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DATE ~~R~~ Sep.15/01**V2500-A1 PROPULSION SYSTEMS SERVICE BULLETIN**

Printed in Great Britain

This document transmits Revision 2 to Service Bulletin EV2500-72-0051

Document History

Service Bulletin Revision Status  
 Initial Issue                      Feb.22/91  
 Revision 1                          Nov.6/95

Supplement Revision Status

Bulletin Revision 2

Remove  
 Pages 1 to 31 of the  
 Service Bulletin

Incorporate  
 Pages 1 to 32 of the  
 Service Bulletin

Reason for change  
 To add a procedure for  
 erasing temporary marking  
 of part number marked with  
 accomplishment of SBE  
 72-0009

**V2500-ENG-72-0051**  
 Transmittal - Page 1 of 2

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED

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# LIST OF EFFECTIVE PAGES

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ENGINE – LP COMPRESSOR – INCORPORATE A FUEL DRAIN TUBE IN THE FAN FRAME ASSEMBLY

1. Planning Information

A. Effectivity

- (1) Airbus A320

V2500-A1 Engines prior to Serial Number V0107

- (2) ATA Locator 72-32-03

B. Reason

- (1) Condition

Existing Fan Frame Assembly does not incorporate the drain tube to drain the fluid in the rear inner flange area.

- (2) Background

A review for the existing Fan Assembly has shown that a drain tube is desirable rather than existing filler compound included in the rear inner flange area to prevent an accumulation of the fluid.

- (3) Objective

The incorporation of the Service Bulletin (Modification) is intended to improve the maintainability.

- (4) Substantiation

An analysis substantiates that an additional hole to install the drain tube in the Fan Frame inner flange is provided in low stress area and will not affect the Fan Frame durability.

- (5) Effect of Bulletin on Workshop Procedure:

- (a) Removal/Installation

Affected (see Supplemental Information)

- (b) Disassembly/Assembly

Affected (see Supplemental Information)

- (c) Cleaning

Not affected



(d) Inspection/Check

Not affected

(e) Repair

Not affected

(f) Testing

Not affected

(6) Supplemental Information

(a) The Removal/Installation of the Post-Service Bulletin configuration requires revision of the Engine Manual under chapter 72-00-40, to show the revised procedure to safety the Booster Stage Bleed Valve Actuator (BSBVA) Brackets attaching bolts with the lockwire.

(b) The Disassembly/Assembly of the Post-Service Bulletin configuration requires revision of the Engine Manual under chapter 72-32-00, to show the revised procedure for installing an additional Drain Tube to the Fan Frame Assembly through the No. 6 Strut Fairing Panel and also to safety the No. 1 and No. 6 Struts Fairing Panel A/O's attaching bolts with the lockwire.

C. Description

(1) The changes introduced by this Service Bulletin are as follows:

- (a) The existing filler compound which is included in the Fan Frame rear inner flange area has been removed. (See Fig. 1 and 2).
- (b) An additional drain tube is installed to the Fan Frame rear inner flange bottom through the additional hole in No. 6 Strut Fairing Panel A/O to drain out the fluid in the rear inner flange area. (See Fig. 1 and 2).
- (c) An additional hole is drilled on the existing No. 6 Strut Fairing Panel A/O as a drain tube path (See Fig 4).
- (d) The bolts and rivet nuts which secure the No. 1 and No. 6 Struts Fairing Panel A/O's and the BSBVA Brackets are replaced with the new bolts and rivet nuts to change a locking method from self lock to wire lock as follows:
  - (i) The existing eight RNCH428-211KLT5, Rivet Nuts, and eight RNCH1032166KLT5, Rivet Nuts, which are fitted on the Fan Frame Assembly are replaced with eight new RNSS428-211K, Rivet Nuts, and eight RNSS1032-166K, Rivet Nuts, respectively. (See Fig. 5).



- (ii) The existing eight 4W0106, Bolts, which attach the No. 1 and No. 6 Struts Fairing Panel A/O's are replaced with eight new MS9714-09, Bolts, or AS43211, Bolts, or AS43611, Bolts, or AS44011, Bolts. (See Fig. 8).
- (iii) The existing eight AS21026, Bolts, which attach the BSBVA Brackets are replaced with eight new AS43326, Bolts. (See Fig. 9).
- (iv) The bolts changed by this Service Bulletin must be safetied with the lockwire.

These changes are not directly related to the fuel drain tube installation, but must be incorporated concurrently.

- (2) The existing Fan Frame Assembly and the No. 6 Strut Fairing Panel A/O can be reworked to the new configurations. (See fig. 3 through 7).
- (3) New No. 6 Strut Fairing Panel A/O and additional Fuel Drain Tube will be available for future replacement purposes.
- (4) The Fan Frame Assembly is not provisioning item, but new 5A0349 will be available on quote basis for future replacement purposes.
- (5) For relationship with other Service Bulletins, see Figure 10, "Family Tree".
- (6) This Service Bulletin comprises the following three parts;

Part 1 - New production Fan Frame and Rework of Fan Frame, incorporating IAE SB No. V2500-ENG-72-0009 part 1.

Part 2 - Rework of Fan Frame, incorporating IAE SB No. V2500-ENG-72-0009 Part 2.

Part 3 - New production Drain Tube, Fairing Panel A/O and Bolts and Rework of Fairing Panel A/O.

#### D. Approval

The Part Number changes and/or part modifications described in Sections 2 and 3 of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model listed.

#### E. Compliance

Category Code 6.

Accomplish when the subassembly (i.e. Module, Accessories, Components, Build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.



F. Manpower

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

(1) In service

Not affected

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

(2) At overhaul

(a) Remove the filler compound

18 minutes

(b) Drill the drain tube hole and scallop on the fan frame assembly

45 minutes

(c) Remove and replace the rivet nuts on the BSBVA brackets and No.1 and No.6 strut fairings

45 minutes

(d) Drill a hole on the No. 6 strut fairing

15 minutes

(e) Install new drain tube to the fan frame assembly

6 minutes

(f) TOTAL

2 hours 9 mins

G. Material – Price and Availability

(1) Modification Kit is not required. Parts supplied as single line items.

Refer to 2. Material Information section for prices and availability of future spares.

H. Tooling – Price and Availability

The following tools are required to accomplish section 2 of this Service Bulletin when reworking the existing Fan Frame Assembly and the No. 6 Strut fairing Panel A/0.



Part No.	Description	Usage A.M.O.	Function	Avail.
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## New tools required:

IAE3J12751	Drilling fixture	*	Guide the drill	(1)
IAE3J12752	Straight drill 0.480in. (12,20 mm) dia	*	Drill the hole	(1)
IAE3J12753	Straight drill 0.364in. (9,25 mm) dia	*	Drill the hole	(1)
IAE3J12754	Straight drill 0.378in. (9,60 mm) dia	*	Drill the hole	(1)
C-845-2528	Header, wrench type 1/4in.	*	Fasten the rivet nut RNSS428-211K	(2)
C-845-1032	Header, wrench type No.10	*	Fasten the rivet nut RNSS1032-166K	(2)

Usage column abbreviation      A - accomplishment  
    M - maintenance  
    O - overhaul

## Availability code:

- (1) Tool Design Aperture Cards are currently available from IAE.
- (2) Tool can be procured directly from the following supplier or manufacturer.

Supplier	Manufacturer
Liverty Engineering Co. 9300 Mason Avenue Chatsworth, CA91311 U.S.A.	The BF Goodrich Company D/1810 Bldg, 41-B 500 S. Main Street Akron, OH44318 U.S.A.
Tel: 818-786-8111 Fax: 818-786-8222	Tel: 216-374-2152

I. Weight and Balance

- (1) Weight change

None



- (2) Moment arm

None

- (3) Datum

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

J. Electrical Load Data

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

K. References

- (1) IAE V2500 Service Bulletin Numbers.

V2500-ENG-72-0009 (Engine - Intermediate Structure - Rework the Fan Frame Assembly to Include Filler Compound in the Rear Inner Flange Area).

- (2) V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-32-03, 75-31-42, and 75-31-43.

- (3) V2500 Engine Manual, 72-00-40, Installation, TASK 72-00-40-420-006, 72-32-00, Assembly, TASK 72-32-00-430-001 and TASK 72-32-00-430-014.

- (4) V2500 Standard Practices/Processes Manual, 70-09-00, Marking of parts, 70-41-00. Torque Tightening Technique.

- (5) V2500 Overhaul Processes and Consumable Index.

- (6) V2500 Facilities Planning Manual, Section 10, Mechanic's Tool Box Profile.

- (7) V2500 Facilities Equipment Manual.

- (8) Internal Reference No.

EC88VJ712E, EC88VJ677, EC88VJ677A

L. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-32-03, 75-31-42 and 75-31-43.

- (2) V2500 Powerplant Illustrated Parts Catalog, Chapter/Section 75-31-42 and 75-31-43.

- (3) V2500 Engine Manual, 72-00-40, Removal, Installation, 72-32-00, Disassembly, Assembly, 72-32-03, Cleaning and Inspection/Check.





## 2. Material Information

### A. Price and Availability

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.

### B. New Production Parts

PART NO.	QTY	UNIT PRICE
5A0351	1	158.00
5A0352	1	1369.00
MS9714-09	8	28.50
AS43326	8	7.37

### C. Kits associated with this Bulletin:

None.

### D. Parts affected by this Bulletin:

Part 3 of IAE SB V2500-72-0051

72-32-03

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
02-080	5A0351	1	Drain pipe	-	(C)(S1)(2D)
02-100	5A0352	1	Panel, A/O Fairing	5A2184	(B)(D)(F)
02-150	MS9714-09	4	Bolt	4W0106	(A)(G)(S1) (4D)
-	or AS43211	Ref	Bolt	-	-
-	or AS43611	Ref	Bolt	-	-
-	or AS44011	Ref	Bolt	-	-
02-330	MS9714-09	4	Bolt	4W0106	(A)(G)(S1) (4D)
-	or AS43211	Ref	Bolt	-	-
-	or AS43611	Ref	Bolt	-	-
-	or AS44011	Ref	Bolt	-	-



## Part 1 of IAE SB V2500-ENG-72-0051

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
03-100	5A0349	1	Frame, assembly fan	5A6596 (5A0290)	(E)(F)(S1) (1D)
03-100	5A0407	1	Frame, assembly fan	5A0365	See Note (B)(E)(F) (S1)(1D)

**NOTE:** 5A0290 is provided as a dummy part number to identify the new production Fan Frame Assembly if incorporated the changes of Bolts and Rivet Nuts to secure the Slave Master Bleed Valve Actuator Brackets and Fairing Panel excluding installation of the additional drain tube.

