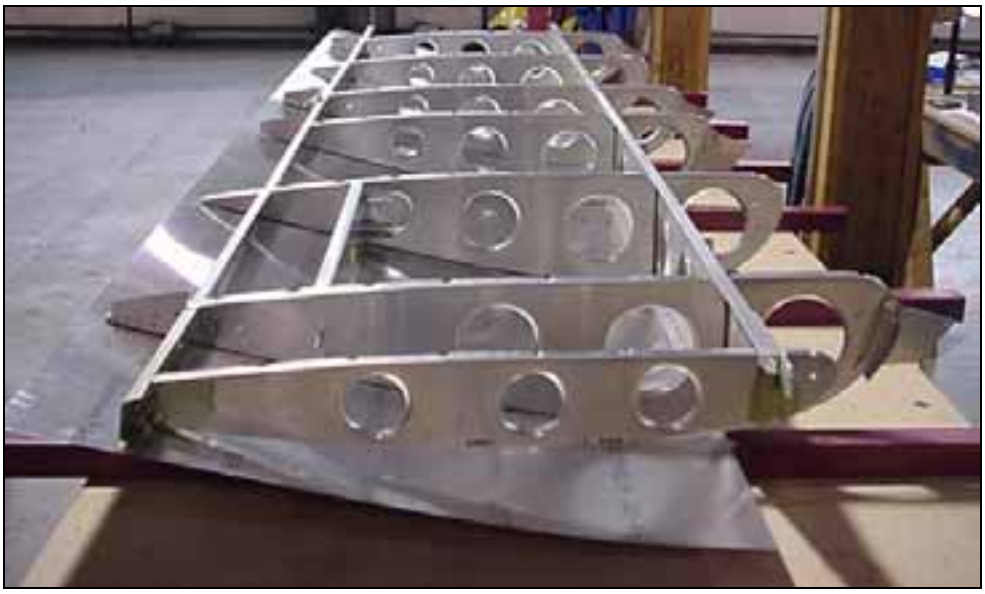
The steel beam will kept the Cleco off the workbench.
One beam under each rib.

Turn the wing assembly over and level the wing.
At this time the top skin will only be Clecoed together.

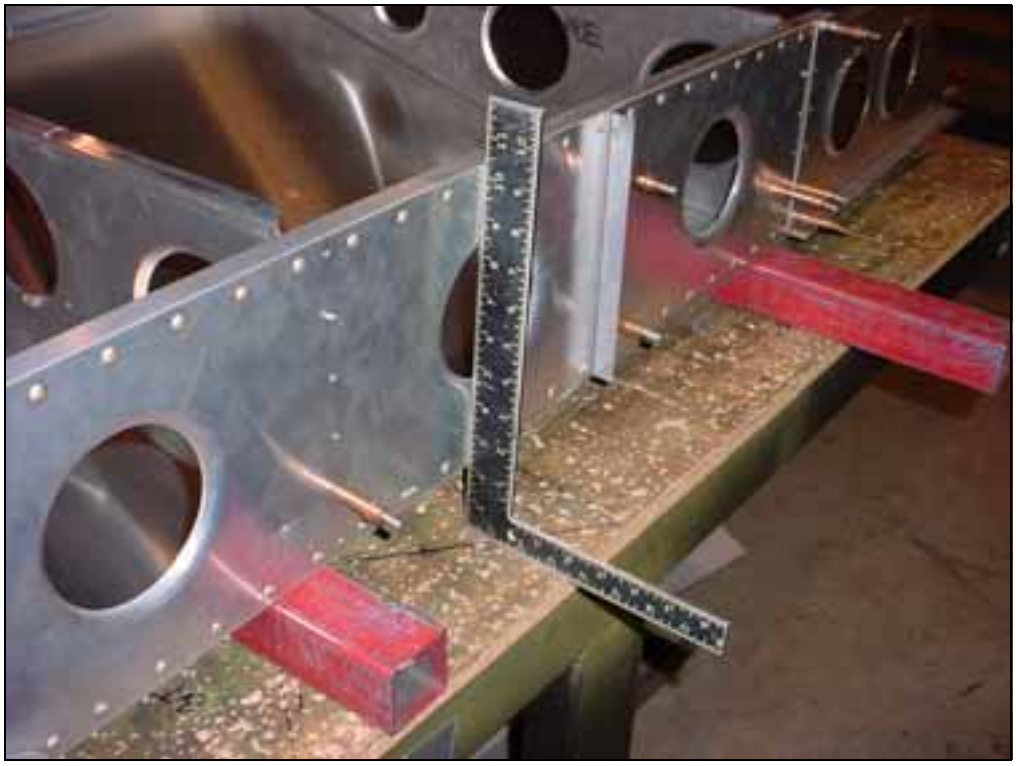


Check the spar is level span wise.

