International Aero Engines

SERVICE BULLETIN

POWER PLANT - ENGINE - INCORPORATE REVISED EEC FAN HARNESS CLIPPING REQUIREMENTS (REFERENCE CP1013) - CATEGORY CODE 3 - MOD.ENG-71-0049

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engines prior to Serial Number V0018

B. Reason

(1) Condition

Insufficient clearance may occur between the EEC Fan Harness and the Stage 10 Bleed Solenoid Valve because of unsatisfactory clipping configuration at CP1013.

(2) Background

This condition has been noted during assembly of production engines. A review of the Harness clipping has shown that the CP1013 where safetied with the Lug on Scavenge Oil Tube is necessary to change the clipping configuration to give the sufficient clearance between the Harness and the Valve.

(3) Objective

To get a sufficient clearance between the Harness and the Valve to maintain engine reliability.

(4) Substantiation

Substantiation test is not required.

(5) Effects of Bulletin on Workshop Procedures:

Removal/Installation	Not affected
Disassembly/Assembly	Not affected
Cleaning	Not affected
Inspection/Check	Not affected
Repair	Not affected
Testing	Not affected

(6) Supplemental Information

None

C. Description

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

(a) The existing CP1013 which safeties the EEC Fan Harness and the Scavenge Oil Tube has been deleted to replace with CP1092, see Fig.1 and 2.

(b) A new CP1092 is introduced adjacent to the existing CP1013 to reroute the EEC Fan Harness, see Fig.3.

(c) One of the six lugs on the Scavenge Oil Tube which is used at CP1013 has been removed, see Fig.4.

(2) The existing Scavenge Oil Tube can be reworked to a new configuration, see Fig.4.

(3) New Scavenge Oil Tube will be available for replacement purpose.

D. Approval

The part number changes and/or part modifications described in Sections 2 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 3

Accomplish prior to revenue service.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

	Venue		Estimated Manhours
(1)	In service		TOTAL 33 minutes
	(a) To gain access	.. ..	7 minutes
	(b) To embody	.. .. ..	18 minutes
	(c) To return engine to flyable status	.. ..	8 minutes
		TOTAL	33 minutes
(2)	At overhaul	TOTAL	18 minutes

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

(a) To embody .. .. .. 18 minutes
TOTAL 18 minutes

G. Material - Price and Availability

(1) Modification Kit is 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 to accomplish this Service Bulletin.

I. Weight and Balance

(1) Weight Change .. .. .. None

(2) Moment Arm .. .. .. No effect

(3) Datum .. .. Engine front mount centerline (Powerplant Station (PPS) 100)

J. Electrical Load Data

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

K. References

(1) Internal Reference No.

88VJ702

(2) Other references

Aircraft Maintenance Manual, 71-13-00, Maintenance Practices, and 70-23-11, Torque Tightening Technique.

V2500 Facilities Equipment Manual.

V2500 Facilities Planning Manual.

V2500 Overhaul Processes and Consumable Index.

L. Other Publications Affected

(1) V2500 Power Plant Illustrated Parts Catalog, Chapter/Section 72-51-41 and 79-22-49.

(2) V2500 Engine Illustrated Parts Catalog, Chapter/Section 71-51-41 and 79-22-49.

(3) V2500 Engine Manual, 72-00-32, Removal-02 and Installation-04.

2. Accomplishment Instructions

A. Prerequisite Instructions

(1) Open the Right Fan Cowl. (Refer to the Aircraft Maintenance Manual, 71-13-00, Maintenance Practices, TASK 71-13-00-010-010.

NOTE: For uninstalled engine (without the Fan Cowls), this step is not applicable.

B. Rework Instructions

	Procedure	Supplementary Information
(1)	Find the CP1013 where is the left side of the Stage 10 Bleed Solenoid Valve	Refer to Fig.1 and 2
(2)	At CP1013, remove 4W0001, Nut, 4W0103, Bolt, 5W1086, Washer and JM44LC39H109RG, Clip, from 5A0159, EEC Fan Harness, and 5A9088, Scavenge Oil Tube	Refer to Fig.2
(3)	Put CoMat 02-085, Plastic Sheet around and under the area to be reworked	Refer to the Overhaul Processes and Consumable Index

WARNING: GOGGLES MUST BE USED WHEN YOU USE THE HAND HELD PNEUMATIC GRINDER TO PREVENT YOUR EYES FROM GROUND CHIPS.

