

Service Bulletin No: 53-003

Ref No: 215

Modification No: INSPECTION

ATA Chapter: 53

**FUSELAGE - REAR FUSELAGE
STABILIZER-TRIM ATTACHMENT COMPONENTS - INSPECTION****1. Planning Information****A. Effectivity**

Pilatus PC-6 Series aircraft MSNs 337 thru 1005.

Fairchild built PC-6 aircraft MSNs 2001 thru 2092.

All PC-6 horizontal stabilizer assemblies, stabilizer control-system fittings, connecting pieces, bearing supports and bearing forks held as spares.

B. Concurrent Requirements

None.

This Service Bulletin applies to the Post SB 53-001 Revision 1 configuration.

C. Reason**(1) Problem**

Wear and cracks have been reported in the following Post SB 53-001 R1 stabilizer-trim attachment and structural components:

- Fitting (116.40.06.112) or (116.40.06.033) in aircraft with electrical horizontal-stabilizer control-systems (CONFIG 1 aircraft)
- Connecting piece (6232.0026 - all variants) in aircraft with mechanical horizontal-stabilizer control-systems (CONFIG 2 aircraft).

(2) Cause

It is possible that slightly asymmetric installation and/or operational conditions resulting in strong stabilizer vibration can cause the initiation of cracks.

(3) Solution

NOTE: As an alternative to the inspections detailed in (a) and (b) you can replace the non-inspected items. Replacement instead of inspection satisfies the requirements of this Service Bulletin.

(a) Before the next flight:

Do a visual inspection for crack damage in the applicable stabilizer-trim attachment components, and the related parts and structure. The stabilizer-trim actuator and the fitting or connecting piece must be removed to do the inspection. No cracks are permitted. Replace all crack damaged components and structure before the next flight.

NOTE: If the fitting or connecting piece has been in service for not more than 100 flight hours and not more than 100 landings at the issue date of this SB, the visual inspection before next flight is not necessary.

(b) Within 100 flight hours or 100 landings (whichever comes first):

(i) Do a visual inspection for crack damage in the applicable stabilizer-trim attachment components, and the related parts and structure. No cracks are permitted. Replace all crack damaged components before the next flight.

(ii) Remove the surface finish and do a dye-penetrant inspection for crack damage in the applicable stabilizer-trim attachment components, and the related parts and structure. No cracks are permitted. Replace all crack damaged components before the next flight.

NOTE: As an alternative to the dye-penetrant inspection you can do an eddy current inspection, which does not require removal of the surface finish. A right-angled shaft surface-probe with minimal drop is required to inspect in the gap between the lugs of the components:

- CONFIG 1 aircraft - smallest gap is 12,7 mm (0.5 in.).
- CONFIG 2 aircraft - smallest gap is 6 mm (0.24 in.).

(c) Before installation on an aircraft or within 6 months (whichever comes first):

(i) Do the inspection, detailed in Para. (3)(b) above, of all PC-6 horizontal stabilizer assemblies held as spares. Replace all crack damaged components before installation on an aircraft.

(ii) Do the inspection, detailed in Para. (3)(b) above, of all PC-6 stabilizer control-system fittings, connecting pieces, bearing supports and bearing forks held as spares. Discard all crack damaged parts.

D. Description

This Service Bulletin gives the data and instructions to do inspections for crack damage in the applicable stabilizer-trim attachment components and to replace defective components (if necessary).

Revision 1 is issued to:

- Show the screw (16), washer (17) and nut (18) on Fig. 1 and include them in the parts lists and procedures
- Correct two cross-references on Page 10 and correct the SB reference in the title of Fig. 2.

If operators have replaced the bearing fork (Fig. 1, Item 12) in accordance with the initial issue of this Service Bulletin, they must make sure it is installed with two bolts and one screw.

E. Compliance

Mandatory.

The visual inspection is required before the next flight, if:

- The fitting (on CONFIG 1 aircraft) P/N 116.40.06.112 or 116.40.06.033 has been in service for more than 100 flying hours or 100 landings at the issue date of this Service Bulletin
- The connecting piece (on CONFIG 2 aircraft) P/N 6232.0026 has been in service for more than 100 flying hours or 100 landings at the issue date of this Service Bulletin.

The non-destructive inspection is required within 100 flight hours or 100 landings (whichever comes first) after the issue date of this Service Bulletin.

Horizontal stabilizer assemblies, stabilizer control-system fittings, connecting pieces, bearing supports and bearing forks held as spares are to be inspected before installation on an aircraft or within 6 months (whichever comes first) after the issue date of this Service Bulletin.

F. Approval

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

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

	Total (Inspection)		Total (Replacements)	
	CONFIG 1	CONFIG 2	CONFIG 1	CONFIG 2
Preparation	1.0	1.0	-	-
Removal	0.5	0.5	-	-
Inspection A - Visual	0.5	0.5	-	-
Inspection B - NDI	0.5	0.5	-	-
Installation/Replacement of Fitting/ Connecting Piece	1.5	1.5	-	-
Replacement of Bearing Fork/Bearing Supports	-	-	4.0	6.0
Close up	0.5	0.5	-	-
TOTAL MAN-HOURS	4.5	4.5	4.0	6.0

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

PC-6 aircraft except B2-H2/B2-H4:

- Airworthiness Limitations (AL) Doc. 02334: Appendix E and J.
- Repair and Overhaul Manual (ROM): Chapter 2 and 12.