Support the rear of the wing assembly to keep the spar at 90 degree to the workbench.

Supports beams under the rear of the wing . Adjust the position of the support beams to keep the spar vertical.

CHECK: use the vertical bubble on the level to Make there is no twist in the wing.



Square to check the spar is vertical (no twist).

Mark the rivet line on the rib flanges and channels.

Wing ready for the rear bottom skin.

Lay the lower rear skin on the skeleton.
ORIENTATION: Locate the rivet line for rear rib #4, holes are towards the rear.
LAYOUT: Mark the rivet line through the pre-drilled holes in the skin to the front and aft edge of the skin. Also mark the rivet line through the pre-drilled holes for the nose ribs to the edge of the spar. Line up the rivet lines on the skin rivet line with the spar rivet line.

NOTE: To bring the front edge of the skin flush with the spar it will be necessary to file a notch in the aft edge to make room for the flaperon brackets 7V4-6

LAYOUT: Mark the location of the notch in line with the front edge of the bracket.

DETAIL: The trailing edge where the flaperon brackets (7V4-6) are located may have to be filed or notched.

Use a 3/16” round file to file the notch, approximately 4mm deep.

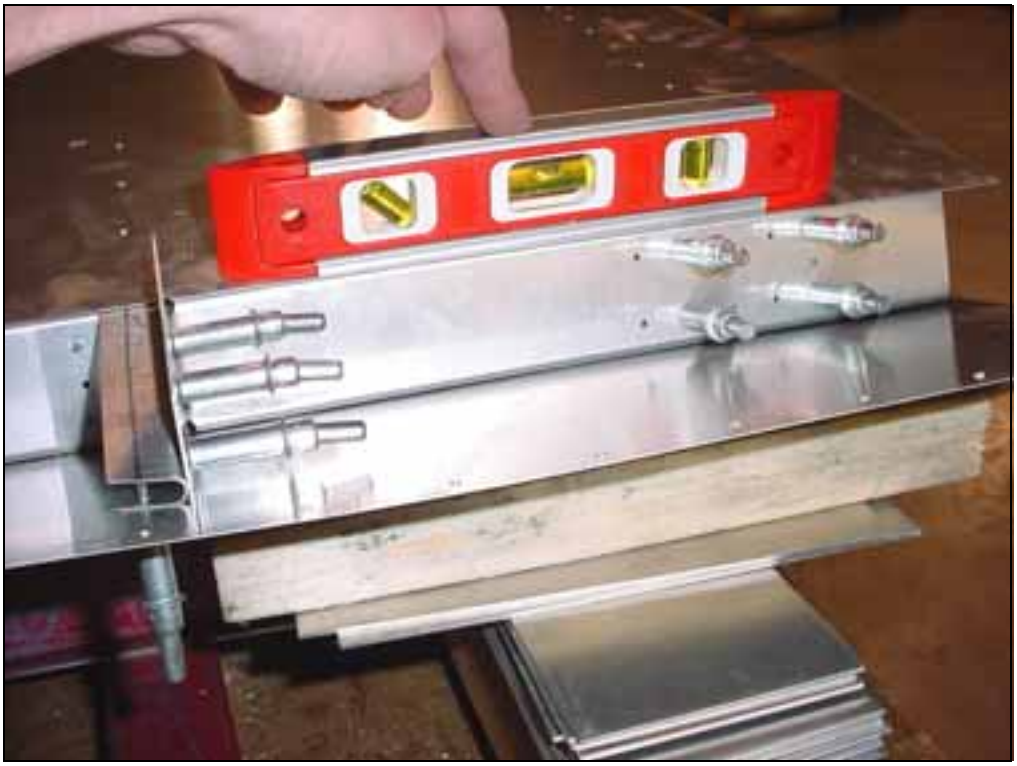
7V7-3 Lower Rear Skin

CHECK: skin is flush with front edge of spar. Predrilled rib holes line are over the rivet line marked on the rib flange.