CAUTION: BE CAREFUL WHEN YOU CUT OFF THE LUG BY THE HAND HELD PNEUMATIC GRINDER TO PREVENT DAMAGE TO THE TUBE SURFACE.

(4)	Use the hand held pneumatic grinder to cut off the Lug on 5A9088, Scavenge Oil Tube	Refer to Fig.4 and 5, and the Facilities Equipment Manual, Repair Equipment specification, Indentation No.RB010 for the Pneumatic Grinder. Refer to the following suppliers for the rotary cutters: Power tools Ltd, 13, Henley Street, Camp Hill, Birmingham, B11 1JD, ENGLAND

Med-Lab. Limited,
Copeland Street, Derby,
DE1 2PU,
ENGLAND

W Canning Co., Ltd,
Great Hamptom Street,
Birmingham, B18 6AS,
ENGLAND

(5) Remove all the sharp corners and the burrs from the edges of the remaining lug with a file

Refer to Fig.4, Sheet 2 and the Facilities Planning Manual, Mechanic's Tool-box Profile, Recommended Toolbox Content (A1 Level)

(6) Remove the Plastic Sheet from the engine

NOTE: Make sure that there is no remaining ground chips scattered over engine components before the installation of replacement clips.

(7) Renumber by the Vibro-Peen adjacent to the existing Part Number on the Scavenge Oil Tube

Refer to Fig.4, Sheet 1

Existing	Renumber
5A9088	5A8790

(8) At new CP1092, install new 400WSS16, Clip, new JM44LC39H109RG, Clip, new 4W0104, Bolt, new 5W1086, Washers (2 off), and new 4W0001, Nut. Tighten 4W0001, Nut, to a torque of 36 - 45 lbfin (4-5 Nm) on 4W0104, Bolt

Refer to Fig.3, and the Aircraft Maintenance Manual, 70-23-11, Torque Tightening Technique

