



# SERVICE BULLETIN

## POWER PLANT - ENGINE - INCORPORATION OF MODIFICATION REQUIREMENTS FOR THE EEC FAN HARNESS - CATEGORY CODE 5 - MOD.ENG-71-0055

### 1. Planning Information

#### A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines, Serial Numbers V0014 through V0106

#### B. Reason

##### (1) Condition

Chafing to the EEC Fan Harness may occur at the bunched area with the oil temperature thermocouple harness for the Air Cooled Oil Cooler.

##### (2) Background

The chafing condition has been observed in service.

##### (3) Objective

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

##### (4) Substantiation

Substantiation test is not required.

##### (5) Effects of Bulletin on Workshop Procedures:

Removal/Installation	Not affected
Disassembly/Assembly	Affected (See Supplemental Information)
Cleaning	Not affected
Inspection/Check	Not affected
Repair	Not affected
Testing	Not affected

##### (6) Supplemental Information

- (a) The assembly of the Post-Service Bulletin configuration requires instruction for installing the Spiral Wrapping to the braided harness on EEC Fan Harness.

#### C. Description

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

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(a) An additional Spiral Wrapping is installed to the braided harness on 5A0356, EEC Fan Harness to prevent chafing to the EEC Fan Harness (See Figures 1 and 2).

(2) The existing EEC Fan Harness can be reworked to a new configuration (See Figure 3).

(a) V2500 Service Bulletin V2500-ENG-71-0050 must be incorporated prior to or concurrently with this bulletin.

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 5

Accomplish when the engine is disassembled sufficiently to afford access to the affected subassembly (i.e. Modules, Accessories, Components, Build Groups) and to all affected spare subassemblies.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
(1) In Service	Not applicable
(2) At overhaul	TOTAL 20 minutes
(a) To accomplish rework and reidentification of the EEC fan harness assembly	20 minutes
TOTAL	20 minutes

G. Material – Price and Availability

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

(2) See "Material Information" section for prices and availability of future spares.

H. Tooling – Price and Availability

Special tools are not required.

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**SERVICE BULLETIN****I. Weight and Balance**

- |                   |  |
|-------------------|--|
| (1) Weight change | None   |
| (2) Moment arm    | Not effect   |
| (3) Datum         | Engine front mount centerline<br>(Power Plant Station (PPS) 100) |

**J. Electrical Load Data**

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

**K. References**

- (1) Internal Reference No.

EC89VJ050

- (2) Other References

V2500 Engine Manual, 72-00-32, Removal, TASK 72-00-32-020-002 and Installation, TASK 72-00-32-420-004.

V2500 Overhaul Processes and Consumables Index.

**L. Other Publications Affected**

- (1) V2500 Power Plant Illustrated Parts Catalog, Chapter/Section 71-51-41.
- (2) V2500 Engine Illustrated Parts Catalog, Chapter/Section 71-51-41.
- (3) V2500 Engine Manual, 72-00-32, Removal, TASK 72-00-32-020-002 and Installation, TASK 72-00-32-420-004.
- (4) V2500 component Maintenance Manual, 71-51-41, Cleaning, TASK 71-51-41-100-000 and Inspection/Check, TASK 71-51-41-220-001.

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2. Accomplishment Instructions

A. Pre-requisite Instructions

- (1) Remove 5A0356, EEC Fan Harness, by the approved procedures in the Engine Manual, 72-00-32, Removal (Refer to 1.K.(1)).

B. Rework Instructions

Procedure	Supplementary Information	
(1) Find the braided harness on 5A0356, EEC Fan Harness	Refer to Figure 1	
(2) Cut and discard the four Lacing Tapes which safety the braided harness and the main EEC Fan Harness	Refer to Figure 3, Sheet 1	
(3) Make a mark on the braided harness on 5A0356, EEC Fan Harness, with CoMat 06-069, Marks-A-Lot, to specify the area to be installed the Spiral Wrapping	Refer to Figure 3, Sheet 1, and 1.K.(2)	
(4) Install 5A0277, Spiral Wrapping, to the braided harness on 5A0356, EEC Fan Harness	Refer to Figure 3, Sheets 2, 3 and 4	
(5) Renumber with new Part Number by hand writing on 5A9246, Marker, on the EEC Fan Harness.	Refer to Figure 3, Sheet 5 and 1.K.(2).	
	Existing	Renumber
	5A0356	5A0392
Use the Matthews White M-145 Ink and No.7 Thinner to renumber	Refer to supplier for the Matthews White M-145 Ink and No.7 Thinner:	
	Jas. H. Matthews & Co. Industrial Marking Products Division 6515 Penn Avenue, U.S.A.	

