



SERVICE INSTRUCTION

SI0020

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EFFECTIVE DATE: This SERVICE INSTRUCTION is effective January 15, 2013

SUBJECT: *FUEL TANK REPLACEMENT AND LID INSTALLATION*

MODELS AFFECTED: *CC11-100, CC11-160 S/N 00001 THROUGH S/N 00183
For CC11-160 S/N 00184 AND ON, See Appendix A*

COMPLIANCE TIME: *COMPLIANCE IS NOT MANDATORY*

PURPOSE: *To install a tank lid, providing access to standard fuel tanks for tank removal/replacement.*

PARTS LIST:

*If replacing both fuel tanks

<u>PART</u>	<u>DESCRIPTION</u>	<u>QTY</u>
SC61000-002*	FUEL TANK ASSEMBLY, RH	1
SC61000-001*	FUEL TANK ASSEMBLY, LH	1
SC30250-001	FUEL TANK BAY COVER ASSEMBLY (LH)	1
SC30250-002	FUEL TANK BAY COVER ASSEMBLY (RH)	1
SC30311-001	WING RIB, NUT PLATE BAR	2
SC31045-001	FUEL TANK BAY EXTENSION SKIN	2
TC1239-003	BRACE, WING CHANNEL	4
TC1239-005	BRACE, WING CHANNEL	4
TC3017-001	GROMMET, FABRIC	16
TC9004-012	WASHER, SCUPPER RING	2
TC9101-001	5 INCH INSPECTION COVER ASSEMBLY	8
AN315-640R	NUT, PLAIN UNF-3B RH	8
AN960-6	WASHER	4
AN530-4R4	SCREW, 4-40 X 1/4	8
AN526C632R8	TRUSS HEAD SCREW, 6-32 X 1/2	40
MS20426A4-4	RIVET, SOLID, COUNTERSUNK	10
MS21059L06	NUT PLATE, TWO LUG	10
MS21059L06K	NUT PLATE, TWO LUG, DIMPLED	10
HDW-04-00981	CHERRY RIVET, 3/32" (.125 LENGTH)	40
HDW-SKL6-32-80	THREADED INSERT, 6-32, LARGE FLANGE	14
HDW-SS/SS42D	RIVET, EMHART POP BRAND	10



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RM0568-001	LOCTITE 330 ADHESIVE, 25ML	2
SC10950-001	Fuel Tank Placard	2
VP13002-01	3M Super Weatherstrip Adhesive	1

PREPARATION:

1. Read all instructions before beginning any work. Note some variation in the configuration of a given aircraft may mean some of these steps do not apply.
2. Take measures to prevent drilling tailings, chips, or other debris from falling into the wing during these operations.
3. Prior to performing any work on the fuel system, the fueling equipment and the aircraft must be grounded to a common source. The aircraft's grounding points are either of the wing tie downs. This will ensure there is no electrical potential difference between the aircraft and the fueling equipment and will minimize the risk of static discharge when the aircraft is being fueled or defueled.

CAUTION: Observe all precautions related to fueling and de-fueling the aircraft. In particular, the following are highlighted:

- a. Connect grounding wire to one of the wing tie-downs and ground the aircraft to an earth ground.
 - b. Do not operate any electrical equipment during the de-fueling operation.
 - c. Operation of any electrical switch during the fueling operation is prohibited.
 - d. Do not allow smoking or open flames within 100 feet of the aircraft or fuel servicing vehicle.
 - e. Do not operate radios, electrical systems, or electronic equipment during the fueling or de-fueling operations.
 - f. Do not drain fuel tanks within 100 feet of any electrical equipment capable of producing sparks.
 - g. Have a suitable fire extinguisher available at all times.
4. Draining Fuel
 - a. Open the fuel strainer drain valve and allow fuel to drain into container.
 - b. Drain the fuel tanks through the drain on rear of right-hand side of fuselage and left front boot cowl.
 5. Prep for removing the Tank
 - a. Remove the front and the lower wing root-fairing panels as well as the skylight and trim strip if present.

TANK REPLACEMENT AND LID INSTALLATION INSTRUCTIONS (PER WING):

6. Reference Figure 0 and install four inspection holes located outboard of the second rib on the underside of the wing (applicable to CC11-00002 through CC11-000183). Two holes approximately 26" outboard of the wing root edge and 10.5" and 27" aft of the edge of the LE skin. Locate the other two holes approximately 39" outboard of the wing root edge and 2.25" and 36" aft of the edge of the LE skin. Using masking tape to keep wing clean from excessive adhesive, do the following for each inspection hole:
 - a. Stick on the grommet, TC3017-001, with adhesive Loctite 330 (RM0568-001).
 - b. Once the adhesive sets, cut out fabric from inside the grommet.
 - c. Stick a second grommet, TC3017-001 on the inside of the hole that you just cut out, using Loctite 330 (RM0568-001), sandwiching the fabric.

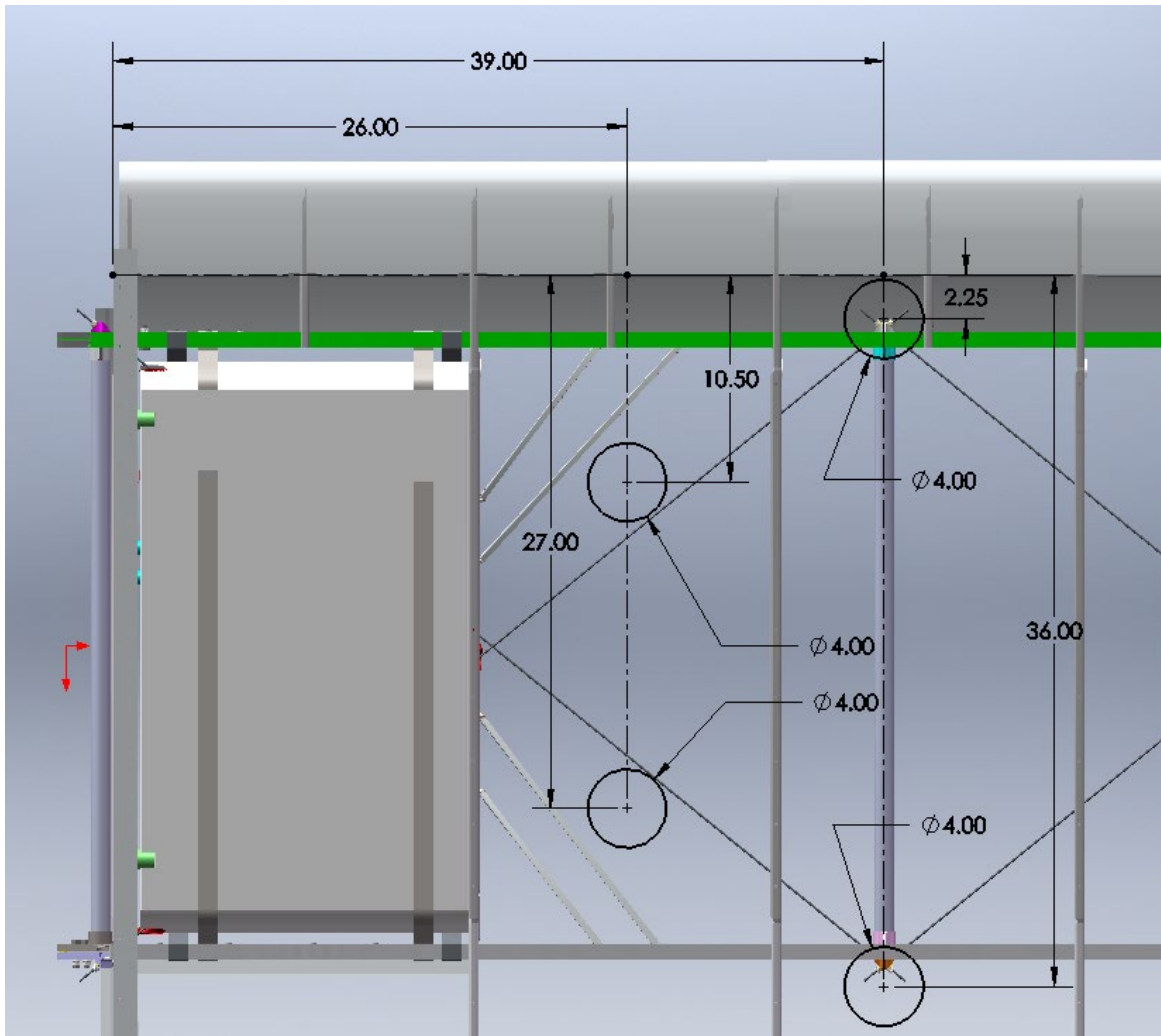
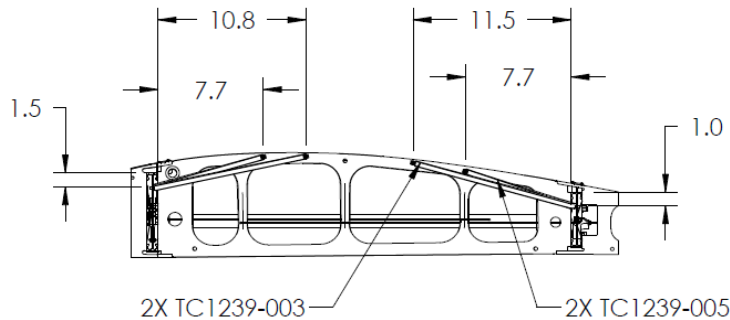


