

Advisory Wire

REFERENCE NO:	AW700-49-0743	INFORMATION TYPE:	Maintenance Operational
ATA:	49-90	EFFECTIVITY:	Global 7500 (70006-79999)
SUBJECT:	APU Oil Replenishment with the ORS (Post SB 700-49-7501)		

1. REFERENCES:

- 1.1. Service Bulletin 700-49-7501 "Modification-General- installation of FADEC Software V2.0"
- 1.2. Flight Crew Operating Manual (FCOM) Volume 1 Section 11-02-5; APU oil tank level check and servicing using the oil replenishment system (ORS)
- 1.3. Aircraft Maintenance Procedure (AMP) TASK BD700-A-J12-14-09-00AAA-200B-A "APU oil supply - Quantity check"
- 1.4. AMP TASK BD700-A-J12-14-09-00AAA-212A-A "APU oil supply - Fill with oil"

2. INTRODUCTION:

This Advisory Wire (AW) informs the Operators about a situation where the oil replenishment system (ORS) could overfill the APU when the temperature of the oil in the Auxiliary Power Unit (APU) is above 120 degrees Fahrenheit (°F) or 49 degrees Celcius (°C).

3. DESCRIPTION:

During the certification of the new APU Full Authority Digital Engine Controller (FADEC) software V2 (Ref 1.1) Safran has improved remote Oil Fill logic to prevent over-filling. While this condition has not been reported in service with the APU FADEC software V1, further testing at the maximum and minimum operating conditions revealed a limitation existing at high operating temperature. When the oil temperature exceeds 49°C, the APU FADEC software does not detect that the fill has gone past the "full" condition on the oil level sensor and continues to overfill the APU unless it is manually stopped. This could potentially result in an oil spill or damage the APU.

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4. ACTION:

Flight crew and Maintenance personal should be familiar with the following instructions to avoid overfilling the APU:

- 4.1. It is preferable to service the APU oil when the **APU OIL LO QTY** Advisory CAS message is posted to ensure that the oil level is below 3.4 quarts (ADD OIL). The APU is capable of operation for a minimum of 20 APU operating hours after reaching the “ADD OIL” level as indicated by the oil level sensor
- 4.2. Monitor the “APU Oil Sump Temp” on the APU system page and make sure the temperature is equal or below 49°C prior servicing the APU with the ORS.
- 4.3. If the temperature is above 49°C or the temperature of the oil cannot be verified, service the APU with the ORS for 5 seconds. The ORS will not be available for 5 minutes after the APU replenishment was stopped. Continue the replenishment of the APU for another 5 seconds until the indication is showing green or 3.8 quarts (full).
- 4.4. The APU oil reservoir can also be serviced manually after 30 minutes.

Bombardier is currently working on a resolution for this condition. Additional details on the corrective action will be communicated by further revision of this Advisory Wire. In the meantime, the FCOM (Ref. 1.2) and the AMP (Ref. 1.3 & 1.4) will be revised including instruction to avoid overfilling the APU with the ORS system.

Should you have any technical questions pertaining to this Advisory Wire, please contact your local Field Service Representative (FSR) or Customer Response Center (CRC).