C. Post-requisite Instructions

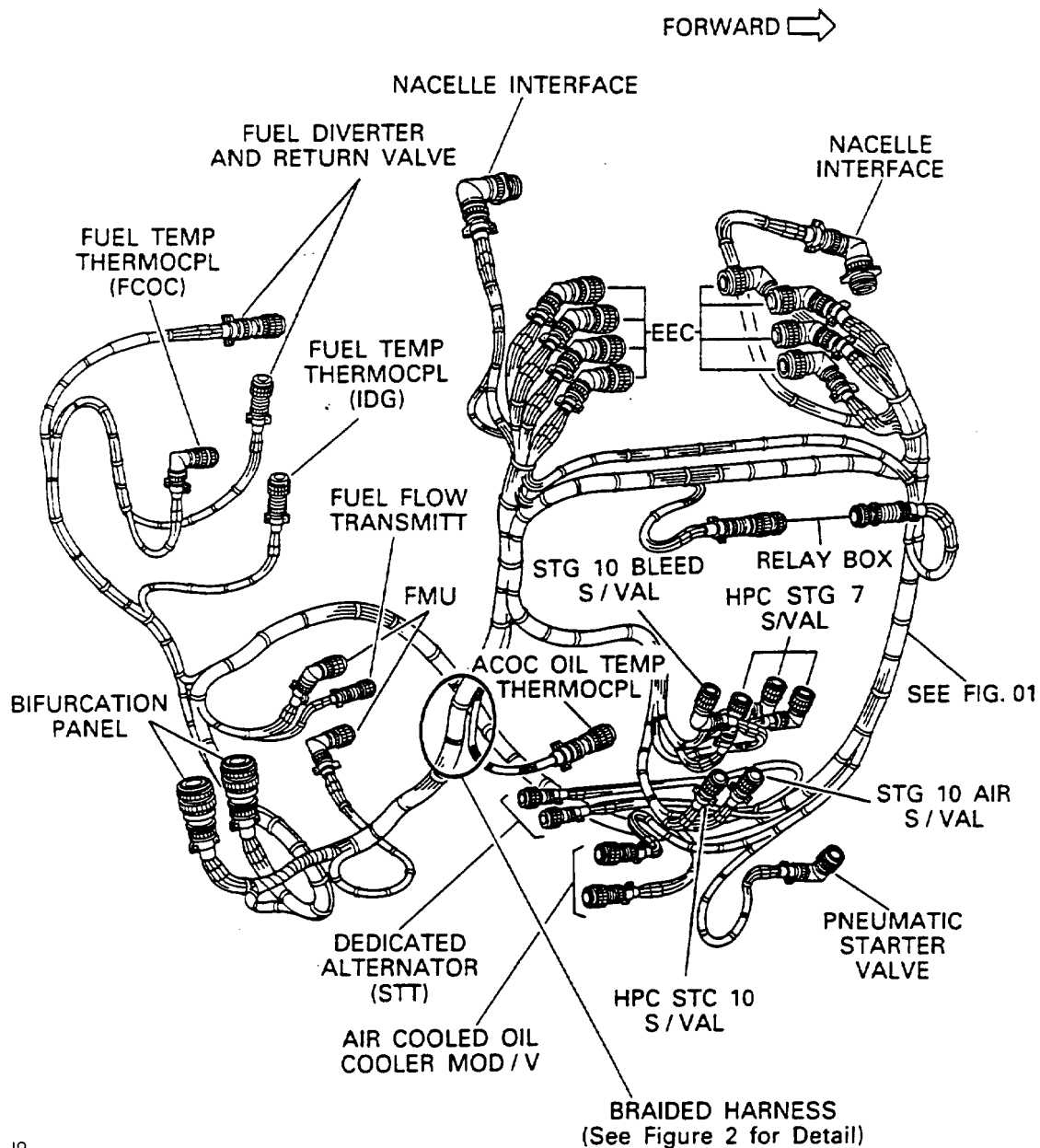
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- (1) Install the reidentified 5A0392, EEC Fan Harness, by the approved procedures in the Engine Manual, 72-00-32, Installation (Refe to 1.K.(1)).

