

SERVICE BULLETIN

SERVICE BULLETIN NO: 32-016

REF NO: 184

MODIFICATION NO:

ATA CHAPTER: 32

LANDING GEAR LANDING GEAR - INSPECTION AND REPLACEMENT OF COMPONENTS

1. Planning Information

A. Effectivity

- (1) PC-12 and PC-12/45 aircraft MSN 101 thru MSN 471 and MSN 473 thru MSN 482.
- (2) All nose landing gear (NLG) assemblies held as spare that have serial numbers which start with the letters AM (P/N: 532.20.12.038 and 532.20.12.039).
- (3) All main landing gear (MLG) assemblies held as spare that have serial numbers which start with the letters AM (P/N: 532.10.12.049 and 532.10.12.050).
- (4) All MLG shock absorber assemblies held as spare that have serial numbers which start with the letters AM (P/N: 532.10.12.175).

B. Concurrent Requirements

Service Bulletins: 32-012 and 32-015.

C. Reason

(1) Problem

It is possible for some components of MLG, NLG and MLG shock absorber assemblies to be defective. The problem is only applicable to specified components installed during the assembly of MLG, NLG and MLG shock absorber 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 specified components.

(3) Solution

- (a) Do a check to identify NLG, MLG and MLG shock absorber assemblies with serial numbers that start with the letters AM.
- (b) If necessary, replace specified components in all NLG, MLG and MLG shock absorber assemblies which have serial numbers that start with the letters AM.

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D. Description

This SB gives the data and instructions necessary to:

- Do checks of the NLG, left and right MLG and the left right MLG shock absorber assemblies Mar 11/04
- Replace specified components as necessary in the NLG, left and right MLGs and the MLG shock absorber assemblies

You must do Part A of this SB. Only do Parts B thru D as necessary if (one or more of) the NLG, left and right MLG and the left and right MLG shock absorber assemblies have serial numbers that start with the letters AM.

E. Compliance

Mandatory.

Required within the next 300 hours time-in-service (TIS) but not later than 12 calendar months after the effective date of this SB

F. Approval

The technical content of this document is approved by the Federal Office for Civil Aviation 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

(1) Part A

Check	0.5
TOTAL MAN-HOURS	0.5

(2) Parts B, NLG with serial numbers which start with letters AM

Preparation	1
Disassembly	3
Assembly	8
TOTAL MAN-HOURS	12

NOTE: Man-hours figures do not include the cure time of sealants and other consumables.

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- (3) Part C, One (left or right) MLG with a serial number which starts with the letters AM

Preparation	2
Disassembly	1.5
Assembly	2.5
Installation	2
TOTAL MAN-HOURS	8

NOTE: Man-hours figures do not include the cure time of sealants and other consumables.

- (4) Parts D, One (left or right) MLG Shock Absorber with a serial number which starts with the letters AM

Preparation	1
Disassembly	1.5
Assembly	2.5
Installation	1
TOTAL MAN-HOURS	6

NOTE: Man-hours figures do not include the cure time of sealants and other consumables.

H. Weight and Balance

(1) Weight Change

Not affected.

(2) Moment Change

Not affected.

I. Electrical Load Data

Not changed.

J. Software

Not changed.

K. References

Aircraft Maintenance Manual (AMM), 07-10-00, 07-20-00, 12-20-04, 20-20-01, 32-10-00, 32-10-03, 32-20-00, 32-20-01, 32-30-00, 32-40-01, 32-40-03, 32-50-00, 32-50-01 and 33-40-00.

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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 SUPPORT MANAGER,
CH-6371 STANS,
SWITZERLAND

General Aviation:
Tel: + 41 41 619 6208
Fax: + 41 41 619 7311
eMail: SupportPC12@pilatus-aircraft.com

Government:
Tel: + 41 41 619 6509
Fax: + 41 41 619 6224
eMail: 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
e-Mail: 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
e-Mail: 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. 287	Contact address above	Contact address above
500.50.12. 288	Contact address above	Contact address above
500.50.12. 289	Contact address above	Contact address above

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B. Warranty

Credit will be issued for all affected aircraft and landing gear assemblies held as spare on approval of a warranty claim, provided:

- The work is done at an authorized service center during the next 300 hour inspection or within 12 months from the effective date of this SB, and
- The old parts are returned to Pilatus
- Pilatus confirm receipt of the old parts

C. Material Necessary for Each Aircraft

(1) Material to be Procured

Modification Kit No. 500.50.12.287 is for the NLG assembly and consists these parts:

New Part No.	Description	Old Part No.	Qty	Disp. Code	Fig	Items
511.23.12.026	Markings - AC Ground	511.23.12.026	2	D	2	34
511.23.12.027	Markings - Jack Point	511.23.12.027	1	D	1	35
532.20.12.110	Damper Attachment	532.20.12.110	1	R	1	8
532.20.12.120	Steering Tube Assembly	532.20.12.120	1	R	1	11
532.20.12.134	Rod End Assembly	532.20.12.134	1	R	1	5
532.20.12.145	Pipe - Cylinder	532.20.12.145	1	R	1	13
532.20.12.150	Bolt - Lubrication	532.20.12.150	1	R	1	22
532.20.12.159	Pin - Lubrication	532.20.12.159	2	R	1	16, 28
532.20.12.166	Bolt	532.20.12.166	1	R	1	36
532.20.12.206	Ring	532.20.12.206	1	R	1	3
532.20.12.500	Kit - Seal	532.20.12.500	1	D	1	N/A
940.17.02.225	Pin - Cotter (MS24665-132)	940.17.02.225	1	D	1	2
940.17.02.226	Pin - Cotter (MS24665-134)	940.17.02.226	1	D	1	19

