International Aero Engines

SERVICE BULLETIN

ENGINE - TURBINE EXHAUST CASE ASSEMBLY - INSPECTION OF THE NO. 5 BEARING SCAVENGE AND PRESSURE TUBE ASSEMBLIES FOR BRAZE AT THE INBOARD ENDS - CATEGORY CODE 4 - MOD.ENG-72-0248

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320, A321
McDonnell Douglas MD-90

(2) Engine: V2500-A1 Engines after Serial No. V0299 that incorporate V2500-ENG-70-0352.

V2500-A5 Engines after Serial No. V10095

V2500-D5 Engines Serial No. V20009 through V20088

B. Reason

The inboard ends of the 2A3091-01 Pressure Tube Assembly and the 2A3092-01 Scavnege Tube Assembly can be brazed at the location of the sleeve and the spacer. This condition does not allow the outer tube (heatshield) to grow normally during engine operation, which can cause the tube assemblies to crack and result in subsequent loss of engine oil.

C. Approval

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

D. Compliance

Category 4

Accomplish at the first visit of an engine or module to a maintenance base capable of compliance with the accomplishment instructions regardless of the planned maintenance action or the reason for engine removal.

E. References

(1) Internal Reference No.

96VC048

(2) Other References

IAE Service Bulletin:

V2500-ENG-70-0352 - Information - Engine - Turbine Exhaust - To Announce The Availability of New No. 5 Bearing Scavenge and Pressure Tube Assemblies Made of Revised Material and with an Improved Braze Material

V2500 Aircraft Maintenance Manual

MD-90 Maintenance Manual

F. Action

Part 1 - Installed Engines

NOTE: The No. 5 Bearing Pressure and Scavenge Tube Assemblies that are not installed in engines or are installed in spare engines must be inspected as soon as possible. The inspection intervals given in the Compliance Section are for tube assemblies that are in installed engines.

For the V2500-A1, V2527-A5 and V2530-A5 Engines

(1) Remove the tail cone assembly by the procedure specified in Reference (2), Chapter/Section 78-11-12 (TASK 78-11-12-000-010).

For the V2525-D5 and V2528-D5 Engines

(2) Remove the tail cone assembly by the procedure specified in Reference (3), Chapter/Section 78-10-02, Maintenance Practices.

For all Engines

(3) Inspect the 2A3091-01 No. 5 Bearing Pressure Tube Assembly (1 off) by Figures 1, 3, and as follows:

(a) Visually inspect to verify the tube assembly is not brazed at the inboard end where the outer tube sleeve fits around the tube spacer.

(b) Hold the inner tube and push on the outer tube sleeve with your finger.

(c) Determine if the outer tube moves in relation to the inner tube when you press on the outer tube sleeve with your finger.

1 The outer tube is not brazed at the inboard end (outer tube sleeve) if you can remove it with respect to the inner tube.

NOTE: Movement will be very slight.

2 The outer tube is brazed at the inboard end (outer tube sleeve) if you cannot move it with respect to the inner tube.

NOTE: Braze material should be visible with naked eye.

(4) Inspect the 2A3092-01 No. 5 Bearing Scavenge Tube Assembly (1 off) by Figures 2, 4, and as follows:

(a) Visually inspect to verify the tube assembly is not brazed at the inboard end where the outer tube sleeve fits around the tube spacer.

(b) Hold the inner tube and push on the outer tube sleeve with your finger.

(c) Determine if the outer tube moves in relation to the inner tube when you press on the outer tube sleeve with your finger.

1 The outer tube is not brazed at the inboard end (outer tube sleeve) if you can remove it with respect to the inner tube.

NOTE: Movement will be very slight.

2 The outer tube is brazed at the inboard end (outer tube sleeve) if you cannot move it with respect to the inner tube.

NOTE: Braze material should be visible with naked eye.

(5) No. 5 Bearing Scavenge and Pressure Tube Assemblies which are found brazed at the inboard ends can continue in service for twenty-five cycles.

For the V2500-A1, V2527-A5 and V2530-A5 Engines

(6) Install the tail cone assembly by the procedure specified in Reference (2), Chapter/Section 78-11-12 (TASK 78-10-02-400-010).