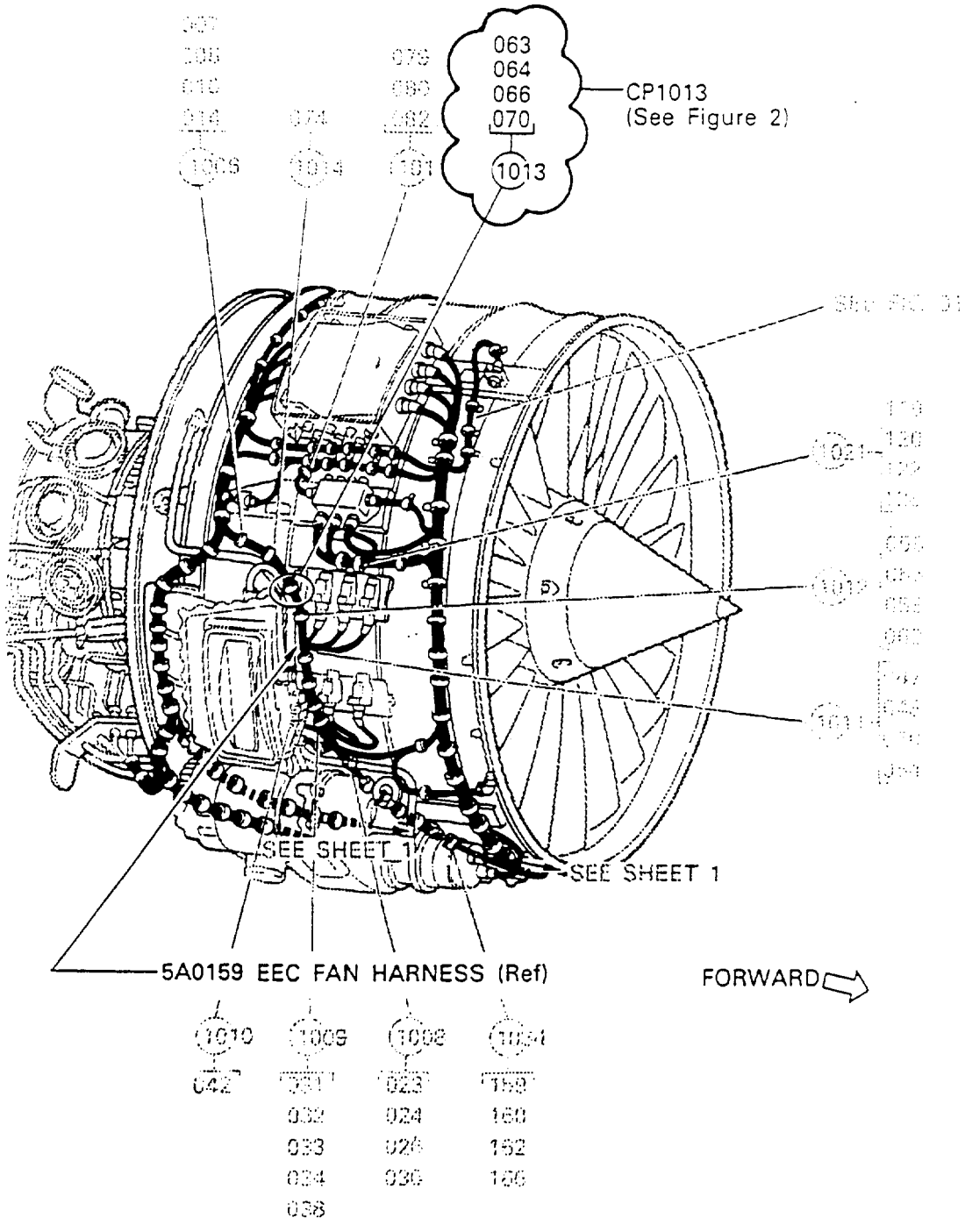
C. Post-requisite Instructions

(1) Close the Right Fan Cowl. (Refer to the Aircraft Maintenance Manual, 71-13-00, Maintenance Practices, TASK 71-13-00-410-010).

NOTE: For uninstalled engine (without the Fan Cowls), this step is not applicable.

