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

Printed in Great Britain

This document transmits the Revision 1 to Service Bulletin V2500-ENG-75-0103 and the Revision 1 to the Supplement

### Document History

#### Service Bulletin Revision Status

Initial Issue Apr.18/08

#### Service Bulletin Revision 1

Remove	Incorporate	Reason for change
All pages of the Service Bulletin	Pages 1 to 22 of the Service Bulletin	To add the V2500-A1 engine model to the Effectivity.
All pages of the Supplement	Page 1 of the Supplement	

# V2500-ENG-75-0103

Transmittal - Page 1 of 1

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED

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ENGINE – LP TURBINE – ACTIVE CLEARANCE CONTROL C-TUBE WITH CHANGED MATERIAL FOR END  
FERRULES

1. Planning Information

A. Effectivity

- (1) Airbus A319
  - (a) V2522-A5, V2524-A5, V2527M-A5 Engines.
- (2) Airbus A320
  - (a) V2500-A1 Engines.
  - (b) V2524-A5, V2527-A5, V2527E-A5 Engines.
- (3) Airbus A321
  - (a) V2530-A5, V2533-A5 Engines.
- (4) Boeing MD-90
  - (a) V2525-D5, V2528-D5 Engines.

B. Concurrent Requirements

None.

C. Reason

(1) Problem

Material Change on ACC Sealing Tube on ACC Connector Tube Assembly.

(2) Evidence

The changed sealing tube has been introduced into service in accordance with the Connector Tube Assembly, but not as repair part to rework existing ACC Connector Tube Assemblies.

(3) Substantiation

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

(4) Objective

The changes in configuration recommended in this Service Bulletin intend to keep maintenance costs at low level.

## (5) Effect of Bulletin on:

## (a) Operation

Not affected.

## (b) Maintenance

Not affected.

## (c) Overhaul

Affected.

## (d) Repair Schemes

Not affected.

## (e) Interchangeability

Not affected.

## (f) Fits and Clearances

Not affected.

**D. Description**

## (1) The changes introduced are:

(a) This Service Bulletin introduces a rework procedure for the ACC Connector Tube Assembly. Do the rework at the ACC piece part level.

(2) Rework existing ACC configurations, see Figure 1 (sheet 1 or 2 of 5) and Figure 2 (sheet 1 or 2 of 5).

(3) P/N	Title
3A3041	Sealing Tube

**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**

Total - 5 Hours.

(a) Accomplish rework and reidentify of Connector Tube Assembly - 5 hours.

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

**H. Material Price and Availability**

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

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

**I. Tooling - Price and Availability**

Tooling necessary (see 2. Material Information, Chapter E.)

**J. Industry Support Information**

Not applicable.

**K. Weight and Balance****(1) Weight Change**

None.

**(2) Moment Arm**

No effect.

**(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. Software Accomplishment Summary**

Not applicable.

**N. References**

- (1) IAE V2500 Engine Manuals (E-V2500-1IA and -3IA), Chapter 72-00-50.
- (2) IAE V2500 Standard Practices/Procedures Manual (SPP-V2500-1IA), Chapters 70-09-00, 70-11-34, 70-23-05, and 70-31-13.
- (3) Internal Reference No.  
Engineering Change No. 06VM015A.
- (4) ATA Locator - 75-24-49.

**O. Other Publications Affected**

- (1) Component Maintenance Manual, THD-V2500-1IA for A1/A5 and THD-V2500-3IA for D5 75-24-49.

**P. Interchangeability of Parts**

Refer to section 2. Material Information.

## 2. Material Information

### A. The kit required consists of the following parts:

None.

### B. New production parts:

See Supplement of this Service Bulletin.

### C. Parts affected by this Service Bulletin:

For V2500-A1/A5 Engines:

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
75-24-49						
01-010	3A3042	1	Connector Tube Assembly	-	3A2316	(A)(B) (S1)
01-010	3A3043	1	Connector Tube Assembly	-	3A2335	(A)(B) (S1)
01-010	3A2988	1	Connector Tube Assembly	-	3A2181	(A)(B) (S1)

For V2500-D5 Engines:

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
75-24-49						
01-010	3A3044	1	Connector Tube Assembly	-	3A2319	(A)(B) (S1)
01-010	3A2991	1	Connector Tube Assembly	-	3A2198	(A)(B) (S1)

### D. Instructions disposition codes:

(A) Old parts will be supplied until stock is exhausted.

(B) Old part can be reworked and reidentified with new part number.

(S1) Modified and new parts are freely and fully interchangeable.

E. Tooling – Price and Availability

Tool Number	Qty	Description	Function	Availability
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.

Price to be quoted upon request.

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### 3. Accomplishment Instructions

#### A. Rework Instructions

Rework V2500 A1/A5 Engines existing tube connector assembly (75-24-49)

Affected Parts:        3A2316  
                               3A2335  
                               3A2181

##### (1) Tools

Refer to Chapter 2, Step E. of this Service Bulletin.

##### (2) Consumable Materials

CoMat 03-288	Welding Material
CoMat 03-195	Welding Material

##### PROCEDURE

##### SUPPLEMENTARY INFORMATION

NOTE: Figure 1, sheet 1 of 5 and 2 of 5  
 Reflect different configurations of the  
 T-connector.

- |   |  |
|---|--|
| (3) Remove the Sealing<br>Tube  | Refer to Figure 1 (sheet 1 or 2 of 5).<br>Use applicable machining equipment and IAE 3M14523<br>cut off and welding fixture 1 off. |
| (4) Examine the machined<br>area  | Refer to Figure 1 (sheet 3 of 5). Use applicable<br>inspection equipment.  |
| (5) Clean the surfaces<br>to be welded  | Refer to SPP TASK 70-11-34-300-503.  |
| (6) Weld in the<br>replacement Sealing<br>Tube (01-341) to the<br>Connector Tube<br>Assembly 01-010 | Refer to SPP TASK 70-31-13-310-501 and Figure 1<br>(sheet 4 of 5 and 5 of 5).  |

Provide an argon gas backup. Flow argon gas into  
 the tube during the weld repair. Weld in a  
 protective atmosphere. Use CoMat 03-288 or 03-195  
 welding material and IAE 3M14523 cut off and  
 welding fixture 1 off.

