

Airworthiness Bulletin

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Beech B300 - Passenger Door Latch Pins

An Airworthiness Bulletin is an advisory document that alerts, educates and makes recommendations about airworthiness matters. Recommendations in this bulletin are not mandatory.

1. Effectivity

All Beech B300 aircraft.

2. Purpose

To notify operators and maintainers of a recent significant defect.

3. Background

After landing, the aircraft cabin door could not be opened. It was discovered that upper aft locking pin/bolt P/N 50-430177-5 had sheared, with indications of corrosion in the middle of the sheared section suggesting that a fatigue crack may have been present for a period of time. See figures 1 and 2 below.

All 4 latch pins were replaced before the aircraft returned to service. The 3 other removed pins were NDT (MPI) inspected to identify if any cracks were present and the upper forward pin/bolt was also found cracked. There were no indications in the two lower pins. Textron has been notified of the results. The pins have a current Life Limit of 5000 FC and the failure has occurred at 542 Cycles.





Figure 1: General view showing access to the latch pin area (top left pin location)





Figure 2: Closer view showing fracture of threaded area. Arrow indicates corrosion product which indicates the crack was present for some time.



4. Recommendations

At this time, this advice is intended to raise awareness, pending further investigations into the cause of this defect.

Until this investigation is completed the following actions are recommended:

- Remove cover over the latch pin assembly to check the latch pin threaded area for corrosion or cracking. Corrosion or fatigue cracking may be a potential cause of this cracking however this is yet to be determined.
- The reported failed door latch pin appeared to have a crack that originated from one of the final cut threads before the treaded section transitioned into the rectangular section of the latch pin. The crack appeared to have originated on the pin side that is closest to the outer door skin (i.e. opposite side of the thread that is visible through the inspection window cover). It is recommended to inspect the thread area with a torch and mirror to access the underside thread section.

If there is any doubt about the general condition of the latch pins, contact the manufacturer for further advice.

5. Enquiries

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link email address:

AirworthinessBulletin@casa.gov.au

or in writing, to:

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