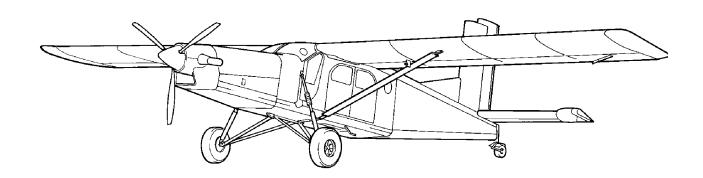


### PC-6

### **MODELS**

PC-6	PC-6-H1	PC-6-H2
PC-6/350	PC-6/350-H1	PC-6/350-H2
PC-6/A	PC-6/A-H1	PC-6/A-H2
PC-6/A1-H2	PC-6/A2-H2	PC-6/B-H2
PC-6/B1-H2	PC-6/C-H2	PC-6/C-H2



## AIRWORTHINESS LIMITATIONS

Document Number 02334
Initial Issue Feb 28 2010

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Pilatus Aircraft Ltd. CH-6371 Stans, Switzerland



### DOCUMENT NO. 02334 RECORD OF REVISIONS

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1	May 14/10	May 14/10	PILATUS	26			
2				27			
3				28			
4				29			
5				30			
6				31			
7				32			
8				33			
9				34			
10				35			
11				36			
12				37			
13				38			
14				39			
15				40			
16				41			
17				42			
18				43			
19				44			
20				45			
21				46			
22				47			
23				48			
24				49			
25				50			

**DOCUMENT NO. 02334** 

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Page 2 Feb 28/10

**DOCUMENT NO. 02334** 

#### **RECORD OF TEMPORARY REVISIONS**

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## PC-6 AIRWORTHINESS LIMITATIONS

#### **DOCUMENT NO. 02334**

Section	Pages	Date	Section	Pages	Date
Title Page		Feb 28/10	APPENDIX C (Cont'd)	607 608	Feb 28/10 Feb 28/10
Record of Revisions	1 2	Feb 28/10 Feb 28/10		609 610 611	Feb 28/10 Feb 28/10 Feb 28/10
Record of Temporary Revisions	1 2	Feb 28/10 Feb 28/10		612 613 614	Feb 28/10 Feb 28/10 Feb 28/10
List of Effective Pages	1 2	May 14/10 May 14/10	APPENDIX D	401 402	Feb 28/10 Feb 28/10
Table of Contents	1 2	Feb 28/10 Feb 28/10		403 404 405	Feb 28/10 Feb 28/10 Feb 28/10
Airworthiness Limitations	1 2	May 14/10 May 14/10		406 407 408	Feb 28/10 Feb 28/10 Feb 28/10
	3 4 5	May 14/10 May 14/10 May 14/10		409 410 411	Feb 28/10 Feb 28/10 Feb 28/10
APPENDIX A	6 601	May 14/10 Feb 28/10	APPENDIX E	412 1	Feb 28/10 Feb 28/10
	602 603 604	Feb 28/10 Feb 28/10 Feb 28/10		2 3 4	Feb 28/10 Feb 28/10 Feb 28/10
	605 606	Feb 28/10 Feb 28/10		5 6 7	Feb 28/10 Feb 28/10 Feb 28/10
APPENDIX B	601 602	Feb 28/10 Feb 28/10		8 9	Feb 28/10 Feb 28/10
	603 604 605	Feb 28/10 Feb 28/10 Feb 28/10		10 11 12	Feb 28/10 Feb 28/10 Feb 28/10
APPENDIX C	606 601	Feb 28/10 Feb 28/10		13 14 15	Feb 28/10 Feb 28/10 Feb 28/10
	602 603 604	Feb 28/10 Feb 28/10 Feb 28/10		16 17 18	Feb 28/10 Feb 28/10 Feb 28/10
	605 606	Feb 28/10 Feb 28/10		.0	. 22 23, . 0

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## PC-6 AIRWORTHINESS LIMITATIONS

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#### **DOCUMENT NO. 02334**

#### **TABLE OF CONTENTS**

Subject		Page	Effectivity
AIRWORTHINESS LIMITATIONS			
General		1	All
Mandatory Structural Inspections		1	All
Life Limited Items		4	All
APPENDICES			
Horizontal Trim-Actuator Support-Bracket and Frame 12A			
Inspection / Check	APPENDIX A	601	All
Horizontal Trim-Actuator Bearing-Fork or Bearing Support Assemblies			
Inspection / Check	APPENDIX B	601	All
Wing Strut Fitting			
Inspection / Check	APPENDIX C	601	All
Wing Strut Fitting			
Removal / Installation	APPENDIX D	401	All
Consumable Materials List			
General	APPENDIX E	1	All

Page 1 Feb 28/10

**DOCUMENT NO. 02334** 

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#### **DOCUMENT NO. 02334**

#### **AIRWORTHINESS LIMITATIONS**

#### 1. General

I

The Airworthiness Limitations section is EASA approved and variations must also be approved.

The Airworthiness Limitations section is also FAA approved for US registered aircraft in accordance with FAR 21.29.

The Airworthiness Limitations section is FAA approved and specifies maintenance required under 14 CFR 43.16 and 91.403 unless an alternate program has been FAA approved.

On any PC-6, do not install the following parts:

Mechanical stabilizer trim system:

Connecting pieces 6232.0026.XX manufactured by Fairchild. The Fairchild part has a rivet in the center that is not on the Pilatus part (refer also to SB 53-001, Rev. 1).

Electrical stabilizer trim system:

Fitting 116.40.06.033 without index after part number (refer also to SB 53-001, Rev. 1).

#### 2. Mandatory Structural Inspections

Item	Maintenance Requirement	Interval
Chapter 27 - Flight Controls		
Aileron, Rudder, Elevator and Flap Bellcranks and Levers	Examine (Fluorescent Dye Penetrant Inspection)	7000 flying hours or 14 years (whichever comes first)
Aileron Trim Screw-Actuator (Mechanical System)	Check for backlash. The maximum permitted backlash is 0,3 mm (0.012 in.)	3500 flying hours or 7 years (whichever comes first)
Chapter 53 - Fuselage		
Stabilizer Trim Attachment Components, FR12A	Examine in accordance with APPENDIX A	3500 flying hours or 7 years (whichever comes first) See NOTE C below
FR12A	Examine in accordance with APPENDIX A	3500 flying hours or 7 years (whichever comes first) See NOTE C below
Fuselage - Wing-Strut Attachment-Brackets	Examine (Fluorescent Dye Penetrant Inspection)	3500 flying hours or 7 years (whichever comes first)

#### **DOCUMENT NO. 02334**

Item	Maintenance Requirement	Interval
Chapter 55 - Stabilizers		
Trim Actuator Attachment	Examine in accordance with APPENDIX B	3500 flying hours or 7 years (whichever comes first) See NOTE C below
Chapter 57 - Wings		
Left and Right Wing-Strut Fitting (All P/Ns)	Examine in accordance with APPENDIX C, Check 1	Aircraft registered in the USA: 3 months
		All other aircraft (not operating in the USA): 3 months (See NOTE 1) 6 months (See NOTE 2) 12 months (See NOTE 3)
		NOTE 1: For aircraft that operate in a severe Corrosion Severity Zone
		NOTE 2: For aircraft that operate in a moderate Corrosion Severity Zone
		NOTE 3: For aircraft that operate in a mild Corrosion Severity Zone
		See NOTE D below
Left Wing-Strut Fitting (P/N 6102.0041.00, 111.35.06.055, 111.35.06.184 or 111.35.06.185)	Examine in accordance with APPENDIX C, Check 2	1100 flying hours or 12 months (whichever comes first) See NOTE D below
Right Wing-Strut Fitting (P/N 6102.0041.00, 111.35.06.056, 111.35.06.184 or 111.35.06.186)	Examine in accordance with APPENDIX C, Check 2	1100 flying hours or 12 months (whichever comes first) See NOTE D below
Left Wing-Strut Fitting (P/N 111.35.06.193 or 111.35.06.195)	Examine in accordance with APPENDIX C, Check 2	12 months See NOTE D below
Right Wing-Strut Fitting (P/N 111.35.06.194 or 111.35.06.195)	Examine in accordance with APPENDIX C, Check 2	12 months See NOTE D below
Wing - Fuselage Attachments	Examine (Fluorescent Dye Penetrant Inspection)	7000 flying hours or 14 years (whichever comes first)

### **DOCUMENT NO. 02334**

Item	Maintenance Requirement	Interval
Aileron/Flap Support-Brackets		7000 flying hours or 14 years (whichever comes first)

#### **DOCUMENT NO. 02334**

#### 3. Life Limited Items

Item	Maintenance Requirement	Interval
Chapter 27 - Flight Controls		
Flight Control Chains (Mechanical Trim and Flaps)	Replace (discard)	7000 flying hours or 14 years (whichever comes first)
Aileron Attachment Bolts	Replace (discard)	7000 flying hours or 14 years (whichever comes first)
Elevator Attachment Bolts	Replace (discard)	7000 flying hours or 14 years (whichever comes first)
Rudder Attachment Bolts	Replace (discard)	7000 flying hours or 14 years (whichever comes first)
Flap Attachment Bolts	Replace (discard)	7000 flying hours or 14 years (whichever comes first)
Horizontal-Stabilizer Attachment-Bolts	Replace (discard)	7000 flying hours or 14 years (whichever comes first)
Stabilizer Trim Actuator (Mechanical Trim)	Overhaul	3500 flying hours
Stabilizer Trim Actuator (Electrical Trim)	Overhaul	3500 flying hours
Flap Actuator (Electrical System) (Electro-Metal Type 55.1-1100, P/N 978.73.14.101)	Overhaul	3000 landings
Flap Actuator (Electrical System) (Electro-Metal Type 55.1-1100, Amdt. 2 P/N 978.73.14.103)	Overhaul	5000 landings or 7 years (whichever comes first)
Flap Actuator Jacks (Mechanical System)	Overhaul	3500 flying hours
Chapter 32 - Landing Gear		
Main-Gear Shock-Strut Attachment-Bolts	Replace (discard)	10000 landings or 7 years (whichever comes first)
Tail-Gear Attachment-Bolts	Replace (discard)	10000 landings or 7 years (whichever comes first)

#### **DOCUMENT NO. 02334**

Item	Maintenance Requirement	Interval
Chapter 35 - Oxygen		
Oxygen Cylinder (if installed)	Overhaul and send to an authorized facility for hydrostatic test	5 years
Chapter 57 - Wings		
Wing Attachment Bolts	Replace (discard)	7000 flying hours or 14 years (whichever comes first)
Wing-Strut Attachment-Bolts	Replace (discard)	7000 flying hours or 14 years (whichever comes first)
Chapter 77 - Engine Indicating		
Low Pitch Warning-Switch	Replace (discard)	3500 flying hours

**NOTE A:** Refer to the appropriate engine and propeller maintenance manuals for the applicable airworthiness limitations.

**NOTE B:** If any of the above maintenance tasks were accomplished at a date earlier than the effective date of this document, the relevant interval starts from that date, except for items with NOTES C or D.

**NOTE C:** If the maintenance requirement of this task was accomplished as part of SB 53-001 or superordinate ADs, the interval starts from that date.

**NOTE D:** If the maintenance requirement of this task was accomplished as part of SB 57-005 or superordinate ADs, the interval starts from that date.

**NOTE E:** Any maintenance task listed above for which NOTES B, C or D do not apply must be accomplished within 12 months from the effective date of this document.

Approved by: Hamid Hampai

FEDERAL OFFICE OF CIVIL AVIATION (FOCA), SWITZERLAND

EASA Project No: 0010004781-001

Approval Signature: Signed original held on file at Pilatus Aircraft Ltd, Stans

Approval Date: May 14th 2010

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EFFECTIVITY: All

Page 6 May 14/10



## APPENDIX A HORIZONTAL TRIM-ACTUATOR SUPPORT-BRACKET AND FRAME 12A INSPECTION / CHECK

#### 1. General

This procedure gives the data and instructions necessary to do an inspection of the horizontal trimactuator support-bracket and auxiliary frame 12A

The inspection is applicable to aircraft with electrical trim (CONFIG 1) or mechanical trim (CONFIG 2).

This inspection should be done at the same time as the inspection of the Horizontal Trim-Actuator Bearing-Fork or Bearing Support Assemblies (Ref. APPENDIX B).

#### 2. Job Set Up Information

#### A. Operator Supplied Parts

Part No.	Description	Qty.	Remarks
932.35.14.105	Bolt (NAS6604-5)	1	Oversize bolt if required.
932.35.14.109	Bolt (NAS6604-9)	1	Oversize bolt if required.
938.07.68.305	Nut (MS21046-4E)	2	Oversize nuts if required.

#### B. Consumable Materials (Ref. APPENDIX E)

Material No.	Description	Remarks
P01-008	Solvent	
P02-016	Scotch-Brite	Very fine grade
P02-031	Absorbent Paper	
P04-012	Corrosion Preventative	Mastinox 6856H
P07-001	CCC Solution	Alodine 1200S
P07-007	Primer (Epoxy)	

#### 3. Procedures

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURER'S HEALTH AND SAFETY INSTRUCTIONS.