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

Modification Kit No. 500.50.12.288 is for one MLG assembly (left or right) and consists these parts:

New Part No.	Description	Old Part No.	Qty	Disp. Code	Fig	Item
532.10.12.078	Axle	532.10.12.078	1	R	2	5
532.10.12.105	Bolt - Towing	532.10.12.105	1	R	2	4
940.17.02.226	Pin - Cotter (MS24665-134)	940.17.02.226	1	D	2	7

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

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Modification Kit No. 500.50.12.289 is for one MLG shock absorber and consists these parts:

New Part No.	Description	Old Part No.	Qty	Disp. Code	Fig	Item
110.70.07.871	Placard	110.70.07.871	1	D	3	4
532.10.12.181	Cylinder Assembly	532.10.12.181	1	R	3	2
532.10.12.182	Cylinder Sleeve Assembly	532.10.12.182	1	R	3	1
532.10.12.500	Kit, Seal	532.10.12.500	1	D	N/A	N/A
942.94.21.112	Placard	110.70.07.870	1	D	3	3

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

(2) Additional Material to be Procured

Not applicable.

(3) Operator Supplied Materials

Part No.	Description	Qty	Remarks
904.48.85.107	Scotch-Brite (Very fine grade)	A/R	Material Item No. P02-016 or approved alternative
907.10.11.232	Sealant (PR1422B-2)	A/R	Material Item No. P08-018
908.40.32.251	Corrosion Preventative (Alodine 1200S)	A/R	Material Item No. P07-001
908.63.81.101	Solvent (White Spirit)	A/R	Material Item No. P10-008 or approved alternative
910.42.72.169	Adhesive (Epoxy EA9395)	A/R	Material Item No. P08-052B (approved alternative to P08-052)
910.42.72.204	Adhesive (Epoxy SW9323)	A/R	Material Item No. P08-052A (approved alternative to P08-052)
910.42.72.205	Adhesive (Epoxy DP490)	A/R	Material Item No. P08-052
919.01.11.104	Lock Wire (MS20995C32)	A/R	Material Item No. P02-001 or approved alternative

D. Material Necessary for Each Spare

(1) Material to be Procured

One Modification Kit No. 500.50.12.287 for each NLG assembly held as spare.

One Modification Kit No. 500.50.12.288 for each MLG assembly (left or right) held as spare.

One Modification Kit No. 500.50.12.289 for each MLG shock absorber held as spare.

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(2) Operator Supplied Material

Ref. Para C. (3).

E. Reidentified Parts

Not applicable.

F. Tooling

Part No.	Description	Remarks
N/A	Freezer (Temp -Minus 75°C or less)	Or approved alternative (approved alternatives are liquid nitrogen in an insulated box or dry ice)
N/A	Oven (Temp - Between 100 and 120°C)	Or approved alternative heating procedure (approved alternatives are an electrical blanket or hot air)

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:
 - NLG
 - Left MLG
 - Left MLG shock absorber
 - Right MLG
 - Right MLG shock absorber

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(2) Obey the instructions given in the following sections (Sects) of this SB if you found serial numbers that started with the letters AM in Step (1):

- Accomplishment Instructions - Aircraft - Part B - NLG
- Accomplishment Instructions - Aircraft - Part C - MLG
- Accomplishment Instructions - Aircraft - Part D - MLG Shock Absorber

You must replace the specified components in all assemblies with serial numbers that start with the letters AM. It is not necessary to replace components 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 of this SB has been incorporated.

4. Accomplishment Instructions - Aircraft - Part B - NLG (Ref. Fig. 1)

WARNING: COMPRESSED GAS IS DANGEROUS. DO NOT POINT THE OUTLET OF A PRESSURIZED GAS SUPPLY OR CONTAINER AT YOURSELF OR OTHER PERSONNEL. THIS CAN CAUSE INJURY.

WARNING: BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS HEALTH AND SAFETY INSTRUCTIONS. THE CHEMICALS IN THE CONSUMABLE MATERIALS ARE POISONOUS AND CAN BE FLAMMABLE.

This procedure is only necessary if the serial number of the NLG starts with the letters AM (Ref. Part A).

A. Preparation

- (1) Do the steps in section 2. Disassembly, C. Preparation (Ref. AMM, 32-20-00, Page Block 801).
- (2) Put a warning sign (DO NOT OPERATE THE LANDING GEAR) in the flight compartment.

B. Disassembly

It is recommended that you record the installed positions of NLG components during the disassembly procedure. This will help you when you assemble the NLG.

NOTE: You need two people to do the following steps.

- (1) Do the steps in section 2. Disassembly/Procedure (Ref. AMM, 32-20-00, Page Block 801). During the disassembly you must hold the steering tube (11) in position.
- (2) Send the removed bolt (36) to PILATUS.
- (3) Remove the taxi light.
 - (a) Remove and discard the locking wire from the bolts (27) and (32).
 - (b) Hold the taxi light (31) in position.
 - (c) Remove the bolts (27) and (32), and washers (26) and (33).

