



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

SAFETY DIRECTIVE/ALERT

SD-030216 REV B

DATE ISSUED: 03/07/2016
DATE EFFECTIVE: 03/07/2016
SUPERSEDES NOTICE: N/A
SUBJECT: Fuel System
AIRCRAFT AFFECTED: **MODEL:** A5
S/N: 00001, 00002, 00003
REQUIRED ACTION: Install fuel system upgrade
TIME OF COMPLIANCE: Prior to Next 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.

ICON has experienced several anomalies related to the functionality of the A5 fuel system. Although none of these events individually have resulted in a safety of flight issue, ICON believes when assessed collectively could potentially have an impact to the safety of flight.

PARTS LIST:

PART	DESCRIPTION	A5
AN833-6D		1
AN924-6D		1
AN816-6D		1
NAS77C5-042		1
Freelin Wade Nylon Tube	0.312OD x 0.232ID x 0.04 w	1
Russell 624160	(remove rubber O-ring)	2
Aeroquip FC598-06		1

INSTRUCTIONS:

Task Specific Training:

This fuel system upgrade is to be performed by an ICON Aircraft, Inc. employed and trained mechanic with an Airframe and Powerplant certificate.

Removal of Existing Assemblies:

1. Remove LH wing, inboard wing access panel, LH baggage panel, baggage floors and headliner per maintenance manual.
2. Remove nuts attached to hold down straps for the fuel tank, remove straps.
3. Disconnect all connectors and hoses to the fuel tank (low level sensor, fuel level probe, inlet and return, filler neck, etc.).
4. Lift fuel tank to remove it from the airframe.



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

SAFETY DIRECTIVE/ALERT

SD-030216 REV B

5. Remove vent line by disconnecting from filler neck, and cutting appropriate zip ties in the wing to remove lines.
6. Remove seated bushing in the wing by applying heat to the local area (no greater than 150°F) and carefully applying pressure to remove it.
7. Remove vent line by cutting appropriate zipties.
Note: While removing line pay careful attention to routing and length of line and slack.
8. Remove 4x bolts on seatbacks, if required.
9. Drill out vent line hole in wing to 7/16"

Consumables and Bulk Materials List:

2x Russell 624160
Aeroquip FC598-06 Hose
AN816-6D
Freelin-Wade Nylon Tubing .312ODx.232IDx.04t
1x McMaster 50775K303
CB200
FB10-6042
1x NAS77C5-042
Permatex Ultrablack silicone

Installation:

Fuel Tank Modifications

1. Remove the pickup line from the assembly, this can be accomplished by removing the plate on the top of the tank, removing the foam, cutting 3 zip ties along the line.
2. Once removed, save the finger strainer, the AN nut on the bottom of the plate, the AN833 90° fitting.
3. Use the new FC598-06 hose to reroute the fuel pick up line. Note: This should be trimmed as short as possible to get the length required to the adapter plate, and connect it to the plate. Excess length creates issues when reinstalling plate.
4. Install all other components as shown in the attached sketch.
Note: It is acceptable to use a piece of the FC598-06 hose on the fuel strainer end to prevent abrasion on the tank. Use safety wire to secure position.
5. Reinstall tank and ensure all connections are completed and torqued.

Vent Line Modifications

1. Bond in new NAS77C5-042 bushing into 7/16" hole in wing.
2. Use Nylon tubing to re-route vent line and install per notes from removal and attached sketches.
3. Inside the fuselage just short of the wing fold tube attachment, splice the line with connector 5111K472.
4. Reference Figure 1 and Figure 2, use a 5/16" drill to open up the stock compression fitting and nut to accept new tubing. Use CB200 to bond assembly together and to seal tube to nut.

