P U B L I C A T I O N T R A N S M I T T A L

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DATE: Nov.12/01

V2500-A1/A5 PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin EV2500-73-0110

Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Pages 1 to 7 of the Service Bulletin	Initial issue

V2500-ENG-73-0110

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
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LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin are as follows:

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NON MODIFICATION SERVICE BULLETIN - ENGINE - INSPECTION OF FUEL MANIFOLDS

1. Planning Information

A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5, V2527M-A5 Engine Serial No. V10435 thru V10945 and all engines incorporating Service Bulletins 73-0131, 73-0139 or 73-0147.

(2) Airbus A320

(a) V2500-A1 All engines incorporating Service Bulletins 73-0131, 73-0139 or 73-0147

(b) V2527-A5, V2527E-A5 Engines Serial No. V10435 thru V10945 and all engines incorporating Service Bulletins 73-0131, 73-0139 or 73-0147.

(3) Airbus A321

V2530-A5, V2533-A5 Engine Serial No. V10435 thru V10945 and all engines incorporating Service Bulletins 73-0131, 73-0139 or 73-0147

(4) ATA locator 73-11-00

B. Concurrent Requirements

Incorporate this Service Bulletin concurrently with Service Bulletin V2500-ENG-73-0131, V2500-ENG-73-0139, and V2500-ENG-73-0147.

This Service Bulletin inspection is a one time only inspection after incorporation of each Service Bulletin V2500-ENG-73-0131, V2500-ENG-73-0139, and V2500-ENG-73-0147.

This Service Bulletin inspection is a one time only inspection for each engine listed in the Effectivity Data.

C. Reason

A loose manifold condition could be experienced at the connection between the fuel feed manifolds and the flow divider valve. The connection has a double seal, with the primary seal being o-rings installed on the internal transfer tubes, and the secondary seal being the metal cone seat between the manifold and flow divider valve. Anti-gallant used on threads of the manifold nut may contribute to the secondary seal not properly seating at the designated torque.

If the secondary seal seating surfaces are not fully seated, a loose manifold condition is possible. To date there have been no failures of this seal reported. To preclude any potential wear visual and hand checks are required to determine whether any manifolds may have been installed with this loose condition.

The Accomplishment Instructions in this Bulletin outlines the inspection process and procedure to eliminate the possibility of a loose manifold. The primary seal for these fuel lines is within the fittings, and will be unaffected by any subsequent torquing operations.

D. 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.

NOTE: DO NOT PERFORM THIS INSPECTION ON-WING.

The Inspection Procedures contained herein should be performed in Maintenance Centers or Overhaul Shops.

E. Manpower

Estimated man-hours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
In Service	Not Applicable
At Overhaul	1 Hour

F. Weight and Balance

Weight Change	None
Moment	No Effect
Datum	Engine Front Mount Centerline (Power Plant Station (PPS) 100)

G. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

H. Software Accomplishment Summary

Not Applicable.

I. References

1. IAE V2500 Service Bulletin V2500-ENG-73-0131 (Engine - Fuel and Control - Replace Certain Fuel Nozzle Supply Manifold Assemblies And The Related Attaching Hardware).

2. IAE V2500 Service Bulletin V2500-ENG-73-0139 (Engine - Fuel and Control - Replace A Fuel Nozzle Supply Manifold Assembly And The Related Attaching Hardware).

3. IAE V2500 Service Bulletin V2500-ENG-73-0147 (Engine - Fuel and Control - Replace Certain Fuel Nozzle Supply Manifold Assemblies And The Related Attaching Hardware).

4. V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-00-40.

5. Internal reference 01VB005

J. Other Publications Affected

None.

K. Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (No)

Added Data (Yes)

Revision to Table of Limits (No)

Inspection Procedures (No)

2. Material Information

A. Material - Price and Availability

Not Applicable.

B. Tooling - Price and Availability

Special tools are not required to accomplish this Service Bulletin.

C. Re-identified Parts

Not Applicable.

D. Other Material Information Data

Not Applicable.

3. Accomplishment Instructions

Perform the following inspection on V2500-A5 engines with serial numbers between V10435 and V10945, and any V2500-A1 or V2500-A5 engine which has incorporated Service Bulletin 73-0131, 73-0139, or 73-0147.

NOTE: DO NOT PERFORM THIS INSPECTION ON-WING.

The Inspection Procedures contained herein should be performed in Maintenance Centers or Overhaul Shops.

NOTE: THIS INSPECTION NEED ONLY BE PERFORMED ONCE ON EACH ENGINE AS IDENTIFIED IN THE EFFECTIVITY SECTION.

(1) Inspection Procedure:

(a) Visually check all connections between the flow divider valve and the fuel manifolds (part numbers 2A3256-01, 2A3257-01, 2A3258-01, 2A3259-01, 2A3260-01, 2A3261-01, 2A3263-01, 2A3264-01, 2A3265-01, and 2A3266-01) for any unusual signs of wear on the outside of the manifold or safety wire. If no wear is visible , continue to step B.

CAUTION: WHEN CHECKING FOR LOOSENESS USE REASONABLE FORCE, DO NOT OVER FORCE MANIFOLDS

(b) Hand check the manifolds for looseness. Grasp the manifold between the flow divider valve fitting and the first manifold bend. Try to move the manifold forward and aft (axially), and from side to side in all directions. No relative motion between the manifold fitting and the valve is permitted. If no relative motion is observed, the inspection is complete. If relative motion is observed, completely loosen the manifold nut to expose the interface between the manifold and flow divider valve, checking for any unusual signs of wear. If any unusual wear is found, replace the worn parts and proceed to step (c) for the installation procedure of any joints that have been opened. If no unusual wear is found, proceed to step (c).

(c) Tightening procedure for manifolds failing Step (a) or (b):

(i) Slide the manifold nut back to expose the welded end fitting. Check to ensure threads on adapter are clean. Application of additional anti-gallant onto ferrule shoulder is not required.

(ii) Torque the nut 95 - 105 pound inches(10.734 - 11.863 N.m)

NOTE: This torque is 10 pound inches (1.130 N.m) higher than the value stated in the Maintenance Manual due to the lack of anti-gallant.

(iii) Perform the hand check inspection per Step (b) above.

(iv) If no relative motion is observed, the inspection is complete. If relative motion is observed, completely loosen the manifold nut and return to Step (ii) of the torquing procedure.

NOTE: The repeated tightening will better distribute the anti-gallant across the threads and allow the proper torque to be reached.

(v) Repeat Steps (ii) through (iv) until the manifold torque (95 - 105 pound inches(10.734 - 11.863 N.m)) is obtained and the manifold successfully passes the hand check. If the manifold repeatedly fails the hand check, check the hardware at the joint for signs of damage and replace if necessary.

(2) Recording Instructions

(a) A record of accomplishment is required.

APPENDIX

Alternate or Optional Procedures

None

Added Data

Number values shown in parenthesis adjacent to U.S. values are Systeme Internationale equivalents.