This Service Instruction is issued per the requirements of ASTM F2295 and falls under the category of Service Notification.

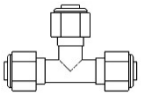
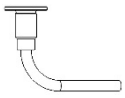
EFFECTIVE DATE: This Service Instruction is effective ***January 28, 2015***

SUBJECT: *STATIC PORT RETROFIT*

MODELS AFFECTED: *CC11-100 AND CC11-160 S/N 0001 THROUGH S/N 00293*

PURPOSE: The static port may be repositioned from inside the cockpit under the instrument panel to two static ports, one on each side of the fuselage.

PARTS LIST:

IMAGE	PART	DESCRIPTION	QTY
	AN924-3D	BULKHEAD NUT	2
	HDW-100-220	1/4” DIAMETER SINGLE WIRE HOSE CLAMP	4
	HDW-261-740	FITTING, IMPERIAL TUBE TO PIPE	5
	HDW-261-760	IMPERIAL NYLON UNION TEE	4
	HDW-261-764	INSERT, IMPERIAL FITTING	17
	SC34202-001	PLATE, STATIC PORT BACKING	2
	SC34204-001	STATIC PORT, EXTERIOR	2
	TC9350-038	STATIC PORT PLACARD	2
N/A	HDW-SR-5065B	NYLON SNAP RIVET, BLACK	6

N/A	RM1004-020	ROUND-IT PROTECTIVE WRAP, 3/16”	3’
N/A	RM5594-004	TUBING, POLY-FLO, 1/4”	10’
N/A	*RM0012-101	3M ADHESIVE PROMOTOR	1 BTL
N/A	*RM1015-008	.50” LOOP TAPE, ADHESIVE	49”
N/A	*RM1016-008	.50” HOOK TAPE, ADHESIVE	49”
AVAILABLE LOCALLY			
N/A	RM0568-003	LOCTITE 242, BLUE	AR
N/A	RM1075-002	CABLE TIES	AR

***For aircraft with double-sided tape only.**

INSTRUCTIONS:

1. Read all instructions before beginning any work.
2. Remove rear seat bar and if equipped, stow rear sling seat per the Pilot's Operating Handbook (POH).

CAUTION

Use extreme care in handling interior panels as they can crack easily and sharp corners may damage fabric covering on the aircraft.

3. Remove right forward interior panel by removing the nylon snap rivets along the bottom and aft edges (see Figure 1 below). Slide the panel slightly forward and down to clear the lip by the door frame then aft and out the door opening.

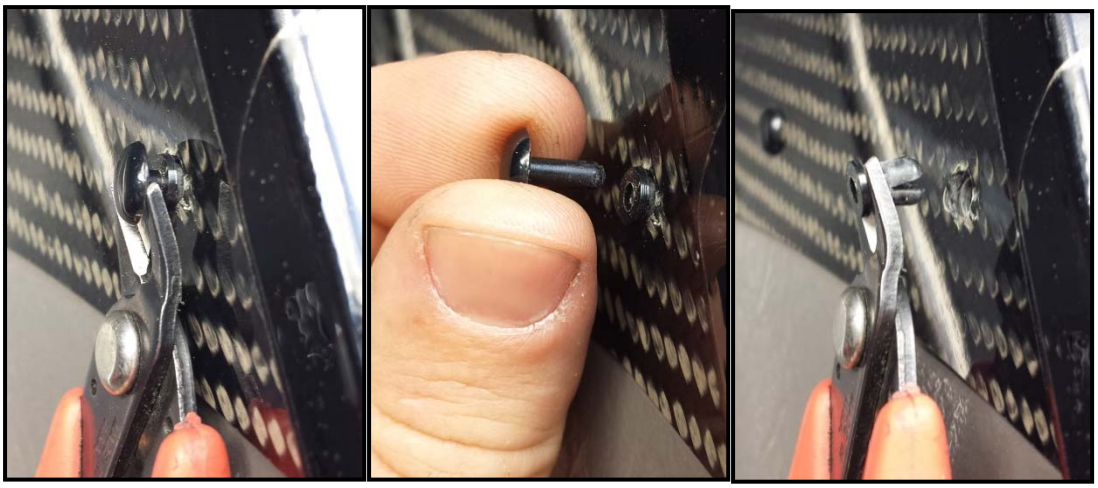


FIGURE 1 - Removal of Nylon Snap Rivet

NOTE

On removal, nylon snap rivets may break. Six extra rivets are included in the kit.

