
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 39.001(1) of CASR 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.

Pratt and Whitney Canada Turbine Engines - PW200 Series

AD/PW200/2	Compressor Turbine Disk Retaining Nut	4/2008
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Applicability: PW206A Serial No. PCE-BA0031 and earlier
 PW206B Serial No. PCE-BB00126 and earlier
 PW206B2 Serial No. PCE-BJ0369 and earlier
 PW206C Serial No. PCE-BC0605 and earlier
 PW206E Serial No. PCE-BE0048 and earlier
 PW207C Serial No. PCE-BH0054 and earlier
 PW207D Serial No. PCE-BF0135 and earlier
 PW207E Serial No. PCE-BG0106 and earlier
 PW207K Serial No. PCE-BK0032 and earlier

Requirement: Inspect the compressor turbine (CT) disk bore area for damage and if any damage is noticed, replace the CT disc before next flight, in accordance with P&WC SB PW200-72-A28280 R4 or later revisions approved by Transport Canada; and

Replace the existing CT disc retaining nut and associated hardware.

Compliance with earlier versions of SB PW200-72-A28280 requirements prior to the effective date of this AD satisfies the corrective action requirements of this AD.

Note: Transport Canada AD CF-2007-24R1 dated 21 December 2007 refers.

Compliance: 1. For engines that have never had a shop visit and have accumulated 4000 CT cycles or more since new, or

Engines that have accumulated 2700 CT cycles or more since:

- a) last shop visit; or
- b) last CT disc inspection; or
- c) incorporation of SB. PW200-72- 28287:

Within 1150 hrs of engine operating time since 28 April 2006 (original issue date

Pratt and Whitney Canada Turbine Engines - PW200 Series

AD/PW200/2 (continued)

of SB PW200-72-A28280), but not later than 10 June 2008.

2. For engines that have never had a shop visit and have accumulated less than 4000 CT cycles since new, before the engine reaches 4000 CT cycles or not later than 10 June 2008, whichever occurs later.
3. For engines that have accumulated less than 2700 CT cycles since:
 - a) last shop visit; or
 - b) last CT disc inspection; or
 - c) incorporation of P&WC SB pw200-72-28287:

Before the engine reaches 2700 CT cycles or not later than 10 June 2008 whichever occurs later.

This Airworthiness Directive becomes effective on 10 April 2008.

Background: PW206 and PW207 Compressor Turbine (CT) Disk bore areas may experience impact damage resulting from bending or fracture of the CT Disk Retaining Nut castellations. Damage of the CT disk bore area can reduce LCF capabilities of the CT disk, resulting in disk fracture.

To preclude any potentially hazardous situation precipitated by a damaged CT disc, P&WC issued Alert Service bulletin PW200-72-A28280, requiring inspection of the CT disc bore area for damage and replacement of the existing Disk Retaining Nut with an improved design nut.

The most recent compliance data indicates that the majority of the affected engines, particularly those with high in-service time, still have not been inspected to SB PW200-72-A28280 requirements and as such, are potentially susceptible to CT disc damage. This AD is issued to mandate the inspection of the CT disc bore area and replacement of the existing Disk Retaining Nut, in accordance with SB PW200-72-A28280 R4 instructions.



David Punshon

Delegate of the Civil Aviation Safety Authority

26 February 2008