

Service Bulletin No: 21-007

Ref No: 198

Modification No: INSPECTION

ATA Chapter: 21

**ENVIRONMENTAL CONTROL - COMPRESSION  
INSPECTION OF THE RH P3 PIPE ASSEMBLY FOR CRACKING****1. Planning Information****A. Effectivity**

MSN 101 thru MSN 313 that have 750 flight hours or more.

**NOTE:** Config. 1 aircraft with RH P3 pipe assembly P/N 959.90.21.143.

**NOTE:** Config. 2 aircraft with RH P3 pipe assembly P/N 959.90.21.156.

**B. Concurrent Requirements**

None.

**C. Reason****(1) Problem**

There has been an in-service incident of the RH P3 pipe assembly failing at the engine attachment point. A failure of the P3 pipe assembly would lead to a reduction in available engine power.

**(2) Solution**

A one time penetrant Non Destructive Test (NDT) inspection of the RH P3 pipe assembly is done for cracks around the pipe/flange interface where the duct is attached to the engine.

**D. Description**

This Service Bulletin gives the instructions and data necessary to inspect the RH P3 pipe assembly.

**E. Compliance**

Mandatory.

Accomplishment required not later than 90 days after the effective date of this Service Bulletin.

**F. Approval**

The technical content of this Service Bulletin is approved under the authority of Letter of DOA Acceptance ref. FOCA. 21J.002.

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

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**H. Manpower**

	<b>Man-Hours</b>
Preparation	0.50
Inspection	1.00
Close up	0.50
<b>TOTAL MAN-HOURS</b>	<b>2.00</b>

**I. Weight and Balance****(1) Weight Change**

None.

**(2) Moment Change**

None.

**J. Electrical Load Data**

Not changed.

**K. Software**

Not changed.

**L. References**

Aircraft Maintenance Manual (AMM): 00-50-00-00A-013A-A, 06-40-00-00A-055A-A, 21-00-00-00A-012A-A, 21-00-00-00A-525A-A, 95-00-00-00A-012A-A.

Structural Repair Manual (SRM): 51-20-07-00A-351A-A.

**M. Publications Affected**

Aircraft Maintenance Manual (AMM).

**N. Interchangeability of Parts**

Not applicable.

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

No modification kit is necessary to do this Service Bulletin.

Operators who require further information on Price and Availability should contact their Customer Liaison Manager at:

Pilatus Aircraft Ltd,  
6371 Stans,  
Switzerland.

Operators are requested to advise Pilatus Aircraft Ltd. of the Manufacturer's Serial Number (MSN), the flying hours and landings of aircraft which are allocated for this Service Bulletin using the Service Bulletin Evaluation Form.

**B. Material Necessary for Each Aircraft****(1) Material to be Purchased**

None.

**(2) Operator Supplied Materials (Ref. AMM, 00-50-00-00A-013A-A):**

MATERIAL NO.	DESCRIPTION	QTY	REMARKS
P02-031	ABSORBENT PAPER	A/R	Or equivalent

**C. Material Necessary for Each Spare**

None.

**D. Re-identified Parts**

None.

**E. Tooling - Cost and Availability**

PART No.	DESCRIPTION	QTY	REMARKS
990.00.02.004	Mechanical Tool Kit	1	-
-	Penetrant NDT Equipment	1	Local supply specified in SRM 51-20-07-00A-351A-A

### 3. Accomplishment Instructions

**WARNING:** MAKE SURE THAT BOTH EJECTION SEATS HAVE THE SAFETY PINS INSTALLED IN THE SAFE FOR SERVICING LOCATIONS AND THAT THE CFS HAS THE SAFETY PIN INSTALLED IN THE SAFE POSITION BEFORE YOU GO INTO THE COCKPIT (REF. AMM, 95-00-00-00A-012A-A).

**NOTE:** The mechanical tool kit (P/N 990.00.02.004) is necessary to do this procedure.

#### A. Preparation (Ref. Fig. 1)

- (1) Do the safety procedures for the Environmental Control System (ECS) before you do work on the ECS (Ref. AMM, 21-00-00-00A-012A-A).
- (2) Remove the engine cowlings ENG03 and ENG04 (Ref. AMM, 06-40-00-00A-055A-A).
- (3) Remove the insulation from the RH P3 pipe assembly (1) as necessary to do the inspection.

