

Service Bulletin No: 32-016**Ref No: 162****Modification No: INSPECTION****ATA Chapter: 32****LANDING GEAR - MAIN LANDING GEAR
INSPECTION OF THE LH AND RH FOLDING STRUT LEVERS****1. Planning Information****A. Effectivity**

PC-7 MkII Aircraft MSN 685 thru MSN 769.

B. Concurrent Requirements

None.

C. Reason**(1) Problem**

There has been an in-service report of a folding strut lever failure. The result of this failure is a misalignment of the MLG microswitch and subsequently, a spurious in-flight MLG cockpit indication.

(2) Solution

The LH and RH folding strut assemblies are removed and the folding strut levers are inspected for damage.

D. Description

This Service Bulletin gives the data and instructions necessary to:

- Remove the LH and RH folding strut assemblies
- Do a visual inspection of the LH and RH upper folding strut, support strut, and folding strut lever
- Do a visual inspection of the LH and RH folding strut brackets
- Do an inspection of the LH and RH MLG actuator spherical bearing for free and easy movement
- Do a NDT inspection of the LH and RH folding strut levers
- If damage is found, replace the LH / RH folding strut lever(s)
- Install the LH and RH folding strut levers
- Install the LH and RH folding strut assemblies.

Revision No.1 of this Service Bulletin is issued to:

- Include an amendment to the compliance time of this Mandatory Service Bulletin
- Include re-identification instructions for the LH and RH levers (if replaced).

For Operators that have accomplished this Service Bulletin at a previous Issue, make sure that the folding strut lever(s) (if replaced) are re-identified. Refer to Para.2.C. and Para.3.B.(13).

E. Compliance

Mandatory.

To be embodied no later than 6 months from the Initial Issue date of this Service Bulletin.

F. Approval

The technical content of this document is approved under the authority of the Letter of DOA acceptance ref. FOCA. 21J.002.

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

G. Copyright Information

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H. Manpower

	Total
Preparation	0.6
Inspection	0.55
Replacement of MLG Folding Strut Levers (If necessary)	1.15
Close up	2.15
TOTAL MAN-HOURS	4.45

I. Weight and Balance

(1) Weight Change

None.

(2) Moment Change

None.

J. Electrical Load Data

Not changed.

K. Software

Not changed.

L. References

Aircraft Maintenance Manual (AMM): 20-31-00, 20-40-02, 20-40-10, 25-10-00, 32-10-02, 32-30-01, 32-30-02.

Structure Repair Manual (SRM) 51-10-02, 51-20-02, 51-20-07.

Tool and Equipment Manual (TEM): PT-A-00-00-00-02A-014A-A.

M. Publications Affected

Illustrated Parts Catalogue (IPC): 32-10-01.

N. Interchangeability of Parts

Not applicable.

2. Material Information

A. Material - Price and Availability

Modification Kit No. 500.50.09.317 (LH) and 500.50.09.318 (RH) is necessary to do this Service Bulletin.

Operators who require further information on Price and Availability should contact their Customer Account Manager.

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

NOTE: When you order the modification kit (P/N 500.50.09.317 (LH) or P/N 500.50.09.318 (RH)) from Pilatus Aircraft Ltd, you will also get a parts list. Use the numbers in column 1 (Pos. No.) to identify the parts in the kit (Ref. Para. 2.B.(1), Column 1).

B. Material Necessary for Each Aircraft

(1) Material to be Procured

For the LH Folding Strut Lever

Modification Kit No. 500.50.09.317.

The table below lists the parts in the Modification Kit (Ref. Para. 2.A.) and the disposition of the replaced parts:

Pos. No.	Description	Old Part No.	Qty	Disp. Code	Fig. No.	Item. No.
1	LEVER, FOLDING STRUT LH	-	1	N	1	18
			1	D	1	3
5	LOCKWASHER	-	1	N	1	15
		532.10.09.133	1	D	1	15
10	BOLT, HEX, ST, CD-PL, 6.4*18.7	-	3	N	1	5
		932.35.14.105	3	D	1	5
11	BOLT, HEX, ST, CD-PL, 7.9*38.9	-	1	N	1	11
		932.35.14.217	1	D	1	11
12	NUT, HEX, ST, CD-PL, 6.4*5.2	-	3	N	1	2
		938.07.68.505	3	D	1	2
13	NUT, HEX, ST, CD-PL, 7.9*6.4	-	1	N	1	9
		938.07.68.506	1	D	1	9

Pos. No.	Description	Old Part No.	Qty	Disp. Code	Fig. No.	Item. No.
14	WASHER, ST,CD-PL,6.4*1.6	-	6	N	1	1, 6
		938.77.11.115	6	D	1	1, 6
15	WASHER, ST, CD-PL,7.9*1.6	-	1	N	1	10
		938.77.11.117	1	D	1	10
16	WASHER, MS9320-11, CADM	-	1	N	1	14
		938.75.11.311	1	D	1	14

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

For the RH Folding Strut Lever

Modification Kit No. 500.50.09.318.