## Part 2 of IAE SB V2500-ENG 72-0051

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
03-100	5A0401	1	Frame, assembly fan	5A0362	(B)(E)(F) (S1)(1D)
03-100	5A0405	1	Frame, assembly fan	5A0364	(B)(E)(F) (S1)(1D)
03-100	5A0403	1	Frame, assembly fan	5A0363	(B)(E)(F) (S1)(1D)
03-100	5A0409	1	Frame, assembly fan	5A0366	(B)(E)(F) (S1)(1D)

## Parts 1 and 2 of IAE SB V2500-ENG-72-0051

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
03-204	RNSS428- 211K	2	Nut, blind rivet	RNCH428- 211KLT5	(A)(F)(S1) (3D)
03-225	RNSS428- 122K	2	Nut, blind rivet	RNCH428- 211KLT5	(A)(F)(S1) (3D)
03-336	RNSS428- 211K	2	Nut, blind rivet	RNCH428- 211KLT5	(A)(F)(S1) (3D)
03-356	RNSS428- 211K	2	Nut, blind rivet	RNCH428- 211KLT5	(A)(F)(S1) (3D)
03-442	RNSS1032- 166K	8	Nut, blind rivet	RNCH1032 166LKT5	(A)(F)(S1) (3D)

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Part 3 of IAE SB V2500-ENG-72-0051

75-31-42

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
01-210	AS43326	4	Bolt	AS21026	(A)(F)(S1)

75-31-43

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
01-210	AS43326	4	Bolt	AS21026	(A)(F)(S1)

**E. Instruction/Disposition Code Statements:**

- (A) New Part is currently available for sale.
- (B) New Part is obtained by reworking.
- (C) New Part will be available approximately October 1990.
- (D) New Part will be available approximately April 1991.
- (E) New Part is a non-provisioning item
- (F) Old Part will no longer be available for sale.
- (G) Old Part will continue to be supplied on other applications.
- (S1) New Parts coded (S1) must replace Old Parts coded (S1) as a COMPLETE SET per engine.
- (1D) Rework Old Part Number and reidentify to the new Part Number.
- (2D) Additional Part.
- (3D) Old Part destroyed during rework.
- (4D) Old parts can be used on other application.



### 3. Accomplishment Instructions

#### A. Rework Instructions

##### Consumable Materials

CoMat 01-124	Isopropyl Alcohol
CoMat 02-031	Masking Tape
CoMat 02-085	Plastic Sheet
CoMat 02-141	Lockwire
CoMat 02-178	Masking Tape

Rework 5A0365 (Part 1 of this SB), 5A0362, 5A0364, 5A0363 or 5A0366 (Part 2 of this SB) Fan Frame Assembly.

**WARNING:** DO NOT GET THE FILLER COMPOUND PARTICLES IN YOUR EYES PUT ON GOGGLES WHEN YOU USE THE CHISEL TO REMOVE THE FILLER COMPOUND FROM THE FAN FRAME ASSEMBLY.

**CAUTION:** USE THE CHISEL CAREFULLY TO PREVENT DAMAGE TO THE SURFACE OF THE FAN FRAME REAR INNER FLANGE AREA.

#### PROCEDURE

#### RELATED DATA

- |   |   |
|---|---|
| (1) Put covers on Fan Frame rear flange where connects the HP System Module with CoMat 02-085, Plastic Sheet.                                       | Refer to Figure 3, and 1.K.(5)                  |
| (2) Mask the rear side holes of Fan Frame Assembly with CoMat 02-031, Masking Tape.   | Refer to Figure 3, and 1.K.(5)                  |
| (3) Remove the filler compound which is included in the Fan Frame rear inner flange area with the Chisel and the Hammer in the Mechanic's Tool Box. | Refer to Figure 3, and 1.K.(6)                  |
| (4) Drill the drain tube hole and scallop on Fan Frame rear flange as follows:  | Refer to Figure 4, and 1.H. Tooling Information |
| (a) Remove CoMat 02-031, Masking Tape from the center bearing housing hole on Fan Frame Assembly.   |   |



- (b) Set Tool No. IAE3J12751,  
Drilling Fixture, with the  
Guide Sleeve of 0.480in.  
(12,20 mm) inside diameter to  
the Fan Frame Assembly, and  
align three aligning holes in  
the Drilling Fixture with the  
locating pins of the Center  
Bearing Housing Assembly.
- (c) Safety the Drilling Fixture  
with four fixing bolts with a  
torque of 85 – 105 lbfin  
(10,00 – 12,00 Nm).
- (d) Set Tool No. IAE3J12752,  
Straight Drill 0.480in. (12,20  
mm) diameter, to  
Identification No. RM008,  
Boring Mill, and also set the  
Fan Frame Assembly with the  
Drilling Fixture to the Boring  
Mill  
Refer to 1.K.(7)
- (e) Make a scalloping on the Fan  
Frame inner flange by drilling  
through 0.480in. (12.20 mm)  
diameter hole of Guide Sleeve  
in the Tool No. IAE3J12751,  
Drilling Fixture
- NOTE: Do not drill the next flange this time
- (f) Replace Tool No. IAE3J12752,  
Straight Drill 0.480in. (12,20  
mm) diameter, with Tool No.  
IAE3J12753, Straight Drill  
0.364in. (9,25 mm) diameter,  
and also change the Guide  
Sleeve in Drilling Fixture  
from 0.480in. (12,20 mm) to  
0.364in. (9,25 mm) in inside  
diameter
- (g) Drill 0.364in. (9,25 mm)  
diameter of a pilot hole on  
the Fan Frame inner Flange  
through the guide sleeve hole  
in Drilling Fixture



- (h) Replace Tool No. IAE3J12753, Straight Drill 0.364in. (9,25 mm) diameter, with Tool No. IAE3J12754, Straight Drill, 0.378in. (9,60 mm) diameter, and also change the Guide Sleeve in the Drilling Fixture from 0.364in. (9,25 mm) to 0.378in. (9,60 mm) in inside diameter
- (i) Drill 0.378in. (9,60 mm) diameter of hole on the Fan Frame inner flange through the guide sleeve hole of Drilling Fixture
- (j) Remove four fixing bolts and Tool No. IAE3J12751, Drilling Fixture with the Guide Fixture from the Fan Frame Assembly
- (k) Remove the burrs from scalloping and hole on Fan Frame inner flange
- (l) Mask the center bearing housing hole again with CoMat 02-031, Masking Tape.

**WARNING:** DO NOT GET THE GRINDING PARTICLES IN YOUR EYES. PUT ON GOGGLES WHEN YOU USE THE PNEUMATIC HAND HELD GRINDER.

**CAUTION:** USE THE PNEUMATIC HAND HELD GRINDER CAREFULLY TO PREVENT DAMAGE TO THE RIVET NUT HOLES OF THE FAN FRAME ASSEMBLY.

- (5) Replace eight RNCH428-211KLT5, Rivet Nuts, to attach the BSBVA Brackets with eight new RNSS428-211K, Rivet Nuts, and also replace eight RNCH1032166KLT5, Rivet Nuts, to attach the No. 1 and No. 6 Struts Fairing Panel A/O's with eight new RNSS1032-166K, Rivet Nuts, as follows:
  - (a) Put CoMat 02-178, Masking Tape around each head of eight RNCH428-211KLT5, Rivet Nuts, and eight RNCH1032166KLT5, Rivet Nuts

Refer to Figure 5

Refer to 1.K.(5)



- (b) Cut each head of eight RNCH428-211KLT5, Rivet Nuts, and eight RNCH1032166KLT5, Rivet Nuts, with Identification No. RB010, Pneumatic Hand Held Grinder and Identification No. RB012, Rotary Files, or an applicable grinding wheel Refer to 1.K.(7)
- (c) Remove and discard eight RNCH428-211KLT5, Rivet Nuts, and eight RNCH1032166KLT5, Rivet Nuts, which are destroyed
- (d) Clean eight new RNSS428-211K, Rivet Nuts and eight new RNSS1032-166K, Rivet Nuts, and also the rivet nuts fitting holes on the Fan Frame Assembly with CoMat 01-124, Isopropyl Alcohol Refer to 1.K.(5)
- (e) Install eight new RNSS428-211K, Rivet Nuts, and eight RNSS1032-166K, Rivet Nuts, to the Fan Frame Assembly. Fasten each RNSS428-211K, Rivet Nut, with Tool No. C-845-2528, Wrench Type Header (1/4 in.), and each RNSS1032-166K, Rivet Nut, with Tool No. C-845-1032, Wrench Type Header (No. 10). Refer to 1.H. Tooling information
- (f) Examine the length of each RNSS428-211K, Rivet Nut, and new RNSS1032-166K, Rivet Nut, with Identification No. IT015, External Micrometer, after fastening of Rivet Nuts. Refer to 1.K.(7)
- (6) Find the Part Number of the Pre-Service Bulletin No. V2500-ENG-72-0009, and mark two lines (==) on part number with Vibro-Peen to erase it Refer to SB V2500-ENG-72-0009 Section 2.B.(8) and See Figure 6 with 1.K.(4) of this Bulletin



## PROCEDURE

## RELATED DATA

R (7) Find the temporary marking of part  
R number which was marked due to  
R accomplishment of Service Bulletin  
R V2500-ENG-72-0009 and mark two  
R lines (==) on PN with Vibro Peen  
R to erase it.

Refer to SB V2500-ENG 72-0009 section  
2.B.(8) and see Fig 7 with 1.N.(5) of  
this Bulletin.

