

T-817 Service Bulletin

Subject:	Compressor Turbine (CT) Blade
EXTEX Part Numbers:	E3045741-01 revision D (or prior)
Installation(s):	Pratt and Whitney Canada PT6A-11, -11AG, -15AG, -21, -25, -25A, -27, -28, -110, -112, -121 Pratt and Whitney Canada PT6A-25C, -34, -34AG, -34B, -36, -38, -41, -114, -114A
Revision History:	IR - Initial Release.
Reason:	To provide Supplemental Instructions for Continued Airworthiness (ICA). EXTEX has identified blades in which the firtree external radii may be undersized. This condition has prompted EXTEX to require inspection prior to installation into a CT Disk Balancing Assembly.
Description:	This service bulletin provides instructions for inspection and disposition of the subject CT blades.
Applicability:	New (zero time) or otherwise serviceable E3045741-01 Revision D (or prior) CT Blades not currently installed in a CT Disk Balancing Assembly.
Accomplishment Instructions:	Prior to installation, inspect blades by measuring over the top lobes as shown in Figure 1. <ul style="list-style-type: none"> Blades that measure 0.218 or more may be installed. Record compliance with this service bulletin in the applicable section of the engine log book. The entry should indicate that the E3045741-01 blades were inspected per EXTEX SB T-817. Blades that measure less than 0.218 are not serviceable and should not be installed. Contact EXTEX customer service for return instructions.
Approval:	This document is FAA approved.
Notes:	Please contact EXTEX Engineered Products customer service with any questions. Blades Rev E or later (shipped starting April 2019) are not subject to this service bulletin.

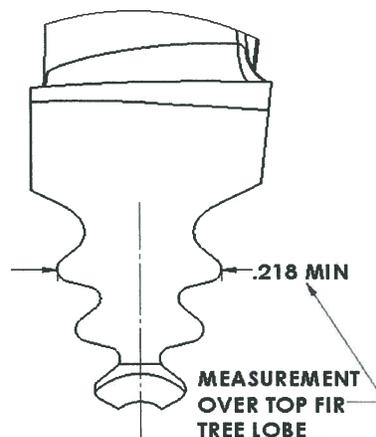


Figure 1

Lawrence Shiembob
General Manager

EXTEX Engineered Products, Inc.
340 E. Germann Road
Gilbert, Arizona, 85297, USA
+1 480.606.3007

August 22, 2019

Subject: EXTEX Service Bulletins T-815, T-816 related to CT Blade E3045741-01

There have been reports of fatigue cracks in E3045741-01 blades installed in PT6A-34/-114 engines. All incidents were investigated and it was determined that, based on metallurgical test results and information contained in PWC SB 1768 and PWC SIL 116, the blade cracking was caused by upstream engine conditions. Consequently no field action was considered necessary.

However, the situation became complicated by discovery of a non-conformance in the fir tree area. Once the non-conformance was discovered EXTEX recommended not installing additional E3045741-01 blades until the impact of the non-conformance on blade integrity could be determined.

EXTEX completed a statistical analysis, a finite element analysis and a review of service documents associated with CT blade issues and have coordinated the findings with the FAA.

The investigation did not find evidence of an unsafe condition associated with the blade fir tree non-conformance. Recent blade fatigue cracks appear to be due to an engine system issue and do not appear to be caused by anything related to individual blades; including dimensional or metallurgical properties. However, because some E3045741-01 blades may not meet type design we are requesting installed blades be inspected at next access per SB T-815 and SB T-816.

We identified the root cause of the non-conformance, the manufacturing process was corrected and additional inspection procedures were implemented. Blades produced with new tooling and subject to the increased inspection procedures are identified as E3045741-01 REV E.

If you have any questions please contact your EXTEX customer service representative.

Sincerely,

