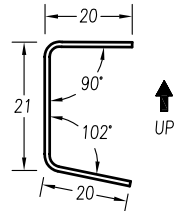


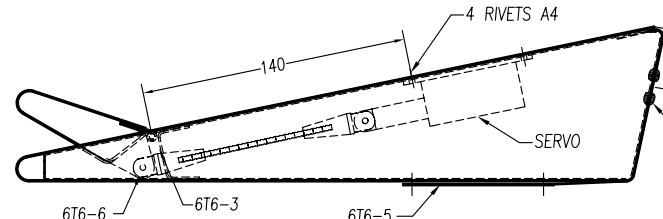
L=895
dl=163

1 **3 TRIM TAB SKIN**
t=.016" 6061-T6 (1 REQ'D)

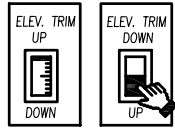


L=940
dl=58

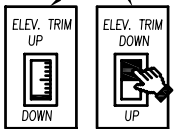
3 **ELEVATOR CUTOUT CHANNEL**
t=.025" 6061-T6 (1 REQ'D)



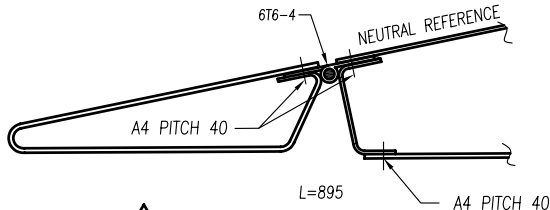
GROMMET QTY=1
AN931-4-7
1/4" ID
7/16" HOLE IN SKIN



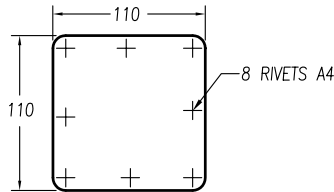
INSTRUMENT PANEL PLACARDS
NOTE: FOR TRIM TAB SWITCH, USE OPPOSITE PLACARD AS TRIM TAB INDICATOR



TRIM TAB IN APPROACH CONFIGURATION

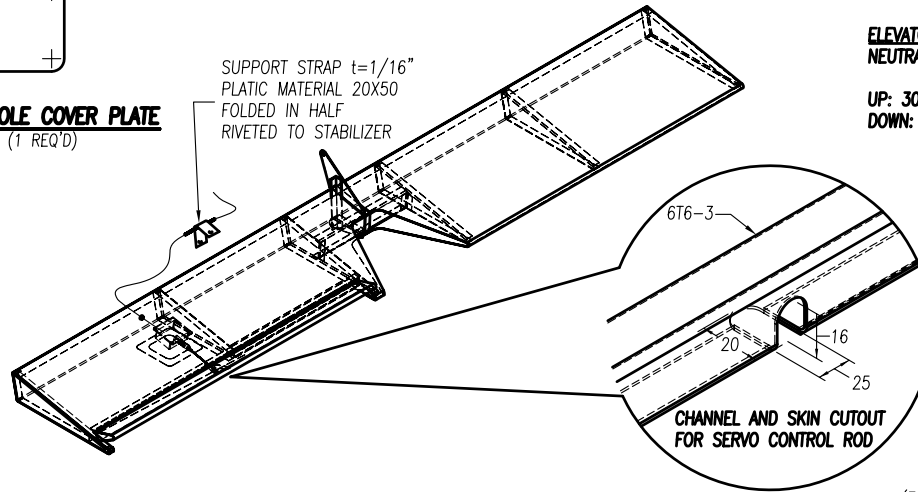


4 **PIANO HINGE**
MS20257-4 (1 REQ'D)
1-1/2" OPEN LENGTH



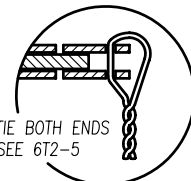
5 **ACCESS HOLE COVER PLATE**
t=.025" 6061-T6 (1 REQ'D)

SUPPORT STRAP t=1/16"
PLATIC MATERIAL 20X50
FOLDED IN HALF
RIVETED TO STABILIZER



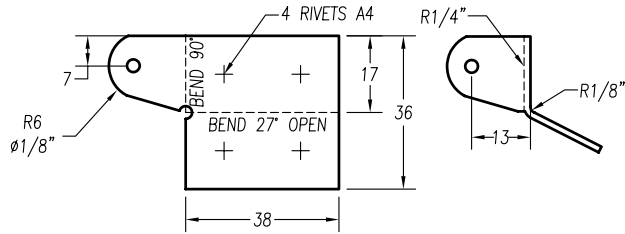
CHANNEL AND SKIN CUTOUT FOR SERVO CONTROL ROD

SAFETY TIE BOTH ENDS OF PIN SEE 6T2-5

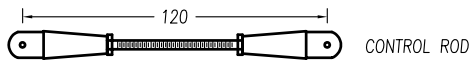


COLOR CONNECTION CHART
(FOR FUTURE REFERENCE TO CONNECT SWITCH)

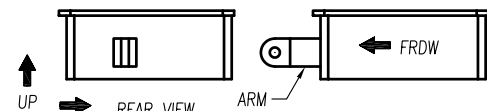
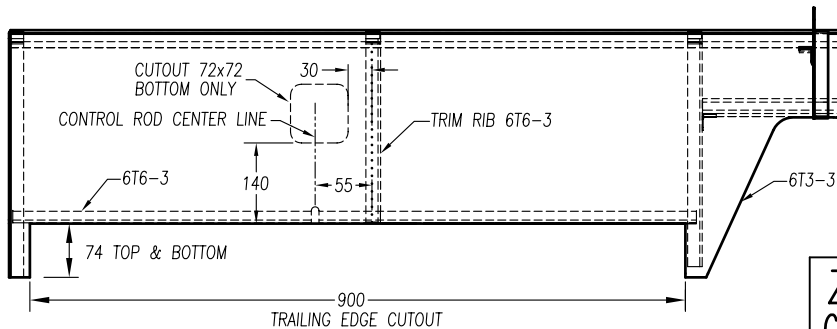
SERVO WIRES	BELTON 5 WIRES
WHITE	WHITE
WHITE	BLACK
WHITE/ORANGE	BROWN
WHITE/GREEN	GREEN
WHITE/BLUE	RED



