

# SERVICE BULLETIN

SERVICE BULLETIN NO: 32-015

REF NO: BS

MODIFICATION NO:

ATA CHAPTER: 32

**LANDING GEAR - MAIN LANDING GEAR  
INSPECTION OF THE LANDING GEAR ASSEMBLIES AND REPLACEMENT OF THE SHOCK  
ABSORBER ATTACHMENT BOLTS**

**1. Planning Information**

**A. Effectivity**

- (1) PC-12 and PC-12/45 aircraft MSN 101 thru MSN 482.
- (2) All main landing gear (MLG) assemblies held as spare that have serial numbers which start with the letters AM. The MLG P/Ns are: 532.10.12.049 and 532.10.12.050.

**B. Concurrent Requirements**

None

**C. Reason**

**(1) Problem**

It is possible for the shock-absorber attachment bolts (special bolts) in some MLG assemblies to be defective. The problem is only applicable to MLG assemblies with serial numbers that start with the letters AM.

**(2) Cause**

It is now known that it is possible for hydrogen embrittlement to occur during the manufacture of the special bolts.

**(3) Solution**

- (a) Do a check to identify MLG assemblies with serial numbers that start with the letters AM.
- (b) If necessary, replace the special bolts in all MLG assemblies which have serial numbers that start with the letters AM.

**≡PILATUS≡**  
**PC12**  
**SERVICE BULLETIN**

**D. Description**

This Service Bulletin (SB) gives the data and instructions necessary to:

- Do checks of the left and right MLG assemblies.
- Replace the special bolts as necessary in the left and right MLG assemblies

You must do the checks given in Part A (Check) (Ref. Sect 3). It is only necessary to do Part B (Special Bolt Replacement) (Ref. Sect 4) if one or the two MLGs have serial numbers that start with the letters AM.

**E. Compliance**

Mandatory.

Required within the next 100 hours time-in-service (TIS) or one month after the effective date of this SB, whichever comes sooner, unless already accomplished.

**F. Approval**

The technical aspects of this SB have been approved by the Federal Office for Civil Aviation (FOCA) of Switzerland as an Airworthiness Directive.

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

**G. Manpower**

	Total	Total
Part A	0.5	0.5
Part B	-	1.0
<b>TOTAL MAN-HOURS</b>	<b>0.5</b>	<b>1.5</b>

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

**H. Weight and Balance**

**(1) Weight Change**

Not affected.

**(2) Moment Change**

Not affected.

**I. Electrical Load Data**

Not changed.

**J. Software**

Not changed.

**PILATUS**  
**PC12**  
**SERVICE BULLETIN**

**K. References**

Aircraft Maintenance Manual (AMM), 06-20-00, 07-10-00, 07-20-00, 20-20-00 and 32-30-00.

**L. Publications Affected**

Not applicable.

**M. Interchangeability of Parts**

Not applicable.

**2. Material Information**

**A. Material - Price and Availability**

Operators must order SB Modification Kits as necessary after incorporation of Part A of this SB

Operators should send orders for SB Modification Kits, to their Authorized PILATUS Service Center, or to:

PILATUS AIRCRAFT LTD.,  
CUSTOMER LIAISON MANAGER,  
CH-6371 STANS,  
SWITZERLAND

General Aviation:  
Tel: + 41 41 619 6319  
Fax: + 41 41 619 6224  
eMail: [asommer@pilatus-aircraft.com](mailto:asommer@pilatus-aircraft.com)

Government:  
Tel: + 41 41 619 6509  
Fax: + 41 41 619 6224  
eMail: [rpaterson@pilatus-aircraft.com](mailto:rpaterson@pilatus-aircraft.com)

PILATUS BUSINESS AIRCRAFT LTD.,  
PRODUCT SUPPORT DEPARTMENT  
11755 AIRPORT WAY  
BROOMFIELD, CO 80021.  
UNITED STATES OF AMERICA

Tel: 303 465 9099  
Fax: 303 465 6040  
eMail: [Productsupport@PilBal.com](mailto:Productsupport@PilBal.com)

PILATUS AUSTRALIA (Pty.) LTD.,  
PO BOX 732  
MARLESTON SA 5033  
AUSTRALIA

Tel: (08) 8234 4433  
Fax: (08) 8234 4499  
Free Call: 1800 445 007  
eMail: [info@pilatus.com.au](mailto:info@pilatus.com.au)

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

Modification Kit Number	Price	Availability
500.50.12.286	Contact address above	Contact address above

**B. Warranty**

Credit will be issued for all affected aircraft and for landing gear assemblies held as spare on approval of a warranty claim, provided the work is accomplished by an authorized Service during the next 100 hour inspection or 30 days from the effective date of this Service Bulletin.