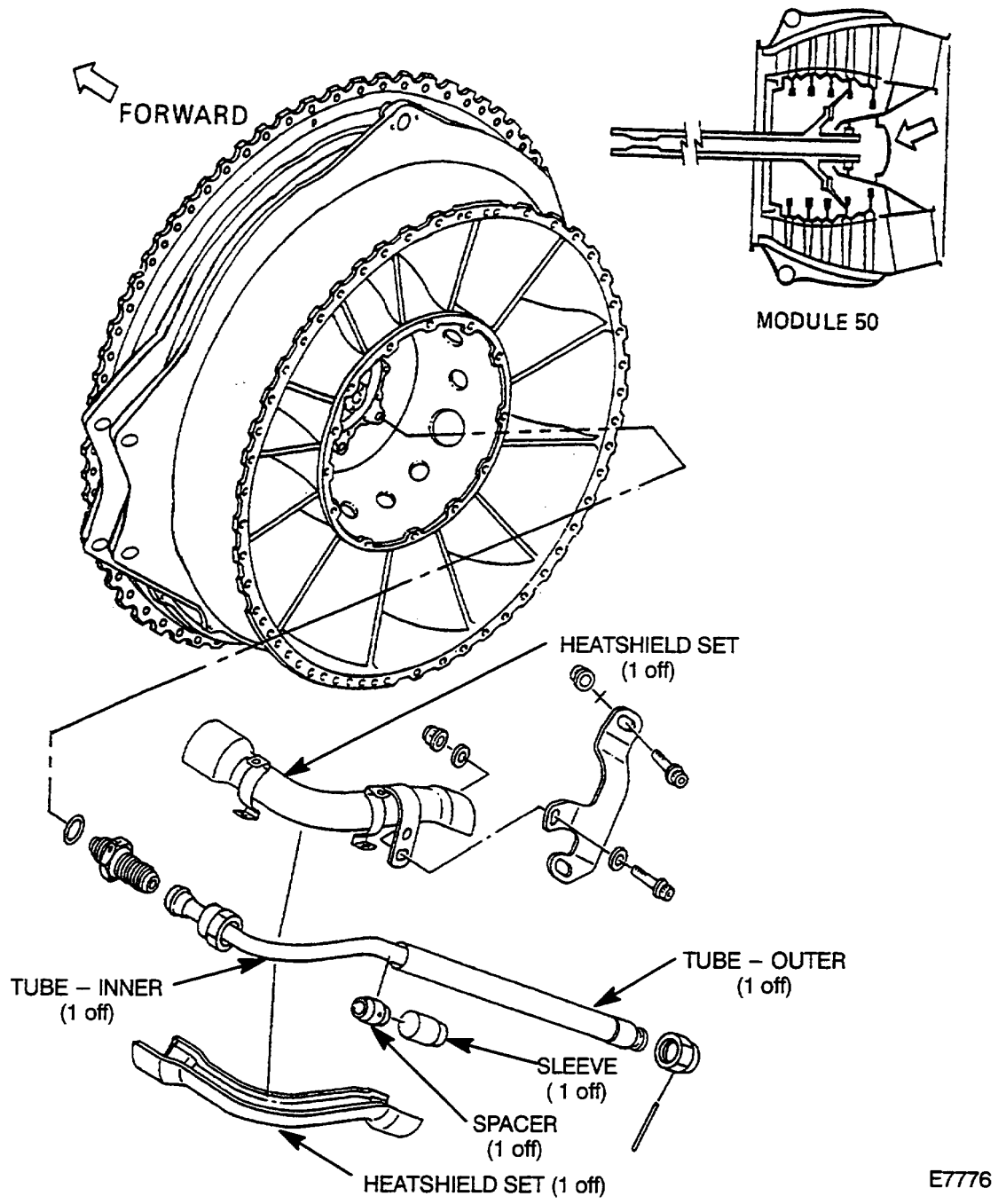
For the V2525-D5 and V2528-D5 Engines

(7) Install the tail cone assembly by the procedure specified in Reference (3), Chapter/Section 78-10-02, Maintenance Practices.