6 **TRIM TAB HORN ANGLE**
t=.063" 6061-T6 (1 REQ'D)



CONTROL ROD



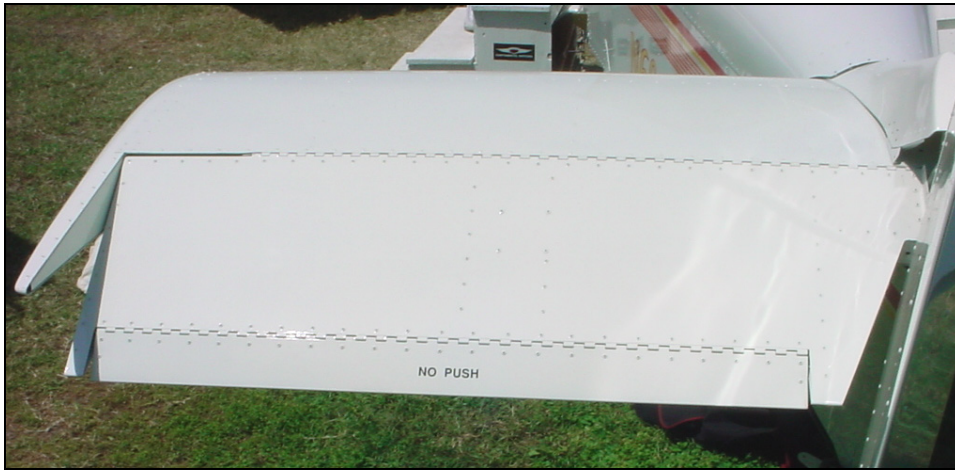
SERVO
(1 REQ'D)

ELECTRIC TRIM SYSTEM
WWW.RAYALLENCOMPANY.COM
P/N T2-7A-TS
.7" TRAVEL

ZODIAC
CH 601 XL

RECESSED ELEVATOR TRIM TAB

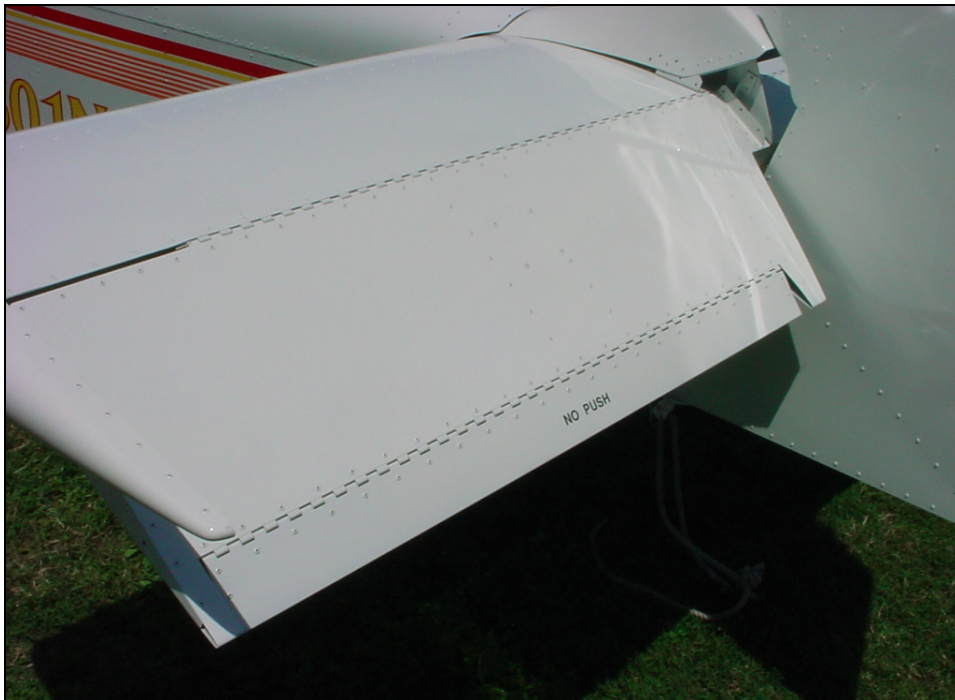
6-T-6



Full length recessed elevator trim tab.



Detail of outboard end.



Trim tab along left trailing edge of elevator.



Detail of inboard end.

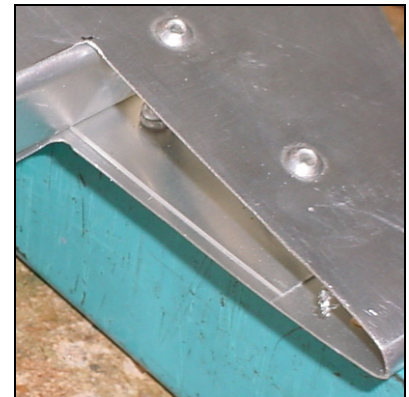
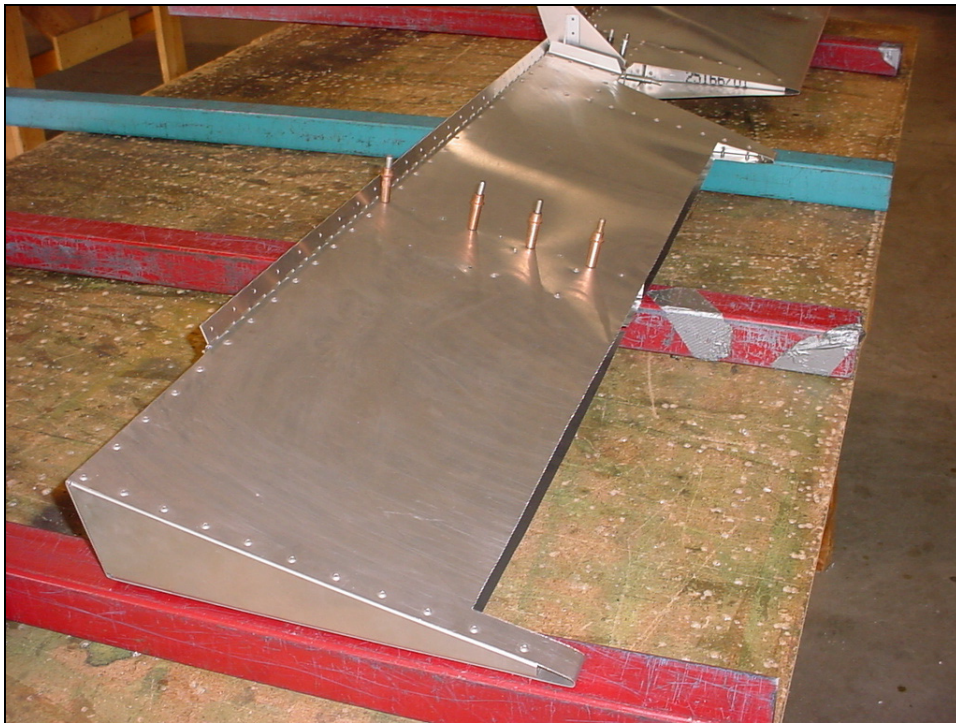