The table below lists the parts in the Modification Kit (Ref. Para. 2.A.) and the disposition of the replaced parts:

Pos. No.	Description	Old Part No.	Qty	Disp. Code	Fig. No.	Item. No.
2	LEVER, FOLDING STRUT RH	-	1	N	1	19
			1	D	1	4
5	LOCKWASHER	-	1	N	1	15
		532.10.09.133	1	D	1	15
10	BOLT, HEX, ST, CD-PL, 6.4*18.7	-	3	N	1	5
		932.35.14.105	3	D	1	5
11	BOLT, HEX, ST, CD-PL, 7.9*38.9	-	1	N	1	11
		932.35.14.217	1	D	1	11
12	NUT, HEX, ST, CD-PL,6.4*5.2	-	3	N	1	2
		938.07.68.505	3	D	1	2
13	NUT, HEX, ST, CD-PL,7.9*6.4	-	1	N	1	9
		938.07.68.506	1	D	1	9
14	WASHER,ST,CD-PL,6.4*1.6	-	6	N	1	1, 6
		938.77.11.115	6	D	1	1, 6

Pos. No.	Description	Old Part No.	Qty	Disp. Code	Fig. No.	Item. No.
15	WASHER,ST,CD-PL,7.9*1.6	-	1	N	1	10
		938.77.11.117	1	D	1	10
16	WASHER, MS9320-11, CADM	-	1	N	1	14
		938.75.11.311	1	D	1	14

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

(2) **Locally Supplied Materials (Ref. AMM 20-31-00)**

Material No.	Description	Qty	Remarks
P01-010	SOLVENT	A/R	Or equivalent
P02-009	ABRASIVE CLOTH	A/R	Or equivalent
P02-010	ABRASIVE CLOTH	A/R	Or equivalent
P02-011	ABRASIVE CLOTH	A/R	Or equivalent
P02-012	ABRASIVE CLOTH	A/R	Or equivalent
P02-013	ABRASIVE CLOTH	A/R	Or equivalent
P02-014	ABRASIVE CLOTH	A/R	Or equivalent
P02-031	ABSORBENT PAPER	A/R	Or equivalent
P04-039	CORROSION PREVENTIVE	A/R	Or equivalent
P04-041	GREASE	AR	Or equivalent
P10-010	CPC	A/R	Or equivalent

C. Re-identified Parts

NOTE: If the replacement of a folding strut lever is necessary, it is reworked and re-identified with the same part number as the previously installed folding strut lever.

New Part No. / Re-identification	Description	Part No. to be Reworked / Re-identified
P/N 532.10.09.131	LEVER, FOLDING STRUT LH	P/N 532.10.09.139
P/N 532.10.09.132	LEVER, FOLDING STRUT RH	P/N 532.10.09.140

D. Tools and Equipment

PART NO.	DESCRIPTION	QTY	REMARKS
932.35.14.219	BOLT (TOOL)	1	-
513.32.09.071	DRILL BUSH	1	-
LOCAL SUPPLY	HEAT GUN	1	-
990.00.02.004	TOOL KIT, MECHANIC	1	-
990.00.02.011	TOOL KIT, METAL WORK	1	-
901.66.01.152	PILOTED DRILL BIT	1	2,4 mm to 6,2 mm
901.80.02.025	REAMER	1	-
-	PERMANENT MARKER PEN	1	Local supply

NOTE: The metal-work tool kit contains a drill set. This drill set contains drill bits in diameters from 1,0 mm to 5,9 mm.

3. Accomplishment Instructions

WARNING: BEFORE YOU GO INTO THE COCKPIT, MAKE SURE THAT THE TWO EJECTION SEATS HAVE THE SAFETY PINS INSTALLED IN THE SAFE FOR SERVICING LOCATIONS (REF. AMM 25-10-00, PAGE BLOCK 201). IF THE EJECTION SEAT OPERATES ACCIDENTALLY OR INCORRECTLY IT CAN CAUSE DEATH OR INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

WARNING: BEFORE YOU OPERATE THE LANDING GEAR, ALL PERSONNEL AND/OR EQUIPMENT MUST BE CLEAR OF THE AREA OF MOVEMENT OF THE LANDING GEAR. THIS WILL HELP TO PREVENT INJURY TO PERSONNEL AND/OR DAMAGE TO THE AIRCRAFT AND/OR EQUIPMENT.

WARNING: BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURER'S HEALTH AND SAFETY INSTRUCTIONS AND ALL THE APPLICABLE LOCAL INSTRUCTIONS. CONSUMABLE MATERIALS CAN BE DANGEROUS AND CAN CAUSE DEATH OR INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

NOTE: The mechanical tool kit (P/N 990.00.02.004) and the metal work tool-kit (P/N 990.00.02.011) are necessary to do this procedure (Ref. TEM, PT-A-00-00-00-02A-014A-A).

NOTE: For the tools and equipment used in this procedure, refer to the Tools and Equipment table (Step 2. D).

A. Preparation

- (1) Remove the LH and the RH MLG folding strut assemblies (Ref. AMM, 32-10-02, Page Block 401) and set aside the items that follow:
 - Self-locking nut (18), washer (17), and the bolt (14) (Ref. AMM, 32-10-02, Page Block 401)
 - Pivot bolt (21) (Ref. AMM, 32-10-02, Page Block 401).

In this document, the items above are referred to in:

- Figure 1, as the self-locking nut (9), washer (10), and the bolt (11)
- Figure 2, as the pivot bolt (2).

B. Removal, inspection, and re-installation / replacement

NOTE: The procedures to do the inspection on the LH and the RH folding strut levers are the same. The procedure below should be done on both the LH and the RH folding strut levers.

- (1) Remove the folding strut lever (3) or (4) from the MLG folding strut assembly (Ref. Fig. 1).
 - (a) Remove and keep the three nuts (2) and the three washers (1).
 - (b) Remove and keep the three bolts (5) and the three washers (6).
 - (c) Remove the folding strut lever (3) or (4) from the MLG folding strut assembly.
 - (d) Use absorbent paper (Material No. P02-031) made moist with solvent (Material No. P01-010) to clean the folding strut lever (3) or (4).