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- (d) Use cable ties or equivalent to attach the taxi light (31) in a position away from the NLG.
- (4) Remove the shimmy damper (Ref. AMM, 32-50-01, Page Block 401).
- (5) Do the related steps to disconnect the rod end assembly (5) (Ref. AMM, 32-20-01, Page Block 401).
- (6) Remove the drive lever assembly and the steering tube.
 - (a) Remove the drive lever assembly (9) with the washer (6).
 - (b) Remove the three cylindrical pins (10).
 - (c) Remove the steering tube (11).
 - (d) Send the removed steering tube (11) to PILATUS.
- (7) Remove the rod end from the drive lever assembly.
 - (a) Remove and discard the cotter pin (2).
 - (b) Remove the pin (1), ring (3) and rod end (5).
 - (c) Send the removed rod end (5) and ring (3) to PILATUS.
- (8) Disassemble the torque links.
 - (a) Obey the manufacturers instructions and use a cloth made moist with the solvent (Material Item No. P10-008 or approved alternative) and the scraper to remove the sealant from the torque links (20) and (25).
 - (b) Remove and discard the cotter pin (19).
 - (c) Remove the nut (18), washer (17), lubrication bolt (22) and spacer (21).
 - (d) Remove the lubrication fittings (14), (24) and (30), and the washers (15), (23) and (29) from the lubrication pins (28) and (16), and the lubrication bolt (22).
 - (e) Send the removed lubrication pins (16) and (28), and lubrication bolt (22) to PILATUS.
- (9) Do the related steps to remove the damper attachment (8) (Ref. AMM, 32-20-01, Page Block 401).
- (10) Send the removed damper attachment (8) to PILATUS.
- (11) Do the related steps to install the new damper attachment (8) (Ref. AMM, 32-20-01, Page Block 401).

C. Cleaning

- (1) Do the related steps in section 3. Cleaning (Ref. AMM, 32-20-00, Page Block 801).

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D. Replacement of the Cylinder Pipe

WARNING: BE CAREFUL WHEN YOU INSTALL THE CYLINDER PIPE IN THE NOSE WHEEL FORK. WEAR APPROVED SAFETY CLOTHING. THE HIGH AND LOW TEMPERATURES NECESSARY DURING THE INSTALLATION OF THESE COMPONENTS CAN CAUSE INJURY.

- (1) Obey the manufacturers instructions and use a cloth made moist with the solvent (Material Item No. P10-008 or approved alternative) and a scraper to remove the sealant. Do this in the areas:
 - Where the cylinder pipe (13) goes into the bore at the top of nose wheel fork (12)
 - At the bottom of the nose wheel fork (12) between the end of the cylinder pipe (13) and the nose wheel fork (12)
- (2) Use a bearing press (or equivalent) to remove the cylinder pipe (13) from its bore in the nose wheel fork (12).
- (3) Send the removed cylinder pipe (13) to PILATUS.
- (4) Use the freezer or an approved alternative (approved alternatives are liquid nitrogen in an insulated box or dry ice) to decrease the temperature of the new cylinder pipe (13) to less than minus 75°C.
- (5) Use an oven or approved alternative (approved alternatives are an electrical blanket or hot air) to increase the temperature of the nose wheel fork (12) to 100°C.
- (6) Quickly push the cylinder pipe (13) in the bore of the nose wheel fork (12) and install the new bolt (36). Make sure that the holes for the new bolt (36) are correctly aligned before the temperature changes and you install the new bolt (36). Remove the new bolt (36).
- (7) Let the temperatures of the cylinder pipe (13) and nose wheel fork (12) become stable (room temperature).
- (8) Obey the manufacturers instructions and apply the layers of surface protection and paint as applicable to the nose wheel fork (12).
- (9) Obey the manufacturers instructions and apply a fillet of the sealant (Material Item No. P08-018). Do this in the areas:
 - Where the cylinder pipe (13) goes into the bore at the top of nose wheel fork (12)
 - At the bottom of the nose wheel fork (12) between the end of the cylinder pipe (13) and the nose wheel fork (12)
- (10) Obey the manufacturers instructions and repair the sealant (Material Item No. P08-018) on the nose wheel fork (12) if necessary. Do this on all of the nose-wheel-fork (12) flanged-bushes.
- (11) Obey the manufacturers instructions and install the markings (34) and (35). Do this at the locations shown on the nose wheel fork (12).

E. Assembly

- (1) Assemble the torque links.
 - (a) Install the lubrication fittings (14), (30) and (24), and the washers (15), (29) and (23) on the new lubrication pins (28) and (16), and new lubrication bolt (22).

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- (b) Install the lubrication bolt (22), spacer (21) and washer (17).
 - (c) Install the nut (18) until:
 - The torque links (25) and (20) can move freely
 - The hole for the cotter pin (19) is aligned
 - The bolt (22) can move axially
 - The bolt (22) can not move more than 0.0039 in (0,1 mm) axially
 - (d) Install the new cotter pin (19).
- (2) Install the rod end on the drive lever assembly.
- (a) Put the new ring (3) in position in D-ring (4).
 - (b) Install the new rod end (5), pin (1) and new cotter pin (2).
- (3) Install the drive lever assembly and the steering tube.
- (a) Install the steering tube (11) in the main fitting (7). Hold the steering tube (11) in position.
 - (b) Put the three cylindrical pins (10) in position.
 - (c) Install the drive lever assembly (9).
- (4) Hold the steering tube (11) in position.
- (5) Connect the rod end assembly (5) (Ref. AMM, 32-20-01, Page Block 401).
- (6) Install the shimmy damper (Ref. AMM, 32-50-01, Page Block 401).
- (7) Install the taxi light.
- (a) Remove the cable ties which were used to hold the taxi light (31).
 - (b) Put the taxi light (31) in position and install the bolts (27) and (32), and the washers (26) and (33).
 - (c) Safety the bolts (27) and (32) with lock wire (Ref. AMM, 20-20-00, Page Block 1).
- (8) Do the steps in section 4. Assembly, D. Procedure (Ref. AMM, 32-20-00, Page Block 801). Use:
- The new NLG seal kit (532.20.12.500)
 - A new bolt (36)
- Torque the new bolt (36) to between 87 and 221 lbf ins (10 and 25 Nm).

