

Service Bulletin No: 25-034

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ATA Chapter: 25

**EQUIPMENT/FURNISHINGS - GENERAL
INSTALLATION OF A SUPPLEMENTARY AIRCRAFT HEATING SYSTEM (110 V AC) FOR EXTREME
COLD TEMPERATURES****1. Planning Information****A. Effectivity**

All PC-12/47E aircraft as a Customer option.

B. Concurrent Requirements

Service Bulletin 45-004 - Load Honeywell Primus APEX Option File for various Factory Options (to enable the underfloor temperature indication).

A similar Service Bulletin is available (SB 25-035) with a supply power rating of 230 V AC.

C. Reason

To improve engine starting and ensure adequate operating environments for the electrical and avionics equipment when the aircraft is operated after cold soak in subzero temperatures.

D. Description

The systems that follow are installed to improve operation of the aircraft in cold soak in subzero temperatures:

- A battery heating system that has heating elements installed around the batteries. This heater element is powered from an external source (110 V AC), through a power receptacle installed on the rear LH fuselage. A pilot light, located along side the power socket, gives an indication when the system is active. The activation of the heater element is controlled by a temperature sensor attached to the fuselage.
- A power outlet that is connected to the battery heating system is also installed. This enables the use of an auxiliary electrical fan-type cabin heater. This auxiliary heater is a commercially-available domestic 'safety' type with a ceramic-core element. It is a free-standing unit (e.g. WINDMERE 110 V AC (1.5 kW) internal cabin heater), with a variable output up to 1.5 kW, using normal North-American domestic 110 Volt, 15 Amp power.
- A engine heating system that has four heating elements installed around the engine. The heater elements are attached, with sealant (IS 808), to the engine oil sump, the FCU and the LH and RH nose case. These elements are powered from an external source (110 V AC), through a power receptacle which is installed on the front underside of the LH fuselage. A pilot light, located along side the power socket, gives an indication when the system is active.

An Insulated Engine Cover (P/N: 968.20.13.901) which retains the engine latent heat, is stored on the aircraft. The blanket is installed around the engine cowling; when the aircraft is on the ground and the temperature is expected to drop beneath -15 °C (5 °F). This blanket weighs 4 kg (9 lb.).

Revision 1 to this Service Bulletin corrects the Aircraft Flight Manual Supplement number and a material number. No rework is required if you accomplished this Service Bulletin at a previous issue.

E. Compliance

Optional

But, this is a mandatory requirement for aircraft seeking certification with the Canadian Airworthiness Authorities.

It is highly recommended for any PC-12/47E aircraft contemplating operating in an environment with extremely low ambient ground temperature.

F. Approval

The technical content of this document is approved under the authority of DOA No. EASA. 21J. 357.

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	0.5
Modification	43.0
Close up	10.0
TOTAL MAN-HOURS	53.5

NOTE: Man-hours figures do not include the time required to cure sealants, paints and adhesives.

H. Weight and Balance

This aircraft must be weighed on completion of the Service Bulletin and the AFM amended.

I. Electrical Load Data

Not changed.

J. Software

Not changed.

K. References

Aircraft Maintenance Manual (AMM), 12-B-06-20-00-00A-040A-A, 12-B-11-00-00-00A-920A-A, 12-B-24-00-00-00A-901A-A, 12-B-24-30-07-00A-920A-A, 12-B-25-23-01-00A-920A-A, 12-B-25-90-00-00A-903A-A.

L. Publications Affected

AMM

Illustrated Parts Catalog (IPC)

Airplane Flight Manual (AFM) Supplement No: 02.

M. Interchangeability of Parts

Not applicable.

2. Material Information**A. Material - Price and Availability**

Use the Order Form in Service Bulletin 45-004 (Load Honeywell Primus APEX Option File for various Factory Options) to send orders for Service Bulletin Modification Kits, to your Authorized Pilatus Service Center, or to:

PILATUS AIRCRAFT LTD.,
CUSTOMER SUPPORT MANAGER,
CH-6371 STANS,
SWITZERLAND

General Aviation:
Tel: + 41 41 619 6208
Fax: + 41 41 619 7311
eMail: SupportPC12@pilatus-aircraft.com

PILATUS BUSINESS AIRCRAFT LTD.,
PRODUCT SUPPORT DEPARTMENT
11755 AIRPORT WAY
BROOMFIELD, CO 80021.
UNITED STATES OF AMERICA

Tel: 303 465 9099
Fax: 303 465 6040
eMail: Productsupport@PilBal.com

PILATUS AUSTRALIA (PTY.) LTD,
17 JAMES SCHOFIELD DRIVE,
ADELAIDE AIRPORT SA 5950,
AUSTRALIA

Tel: (08) 8234 4433
Fax: (08) 8234 4499
Free Call: 1800 445 007
eMail: supportpc12@pilatus.com.au

Operators are requested to advise Pilatus Aircraft Ltd, of the Manufacturer's Serial Number (MSN) and the flying hours of aircraft which are affected by this Service Bulletin.