4. Remove left forward interior panel.
   - **a.** Remove fuel selector handle, gate and fuel selector panel from the left forward panel.
   - **b.** Remove the pulley cover on the left side of the floorboard near the center of the interior panel.
   - **c.** Remove nylon snap rivets along the bottom edge of the left forward panel, and the rivets along the bottom edge of the aft interior panel.
   - **d.** Remove nylon snap rivets along vertical seam between left forward interior panel and left aft interior panel.
   - **e.** Check the left interior panel on your aircraft to determine if it is secured to the window frame using hook and loop tape (Velcro™) or double-sided tape. If hook and loop tape, skip to step **h.** below and skip steps 15-20 later. If double-sided tape, skip step **h.** below.

f. Install masking tape on fuselage below the panel seam as shown in Figure 2.

g. From outside the aircraft, run a putty knife between top lip of the panel and the fuselage along the length of the panel to break the bond of the double stick tape.

FIGURE 2 - Tape Installation on Fuselage

h. Open top of left interior panel by slipping a piece of sheet metal strap (approximately 2" wider than the hook and loop tape width and about 2" shorter than the hook and loop tape length) in one end and keep pushing it in, unlocking the hook and loop tape (see Figure 3 below). Tape in place so hook and loop tape stays unlocked while completing the rest of this service instruction.

FIGURE 3 – Metal Strap Placement

i. Reach behind left aft interior panel through the lap seam between left center and left aft interior panels. Using a putty knife, unstick the left center panel from the double sided tape along its aft edge.

j. Remove four bolts securing the pilot's throttle assembly from the left forward panel. There are multiple spacers on each bolt, use care to ensure hardware is not dropped (see Figure 4).

k. Remove clevis screw holding the throttle linkage rod to the forward throttle lever. Tape the throttle linkage rod to the panel so it doesn't puncture the fabric.

