### Section 4C DOOR LATCH & STOP (continued from 4b)



8F19-10 EXTERIOR DOOR HANDLE ASSEMBLY (LEFT & RIGHT)



ORIENTATION: The lock and key is towards the front. Inside & exterior handle point towards the rear.

There are left and right side Handles. To open, the handle will rotate upwards.

Photo of the exterior door handle in the close position (horizontal).



Photo of left interior door handle in closed position. Note: The exterior door handle assembly will only allow rotation of 90 degrees.

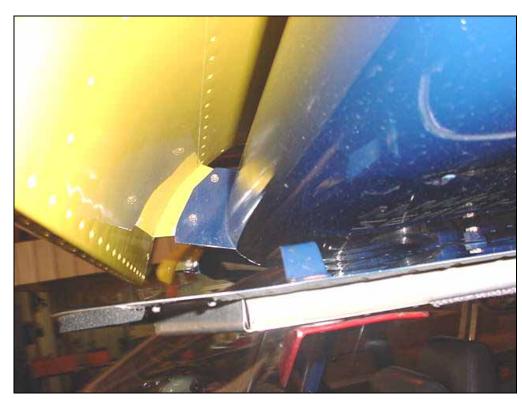
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#### 8F19-11 INTERIOR HANDLE (LEFT & RIGHT)



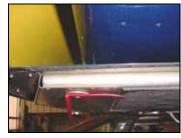
Left latch assembly in the open position.



Door open: The exterior latch handle on the door is forward of the leading edge

Cleco the Bottom Forward Gusset 8F19-3 on the inside of the door. Locate the center of the door latch on the Gusset. Drill a #30 pilot hole through the gusset and into the door skin 8F19-2. When drilling the center pilot hole be sure the drill is square to the surface as it will set the pilot hole for the exterior handle.







Center of door latch:

VERTICAL POSITION Mark a parallel line 32mm up from the rivet line in the bottom tube 8F19-8

HORIZONTAL: Position the front of the Exterior handle 8F19-10 even with the front bent in the Gusset 8F19-4

Locate the 2 holes for the mounting screws 19mm from the center.

### 2 HOLES #20

Check that the exterior handle will be in a horizontal position when the door is closed.

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Drill a **7/8**" hole in the Lower Door Skin 8F19-2 (center of exterior latch) Drill a **9/16**" hole in the Gusset 8F19-3 (center of interior handle)

BACKGROUND: To allow for maximum separation between the exterior door handle and the wing leading edge, it is best to reference the door latch from the front bend in the gusset 8F19-4 instead laying out 53mm form the aft bend as shown in the above photo and previous photo.



Unibit (step drill)



Unibit in electric drill



NOTE: For additional support add a doubler on the inside of the door skin.

CHECK: if the screws are too short, replace them with Metric screw M4-12-.07mm

LOCK WASHERS: use M4 Tooth Washer underneath the head of each screw.

Remove the Gusset. Screw the exterior door handle from the inside.

PHOTO from the CH 701 door (the 801 does not have the diagonal tube).

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Rivet the Bottom Forward Gusset 8F19-3 to the door frame. Screw in the Interior door handle.



PLACARD: Mark the Open & closed position.

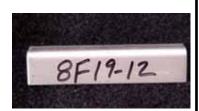
SUGGESTION: Paint the door handle red.

Door latch assembly with striker plate. left side

PHOTO from the CH 701 bubble door

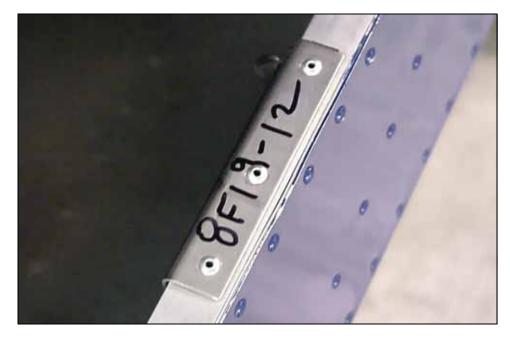
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8F19-12 DOOR LATCH STRIKER PLATE (stainless steel)

Location of the door latch strike plate (8F19-12)



**3 RIVETS A5** 

- Position the strike plate on the cabin side assembly and close the door with the door latch in the closed position.
- Drill three A5 rivets to secure the strike plate in position.



The closed door latch system with the strike plate 8F19-12

Left door with the front seat removed.



Photo of right side.

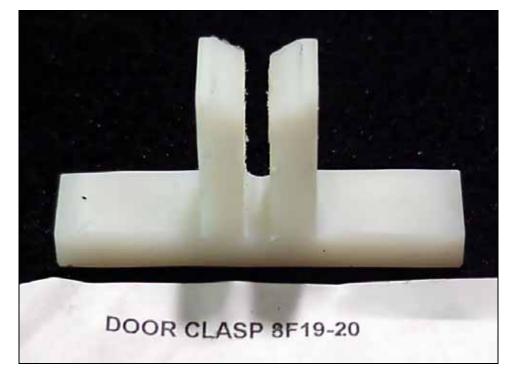
NOTE: the striker plate is not centered on the interior latch.



