ADVISORY WIRE
AW700-49-0334, Rev. 1

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FROM: BOMBARDIER CUSTOMER SERVICES BUSINESS AIRCRAFT

ADVISORY WIRE

REFERENCE NO: AW700-49-0334, Rev. 1

SUBJECT: APU STARTER - Brush Inspection

EFFECTIVITY: Global Express Aircraft (9002 to 9153)

Global 5000 aircraft (9127 to 9413, 9415 to 9442, 9998)

Global XRS aircraft (9159 to 9431)

Global 5000 featuring Vision Flight Deck (9386, 9401, 9445 to 9997)

Global 6000 aircraft (9313, 9381, 9432 to 9997)

ATA: 49-42

This Advisory Wire contains Maintenance Information

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1.0 REFERENCES:

1.1 Honeywell Service Information Letter (SIL) APU-137.

1.2 Time Limit Maintenance Check (TLMC) Task 49-42-01-220-801 “Detailed Inspection of the Starter Motor”.

1.3 Aircraft Maintenance Manual (AMM) Task 49-10-00-866-801 “Starting the Auxiliary Power Unit (APU)”.

1.4 AMM Task 49-42-01-110-801 “Cleaning of the Starter Motor of Brush Dust Material”.

1.5 Honeywell Service Bulletin (SB) 2704554-49-2386 “Inspection and Repair of Starter Motor P/N 270454-2”.

1.6 Honeywell SB 2704554-49-2393 “Modification of the Starter Motor assembly from P/N 2704554-2, series 2 to P/N 2704554-3, series 1”.

2.0 INTRODUCTION:

This Advisory Wire (AW) was issued to inform Operators about potential early APU starter motor brush wear as a result of excessive cycling of the APU starter.

This revision is to provide the latest development and to extend the effectivity to include the Global 5000 featuring Vision Flight Deck aircraft and the Global 6000 aircraft.

3.0 DESCRIPTION:

Operators have recently reported the replacement of a starter motor due to an APU NO-START or APU SLOW START occurrence. The majority of the reviewed Starter teardown reports reveal the presence of heavy brush carbon dust accumulation and excessive brush wear or burns.

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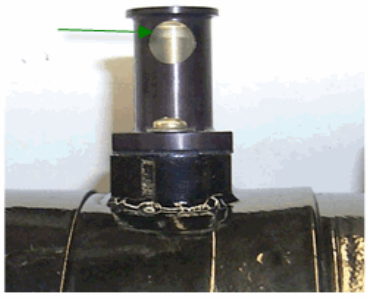
As mentioned in the vendor SIL (Ref. 1.1) dated 2007, in-service experience with the APU starter motor (P/N 2704554-2) has revealed that starter brush carbon dust may collect inside the starter and lead to an accelerated and uneven starter brush wear. This can also contribute to accelerated armature damage.

As preventive maintenance, Honeywell recommends Operators to return, for in-shop brush cleaning procedure, all starter motors which have accumulated 2,000 APU start cycles (Ref. 1.1.)

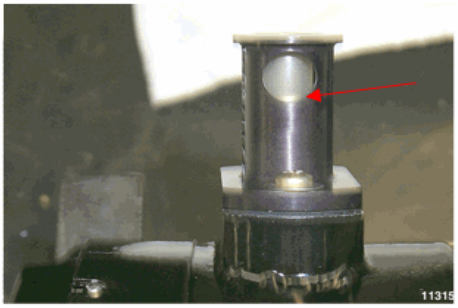
Bombardier has released an AMM task (Ref. 1.4) which allows the Operators to clean the starter motor brushes on site. This AMM task has been added in the Optional Maintenance Planning Document (MPD) with a Servicing Interval of 1,000 APU hours.

4.0 ACTION:

- When performing the 500 APU hours TLMC task (Ref. 1.2), Bombardier encourages technicians to pay particular attention when inspecting the brush wear indicator:



Indicator in UP position, indicating brushes are good



Indicator in DOWN position, indicating brushes are worn

On Starter Motor P/N 2704554-2, the bronze pin color can be hard to read and a dropped indicator pin can be missed during inspection as shown on the pictures attached.

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On Starter Motor P/N 2704554-3 (Ref 1.6), take note that to improve visibility, the new Brush Wear Indicator (BWI) is now equipped with an indicator pin coloured bright red.

- Operators may want to adapt the frequency of the brush cleaning procedure (Ref. 1.4) to a schedule which best supports their individual needs.

- Operators should always adhere to the APU Starter duty cycle as per the AMM (Ref. 1.3) in order to minimize degradation of the Starter brushes.

- Bombardier recommends concerned Operators comply with the previous Honeywell Service Bulletin dated 2007 (Ref. 1.5.)

- Honeywell has recently developed and made available through Vendor Service Bulletin Ref. 1.6 an improved BWI design that directly acts on the motor brush, thus minimizing tolerance stack-up and providing a more accurate indication of brush wear. This Vendor Service Bulletin (VSB) was incorporated in production as of aircraft 9486.

Should you have any technical question or you need technical assistance, please do not hesitate to contact the Customer Response Center (CRC) in Montreal (24/7/365) or your Field Service Representative.