V2500 International Aero Engines
SERVICE BULLETIN

ENGINE - HIGH PRESSURE TURBINE ASSEMBLY - INSPECT THE STAGE 1 HIGH PRESSURE TURBINE COOLING DUCT ASSEMBLY FOR CRACK INDICATIONS

MODEL APPLICATION

V2500-A1
V2522-A5
V2524-A5
V2527-A5
V2527E-A5
V2530-A5
V2533-A5
V2525-D5
V2528-D5

BULLETIN INDEX LOCATOR

72-40-00

Compliance Category Code

6

Internal Reference No.

98VC038

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320, A321

McDonnell Douglas MD-90

(2) Engine: V2500-A1 Engines as applicable*
V2522-A5 Engines as applicable*
V2524-A5 Engines as applicable*
V2527-A5 Engines as applicable*
V2527E-A5 Engines as applicable*
V2530-A5 Engines as applicable*
V2533-A5 Engines as applicable*
V2525-D5 Engines as applicable*
V2528-D5 Engines as applicable*

*This inspection must be done for any of the listed engine models with the Stage 1 HPT Cooling Duct Assemblies that follow: 2A0008-01, 2A2141-01, 2A1997-01, 2A3180-01 and 2A3329-01.

B. Reason

The High Pressure Turbine Stage 1 Cooling Duct Assembly has been shown to be locally susceptible to crack indications during the manufacturing process. It is possible that some duct assemblies with crack indications may have entered service. (Maintenance Center inspection records indicate that there have been few crack indications in service run hardware.) While the engine manual does require the full Fluorescent Penetrant Inspection (FPI) of the Stage 1 Cooling Duct Assembly upon each exposure, it is desirable to also have a focused inspection available to emphasize the importance of inspecting the area in question. Structural analysis of the Stage 1 Cooling Duct Assembly finds the area in question to be relatively low stressed.

C. Compliance

Category 6

Accomplish when the subassembly (i.e. modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

D. Approval

The 'compliance' statement and the procedures described in paragraph F of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-Approved for the Engine Model listed.

E. References

(1) V2500 Standard Practices Manual (SPP-V2500-1I-A) Chapter/Section 70-23-05.

(2) V2500 Engine Manual (E-V2500-1I-A) Chapter/Section 72-44-50, Inspection/Check.

(3) V2500 Engine Manual (E-V2500-2I-A) Chapter/Section 72-44-50, Inspection/Check.

(4) V2500 Engine Manual (E-V2500-3I-A) Chapter/Section 72-44-50, Inspection/Check.

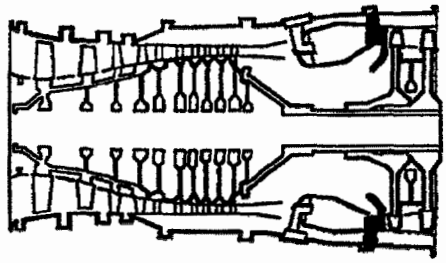
F. Action

(1) Do a fluorescent penetrant inspection by the procedure specified in Reference (1) Chapter/Section 70-23-03, Control No./Task No. 70-23-03-230-501 or Chapter/Section 70-23-08, Control No./Task No. 70-23-08-230-501. See Figures 1 and 2.

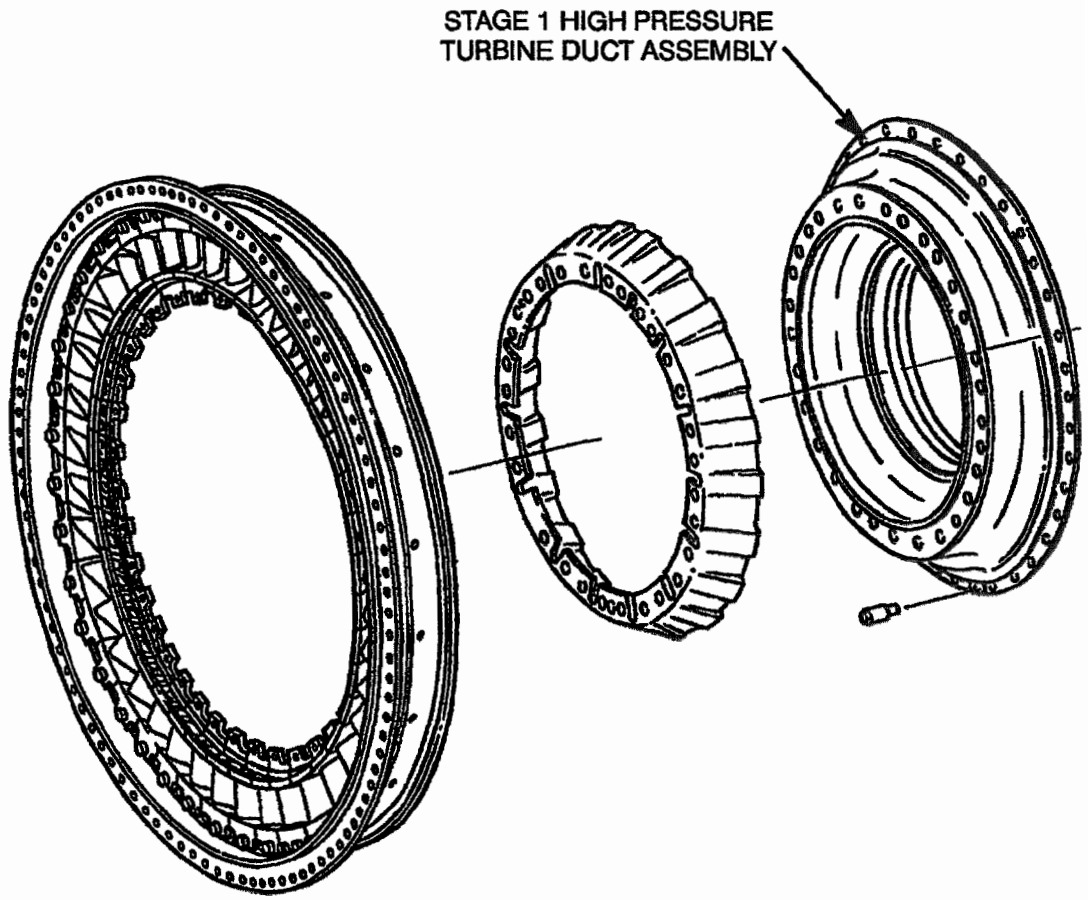
(a) Parts that do not have crack indications can be continued in service. These parts shall be marked as follows:

I Mark this Service Bulletin number adjacent to the part number by the vibration peen method specified in Reference (1), Chapter/Section 70-09-00, Control No./Task No. 70-09-00-400-501.

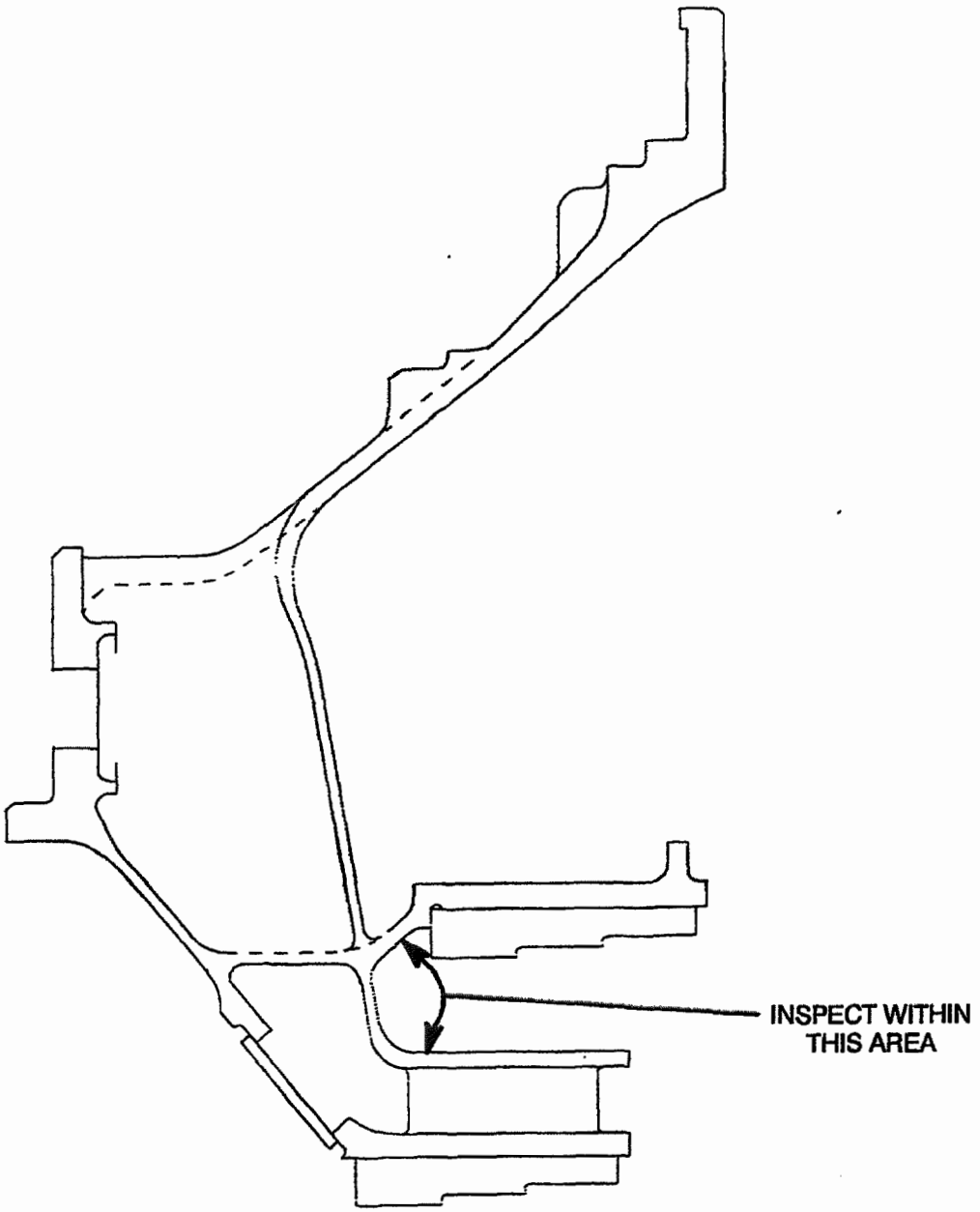
(b) Follow the disposition instructions of the applicable V2500 Engine Manual Reference (2), (3) or (4), Chapter/Section 72-44-50, Inspection/Check-01, Control No./Task No. 72-44-50-200-001-000, for parts with crack indications.



MODULE 40



Location of the Stage 1 High Pressure Turbine Duct Assembly
Figure 1



SECTION THROUGH THE STAGE 1 HIGH
PRESSURE TURBINE DUCT ASSEMBLY

E8002

Inspection of the Stage 1 High Pressure Turbine Duct Assembly
Figure 2