



Airworthiness Directive

AD No.: 2016-0034

Issued: 24 February 2016

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):

BR700-710 Engines

Effective Date: 09 March 2016

TCDS Number(s): EASA.E.018

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Low Pressure Turbine Fuel Shut-Off Pawl Carrier Pivot Pin – Replacement

Manufacturer(s):

Rolls-Royce Deutschland Ltd & Co KG (RRD)

Applicability:

BR700-710A1-10 engines, manufacturer serial number (MSN) up to and including 11505 and equipped with low pressure turbine (LPT) module Part Number (P/N) M51-104 or P/N M51-111.

BR700-710A2-20 engines, MSN up to and including 12492 and equipped with LPT module P/N M51-108 or P/N M51-111.

BR700-710C4-11 engines, MSN up to and including 15277, having configuration standard 710C4-11 engraved on the engine data plate and equipped with LPT module P/N M51-112.

BR700-710C4-11 engines, MSN up to and including 15329, having configuration standard 710C4-11/10 engraved on the engine data plate and equipped with LPT module P/N M51-112.



These engines are known to be installed on, but not limited to, Gulfstream GV and GV-SP (G500, G550) and Bombardier BD-700-1A10 and BD-700-1A11 series aeroplanes.

Reason:

Seizing of a fuel shut-off mechanism pawl carrier was reported. The subsequent investigation determined that corrosion of the pawl carrier pivot pin P/N BRR17117, was the failure cause.

This condition, if not corrected, could lead to loss of the fuel shut-off mechanism functionality and loss of the engine over-speed protection, possibly resulting in release of high-energy debris, with consequent damage to, and/or reduced control of, the aeroplane.

To address this potential unsafe condition, RRD issued Service Bulletin (SB) SB-BR700-72-A101523 to provide replacement instructions, introducing an improved pawl carrier pivot pin, which is more corrosion resistant.

For the reasons described above, this AD requires replacement of the affected P/N BRR17117 pawl carrier pivot pins with improved parts.

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

Required as indicated, unless accomplished previously:

- (1) Within 6 months after the effective date of this AD, replace each pawl carrier pivot pin P/N BRR17117 with an improved part in accordance with the instructions of the RRD Alert SB-BR700-72-A101523 Revision 3.
- (2) From the effective date of this AD, installation of a pawl carrier pivot pin on an engine is allowed, provided the part is an improved part as defined in the RRD Alert SB-BR700-72-A101523 Revision 3.
- (3) Modification of an engine, before the effective date of this AD, in accordance with the instructions of RRD SB-BR700-72-A101523 original issue, or Revision 1, or Revision 2, is an acceptable method to comply with the requirements of paragraph (1) of this AD for that engine.

Ref. Publications:

RRD SB-BR700-72-A101523 original issue dated 05 September 2005, or Revision 1 dated 14 December 2005, or Revision 2 dated 19 December 2013, or Revision 3 dated 10 December 2015.

The use of later approved revisions of this 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 25 January 2016 as PAD 16-008 for consultation until 22 February 2016. 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. For any question concerning the technical content of the requirements in this AD, please contact: Rolls-Royce Deutschland Ltd&Co KG, Eschenweg 11, Dahlewitz
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