European Union Aviation Safety Agency

Airworthiness Directive

AD No.: 2006-0085R3

Issued: 02 December 2025

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I Part M.A.301, or Annex Vb Part ML.A.301, as applicable, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I Part M.A.303, or Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

DAHER AEROSPACE

Type/Model designation(s):

TBM 700 aeroplanes

Effective Date: Revision 03: 09 December 2025
Revision 02: 30 January 2015
Revision 01: 05 January 2015
Original Issue: 26 April 2006

TCDS Number(s): EASA.A.010

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2006-0085R2 dated 16 January 2015.

ATA 32 – Landing Gear – Main Landing Gear Shock Strut Cylinder – Inspection / Replacement / Modification

Manufacturer(s):

Compagnie DAHER, formerly SOCATA, EADS SOCATA, Société de Construction d'Avions de Tourisme et d'Affaires

Applicability:

DAHER Aerospace TBM 700 aeroplanes, manufacturer serial numbers (MSN) 1 through 638, and MSN 687.

Definitions:

For the purpose of this AD, the following definitions apply:

The SB: DAHER Service Bulletin (SB) 70-130-32.

Affected part: Main landing gear (MLG) with forging body having Part Number (P/N) 21236-000-00, 21236-000-01, 22609-000-00, 22609-001-00, 22611-000-00, 22611-001-00, D67685 or D67686.

Serviceable part: Any MLG body, eligible for installation in accordance with applicable DAHER instructions, that is not an affected part.

Reason:

Cracks on several main landing gear cylinders have been reported in service.

This condition, if not detected and corrected, could lead to fatigue cracks in the shock strut cylinder of the MLG, which could result in a collapsed MLG during take-off or landing runs, and possibly reduce the structural integrity of the aeroplane.

To address this unsafe condition, EASA issued AD 2006-0085 to require repetitive special detail inspections (SDI) for cracks of the MLG shock strut cylinder and, depending on findings, relevant investigative and corrective actions.

After EASA AD 2006-0085 was issued, DAHER performed an analysis to demonstrate that the inspection interval could be extended, and developed a reinforced MLG less prone to fatigue, which is embodied in production through DAHER modification (MOD) 70-0190-32 and can be introduced in service through DAHER SB 70-130-32 at Revision 03.

Prompted by these developments, EASA issued AD 2006-0085R1 to increase the inspection interval and to introduce the installation of a reinforced MLG on the right-hand (RH) side and left-hand (LH) side as an optional terminating action for the repetitive SDI required by this AD.

After EASA AD 2006-0085R1 was issued, it was found that aeroplanes MSN 639 to 683 (inclusive) are not affected by this AD. Consequently, EASA issued 2006-0085R2 to reduce the applicability by excluding those MSN.

Since that AD was issued, DAHER has developed additional P/N of reinforced MLG.

For the reason described above, this AD is revised introducing definitions of ‘affected part’ and ‘serviceable part’, which accept the installation of the additional P/N of reinforced MLG as optional terminating action for the repetitive SDI required by this AD.

Required Action(s) and Compliance Time(s):

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

(1) For aeroplanes equipped with an affected part, initially within the compliance time specified in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 240 landings (LDG), accomplish an SDI of the MLG forging body in accordance with the instructions of the SB.

Table 1 – Initial inspection

LDG accumulated by the MLG on 26 April 2006 [the effective date of the original issue of this AD] since first installation on an aeroplane	**Compliance time after 26 April 2006 [the effective date of the original issue of this AD]**
3 500 LDG or more	Within 25 LDG
1 750 LDG or more, but less than 3 500 LDG	Within 100 LDG
Less than 1 750 LDG	Before exceeding 1 850 LDG since first installation on an aeroplane

(2) If, during any SDI as required by paragraph (1) of this AD, any crack is suspected or confirmed, before next flight, remove the concerned MLG leg and confirm the presence of the crack with dye penetrant inspection or fluorescent penetrant inspection in accordance with the instructions of the SB.

(3) If, during the dye penetrant inspection or fluorescent penetrant inspection as required by paragraph (2) of this AD, any crack is confirmed, before next flight, contact DAHER for approved instructions (repair or replacement) and, within the compliance time specified in those instructions, accomplish the repair or replacement, as applicable, accordingly.

(4) Aeroplanes on which DAHER MOD 70-0190-32 has been embodied in production are not affected by the requirements of this AD, provided that, since aeroplane first flight, no affected part, has been installed on that aeroplane.

(5) Modification of an aeroplane in service, by installation of serviceable parts (LH and RH) in accordance with the instructions of DAHER Component Maintenance Manuals (CMM) 32-11-01 and 32-11-02 or DAHER SB 70-130-32 Revision 03 or Revision 04 constitutes terminating action for the repetitive SDI as required by paragraphs (1) and (2) of this AD.

Ref. Publications:

DAHER SB 70-130-32 original issue dated January 2006, or Revision 1 dated November 2013, or Revision 2 dated June 2014, or Revision 3 dated October 2014, or Revision 4 dated October 2025.

DAHER Component Maintenance Manuals (CMM) 32-11-01 Revision 4 dated October 2014, or Revision 5 dated September 2024 and 32-11-02 Revision 3 dated October 2014, or Revision 4 dated September 2024.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

2. The original issue of this AD was posted on 10 February 2006 as PAD 06-029 for consultation until 10 March 2006. No comments were received during the consultation period.

3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the EU aviation safety reporting system. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.

5. For any question concerning the technical content of the requirements in this AD, please contact: DAHER AEROSPACE, Direction des services, 65921 Tarbes Cedex 9, France, Telephone +33 (0) 5 62 41 73 00, Fax + 33 (0) 5 62 41 76 54,
E-mail: TBMCare@daher.com.