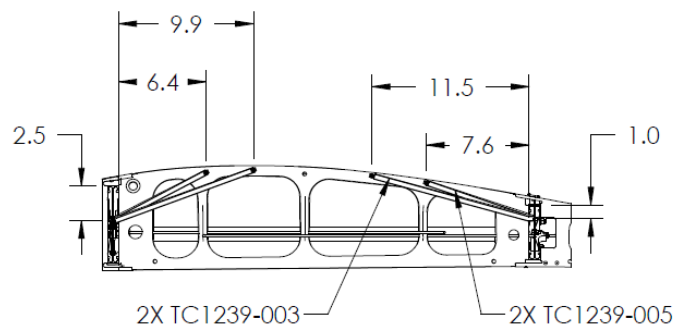
Figure 0 - Inspection Hole Locations

7. With access to the outboard side of rib fit (2) TC1239-003 and (2) TC1239-005 to the rib and spar. Figure 1 shows ideal measurements for the fit of the ribs. Dimensions are reference only; parts may be moved slightly to avoid any obstructions.



CC11-100 RIB REINFORCEMENTS

(MEASUREMENTS ARE FROM EDGE OF SPARS)



CC11-160 RIB REINFORCEMENTS

(MEASUREMENTS ARE FROM EDGE OF SPARS)

Figure 1 – Rib Reinforcement Installation

8. Match drill $\varnothing.098$ through each reinforcement into the spar web using a #40 drill and install (1) AN530-4R4.
9. Match drill $\varnothing.129$ through each reinforcement into the rib using a #30 drill and install (1) HDW-SS/SS42D
10. If fuel tanks need to be replaced or removed for easier access while performing installation instructions, proceed below. If tanks are not going to be removed, disregard the applicable steps.
11. Measure the length of drag wires that protrude past the fitting on the outboard side. Figure 2 shows the aft drag wire with measurement 'L'. The forward drag wire is similar. Record measurements for later use: LH FWD wire _____, LH AFT wire _____, RH FWD wire _____, and RH AFT wire _____.

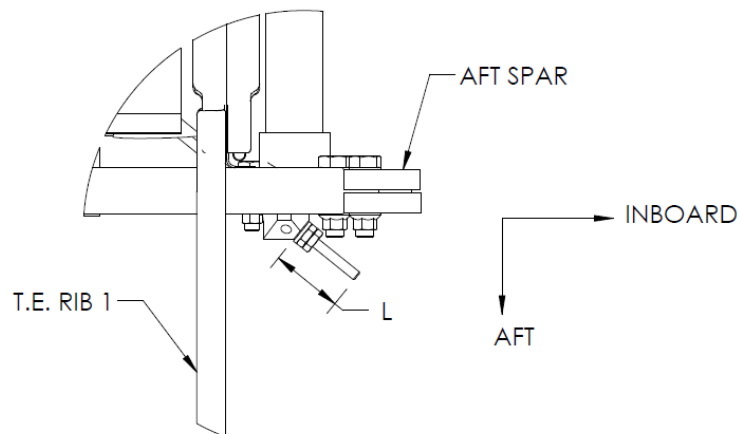


Figure 2 – Drag Wire Measurement

12. Once measurements have been taken, the drag wires can be removed. Note that it may be helpful to heat up the nuts to loosen Loctite but be cautious not to overheat the surrounding fabric, glue or paint. Depending on the aircraft serial number, there may be a cutout in the skin (covered in fabric) to allow the drag wires to be removed in the outboard direction. Otherwise, remove the outboard set of nuts and push the drag wires inboard. Drag wires will run out into the passenger area so make sure to guide them and prevent damaging the interior/ windshield. Note the placement of the chafe protection on the drag wires; it will need to be replaced as it was. Do not remove inboard hardware from drag wires.
13. Push the drag wires out far enough so that the fuel tank may be removed.

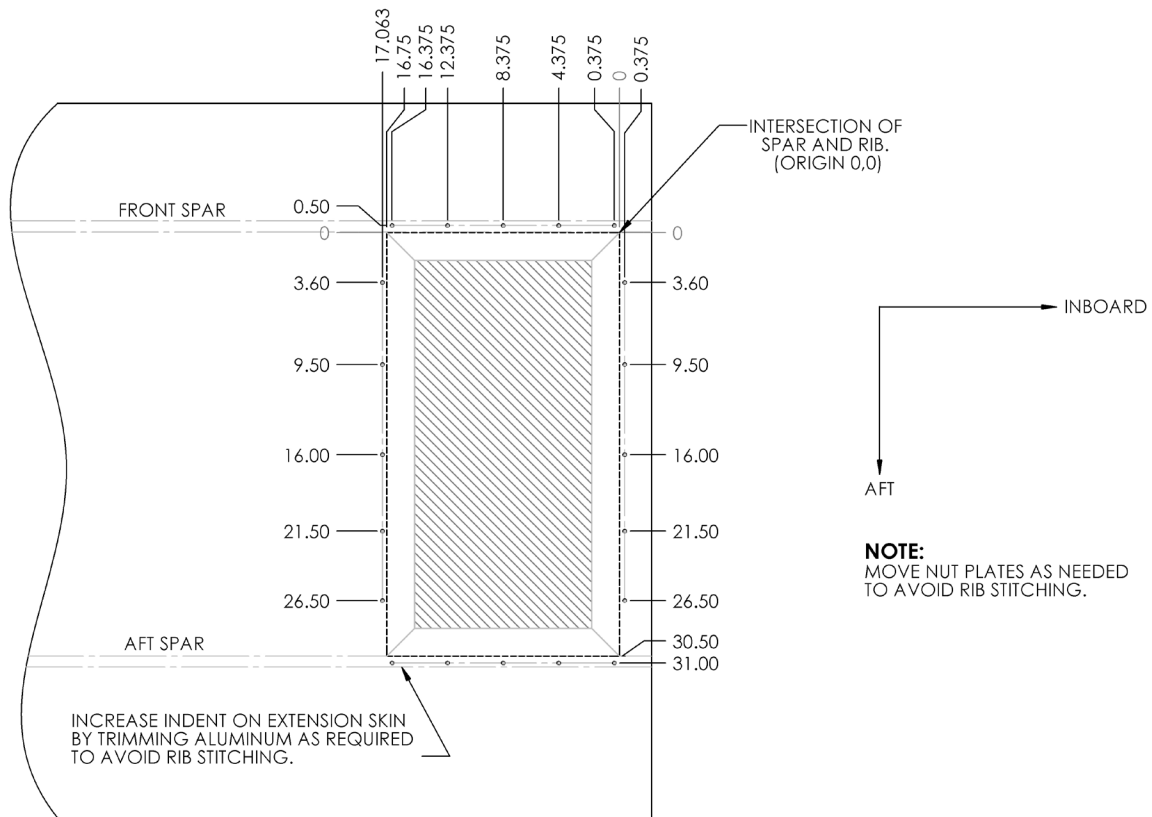


Figure 3a – Tank Bay Hole Locations (All Tolerances within 1/8”)

NOTE

Some aircraft (S/N 00171 and on) may have the holes along the front line leading edge skin (or elsewhere) already drilled and mounted with nut plates. If so, use these holes and hardware for mounting the tank lid in place.