(8) Renumber the Part Number of the Fan  
Frame Assembly with the Vibro-Peen

Refer to Figure 6, and 1.K.(4)

Existing	Re-number
5A0365	5A0407
5A0362	5A0401
5A0364	5A0405
5A0363	5A0403
5A0366	5A0409

NOTE: New Part Number must be marked on the right area of the erased  
Pre-Service Bulletin No. V2500-ENG-72-0009 Part Number in the Fan  
Frame marking area.

Rework 5A0352, Fairing panel A/0 (Part 3 of this Service Bulletin).

(9) Remove CoMat 02-085, Plastic Sheet  
cover from the Fan Frame rear  
flange where connect the HP System  
Module

(10) Remove CoMat 02-031, Masking Tape  
from all the rear holes on Fan  
Frame Assembly

(11) Drill the hole on the No. 6 Strut  
Fairing Panel A/0 as follows:

Refer to Figure 7, and 1.H. Tooling  
information

(a) Set Tool No. IAE3J12752,  
Straight Drill 0.480in. (12,20  
mm) diameter, to  
Identification No. RM011,  
Drill Machine, Single  
Spindle-Floor/Pedestal.

Refer to 1.K.(7)

(b) Set the No. 6 Strut Fairing  
Panel A/0 to Identification  
No. RM011, Drill Machine,  
Single Spindle -  
Floor/Pedestal

Refer to 1.K.(7)





(c) Drill 0.480in. (12,20 mm)  
diameter of hole on the No. 6  
Strut Fairing Panel A/O.

(d) Remove the burrs from the hole

- (12) Renumber the Part Number of the No. 6 Strut Fairing Panel A/O with the Vibro-Peen Refer to Figure 7, and 1.K.(4)

Existing	Re-number
5A2184	5A0352

#### B. Assembly Instructions

- (1) Assemble the reworked Fan Frame Assembly to the LP Compressor/Intermediate Case Module by the approved procedures in the Engine Manual, 72-32-00, Assembly-01. (Refer to 1.K.(3).)
- (2) Replace eight 4W0106, Bolts, which attach the No. 1 and No. 6 Struts Fairing Panel A/O's with eight new MS9714-09, Bolts, or AS43211, Bolts, or AS43611, Bolts, or AS44011, Bolts. Assemble the No. 1 Strut Fairing Panel A/O and the reworked 5A0352, No. 6 Strut Fairing Panel A/O, to the LP Compressor/Intermediate Case Module by the approved procedures in the Engine Manual, 72-32-00, Assembly-14, Config-1. (Refer to Figure 8, and 1.K.(3)).)

**NOTE:** Do not install the right side bolt and washer adjacent to the drain tube hole on the No. 6 Strut Fairing Panel this time.

- (3) Install new 5A0351, Drain Tube, to the Fan Frame Assembly through the hole in reworked 5A0352, No. 6 Strut Fairing Panel, with AN960C10, Washer, and new MS9714-09, Bolt, or AS43211, Bolt, or AS43611, Bolt, or AS44011, Bolt. Torque the Bolt to 36 - 45 lbfin (4,00 - 5,00 Nm). (Refer to figure 8, and 1.K.(4).)
- (4) Safety eight new MS9714-09, Bolts, or AS43211, Bolts, or AS43611, Bolts, or AS44011, Bolts, which attach the No. 1 and No. 6 Struts Fairing Panel A/O's to the Fan Frame Assembly with CoMat 02-141, Lockwire. (Refer to Figure 8.)
- (5) Replace eight AS21026, Bolts, which attach the BSBVA Brackets with eight new AS43326, Bolts. Install the BSBVA Brackets by the approved procedures in the Engine Manual, 72-00-40, Installation-09, Config-1. (Refer to Figure 9, and 1.K.(3).)
- (6) Safety eight new AS43326, Bolts, which attach the BSBVA Brackets, with CoMat 02-141, Lockwire. (Refer to Figure 9.)

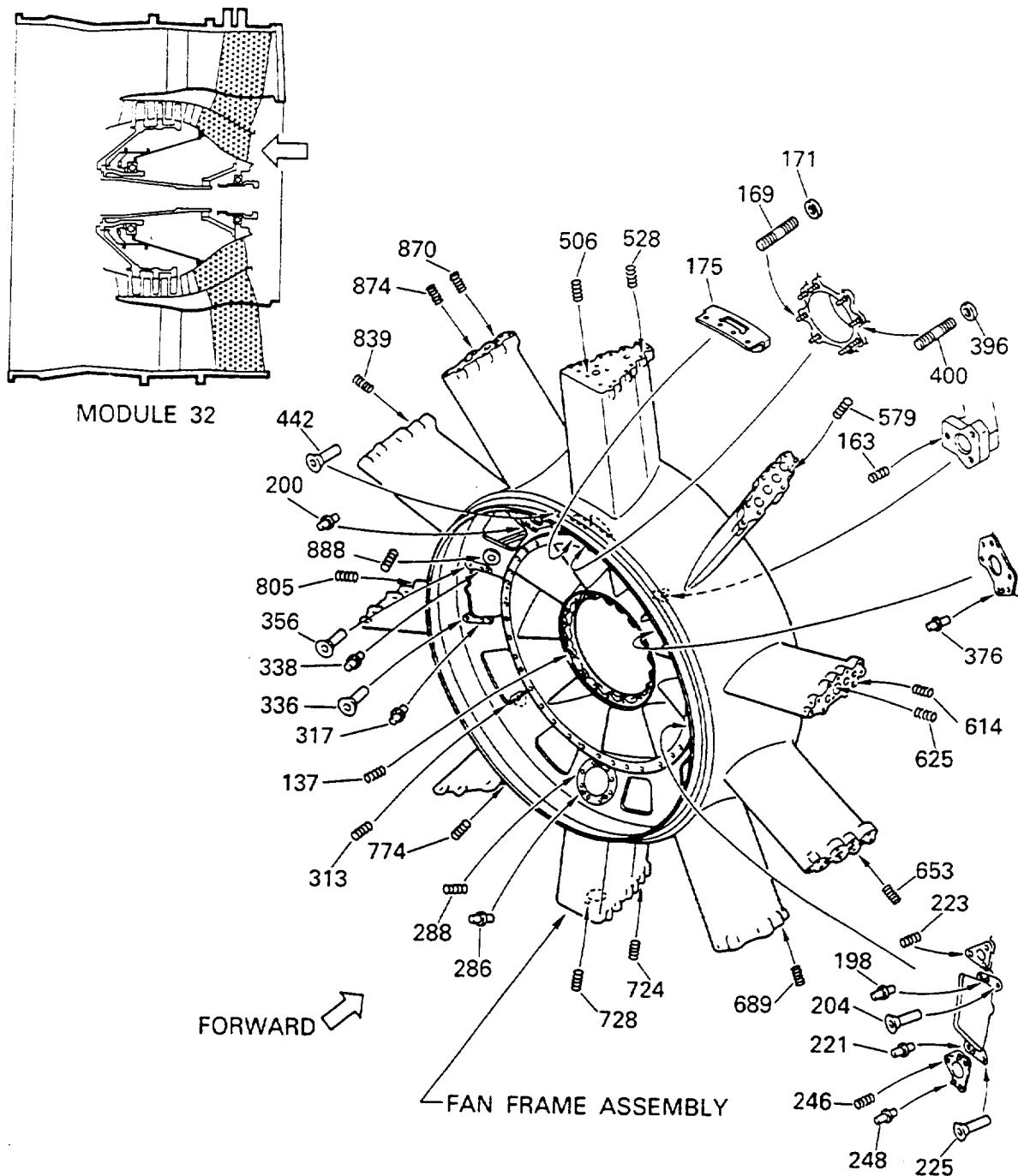


**C. Recording Instructions**

- (1) A record of accomplishment is required.