8F19-21 DOOR RETAINER (welded assembly)

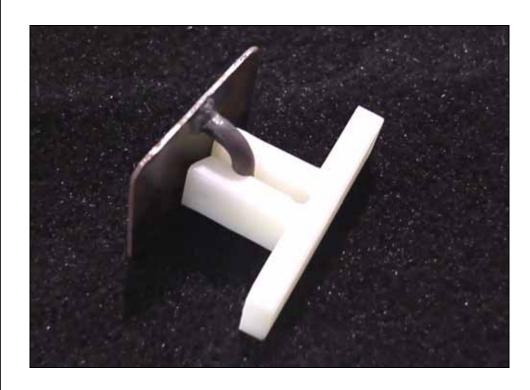
2 RIVETS A5

The Door Retainer will be riveted to the bottom of the door through the lower bent tube 8F19-8



8F19-20 DOOR CLASP

The door clasp (8F19-20)



Join the welded door retainer 8F19-21 to the door clasp 8F19-20.



The door retainer will be riveted to the door while the door clasp will be riveted to the bottom of the wing to allow the door to remain in the open position.

The open door – observe and mark the position of the wing spar on the lower rivet line along the bottom of the door through the bent tube 8F19-8

Tape the welded door retainer 8F19-21 (joined as shown in top photo) on the door skin over the rivet line through 8F19-8.

Open the door to tape the door claps on the bottom of the wing.

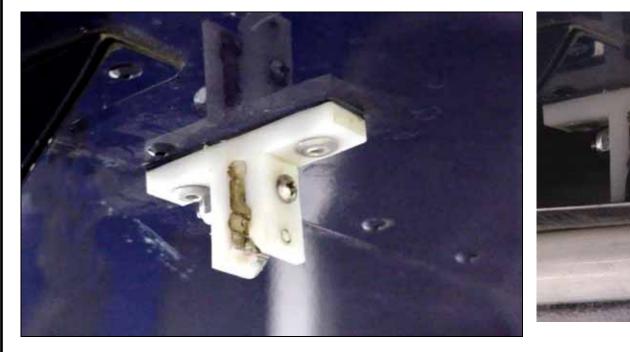
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Position the door claps on the spar or in front of the spar. Do not position it behind the par as the rivets may interfere with the wing tank!

Check the align 8F19-20 and 8F19-21

- Door clasp (8F19-20): Drill one A6 rivet into the wing spar and one A6 rivet into the leading edge skin.
- Retainer (8F19-21): Drill two A5 rivets to the door frame.



A nut & bolt can optionally be added near the top of the door clasp for a tighter grip to the door retainer (tighten bolt to decrease clasp gap) and/or a safety pin can be added to keep the door open.

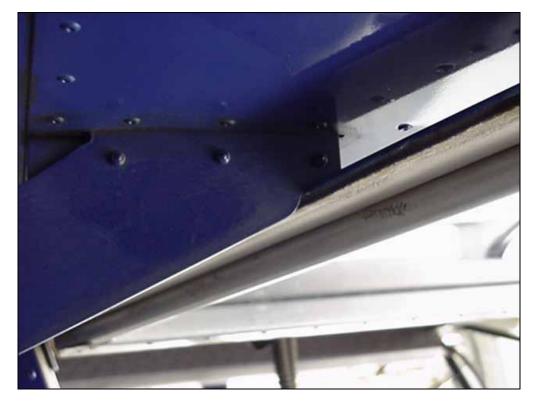


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Cutout the front corner of the Flaperon Bracket 8V4-7 to make room for the door.

Right wing - door closed



Right wing - door open

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8F19-22 DOOR PULL

Left door – we though it was more comfortable to have the door pull pointing down.



The front edge of the door pull is approximately 240mm measured back from the front of the door tube frame.

Door pull on the right door, installed pointing up.

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# 3-1/4" Snap Vents

Available from Aircraft Spruce or Wicks Aircraft Supply.

NOTE: on the above aircraft, the front and rear trim 8F22-9 was not installed.



Next, build the right side door.

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# **SECTION 4 - ASSEMBLY OF THE DOORS**

PART #	PART NAME	QTY	INSTALLED	SIGN OFF
8F-19-2	LOWER DOOR SKIN	2		
8F-19-3	BOTTOM FORWARD GUSSET	1L + 1R		
8F-19-4	BOTTOM REAR GUSSET	2		
8F-19-5	TOP DOOR SILL	2		
8F-19-6	TOP & CENTER CHANNELS	6		
8F-19-7	TOP OUTSIDE CHANNEL	2		
8F-19-8	BENT LOWER TUBE	2		
8F19-9	FRONT & BACK TUBES	4		
8F19-10	EXTERIOR DOOR HINGE	2		
8F19-11	INTERIOR HANDLE	L&R		
8F19-12	DOOR LATCH STRIKER PLATE	L&R		
8F19-20	DOOR CLASP	2		
8F19-21	DOOR RETAINER	2		
8F19-22	DOOR PULL	2		
8F19-23	UPPER DOOR PIANO HINGE	2		
8F22-3	LEXAN or PLEXIGLAS	2		
8F22-9	DOOR FRONT & BACK TRIM	2		
A4	RIVETS	300		

I have checked my work and parts list and confirm to myself, that all items listed in this section have been installed.

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