- (2) Do an inspection of the folding strut lever (3) or (4) (Ref. Figure 1).
 - (a) Do a detailed visual inspection of the folding strut lever (3) or (4), refer to SRM 51-10-02, Page Block 001.
 - (b) Do an inspection of the internal surfaces of the MLG actuator attachment lugs on the folding strut lever (3) or (4). Inspect for witness marks of corrosion or damage to the surface finish.
 - (c) Do a dye penetrant inspection or an eddy current inspection, refer to 51-20-07, Page Block 001. Report the results to Pilatus via the the Service Bulletin Evaluation Sheet.

NOTE: A dye penetrant inspection is the Pilatus recommended procedure. An eddy current inspection is an approved alternative procedure.

- (3) If you do not find cracks or other damage (Ref. Fig. 1), do the work-steps that follow:
 - (a) Put the small end of the folding strut lever (3) or (4) in the fork end of the support strut (12), and hold in position.
 - (b) Install the bolt (11), the washer (10), and the self-locking nut (9). Do not torque tighten the self-locking nut (9) at this time.
 - (c) Put and hold the large end of the folding strut lever (3) or (4) between the lugs (7) and (8) on the upper folding strut (13).
 - (d) Install the three bolts (5), the three washers (6), the three washers (1), and the three nuts (2).

NOTE: These are the attaching parts that you set aside in step 3.B.(1)(a) and (b).

- (e) Torque each of the three bolts (5) to between 3,4 Nm and 4,5 Nm (30 lbf in and 40 lbf in) plus the run down torque.
 - (f) Remove the self-locking nut (9), the washer (10), and the bolt (11).
 - (g) Continue to the Close Up paragraph (Step 3. C.).
- (4) If you find damage to the folding strut lever (3) or (4) (Ref. Fig. 1), discard the damaged component.
- (5) At the interface surfaces (Ref. Fig. 1) between the support strut (12) and the upper folding strut (13), do these work-steps:
 - (a) Use a feeler gauge to check that there is no gap between the parts.
 - (b) Make sure that you cannot turn the support strut (12) and the upper folding strut (13) around the bolt (16) axis.
- (6) Put a protective material around the lower folding strut to help prevent damage.

- (7) Remove the support strut (12) from the upper folding strut (13) (Ref. Fig. 1).
- (a) Release the tabs on the lockwasher (15).
 - (b) Remove the bolt (16), the washer (14) and the lockwasher (15).
 - (c) Keep the bolt (16) and discard the washer (14) and the lockwasher (15).
 - (d) Try to remove the support strut (12) from the upper folding strut (13). If you remove the support strut (12) from the upper folding strut (13), continue from work-step 3.B.(7)(f).
 - (e) If you cannot disconnect the end of the support strut (12) from the upper folding strut (13), do these work-steps:

WARNING: BE CAREFUL WHEN YOU USE THE HEAT GUN. USE THE CORRECT EYE PROTECTION AND HEAT RESISTANT SAFETY GLOVES. IF YOU DO NOT, YOU CAN CAUSE INJURY AND / OR DEATH.

CAUTION: DO NOT USE TOO MUCH HEAT ON THE SUPPORT STRUT (12). DO NOT EXCEED 120 °C (248 °F) FOR MORE THAN 15 MINUTES.

1 If necessary, move the protective material and use the heat gun to apply heat to the support strut (12).

2 Remove the support strut (12) from the upper folding strut (13).

- (f) Try to remove the bush (17) from the upper folding strut (13). If you can remove the bush (17), continue from work-step 3.B.(8).
- (g) If you cannot remove the bush (17) from the end of the upper folding strut (13), do these work-steps:

WARNING: BE CAREFUL WHEN YOU USE THE HEAT GUN. USE THE CORRECT EYE PROTECTION AND HEAT RESISTANT SAFETY GLOVES. IF YOU DO NOT, YOU CAN CAUSE INJURY AND / OR DEATH.

CAUTION: DO NOT USE TOO MUCH HEAT ON THE UPPER FOLDING STRUT (13). DO NOT EXCEED 120 °C (248 °F) FOR MORE THAN 15 MINUTES.

1 If necessary, move the protective material and use the heat gun to apply heat to the upper folding strut (13).

2 Try to remove the bush (17) from the upper folding strut (13). If you cannot remove the bush (17), leave it in position.

- (h) If a heat gun has been used, let the support strut (12) and / or the upper folding strut (13) become cool.
- (i) Move the protective material back into the correct position to protect the lower folding strut.

- (8) Do a detailed visual inspection of the two bushes in the LH and RH MLG folding strut brackets (1) for signs of damage (Ref. Fig 2). If you find damage, contact Pilatus Aircraft Ltd.
- (9) On the MLG actuator (Ref. Fig. 2), try to turn the spherical bearing (3) with your fingers. Make sure that the spherical bearing (3) turns freely.
- (10) Do a detailed visual inspection of these items (Ref. Fig. 1):
- The support strut (12)
 - The outboard end of the upper folding strut (13) (where it connects to the support strut (12) (Ref. Fig.1 View C)).
 - The bush (17), as far as possible
 - The bolt (16).

Refer to SRM 51-10-02, Page Block 001.

- (a) If you find damage to the items, replace with new items as necessary.

NOTE: New items will keep the same item numbers as the replaced item.

- (11) Install the support strut (12) on the upper folding strut (13) (Ref. Fig. 1):

WARNING: BE CAREFUL WHEN YOU USE THE HEAT GUN. USE THE CORRECT EYE PROTECTION AND HEAT-RESISTANT SAFETY GLOVES. IF YOU DO NOT, YOU CAN CAUSE INJURY AND / OR DEATH.

