
SERVICE BULLETIN

N° 189-282

DATE: May 29, 2023

REV. : /

TITLE

ATA 32 – MAIN LANDING GEAR PINTLE PIN NEW BOLTS INSTALLATION

REVISION LOG

First Issue

An appropriate entry should be made in the aircraft log book upon accomplishment.
If ownership of aircraft has changed, please, forward to new owner.

1. PLANNING INFORMATION

A. EFFECTIVITY

All AW189 helicopters from S/N 49007 thru S/N 49089 (S/N's 49024, 49036, 49040, 49041 excluded), S/N 49102, from S/N 89001 thru S/N 89013 (S/N's 89005 and 89006 excluded) and from S/N 92001 to S/N 92010.

B. COMPLIANCE

Within 1 year or at first scheduled maintenance check (AMPI task 32-02) whichever occurs first after the issue of this Service Bulletin.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide the necessary instruction on how to perform the "MLG bolt trailing arm retromod" P/N 8G3210P00211.

E. DESCRIPTION

Leonardo Helicopters, after reports of excessive wear and damages to the safety bolt that secure the MLG internal pintle pins, developed a new design for this installation in order to prevent further occurrences.

This Service Bulletin provides the instruction to apply the "MLG bolt trailing arm retromod" P/N 8G3210P00211 in order to replace the safety bolt P/N AN3-34 of the pintle pin installation on MLG LH and RH with the new higher strength characteristics bolt P/N 8G3210A00551 and new related nut, washers and cotter pin.

F. APPROVAL

The technical content of this Service Bulletin is approved under the authority of DOA nr. EASA.21.J.005. For helicopters registered under other Aviation Authorities, before applying the Service Bulletin, applicable Aviation Authority approval must be checked within Leonardo Helicopters customer portal.

EASA states mandatory compliance with inspections, modifications or technical directives and related time of compliance by means of relevant Airworthiness Directives. If an aircraft listed in the effectivity embodies a modification or repair not LHD certified and affecting the content of this Service Bulletin, it is responsibility of the Owner/Operator to obtain a formal approval by Aviation Authority having jurisdiction on

the aircraft, for any adaptation necessary before incorporation of the present Service Bulletin.

G. MANPOWER

To comply with this Service Bulletin three (3) MMH are deemed necessary. MMH are based on hands-on time and can change with personnel and facilities available.

H. WEIGHT AND BALANCE

N.A.

I. REFERENCES

1) PUBLICATIONS

Following Data Modules refer to AMP:

<u>DATA MODULE</u>	<u>DESCRIPTION</u>	<u>PART</u>
DM01 89-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance.	-
DM02 89-A-32-11-01-00A-520A-A	Left main landing gear - Remove procedure	-
DM03 89-A-32-11-01-00A-720A-A	Left main landing gear - Install procedure	-
DM04 89-A-32-12-01-00A-520A-A	Right main landing gear - Remove procedure	-
DM05 89-A-32-12-01-00A-720A-A	Right main landing gear - Install procedure	-

2) ACRONYMS & ABBREVIATIONS

AMP	Aircraft Maintenance Publication
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
LH	Leonardo Helicopters
MLG	Main Landing Gear
MMH	Maintenance Man Hours
P/N	Part Number
VP	Vital Point

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

AW189 Illustrated Part Data (IPD).

AW189 Aircraft Maintenance Publication (AMP).

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

1) PARTS

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	8G3210P00211		MLG BOLT TRAILING ARM RETROMOD	REF	.	-	-
2	8G3210A00551		Bolt	2	..	-	189-282L1
3	MS21225-4		Nut	REF	..	-	189-282L1
4	MS20002C4		Washer	2	..	-	189-282L1
5	MS24665-248		Cotter pin	2	..	-	189-282L1
6	NAS1149C0463R		Washer	2	..	(1)	189-282L1
7	NAS75-4-005		Sleeve	2	..		189-282L1

2) CONSUMABLES

The following consumable materials, or equivalent, are necessary to accomplish this Service Bulletin:

#	SPEC./LHD CODE NUMBER	DESCRIPTION	Q.TY	NOTE	PART
8	-	ARDROX AV 40 (C551)	AR	(2)	-
9	MIL-PRF-16173	Rust-Guard (C661)	AR	(2)	-
10	DTD 900AA/4488A	Anti-corrosion compound JC5A (C001)	AR	(2)	-
11	BMS3-38	Cor-Ban 27L (C075)	AR	(2)	-
12	-	Anti-corrosion compound CA1000 (C457)	AR	(2)	-

3) LOGISTIC MATRIX

In order to apply this Service Bulletin, the following Logistic P/N can be ordered in accordance with the applicable notes:

LOGISTIC P/N	Q.TY (PER HELO)	NOTE	PART
189-282L1	1	-	-

NOTE

- (1) It is allowed to install in addition or replacement one or more washers P/N NAS1149C0432R, P/N NAS1149C0463R and P/N NAS1149C0416R.
- (2) Item to be procured as local supply.

B. SPECIAL TOOLS

N.A.

C. INDUSTRY SUPPORT INFORMATION

Owners/Operators who comply with the instructions of this Service Bulletin no later than the applicable date in the "Compliance" section will be eligible to receive REQUIRED MATERIALS on free of charge basis, except for Consumable Materials and Special Tools.

NOTE: Customers who fail to comply with the instructions in this Service Bulletin before the compliance date are not eligible for the aforementioned special policy.

Please Issue relevant MMIR form to your Warranty Administration Dpt.

3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

- a) Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the modification area and adequately protect them until their later re-use.
 - b) Carry out duplicate inspections to check correct installation, safety, security, final torque and locking on vital point parts.
 - c) Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.
1. In accordance with AMP DM 89-A-00-20-00-00A-120A-A prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
 2. In accordance with AMP DM 89-A-00-20-00-00A-120A-A and with reference to Figure 1, gain access to the area affected and perform the “MLG bolt trailing arm retromod” P/N 8G3210P00211 as described in the following procedure:

NOTE

It is not required to lift the helicopter on jacks.

- 2.1 With reference to Figure 1 view A and in accordance with the applicable steps of AMP DM 89-A-32-11-01-00A-520A-A, remove the cotter pin P/N MS24665-248, the nut P/N MS21225-4 and the bolt P/N AN3-34 from the LH MLG. Discard the bolt P/N AN3-34 and keep nut P/N MS21225-4 for further use.
- 2.2 With reference to Figure 1 view A and in accordance with AMP DM 89-A-32-11-01-00A-720A-A, perform the following procedure:
 - 2.2.1 With reference to Figure 1, apply the corrosion preventive compound Cor-ban 27L (C075) or the corrosion inhibitive compound CA1000 (C457) or the corrosion preventive compound JC5A (C001) under the head of the bolt P/N 8G3210A00551.

NOTE

- In order to obtain the optimum grip length and a correct pin installation it is permitted not to install the washer P/N NAS1149C0463R under the nut P/N MS21225-4.
- It is also allowed to install, in addition or replacement under the existing washer, one or more washer P/N NAS1149C0432R, washer P/N NAS1149C0463R and washer P/N NAS1149C0416R.

- 2.2.2 With reference to Figure 1 view A, install the bolt P/N 8G3210A00551, the sleeve P/N NAS75-4-005, the washer P/N MS20002C4, the washer P/N NAS1149C0463R and the existing nut P/N MS21225-4 that attach the internal pin to the structure.
- 2.2.3 With reference to Figure 1 view A, tighten the nut P/N MS21225-4 to 5.65 thru 7.91 Nm (50 thru 70 lbf in). Install the new cotter pin P/N MS24665-248.
- 2.2.4 With reference to Figure 1 view A, apply the corrosion inhibitor Ardrox Av40 (C551) or corrosion inhibitor (C661) to the exposed surface of the hardware previously installed.
- 2.3 With reference to Figure 1 view A and in accordance with the applicable steps of AMP DM 89-A-32-12-01-00A-520A-A, remove the cotter pin P/N MS24665-248, the nut P/N MS21225-4 and the bolt P/N AN3-34 from the RH MLG. Discard the bolt P/N AN3-34 and keep nut P/N MS21225-4 for further use
- 2.4 With reference to Figure 1 view A and in accordance with AMP DM 89-A-32-12-01-00A-720A-A, repeat Step 2.2 for the RH MLG.
3. Return the helicopter to flight configuration and record for compliance with this Service Bulletin on the helicopter logbook.
4. Gain access to My Communications section on Leonardo WebPortal and compile the "Service Bulletin Application Communication".