14. Mark out the hole locations for three sides of the tank bay lid with reference to Figure 3a and according to the following:

- i) Locate the front inboard corner of the tank bay. This is the intersection of the trailing edge of the leading edge skin (front spar) and the outboard edge of the inboard rib of the first bay and is marked as Origin (0, 0). Make a small 45 degree fabric cut from the corner into the tank bay.
- ii) Locate the front outboard corner of the tank bay. This is the intersection of the trailing edge of the leading edge skin and the inboard edge of the outboard rib of the first bay and is located 16.75” outboard of the front inboard corner. Make a small 45 degree fabric cut to determine the exact corner.
- iii) Front Line: Connect the front outboard corner to the front inboard corner with a line.
- iv) Outboard Line: Mark a line 30.50” long from the front outboard corner directly aft, keeping parallel to the inboard edge of the outboard rib. The trailing end of this line is the aft outboard corner.



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- v) Inboard Line: Mark a line 30.50" long from the front inboard corner directly aft, keeping parallel to the outboard edge of the inboard rib. The trailing end of this line is the aft inboard corner.
- vi) Aft Line: Connect the two aft corners with a line parallel to the front line. This will create a rectangle 16.75" x 30.50" denoting the tank bay edges.
- vii) Mark a line parallel to and .50" in front of the front line. The line should start .375" outboard of the inboard line and end .375" inboard of the outboard line. Mark five holes along this line with equal 4.00" spacing between them.
- viii) Mark a line parallel to and .375" inboard of the inboard line. Mark five holes along this line located 3.60", 9.50", 16.00", 21.50", and 26.50" aft of the front line.
- ix) Mark a line parallel to and 5/16" (.31") outboard of the outboard line. Mark five holes along this line located 3.60", 9.50", 16.00", 21.50", and 26.50" aft of the front line.