- |      |   |   |
|------|---|---|
| (7)  | Examine the welded areas for cracks                             | Refer to SPP TASK 70-23-05-230-501. Use medium sensitivity level. No cracks are permitted.  |
| (8)  | Examine the welded areas dimensionally                          | Refer to Figure 1 (sheet 4 of 5). Use applicable inspection equipment.  |
| (9)  | Clean the Connector Tube Assembly                               | Refer to SPP TASK 70-11-34-300-503.   |
| (10) | Reidentify the Connector Tube Assembly with the new part number | Reidentify adjacent to the existing part number as given below.<br>Refer to SPP TASK 70-09-00-400-501.<br>Use shallow electrochemical marking method. |

NEW PART NUMBER	OLD PART NUMBER
3A3042	3A2316
3A3043	3A2335
3A2988	3A2181

#### B. Rework Instructions

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

Affected Parts:     3A2319  
                              3A2198

#### (1) Tools

Refer to Chapter 2, Step E. of this Service Bulletin

#### (2) Consumable Materials

CoMat 03-288	Welding Material
CoMat 03-195	Welding Material

PROCEDURE	SUPPLEMENTARY INFORMATION
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NOTE: Figure 2, sheet 1 of 5 and 2 of 5.  
Reflect different configurations of the T-connector.

- |     |                         |   |
|-----|-------------------------|---|
| (3) | Remove the Sealing Tube | Refer to Figure 2 (sheet 1 or 2 of 5).<br>Use applicable machining equipment and IAE 3M14523 cut off and welding fixture 1 off. |
|-----|-------------------------|---|

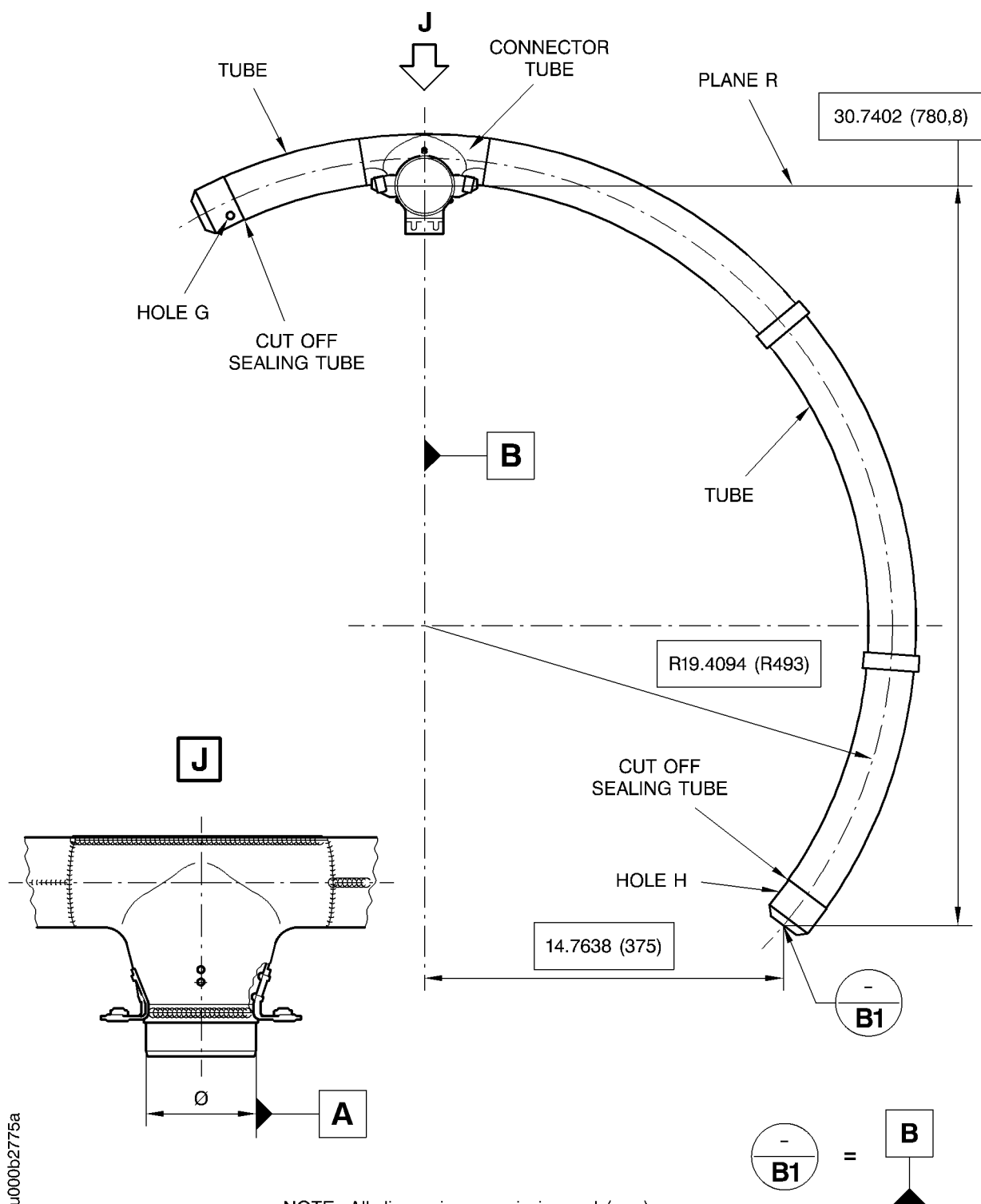
- |   |  |
|---|--|
| (4) Examine the machined area   | Refer to Figure 2 (sheet 3 of 5). Use applicable inspection equipment.   |
| (5) Clean the surfaces to be welded   | Refer to SPP TASK 70-11-34-300-503.  |
| (6) Weld in the replacement Sealing Tube (01-341) to the Connector Tube Assembly 01-010 | Refer to SPP TASK 70-31-13-310-501 and Figure 2 (sheet 4 of 5 and 5 of 5). Provide an argon gas backup. Flow argon gas into the tube during the weld repair. Weld in a protective atmosphere. Use CoMat 03-288 or 03-195 welding material and IAE 3M14523 cut off and welding fixture 1 off. |
| (7) Examine the welded area for cracks  | Refer to SPP TASK 70-23-05-230-501. Use medium sensitivity level. No cracks are permitted.   |
| (8) Examine the welded areas dimensionally  | Refer to Figure 2 (sheet 4 of 5). Use applicable inspection equipment.   |
| (9) Clean the Connector Tube Assembly   | Refer to SPP TASK 70-11-34-300-503.  |
| (10) Reidentify the Connector Tube Assembly with the new part number                    | Reidentify adjacent to the existing part number as given below.<br>Refer to SPP TASK 70-09-00-400-501. Use shallow electrochemical marking method.   |
| NEW PART NUMBER   | OLD PART NUMBER  |
| 3A3044  | 3A2319   |
| 3A2991  | 3A2198   |

