## STOL CH 801 WING ASSEMBLY

#### **SECTION 7**

# "INSTALLING THE BOTTOM SECTION OF THE LEADING EDGE SKIN"

### **Compass Check**

- 1. Remove the strut pick up bracket from the main spar.
- 2. Position the skin and drill to the spar.
- 3. Drill rib rivet holes.

## STOL CH 801 WING ASSEMBLY

### **SECTION 7**

## "INSTALLING THE BOTTOM SECTION OF THE LEADING EDGE SKIN"

### **Helpful Building Tips**

- See section six Helpful building tips
- See photo V6-0
- The skin is made in two pieces 8V7-1 I/B (inboard) and 8V7-1 O/B (outboard)

Section 7: INSTALLING THE BOTTOM SECTION OF THE LEADING EDGE SKIN



file V-80 Photo V7-1

Remove the strut attach bracket from the spar.



The leading edge skin consist of two pieces 8V7-1 O/B and 8V7-1 I/B.

The skin 8V7-1 I/B is the largest and is installed first.

The location of the precut slots for the slat attachment brackets is the best indicator in determining which skin is for the left or right wing.

file V-81 Photo V7-2

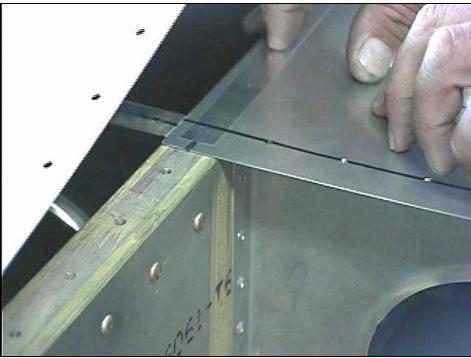
Install the leading edge skin.

This skin fits under the rear skins at this time to facilitate transferring the rivet holes from the predrilled holes in the rear skin.



The leading edge skin goes under the rear skin and flush with the rear edge of the spar cap. Lateral position is established by aligning the predrilled holes with the rib centerline.

file V-83 Photo V7-3

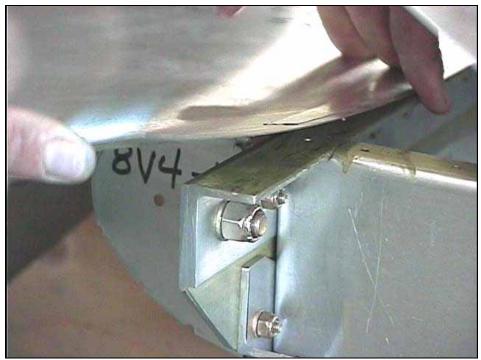


file V-88 Photo V7-4



Nose skin is flush with rear of spar cap.

file V-86 Photo V7-5

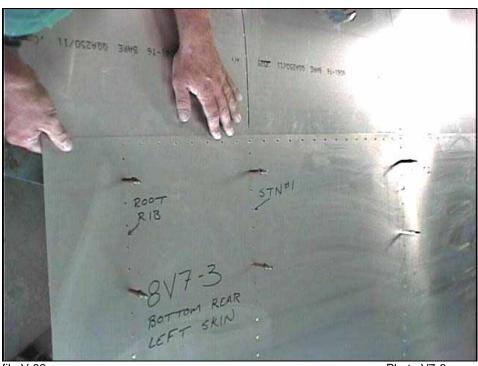


file V-87 Photo V7-6



file V-84 Photo V7-7

The edge of the skins are to be flush with each other. Clamp securely.



Take your time to establish the proper alignment.

file V-82

Photo V7-8

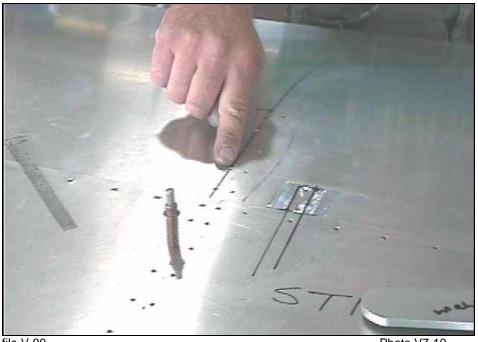


When drilling the rib rivet holes, drill only the holes on the bottom rib flanges.

file V-91 Photo V7-9

Proceed to drill the rib rivet holes. - Align each rib center line, drill, cleco -3/32 drill.