**NOTE:** In the procedures that follow:

- · CONFIG 1 refers to aircraft with electrical trim
- CONFIG 2 refers to aircraft with mechanical trim and:
  - CONFIG 2A has 6 mm bolts installed
  - CONFIG 2B has 6,35 mm bolts installed



#### A. Preparation

#### **CONFIG 1:**

(1) Remove the horizontal stabilizer actuator.

#### **CONFIG 2:**

(2) Remove the horizontal stabilizer actuator. During this procedure use clamps (or equivalent) to make sure the cables stay in position on spools of the mechanical actuator and operating mechanism.

#### B. Removal (Ref. Fig. 601)

#### **CONFIG 1:**

(1) Remove the nuts (4), the washers (2) and the bolts (1), and remove the fitting (3) from FR 12A.

#### **CONFIG 2:**

- (2) CONFIG 2A:
  - (a) Remove the nuts (7), the washers (6) and the bolts (5), and remove the connecting piece (8) from FR12A. Record the quantity of washers (6) installed under the lower nut (7).
- (3) CONFIG 2B:
  - (a) Remove the nuts (11), the washers (6), the bolts (9) and (10), and remove the connecting piece (8) from FR12A.

#### C. Inspection

- (1) Do dye-penetrant flaw detection (PFD) tests:
  - (a) Obey the manufacturers instructions and use the solvent (Material No. P01-008), Scotch-Brite (Material No. P02-016) and/or non-metallic scrapers to remove the layers of paint and protection from:
    - All surfaces of the fitting (3) or connecting piece (8)
    - The area of the surface of FR12A where the fitting (3) or connecting piece (8) was installed
  - (b) Obey the manufacturers instructions and use dye flaw detection procedures (fluorescent or color contrast) to do inspections for cracks in the fitting (3) or connecting piece (8) and the applicable area of FR12A. No crack damage is permitted. You must replace:
    - Cracked components (Ref. Table 601 Component Replacement Data)
    - FR12A if cracks are found



- (2) Do a visual inspection of FR12A:
  - (a) Use a X10 magnifier and a source of bright light to do an inspection of FR12A for crack damage and signs of corrosion. Crack damage is not permitted. If you find crack damage you must replace FR12A (Ref. Repair and Overhaul Manual (ROM), Chap 2). Surface corrosion is permitted if not less than 90% of the material thickness remains after the corrosion is removed (Ref. ROM, Chap 12)
- (3) Do a check of the attachment hole diameters:

#### **CONFIG 1:**

- (a) Use internal vernier callipers (or equivalent) to do a check of the actuator attachment hole diameter in the fitting (3).
- (b) A hole diameter of more than 9,555 mm (0.3762 in.) in the fitting (3) is not permitted. Replace if necessary (Ref. Table 601 Component Replacement Data).
- (c) Use internal vernier callipers (or equivalent) to do a check of the diameters of the attachment bolt holes in the fitting (3) and FR12A. Hole diameters of more than 4,85 mm (0.191 in.) are not permitted. Replace defective components as necessary (Ref. Table 601 Component Replacement Data).

#### **CONFIG 2:**

- (d) Use internal vernier callipers (or equivalent) to do a check of the actuator attachment hole diameter in the connecting piece (8).
- (e) A hole diameter of more than 16.036 mm (0.631 in.) in the connecting piece (8) is not permitted. Replace if necessary (Ref. Table 601 Component Replacement Data).
- (f) Use internal vernier callipers (or equivalent) to do a check of the diameters of the attachment bolt holes in the connecting piece (8) and FR12A.

If all of the hole diameters are 6,024 mm (0.23717 in.) or less, continue the procedure from Para D.(2).

If one or more of the holes is 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 all of the bolt holes in the connecting piece (8) and FR12A. Deburr the holes.
- (g) If one or more holes is 6,374 mm (0.251 in.) or more, replace the connecting piece (8) and/or FR12A (Ref. Table 601 Component Replacement Data).

Component	Part No.	Replacement
FR12A (Assembly)	112.35.06.197 6201.0134	Ref. ROM, Chap 2

Table 601 - Component Replacement Data



Component	Part No.	Replacement
Fitting (CONFIG 1)	116.40.06.033 or 116.40.06.112	Ref. Para D (1)
Connecting Piece (CONFIG 2)	6232.0026	Ref. Para D (2)

Table 601 - Component Replacement Data

#### D. Installation (Ref. Fig. 601)

#### **CONFIG 1:**

- (1) Install the fitting (3):
  - (a) 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).
  - (b) 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).
  - (c) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P04-012) on the faying surfaces of FR12A and the fitting (3), the nuts (4), the washers (2) and the bolts (1).
  - (d) Put the fitting (3) in position on FR12A and install the bolts (1), the washers (2) and the nuts (4). For each bolt install one washer (2) under the head of the bolt and one washer under the nut.
  - (e) Obey the manufacturers instructions and use absorbent paper (Material No. P02-031) and solvent (Material No. P01-008) to remove unwanted corrosion preventative.

#### **CONFIG 2:**

- (2) Install the connecting piece (8):
  - (a) 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).
  - (b) 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).
  - (c) If you increased the diameter of the holes during the inspection, use the new bolt (9) (NAS6604-9), the new bolt (10) (NAS6604-5) and the new nuts (11) (MS21046-4E), and follow the instructions for CONFIG 2B.



#### (3) CONFIG 2A:

- (a) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P04-012) on the faying surfaces of FR12A and the connecting piece (8), the washers (6), the bolts (5) and the nuts (7).
- (b) Install the connecting piece (8) with the bolts (5), washers (6) and nuts (7). Install the same quantity of washers (6) under the lower nut (7) that you recorded in the removal procedure.
- (c) Obey the manufacturers instructions and use absorbent paper (Material No. P02-031) and solvent (Material No. P01-008) to remove unwanted corrosion preventative.

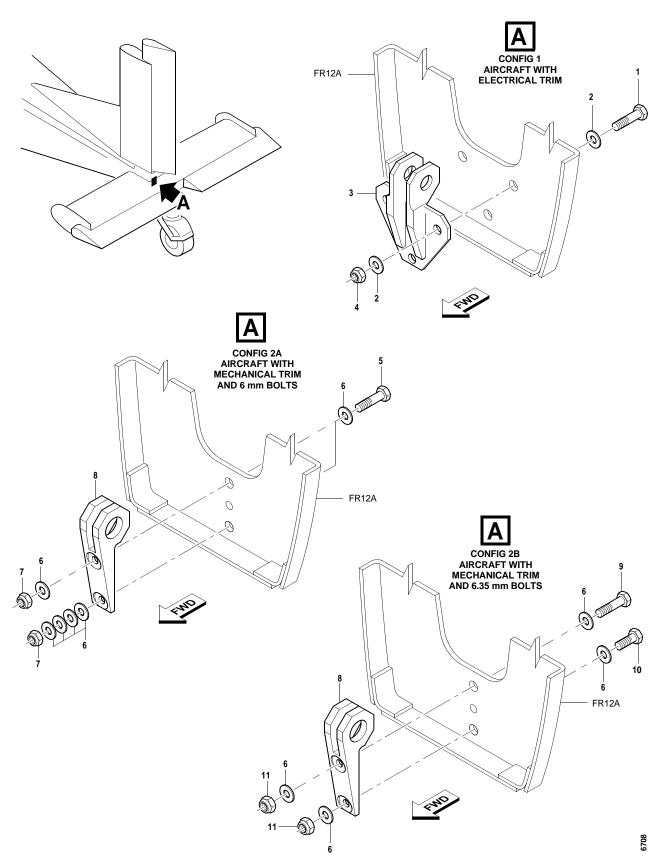
#### (4) CONFIG 2B:

- (a) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P04-012) on the faying surfaces of FR12A and the connecting piece (8), the washers (6), the bolts (9) and (10) and the nuts (11).
- (b) Install the connecting piece (8) with the bolt (9), the bolt (10), the washers (6) and the nuts (11).
- (c) Obey the manufacturers instructions and use absorbent paper (Material No. P02-031) and solvent (Material No. P01-008) to remove unwanted corrosion preventative.

#### E. Close up

- (1) Remove all tools and materials. Make sure the work areas are clean.
- (2) Install the horizontal stabilizer actuator.

### ■PILATUS■ PC-6 MAINTENANCE MANUAL



Horizontal Trim-Actuator Support-Bracket and FR12A - Inspection/Check Figure 601



## APPENDIX B HORIZONTAL TRIM-ACTUATOR BEARING-FORK OR BEARING SUPPORT ASSEMBLIES INSPECTION / CHECK

#### 1. General

This procedure gives the data and instructions necessary to do an inspection of the horizontal trimactuator bearing-fork, or bearing support assemblies, installed in the horizontal stabilizer.

The inspection is applicable to aircraft with electrical trim (CONFIG 1) or mechanical trim (CONFIG 2).

Aircraft with electrical trim (CONFIG 1) have a bearing fork.

Aircraft with mechanical trim (CONFIG 2) have bearing support assemblies.

This inspection should be done at the same time as the inspection of the Horizontal Trim-Actuator Support-Bracket and Frame 12A (Ref. APPENDIX A).

#### 2. Job Set Up Information

#### A. Consumable Materials (Ref. APPENDIX E)

Material No.	Description	Remarks
P01-008	Solvent	
P02-016	Scotch-Brite	Very fine grade
P02-031	Absorbent Paper	
P04-012	Corrosion Preventative	Mastinox 6856H
P07-001	CCC Solution	Alodine 1200S
P07-007	Primer (Epoxy)	

#### 3. Procedures

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURER'S HEALTH AND SAFETY INSTRUCTIONS.

**NOTE:** In the procedures that follow:

- CONFIG 1 refers to aircraft with electrical trim
- CONFIG 2 refers to aircraft with mechanical trim

#### A. Preparation

#### **CONFIG 1:**

- (1) Remove the horizontal stabilizer actuator.
- (2) Use applicable supports to hold the horizontal stabilizer in a position which gives access to the bottom surface.

EFFECTIVITY: All

**APPENDIX B** 



#### **CONFIG 2:**

- (3) Remove the horizontal stabilizer actuator. During this procedure use clamps (or equivalent) to make sure the cables stay in position on spools of the mechanical actuator and operating mechanism.
- (4) Use applicable supports to hold the horizontal stabilizer in a position which gives access to the bottom surface.

#### B. Inspection (Ref. Fig. 601)

- (1) Do the dye-penetrant flaw detection (PFD) tests
  - (a) Obey the manufacturers instructions and use the solvent (Material No. P01-008), Scotch-Brite (Material No. P02-016) and/or non-metallic scrapers to remove the layers of paint and protection from:
    - The surfaces of the bearing fork (4) or bearing supports (6) and (7) to which you have access
  - (b) Obey the manufacturers instructions and use dye flaw detection procedures (fluorescent or color contrast) to do inspections for cracks in the bearing fork (4) or bearing supports (6) and (7). No crack damage is permitted. You must replace:
    - Cracked components (Ref. Table 601 Component Replacement Data)
    - The two bearing supports (6) and (7) if only one is found cracked

Component	Part No.	Replacement
Bearing Fork (CONFIG 1)	116.40.06.034	Ref. Para C
Bearing Support Assembly (Left and Right) (CONFIG 2)	6304.0023	Ref. Repair and Overhaul Manual (ROM), Chap 2

Table 601 - Component Replacement Data

- (2) If you find no crack damage:
  - (a) Obey the manufacturers instructions and apply a layer of CCC Solution (Material No. P07-001) to all bare metal areas.
  - (b) Obey the manufacturers instructions and apply layers of primer (Material No. P07-007) and paint as necessary to the applicable components (Ref. ROM, Chap 12).



#### C. Replacement (Ref. Fig. 601)

- (1) Remove the horizontal stabilizer.
- (2) Use a 3,2 mm (0.126 in.) diameter drill to remove the rivets that attach the access panel(s) (1) to the bottom skin of the horizontal stabilizer. (Ref. ROM, Chap 2).

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

#### **CONFIG 1:**

- (3) Replace the bearing fork if necessary:
  - (a) Remove the bearing fork (4).
    - (i) Remove the nuts (5), the washers (3) and the bolts (2) then remove and discard the bearing fork (4).
    - (ii) 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.
  - (b) Install the new bearing fork (4).
    - (i) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P04-012) on the faying surfaces of the bearing fork (4) and the adjacent structure. Also do this on the applicable surfaces of the nuts (5), the washers (3) and the bolts (2).
    - (ii) Put the bearing fork (4) in position and install the bolts (2), washers (3) and the nuts (5).
    - (iii) Obey the manufacturers instructions and use absorbent paper (Material No. P02-031) and solvent (Material No. P01-008) to remove unwanted corrosion preventative.

#### **CONFIG 2:**

(4) Replace the bearing supports (6) and (7) if necessary (Ref. ROM, Chap 2).

