400 MAIN STREET, MAIL STOP 121-10 EAST HARTFORD, CT 06108, USA. TELEPHONE: - 860 565 5515 FAX:- 860 565 0600

P.O. BOX 31, DERBY TELEGRAMS - 'ROYCAR' DERBY TELEX - 37645 TELEPHONE: - 44 (0) 1332 242424 FAX:- 44 (0) 1332 249936

DATE: Sep.11/06

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

This document transmits Revision 2 to Service Bulletin EV2500-75-0091 and the Initial Issue of the Supplement

Document History

Printed in Great Britain

Service Bulletin Revision Status Supplement Revision Status

Initial Issue Feb.2/04 Mar.24/05 Revision 1

Bulletin Revision 2

Remove Incorporate Reason for change

Pages 1 to 17 of the All pages of the To add the Supplement.

Service Bulletin Service Bulletin

Supplement Initial Issue

Remove Incorporate Reason for change

> Page 1 To add the Supplement.

> > V2500-ENG-75-0091 Transmittal - Page 1 of 2

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

Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin following incorporation of Revision 2 to the Bulletin and the Initial Issue of the Supplement are as follows:

<u>Page</u>		Revision Number	Revision Date
	Bulletin		
R	1	2	Sep.11/06
R	2	2	Sep.11/06
R	3	2	Sep.11/06
R	4	2	Sep.11/06
R	5	2	Sep.11/06
R	6	2 2 2 2 2	Sep.11/06
R	7	2	Sep.11/06
R	8	2	Sep.11/06
R	9	2	Sep.11/06
R	10	2	Sep.11/06
R	11	2	Sep.11/06
R	12	2	Sep.11/06
R	13	2	Sep.11/06
R	14	2	Sep.11/06
R	15	2	Sep.11/06
R	16	2	Sep.11/06
R	17	2	Sep.11/06
	Supplement		
	1		Sep.11/06



ENGINE - LP TURBINE - RELEASE OF SALEABLE DETAIL PARTS FOR ACC DUCT REPAIR

1. Planning Information

A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5 Engines

(2) Airbus A319CJ

V2527M-A5 Engines

- (3) Airbus A320
 - (a) V2500-A1 Engines
 - (b) V2527-A5, V2527E-A5 Engines
- (4) Airbus A321

V2530-A5, V2533-A5 Engines

(5) Boeing - Longbeach Division MD-90

V2525-D5, V2528-D5 Engines

B. Concurrent Requirements

None.

C. Reason

(1) Problem

Release of rework of ACC connector tube of the old configuration (P/N 3A0494, 3A1549, 3A2316, 3A2335, 3A2003 and 3A2319) in case EM-Limits are exceeded and no existing repair can be applied.

(2) Evidence

The saleable detail parts to permit the rework have been introduced in accordance with repair schemes VRS4478, VRS4479, VRS4480, VRS4481, VRS4484 and VRS4485.

Feb. 2/04 R Sep.11/06



(3) Substantiation

The manufacturing process is identical with the current production process. Therefore an additional substantiation is not required.

(4) Objective

The changes in configuration recommended in this Service Bulletin are intended to maintain engine reliability.

- (5) Effect of Bulletin on:
 - (a) Operation

None

(b) Maintenance

None

(c) Overhaul

Affected

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. <u>Description</u>

- (1) The changes introduced are:
 - (a) This Service Bulletin introduces new parts, as well as a rework procedure for the ACC Connector Tube Assembly. Do the rework at the ACC piece part level.
- (2) Rework existing ACC configurations, see Fig 1 (sheet 1 of 3) and Fig 2 (sheet 1 of 4)

Part No. Title

3A2847 A/O Connector Tube

3A2846 Sealing Tube

Feb. 2/04 R Sep.11/06



E. Compliance

Category Code 8

Accomplish based upon experience with the prior configuration

F. Approval

The part number changes and/or part modification described in Section 2 and 3 of this Modification 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

Accomplish rework and reidentify 5 hours Connector Tube Assembly

TOTAL 5 hours

<u>NOTE</u>: The parts affected by this Service Bulletin are accessible at overhaul.

