

Service Bulletin No: 27-009

Ref No: 137

Modification No: Inspection

ATA Chapter: 27

**FLIGHT CONTROLS - FLAPS
INSPECT THE LEFT AND RIGHT, INNER AND OUTER, FLAP HINGE BRACKETS****1. Planning Information****A. Effectivity**

MSN 101 thru MSN 154.

B. Concurrent Requirements

None.

C. Reason**(1) Problem**

Evidence of corrosion has been found in the flap hinge brackets.

(2) Solution

Do a one time inspection on the left and right, inner and outer, flap hinge brackets for corrosion.

D. Description

This Service Bulletin gives the data and instructions necessary to inspect the left and right, inner and outer, flap hinge brackets for corrosion.

E. Compliance

Mandatory.

Accomplishment required not later than 365 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.

G. Copyright

© Pilatus Aircraft Ltd. This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be copied, reproduced or translated to other languages without the prior written consent of Pilatus Aircraft Ltd.

H. Manpower

	Man-Hours
Preparation	1.5
Inspection of the Flap Hinge Brackets	2.0
Close up	2.5
TOTAL MAN-HOURS	6.0

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

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, 27-50-00-00A-520A-A, 27-50-00-00A-720A-A, 95-00-00-00A-012A-A.

Structural Repair Manual (SRM), 51-00-00-00A-284A-A, 51-20-01-00A-250A-A.

M. Publications Affected

None.

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 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**

No modification kit is necessary to do this Service Bulletin.

If you must replace parts, refer to the IPC for the new parts you need.

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

MATERIAL NO.	DESCRIPTION	QTY	REMARKS
P01-010	SOLVENT	A/R	Or equivalent
P02-031	ABSORBENT PAPER	A/R	Or equivalent
P04-039	CORROSION PREVENTATIVE COMPOUND (CPC) CA 1000	A/R	Or equivalent
P10-013	CPC ARDROX 40	A/R	Or equivalent

C. Material Necessary for Each Spare

None.

D. Re-identified Parts:

None.

E. Tooling - Cost and Availability

None.

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: These tool kits are necessary to do this procedure.

- The mechanical tool kit, P/N 990.00.02.004
- The torque wrench kit, P/N 513.12.21.004.

A. Preparation

- (1) Remove the left and right flaps (Ref. AMM, 27-50-00-00A-520A-A).
- (2) Turn the flaps upside down and put them on a clean table.

B. Inspection (Ref. Fig. 1)

- (1) At the inner flap-hinge bracket (5) on the left flap (1):
 - (a) Remove the nut (6) and the washer (7).
 - (b) Remove the rod-end (2) and the washers (3) and (4) from the hinge bracket (5).
 - (c) Attach the washers (3) and (4) to the rod-end (2) and make a note of which flap bracket they were installed on.
 - (d) Clean the rod-end (2) and the bore in the inner flap-hinge bracket (5) with the absorbent paper (Material No. P02-031) made moist with the solvent (Material No. P01-010).
 - (e) Look for corrosion in the bore of the hinge bracket (5) and on the rod-end (2), as shown in Fig. 1 (Ref. SRM, 51-00-00-00A-284A-A).
- (2) Do Step 3.B.(1)(a) thru Step 3.B.(1)(e) again for:
 - The outer flap-hinge bracket on the left flap
 - The inner flap-hinge bracket on the right flap
 - The outer flap-hinge bracket on the right flap.
- (3) If you find corrosion:
 - (a) Remove it (Ref. SRM, 51-20-01-00A-250A-A).
 - (b) After the corrosion has been removed:
 - 1 Measure the minimum diameter, in twelve positions, of the shank of the rod-end (2) as shown in Detail D and make a note of the dimensions in Table 1.
 - a If the minimum diameter, at one of the twelve positions, is 12,699 mm or less, contact Pilatus Customer Technical Support (MCC), Fax: +41 (0) 41 619 67 73, Email: Techsupport@pilatus-aircraft.com.