#### C. Assembly Instructions

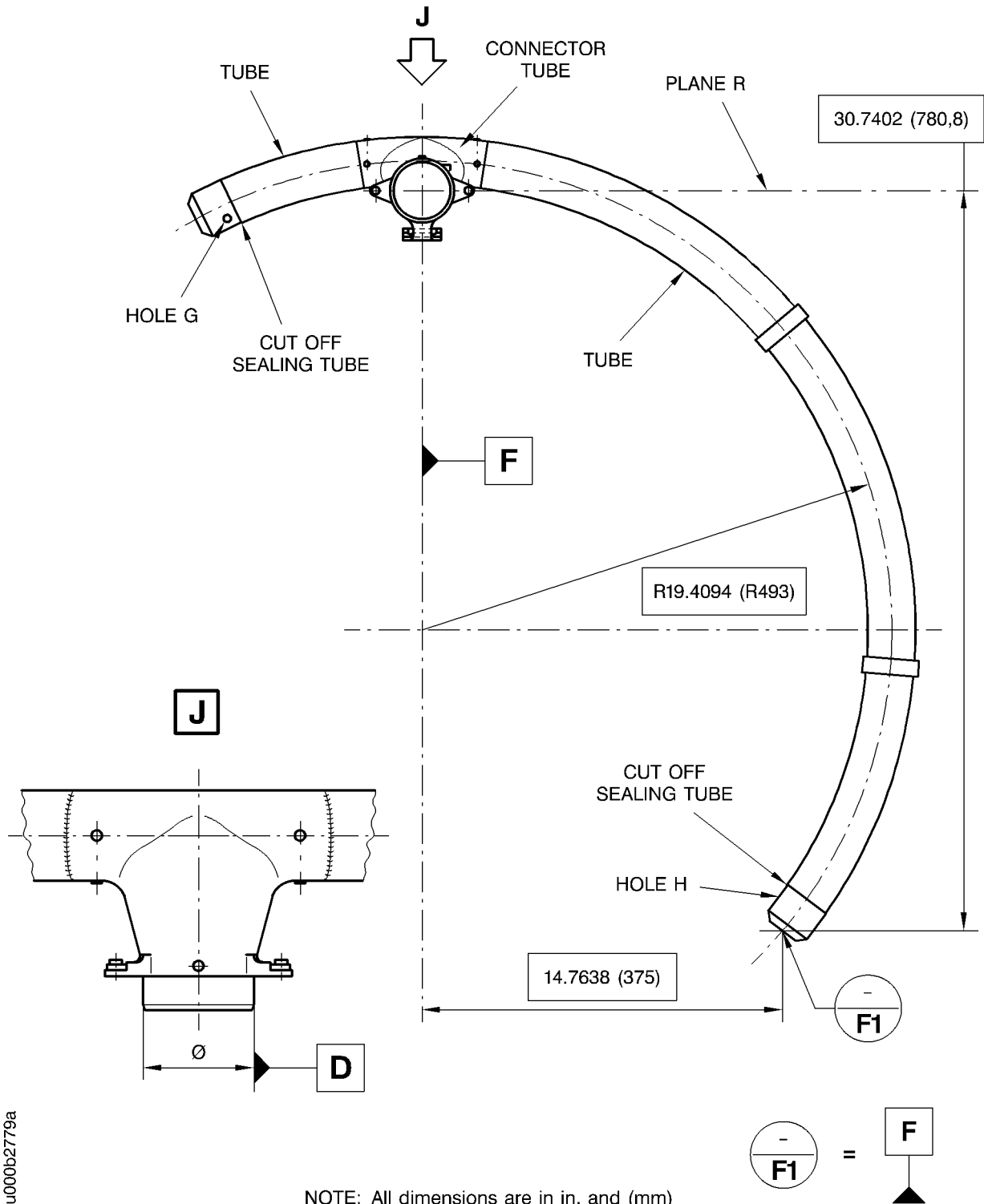
For assembly instructions refer to Engine Manual Pub. Ref. E-V2500-1IA, TASK 72-00-50-420-000 for A1/A5 or Engine Manual Pub. Ref. E-V2500-3IA TASK 72-00-50-420-000 for D5 Engines.

#### D. Record Instructions

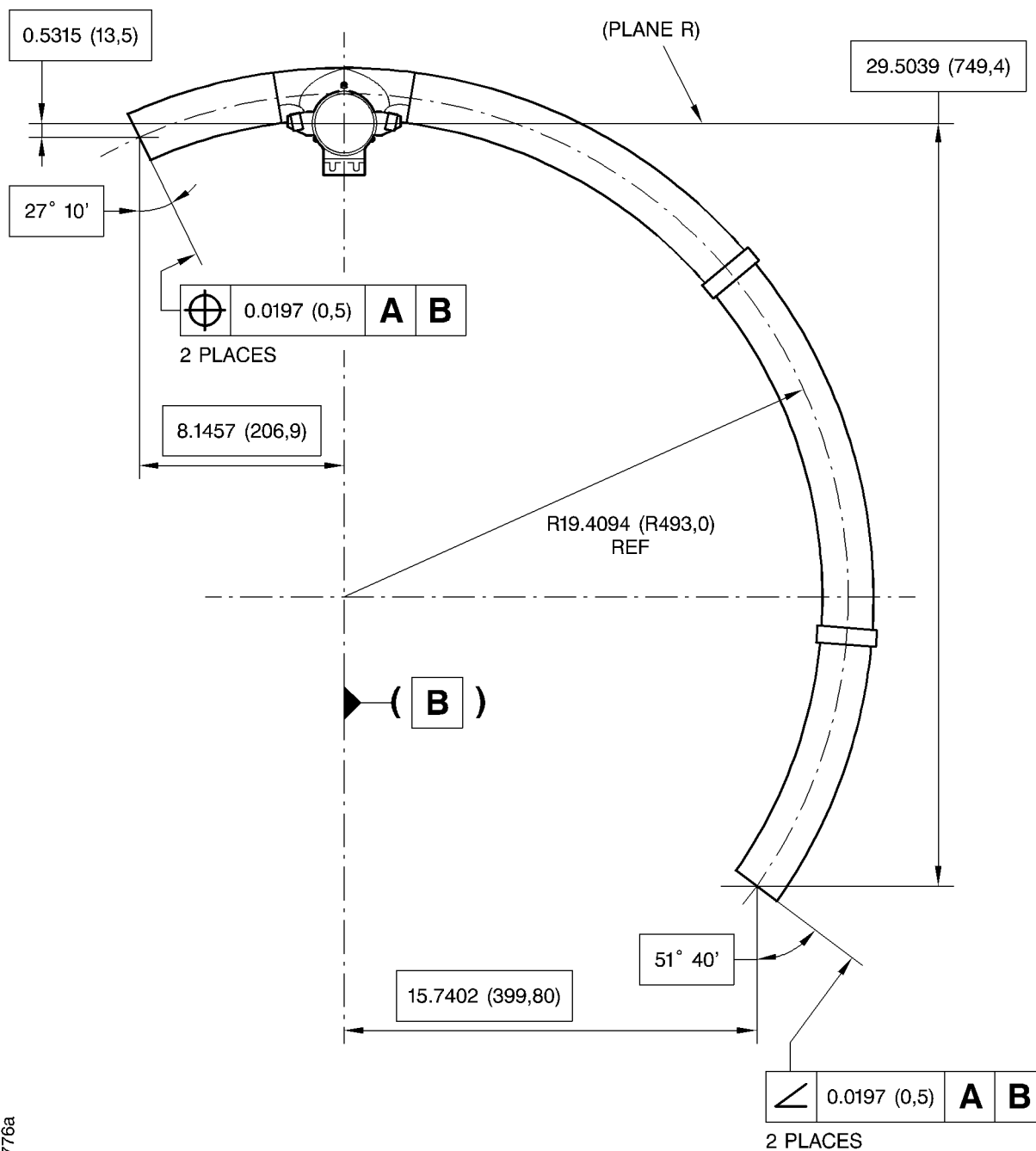
A record of accomplishment is required.