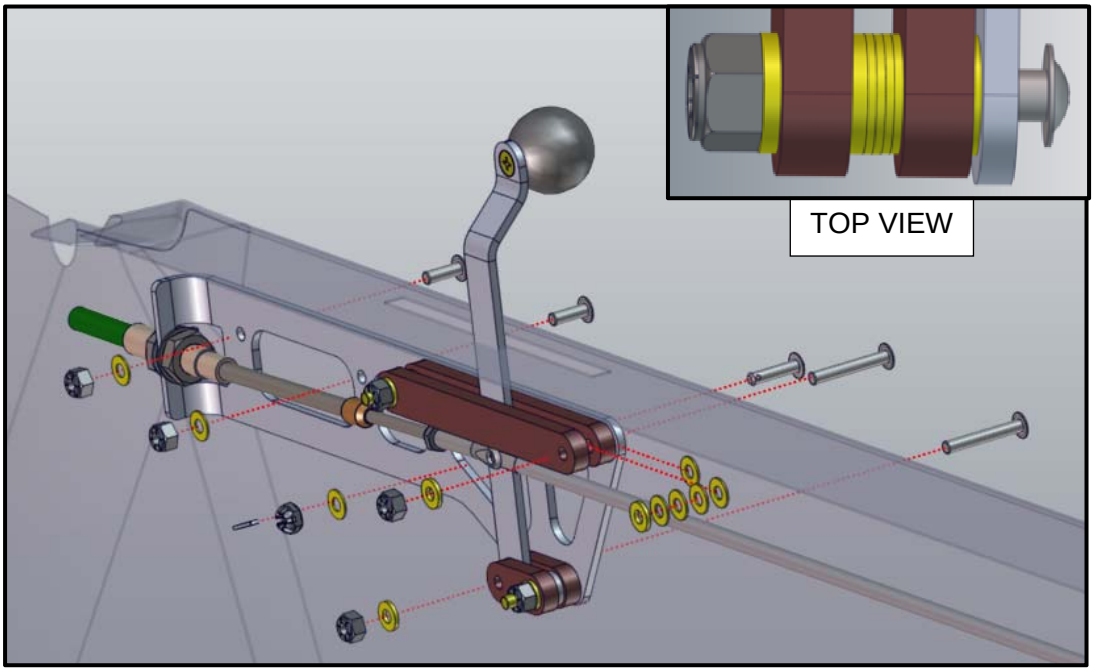


FIGURE 4 – Throttle Linkage Rod and Hardware Removal

5. Remove left forward panel by gently bending the front corner of the panel inward. Pull forward to free the aft edge of the panel then slide the panel aft to clear instrument panel. Lift panel out of aircraft front end first and set aside. It may be necessary to disconnect LH rudder cable from rudder pedal in order to gain sufficient clearance at lower aft corner of front interior panel section where it wraps around rudder cable fairlead, see Figure 5.

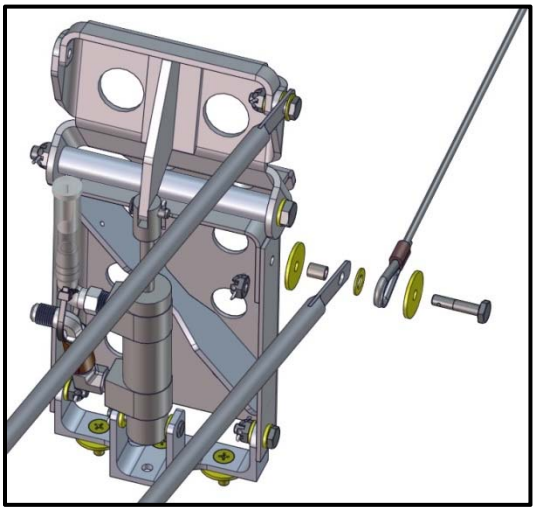
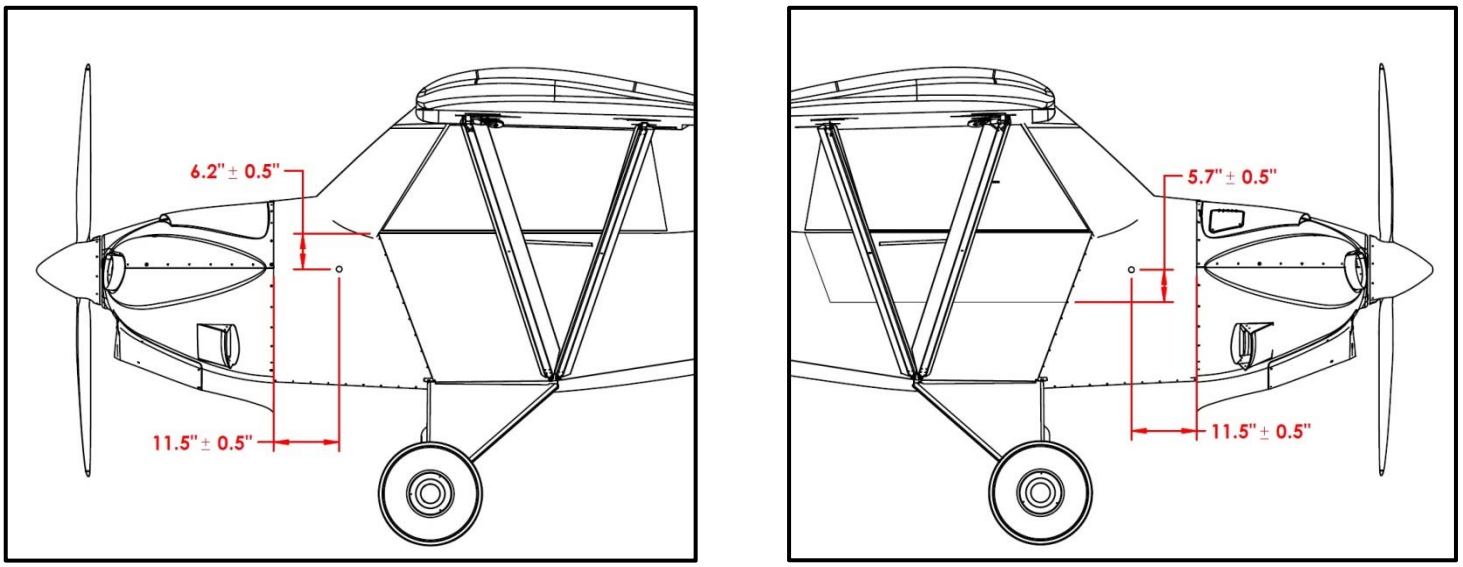


