

Mark the rivet line along the bottom of the outside flashing, identify the no rivet zone at the front for the gas spring, and at the back for the handle and latch. Layout the rivet pitch.

**Outside Flashing
6C3-3**

Mark the no rivet zone for
**Extrusion Handle
6C3-8**

Cleco the inside and outside flashing to the canopy side frame before the canopy bubble is fitted.

Ref. Front edge 50mm back from the square tube (aft edge of the 1/8" welded plates).

Bottom edge extends down below the bottom of the canopy side frame: It is best to leave a small gap between the bottom edge of the skin and the Longeron than to have the skin damage the paint!



The top flange of the inside flashing will be cut later to clear the canopy tube frames.

**Inside Flashing
6C3-5**

Line up the top flange of the inside flashing even with the top edge of the outside flashing. Layout the rivet pitch across from the rivets in the outside flashing.

For now, remove the inside Flashing from the side frame.



**ACRYLIC CANOPY
BUBBLE
TC (Tinted Canopy)**

Canopy is supplied pre-cut along the front and back to fit the curvature of the fuselage.



Note: Bottom edge of the canopy does not have to be parallel with the longerons.

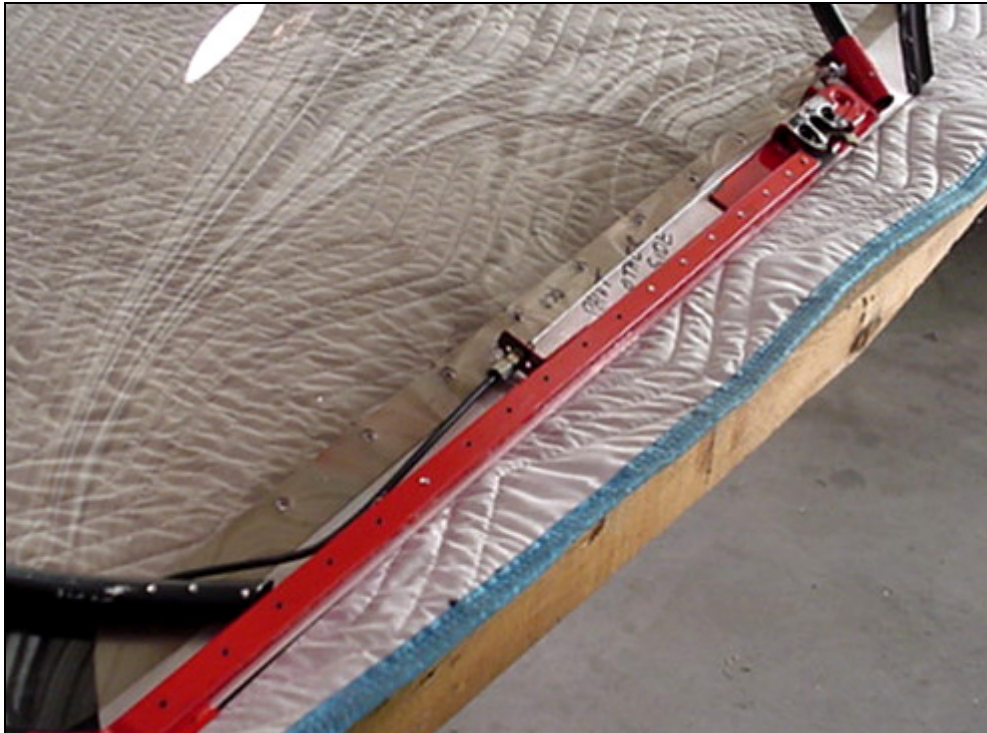
Center the canopy bubble on the fuselage. Check for equal distance between left and right side from the Longeron to the bottom edge.

To move the canopy on and off the fuselage, we advise the job be done with two people.



Position the canopy fore and aft: the front bottom corner is in line with the instrument panel. Check: Look at the canopy on profile to find the highest point for maximum headroom.