#### B. Inspection (Ref. Fig. 1)

- (1) Do the inspection of the RH P3 pipe assembly (1).
  - (a) Do the penetrant NDT inspection in the area of the weld at the pipe/flange interface where the RH P3 pipe assembly (1) is attached to the engine, refer to SRM 51-20-07-00A-351A-A.

**NOTE:** When you do the penetrant NDT inspection, use absorbent paper (Material No. P02-031) (or equivalent) to protect the area from the penetrant materials around the inspection area.

- (b) Use Sheet 2 of Fig. 1 and make an inspection report as follows:
  - Give the date of the inspection
  - Give the aircraft details
  - Give the RH P3 pipe assembly details: Config. 1 (P/N 959.90.21.143) or Config. 2 (P/N 959.90.21.156) and serial number
  - Show the location(s) and dimensions of the crack(s) found (if applicable)
  - Add any additional comments, use the 'clock-face' indicator numerals to give more detail of the location of any cracks if necessary.
- (c) Send the inspection report with the results of the penetrant NDT inspection to PILATUS.
- (d) If you do not find cracks, continue with this Service Bulletin from Step 3.C, if you do find cracks contact PILATUS.

#### C. Close up

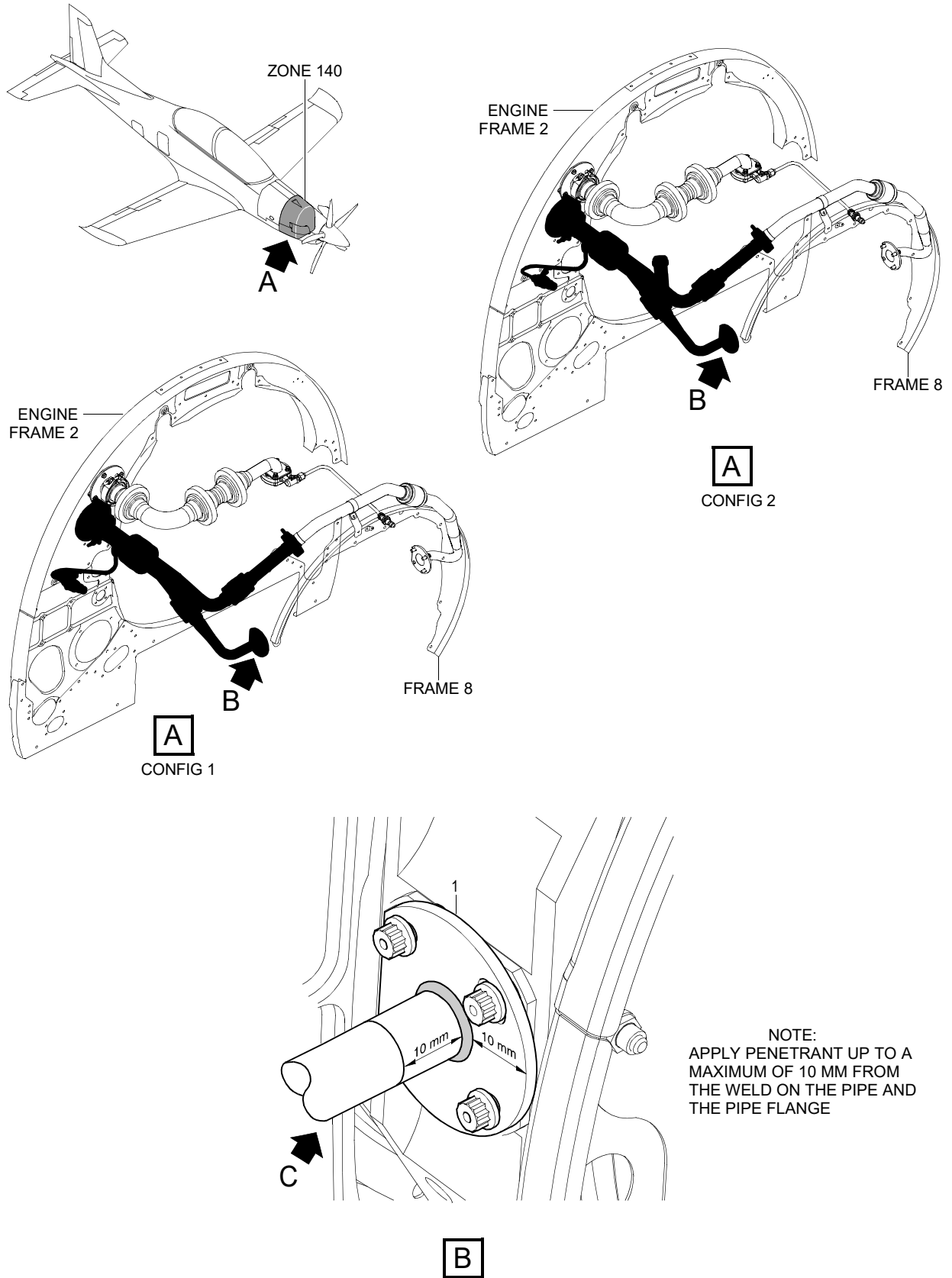
- (1) Remove all equipment, materials and tools from the work area. Make sure that the work area is clean.
- (2) Install the insulation on the RH P3 pipe assembly (1) you removed to do the inspection.

