

Advisory Wire

REFERENCE NO:	AW700-27-0850	INFORMATION TYPE:	Maintenance Operational
ATA:	27-04	EFFECTIVITY:	Global 7500
SUBJECT:	27 FLT CTRL – PRIM PCU INOP (INFO) when engines at idle		

1. REFERENCES:

- 1.1 Flight Operation Notifications Manual (FONM), FCTL-012-NC, [27 FLT CTRL – PRIM PCU INOP] (INFO) when engines at idle on the ground
- 1.2 Bombardier Service Bulletin [\(SB\) 700-27-7501](#) – Modification General Installation of Fly-By-Wire Configuration 4.0

2. INTRODUCTION:

Bombardier has received reports where the 27 FLT CTRL – PRIM PCU INOP (INFO) message was posted under specific conditions: aircraft on the ground with the engines running at idle.

3. DESCRIPTION:

The 27 FLT CTRL – PRIM PCU INOP INFO message may be posted on EICAS when the aircraft is on ground with the engines running at idle and the Aileron, Rudder or Elevator PCUs have not been moved for a certain period of time.

The INFO message is associated with a surface PCU CYLINDER PRESSURE LOW OMS fault message.

Investigation revealed that some PCU cylinder pressures may start to deplete slowly when the hydraulic system is pressurized and that the PCU is not exercised for a period of time. Once the cylinder average pressures drop below 400 psi for at least 60 seconds, the PCU Cylinder Pressure Monitor trips and latches resulting in posting the 27 FLT CTRL – PRIM PCU INOP (INFO) message.

To date, this condition was reported only on aircraft where the Bombardier Service Bulletin (Ref 1.2) has been incorporated. The Service Bulletin (Ref 1.2) introduces the Fly-By-Wire software update retrofit on aircraft 70006 to 70086 and is installed in production for aircraft 70087 and subs.

Customer Services

Advisory Wire

A procedure (Ref 1.1) has been developed in order to clear the fault and resume normal aircraft operation.

4. ACTION:

If 27 FLT CTRL – PRIM PCU INOP (INFO) message posts when the engines are running at idle and the primary surfaces have not been moved while the aircraft is on-ground, perform the following procedure to clear the INFO message prior to flight:

- a) Confirm that the 27 FLT CTRL – PRIM PCU INOP (INFO) was triggered by a primary surface PCU CYLINDER PRESSURE LOW OMS fault message(s) by accessing / reviewing the ATA-27 OMS active messages.
NOTE: This reset procedure is intended for any primary surfaces PCU CYLINDER PRESSURE LOW OMS fault message(s). If any other OMS fault message (s) is (are) posted, proceed with fault isolation by following the applicable smartfix Plus (SFP) procedure.
- b) Perform one full stop to stop cycle of the Aileron, Elevator and Rudder surfaces.
- c) Using overhead cut-out switch, push PFCC 1 PBA out and confirm PFCC 1 OFF (status) is posted on EICAS.
- d) Push PFCC 1 PBA in and confirm PFCC 1 OFF (status) is no longer posted. Wait 30 seconds.
- e) Using overhead cut-out switch, push PFCC 2 PBA out and confirm PFCC 2 OFF (status) is posted on EICAS.
- f) Push PFCC 2 PBA in and confirm PFCC 2 OFF (status) is no longer posted. Wait 30 seconds.
- g) Using overhead cut-out switch, push PFCC 3 PBA out and confirm PFCC 3 OFF (status) is posted on EICAS.
- h) Push PFCC 3 PBA in and confirm PFCC 3 OFF (status) is no longer posted. Wait 30 seconds.
- i) Perform one full stop to stop cycle of the Aileron, Elevator and Rudder surfaces.
- j) After 60 seconds, confirm 27 FLT CTRL – PRIM PCU INOP (INFO) remains cleared. If INFO message has cleared, proceed with ground and flight operations without restriction.
- k) If the primary surface (s) PCU CYLINDER PRESSURE LOW OMS fault message(s) remain posted after performing the above reset procedure, proceed with fault isolation by following the applicable SmartFix Plus (SFP) procedure.

The 27 FLT CTRL – PRIM PCU INOP (INFO) message issue caused by the low cylinder pressures remains under investigation by Bombardier. Future updates and additional information on potential corrective actions will be communicated via revisions to this Advisory Wire.

Should you have any questions pertaining to this AW or require additional information, please contact your Bombardier Field Service Representative (FSR) or the Customer Response Centre.