H. Material Price and Availability

Modification kit not required; parts supplied as single line items.

R For prices and availability of future spares, see Supplement of this Service R Bulletin.

I. Tooling Price and Availability

Tooling necessary (see Section 2. Material Information, Part E).

J. <u>Industry Support Information</u>

Not applicable.

K. Weight and Balance

(1) Weight Change

None.

Feb. 2/04 R Sep.11/06



(2) Moment Arm

None.

(3) Datum

Engine front mount centreline (Power Plant Station PPS 100).

L. Electrical Load Data

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

M. <u>Software Accomplishment Summary</u>

Not applicable.

N. References

- (1) IAE Service Bulletin V2500-ENG-75-0051 Revised Connector Tube Assembly with new Periseal Housing Clamps.
- (2) Engineering Change O3VMOO2.
- (3) ATA Locator 75-24-49.

O. Other Publications Affected

(1) Component Maintenance Manual, THD 75-24-49, Rework.

P. Interchangeability of Parts

Refer to Section 2. Material Information.

2. Material Information

A. The kit required consists of the following parts:

Not applicable.

R B. Parts to be reworked:

R Refer to Section 3. Accomplishment Instructions of this Service Bulletin.

C. Parts affected by this Bulletin:

V2500-A1/A5 Engines

75-24-49

Printed in Great Britain

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
01010	3A2181	1	Connector Tube Assembly	3A0494	(A)(B)(S1)
01010	3A2181	1	Connector Tube Assembly	3A1549	(A)(B)(S1)
01010	3A2181	1	Connector Tube Assembly	3A2316	(A)(B)(S1)
01010	3A2181	1	Connector Tube Assembly	3A2335	(A)(B)(S1)

V2500 D5 Engines

75-24-49

FIG	NEW	QTY	PART TITLE	OLD	INSTR
ITEM	PART			PART	DISP
NO.	NO.			NO.	
01010	3A2198	1	Connector Tube Assembly	3A2003	(A)(B)(S1)
01010	3A2198	1	Connector Tube Assembly	3A2319	(A)(B)(S1)

D. <u>Instructions disposition codes:</u>

- (A) New part currently available for sale
- (B) Old parts no longer available for sale
- (S1) Modified and new parts are freely and fully interchangeable.

Feb. 2/04 R Sep.11/06



R

SERVICE BULLETIN

E. <u>Tooling Price and Availability</u>

1	Tool Number	Qty	Description	Function	Availability
3	3M14523	1	Cut off and welding fixture	Cut off and weld sealing tube and/or Tube Connector	(1)

(1) Indicates that Tool Design Aperture Cards are currently available from IAE.



3. Accomplishment Instructions

A. Rework Instructions

Rework V2500 A1/A5 Engines existing Tube Connector Assembly (75-24-49)

Affected Parts:

3A0494

3A1549

3A2316

3A2335

(1) Tools:

Refer to Section 2.E. of this Service Bulletin

(2) Consumable Materials

CoMat 03-246 Welding Material

PROCEDURE

RELATED DATA

(3)	Remove the Connector	Tube	Refer to Fig 1 (sheet 1 of 3). Use
			applicable machining equipment and
			IAE 3M14523 cut off and welding
			fixture 1 off.

(4) Examine the machined area Refer to Fig. 1 (sheet 2 of 3). Use applicable inspection equipment

(5) Clean the surfaces to be welded Refer to SPP TASK 70-11-34-300-503

(6) Weld in the replacement Connector Tube (01-840) to the Connector Tube Assembly Refer to SPP TASK 70-31-13-310-501 and Fig 1 (sheet 3 of 3). Provide an argon gas backup. Flow argon gas in to the tube during the weld repair. Weld in a protective atmosphere. Use CoMat 03-246 welding material and IAE 3M14523 cut off and welding fixture 1 off.

off.

Feb. 2/04 R Sep.11/06



(7) Weld the Cut Tube Assembly to the Connector Tube Assembly

Refer to SPP 70-31-13-310-501 and Fig 1 (sheet 3 of 3). Provide an argon gas backup. Flow argon gas into the tube during the weld repair. Weld in a protective atmosphere. Use CoMat 03-246 welding material and IAE 3M14523 cut off and welding fixture 1 off.

