PILATUS AIRCRAFT LTD. CH-6371 STANS, SWITZERLAND

SERVICE BULLETIN

SERVICE BULLETIN NO: 32-001 REF NO: 191

MODIFICATION NO: EC-06-0104 ATA CHAPTER: 32

LANDING GEAR
LOCKING PLATE ATTACHMENT SCREW - REPLACEMENT

1. Planning Information

A. Effectivity

All PC-6 Series aircraft.

All locking lever assemblies (P/N 6403.0094.00 or 114.45.06.077) held as spare or in stores.

All tail landing gear assemblies (P/N 6403.0067.xx or 114.45.06.050) held as spare or in stores.

B. Concurrent Requirements

None

C. Reason

(1) Problem

A recent incident on a PC-6 highlighted a potential problem with the locking mechanism installed on the tail landing gear.

(2) Cause

The tail wheel has a locking mechanism that:

- When locked, keeps the tail wheel in line with the center-line of the fuselage, for take off and landing
- When unlocked, is linked to the rudder system to permit steering, when taxying.

On the aircraft which had the incident, the pilot had selected “wheel locked” for the landing, but the attachment screws of part of the mechanism had sheared and the locking plate had become detached, thus preventing the tail wheel locking.

(3) Solution

(a) Replace the screws which attach the locking plate (P/N 6403.0095.01 or P/N 114.45.06.080) to the locking lever (P/N 6403.0094.00 or 114.45.06.077) with steel screws (P/N 933.11.31.046).

(b) Install the “UNLOCK TAIL GEAR BEFORE TOWING” placard.

D. Description

This Service Bulletin gives the data and instructions necessary to replace the locking-plate attachment screws with steel screws (P/N 933.11.31.046) and install the placard.

E. Compliance

Mandatory.

Required within the next 100 hours after receipt of this Service Bulletin, unless already accomplished.

F. Approval

The technical aspects of this Service Bulletin 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 Service Bulletin.

G. Manpower

	Total
Preparation	0.50
Rework of the locking plate (if necessary)	1.00
Replacement of the screws	0.75
Installation of the placard	0.25
Close up	0.50
TOTAL MAN-HOURS	**3.00**

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

Repair and Overhaul Manual (ROM), Chapter 2, Chapter 12.

L. Interchangeability of Parts

Pre and Post-Service Bulletin 32-001 items are not interchangeable.

2. Material Information

A. Material - Price and Availability

Operators should send orders for Service Bulletin modification kits, to:

PILATUS AIRCRAFT LTD,
CUSTOMER LIAISON MANAGER,
CH 6371 STANS, Tel: +41 41 619 65 80
SWITZERLAND Fax:+41 41 619 6576

NOTE: 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.

Modification Kit Number	Price *	Availability *
100.50.06.120	Contact address above	Contact address above

B. Material Necessary for Each Aircraft

(1) Material to be Purchased

Part Numbers, given in this Service Bulletin, are correct at the time of approval. PILATUS AIRCRAFT LTD. reserves the right to change part numbers as necessary.

Part number of items, delivered with the Modification Kit, are correct when the kit is dispatched which could lead to differences between those quoted in this Service Bulletin and the Modification Kit.

Modification Kit No. 100.50.06.120 consists of these parts:

New Part No.	Description	Qty	Fig	Item
933.11.31.046	Screw	2	1	2
938.07.31.105	Nut	2	1	1
110.71.06.675	Placard	1	1	4

(2) Operator Supplied Materials

Material No.	Description	Qty
P01-009	Solvent	A/R
P02-003	Cloth	A/R

C. Material Necessary for Each Spare

(1) Material to be Purchased

(a) For the locking lever assemblies (P/N 6403.0094.00 or 114.45.06.077)

New Part No.	Description	Qty	Fig	Item
933.11.31.046	Screw	2	1	2
938.07.31.105	Nut	2	1	1

(b) For the tail landing gear assemblies (P/N 6403.0067.xx or 114.45.06.050), Modification Kit No. 100.50.06.120, which consists of these parts:

New Part No.	Description	Qty	Fig	Item
933.11.31.046	Screw	2	1	2
938.07.31.105	Nut	2	1	1
110.71.06.675	Placard	1	1	4

3. Accomplishment Instructions - Aircraft

A. Preparation

(1) Make sure the tail wheel is in the center position.

(2) Move the tail-wheel handle, located on the left side of the pilots seat, to the LOCKED position.

(3) Apply the park brake and put the wheel chocks in position.

