



400 MAIN STREET, MAIL STOP 121-10
EAST HARTFORD, CT 06108, USA.
TELEPHONE:- 860 565 5515

DATE: Feb. 5/10

V2500-A1/A5/D5 SERIES PROPULSION SYSTEM SERVICE BULLETIN

This document transmits the Revision 1 of Service Bulletin V2500-ENG-72-0592.

Document History

Service Bulletin Revision Status

Initial Issue Aug.11/09

Service Bulletin Revision 1

Remove	Incorporate	Reason for change
All Pages of the Service Bulletin.	Pages 1 to 10 of the Service Bulletin.	To revise the Effectivity. To remove International Aerospace Tubes, Indianapolis, IN, U.S.A. and add International Aerospace Tubes - Asia Pte. Ltd., Singapore as an approved source.
	Pages 1 to 3 of the Appendix.	No change.
	Page 1 of the Supplement.	No change.

V2500-ENG-72-0592
Transmittal - Page 1 of 1

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
If any have not been received please advise IAE International Aero Engines AG

ENGINE – TUBE, NO.4 BEARING ASSEMBLY PRESSURE – MODIFICATION TO PREVENT CRACKING OF
WELD REPAIRED PARTS

1. Planning Information

A. Effectivity Data

(1) Airbus A319

- (a) V2522-A5, V2524-A5, V2527M-A5 (A5 Standard and A5 SelectOne™ Retrofit Standard).

R Engines from Serial No. V10001 thru V13190 and V15001.

- (b) V2522-A5, V2524-A5, V2527M-A5 (A5 SelectOne™ Production Standard).

R Engines from Serial No. V15002 thru V15286 and V15288, V15290, V15292,
R V15294, V15296, V15298, V15300, V15302 and V15304.

(2) Airbus A320

- (a) V2500-A1.

Engine Serial Nos. V0001 thru V0361.

- (b) V2527-A5, V2527E-A5 (A5 Standard and A5 SelectOne™ Retrofit Standard).

R Engines from Serial No. V10001 thru V13190 and V15001.

- (c) V2527-A5, V2527E-A5 (A5 SelectOne™ Production Standard).

R Engines from Serial No. V15002 thru V15286 and V15288, V15290, V15292,
R V15294, V15296, V15298, V15300, V15302 and V15304.

(3) Airbus A321

- (a) V2530-A5, V2533-A5 (A5 Standard and A5 SelectOne™ Retrofit Standard).

R Engines from Serial No. V10001 thru V13190 and V15001.

- (b) V2530-A5, V2533-A5 (A5 SelectOne™ Production Standard).

R Engines from Serial No. V15002 thru V15286 and V15288, V15290, V15292,
R V15294, V15296, V15298, V15300, V15302 and V15304.

(4) Boeing MD-90

(a) V2525-D5, V2528-D5.

Engines from Serial No. V20001 thru V20285.

B. Concurrent Requirements

There are no concurrent requirements.

C. Reason

(1) Condition

(a) A V2500 engine experienced oil loss outside of the No.4 bearing compartment due to a crack in the No.4 oil pressure tube, resulting in oil ignition outside of the No.4 bearing compartment.

(2) Background

(a) Investigation determined the crack is attributed to the weld repair per VRS3642 of the upper seal land area performed during a previous shop visit. The subject repair, VRS3642, has been removed from the Engine Manual by a temporary revision. An existing alternate repair for the No.4 bearing pressure tube seal land area will still be available, VRS3728, which will replace the tube section. All tubes will either be repaired, if required, to VRS3728 or replaced new.

(3) Objective

(a) Introduce a new No.4 bearing assembly pressure tube part number to distinguish tubes in-service that have been repaired to alternate existing repair VRS3728 or that have never had repair VRS3642 accomplished. Tubes that have not been repaired per VRS3642 need to be reidentified to the new part number at next exposure. Tubes that have been repaired per VRS3642 need to be either repaired per VRS3728, then re-identified to the new part number, or scrapped.

(4) Effects of Bulletin on:

Removal/Installation: Not affected.

Disassembly/Assembly: Not affected.

Cleaning: Add new No.4 Bearing Assembly Pressure Tube, P/N 2A4256-01 to Reference 3 or 4, Component Maintenance Manual – Tube, Hoses and Ducts, Task 72-42-20-100-100, Cleaning-00.

