

Service Bulletin No: 57-006

Ref No: 214

Modification No: EC-16-0061

ATA Chapter: 57

**WINGS - AILERONS  
INSPECTION OF THE AILERON MASS-BALANCE COUNTERWEIGHT ATTACHMENT****1. Planning Information****A. Effectivity**

Pilatus PC-6 Series aircraft MSNs 337 thru 1005.

Fairchild built PC-6 aircraft MSNs 2001 thru 2092.

**B. Concurrent Requirements**

None.

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

There are old and new versions of counterweight and it is possible that some bolts that attach the counterweight to the aileron can have inadequate thread engagement.

**(2) Cause**

Several combinations of anchor nuts, bolts and washers can be installed at the aft attachment points. Also, the thickness of the mounting flange on the old version counterweight can vary. Some combinations of counterweight and attaching parts can result in reduced thread engagement.

**(3) Solution**

Do an inspection/check to determine the type of anchor nuts installed at the aft attachment points and, if necessary, the thickness of the mounting flange, then install the counterweight with new bolts and the correct washers.

**D. Description**

This Service Bulletin gives the data and instructions to:

- Remove the counterweight
- Do an inspection/check to determine the type of anchor nuts installed
- On old version counterweights (P/N 6106.0011.00), measure the thickness of the mounting flange
- Install the counterweight with the correct bolts and washers

**E. Compliance**

Mandatory.

At the next annual inspection, or 12 calendar months, whichever comes first.

**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
Preparation	0.25
Procedure	0.50
Close up	0.50
<b>TOTAL MAN-HOURS</b>	<b>1.25</b>

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

None.

**(2) Moment Change**

None.

**J. Electrical Load Data**

Not changed.

**K. Software**

Not changed.

**L. References**

Aircraft Maintenance Manual (Holders of Doc. No. 01975 only): 20-31-00.

**M. Publications Affected**

Aircraft Maintenance Manual (AMM): 57-61-11.

Illustrated Parts Catalog (IPC): 57-61-01.

**N. Interchangeability of Parts**

Post SB 57-006: If you remove a counterweight you must install it with the same type and length of bolts, and the same type and quantity of washers, in the same positions, as you removed.

**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: .

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**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 Procured**

Part No.	Description	Qty	Fig	Item
932.53.47.009	BOLT, NFL22201BE050009L	4	1	2
938.78.11.203	WASHER, FS3508.021/5.3/12*1,5	A/R	1	1
938.78.13.205	WASHER, FS3508.021/5.3/12*1	A/R	1	1

**(2) Operator Supplied Materials (Ref. AMM Doc. No. 01975: 20-31-00)**

Material No.	Description	Pilatus Part No.
P01-008	SOLVENT	908.63.81.101
P02-031	ABSORBENT PAPER	904.49.73.004

**C. Re-identified Parts**

Not applicable.

**D. Tooling - Cost and Availability**

Not applicable.

**3. Accomplishment Instructions****A. Preparation**

- (1) Put a warning sign 'DO NOT OPERATE THE FLIGHT CONTROLS' in the cockpit.

**B. Procedures (Ref. Fig. 1)**

- (1) Removal:

**CAUTION:** MAKE SURE YOU GIVE SUPPORT TO THE COUNTERWEIGHTS DURING REMOVAL. YOU MUST NOT TRANSPOSE THE COUNTERWEIGHTS. DO THE PROCEDURE ON ONE AILERON AT A TIME.

- (a) At the left outboard aileron, remove the bolts (2) and washers (1) (if installed), the bolt (4) and the washer (3), and remove the counterweight (5).
- (b) Discard the bolts (2) and washers (1).

- (2) Inspection/Check:

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE INSTRUCTIONS ON THE CONTAINER AND/OR LOCAL REGULATIONS.

- (a) Use absorbent paper (Material No. P02-031) made moist with solvent (Material No. P01-008) to clean the surface of the aileron around the two aft attachment holes.
- (b) Put a new bolt (2) (P/N 932.53.47.009) into one of the two aft attachment holes and turn it until the threads engage in the anchor nut.
- (c) Turn the bolt (2) back until it is released from the anchor nut and hold it in this position.
- (d) To determine the type of anchor nut installed, measure the Dimension 'X' as shown on Figure 1, Section B - B.

**NOTE:** Dimension 'X' is an approximate dimension.

- (e) Do steps (b) thru (d) for the second aft attachment hole.

**NOTE:** It is possible that the two aft attachment points have different anchor nuts installed.

- (f) For the old version counterweights P/N 6106.0011.00 only, measure the thickness of the mounting flange as follows:

- 1 If necessary, remove any thick paint from the flange to permit an accurate measurement.
- 2 Measure the Dimension 'Y', as shown on Figure 1, Section C - C, at the flat surface where the washer is installed.

## (3) Installation:

- (a) For each of the two aft attachment positions, refer to Table 1 and determine the correct type and quantity of washers to be installed.