As an alternative, send the attached compliance form to the following mail box:

engineering.support.lhd@leonardo.com

and (for North, Central and South America) also to:

AWPC.Engineering.Support@leonardocompany.us

MLG BOLT TRAILING ARM RETROMOD
8G3210P00211

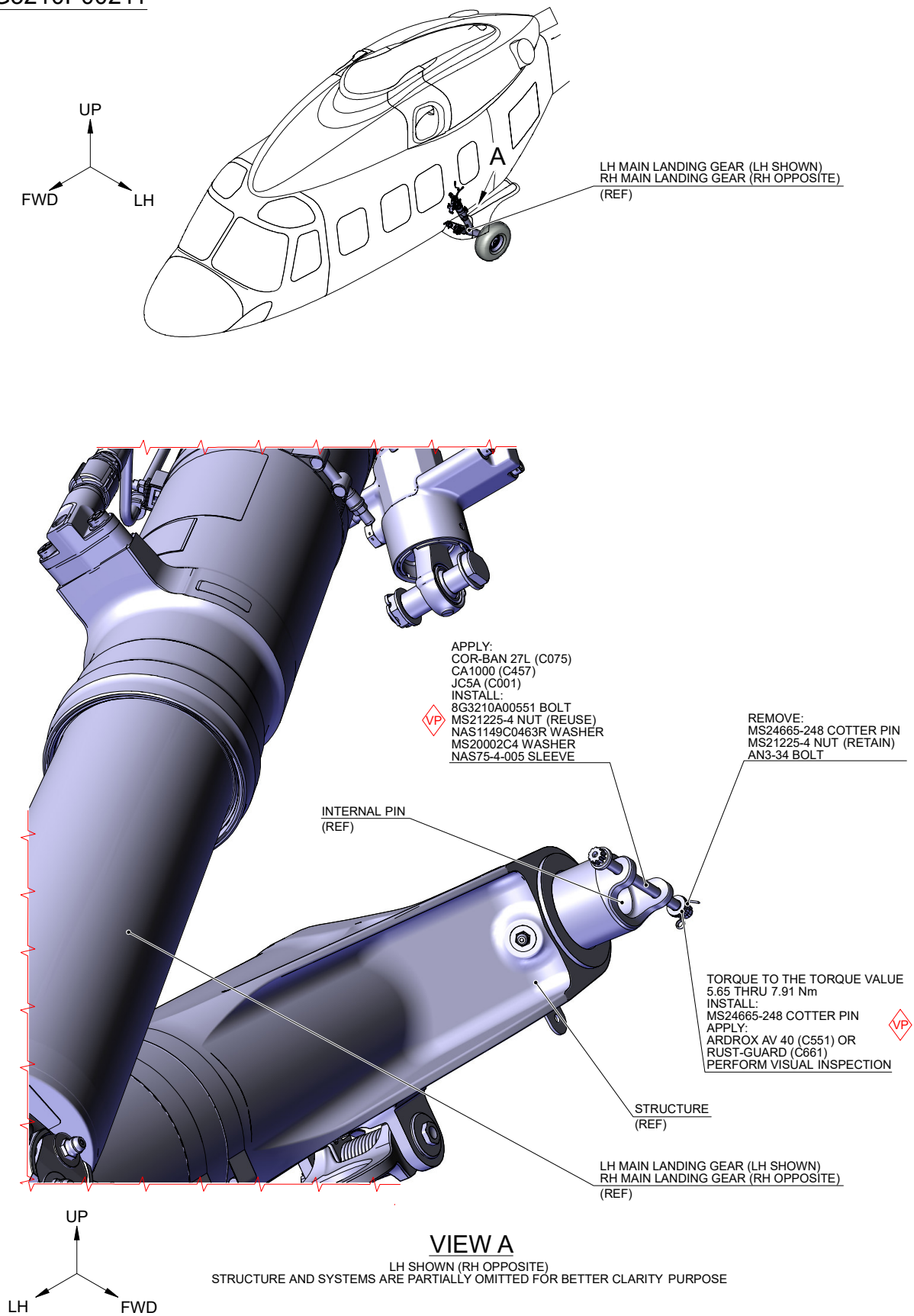


Figure 1

