

Time Limits Manual (T-T7000-1RR)
05-10-01-800-801

Critical Part Mandatory Lives

DESCRIPTION AND
OPERATION

Model: Trent 7000-72, 7000-72C
Effectivity: TRENT 7000/ALL [+
]

RevDate: 10/SEP/2021

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Reference

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subtask-051001890003	05-10-01-890-003
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PART-723111001000250000	72-31-11, 01-250
PART-723121001000250000	72-31-21, 01-250
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PART-724131002000250000	72-41-31, 02-250
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TASK 05-10-01-800-801

CRITICAL PART MANDATORY LIVES

SUBTASK 05-10-01-890-001

1. General

- A. THIS AIRWORTHINESS LIMITATIONS SECTION IS APPROVED BY THE EUROPEAN AVIATION SAFETY AGENCY (EASA) IN ACCORDANCE WITH PART 21.A.31(a)(3) AND CS-E 25(b). ANY CHANGE TO EACH MANDATORY REPLACEMENT TIME, INSPECTION INTERVAL, AND RELATED PROCEDURE CONTAINED IN THIS AIRWORTHINESS LIMITATIONS SECTION MUST ALSO BE APPROVED.

CAUTION:

THE FOLLOWING AIRWORTHINESS LIMITATIONS HAVE BEEN SUBSTANTIATED BASED ON ENGINEERING ANALYSIS THAT ASSUMES THIS PRODUCT WILL BE OPERATED AND MAINTAINED USING THE PROCEDURES AND INSPECTIONS PROVIDED IN THE INSTRUCTIONS FOR CONTINUED AIRWORTHINESS SUPPLIED WITH THIS PRODUCT BY THE TYPE CERTIFICATE HOLDER, OR ITS LICENSEES. FOR ENGINE CRITICAL PARTS AND PARTS THAT INFLUENCE ENGINE CRITICAL PARTS, ANY REPAIR, MODIFICATION OR MAINTENANCE PROCEDURES NOT APPROVED BY THE TYPE CERTIFICATE HOLDER, OR ITS LICENSEES, OR ANY SUBSTITUTION OF SUCH PARTS NOT SUPPLIED BY THE TYPE CERTIFICATE HOLDER, OR ITS LICENSEES, MAY MATERIALLY AFFECT THESE LIMITS.

CAUTION:

IT IS POSSIBLE TO GET TO THE END OF THE MAXIMUM APPROVED LIFE OF A PART IN AN ENGINE OR MODULE BETWEEN REWORKS, OR BEFORE A PROBLEM MAKES IT NECESSARY TO REMOVE THE ENGINE OR MODULE. THE OPERATOR MUST MAKE SURE THE PART DOES NOT STAY IN OPERATION FOR MORE THAN THE MAXIMUM APPROVED LIFE.

- B. Refer to [TASK 05-00-00-800-801](#) General Data, and [TASK 05-00-01-800-801](#) Recording and Control of the Lives of Parts.
- C. This task gives the details of the maximum approved lives of Critical Parts.

SUBTASK 05-10-01-890-002

2. Life Monitor, Part Numbers and Life Limits

A. Life monitor

Refer to [TASK 05-00-01-800-801](#) for the data on the Recording and Control of the Lives of Parts.

Declared Safe Cycle Lives (DSCL) are declared in Engine Flight Cycles (EFC).

B. Part numbers

The part numbers given in this task are those that can be seen in the Illustrated Parts Catalog (IPC) for the part or assembly. They are identified by part description; Chapter/Section/Subject and by Fig/Item number in the applicable SUBTASK.

The IPC supplied to airlines could be special to their needs, or only applicable for some engine marks. It is possible that a supplied IPC does not contain all the part numbers given in this task.

C. Life limits

Unless specified differently the life limits given in this task are total lives that must be counted continuously for each part from the start of its first operation.

The life limits are shown in [SUBTASK 05-10-01-890-003](#) thru [SUBTASK 05-10-01-890-021](#) .

SUBTASK 05-10-01-890-003

3. LP Compressor Rotor Disc Assembly - Maximum Approved Life

A. LP Compressor Rotor Disc Assembly ([72-31-11, 01-250](#)).

([72-31-11, 01-250](#)) is the assembly of the LP Compressor Rotor Disc, this is a Critical Assembly and its serial number must be tracked. The assembly has sub-assembly parts, their serial numbers do not need to be tracked.

Part category is: CRITICAL

KH59799 4640 EFC

SUBTASK 05-10-01-890-004

4. LP Compressor Balanced Shaft Assembly - Maximum Approved Life

A. LP Compressor Balanced Shaft Assembly ([72-31-21, 01-250](#)).

([72-31-21, 01-250](#)) is the balanced assembly of the LP Compressor Shaft, this is a Critical Assembly and its serial number must be tracked. The LP Compressor Balanced Shaft Assembly FW60183 ([72-31-21, 01-250](#)) contains the sub-assembly critical part LP Compressor Shaft Assembly FW57370 ([72-31-21, 01-475](#)). The life of the LP Compressor Balanced Shaft Assembly ([72-31-21, 01-250](#)) must always be the same as the life of the sub-assembly critical part LP Compressor Shaft Assembly FW57370 ([72-31-21, 01-475](#)). If the sub-assembly part LP Compressor Shaft Assembly FW57370 ([72-31-21, 01-475](#)) is ever changed, then the life of the LP Compressor Balanced Shaft Assembly FW60183 ([72-31-21, 01-250](#)) needs to be changed.

