

# STOL CH 801 LEADING-EDGE WING SLATS ASSEMBLY

## SECTION 1 of 3

### PARTS LIST AND ASSEMBLY INSTRUCTIONS

#### CONTENTS

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# STOL CH 801 WING SLATS ASSEMBLY

## SECTION 1

### “INSTALLING THE RIBS”

#### Compass Check

1. Install Std “L” stiffener
2. Install rear channel
3. Install ribs.

# STOL CH 801 WING SLATS ASSEMBLY

## SECTION 1

### “INSTALLING THE RIBS”

#### Helpful Hints

1. Work from centerlines where ever practical.
2. When installing the ribs press the nose tight into the corner (90<sup>0</sup> bend) of the skin.
3. Where things are difficult to hold, get the help of a second set of hands.

**STOL CH 801 SLATS ASSEMBLY - SECTION 1**  
**"INSTALLING THE RIBS"**



file S-9

Photo S1-1

A sample of parts required.



file S-10

Photo S1-2

The slat support and slat ribs have been pre-assembled and drilled in factory jigs.

Keep these parts together in the matched sets.



End view of slat.

file S-44

Photo S1-3



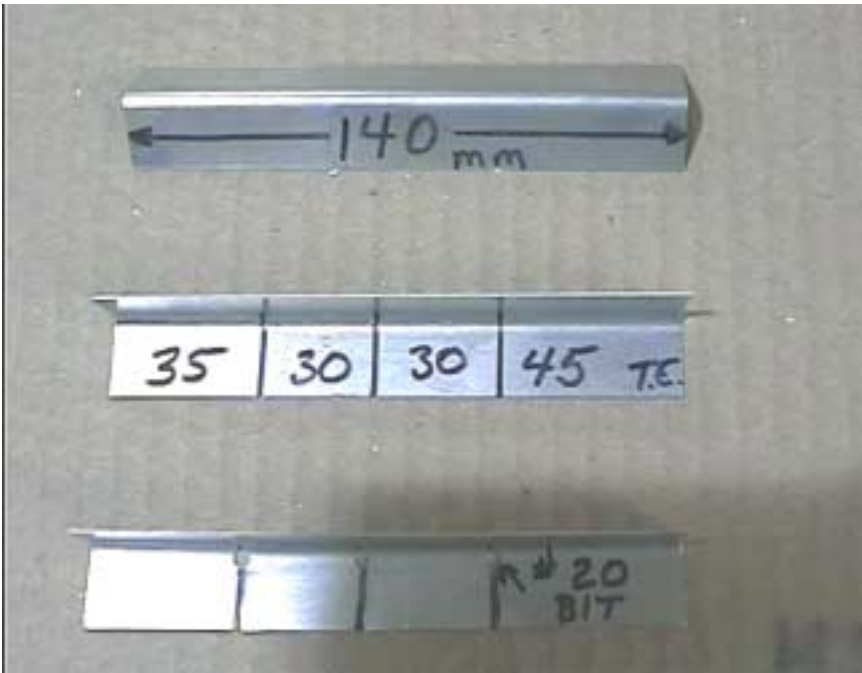
Same end view, turned other side up.

file S-45

Photo S1-4



Eight of the twelve ribs have been predrilled for the wing attachment brackets. These eight will require the installation of std "L" brackets.



Very similar to the nose ribs on the wing.

Cut eight pieces of std "L" , drill and cut as shown.



Clamp the std "L" in place keeping it flush with the flange of the rib.



The slat supports have 6 holes. 4 will hit the tabs on the formed "L", 1 will be above the "L", and the 6th is just at the top edge of the formed "L" at the rear of the rib.

Drill #20 from the back of the rib.





6 RIVETS A5

A look at a completed assembly, photo of std "L" clecoed to the rib and slat support. Deburr, Cleco, rivet



file S-13

Photo S1-10

Cut the eight foot std "L" to the same length as 8-S1-4.



file S-14

Photo S1-11

Do not place rivets where the predrilled rib rivet lines intersect the "L" .

Mark the center line on the slat skin, rear channel and the std "L"  
 Position the std "L" in the skin as shown in the photo. Drill and rivet the std "L" in place. Use a #30 drill bit.



file S-18

Photo S1-12

No rivets where "L" rivet line intersects the rib rivet lines.



file S-14

Photo S1-13

The rear channel 8S1-4 is symmetrical.