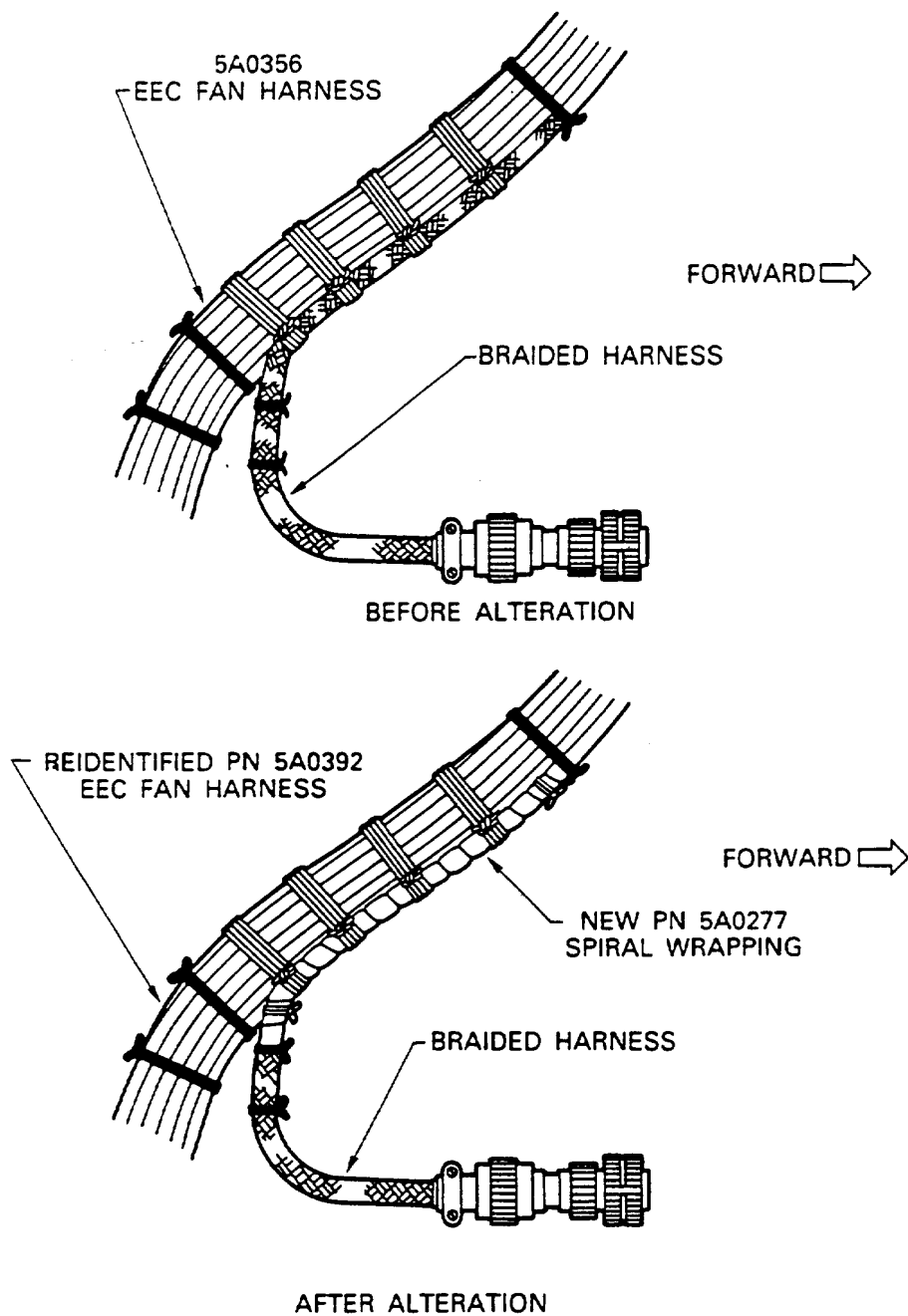
**D. Recording Instructions**

- (1) A record of accomplishment is necessary.



