

SERVICE BULLETIN

SB-010917 REV A

DATE ISSUED: 1/9/2017
DATE EFFECTIVE: 1/9/2017
SUPERSEDES NOTICE: None

SUBJECT: Fuel Tank Leak in Cockpit

AIRCRAFT AFFECTED: MODEL: ICON A5

S/N: 00001, 00003 - 00017

REQUIRED ACTION:

TIME OF COMPLIANCE: 1) If fuel odor is present in the cockpit – Prior to next flight.

2) If no fuel odor is present in the cockpit – Perform within the next

10 hours of flight.

PURPOSE:

ICON is committed to designing, manufacturing, delivering, and supporting a high quality Light Sport Aircraft, providing a level of safety well beyond expectations.

It was discovered that an aircraft had a strong fuel odor in the cockpit especially apparent during high pitch attitudes (during stalls) with windows in, but also during other maneuvers. The fuel odor was also apparent on the ground with windows in and canopy closed overnight. Upon inspection it was found that there was fuel in the fuel tank mounting structure (ICA006716). Although this event has not resulted in a safety of flight issue, ICON believes it could potentially have an impact to the safety of flight.

Although there have been no customer safety or performance notifications to date, ICON Aircraft is proactively implementing a solution to prevent possible fuel leaks. This Service Bulletin is to provide instructions on how to inspect the fuel tank installation and determine if a repair and/or added protection is needed.

WARRANTY:

N/A

PARTS LIST:

PART	DESCRIPTION	QTY
Loctite 243	Thread locker	A/N
Velcro PSA Loop 1"	Velcro Loop side	A/N
Velcro PSA Hook 1"	Velcro Hook side	A/N
95606A520	Washer, flat, nylon 6-6, .82X.63X.0507	2
Isopropyl alcohol	Isopropyl alcohol	A/N

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INSTRUCTIONS:

- 1. ___Remove baggage floors, headliner and LH sidewall baggage panel in accordance with the maintenance manual section 6.6.
- 2. ____Inspect both AN833-6D bulkhead fitting on the fuel tank filler neck access plate. If they are loose and can be rotated by hand and there has been a complaint of fuel odor, the fuel tank will require removing to inspect and clean, if required, any remaining fuel from the fuel tank mounting structure and hull. If there isn't a fuel odor present in-flight or on ground proceed to step 10 with the fuel tank installed in the plane.
- 3. Remove 4x bolts on seatbacks.
- 4. ___Remove nuts attached to hold down straps for the fuel tank, remove straps.
- 5. ___Disconnect all connectors and hoses to the fuel tank (low level sensor, fuel level probe, inlet and return, filler neck, etc.).
- 6. ___Lift fuel tank to remove it from the airframe.
- 7. ___Inspect Velcro on the exterior of the tank if leaked fuel has reduced the integrity of the Velcro adhesion to the exterior of the tank replace the Velcro after a thorough cleaning with 90% Isopropyl alcohol.
- 8. ___Inspect the fuel tank mounting structure for standing fuel and or fuel residue. Clean fuel tank mounting structure thoroughly with isopropyl alcohol. If standing fuel is present (as shown in figure 1) inspect the bottom of the hull under the fuel tank mounting structure back to the bilge pump area for fuel and thoroughly clean the hull of fuel and fuel residue.

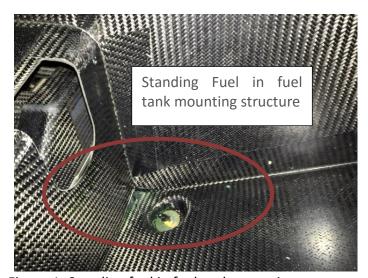


Figure 1: Standing fuel in fuel tank mounting structure.

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- 9. ___Inspect the fuel tank mounting structure velcro adhesion to the structure. Replace the velcro after a thorough cleaning and prepping of the surface with isopropyl alcohol.
- 10. ___Remove the 12x 1/4 bolts from the fuel tank filler neck access port, disconnecting the fuel pickup line from the AN833-6D bulkhead elbow fitting, completely remove the fuel tank filler neck access port plate.
- 11. ___Inspect the AN833-6D bulkhead fitting nylon washers, replace if damaged.
- 12. ___Re-install pickup side AN833-6D bulkhead fitting NAS1149C0932R steel washer, 95606A520 nylon washer and AN924-6D nut. Apply Loctite 243 and torque fitting and nut to 120-150 in-lb.

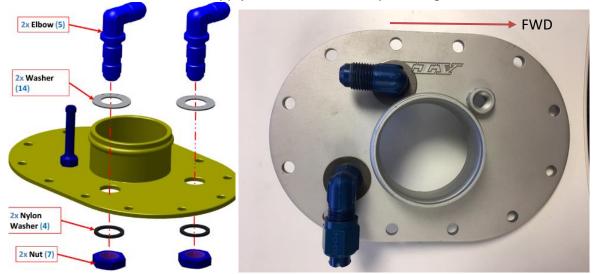


Figure 2: Assembly diagram of the bulkhead fittings and hardware in the filler neck access port.

13. ____Re-install the return side AN833-6D bulkhead fitting, NAS1149C0932R steel washer, 95606A520 nylon washer and AN924-6D nut. Bias the nylon washer as far off the weld as possible during reassembly (as shown in figure 3). Apply Loctite 243 and torque fitting and nut to 120-150 in-lb.

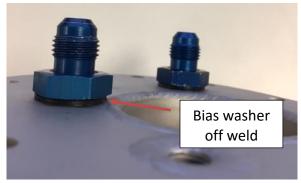


Figure 3: Photo of nylon washer bias off the weld as far a possible.

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4Re-connect fuel pickup line and re-install filler neck access plate on to the fuel tank. Torqu
the 12 fasteners to 40 in-lb.
5Reinstall fuel tank assembly IAW ICA000267
5Reconnect all connectors and hoses to the fuel tank (low level sensor, fuel level probe, inlet
and return, filler neck, etc.).
7Re-install straps and secure with nuts attached to hold down straps for the fuel tank.
BTurn on fuel pumps to Both and check for leaks and correct as necessary.
9Reinstall baggage floors, headliner, and side panel per maintenance manual section 6.6.
DReinstall seatbacks

MAKE THE FOLLOWING LOGBOOK ENTRY:

"Service Bulletin SB-010917 Rev A. has been complied with and reported to ICON Aircraft Owner 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
ownersupport@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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