Trim tab in neutral position



Drill out the middle rib.

Layout the cutout on the top and bottom side of the elevator skin.

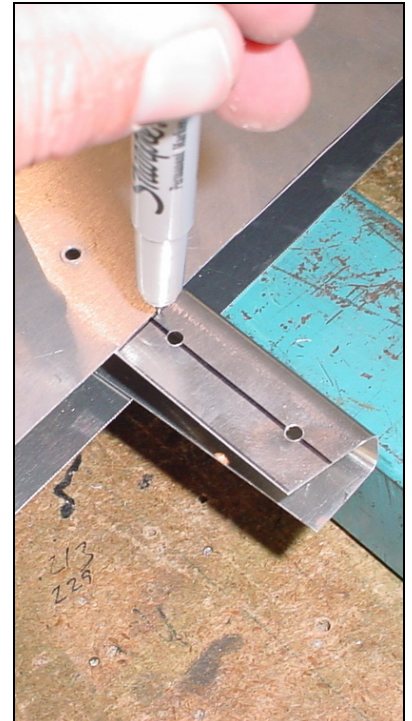


Cutout.

CORNER RELIEF HOLE:
with a round rat-tail file, file a corner relief hole in the 4 corners



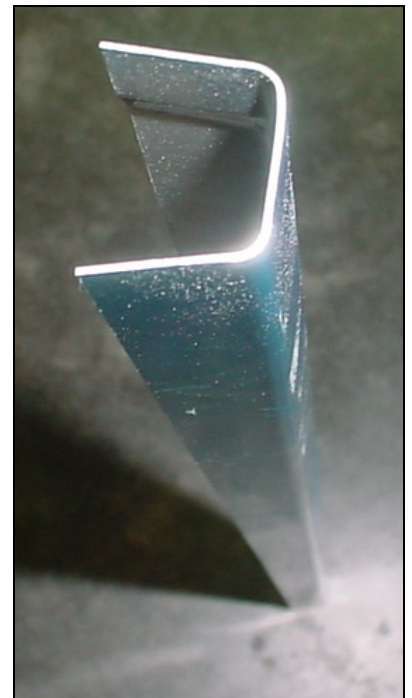
Middle rib 6T6-3, Ref. bottom middle diagram 6-T-6



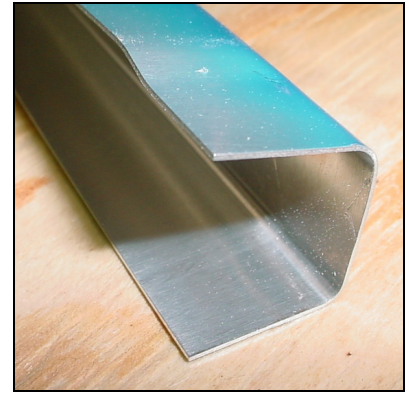
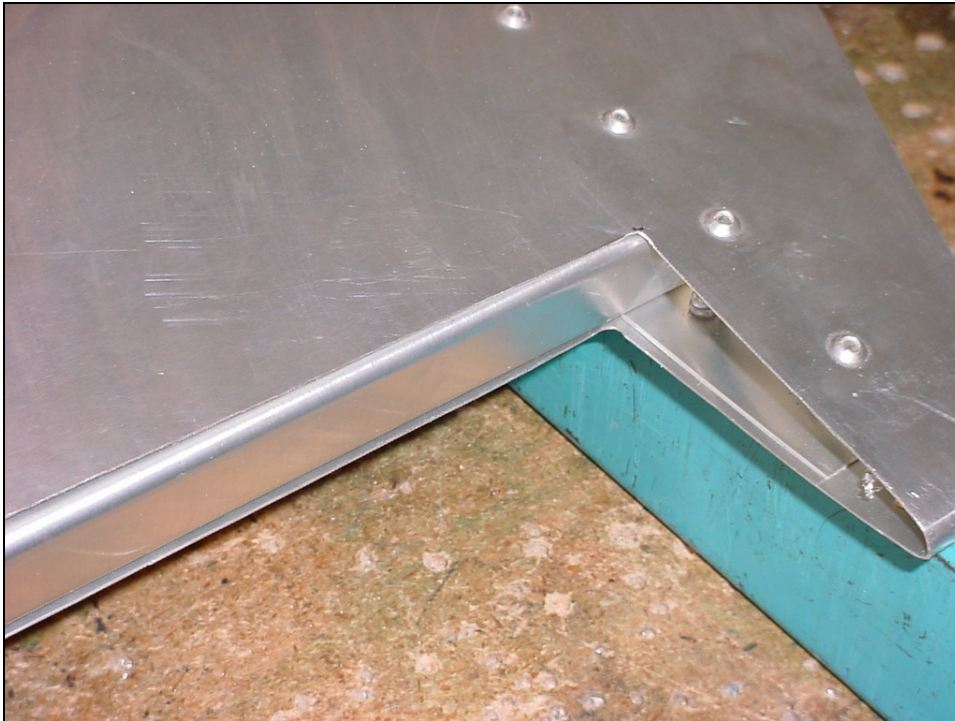
Cleco the rib and mark the top and bottom edge of the skin: Cut rib.



Install the channel with the web flush with the aft edge of the skin.