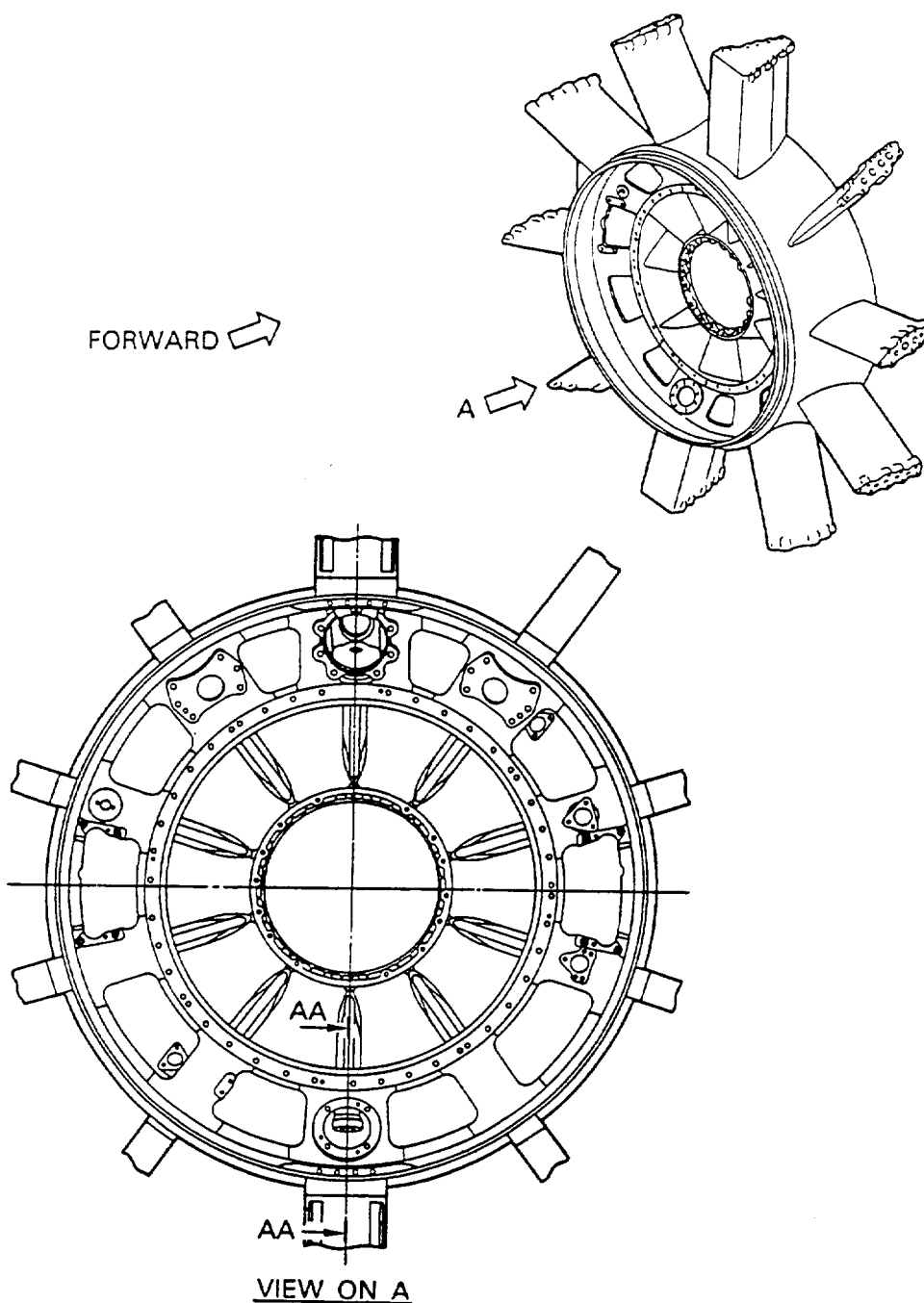


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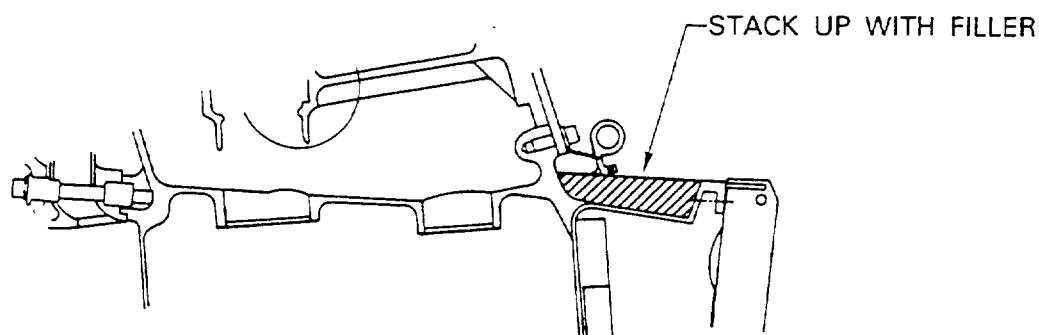
dec0000551

Location of the Fan Frame Assembly  
Figure 1

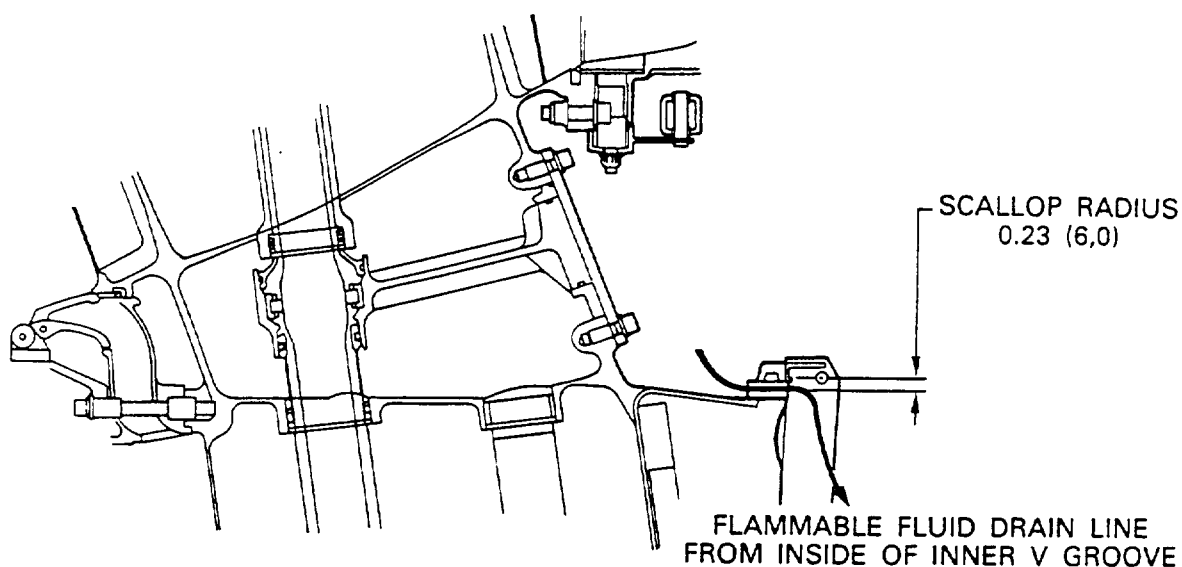


Fan Frame Assembly - Before and after alteration  
Figure 2 (Sheet 1 of 2)

ded0000552



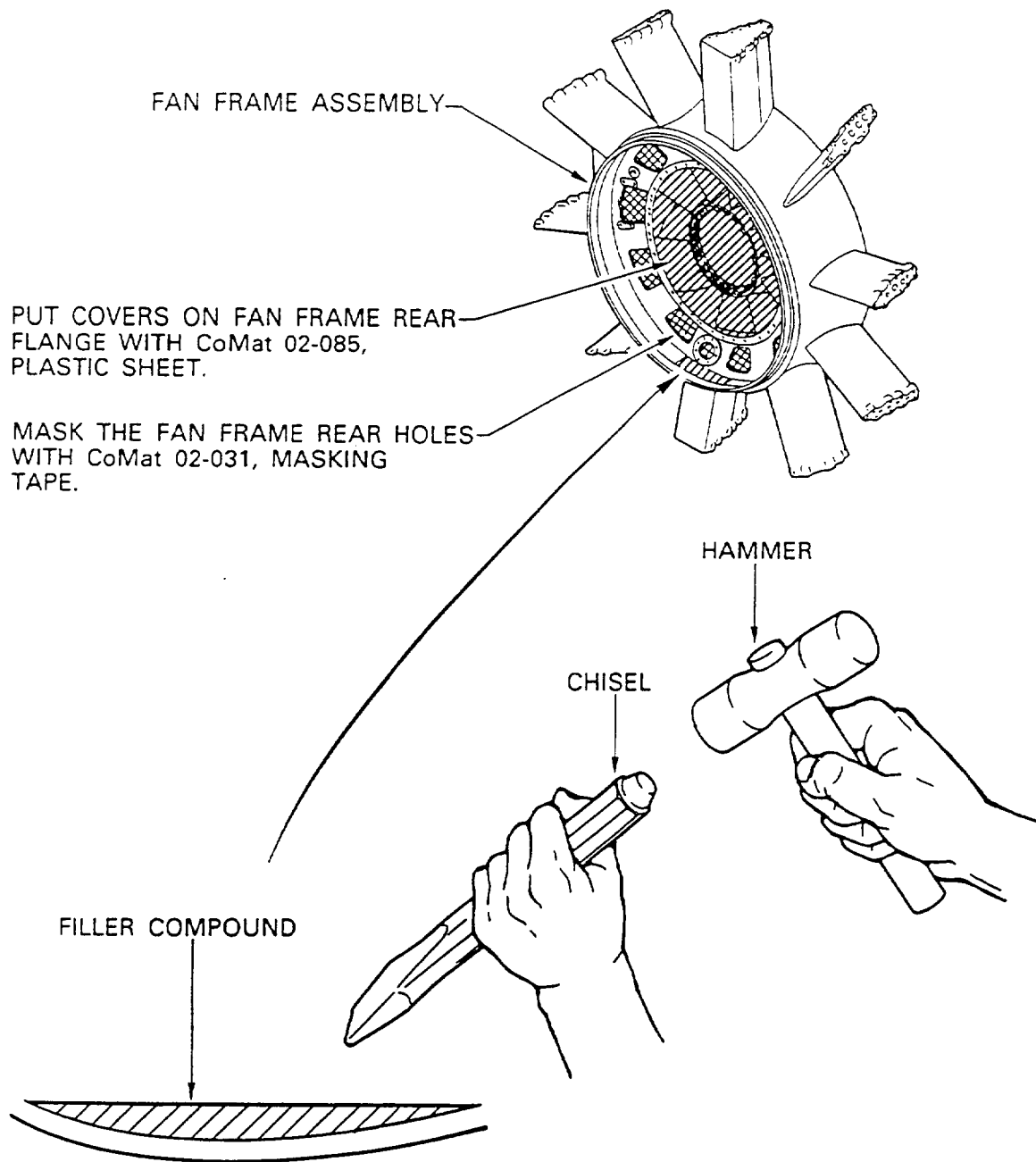
SECTION AA - AA, - BEFORE ALTERATION



SECTION AA - AA, - AFTER ALTERATION

ded0000553

Fan Frame Assembly - Before and after alteration  
Figure 2 (Sheet 2 of 2)



