



適航指令發布單

Airworthiness Directive Issuance Form

民航局AD編號 AD Number	CAA-2017-10-003	發布日期 Date issued	2017/10/16
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Rolls-Royce Deutschland BR700 series engines.		
主旨摘要	Engine Fuel and Control – Engine Electronic Controller Firebox Assembly – Replacement		
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主關機構 Original Authorities <input type="checkbox"/> FAA <input type="checkbox"/> Germany LBA <input checked="" type="checkbox"/> EASA <input type="checkbox"/> CAA-NL <input type="checkbox"/> Brazil <input type="checkbox"/> UK CAA <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> Japan CAB <input type="checkbox"/> DGAC <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____		
	設計國AD編號 Original AD number	2017-0198	
	1. 直接採用原AD之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) ____ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將AD執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	RRD Alert SB-BR700-73-A101977 original issue dated 22 December 2016, or Revision 1 dated 24 January 2017, or Revision 2 dated 27 March 2017, or Revision 3 dated 10 July 2017. RRD Alert SB-BR700-73-A101981 original issue dated 22 December 2016, or Revision 1 dated 24 January 2017, or Revision 2 dated 27 March 2017, or Revision 3 dated 10 July 2017. RRD Alert SB-BR700-73-A101985 original issue dated 22 December 2016, or Revision 1 dated 24 January 2017, or Revision 2 dated 27 March 2017, or Revision 3 dated 10 July 2017.		
註： 1. AD內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail：adcaa@mail.caa.gov.tw Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail：adcaa@mail.caa.gov.tw			



Airworthiness Directive

AD No.: 2017-0198

Issued: 10 October 2017

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:

Type/Model designation(s):

ROLLS-ROYCE DEUTSCHLAND Ltd & Co KG BR700-710 engines

Effective Date: 24 October 2017

TCDS Number(s): EASA.E.018

Foreign AD: Not applicable

Supersedure: None

ATA 73 – Engine Fuel and Control – Engine Electronic Controller Firebox Assembly – Replacement

Manufacturer(s):

Rolls-Royce Deutschland Ltd & Co KG (RRD)

Applicability:

BR700-710A2-20 engines, manufacturer serial number (MSN) 12619 to 12648 inclusive, and MSN 12650 to 22719 inclusive.

BR700-710A2-20 engines, MSN up to 12618 inclusive, and MSN 12649, if modified in accordance with RRD Service Bulletin (SB) SB-BR700-73-101559, or SB-BR700-73-101634, as applicable.

BR700-710C4-11 engines, MSN 15404 to 16261 inclusive, having configuration standard 710C4-11 engraved on the engine data plate.

BR700-710C4-11 engines, MSN up to 15403 inclusive, if modified in accordance with RRD SB-BR700-73-101438, and having configuration standard 710C4-11 engraved on the engine data plate.

BR700-710C4-11 engines MSN 16049 to 16275 inclusive, having configuration standard 710C4-11/10 engraved on the engine data plate.



BR700-710C4-11 engines MSN up to 16048 inclusive, if modified in accordance with RRD SB-BR700-73-101873, and having configuration standard 710C4-11/10 engraved on the engine data plate.

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

Reason:

Occurrences were reported where deterioration of an Electronic Engine Controller (EEC) firebox assembly intumescent heat resistant paint system was found to be beyond acceptable limits. Subsequent investigation determined that lack of paint adhesion, due to incorrect surface preparation during manufacturing, had caused this deterioration.

This condition, if not corrected, could reduce the fire protection capability of the EEC firebox, possibly leading to reduced control of an engine during engine fire, engine overspeed and release of high-energy debris, resulting in damage to, and/or reduced control of, the aeroplane.

To address this potential unsafe condition, RRD issued Alert SB SB-BR700-73-A101977, SB-BR700-73-A101981 and SB-BR700-73-A101985 to provide modification instructions introducing improved new or reworked EEC firebox assembly parts, which have a more durable paint system.

For the reason described above, this AD requires replacement of affected EEC firebox assembly parts with improved parts.

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, EEC firebox cover assembly, EEC firebox base assembly, EEC firebox port shield and EEC firebox cover plate are hereafter referred to as 'firebox assembly parts'.

Note 2: For the purpose of this AD, RRD Alert SB-BR700-73-A101977 (BR700-710A2-20 engines), Alert SB-BR700-73-A101981 (BR700-710C4-11 engines having configuration standard 710C4-11 engraved on the engine data plate) and Alert SB-BR700-73-A101985 (BR700-710C4-11 engines, having configuration standard 710C4-11/10 engraved on the engine data plate) are hereafter collectively referred to as 'the applicable RRD SB'.

Modification:

- (1) Within 38 months after the effective date of this AD, modify the engine by replacing each firebox assembly part (see Note 1 of this AD) with an improved part, as defined in, and in accordance with the instructions of Revision 3 of the applicable RRD SB (see Note 2 of this AD).

Credit:

- (2) Modification of an engine, before the effective date of this AD, in accordance with the instructions of the applicable RRD SB at 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.



Parts Installation:

- (3) From the effective date of this AD, installation of a firebox assembly part on an engine is allowed, provided the part is an improved part as defined in the instructions of RRD SB, as applicable to engine model and configuration.

Ref. Publications:

RRD Alert SB-BR700-73-A101977 original issue dated 22 December 2016, or Revision 1 dated 24 January 2017, or Revision 2 dated 27 March 2017, or Revision 3 dated 10 July 2017.

RRD Alert SB-BR700-73-A101981 original issue dated 22 December 2016, or Revision 1 dated 24 January 2017, or Revision 2 dated 27 March 2017, or Revision 3 dated 10 July 2017.

RRD Alert SB-BR700-73-A101985 original issue dated 22 December 2016, or Revision 1 dated 24 January 2017, or Revision 2 dated 27 March 2017, or Revision 3 dated 10 July 2017.

The use of later approved revisions of these 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. This AD was posted on 08 September 2017 as PAD 17-127 for consultation until 06 October 2017. 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, 15827 Blankenfelde-Mahlow, Germany
Telephone: +49 (0) 337086 1200, E-mail: rrd.techhelp@rolls-royce.com.