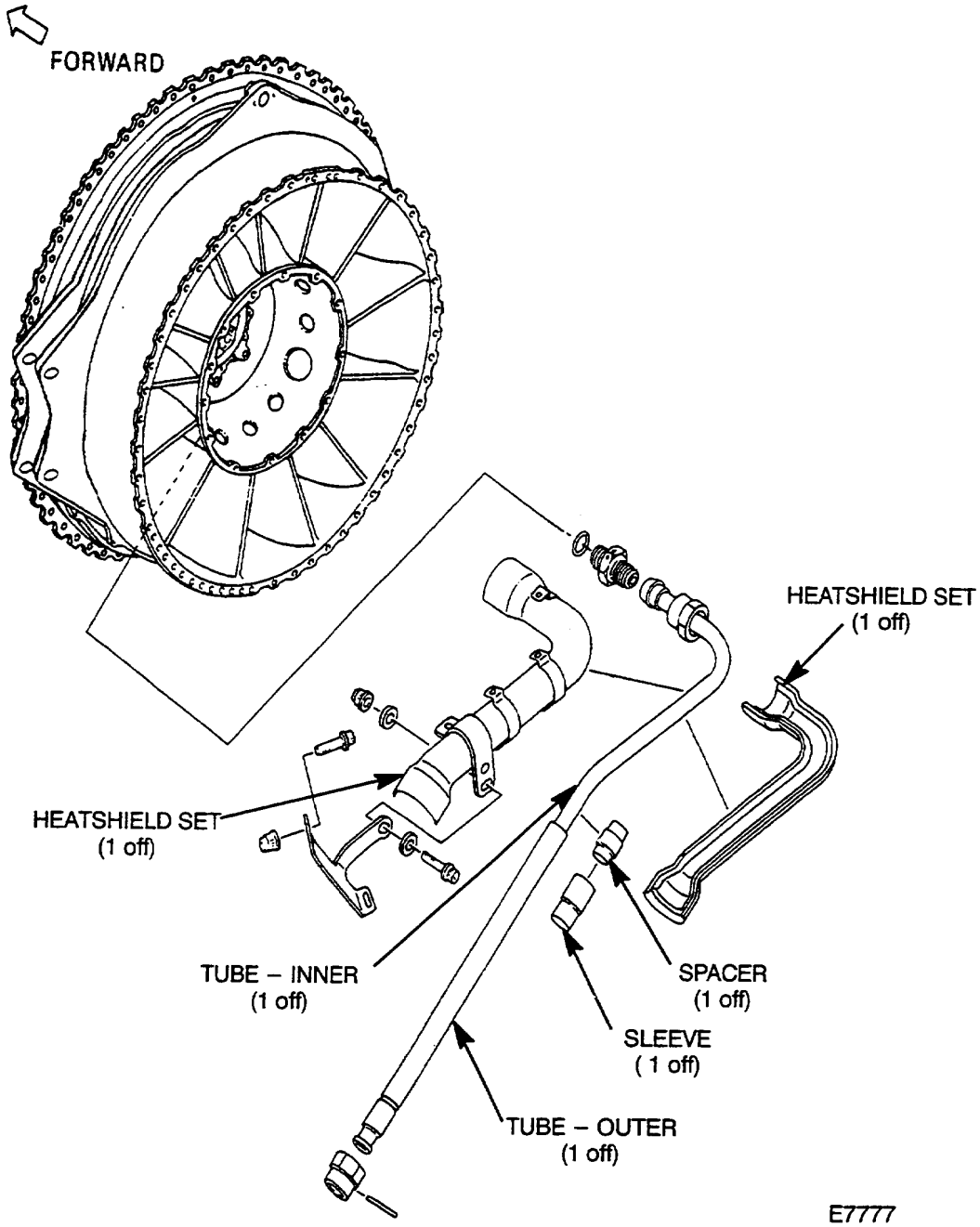
Part 2 - Tube Assemblies That are Not Installed or Are Installed In Spare Engines

(1) Inspect the 2A3091-01 No. 5 Bearing Pressure Tube Assembly (1 off) and the 2A3092-01 No. 5 Bearing Scavenge Tube Assembly (1 off) by steps (3) and (4) from paragraph F. and Figures (3) and (4).