- b If the minimum diameter, at all of the twelve positions, is more than 12,699 mm, continue with this Service Bulletin from Step 3.B.(3)(b)2.

	TOP	MIDDLE	BOTTOM
0 deg			
45 deg			
90 deg			
135 deg			

Table 1: Dimensions of the Shank of the Rod-End (2)

- 2 Measure the maximum diameter, in twelve positions, of the bore of the hole in the inner flap-hinge bracket (5) as shown in Detail C and make a note of the dimensions in Table 2.

- a If the maximum diameter, at one of the twelve positions, is 12.792 mm or more, contact Pilatus Customer Technical Support (MCC), Fax: +41 (0) 41 619 67 73, Email: Techsupport@pilatus-aircraft.com.
- b If the maximum diameter, at all of the twelve positions, is less than 12.792 mm, continue with this Service Bulletin from Step 3.B.(4).

	TOP	MIDDLE	BOTTOM
0 deg			
45 deg			
90 deg			
135 deg			

Table 2: Dimensions of the Bore of the Hole in the Inner Flap-Hinge Bracket (5)

- (4) If you find corrosion on the threads of the rod-end (2), contact Pilatus Customer Technical Support (MCC), Fax: +41 (0) 41 619 67 73, Email: Techsupport@pilatus-aircraft.com.
- (5) If no corrosion is found or the rod-ends (2) and the flap-hinge brackets (5) are in limits, continue with the Service Bulletin from Step 3.B.(6).
- (6) At the inner flap-hinge bracket (5) on the left flap (1):
 - (a) Apply a layer of the CPC (Material No. P04-039) to the:
 - Shank of the rod-end (2)
 - Mating surfaces of the washer (3)
 - Mating surfaces of the washer (4).

- (b) Put the washers (3) and (4) on the rod-end (2).

NOTE: Make sure you have the correct rod-end (2) and washers (3) and (4) (Ref. Step 3.B.(1)(c)).

- (c) Put the rod-end (2), complete with the washers (3) and (4) in the bore of the hinge bracket (5).
- (d) Apply a layer of the CPC (Material No. P04-039) to the mating surfaces of the washer (7).
- (e) Install the washer (7) and the nut (6).
- (f) Torque the nut (6) to between 30 and 40 Nm (260 and 350 lb in).
- (g) Remove the unwanted CPC (Material No. P04-039) with the absorbent paper (Material No. P02-031) made moist with the solvent (Material No. P01-010).
- (h) Apply a layer of the CPC (Material No. P10-013) to the cover the nut (6) and the washer (7).

- (7) Do Step 3.B.(6)(a) thru Step 3.B.(6)(h) again for:

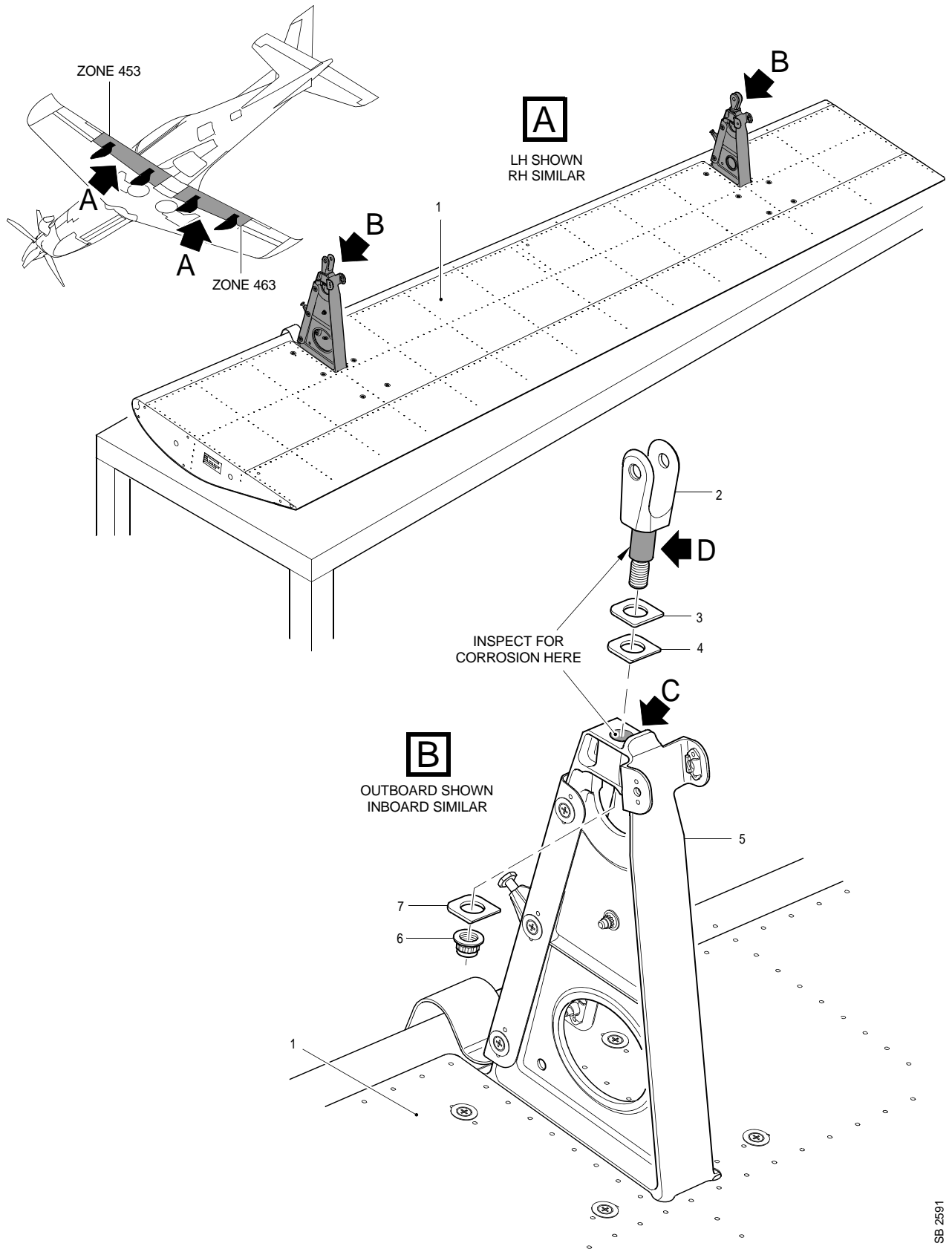
- The outer flap-hinge bracket on the left flap
- The inner flap-hinge bracket on the right flap
- The outer flap-hinge bracket on the right flap.