F. Landing Gear Adjustment/Test

- (1) Do the steps in section 4. Assembly, E. Close Up (Ref. AMM, 32-20-00, Page Block 801).
- (2) Remove the warning sign (DO NOT OPERATE THE LANDING GEAR) from the flight compartment.


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- (3) Do the adjustment/test of the nose wheel steering (Ref. AMM, 32-50-00, Page Block 501).
- (4) Do the functional test of the extension and retraction of the landing gear (Ref. AMM, 32-30-00, Page Block 501).
- (5) Do the adjustment of the taxi light (31) (Ref. AMM, 33-40-00, Page Block 501).

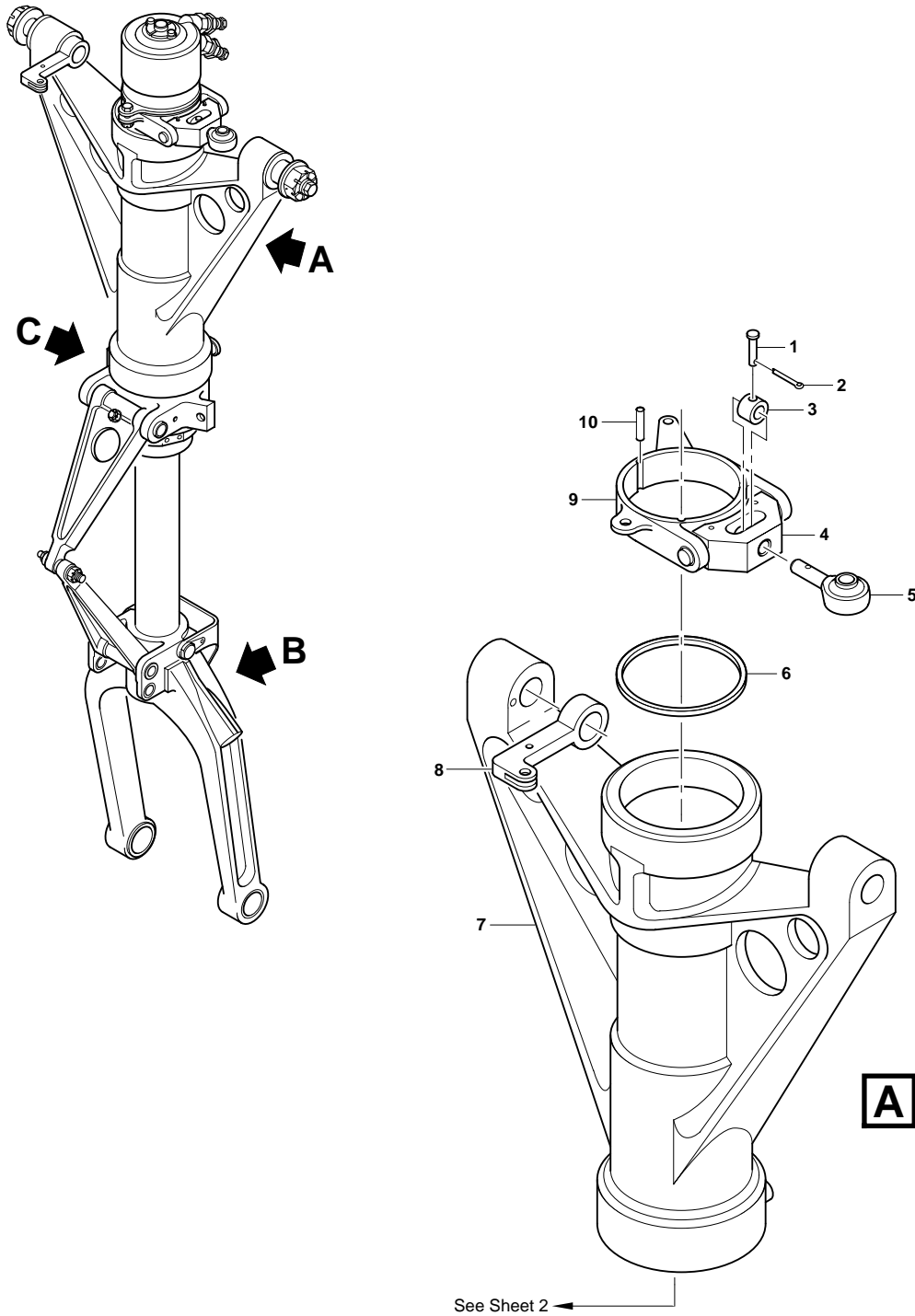
G. Close-up

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

H. Documentation

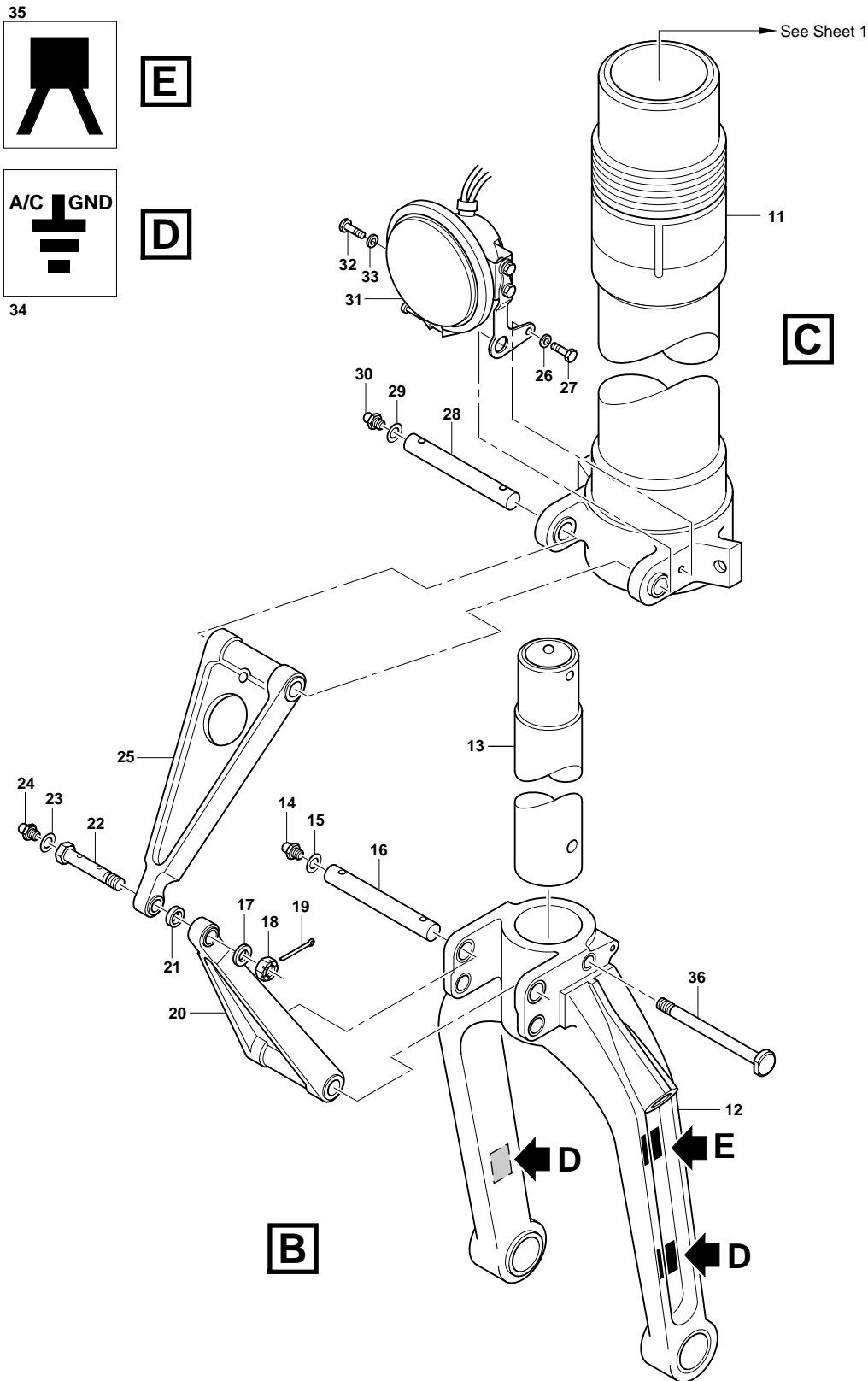
Make an entry in the Aircraft Logbook that Part B of this SB has been incorporated.

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NLG - Replacement of Components
Figure 1 (Sheet 1 of 2)

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NLG - Replacement of Components
Figure 1 (Sheet 2 of 2)

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5. Accomplishment Instructions - Aircraft - Part C (MLG) (Ref. Fig. 2)

WARNING: BE CAREFUL WHEN YOU LIFT THE MLG ASSEMBLY IT IS HEAVY AND THIS CAN CAUSE INJURY. NOT LESS THAN TWO PERSONS ARE NECESSARY TO LIFT OR MOVE THE ASSEMBLY.

