

 CT7-2E1 ALERT SERVICE BULLETIN - 72- A0031 R00Revised:
10/03/2023SB 72-A0031 R00 ENGINE - GENERAL - REVISED SERVICE LIFE LIMITS FOR CT7-2E1
STAGE 2 TURBINE AFT COOLING PLATE P/N 5166T27P01Issued:
10/03/2023**GE Designated: -CONFIDENTIAL-**

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1. PLANNING INFORMATIONA. Effectivity

CT7-2E1

This Alert Service Bulletin is applicable to all CT7-2E1 engines.

The stage 2 turbine aft cooling plate P/N 5166T27P01 is affected by this Alert Service Bulletin.

B. Description

This Alert Service Bulletin is being issued to provide notification of revised service life limits for the CT7-2E1 stage 2 turbine aft cooling plate P/N 5166T27P01.

C. Compliance

Category 2

GE recommends that you do this Alert Service Bulletin as soon as possible without effect on revenue service but before the stage 2 turbine aft cooling plate accrues 3,100 cycles since new (CSN).

Impact B

This recommendation is to address a condition that may result in an increased rate of In-Flight Shutdowns (IFSD), Take-off Aborts (TOA), Air Turn Backs (ATB,) or Diversions (DIV).

D. Concurrent Requirements

None.

The life limit for the stage 2 turbine aft cooling plate P/N 5166T27P01 has been added to the CT7-2E1 Maintenance Manual, GEK 112043-02, Section 05-11-03 by Temporary Revision (TR) 05-0017. Refer to the CT7-2E1 Maintenance Manual for the life limit of this part.

E. Reason

(1) Objective:

This Alert Service Bulletin provides notification that the life limit for the stage 2 turbine aft cooling plate P/N 5166T27P01 shown in CT7-2E1 Maintenance Manual, GEK 112043-02, Section 05-11-03, has been reduced.

(2) Condition:

New seal wire groove life simulation model on the stage 2 turbine aft cooling plate P/N 5166T27P01 updated stresses cause new life limiting location on the cooling plate.

- (3) Cause:
CT7-2E1 revised analysis, with updated stress model, calculated life is less than the current life limit of 6,100 cycles listed in CT7-2E1 Maintenance Manual, GEK 112043-02, Section 05-11-03.
- (4) Improvement:
The CT7-2E1 stage 2 turbine aft cooling plate P/N 5166T27P01 life limit is reduced from 6,100 cycles to 3,100 cycles.
- (5) Substantiation:
Substantiation is by analysis.

F. Approval

The data contained in this Alert Service Bulletin has been reviewed by the FAA or authorized entity representing the FAA and the repair(s) and modification(s) herein comply with the applicable Aviation Regulations and are APPROVED for installation in the model(s) listed in this Alert Service Bulletin.

G. Manpower

No additional man-hours are required to comply with this Alert Service Bulletin.

H. Weight and Balance

Weight and balance are not changed.

I. References (Use the latest version of these documents)

GEK 112043-02, CT7-2E Turboshaft Engine Maintenance Manual
Temporary Revision 05-0017, Stage 2 Turbine Aft Cooling Plate - Service Life Limits

J. Publications Affected

GEK 112043-02, CT7-2E Turboshaft Engine Maintenance Manual

K. Interchangeability

Not applicable.

L. Software Accomplishment Summary

Not applicable.

2. MATERIAL INFORMATION

A. Material - Price and Availability

- (1) Parts necessary to do this Alert Service Bulletin:
None.
- (2) Other Spare Parts:
None.
- (3) Consumables:
None.

B. Industry Support Information

Contact your Customer Support Manager.

C. Configuration Chart

Not applicable.

D. Parts Disposition

Not applicable.

E. Tooling - Price and Availability

Not applicable.

3. ACCOMPLISHMENT INSTRUCTIONS

A. General

- (1) Identify the stage 2 aft turbine cooling plate P/N 5166T27P01 in the affected engine log book.
 - (a) Line out the current 6,100 cycle life limit for the stage 2 aft turbine cooling plate P/N 5166T27P01.
 - (b) Enter the new life limit of 3,100 cycles for the stage 2 aft turbine cooling plate P/N 5166T27P01.
- (2) Record compliance of this Alert Service Bulletin in the accomplishment instructions of the engine log book.

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