

 <b>適航指令發布單</b> <b>Airworthiness Directive Issuance Form</b>			
民航局 AD 編號 AD number	CAA-2016-12-003	發布日期 Date issued	2016/12/13
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	RR Trent XWB-75, Trent XWB-79, Trent XWB-79B and Trent XWB-84 engines, serial numbers as listed in Appendix 1 of Alert Non-Modification Service Bulletin (NMSB) TRENT XWB 72-AJ443 dated 30 August 2016.		
主旨摘要	Engine - Low Pressure Compressor Case Support Inboard Pins, Dowels and Bolts - Inspection / Replacement		
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authorities <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> FAA  <input checked="" type="checkbox"/> EASA  <input type="checkbox"/> Brazil  <input type="checkbox"/> Transport Canada Civil Aviation  <input type="checkbox"/> DGAC               </div> <div> <input type="checkbox"/> Germany LBA  <input type="checkbox"/> CAA-NL  <input type="checkbox"/> UK CAA  <input type="checkbox"/> Japan CAB  <input type="checkbox"/> CAA of Israel  <input type="checkbox"/> Other _____               </div> </div>		
	設計國 AD 編號 Original AD number	2016-0242	
	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	ATA 72. Ref. Publications: RR Alert NMSB TRENT XWB 72-AJ443 original issue dated 30 August 2016.		
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： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a> 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： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a>			



## Airworthiness Directive

**AD No.:** 2016-0242

**Issued:** 07 December 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 plc

### Type/Model designation(s):

Trent XWB engines

**Effective Date:** 21 December 2016

**TCDS Number(s):** EASA.E.111

**Foreign AD:** Not applicable

**Supersedure:** None

## ATA 72 – Engine – Low Pressure Compressor Case Support Inboard Pins, Dowels and Bolts – Inspection / Replacement

### Manufacturer(s):

Rolls-Royce plc (RR)

### Applicability:

RR Trent XWB-75, Trent XWB-79, Trent XWB-79B and Trent XWB-84 engines, serial numbers as listed in Appendix 1 of Alert Non-Modification Service Bulletin (NMSB) TRENT XWB 72-AJ443 dated 30 August 2016.

These engines are known to be installed on, but not limited to, Airbus A350 aeroplanes.

### Reason:

It has recently been established that a certain population of low pressure (LP) compressor case support pins and hollow dowels have insufficient material properties and do not meet specification requirements.

This condition, if not corrected, could result in loss of core to fan case concentricity, LP compressor blade rubs and possible blade release, or engine under cowl fire.

To address this unsafe condition, RR published Alert NMSB TRENT XWB 72-AJ443 to provide instructions to inspect and replace the affected non-conforming components.



For the reasons described above, this AD requires a one-time on-wing or in-shop visual identification of LP compressor case support inboard pins, replacement of certain pins, and replacement of the affected outboard hollow dowels, nuts and bolts.

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

Required as indicated, unless accomplished previously:

Note 1: Where, in this AD, reference is made to a RR SB or NMSB with an 'A' (Alert) in the number, it should be recognised that an earlier or later revision may not have that 'A'. This kind of change does not effectively alter the publication references for the purpose of this AD.

Note 2: RR Alert NMSB TRENT XWB 72-AJ443 is hereafter referred to as 'the NMSB' in this AD.

**Inspection:**

- (1) Before exceeding 1 500 flight cycles (FC) since first operation of an engine, or within 4 months after the effective date of this AD, whichever occurs later, inspect each LP compressor support inboard pin to identify the serial number (s/n) in accordance with the instructions of the NMSB.

**Corrective Action(s):**

- (2) If, during the identification as required by paragraph (1) of this AD, a pin is found installed, having a s/n that begins with 235338, within the compliance times as specified in paragraph (1) of this AD (for on-wing inspection), or before release to service of the engine (for in-shop inspection), as applicable, replace each affected LP compressor support inboard pin, and outboard hollow dowels, nuts and bolts, in accordance with the instructions of the NMSB.
- (3) If, during the identification as required by paragraph (1) of this AD, a pin is found installed, having a s/n that begins with 237746 or 204520, within the compliance times as specified in paragraph (1) of this AD (for on-wing inspection), or before release to service of the engine (for in-shop inspection), as applicable, replace the LP compressor case support outboard hollow dowel, nuts and bolts, in accordance with the instructions of the NMSB.
- (4) If, during the identification as required by paragraph (1) of this AD, a pin is found installed, having a s/n that does **not** begin with either 235338, 237746 or 204520, or the s/n of the pin cannot be identified, before next flight (for on-wing inspection), or before release to service of the engine (for in-shop inspection), as applicable, contact RR for instructions and accomplish those instructions accordingly.

**Engine Installation:**

- (5) From the effective date of this AD, it is allowed to install an engine affected by this AD on an aeroplane, provided the pins, dowels, nuts and bolts on that engine have passed an inspection in accordance with the instructions of the NMSB.

**Ref. Publications:**

RR Alert NMSB TRENT XWB 72-AJ443 original issue dated 30 August 2016.



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 06 October 2016 as PAD 16-142 for consultation until 27 October 2016. The Comment Response Document can be found at <http://ad.easa.europa.eu>.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. For any question concerning the technical content of the requirements in this AD, please contact your designated Rolls-Royce representative, or download the publication from your Rolls Royce Care account at <https://customers.rolls-royce.com>.

If you do not have a designated representative or Rolls Royce Care account, please contact **Corporate Communications** at **Rolls-Royce plc**, P.O. Box 31, Derby, DE24 8BJ, United Kingdom Telephone +44 (0)1332 242424,

or send an email through [http://www.rolls-royce.com/contact/civil\\_team.jsp](http://www.rolls-royce.com/contact/civil_team.jsp) identifying the correspondence as being related to **Airworthiness Directives**.

