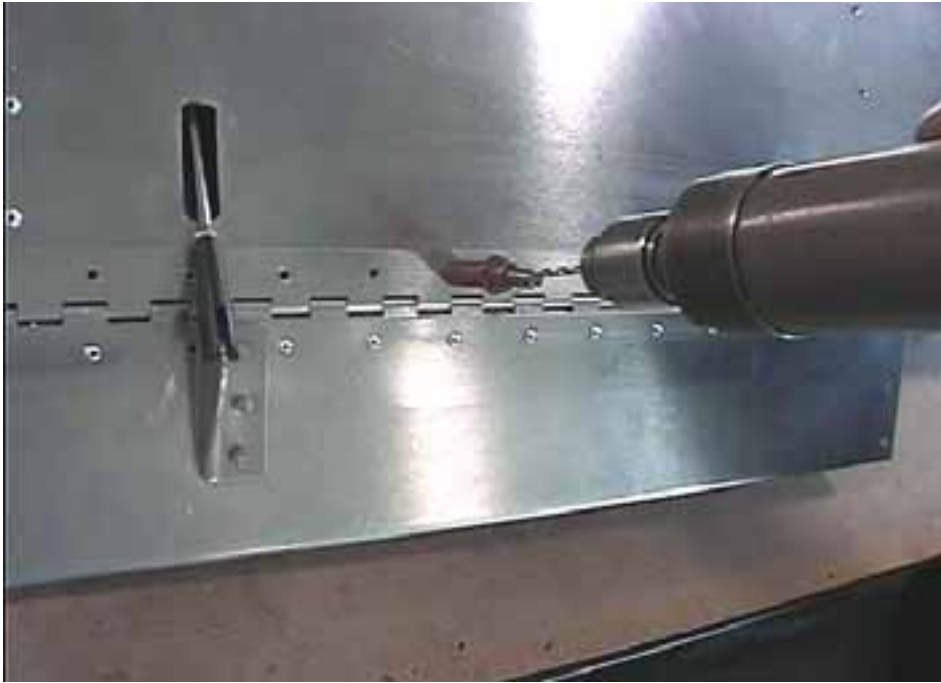
Rivet hinge in position with the A3 rivets. The rivets will be on the bottom side only. (no holes through top surface of trim tab)

NOTE: the A3 rivets have a dome head – use a flat nose piece on the riveter



There are three solid rivets to set. One AD3 at either end and one AD4 at the motor attachment bracket. The hole for the AD4 must be enlarged with a #30 drill.

A5 (5/32) blind rivets may be used here instead of the AD solid rivets.



The trim tab assembly is positioned to the trailing edge of the elevator.

Place the trim tab in position with the motor push rod locating off the attachment bracket. This will give the trim tab the correct lateral position. Drill #30 and rivet - A4. Use the same pitch as the other side of the hinge. Be careful not to drill through both sides of the elevator skin.



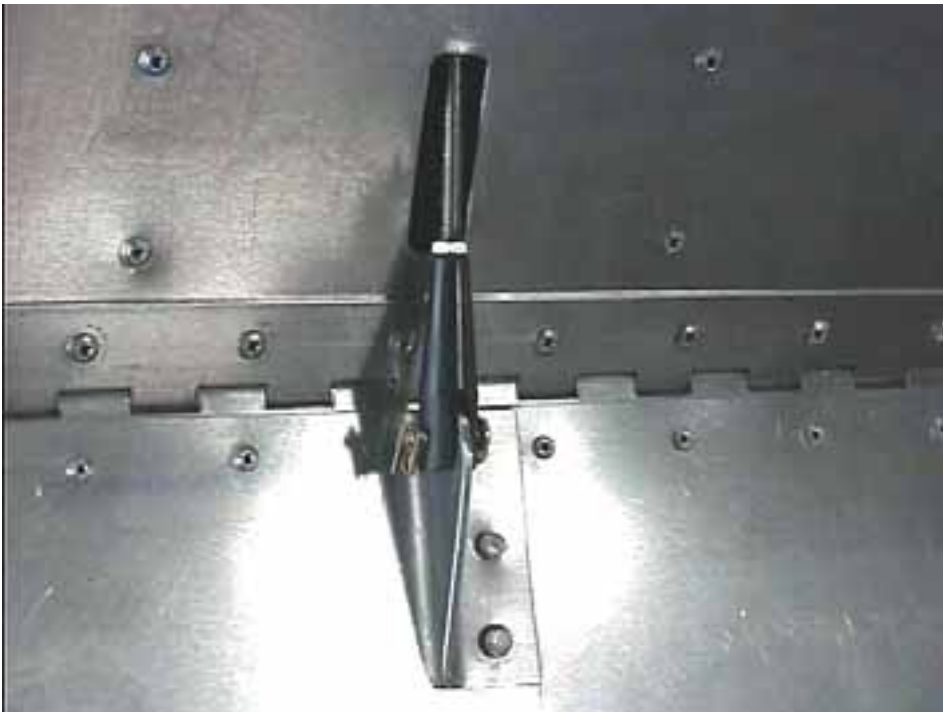
Remove the motor and make the electrical connections. Re-install the motor and rivet it in place - A4



**TRIM MOTOR COVER
PLATE 8H4-6**

8 RIVETS A4
8H4-6 to skin 8H6-1

Drill the holes to mount the cover - eight #30 holes.
Do not rivet the cover in place at this time.



top side



bottom side

Attach the rod but do not bend the cotter pin to its final position. That's it for now. The deflections will be set after installing elevator on the aircraft.