Connector tube assembly - Replacement of sealing tubes  
Figure 1 (Sheet 1 of 5)

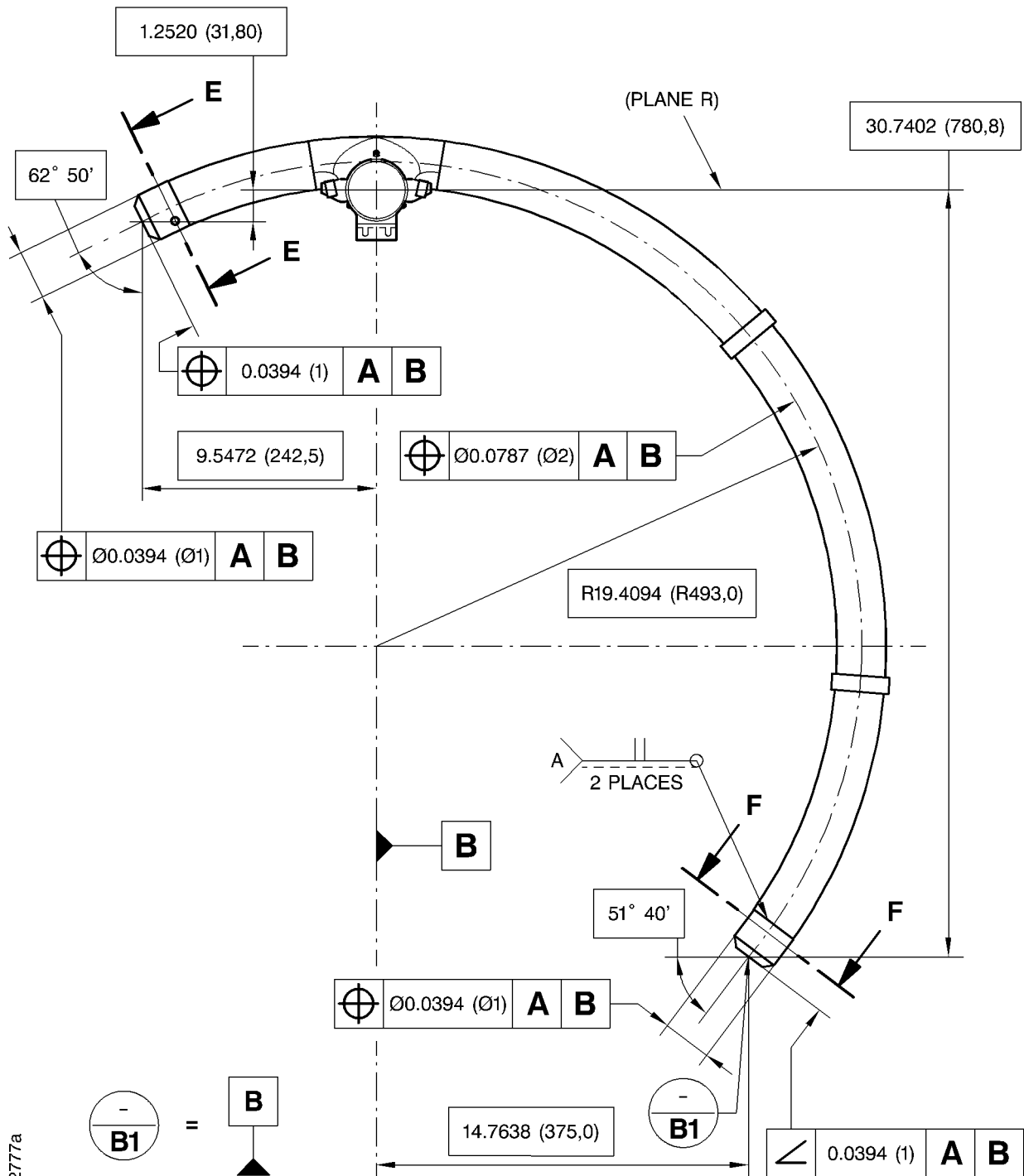


Connector tube assembly – Replacement of sealing tubes  
Figure 1 (Sheet 2 of 5)