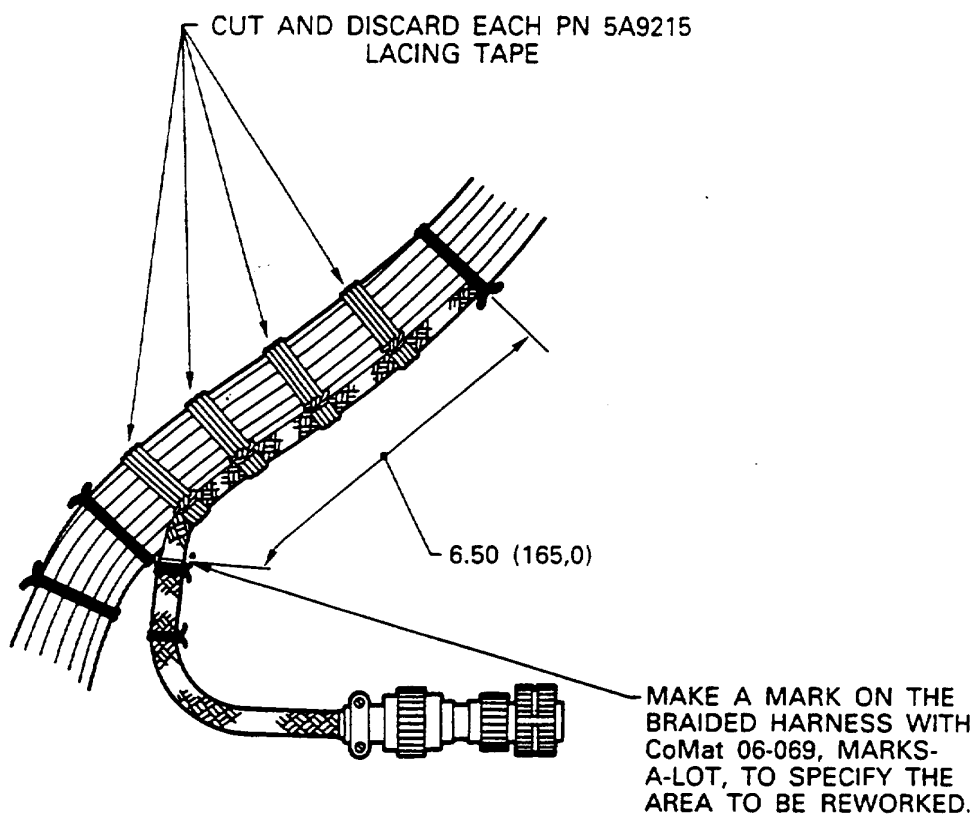
Location of the Braided Harness on EEC Fan Harness  
Fig.1

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Braided Harness on EEC Fan Harness – Before and After Alteration  
Fig.2

