



2141 ICON Way, Vacaville, CA 95688 - Tel: 707.564.4000 – www.iconaircraft.com

SERVICE BULLETIN

SB-031318 REV A

DATE ISSUED: 3/21/2018
DATE EFFECTIVE: 3/21/2018
SUPERSEDES NOTICE: N/A
SUBJECT: Loose Engine Mount Bolt – Engine to Engine Mount Weldment
AIRCRAFT AFFECTED: **MODEL:** ICON A5
S/N: 00001-00033 (excluding serial numbers that have completed MRA00363-A)

REQUIRED ACTION: Replace all six engine mount bolts with the new design.
TIME OF COMPLIANCE: At or before the next service intervention or regularly scheduled maintenance event, but not to exceed the next one hundred (100) hours' time-in-service from the effective date above.

PURPOSE:

ICON is committed to designing, manufacturing, delivering, and supporting a high quality Light Sport Aircraft, providing a level of safety well beyond expectations. During routine maintenance several aircraft have experienced a loose engine mount bolt due to normal engine vibration. It was determined through testing that the current engine bolt stack up with a split washer or spacer with nordlock were not adequate to hold the torque on the bolt. Although there have been no customer safety notifications from the loose bolt, to date, ICON Aircraft is implementing a solution to prevent future loosening of the bolt. This Service Bulletin is to provide instructions on how to install a new design engine bolt stack up to eliminate a chance of loosening the bolt due to normal engine vibration. If MRA00363-A was issued and completed this service bulletin does not apply.

WARRANTY:

ICON Certified Service Providers: Please submit an invoice for warranty reimbursement for labor on completion of the engine mount bolt installation. Please reference service bulletin number SB-031318.

1. 21-man hours of labor for engine removal, installation and run up with a crew of 2.

PARTS LIST:

Part Number	Part Description	Quantity
840947	SCREW, ALLEN, M10X35 DIN 912, ROTAX (SHORT)	5
941487	SCREW, ALLEN, M10X110 DIN 912, ROTAX (LONG)	1
NL10SS	WASHER, NORD-LOCK, CRES, 10MM X 2MM	6
Loctite 243	Threadlocker	As Required
ICA011740	Torque Seal	As Required
ICA012078	Anticorrosion/Lubricant/Tef-Gel	As Required
T-FGHD-SRHD-M051-32	INSULATING TAPE, SILICONE COATED	As Required

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Instructions:

Special tools, fixtures, or test equipment:

1. Engine Hoist

PREPARATION:

1. Remove the aft bulkhead baggage panel.
2. Remove engine cowling in accordance with Maintenance Manual.
3. Remove mufflers/aft headers only.
4. Burp engine oil.
5. Drain engine oil.
6. Drain coolant.
7. Remove fire sleeve only on LH side at the firewall pass-thru for electrical.
8. Disconnect throttle cable from engine throttle valve
 - a. Cut and remove a zip tie that is securing the throttle cable to the engine mount.
 - b. Remove throttle cable out of the way and leave it in engine bay.
9. Remove coolant hoses for possible rotation of engine
 - a. Remove hoses from both sides of the radiator.
 - b. Remove hoses from water pump on aircraft (firewall) side
10. Remove supply and return fuel hoses on aircraft (firewall) side.
11. Remove oil tank supply and return line on oil tank side only.

CAUTION: Do not use the fuel line assembly to lift the engine.

12. Support the weight of the engine using a properly rated engine hoist.
13. Remove the two forward AN7C27A engine mount bolts with one NSA1149C0763R washer under each head and label them.
14. Remove the aft AN7C27A mount bolts, MS21046C7 nuts, and NAS1149C0763R washers and label them.

CAUTION: Monitor wire harness under firewall during lifting procedure to ensure there is enough slack for engine lift.

15. Carefully lift the engine slightly and rotate as required to facilitate engine mount removal.
16. Remove the four sets of 94150-40 rubber engine mount isolators and label them.

NOTE: If you remove all the mount bolts at the same time it will be very difficult to re-align the mount on the engine in that position.

17. Remove and replace mount bolts one at a time to maintain alignment of engine mount.
18. Discard the six M10 screws and hardware that attach the engine mount to the engine case.

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1. Install the engine mount as shown in Figure 1.
 - a. The single long screw, 941487, is used with Nord-Lock NL10SS washers and no spacers.
 - b. The five short screws, 840947, is used with Nord-Lock NL10SS washers and no spacers.
2. Apply LOCTITE®243™ to all the threads and around entire bolt on installation.
3. Torque each of the six screws to 30 ft-lbs. Apply torque stripe.