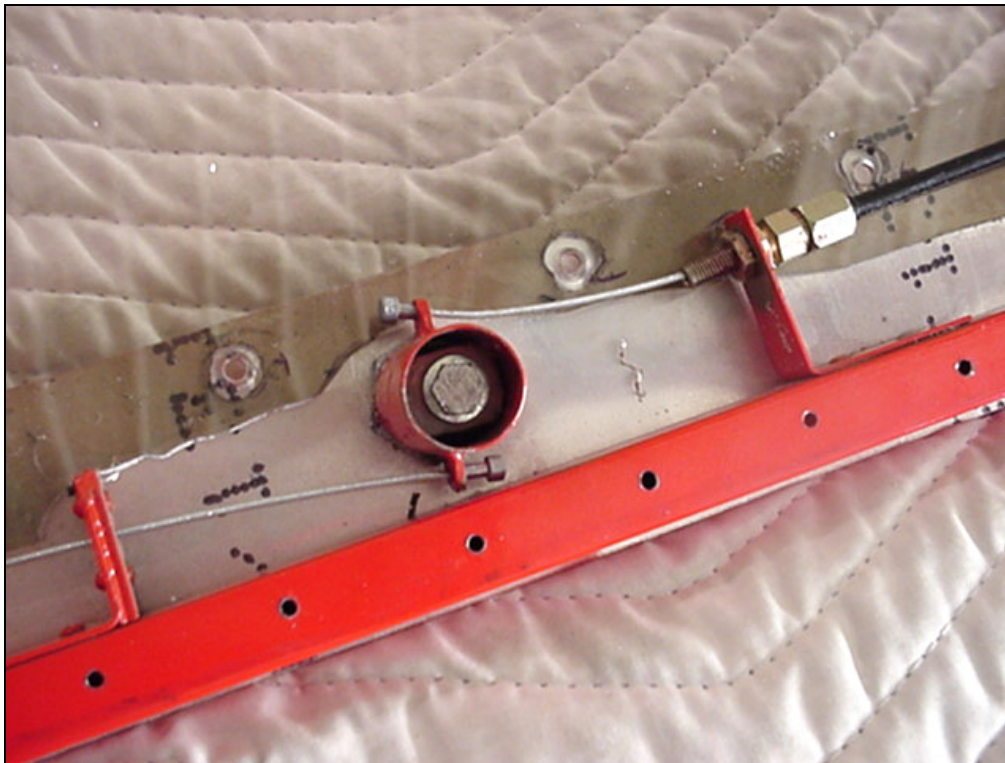
It is normal for the canopy to be more to the rear. The canopy covers more of the Middle Top Skin 6B21-7 than it does of the Forward Top Skin 6C1-4.



With a grease pencil, trace along the top edge of the outside flashing to mark a line on the canopy bubble.

In the photo, notice how there is more overlap at the front than at the rear.

Ref. The bottom diagram on drawing 6-C-4, mark a vertical line on the canopy for the external handle (left side only) at 370mm.



Plan ahead to avoid having to take the canopy bubble on and off too many times!

It will be necessary to trim the bottom edge of the canopy to make room for the handle.

Also mark the location of the Cable Supports 6C4-1 on the outside of the canopy. Plan to layout the pitch for the screws to avoid these locations.

