



SERVICE INSTRUCTION SK-SI002 Rev NC Page 1 of 5

EFFECTIVE DATE: This Service Instruction is effective 10-02-2020

SUBJECT: FUEL FILTER RELOCATION

MODELS AFFECTED: CCK-2000-0001 THROUGH CCK-2000-0057
CCX-2000-0001 THROUGH CCX-2000-0052

COMPLIANCE TIME: THIS RELOCATION IS OPTIONAL AND NOT REQUIRED FOR CONTINUED SAFE OPERATION. COMPLIANCE WITH THIS SERVICE INSTRUCTION IS AT THE DISCRETION OF THE OWNER/OPERATOR.

PURPOSE: This document provides instructions for relocating the fuel filter to be in accordance with current production standards. The relocation provides ease of access for service. If desired, it is recommended to incorporate this retrofit at the time of compliance with SK-SB003.

PARTS LIST:

| <u>PART</u> | <u>DESCRIPTION</u> | <u>QTY</u> |
|-----------------|--|------------|
| AN363-832 | Nut, Hi-Temp Lock | 2 |
| AN507C832R12 | Screw, 8-32X3/4 C | 2 |
| AN816-6J | Nipple Fitting, Stainless | 1 |
| AN960-8 | Washer | 4 |
| HDW-A313501724A | Washer, Dimple, #8 Tinnerman | 2 |
| RM6032-001 | Fuel and Oil System Lubricant (MIL-G-6032D) | AR |
| SK50102-005 | Fuel Line Assembly Part | 1 |
| SK55102-001 | Splash Shield, Fuel Pump | 1 |
| SK55103-001 | Support, Fuel Filter | 1 |
| VP5006-015 | Hose Assembly, Firesleeve Straight to Straight, Fuel Pump | 1 |
| VP5006-017 | Hose Assembly, Firesleeve Straight to Straight, Gascolator | 1 |
| VP5612-005 | FX375-M, Andair 62 Micron SS Screen Fuel Filter | 1 |

*AR = As Required

INSTRUCTIONS:

1. Read all instructions before beginning any work.
2. Turn the fuel selector to off.
3. Remove the engine cowling.

4. Remove the fuel pump splash shield and save all hardware. Remove the hard fuel line between the fuel filter and gascolator. Remove the fuel filter. Figure 1 illustrates the original configuration. Figure 2 illustrates the new filter and fuel line placement.