(8) Examine the welded areas for cracks

Refer to SPP TASK 70-23-05-230-501. Use medium sensitivity level. No cracks are permitted.

(9) DELETED

DELETED

(10) Examine the welded areas dimensionally Refer to Fig 1 (sheet 3 of 3). Use applicable inspection equipment

(11) DELETED

DELETED

(12) Clean the Connector Tube Assembly

Refer to SPP TASK 70-11-34-300-503

(13) Reidentify the Connector Tube
Assembly with the new part number

Reidentify adjacent to the existing part number as given below. Refer to SPP70-09-00-400-501. Use shallow electrochemical marking method.

New Part No.	Old Part No.
3A2181	3A0494
3A2181	3A1549
3A2181	3A2316
3A2181	3A2335

B. Rework Instructions

Rework V2500 D5 Engines existing Tube Connector Assembly (75-24-49)

Affected Parts:

3A2003

3A2319

(1) Tools:

Refer to Section 2.E. of this Service Bulletin

Feb. 2/04 R Sep.11/06



(2) Consumable Materials

CoMat 03-246 Welding Material

PROCEDURE RELATED DATA

(3) Remove the damaged Connector Tube Refer to Fig 2 (sheet 1 of 4). Use applicable machining equipment and IAE 3M14523 cut off and welding fixture 1 off.

- (4) Examine the machined area dimensionally
- Refer to Fig. 2 (sheet 2 of 4). Use applicable inspection equipment
- (5) Clean the surfaces to be welded
- Refer to SPP TASK 70-11-34-300-503
- (6) Weld in the replacement Connector Tube (01-840) to the Connector Tube Assembly

Refer to SPP TASK 70-31-13-310-501 and Fig 2 (sheet 3 of 4). Provide an argon gas backup. Flow argon gas in to the tube during the weld repair. Weld in a protective atmosphere. Use CoMat 03-246 welding material and IAE 3M14523 cut off and welding fixture 1 off.

(7) Weld the Sealing Tube to the Connector Tube Assembly

Refer to SPP 70-31-13-310-501 and Fig 2 (sheet 4 of 4). Provide an argon gas backup. Flow argon gas into the tube during the weld repair. Weld in a protective atmosphere. Use CoMat 03-246 welding material and IAE 3M14523 cut off and welding fixture 1 off.

(8) Examine the welded areas for cracks

Refer to SPP TASK 70-23-05-230-501. Use medium sensitivity level. No cracks are permitted.

(9) DELETED

DELETED

DELETED

(10) Examine the welded areas dimensionally

Refer to Fig 2 (sheet 4 of 4). Use applicable inspection equipment

(11) DELETED

Refer to SPP TASK 70-11-34-300-503

(12) Clean the Connector Tube Assembly

Keler to SPP 145K /U-11-34-300-303

Feb. 2/04 R Sep.11/06



(13) Reidentify the Connector Tube Assembly with the new part number Reidentify adjacent to the existing part number as given below. Refer to SPP70-09-00-400-501. Use shallow electrochemical marking method.

New Part No. Old Part No.