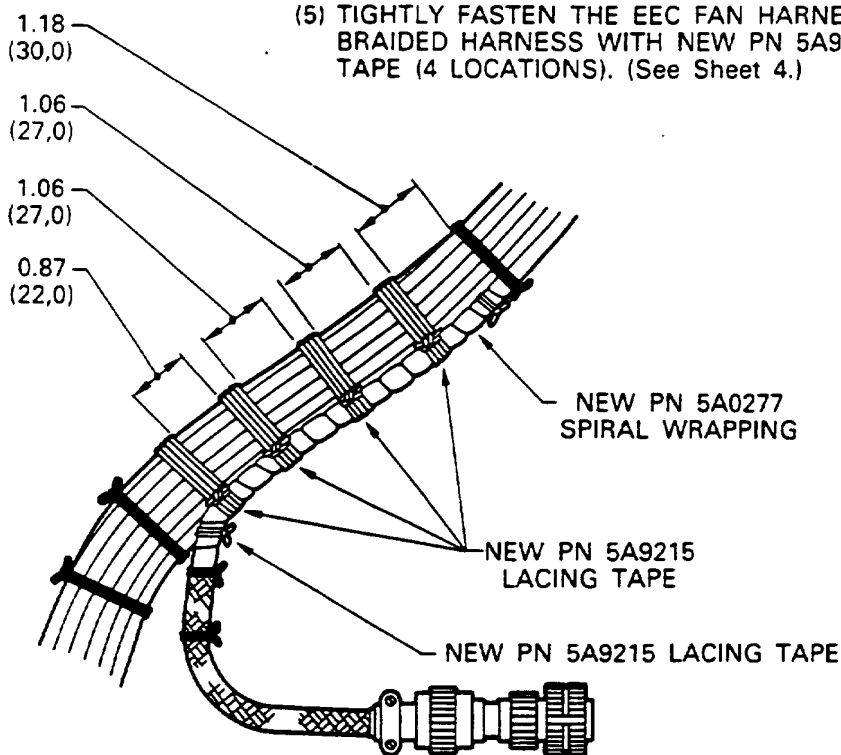


Rework of the EEC Fan Harness  
Fig.3 (Sheet 1 of 5)

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- (1) WIND NEW PN 5A0277, SPIRAL WRAPPING, AROUND THE BRAIDED HARNESS BETWEEN THE BRANCHING POSITION AND THE MARKED POSITION.
- (2) CUT THE UNNECESSARY ENDS OF THE SPIRAL WRAPPING.
- (3) REMOVE THE SHARP CORNERS AT THE TWO ENDS OF THE SPIRAL WRAPPING.
- (4) TIGHTLY FASTEN THE SPIRAL WRAPPING WITH NEW PN 5A9215, LACING TAPE, AT THE NEXT TURNS TO THE SPIRAL WRAPPING ENDS.  
(See Sheet 3.)
- (5) TIGHTLY FASTEN THE EEC FAN HARNESS AND THE BRAIDED HARNESS WITH NEW PN 5A9215, LACING TAPE (4 LOCATIONS). (See Sheet 4.)



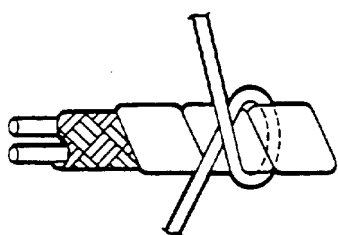
FORWARD →

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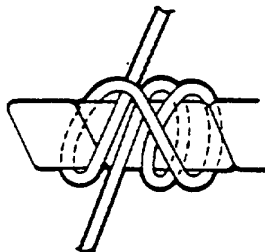
Rework of the EEC Fan Harness  
Fig.3 (Sheet 2 of 5)



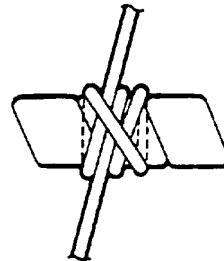
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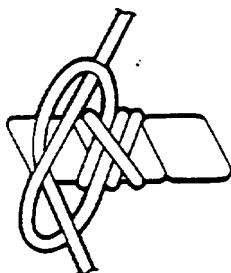
STEP 1



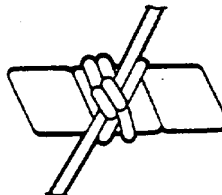
STEP 2



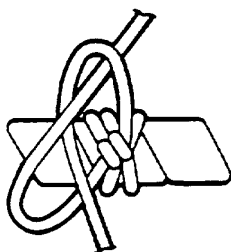
STEP 3



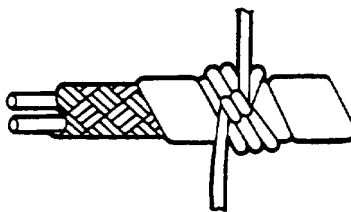
STEP 4



STEP 5



STEP 6



STEP 7

THIS ILLUSTRATION SHOWS A STEP-BY-STEP PROCEDURE  
HOW TO FASTEN EACH END OF THE SPIRAL WRAPPING  
WITH THE LACING TAPE.