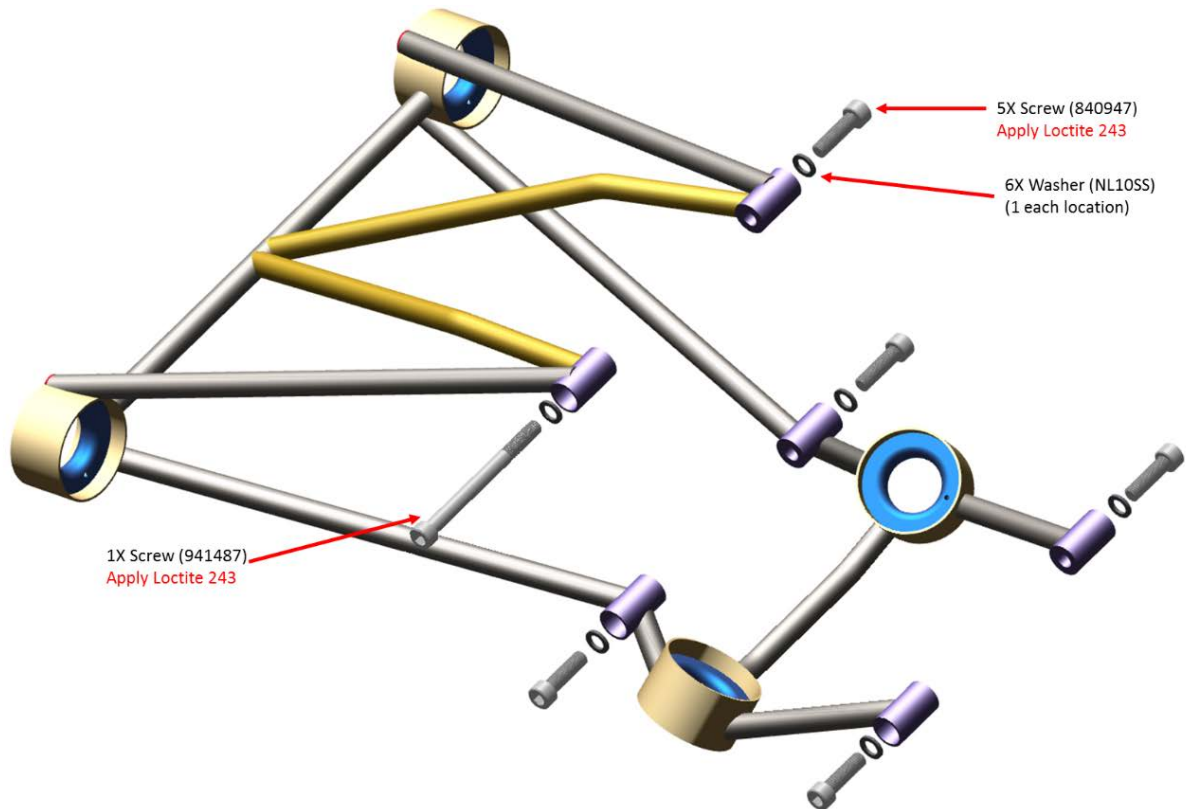


Figure 1: Engine Mount Bolt Installation

4. Install engine in the reverse order of removal.
5. Inspect and clean the threads of engine mount bolts and coat their shank and threads with lubricant.
6. Clean the nutplates in the main wing spar (forward engine mount bolt locations) and lubricate their threads with lubricant.
7. Install the four sets of 94150-40 engine mount isolators, being careful that the roll pins in the mount weldment engage the alignment holes in the isolators. If isolators fit loosely, use tape to temporarily hold them in place.



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8. Align the engine mount with the mounting holes in the firewall and remove any tape from isolators.
9. Loosely attach the engine at the aft two mounting points. Install each AN7C27A bolt up from inside the fuselage with one 93852A105 washer under the head and with an MS21046C7 nut with two NAS1149C0763R washers under it. Do not tighten these fasteners yet.
10. Install the two forward AN7C27A engine mount bolts with one NSA1149C0763R washer under each head. Torque these bolts to 354 inch-lbs. and apply torque stripe.
11. Torque the aft engine mount bolts to 354 inch-lbs. and apply torque stripe.
12. Remove the engine hoist.
13. Install oil tank supply and return line on oil tank side.
14. Install supply and return fuel hoses on aircraft (firewall) side.
15. Install hoses from water pump on aircraft (firewall) side.
16. Install hoses from both sides of the radiator.
17. Apply insulating tape, T-FGHD-SRHD-M051-32, around the wiring at each firewall opening. This tape must lie between the wiring bundle and the firewall flange to seal and prevent chafing. Apply an outer wrap of insulating tape around the outside of the firewall flange and outside of inner tape wrap. Secure the outer tape with hose clamps until a compression seal is achieved.
18. Install fire sleeve for both inner and outer fire sleeve installation on the firewall pass-thru for electrical.
19. Fill the cooling system with coolant per the latest Rotax 912iS Maintenance Manual.
20. Connect the throttle cable to the engine throttle valve. Check and adjust throttle rigging as per the Maintenance Manual.
21. Install mufflers/aft headers.
22. Fill the engine with correct quantity and type of oil.
23. Purge the engine oil system per the latest Rotax 912iS Maintenance Manual.
24. Reverse engine cowling instructions to install cowling.
25. Install the aft bulkhead baggage panel.

VERIFICATION:

1. Complete the engine test run in accordance with ICON Maintenance Manual and inspect the bolts after the run up to ensure no loose bolts.



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MAKE THE FOLLOWING LOGBOOK ENTRY:

“Service Bulletin (insert subject bulletin number) has been complied with and installation is reported to ICON Aircraft Customer Owner Support and Service”.

If you need assistance relocating your A5 to your home base or temporary storage arrangements, please contact ICON Aircraft and ask for Customer Service and Support.

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify ICON Aircraft, Owners Center at:

ICON Aircraft
2141 ICON Way
Vacaville, CA 95688
(855) FLY-ICON or (707) 564-4000
support@iconaircraft.com

Please include the aircraft registration number, serial number, your name, and if known the contact information of the new owner/operator.



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SERVICE BULLETIN APPROVAL

A handwritten signature in black ink, appearing to read "Burt Davis", is written over a horizontal line.

Flight Sciences Manager

3/21/2018

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