Rework of the Fan Frame Assembly - Remove the filler compound  
Figure 3



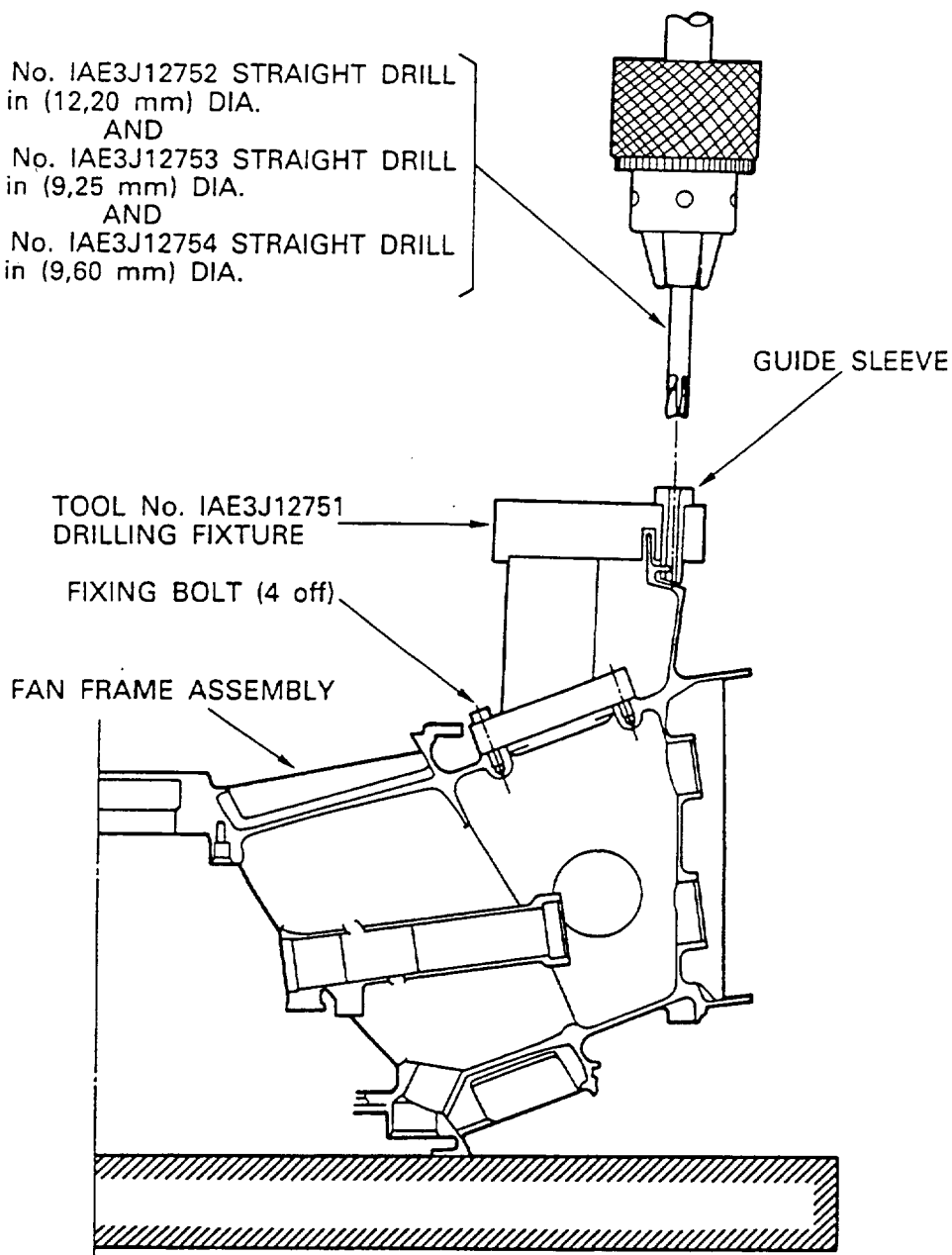
TOOL No. IAE3J12752 STRAIGHT DRILL  
0.480 in (12,20 mm) DIA.

AND

TOOL No. IAE3J12753 STRAIGHT DRILL  
0.364 in (9,25 mm) DIA.

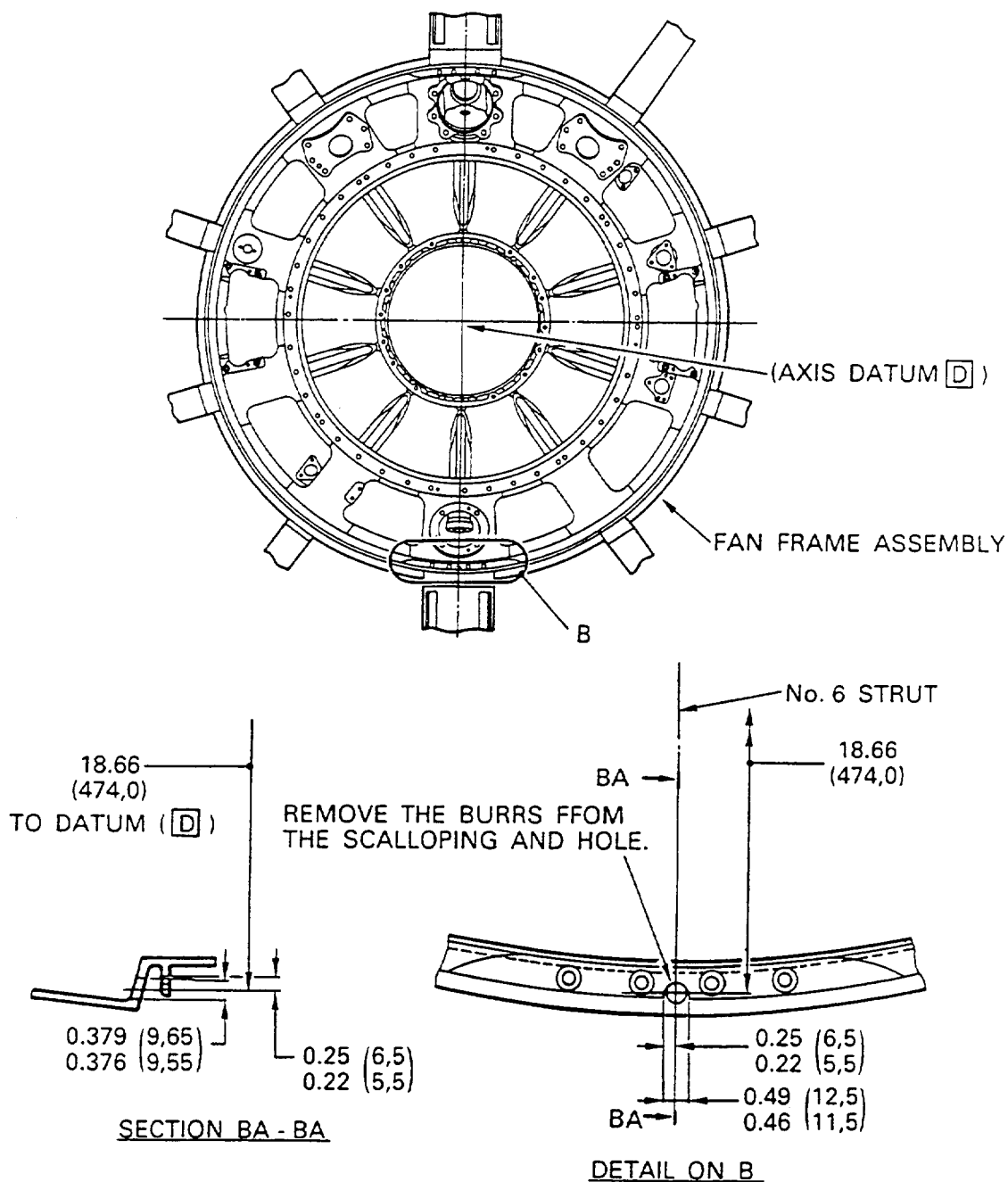
AND

TOOL No. IAE3J12754 STRAIGHT DRILL  
0.378 in (9,60 mm) DIA.



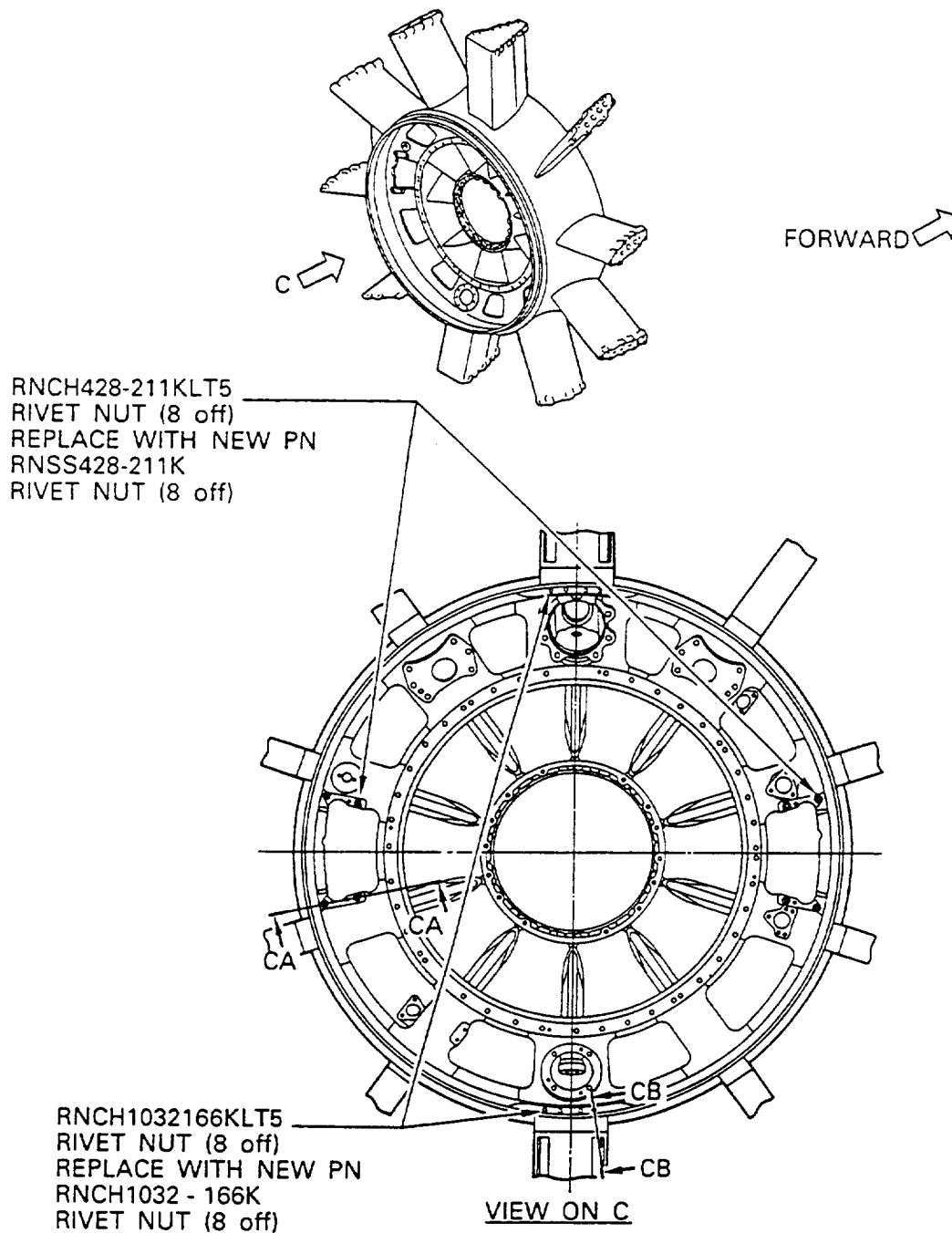
Rework of the Fan Frame Assembly - Drill the Drain Tube Hole and Scallop  
Figure 4 (Sheet 1 of 2)

ded0000555



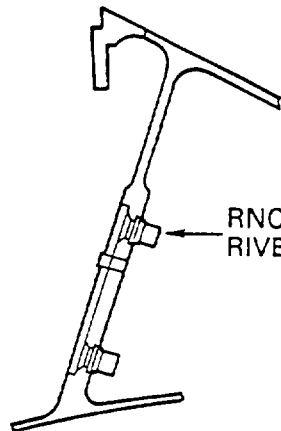
Rework of the Fan Frame Assembly - Drill the Drain Tube Hole and Scallop  
Figure 4 (Sheet 2 of 2)