C. Close up

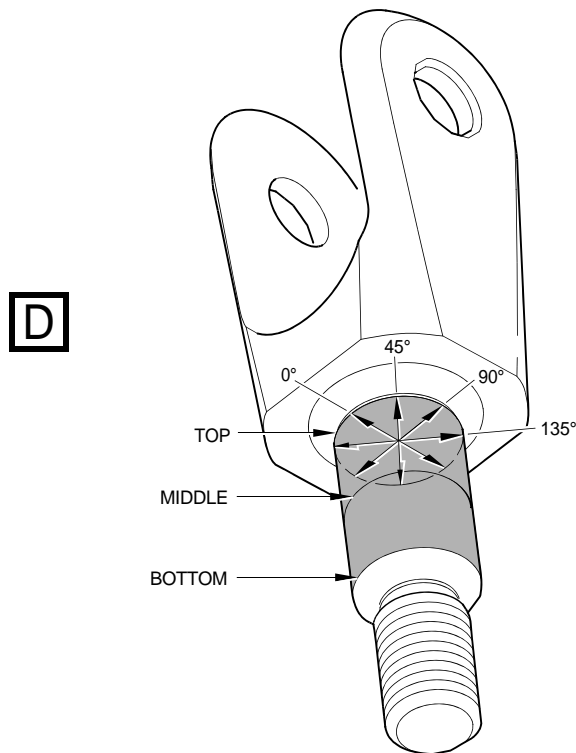
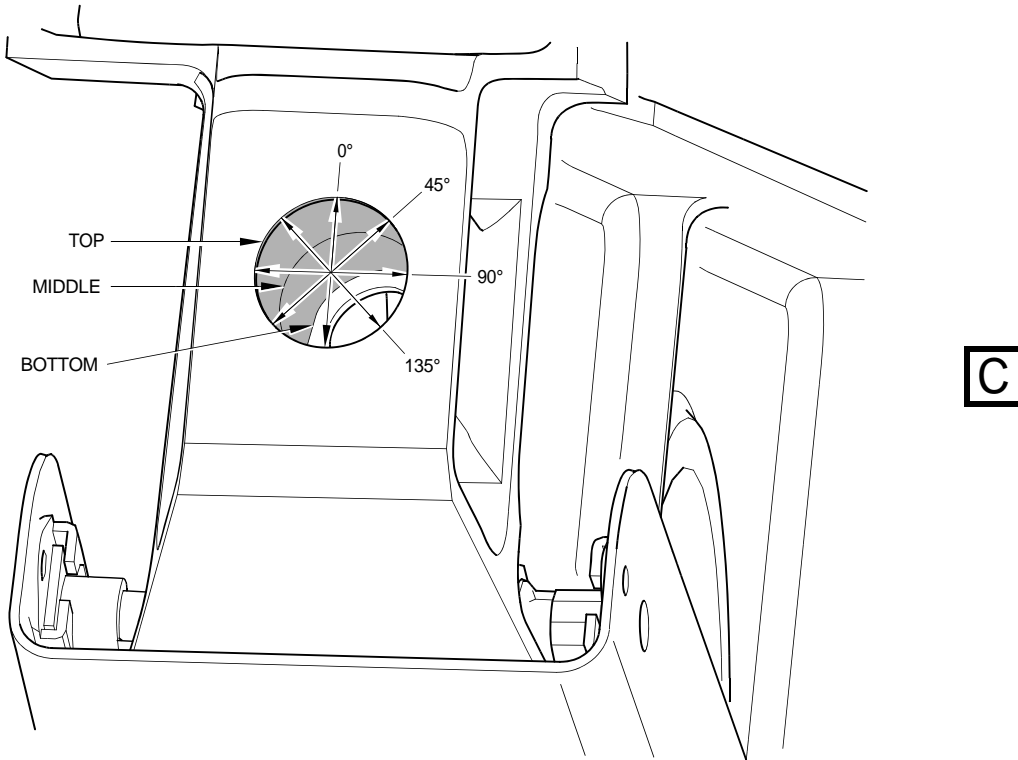
- (1) Remove all the equipment, tools and materials from the work area. Make sure that the work area is clean.
- (2) Install the left and right flaps (Ref. AMM, 27-50-00-00A-720A-A).

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.



Inspection of the Flap Hinge Brackets
Figure 1, Sheet 1 of 2



Inspection of the Flap Hinge Brackets
Figure 1, Sheet 2 of 2

SB 2608

SERVICE BULLETIN EVALUATION SHEET FOR SB No. 27-009			
Title	Flight Controls - Flaps Inspect the Left and Right, Inner and Outer, Flap Hinge Brackets		
Customer			
Service Center			
EMBODIMENT REPORTING			
This SB has been embodied:		<input type="checkbox"/>	On the entire fleet
		<input type="checkbox"/>	Only partially
Provide embodiment details per aircraft (use additional copies of this table, if necessary)			
MSN	Flying Hours	MSN	Flying Hours
Additional embodiment comments/findings			
EDITORIAL COMMENTS (procedure, kit quality, suggested improvements, etc.)			
Name	Signature	Date	
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: Techsupport@pilatus-aircraft.com			

SERVICE BULLETIN EVALUATION SHEET

INTENTIONALLY BLANK