



# SERVICE INSTRUCTION **XK-SI002** Rev NC Page 1 of 5

**EFFECTIVE DATE:** This Service Instruction is effective **3-23-2021**

**SUBJECT:** *IGNITION MODULE NOISE FILTER*

**MODELS AFFECTED:** *CCX-2300 S/N 0001 AND ON*

*THIS SERVICE INSTRUCTION IS OPTIONAL BUT RECOMMENDED AND IS NOT REQUIRED FOR CONTINUED SAFE OPERATION. COMPLIANCE WITH THIS SERVICE INSTRUCTION IS SUGGESTED AND IS AT THE SOLE DISCRETION OF THE OWNER / OPERATOR / BUILDER OF THE EXPERIMENTAL AMATEUR-BUILT AIRCRAFT.*

**PURPOSE:** *This document provides instructions for the installation of a noise filter on the left engine ignition module to reduce the associated noise in the audio system.*

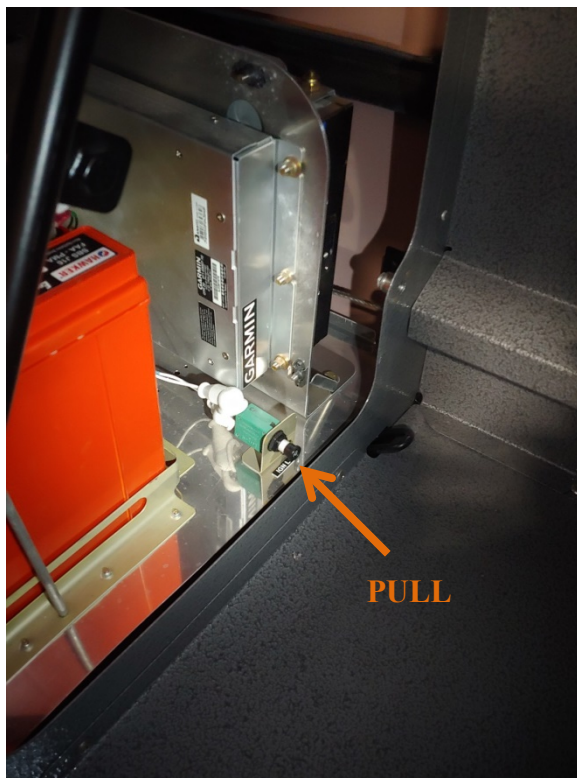
**PARTS LIST:**

<u>PART</u>	<u>DESCRIPTION</u>	<u>QTY</u>
AN315-3R	Nut, Plain, Airframe	1
AN365-1032A	Nut, Nylon Lock	1
AN526C1032R10	Truss Head Screw, 10-32 X 5/8 SS	1
AN960-10L	Washer, Flat, Thin	1
MS21919WDG12	Clamp, Cushioned, #12, 3/4"	1
MS21919WDG22	Clamp, Cushioned, #22	1
MS25171-1S	Boot Electrical	1
RM1075-001	Cable Ties, 4"	AR
VP6056-001	Capacitor, 10K Micro Farads	ALT PN
SP55001-003		1
XC75011-003	POS+ Wire Assembly	1
XC75011-005	NEG- Wire Assembly	1

**WARRANTY:** *Aircraft under warranty will be provided parts at no cost and receive up to 1 hour of labor, if work is performed at a Cub Crafters Authorized Service Center. Please contact Cub Crafters Customer Support for assistance.*

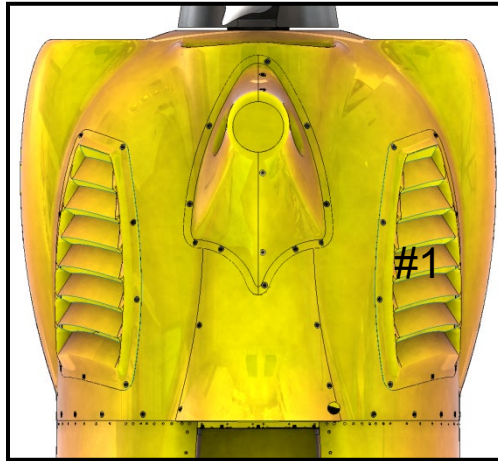
**INSTRUCTIONS:**

1. Read all instructions before beginning any work.
2. Remove aft baggage aft bulkhead to access battery and avionics area.
3. Pull IGN L circuit breaker to remove power from left ignition module. See Figure 1.



