

Advisory Wire

AW300-27-0368 Rev.02

INFORMATION
TYPE:

Maintenance
Operational

ATA: 27-62

EFFECTIVITY: Challenger 300 (20003 – 20457)
Challenger 350 (20501 – 20999)

**SUBJECT: Replacement of the
Multifunction Spoiler Power
Control unit (MFS PCU) –
SB 100-27-17, SB 350-27-010**

1. REFERENCES:

- 1.1 Bombardier Service Bulletin SB 100-27-17, Special Check/Modification – Multi-Function Spoiler – Replacement of the Multifunction Spoiler Power Control Unit (MFS PCU) Seals. Revision 3
- 1.2 Bombardier Service Bulletin SB 350-27-010, Special Check/Modification – Multi-Function Spoiler – Replacement of the Multifunction Spoiler Power Control Unit (MFS PCU) Seals. Basic issue
- 1.3 Transport Canada Airworthiness Directive (AD) CF-2020-26.
- 1.4 EASA (AD) CF-2020-26
- 1.5 FAA (AD) 2021-09-17

2. INTRODUCTION:

This Advisory Wire (AW) is to inform operators of the recent revision 3 to the SB (ref.1.1) and the release of the SB (ref.1.2) basic issue.

Revision 2 of this AW is to inform operators of the AD issued by the FAA (ref. 1.5) to mandate the incorporation of SBs (ref 1.1 and 1.2).

3. DESCRIPTION:

During a production flight test for emergency descent, (Maximum Mach Operation speed (MMO) and spoilers at EMER position), the inboard MFS surfaces failed to deploy. This resulted in the degradation of the Proportional Lift Dumping (PLD) and Ground Lift Dumping (GLD). If not corrected, degraded PLD function in combination with sudden cabin depressurization at high altitude could result in structural damage and injury to passengers. A detailed inspection of the MFS PCU showed that the piston seal did not have the

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necessary notches. These notches are necessary to prevent internal leakage when a load is applied to the actuator.

To address potential MFS PCU internal leakage and improve the MFS system reliability, the Basic issue of SB (ref .1.1) was released for the Challenger 300 in 2012. As not all Challenger 300 complied with the SB (ref. 1.1) and due to the possibility that an affected MFS PCU may have been installed on another aircraft, revision 3 to the Challenger 300 SB (ref .1.1) and the Basic Issue of the Challenger 350 SB (ref 1.2) were released to replace any remaining affected MFS PCUs.

The ADs (ref.1.3 and 1.4) became effective on August 18th, 2020 and the AD (ref 1.5) became effective on June 23rd, 2021. The ADs (ref. 1.3, 1.4 and 1.5) mandate the removal and replacement of affected MFS PCUs. ADs (ref.1.3, 1.4 and 1.5) should be accomplished in conjunction with the SBs (ref.1.1 or 1.2) which provides detailed instructions concerning the inspection of the MFS PCU.

Both SBs are covered by a dedicated schedule. To ensure effective planning, advanced scheduling is required through our In-Service Implementation Team (ISIT).

4. ACTION:

Operators should be aware of the SBs (ref.1.1 and 1.2) and the ADs (ref.1.3, 1.4 and 1.5) to make sure the MFS PCU serial number verification and replacement, when required, has been completed within the recommended compliance time.

Operators who have already complied with the Basic Issue, Rev 1 or Rev 2 of the SB (ref. 1.1) will be required to comply with the revision 3 of SB (ref 1.1).

For any remaining MFS PCU that required replacement, operators will be supported by our Bombardier In-Service Implementation Team (ISIT). Operators will need to contact their Regional Manager (RM), Field Service Representative (FSR) or Customer Service Representative (CSR) to schedule your aircraft.

Should you have any queries pertaining to this AW or requiring additional information please contact your Bombardier Field Service Representative (FSR) or the Customer Response Center (CRC).