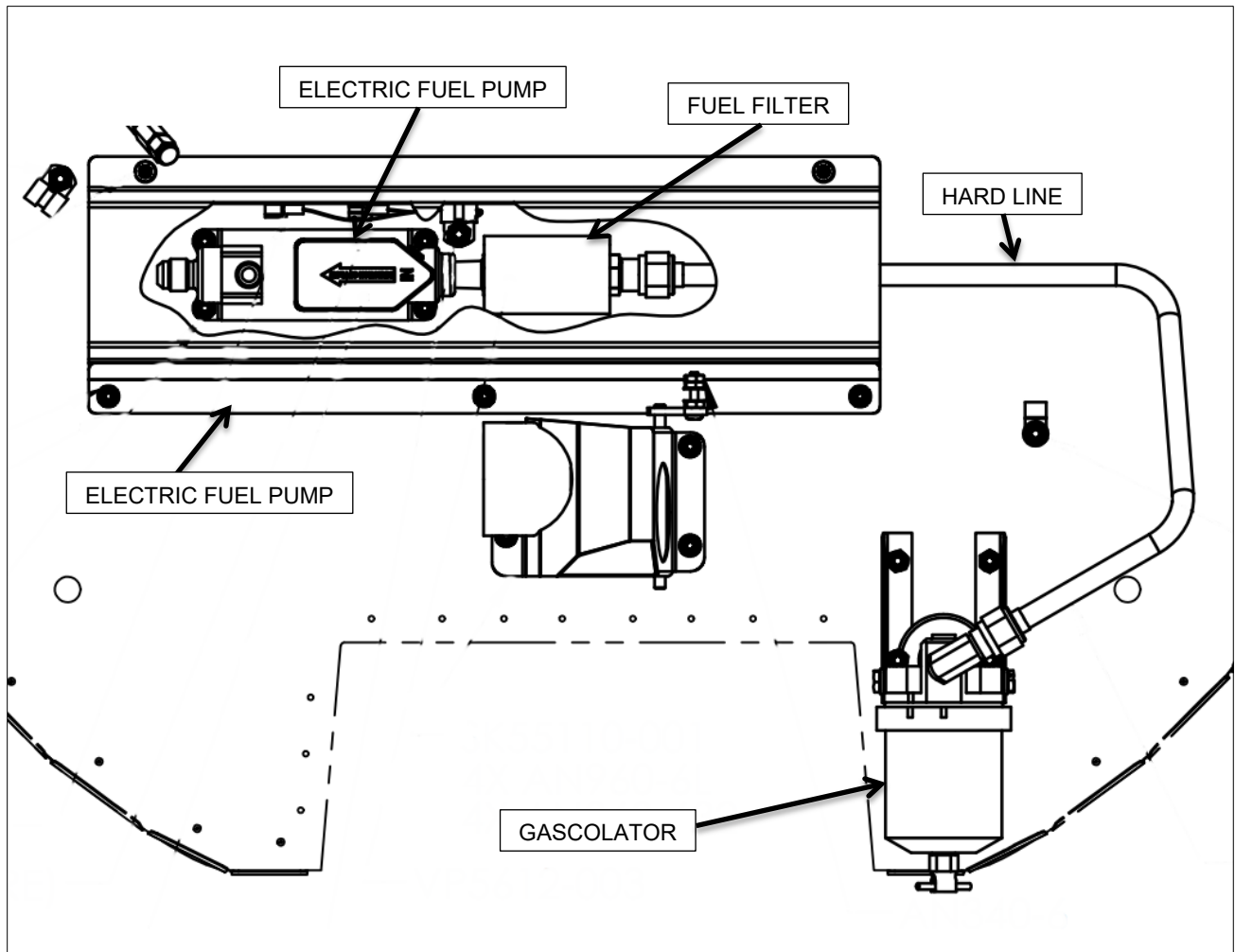


Figure 1 - Original Configuration

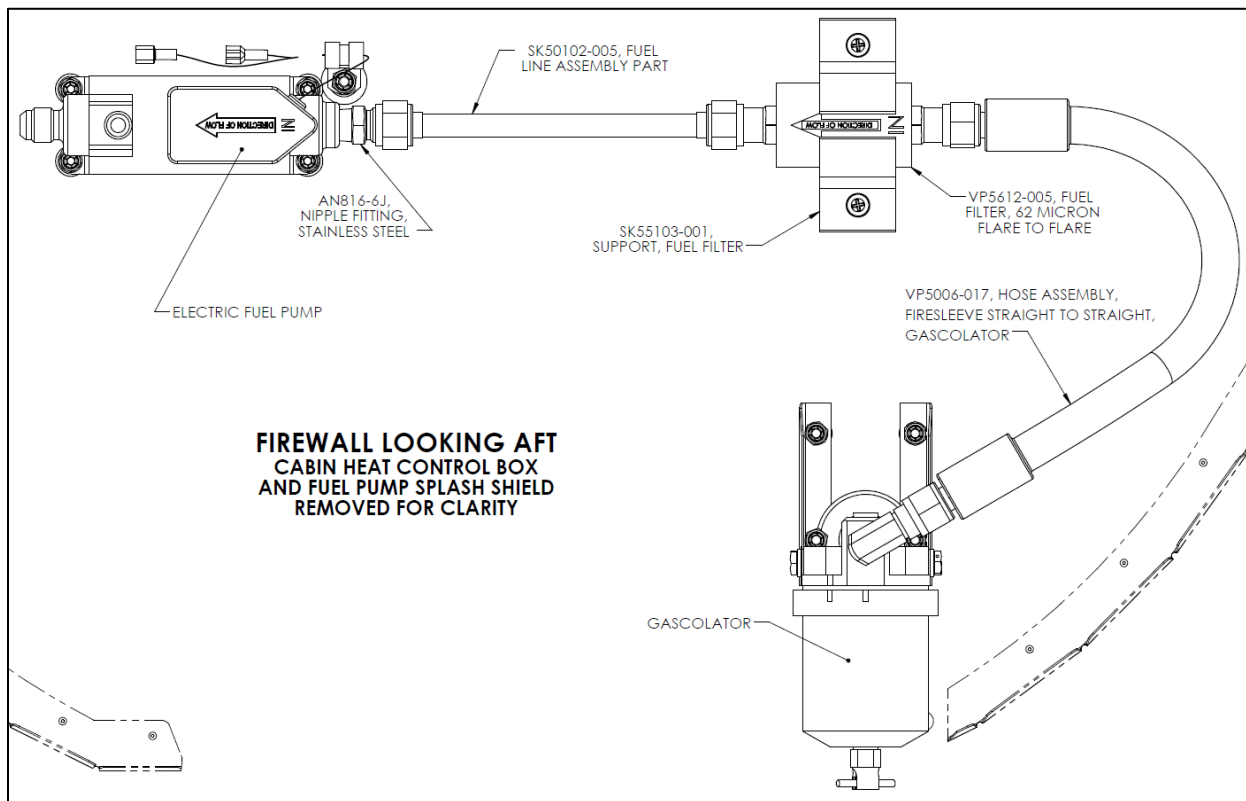


Figure 2- Fuel Filter Retrofit Installation

5. Lube all but the first couple of threads on the NPT side of the AN816-6J stainless nipple fitting using fuel and oil system lubricant, CubCrafters' Part Number RM6032-001. Screw AN816-6J into the "in" side of the electric fuel pump. Tighten 2-3 turns from finger tight. Reference Figure 2.
6. Connect the new hard fuel line, CubCrafters' Part Number SK50102-005, to the stainless nipple fitting, AN816-6J. Torque 270-300 inch-pounds. Reference Figure 2.
7. Connect the new 62 micron fuel filter, CubCrafters' Part Number VP5612-005, to the hard fuel line (SK50102-005) and torque 110-130 inch-pounds. Reference Figure 2.
8. Center the fuel filter support, CubCrafters' Part Number SK55103-001, over the fuel filter and mark the location of the holes on the firewall with a fine tip marker. Centering is critical because the drilled holes will be close to a fuselage tube, see Figure 2.
9. Using a 90° drill and a drill stop, carefully drill 2X pilot holes in the marked locations. Set the drill stop to the minimum depth to penetrate firewall. It is recommended to use a new drill bit, no larger than #40.

NOTE

If the drill walks, use an automatic center punch to *lightly* punch the marked location.

10. Using the 90° drill, and drill stop, open the holes to #23. Deburr outside edges of holes.

11. Find the 2X holes in the firewall from the cabin side. They will be on either side of the left cross tube near the bottom; see Figure 3. It may be required to poke through each hole with a straight pick from the forward side of the firewall to find the holes in the firewall blanket.