#### CONFIGS 1 and 2:

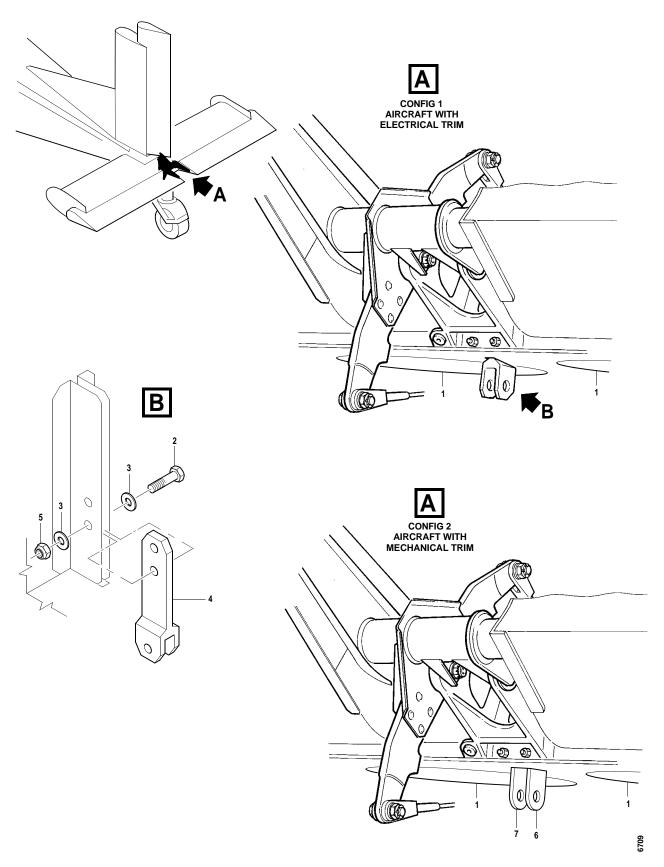
- (5) Obey the manufacturers instructions and apply layers of corrosion preventative (Material No. P04-012) as necessary) on the faying surfaces of the access panel (1).
- (6) Put the access panel (1) in position and install rivets (CR3223-4-2) (Ref. ROM, Chap 2).
- (7) Install the horizontal stabilizer.



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- (1) Remove all tools and materials. Make sure the work areas are clean.
- (2) Install the horizontal stabilizer actuator.

### ■PILATUS■ PC-6 MAINTENANCE MANUAL



Horizontal Trim-Actuator Bearing-Fork or Bearing Support Assembly - Inspection/Check Figure 601



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## APPENDIX C WING STRUT FITTING - INSPECTION / CHECK CHECK 1 - VISUAL INSPECTION

#### 1. General

This procedure gives the data for the Visual Inspection (Check 1) of the Wing Strut Fittings and is applicable to both the LH and RH wing strut fittings.

For the Eddy Current Inspection (Check 2) of the Wing Strut Fittings, refer to Page 607.

#### 2. Job Set Up Information

#### A. Tools and Equipment

Part No.	Description	Remarks
-	Torque wrench	0 to 85 Nm (0 to 750 lb. in.)
-	X10 magnifier	Local Supply
-	Source of Bright Light	Local Supply

#### B. Expendable Parts

IPC Ref.	Description	Remarks
57-21-01, Fig. 01	Cotter pin	
57-26-01, Fig. 01	Bearing	If necessary

#### C. Consumable Materials (Ref. APPENDIX E)

Material No.	Description	Remarks
P01-010	Solvent	Or an Approved Alternative
P02-031	Absorbent Paper	
P02-016	Scotch-Brite	
<b>CAUTION:</b> DO NOT MIX DIFFERENT TYPES OF GREASE. IF THE ORIGINAL GREASE IS TO BE REPLACED WITH A NEW TYPE OF GREASE, MAKE SURE THE BEARINGS ARE COMPLETELY CLEAN BEFORE PACKING WITH THE NEW GREASE.		
P04-028	Grease	P04-001, P04-004 and P04-031 are suitable alternatives for P04-028 for this application.
P07-001	Alodine 1200S	
P07-007	Primer Paint	



Material No.	Description	Remarks
P08-059	Adhesive	P08-052 or P08-060 are suitable alternatives for P08-059 for this application.

#### 3. Procedures

#### A. Job Set Up

Remove the left and right wing struts.

#### B. Inspection (Ref. Fig. 601)

- (1) Remove loose paint if necessary, then, use absorbent paper (Mat. No. P02-031) and the solvent (Mat. No. P01-010) to clean the left and right wing strut fittings (1).
- (2) Visually examine the left and right fittings (1) for signs of corrosion. Do this with a X10 magnifier and a source of bright light.

**NOTE:** You can also use the straight edge of a ruler which will indicate distortion caused by corrosion.

Minor surface corrosion is permitted (Ref. ROM. Chap. 2 and 4). All other corrosion is not permitted and you must replace the defective fitting (Ref. APPENDIX D).

- (3) Remove minor surface corrosion (Ref. ROM. Chap. 2 and 4) from the given fittings (1). This step in only applicable if you have found permitted corrosion (Ref. Step 3.B.(2).
- (4) Visually examine the left and right wing strut fittings (1) for signs of cracks. Do this with a X10 magnifier and a source of bright light. No cracks are permitted. If you find a crack, you must replace the fitting before next flight (Ref. APPENDIX D).
- (5) Examine the bearing (2).

#### Make sure:

- The bearing ball is free to rotate by hand. If necessary, you can use the attachment bolt as a lever.
- The bearing ball and housing are not corroded. Remove superficial corrosion with the absorbent paper (Mat. No. P02-031) and the solvent (Mat. No. P01-010). No remaining corrosion is permitted.
- The bearing housing is not loose in the wing strut fitting (1)
- The bearing housing is aligned (as shown in Detail B)
- The bearing ball and housing are not worn. No measurable gap is permitted.

EFFECTIVITY: All

**APPENDIX C** 



#### If necessary:

- Remove the bearing (Ref. Para. 3.C.)
- Examine the bearing and replace if necessary (Ref. Para. 3.C.)
- Install the bearing (Ref. Para. 3.D.).

**NOTE:** If you must replace the bearing, do not install the new bearing until you have done the Eddy Current Inspection.

- (6) Apply layers of Alodine 1200S (Mat. No. P07-001), the primer (Mat. No. P07-007) and the applicable paint on all bare metal surfaces except the bearing housing interfaces.
- (7) Lubricate the bearing (2).
  - (a) Remove the bearing ball:
    - 1 Rotate the bearing ball out of the bearing housing by 90 degrees.
    - Turn it until it aligns with the cut-outs in the bearing housing.
    - 3 Remove the bearing ball.
    - Use absorbent paper (Mat. No. P02-031) and the solvent (Mat. No. P01-010) to clean the bearing and the bearing housing.
    - 5 Apply a layer of the grease (Mat. No. P04-028) to the mating surfaces of the bearing and the bearing housing.
  - (b) Install the bearing ball:
    - 1 Align the bearing ball with the cut-outs in the bearing housing.
    - 2 Install the bearing ball.
    - 3 Turn the bearing by 90 degrees until it is flush in the bearing housing.
- C. Removal of the Bearing (Ref. Fig. 601)

**NOTE:** This procedure is applicable if loose, damaged, corroded, incorrectly aligned or worn bearings are found.

**CAUTION:** DO NOT USE TOO MUCH HEAT TO REMOVE THE BEARING. DO NOT EXCEED 120°C (224°F) FOR MORE THAN 15 MINUTES.

(1) Use a hot air blower (for heat shrink sleeves) and apply heat to loosen the adhesive between the bearing and the fitting or the bush.

**CAUTION:** DO NOT USE TOO MUCH FORCE TO REMOVE THE BEARING. YOU CAN DAMAGE THE WING STRUT FITTING IF YOU USE TOO MUCH FORCE.

(2) Use a press or applicable diameter drift to remove the bearing (2) from the bore in the fitting or the bush. If you cannot remove the bearing (2), replace the fitting (Ref. APPENDIX D).

**NOTE:** The bearing (2) is removed from the top (wing side) of the wing strut fitting (1).



- (3) Use the solvent (Mat. No. P01-010) to remove the unwanted adhesive from the hole in the fitting or the bush.
- (4) Use the Scotch-Brite (Mat. No. P02-016) to polish the hole in the fitting or the bush.
- (5) Use the absorbent paper (Mat. No. P02-031) made moist with the solvent (Mat. No. P01-010) and clean the hole in the fitting or the bush.
- (6) For wing strut-fittings P/N 6102.0041.00, 111.35.06.055, 111.35.06.056, 111.35.06.184, 111.35.06.185 and 111.35.06.186:
  - (a) Do a visual inspection of the bearing hole in the fitting for wear. No wear is permitted. Replace wing strut fittings that are worn before the next flight (Ref. APPENDIX D).
  - (b) Apply a layer of alodine (Mat. No. P07-001) to the surface of the hole and facing. Install the replacement bearing (2) in the alodined hole in less than 72 hours.
- (7) For wing strut-fittings P/N 111.35.06.193, 111.35.06.194 and 111.35.06.195:

Do a visual inspection of the bearing hole in the fitting for wear and corrosion. No corrosion is permitted. Remove all the corrosion and measure the inner diameter of the bush. The maximum permitted diameter is 32.24 mm (1.27 in.). If the inner diameter of the bush is more than the maximum permitted diameter, replace the fitting (Ref. APPENDIX D).

- (8) Examine the bearing (2). Make sure:
  - The bearing ball is free to rotate by hand. If necessary, you can use the attachment bolt as a lever.
  - The bearing ball and housing are not corroded. Remove superficial corrosion with the absorbent paper (Mat. No. P02-031) and the solvent (Mat. No. P01-010). No remaining corrosion is permitted.
  - The bearing ball and housing are not worn. No measurable gap is permitted.
- (9) If necessary, discard the old bearing and use a new bearing.
- D. Installation of the Bearing (Ref. Fig. 601)
  - (1) Use the absorbent paper (Mat. No. P02-031) made moist with the solvent (Mat. No. P01-010) and clean the bonding face of the bearing (2).
  - (2) Use the Scotch-Brite (Mat. No. P02-016) to polish the bonding face of the bearing (2).
  - (3) Use the absorbent paper (Mat. No. P02-031) made moist with the solvent (Mat. No. P01-010) and clean the bonding face of the bearing (2).
  - (4) Put the bearing (2) in position in the hole. Make sure it can be installed easily. Remove the bearing (2).

**NOTE:** Put the bearing (2) in the hole as shown in Detail B, NEW ORIENTATION.

(5) Mix the two parts of the adhesive (Mat. No. P08-059).



- (6) Apply a layer of the adhesive (Mat. No. P08-059) to the applicable surfaces of the bearing (2) and the hole. Make sure there is sufficient adhesive to give a full bond when the parts are assembled.
- (7) Put the bearing (2) in position in the hole. Make sure the bearing (2) is correctly aligned (Ref. Detail B, NEW ORIENTATION) and push the bearing (2) firmly into the hole to make sure it is tightly against the flange face.
- (8) Remove the unwanted adhesive (Mat. No. P08-059).

**CAUTION:** DO NOT USE TOO MUCH HEAT. DO NOT EXCEED 120°C (224°F) FOR MORE THAN 15 MINUTES.

(9) Let the adhesive (Mat. No. P08-059) cure for 5 to 7 days at room temperature or 2 hours at  $65 \pm 5$ °C (136  $\pm$  8°F).

#### E. Close up

- (1) Remove all tools and materials. Make sure that the work areas are clean.
- (2) Install the wing struts.

### ■PILATUS■ PC-6 MAINTENANCE MANUAL

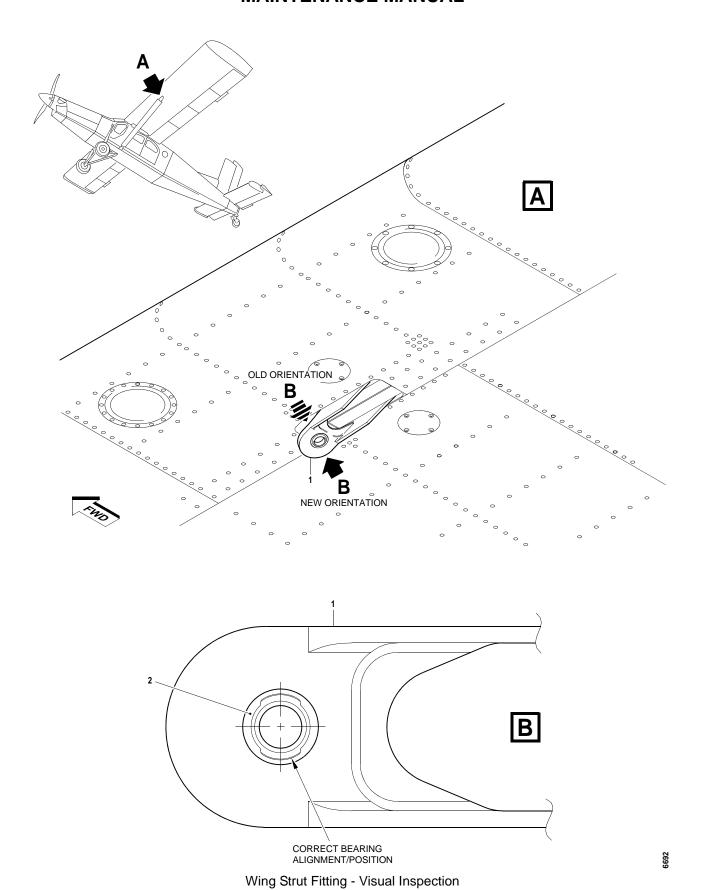


Figure 601



#### **CHECK 2 - EDDY CURRENT INSPECTION**

#### 1. General

This procedure gives the data for the Eddy Current Inspection (Check 2) of the Wing Strut Fittings and is applicable to both the LH and RH wing strut fittings.

