

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2013-0041 Date: 26 February 2013 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.
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].	
Design Approval Holder's Name: ROLLS-ROYCE plc	Type/Model designation(s): RB211-524 engines
TCDS Number: UK CAA No. 1043	
Foreign AD: Not applicable	
Supersedure: None	
ATA 72	Engine – Intermediate Pressure Compressor Shaft Stage 6 and 7 – Life Limit Reduction
Manufacturer(s):	Rolls-Royce plc
Applicability:	RB211-524B-02, RB211-524B2-B-19, RB211-524B3-02, RB211-524B4-02 and RB211-524C2-B-19 engines, all serial numbers. These engines are known to be installed on, but not limited to, Boeing 747 and Lockheed L1011 series aeroplanes.
Reason:	A re-evaluation of the stress and life analysis of the Intermediate Pressure (IP) Compressor Shaft Stage 6 and 7 resulted in a reduction of the Declared Safe Cyclic Lives for Stage 6 and 7 IP Compressor Shafts having certain part numbers (P/N). Operating an engine beyond the applicable reduced cyclic life limits could lead to an uncontained IP Compressor Shaft Stage 6 and 7 failure, possibly resulting in damage to, and reduced control of, the aeroplane. For the reasons described above, this AD requires replacement of each affected IP Compressor Shaft Stage 6 and 7, based on the applicable reduced cyclic life limit.
Effective Date:	12 March 2013

Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 30 days after the effective date of this AD, determine the accumulated flight cycles (FC) since new for each IP Compressor Shaft Stage 6 and 7 as identified by P/N in Appendix 1 of this AD. (2) If, as a result of the determination as required by paragraph (1) of this AD, the accumulated FC since new of an affected IP Compressor Shaft Stage 6 and 7 is equal to or exceeds the applicable reduced cyclic life limit as specified in Appendix 1 of this AD, before next flight, replace the affected IP Compressor Shaft Stage 6 and 7, as applicable, with a serviceable component in accordance with the instructions of Rolls-Royce Non-Modification Service Bulletin (NMSB) RB.211-72-AG391. (3) If, as a result of the determination as required by paragraph (1) of this AD, the accumulated FC since new of an affected IP Compressor Shaft Stage 6 and 7 is less than the applicable reduced cyclic life limit as specified in Appendix 1 of this AD, before exceeding the applicable reduced cyclic life limit as specified in Appendix 1 of this AD, replace this IP Compressor Shaft Stage 6 and 7 with a serviceable component in accordance with the instructions provided in Rolls-Royce NMSB RB.211-72-AG391. (4) From the effective date of this AD, do not install on an engine an IP Compressor Shaft Stage 6 and 7 having a P/N as listed in Appendix 1 of this AD, unless, prior to installation, it has been determined that the accumulated FC since new of the component is less than the applicable reduced cyclic life limit specified in Appendix 1 of this AD.
Ref. Publications:	Rolls-Royce NMSB RB.211-72-AG391 dated 21 December 2012. 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication. 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, or contact at Rolls-Royce plc. Corporate Communications, 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.

Appendix 1 – Life Limits of affected IP Compressor Shafts Stage 6 and 7

P/N	Reduced Cyclic Life Limit
UL33373	13 480 FC
UL33374	
UL33375	
UL33376	
UL36824	
UL36996	
UL37001	
UL37053	
UL37058	
LK58681	6 250 FC
LK66401	
LK69092	
LK73363	
LK73365	