P&WC S.B. No. 41074

## BULLETIN INDEX LOCATOR 79-20-03

TURBOSHAFT ENGINE FUEL-COOLED OIL COOLER - INSPECTION OF

MODEL APPLICATION

PT6C-67C

Compliance: CATEGORY 6

Summary: In one instance on a different engine model, a Fuel-Cooled Oil Cooler (FCOC) developed a small crack in a weld joint, allowing fuel to leak. Investigation has determined that this crack initiation was due to a stress condition at the thinnest weld penetration point. This service bulletin gives instructions for a one time inspection of the FCOC to the supplier to validate conformity of the welded area.

May 30/2012

PT6C-72-41074

Cover Sheet

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#### TURBOSHAFT ENGINE FUEL-COOLED OIL COOLER - INSPECTION OF

- 1. Planning Information
  - A. Effectivity

PT6C-67C Engines fitted with FCOC Serial Number WA41927 or below and the FCOC is not identified with "RE-34" adjacent to the serial number.

B. Concurrent Requirements

None.

- C. Reason
  - (1) Problem

One Fuel-Cooled Oil Cooler (FCOC) on a different engine model was found with a small crack causing a fuel leak.

(2) Cause

The crack initiation was due to the stress condition at the thinnest weld penetration point.

(3) Solution

This service bulletin gives instruction for a one time inspection of the Fuel-Cooled Oil Cooler (FCOC) by the supplier to validate conformity of the welded area around the shell and collector.

D. Description

Return FCOC to the supplier for a one time inspection of the welded area around the shell and collector.

E. Compliance

CATEGORY 6 - P&WC recommends to do this service bulletin when the subassembly (i.e. module, accessories, components, or build groups) is disassembled and access is available to the necessary part. Do all spare subassemblies.

F. <u>Approval</u>

D.O.T./D.A.A. approved.

G. Manpower

Once you have access to the part, an estimate of 2 man-hours is required to include this service bulletin at maintenance.

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- 1. Planning Information (Cont'd)
  - H. Weight and Balance

None.

I. Electrical Load Data

Not changed.

J. Software Accomplishment Summary

Not applicable.

K. References

Maintenance Manual P/N 3045332 (PT6C-67C) Meggitt Service Bulletin No. 10845-79-02

L. Publications Affected

None.

M. Interchangeability and Intermixability of Parts

Interchangeability - Refer to Para. 2.C.

Intermixability - Not changed.

#### 2. Material Information

A. Industry Support Information

Refer to attached Meggitt Service Bulletin No. 10845-79-02

B. Material - Cost and Availability

You can get the procurable parts listed in Para. 2.C. from any Pratt & Whitney Canada Parts Distribution Center.

The estimated total cost of new parts needed to replace old parts is \$Quote (US, 2012).

The new parts are scheduled to be available in .Refer to attached Meggitt Service Bulletin No. 10845-79-02.

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#### C. Material Necessary for Each Engine

The quantity of materials listed in this section is on a per Engine basis.

New P/N	Keyword	Old P/N	Qty	Est. Unit List Price (\$US, <u>2012)</u>	Instructions Disposition
Ref. IPC 79-20-03	3, Fig. 1				
AS3208-10	Packing, Preformed		2	Quote	(A)
	OR				
ST6202-910	Packing, Preformed		2	Quote	(A)
AS3208-06	Packing, Preformed		2	Quote	(A)
	OR				
ST6202-906	Packing, Preformed		2	Quote	(A)

- (A) Standard replacement part.
  - D. Reidentified Parts

None.

E. Tooling - Price and Availability

Not applicable.

#### 3. Accomplishment Instructions

- A. Remove the FCOC P/N 3118263-01 (supplier P/N 10845B) per the instructions in the maintenance manual (Ref. FUEL COOLED OIL COOLER MAINTENANCE PRACTICES 79-20-03).
  - <u>NOTE</u>: Units manufactured beginning with Serial Number WA41928 or above, or identified with "RE-34" adjacent to the serial number are not affected by this service bulletin.
- B. Ship FCOC to the address below:

Meggitt (Troy) Inc. Attention: Repair Station, SB 10845-79-02 3 Industrial Drive Troy IN 47588 USA

Attention: For contact information see attached Meggitt SB.

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#### TURBOSHAFT ENGINE FUEL-COOLED OIL COOLER - INSPECTION OF

- 3. Accomplishment Instructions (Cont'd)
  - C. Install the FCOC P/N 3118263-01 (supplier P/N 10845B) per the instructions in the maintenance manual (Ref. FUEL COOLED OIL COOLER MAINTENANCE PRACTICES 79-20-03).
  - D. Write accomplishment of P&WC S.B. No. 41074 in the engine module log book.
- 4. Appendix

THE ATTACHED SUPPLIER'S SERVICE BULLETIN IS PROVIDED FOR <u>PLANNING</u> PURPOSES ONLY. P&WC DISCLAIMS ANY LIABILITY RESULTING FROM USE OR COMPLIANCE THEREWITH.

PLEASE MAKE SURE TO OBTAIN THE ORIGINAL COPY AND ALL REVISIONS TO THIS SERVICE BULLETIN DIRECTLY FROM THE SUPPLIER.