FIGURE 5 – Rudder Cable Disconnection

6. Mark each port position using the dimensions provided below. The holes are positioned in the same location on the right and left side of the fuselage but are measured from different points (Figure 6). The holes are approximately in line with the split line of the cowling.



LEFT SIDE
Measure down 6.2 ± 0.1" from bottom edge of window frame
Measure back 11.5 ± 0.1" from forward edge of boot cowl

RIGHT SIDE
Measure up 5.7 ± 0.1" from top edge of door header
Measure back 11.5 ± 0.1" from forward edge of boot cowl

FIGURE 6 – Static Port Hole Position (FOR REFERENCE ONLY)

CAUTION

The right side port position is near the Electronic Ignition Boxes. Take measures to prevent drilling into wiring.

7. Run a vacuum on the inside of the aircraft while drilling to prevent drill chips from getting loose.

8. Start by drilling a small pilot hole. Use a step drill for a 7/16" diameter hole through the aluminum. De-burr the edges of the hole.

9. Cut enough poly-flo tubing to route from the instrument panel to each drilled hole in the aircraft. Make sure the cuts are square to ensure proper assembly with the fittings. Put the clamps, nut and plate onto the poly-flo tubing. Feed the tubing from the interior of the aircraft through the drilled hole.

NOTE
Light lube such as DC4 or rubbing alcohol may be used to help the Poly-Flo tubing slide onto the static port.

10. Install static port into the poly-flo tubing, making sure there is a ½"-1" overlap (see Figure 7). Once the tubing is fitted onto the static port, feed both parts back through the hole.

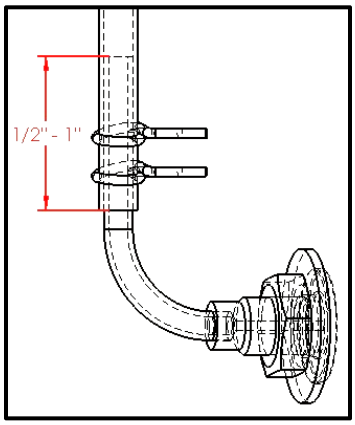


FIGURE 7 - Poly-Flo Tubing Overlap

11. Slide the plate and nut down over the static port threads and tighten the nut using blue Loctite, with the port oriented so the tubing goes up. Secure the two clamps over the overlapping tubes (Figure 8 and Figure 9).

12. Route static poly-flo tubing up to the instrument panel. Make sure the poly-flo tubing goes over the top of the horizontal structural tube at the top of the interior panels. Route with existing wire bundles and secure the tubing to the wire bundles. Add protective wrap on any parts of the poly-flo tubing that may chafe on existing wires.