PC-6 aircraft B2-H2/B2-H4:

- Aircraft Maintenance Manual (AMM) Doc. 01975: 27-45-11, 55-11-11.
- Structural Repair Manual (SRM): 51-00-03, 51-00-05, 51-00-06, 51-00-09.

M. Publications Affected

None.

N. Interchangeability of Parts

Not applicable.

2. Material Information
A. Material - Price and Availability

No Modification Kit is required for this Service Bulletin.

Operators who require further information and/or Service Bulletin material should contact their Authorized Pilatus Service Center, or:.

PILATUS AIRCRAFT LTD
 CUSTOMER SUPPORT MANAGER
 CH-6371 STANS
 SWITZERLAND

General Aviation:
 Tel: + 41 41 619 3333
 Fax: + 41 41 619 7311
 eMail: SupportPC12@pilatus-aircraft.com

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

B. Material Necessary for Each Aircraft

NOTE: 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 numbers of items delivered are correct when dispatched. This could lead to differences between those part numbers quoted in this Service Bulletin and the delivered parts, if parts are superseded. Operators are requested to check the IPC for delivered parts which differ from those listed in the Service Bulletin Materials List.

(1) Material to be Purchased

Operators must order the following parts as necessary for replacement:

New Part No.	Description	Old Part No.	Qty	Disp. Code	Fig	Item
112.35.06.197 6201.0134	FR12a Assembly	112.35.06.197 6201.0134	1	R	1	N/A
116.40.06.033	Fitting (CONFIG 1)	116.40.06.033	1	R	1	6
116.40.06.034	Bearing Fork (CONFIG 1)	116.40.06.034	1	R	1	12
116.40.06.112	Fitting - Post SB 147 (CONFIG 1)	116.40.06.112	1	R	1	N/A
6232.0026.01	Connecting Piece (CONFIG 2)	6232.0026.01	1	R	1	9
6304.0023.01	Bearing Support (Left) (CONFIG 2)	6304.0023.01	1	R	1	3
6304.0023.02	Bearing Support (Right) (CONFIG 2)	6304.0023.02	1	R	1	2
932.35.14.105	Bolt (NAS6604-5) (CONFIG 2)	932.35.14.105	1	D	1	8

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

New Part No.	Description	Old Part No.	Qty	Disp. Code	Fig	Item
932.35.14.109	Bolt (NAS6604-9) (CONFIG 2)	932.35.14.109	1	D	1	8
6201.0134.11	Washer (CONFIG 2)	6201.0134.11	7	D	1	10
938.07.68.305	Nut (MS21046-4E) (CONFIG 2)	938.07.68.305	2	D	1	11
931.54.41.720	Screw, Pan Head (NFL22271BC030020L) (CONFIG 2)	931.54.41.209	1	D	1	16
938.07.31.103	Nut (3PA108) (CONFIG 2)	938.07.34.100	1	D	1	18
938.71.51.103	Washer (NFL23111CA030) (CONFIG 2)	938.78.13.103	1	D	1	17

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

(2) Operator Supplied Materials (Ref. AMM Doc. 01975, 20-31-00 or AL Doc. 02334, Appendix E)

Material No.	Description	Qty	Remarks
P01-008	Solvent (White Spirit)	A/R	Or approved alternative
P02-020	Scotch-Brite	A/R	
P02-031	Absorbent Paper	A/R	
P04-039	Corrosion Preventative	A/R	CA1000
P07-001	CCC Solution	A/R	
P07-007	Epoxy Primer	A/R	
N/A	Permanent Marker Pen	1	Edding Aerospace Marker 8404 or equivalent

C. Material Necessary for Each Spare

(1) Material to be Purchased

Operators must order the following parts as necessary for replacement:

New Part No.	Description	Old Part No.	Qty	Disp. Code	Fig	Item
116.40.06.034	Bearing Fork (CONFIG 1)	116.40.06.034	1	R	1	12
116.40.06.033	Fitting (CONFIG 1)	116.40.06.033	1	R	1	6

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

New Part No.	Description	Old Part No.	Qty	Disp. Code	Fig	Item
116.40.06.112	Fitting - Post SB 147 (CONFIG 1)	116.40.06.112	1	R	1	N/A
6304.0023.01	Bearing Support (Left) (CONFIG 2)	6304.0023.01	1	R	1	3
6304.0023.02	Bearing Support (Right) (CONFIG 2)	6304.0023.02	1	R	1	2
6232.0026.01	Connecting Piece (CONFIG 2)	6232.0026.01	1	R	1	9
931.54.41.720	Screw, Pan Head (NFL22271BC030020L) (CONFIG 2)	931.54.41.209	1	D	1	16
938.07.31.103	Nut (3PA108) (CONFIG 2)	938.07.34.100	1	D	1	18
938.71.51.103	Washer (NFL23111CA030) (CONFIG 2)	938.78.13.103	1	D	1	17

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

D. Re-identified Parts

Not applicable.

E. Tooling - Cost and Availability

Not applicable.

3. Accomplishment Instructions - Aircraft

NOTE: AMM references given are applicable for holders of AMM Doc. 01975.

