

AIRWORTHINESS DIRECTIVE

released by DIRECTION GENERALE DE L'AVIATION CIVILE

Inspection and/or modifications described below are mandatory. No person may operate a product to which this Airworthiness Directive applies except in accordance with the requirements of this Airworthiness Directive.

Translation of 'Consigne de Navigabilité' ref. : 1999-257-074(A) R5
In case of any difficulty, reference should be made to the French original issue.

EUROCOPTER

AS 332 helicopters

Engine-to-MGB Coupling (ATA 63)

1. EFFECTIVITY:

This Airworthiness Directive applies to AS 332 helicopters, versions: C, C1, L and L1, equipped with engine-to-main gearbox "BENDIX" coupling shafts, all part numbers.

2. REASONS:

This Airworthiness Directive is prompted further to many reports of failure of the engine-to-MGB coupling and in particular, further to the accident that occurred to an AS 332 L1 helicopter over the North Sea in Norway in September 1997. This Airworthiness Directive covers in full all the checks previously introduced by AD 86-012-023(A) and AD 97-303-066(A) which it replaces. These Ads are therefore cancelled.

The main purpose of Revision 1 of this AD was to cancel the 25-flight hour vibration level check for aircraft modified per MOD 0726070 or MOD 0726075 (TU 203) and per MOD 0752318.

The purpose of Revision 2 was to specify the revision numbers of the Flight Manuals according to the helicopter versions.

The purpose of Revision 3 was:

- To remove references to Flight Manual revisions.
- To incorporate the Airworthiness matter (update of the aircraft flight manuals) of Airworthiness Directive 97-288-065(AB), which is cancelled by its Revision 1, as EUROCOPTER Service Telex No. 01.00.44 related to this AD is cancelled.
- To specify that it is mandatory to have both engines on the same helicopter at the same standard.

The purpose of Revision 4 was:

- To reintroduce the vibration level check of the engine-to-main gearbox coupling regardless of the modification status, further to the discovery of the potential failure of an electronic component on the printed circuit boards of the computer post MOD 0726070 or 0726075 (MOD TU 203 - TURBOMECA SB No. 298.73.0146).
- To specify that the Service Bulletin has been converted into Alert Service Bulletin (ASB) No. 63.00.58.

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November 14, 2001

EUROCOPTER
AS 332 helicopters

1999-257-074(A) R5

The purpose of Revision 5 is:

- To cancel the engine/MGB vibration level check that was to be carried out every 25 hours for aircraft modified per MOD 0726197 (TU 215 which forms the subject of TURBOMECA Service Bulletin 298.73.0166) and per MOD 0752318 (new splined sleeve).
- To inform about implementation of TURBOMECA modification TU 215.
- To take into account the cancellation of EUROCOPTER ASB No. 77-00-11 following the update of the aircraft Flight Manuals. This cancellation involves the cancellation of Airworthiness Directive 2001-059-078(A) (cancelled by its Revision 2).

3. **MANDATORY ACTIONS AND COMPLIANCE:**

3.1. Compliance with the measures specified below is rendered mandatory from the effective date of the original issue of this Airworthiness Directive.

3.1.1. On removal/installation:

- of an engine,
- of the MGB,
- of an engine-to-MGB coupling shaft (BENDIX shaft),
- in the event of tightening torque load loss or failure of one engine-to-MGB coupling tie bolt

Comply with the instructions given in paragraph 2B (1 to 8) of referenced EUROCOPTER AS 332 Alert Service Bulletin No. 63.00.58.

Note: Should re-indexing of the "BENDIX" shaft be necessary after compliance with the referenced Alert Service Bulletin, in order to restore a vibration level within the tolerance limits, only the vibration level check as per work card 63.20.00.501 specified in paragraph 2B8 of the referenced Alert Service Bulletin is to be carried out.

3.1.2. In accordance with Revision 5 of this AD, for all aircraft that have not been modified per MOD 0726197 (TU 215) and per MOD 0752318:

- Check the vibration level every 25 operating hours as per work card No. 63.20.00.501 referred to in paragraph 2.B.8 of the referenced Alert Service Bulletin, except for aircraft equipped with the EUROHUMS maintenance system. For these aircraft, monitor the vibration level continuously as per MFI work card No. 45.11.02.03 referred to in the referenced Alert Service Bulletin.

3.1.3. Every 50 operating hours logged by an engine-to-MGB coupling that has not been modified per MOD 0752316 and 0752317 or 0752364, check the condition and the tightening torque load of the coupling tie bolts in compliance with the instructions given in referenced Alert Service Bulletin, paragraph 2B (1).

3.1.4. Every 550 operating hours logged by an engine-to-MGB coupling, perform the checks and inspections in compliance with the instructions given in referenced Alert Service Bulletin, paragraph 2B (1 to 8).

3.1.5. Spares

When replacing an engine-to-MGB "BENDIX" coupling shaft, a flange or a splined sleeve on an MGB or on an engine, comply with the instructions given in referenced Alert Service Bulletin, paragraph 2B (1 to 8).

3.1.6. Incorporate the latest applicable Conditional Revisions (CR) and Rush Revisions (RR) in the Aircraft Flight Manuals.

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3.2. The following measure must be taken before the next flight following the effective date of Revision 3 of this Airworthiness Directive:

- Engine governors (MOD 07 26070 and MOD 07 26075) must not be mixed on the same aircraft.

3.3. The following measure must be taken before the next flight following the effective date of Revision 5 of this Airworthiness Directive:

- Both engines installed on the aircraft must have the same modification status: either pre TU 215 or post TU 215 (refer to TURBOMECA Service Bulletin No. 298 73 0166).

REF.: EUROCOPTER AS 332 Alert Service Bulletin (ASB) No. 63.00.58 R4
Aircraft Flight Manuals.

This Revision 5 replaces AD 1999-257-074(A) R4 dated July 25, 2001.

EFFECTIVE DATES :

Original AD : JUNE 26, 1999
Revision 1 : APRIL 15, 2000
Revision 2 : Upon receipt from JUNE 14, 2000
Revision 3 : NOVEMBER 25, 2000
Revision 4 : AUGUST 04, 2001
Revision 5 : NOVEMBER 24, 2001