- (3) Install the engine cowlings ENG03 and ENG04 (Ref. AMM, 06-40-00-00A-055A-A).
- (4) Do the close-up procedures for the Environmental Control System (ECS), refer to AMM 21-00-00-00A-525A-A.

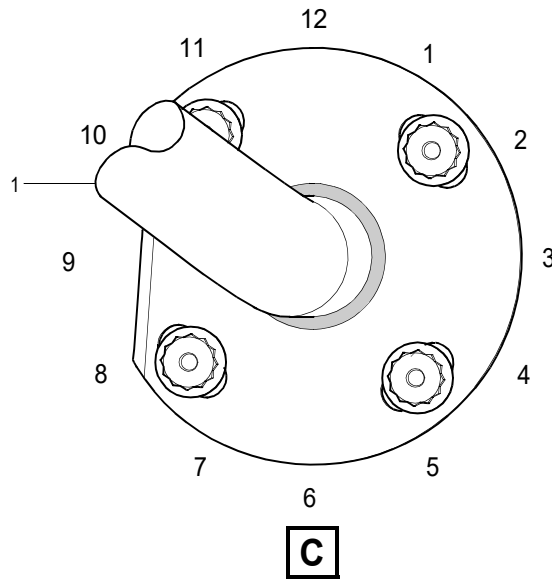
**D. Documentation**

- (1) Make an entry in the Aircraft Logbook that this Service Bulletin has been incorporated.
- (2) Use the Service Bulletin Evaluation Sheet and report your results and the serial number of the aircraft to PILATUS.

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Inspection of the RH P3 pipe assembly  
Figure 1 (Sheet 1 of 2)



DATE:	AIRCRAFT MSN:	FLYING HOURS:	LANDINGS:
CONFIG. 1 RH P3 PIPE P/N 959.90.21.143: OR CONFIG. 2 RH P3 PIPE P/N 959.90.21.156:			
ADDITIONAL COMMENTS			
CRACK 1:	mm		
CRACK 2:	mm		
CRACK 3:	mm		

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Inspection of the RH P3 pipe assembly  
Figure 1 (Sheet 2 of 2)



<b>SERVICE BULLETIN EVALUATION SHEET FOR SB No. 21-007</b>			
<b>Title</b>	<b>Environmental Control - Compression Inspection of the RH P3 Pipe Assembly for Cracking</b>		
<b>Customer</b>			
<b>Service Center</b>			
<b>EMBODIMENT REPORTING</b>			
<b>This SB has been embodied:</b>		<input type="checkbox"/>	<b>On the entire fleet</b>
		<input type="checkbox"/>	<b>Only partially</b>
<b>Provide embodiment details per aircraft (use additional copies of this table, if necessary)</b>			
<b>MSN</b>	<b>Flying Hours</b>	<b>MSN</b>	<b>Flying Hours</b>
<b>Additional embodiment comments/findings</b>			
<b>EDITORIAL COMMENTS (procedure, kit quality, suggested improvements, etc.)</b>			
<b>Name</b>	<b>Signature</b>	<b>Date</b>	
Please complete and forward this form to: Pilatus Aircraft LTD, Customer Technical Support (MCC), P.O. BOX 992, 6371 Stans, Switzerland Fax: +41 (0)41 619 6773 Email: <a href="mailto:Techsupport@pilatus-aircraft.com">Techsupport@pilatus-aircraft.com</a>			

**SERVICE BULLETIN EVALUATION SHEET**

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