

# ADVISORY WIRE

REFERENCE NO:	AW300-24-0222	INFORMATION TYPE:	Maintenance Operational
ATA:	24	EFFECTIVITY:	Challenger 300 (20003 to 20500) Challenger 350 (20501 to 20635)
<b>SUBJECT:</b>	<b>Aft Fuselage - APU Generator Power Feeder Cable Fouling Condition</b>		

## 1. REFERENCES:

- 1.1. BD-100 Aircraft Illustrated Parts Catalog (AIPC) 29-18-01-02 – item 155 (TUBE ASSY), P/N 1005354244-007
- 1.2. BD-100 Standard Practices Manual (SPM) - TASK 20-22-00-910-805 (Tubing/Allowable Damage)

All manuals are available on the CIC website (<http://www.cic.bombardier.com>) within the Technical Library.

## 2. INTRODUCTION:

This Advisory Wire is to inform Operators that a wiring fouling condition was discovered in the aft equipment compartment of an in-service aircraft.

## 3. DESCRIPTION:

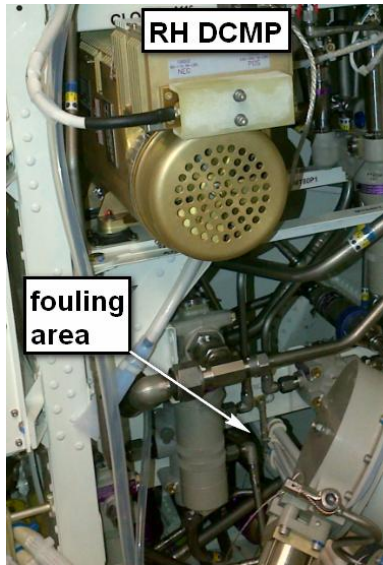
An APU generator power feeder cable was found touching the Ref. 1.1 hydraulic system return line, under the right hydraulic equipment rack, during a scheduled maintenance inspection in the aft equipment compartment of a Challenger 300. See photos on page 2.

There was no effect reported on the aircraft systems and only some minor damage was found on the insulation jacket of one of the two APU generator power feeder cables (photos next page). Neither the hydraulic line, nor the power feeder wire had to be replaced. The power feeder wires were pushed away slightly from the Ref. 1.1 hydraulic line to re-establish a proper clearance (minimum of 0.5") and the aircraft was returned to service.

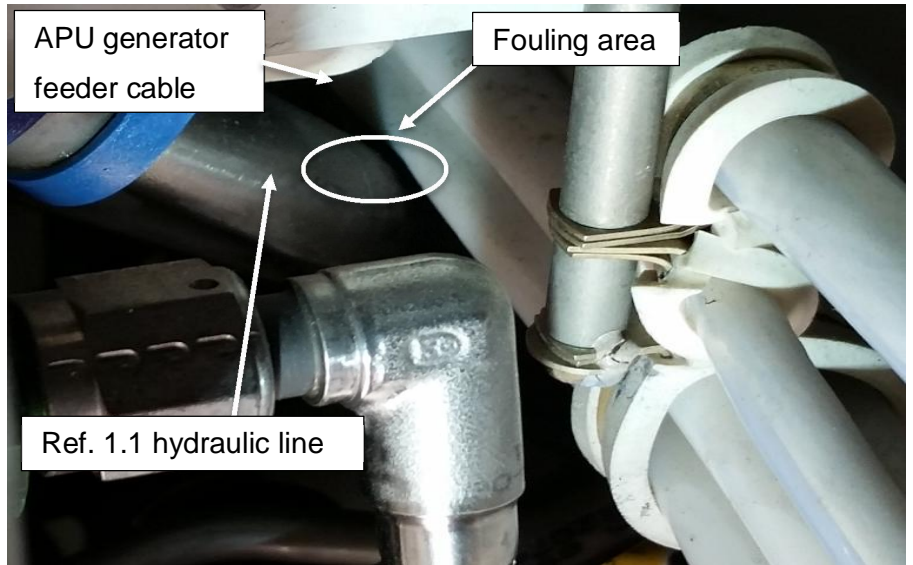
Following this report, several Challenger 300 & 350 were inspected for the same condition. Most aircraft inspected were found with a proper clearance (minimum of 0.5 inch) between the power feeder cables and the Ref. 1.1 hydraulic line. Only a few aircraft were found with either a light fouling condition or with less than the minimum clearance needed. All aircraft inspected were found with the power feeder cables supporting hardware installed as per drawing.

On aircraft 20636 and subs, the power feeder cables supporting hardware installation has been modified to correct the fouling condition by a one-clamp configuration to provide improved clearance.

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Rh Hydraulic Equip Rack



Close up view of fouling area

Service bulletins for the Challenger 300 and 350 models will be released shortly to address this fouling condition. The rework will consist of removing the existing power feeder cables supporting hardware (multiple clamps configuration) and replacing it with the one clamp supporting hardware configuration currently installed onto aircraft 20636 and subs.



AC 20003 to 20590 Supporting Hardware Configuration



AC 20591 to 20635 Supporting Hardware Configuration



AC 20636 & Subs Supporting Hardware Configuration

# ADVISORY WIRE

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## 4. ACTION:

There are no immediate action for Operators to take at this time.

Until the above mentioned SB are made available to Operators to address this fouling condition, the affected aircraft can be inspected at operator's discretion in accordance with the following criteria:

1. Clearance should be 0.5 Inch or more between the APU generator power feeder cables and the Ref. 1.1 hydraulic line. If a low clearance is found, the power feeder cables should be pushed away from the hydraulic line to re-establish a proper clearance.
2. In case of fouling, if any damage on the power cables is found, a Service Request for Product Support Action (SRPSA) should be sent to "SRPSA@aero.bombardier.com" to further evaluate the damage and provide a proper disposition.
3. In case of fouling, if any damage on the Ref. 1.1 hydraulic line is found, the ref. 1.2 Standard Practices Manual (SPM) task should be used to evaluate the damage and provide a proper disposition.

Please report any issues of this type to your Field Service Representative or to the Customer Response Centre.