D. Recording Instructions

(1) A record of accomplishment is necessary.



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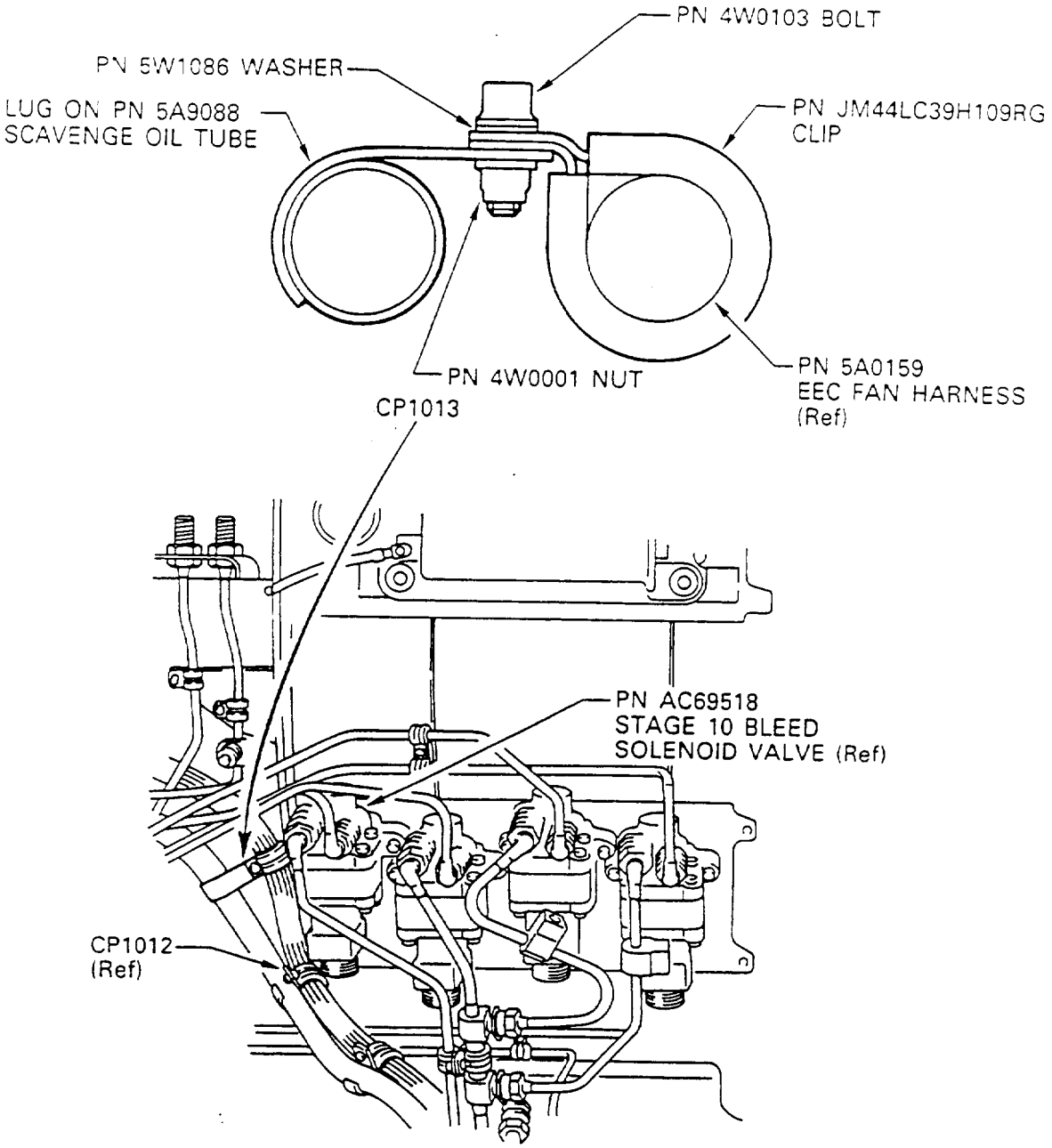
Location of the Clipping Point CP1013
Fig.1