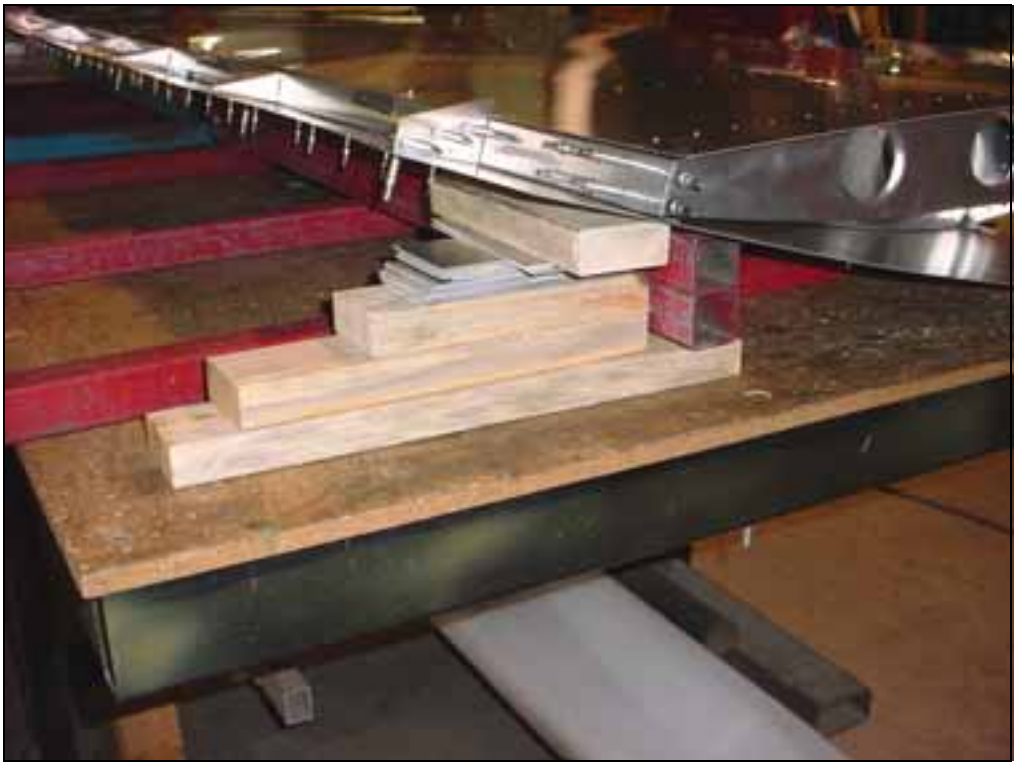
COMMENT: The trailing edge 7V7-4 and 7V7-5 will close the aft bottom portion of the wing.

Use pieces of duct tape to hold the skin to the spar.
CHECK: The spar is straight with the edge of the skin.

OPTION: Like on the top skin, tack rivets can also be set at 20mm from the rib rivet line into the spar extrusion.



Level the ends of the rear channel.
Detail of the outboard end.



Extra spacer blocks under the inboard end of the rear channel to level the top of the channel.