#### 2. Job Set Up Information

#### A. Tools and Equipment

Part No.	Description	Remarks
-	Torque wrench	0 to 85 Nm (0 to 750 lb. in.)
-	X10 magnifier	Local Supply
-	Source of Bright Light	Local Supply
-	Eddy Current NDT Equipment	NORTEC 2000 Eddy Current Instrument or equivalent
-	Shielded Probe and Lead Combination	3 mm Diameter, 500 KHz, 90-degree
-	Calibration Standard	7075 Aluminum, 2124 Aluminum or 2024 Aluminum with an EDM slot 0.5 mm deep

#### B. Expendable Parts

IPC Ref.	Description	Remarks
57-21-01, Fig. 01	Cotter pin	
57-26-01, Fig. 01	Bearing	If necessary

#### C. Consumable Materials (Ref. APPENDIX E)

Material No.	Description	Remarks
P01-010	Solvent	Or an Approved Alternative
P02-031	Absorbent Paper	
P02-016	Scotch-Brite	
CAUTION: DO NOT MIX DIFFERENT TYPES OF GREASE. IF THE ORIGINAL GREASE IS TO BE REPLACED WITH A NEW TYPE OF GREASE, MAKE SURE THE BEARINGS ARE COMPLETELY CLEAN BEFORE PACKING WITH THE NEW GREASE.		
P04-028	Grease	P04-001, P04-004 and P04-031 are suitable alternatives for P04-028 for this application.
P07-001	Alodine 1200S	



Material No.	Description	Remarks
P07-007	Primer Paint	
P08-018	Sealant	For strut fittings 111.35.06.193, 111.35.06.194 and 111.35.06.195
P08-059	Adhesive	P08-052 or P08-060 are suitable alternatives for P08-059 for this application.

#### 3. Procedures

#### A. Job Set Up

Remove the left and right wing struts.

#### B. Inspection (Ref. Fig. 602)

- (1) Remove loose paint if necessary, then, use absorbent paper (Mat. No. P02-031) and the solvent (Mat. No. P01-010) to clean the left and right wing strut fittings (1).
- (2) Visually examine the left and right fittings (1) for signs of corrosion. Do this with a X10 magnifier and a source of bright light.

**NOTE:** You can also use the straight edge of a ruler which will indicate distortion caused by corrosion.

Minor surface corrosion is permitted (Ref. ROM. Chap. 2 and 4). All other corrosion is not permitted and you must replace the defective fitting (Ref. APPENDIX D).

- (3) Remove minor surface corrosion (Ref. ROM. Chap. 2 and 4) from the given fittings (1). This step in only applicable if you have found permitted corrosion (Ref. Step 3.B.(2).
- (4) Visually examine the left and right wing strut fittings (1) for signs of cracks. Do this with a X10 magnifier and a source of bright light. No cracks are permitted. If you find a crack, you must replace the fitting before next flight (Ref. APPENDIX D).
- (5) Examine the bearing (2).

#### Make sure:

- The bearing ball is free to rotate by hand. If necessary, you can use the attachment bolt as a lever.
- The bearing ball and housing are not corroded. Remove superficial corrosion with the absorbent paper (Mat. No. P02-031) and the solvent (Mat. No. P01-010). No remaining corrosion is permitted.
- The bearing housing is not loose in the wing strut fitting (1)
- The bearing housing is aligned (as shown in Detail B)
- The bearing ball and housing are not worn. No measurable gap is permitted.



#### If necessary:

- Remove the bearing (Ref. Para. 3.C.)
- Examine the bearing and replace if necessary (Ref. Para. 3.C.)
- Install the bearing (Ref. Para. 3.D.).

**NOTE:** If you must replace the bearing, do not install the new bearing until you have done the Eddy current inspection (Ref. Para. 3.B.(6)).

**CAUTION:** ONLY PERSONNEL THAT ARE TRAINED AND APPROVED (BY THE LOCAL AIRWORTHINESS AUTHORITIES) CAN DO THIS PROCEDURE.

- (6) Do the non destructive inspection (Eddy Current).
  - (a) For strut fittings 111.35.06.193, 111.35.06.194 and 111.35.06.195:
    - Use a non-metallic scraper and remove the bead of sealant (Mat. No. P08-018) from between the bush and the fitting (Ref. Sheet 2).
    - Use the absorbent paper (Mat. No. P02-031) and the solvent (Mat. No. P01-010) to clean the area where the sealant was applied.
  - (b) Calibrate the Eddy Current Instrument as follows:
    - Frequency 300 500 KHz
    - · Probe selection Absolute
    - Refer to the manufacturer's handbook and calibrate the instrument for an 80% upscale deflection from the 0.5 mm EDM slot of the calibration standard.
  - (c) Inspection of the fittings
    - **NOTE 1:** Use a non-metallic object to guide the probe as close as possible to all the edges.
    - NOTE 2: Specially inspect the areas shown on Figure 602, Detail B.
    - Do the procedure as given in the manufacturer's handbook.
    - Put the probe on the lower face of the left fitting.
    - Move the probe across the lower face. Make sure you get as close as possible to the outer edges of the fitting and as close as possible to the edges of the bearing (Ref. Detail B).
    - 4 Put the probe on the upper face of the left fitting.
    - Move the probe across the upper face. Make sure you get as close as possible to the outer edges of the fitting and as close as possible to the edges of the bearing (Ref. Detail B).
    - Put the probe on the face of the edge of the left fitting.
    - Move the probe across the face of the edge. Make sure you get as close as possible to the outer edges (Ref. Detail C).



- 8 If the bearing is removed:
  - Put the probe on the inner face of the bearing hole of the left fitting
  - Move the probe across the face and around the hole. Make sure you get as close as possible to the outer edges of the hole.
- 9 Do Para. 3.B.(6)(b)2 thru 8 again for the right fitting.
- 10 If you find a crack, you must replace the fitting before next flight (Ref. APPENDIX D).
- (d) Apply layers of Alodine 1200S (Mat. No. P07-001), the primer (Mat. No. P07-007) and the applicable paint on all bare metal surfaces except the bearing housing interfaces.
- (e) For strut fittings 111.35.06.193, 111.35.06.194 and 111.35.06.195:
  - Use the absorbent paper (Mat. No. P02-031) and the solvent (Mat. No. P01-010) and clean the area between the bush and the fitting. where the sealant will be applied (Ref. Sheet 2).
  - Apply a bead of sealant (Mat. No. P08-018) between the bush and the fitting (Ref. Sheet 2).
- (7) Lubricate the bearing (2).
  - (a) Remove the bearing ball:
    - 1 Rotate the bearing ball out of the bearing housing by 90 degrees.
    - Turn it until it aligns with the cut-outs in the bearing housing.
    - 3 Remove the bearing ball.
    - <u>4</u> Use absorbent paper (Mat. No. P02-031) and the solvent (Mat. No. P01-010) to clean the bearing and the bearing housing.
    - 5 Apply a layer of the grease (Mat. No. P04-028) to the mating surfaces of the bearing and the bearing housing.
  - (b) Install the bearing ball:
    - 1 Align the bearing ball with the cut-outs in the bearing housing.
    - 2 Install the bearing ball.
    - Turn the bearing by 90 degrees until it is flush in the bearing housing.



#### C. Removal of the Bearing (Ref. Fig. 602)

**NOTE:** This procedure is applicable if loose, damaged, corroded, incorrectly aligned or worn bearings are found.

**CAUTION:** DO NOT USE TOO MUCH HEAT TO REMOVE THE BEARING. DO NOT EXCEED 120°C (224°F) FOR MORE THAN 15 MINUTES.

(1) Use a hot air blower (for heat shrink sleeves) and apply heat to loosen the adhesive between the bearing and the fitting or the bush.

**CAUTION:** DO NOT USE TOO MUCH FORCE TO REMOVE THE BEARING. YOU CAN DAMAGE THE WING STRUT FITTING IF YOU USE TOO MUCH FORCE.

(2) Use a press or applicable diameter drift to remove the bearing (2) from the bore in the fitting. If you cannot remove the bearing (2), replace the fitting (Ref. APPENDIX D).

**NOTE:** The bearing (2) is removed from the top (wing side) of the wing strut fitting (1).

- (3) Use the solvent (Mat. No. P01-010) to remove the unwanted adhesive from the hole in the fitting or the bush.
- (4) Use the Scotch-Brite (Mat. No. P02-016) to polish the hole in the fitting or the bush.
- (5) Use the absorbent paper (Mat. No. P02-031) made moist with the solvent (Mat. No. P01-010) and clean the hole in the fitting or the bush.
- (6) For wing strut-fittings P/N 6102.0041.00, 111.35.06.055, 111.35.06.056, 111.35.06.184, 111.35.06.185 and 111.35.06.186:
  - (a) Do a visual inspection of the bearing hole in the fitting for wear. No wear is permitted. Replace wing strut fittings that are worn before the next flight (Ref. APPENDIX D).
  - (b) Apply a layer of alodine (Mat. No. P07-001) to the surface of the hole and facing. Install the replacement bearing (2) in the alodined hole in less than 72 hours.
- (7) For wing strut-fittings P/N 111.35.06.193, 111.35.06.194 and 111.35.06.195:

Do a visual inspection of the bearing hole in the fitting for wear and corrosion. No corrosion is permitted. Remove all the corrosion and measure the inner diameter of the bush. The maximum permitted diameter is 32.24 mm (1.27 in.). If the inner diameter of the bush is more than the maximum permitted diameter, replace the fitting (Ref. APPENDIX D).

- (8) Examine the bearing (2). Make sure:
  - The bearing ball is free to rotate by hand. If necessary, you can use the attachment bolt as a lever.
  - The bearing ball and housing are not corroded. Remove superficial corrosion with the absorbent paper (Mat. No. P02-031) and the solvent (Mat. No. P01-010). No remaining corrosion is permitted.
  - The bearing ball and housing are not worn. No measurable gap is permitted.
- (9) If necessary, discard the old bearing and use a new bearing.



#### D. Installation of the Bearing (Ref. Fig. 602)

- (1) Use the absorbent paper (Mat. No. P02-031) made moist with the solvent (Mat. No. P01-010) and clean the bonding face of the bearing (2).
- (2) Use the Scotch-Brite (Mat. No. P02-016) to polish the bonding face of the bearing (2).
- (3) Use the absorbent paper (Mat. No. P02-031) made moist with the solvent (Mat. No. P01-010) and clean the bonding face of the bearing (2).
- (4) Put the bearing (2) in position in the hole. Make sure it can be installed easily. Remove the bearing (2).

**NOTE:** Put the bearing (2) in the hole as shown in Detail B, NEW ORIENTATION.

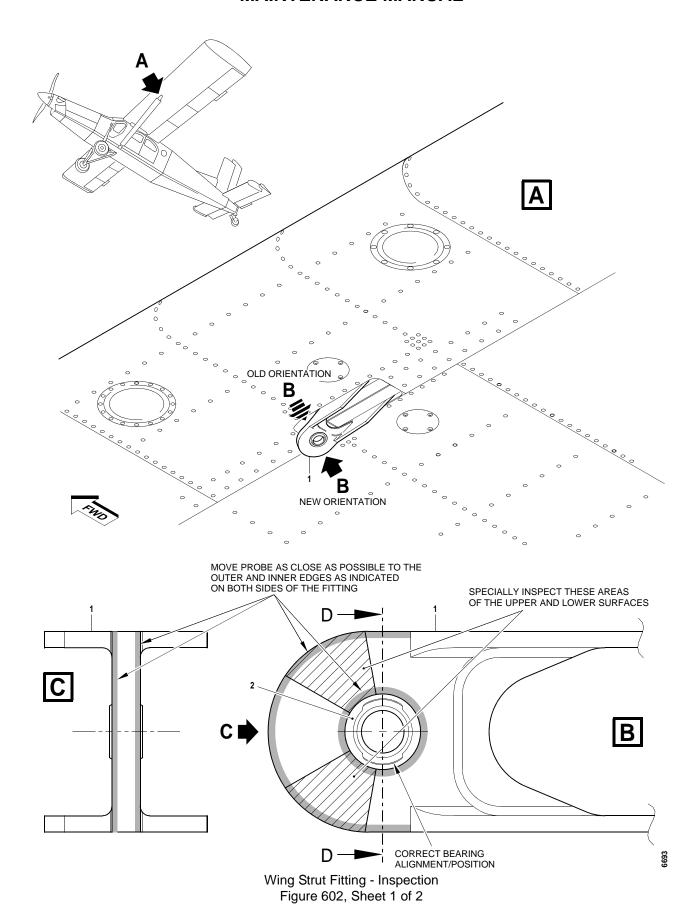
- (5) Mix the two parts of the adhesive (Mat. No. P08-059).
- (6) Apply a layer of the adhesive (Mat. No. P08-059) to the applicable surfaces of the bearing (2) and the hole. Make sure there is sufficient adhesive to give a full bond when the parts are assembled.
- (7) Put the bearing (2) in position in the hole. Make sure the bearing (2) is correctly aligned (Ref. Detail B, NEW ORIENTATION) and push the bearing (2) firmly into the hole to make sure it is tightly against the flange face.
- (8) Remove the unwanted adhesive (Mat. No. P08-059).

