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: Dec.11/08

V2500-A1/A5 SERIES PROPULSION SYSTEM NON-MODIFICATION SERVICE BULLETIN

This document transmits the Initial Issue of Non-Modification Service Bulletin V2500-ENG-73-0211.

Non-Modification Service Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Pages 1 to 11 of the Service Bulletin	Initial Issue.
	Page 1 of the Supplement (Added Data)	Initial Issue.

V2500-ENG-73-0211

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
If any have not been received please advise Customer Data Services, Rolls-Royce plc, Derby, England

International Aero Engines

SERVICE BULLETIN

NON-MODIFICATION SERVICE BULLETIN - ENGINE FUEL AND CONTROL - INSPECTION OF FUEL NOZZLE AND SUPPORT ASSEMBLIES

1. Planning Information

A. Effectivity Data

(1) Airbus A319

(a) V2522-A5, V2524-A5, V2527M-A5

Engine Serial Nos. V10587, V10605, V10692, V10734, V10826, V10955, V11096, V11645, V13063.

(2) Airbus A320

(a) V2500-A1

Engine Serial Nos.V0128, V0223.

(b) V2527-A5, V2527E-A5

Engine Serial Nos. V10369, V10604, V11386, V12271, V12594, V13039, V13061.

(3) Airbus A321

(a) V2530-A5, V2533-A5

Engine Serial Nos. V10408, V10834, V11424, V13043, V13059.

B. Concurrent Requirements

There are no concurrent requirements.

C. Reason

(1) Condition:

During manufacture of fuel nozzle and support assemblies, a number of inlet fittings were installed that were manufactured from a non-conforming material. The non-conforming fuel nozzle and support assemblies have a potential of external fuel leak either at the conical sealing surface or through the attaching braze point.

(2) Background:

During manufacture of fuel nozzle and support assemblies, a number of inlet fittings were installed that were manufactured from a non-conforming material (AMS 5630/AMS 5618) rather than the correct material (AMS 5646).

(3) Objective:

Do an inspection of the fuel nozzle and support assemblies installed on the engines.

(4) Substantiation:

The integrity of the conical sealing surface was validated using rig test and there was no fuel leakage at the conical seat. In order to address the leakage problem at the attachment braze joint, a thermal/structural analysis was done. Review of the analysis and subsequent lifing by P&W structures engineering determined that there was sufficient Low Cycle Fatigue (LCF) life in the braze joint to support an inspection interval of 1,200 hours.

(5) Effects of Bulletin on:

(a) Removal/Installation:

Not affected.

(b) Disassembly/Assembly:

Not affected.

(c) Cleaning:

Not affected.

(d) Inspection/Check:

Not affected.

(e) Repair:

Not affected.

(f) Testing:

Not affected.

(6) Supplemental Information

None.

D. Description

Do an inspection of the fuel nozzle and support assemblies.

E. Compliance

Category 3

Accomplish within 600 hours.

F. Approval

The compliance statement and the procedures described in this Non-Modification Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved for the engine models listed.

G. Manpower

(1) In Service

(a) To Gain Access:

45 Minutes

(b) To Perform The Inspection at 20 Locations:

40 Minutes

(c) To Return The Engine To A Serviceable Status:

45 Minutes

(d) Total Necessary Man-hours:

2 Hours 10 Minutes.

(2) At Overhaul

Not Applicable.

H. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

No Effect.

(3) Datum

Engine Front Mount Centerline (Power Plant Station (PPS) 100)

I. Electrical Load Data

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

J. Software Accomplishment Summary

Not Applicable.

K. References

(1) IAE V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, and S-V2500-7IB), Chapter/Section 73-13-41.

(2) Airbus A319/A320/A321 Aircraft Maintenance Manual.

(3) Internal Reference No. - IEN 08VC361.

(4) ATA Locator - 73-13-41.

L. Other Publications Affected

None.

M. Interchangeability of Parts

Not Applicable.

N. 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

There is no kit provided to do this Non-Modification Service Bulletin.

B. Industry Support Program

Not Applicable.

C. The material data that follows is for each engine.

This Non-Modification Service Bulletin is for inspection only.

D. Instructions/Disposition Code Statements:

Parts Modification Conditions

Not Applicable.

Spare Parts Availability

Not Applicable.

Cleaning, Inspection and Repair Information

Not Applicable.

E. Tooling - Price and Availability

Special tools are not required to accomplish this Non-Modification Service Bulletin.

F. Reidentified Parts

Not Applicable.

G. Other Material Information Data

Not Applicable.

