

Advisory Wire

REFERENCE NO:	AW300-27-0317, Rev. 1	INFORMATION TYPE:	Maintenance Operational
ATA:	27-61	EFFECTIVITY:	Challenger 300 (20003 – 20500) Challenger 350 (20501 – 20999)
SUBJECT:	SPOILERS FAULT EICAS message caused by SECU INTERNAL FAULT		

1. REFERENCES:

- 1.1. Aircraft Maintenance Manual (AMM) Task 45-45-01-970-802 – Data Download from the Maintenance Diagnostic Computer (MDC)
- 1.2. Service Bulletin – SB100-76-02
- 1.3. Service Bulletin – SB350-76-001
- 1.4. SmartFix Plus – B3-007883 SECU1 INTERNAL FAULT
- 1.5. SmartFix Plus – B3-007916 SECU2 INTERNAL FAULT

2. INTRODUCTION:

This advisory wire revision is to inform operators about the release of the Service Bulletins (ref 1.2 & 1.3) addressing the failure messages of “SPOILER FAULT” linked to the Throttle Quadrant Assembly (TQA).

In an effort to reduce the high rate of No Fault Found (NFF) experienced on Spoiler Electronic Control Units (SECU), this Advisory Wire (AW) provides troubleshooting tips to help identify if a defective TQA is causing “SPOILERS FAULT” messages (Amber or Cyan) posted on the Engine Indication and Crew Alerting System (EICAS).

3. DESCRIPTION:

Operators have been reporting cases where a SECU replaced following a “SPOILERS FAULT” was subsequently found NFF by the repair facility. Our investigation revealed that the cause of the EICAS message may be due to or a malfunction of a TQA idle switch, and not because of a defective SECU.

Each throttle lever is equipped with two idle switches that are each monitored by one of the two SECU. Each SECU compares the position of its own switch to that of the other SECU and will display a “SPOILERS FAULT” EICAS message if they are found in an opposite state (open/closed). The Maintenance Diagnostic Computer (MDC) will then record a SECU Internal failure code (B3-007883 or B3-007916), even though the issue lies within the TQA.

In order to differentiate a real SECU internal fault from a fault caused by a TQA idle switch, a download of the SECU non-volatile memory (NVM) is required. If the corresponding SECU NVM fault was triggered by “LTQAIdSwID” or “RTQAIdSwID”, complying with SB100-76-02 (Ref. 1.2) or SB350-76-001 (Ref. 1.3) will fix the issue.

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4. ACTION:

Operators should familiarize themselves with the Smart Fix task (Ref 1.4 & 1.5) as well as the SBs (ref 1.2 & 1.3).

Should you have any technical queries pertaining to this Advisory Wire, please contact the Bombardier Customer Response Center or your local Field Service Representative.