B. Replacement of the Screws (Ref. Fig. 1)

(1) Hold the screws (2) and remove the nuts (1). Discard the nuts (1).

(2) Remove the screws (2) and the locking plate (3). Discard the screws (2).

(3) Do a check of the locking plate (3):

Either:

(a) Make sure the holes in the locking plate (3) are 5 mm (0.197 in.) diameter. If necessary, use a 5 mm (0.197 in.) diameter drill to make the holes bigger (Ref. Repair and Overhaul Manual, Chapter 2).

(b) Make sure the countersink for the holes in the locking plate (3) is 90 degrees. If necessary, use the correct countersink tool to make the 90 degree countersink in each hole (Ref. Repair and Overhaul Manual, Chapter 2).

(c) Apply the necessary surface finish (Ref. Repair and Overhaul Manual, Chapter 12)

or:

(d) Buy a new locking plate (P/N 114.45.06.080) (3) from Pilatus.

(4) Put the locking plate (3) in position and install the new screws (P/N 933.11.31.046) (2) and the new nuts (P/N 938.07.31.105) (1).

(5) Move the tail-wheel handle to the STEER position and make sure the screws (2) do not touch the bearing plate when the tail wheel is moved. If the screw (2) touch the bearing plate, shorten the screws (2) as necessary.

C. Installation of the Placard (Ref. Fig. 1)

(1) Use the cloth (Material No. P02-003) made moist with the solvent (Material No. P01-002) and clean the area where the placard (P/N 110.71.06.675) (4) will be installed.

(2) Remove the backing paper and bond the placard (P/N 110.71.06.675) (4) in the position shown in Detail C.

NOTE: Pilatus has no objection if the operator wants to paint the same words that are on the placard (4) directly onto the mudguard.

D. Close up

(1) Lower the aircraft and remove the tail stand or jack (Ref. AMM 07-10-00, Page Block 201).

(2) Make sure the work area is clean and clear of tools and other items.

E. Documentation

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

(2) Use the Service Bulletin Evaluation Sheet to report your results and the serial number of the modified aircraft to PILATUS.

4. Accomplishment Instructions - Spares

A. For the locking lever assemblies (P/N 6403.0094.00 or 114.45.06.077)

(1) Replacement of the Screws (Ref. Fig. 1)

(a) Hold the screws (2) and remove the nuts (1). Discard the nuts (1).

(b) Remove the screws (2) and the locking plate (3). Discard the screws (2).

(c) Do a check of the locking plate (3):

Either:

1 Make sure the holes in the locking plate (3) are 5 mm (0.197 in.) diameter. If necessary, use a 5 mm (0.197 in.) diameter drill to make the holes bigger (Ref. Repair and Overhaul Manual, Chapter 2).

2 Make sure the countersink for the holes in the locking plate (3) is 90 degrees. If necessary, use the correct countersink tool to make the 90 degree countersink in each hole (Ref. Repair and Overhaul Manual, Chapter 2).

3 Apply the necessary surface finish (Ref. Repair and Overhaul Manual, Chapter 12)

or:

4 Buy a new locking plate (P/N 114.45.06.080) (3) from Pilatus.

(d) Put the locking plate (3) in position and install the new screws (P/N 933.11.31.046) (2) and the new nuts (P/N 938.07.31.105) (1).

B. For the tail landing gear assemblies (P/N 6403.0067.xx or 114.45.06.050)

(1) Replacement of the Screws (Ref. Fig. 1)

(a) Hold the screws (2) and remove the nuts (1). Discard the nuts (1).

(b) Remove the screws (2) and the locking plate (3). Discard the screws (2).

(c) Do a check of the locking plate (3):

Either:

1 Make sure the holes in the locking plate (3) are 5 mm (0.197 in.) diameter. If necessary, use a 5 mm (0.197 in.) diameter drill to make the holes bigger (Ref. Repair and Overhaul Manual, Chapter 2).

2 Make sure the countersink for the holes in the locking plate (3) is 90 degrees. If necessary, use the correct countersink tool to make the 90 degree countersink in each hole (Ref. Repair and Overhaul Manual, Chapter 2).

3 Apply the necessary surface finish (Ref. Repair and Overhaul Manual, Chapter 12)

or:

4 Buy a new locking plate (P/N 114.45.06.080) (3) from Pilatus.

(d) Put the locking plate (3) in position and install the new screws (P/N 933.11.31.046) (2) and the new nuts (P/N 938.07.31.105) (1).

(e) Unlock the tail wheel and make sure the screws (2) do not touch the bearing plate when the tail wheel is moved. If the screw (2) touch the bearing plate, shorten the screws (2) as necessary.