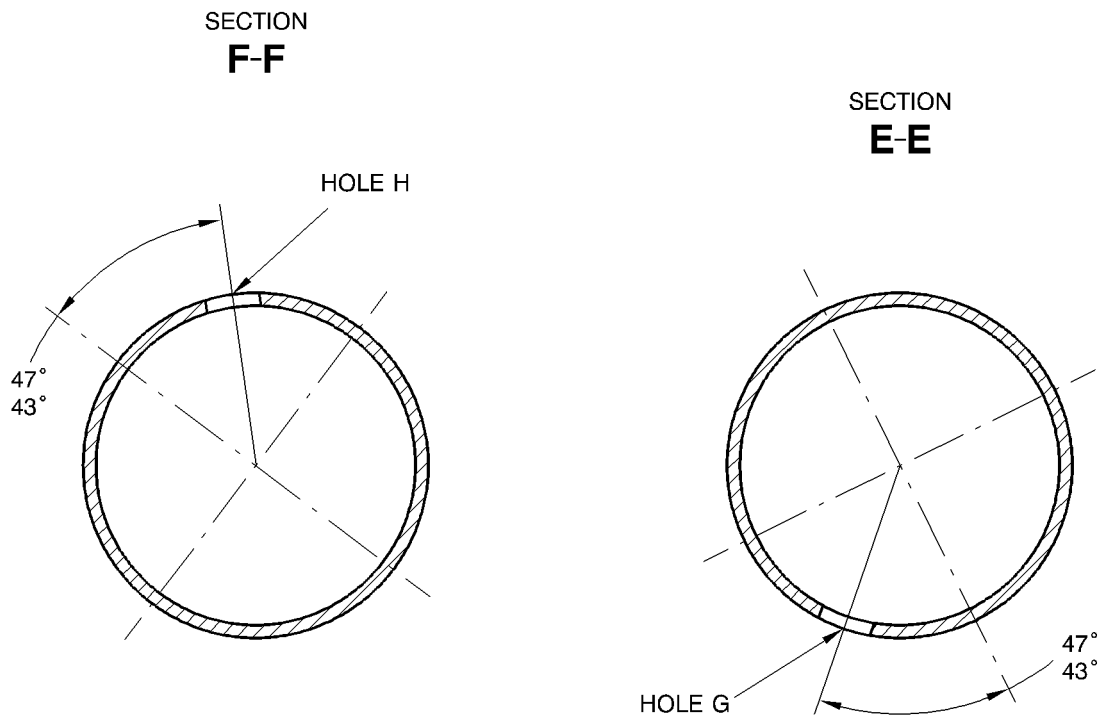
NOTE: All dimensions are in in. and (mm)

Connector tube assembly – Replacement of sealing tubes  
Figure 1 (Sheet 3 of 5)



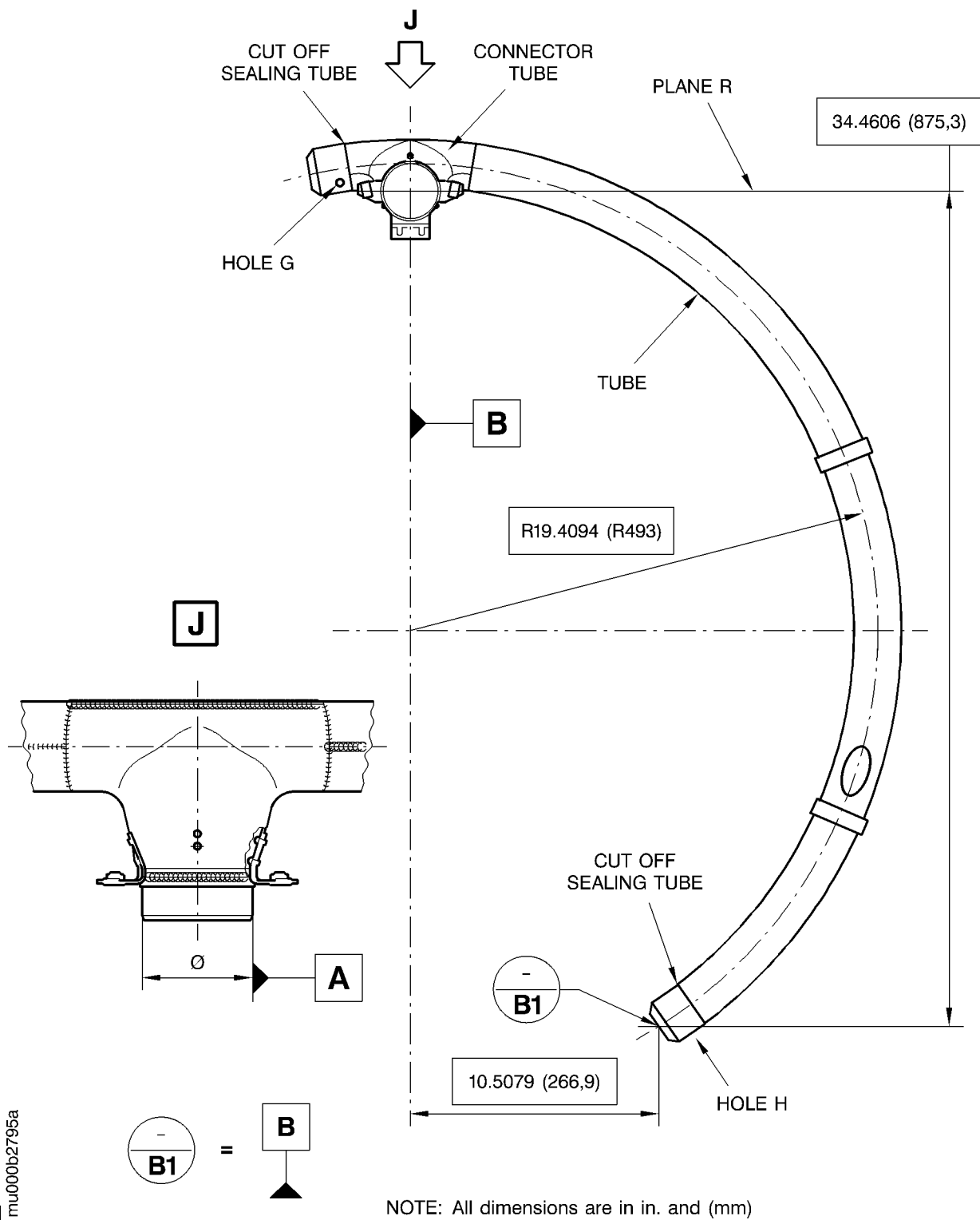
NOTE: All dimensions are in in. and (mm)

Connector tube assembly – Replacement of sealing tubes  
Figure 1 (Sheet 4 of 5)