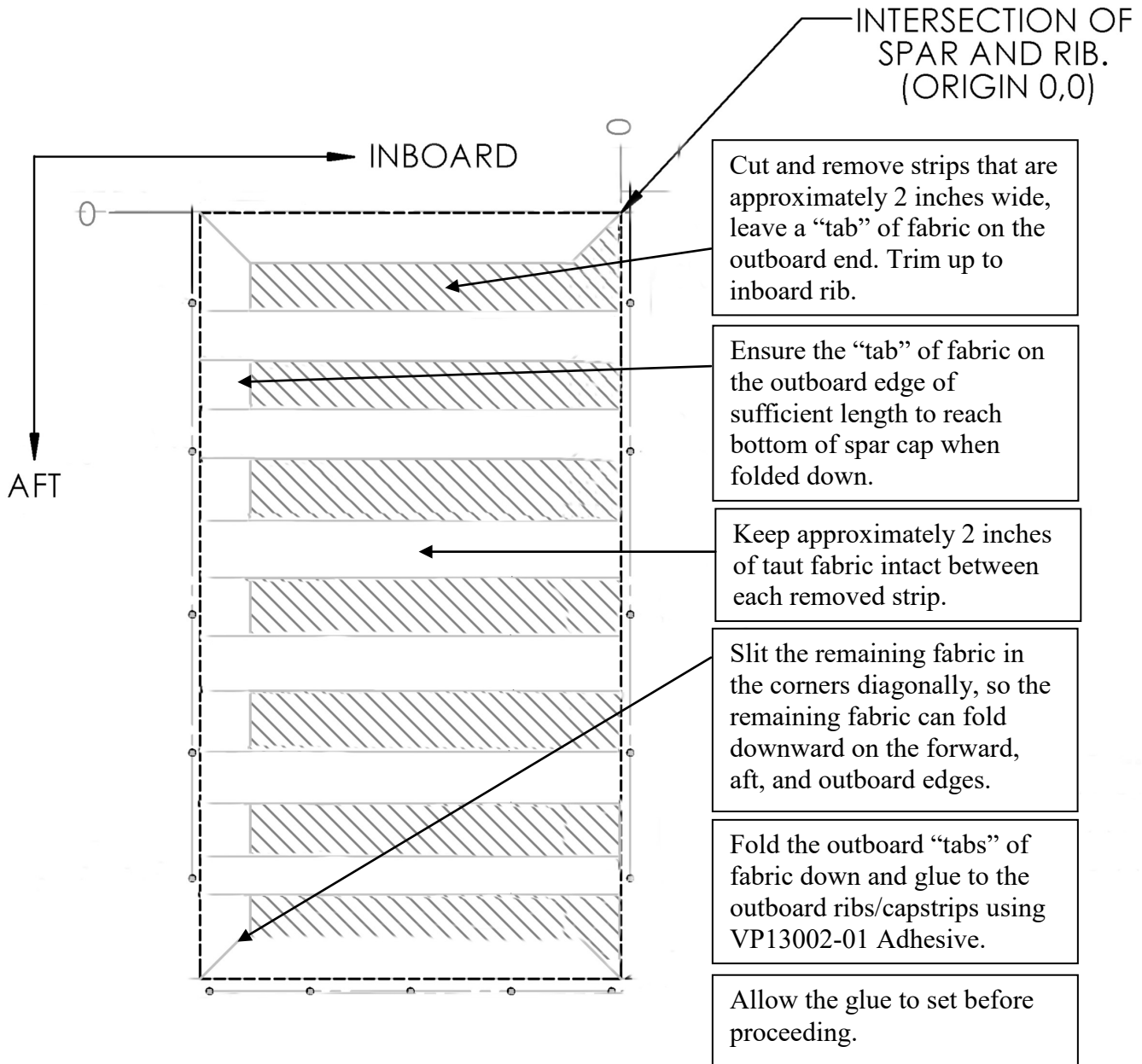


Figure 3b – Tank Bay Hole, Fabric Cutting

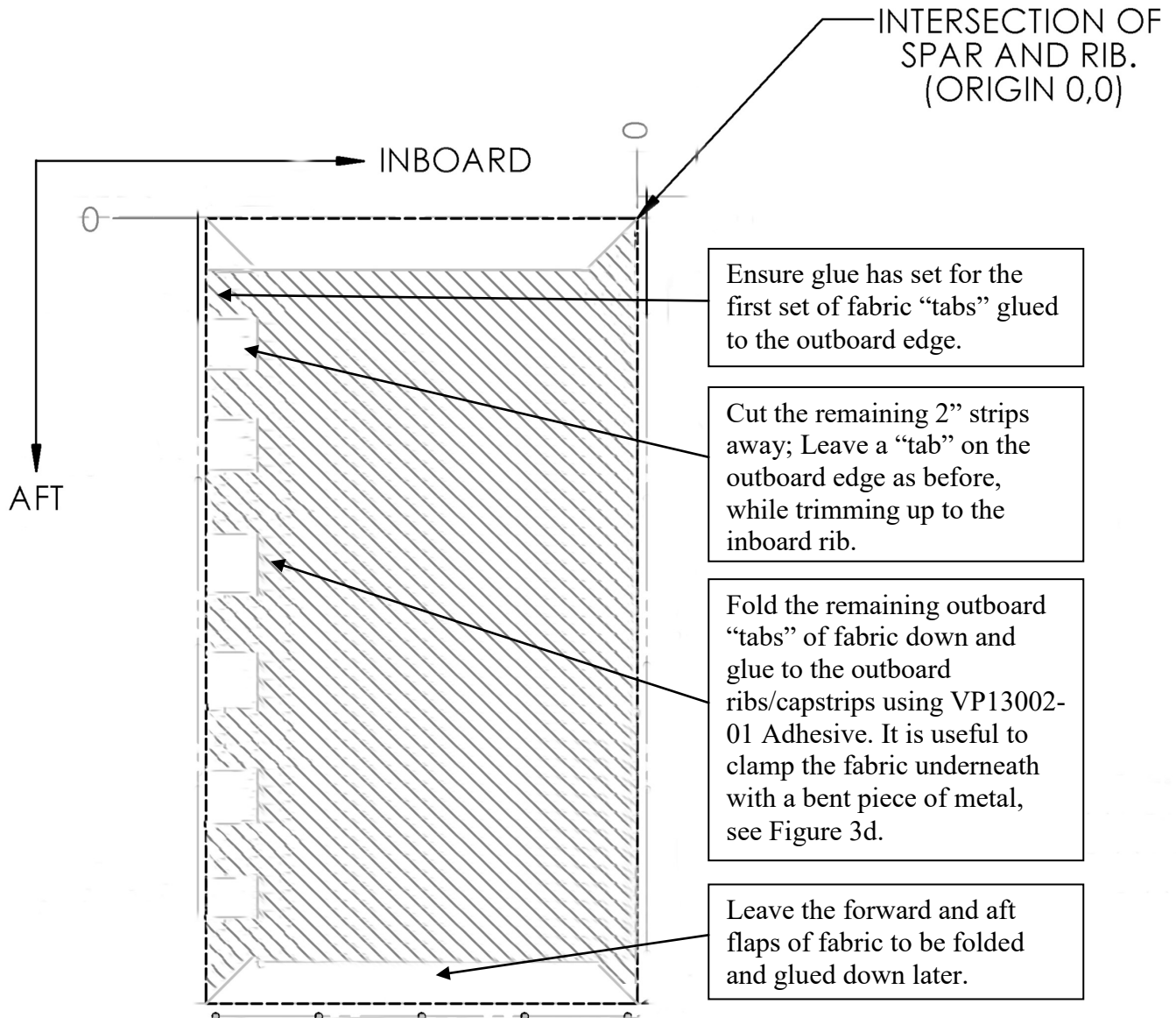


Figure 3c – Tank Bay Hole, Fabric Removal

15. Cut fabric in the first rib bay as shown in figures 3b and 3c. Cutting strips will help preserve fabric tension by gluing the outboard fabric flaps (in two stages) to the ribs/capstrips using adhesive 3m Super Weatherstrip Adhesive (VP13002-01). It may be useful to use bent pieces of sheet metal to “clamp” the fabric strips with upward force while gluing under the capstrips. See figure 3d.

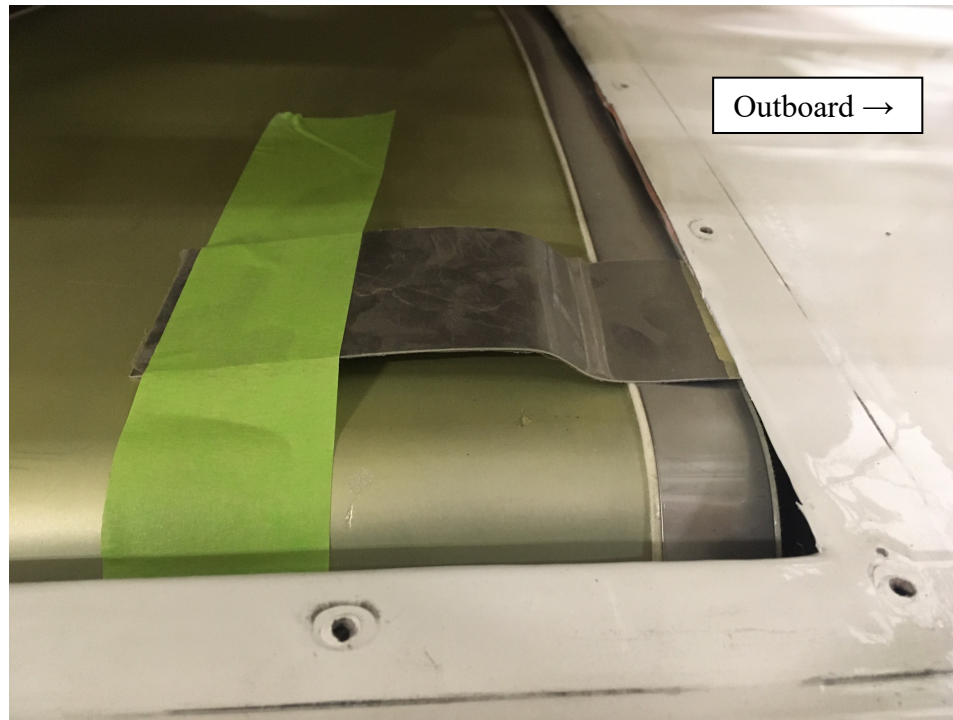


Figure 3d – Holding Outboard Fabric Underneath Capstrip While Gluing

- 16.** Disconnect the supply and fuel sight gauge lines from fuel tank. Remove all (4) nipple fittings from tank. Remove the tank ground wire from the inboard rib. Remove the fuel tank by loosening the straps holding the tank in place and then lifting the tank out.
- 17.** Drill the tank bay holes along the front, outboard, and inboard lines through the ribs and skins using a #30 (Ø.129) drill. The corner holes in the rear line will be drilled in step 26. Make sure not to drill through the rib lace or front spar.
- 18.** With the bay open, center SC31045-001 along the aft spar making sure that the skin extends to the edge of both ribs, see Figure 4. Clamp the extension skin to the aft spar in the inboard and outboard corners to secure it while drilling.
- 19.** Mark locations for five equally (3.6") spaced Ø.129 holes on the leading edge face of the skin extension. Using a drill stop set for no more than 0.25" penetration, drill the holes through the skin and ledge of spar using a #30 drill and install (5) HDW-SS/SS42D as shown in Figure 4.

CAUTION
DO NOT DRILL INTO THE CENTER WEB OR THE BULB OF THE SPAR

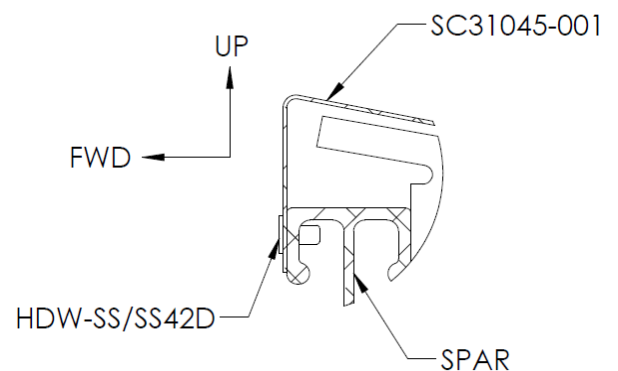


Figure 4 – Extension Skin



20. Expand the ten holes to $\varnothing.150$ in the inboard and outboard ribs, drill using a #25 drill. Make sure not to drill through the rib lace if wing is stitched.
21. Drill nut plate pattern in the inboard rib then install (1) MS21059L06 using (2) HDW-04-00981.
22. Match drill the nut plate bar (SC30311-001) to the outboard rib and install (1) MS21059L06K nut plate at each hole location using (2) HDW-04-00981 rivets.
23. Drill through the rib and nut plate bar (SC30311-001) at five additional locations and install (5) MS20426A4-4 rivets.
24. Expand the five holes to $\varnothing.266$ in leading edge skin and install (5) HDW-SKL6-32-80. Drill the two corner holes in the aft skin extension and install (2) HDW-SKL6-32-80.
25. Glue the fabric flaps to forward and aft edges of wing bay so that the fabric extends past the vertical edge of the skin, trim off excess fabric.
26. If needed, trim fabric on the inboard side to the edge of the rib where it is glued already. Clean out any drilling tailings, chips, or other debris from inside the wing.
27. Reinstall tank or install a new tank, whichever option is necessary. Installation will be the reverse of the removal. Lubricate the fuel nipple fittings with EZ TURN Lubricant, insert in the tank and tighten. Reconnect the fuel supply and fuel sight gauge line. Make sure all the nipple fittings and hose clamps are tight. Refasten the fuel tank straps loosely until next step.
28. Reinstall drag wires using (1) AN960-6 and (2) AN315-640R. Be sure to replace the chafe protection in the same places that it was originally located on the drag wires. Tighten nuts until the length of the drag wire matches the measurement that was taken in step 6 for that wire. Reconnect the tank ground wire to the inboard rib. Tighten the fuel tank straps until the strap slack is removed.
29. Add fuel and check for leaks.
30. Test fit the fuel tank bay cover SC30251-001/-002 to the aircraft making sure to align the tank lid hole with the fuel tank cap. Pay special attention to the front edge of the tank lid to keep it from rising above the surface of the wing leading edge, while maintaining uniform gaps around the other edges of the lid as possible.
31. Install the scupper ring (TC9004-012) onto the fuel neck.
32. Tape off all around the fuel tank bay to catch any swarf. With tank cover assembly fit on wing, use a hole finder to match drill ($\varnothing.129$) the tank lid cover to the ribs and skins using a #30 drill. Place the first couple screws in the leading edge corners to immediately to secure the position of the lid. Trim off any excess material from the edges as necessary. Finished installing the remaining screws. Lastly, remove the tank cover to access and clean out any swarf and the tape placed earlier.
33. Re-install the skylight with new silicone seal on aft edge and screw holes and stand-offs.
34. Install 20 AN526C632R8 screws per tank bay cover.
35. Install (1) TC9101-001 in each inspection hole created in step 2.
 - a. Be sure that the inspection cover internal brace is not facing forward, as they may shift during flight.
36. Repeat steps for opposite wing as applicable.
37. Install the lower and the front wing root fairings.