CAUTION: DO NOT USE TOO MUCH HEAT ON THE SUPPORT STRUT (12). DO NOT EXCEED 120 °C (248 °F) FOR MORE THAN 15 MINUTES.

- (a) If you could not remove the bush (17) in Step 3.B.(7)(f), apply a layer of corrosion preventive (Material No. P04-039) to the exposed exterior surface of the bush (17).
- (b) If you removed the bush (17) in Step 3.B.(7)(f), apply a layer of corrosion preventive (Material No. P04-039) to the full exterior surface of the bush (17).
- (c) If removed, install the bush (17) in the upper folding strut (13).

1 If the bush cannot be installed into the upper folding strut by hand:

- a Put the bush (17) in the correct installation position in the hole, in the upper folding strut (13). Use a soft-faced hammer to carefully seat the bush (17) in the hole.
- b Put the bolt (tool) (P/N 932.35.14.219) through the bush (17) and engage the threads of the bolt (tool) (P/N 932.35.14.229) in the threaded hole, in the upper folding strut (13).
- c Turn the bolt (tool) (P/N 932.35.14.219) into the threaded hole until the bush (17) is pushed fully into the installation hole.
- d Remove the bolt (tool) (P/N 932.35.14.219).

- (d) Install the bush (17) in the support strut (12).
 - 1 If the bush cannot be installed into the support strut by hand:
 - a Use a heat gun to heat the support strut (12) at the installation hole for the bush (17).
 - b Use a plastic hammer on the upper folding strut (12) to help engage the bush (17) fully into the installation hole in the support strut (12).
 - c Let the support strut (12) become cool.
 - (e) Apply a layer of corrosion preventive (Material No. P04-039) to the shank of the bolt (16), the new lockwasher (15) (Pos. No. 5) and the new washer (14) (Pos. No. 16).
 - (f) Put the new lockwasher (15) (Pos. No. 5) and the new washer (14) (Pos. No. 16) on the bolt (19) and loosely install the bolt (16) to attach the support strut (12) to the upper folding strut (13). Do not bend the tabs on the lockwasher (15) to safety the bolt (16) at this time.
 - (g) Hand-tighten the bolt (16) sufficiently to hold the support strut (12) securely against the upper folding strut (13).
 - (h) Make sure that all the mating surface area of the support strut (12) and the upper folding strut (13) are in contact.
 - (i) Use a feeler gauge (P/N 903.70.29.003) to check that there is no gap between the support strut (12) on the upper folding strut (13), at the installation holes for the bush (17).

NOTE: The feeler gauge is part of the mechanical tool kit (P/N 990.00.02.004).
 - (j) Make sure that the support strut (12) and the upper folding strut (13) can rotate around the axis of the bolt (16).
- (12) Install the new folding strut lever (18) or (19) in the MLG folding strut assembly (Ref. Fig. 1):
- (a) Put the new folding strut lever (18) LH (Pos. No. 1) or (19) RH (Pos. No. 2) in position on the MLG folding strut assembly, and hold in position.
 - (b) Align the lower existing holes in the folding strut lever (18) or (19) with the two holes in the support strut (12).
 - (c) Temporarily install the bolt (11), the washer (10) and the nut (9) to hold the folding strut lever (18) or (19) in the support strut (12).
 - (d) Hand tighten the nut (9).
- CAUTION:** DO NOT TORQUE TIGHTEN THE NUT AT THIS STAGE AS THIS COULD DAMAGE THE SUPPORT STRUT AND THE FOLDING STRUT LEVER.
- (e) Align the upper end of the folding strut lever (18) or (19) in the upper folding strut (13).

- (f) Make sure that the line marking on the folding strut lever (18) or (19) is visible in the center of the upper hole in the lug (8) of the upper folding strut (13). Refer to view G.

NOTE: The lug (8) has two bolt attachment holes, the lug (7) has one attachment hole.

- (g) If necessary, adjust the position of the support strut (12) to get the best alignment of the line marking in the center of the upper hole.

- (h) If the folding strut lever (18) or (19) touches the radius between lug (7) or lug (8) and the body of the upper folding strut, use abrasive cloth to remove material from the edge of the folding strut lever until the surfaces no longer touch. Refer to View G.

NOTE: You can abrade up to a maximum of 0,5 mm (0.0196 in)) from the contact area of the folding strut lever (18) or (19).

NOTE: Refer to the Consumable materials table (Step 2.B.(2)) for the necessary abrasive cloth material number.

- (i) Make sure that you make the abraded surface of the folding strut lever (18) or (19) smooth.

- (j) Use clamps (or equivalent) to hold the folding strut lever (18) or (19) in position in the upper folding strut (13).

- (k) Torque the bolt (16) to between 7,0 Nm and 9,5 Nm (60 lbf in and 85 lbf in) plus the run down torque.

- (l) Make sure that the line marking on the folding strut lever (18) or (19) is still aligned with the center of the hole in the lug of the upper folding strut (13). Adjust if necessary.

- (m) Put the drill bush (P/N 513.32.09.071) in the upper hole in the lug (8) of the upper folding strut (13) and hold it in position.

- (n) Use a 2,4 mm diameter drill bit to drill a pilot hole in the folding strut lever (18) LH or (19) RH.

- (o) Remove the drill bush (P/N 513.32.09.071) from the upper hole of the upper folding strut (13).

- (p) Remove the clamps (or equivalent) that hold the folding strut lever (18) or (19).