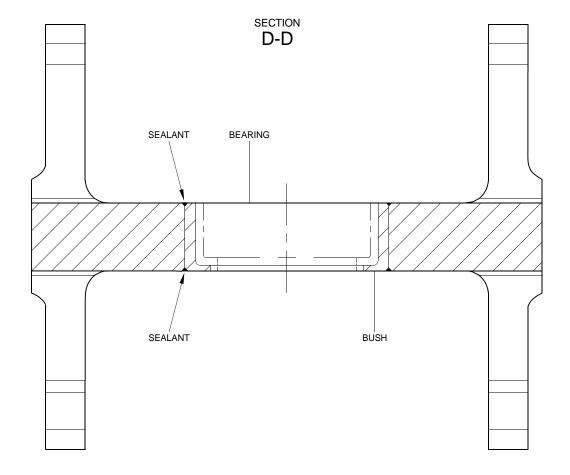
**CAUTION:** DO NOT USE TOO MUCH HEAT. DO NOT EXCEED 120°C (224°F) FOR MORE THAN 15 MINUTES.

(9) Let the adhesive (Mat. No. P08-059) cure for 5 to 7 days at room temperature or 2 hours at  $65 \pm 5^{\circ}$ C (136  $\pm$  8°F).

#### E. Close up

- (1) Remove all tools and materials. Make sure that the work areas are clean.
- (2) Install the wing struts.





6694

Wing Strut Fitting - Inspection Figure 602, Sheet 2 of 2



# APPENDIX D WING STRUT FITTING - REMOVAL/INSTALLATION

#### 1. General

This procedure is only applicable if you found cracks during the inspection, or cannot remove the bearing (Ref. APPENDIX C). The procedure is given for replacement of the left fitting but is also applicable for the right fitting.

**NOTE:** Not all aircraft have the applicable openings for internal access to the fittings. This procedure gives the data and instructions to make new access panels if necessary.

### 2. Job Set Up Information

#### A. Operator Supplied Parts

(1) The parts listed below are necessary for the replacement of one wing strut fitting (left or right). Operators must order the parts from PILATUS as necessary:

New Part No.	Description	Old Part No.	Qty	Fig.	Item
111.35.06.057 111.35.06.191 111.35.06.192	Bolt (8.2 mm Dia 1st Oversize) Bolt (8.4 mm Dia 2nd Oversize) Bolt (8.6 mm Dia 3rd Oversize)	932.53.47.286 932.53.46.436 111.35.06.057 111.35.06.191	5	403	1
111.35.06.193	Left Wing Strut-Fitting	6102.0041.00 111.35.06.055 111.35.06.184 111.35.06.185 111.35.06.193 111.35.06.195	1	403	4
111.35.06.194	Right Wing Strut-Fitting	6102.0041.00 111.35.06.056 111.35.06.184 111.35.06.186 111.35.06.194 111.35.06.195	1	N/A	N/A
938.07.31.124	Nut	938.07.34.104 938.07.65.105 938.07.31.108 938.07.31.124	5	403	3
938.78.11.206	Washer	938.71.51.108 938.78.11.106 938.78.11.206	5	403	2



(2) The parts listed below are necessary if the aircraft has no access panels:

Part No.	Description	Qty each Wing
916.16.35.110	Aluminium Alloy Sheet	Size 224 x 84 mm (8.8 x 3.3 in.)
939.19.86.102	Rivet	34
916.16.35.110	Aluminium Alloy Sheet	Size 155 x 155 mm (6.1 x 6.1 in.)
or 6102.0125.02	Panel	1

### B. Tools and Equipment

Part No.	Description	Qty	Remarks
	Drill - 8,0 mm	A/R	
	Reamer - 8,1 mm	A/R	For 1st Oversize
	Reamer - 8,2 mm	A/R	
	Drill - 8,2 mm	A/R	
	Reamer - 8,3 mm	A/R	For 2nd Oversize
	Reamer - 8,4 mm	A/R	
	Drill - 8,4 mm	A/R	
	Reamer - 8,5 mm	A/R	For 3rd Oversize
	Reamer - 8,6 mm	A/R	

### C. Consumable Materials (APPENDIX E):

Mat. No.	Description	Qty	Remarks
P01-010	Solvent	A/R	Or Approved Alternative
P02-031	Absorbent Paper	A/R	
P04-012	Corrosion Preventative	A/R	
P07-001	Alodine 1200S	A/R	
P07-007	Epoxy Primer	A/R	Required for a new access panel
P10-013	Corrosion Preventative	A/R	



#### 3. Procedures

WARNING: OBEY THE MANUFACTURERS HEALTH AND SAFETY INSTRUCTIONS WHEN YOU

USE THE CONSUMABLE MATERIALS.

CAUTION: OBEY THE MANUFACTURERS INSTRUCTIONS WHEN YOU APPLY THE

CONSUMABLE MATERIALS.

#### A. Preparation

(1) Remove the left and right wing struts.

### B. Fittings - Replacement (Ref. Fig. 401 and 402)

- (1) Remove the access panels LB10 and/or RB9. Keep two of the screws (P/N 935.13.16.018) from the access panel. Discard the unwanted panel and screws.
- (2) Make an access opening in the skin, forward of the fitting (Ref. Fig. 401). This step is only applicable if there is no internal access to the forward flange of the fitting assembly.
  - **NOTE:** The new opening is at the same location (and is the same width) as the circular (inspection) opening LB10 (left) or RB9 (right). The forward and aft anchor nuts for the access covers LB10 or RB9 will also be used for the cover of the new opening.
  - (a) Make marks to show the contours of the opening on the skin. Do this at the location shown and to the given dimensions (192 x 52 mm (7.6 x 2.0 in.) with 26 mm (1.0 in.) radii at each end).
  - (b) Cut the opening in the skin to the contour marks with the applicable cutting tools. Make sure that there are no sharp edges. Do not remove the forward and aft anchor nuts for the access covers LB10 or RB9.
- (3) If necessary make a new access opening in the skin aft of the fitting.
  - (a) Make marks to show an intersection of center lines and the contours of a circular opening 120 mm (4.7 in.) in diameter. Do this on the skin at the location shown.
  - (b) Cut the opening in the skin to the contour marks with the applicable cutting tools. Make sure that there are no sharp edges.
- (4) Remove the defective fitting(s) (Ref. Fig. 402).
  - (a) Remove the nuts (3), the washers (2) and the bolts (1). Keep two of the bolts (1), the washers (2) and the nuts (3).
  - (b) Disassemble and remove the fitting (4) from the wing structure.
- (5) Make the bolt holes for the new fitting (Ref. Fig. 402).

**NOTE:** The rear flange of the new fitting contains five 8.0 mm diameter holes (A thru E). These holes are pilot, positioning and alignment holes for the new fitting which align with the holes of the wing spar.



The forward flange of the new fitting contains only one hole (F). This hole serves as an alignment hole. The remaining four holes (G, H J and K) in the forward flange are drilled during installation of the new fitting.

All holes in the new fitting are reamed to the final diameter together with the wing spar holes for the tight fit bolt installation. All bolts must have the same diameter. If the fitting was replaced before, the diameter of the existing holes in the new fitting must be increased to match the wing spar hole diameter first.

- (a) Measure the diameter of one removed bolt (1).
- (b) Determine the drill and reamer sizes necessary (Ref. Table 1) for the diameter measured in Step 3.B.(5)(a).

Old Bolt Dia	Diameter of Drill Required for New Fitting	Diameter of Reamer Required	P/N of New Bolt Required
8.0 mm	8.0 mm	8.1 and 8.2 mm	111.35.06.057 (1st Oversize)
8.2 mm	8.2 mm	8.3 and 8.4 mm	111.35.06.191 (2nd Oversize)
8.4 mm	8.4 mm	8.5 and 8.6 mm	111.35.06.192 (3rd and Maximum Oversize)

Table 1: Drill and Reamer sizes

- (c) If the measured diameter from Step 3.B.(5)(a) is larger than 8.0 mm, use the drill determined in Step 3.B.(5)(b) to increase the fitting holes (A) thru (E) and (F).
- (d) Put the new fitting (4) in position and temporarily install one of the used bolts (1), one of the used washers (2) and one of the used nuts (3) thru the holes (A) and (F). Tighten the nut (3).
- (e) Install the other used bolt (1) thru the rear flange hole (E) into wing spar hole to align the fitting (4).
- (f) Use the fitting rear flange hole (D) as pilot hole and drill hole (J) in forward fitting flange. Use the drill determined in Step 3.B.(5)(b). Do not damage the wing spar holes.
- (g) Remove the bolt (1), installed in Step 3.B.(5)(e), and install the bolt (1), the other used washer (2) and the other used nut (3) thru the holes (D) and (J). Tighten the nut (3).
- (h) Use the fitting rear flange holes (B), (C) and (E) as pilot holes and drill the holes (G), (H) and (K) in the fitting forward flange. Do not damage the wing spar holes.
- (i) Increase the diameter of the holes (B-G), (C-H) and (E-K) to the next oversize. Use the two reamers determined in Step 3.B.(5)(b).
- (j) Temporarily install the new oversized bolts (1), the new washers (2) and the new nuts (3) at the holes (B-G) and (E-K), and tighten nuts.



- (k) Remove the used bolts (1), the used washer (2) and the used nut (3) installed in Step 3.B.(5)(d) and (g).
- (I) Discard all five used bolts (1), washers (2) and nuts (3).
- (m) Increase the diameter of the holes (A-F) and (D-J) to the next oversize. Use the two reamers determined in Step 3.B.(5)(b).
- (n) Remove the new bolts (1), the new washers (2) and the new nuts (3) installed in Step 3.B.(5)(j) and remove the new fitting (4) from the wing spar.
- (o) If one or more of the holes, reamed in Step 3.B.(5)(i) and (m), in the new fitting (4) and the wing spar are not circular, determine the next oversize diameter reamers (Ref. Table 1) and:
  - Temporarily install the fitting (4). Use the bolts (1), the washers (2) and the nuts (3) used in Step 3.B.(5)(j) to attach the fitting (4) in holes (A-F) and (E-K).
  - 2 Increase the diameter of the holes (B-G), (C-H) and (D-J) to the next oversize. Use the two reamers determined in Step 3.B.(5)(o).
  - Temporarily install the next oversize bolts (1), the washers (2) and the nuts (3) at the holes (B-G) and (D-J), and tighten nuts.
  - 4 Remove the bolts (1), the washers (2) and the nuts (3) installed in Step 3.B.(5)(0)1.
  - Increase the diameter of the holes (A-F) and (E-K) to the next oversize. Use the two reamers determined in Step 3.B.(5)(o).
  - Remove the bolts (1), the washer (2) and the nuts (3) installed in Step 3.B.(5)(0)3 and remove the new fitting (4) from the wing spar.
- (p) If one or more of the holes, reamed in Step 3.B.(5)(o), in the new fitting (4) and the wing spar are not circular, determine the next oversize diameter reamers (Ref. Table 1) and repeat Step 3.B.(5)(o). If you cannot get the holes circular and the holes are at the maximum of 8.6 mm, contact Pilatus.
- (q) Deburr the holes (A thru H, J and K) in the new fitting and wing spar.
- (r) Apply layers of Alodine 1200S (Material No.P07-001). Do this on the bare metal surfaces of the holes in the wing structure and the fitting (4).
- (6) Install the replacement fitting.
  - (a) Apply layers of the corrosion preventative (Material No. P04-012) on the faying surfaces of new bolts (1), the washers (2) and the nuts (3).
  - (b) Put the fitting (4) in position in the wing and align the holes.
  - (c) Install the new bolts (1), the washers (2) and the nuts (3). Make sure that the heads of the bolts point forward.
  - (d) Torque the nuts (3) to between 18 and 24 Nm (159.3 and 212.4 lbf in.).



- (e) Remove the unwanted corrosion preventative (Material No. P04-012) with the solvent (Material No. P01-010).
- (f) Apply layers of the corrosion preventative (Material No. P10-013) on the bolts (1), the washers (2), the nuts (3) and the fitting (4).
- (7) Make the cover for the forward access opening (Ref. Fig. 401).
  - (a) Make marks to show the center line and contours of the cover on the piece of aluminium alloy sheet (P/N 916.16.35.110). Do this to the given dimensions (224 x 84 mm (8.8 x 3.3 in.) with 42 mm (1.7 in.) radii at each end).
  - (b) Cut the aluminium alloy sheet (P/N 916.16.35.110) at the contour marks with the applicable cutting tools to make the cover (1). Make sure that there are no sharp edges.
  - (c) Make marks to show the locations of the rivet and screw holes around the edges of the cover (1). Do this at the pitch dimensions shown.
  - (d) Make the rivet holes at the applicable marks on the cover (1) with a 3,3 mm (0.13 in.) diameter drill. Deburr the holes.
  - (e) Make the screw holes at the applicable marks on the cover (1) with a 4,0 mm (0.16 in.) diameter drill. Deburr the holes.
  - (f) Apply layers of the Alodine 1200S (Material No. P07-001) and the primer (Material No. P07-007). Do this on the bare metal surfaces of the cover (1) and the edges of the opening in the skin.
- (8) Make the rivet holes for the cover for the forward access opening in the skin.
  - (a) Put the cover (1) in position on the skin, align the center lines and hold.
  - (b) Make the rivet and screw holes in the skin with a 3,3 mm (0.13 in.) and 4,0 mm (0.16 in.) diameter drill.
  - (c) Remove the cover and deburr the rivet holes.
  - (d) Apply layers of the Alodine 1200S (Material No. P07-001) and the primer (Material No. P07-007). Do this on the bare metal surfaces of the cover (1) and the edges of the opening in the skin.
- (9) Install the cover for the forward access opening.
  - (a) Apply layers of the sealant (Material No. P08-057) on the faying surfaces of the cover (1) and the skin.
  - (b) Put the cover (1) in position on the skin and hold with gripper pins.
  - (c) Install the rivets (P/N 939.19.86.102) (Ref. ROM. Chap. 2). Apply a layer of the sealant (Material No. P08-057) on each rivet before you install it.
  - (d) Remove the unwanted sealant (Material No. P08-057) with the solvent (Material No. P01-010).
  - (e) Install the two screws (P/N 935.13.16.018) that you kept at Para. 3.B.(1).