A. Preparation

- (1) Remove the access panel FL2.
- (2) CONFIG 1 Aircraft:
 - (a) Remove the horizontal stabilizer actuator (Ref. AMM 27-45-11 (CONFIG 1), Page Block 401).
- (3) CONFIG 2 Aircraft:
 - (a) Remove the horizontal stabilizer actuator (Ref. AMM 27-45-11 (CONFIG 2), Page Block 401). During this procedure use clamps (or equivalent) to make sure the cables stay in position on the spools of the mechanical actuator and operating mechanism.
- (4) Use applicable supports to hold the horizontal stabilizer in a position which gives access to bottom surface.

B. Removal (Ref. Fig. 1)

- (1) CONFIG 1 Aircraft:
 - (a) Remove the nuts (7), washers (5), bolts (4).
 - (b) Remove the fitting (6) from FR12a.
 - (c) Record the part marking of the fitting (6) on the Report Form supplied with this Service Bulletin.
 - (d) Discard the fitting if it has incomplete or missing part marking, unless you can confirm the service history of the fitting from its documentation.
- (2) CONFIG 2 Aircraft:
 - (a) Remove the nuts (11), washers (10), bolts (8) and disassemble the connecting piece (9) from FR12a.
 - (b) Record the part marking of the connecting piece (9) on the Report Form supplied with this Service Bulletin.
 - (c) Discard the connecting piece if it has incomplete or missing part marking, unless you can confirm the service history of the connecting piece from its documentation.

C. Inspections (Ref. Fig. 1)**(1) Inspection A - Visual Inspection - Before the next flight:**

- (a) Remove loose paint if necessary, then use absorbent paper (Material No. P02-031) and the solvent (Material No. P01-008) to clean:
- All surfaces of the fitting (6) or connecting piece (9)
 - The surfaces of the bearing fork (12) or bearing supports (2) and (3) to which you have access
 - The location on the surface of FR12a where the fitting (6) or connecting piece (9) was installed.
- (b) Use a 10x magnifier and bright light to visually examine the following parts for damage, cracks and signs of uneven wear. No damage, cracks or uneven wear is permitted:
- The fitting (6) or connecting piece (9)
 - The bearing fork (12) or bearing supports (2) and (3) to which you have access.

If you find uneven wear, contact Pilatus Aircraft Ltd.

- (c) Use a 10x magnifier and bright light to visually examine the surface of FR12a where the fitting (6) or connecting piece (9) was installed for damage, cracks and corrosion. No damage or cracks are permitted. Remove surface corrosion if found (Ref. ROM Chap 2 or SRM 51-00-05). Discard the part if less than 90% of the original material thickness remains after removal of the corrosion.
- (d) Use internal vernier callipers (or equivalent) to do a check of the actuator attachment hole diameters in the fitting (6) (CONFIG 1) and connecting piece (9) (CONFIG 2). Hole diameters of more than 9,555 mm (0.3762 in.) in the fitting or 16.036 mm (0.631 in.) in the connecting piece are not permitted. Replace defective components (Ref. Table 1 - Component Replacement Data).
- (e) Use internal vernier callipers (or equivalent) to do a check of the diameters of the attachment bolt holes in the fitting (6) (CONFIG 1) and FR12a (CONFIG 1). Hole diameters of more than 4,85 mm (0.191 in.) are not permitted. Replace the component if defective. If necessary, also replace FR12a, if the applicable holes for the fitting are out of limits (Ref. Table 1 - Component Replacement Data).

NOTE: If the Post SB 147 oversize bush (P/N 116.40.06.111) is installed, contact Pilatus Aircraft Ltd. for more information.

- (f) Use internal vernier callipers (or equivalent instrument) to do a check of the diameters of the attachment bolt holes in the connecting piece (9) (CONFIG 2) and FR12a (CONFIG 2):
- If all of the hole diameters are 6,024 mm (0.23717 in.) or less, continue from Para D, Step (2)(b)
 - If one or more of the holes are more than 6,024 mm (0.237 in.) but less than 6,35 mm (0.25 in.), continue from Para D, Step (2)(c)

- If one or more holes are 6,35 mm (0.25 in.) or more, replace the connecting piece (9) and/or the FR12a (Ref. Table 1 - Component Replacement Data).

(2) Inspection B - Non-Destructive Inspection (NDI) - Within 100 flight hours or 100 landings (whichever comes first):

- (a) Do Inspection A - Visual Inspection (Ref. Para. 3.C.(1)).

NOTE: The following step (b) is only necessary if you will do a dye-penetrant NDI. The eddy current NDI does not require the removal of surface treatment.

- (b) Obey the manufacturers instructions and use the solvent (Material No. P01-008), Scotch-Brite (Material No P02-020) and/or non-metal scrapers to remove the layers of paint and protection from:

- All surfaces of the fitting (6) or connecting piece (9)
- The surfaces of the bearing fork (12) or bearing supports (2) and (3) to which you have access
- The location on the surface of FR12a where the fitting (6) or connecting piece (9) was installed.

CAUTION: ONLY PERSONNEL QUALIFIED AND CERTIFIED TO THE APPLICABLE LEVEL II (OR HIGHER) OF NATIONAL AEROSPACE STANDARD NAS 410, EUROPEAN STANDARD EN 4179 OR MIL-STD-410E, OR EQUIVALENT AEROSPACE STANDARD, ARE PERMITTED TO DO THE NDI.

- (c) Do a dye-penetrant NDI, or the alternative eddy current NDI, as follows:

NOTE: Refer to Airworthiness Limitations Doc. 02334, Appendix J, or SRM 51-00-09 as applicable for the related inspection procedures.