WARNING: BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS HEALTH AND SAFETY INSTRUCTIONS. THE CHEMICALS IN THE CONSUMABLE MATERIALS ARE POISONOUS AND CAN BE FLAMMABLE.

This procedure is only necessary if the serial number of the left or right MLG starts with the letters AM (Ref. Part A).

This procedure is given for the left MLG assembly but is also applicable to the right MLG assembly. It is not necessary to remove the MLG assembly when you do this procedure.

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).
- (5) Remove the MLG wheel (Ref. AMM, 32-40-01, Page Block 401).
- (6) Remove the MLG brake assembly (Ref. AMM, 32-40-03, Page Block 401).
- (7) Remove the shock absorber (Ref. AMM, 32-10-03, Page Block 401).
- (8) Disconnect the trailing link from the yoke assembly (Ref. AMM, 32-10-00, Page Block 601).

B. Disassembly

It is recommended that you record the installed positions of MLG components during the disassembly procedure. This will help you when you assemble the MLG.

- (1) Remove the bonded bushes.

NOTE: Removal of the bushes (2) and (9) is necessary because their adhesive bonds will be broken when you apply heat to the trailing link (3).

- (a) Use a hot air blower (or equivalent) to loosen the adhesive bond between the two bushes (2) and (9), and the surfaces in the bores in the trailing link (3).
- (b) Use a bearing press (or equivalent) or drift to remove the bushes (2) and (9).