13. Repeat for opposite side.

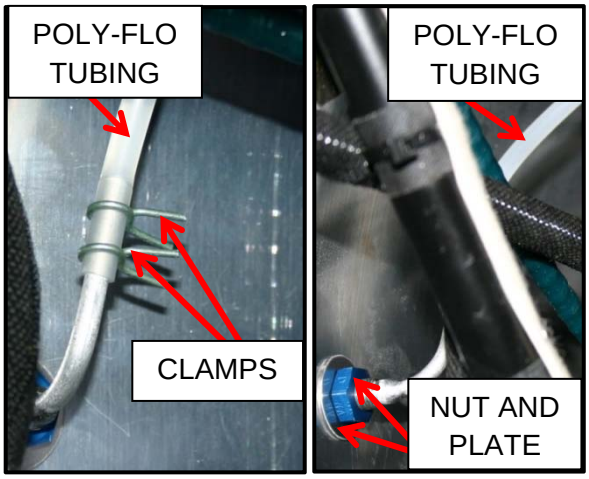


FIGURE 8 - LEFT SIDE Static Port Installation

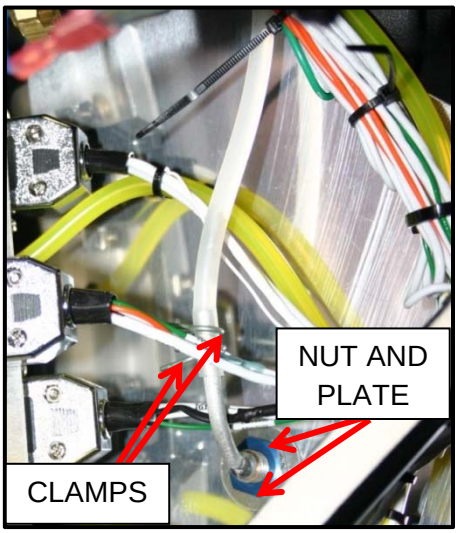


FIGURE 9 - RIGHT SIDE Static Port Installation

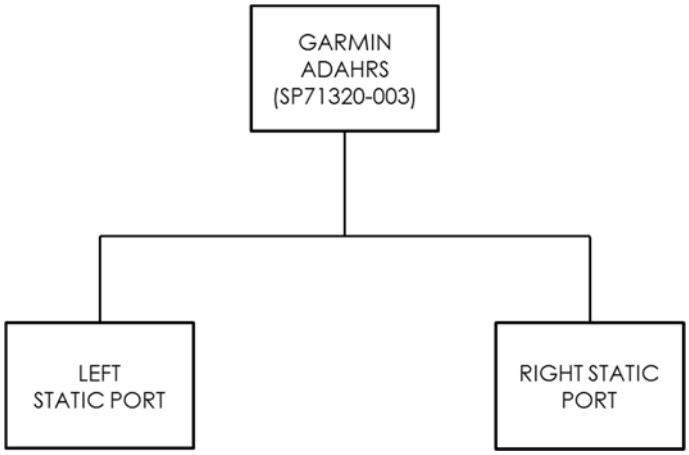
14. Instrument Panel Connections:

Each panel uses a different number of union tees, insert fittings, and tube to pipe fittings. See the appropriate schematic for specific details.

NOTE

For ease of installation, remove affected instruments from panel for installation if needed.

- EXECUTIVE GLASS TOUCH Instrument Panel: see Figure 10.
- EXECUTIVE GLASS Instrument Panel: skip to Figure 11.
- WORLD VFR Instrument Panel: skip to Figure 13.
- MYPANEL Instrument Panel: skip to Figure 14.
- STANDARD Instrument Panel: skip to Figure 15.



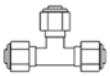
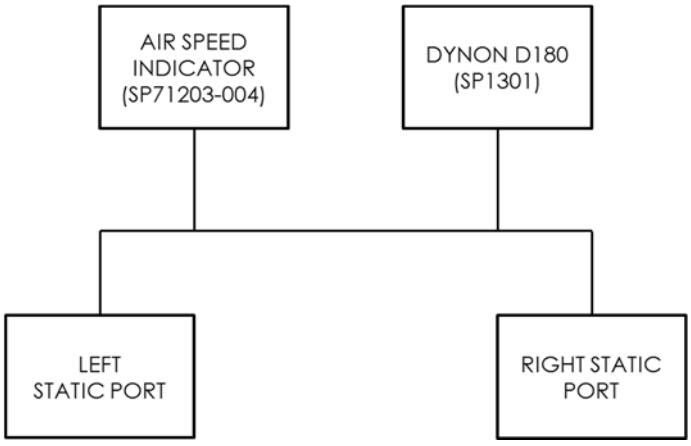
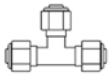
	1 Tube to Pipe Fitting
	1 Union Tee
	4 Insert Fittings