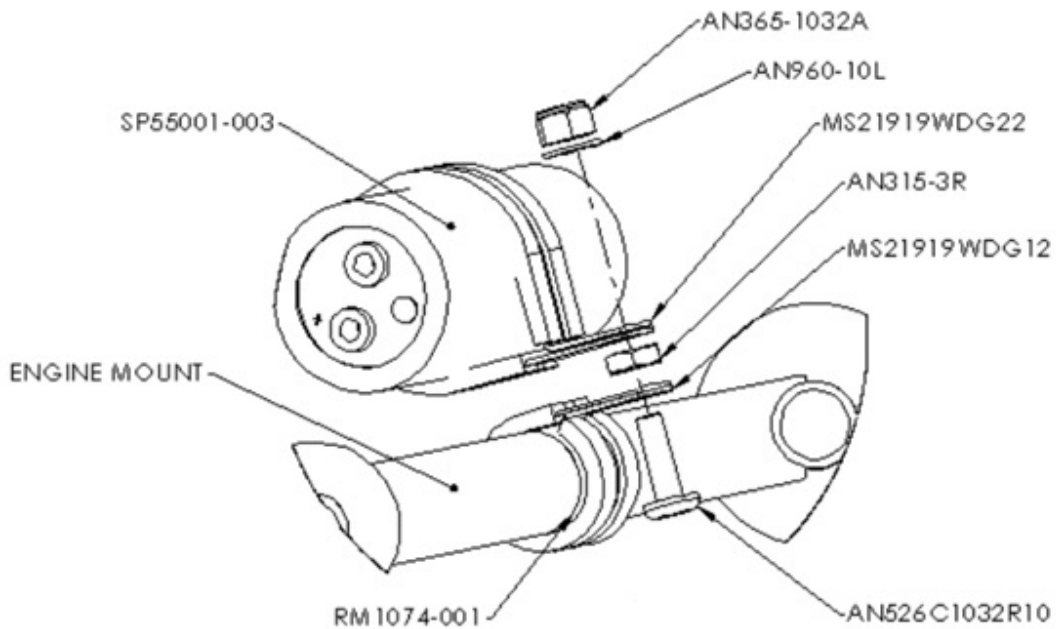
**Figure 1: Ign L Circuit Breaker Location**

4. Remove the top engine cowling and left lower engine cowl louver:
  - a. Apply masking tape to upper cowl behind propeller spinner and backing plate to prevent scratches during removal
  - b. Remove upper cowl fasteners and gently lift off. It may be easier to remove in a rocking motion by lifting one side slowly before lifting entire cowl away
  - c. Remove lower cowl left louver #1. See Figure 2.