**≡PILATUS≡**  
**PC12**  
**SERVICE BULLETIN**

**C. Material Necessary for Each Aircraft**

**(1) Material to be Procured**

Modification Kit No. 500.50.12.286 is for one MLG assembly (left or right) and consists these parts:

New Part No.	Description	Old Part No.	Qty	Disp. Code	Fig	Item
532.10.12.110	Bolt - Special	532.10.12.110	2	R	2	2
940.17.02.248	Pin - Cotter (MS24665-285)	940.17.02.248	2	D	2	6

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

**(2) Additional Material to be Procured**

Not applicable

**(3) Operator Supplied Materials**

Not applicable.

**D. Material Necessary for Each Spare**

**(1) Material to be Procured**

One Modification Kit No. 500.50.12.286 for each MLG assembly (left or right) held as spare.

**(2) Operator Supplied Material**

Not applicable.

**E. Reidentified Parts**

Not applicable.

**F. Tooling - Cost and Availability**

Not applicable.

**≡PILATUS≡**  
**PC12**  
**SERVICE BULLETIN**

**3. Accomplishment Instructions - Aircraft - Part A - Check**

**A. Preparation**

- (1) Obey the safety instructions given in Landing Gear Maintenance Practices (Ref. AMM, 32-30-00, Page Block 201).
- (2) If the aircraft is on jacks and/or trestles:
  - Put a warning sign (DO NOT OPERATE THE LANDING GEAR) in the flight compartment
  - Open and safety the circuit breaker  
HYDR CTL (NON ESSENTIAL BUS)

**B. Check**

- (1) Do a check to identify if the serial numbers of the following assemblies start with the letters AM:
  - Left MLG
  - Right MLG
- (2) Obey the instructions given in the Part B of this SB if you found serial numbers that started with the letters AM in Step (1):

Replace the special bolts (2, Fig 1) in all assemblies with serial numbers that start with the letters AM (Ref. Part B). It is not necessary to replace the special bolts in assemblies with serial numbers that do not start with the letters AM.

**C. Close up**

Remove all tools and materials. Make sure the work areas are clean.

**D. Documentation**

Make an entry in the Aircraft Logbook that Part A (Check) of this SB has been incorporated.

**PILATUS**  
**PC12**  
**SERVICE BULLETIN**

**4. Accomplishment Instructions - Aircraft - Part B (Special Bolt Replacement) (Ref. Fig. 1)**

This procedure is:

- Only necessary if the serial number of the left or right MLG starts with the letters AM (Ref. Part A (Sect 3))
- Given for the left MLG assembly but is also applicable to the right MLG assembly

**A. Preparation**

- (1) Obey the safety instructions given in Landing Gear - Maintenance Practices (Ref. AMM, 32-30-00, Page Block 201).
- (2) Open and safety the circuit breaker:  

HYDR CTL (NON ESSENTIAL BUS)
- (3) Put a warning sign (DO NOT OPERATE THE LANDING GEAR) in the flight compartment.
- (4) Lift the aircraft on jacks until the wheels are off the ground (Ref. AMM, 07-10-00, Page Block 201) and install shoring equipment (trestles) as necessary (Ref. AMM, 07-20-00, Page Block 201).

**B. Replace the Special Bolts**

- (1) Remove the shock absorber.
  - (a) Remove the cotter pins (6), nuts (7) washers (5) and special bolts (2). Discard the cotter pins.
  - (b) Remove the shock absorber (3) from the trunnions (8) on the trailing link (4) and the trunnions (1) on the yoke fitting (9).
- (2) Send the special bolts (2) to PILATUS.
- (3) Install the shock absorber.
  - (a) Put the shock absorber (3) in position between the trunnions (1) and (8).
  - (b) Put the new special bolts (2) in position and install the washers (5), nuts (7) and cotter pins (6) (Ref. AMM, 20-20-00, Page Block 1).

**C. Close-up**

- (1) Remove all tools and materials. Make sure the work areas are clean.
- (2) Remove the shoring equipment (Ref. AMM, 07-20-00, Page Block 201) and lower the aircraft to the ground (Ref. 07-10-00, Page Block 201).
- (3) Remove the warning sign (DO NOT OPERATE THE LANDING GEAR) From the flight compartment.
- (4) Close the circuit breaker:

HYDR CTL (NON ESSENTIAL BUS)

**≡PILATUS≡**  
**PC12**  
**SERVICE BULLETIN**

**D. Documentation**

- (1) Make an entry in the Aircraft Logbook that Part B (Special Bolt Replacement) of this SB has been incorporated.
- (2) Make sure that components sent to PILATUS have fully completed un-serviceability certificates (or approved equivalents) attached which contain the MLG assembly and aircraft serial numbers.