3. Accomplishment Instructions

A. FOR ENGINES INSTALLED ON AIRCRAFT

(1) Do an inspection of the 20 Fuel Nozzle And Support Assemblies, PN 2A3448 or PN 2A3453 by the procedure that follows. See Figure 1 for the location of the part.

(a) Open the fan cowl doors as specified in Reference 2, Aircraft Maintenance Manual, Chapter/Section 71-13-00.

(b) Open the thrust reverser halves as specified in Reference 2, Aircraft Maintenance Manual, Chapter/Section 78-32-00.

(c) Deactivate the thrust reverser hydraulic control unit as specified in Reference 2, Aircraft Maintenance Manual, Chapter 78-30-00.

(d) Make a suitable magnet to do the inspection of the fuel nozzle fitting. Use rare earth magnet. See Figure 2.

CAUTION: DO NOT TOUCH THE MAGNET WITH THE FUEL LINE NUT LOCK WIRE DURING THE INSPECTION. THIS CAN CAUSE AN ERRONEOUS RESULT (LOCK WIRE IS MAGNETIC).

(e) Place the magnet against the surface to check for magnetism on each fuel nozzle fitting. See Figure 3 for the correct placement of the magnet.

(i) If there is no magnetic bond, the part is acceptable.

(ii) If there is a strong magnetic bond, the part is not acceptable and is made of non-conforming material (suspect part).

(f) Replace the suspect fuel nozzle and support assembly as soon as possible, but not later than 600 hours (next scheduled "A" check).

(g) Close the thrust reverser halves as specified in Reference 2, Aircraft Maintenance Manual, Chapter/Section 78-32-00.

(h) Close the fan cowl doors as specified in Reference 2, Aircraft Maintenance Manual, Chapter/Section 71-13-00.

(i) Activate the thrust reverser hydraulic control unit as specified in Reference 2, Aircraft Maintenance Manual, Chapter 78-30-00.

(j) Operators are requested to provide a summary of their fleet inspection to IAE Technical Support with the following information: (See Figure 4 for the Data Retrieval Form)

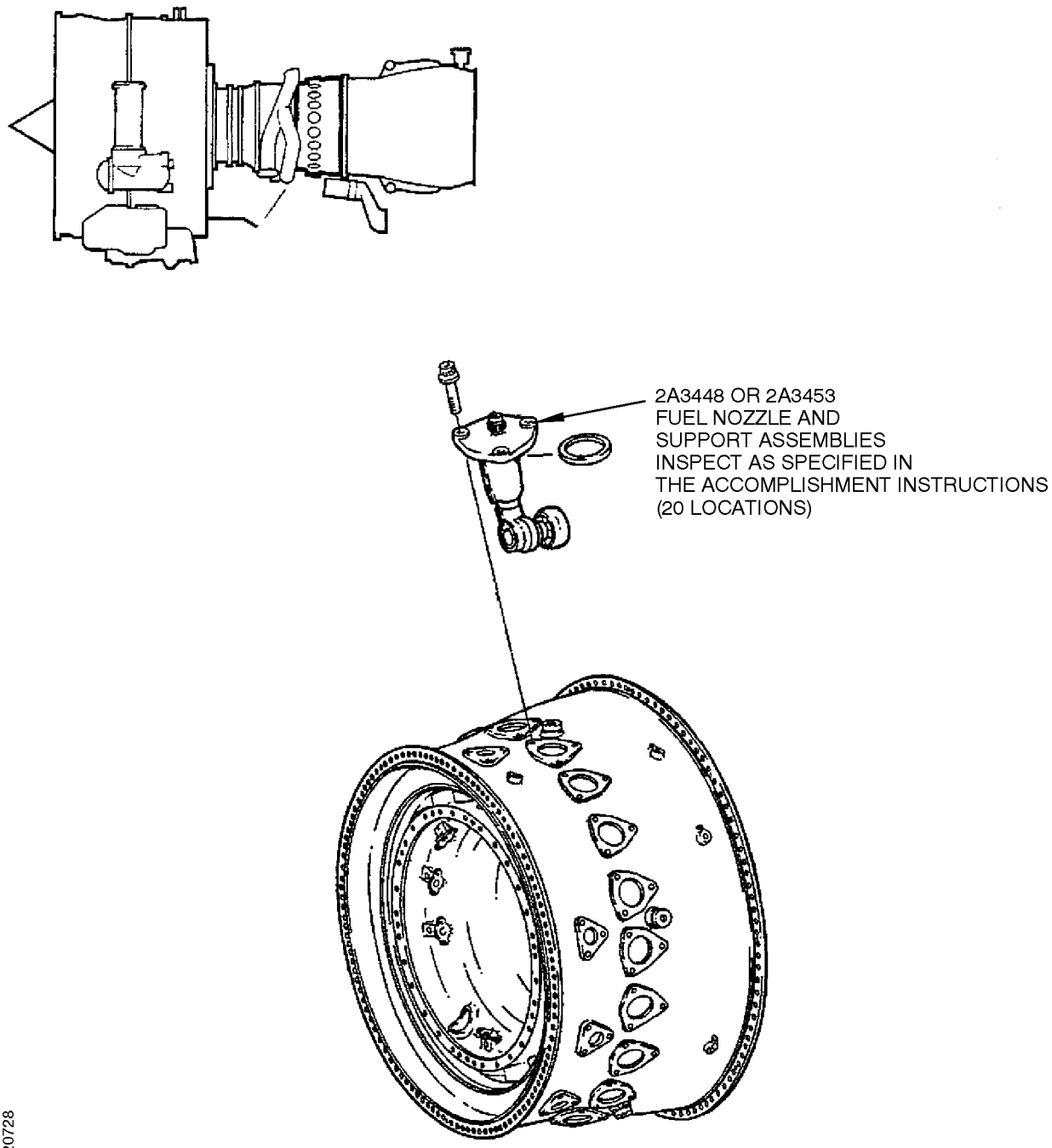
Airline/Operator
Engine Serial Number
Fuel Nozzle and Support Assembly Part Number
Non-Modification Service Bulletin Inspection Date
Inspection Findings (Suspect Part): Yes/No

