

EASA	EMERGENCY AIRWORTHINESS DIRECTIVE
	AD No.: 2012-0137-E Date: 25 July 2012 Note: This Emergency 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 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].	
Design Approval Holder's Name: Rolls-Royce plc.	Type/Model designation(s): Trent 1000 engines
TCDS Number:	EASA.E.036
Foreign AD:	Not applicable
Supersedure:	None
ATA 72	Engine – Gearbox Assembly – Replacement
Manufacturer(s):	Rolls-Royce plc
Applicability:	Trent 1000-A, 1000-C, 1000-D, 1000-E, 1000-G and 1000-H engines, all serial numbers. These engines are known to be installed on, but not limited to Boeing 787 series aeroplanes.
Reason:	Transfer gearbox (TGB) failures occurred during Trent 1000 engine testing. Engineering investigation determined that the crown wheel gear of the TGB had failed due to corrosion. The latter was the result of a change in a step of the manufacturing process. It was possible to identify a list of potentially affected gearbox assemblies. This condition, if not corrected, may result in an engine in-flight shutdown, increasing the risk of an emergency landing, possibly resulting in damage to the aeroplane and injury to the occupants. For the reasons described above, this AD requires replacement of an affected gearbox assembly with a serviceable part. This AD also prohibits installation of an affected gearbox assembly.
Effective Date:	26 July 2012

Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Before next flight after the effective date of this AD, determine whether the engine is equipped with an gearbox assembly with a part number 7000147H and a serial number from AADN000085 inclusive through AADN000127 inclusive (the affected gearbox assemblies). (2) If, during the identification as required by paragraph (1) of this AD, it is determined that the engine is equipped with an affected gearbox assembly, before next flight, replace the gearbox assembly with a serviceable part. A single ferry flight is allowed with no passenger on board of the aeroplane to a location where requirements of this AD can be accomplished, provided that only one engine of the aeroplane is equipped with an affected gearbox assembly. Note 1: For the purpose of this AD, a serviceable gearbox assembly is a part that is not an affected gearbox assembly for this AD. Note 2: Rolls-Royce Trent 1000 Alert Non Modification Service Bulletin 72-AH052 Initial Issue, containing gearbox assembly replacement instructions, is not yet available at the time of issuance of this AD, it is however expected to be released shortly. (3) From the effective date of this AD, do not install an affected gearbox assembly on an engine or an engine with an affected gearbox box assembly on an aeroplane.
Ref. Publications:	None
Remarks:	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process. 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.