


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2013-0042</p> <p>Date: 26 February 2013</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 EU 748/2012, Part 21.A.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 AD applies, except in accordance with the requirements of that AD, 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>Design Approval Holder's Name :</p> <p>ROLLS-ROYCE PLC</p>	<p>Type/Model designation(s) :</p> <p>RB211-524, Trent 500, Trent 700 and Trent 800 series Engines</p>
<p>TCDS Numbers: EASA.E.042, EASA.E.060, United Kingdom Nos. 1046, 1048 and 1051</p>	
<p>Foreign AD: Not applicable</p>	
<p>Supersedure: This AD supersedes EASA AD 2009-0073R1 dated 08 April 2009.</p>	
ATA 72	Engine – High Pressure Compressor Rotor Discs and Rotor Shafts – Inspection / Replacement
Manufacturer(s):	Rolls-Royce plc
Applicability:	<p>RB211 Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-61, 556B2-61, 560-61 and 560A2-61 engines, all serial numbers. These engines are known to be installed on, but not limited to, Airbus A340 series aeroplanes.</p> <p>RB211 Trent 768-60, 772-60, 772B-60 and 772C-60 engines, all serial numbers. These engines are known to be installed on, but not limited to, Airbus A330 series aeroplanes.</p> <p>RB211 Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17 and 895-17 engines, all serial numbers. These engines are known to be installed on, but not limited to, Boeing 777 series aeroplanes.</p> <p>RB211-524G2-T-19, RB211-524G3-T-19, RB211-524H-T-36 and RB211-524H2-T-19 engines. These engines are known to be installed on, but not limited to, Boeing 747 and 767 series aeroplanes.</p>
Reason:	<p>During manufacture of a number of high pressure compressor (HPC) Stage 1 and 2 discs with axial dovetail slots, anomalies at the disc post corners were found. Fatigue crack initiation and subsequent crack propagation at the disc post may result in failure of two blades and the disc post.</p> <p>This condition, if not detected and corrected, could lead to an uncontained engine failure and consequent release of high energy debris, possibly resulting in</p>

	<p>damage to the aeroplane and injury to occupants.</p> <p>To address this potential unsafe condition, EASA issued AD 2009-0073 (later revised) to require repetitive inspections of the axial dovetail slots and, depending on findings, accomplishment of the applicable corrective action(s).</p> <p>Since EASA AD 2009-0073R1 was published, the relevant Rolls-Royce (RR) Non-Modification Service Bulletin (NMSB), RB.211-72-AF964, has been amended to Revision 3, adding several HPC rotor discs and -shafts, identified by Part Number (P/N) in Section 1.A of that NMSB, which also need to be inspected.</p> <p>For the reasons described above, this new EASA AD retains the requirements of EASA AD 2009-0073R1, which is superseded, and extends the applicability to all HPC rotor discs and HPC rotor shafts identified in Section 1.A of RR NMSB RB.211-72-AF964 at Revision 3.</p>
Effective Date:	12 March 2013
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) For engines with an HPC rotor disc/shaft installed with a P/N as listed in Section 1.A of RR NMSB RB.211-72-AF964 Revision 3, as applicable to engine type, during each qualifying shop visit (as defined in Section 1.C.(1) of RR NMSB RB.211-72-AF964 Revision 3) after the part exceeds 1 000 cycles since new (CSN), inspect the axial dovetail slots in accordance with the instructions of Section 3 of RR NMSB RB.211-72-AF964 Revision 3. (2) If, during any inspection as required by paragraph (1) of this AD, discrepancies are detected, before release to service of the engine, accomplish the applicable corrective action(s) in accordance with the instructions of Section 3 of RR NMSB RB.211-72-AF964 Revision 3. (3) If, on the effective date of this AD, an engine with an affected part (P/N as listed in Section 1.A of RR NMSB RB.211-72-AF964 Revision 3) that has accumulated or exceeded 1 000 CSN is undergoing overhaul and in a condition as defined in Section 1.C.(2) of RR NMSB RB.211-72-AF964 Revision 3, before release to service of the engine, inspect the axial dovetail slots and, depending on findings, accomplish the applicable corrective action(s), in accordance with the instructions of Section 3 of RR NMSB RB.211-72-AF964 Revision 3. (4) From the effective date of this AD, installation on an aeroplane of an engine that contains an affected part (HPC rotor disc/shaft with a P/N as listed in Section 1.A of RR NMSB RB.211-72-AF964 Revision 3) is allowed, provided that, after installation, that engine is inspected and, depending on findings, corrected, as required by paragraphs (1) and (2) of this AD.
Ref. Publications:	<p>Rolls-Royce NMSB RB.211-72-AF964 Revision 3 dated 11 January 2013.</p> <p>The use of later approved revisions of this document 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. This AD was posted on 21 January 2013 as PAD 13-017 for consultation until 18 February 2013. The Comment Response Document can be found at http://ad.easa.europa.eu. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive 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.

	<p>If you do not have a designated representative or Aeromanager 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 e-mail through http://www.rolls-royce.com/contact/civil_team.jsp identifying the correspondence as being related to Airworthiness Directives.</p>
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