- (f) Apply layers of the primer (Material No. P07-007) and the applicable paint on the rivet and screw heads and the exterior surface of the cover (1).
- (10) Make the new cover for the aft access opening or use the procured panel (P/N 6102.0125.02).

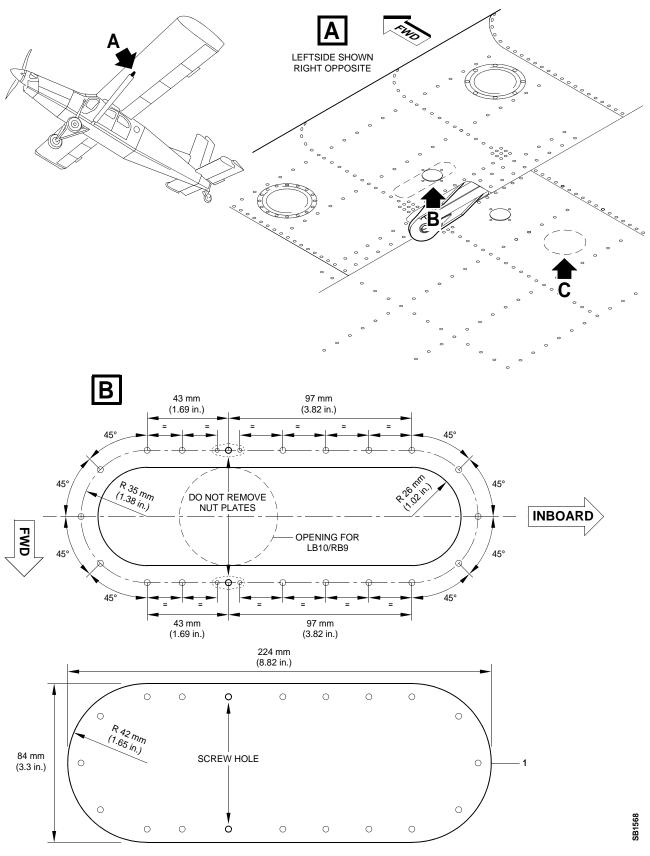
**NOTE:** The steps that follow are only necessary if you do not use the procured panel (P/N 6102.0125.02).

- (a) Make marks to show an intersection of center lines and the contours of a 155 mm (6.1 in.) diameter circular cover. Do this on a piece of the aluminium alloy sheet (P/N 916.16.35.110).
- (b) Cut the aluminium alloy sheet (P/N 916.16.35.110) at the contour marks with the applicable cutting tools to make the cover (2). Make sure that there are no sharp edges.
- (c) Make marks to show the locations of the 16 rivet holes around the edges of the cover (2). Make sure that the holes are of equal pitch, at a diameter of 135 mm (5.32 in.).
- (d) Make pilot holes in the cover (2). Do this at the marks for the rivet holes with a 2,4 mm (0.1 in.) diameter drill. deburr the holes.
- (11) Make the rivet holes for the cover for the aft access opening.
  - (a) Put the cover (2) in position on the skin, align the center lines and hold.
  - (b) Make the rivet holes in the cover (2) and the skin. Do this through the pilot holes with a 3,3 mm (0.13 in.) drill.
  - (c) Remove the cover (2) and deburr the rivet holes.
  - (d) Apply layers of the Alodine 1200S (Material No. P07-001) and the primer (Material No. P07-007). Do this on the bare metal surfaces of the cover (2) and the edges of the opening in the skin.
- (12) Install the cover for the aft access opening cover.
  - (a) Apply layers of the sealant (Material No. P08-057) on the faying surfaces of the cover (2) and the skin.
  - (b) Put the cover (2) in position the skin and hold with gripper pins.
  - (c) Install the rivets (P/N 939.19.86.102) (Ref. ROM. Chap. 2). Apply a layer of the sealant (Material No. P08-057) on each rivet before you install it.
  - (d) Remove the unwanted sealant (Material No. P08-057) with the solvent (Material No. P01-010).
  - (e) Apply layers of the primer (Material No. P07-007) and the applicable paint on the rivet heads and the exterior surface of the cover (2).
- (13) If necessary do Steps (1) thru (12) again to make the access openings and replace the fitting (4) in the remaining wing.

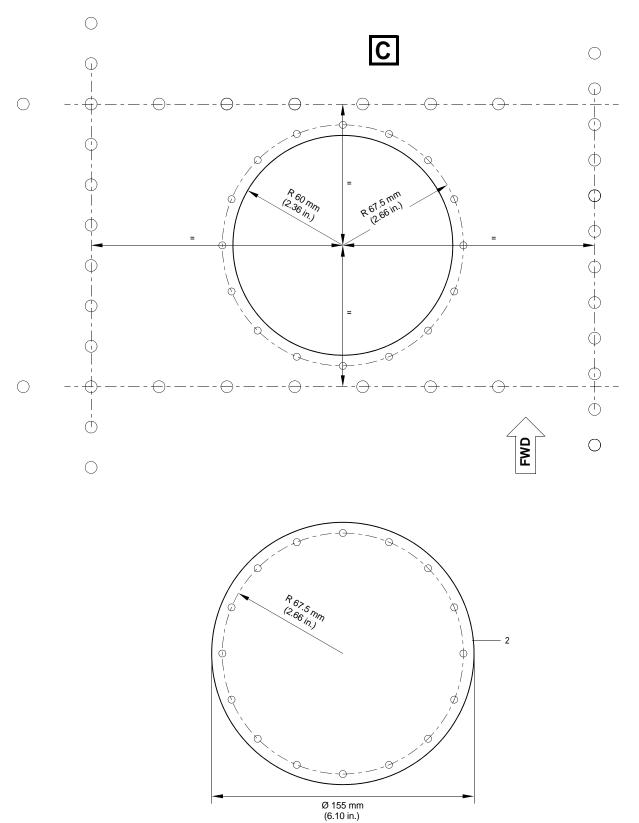


### C. Close up

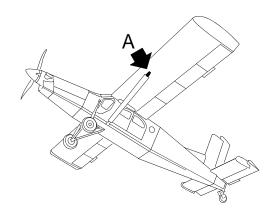
- (1) Remove all tools and materials. Make sure that the work areas are clean.
- (2) Install the access panels LB10 and RB9 as applicable.
- (3) Install the wing struts.

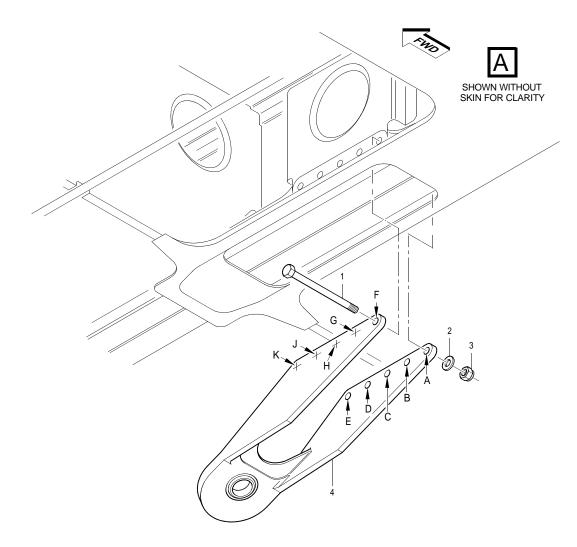


Access Openings and Covers - Installation (Left Shown, Right Similar)
Figure 401(Sheet 1 of 2)



Access Openings and Covers - Installation (Left Shown, Right Similar) Figure 401(Sheet 2 of 2)





SB1569

Fitting - Replacement (Left Shown, Right Similar) Figure 403



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# APPENDIX E CONSUMABLE MATERIALS LIST

#### 1. General

This section gives the data for the consumable materials which are recommended for the maintenance of all Pilatus aircraft types.

The materials are put into groups to show the type of material. The groups used in this section are:

P01 - Processing and Cleaning P07 - Paints, Varnishes and Thinners

P02 - Processing Sundries P08 - Bonding, Adhesives, Fillers and Sealers

P03 - Welding and Metal P09 - General Stores

P04 - Jointing Compounds and Greases P10 - Oils and Fluids

P05 - Polishing P11 - Fuels

P06 - Inspecting P12 - Packing

Each material is also given an item number which comes after the group number.

The groups of materials are shown in tables, each table has these columns:

- · Material No.
- Material Name
- Notes
- Pilatus Part No.
- · Alternative Product / Specification.

The Material No., Material Name, Notes and Pilatus Part No. columns give the products recommended by Pilatus.

The Alternative Product / Specification column is to show alternative products or the specifications for alternative products, when known.

The section gives the consumable materials necessary for each procedure for this aircraft.

You can use alternative materials, but if no alternative products are given in the tables then you must only use the recommended product.

Material Safety Data Sheets (MSDS) contain data about the trade name, safety hazards, reactions, spill and leak procedures, special protection data, special precautions, transport and labels are available from the manufacturer of the products. Before you use any consumable materials, read all MSDS.

Changes to items in the tables are shown by revision bars. The Page Date will identify the latest issue.



#### 2. **Consumable Materials List**

Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
		P01 - Processing and Cleaning	g	,
P01-001	Alkaline cleaner, Turco 5884		910.21.31.008	MIL-PRF-85704 Almon AL-333 Ardrox 624 B & B 3100 Carbitol CLIX Magnus 1214 Rivenaes R-MCS Rivenaes R-MC G21 Turco 5884
P01-002	Triethanolamine			
P01-003	Emulsifier, Witco HC-59B or P10-59B			
P01-004		Superseded by P01-015		
P01-005	Soap solution, Aero-Klene No. 299		910.21.21.120	
P01-006	Cleaner	Refer to P05-003		
P01-007	Non leaded gasoline, Petroleum		908.62.11.101	MIL-G-5572F, ASTM-D910
P01-008	White spirit, EXXSOL D40		908.63.81.101	
P01-009	Solvent, Methanol (Methyl- alcohol)		908.44.52.003	AMS 3004, O-M-232K, PWC011-010
P01-010	Solvent, Methyl-Ethyl-Ketone (MEK)		910.21.61.015	ASTM D740, MIL-M-13999, O-C-265
P01-011	Solvent alcohol, Isopropyl (Isoproponol)		908.44.52.005	TT-I-735 GRADE A, PWC011-014
P01-012	Liquid detergent, Teepol			MIL-D-16791
P01-013	Solvent, Toluene		910.33.90.270	TT-T-548
P01-014	Cleaner, detergent, Turboclean 2			MIL-PRF-85704
P01-015	Ethanol (Ethyl alcohol)		908.44.52.006	AMS3002, MIL-A-6091, O-E-760 type III,PWC011-009
P01-016	Acetone		910.21.21.001	O-A-51, ASTM D329-95
P01-017	Electrical contact protector, Progold G5S-6		908.24.32.024	
P01-018		Superseded by P01-020		
P01-019	Cleaning fluid, Kontakt 60		908.18.12.094	
P01-020	Electrical contact enhancer, Stabilant 22		908.24.32.026	
P01-021	Corrosion remover	Phos-Klene 1 Super	908.40.32.155	
P01-022	Corrosion remover	Turco 4409	908.40.32.154	
P01-023	Paint remover	Turco 6776 LO WOD	910.10.00.003	
P01-024	Heavy duty cleaner Ardrox 1900C	Do not use on canopies	-	
P01-025	Heavy duty cleaner Zip-Chem Calla 800	Do not use on canopies	-	MIL-PRF-87937D Type II
P01-026	Disinfectant Virkon S, Antec International		-	



