
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (1) of CAR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

AlliedSignal (Lycoming) Turbine Engines - LTS 101 Series

AD/LTS/17

Compressor Impeller

6/2002

Applicability: LTS 101Series turboshaft engines incorporating a centrifugal compressor impeller part numbers 4-101-052-57 or 4-101-052-62, except for impellers with serial numbers or part numbers listed in paragraphs 1.A. (1) through 1.A. (3) in Honeywell Service Bulletin (SB) LT 101-72-30-0186 Revision 1, or AlliedSignal SB LT 101-72-30-0186.

Requirement:

1. **Visual / Fluorescent Inspection:** Conduct a one time visual inspection for surface finish, and fluorescent inspection of impellers as per the accomplishment instructions of Honeywell SB LT 101-72-30-0186 Revision 1, or AlliedSignal SB LT 101-72-30-0186.
2. **Impeller Removal:** Remove from service all impellers that exceed the acceptable limits of the accomplishment instructions of Honeywell SB LT 101-72-30-0186 Revision 1, or AlliedSignal SB LT 101-72-30-0186.
3. **Impeller Replacement:** Impellers with part numbers as listed in applicability of this Directive shall not be fitted unless the inspection criteria of Honeywell SB LT 101-72-30-0186 Revision 1, or AlliedSignal SB LT 101-72-30-0186 is met.

Note: FAA AD 2002-03-09 R1 refers.

Compliance:

1. **Visual / Fluorescent Inspection:** Unless previously accomplished; within 900 gas generator (Ng) cycles after the effective date of this Directive.
2. **Impeller Replacement:** Before further flight.
3. **Spare Impellers:** Prior to installation in an aircraft.

This Airworthiness Directive becomes effective on 13 June 2002.

AlliedSignal (Lycoming) Turbine Engines - LTS 101 Series

AD/LTS/17 (continued)

Background: A machining discrepancy may have occurred during manufacture of impellers listed in this Directive. This discrepancy may result in cracks developing in the impeller back plate area leading to engine damage or failure.



James Coyne
Delegate of the Civil Aviation Safety Authority

3 May 2002