Inspection/Check: Add new No.4 Bearing Assembly Pressure Tube, P/N 2A4256-01 to Reference 3 or 4, Component Maintenance Manual – Tube, Hoses and Ducts, Task 72-42-20-200-100, Inspection/Check-00.

Repair: Add new No.4 Bearing Assembly Pressure Tube, P/N 2A4256-01 to Reference 3 or 4, Component Maintenance Manual – Tube, Hoses and Ducts, Task 72-42-20-300-023, Repair 023.

Testing: Not affected.

(5) Supplemental Information

None.

D. Description

Modify the No.4 bearing assembly pressure tube.

E. 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.

F. Approval

The part number changes and/or part modifications specified in the Accomplishment Instructions and Material Information sections of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Models given.

The compliance statement and the procedures described in this 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

Not Applicable.

(2) At Overhaul

NOTE: The parts affected by this Service Bulletin are accessible at overhaul.

To re-identify No.4 bearing assembly pressure tube: 5 mins

Total Necessary Man-hours: 5 mins

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) V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-3IA, S-V2500-3IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA and S-V2500-7IB), Chapter/Section 72-42-20, Figure 01.
- (2) V2500 Engine Illustrated Parts Catalogs (S-V2500-2SA, S-V2500-2SB, S-V2500-5SA, S-V2500-5SB, S-V2500-6SA, S-V2500-6SB, S-V2500-7SA, S-V2500-7SB), Chapter/Section 72-42-20, Figure 01.
- (3) V2500 Component Maintenance Manual (CMM-THD-V2500-1IA), Chapter/Section 72-42-20.
- (4) V2500 Component Maintenance Manual (CMM-THD-V2500-3IA), Chapter/Section 72-42-20.
- (5) V2500 Standard Practices/Processes Manual (E-V2500-1IA), Chapter/Section 70-09-00.
- (6) V2500 Standard Practices/Processes Manual (E-V2500-3IA), Chapter/Section 70-09-00.
- R (7) Internal Reference No. - 08VA095, 08VA095 Memo 2 and IEN 03VC161H.
- (8) ATA Locator - 72-42-20.

L. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-3IA, S-V2500-3IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA and S-V2500-7IB), Chapter/Section 72-42-20.
- (2) V2500 Engine Illustrated Parts Catalogs (S-V2500-2SA, S-V2500-2SB, S-V2500-5SA, S-V2500-5SB, S-V2500-6SA, S-V2500-6SB, S-V2500-7SA and S-V2500-7SB), Chapter/Section 72-42-20.
- (3) V2500 Component Maintenance Manual (CMM-THD-V2500-1IA), Chapter/Section 72-42-20.

V2500 Component Maintenance Manual (CMM-THD-V2500-3IA), Chapter/Section 72-42-20.

M. Interchangeability of Parts

Old and new parts are directly interchangeable.

N. Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (Yes)

Added Data (Yes)

Revision to Table of Limits (No)

Inspection Procedures (No)

2. Material Information

A. Material – Price and Availability

Modification kit is not required.

For Price and availability of spares refer to the supplement of this Service Bulletin.

B. Industry Support Program

Not applicable.

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

72-42-20

R For V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5,
R V2533-A5, V2522-A5 (SelectOne™), V2524-A5 (SelectOne™), V2527-A5 (SelectOne™),
R V2527E-A5 (SelectOne™), V2527M-A5 (SelectOne™), V2530-A5 (SelectOne™), V2533-A5
R (SelectOne™), V2525-D5, V2528-D5 Engines:

FIG- ITEM NUMBER	NEW PART NUMBER	QTY	PART TITLE	MAT	OLD PN	INSTR – DISP
01-060	2A4256-01	1	TUBE – PRESSURE, NO.4 BEARING ASSEMBLY	-	2A2493-01	(1)(B)(C1)(I)

D. Instructions/Disposition Code Statements:

Parts Modification Conditions

(1) The new part can be obtained by modification of the old part as specified in the Accomplishment Instructions.

Spare Parts Availability

(B) The new part will be available approximately September 15, 2009.
(C1) The old part will continue to be supplied until approximately September 15, 2009.

Cleaning, Inspection and Repair Information

(I) The cleaning, inspection and repair requirements are the same for the old and new part. The applicable engine manuals will be revised.

E. Tooling – Price and Availability

Special tools are not required to accomplish this Service Bulletin.

F. Reidentified Parts**Reidentified Parts Data**

New P/N	Keyword	Old P/N
2A4256-01	No.4 Bearing Assembly Pressure Tube	2A2493-01

G. Other Material Information Data

Not applicable.