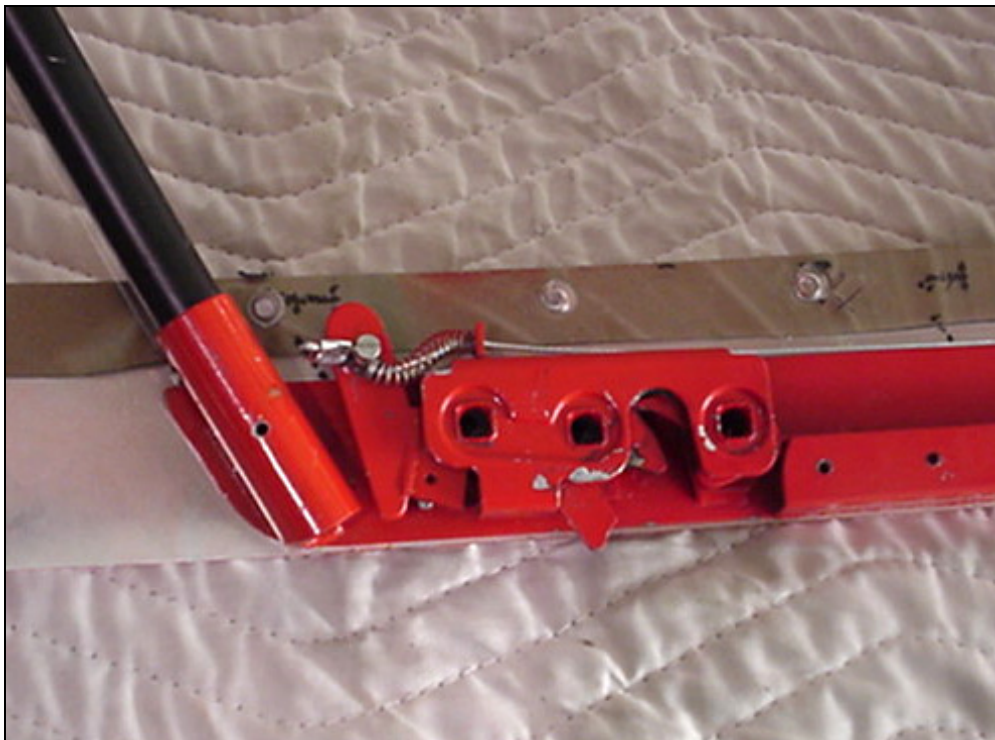


Rear Canopy Frame 6C3-1

The Tube Frames are not supplied cut to length. They are approx. 6" oversized at each end (extra length is required to bend the tube in the manufacturing process)

The height of the frames is adjusted from the inside to fit the bubble canopy.

Mark the contour of the canopy on the fuselage for future reference. Work on the Rear Tube first, then the front.



Trial test, insert the rear tube frame inside the welded 7/8" tube at the back of the canopy side frame. The Tube Frame is too long if the canopy is raised off the fuselage.

Depth gauge: Mark a line 60mm up from the bottom of the tube frame 6C3-1

Keep trimming off the length of the tube frame until the canopy is about to touch the fuselage: a little space will make it easier to install the rubber trim seal along the back edge.



CHECK: Check that the width of the Rear Canopy Frame maintains the required width of the canopy side frame in line with the Striker Stud 6C2-1.

Adjust the frame as necessary to fit the fuselage before any holes are drilled in the tube.

Open and close the canopy to check the alignment of the canopy frame with the striker studs. Also check that the width of the canopy matches the width of the fuselage.



When the canopy bubble is added to the frame, it will not improve or worsen the alignment of the canopy sides on the fuselage.

Note: On the finished assembly it will still be required to push down on the left and right sides separately to engage the latch mechanism in the closed position. Turn the handle and push the canopy up to open.

The width of the Rear Tube is what keeps the left and right sides canopy side frames in alignment over the Strike Studs 6C2-1.



**Front Canopy Frame
6C3-2**

The Tube has to clear the sides of the instrument panels

Height measured on center line: approximately 45mm between the top of the tube and the forward top skin 6C1-4

Keep the front tube low towards the forward top skin for maximum visibility over the nose.



(Photo of right side showing the flexible cable housing to connect the right latch to the canopy open handle mounted on the left side).

The bottom of the canopy tube frame is cut-off on an angle and rests on top of the canopy side frame.



Drill and Cleco through the canopy bubble into the Rear Bent Tube Frame. Use a new (sharp) #40 drill bit.