Completed forms as shown in Figure 4 must be forwarded to:

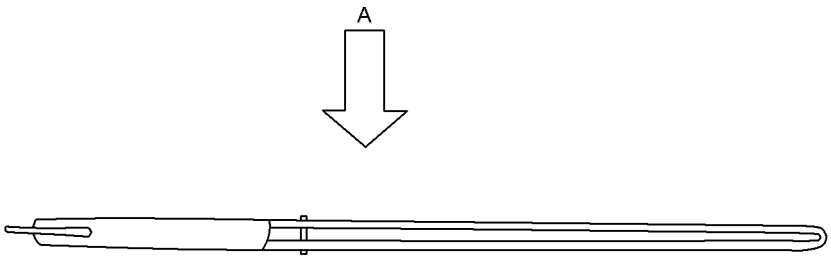
V2500 Customer Technical Service
Fax: (860) 755-1595
E-Mail: Richard.Greenland@iaev2500.com (or)
richard.greenland@pw.utc.com

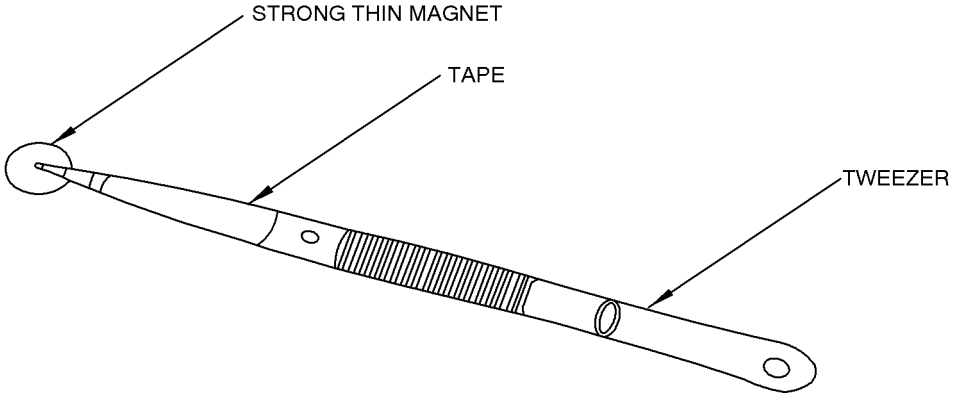
(2) Recording Instructions

(a) A record of accomplishment is required. Complete the Data Retrieval Form (Figure 4) and send it to the local IAE representative for forwarding to the IAE Fleet Manager.



