

# Ayres service bulletin No. SB-AG-40

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Service Bulletin No. SB-AG-40 October 30, 1997

# **FUEL TANK INSPECTION**

**MODELS AFFECTED:** All turbine powered S2R aircraft including conversions.

**REASON FOR PUBLICATION:** As a result of contamination, several aircraft have experienced

fuel flow problems between the wing fuel and the header tanks.

**COMPLIANCE:** Inspection is required upon receipt of this bulletin.

BY WHOM WORK WILL

BE ACCOMPLISHED: A & P mechanic or equivalent.

APPROVAL: FAA approved.

**ESTIMATED MAN-HOURS** 

FOR COMPLIANCE: 5 hours.

**PARTS DATA:** P/N 20361T001

SPECIAL TOOLS: N/A

#### **ACCOMPLISHMENT INSTRUCTIONS:**

1. De-fuel the aircraft. Due to the presence of flammable vapors, the danger of fire is greatly increased. Use extreme care and follow local fire safety procedures regarding specific open areas for de-fueling operations, fire extinguishers, and personnel.

The following operations provide detail instructions for the inspection of the aircraft fuel system for contamination and obstruction.

- 2. Wing fuel tank inspection. Remove the fuel tank inspection plates located on the top surface of each wing.
- 3. Using an inspection mirror and an explosion proof light, inspect each wing fuel nay for evidence of contamination. The aft wing spar will be a tank low-point, and thus would have probably collected contamination if present.

Inspect the fuel level-sending unit within the tank just aft of the first inspection plate by the fuselage. Inspect the fuel filler cap plate and adjoining area. The attach bolts should have a uniform fluid tight coverage of the fuel tank sealer.

- 4. Upon completion of the tank inspection, the inspection plates should be reinstalled to prevent the possibility of accidental contamination. Remove the old sealant in and around the cover plates.
  - a. Thoroughly clean and rinse the fuel tank. Reinstall inspection plates with (P/N 20361T001) gasket. PRC is used as the sealant throughout the system.
  - b. Use a light film of sealer on the threads of the bolts and then tighten in a crossing type sequence.
- 5. <u>Fuel line inspection.</u> Located underneath wings at the fuselage. Disconnect the fuel lines from the elbow fittings and remove the wing fuel outlet fittings from the wing. Two each 90 degree elbow fitting under each wing (four each total.) Examine the fittings for contamination and thoroughly clean.
- 6. Remove header tank drain and fuel outlet hose. Cap three lines from the wings and all fuel outlet fittings on header tank. With suitable container under tank drain, blow compressed air through the one open line to insure good airflow from line through the tank drain. Next, blow air through drain insuring good airflow through open line. Repeat process for each line and header tank outlet.
- 7. Thoroughly clean and rinse header tank.
- 8. Reinstall wing fittings and tank drain using light film of thread sealer. Reconnect lines, refuel aircraft and check for leaks.
- 9. <u>Contamination control.</u> Refer to the attached Service Letter, SIL-AG-12, for fuel delivery information.
- 10. Refer to the maintenance Manuel Section 5 "Fuel System" under "Leak Sealing" for tank leak check.
- 11. After repairs are completed, recheck the fuel filter after first run-up (before first flight.)
- 12. Fill out and return the enclosed compliance card indication the results of the inspection. Upon completion, no further action is required under Service Bulletin No. SB-AG-40.

## AIRCRAFT RECORDS:

SB-AG-40, dated N	November 3, 1997
<b>Entitled FUEL TAN</b>	IK INSPECTION,
accomplished	(date).