On the canopy bubble, layout the pitch for the screws centered on the Rear Tube Frame. (It may be necessary to peel back the protective coating from the inside and outside to clearly see where the tube makes contact with the bubble). Check that the bubble touches the tube along its full length.



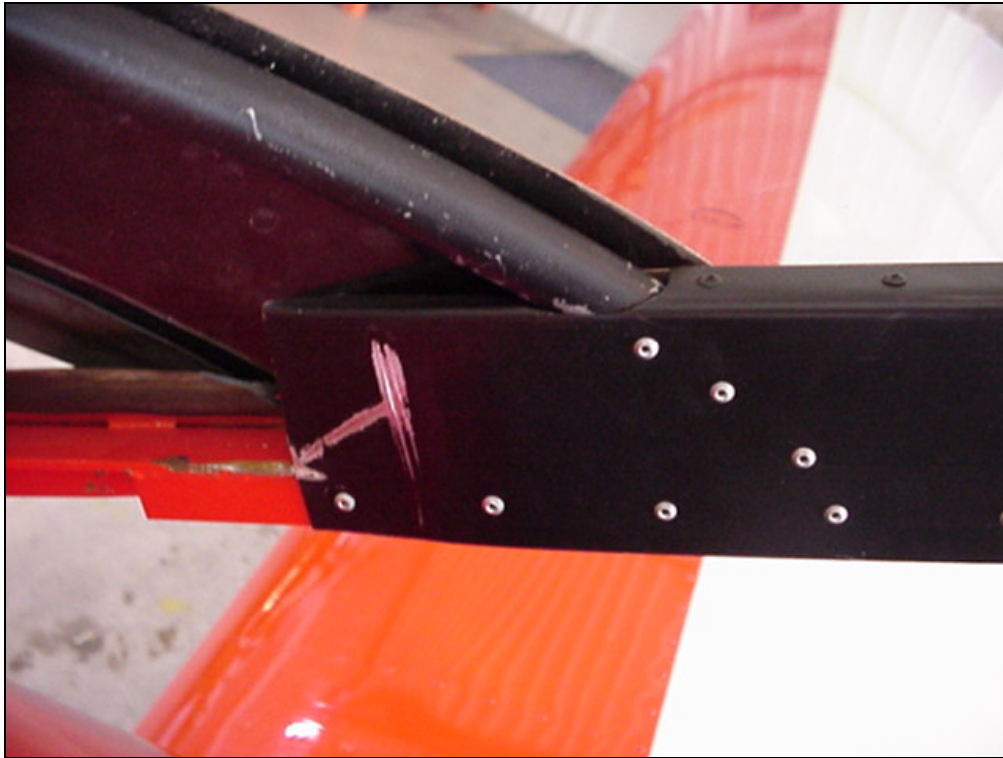
Have someone sit inside and hold the front tube against the bubble canopy.

Drill and Cleco through the canopy bubble into the Front Bent Tube Frame #40 drill bit.

Drill the Outside flashing to the Front Canopy Frame.

Remove the canopy bubble from the frame.

Check that the bubble touches the tube along its full length.



