



TECHNICAL BULLETIN

Czech Aircraft Works s.r.o.
Na Zahonech 1177 Building A10s
686 04 Kunovice -Airport
Czech Republic
tel: 00 420 572 543 456
fax: 00 420 572 543 692

NO: TB-SC-FRA-005

DATE: 2008/07/25

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SUBJECT:	FUEL-TANK SENDER GASKET REPLACEMENT
AIRCRAFT AFFECTED:	Due to the potential nature and frequency of this problem, this Technical Bulletin can affect all SportCruiser models delivered between March and July of 2008 to the United States.
COMPLIANCE:	Czech Aircraft Works recommends accomplishment of this bulletin IF the effects of fuel additives such as ethanol and other chemicals are affecting the normal operation of the fuel-sender gasket components or seals.

DESCRIPTION:

Due to the current practice of additives placed in fuels by fuel distributors, a potential problem related with the fuel sender gaskets used on some SportCruiser's may result when using fuels such as Automotive and MOGAS. It has also been documented that the use of 100 LL will delay the onset of gasket deterioration, but it too will ultimately cause deterioration over time. The fuel contamination problem manifests itself in a unique way and if not resolved, may cause fuel blockage and/or flow restriction, leaky fuel drain valves, and/or ultimately fuel starvation to the engine.

APPROVAL:

Sport Aircraft Works INC. authorizes alteration/installation of the following equipment on all SportCruiser's that are experiencing gasket related problems in the form of swelling of components and /or seals and or contamination in the form of gasket debris in the fuel line as a result from fuel additives and other chemicals introduced into the fuel system. The engineering design aspects of this bulletin are Czech Aircraft Works s.r.o approved.

All equipment will be installed in accordance with the manufacturer's written instructions and diagrams. Such diagrams and instructions must be kept permanently with the owner's Aircraft's Maintenance Manual.

Affidavit of ASTM Compliance;

I certify that the installation of the equipment described and outlined in the Technical Bulletin TB-SC-FRA-005 will not alter the applicable ASTM design and performance of this aircraft.

Dan Defelici – Czech Aircraft Works Authorized Technical Representative



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MANPOWER/SCOPE OF LABOR:

Approximately 1.5 hour(s) of labor is required to complete this technical bulletin. Man-hours may vary with personnel and facilities available.

The scope of work for this technical bulletin is intended for those individuals certified as either Aviation Maintenance Technicians AMT (A&P) or a Light Sport Repairman with a Maintenance Rating.

WARRANTY:

Warranty Coverage is available for this modification. A gasket kit will be sent out upon request.

MATERIAL:

SPECIAL TOOLS: No special tools required.

WEIGHT AND BALANCE: Insignificant.

ELECTRICAL LOAD DATA: NONE

REFERENCES:

SPORTCRUISER Maintenance and Inspection Procedures (MIP)

PUBLICATIONS AFFECTED: NONE

TECHNICAL BULLETIN INSTRUCTIONS:

IMPORTANT: Before proceeding with this bulletin verify that the fuel remaining in the tank is less than 10 gallons.

1. Remove the $\frac{1}{8}$ " rivets by drilling off the heads that attach the plate to the wing. Take care not to damage the plate when removing the rivets by using a drill stop or equivalent. Mark the orientation of the plate with a piece of tape (see figure 1). Also note the orientation of the sender and the wires once the plate has been removed.



FIGURE 1

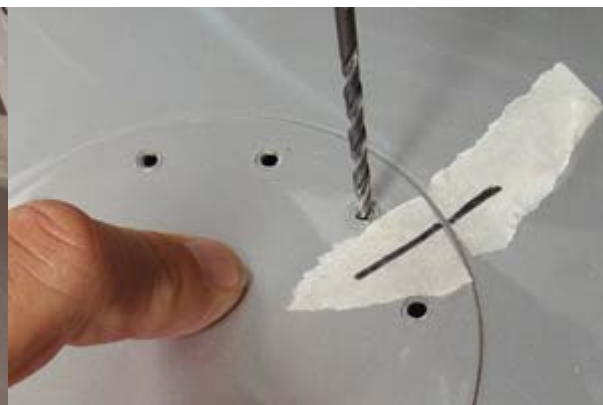


FIGURE 2.