**ELEVATOR CUTOUT CHANNEL
6T6-3/1**



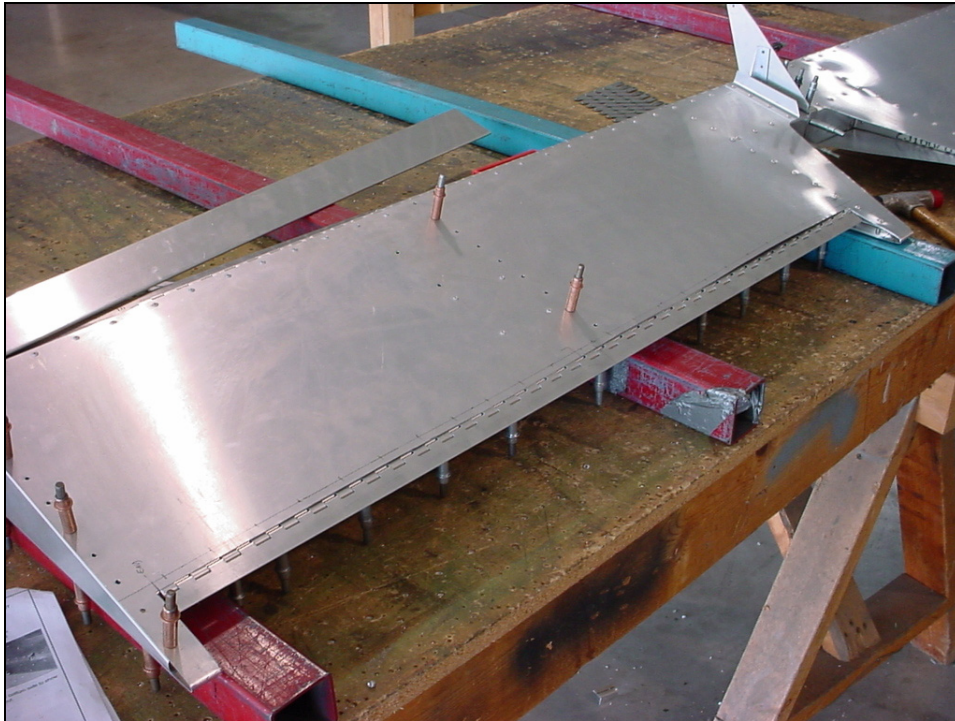
The ends of the channel are joggled to fit inside the rib flange.

Detail of the inboard end of the channel overlapping inside the rib flanges.

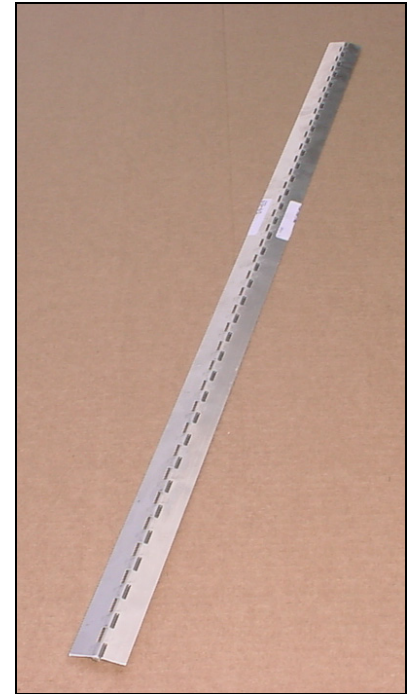


A4 PITCH 40
Top and bottom
6T3-3 to 6T6-3

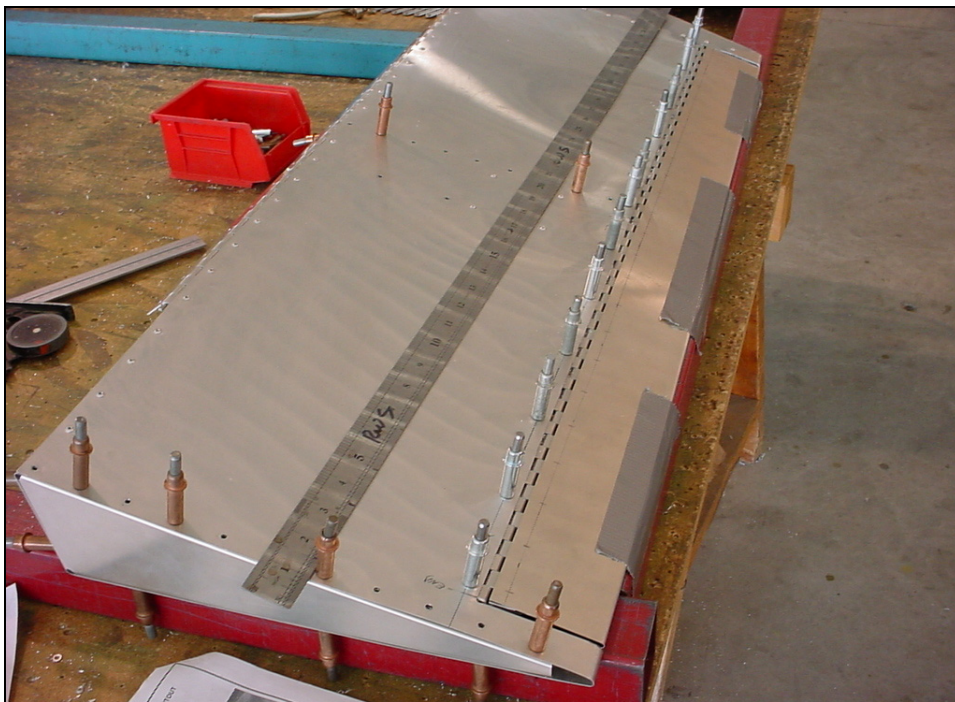
Layout the rivet line in the channel. Drill & Cleco the bottom flange to the skin.



