

Advisory Wire

REFERENCE NO:	AW300-27-0322	INFORMATION TYPE:	Maintenance Operational
ATA:	27-61	EFFECTIVITY:	Challenger 300 (20003 – 20500) Challenger 350 (20501 – 20999)
SUBJECT:	Introduction of new SECU software for PN C47330-006/006A, C47330-008/008A and C47330-011		

1. REFERENCES:

- 1.1. SB100-27-18 – Modification – SECU – software update of SECU Part Nos. C47330-006/006A, C47330-008/008A and C47330-011
- 1.2. SB350-27-003 – Modification – SECU – software update of SECU Part No. C47330-011
- 1.3. Aircraft Maintenance Manual (AMM) Task 45-45-01-970-802 – Data Download from the Maintenance Diagnostic Computer (MDC)

2. INTRODUCTION:

This Advisory Wire (AW) is to inform Operators of the availability of the Spoiler Electronic Control Unit (SECU) software upgrade for Part Numbers (PN) C47330-006/006A, C47330-008/008A and C47330-011. The software upgrade will mitigate SECU resets that have been caused by Frame Overrun issues. This can be done via Service Bulletin (SB) ref. 1.1 and ref. 1.2.

3. DESCRIPTION:

Operators have reported numerous Engine Indication and Crew Alerting System (EICAS) SPOILERS FAULT messages posted on ground and in flight due to the SECU and its associated spoilers being inoperative for a short period of time. These SECU resets are the result of a Frame Overrun monitor that detected a trip at the box level causing the following faults to be posted on the EICAS for a few seconds.

- SPOILERS FAULT Amber
- SPOILERS FAULT Cyan
- STAB TRIM FAULT Cyan

The ref.1.1 and ref. 1.2 SBs introduce a new software to fix the problem.

In order to confirm if the failure was caused by the frame counter CPLD, a download of the SECU non-volatile memory (NVM) is required. If the SECU NVM logged a "FrameOvrRun" message, upgrading the affected SECU software will fix the issue.

4. ACTION:

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If you experience both an amber and cyan “SPOILERS FAULT” EICAS message combined with a cyan “STAB TRIM FAULT” EICAS message, carry out a download of the SECU NVM (AMM task ref 1.3). Send the file to the Bombardier Customer Response Center (CRC) or your local Bombardier Field Service Representative (FSR) and ask to verify if the fault was caused by the frame counter CPLD.

Should the CRC confirm the failure was caused by the frame counter CPLD, make sure you verify which configuration of SECUs you have installed. Since the new software (software -22) is not intermixable with previous software versions, and because SB ref. 1.1 and ref. 1.2 only applies to SECU PN C47330-006/006A, C47330-008/008A and C47330-011, the matrix below will need to be followed:

SECU A: That generates the order

SECU B: Second SECU on A/C

SECU B \ SECU A	-6/6A	-7/7A	-8/8A	-9	-10	-11
-6/6A	SB SB	FOC Exchange SB	SB SB	FOC Exchange SB	FOC Exchange SB	SB SB
-7/7A	SB Exchange	N/A Exchange	SB Exchange	N/A Exchange	N/A Exchange	SB Exchange
-8/8A	SB SB	FOC Exchange SB	SB SB	FOC Exchange SB	FOC Exchange SB	SB SB
-9	SB Exchange	N/A Exchange	SB Exchange	N/A Exchange	N/A Exchange	SB Exchange
-10	SB Exchange	N/A Exchange	SB Exchange	N/A Exchange	N/A Exchange	SB Exchange
-11	SB SB	FOC Exchange SB	SB SB	FOC Exchange SB	FOC Exchange SB	SB SB


Qualified units

Bombardier is in the process of qualifying the remaining SECU configurations to make the software available to all aircraft. This AW will be revised once the remaining configurations have been qualified.

Should you have any queries pertaining to this AW or requiring additional information in completing SB ref. 1.1 or ref. 1.2, please contact your FSR or the CRC.