3A2198 3A2003 3A2198 3A2319

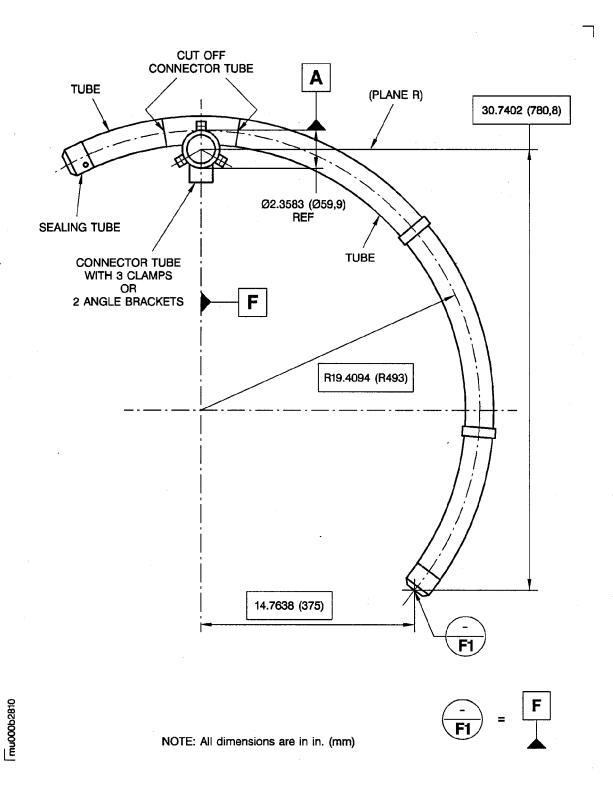
C. Assembly Instructions

For assembly instructions refer to Engine Manual TASK 72-00-50-420-000.

D. Recording Instructions

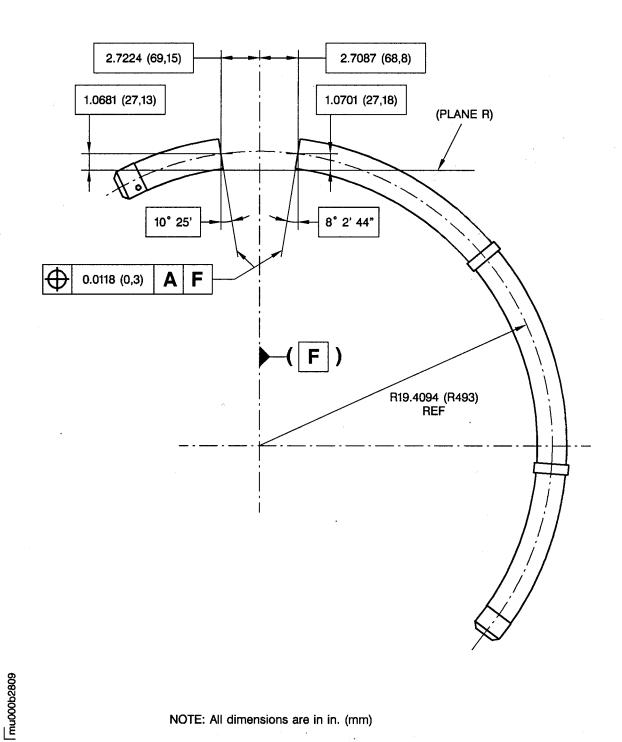
A record of accomplishment is required.





Connector Tube Assembly - Replacement of Connector Tube Fig.1 (Sheet 1 of 3)

Feb. 2/04 R Sep.11/06

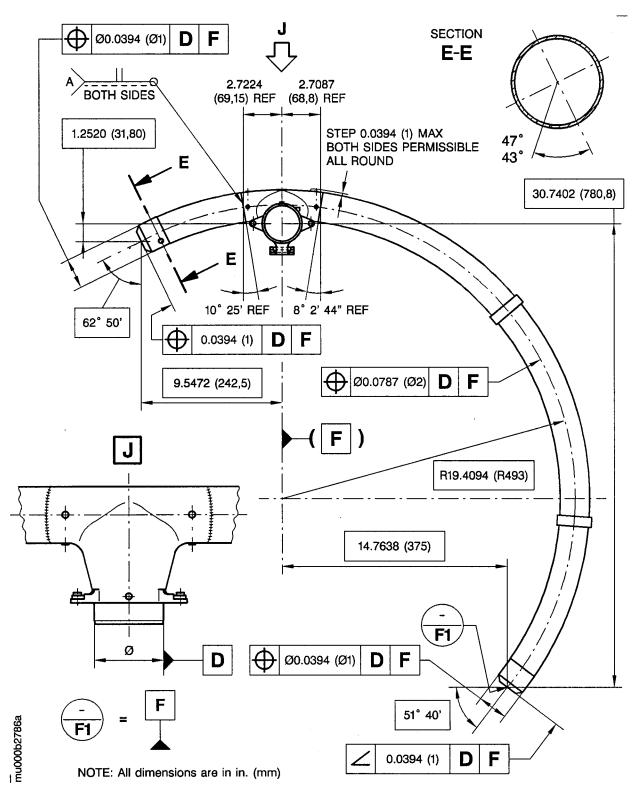


NOTE: All dimensions are in in. (mm)