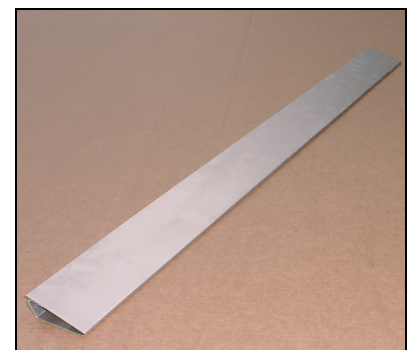
Slide the piano hinge between the channel and the skin.
ORIENTATION: The spin is down.
CHECK: Trial fit the trim tab skin, check that the aft edge of the trim tab is flush with the trailing edge of the elevator. Center the hinge for equal overlap with the elevator and trim tab skin.



**PIANO HINGE
6T6-4/2**



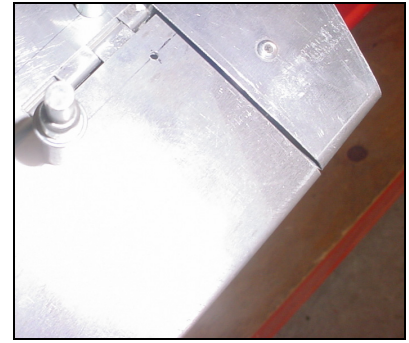
Lay the trailing edge of the elevator on a steel beam or on a straight board. Line up the trailing edge of the trim tab even with the trailing edge of the elevator skin.



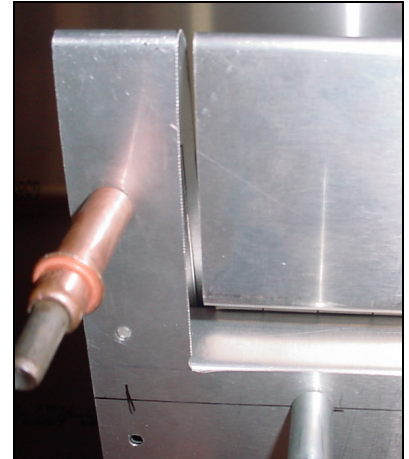
**TRIM TAB SKIN
6T6-1/3**



CHECK that the trailing edge rests uniformly on the steel beam to prevent twist.
 SUGGESTION: Tape the trailing edge to the beam.
 Drill and Cleco.



Top view



Bottom view



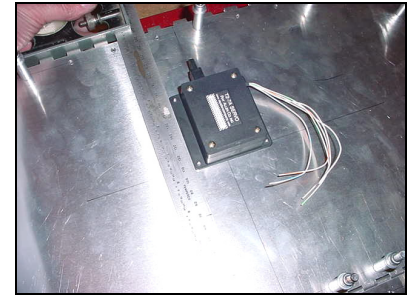
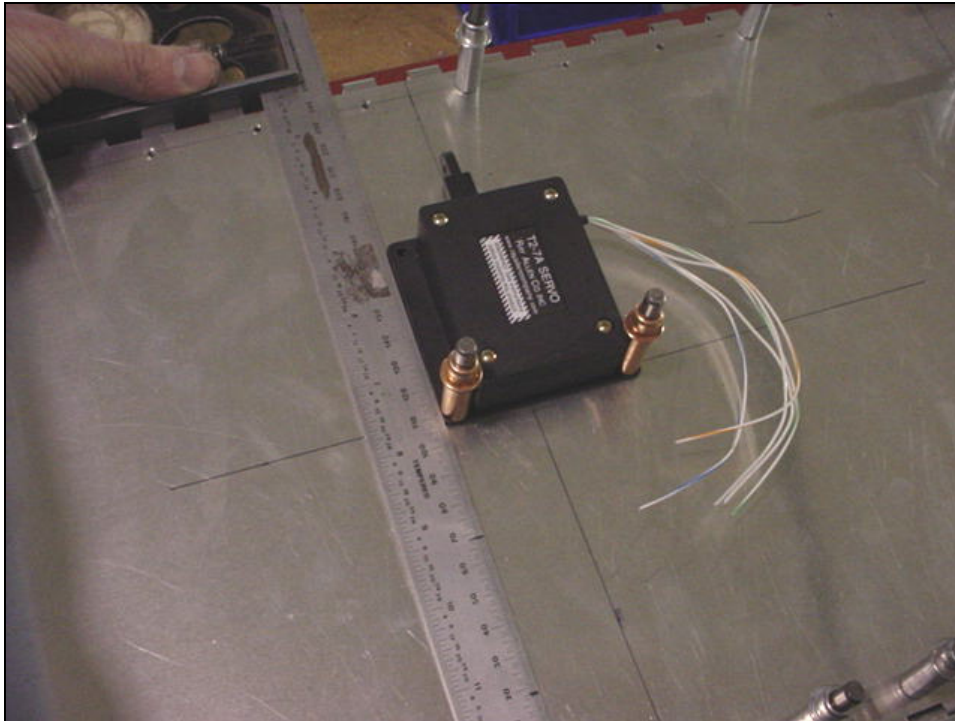
ORIENTATION: The servo will be riveted to the underside of the top skin. Lay the servo on the top skin in the same orientation, as it will be installed.



P/N T2-7A-TS (box content)

NOTE: the Arm is offset to the side.

LAYOUT on top side of skin: Mark the servo control rod center line parallel to the rib rivet line (on outboard of side of rib), mark the line 140mm from the center of the piano hinge.

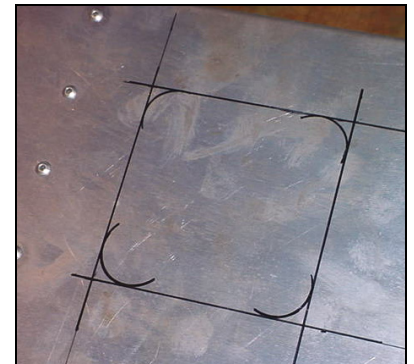


With a square, check that the servo is installed square.

Note: The arm on the servo is on the control rod centerline.

