

# **SERVICE BULLETIN**

SERVICE BULLETIN NO: 53-008

MODIFICATION NO: INSPECTION

REF NO: 64

53

ATA CHAPTER:

FUSELAGE

# ENGINE MOUNTING-FRAME ATTACHMENT-FITTINGS - INSPECTION

#### 1. Planning Information

A. Effectivity

All PC-7 MkII aircraft with more than 5 years in service or more than 5,000 flying hours.

# B. Concurrent Requirements

None

# C. Reason

#### (1) Problem

Corrosion has been found on the bolts and in the bores of the attachment fittings for the engine mounting frame.

#### (2) Cause

Damage to the cadmium plating of the bolt, or to the surface finish of the attachment fitting, can cause corrosion. The damage is caused when the bolts are removed and installed.

#### (3) Solution

A one time inspection of the attachment fittings and bolts, and the installation of new bolts and washers. The AMM Chapters 05-05-01 Airworthiness Limitations List and 05-12-01 Master Maintenance Plan will be revised to include repeat inspections.

# D. Description

This Service Bulletin gives the data and instructions necessary to:

- Remove the attachment bolts and washers
- Do a visual inspection of the removed attachment bolts for corrosion
- Do a visual (boroscope) inspection of the attachment brackets for corrosion
- Install new attachment bolts and washers.



# E. Compliance

#### Mandatory.

For aircraft with more than 5 years in service or more than 5,000 flying hours this Service Bulletin must be accomplished within 6 months of the issue date of this Service Bulletin.

## F. Approval

The technical content of this document is approved under FOCA accepted procedures.

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 MAN-HOURS	4.5
Installation	2.0
Inspection	1.0
Removal	1.5
	Total

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

## 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) Chapters 20-31-00 and 71-20-01.

# L. Publications Affected

AMM Chapters 05-05-01 and 05-12-01.

# M. Interchangeability of Parts



# 2. Material - Price and Availability

Operators should send orders for Service Bulletin kits to:

PILATUS AIRCRAFT LT	ΓD,
CUSTOMER LIAISON I	MANAGER,
CH 6371 STANS,	Tel: +41 41 619 62 26(Government)
SWITZERLAND	Fax:+41 41 619 61 70.

Kit Number	Price *	Availability
500.50.09.053	Contact address above	Contact address above

#### A. Material Necessary for Each Aircraft

#### (1) Material to be Purchased

Part Numbers, given in this Service Bulletin, are correct at the time of approval. PILATUS AIRCRAFT LTD. reserves the right to change the part numbers as necessary.

Part number of items, delivered with the kit, are correct when the kit is dispatched which could lead to differences between those quoted in this Service Bulletin and the kit.

Kit No. 500.50.09.053 consists of these parts:

New Part No.	Description	Old Part No.	Qty	Disp. Code	Fig	Item
571.20.09.031	Bolt, Tension	571.20.09.031	4	D	-	-
938.75.11.105	Washer	938.75.11.105	4	D	-	-

Disposition Codes: D - Discard / R - Return to Pilatus

#### (2) Operator Supplied Tools

Part No.	Description	Remarks
-	Boroscope	

#### (3) Operator Supplied Materials (Ref. AMM 20-31-00).

Material No.	Description	Qty	Remarks
P01-008	Solvent	A/R	
P02-002	Aluminum wool	A/R	
P02-031	Absorbent Paper	A/R	
P07-001	CCC Solution	A/R	

#### B. Material Necessary for Each Spare



# C. Re-identified Parts

Not applicable.