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## SERVICE BULLETIN

FUEL COOLED OIL COOLER - HEAT EXCHANGER WELDMENT INSPECTION

#### 1. <u>Planning Information</u>

#### A. Summary

A one time factory inspection of Fuel Cooled Oil Coolers (FCOC), Meggitt part number: 10841B and 10845B to validate conformity of the welded area around the shell and T/A collector. This inspection is a preventative measure to ensure no stress conditions exist that could result in fatigue cracking.

#### B. Effectivity

Meggitt (Troy), Inc. Part Numbers 10841B (PWC 3118262-01) and 10845B (PWC 3118263-01). These Fuel Cooled Oil Coolers are used on various Pratt & Whitney Canada Corp. engines. Units manufactured beginning with Serial Number WA41928 or above, or identified with "RE – 34" adjacent the serial number are not affected by this service bulletin.

#### C. Reason

1.	Problem:	One (1) Fuel Cooled Oil Cooler, Part No. 10845B developed a small crack along the shell and turnaround collector weld joint.
2.	Preliminary Cause:	Stress condition at the thinnest weld penetration point.
3.	Interim Solution:	Perform an inspection of the welded area to verify similar condition does not exist in other units. Investigation is ongoing to determine manufacturing process improvements to eliminate potential recurrence.

#### D. Description

1. A Fuel Cooled Oil Cooler that is currently removed from an engine for maintenance or modification or upon next scheduled maintenance removal may be shipped to the address below for inspection by the manufacturer. The removed unit shall be properly cleaned and flushed prior to return shipment per DOT regulations for transport.

Ship unit to:

Meggitt (Troy), Inc. 3 Industrial Drive Troy, IN 47588 Attention: Repair Station, SB 10845-79-02

Meggitt (Troy), Inc. will perform an inspection of the FCOC turnaround collector weld and perform rework of this weld if a non-conformance is identified per repair specification PS 899. A rotable exchange service pool will be utilized when

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necessary (as determined by Meggitt) to facilitate quicker turnaround times and the FCOC returned may not be the same as the original FCOC returned.

- 2.a Meggitt will perform the weld inspection and rework of the weld if required per PS-899, and also perform a full overhaul per CMM 79-20-04 or CMM 79-20-03 whichever is applicable of all hardware returned with operational hours in excess of 5000 hrs. at a price of \$575.00 ea. This price will be valid through December 31, 2014. A 3% per year price increase will be applicable beginning in January 2015. Meggitt will provide a one year warranty on the heat exchanger assembly (including the valve assembly) and all services rendered. Thermal valves requiring replacement as determined during bench testing will be offered at a price of \$415.00 during the incorporation of this Service Bulletin. A 3% per year price increase will be applicable to this valve pricing beginning in January 2012.
- 2.b Meggitt will perform the weld inspection and rework of the weld if required per PS-899, on all hardware returned with operational hours equal to or less than 5000 hrs. Free of Charge. Meggitt will provide a one year warranty on the heat exchanger assembly (including the valve assembly) and all services rendered.

Note: Pricing for hardware with 5000 operational hours or less is not applicable if removal has been driven as a direct result of a fleet wide event not the responsibility of Meggitt Control Systems. In this event the over 5000 hours pricing in para. 2.a is applicable.

 Units found compliant or reworked in accordance with the Service Bulletin will be identified by Meggitt (Troy), Inc. by placing "RE-34" adjacent to the serial number. The identification shall be applied in accordance with Meggitt (Troy), Inc. approved, internal identification and traceability procedures.

#### E. Compliance

Code 6 - When the subassembly (i.e. module, accessories, components, or build groups) is disassembled and access is available to the necessary part. Do all spare subassemblies. This inspection is at the manufacturing production level.

#### F. Approval

Issued under DOT/FAA approval.

#### G. Manpower

Not Applicable.

H. Material - Cost and Availability

Not Applicable.

I. Tooling - Price and Availability

None.

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J. Weight and Balance

Not affected.

K. Electrical Load Data

Not Affected.

L. Software Accomplishment Summary

None.

#### M. References

Component Maintenance Manual with Illustrated Parts List 79-20-03 and 79-20-04.

#### N. Other Publications Affected

None.

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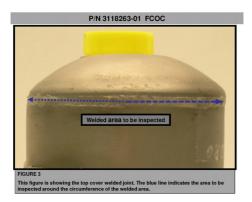
#### 2. <u>Material Information</u>

Part Number	Quantity	Estimated Unit Price	Key Word
10841B	1	N/A	Fuel Cooled Oil Cooler
10845B	1	N/A	Fuel Cooled Oil Cooler

#### 3. Accomplishment Instructions

None Required.

#### 4. Example of Area to be inspected



#### 5. <u>Contact Information</u>

Gary Whalen Quality Manager Meggitt (Troy), Inc. 3 Industrial Drive Troy, IN 47588

Phone: 812-547-7071 X2124 email: gary.whalen@meggitt.com Lisa Dauby Sr. Customer Service Representative Meggitt (Troy), Inc. 3 Industrial Drive Troy, In 47588

Phone: 812-547-7071 X2121 email: <u>lisa.dauby@meggitt.com</u>

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