Level the inboard end of the heavy rear channel 7V6-1

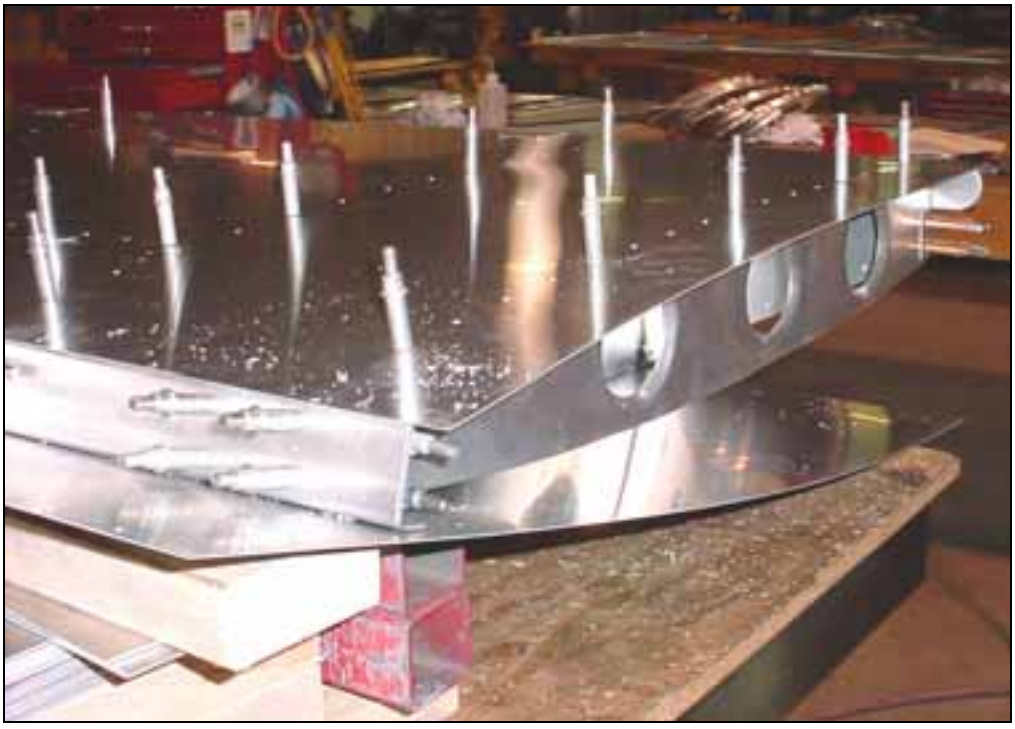
If necessary, build up space between workbench and side of wing to level the channel.

Between the ribs, check that the rear channels are level.

Spirit level bubble.

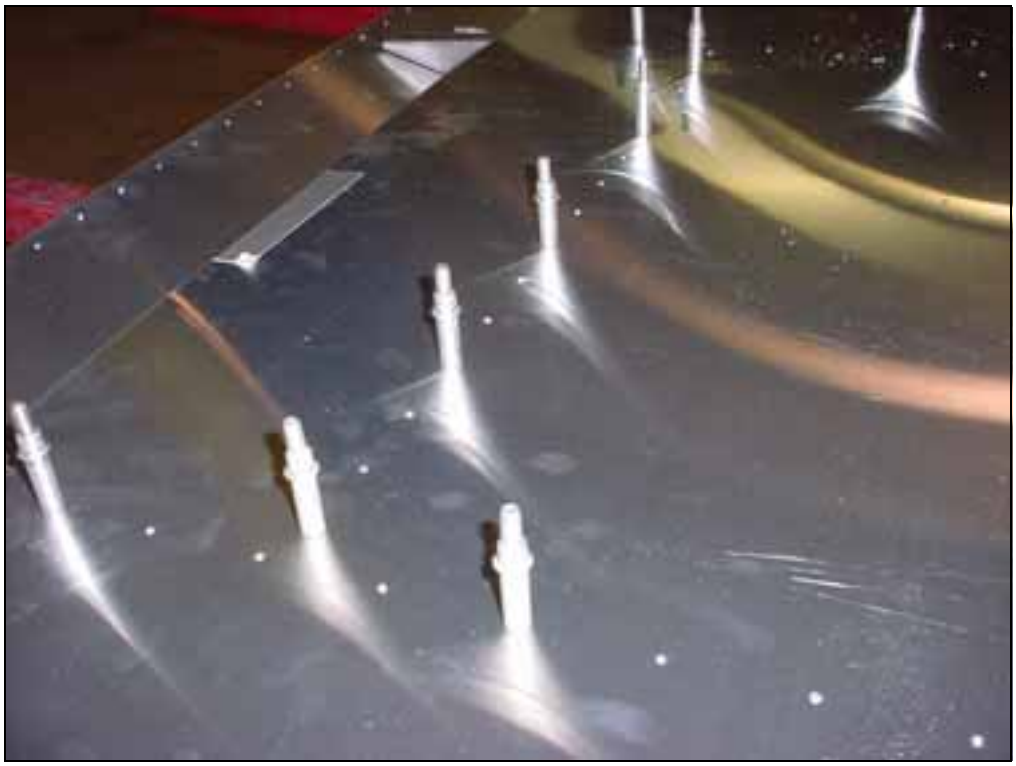
As always, drill and cleco when the rib flange centerline (rivet line) is visible through the predrilled holes in the skin.

Start at the front. Drill and Cleco the first hole in each rib.