- (i) Do the NDI for cracks in all surfaces of the:

- Fitting (6) or connecting piece (9). Make sure you do a thorough inspection of the critical areas shown on Figure 3
- Bearing fork (12) or bearing supports (2) and (3)
- Applicable area of FR12a.

- (ii) No crack damage is permitted. You must replace:

- Cracked components (Ref. Table 1 - Component Replacement Data)
- The two bearing supports (2) and (3) if only one is found cracked
- FR12a if cracks are found.

Component	Part No.	Replacement
FR12a Assembly	112.35.06.197 6201.0134	Ref. ROM Chap 2 or SRM 51-00-03
Fitting (CONFIG 1)	116.40.06.033	Ref. Para D, Pre-Drilled
Bearing Fork (CONFIG 1)	116.40.06.034	Ref. Para D
Fitting (CONFIG 1)	116.40.06.112	Ref. Para D, Final Diameter
Connecting Piece (CONFIG 2)	6232.0026.01	Ref. Para D, Pre-Drilled
Bearing Support (Left) (CONFIG 2)	6304.0023.01	Ref. ROM Chap 2 or SRM 51-00-03
Bearing Support (Right) (CONFIG 2)	6304.0023.02	Ref. ROM Chap 2 or SRM 51-00-03

Table 1 - Component Replacement Data

D. Installation/Replacement (Ref. Fig. 1)

- (1) Install the fitting on CONFIG 1 aircraft:

NOTE: The following Steps (a) and (b) are not required when using a new fitting P/N 116.40.06.112.

- (a) Preparation of removed and inspected fitting:
- (i) Obey the manufacturers instructions and apply layers of CCC solution (Material No. P07-001) as necessary to the applicable components and inspection areas (Ref. ROM Chap 12 or SRM 51-00-06).
 - (ii) Obey the manufacturers instructions and apply layers of primer (Material No. P07-007) and paint as necessary to the applicable components and inspection areas (Ref. ROM Chap 12 or SRM 51-00-06).
 - (iii) Use a permanent marker pen to re-apply the part markings as recorded during the removal procedure.
- (b) Preparation of new fitting P/N 116.40.06.033:
- (i) Use a suitable drill and reamer to increase the diameter of the three attachment holes to between 4,820 and 4,832 mm.
 - (ii) Obey the manufacturers instructions and apply layers of CCC solution (Material No. P07-001) as necessary to the reamed holes (Ref. ROM Chap 12 or SRM 51-00-06).
- (c) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P04-039) on the faying surfaces of FR12a and the fitting (6), nuts (7), washers (5) and bolts (4).
- (d) Put the fitting (6) in position on FR12a and install the bolts (4), washers (5) and nuts (7).

- (e) Obey the manufacturers instructions and use the solvent (Material No. P01-008) to remove unwanted corrosion preventative.
- (2) Install the connecting piece on CONFIG 2 aircraft:

NOTE: The following Step (a) is required when using a new connecting piece P/N 6232.0026.01.

- (a) Preparation of a new connecting piece P/N 6232.0026.01:
 - (i) Use a suitable drill and reamer to increase the diameter of the two attachment holes to between 6,000 and 6,012 mm.
 - (ii) Obey the manufacturers instructions and apply layers of CCC solution (Material No. P07-001) as necessary to the reamed holes (Ref. ROM Chap 12 or SRM 51-00-06).
- (b) Do the subsequent steps if all of the hole diameters are 6,024 mm (0.23717 in.) or less:

NOTE: The following Steps (i) thru (iii) are required only when using the removed and inspected connecting piece.

- (i) Obey the manufacturers instructions and apply layers of CCC solution (Material No. P07-001) as necessary to the applicable components and inspection areas (Ref. ROM Chap 12 or SRM 51-00-06).
 - (ii) Obey the manufacturers instructions and apply layers of primer (Material No. P07-007) and paint as necessary to the applicable components and inspection areas (Ref. ROM Chap 12 or SRM 51-00-06).
 - (iii) Use a permanent marker pen to re-apply the part markings as recorded during the removal procedure.
 - (iv) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P04-039) on the faying surfaces of FR12a and the connecting piece (9), bolts (8), washers (10) and nuts (11).
 - (v) Put the connecting piece (9) in position on FR12a and install the bolts (8), washers (10) and nuts (11).
 - (vi) Obey the manufacturers instructions and use the solvent (Material No. P01-008) to remove unwanted corrosion preventative.
- (c) Do the subsequent steps if one or more of the holes are more than 6,024 mm (0.237 in.) but less than 6,35 mm (0.25 in.).
- (i) Use a 6,35 mm (0.25 in.) (H7) reamer to increase the diameters of the bolt holes. Make sure there are no sharp edges.
 - (ii) Obey the manufacturers instructions and apply layers of CCC solution (Material No. P07-001) as necessary to the applicable components and inspection areas and the surfaces of the bolt holes (Ref. ROM Chap 12 or SRM 51-00-06).