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38. Update the weight and balance of the aircraft, by adding 3.50 lbs. at 72.00". Total moment increase is 252.00.
39. Make entry in the aircraft log book indicating that SI0020 Rev C has been performed.

MAJOR REPAIR AND ALTERATION (MRA)

Installation of this service instruction is a major alteration per ASTM F2483 Section 9 and therefore an MRA form must be issued by Cub Crafters Inc. for installation in an S-LSA Aircraft.

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify Cub Crafters, Inc. of the address of the current owner to:

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

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

APPENDIX A: FUEL TANK LID INSTALLATION FOR AIRCRAFT S/N 00184 AND ON

PARTS LIST:

<u>PART</u>	<u>DESCRIPTION</u>	<u>QTY</u>
SC61000-002	FUEL TANK ASSEMBLY, RH	1
SC61000-001	FUEL TANK ASSEMBLY, LH	1
SC30250-001	FUEL TANK BAY COVER ASSEMBLY (LH)	1
SC30250-003	FUEL TANK BAY COVER ASSEMBLY (RH)	1
SC30311-001	WING RIB, NUT PLATE BAR	2
SC31045-001	FUEL TANK BAY EXTENSION SKIN	2
TC3017-001	GROMMET, FABRIC	16
TC9004-012	WASHER, SCUPPER RING	2
TC9101-001	5 INCH INSPECTION COVER ASSEMBLY	8
AN315-640R	NUT, PLAIN UNF-3B RH	8
AN960-6	WASHER	4
AN530-4R4	SCREW, 4-40 X 1/4	4
AN526C632R8	TRUSS HEAD SCREW, 6-32 X 1/2	40
MS20426A4-4	RIVET, SOLID, COUNTERSUNK	10
MS21059L06	NUT PLATE, TWO LUG	10
MS21059L06K	NUT PLATE, TWO LUG, DIMPLED	10
HDW-04-00981	CHERRY RIVET, 3/32" (.125 LENGTH)	40
HDW-SKL6-32-80	THREADED INSERT, 6-32, LARGE FLANGE	14
HDW-SS/SS42D	RIVET, EMHART POP BRAND	6
RM0568-001	LOCTITE 330 ADHESIVE, 25ML	2
SC10950-001	FUEL TANK PLACARD	2
VP13002-01	3M Super Weatherstrip Adhesive	1



PREPARATION:

1. Read all instructions before beginning any work. Note some variation in the configuration of a given aircraft may mean some of these steps do not apply.
2. Take measures to prevent drilling tailings, chips, or other debris from falling into the wing during these operations.
3. Prior to performing any work on the fuel system, the fueling equipment and the aircraft must be grounded to a common source. The aircraft's grounding points are either of the wing tie downs. This will ensure there is no electrical potential difference between the aircraft and the fueling equipment and will minimize the risk of static discharge when the aircraft is being fueled or defueled.

CAUTION: Observe all precautions related to fueling and de-fueling the aircraft. In particular, the following are highlighted:

- a. Connect grounding wire to one of the wing tie-downs and ground the aircraft to an earth ground.
 - b. Do not operate any electrical equipment during the de-fueling operation.
 - c. Operation of any electrical switch during the fueling operation is prohibited.
 - d. Do not allow smoking or open flames within 100 feet of the aircraft or fuel servicing vehicle.
 - e. Do not operate radios, electrical systems, or electronic equipment during the fueling or de-fueling operations.
 - f. Do not drain fuel tanks within 100 feet of any electrical equipment capable of producing sparks.
 - g. Have a suitable fire extinguisher available at all times.
4. Draining Fuel
- h. Open the fuel strainer drain valve and allow fuel to drain into container.
 - a. Drain the fuel tanks through the drain on rear of right-hand side of fuselage and left front boot cowl.
5. Prep for removing the Tank
- a. Remove the front and the lower wing root-fairing panels as well as the skylight and trim strip if present.

TANK REPLACEMENT AND LID INSTALLATION INSTRUCTIONS (PER WING):

6. Reference Figure 0 and Install two inspection holes located outboard of the second rib on the underside of the wing (applicable to CC11-00184 and on). Locate two holes approximately 39" outboard of the wing root edge and 2.25" and 36" aft of the edge of the LE skin. Using masking tape to keep wing clean from excessive adhesive, do the following for each inspection hole:
 - i. Stick on the grommet, TC3017-001, with adhesive Loctite 330 (RM0568-001).
 - j. Once the adhesive sets, cut out fabric from inside the grommet.
 - k. Stick a second grommet, TC3017-001 on the inside of the hole that you just cut out, using Loctite 330 (RM0568-001), sandwiching the fabric.

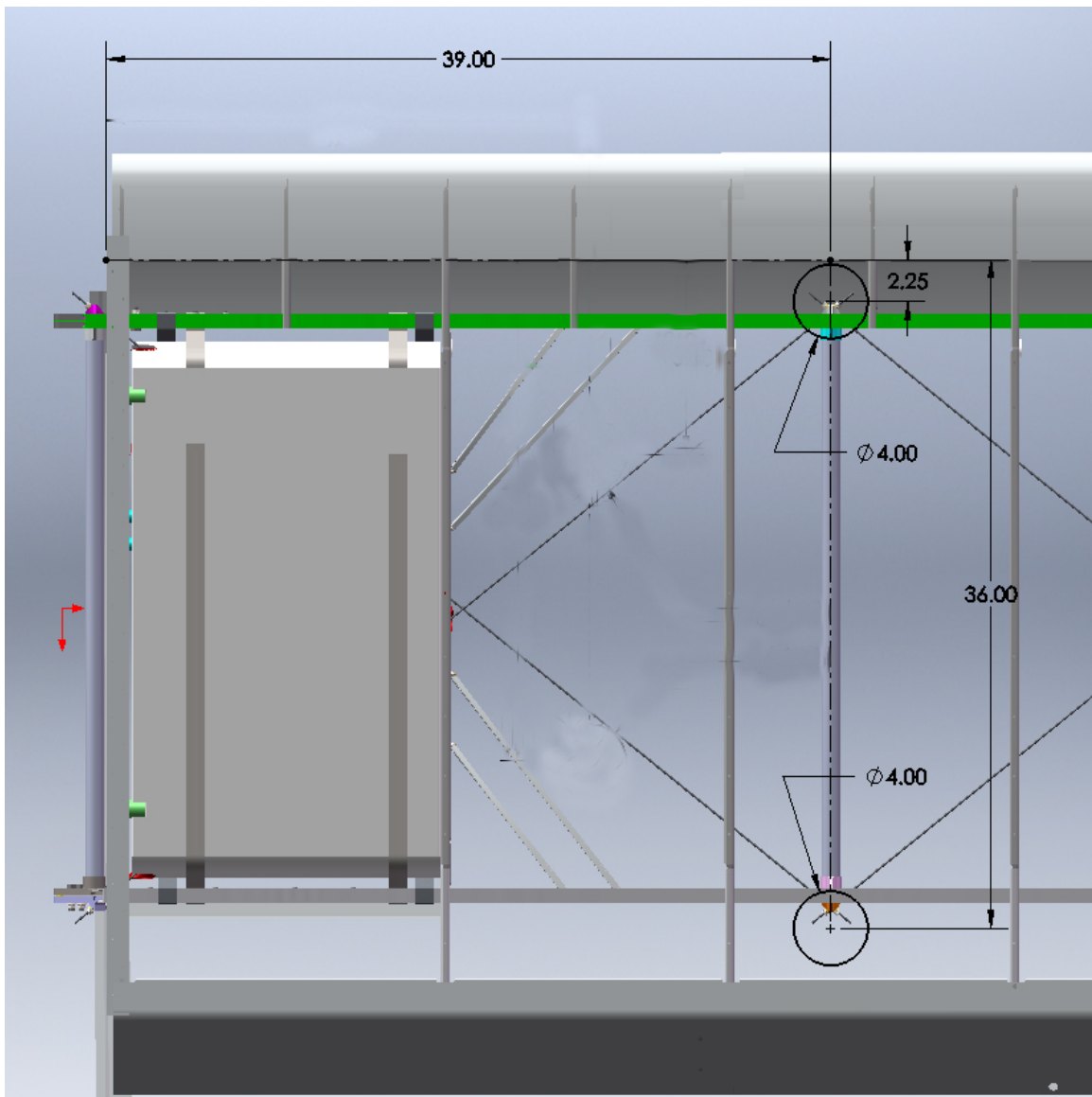


Figure 0 - Inspection Hole Locations

7. Measure the length of drag wires that protrude past the fitting on the outboard side. Figure 2 shows the aft drag wire with measurement 'L'. The forward drag wire is similar. Record measurements for later use: LH FWD wire _____, LH AFT wire _____, RH FWD wire _____, and RH AFT wire _____.

