



Airworthiness Directive

AD No.: 2018-0115

Issued: 28 May 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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, 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 agreed with the Authority of the State of Registry [Regulation (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

ROLLS-ROYCE DEUTSCHLAND Ltd & Co KG

Type/Model designation(s):

BR700-710C4-11 engines

Effective Date: 04 June 2018

TCDS Number(s): EASA.E.018

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Accessory Gearbox Mount Assembly Tie Bolts – Replacement

Manufacturer(s):

Rolls-Royce Deutschland Ltd & Co KG (RRD)

Applicability:

BR700-710C4-11 engines, manufacturer serial numbers up to 16201 inclusive, having configuration standard 710C4-11/10 engraved on the engine data plate (RRD Service Bulletin (SB) SB-BR700-72-101466 incorporated), except those modified in accordance with RRD SB-BR700-72-101905.

These engines are known to be installed on, but not limited to, Gulfstream GV-SP (commercial designation G550) aeroplanes.

Definitions:

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

The SB: RRD Alert SB-BR700-72-A101962 Revision 2 dated 05 July 2017.

Affected tie bolt: Tie bolts, having Part Number (P/N) 39544000, installed on the Accessory Gearbox (AGB) mount assembly P/N 39543700.

Serviceable part: Tie bolts, having P/N 39544001, with "MLX17" marked on the tie bolt head.



Reason:

An engineering review revealed a negative strength margin for the AGB mounting pins in case of windmilling after a Fan Blade-Off event.

This condition, if not corrected, could lead to failure of the AGB mount pins, possibly resulting in separation of the AGB from the engine with consequent damage to, and/or reduced control of, the aeroplane.

To address this potential unsafe condition, RRD developed an improved tie bolt and issued the SB to provide replacement instructions.

For the reason described above, this AD requires replacement of the AGB mount assembly tie bolts on the magnesium AGB.

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

Required as indicated, unless accomplished previously:

Replacement:

- (1) Within 8 years and 6 months after the effective date of this AD, replace each affected tie bolt with a serviceable part in accordance with the instructions of the SB.

Credit:

- (2) Modification of an engine, accomplished before the effective date of this AD in accordance with the instructions of RRD SB-BR700-72-A101962 at original issue or Revision 1, is an acceptable method to comply with the requirements of paragraph (1) of this AD for that engine.

Parts Installation:

- (3) After modification of an engine as required by paragraph (1) of this AD, it is allowed to install a tie bolt as part of the AGB mount assembly on an engine, provided the part is a serviceable part.

Ref. Publications:

RRD SB-BR700-72-A101962 original issue dated 02 June 2016, or Revision 1 dated 13 September 2016, or Revision 2 dated 05 July 2017.

The use of later approved revisions of the above-mentioned document 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. This AD was posted on 27 April 2018 as PAD 18-061 for consultation until 25 May 2018. 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](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlewitz, 15827 Blankenfelde-Mahlow, Germany, Telephone: +49 (0) 337086 1200, E-mail: rrd.techhelp@rolls-royce.com.