Connector Tube Assembly - Replacement of Connector Tube Fig.1 (Sheet 2 of 3)

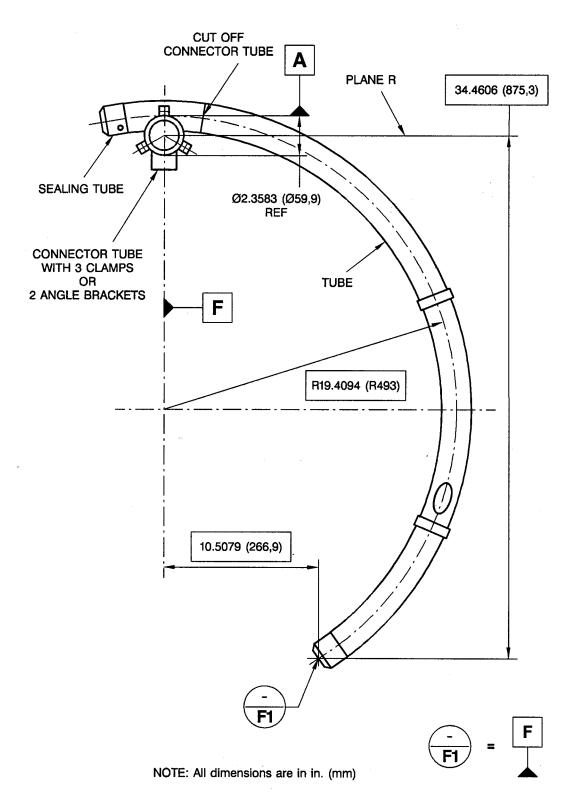
Feb. 2/04 R Sep.11/06





Connector Tube Assembly - Replacement of Connector Tube Fig.1 (Sheet 3 of 3)

Feb. 2/04 R Sep.11/06

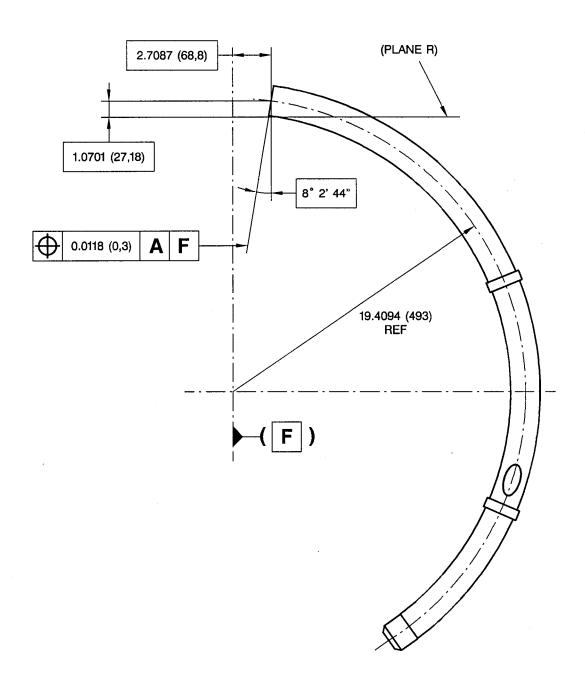


Connector Tube Assembly - Replacement of Connector Tube Fig.2 (Sheet 1 of 4)