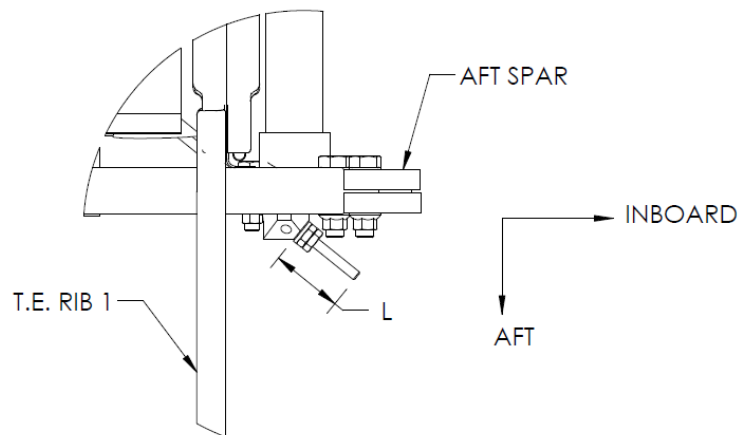


Figure 2 – Drag Wire Measurement

8. Once measurements have been taken, the drag wires can be removed. Note that it may be helpful to heat up the nuts to loosen Loctite but be cautious not to overheat the surrounding fabric, glue or paint. Depending on the aircraft serial number, there may be a cutout in the skin (covered in fabric) to allow the drag wires to be removed in the outboard direction. Otherwise, remove the outboard set of nuts and push the drag wires inboard. Drag wires will run out into the passenger area so make sure to guide them and prevent damaging the interior/ windshield. Note the placement of the chafe protection on the drag wires; it will need to be replaced as it was. Do not remove inboard hardware from drag wires.
9. Push the drag wires out far enough so that the fuel tank may be removed.

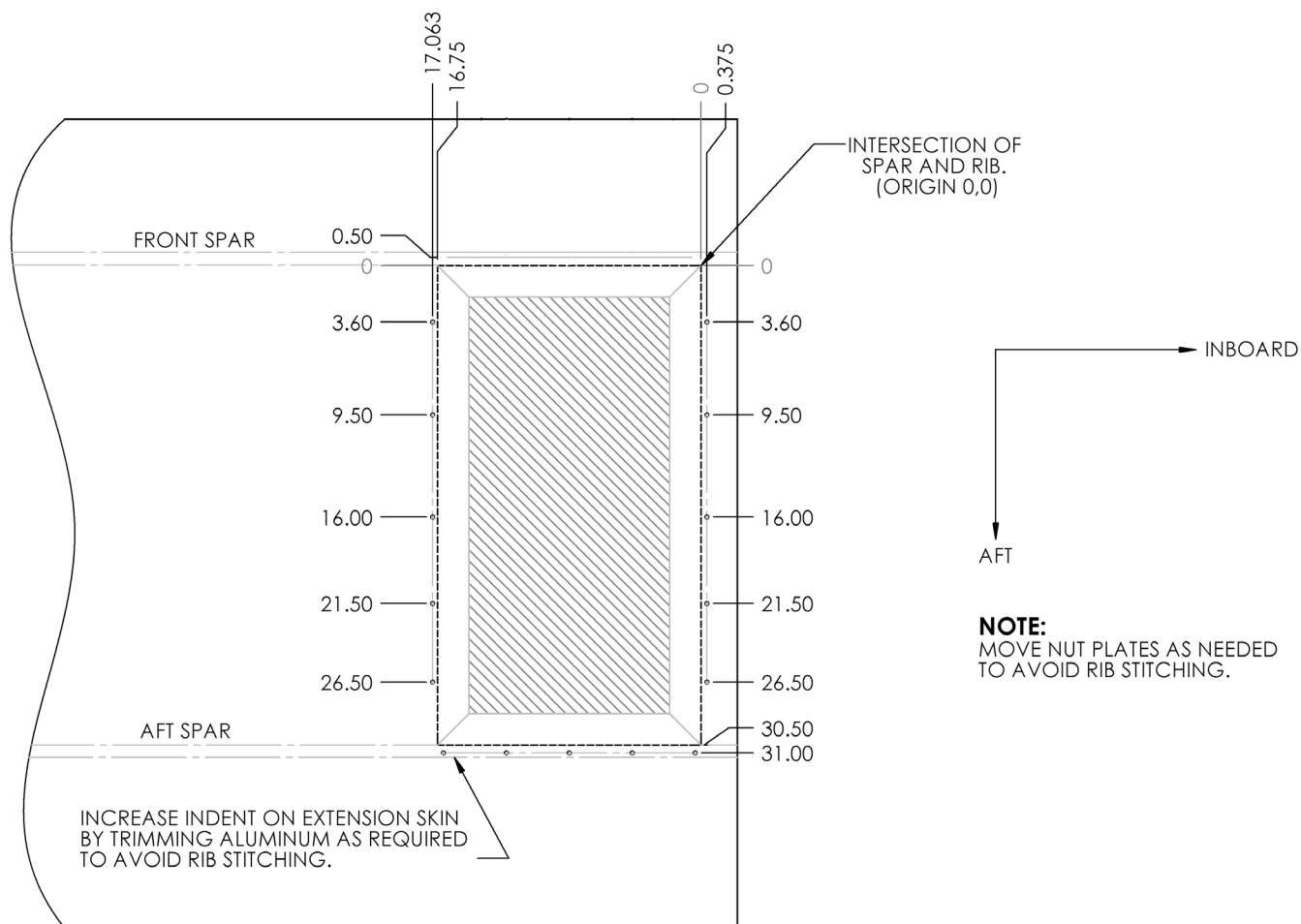


Figure 3a – Tank Bay Hole Locations (All Tolerances within 1/8”)

NOTE

Some aircraft (S/N 00171 and on) may have the holes along the front line leading edge skin (or elsewhere) already drilled and mounted with nut plates. If so, use these holes and hardware for mounting the tank lid in place.

10. Mark out the hole locations for the inboard and outboard sides of the tank bay lid with reference to Figure 3a and according to the following:

- i) Locate the front inboard corner of the tank bay. This is the intersection of the trailing edge of the leading edge skin (front spar) and the outboard edge of the inboard rib of the first bay and is marked as Origin (0, 0). Make a small 45 degree fabric cut from the corner into the tank bay.
- ii) Locate the front outboard corner of the tank bay. This is the intersection of the trailing edge of the leading edge skin and the inboard edge of the outboard rib of the first bay and is located 16.75” outboard of the front inboard corner. Make a small 45 degree fabric cut to determine the exact corner.