- (iii) Obey the manufacturers instructions and apply layers of primer (Material No. P07-007) and paint as necessary to the applicable components and inspection areas (Ref. ROM Chap 12 or SRM 51-00-06).
 - (iv) Use a permanent marker pen to re-apply the part markings as recorded during the removal procedure.
 - (v) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P04-039) on the faying surfaces of FR12a and the connecting piece (9), bolts (8) (NAS6604-5 and -9), washers (10) and nuts (11) (MS21046-4E).
 - (vi) Put the connecting piece (9) in position on FR12a and install the longer bolt (8) (NAS6604-9) in the top hole and the shorter bolt (8) (NAS6604-5) in the lower hole. For each bolt (8) install one washer (10) under the head of the bolt and one washer (10) under the nut (11).
 - (vii) Obey the manufacturers instructions and use the solvent (Material No. P01-008) to remove unwanted corrosion preventative.
- (3) Replace the bearing fork or bearing supports if necessary (Ref. Fig. 1).
- (a) Remove the horizontal stabilizer (Ref. AMM 55-11-11, Page Block 401).
 - (b) On CONFIG 1 aircraft, remove the bearing fork (12):
 - (i) Use a suitable drill to remove the rivets that attach the access panel (1) to the bottom skin of the horizontal stabilizer. (Ref. ROM Chap 2 or SRM 51-00-03).
NOTE: Some horizontal stabilizers have two access panels (1).
 - (ii) Remove the nuts (15) and (18), washers (14) and (17), the bolts (13) and the screw (16) then remove and discard the bearing fork (12).
 - (iii) Obey the manufacturers instructions and apply layers of CCC solution (Material No. P07-001) as necessary in the rivet holes and on all bare metal surfaces.
 - (c) Preparation of a new bearing fork (12):
 - (i) Use a suitable drill and reamer to match drill the third hole in the bearing fork (12) to the existing 3,2 mm hole in the stringer. Use the removed bearing fork as a template.
 - (ii) Obey the manufacturers instructions and apply layers of CCC solution (Material No. P07-001) as necessary to the reamed hole (Ref. ROM Chap 12 or SRM 51-00-06).
 - (d) Install the new bearing fork (12).
 - (i) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P07-039) on the faying surfaces of the bearing fork (12) and the adjacent structure. Also do this on the applicable surfaces of the nuts (15) and (18), washers (14) and (17), the bolts (13) and the screw (16).

- (ii) Put the bearing fork (12) in position and install the bolts (13), the screw (16), the washers (14) and (17) and the nuts (15) and (18).
- (iii) Obey the manufacturers instructions and use the solvent (Material No. P01-008) to remove unwanted corrosion preventative.
- (e) On CONFIG 2 aircraft, replace the bearing supports (2) and (3) (Ref. ROM Chap 2 or SRM 51-00-03).
- (f) Obey the manufacturers instructions and apply layers of CCC solution (Material No. P07-001) on the faying surfaces of the access panel (1) and adjacent skin.
- (g) Put the access panel (1) in position and install rivets (CR3223-4-2) (Ref. ROM Chap 2 or SRM 51-00-03).
- (h) Install the horizontal stabilizer (Ref. AMM 55-11-11, Page Block 401).

E. Close up

- (1) CONFIG 1 Aircraft:
 - (a) Install the horizontal stabilizer actuator (Ref. AMM 27-45-11 (CONFIG 1), Page Block 401).
- (2) CONFIG 2 Aircraft:
 - (a) Install the horizontal stabilizer actuator (Ref. AMM 27-45-11 (CONFIG 2), Page Block 401).
- (3) Remove all tools and materials. Make sure the work areas are clean.
- (4) Install access panel FL2.

F. Reporting Action

- (1) Send a report to Pilatus Aircraft Ltd. of the inspection (including nil findings). Use the report form provided in this Service Bulletin.
- (2) Return replaced parts to:

Pilatus Aircraft Ltd.
Customer Support General Aviation
Department GC
Ennetburgerstrasse 101
6370 Stans
Tel: +41 41 619 3333

G. Documentation

Make an entry in the Aircraft Logbook that Inspection A and/or B of this Service Bulletin is incorporated.

4. Accomplishment Instructions - Spares

NOTE: AMM references given are applicable for holders of AMM Doc. 01975.

A. Horizontal Stabilizer Assembly (Ref. Fig. 1)

It is not necessary to do this procedure if the horizontal stabilizer assembly held as spare has zero flying hours.

CAUTION: ONLY PERSONNEL QUALIFIED AND CERTIFIED TO THE APPLICABLE LEVEL II (OR HIGHER) OF NATIONAL AEROSPACE STANDARD NAS 410, EUROPEAN STANDARD EN 4179 OR MIL-STD-410E, OR EQUIVALENT AEROSPACE STANDARD, ARE PERMITTED TO DO THE NDI.

(1) Inspection

- (a) Do a dye-penetrant inspection, or the alternative eddy current inspection, as follows:

NOTE: The dye-penetrant inspection requires the removal and re-application of surface finish and part markings. Keep a record of the part markings and re-apply using a permanent marker pen. Refer to Airworthiness Limitations Doc. 02334 (Appendix J) or SRM 51-00-09 for the related inspection procedures.

- (i) Do inspections for cracks in the bearing fork (12) or bearing supports (2) and (3).
- (ii) No crack damage is permitted. Replace defective components (Ref. Para. 4.A.(2)). You must replace the two bearing supports (2) and (3) if only one is found cracked.

(2) Replacement

- (a) CONFIG 1 Horizontal Stabilizer Assemblies:

- (i) Use a suitable drill to remove the rivets that attach the access panel (1) to the bottom skin of the horizontal stabilizer. (Ref. ROM Chap 2 or SRM 51-00-03).