Part category is: CRITICAL

FW60183 8852 EFC

SUBTASK 05-10-01-890-005

5. IP Compressor Shaft Assembly - Maximum Approved Life

- A. IP Compressor Shaft Assembly of Rotor Stages 1 to 8 ([72-32-31, 01-450](#)).

Part category is: CRITICAL

KH18436 2900 EFC

LV18447 2900 EFC

LV19601 2900 EFC

SUBTASK 05-10-01-890-006

6. IP Compressor Rear Stub Shaft Assembly - Maximum Approved Life

- A. IP Compressor Rear Stub Shaft Assembly ([72-33-21, 01-250](#)).

Part category is: CRITICAL

KH61415 8852 EFC

SUBTASK 05-10-01-890-007

7. Assembly of HP Compressor Rotor Discs Shaft - Maximum Approved Life

- A. Assembly of HP Compressor Rotor Discs Shaft ([72-41-31, 01-250](#)).

Part category is: CRITICAL

KH19517 1500 EFC

SUBTASK 05-10-01-890-008

8. HP Compressor Stage 4 Disc - Maximum Approved Life

- A. HP Compressor Stage 4 Disc ([72-41-31, 02-250](#)).

Part category is: CRITICAL

KH19635 1500 EFC

SUBTASK 05-10-01-890-009

9. Assembly of HP Compressor Stage 5 and 6 Discs and Cone Rotor Rear Shaft - Maximum Approved Life

- A. Assembly of HP Compressor Stage 5 and 6 Discs and Cone Rotor Rear Shaft ([72-41-31, 03-250](#)).

Part category is: CRITICAL

KH19634 1500 EFC

SUBTASK 05-10-01-890-010

10. HP Turbine Disc Front Cover Plate - Maximum Approved Life

- A. HP Turbine Disc Front Cover Plate ([72-41-51, 01-205](#)).

Part category is: CRITICAL

KH59279 1500 EFC

SUBTASK 05-10-01-890-011

11. HP Turbine Rotor Disc Assembly - Maximum Approved Life

- A. HP Turbine Rotor Disc Assembly ([72-41-51, 01-250](#)).

([72-41-51, 01-250](#)) is the assembly of the HP Turbine Rotor Disc, this is a Critical Assembly and its serial number must be tracked. The assembly has sub-assembly parts, their serial numbers do not need to be tracked.

Part category is: CRITICAL

KH14275 1500 EFC

SUBTASK 05-10-01-890-012

12. IP Turbine Rotor Disc - Maximum Approved Life

- A. IP Turbine Rotor Disc ([72-51-31, 01-250](#)).

Part category is: CRITICAL

KH20444 3000 EFC

KH62917 3000 EFC

SUBTASK 05-10-01-890-013

13. IP Turbine Shaft Assembly - Maximum Approved Life

- A. IP Turbine Shaft Assembly ([72-51-33, 01-250](#)).

([72-51-33, 01-250](#)) is the assembly of the IP Turbine Rotor Shaft, this is a Critical Assembly and its serial number must be tracked. The assembly has sub-assembly parts, their serial numbers do not need to be tracked.

Part category is: CRITICAL

KH51313 8852 EFC

KH62913 8852 EFC

SUBTASK 05-10-01-890-014

14. LP Turbine Stage 1 Rotor Disc - Maximum Approved Life

A. LP Turbine Stage 1 Rotor Disc ([72-52-31, 01-250](#)).

Part category is: CRITICAL

KH34200 1500 EFC

SUBTASK 05-10-01-890-015

15. LP Turbine Stage 2 Rotor Disc - Maximum Approved Life

A. LP Turbine Stage 2 Rotor Disc ([72-52-31, 02-250](#)).

Part category is: CRITICAL

KH34201 1500 EFC

SUBTASK 05-10-01-890-016

16. LP Turbine Stage 3 Rotor Disc - Maximum Approved Life

A. LP Turbine Stage 3 Rotor Disc ([72-52-31, 03-250](#)).

Part category is: CRITICAL

KH34202 1500 EFC

SUBTASK 05-10-01-890-017

17. LP Turbine Stage 4 Rotor Disc - Maximum Approved Life

- A. LP Turbine Stage 4 Rotor Disc ([72-52-31, 04-250](#)).

Part category is: CRITICAL

KH76711 1500 EFC

SUBTASK 05-10-01-890-018

18. LP Turbine Stage 5 Rotor Disc - Maximum Approved Life

- A. LP Turbine Stage 5 Rotor Disc ([72-52-31, 05-250](#)).

Part category is: CRITICAL

KH33944 1500 EFC

SUBTASK 05-10-01-890-019

19. LP Turbine Stage 6 Rotor Disc - Maximum Approved Life

- A. LP Turbine Stage 6 Rotor Disc ([72-52-31, 06-250](#)).

Part category is: CRITICAL

KH33945 1500 EFC

SUBTASK 05-10-01-890-020

20. LP Turbine Shaft Assembly - Maximum Approved Life

- A. LP Turbine Shaft Assembly ([72-52-33, 01-250](#)).

([72-52-33, 01-250](#)) is the assembly of the LP Turbine Rotor Shaft, this is a Critical Assembly and its serial number must be tracked. The assembly has sub-assembly parts, their serial numbers do not need to be tracked.

Part category is: CRITICAL

KH13214 7500 EFC

SUBTASK 05-10-01-890-021

21. LP Turbine Rotating Arm Seal - Maximum Approved Life

A. LP Turbine Rotating Arm Seal ([72-52-34, 01-300](#)).

Part category is:	CRITICAL	
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