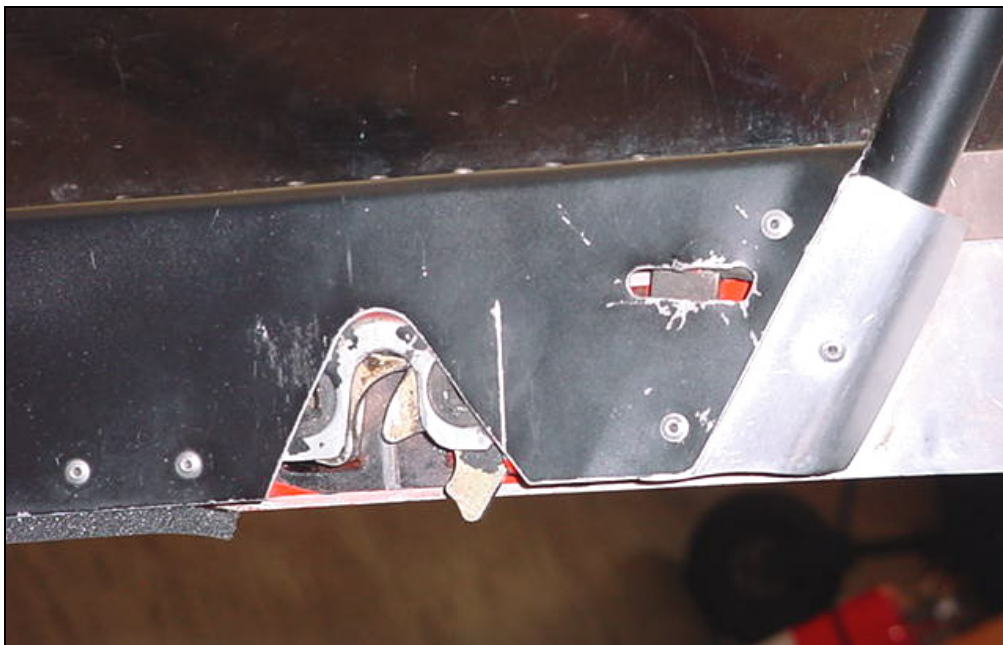
FRONT END

Trim the top flange of 6C3-5

Cut off the top flange of 6C3-5 and radius the corner to go around the tube frame.

3 RIVETS A5 in the Front Canopy Tube 6C3-2

Cleco the inside flange to the canopy side frame through the hole drilled earlier.



AFT END

Cut the aft end of the Inside flashing C3-5 parallel to the tube frame.

Cutout for striker stud
Made a triangular cutout for the Striker Stud 6C2-1

NOTE: The slot is to insert a screwdriver and trigger the lever extension on the latch to open the canopy - this is a way to open the canopy if the cable to the latches were to fail!

COMMENT: Pushing the bottom portion of the lever extension back can also open the latch. Cut off the bottom edge of the flashing (inside and outside) to reach in with a screwdriver. A bend angle with 3 rivets can be used to close the gap between the aft edge of the inside flashing with rear canopy frame.



Alternative: Larger cutout on inside flashing 6C3-5 to make room for the latch



Stretch the top flange of the inside flashing to follow the curvature of the fuselage.

Remove the Inside Flashing from the canopy frame. Lay the top over a dolly block (or the back side of a vise) then with steel ball peen gently hammer to stretch the flange. Avoid hammering in one spot for too long to avoid ripples or waves in the top flange. Then use a plastic or rubber mallet to bring the flange back to 90 degrees.



Inside Angle 6C3-4

Drill corner relief holes and cut slots in the top flange to curve the outside flange to match the curvature of the fuselage.

The top flange is riveted to the under side of the top flange of the Inside Flashing.

Towards the rear the rivets are spaced closer together between the relief cuts.

For now, drill and Cleco with pilot holes every other hole. Additional adjustment may be required for a better fit after the canopy bubble is positioned on the frame.



Front Flashing 6C3-7

Trim top and bottom edge of the front flashing to fit the fuselage.

Cleco through the middle hole, wrap the flashing around the side to trim along the top edge; then trim the front edge. With the bubble canopy removed from the frame (upside down on the floor) cleco the Flashing to the bubble. Line up the offset line and back drill through the pilot holes in the canopy (set the Clecos from the bubble side). Trace along the front edge of the bubble for an indication of how much to trim off.



Side Cover 6C3-6

Use a hack saw to cut a slot through the middle of the bend. Drill a small corner relief hole at the end.

The cover fits in between the Outside Hinge Angle and the Canopy Frame. Remove the Hinge bolt and insert through the $\frac{1}{4}$ " hole drilled at the front of the Cover.

Taper the front end of the cover to avoid interference with the longerons when the canopy is in the open position. The front of the cover is inside the Forward Top Skin 6C1-4

Cleco to the two welded plates along the top of the canopy frame.