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
		P02 - Processing Sundries		
P02-001	Lockwire (standard), diameter 0,8 mm (0.032 in.)		919.01.11.104	NASM20995 (was MS20995C-32)
P02-002	Aluminum wool		904.48.83.103	
P02-003	Cleaning cloth	Superseded by P02-031	904.49.73.004	
P02-004	Chamois leather		904.49.74.204	
P02-005	Sponge		904.49.75.303	
P02-006	Lockwire (heat resistant), diameter 0,6 mm (0.025 in.)		919.01.11.203	MS 9226-03
P02-007	Lockwire (standard), diameter 0,6 mm (0.025 in.)		919.01.11.103	NASM20995 (was MS20995C-25)
P02-008	Lockwire (heat resistant), diameter 1,0 mm (0.04 in.)		919.01.11.107	MS 9226-05
P02-009	Abrasive cloth, Grade 120	1913 Siawat FC	904.47.22.210	
P02-010	Abrasive cloth, Grade 180	1913 Siawat FC	904.47.22.213	
P02-011	Abrasive cloth, Grade 240	1913 Siawat FC	904.47.22.216	
P02-012	Abrasive cloth, Grade 280	1913 Siawat FC	904.47.22.218	
P02-013	Abrasive cloth, Grade 320	1913 Siawat FC	904.47.22.220	
P02-014	Abrasive cloth, Grade 400	1913 Siawat FC	904.47.22.222	
P02-015	Lockwire (heat resistant), diameter 0,8 mm (0.032 in.)		919.01.11.105	MS 9226-04
P02-016	Scotch-Brite, Very fine grade		904.48.85.107	
P02-017	Lockwire (standard), diameter 1,0 mm (0.04 in.)		919.01.11.106	NASM20995 (was MS20995C-41)
P02-018	Abrasive cloth, Grade 80		904.47.23.176	
P02-019	Cloth, cotton		904.49.71.203	
P02-020	Scotch-Brite, Regular Grade			
P02-021	Lockwire (brass), diameter 0,5 mm (0.02 in.)		919.01.11.117	
P02-022	Lockwire (special), diameter 0,4 mm (0.016 in.)		919.01.11.101	MS 9226-01
P02-023		Superseded by P02-024		
P02-024	Abrasive cloth, Grade 600	1913 Siawat FC	904.47.22.223	
P02-025	Cotton wadding	Pure cotton wool	904.49.73.006	
P02-026	Abrasive cloth, Grade 1500		907.71.22.703	
P02-027	Abrasive cloth, Grade 1800		907.71.22.704	
P02-028	Abrasive cloth, Grade 2400		907.71.22.705	
P02-029	Abrasive cloth, Grade 3200		907.71.22.706	
P02-030	Abrasive cloth, Grade 4000		907.71.22.707	
P02-031	Absorbent paper		904.49.73.004	
P02-032	Abrasive paper	3M Trizact P3000 D32 MM	907.71.22.791	
P02-033	Lamb wool pad	Polishing pad	904.49.76.362	
P02-034	Polish pad	Mirror polish - black	904.49.76.341	
P02-035	Polish pad small	Finesse it Buff pad	904.49.76.321	
P02-036	Polish hood	Off Polish Hood of Micro Fiber white	904.49.76.361	
P02-037	Micro Fiber cloth	Micro Power Cloth - Terrycloth	904.49.76.381	



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
P02-038	Cleaning Modelling Material	Magic Smooth and Clean, yellow	904.49.76.121	
P02-039	All Purpose Cleaner	All Purpose Cleaner PLUS Concentrate D-12	904.49.76.141	
P02-040	Lockwire (heat resistant), diameter 0,5 mm (0.02 in.)	Inconel	919.01.11.102	MS9226-02



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
		P03 - Welding and Metal		
P03-001	Welding Rod, Filler rod 347	Diameter 0,8 mm (0.032 in.)	907.83.32.501	AMS 5680
		Diameter 1,0 mm (0.039 in.)	907.83.32.502	
		Diameter 1,14 mm (0.045 in.)	907.83.32.503	
		Diameter 1,6 mm (0.064 in.)	907.83.32.505	
P03-002	Welding Rod, Filler rod	Diameter 1,5 mm (0.06 in.)	907.83.31.911	
	(1.7734.2)	Diameter 2,0 mm (0.08 in.)	907.83.31.912	



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
		P04 - Jointing Compounds an	d Greases	,
P04-001	Grease, Aeroshell Grease 5	Do not use Superseded by P04-031	908.21.52.003	MIL-PRF-81322F, G-395, DOD-G-24508
P04-002	Grease, Aeroshell Grease 7		908.20.02.063	MIL-PRF-23827 Type II
P04-003	Grease, Aeroshell Grease 22		908.20.02.064	MIL-PRF-81322F G-395, DOD-G-24508
P04-004	Grease, Plastilube 3		908.25.71.501	PWC04-004
P04-005		Superseded by P04-030		
P04-006	Grease, Aeroshell Grease 17	Superseded by P04-037	908.25.71.803	MIL-G-21164, G-353
P04-007		Superseded by P04-030		
P04-008	Wellseal	Superseded by P04-017	907.13.11.923	
P04-009	Anti-seize compound		908.25.71.802	MIL-PRF-83483
P04-010	Anti-seize compound, Aeroshell Compound 08		908.20.02.102	SAE-AMS2518, Def Stan 80-80 grade ZX-1
P04-011	Spray lubricant, Molyslip ADF301		908.10.09.002	
P04-012	Corrosion preventative, Mastinox 6856H		910.31.20.040	MIL-PRF-8116 Mastinox 6856K
P04-013		Superseded by P04-003		
P04-014	Heat conducting paste, V5004		907.13.11.998	
P04-015	Anti-seize compound, Molykote 1000		908.24.02.004	
P04-016	Grease, Aeroshell Grease 6		908.25.71.111	MIL-G-24139, G-382, G-450
P04-017	Jointing compound, Hylomar SQ 32M	Purchased as Hylomar M	907.13.11.903	
P04-018	Silicon grease, MS4		908.20.02.093	SAE AS8660, S-736 (was MIL-S-8660)
P04-019		Not used now		
P04-020		Superseded by P04-004		
P04-021		Superseded by P04-029		
P04-022	Grease, Molykote G Rapid Plus			Nato-No.9150-0-200-0097
P04-023	Propeller grease, Gulfflex 2		908.25.71.101	
P04-024	Grease, MolySlip liquid grease		908.10.09.013	
P04-025	Compound, anti-seize, Never Seez			PWC06-009
P04-026	Compound, anti-seize, Silver Goop			PWC06-023
P04-027	Grease, Mobil Special		908.21.42.110	
P04-028	Grease, Aeroshell Grease 33		908.20.02.065	MIL-PRF-23827 Type I Def Stan 91-53 Nato G-354 Mobil Grease 27
P04-029	Paste, installation, Duotempi PMY45	60 g tube 600 g tin	908.24.02.001 908.24.02.002	
P04-030	Grease, Vaselinum, 26-7500-1		908.20.02.101	VV-236A, Def Stan 91-38, Grade PX-7, MIL-C-11796
P04-031	Grease, MAG SHC 100		908.20.02.066	
P04-032	Grease, Isoflex Topas NCA 51		908.21.42.115	



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
P04-033	Oxygen paste, Oxygenoex FF250	Superseded by P04-038	908.25.71.700 908.25.71.701	MIL-T-5542
P04-034	Lubricant ULTRA-PLUS EXTRA		908.40.01.002	
P04-035	Anti-seize compound, Molykote P-37		908.24.02.003	
P04-036	Heat conducting paste, Dow Corning 340	Supersedes P04-014	907.13.11.997	
P04-037	Grease, Aeroshell Grease 33MS	Supersedes P04-006	908.25.71.804	MIL-G-21164, G-353
P04-038	Grease, Krytox 240AC	Supersedes P04-033	908.25.71.702	MIL-PRF-27617



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
		P05 - Polishing		
P05-001	Not used now	See Note		
P05-002	Plastic / Acrylic Cleaner (paste) MGH No. 17		908.64.22.203	
P05-003	Plastic / Acrylic Cleaner (liquid), Aero-Klene		910.21.21.120	MIL-D-16791 Type I
	Plastic / Acrylic Cleaner (liquid), MGH No. 18		908.64.22.202	Novus No. 1
P05-004	Plastic / Acrylic Polish (fine), Altuglas No. 2		907.71.22.702	
P05-005	Plastic / Acrylic Polish (heavy), Altuglas No. 1		907.71.22.701	Novus No. 3
P05-006	Plastic / Acrylic Polish (Medium), MGH No. 10		908.64.22.201	Novus No. 2
P05-007	Grinding polish	Diamant Grinding polish M-85	904.49.76.261	
P05-008	Polish Cleaner	Cleaning and Mirror Polish M-83	904.49.76.241	
P05-009	Sealing	Polymer Sealing M-20	904.49.76.221	
P05-010	Fine Cleaner	Last Touch Detailing D-155	904.49.76.165	
NOTE:	The procedure that used the P0	5-001 is deleted.	1	<u>'</u>



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification			
	P06 - Inspecting						
P06-001	Penetrant	Aerosol	908.68.12.105	AMS-2644, ASTM-E1417, MIL-STD-2132, ASTM-E-165			
P06-002	Remover	Aerosol	908.68.12.106	AMS-2644, ASTM-E1417, MIL-STD-2132, ASTM-E-165			
P06-003	Developer	Aerosol	908.68.12.107	AMS-2644, ASTM-E1417, MIL-STD-2132, ASTM-E-165			
P06-004	Leak detector spray		907.12.11.004	MIL-PRF-25567			



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification		
P07 - Paints, Varnishes and Thinners						
P07-001	Alodine 1200S	CCC Solution	908.40.32.251			
P07-002	Zinc chromate primer	Superseded by P07-003				
P07-003	Epoxy primer	Superseded by P07-007				
P07-004	Primer	8010-0-100-012P				
P07-005	Thinner	8010-0-100-0143				
P07-006	Paint, cockpit, grey	8010-0-100-0144				
P07-007	Epoxy primer, yellow, Akzo-Nobel	Primer	910.02.05.031			
		Hardener	910.02.05.032			
		Thinners	910.09.00.101			
P07-008	Paint, marking, red, Enictol 234183-125	Enictol	910.33.82.150			
P07-009	Paint, anti-erosion, Celoflex 95	Paint	910.04.04.504			
		Hardener	910.04.04.505			
		Thinners	910.09.00.057			
P07-010	Paint, black		910.07.05.102			
	Paint, white		910.07.05.103			
	Paint, red		910.07.05.104			
		Paint, hardener	910.07.05.101			
		Paint, thinners	910.09.00.508			
		Paint, retarder	910.09.00.904			
P07-011	Deleted	Refer to P07-010	910.07.05.102			
P07-012	Deleted	Refer to P07-010	910.07.05.103			
P07-013	Deleted	Refer to P07-010	910.07.05.104			
P07-014	Deleted	Refer to P07-010	910.09.00.508			
P07-015	Deleted	Refer to P07-010	910.09.00.904			
P07-016	Primer, barrier white 37045	Primer	910.02.05.030			
		Hardener	910.04.04.316			
P07-017	Paint, white Aviox finish 90075	Paint	910.04.04.515			
		Hardener	910.04.04.502			
P07-018	Paint, snow-white anti-chafe, Celogliss 5456 / 1238	Paint	910.07.09.012			
	Paint, grey anti-chafe, Celogliss 5456 / 1238	Paint	910.07.09.015			
		Hardener for Celogliss 5456	910.07.09.014			
		Thinners for Celogliss 5456	910.07.09.013			
P07-019	Paint, top coat, Nuvovern ACR Enamel, Aluminum	Paint	910.04.04.022			
		PUR Hardener	910.04.04.050			
		Thinners	910.09.00.005			



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
P07-020	Paint, white	Aerodur finish, C21/100 UVR	910.04.04.320	
	Paint, black	Aerodur finish, C21/100 UVR	910.04.04.416	
	Paint, red	Aerodur finish, C21/100 UVR	910.04.04.317	
		Paint, hardener	910.04.04.316	
		Paint, thinners or	910.09.00.101	
		Paint, thinners	910.09.00.102	
P07-021	Alodine 1132	Touch-N-Prep Pen	908.40.32.252	
P07-022	Snow white, ECL-G-1678	Eclipse HS PUR topcoat paint	910.04.04.517	Snow white 702112
	Light grey, ECL-G-11018	Eclipse HS PUR topcoat paint	910.04.04.521	RAL 7035
	Gray, ECL-G-11017	Eclipse HS PUR topcoat paint	910.04.04.522	RAL 7040
	Black, ECL-G-92	Eclipse HS PUR topcoat paint	910.04.04.523	RAL 9005
	Blue, ECL-G-2843	Eclipse HS PUR topcoat paint	910.04.04.524	RAL 5017
	White, ECL-G-1681	Eclipse HS PUR topcoat paint	910.04.04.525	RAL 9003
	Traffic red, ECL-G-3637	Eclipse HS PUR topcoat paint	910.04.04.531	RAL 3020
	White, ECL-G-1670	Eclipse HS PUR topcoat paint	910.04.04.532	RAL 9010
	White, ECL-G-10 BAC 7067	Eclipse HS PUR topcoat paint	910.04.04.534	FSB 17925
	Red 715045, ECL-G-3701	Eclipse HS PUR topcoat paint	910.04.04.535	FSB 11350
	UK, ECL-G-3818	Eclipse HS PUR topcoat paint	910.04.04.538	CM410A5, orange
	ECL-G-6663	Eclipse HS PUR topcoat paint	910.04.04.540	RAL 2009, orange 71740
		Hardener	910.04.04.536	
		Activator	910.04.04.529	
P07-023	ECL-G-7	Eclipse HS PUR clearcoat paint	910.04.04.537	
		Hardener	910.04.04.536	
		Activator	910.04.04.529	
P07-024	Varnish, RD 1177 Blue	8010-0-100-0143	910.42.72.701.	
P07-025	Spray Filler (AKZO Autocryl Multi-use HS)			
		Base Hardener (Autocryl P25) Thinner (Sikkens Plus Reducer Fast)	910.08.06.010 910.08.06.013 917.00.40.019	
P07-026	Wash Primer (ANAC Metaflex FCR)	(		
		Base Hardener (Metaflex FCR) Thinner (C25/90S)	910.02.09.005 910.02.09.006 910.09.00.101	
P07-027	Conductive Coating (Pyroflex 7 D 713.	Base Hardener (0651)	910.04.04.334 910.04.04.335	
		Thinner (C25/90S)	910.09.00.101	



