


EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2009-0187R2</p> <p>Date: 06 May 2011</p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>	
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 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 Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>		
<p>Type Approval Holder's Name :</p> <p>ROLLS ROYCE PLC</p>		<p>Type/Model designation(s) :</p> <p>RB211 Trent 700, RB211-535 series and -524 engines</p>
<p>TCDS Numbers: EASA E.042, UK CAA No. 1044, 1049, 1043, 1046 and 1048.</p>		
<p>Foreign AD : Not applicable</p>		
<p>Revision : This AD revises AD 2009-0187R1 dated 08 September 2009 and corrected on 11 September 2009.</p>		
ATA 72	Engine – Front Combustion Liner Head Section – Inspection / Replacement	
<p>Manufacturer(s):</p>	<p>Rolls-Royce plc</p>	
<p>Applicability:</p>	<p>RB211Trent 700 series engines, all models, all serial numbers. These engines are known to be installed on, but not limited to, Airbus A330 series aeroplanes.</p> <p>RB211- 524 series engines, models RB211-524H-T-36, H2-T-19, G2-T-19 and G3-T-19, all serial numbers. These engines are known to be installed on, but not limited to, Boeing 747 and Boeing 767 series aeroplanes.</p> <p>RB211-535 series engines, models RB211-535E4-37, E4-B-37 and E4-C-37 in which Service Bulletin RB211-72-C230 has been incorporated. These engines are known to be installed on, but not limited to, Boeing 757 series aeroplanes.</p> <p>RB211- 535 series engines, model RB211-535E4-B-75 in which Service Bulletin RB211-72-C230 has been incorporated. These engines are known to be installed on, but not limited to, Tupolev Tu 204 series aeroplanes.</p>	
<p>Reason:</p>	<p>Routine inspections have revealed cracking on the head sections of two Trent 800 front combustion liners. Cracking in this position could result in an unsafe condition in which hot gas breakout with subsequent downstream component release leads to uncontained high energy debris.</p>	

	<p>For the reason stated above, this AD mandates initial inspection of the head section of the Front Combustion Liner (FCL) and possible repetitive inspections or replacement of the FCL depending upon the acceptance criteria defined in Rolls-Royce Service Bulletin 72-AG073 revision 1.</p> <p>Revision 1 of this AD was issued to confirm that inspection per the initial issue of Rolls Royce Service Bulletin No. RB211-72-AG073 is an acceptable means of compliance with the inspection requirements of the AD. This AD had been republished to correct a typographical error within the Service Bulletin reference of the <i>Reason</i> paragraph.</p> <p>Revision 2 of this AD is issued to exclude RB 211 Trent 800 engines from the applicability of this AD as Rolls Royce has now developed a separate inspection programme for those engines. EASA AD 2011-0080 requires accomplishment of this inspection programme. In addition to that, few minor changes have been made to improve the quality of the AD.</p>
Effective Date:	20 May 2011
Required Action(s) and Compliance Time(s):	<p>Required as indicated unless previously accomplished:</p> <p>For engines that will have accumulated 250 cycles or more, since new or since last front combustion liner head refurbishment, by 30 September 2009:</p> <p>(1) Before 31 December 2009, borescope inspect the head section of the front combustion liner in accordance with the accomplishment instructions of Rolls-Royce Service Bulletin No. RB.211-72-AG073 revision 1.</p> <p>It may be noted that the referenced Rolls-Royce Service Bulletin provides both on-wing (paragraph 3A) and in-shop (paragraph 3B) accomplishment instructions.</p> <p>(1.1) (a) If any crack is found during in-shop inspection, reject the FCL.</p> <p>(b) If any crack is found during on-wing inspection, follow the instructions for acceptance of the FCL with repeat inspections, or engine removal, in paragraph 3C of the referenced Rolls Royce Service Bulletin.</p> <p>The replacement of the FCL terminates the repetitive inspections required by paragraph (1.1) of this AD.</p> <p>(1.2) Within 30 days after any inspections when a crack is found, submit a detailed report of the findings to Rolls-Royce plc. To that end, use the contact details as given in the 'Remarks' section of this AD.</p> <p>(2) Accomplishment of the borescope inspection, done before 14 September 2009 [effective date of EASA AD 2009-0187], in accordance with the initial issue of Rolls-Royce Service Bulletin No. RB.211-72-AG073 is acceptable for compliance with the inspection requirements of this AD.</p>
Ref. Publications:	<p>Rolls-Royce Service Bulletin No. RB.211-72-AG073, Initial Issue.</p> <p>Rolls-Royce Service Bulletin No. RB.211-72-AG073, Revision 1.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication. 3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail 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 Aeromanager account at www.aeromanager.com.

If you do not have a designated representative or Aeromanager account, please contact **Corporate Communications** at **Rolls-Royce plc**.

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telephone: +44 (0) 1332 242424, or send an e-mail through
http://www.rolls-royce.com/contact/civil_team.jsp identifying the
correspondence as being related to **Airworthiness Directives**.