
SERVICE BULLETIN

N° **109EP-174**

ALERT

DATE: January 20, 2021

REV. : /

TITLE

**ATA 65 - REPLACEMENT OF TAIL ROTOR GEARBOX ASSY, 90-DEGREE
P/N 109-0440-01-115**

REVISION LOG

New 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 the Leonardo S.p.a A109E helicopters up to S/N 11160 currently equipped with tail rotor gearbox assy, 90-degree P/N 109-0440-01-115.

B. COMPLIANCE

- Helicopters that install a TGB P/N 109-0440-01-115 with less than 10000 FH since new and less than 3000 FH since new / last overhaul (whichever occurs last): within 50 FH or 6 months, whichever occurs first after the issuance of this SB, not exceeding the total amount of 3025 FH since new / last overhaul (whichever occur last), or 10025 FH since new.
- Helicopters that install a TGB P/N 109-0440-01-115 with 10000 FH or more since new or 3000 FH or more since new / last overhaul (whichever occurs last): within 25 FH or 3 months, whichever occurs first after the effective date of this SB.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide the necessary instruction to replace the tail rotor gearbox assy, 90-degree P/N 109-0440-01-115.

E. DESCRIPTION

During the revision process of the A109E Technical Publications, it has been noticed that the 90-Degree Gearbox P/N 109-0440-01-115 is included in the Illustrated Parts Catalogue (A109E-IPC) up to S/N 11160 and declared fully interchangeable with P/N 109-0440-01-119 or P/N 109-0440-01-121. The Tail Rotor Gearbox assy, 90-Degree P/N 109-0440-01-115 is not certified for the installation on the A109E model and consequently no overhaul limits are published in A109E AMPI Chapter 5.

It shall be noticed that the differences among Tail Rotor Gearbox assy, 90-Degree P/N 109-0440-01-115, 109-0440-01-119 and 109-0440-01-121 do not represent a concern for the operations. In order to ensure alignment with the Type Design data, LH decided to issue this SB to remove the 90-Degree Gearbox P/N 109-0440-01-115 that could have been installed as a replacement part of the original P/N 109-0440-01-119 from service and replace it with an applicable P/N (i.e. 109-0440-01-119, 109-0440-01-121

or 109-0440-01-123; the last P/N has been recently added as a new alternative part number).

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 12 (twelve) 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

<u>SECTION/PARAGRAPH</u>	<u>DESCRIPTION</u>	<u>PART</u>
DM01 00-20-1	Helicopter safety	-
DM02 65-21-6	90-degree gearbox removal/installation	-

2) ACRONYMS

DOA	Design Organization Approval
EASA	European Aviation Safety Agency
IETP	Interactive Electronic Technical Publications
IPC	Illustrated Parts Catalog
LHD	Leonardo Helicopters Division

MM	Maintenance Manual
MMH	Maintenance Man Hours
P/N	Part Number
PTUM	Pictorial Tools Usage Manual
TGB	Tail Gearbox

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

A109E IPC Up to S/N 11600 – Illustrated Parts Catalog Up to S/N 11600

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	109-0440-01-119	109-0440-01-121 or 109-0440-01-123	Tail rotor gearbox assy, 90-degree	1	.	-	-

Refer also to IPC for the spares materials required to comply with the MM Paragraphs referenced in the accomplishment instructions.

2) CONSUMABLES

Refer also to AMDI for the consumable materials required to comply with the MM Paragraphs referenced in the accomplishment instructions.

3) LOGISTIC MATRIX

N.A.

B. SPECIAL TOOLS

Refer also to PTUM for the special tools required to comply with the MM Paragraphs referenced in the accomplishment instructions.

C. INDUSTRY SUPPORT INFORMATION

WARRANTY: 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.

1. In accordance with MM Paragraph 00-20-1, prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.

NOTE

The removed -115 gearbox can be reused on eligible helicopters providing that an overhaul has been accomplished.

2. In accordance with MM Paragraph 65-21-6 remove from the helicopter the tail rotor gearbox assy, 90-degree P/N 109-0440-01-115.
3. In accordance with MM Paragraph 65-21-6 install on the helicopter the tail rotor gearbox assy, 90-degree P/N 109-0440-01-119 or 109-0440-01-121 or 109-0440-01-123.
4. Return the helicopter to a ready to flight condition and record for compliance with this Service Bulletin on the helicopter logbook.
5. Send the attached compliance form to the following mail box:

engineering.support.lhd@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the "Service Bulletin Application Communication".