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- (2) Remove the axle from the trailing link.
 - (a) Obey the manufacturers instructions and use a cloth made moist with the solvent (Material Item No. P10-008 or approved alternative) and a scraper to remove the sealant. Do this from around the inboard end of the axle (5) and where the axle comes out of the trailing link (3).
 - (b) Remove and discard the cotter pin (7).
 - (c) Remove the nut (6), washer (8) and towing bolt (4).
 - (d) Send the towing bolt (4) to PILATUS.
 - (e) Use a bearing press (or equivalent) to remove the axle (5) from its bore in the trailing link (3).
 - (f) Send the axle (5) to PILATUS.

C. Replacement of the Axle

WARNING: BE CAREFUL WHEN YOU INSTALL THE (MAIN WHEEL) AXLE. DURING THE INSTALLATION PROCEDURE, THE AXLE IS VERY COLD AND THE TRAILING LINK IS VERY HOT. WEAR APPROVED SAFETY CLOTHING.

- (1) Install the new axle in the trailing link.
 - (a) Use the freezer or an approved alternative (approved alternatives are liquid nitrogen in an insulated box or dry ice) to decrease the temperature of the axle (5) to -75°C .
 - (b) Use the oven or approved alternative (approved alternatives are an electrical blanket or hot air) to increase the temperature of the trailing link (3) to 100°C .
 - (c) Quickly push the axle (5) in the bore of the trailing link (3). Make sure that the holes for the towing bolt (4) are aligned and install the new towing bolt (4).
 - (d) Let the temperatures of the axle (5) and trailing link (3) become stable (room temperature).
 - (e) Obey the manufacturers instructions and apply the layers of surface protection and paint as applicable to the trailing link (3).
 - (f) Install the washer (8) and nut (6).
 - (g) Torque the nut (6) to between 290 and 410 lbf ins (33 and 46 Nm).
 - (h) Install the new cotter pin (7).
 - (i) Obey the manufacturers instructions and apply fillets of the sealant (Material Item No. P08-018). Do this around the inboard end of the axle (5) and where the axle comes out of the trailing link (3).
 - (j) Obey the manufacturers instructions and repair the sealant (Material Item No. P08-018) on the trailing link (3) if necessary. Do this on bushes where the shock absorber attaches to the trailing link (3).

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D. Installation

- (1) Install the bushes.
 - (a) Obey the manufacturers instructions and use the solvent (Material Item No. P10-008 or approved alternative) and the abrasive material (Material Item No. P02-016 or approved alternative) to clean and polish the surfaces of the bush bores in the trailing link (3).
 - (b) Obey the manufacturers instructions and apply a layer of the corrosion preventative (Material Item No. P07-001) on the surfaces of the bores. You must bond the bushes (2) and (9) in the bores not later than 72 hours after you have applied the corrosion preventative). You must make the surfaces of the bore rough if it is necessary to bond the bush after 72 hours.
 - (c) Use the abrasive material (Material Item No. P02-016 or approved alternative) lightly to make the surfaces of the bore rough. This step is only applicable if you install the bush 72 hours after you applied the corrosion preventative.
 - (d) Obey the manufacturers instructions and use the solvent (Material Item No. P10-008 or approved alternative) to clean the faying surfaces of the bushes (5) and bores.
 - (e) Apply the adhesive.
 - (i) Obey the manufacturers instructions and prepare the adhesive (Material Item No. P08-052 or approved alternative) as applicable.
 - (ii) Apply layers of the adhesive (Material Item No. P08-052 or approved alternative) on the faying surfaces of the bushes (2) and (9) and bores. Make sure that there are no areas of missing adhesive.
 - (f) Install the bushes (2) and (9) in the bores. Obey the manufacturers instructions and use the solvent (Material Item No. P10-008 or approved alternative) to remove unwanted adhesive.
 - (g) Obey the manufacturers instructions and apply a fillet of sealant (Material Item No. P08-018) around the seams at the ends of the bushes (2) and (9) and bores.
- (2) Connect the trailing link (3) to the yoke assembly (1) (Ref. AMM, 32-10-00, Page Block 601).
- (3) Install the shock absorber (Ref. AMM, 32-10-03, Page Block 401).
- (4) Install the MLG brake assembly (Ref. AMM, 32-40-03, Page Block 401).
- (5) Install the MLG wheel (Ref. AMM, 32-40-01, Page Block 401).
- (6) Do the landing gear servicing applicable to the MLG (Ref. AMM, 12-20-04, Page Block 301).

E. Landing Gear Adjustment/Test

- (1) Remove the warning sign (DO NOT OPERATE THE LANDING GEAR) from the flight compartment.


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- (2) Close the circuit breaker:

HYDR CTL (NON ESSENTIAL BUS)

- (3) Do the functional test of the extension and retraction of the landing gear (Ref. AMM, 32-30-00, Page Block 501).
- (4) Remove the shoring equipment (Ref. AMM, 07-20-00, Page Block 201) and lower the aircraft to the ground (Ref. AMM, 07-10-00, Page Block 201).

