



**Airworthiness  
Directive  
D-2002-358R6**

**Luftfahrt-Bundesamt**  
Airworthiness Directive Section  
Hermann-Blenk-Str. 26  
38108 Braunschweig  
GERMANY

*This Airworthiness Directive supersedes the Airworthiness Directives 2002-358/5 of 18 November 2003*

**Rolls-Royce Deutschland**

**Effective Date: 30 June 2005**

**Affected:**

Kind of aeronautical product:	Aircraft Engine
Manufacturer:	Rolls-Royce plc, Derby, United Kingdom
Type:	TAY620, TAY650
Models affected:	TAY611-8, TAY620-15, TAY650-15 and TAY651-54
Serial numbers affected:	All
German Type Certificate No.:	6327, 6328

**Subject:**

Engine Fuel and Control - Engine LP Fuel Tube - Fuel Leakage (ATA 73)

**Reason:**

In service experience from the TAY650 engine fleet has shown the possibility of fuel leakage from the engine low pressure fuel tube which connects the low pressure fuel flowmeter with the high pressure fuel pump. Severe fuel leakage of the affected low pressure fuel tube can lead to fuel starvation on both engines, dual engine flame-out and potential hazard to the aircraft.

**Action:**

This Airworthiness Directive requires the following actions:

1. Initial inspection of the low pressure fuel tube, P/N JR33021, for fretting in accordance with the Accomplishment Instructions of the Rolls-Royce Service Bulletins TAY-73-1553R3 dated May 31, 2005 or TAY-73-1593R1 dated May 31, 2005.
2. Repeat inspections of the low pressure fuel tube, P/N JR33021, at fixed intervals in accordance with the Accomplishment Instructions of the Rolls-Royce Service Bulletins TAY-73-1553R3 dated May 31, 2005 or TAY-73-1593R1 dated May 31, 2005.
3. Initial fuel leak inspection of the low pressure fuel tube, P/N JR26955, in accordance with the Accomplishment Instructions of the Rolls-Royce Service Bulletins TAY-73-1669 dated May 31, 2005.
4. Repeat fuel leak inspections of the low pressure fuel tube, P/N JR26955, at fixed intervals in accordance with the Accomplishment Instructions of the Rolls-Royce Service Bulletins TAY-73-1669 dated May 31, 2005.
5. Replacement of the low pressure fuel tube, P/N JR33021, with the new improved version with the manufacturer part number P/N JR58112 in accordance with the Accomplishment Instructions in Rolls-Royce Service Bulletin TAY-73-1592R1 dated May 31, 2005.

Note 1: All necessary actions must be performed on the basis of the referenced manufacturer Service Bulletins.

Note 2: After the replacement of the low pressure fuel tubes with the improved version with the manufacturer part number P/N JR58112 no further inspections of the fuel tube are necessary.

**Compliance:**

The necessary actions must be carried out:

For TAY620-15 and 650-15 engines:

- Action 1: Before further flight.  
Note: Accomplishment of LBA AD 2002-331 or earlier revisions of LBA AD 2002-358 is considered to be acceptable to the accomplishment of Action 1.
- Action 2: At intervals not to exceed 1000 hours time in service (TIS) since the last inspection.
- Action 3: Within 1000 flight hours after the effective date of the Airworthiness Directive.
- Action 4: At intervals not to exceed 1000 flight hours time in service (TIS) since the last inspection.

Enquiries regarding this Airworthiness Directive should be referred to Mr. Martin Borsum, Airworthiness Directive Section, at the above address, fax-no. ++49-531-2355-725. Please note, that in case of any difficulty, reference should be made to the German issue!

Action 5: The replacement must be accomplished by 31 December 2005. For engines with less than 4000 hours time since new (TSN) on 31 December 2005 this replacement must be accomplished before reaching 4000 hours time since new (TSN).

For TAY611-8 and 651-54 engines:

- Action 1: For engines with less than 4000 hours time since new (TSN) the initial inspection must be accomplished before reaching 4000 hours TSN. For engines with more than 4000 hours TSN the initial inspection must be accomplished before further flight.
- Action 2: At intervals not to exceed 1000 hours time in service (TIS) since the last inspection.
- Action 3: Within 1000 flight hours after the effective date of the Airworthiness Directive.
- Action 4: At intervals not to exceed 1000 flight hours time in service (TIS) since the last inspection.
- Action 5: The replacement must be accomplished by 31 December 2005. For engines with less than 4000 hours time since new (TSN) on 31 December 2005 this replacement must be accomplished before reaching 4000 hours time since new (TSN).

**Technical publication of the manufacturer:**

Rolls-Royce Service Bulletins TAY-73-1553R3 dated May 31, 2005, TAY-73-1593R1 dated May 31, 2005, TAY-73-1669 dated May 31, 2005 and TAY-73-1592R1 dated May 31, 2005 become herewith part of this AD and may be obtained from:

Rolls-Royce Deutschland Ltd & Co KG  
Eschenweg 11  
15827 Dahlewitz  
G E R M A N Y  
Phone ++49-33-708-3-2026 or ++49-171-613-4213  
Fax ++49-33-708-6-3614

**EASA Approval:**

Approved by EASA under approval number 2005-4734 on 31 May 2005.