**5. Accomplishment Instructions - Spares**

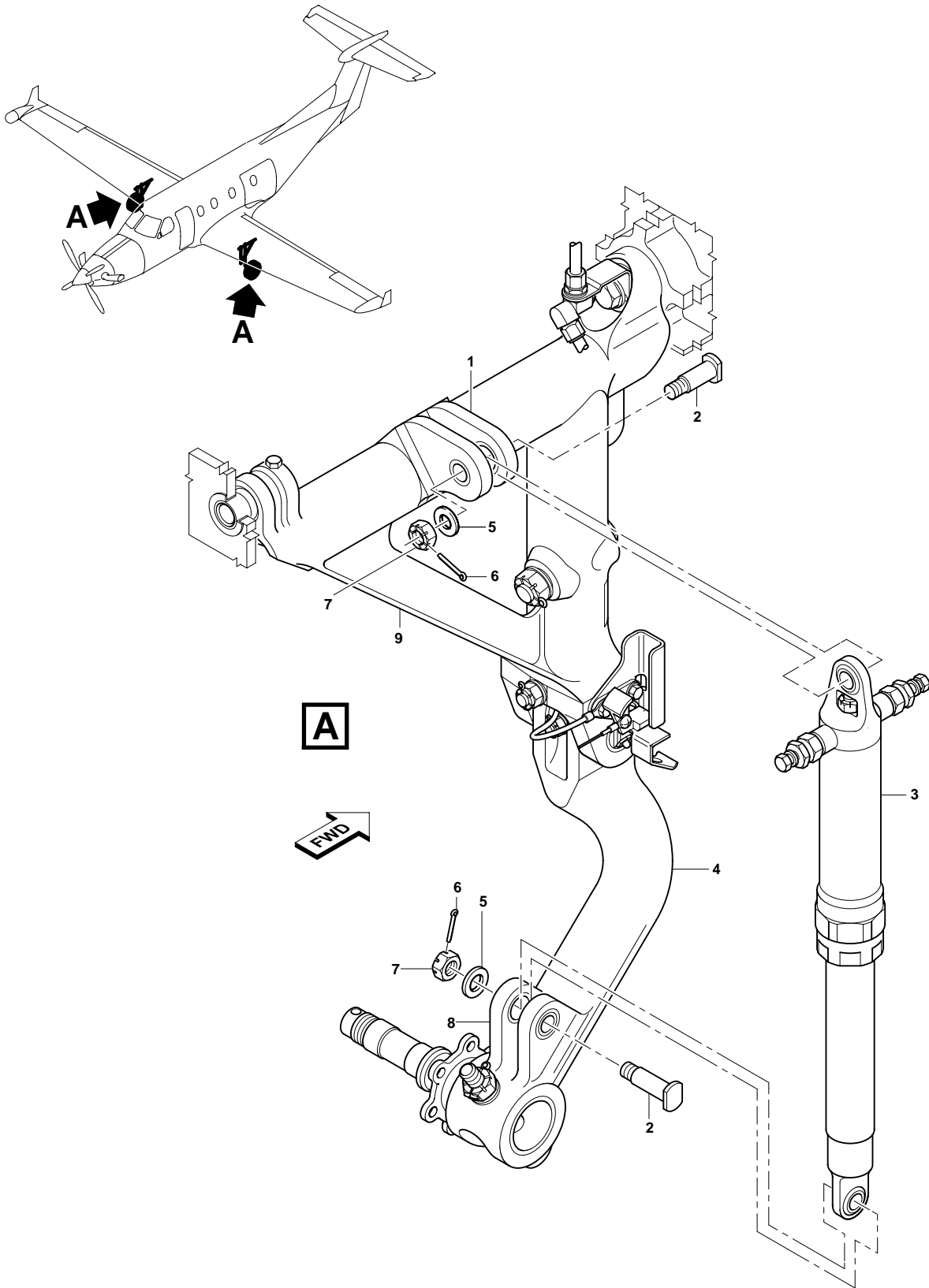
**A. Part A - Check**

Do Part A (Check) (Ref. Sect 3) on all MLG assemblies held as spare.

**B. Part B - MLG**

Do Part B (Special Bolt Replacement) (Ref. Sect 4) on all MLG assemblies held as spare which have serial numbers that start with the letters AM.

**PILATUS**  
**PC12**  
**SERVICE BULLETIN**



SB1308

MLG - Replacement of Components  
Figure 1