FIGURE 10 – EXECUTIVE GLASS TOUCH Instrument Panel



	2 Tube to Pipe Fittings
	2 Union Tees
	8 Insert Fittings

NOTE
Refer to Dynon Avionics Product Documentation for additional information.
(dynonavionics.com under the “support” tab)

FIGURE 11 – EXECUTIVE GLASS Instrument Panel

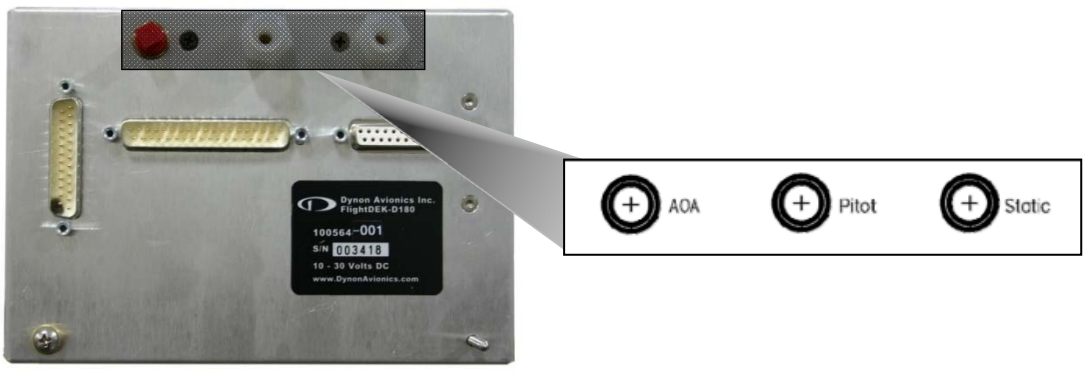
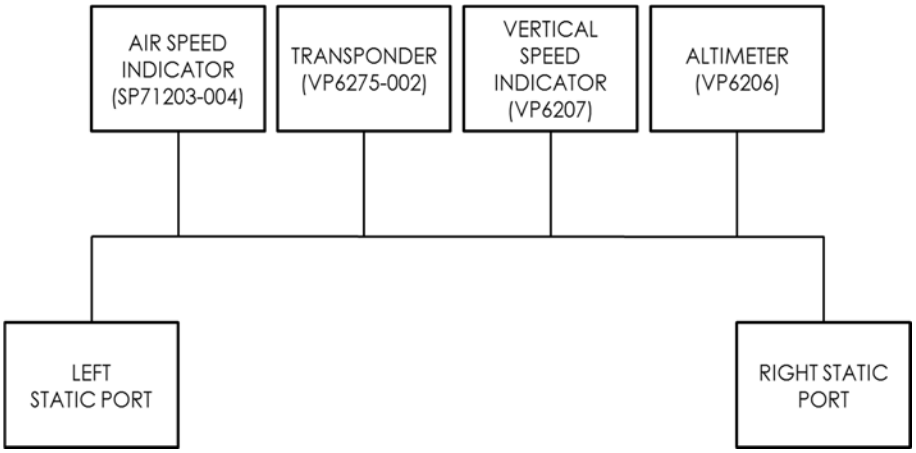