NOTE: Some horizontal stabilizers have two access panels (1).

- (ii) Remove the nuts (15) and (18), washers (14) and (17), the bolts (13) and the screw (16) then remove and discard the bearing fork (12).
- (iii) Prepare the new bearing fork (12) (Ref. Para. 3.D.(3)(c)).
- (iv) Obey the manufacturers instructions and apply layers of CCC solution (Material No. P07-001) as necessary in the rivet holes and on all bare metal surfaces.
- (v) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P04-039) on the faying surfaces of the new bearing fork (12) and the adjacent structure. Also do this on the applicable surfaces of the nuts (15) and (18), washers (14) and (17), the bolts (13) and the screw (16).

- (vi) Put the bearing fork (12) in position and install the bolts (13), the screw (16), the washers (14) and (17) and the nuts (15) and (18).
 - (vii) Obey the manufacturers instructions and use the solvent (Item No. P01-008 or approved alternative) to remove unwanted corrosion preventative.
 - (viii) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P04-039) as necessary) on the faying surfaces of the access panel (1) and adjacent skin.
 - (ix) Put the access panel (1) in position and install rivets (CR3223-4-2) (Ref. ROM Chap 2 or SRM 51-00-03).
- (b) CONFIG 2 Horizontal Stabilizer Assemblies:
- (i) If cracks are found replace the bearing supports (2) and (3) (Ref. ROM Chap 2 or SRM 51-00-03). You must replace the two bearing supports if only one was found defective.

B. Inspection - Stabilizer Control-System Fittings, Connecting Pieces, Bearing Supports and Bearing Forks

It is not necessary to do this procedure if the stabilizer control-system fittings, connecting pieces, bearing supports and bearing forks held as spare have zero flying hours.

CAUTION: ONLY PERSONNEL QUALIFIED AND CERTIFIED TO THE APPLICABLE LEVEL II (OR HIGHER) OF NATIONAL AEROSPACE STANDARD NAS 410, EUROPEAN STANDARD EN 4179 OR MIL-STD-410E, OR EQUIVALENT AEROSPACE STANDARD, ARE PERMITTED TO DO THE NDI.

- (1) Do a dye-penetrant inspection, or the alternative eddy current inspection, as follows:

NOTE: The dye-penetrant inspection requires the removal and re-application of surface finish and part markings. Keep a record of the part markings and re-apply using a permanent marker pen. Refer to Airworthiness Limitations Doc. 02334 (Appendix J) or SRM 51-00-09 for the related inspection procedures.

- (a) Do inspections for cracks in all stabilizer control-system fittings, connecting pieces, bearing supports and bearing forks.
- (b) No crack damage is permitted. Discard all defective parts.