- (q) Remove the bolt (11), the washer (10) and the nut (9) from the support strut (12).

- (r) Remove folding strut lever (18) or (19) from the MLG folding strut assembly.

- (s) Use the piloted drill bit (P/N 901.66.01.152) to increase the diameter of the 2,4 mm diameter pilot hole to 6,2 mm.

NOTE: Pilatus recommends you use a pillar drill or similar tool. The drill bit in the pillar drill must be perpendicular to the folding strut lever (18) or (19) and aligned to the center of the hole.

- (t) Use the hand reamer (D6.35 H7) (P/N 901.80.02.025) to increase the diameter of the new hole in the folding strut lever (18) or (19). Make sure that you turn the hand reamer through the hole until its maximum diameter is attained.
- (u) Make sure that you can push the threads and shank of the bolt (5) through the new hole in the folding strut lever (18) or (19).
- (v) Use a 90° countersink bit to chamfer the edges of the new hole in the folding strut lever (18) or (19) to between 0,2 mm and 0,4 mm (0.0078 in and 0.0157 in).

NOTE: The 90° countersink bit is part of the metal work tool-kit (P/N 990.00.02.011).

- (w) Carefully remove any remaining unwanted material from the hole in the folding strut lever (18) or (19).
- (x) Use absorbent paper (Material No. P02-031) made moist with solvent (Material No. P01-010) to clean the hole in the folding strut lever (18) or (19).
- (y) Put the small end of the folding strut lever (18) or (19) in the correct installation position between the forked end of the support strut (12), and hold in position.
- (z) Loosely install the bolt (11), the washer (10) and the nut (9) to hold the folding strut lever (18) or (19) in the support strut (12).

CAUTION: DO NOT TORQUE TIGHTEN THE NUT AT THIS TIME AS THIS COULD DAMAGE THE SUPPORT STRUT AND THE FOLDING STRUT LEVER.

- (aa) Hand tighten the nut (9).
- (ab) Align the upper end of the folding strut lever (18) or (19) in the upper folding strut (13).
- (ac) Install the bolt (5), the washer (6), the washer (1), and the nut (2) you kept in the new hole of the folding strut lever (18) or (19) and the upper folding strut (13).
- (ad) Torque the bolt (5) to between 3,4 Nm and 4,5 Nm (30 lbf in and 40 lbf in) plus the run down torque.
- (ae) Put the drill bush (P/N 513.32.09.071) in the lower hole of the lug (8) in the upper folding strut (13) and hold it in position.
- (af) Use a 2,4 mm diameter drill bit to drill a pilot hole in the folding strut lever (18) or (19).
- (ag) Remove the drill bush (P/N 513.32.09.071) from the lower hole of the lug (8) of the upper folding strut (13).
- (ah) Put and hold the drill bush (P/N 513.32.09.071) in the hole of the lug (7) in the upper folding strut (13).
- (ai) Use a 2,4 mm diameter drill bit to drill a pilot hole in the folding strut lever (18) or (19).
- (aj) Remove the drill bush (P/N 513.32.09.071) from the hole of the lug (7) of the upper folding strut (13).

- (ak) Remove the folding strut lever (18) or (19) from the MLG folding strut assembly:
- Remove the bolt (5), the washer (6), the washer (1), and the nut (2) from the upper folding strut (18). Discard the bolt (5), the washer (6), the washer (1) and the nut (2)
 - Remove the bolt (11), the washer (10), and the nut (9) from the support strut (12). Discard the bolt (11), the washer (10) and the nut (9).
- (al) Use the piloted drill bit (P/N 901.66.01.152) to increase the diameter of the two new 2,4 mm diameter pilot holes to 6,2 mm.
- NOTE:** Pilatus recommends you use a pillar drill or similar tool. The drill bit in the pillar drill must be perpendicular to the folding strut lever (18) or (19) and aligned to the center of the hole.
- (am) Use the hand reamer (D6.35 H7) (P/N 901.80.02.025) to increase the diameter of the two new holes in the folding strut lever (18) or (19). Make sure that you turn the hand reamer through the hole until its maximum diameter is attained.
- (an) Make sure that you can push the threads and shank of the bolt (5) through the new holes in the folding strut lever (18) or (19).
- (ao) Use a 90° countersink bit to chamfer the edges of the new holes in the folding strut lever (18) or (19) to between 0,2 mm and 0,4 mm (0.0078 in and 0.0157 in).
- NOTE:** The 90° countersink bit is part of the metal work tool-kit (P/N 990.00.02.011).
- (ap) Carefully remove any remaining unwanted material from the hole in the folding strut lever (18) or (19).
- (aq) Use absorbent paper (Material No. P02-031) made moist with solvent (Material No. P01-010) to clean the holes in the folding strut lever (18) or (19).
- (ar) Apply Chemical Conversion Coating (CCC):
- To the bare metal area of the folding strut lever (18) or (19). Refer to the AMM 20-40-10, Page Block 201
 - In and around the holes in the folding strut lever (18) or (19). Refer to AMM 20-40-10, Page Block 201.
- (as) Apply primer to areas of bare metal on the surfaces and edges of the folding strut (18) or (19). Refer to SRM 51-20-02, Page Block 001. Do not apply primer to the three reamed holes in the folding strut lever (18) or (19).
- (at) Put the folding strut lever (18) or (19) in the MLG folding strut assembly and hold it in position.
- (au) Loosely install the new bolt (11) (Pos. No. 11) to hold the folding strut lever (18) or (19) in the support strut (12).
- (av) Apply a layer of corrosion preventive (Material No. P04-039) to the shank of the three new bolts (5) (Pos. No. 10).