FIGURE 12 – D180 Rear View Showing Static Port Connection



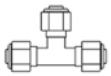
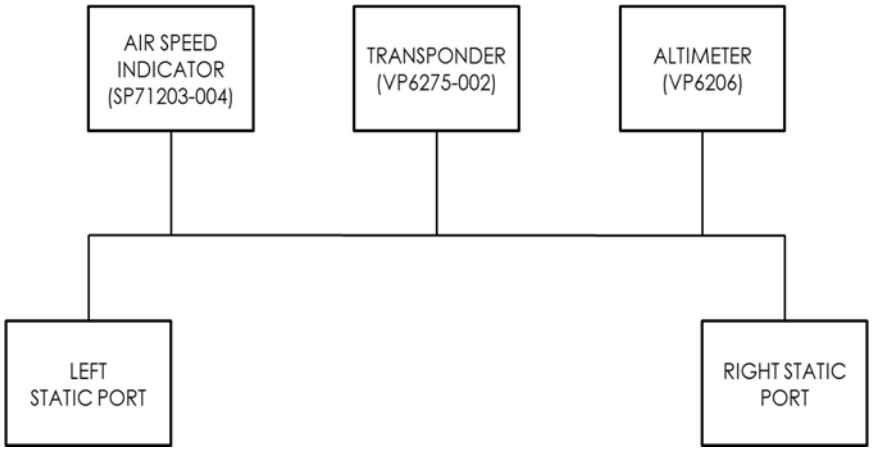
	4 Tube to Pipe Fittings
	4 Union Tees
	16 Insert Fittings

FIGURE 13 – World VFR Instrument Panel

NOTE

To install the poly-flo tubing onto the back of the Trig TT21 Transponder, carefully add pressure and use a twisting motion until the tubing fully slides onto the barbed fitting. The poly-flo tubing is stiff; it will fit onto the barbed fitting.



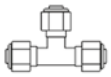
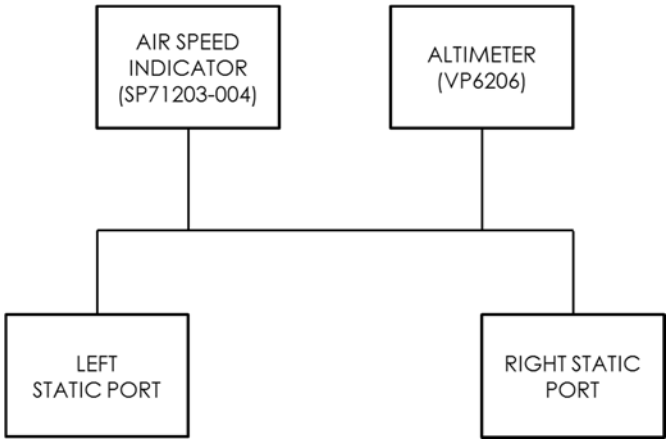
	3 Tube to Pipe Fittings
	3 Union Tees
	12 Insert Fittings

FIGURE 14 – MYPANEL Instrument Panel

NOTE

To install the poly-flo tubing onto the back of the Trig TT21 Transponder, carefully add pressure and use a twisting motion until the tubing fully slides onto the barbed fitting. The poly-flo tubing is stiff; it will fit onto the barbed fitting.



	2 Tube to Pipe Fittings
	2 Union Tees
	8 Insert Fittings

FIGURE 15 – STANDARD Instrument Panel

15. To remove double-sided tape from fuselage: Install a drill bit (approximately 1/8" bit) into a cordless drill. Hold the drill perpendicular and turn slowly to catch and remove the tape (Figure 16). A pinstripe remover eraser wheel, available from auto paint supply store may also be used.

16. Clean surfaces of window frame using isopropyl alcohol. Let dry. Apply adhesive promoter with an acid brush in places hook and loop tape will be installed and let it dry slightly until tacky.

17. Apply adhesive loop tape to window edge where tape was removed; centering the tape on the surface. Apply adhesive hook tape to underside of interior panel flange; centering the tape on the surface.

FIGURE 16 - Tape Removal from Fuselage

18. Clean fuselage tube under joint of two LH interior panels and mating faces of each panel using isopropyl alcohol. Let dry.