Table 1							
Counterweight P/N	Anchor Nut		Flange Thickness			Type/Quantity of Washers	
	Dimension 'X' (mm)		Dimension 'Y' (mm)			1,5 (mm)	1,0 (mm)
	12*	15*	2,0	2,5	3,0	938.78.11.203	938.78.13.205
6106.0011.00 (Old Version)	X		X			0	2
	X			X		1	0
	X				X	0	1
		X	X			2	0
		X		X		1	1
		X			X	0	2
111.45.08.001 (New Version)	X		No measurement required			0	1
		X	No measurement required			0	2
111.45.06.005 (New Version)	X		No measurement required			0	1
		X	No measurement required			0	2

\* Approximate dimension.

**CAUTION:** DO NOT APPLY GREASE TO THE BOLTS.

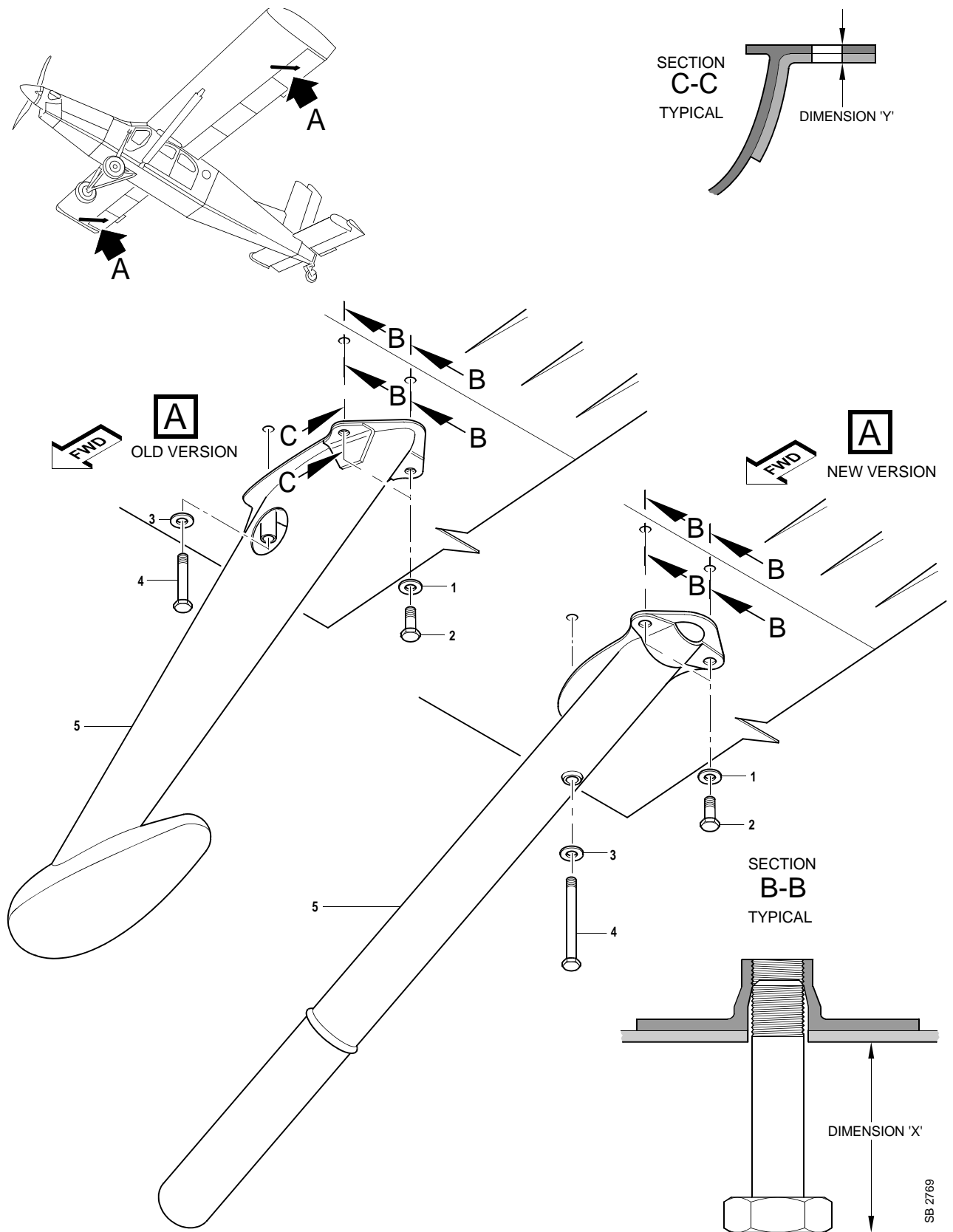
- (b) Support the counterweight (5) in the installed position.
- (c) Install the removed bolt (4) and washer (3).
- (d) At each of the two aft attachment positions, install a new bolt (2) (P/N 932.53.47.009) with the correct type and quantity of washers (1).
- (e) Torque tighten the bolts (2) and (4) to between 3,9 and 4,5 Nm (35 and 40 lbf. in.).
- (4) Do the procedures again for the right outboard aileron.

**C. Close Up**

- (1) If necessary, apply touch-up paint to repair the surface finish on the flange of the counterweights.
- (2) Remove the warning sign 'DO NOT OPERATE THE FLIGHT CONTROLS'.
- (3) Remove all tools and materials. Make sure the work areas are clean.

**D. Documentation**

- (1) Make an entry in the Aircraft Logbook that this Service Bulletin has been incorporated.



Aileron Balance-Weight Attachment - Inspection/Check  
Figure 1

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