- iii) Front Line: Connect the front outboard corner to the front inboard corner with a line.
- iv) Outboard Line: Mark a line 30.50" long from the front outboard corner directly aft, keeping parallel to the inboard edge of the outboard rib. The trailing end of this line is the aft outboard corner.
- v) Inboard Line: Mark a line 30.50" long from the front inboard corner directly aft, keeping parallel to the outboard edge of the inboard rib. The trailing end of this line is the aft inboard corner.
- vi) Aft Line: Connect the two aft corners with a line parallel to the front line. This will create a rectangle 16.75" x 30.50" denoting the tank bay edges.
- vii) Mark a line parallel to and .375" inboard of the inboard line. Mark five holes along this line located 3.60", 9.50", 16.00", 21.50", and 26.50" aft of the front line.
- viii) Mark a line parallel to and 5/16" (.31") outboard of the outboard line. Mark five holes along this line located 3.60", 9.50", 16.00", 21.50", and 26.50" aft of the front line.
- ix) Mark a line parallel to and 5/16" (.31") outboard of the outboard line. Mark five holes along this line located 3.60", 9.50", 16.00", 21.50", and 26.50" aft of the front line.

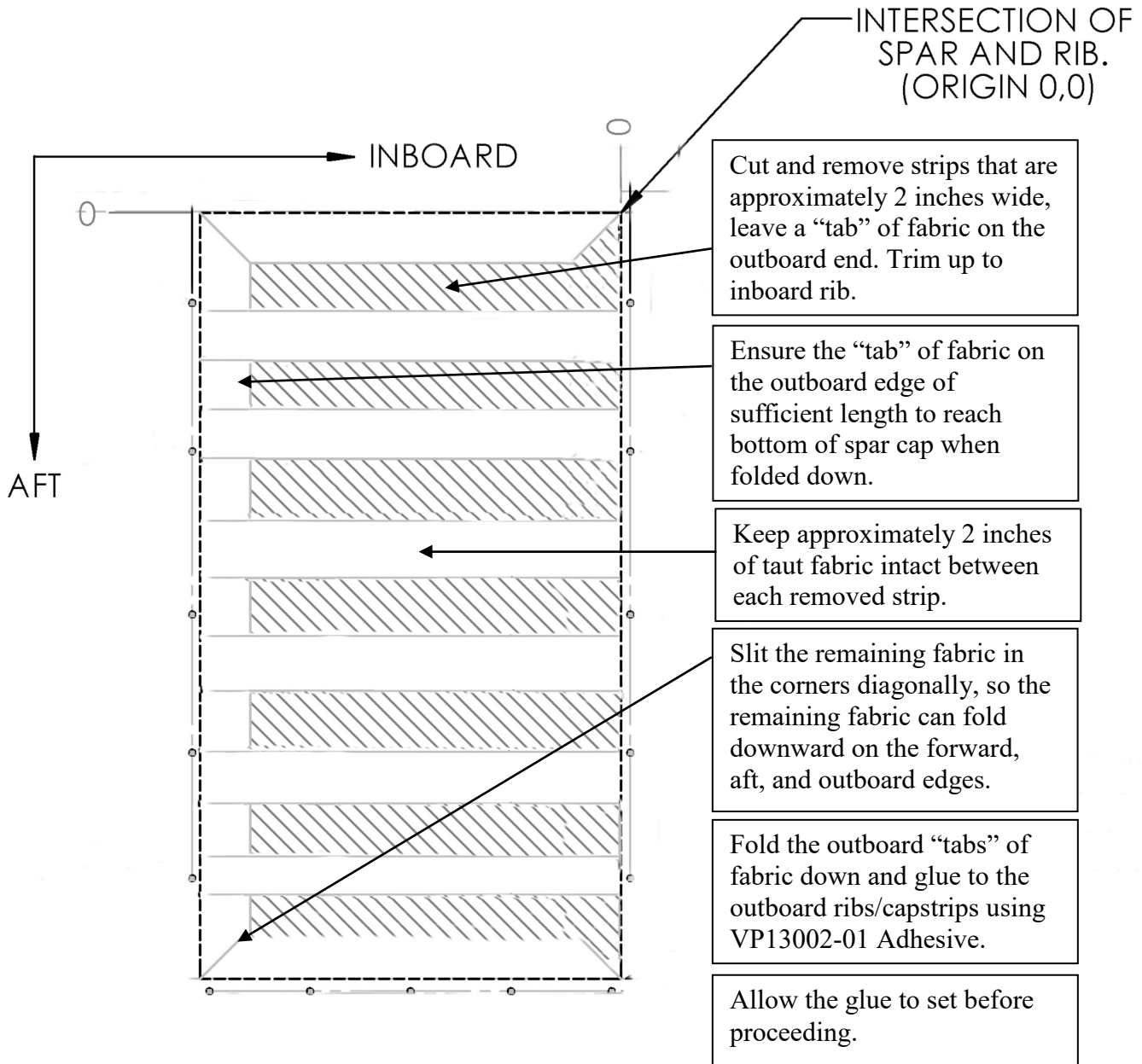


Figure 3b – Tank Bay Hole, Fabric Cutting

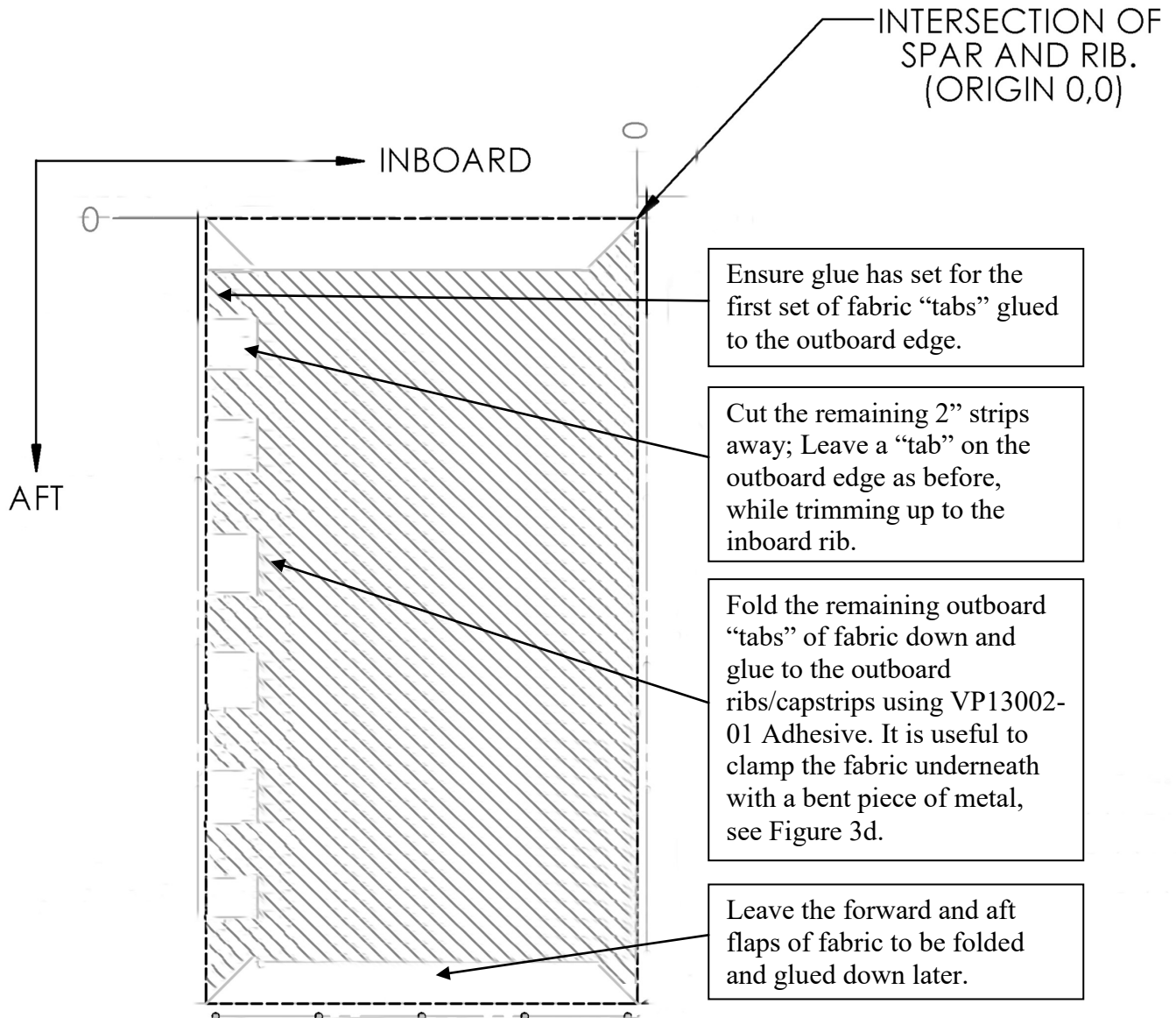


Figure 3c – Tank Bay Hole, Fabric Removal

11. Cut out fabric in the first rib bay as shown in figures 3b and 3c. Cutting strips will help preserve fabric tension by gluing the outboard fabric flaps (in two stages) to the ribs/capstrips using adhesive 3m Super Weatherstrip Adhesive (VP13002-01). It may be useful to use bent pieces of sheet metal to "clamp" the fabric strips with upward force while gluing under the capstrips. See figure 3d.