Feb. 2/04 R Sep.11/06

mu000b2811





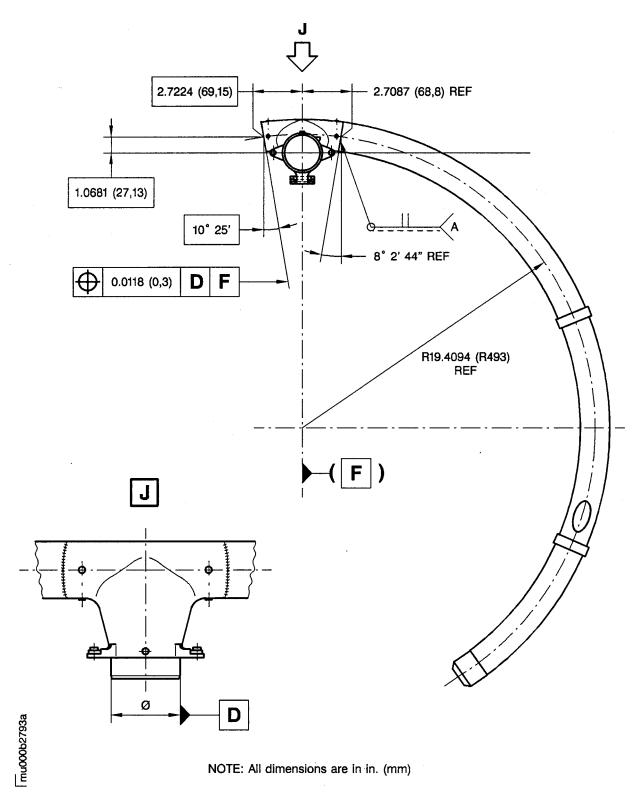
nu000b2792a

NOTE: All dimensions are in in. (mm)

Connector Tube Assembly - Replacement of Connector Tube Fig.2 (Sheet 2 of 4)

Feb. 2/04 R Sep.11/06

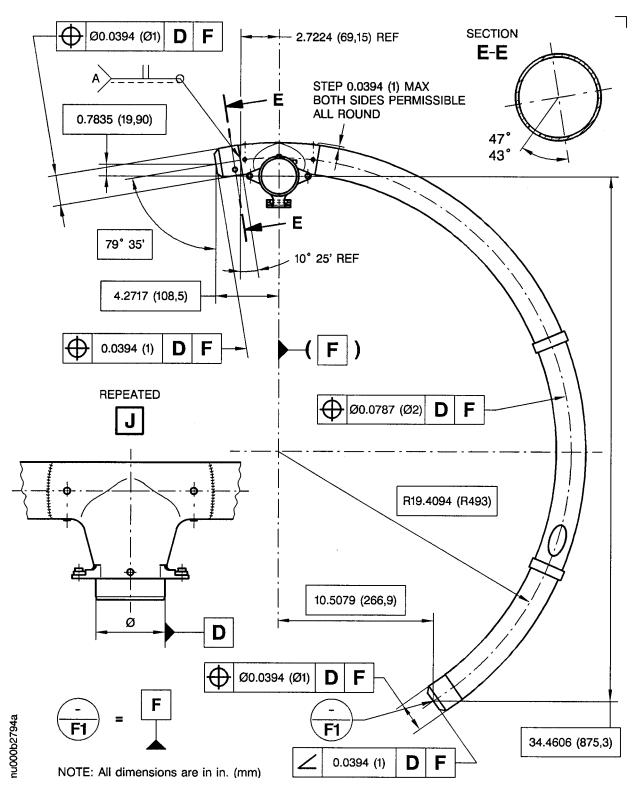




Connector Tube Assembly - Replacement of Connector Tube Fig.2 (Sheet 3 of 4)

Feb. 2/04 R Sep.11/06





Connector Tube Assembly - Replacement of Connector Tube Fig.2 (Sheet 4 of 4)

Feb. 2/04 R Sep.11/06





ENGINE - LP TURBINE - RELEASE OF SALEABLE DETAIL PARTS FOR ACC DUCT REPAIR

R <u>SUPPLEMENT - PRICES AND AVAILABILITY</u>

R The prices shown are for estimating purposes only and as such are given in good R faith, without commercial liability for advanced planning purposes only. Refer to R IAE Spares and/or current price catalogue for current prices.

R 1. Modification Kit:

R Not applicable.

R 2. New Production Parts:

R R	Part No.	Description	Unit Price US Dollars
R R	3A2181	Connector Tube Assembly	8061.00
R R	3A2198	Connector Tube Assembly	15520.00

R 3. Tools

Printed in Great Britain

R None.