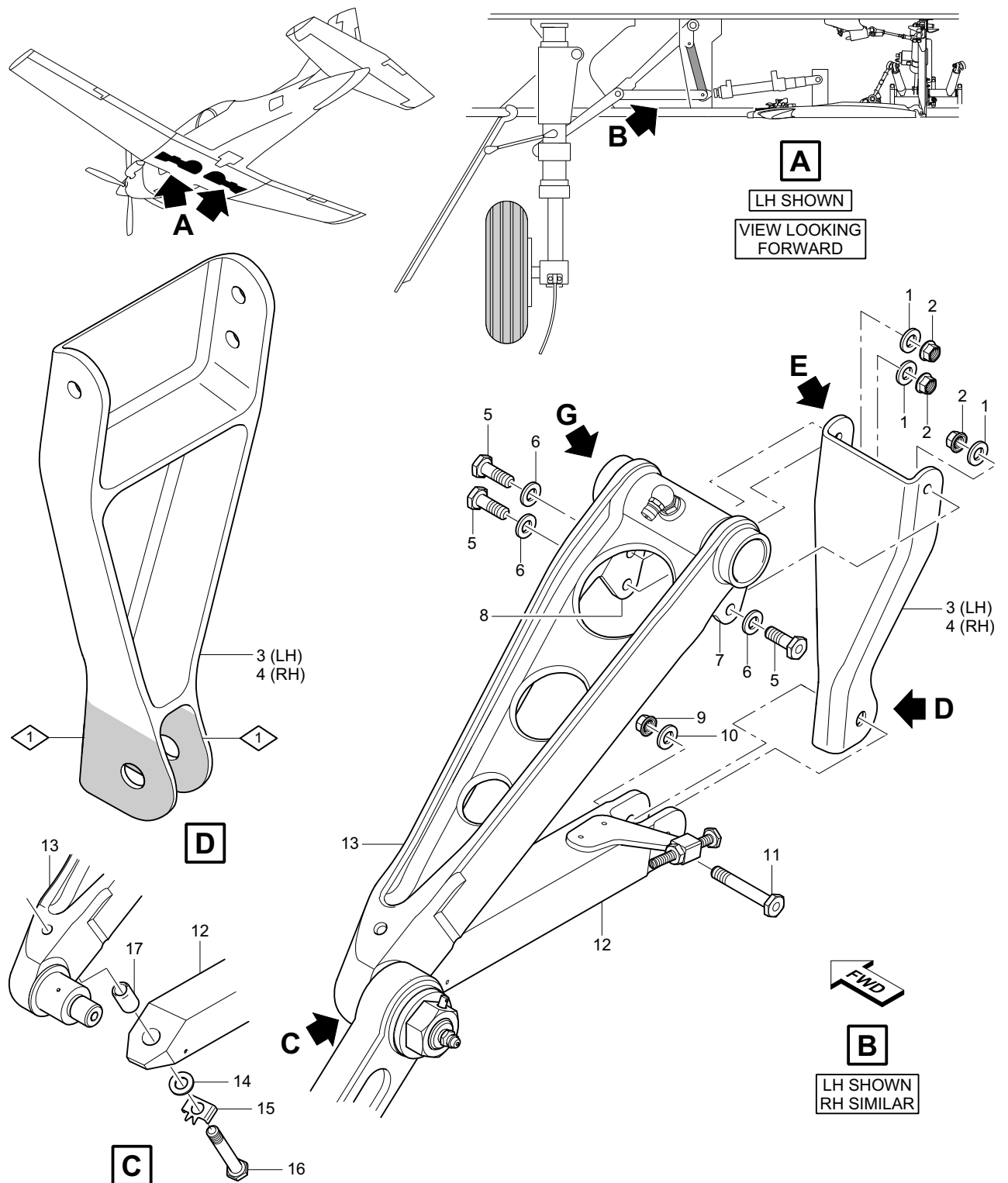
- (aw) Install the three bolts (5) and the three new washers (6) (Pos. No. 14) through the lugs (7) and (8) of the upper folding strut (13).
 - (ax) Install the three new washers (1) (Pos. No. 14) and the three new nuts (2) (Pos. No. 12) on the bolts (5).
 - (ay) Torque each of the three bolts (5) to between 3,4 Nm and 4,5 Nm (30 lbf in and 40 lbf in) plus the run down torque.
 - (az) Bend the tabs on the lockwasher (15) to safety the bolt (16).
 - (ba) Apply a layer of CPC (Material No. P10-013) to the head of the bolt (16), the lockwasher (15) and the washer (14). Refer to AMM, 20-40-02, Page Block 201.
 - (bb) Remove (and keep) the bolt (11) from the support strut (12). Make sure you can remove the bolt (11) with your hand.
 - (bc) Remove the protective material from the support strut (12) and the upper folding strut (13).
- (13) Re-identify the folding strut lever(s), if replaced:
- (a) If you can see a part number on the LH/RH folding strut lever, remove it or strike it through with a permanent marker pen. Refer to Para. **2.C**.
 - (b) Use a permanent marker pen and re-identify the LH/RH folding strut lever with the applicable new part number:
 - LH: 532.10.09.131
 - RH: 532.10.09.132
- Refer also to Para. **2.C**.