**Figure 2 - Lower Cowl Left Louver**

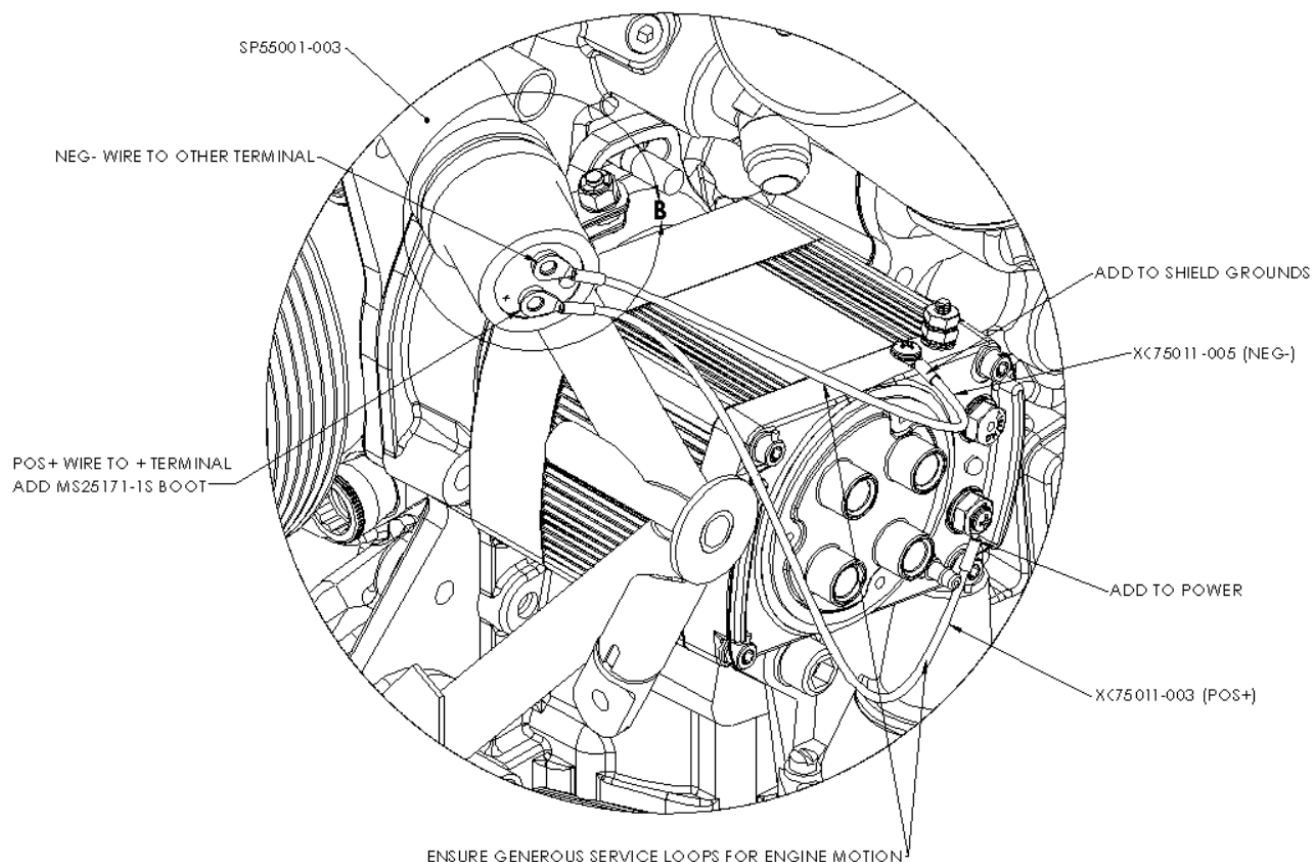
5. Install the capacitor noise filter above upper left engine mount tube as shown in Figure 3.



**LOOKING FORWARD**

**Figure 3: Noise Filter Capacitor on Engine Mount**

6. Install wires as shown in Figure 4 below.



**Figure 4 – Left Ignition Module Noise Filter Installation**

**NOTE**

ENSURE GENEROUS SERVICE LOOPS FOR ENGINE MOTION. DO NOT TIE WIRES TO OTHER WIRES OR STRUCTURE.

7. Verify connections, capacitor + to POWER terminal on ignition module.
8. Ensure MS25171 boot is installed on capacitor over + connector
9. Ignition module POWER terminal should already have a boot over it that will overshadow the added POS+ wire.
10. Reinstall lower engine cowl left louver #1 (from Figure 2).
11. Reinstall top engine cowling.
  - a. Reinstall upper cowl. Take extra precaution to avoid propeller spinner backing plate fasteners as chipping of the composite cowl may occur.



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- b. Ensure all baffle seal overlaps are in the appropriate direction. All seal sections should be flexed up and in toward the center of the upper air plenum
- c. Tighten and cross-check that all cowl fasteners are installed and tight and the all ducting has been reconnected. Recommended order is to tighten all fasteners between the top and bottom cowl, then start at the top cowl center fastener and work downward around the boot cowl attachment.
- d. Remove masking tape from cowling behind propeller spinner and backing plate

**12.** Reset IGN L circuit breaker near main battery.

**13.** Reinstall aft baggage bulkhead.

**14.** Start engine and verify ignition noise is alleviated.

**15.** Run engine up to 2500 RPM and check with ignition key in R, and L, and BOTH.

**16.** Shutdown engine.

**17.** Make a logbook entry stating left ignition noise filter installed per XK-SI002. This modification does not create any notable change to weight and balance of the aircraft.

**18.** Instructions for Continued Airworthiness:

At every annual, or when the top engine cowl is removed,

- a. Check position and security of left ignition noise filter capacitor.
- b. Check ring terminals for security.
- c. Check wires for chafing or any other damage.

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. 16<sup>th</sup> Avenue  
Yakima, WA 98903.  
1-877-484-7865 or 1-509-248-9491  
[support@cubcrafters.com](mailto:support@cubcrafters.com)

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