

# SERVICE BULLETIN

SERVICE BULLETIN NO: 79-003

REF NO: 086

MODIFICATION NO: 98-0429

ATA CHAPTER: 79

## OIL - OIL COOLER REPLACEMENT OF THE THERMAL ACTUATOR ON THE OIL COOLER

### 1. Planning Information

#### A. Effectivity

All PC-12 and PC-12/45 aircraft, MSN 101 thru MSN 108, MSN 110 thru MSN 113, MSN 115 thru MSN 119, MSN 122 thru MSN 131 and MSN 133 thru MSN 272.

#### B. Concurrent Requirements

None

#### C. Reason

##### (1) Problem

There have been incidents where excessive carbon was produced in the engine oil system which was caught by the filter. In very bad cases, this caused oil pressure fluctuations (Ref. P&WC SIL PT6A-034).

##### (2) Cause

It has been identified that the controlled oil temperature of 80°C (176°F) can cause the oil to coke (i.e. carbon build-up) in the No. 2 bearing area.

##### (3) Solution

The thermal actuator in the engine oil cooler is replaced with a new one which regulates the oil to 60°C (140°F).

Pratt and Whitney Service Bulletin 14320R1 recommends that the compressor-turbine air seal, No. 2 bearing oil nozzle and the bearing cover and flange are replaced at the next opportunity.

#### D. Description

This Service Bulletin describes how to change the thermal actuator on the oil cooler.

This revision makes it necessary to do an oil drain and flush and replace the oil filter. This revision also changes the compliance of the Service Bulletin to Mandatory.

**≡PILATUS≡**  
**PC12**  
**SERVICE BULLETIN**

**E. Compliance**

**FOR PLANNING PURPOSES**

Mandatory.

Within the next 12 calendar months after the effective date of this Service Bulletin

**F. Approval**

The technical aspects of this Service Bulletin have been approved by the Federal Office for Civil Aviation (FOCA) of Switzerland.

**NOTE:** PILATUS advises Operators/Owners to check with their local Airworthiness Authorities for any changes, local regulations or sanctions that may affect the embodiment of this Service Bulletin.

**G. Manpower**

	Total
Preparation	3.0
Modification of the Engine Oil Cooler	2.0
Close up	4.0
<b>TOTAL MAN-HOURS</b>	<b>9.0</b>

**H. Weight and Balance**

**(1) Weight Change**

Not affected.

**(2) Moment Change**

Not affected.

**I. Electrical Load Data**

Not changed.

**J. Software**

Not changed.

**K. References**

Aircraft Maintenance Manual (AMM), Chapter 71-00-00, 79-00-00 and 79-20-01.

Illustrated Parts Catalog (IPC), Chapter 79-20-00.

P&WC SIL PT6A-034.

**L. Publications Affected**

AMM, Chapter 79-20-02.

IPC, Chapter 79-20-00.