LOCATION OF THE FUEL NOZZLE AND SUPPORT ASSEMBLY 73-13-41
FIGURE 1





VIEW A

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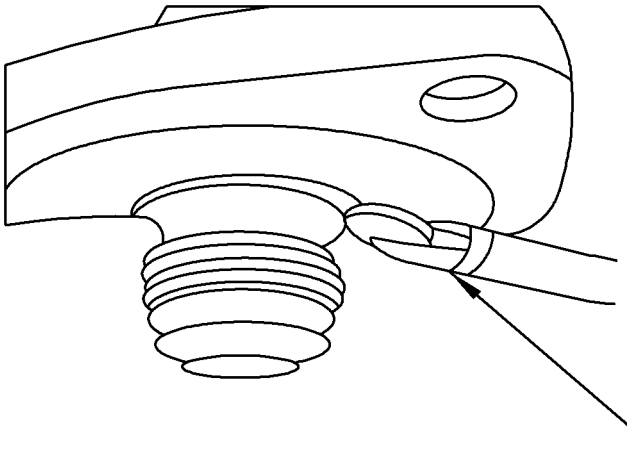
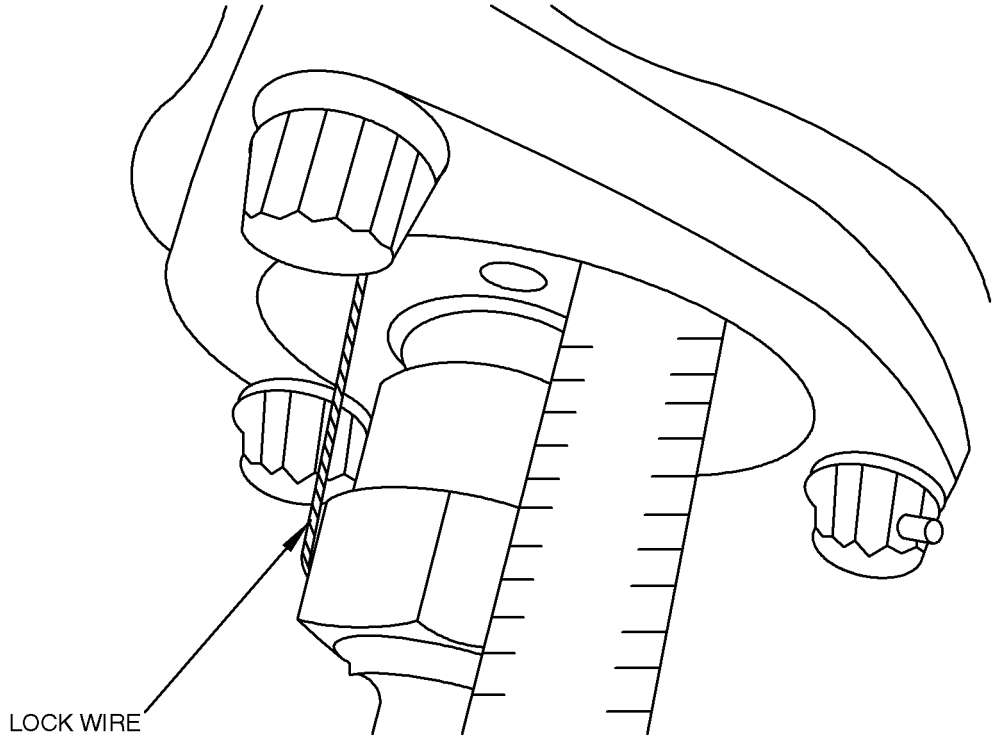
STRONG THIN MAGNET
FIGURE 2



NOTE: FUEL MANIFOLD B-NUT NOT SHOWN FOR CLARITY.



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CORRECT PLACEMENT OF MAGNET FOR INSPECTION
FIGURE 3

AIRCRAFT TYPE	
OPERATOR	
ENGINE SERIAL NUMBER	
SERVICE BULLETIN INSPECTION DATE	
ACCOMPLISHMENT LOCATION OF THE NON-MODIFICATION SERVICE BULLETIN (RECORD THE ADDRESS)	

INSPECTION RESULTS OF
FUEL NOZZLE AND SUPPORT ASSEMBLIES
FOR NON-CONFORMING MATERIAL

FUEL NOZZLE AND SUPPORT ASSEMBLY PART NUMBER	SUSPECT PART (YES / NO)

ADDITIONAL INFORMATION:

PLEASE SEND THE COMPLETED ACCOMPLISHMENT FORM TO THE LOCAL IAE REPRESENTATIVE OR IAE FLEET MANAGER.

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DATA RETRIEVAL FORM
FIGURE 4

International Aero Engines

SERVICE BULLETIN

NON-MODIFICATION SERVICE BULLETIN - ENGINE FUEL AND CONTROL - INSPECTION OF FUEL NOZZLE AND SUPPORT ASSEMBLIES

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	IENO8VC361	RG/IEL