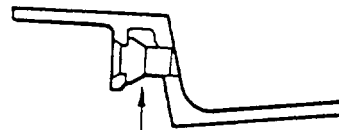
ded00000557

Rework of the Fan Frame Assembly - Replace the Rivet Nuts  
Figure 5 (Sheet 1 of 3)



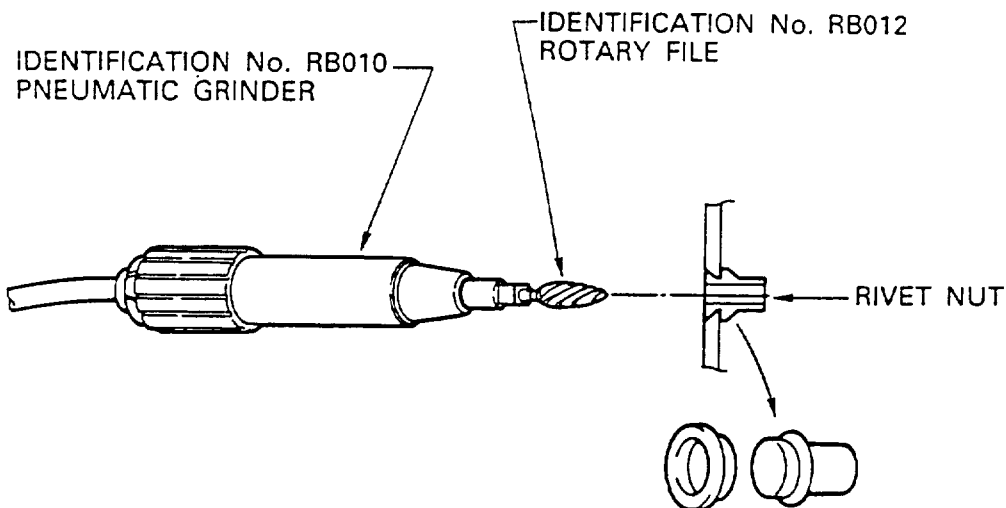
RNCH428-211KLT5  
RIVET NUT

(TYPICAL)  
SECTION CA - CA



RNCH1032166KLT5  
RIVET NUT

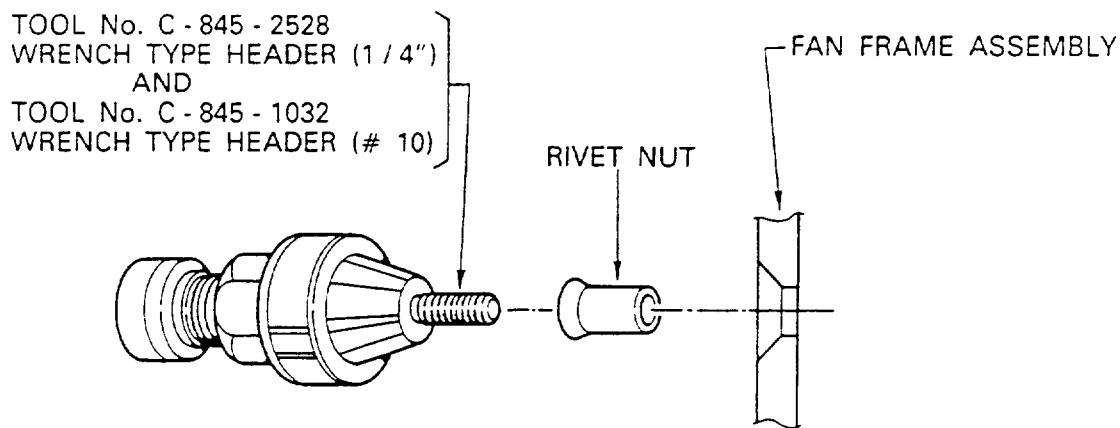
(TYPICAL)  
SECTION CB - CB



REMOVE INSIDE MATERIAL OF RIVET NUT HEAD WITH  
IDENTIFICATION No. RB010, PNEUMATIC GRINDER,  
AND IDENTIFICATION No. RB012, ROTARY FILE  
TO CUT RIVET NUT.

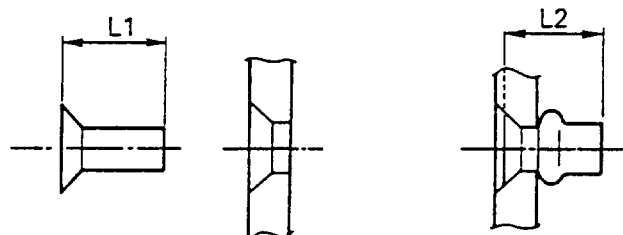
Rework of the Fan Frame Assembly - Replace the Rivet Nuts  
Figure 5 (Sheet 2 of 3)

ded00000558



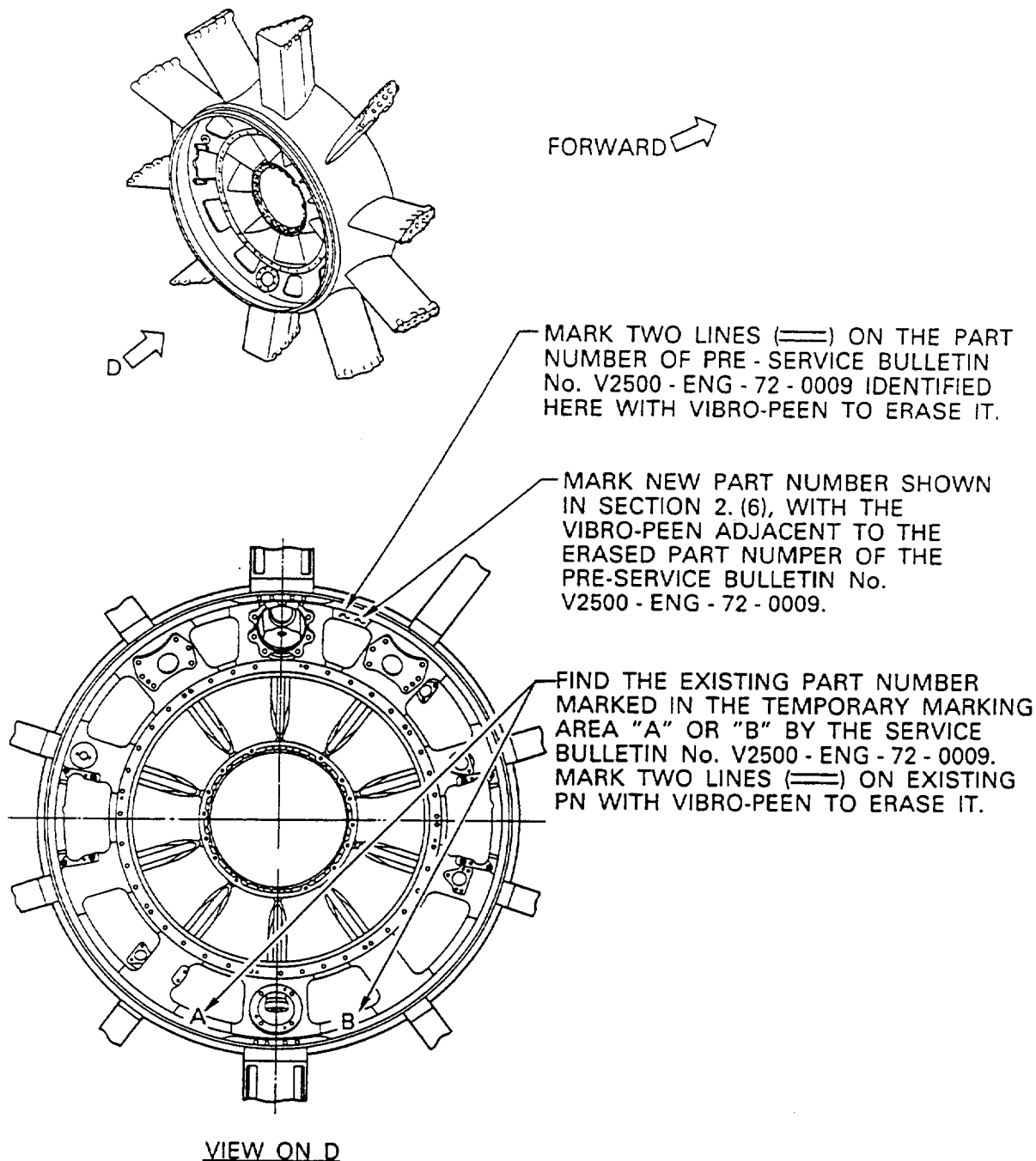
FASTN THE RIVET NUTS ON FUN FRAME ASSEMBLY  
WITH WRENCH TYPE HEADERS.