# D. Tooling - Cost and Availability



# 3. Accomplishment Instructions

## A. Inspection/Repair (Ref. Fig 1)

**WARNING:** TO PREVENT INJURY TO PERSONNEL, AND DAMAGE TO EQUIPMENT, YOU MUST ONLY REMOVE ONE BOLT AT A TIME.

- NOTE: It is not necessary to remove the barrel nut to do the inspection.
- (1) Remove the bolt and washer from one of the four engine mounting-frame attachment points (Ref. AMM 71-20-01, Page Block 401).
- (2) Do a visual inspection for corrosion on the removed bolt.
- (3) Do a visual inspection for corrosion in the bore of the attachment fitting. Do this with a boroscope. If you find corrosion, do the subsequent steps:
  - **CAUTION:** WHEN YOU REMOVE CORROSION YOU MUST MAKE SURE YOU REMOVE ALL SWARF AND DEBRIS FROM THE AREA OF THE ATTACHMENT FITTING. IF NECESSARY YOU MUST REMOVE THE BARREL NUT AND/OR THE ENGINE MOUNTING FRAME TO DO THIS.
  - (a) Use aluminum wool (Material No. P02-002) to remove surface corrosion.
  - (b) If you cannot remove all of the corrosion contact Pilatus for repair information.
  - (c) Clean the bore and the threads of the barrel nut with solvent (Material No. P01-008) and absorbent paper (Material No. P02-031).
  - (d) Remove all swarf and debris from the attachment fitting. If necessary, you must remove the barrel nut and/or the engine mounting frame to do this. Make sure there is no swarf and debris in the joints between:
    - The attachment fitting and the barrel nut
    - The attachment fitting and the engine mounting frame.
  - (e) Apply a layer of CCC solution (Material No. P07-001) to the bore.
  - (f) If necessary, install the barrel nut and/or the engine mounting frame.
- (4) Install the new bolt (P/N 571.20.09.031) and the washer (P/N 938.75.11.105) (Ref. AMM 71-20-01, Page Block 401).
- (5) Do the procedure for each attachment point in turn.

#### B. Reporting Action

(1) If you cannot remove all of the corrosion using the procedure given in Para 3.A.(3), contact Pilatus for repair information.

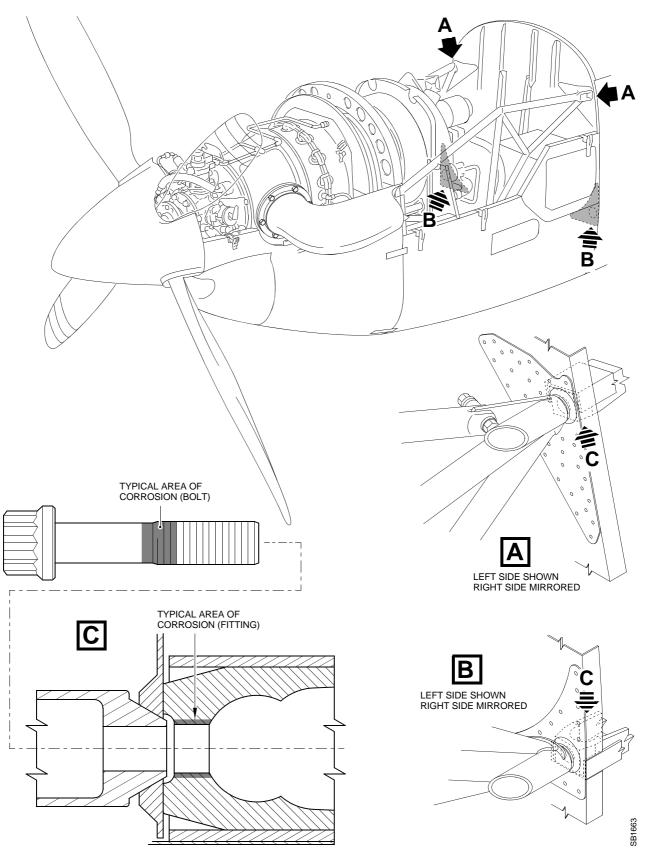


# C. Documentation

Make an entry in the Aircraft Logbook that this Service Bulletin has been incorporated.

# 4. Accomplishment Instructions - Spares





Engine Mount Attachment Fittings - Inspection/Repair Figure 1



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