C. Close Up

- (1) Remove all equipment, materials and tools from the work area. Make sure that the work area is clean.
- (2) Install the LH and the RH MLG folding strut assemblies (Ref. Fig. 1 and AMM, 32-10-02, Page Block 401). During this procedure:
 - Use the bolt (11) that you removed and kept in Step 3.B.(11)(bb) together with:
 - The new washer (10) (Pos. No. 15) and the new self-locking nut (9) (Pos. No. 13).
- (3) Do the rigging checks 1 thru 5 for the MLG (Ref. AMM, 32-30-02, Page Block 501).
- (4) Do a functional test of the landing gear (Ref. AMM, 32-30-01, Page Block 501).

D. Documentation

- (1) Make an entry in the Aircraft Logbook that this Service Bulletin has been incorporated.
- (2) Use the Service Bulletin Evaluation Sheet and report your results and the serial number of the aircraft to Pilatus.



**LOWER FOLDING STRUT
NOT SHOWN FOR CLARITY**

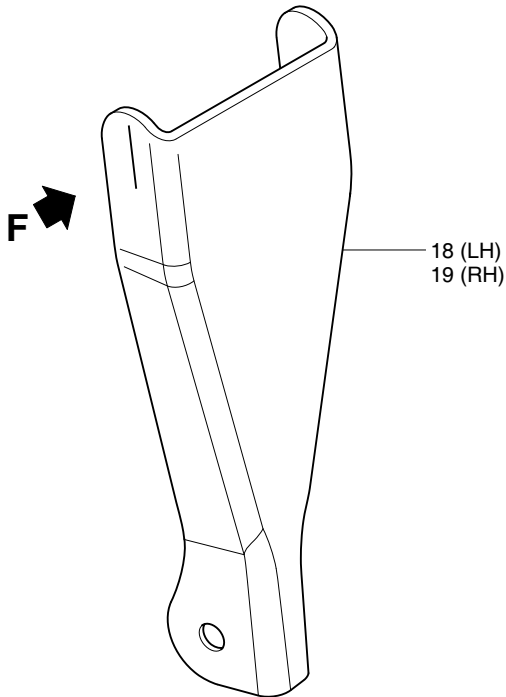
NOTE:

1 DO A DYE PENETRANT INSPECTION OF THE SHADED AREAS

Inspection of the LH and RH MLG Folding Strut Levers
Figure 1 (Sheet 1 of 2)

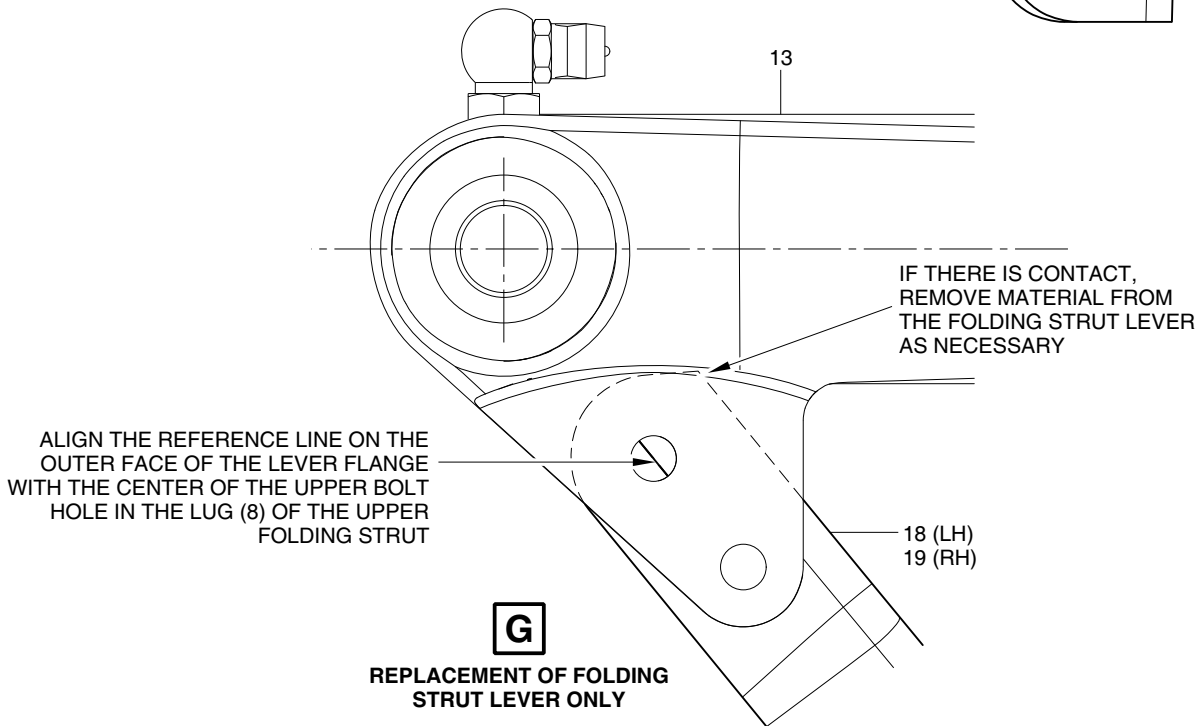
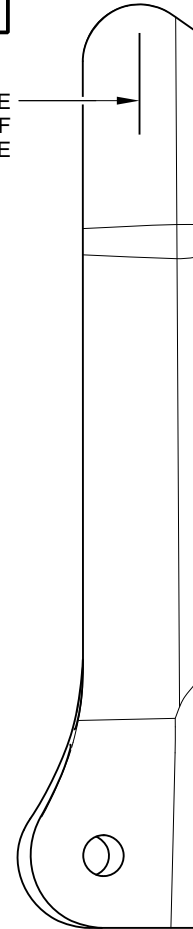
E