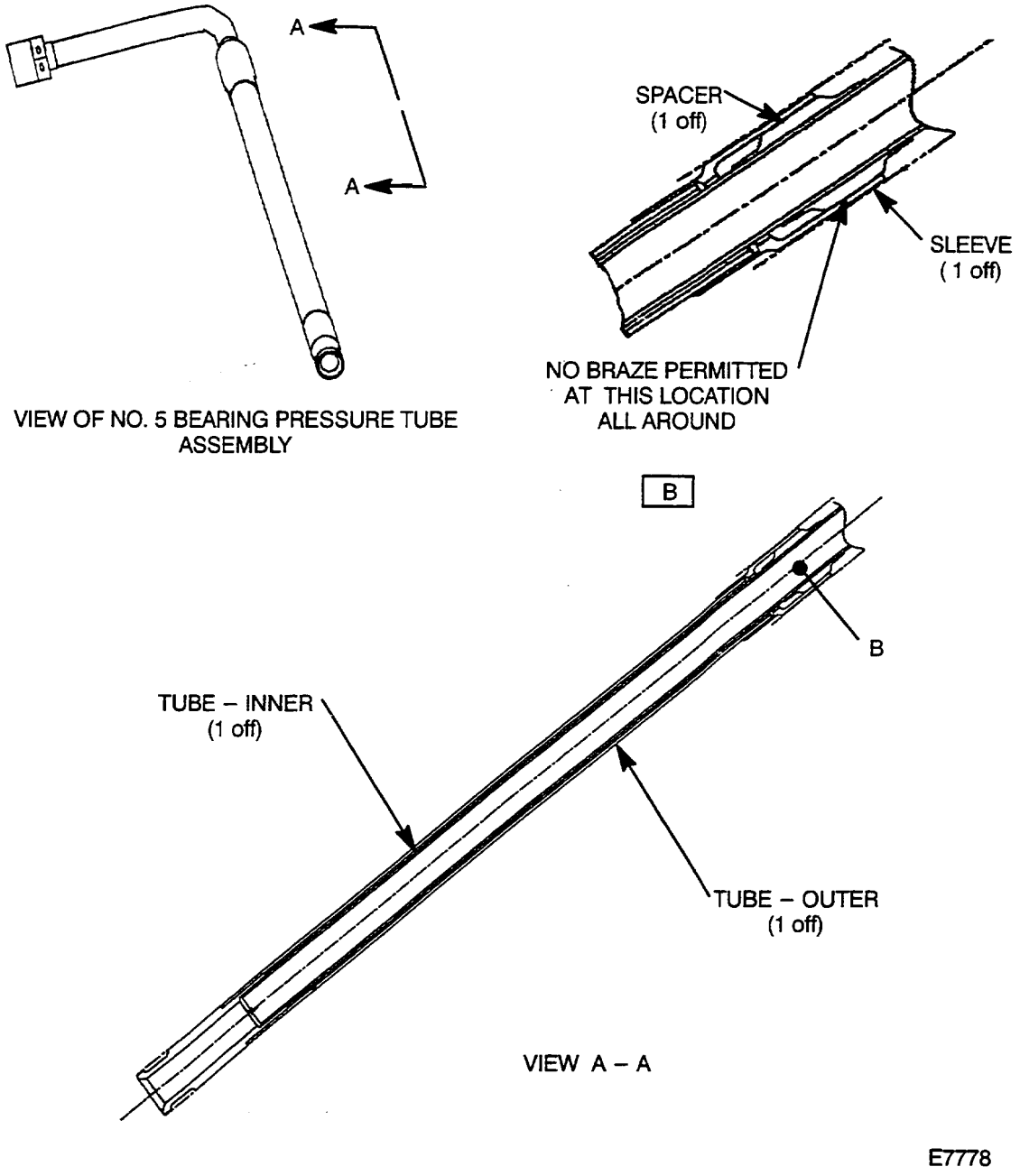
(2) Scrap any tube assembles which are found with braze at the inboard end where the sleeve and spacer are located.



