



This AD is issued by the UK CAA as the Primary Airworthiness Authority (ICAO Annex 8 Authority of State of Design) for the affected product(s).

In accordance with Article 9(7)(b) of the Air Navigation Order 2000 as amended the following action required by this Airworthiness Directive (AD) is mandatory for applicable aircraft registered in the United Kingdom.

No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holders Name:

Type/Model Designation(s):

**ROLLS-ROYCE plc**

**RB211-524**

**CORRECTION** to AD No G-2003-0009 dated 19 September 2003

**Type Certificate Data Sheet No:** 1043, 1046 and 1048

### **ATA 72 ENGINE – GROUP A (CRITICAL) PARTS – FOCUSED INSPECTIONS**

**Manufacturer(s):** Rolls-Royce plc

**Applicability:** Model RB211-524 Series engines installed on but not limited to Boeing 747, 767 and Lockheed L-1011 aeroplanes certificated in any category.

**Reason:** To prevent Group A (Critical) rotating engine part failure, which could result in an uncontained engine failure and damage to the aeroplane.

This correction has been issued to clarify that compliance action should only be carried out at an appropriate level of engine workshop visit, and to ensure common text with the Time Limits Manual reference.

**Effective Date:** 26 September 2003

#### **Compliance/Action:**

**A** Within 40 days from the effective date of this Directive, at each engine workshop visit inspect the Group A components listed in Table 1, 2 and 3 of the Directive when these components are disassembled to piece-part level. This shall be carried out in accordance with the disassembly procedures contained in the Engine Manual and referenced in Time Limits Manual 05-20-01, dated 1 July 2002.

The inspections to be carried out on these Group A components are those referred to as, "Focus Inspect" in the relevant Engine Manual inspection task, and are applicable when the following conditions are satisfied:

(1) The component has been completely disassembled to piece-part level in accordance with the appropriate disassembly procedures contained in the Engine Manual,

**and .....**

The part has accumulated in excess of 100 flight cycles in service since the last piece-part inspection,

**or .....**

(2) The component removal was for damage or a cause directly related to its removal,

**or .....**

(3) Where serviceable used components, for which the inspection history is not fully known, are being returned to service.

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The list of Group A Parts is specified below:

**Table 1 - RB211-524B/B3/B4 (on L1011)**

<b>Part Nomenclature</b>	<b>Part No.</b>	<b>Engine Manual Inspection Task</b>
Low Pressure Compressor Rotor Disc	All	72-31-12-200-05 (CONFIG 1) 72-31-12-200-013 (CONFIG 2)
Low Pressure Compressor Rotor Shaft	All	72-31-20-200-000
Intermediate Pressure Compressor Stage 1 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 2 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 3 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 4 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 5 Disc	All	72-32-31-200-001
Intermediate Pressure Compressor Rotor Shaft Stages 6 to 7	All	72-32-31-200-001
Intermediate Pressure Compressor Front Stubshaft Drive Cone	All	72-32-31-200-008
Intermediate Pressure Compressor Rotor Rear Stubshaft	All	72-33-21-200-010
High Pressure Compressor Rotor Stage 1 to 2 Disc	All	72-41-31-200-000
High Pressure Compressor Rotor Stage 3 Disc	All	72-41-31-200-001
High Pressure Compressor Rear Rotor Shaft Assembly	All	72-41-31-200-002
High Pressure Compressor/Turbine Joint Flange Support Disc	All	72-41-31-200-006
High Pressure Turbine Bearing Inner Race Support Panel	All	72-41-51-200-005
High Pressure Turbine Disc	All	72-41-51-200-019
High Pressure Turbine Conical Shaft	All	72-41-51-200-021
Intermediate Pressure Turbine Disc	All	72-51-31-200-003
Intermediate Pressure Turbine Shaft	All	72-51-33-200-005
Low Pressure Stage 1 Turbine Disc	All	72-51-61-200-000 (CONFIG 1) 72-51-61-200-007 (CONFIG 2)
Low Pressure Stage 2 Turbine Disc	All	72-51-61-200-001 (CONFIG 1) 72-51-61-200-008 (CONFIG 2)
Low Pressure Stage 3 Turbine Disc	All	72-51-61-200-002 (CONFIG 1) 72-51-61-200-009 (CONFIG 2)
Low Pressure Turbine Shaft	All	72-51-63-200-000 (CONFIG 1) 72-51-63-200-003 (CONFIG 2)