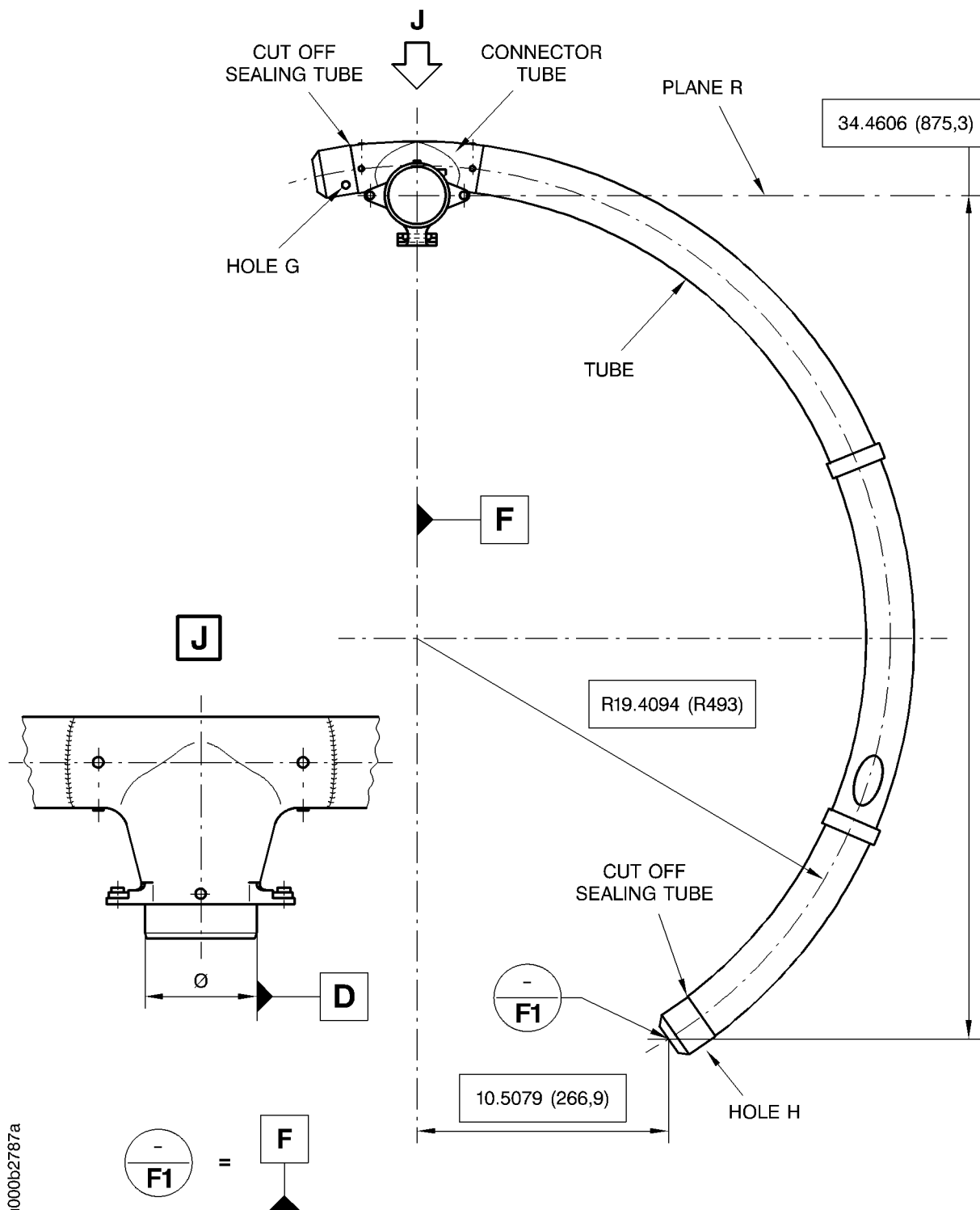


Connector tube assembly – Replacement of sealing tubes  
Figure 1 ( Sheet 5 of 5)