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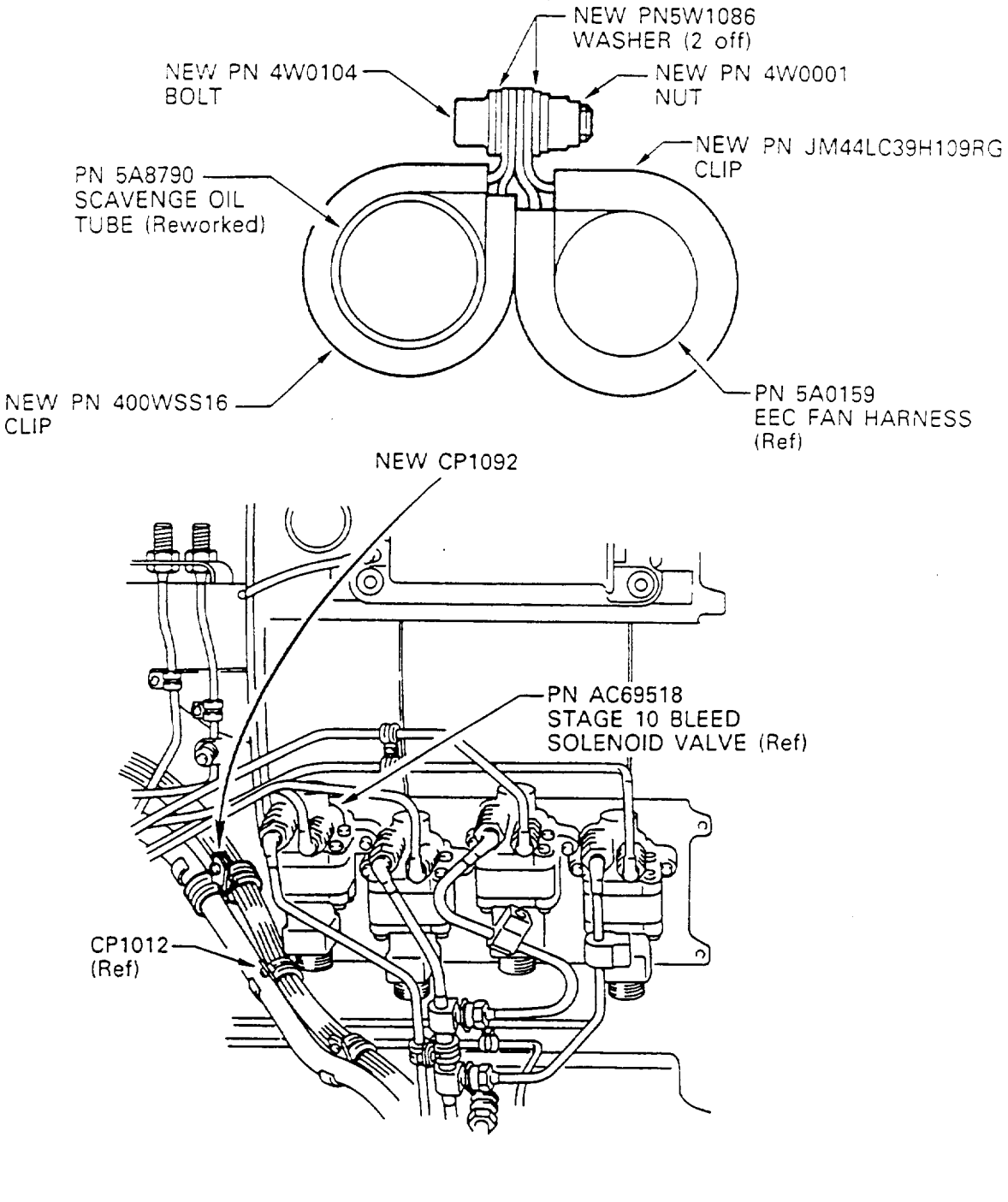
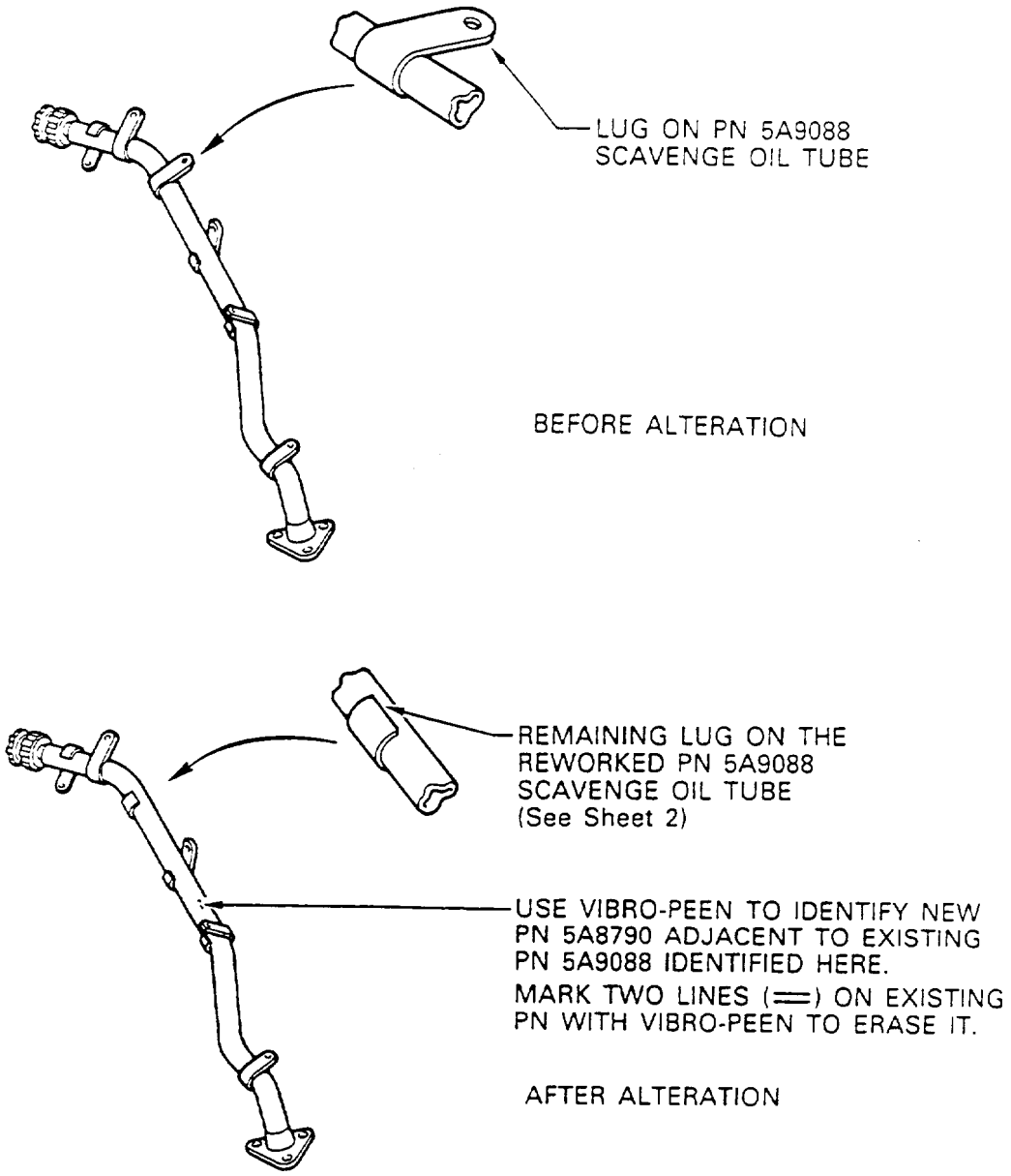
View of the Clipping Point CP1013 - Before Alteration
Fig.2