19. Apply 3M black acrylic foam tape to sections of fuselage tube where previously applied to secure interior panels and joining edge of one section of interior panel. LEAVE RED BACKING ON TOP OF TAPE UNTIL PANEL IS IN PLACE.

20. Reinstall left forward interior panel by maneuvering the panel over the rudder cable, underneath the left aft panel and instrument panel. Make sure the forward edge of the interior panel is outboard of the vertical tube at the firewall and check the rudder pedal throughout its full travel to verify clearance between rudder pedal and panel.

NOTE

Reconnect rudder cable if applicable. Use Figure 5 for reassembly.

21. Reinstall the clevis screw holding the throttle linkage rod to the forward throttle lever. Remove tape holding the throttle linkage rod to the panel.

22. Reinstall the four bolts securing the pilot's throttle assembly from the left forward panel. There are two thicker washers per bolt, make sure these are in the correct position (see Figure 16).
23. Reinstall fuel selector handle, gate and fuel selector panel into the left interior panel.
24. Reinstall the nylon snap rivets along the bottom edge, including rivets removed in the aft interior panel.
25. Reinstall nylon snap rivets along vertical seam between left center interior panel and right aft interior panel.

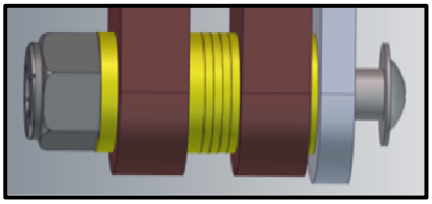


FIGURE 16 – Washer Order for Reassembly

26. Stick the left center panel back onto the double sided tape along its aft edge.
27. Reinstall the pulley cover on the left side of the floorboard near the center of the interior panel.
28. Close the top of the left interior panel by lining up the Velcro then remove the sheet metal strap.
29. Reinstall the right forward interior panel by installing the nylon snap rivets along the bottom and aft edges. Make sure the forward edge is outboard of the vertical tube by forward rudder pedal.
30. Reinstall rear seat bar and secure the rear seat per the Pilot's Operating Handbook (POH).
31. Install static port placards above each static port (see Figure 17 below).
32. Perform a static system certification per FAR Part 43, Appendix E.
33. Make logbook entry stating SI0033 Rev NC has been complied with.

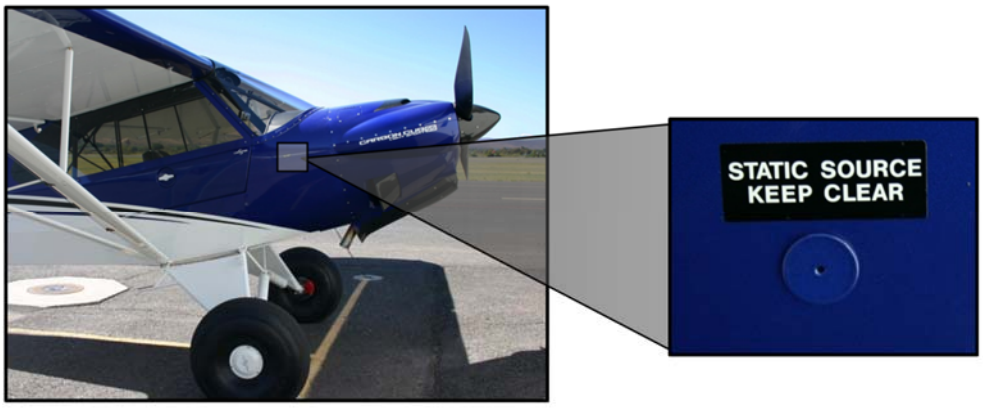


FIGURE 17 - Final Assembly Reference

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify Cub Crafters, Inc. Contact the customer service department at:

Cub Crafters, Inc.
1918 S. 16th Avenue
Yakima, WA 98903
1-509-248-9491
1-877-484-7865
support@cubcrafters.com

Please include the aircraft registration number, serial number, current name, and address of the owner and/or operator.