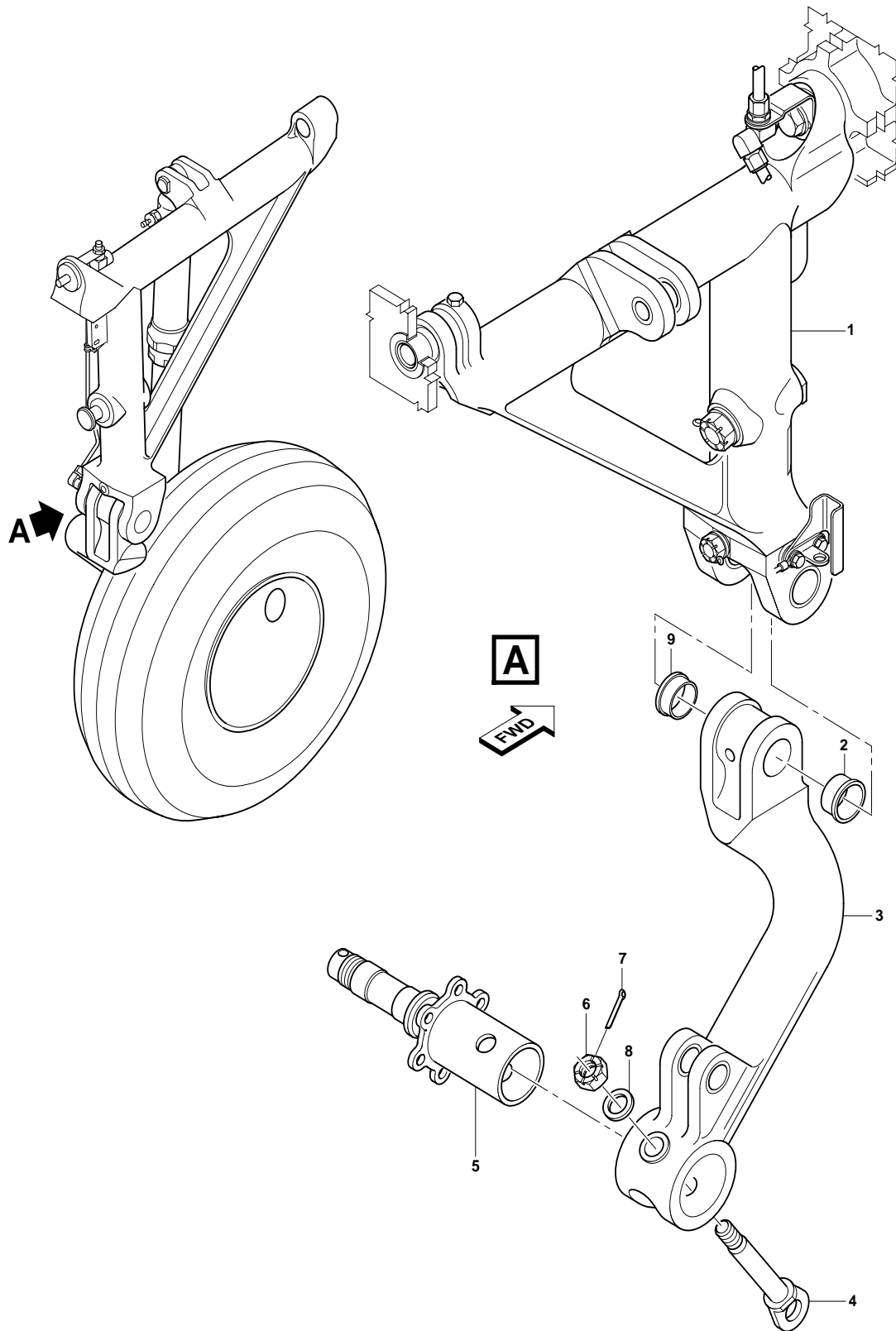
F. Close-up

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

G. Documentation

Make an entry in the Aircraft Logbook that Part C of this SB has been incorporated.

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MLG - Replacement of Components
Figure 2

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6. Accomplishment Instructions - Aircraft Part D - MLG Shock Absorber (Ref. Fig. 3)

WARNING: COMPRESSED GAS IS DANGEROUS. DO NOT POINT THE OUTLET OF A PRESSURIZED GAS SUPPLY OR CONTAINER AT YOURSELF OR OTHER PERSONNEL. THIS CAN CAUSE INJURY.

WARNING: BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS HEALTH AND SAFETY INSTRUCTIONS. THE CHEMICALS IN THE CONSUMABLE MATERIALS ARE POISONOUS AND CAN BE FLAMMABLE.

This procedure is only necessary if the serial number of the left or right MLG shock absorber starts with the letters AM (Ref. Part A).

This procedure is given for the left MLG shock absorber but is also applicable to the right MLG shock absorber.

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).
- (5) Remove the shock absorber (Ref. AMM, 32-10-03, Page Block 401) and install in the support stand.
- (6) Record the data that is shown on the placard (3).

B. Disassembly

It is recommended that you record the installed positions of shock absorber components during the disassembly procedure. This will help you when you assemble the shock absorber.

- (1) Disassemble the MLG shock absorber (Ref. AMM, 32-10-00, Page Block 801).
- (2) Send the cylinder (2) and cylinder sleeve (1) to PILATUS.

C. Assembly

- (1) Assemble the MLG shock absorber (Ref. AMM, 32-10-00, Page Block 801). Use the new seal kit (532.10.12.500).
- (2) Obey the manufacturers instructions and install the new placards (3) and (4) at the locations shown on the cylinder sleeve (1).
- (3) Use letter stamps to make a copy of the data recorded in Para A, Step (6) on the new placard (3). Record the date of assembly in the date box of the placard.
- (4) Install the shock absorber (Ref. AMM, 32-10-03, Page Block 401).

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- (5) Do the landing gear servicing applicable to the MLG (Ref. AMM, 12-20-04, Page Block 301).