View of the Clipping Point CP1013 - After Alteration
Fig.3



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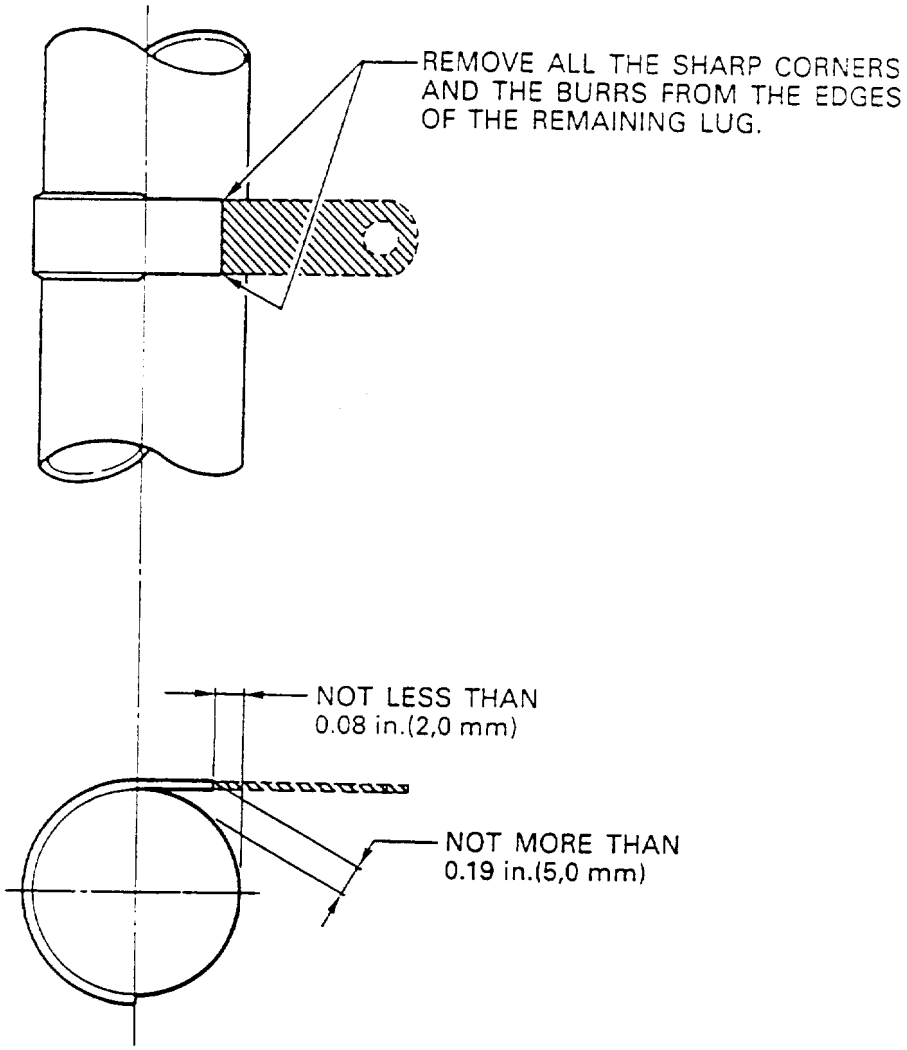
Rework of the Scavenge Oil Tube
Fig.4, Sheet 1 of 2