Where the rear skin was installed every 8<sup>th</sup> to 10<sup>th</sup> hole was drilled in the main spar. Drill these same holes through the leading edge skin and re cleco.

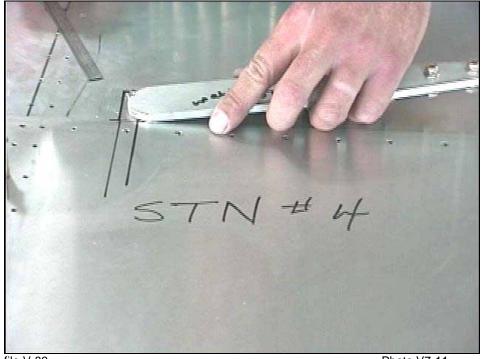


Disregard the double run of rivet holes shown in this photo.

Second row is drilled in assembly instruction section 8.

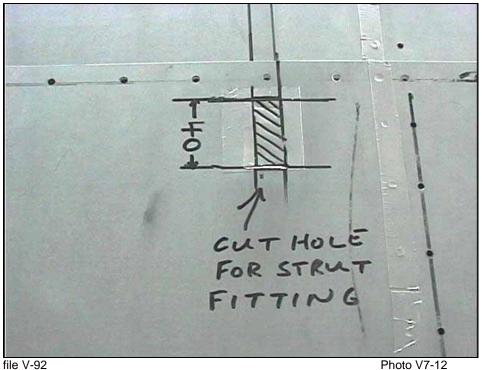
file V-90 Photo V7-10

At station #4, (photo V6-9) extend the lines you made earlier for the main strut attachment clearance hole onto the leading edge skin.



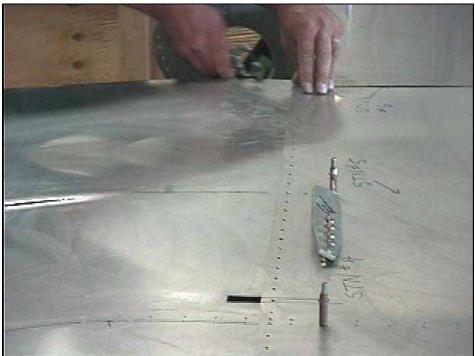
The strut attachment runs through this area.

file V-89 Photo V7-11



Drill out the corners of the hole, cut and file to size. The edge of the hole closest to the main spar is flush with the forward edge of the spar.

Strut attachment clearance hole layout.



file V-85 Photo V7-13

Cleco the leading edge skin back in position with the hole cut for the main strut attach bracket. Test fit bracket to be sure of correct clearance. But don't install it permanently yet.

Position the O/B portion of 8V7-1 similar to the O/B skin placement. The O/B skin will slide under the I/B skin at rib #6, lateral positioning is established by aligning the predrilled holes at rib station #7 with the rib centerline.

- Clamp the skin to the spar and drill every 8<sup>th</sup> to 10<sup>th</sup> hole along the main spar rivet line. Use a 3/32 drill and cleco.
- Drill the rib rivet line at rib #7.
- At rib #6 drill the holes only half way through the O/B skin.
- Remove the O/B skin and complete the drilling for rib #6.
- Remove the I/B skin.
- Re-install both 8V7-1 skins as follows: 8V7-1 I/B over the rear bottom skin at the main spar. 8V7-1 O/B over the rear bottom skin at the main spar and A7 rib station #6. When these skins are riveted (last part of section 8) they will be located in this same manner.
- Cleco in place.
- Complete the drilling of all the rivet line holes along the spar with a 3/32 drill.
- Open all holes in the spar rivet line except the last two at either end of the main spar with a #20 drill, clecoing generously as drilling proceeds.
- Open all rib rivet holes except the last thirteen closest to the main spar at station #4 with a #30 drill clecoing generously as drilling proceeds.
- Remove both leading edge skins and place aside for the moment.

I have checked my work and parts list and confirm to myself, that all items listed in this portion of the elevator hinge have been installed.					
or the elevator	r ninge nave been insta	ilea.			
Signed:	Date:				
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Revision List:				
Revision	Summary	Revised By:	Date:	
3.0	Reformat	SH	8/18/1999	