

<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2010-0188</b>  <b>[Corrected: 22 February 2011]</b></p> <p><b>Date: 20 September 2010</b></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 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><b>Type Approval Holder's Name :</b></p> <p>Rolls-Royce plc</p>	<p><b>Type/Model designation(s) :</b></p> <p>RB211 Trent 800 series engines</p>
<p>TCDS Number : UK CAA 1051</p>	
<p>Foreign AD : Not applicable</p>	
<p>Supersedure : None</p>	
<b>ATA 73</b>	<b>Engine – Fan Case Low Pressure Fuel Tubes and Clips - Inspection/Replacement</b>
Manufacturer(s):	Rolls-Royce plc
Applicability:	<p>Models RB211 Trent 895-17, 892-17, 892B-17, 884-17, 884B-17, 877-17 and 875-17.</p> <p>These engines are known to be installed on, but not limited to, Boeing 777 series aeroplanes.</p>
Reason:	<p>Fuel leaks from the engine have occurred in-service due to damage to sections of the fan case Low Pressure (LP) fuel tubes which run between the Low Pressure and the High Pressure (HP) fuel pumps. This damage has been caused by fretting between the securing clips and the tube outer surface, which has caused localised thinning of the tube wall thickness. The thinning of the tube wall causes the tube to fracture and fuel loss to occur. In one case, fuel loss in excess of 10 000 pounds (lbs) occurred.</p> <p>Fuel leaks, if not detected early enough or if not correctly managed, could lead to potential unsafe conditions such as critical fuel unbalance or in-flight fuel starvation. Fuel leak detection and the associated aeroplanes procedures can be complex, leading to some flight crews failing to detect and/or address such situations. EASA has initiated reviews of fuel leak management procedures. This AD is issued as a precautionary measure to mitigate the risk of in-flight fuel starvation identified as a result of the existence of a known cause of fuel leaks.</p> <p>This AD requires inspection and, if necessary, replacement of fan case LP fuel tubes and clips.</p>

	This AD has been corrected to clarify that the reference number of the applicable Rolls-Royce plc Service Bulletin (SB) mentioned in the "Ref. Publications" of this AD changed to incorporate an "A" (indicating categorisation as "Alert", within the Rolls-Royce system).
Effective Date:	04 October 2010
Required Action(s) and Compliance Time(s):	<p>Required as indicated:</p> <p>(1) Initial Inspection</p> <p>Inspect and, if necessary, replace the fan case LP fuel tubes (Part Numbers (P/N) FK22617, FK19213 and FK23986) and the relevant associated clips, in accordance with Rolls-Royce NMSB 73-D685 revision 3 before the accumulation of 3 000 hours since new, or 3 000 hours since last inspection accomplished before the effective date of this AD in accordance with Rolls-Royce NMSB 73-D685 revision 3 or within 2 000 hours after the effective date of this AD, whichever occurs latest.</p> <p>(2) Repetitive Inspection</p> <p>Following accomplishment of the initial inspection in compliance with the requirements of paragraph (1) of this AD, repeat the inspection at intervals not exceeding 3 000 hours, and, if necessary, replace the fan case LP fuel tubes (P/N FK22617, FK19213 and FK23986) and the relevant associated clips in accordance with Rolls-Royce NMSB 73-D685 revision 3.</p> <p>(3) Replacement of the fan case LP fuel tubes (P/N FK22617, FK19213 and FK23986) and the relevant associated clips with serviceable parts does not constitute terminating action for the inspection requirements of this AD.</p>
Ref. Publications:	<p>Rolls-Royce RB211 Propulsion System Non Modification Service Bulletin RB211-73-D685 revision 3 dated 18 August 2009 (From revision 5, the NMSB is identified as RB211-73-AD685).</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"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. This AD was issued as PAD 10-013 on 21 January 2010 for consultation until 18 February 2010. This AD has been changed in comparison with the PAD 10-013, introducing less stringent requirements. The Comment Response Document can be found at <a href="http://ad.easa.europa.eu/">http://ad.easa.europa.eu/</a>.</li> <li>3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management &amp; Research Section, Certification Directorate, EASA. E-mail <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a></li> <li>4. For any questions concerning the technical content of the requirements in this AD, please contact:</li> </ol> <p>Your designated Rolls-Royce representative or download the publication from your Aeromanager account at <a href="http://www.aeromanager.com">www.aeromanager.com</a>. If you do not have a designated representative or Aeromanager account, please contact <b>Corporate Communications</b> at <b>Rolls-Royce plc</b>, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424, or e-mail from <a href="http://www.rolls-royce.com/contact/civil_team.jsp">http://www.rolls-royce.com/contact/civil_team.jsp</a> identifying the correspondence as being related to <b>Airworthiness Directives</b>.</p>