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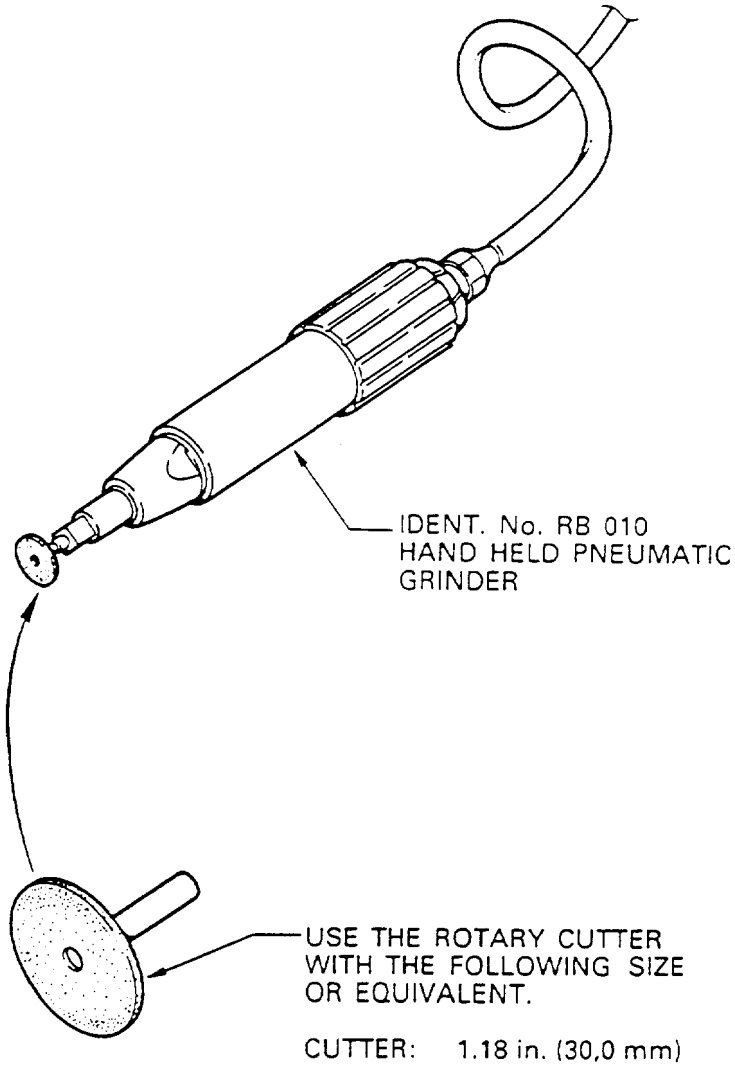
Rework of the Scavenge Oil Tube
Fig.4, Sheet 2 of 2



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Rework of the Scavenge Oil Tube
Fig.5

3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price ($)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
- (71-51-41)	1		.Bolt, CP1013	4W0103 (02-063)	(S1)
- (71-51-41)	1		.Washer, CP1013	5W1086 (02-064)	(S1)(S3)
- (71-51-41)	1		.Clip, CP1013	JM44LC39H109RG (02-066)	(S1)(S3)
- (71-51-41)	1		.Nut, CP1013	4W0001 (02-070)	(S1)(S3)
4W0104 (71-51-41)	1		.Bolt, CP1092	- (02-389)	(A)
5W1086 (71-51-41)	2		.Washer, CP1092	- (02-390)	(A)(2D)
JM44LC39H109RG (71-51-41)	1		.Clip, CP1092	- (02-392)	(A)
4W0001 (71-51-41)	1		.Nut, CP1092	- (02-396)	(A)
5A8790 (79-22-49)	1		.Tube, A/O	5A9088 (10-500)	(A)(B)(S2)(1D)
400WSS16 (79-22-49)	1		.Clip, Loop Type, CP1092	- (10-544)	(A)

C. Instruction/Dispostion Code Statements:

(A) New part is currently available.
(B) Old part will no longer be available for sale.
(S1) Old part can be used up on other applications.
(S2) New part may be used in place of old part, but not vice versa.
(S3) Old part has been transferred to new application.
(1D) Old part can be reworked and reidentified to the New Part Number.
(2D) Quantity of Part No.5W1086 increased from 1 to 2.

D. Expendables Required to incorporate this Bulletin:

None

E. Consumables Required to incorporate this Bulletin:

(1) CoMat No.02-085, Plastic Sheet.

NOTE: The estimated 1991 prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult IAE Price Catalog or contact IAE's Spare parts Sales Department for information concerning firm prices.