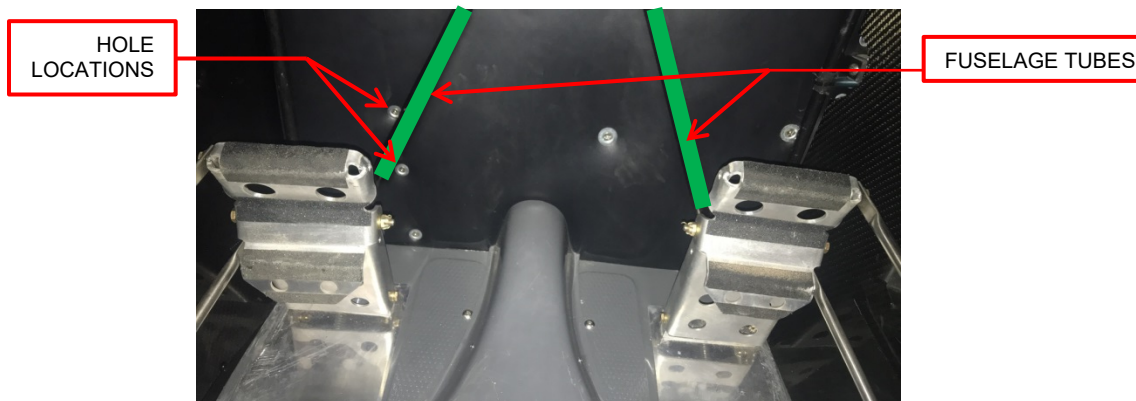


Figure 3 - Firewall Blanket Hole Locations

12. Carefully singe the edges of each hole on the firewall blanket using a soldering iron.

WARNING

HEAT SOURCES WITHIN FUELED AIRCRAFT SHOULD BE USED ONLY WITH EXTREME CAUTION

13. Install the fuel filter support, CubCrafters' Part Number SK55103-001, using the following hardware: 2X AN507C832R12 screws, 2X HDW-A313501724A washers, 4X AN960-8 washers and 2X AN363-832 nuts. Reference Figure 4 for hardware stack order. Torque 27-30 inch-pounds.

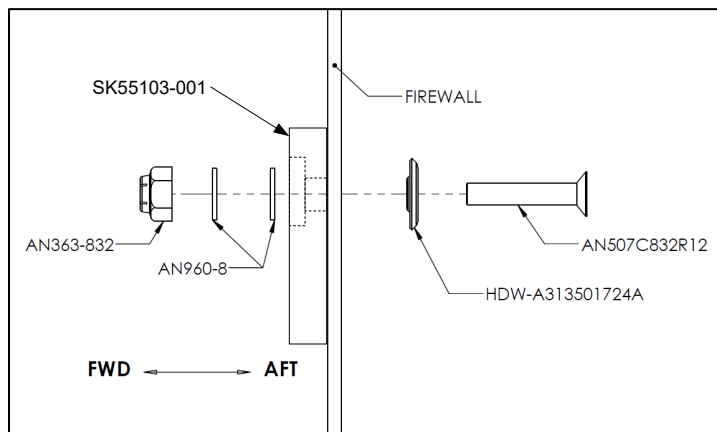


Figure 4 - Hardware Stack, Two Places

14. Install the flexible hose assembly, CubCrafters' Part Number VP5006-017, between the gascolator and the fuel filter. Torque both connections 110-130 inch-pounds. Reference Figure 3.



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15. If equipped, remove the stainless steel formed hard fuel line, union fitting, and flexible hose assembly that run from the outlet side of the electric fuel pump to the inlet side of the mechanical fuel pump. Replace the removed plumbing with CubCrafters' Part Number VP5006-015, hose assembly. Torque the connection at the electric pump 110-130 inch-pounds. Torque the connection at the mechanical pump 270-300 inch-pounds.
16. Verify all lines are torqued as detailed above. Apply 'torque stripe' as each connection is verified.
17. Perform a leak check.
 - a. Turn the fuel selector to both and check for leaks. Re-torque fuel line connections as described in Steps 13-15 if necessary.
 - b. Turn the master and fuel pump on; check for leaks. Re-torque if necessary. Listen for a change in pump tone, indicating that it has been primed with fuel. It may be necessary to push in the mixture knob for 10 seconds to bleed air from the system. Ensure that dry running of the pump is kept to a minimum and that total zero-flow run time on the pump is limited to approximately 30 seconds.
18. Install the new splash shield with the cutout, CubCrafters Part Number SK55102-001, using hardware from the splash shield removed in step 4.
19. Reinstall the engine cowling.
20. Make a logbook entry stating that SK-SI002 Rev NC was complied with. This modification does not create any notable change to weight and balance of the 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. Contact the customer service department at:

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.