3. Accomplishment Instructions

- (1) If you have a No.4 Bearing Assembly Pressure Tube, P/N 2A2493-01 that was previously repaired by Reference 3 or 4, Component Maintenance Manual, VRS3642 or if you have a No.4 Bearing Assembly Pressure Tube, P/N 2A2493-01 and it cannot be determined whether it has been repaired by Reference 3 or 4, Component Maintenance Manual, VRS3642, then do one of the procedures that follow. See Figure 1 for the location of the part.

- (a) Replace No.4 Bearing Assembly Pressure Tube, P/N 2A2493-01 with P/N 2A4256-01. Refer to the list that follows for old and new part numbers.

Replacement of the No.4 Bearing Assembly Pressure Tube

Old P/N

New P/N

2A2493-01

2A4256-01

OR

- (b) Send No.4 Bearing Assembly Pressure Tube, P/N 2A2493-01 to the following approved source:

R International Aerospace Tubes - Asia Pte. Ltd.

R 32 Loyang Drive - Mail Stop 997-00

R Singapore 508964

R Repair License: IIBY807X

- (c) Specify that the tube is being sent for incorporation of Service Bulletin No.V2500-ENG-72-0592.

NOTE: The approved source will remove and replace two tube details, reidentify the No.4 bearing assembly pressure tube as P/N 2A4256-01 and return the No.4 bearing assembly pressure tube to you.

- (d) Install the modified No.4 Bearing Assembly Pressure Tube, P/N 2A4256-01 per standard overhaul procedures. Refer to the list that follows for old and new part numbers.

Modification of the No.4 Bearing Assembly Pressure Tube

Old P/N

New P/N

2A2493-01

2A4256-01

- R (2) If you have a serviceable No.4 Bearing Assembly Pressure Tube, P/N 2A2493-01 that was never repaired by Reference 3 or 4, Component Maintenance Manual, VRS3642, then do the procedure that follows:
- (a) Reidentify the No.4 bearing assembly pressure tube as specified in Reference 5 or 6, Standard Practices Manual, Task 70-09-00-400-501, Procedures to Make Permanent Identification and Location Marks. Approved marking methods are deep electrolytic etch, metal stamp (press or roll), vibration peen (manual or mechanical), engraving (manual or mechanical), or drag impression. Refer to the list that follows for old and new part numbers.

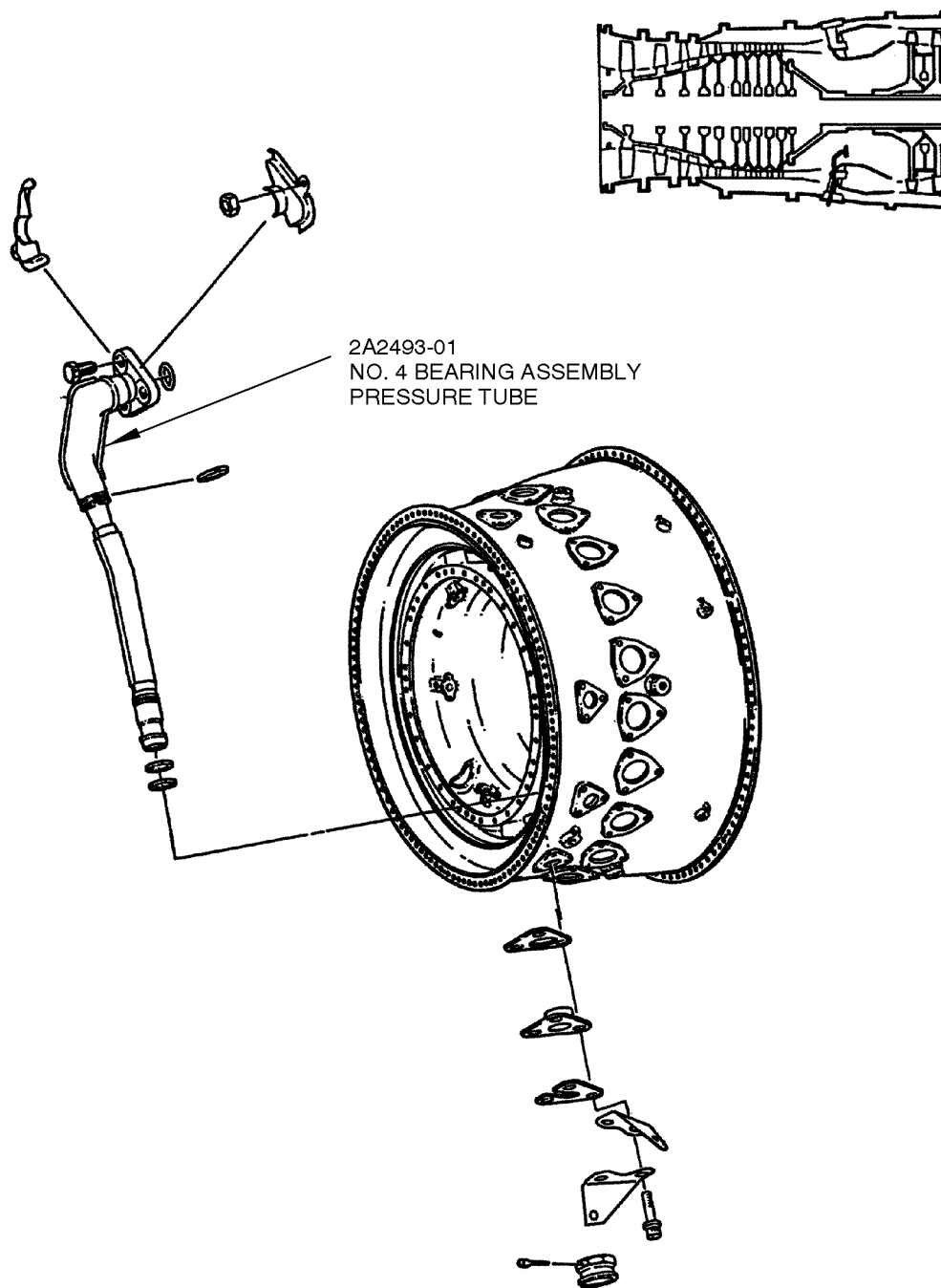
Reidentification of the No.4 Bearing Assembly Pressure Tube