SAFETY DIRECTIVE/ALERT

SD-030216 REV B

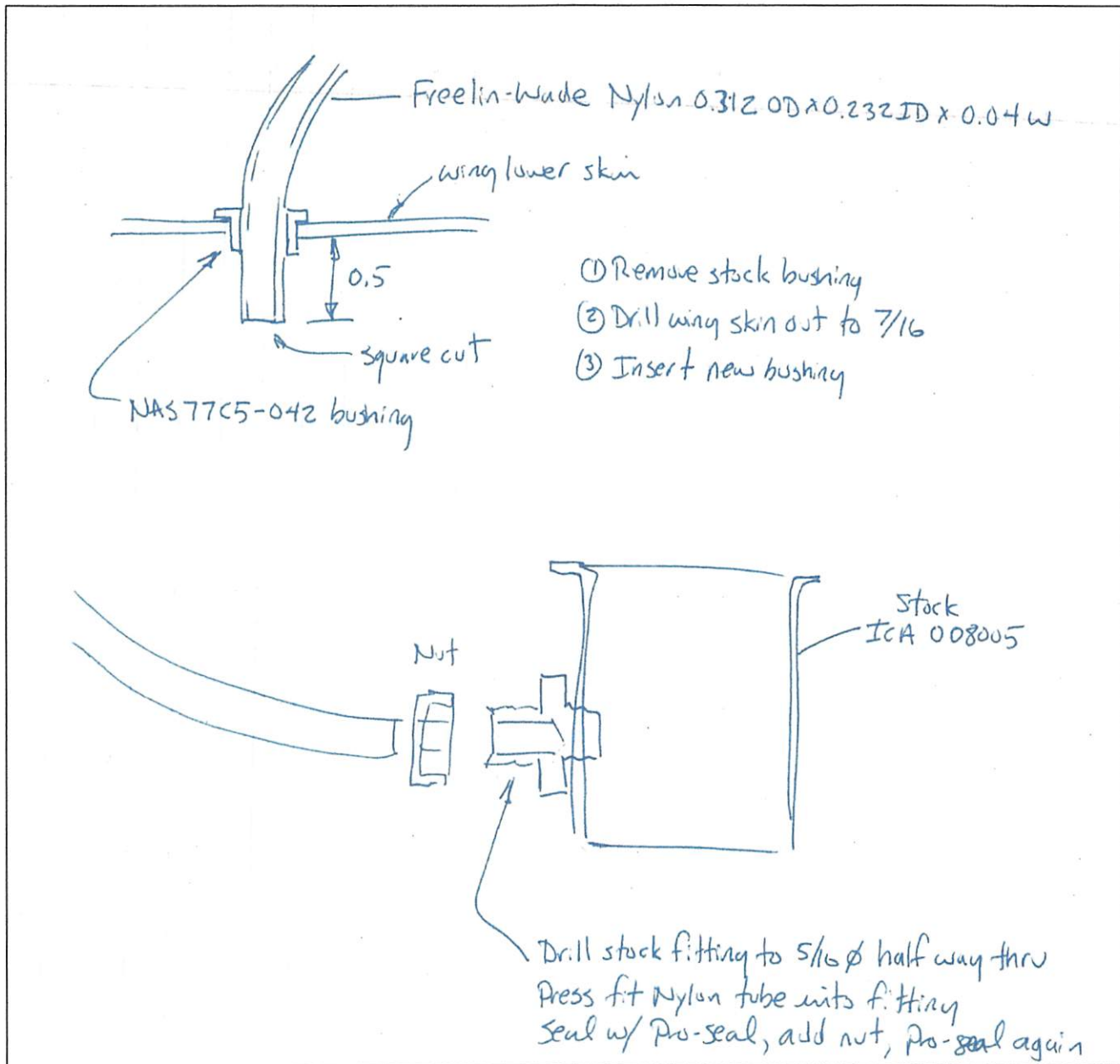


Figure 1



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

SAFETY DIRECTIVE/ALERT

SD-030216 REV B

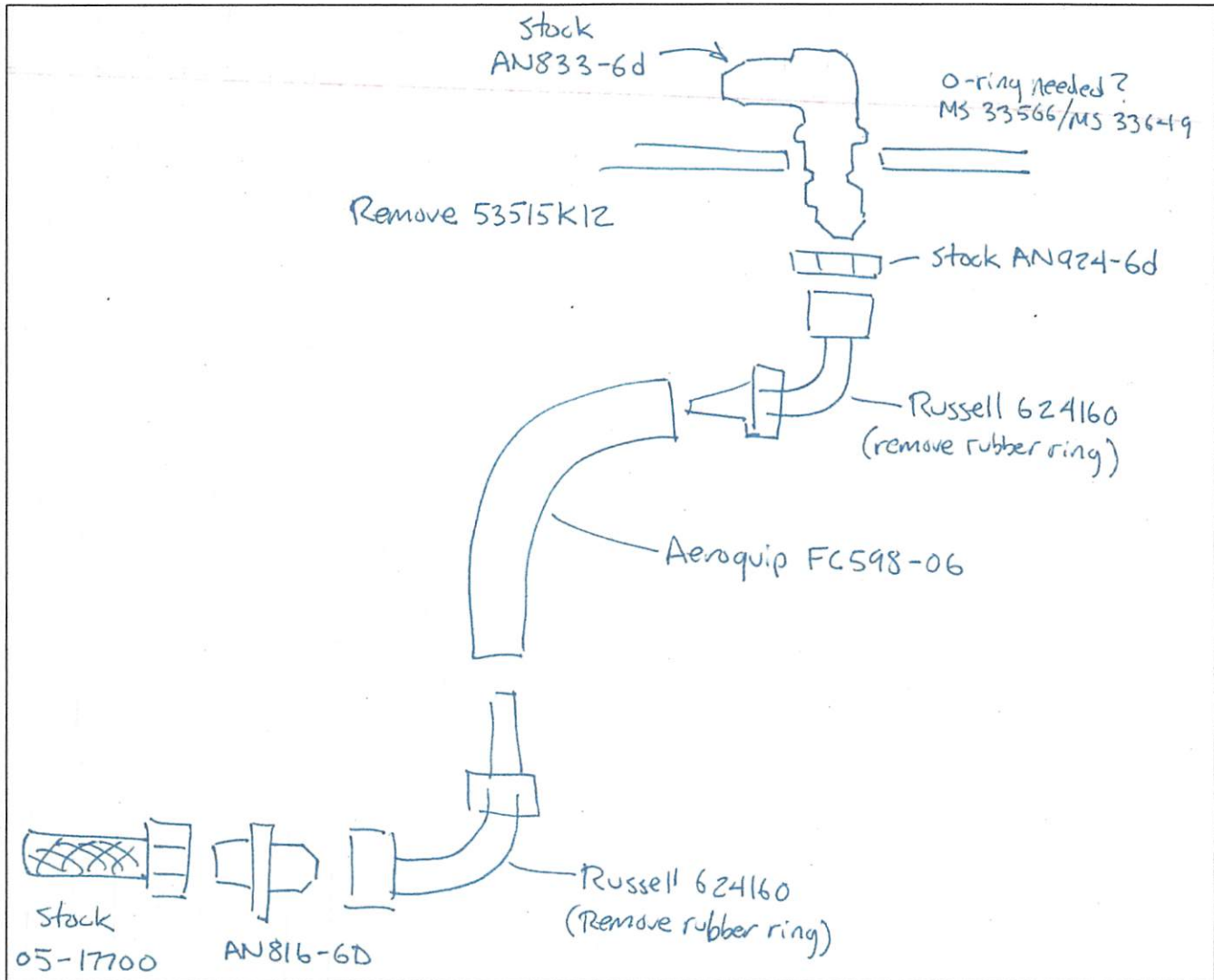


Figure 2

Verification:

1. Run full power on ground to ensure operation of system.
2. Perform Functional Check Flight for 1 hour. Ensure at least 20 minutes of the flight are at full throttle. Remove DAC after flight and review data for any anomalies in operational performance. Primarily throttle control, fuel flow and fuel pressure.
3. Reinstall DAC

Make the following logbook entry:

"The corrective action of Safety Directive SD-030216-B has been complied with and reported to ICON Aircraft Owner Support"



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

SAFETY DIRECTIVE/ALERT

SD-030216 REV B

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

If you are no longer owner/operator 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.






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

SAFETY DIRECTIVE/ALERT

SD-030216 REV B

SAFETY DIRECTIVE APPROVAL

	VP Engineering	
NAME	TITLE	DATE

		
NAME	TITLE	DATE

NAME	TITLE	DATE

NAME	TITLE	DATE