EXAMINE THE LENGTH OF RIVET NUTS AFTER FASTENING  
ON FAN FRAME ASSEMBLY WITH IDENTIFICATION  
No..IT015 EXTERNAL MICROMETER



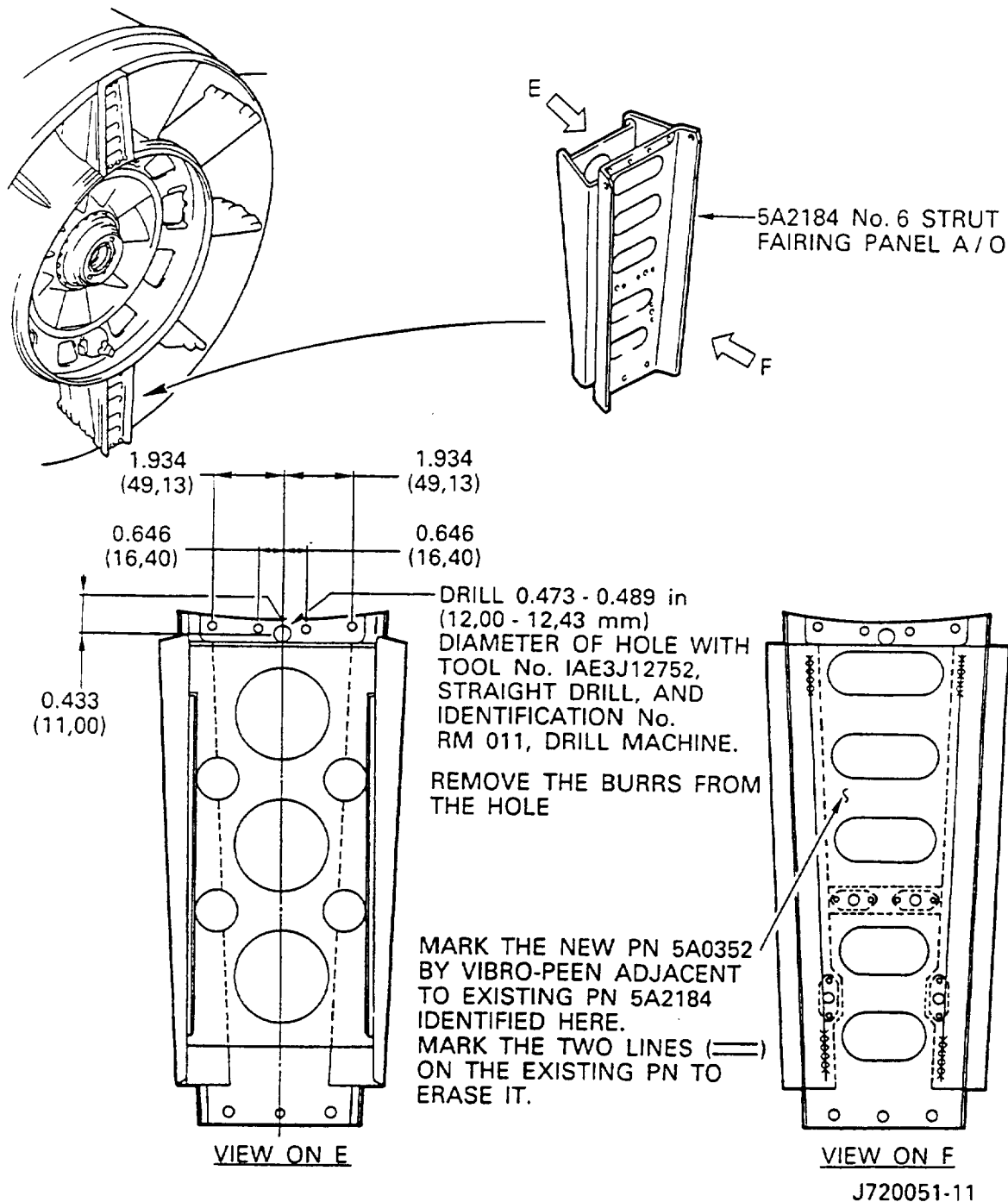
<u>RIVET NUT PN</u>	<u>LENGTH L1 (Ref)</u> <u>(BEFORE FASTENING)</u>	<u>LENGTH L2</u> <u>(AFTER FASTENING)</u>
RNSS428-211K	0.735 (18,67) 0.765 (19,43)	0.610 (15,50) 0.640 (16,25)
RNSS1032-166K	0.597 (15,17) 0.637 (16,17)	0.495 (12,58) 0.510 (12,97)

Rework of the Fan Frame Assembly - Replace the Rivet Nuts  
Figure 5 (Sheet 3 of 3)



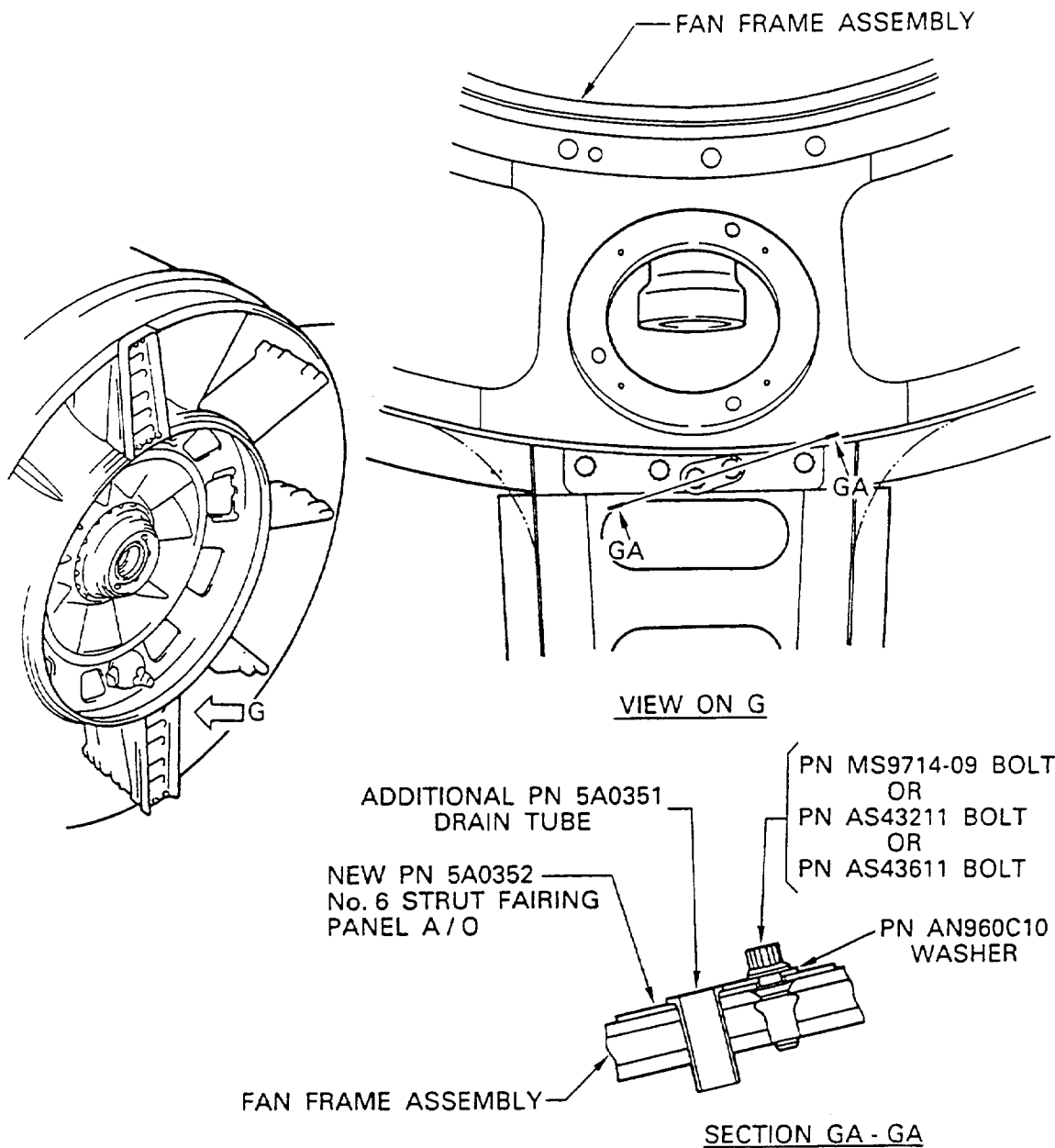
Rework of the Fan Frame Assembly - Renumber the Part Number  
Figure 6