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification		
P08 - Bonding, Adhesives, Fillers and Sealers						
P08-001	Caulking Putty	3M body caulking	907.13.13.092			
P08-002	Silicon Sealant, Loctite 5368		910.42.12.126			
P08-003	Sealant	Superseded by P08-018				
P08-004	Sealant	Superseded by P08-020				
P08-005	Sealant, Pro-seal 890 A2		907.13.13.022			
P08-006	Coating, Laminar X-500	Superseded by P08-024				
P08-007	Coating, PR 1560	Superseded by P08-024				
P08-008	Adhesive BALCO-ME		910.42.22.372			
P08-009	Adhesive 3M Fastbond 10		910.42.22.037	MIL-A-21366, A-A-1936		
P08-010	Thinners 3M Fastbond 10		910.42.22.038			
P08-011	Contact adhesive	Superseded by P08-009				
P08-012	Thinner	Superseded by P08-010				
P08-013	Sealant	Superseded by P08-018				
P08-014	Sealant	Superseded by P08-056				
P08-015	Adhesive, Acrylic, Tensol No.6		910.42.22.393			
P08-016	Edge sealer	Superseded by P08-041				
P08-017	Adhesive, Loctite Grade 241 Adhesive, Loctite Grade 243	Adhesive, Loctite Grade 641 moved to P08-065	910.42.12.123 910.42.12.128			
P08-018	Sealant, PR 1422B-2	1,0 liter	907.10.11.232	DMS 2082		
P08-019	Sealant, RTV 123		907.13.11.931			
P08-020	Sealant, PR 1422A-2	1,5 liters	907.10.11.222			
P08-021	Loctite, Grade 542		910.42.12.121			
P08-022	Sealant, Permatex, Form-a-Gasket No. 1		907.12.11.203	MIL-S-45180D		
P08-023	Adhesive	Superseded by P08-059				
P08-024	Coating, PR 1005-L		907.10.02.001	AMS-S-4383		
P08-025	Thinner, BALCO ME		910.42.22.375			
P08-026	Adhesive, Bostik M890		910.42.72.111			
P08-027	Coating, Age Master No. 1		908.41.01.001			
P08-028	Fuel Protective Coating, BFG A-851-B		907.13.13.041			
P08-029	Adhesive, Scotchgrip 1300L		910.42.22.051	MIL-A-21366, A-A-1936		
P08-030	Filler, Scotchseal EC-801					
P08-031	Conductive sealant, BFG A-56-B		910.07.19.012			
P08-032	Sealant	Superseded by P08-057				
P08-033	Sealant	Superseded by P08-058				
P08-034	Adhesive, Araldite rapid		910.42.62.002			
P08-035	Plastic sealant, Loctite AVX		957.30.00.049			
P08-036	Resin, epoxy, Dexter Hysol AE 9396	2 part	910.42.72.170			
P08-037	Glass microspheres, Cap-o-Sil		910.82.20.910			
P08-038	Adhesive, epoxy, Araldite	2 component, 50 g	910.42.62.000			
P08-039	Sealant, Loctite Grade 307	8010-0-000-0021				



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
P08-040	Sealant	Superseded by P08-056		
P08-041	Clear sealer, 3M 08551	Not available now Superseded by P08-056	907.13.13.093	
P08-042	Sealant, Sikaflex-221		907.13.13.201	
P08-043	Loctite, Grade 243, blue	50cm <sup>3</sup>	910.42.12.128	
P08-044	Resin, epoxy, Dexter Hysol AE 9395	2 part	910.42.72.169	
P08-045	Sealant, silicon, translucent, RTV		907.13.13.102	MIL-A-46106
P08-046	Sealant, electrically conductive, PR 1764 Class B		907.10.11.271	
P08-047		Superseded by P04-029		
P08-048	Resin, epoxy, Hysol 9394 A/B	2 part	907.10.11.272	MMM-A-132
P08-049	Honeycomb core, Nomex 3.2-80	Thickness 14 mm (0.55 in.)	917.00.25.210	
P08-050	Honeycomb core, Nomex 3.2-48	Thickness 12 mm (0.50 in.)	917.00.25.227	
P08-051	Foam core, PMI Rohazell 51WF	Thickness 35 mm (1.37 in.)	917.33.14.146	
P08-052	Adhesive, epoxy, 3M DP490		910.42.72.205	
P08-053	Filler, spray, Filler 2K UP		910.08.06.004	
P08-054	Resin, epoxy, Araldite 5052		917.00.40.001	
P08-055	Ceramic adhesive, Resbond 907GF		907.10.11.273	MMS3500-11
P08-056	Sealant, PR 1829, B1/2 Sealant, PR 1829, B2, Black	Pot life 30 minutes Pot life 120 minutes	907.10.11.262 907.10.11.263	
P08-057	Sealant, PS 892 C12		907.10.11.244	
P08-058	Sealant, PS 892 C24		907.10.11.243	
P08-059	Adhesive, epoxy, SW9323		910.42.72.204	
P08-060	Adhesive, epoxy, EC1614B/A	Superseded by P08-059	910.42.72.203	
P08-061	Adhesive, epoxy, DP-100FR	2 part	910.42.62.003	
P08-062	Insulkleber 1000		910.42.22.351	
P08-063	Adhesive, Acrylic, Tensol No.70		910.42.72.112	
P08-064	Adhesive, epoxy, Raychem S1005		910.42.72.206	
P08-065	Adhesive, Loctite Grade 641		910.42.12.120	



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification		
P09 - General Stores						
P09-001	Tape, PTFE 01.1040.1212		917.47.71.103			
P09-002	French chalk, Talcum powder		908.44.12.203			
P09-003	Fabric strip	50 mm (2.0 in.) wide	918.71.62.032			
P09-004	Koroseal binding					
P09-005	Cable ties	119 x 3,6 mm (4.69 x 0.14 in.)	971.32.51.105	MS3367-5-9, PA66, SAE-AS3367I		
P09-006	Thread, red indicating		918.71.03.121			
P09-007	Glass fiber tape, 3M-386	25 mm (1.0 in.) wide	917.40.80.006	FAR 25.853(a)		
P09-008	Cable ties	69 x 2,5 mm (2.72 x 0.10 in.)	971.32.51.104	MS3367-4-9, PA66, SAE-AS33671		
P09-009		Superseded by P09-024				
P09-010	Rubber band	178 x 16 mm (7.00 x 0.63 in.)	944.85.82.112			
P09-011	Lead seal	8,0 x 5,0 mm (0.32 x 0.20 in.)	911.21.91.005			
P09-012	Tape Aluminum, Scotch 425	50 mm (2.0 in.) wide	917.40.91.005	FAR25.853(a), L-T-80, MIL-T-23397, TO 1-1-8		
P09-013	Tape, Armaflex Band	50 mm (2.0 in.) wide	957.30.00.046			
P09-014	Cable ties	160 x 4,8 mm (6.30 x 0.20 in.)	971.32.51.101	MS3397-1-9, PA66, SAE-AS3367I		
P09-015	Protective tape	BAS185-GS3-0.6 in	946.33.21.296			
P09-016		Superseded by P09-046				
P09-017	Cable tie, heat-resistant	180 x 6,0 mm (7.10 x 0.24 in.)	971.32.51.206			
P09-018	Soldering Sleeve, D142-50		971.19.26.104	NAS1745-14		
P09-019	Soldering Sleeve, D142-51		971.19.26.105	NAS1745-15		
P09-020	Glass fiber tape, 3M-361	19 mm (0.75 in.) wide	917.40.80.004	FAR25.853(a)		
P09-021		Superseded by P09-045				
P09-022	Thread		917.54.16.203			
P09-023	Lead seal	5,5 x 3,5 mm (0.22 x 0.14 in.)	911.21.91.002			
P09-024	Rope, polyester, white	3,0 mm (0.12 in.) diameter	917.54.26.520			
P09-025	Polyethylene foil, 3M-5423	19 (0.75) wide x 1000 mm (39.40 in.) long	917.40.69.019			
P09-026	Tape adhesive, 3M-8561	0,35 x 20 mm (0.014 x 0.80 in.)	917.40.68.001			
P09-027		Superseded by P09-044				
P09-028	Ident sleeve	20 mm (0.80 in.) wide	942.94.51.106			
P09-029	String		918.71.03.071	MIL-T-43435B, A-A-52080B, A-A-52081B, A-A-52082B, A-A-52083B, A-A-52084B		
P09-030	Heat shrink sleeve	3/16 inch diameter	917.99.88.605			
P09-031	Glass fiber fabric	163 g/m <sup>2</sup>	917.00.11.002	WL8.4548.60		
P09-032	Carbon fiber fabric	Not used now				
P09-033		Not used now				
P09-034	Copper wire mesh	Lightning strike protection 72 g/m <sup>2</sup>	919.02.30.111			
P09-035		Not used now				
P09-036	Tape adhesive	0,64 x 19 mm (0.025 x 0.75 in.)	917.40.67.312			
P09-037	Spiralwrap	, , , ,	917.99.90.002			



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
P09-038		Superseded by P09-043		
P09-039	Masking Paper	Masking paper, 300 mm (11.80 in.) width	905.20.10.003	Permafix 045
P09-040	Masking Paper	Masking paper, 600 mm (23.60 in.) width	905.20.10.006	Permafix 045
P09-041	Masking Paper	Masking paper, 900 mm (35.43 in.) width		
P09-042	Masking Paper	Masking paper, 1500 mm (59.10 in.) width	905.20.10.015	Permafix 045
P09-043	Tape adhesive, transparency	0,35 x 40 mm (0.014 x 1.575 in.)	917.40.20.703	
P09-044	Heat shrink sleeve	3/8 in. diameter	917.99.88.607	
P09-045	Heat shrink sleeve	1/4 in. diameter	917.99.88.606	
P09-046	Heat shrink sleeve	25,4 mm (1.0 in.) diameter	917.99.88.610	
P09-047	Tape, adhesive	25,4 mm (1.0 in) width	917.40.61.108	
P09-048	Tape, adhesive	76,2 mm (3.0 in) width	917.40.61.113	
P09-049	Tape, Adhesive	0.36*305 3M-8673	917.40.69.152	
P09-050	Tape, Lead	12 mm	917.40.91.011	
P09-051	Tape, Lead	12 mm	917.40.91.012	
P09-052	Tape Aluminum, Scotch 425	25 mm (1.0 in.) wide	917.40.91.003	



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification
		P10 - Oils and Fluids		
P10-001	CPC-temporary (Supersedes P10-001B & C)	Lear Chemical ACF-50 Lear Chemical ACF-50, aerosol	908.18.12.087 908.18.12.088	MIL-C-81309 Type III
P10-002		Superseded by P10-005		
P10-003	Hydraulic Fluid	Castrol Aero 585B Replaced by P10-017	908.14.12.015	MIL-H-5606
P10-004	Engine oil	Refer to the applicable P&WC SB: 1001, 13001, 14001		
P10-005	CPC-light (Supersedes P10-001A, P10- 002 and P10-005A & B)	Ardrox / Dinitrol AV 8 Ardrox / Dinitrol AV 8, aerosol	908.18.12.081 908.18.12.083	MIL-PRF-16173 Grade 1 & 4
P10-006	Hydraulic fluid	Aeroshell Fluid 31	908.14.12.016	MIL-PRF-83282 (was MIL-H-83282)
P10-007	Compressor oil, BVM 100N Tamoil Tamfrost 100	Supersedes P10-007A, B, C & D	908.12.22.101 957.30.00.050	
P10-008	Refrigerant	R12, Freon, Fresan	957.30.00.058	
P10-009	Cold air unit oil	Esso ETO 2380,	908.11.02.105	MIL-PRF-23699 (was MIL-L-23699)
P10-010	Refrigerant	R134A	957.30.00.063	
P10-011	Compressor oil, Castrol Icematic SW32	Supersedes P10-011A, B & C	957.30.00.051	
P10-012	Oil, Hellerine	248 ml	908.20.02.047	
P10-013	CPC-Ardrox AV 40	Ardrox / Dinitrol AV 40	908.18.12.086	
P10-014	CPC Remover	Ardrox / Dinitrol AV 980, aerosol	908.18.12.089	
P10-015	CPC-Ardrox AV 30 (Supersedes P10-005C)	Ardrox / Dinitrol AV 30, 20 liter Ardrox / Dinitrol AV 30, aerosol	908.18.12.080 908.18.12.085	MIL-PRF-16173 Grade 1 & 4 AMS 3077
P10-016	CPC-Ardrox AV 25 (Supersedes P10-005D)	Ardrox / Dinitrol AV 25, aerosol	908.18.12.084	MIL-PRF-16173 Grade 3 AMS 3066
P10-017	Hydraulic fluid	Aeroshell Fluid 41 (20 liters) Aeroshell Fluid 41 (5 liters) Replaces P10-003	908.14.12.017 908.14.12.018	MIL-PRF-5606 (was MIL-H-5606)
P10-018	CPC-Ardrox AV 15	Ardrox / Dinitrol AV 15		



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification		
	P11 - Fuels					
P11-001	Fuel			For fuel specifications refer to P&WC EMM		



Material No.	Material Name	Notes	Pilatus Part No.	Alternative Product / Specification		
P12 - Packing						
There are	There are no Pilatus Recommended Materials in this section.					