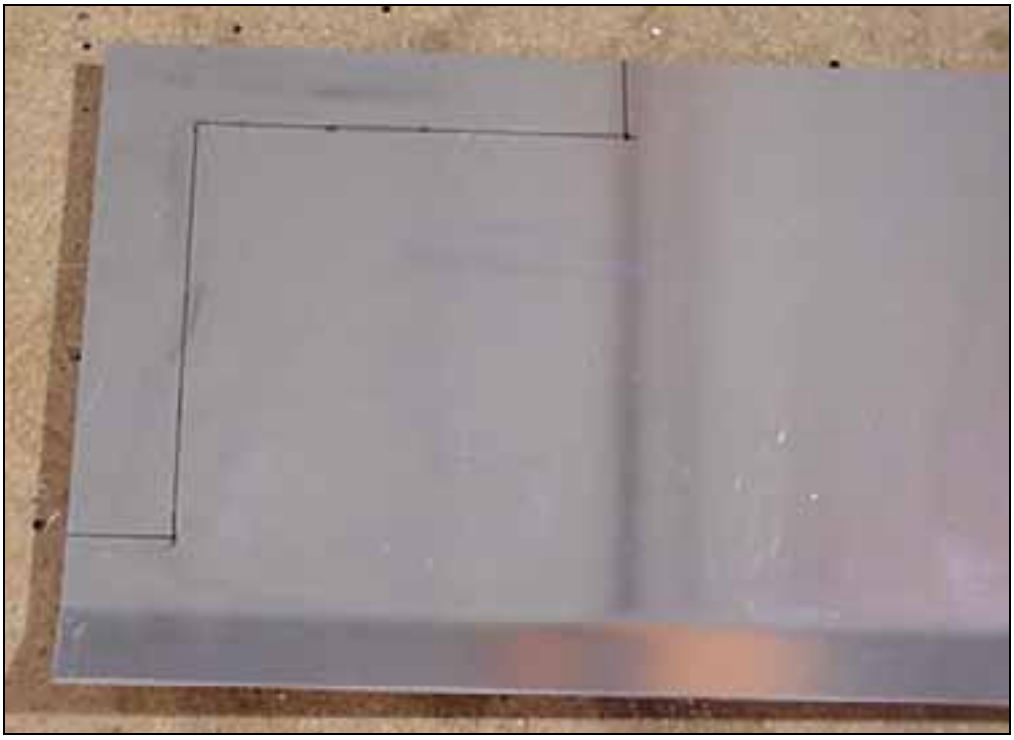
Drill and cleco every 4th hole (or 3rd hole).

NOTE: At rib number 4 it will be missing the first few holes, this is for the Strut Angle 7V8-4SP will be drilled later.



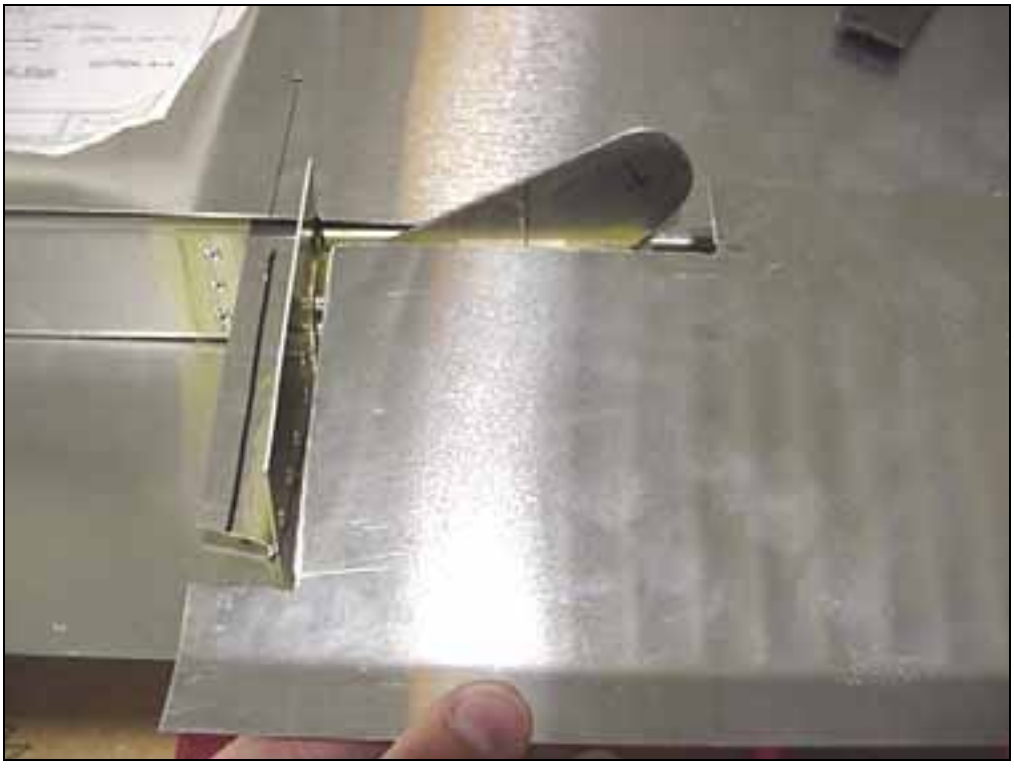
Wait to dill the rivet line through the rear channels.