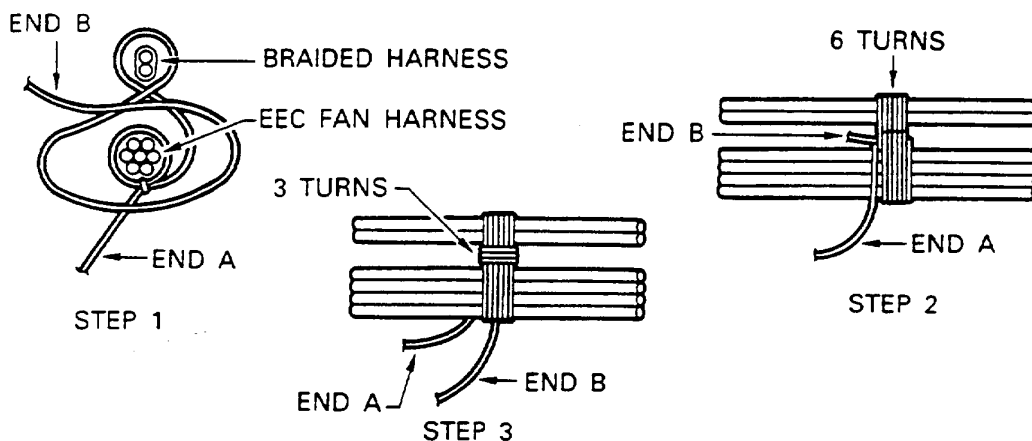
NOTE: REQUIRED QUANTITY OF THE LACING TAPE IS  
47.24 in. (1200 mm) TO FASTEN EACH END OF THE  
SPIRAL WRAPPING.

Rework of the EEC Fan Harness  
Fig.3 (Sheet 3 of 5)

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THIS ILLUSTRATION SHOWS THE PROCEDURES HOW TO FASTEN THE EEC FAN HARNESS AND BRAIDED HARNESS BUNCHES WITH THE LACING TAPES.

NOTE: REQUIRED QUANTITY OF THE LACING TAPE AT EACH POSITION IS 47.24 in. (1200 mm) TO FASTEN THE EEC FAN HARNESS AND THE BRAIDED HARNESS.

(1) STEP 1

- o THREAD THE LACING TAPE END "B" BETWEEN THE TWO HARNESSES.
- o WIND THE END "B" AROUND THE BRAIDED HARNESS BY A TURN.
- o THREAD THE END "B" AGAIN BETWEEN THE TWO HARNESSES.
- o PULL THE END "B" TIGHTLY TO MAKE A FIGURE-OF-EIGHT WHIP.

(2) STEP 2

- o REPEAT THE PROCEDURES IN STEP 1 SIX TIMES AND PULL THE END "B" EACH TIME TIGHTLY.
- o TAKE THE END "B" ACROSS THE SIX COMPLETED WHIPPINGS TO THE STARTING POINT OF LACING.