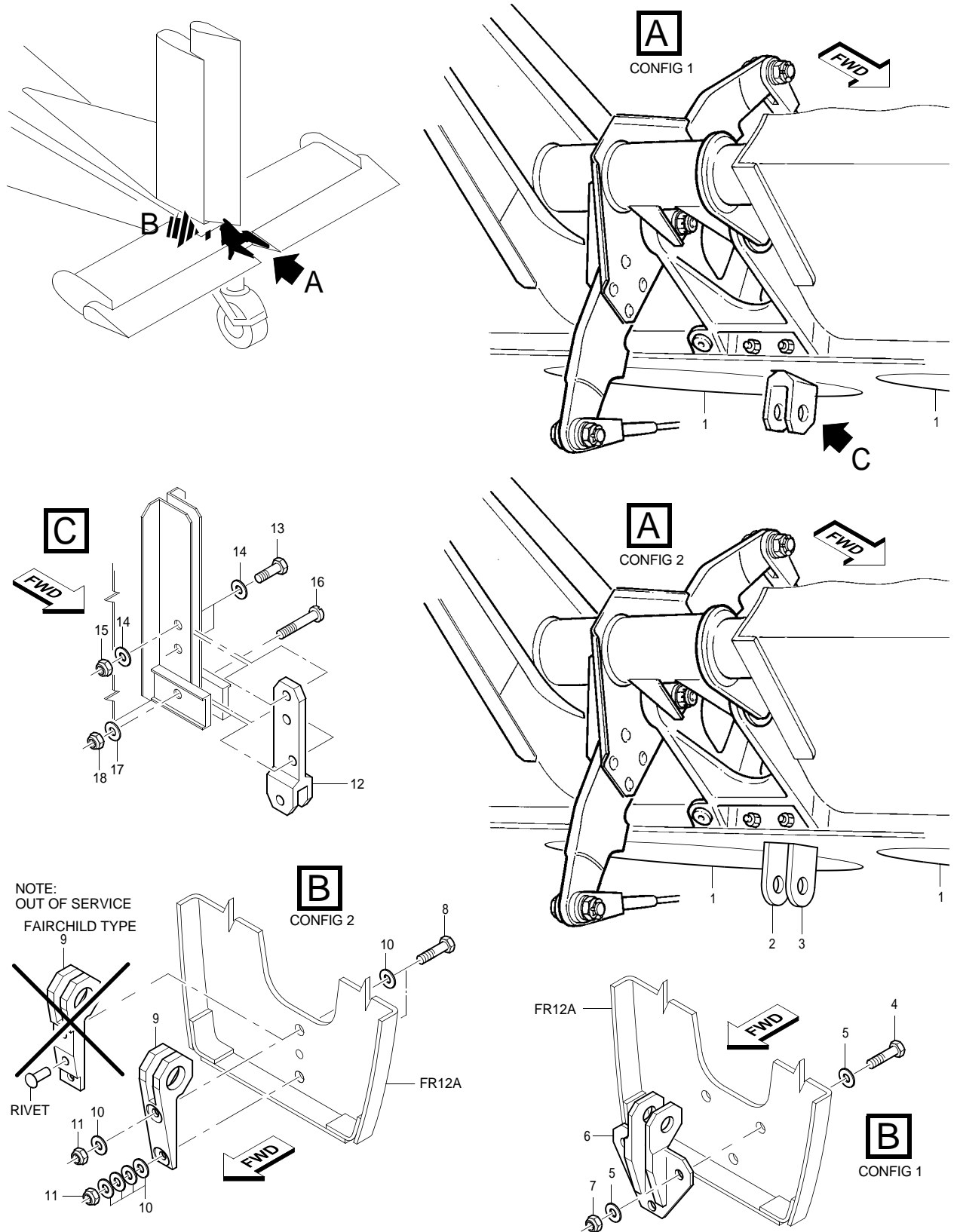
C. Reporting Action

- (1) Send a report to Pilatus Aircraft Ltd. of the inspection (including nil findings). Use the report form provided in this Service Bulletin.
- (2) Return replaced parts to:

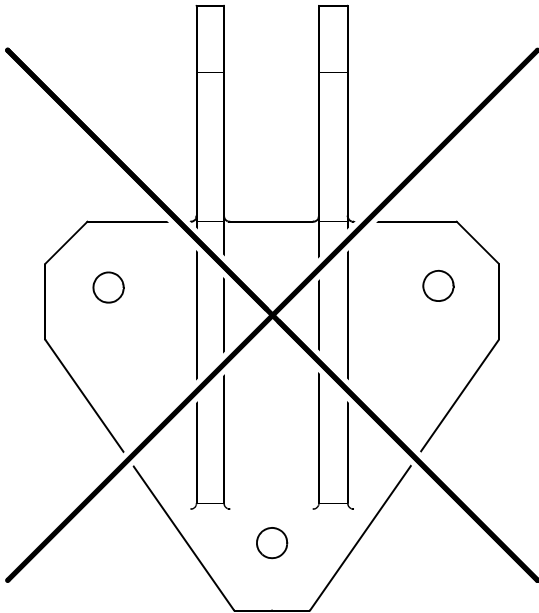
Pilatus Aircraft Ltd.
Customer Support General Aviation
Department GC
Ennetburgerstrasse 101
6370 Stans
Tel: +41 41 619 3333

D. Documentation

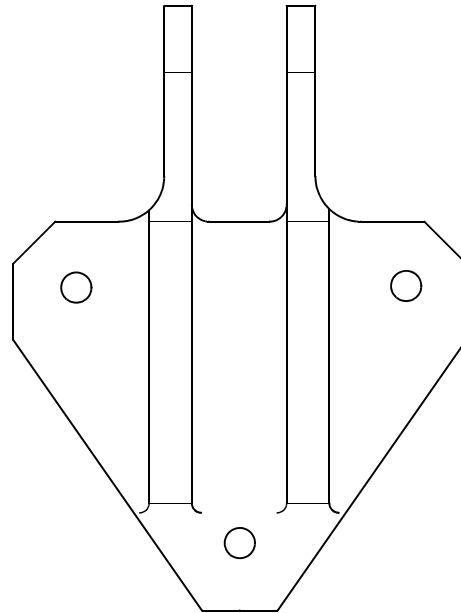
Make an entry in the spare parts inventory list that this Service Bulletin is incorporated.



Stabilizer-trim Attachment Components - Inspection and Replacement
 (Riveted Fairchild Type was Removed by SB 53-001 Rev. 1)
 Figure 1