D. Landing Gear Adjustment/Test

- (1) Remove the warning sign (DO NOT OPERATE THE LANDING GEAR) From the flight compartment.
- (2) Close the circuit breaker:
- HYDR CTL (NON ESSENTIAL BUS)
- (3) Remove the shoring equipment (Ref. AMM, 07-20-00, Page Block 201) and lower the aircraft to the ground (Ref. AMM, 07-10-00, Page Block 201).

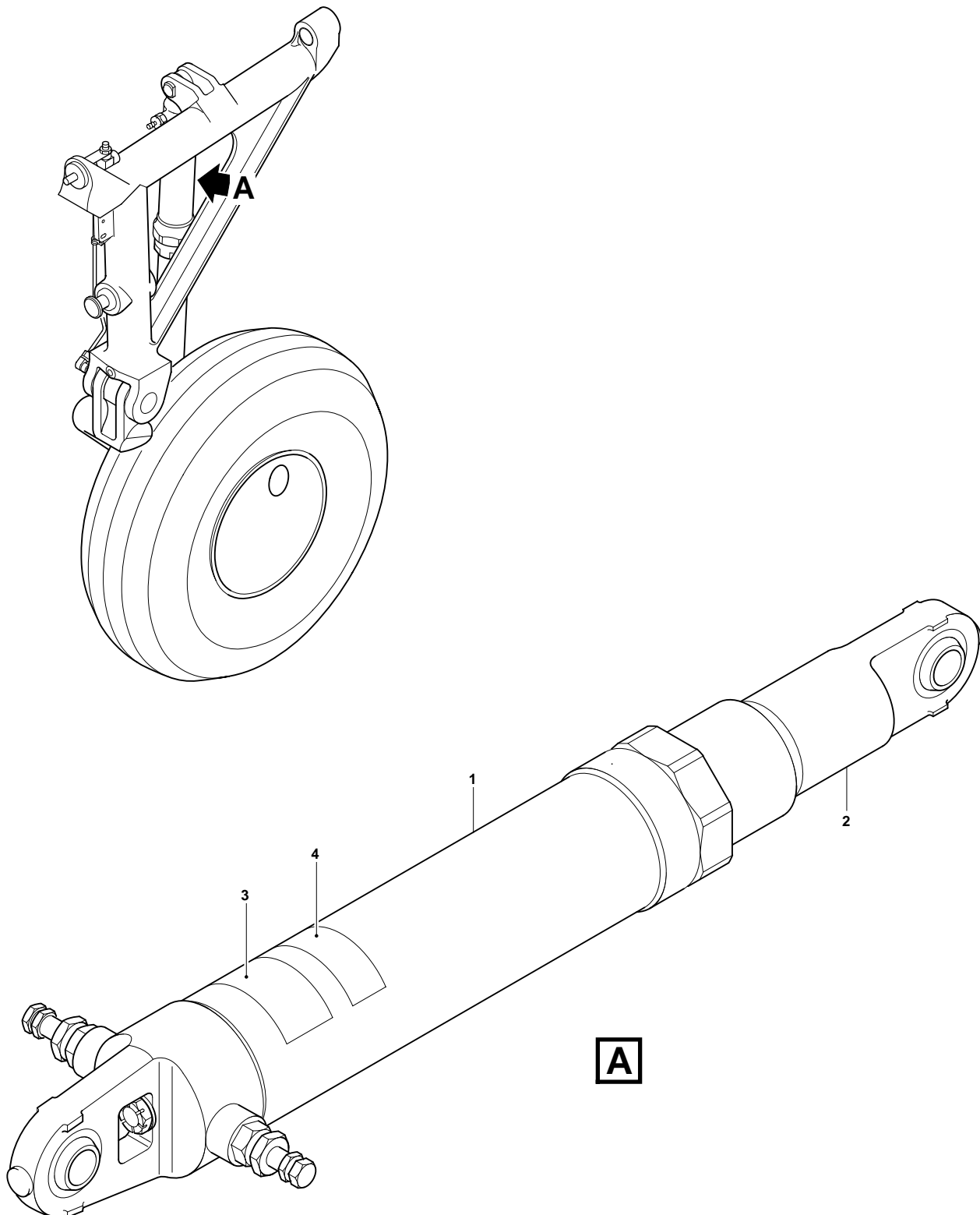
E. Close-up

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

F. Documentation

Make an entry in the Aircraft Logbook that Part D of this SB has been incorporated.

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MLG Shock Absorber - Replacement of Components
Figure 3

SB 1376

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7. Accomplishment Instructions - Spares

A. Part A - Check

Do the Accomplishment Instructions - Aircraft - Part A - Check on all NLG, MLG and MLG Shock strut assemblies held as spare (Ref. Sect 3).

B. Part B- NLG

Do the Accomplishment Instructions - Aircraft - Part B - NLG on all NLG assemblies held as spare which have serial numbers that start with the letters AM (Ref. Sect 4).

C. Part C- MLG

Do the Accomplishment Instructions - Aircraft - Part C - MLG on all MLG assemblies held as spare which have serial numbers that start with the letters AM (Ref. Sect 5).

D. Part D - MLG Shock Absorber

Do the Accomplishment Instructions - Aircraft - Part D - MLG Shock Absorber on all MLG shock absorber assemblies held as spare which have serial numbers that start with the letters AM (Ref. Sect 6).

E. Documentation

Make an entry in the spare parts inventory list that this modification has been incorporated.