
SERVICE BULLETIN

N° **189-388**

EMERGENCY ALERT

DATE: December 22, 2023

REV. : /

TITLE

ATA 64 – TAIL ROTOR DAMPER REPLACEMENT

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

Part I

All TR damper P/N 4F6420V00254 and S/N listed in the table below, only in case two or more affected damper is installed on the same helicopter.

Part II

All TR damper P/N 4F6420V00254 and S/N listed in the table below, only in case one affected damper is installed on the same helicopter.

| P/N | S/N |
|--------------|---------|
| 4F6420V00254 | LK0454R |
| | LK0968R |
| | LK1009R |
| | LK1478 |
| | LK1479 |
| | LK1493 |
| | LK1509 |
| | LK1519 |
| | LK1525 |
| | LK1530 |
| | LK1534 |
| | LK1536 |
| | LK1537 |
| LK1539 | |

B. COMPLIANCE

Part I

Before next flight.

Part II

Within 100 FH, or 6 months, whichever occurs first.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

Leonardo Helicopters received a Quality Alert about TR damper P/N 4F6420V00254 regarding a bonding issue between the elastomer and the metal component that could result in loss of oil and damping.

If more than one affected damper is installed on the same tail rotor, the simultaneous loss of oil could result in insufficient TR damping leading to possible ground resonance scenario.

In order to prevent a possible unsafe condition, Leonardo Helicopters released this Service Bulletin in order to replace the affected dampers.

Part I is applicable to helicopters equipped with two or more affected dampers to replace immediately all the dampers in excess of one.

Part II of this Service Bulletin is applicable to helicopters equipped with only one affected damper.

E. DESCRIPTION

This SB is composed by two parts. Part I gives instruction to replace the affected dampers on helicopters equipped with two or more of them.

Part II gives instructions to replace the affected dampers on helicopter equipped with one of them.

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, the following MMH are deemed necessary.

Part I: approximately three (3) MMH;

Part II: approximately three (3) MMH;

MMH are based on hands-on time and can change with helicopter configuration, personnel and facilities available. MMH are not comprehensive of the overall hours necessary to get access to work areas and to remove all the equipment that interferes with the application of the prescribed instructions.

H. WEIGHT AND BALANCE

N.A.

I. REFERENCES

I.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. | I, II |
| DM02 89-A-64-21-02-00A-520A-A | Lag damper - Remove procedure | I, II |
| DM03 89-A-64-21-02-00A-720A-A | Lag damper - Install procedure | I, II |

I.2 ACRONYMS & ABBREVIATIONS

| | |
|------|---------------------------------------|
| AMD | Aircraft Material Data Information |
| AMP | Aircraft Maintenance Publication |
| AR | As Required |
| DM | Data Module |
| DOA | Design Organization Approval |
| EASA | European Union Aviation Safety Agency |
| LHD | Leonardo Helicopters Division |
| IPD | Illustrated Parts Data |
| MMH | Maintenance Man Hours |
| N.A. | Not Applicable |
| P/N | Part Number |
| SB | Service Bulletin |
| S/N | Serial Number |
| TR | Tail Rotor |

I.3 ANNEX

N.A.

J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

A.1 PARTS

PART I

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|---|--------------|-----------------|-------------|------|-----|------|---------|
| 1 | 4F6420V00254 | | TR damper | AR | . | (1) | - |

PART II

| # | P/N | ALTERNATIVE P/N | DESCRIPTION | Q.TY | LVL | NOTE | LOG P/N |
|---|--------------|-----------------|-------------|------|-----|------|---------|
| 2 | 4F6420V00254 | | TR damper | 1 | . | - | - |

Refer also to IPD for the spares materials required to comply with the AMP DMs referenced in the accomplishment instructions.

A.2 CONSUMABLES

Refer to AMDI for the consumable materials required to comply with the AMP DM referenced in the accomplishment instructions.

A.3 LOGISTIC MATRIX

N.A.

NOTES

(1) This item will be supplied in sufficient quantity to replace the affected TR dampers.

B. SPECIAL TOOLS

Refer to ITEP for the special tools required to comply with the AMP DM referenced in the accomplishment instructions.

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.

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., including pictures, as required on “Accomplishment instructions” section; claims without the aforementioned picture will be rejected.

NOTE: WRM will include RETURN MATERIAL AUTHORIZATION (RMA) number; the unit disembarked from the aircraft (TR damper P/N 4F6420V00254) has to be returned for Investigation to LHD within thirty (30) calendar days after the shipment of the replacement part, as per instructions defined into LHD Information Letter GEN-15-047. In case of missing return within thirty (30) calendar days, Customer will be invoiced for the price of the replacement part (TR damper P/N 4F6420V00254)

3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

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.

PART I

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. Get access to the tail rotor and check if any of the TR dampers P/N 4F6420V00254 are affected by this SB. If no TR affected are installed, skip to Step 6. Otherwise, take a picture of the affected dampers with the identification plate in view. Send pictures to Leonardo Helicopters at the following mail box:
engineering.support.lhd@leonardo.com.
3. In accordance with AMP DM 89-A-64-21-02-00A-520A-A, remove one of the affected TR damper P/N 4F6420V00254.

NOTE

A serviceable TR damper is any damper with S/N not included in the list of affected parts reported in Section 1.A of this SB.

4. In accordance with AMP DM 89-A-64-21-02-00A-720A-A, install a serviceable TR damper P/N 4F6420V00254.
5. If the affected dampers installed are more than two, perform again Steps 3 and 4 to replace the other affected dampers. A single affected TR damper could remain installed until compliance with Part II.
6. Return the helicopter to flight configuration and record for compliance with Part I of this Service Bulletin on the helicopter logbook.
7. 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

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PART II

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.

NOTE

Provide the identification picture of the damper only if not already performed in Part I of this SB.

2. Get access to the tail rotor and identify the affected TR damper P/N 4F6420V00254. Take a picture of the damper with the identification plate in view. Send picture to Leonardo Helicopters at the following mail box:
engineering.support.lhd@leonardo.com
3. In accordance with AMP DM 89-A-64-21-02-00A-520A-A, remove the affected TR damper P/N 4F6420V00254.

NOTE

A serviceable TR damper is any damper with S/N not included in the list of affected parts reported in Section 1.A of this SB.

4. In accordance with AMP DM 89-A-64-21-02-00A-720A-A, install a serviceable TR damper P/N 4F6420V00254.
5. Return the helicopter to flight configuration and record for compliance with Part II of this Service Bulletin on the helicopter logbook.
6. 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

| | | | | | |
|---|-----|---|-----------------------|--------|--|
| Please send to the following address: | | SERVICE BULLETIN COMPLIANCE FORM | | Date: | |
| LEONARDO S.p.A. CUSTOMER SUPPORT & SERVICES - ITALY PRODUCT SUPPORT ENGINEERING & LICENSES DEPT. Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA) - ITALY Tel.: +39 0331 225036 Fax: +39 0331 225988 | | Number: | | | |
| | | Revision: | | | |
| Customer Name and Address: | | | Telephone: | | |
| | | | Fax: | | |
| | | | B.T. Compliance Date: | | |
| Helicopter Model | S/N | Total Number | Total Hours | T.S.O. | |
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| | | | | | |
| Remarks: | | | | | |
| Information: We request your cooperation in filling this form, in order to keep out statistical data relevant to aircraft configuration up-to-date. The form should be filled in all its parts and sent to the above address or you can communicate the application also via Technical Bulletin Application Communication Section placed in Leonardo AW Customer Portal - MyCommunications Area. We thank you beforehand for the information given. | | | | | |