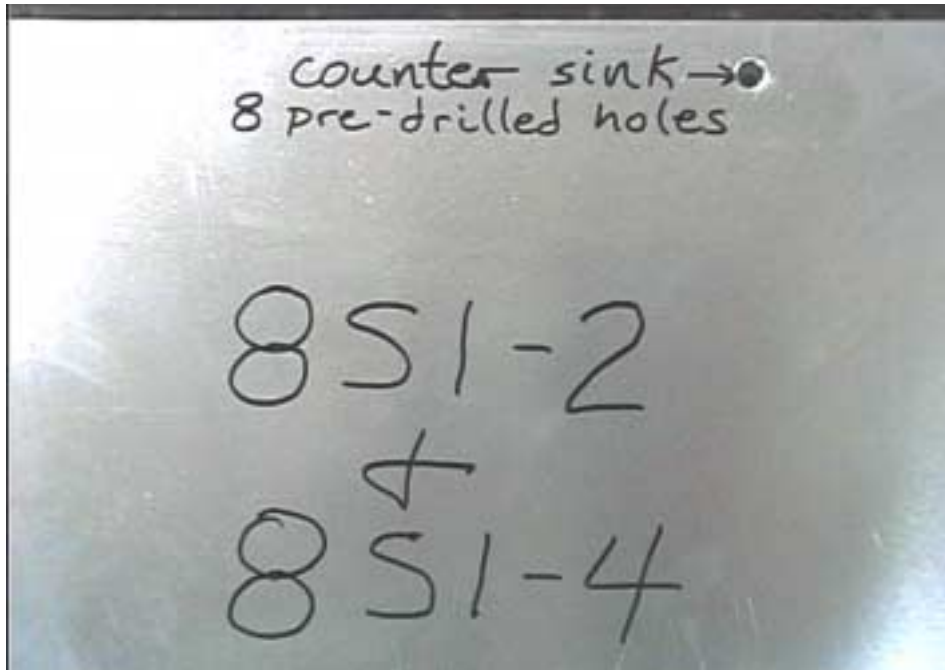
Clamp the channel in position on the skin. Keep the centerline on it's flange aligned with the center of the seven predrilled holes in the skin and drill. Cleco as drilling progresses.



file S-17

Photo S1-14

Mark where trimming is required at slots in the skin. Remove channel, trim and re-cleco the skin in place.



file S-19

Photo S1-15

The tack rivets are not structural. They are only installed to hold the parts in position until all other drilling is completed. There is no need to remove the tack rivets.

Counter sink the holes slightly and install seven rivets using a rivet gun with a flat bottom tip to produce flush rivet heads.



file S-25

Photo S1-16

Use a #30 drill. The instructions with photo's S1-16, S1-17 and S1-18 refer to the rib flange not the std "L" flange attached to the rib.

Place the rib in position inside the skin, press the nose firmly into the bend and radius of the skin.

Drill the most forward hole position into the ribs, lower flange and cleco.

Move to the next rib and drill the most forward hole.

Repeat for all rib positions.



file S-3

Photo S1-17

The most forward rib rivet hole.



file S-1

Photo S1-18

All ribs with forward two holes drilled and clecoed.

Repeat the process for the second most forward hole position in all ribs, the third, fourth etc.

Make sure the rib is kept on center and that a cleco is placed in every hole as drilling proceeds.

Best results will be obtained if the center rib is drilled first then either outside rib next.

A definite concave shape will develop as drilling and clecoing progresses.





file S-4

Photo S1-19

Mark the position of the rivet holes on the std "L".  
Place these holes directly opposite the rib rivet holes.  
Drill these with a 1/8 drill and cleco. Now remove the clecos in the ribs and mark the rib position on the skin and each rib.  
Remove the ribs. Deburr and re-cleco in place.  
Rivet the ribs and std "L" on the ribs in place.



file S-26

Photo S1-20

Riveting ribs into place.

**STOL CH 801 WING SLATS ASSEMBLY - SECTION 1**  
**"INSTALLING THE RIBS"**

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.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

**Revision List:**

<b>Revision</b>	<b>Summary</b>	<b>Revised By:</b>	<b>Date:</b>
3.0	Reformat	SH	05/05/1999
3.1	Reformat	MJM	08/05/2002