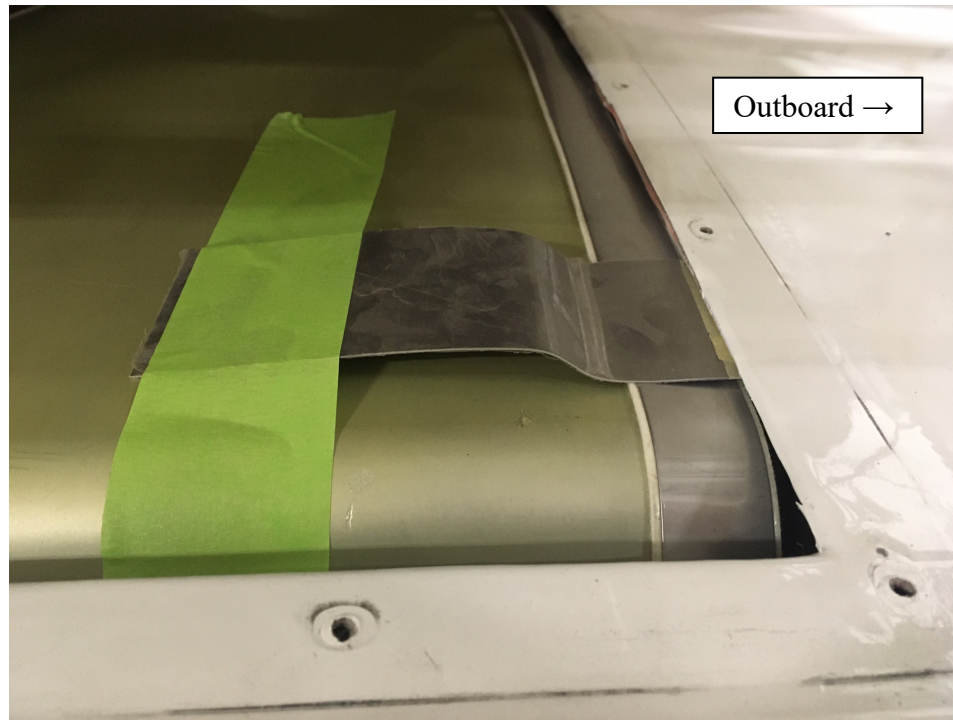


Figure 3d – Holding Outboard Fabric Underneath Capstrip While Gluing

12. Disconnect the supply and fuel and fuel sight gauge lines from fuel tank. Remove all (4) nipple fittings from tank. Remove the tank ground wire from the inboard rib. Remove the fuel tank by loosening the straps holding the tank in place and then lifting the tank out.
13. Drill the tank bay holes along the outboard and inboard lines through the ribs and skins using a #30 (Ø.129) drill. The corner holes in the rear line will be drilled in step 22. Make sure not to drill through the rib lace or front spar.
14. With the bay open, center SC31045-001 along the aft spar making sure that the skin extends to the edge of both ribs, see Figure 4. Clamp the extension skin to the aft spar in the inboard and outboard corners to secure it while drilling.
15. Mark locations for five equally (3.6") spaced Ø.129 holes on the leading edge face of the skin extension. Using a drill stop set for no more than 0.25" penetration, drill the holes through the skin and ledge of spar using a #30 drill and install (5) HDW-SS/SS42D as shown in Figure 4.

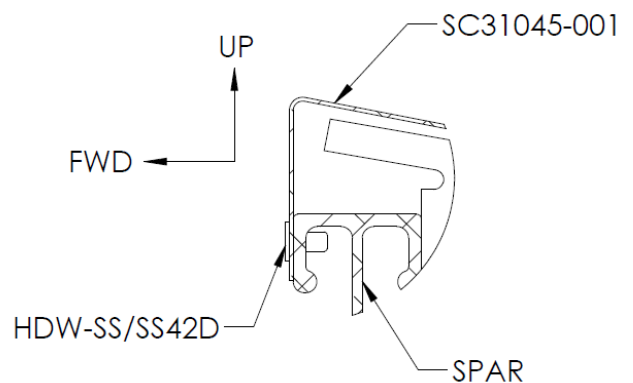


Figure 4 – Extensions Skin

CAUTION

DO NOT DRILL INTO THE CENTER WEB OR THE BULB OF THE SPAR



16. Expand the ten holes to Ø.150 in the inboard and outboard ribs, drill using a #25 drill. Make sure not to drill through the rib lace if wing is stitched.
17. Drill nut plate pattern in the inboard rib then install (1) MS21059L06 using (2) HDW-04-00981.
18. Match drill the nut plate bar (SC30311-001) to the outboard rib and install (1) MS21059L06K nut plate at each hole location using (2) HDW-04-00981 rivets.
19. Drill through the rib and nut plate bar (SC30311-001) at five additional locations and install (5) MS20426A4-4 rivets.
20. Expand the five holes to Ø.266 in leading edge skin and install (5) HDW-SKL6-32-80. Drill the two corner holes in the aft skin extension and install (2) HDW-SKL6-32-80.
21. Glue fabric to forward and aft edges of wing bay so that the fabric extends past the vertical edge of the skin, trim off excess fabric.
22. If needed, trim fabric on the inboard side to the edge of the rib where it is glued already. Clean out any drilling tailings, chips, or other debris from inside the wing.
23. Reinstall tank or install a new tank, whichever option is necessary. Installation will be the reverse of the removal. Lubricate the fuel nipple fittings with EZ TURN Lubricant, insert in the tank and tighten. Reconnect the fuel supply and fuel sight gauge line. Make sure all the nipple fittings and hose clamps are tight. Refasten the fuel tank straps loosely until next step.
24. Reinstall drag wires using (1) AN960-6 and (2) AN315-640R. Be sure to replace the chafe protection in the same places that it was originally located on the drag wires. Tighten nuts until the length of the drag wire matches the measurement that was taken in step 3 for that wire. Reconnect the tank ground wire to the inboard rib. Tighten the fuel tank straps until the strap slack is removed.
25. Add fuel and check for leaks.
26. Test fit the fuel tank bay cover SC30250-001/-003 to the aircraft making sure to align the tank lid hole with the fuel tank cap. Pay special attention to the front edge of the tank lid to keep it from rising above the surface of the wing leading edge, while maintaining uniform gaps around the other edges of the lid as possible.
27. Install the scupper ring (TC9004-012) onto the fuel neck.
28. Tape off all around the fuel tank bay to catch any swarf. With tank cover assembly fit on wing, use a hole finder to match drill (Ø.129) the tank lid cover to the ribs and skins using a #30 drill. Place the first couple screws in the leading edge corners immediately to secure the position of the lid. Trim off any excess material from the edges as necessary. Finished installing the remaining screws. Lastly, remove the tank cover to access and clean out any swarf and the tape placed earlier.
29. Re-install the skylight with new silicone seal on aft edge and screw holes and stand-offs.
30. Install 20 AN526C632R8 screws per tank bay cover.
31. Install (1) TC9101-001 in each inspection hole created in step 2.
 - a. Be sure that the inspection cover internal brace is not facing forward, as they may shift during flight.
32. Repeat Appendix A steps for the opposite wing as applicable.
33. Install the lower and the front wing root fairings.



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34. Update the weight and balance of the aircraft, by adding 3.50 lbs. at 72.00". Total moment increase is 252.00.
35. Make entry in the aircraft log book indicating that SI0020 Rev C has been performed.

MAJOR REPAIR AND ALTERATION (MRA)

Installation of this service instruction is a major alteration per ASTM F2483 Section 9 and therefore an MRA form must be issued by Cub Crafters Inc. for installation in an S-LSA Aircraft.

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify Cub Crafters, Inc. of the address of the current owner to:

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

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