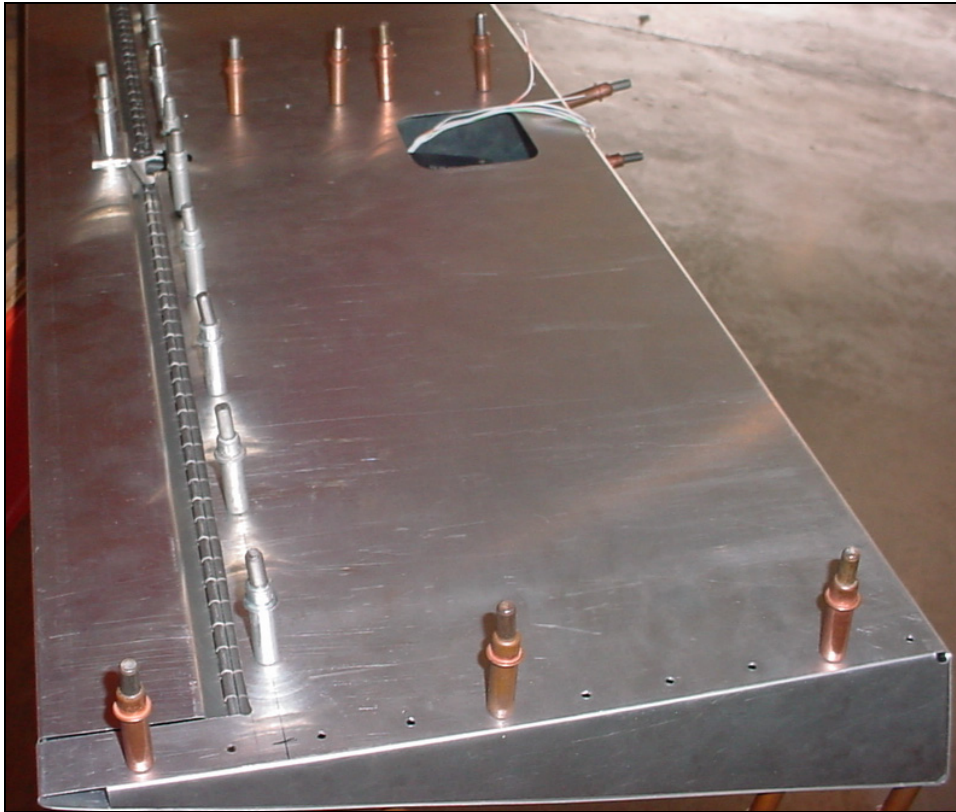
Drill & Cleco 2 holes on the 140mm line.

ORIENTATION: Drill the two attachment holes on the 140mm line. In the photo the servo is shown on the topside of the skin with the arm pointing forwards. When the servo will be installed on the underside of the top skin, the servo will in effect be rotated 180 degrees: the servo will be suspended on the bottom side of the skin with the arm pointing aft.



Layout the access cutout on the bottom side 72x72mm. Note: layout the corner relief holes.

First drill pilot hole in the middle of the access cutout, then go in with the snips to cut the size. Photo using a hole saw to enlarge the pilot hole.



Access hole on the bottom of the elevator skin.



Use the hand snips to cut up to the line.



Detail of the servo clecoed to the underside of the topside of the elevator skin.



COMMENT: The Cover plate will overlap 19mm along the side.

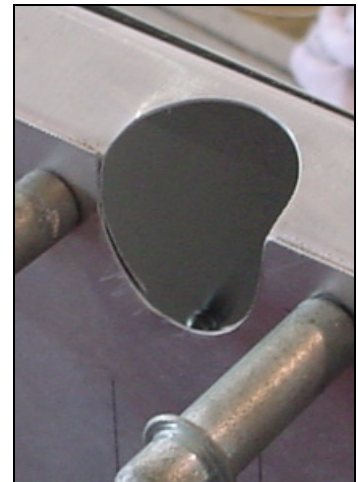
IMPORTANT: Review the installation instructions that are supplied by The Ray Allen Company with the servo.



Height = 16mm
Width = 25mm

Layout the cutout for the trim motor arm assembly in the Elevator Channel 6T6-3.

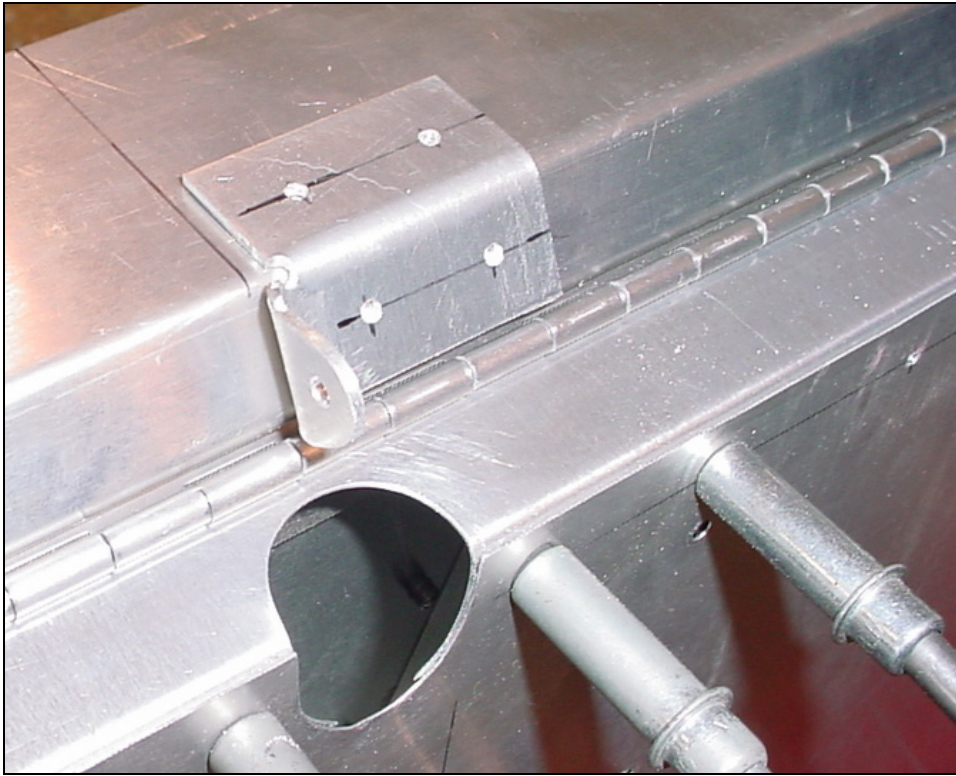
The cutout is centered on the control rod centerline.



Depth = 20

Cutout in the bottom skin and channel flange.