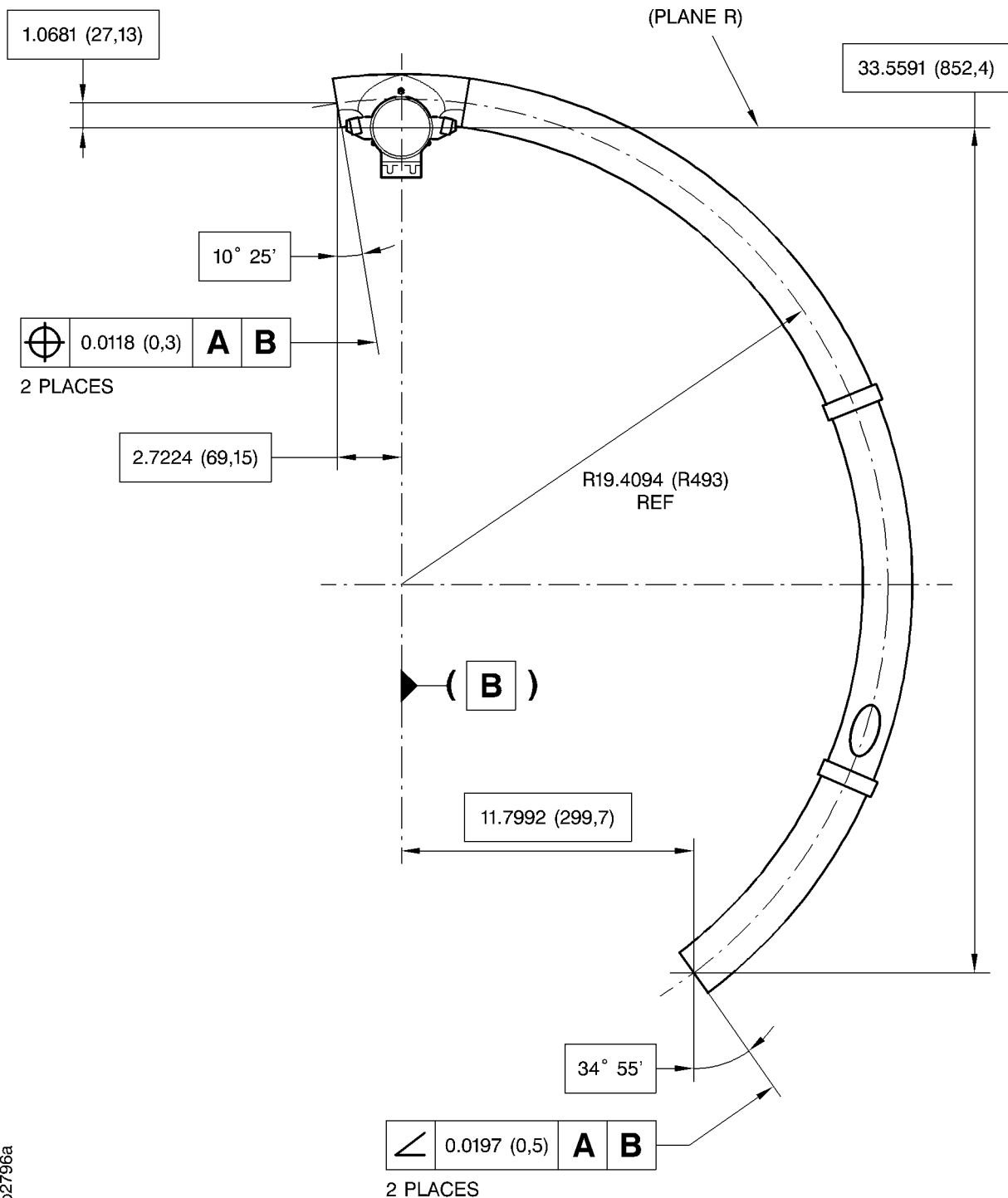




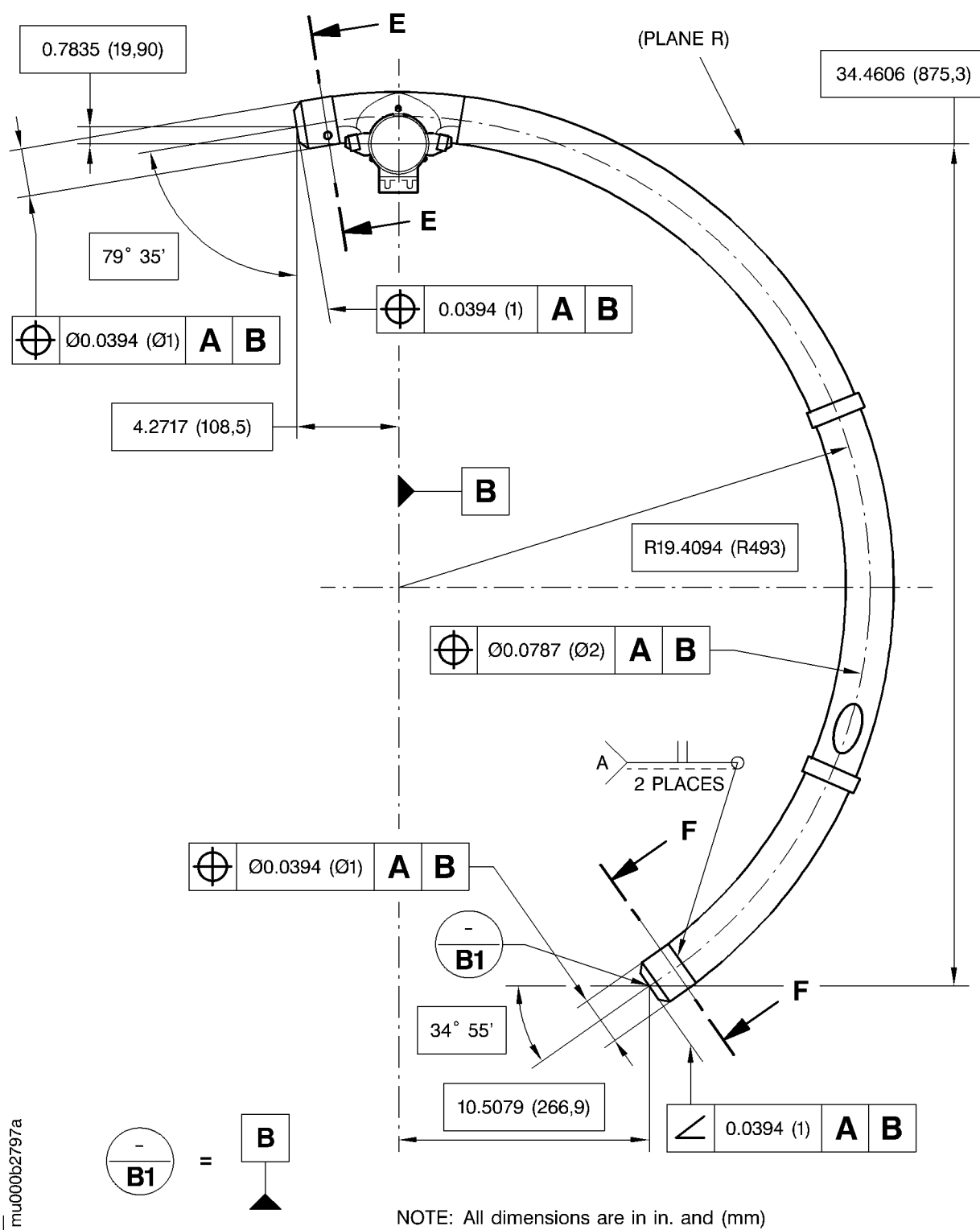
Connector tube assembly – Replacement of sealing tubes  
Figure 2 (Sheet 1 of 5)



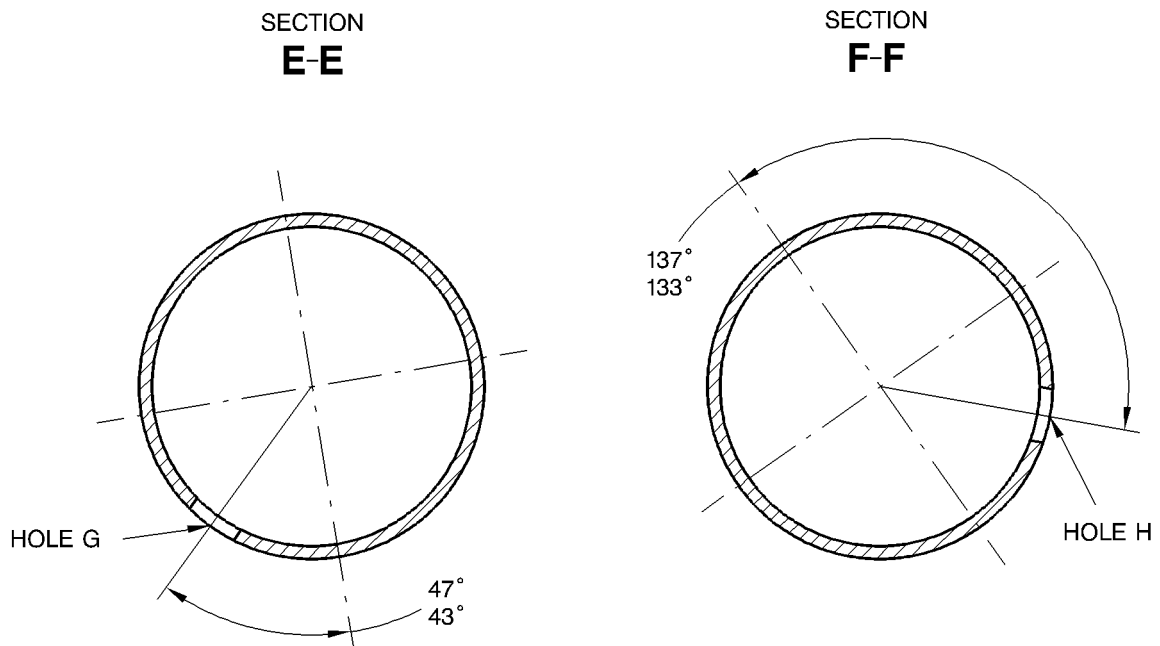
Connector tube assembly – Replacement of sealing tubes  
Figure 2 (Sheet 2 of 5)