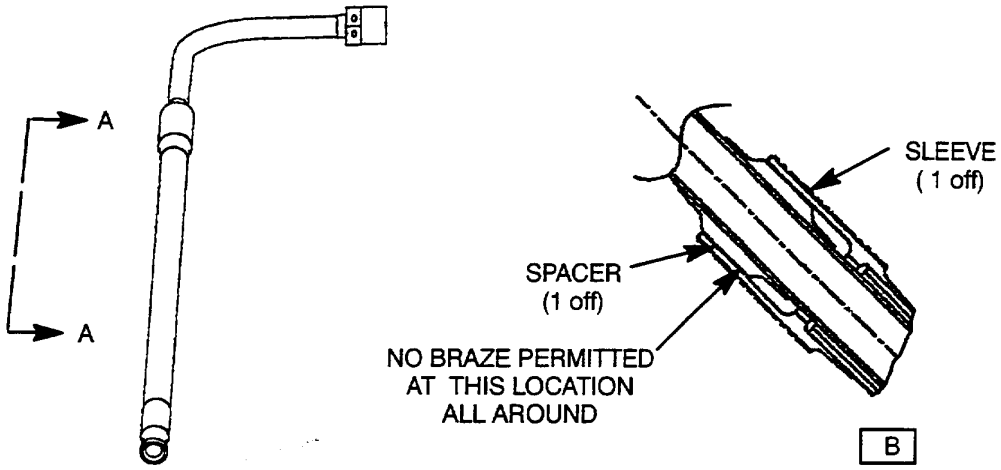
Location of the No. 5 Bearing Pressure Tube Assembly
Fig.1



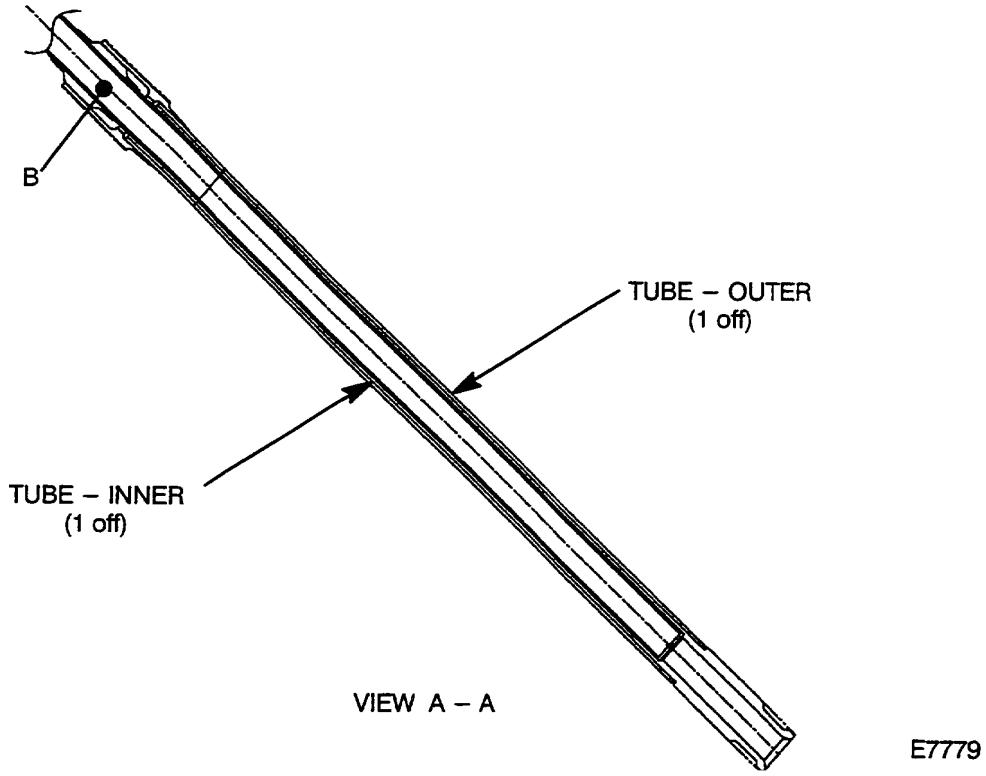
Location of the No. 5 Bearing Scavenge Tube Assembly
Fig.2



Inspection of the No.. 5 Bearing Pressure Tube Assembly
Fig.3



VIEW OF NO. 5 BEARING SCAVENGE TUBE ASSEMBLY



Modification of the No. 5 Bearing Scavenge Tube Assembly
Fig.4

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