Radius the end of the cutout.

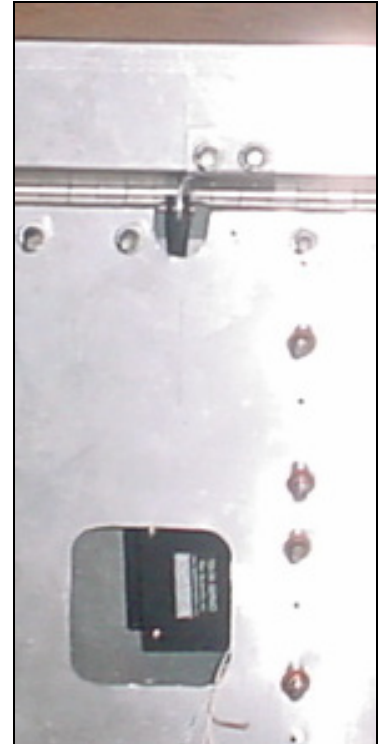
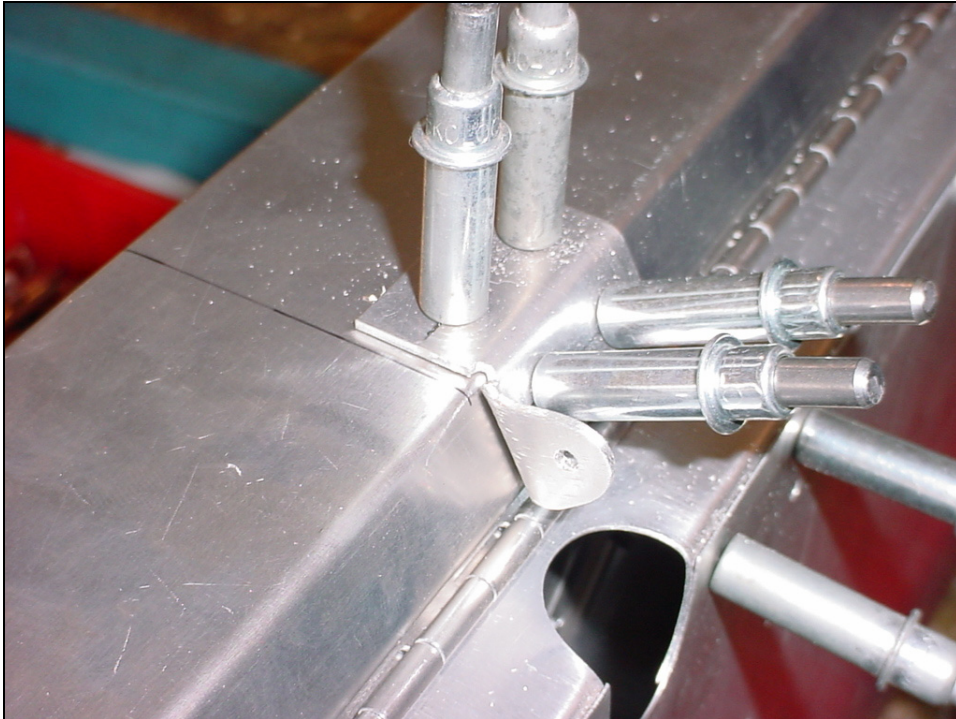


**TRIM TAB HORN ANGLE
6T6-6/2**



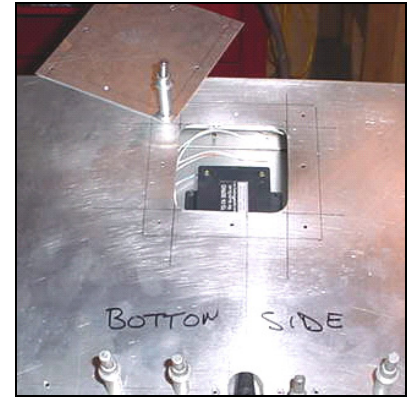
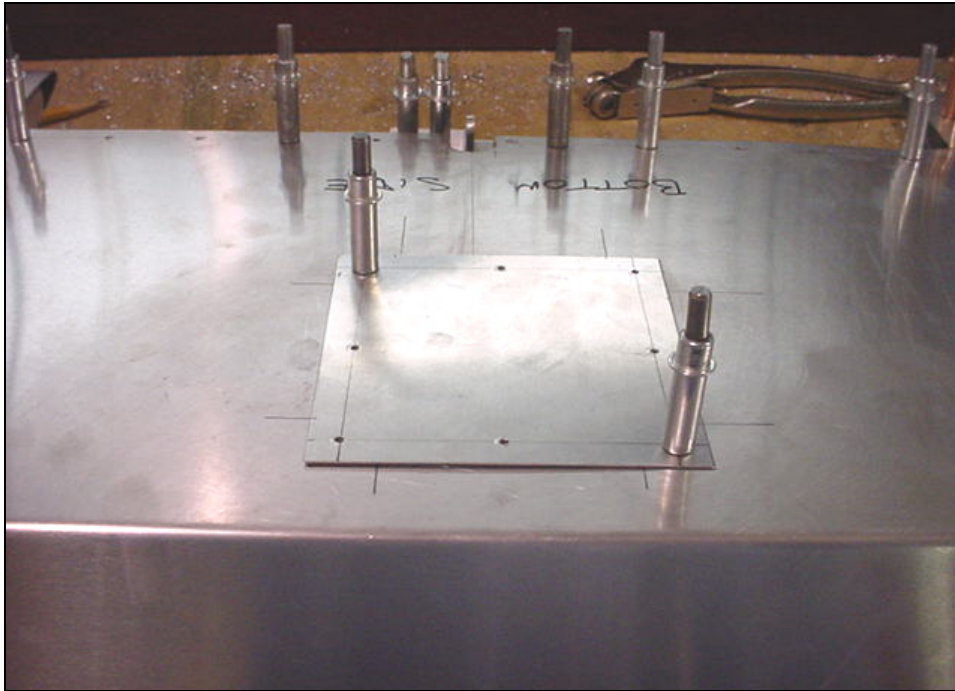
Pre-drill pilot holes.

The Horn is positioned on the I/B side of the trim tab centerline.