REPLACEMENT OF FOLDING STRUT LEVER ONLY



F

REFERENCE LINE ON OUTER FACE OF LEVER FLANGE

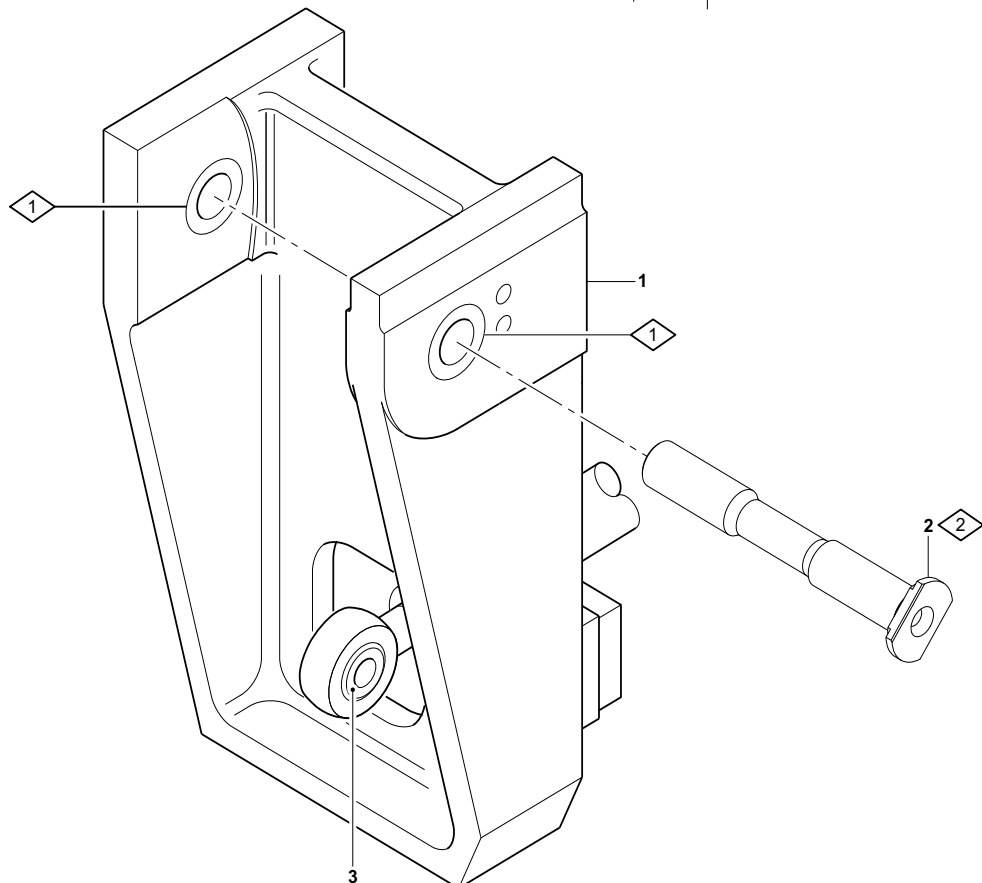
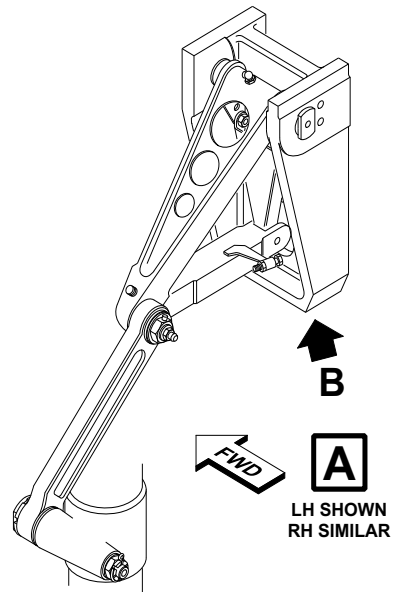
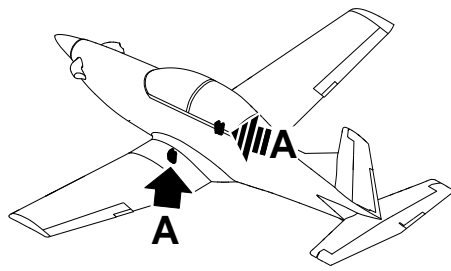


G

REPLACEMENT OF FOLDING STRUT LEVER ONLY

Inspection of the LH and RH MLG Folding Strut Levers
Figure 1 (Sheet 2 of 2)

SB 4802



NOTES:

- ① INSPECT THE BUSHES
- ② PIVOT BOLT SHOWN FOR IDENTIFICATION PURPOSES
FOR REMOVAL/INSTALLATION REFER TO AMM 32-10-02, PAGE BLOCK 401

B

SB 4811

MLG folding strut bracket - Pivot bolt and bushes - Inspection
Figure 2

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SERVICE BULLETIN EVALUATION SHEET FOR SB No. 32-016			
Title	Landing Gear - Main Landing Gear Inspection of the LH and RH Folding Strut Levers		
Customer			
Service Center			
EMBODIMENT REPORTING			
This SB has been embodied:		<input type="checkbox"/>	On the entire fleet
		<input type="checkbox"/>	Only partially
Provide embodiment details per aircraft (use additional copies of this table, if necessary)			
MSN	Flying Hours	MSN	Flying Hours
Additional embodiment comments/findings			
EDITORIAL COMMENTS (procedure, kit quality, suggested improvements, etc.)			
Name	Signature	Date	
Please complete and forward this form to: Email: techsupport@pilatus-aircraft.com			

SERVICE BULLETIN EVALUATION SHEET

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