**Table 2 - RB211-524 B2/C2/D4 (on B747SP/-200/-300)**

<b>Part Nomenclature</b>	<b>Part No.</b>	<b>Engine Manual Inspection Task</b>
Low Pressure Compressor Rotor Disc	All	72-31-12-200-013
Low Pressure Compressor Rotor Shaft	All	72-31-20-200-000
Intermediate Pressure Compressor Stage 1 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 2 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 3 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 4 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 5 Disc	All	72-32-31-200-001
Intermediate Pressure Compressor Rotor Shaft Stages 6 to 7	All	72-32-31-200-001
Intermediate Pressure Compressor Front Stubshaft Drive Cone	All	72-32-31-200-008
Intermediate Pressure Compressor Rotor Rear Stubshaft	All	72-33-21-200-010
High Pressure Compressor Rotor Stage 1 to 2 Disc	All	72-41-31-200-000
High Pressure Compressor Rotor Stage 3 Disc	All	72-41-31-200-001
High Pressure Compressor Rear Rotor Shaft Assembly	All	72-41-31-200-002
High Pressure Compressor/Turbine Joint Flange Support Disc	All	72-41-31-200-006
High Pressure Turbine Bearing Inner Race Support Panel	All	72-41-51-200-005
High Pressure Turbine Disc	All	72-41-51-200-019
High Pressure Turbine Conical Shaft	All	72-41-51-200-021
Intermediate Pressure Turbine Disc	All	72-51-31-200-003
Intermediate Pressure Turbine Shaft	All	72-51-33-200-005
Low Pressure Stage 1 Turbine Disc	All	72-51-61-200-007
Low Pressure Stage 2 Turbine Disc	All	72-51-61-200-008
Low Pressure Stage 3 Turbine Disc	All	72-51-61-200-009
Low Pressure Turbine Shaft	All	72-51-63-200-003

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The list of Group A Parts is specified below:

**Table 3 RB211-524G/H (on B747-400 & B767)**

<b>Part Nomenclature</b>	<b>Part No.</b>	<b>Engine Manual Inspection Task</b>
Low Pressure Compressor Rotor Disc	All	72-31-12-200-000
Low Pressure Compressor Rotor Shaft	All	72-31-20-200-000
Intermediate Pressure Compressor Stage 1 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 2 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 3 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 4 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Stage 5 Disc	All	72-32-31-200-000
Intermediate Pressure Compressor Rotor Shaft Stages 6 to 7	All	72-32-31-200-001
Intermediate Pressure Compressor Front Stubshaft Drive Cone	All	72-32-31-200-008
Intermediate Pressure Compressor Rotor Rear Stubshaft	All	72-33-21-200-010
High Pressure Compressor Rotor Stage 1 to 2 Disc	All	72-41-31-200-000 CONFIG 1
High Pressure Compressor Rotor Stage 3 Disc	All	72-41-31-200-001 CONFIG 1
High Pressure Compressor Rear Rotor Shaft Assembly	All	72-41-31-200-002 CONFIG 1
Compressor/Turbine Joint Flange Support Disc	All	72-41-31-200-003 CONFIG 1
High Pressure Compressor Rotor Shaft Assembly	All	72-41-31-200-014 CONFIG 2
High Pressure Turbine Disc	All	72-41-51-200-010 (CONFIG 1) 72-41-51-200-024 (CONFIG 2)
Intermediate Pressure Turbine Disc	All	72-51-31-200-003
Intermediate Pressure Turbine Shaft	All	72-51-33-200-005
Low Pressure Stage 1 Turbine Disc	All	72-51-61-200-007
Low Pressure Stage 2 Turbine Disc	All	72-51-61-200-008
Low Pressure Stage 3 Turbine Disc	All	72-51-61-200-009
Low Pressure Turbine Shaft	All	72-51-63-200-003

- B** Unless already accomplished, operators must amend their Approved Maintenance Programmes to reflect the inspection requirements stated above.
- C** Operators must maintain records of the Mandatory inspections arising from this Directive, as they are accomplished throughout the life of each Group A component.

**Reference Publications:** Rolls-Royce RB211-524 series Time Limits Manual Reference 05-20-01, dated 1 July 2002 or later CAA approved revision. Copies may be obtained from Rolls-Royce plc, Technical Publications, PO Box 31, Derby, DE24 8BJ, United Kingdom. Phone: +44 (0) 1332 242424, Fax: +44 (0) 1332 249936.

**Remarks:** Enquiries regarding this Directive should be directed to the Civil Aviation Authority, Safety Regulation Group, Propulsion Department, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR  
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