(3) STEP 3

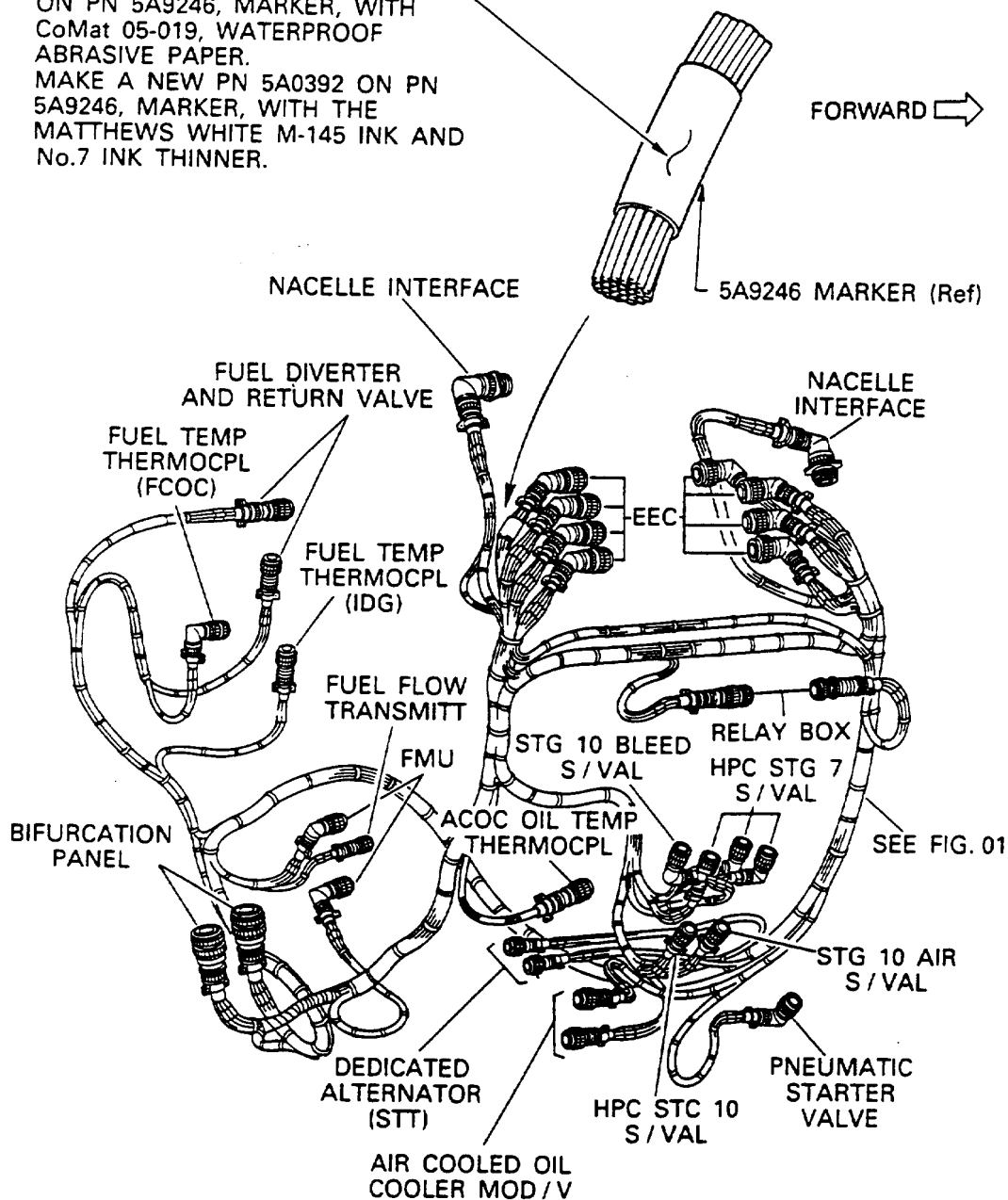
- o WIND THE END "B" TIGHTLY AROUND THE SIX COMPLETED WHIPPINGS BETWEEN THE TWO HARNESSES BY THREE TURNS.
- o PICK UP THE LACING TAPE END "A", AND KNOT THE ENDS "A" AND "B" WITH THE REEF KNOT.
- o CUT OFF THE UNNECESSARY LACING TAPE LEAVING BEHIND TAILS WITH MINIMUM OF 0.31 in. (8,0 mm) AT THE KNOT.

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Rework of the EEC Fan Harness  
Fig.3 (Sheet 4 of 5)

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ERASE THE EXISTING PN 5A0356 ON PN 5A9246, MARKER, WITH CoMat 05-019, WATERPROOF ABRASIVE PAPER. MAKE A NEW PN 5A0392 ON PN 5A9246, MARKER, WITH THE MATTHEWS WHITE M-145 INK AND No.7 INK THINNER.



Rework of the EEC Fan Harness  
Fig.3 (Sheet 5 of 5)



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3. Material Information

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
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## Applicability

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

5A0392 (71-51-41)	1	-	Harness, EEC Fan	5A0356 (01-005)	(A)(B)(S1) (1D)
5A9202 (71-51-41)	A/R	-	Sleeve	- (03-955)	(S2)(S3)
5A0277 (71-51-41)	A/R	-	Wrapping, Spiral	- (03-955)	(A)(S2) (Note 1)
5A9215 (71-51-41)	A/R	-	Tape, Lacing	5A9215 (03-915)	(A)(2D) (Note 2)

C. Instruction/Disposition Code Statements:

- (A) New part is currently available.
- (B) Old part will no longer be available for sale.
- (S1) New part may be used in place of old part, but not vice versa.
- (S2) Additional Part.
- (S3) New Part is for use with the new production engines (Engine Serial Numbers V0107 onward) only.
- (1D) Old part can be reworked and reidentified to the New Part Number.
- (2D) Old Part Number is destroyed during rework.

NOTE: 1. Required quantity of the Sprial Wrapping is 0.84in. (250 mm)  
Long when reworking assembly Part Number 5A0356.

2. Required quantity of the Lacing Tape is 283.46in. (7200 mm)  
Long when reworking assembly Part Number 5A0356.

NOTE: The estimated 1990 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the IAE Price Catalog or IAE's Spare Parts Sales Department for information concerning firm prices.

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