Old P/N

New P/N

2A2493-01

2A4256-01

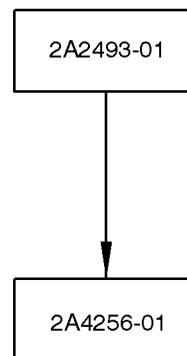


LOCATION OF THE NO.4 BEARING ASSEMBLY PRESSURE TUBE
72-42-20
FIGURE 1

APPENDIXParts Progression To Show the Changed Part in Relation to Other Parts

BASELINE

V2500-ENG-72-0592
ENGINE - TUBE, NO. 4 BEARING ASSEMBLY
PRESSURE - MODIFICATION TO PREVENT
CRACKING OF WELD REPAIRED PARTS



pw0b521194

FAMILY TREE – NO.4 BEARING ASSEMBLY PRESSURE TUBE, REF. CATALOG
SEQUENCE NO. 72-42-20 FIGURE 01, ITEM 060
CHART A

Aug.11/09
Feb. 5/10 Revision 1

V2500-ENG-72-0592
Appendix – Page 2

IAE PROPRIETARY INFORMATION

© IAE International Aero Engines AG. All rights reserved.
Not subject to the EAR per EC-F.R. Chapter 9, Part 754.3(b)(3).

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC 08VA095	RG/JDH
1	EC08VA095 IEN03VC161H	RG/JDH

2008

Aug. 11/09
Feb. 5/10 Revision 1

V2500–ENG–72–0592
Appendix – Page 3

IAE PROPRIETARY INFORMATION

© IAE International Aero Engines AG. All rights reserved.
Not subject to the E.A.R. per 15 C.F.R. Chapter 1, Part 934.3(b)(3).

ENGINE – TUBE, NO.4 BEARING ASSEMBLY PRESSURE – MODIFICATION TO PREVENT CRACKING OF
WELD REPAIRED PARTSSUPPLEMENT – PRICES AND AVAILABILITY

V2500 ALL

1. Modification Kit

A. There is no kit provided to do this Service Bulletin.

2. Material Cost

NOTE: The prices shown are for estimating purposes only and as such are given in good faith without commercial liability for advanced planning purposes only. Refer to IAE Spares and/or current Price Catalog for current prices.

A. There is no kit provided to do this Service Bulletin.

3. New Production Parts

New Production Part Number	Description	Unit Price US Dollars
2A4256-01	No.4 Bearing Assembly Pressure Tube	7,995.00