FIGURE 3.



FIGURE 4.

2. Remove the wires from the sender. Tape the wires off onto the surface. Remove the screws that hold the sender and carefully clear out all other debris such as rivets and /or gasket material that may fall into the hole before removing the sender and gasket.

3. Clean the surface area with alcohol or equivalent solvent. Make sure no debris falls into the tank as the area is being cleaned.



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IMPORTANT: If there is evidence of gasket deterioration, then the tanks should be flushed and drained to remove the debris in the associated tank. This may be as easy as siphoning the tank, however, the technician must ensure that most debris has been removed from the tank. Removal of the Fuel sump drain plug may be necessary.

4. Reinstall gasket and sender. Refer to figures 5-8 below.



FIGURE 5.

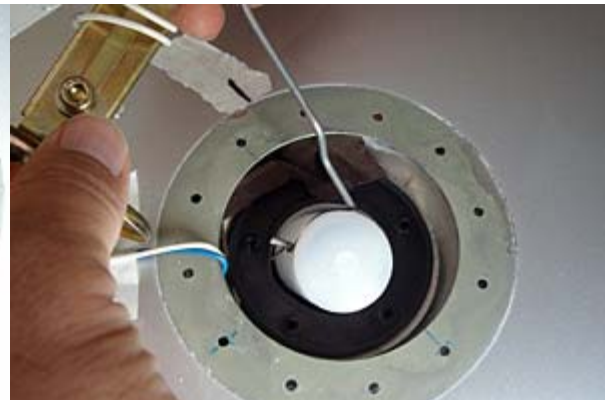


FIGURE 6.

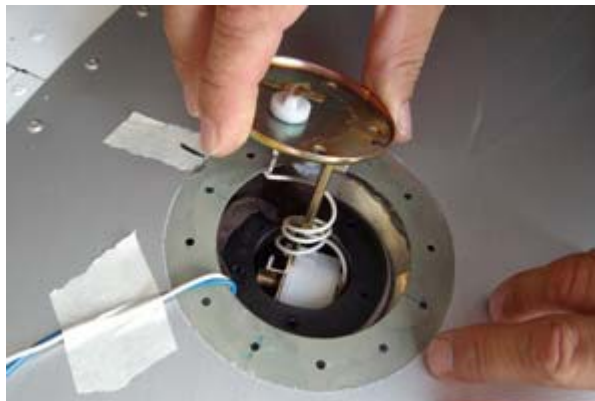


FIGURE 7.



FIGURE 8.



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5. Tighten the screws in a criss-cross pattern. Make sure to step torque several times. Slowly tighten the screws making several passes until the screws are snug. Do not over tighten the screws, as this will deform the gasket and cause a seal problem.

6. Reconnect the wires in the correct orientation as noted in step 1.

IMPORTANT: Before reattaching the inspection cover, verify operation of the sender by checking the fuel gauge reading in the cockpit.

7. Reattach the fuel sender inspection plate with $\frac{1}{8}$ " diameter soft rivets.



FIGURE 9.



FIGURE 10.

Repeat the steps above for the opposite side Fuel-sender gasket.

RESTORE AIRCRAFT TO AIRWORTHY CONDITION:

7. Record and Log the maintenance work in the aircraft records to reflect compliance with this technical bulletin. Technicians may use the following annotation in Maintenance Logbook entry:

INSPECTED AND COMPLIED WITH CZAW TECHNICAL BULLETIN TB-SC-FRA-005 PERTAINING TO FUEL TANK GASKET REPLACEMENT DUE TO ETHANOLS AND OTHER UNKNOWN FUEL ADDITIVES.