WITHOUT INDEX AFTER
PART NUMBER

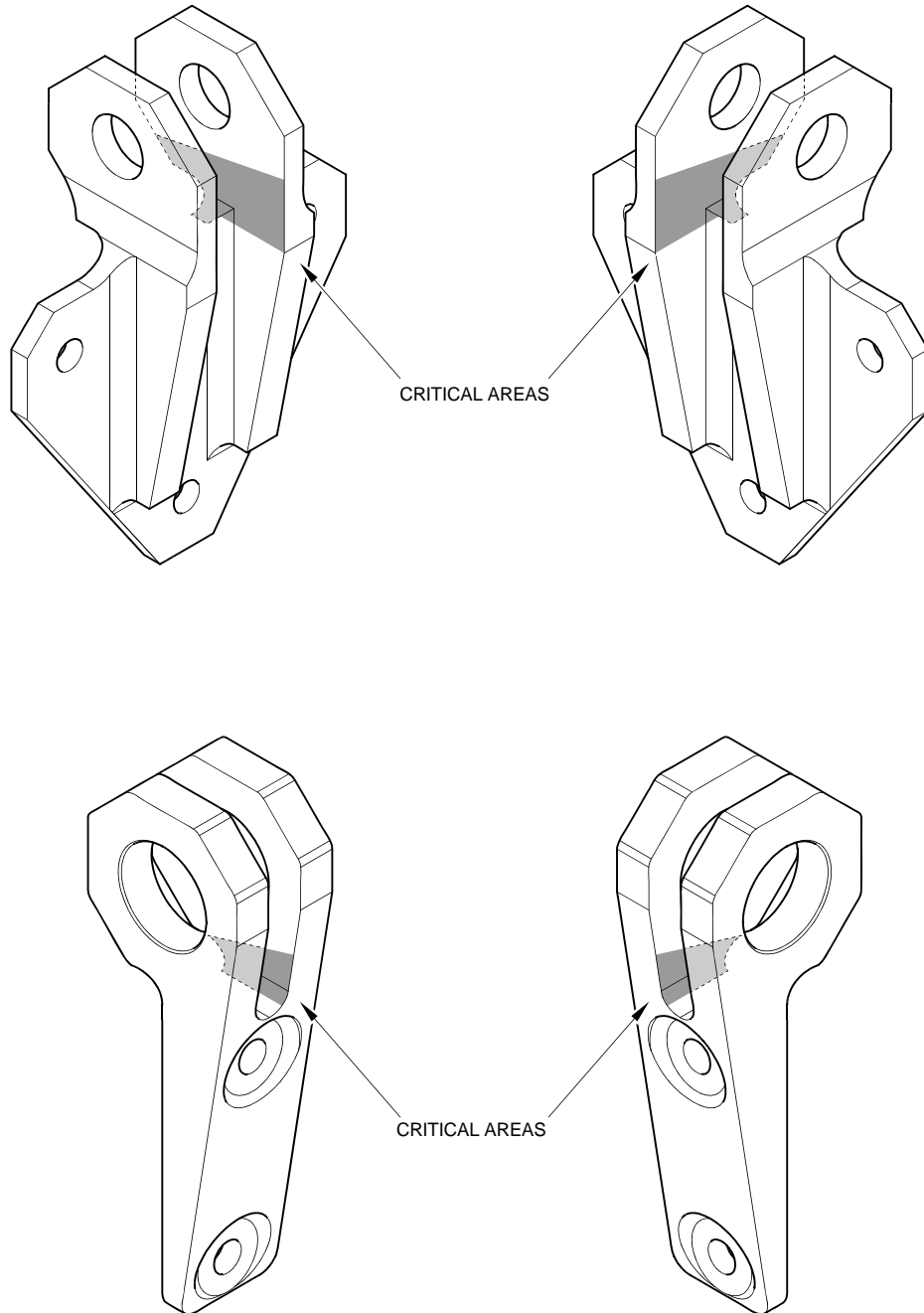


WITH INDEX AFTER
PART NUMBER

NOTE: OUT OF SERVICE

1479

Difference Between Fittings 116.40.06.033
(Fitting Without Index was Removed by SB 53-001 Rev. 1)
Figure 2



Critical Inspection Areas
Figure 3

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Compliance Level

- Inspection A - Visual Inspection
- Inspection B - Dye Penetrant or Eddy Current NDI

Aircraft Data	Manufacturer's Serial Number	Aircraft Total Flying Hours	Aircraft Total Landings
SB 53-001 Initial Issue	Date of Incorporation	Aircraft Total Flying Hours	Aircraft Total Landings
SB 53-001 Revision 1			
AMM Inspection (Ref. AMM 53-30-00 or AL Doc. 02334 APP. A)	Date of Last Inspection	Aircraft Total Flying Hours	Aircraft Total Landings
	Inspection Method	<input type="checkbox"/> Dye Penetrant	<input type="checkbox"/> Eddy Current (AMOC)

Service Data of Installed Parts

Mechanical Trim System	Date of Installation	Aircraft Total Flying Hours	Aircraft Total Landings
FR12a Assembly P/N 6201.0134	_____	_____	_____
Connecting Piece P/N 6232.0026.01	_____	_____	_____
Bearing Support P/N 6304.0023.01/02 or	_____	_____	_____
Bearing Fork P/N 116.40.06.034	_____	_____	_____
Electro-Mechanical Trim System	Date of Installation	Aircraft Total Flying Hours	Aircraft Total Landings
FR12a Assembly P/N 112.35.06.197	_____	_____	_____
Fitting P/N 116.40.06.112 or	_____	_____	_____
P/N 116.40.06.033	_____	_____	_____
Bearing Fork P/N 116.40.06.034	_____	_____	_____

Inspection Result of Installed Parts

		Uneven Wear YES / NO	Cracks YES / NO	Corrosion YES / NO	Repair YES / NO	Replacement YES / NO
Mechanical Trim System						
FR12a Assembly P/N 6201.0134		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Connecting Piece P/N 6232.0026.01		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Bearing Support P/N 6304.0023.01/02 or		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Bearing Fork P/N 116.40.06.034		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Electro-Mechanical Trim System						
FR12a Assembly P/N 112.35.06.197		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Fitting P/N 116.40.06.112 or		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
P/N 116.40.06.033		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Bearing Fork P/N 116.40.06.034		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Other Observations _____

Date _____
 Inspector Name _____
 Inspector Level _____
 Inspector Signature _____

Return Completed Form To:
 Pilatus Aircraft Ltd.,
 Customer Support General Aviation,
 CH-6371 Stans, Switzerland. FAX +41 41 619 73 11
 Email: supportpc12@pilatus-aircraft.com

Report Form

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