Connector tube assembly – Replacement of sealing tubes  
Figure 2 (Sheet 3 of 5)

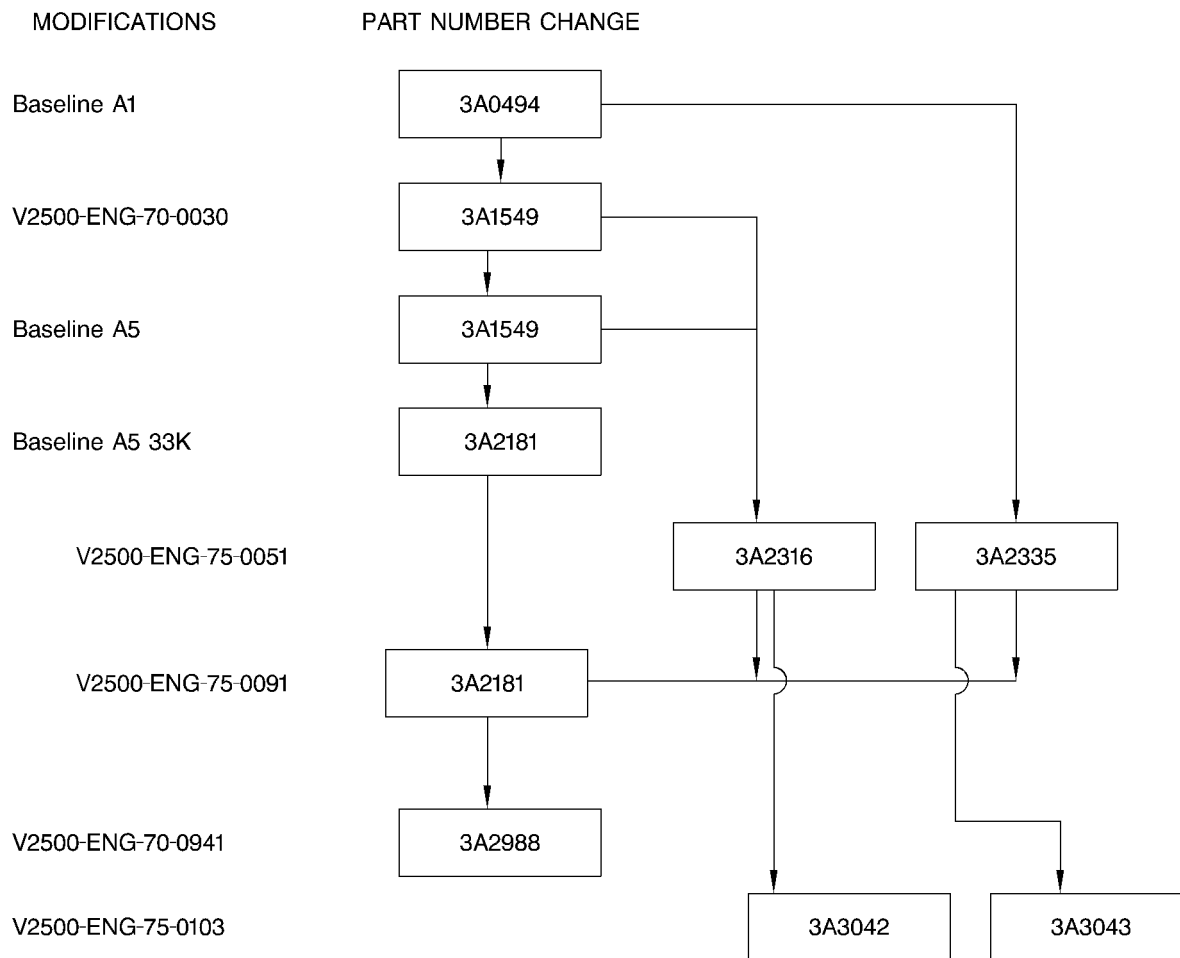


Connector tube assembly – Replacement of sealing tubes  
Figure 2 (Sheet 4 of 5)



mu000b2798

Connector tube assembly – Replacement of sealing tubes  
Figure 2 (Sheet 5 of 5)



Family Tree Connector tube assembly for V2500 A1 and A5 Engines  
Figure 3

MODIFICATIONS

Baseline D5

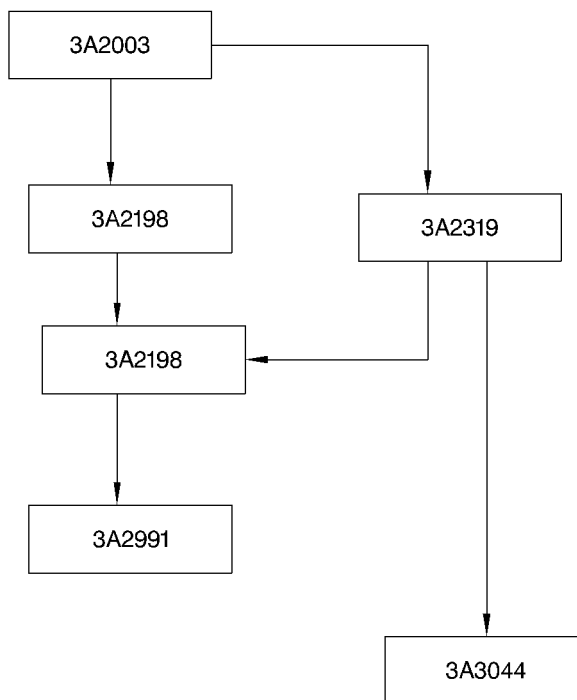
V2500-ENG-75-0051

V2500-ENG-75-0091

V2500-ENG-70-0941

V2500-ENG-75-0103

PART NUMBER CHANGE



mu000b2922

Family Tree Connector tube assembly for V2500 D5 Engines  
Figure 4





INFORMATION - LP TURBINE - ACTIVE CLEARANCE CONTROL C-TUBE WITH CHANGED MATERIAL FOR  
END FERRULES

SUPPLEMENT - PRICE AND AVAILABILITY

The prices shown are for estimating purposes only and such are given in good faith without Commercial liability for advanced planning purposes only. Refer to IAE spares and/or current price catalogue for current prices.

Part No	Description	Unit Price (US Dollars)
3A3041	Sealing Tube	633.00