V2500-ENG-72-0051



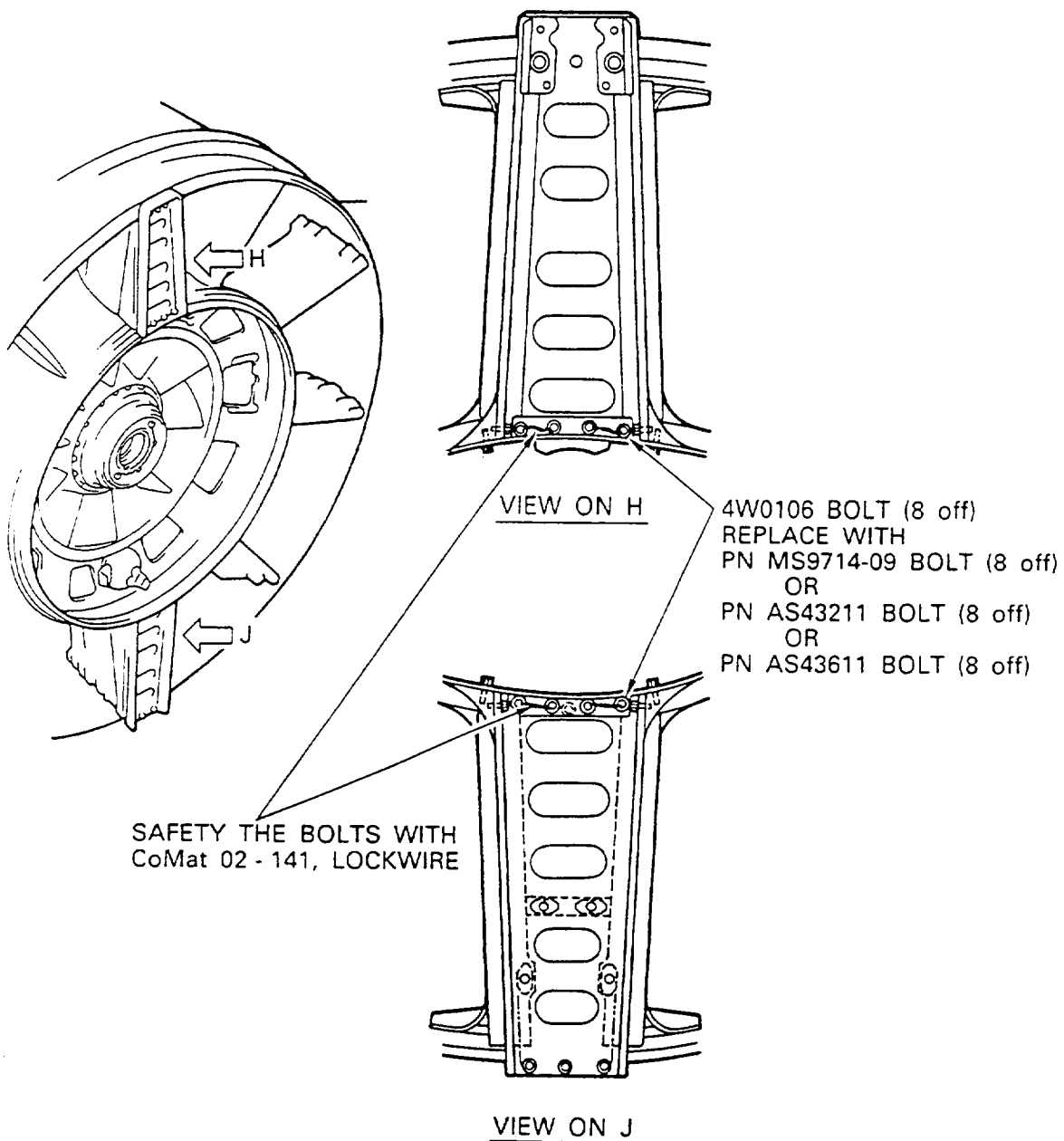
dec0000561

Rework of the No.6 Strut Fairing Panel  
Figure 7



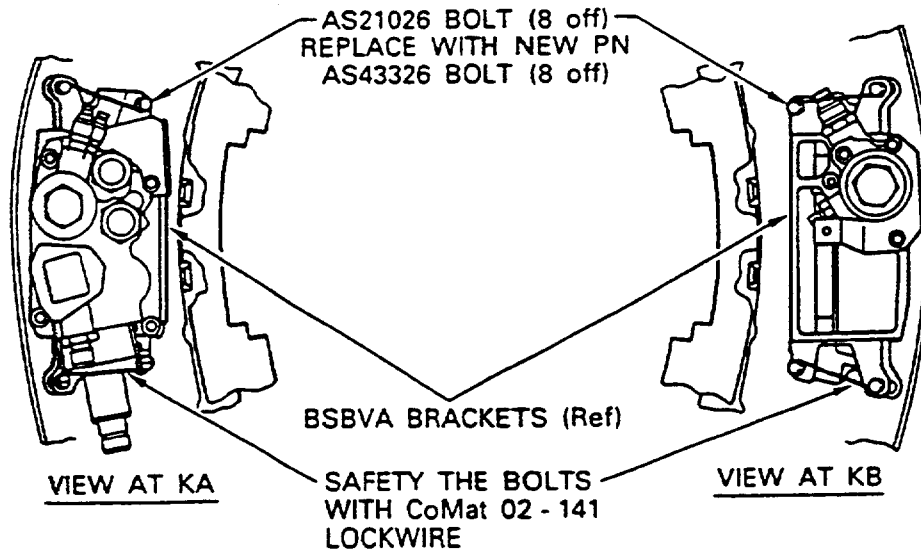
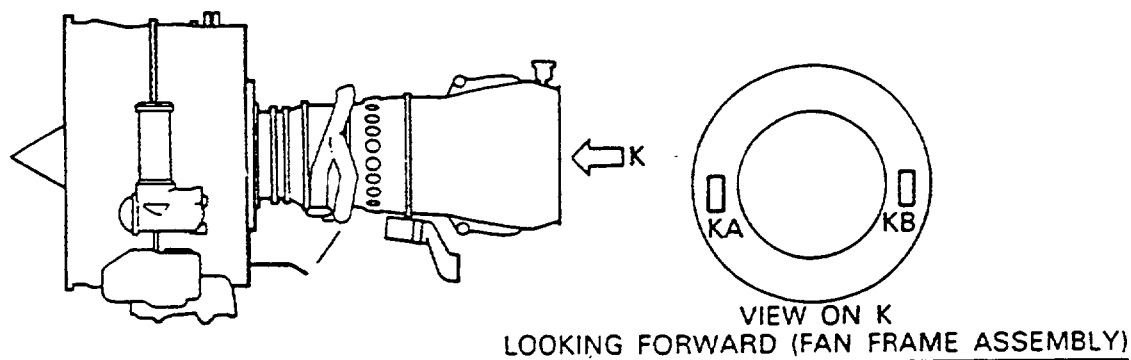
Assembly of the No.6 Strut Fairing Panel and the Drain Tube  
Figure 8 (Sheet 1 of 2)

ded00000562



ded00005563

Assembly of the No.6 Strut Fairing Panel and the Drain Tube  
Figure 8 (Sheet 2 of 2)



Assembly of the BSBVA Brackets  
Figure 9

**V2500-ENG-72-0051**





MODIFICATIONS

PART NUMBER

BASE LINE

V2500-ENG-70-0002

PROVIDES AN INTERMEDIATE  
STRUCTURE THAT ELIMINATES FLIGHT  
TEST INSTRUMENTATION PROVISIONS

V2500-ENG-72-0077

PROVIDES A FAN FRAME ASSEMBLY  
WITH REVISED ATTACHMENT FEATURES

V2500-ENG-72-0009 PART 1

ADDS FILLER COMPOUND TO THE FAN  
FRAME ASSEMBLY TO INCLUDE FILLER  
COMPOUND IN THE REAR INNER  
FLANGE AREA

V2500-ENG-72-0009 PART 2

ADDS FILLER COMPOUND TO THE FAN  
FRAME ASSEMBLY TO INCLUDE FILLER  
COMPOUND IN THE REAR INNER  
FLANGE AREA

V2500-ENG-72-0051 PART 1

INCORPORATES A FUEL DRAIN TUBE  
IN THE FAN FRAME ASSEMBLY

V2500-ENG-72-0051 PART 2

INCORPORATES A FUEL DRAIN TUBE  
IN THE FAN FRAME ASSEMBLY

5A6592\*

A

CONTINUED ON  
SHEET 2

5A0256\*

5A6596\*

5A0365

5A0362

5A0349

5A0407

5A0401

\* Shows that part number is no longer in service

Family Tree - Fan Frame Assembly  
Ref. Catalog Sequence No. 72-32-03, Fig.03, Item 100  
Figure 10 (Sheet 1 of 2)

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CONTINUED FROM  
SHEET 1

V2500-ENG-70-0002

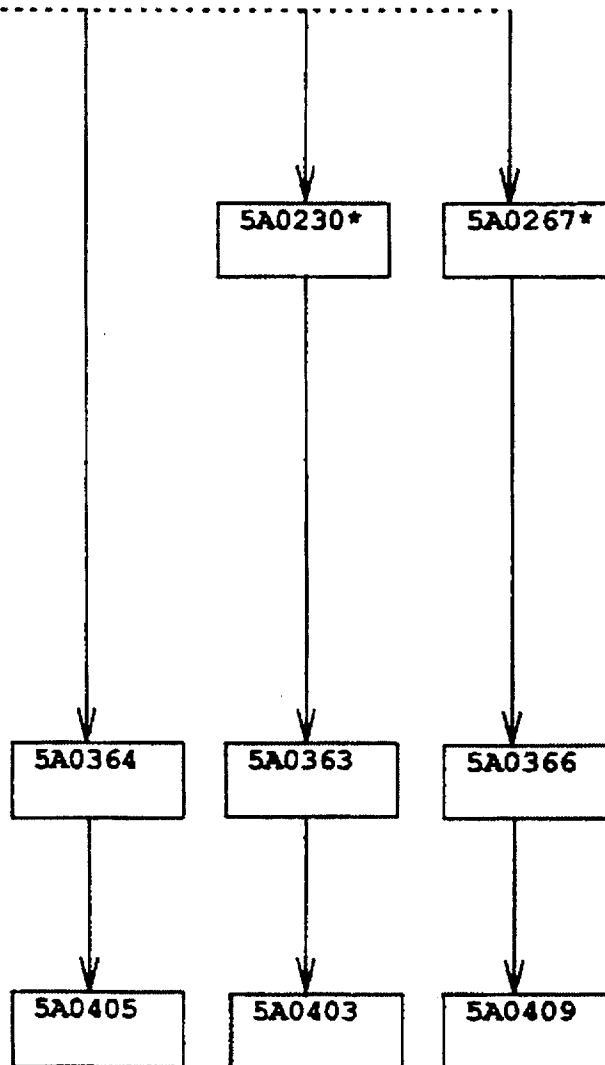
PROVIDES AN INTERMEDIATE  
STRUCTURE THAT ELIMINATES FLIGHT  
TEST INSTRUMENTATION PROVISIONS

V2500-ENG-72-0009 PART 2

ADDS FILLER COMPOUND TO THE FAN  
FRAME ASSEMBLY TO INCLUDE FILLER  
COMPOUND IN THE REAR INNER  
FLANGE AREA

V2500-ENG-72-0051 PART 2

INCORPORATES A FUEL DRAIN TUBE  
IN THE FAN FRAME ASSEMBLY



\* Shows that part number is no longer in service

Family Tree - Fan Frame Assembly  
Ref. Catalog Sequence No. 72-32-03, Fig.03, Item 100  
Figure 10 (Sheet 2 of 2)

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