(2) Installation of the Placard (Ref. Fig. 1)

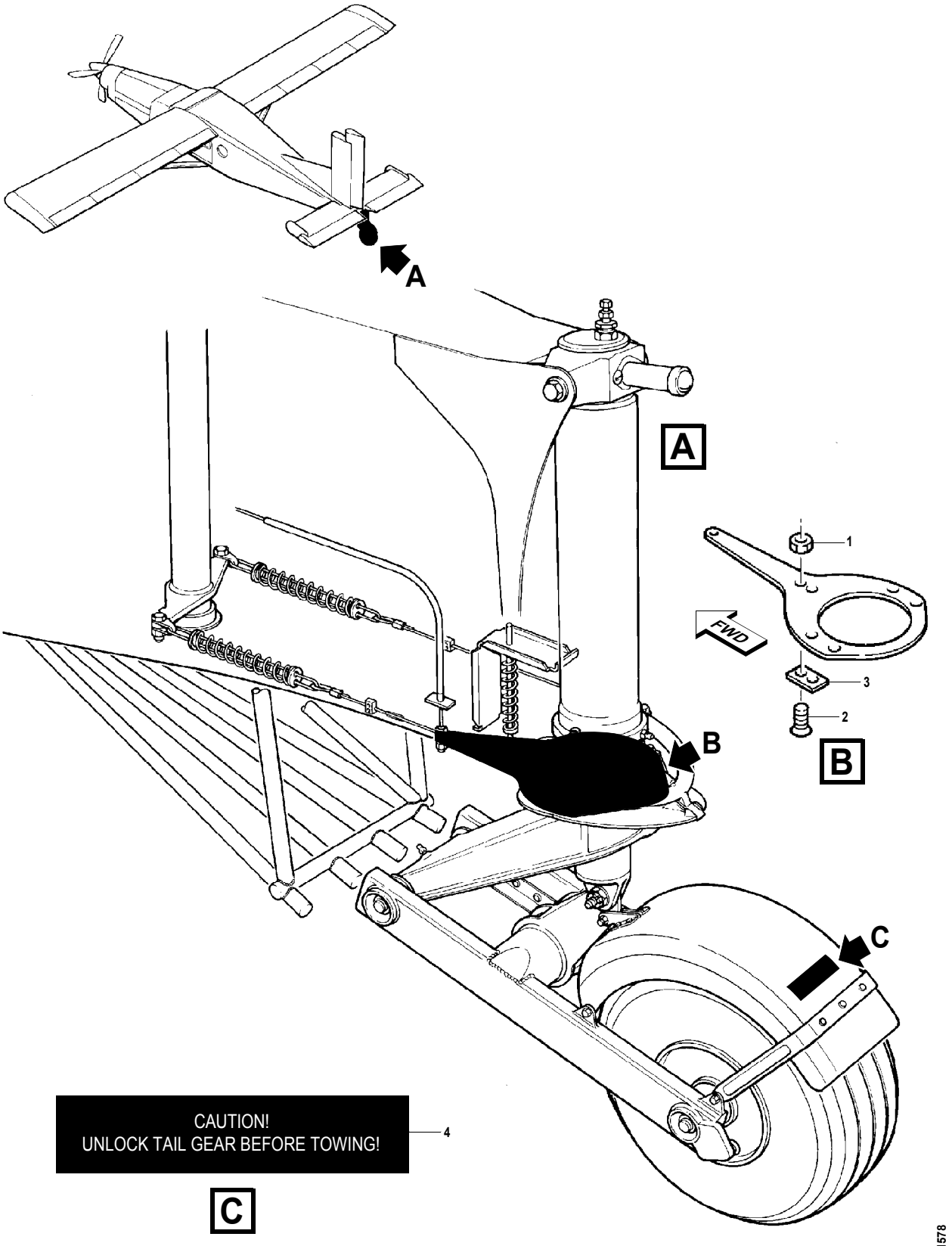
(a) Use the cloth (Material No. P02-003) made moist with the solvent (Material No. P01-002) and clean the area where the placard (P/N 110.71.06.675) (4) will be installed.

(b) Remove the backing paper and bond the placard (P/N 110.71.06.675) (4) in the position shown in Detail C.

NOTE: Pilatus has no objection if the operator wants to paint the same words that are on the placard (4) directly onto the mudguard.

C. Documentation

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



Replacement of the Locking-Plate Attachment Screws and Installation of the Placard
Figure 1