Finish drilling the ribs and fuel tank channel.



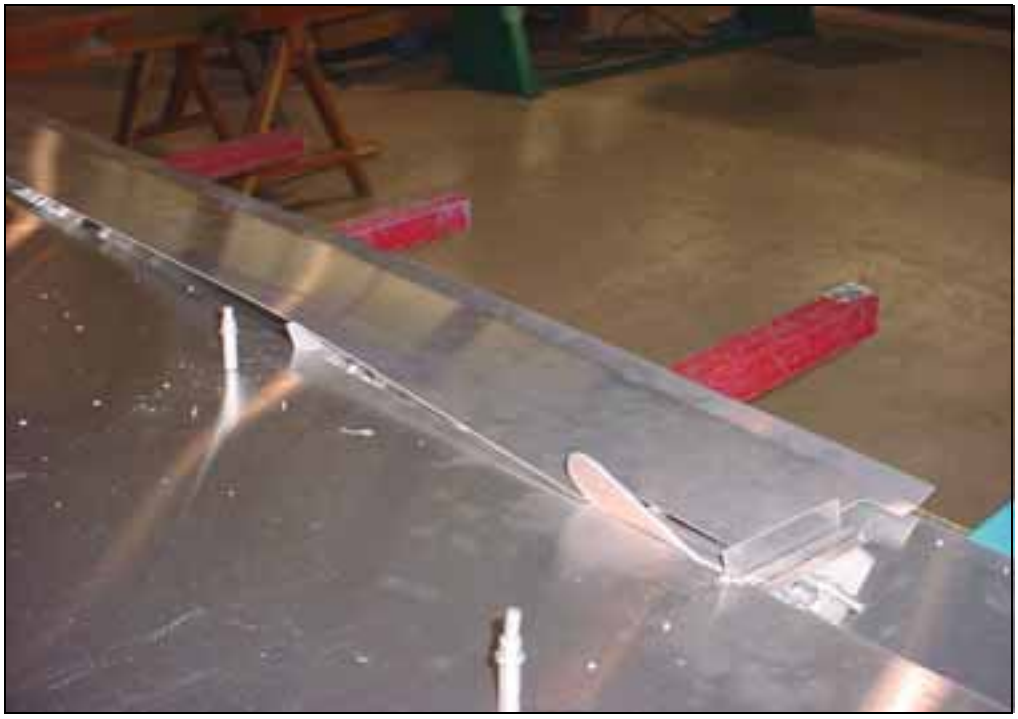
7V7-4 Inboard Lower Trailing Edge

Layout the cut out on the inboard and cut (drawing 7V-7).



Cutout to make room for the rear strut attachment and bracket.

Double check before cutting.
ORIENTATION: The bent edge is towards the rear.



DETAIL: Layout over the bracket 7V4-6

LAYOUT: Layout the location of the slots for the brackets 7V4-6, Ref. drawing 7-V-7
CHECK: Position the lower trailing edge 7V7-4 on the wing to check the location of the cutout for the brackets.

Location of the slots over the bracket.

To cut the slots: drill a series of holes with #40 drill bit.

Use a file to connect the holes and to straighten the edge of the slots.

NOTE: Slot is open towards the front.

7V7-4 Inboard Lower Trailing Edge

Layout the rivet line on 7V7-4 and 7V7-5. Do not drill at this time where the flaperon bracket are located, there will be an “L” angle on each side of the bracket (drawing 7V5). The lower trailing edges (7V7-4 and7V7-5) are positioned on top just for drilling, and will be placed under the lower rear skin (7V7-3).

Clamp the tailing edges flush.