**4 RIVETS A4
6T6-6 to 6T6-1**

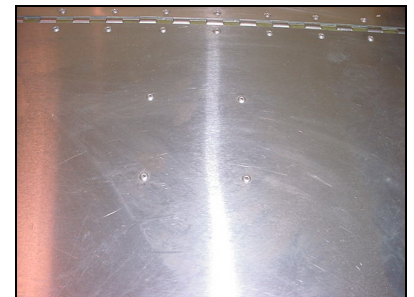
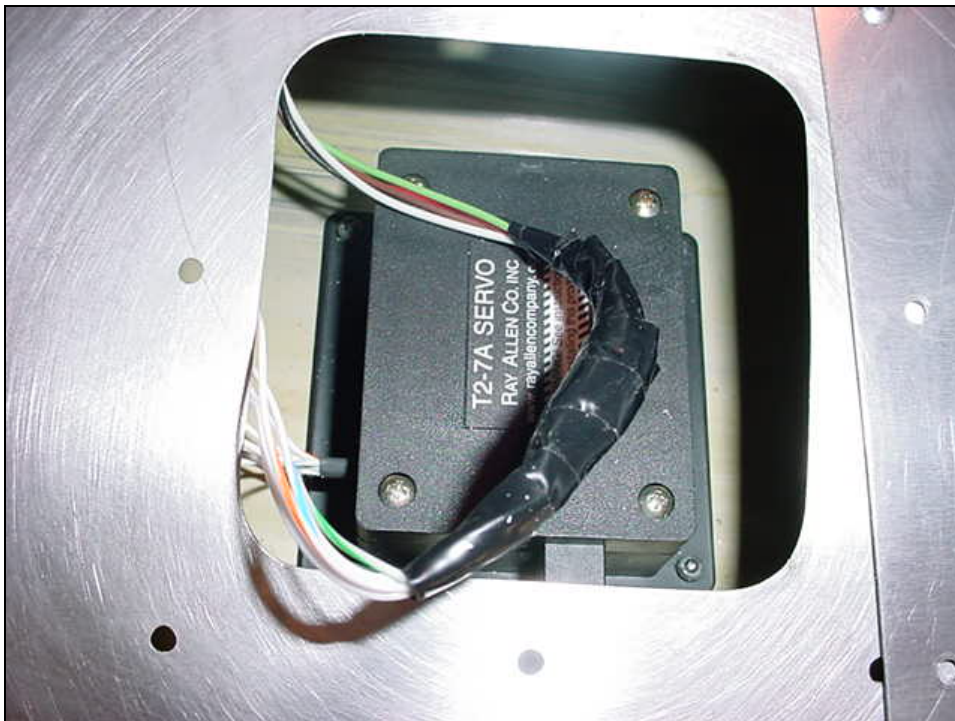
Drill and cleco.



**ACCESS HOLE COVER
PLATE
6T6-5/0**

Overlap = 19mm
Overlaps on the outside of the skin.

The Cover plate will be riveted with 8 RIVETS A4.



4 RIVETS A4
Servo to skin (rivets pulled
from top side of the skin).

Cycle the trim servo to check
trim tab deflections (refer to
the instructions with the
servo).

Solder the wires together and insulate with tape.
Refer to the chart at the bottom right on drawings 6-T-6 for future
reference.



BELTON 5 WIRE The cable comes out the front of the elevator. Grommet located 30mm down from the top of the elevator. Grommet in the front of the elevator skin for the cable. **AN931-4-7**



Control rod with lock nut.

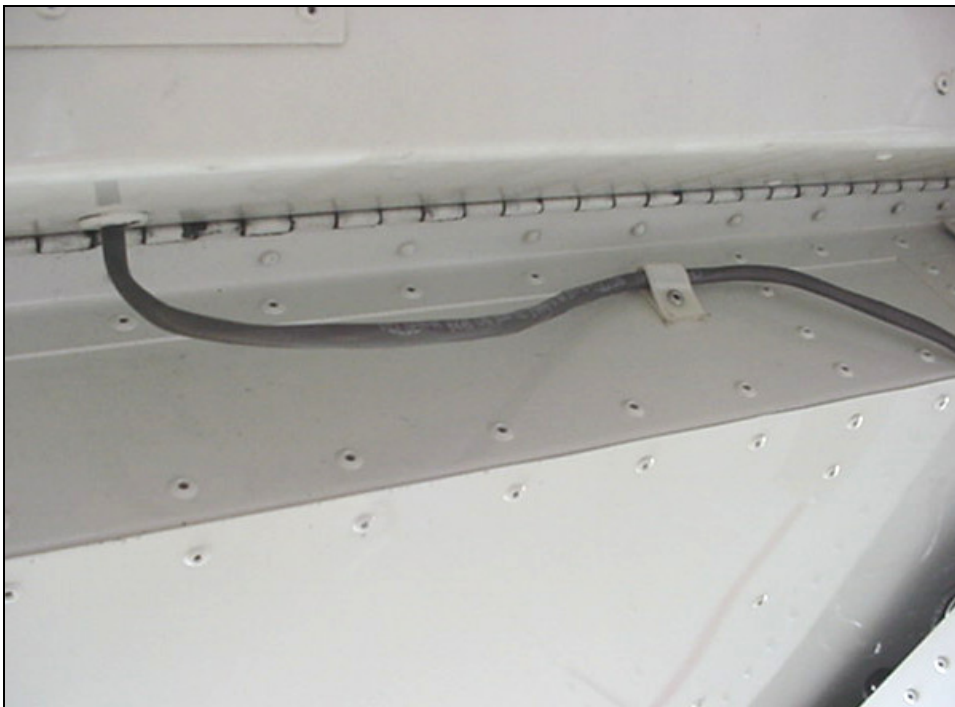


Photo taken with the elevator in the up position. Support strap riveted to the stabilizer to guide the cable to the fuselage.



Install the Trim Motor arm assembly to the servo and to the Horn. The stainless steel threaded rod will have to be cut to length. Ref: bottom left diagram on 6-T-6.

CHECK: that the clevis does not interfere with the Horn. If necessary trim the Horn. Do not modify the clevis: see Ray Allen installation instructions.