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DATE: Aug. 23/05

V2500 A5 SERIES PROPULSION SYSTEM SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin EV2500-71-0294 and the Initial Issue of the Supplement

Bulletin Initial Issue

Remove Incorporate Reason for change

Page 1 and 2 of the Initial issue

Summary

Pages 1 to 11 of the Initial issue

Service Bulletin

Supplement Initial Issue

Remove Incorporate Reason for change

Page 1 Initial issue

V2500-ENG-71-0294

Printed in Great Britain

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POWER PLANT - ELECTRICAL HARNESS - EEC HARNESS - FAN - DELETION OF LIGHTNING STRIKE
PROTECTION SLEEVES - MOD 71-0294

SUMMARY

1. PLANNING

A. EFFECTIVITY

V2500-A5 Engines prior to Serial No. V12125.

B. CONCURRENT REQUIREMENTS

This IAE V2500 Service Bulletin can only be fitted to engines which incorporate Service Bulletin ENG-71-0288.

C. REASON/PROBLEM

Problem:

A design review has indicated that with the introduction of Service Bulletin ENG-71-0288, the combined EEC Fan and Ignition Supply harness is adequately protected from induced voltages from lightening strikes and therefore the lightening strike protection sleeves can be deleted.

Substantiation:

The changes introduced by this Service Bulletin have been the subject of extensive engineering analysis and a successful trial fit on a mock-up engine.

Objective:

Incorporation of this Service Bulletin is designed to facilitate engine build.

D. DESCRIPTION

The four lightning strike protection sleeves are deleted.

The anti-frettage tape and packing tape is deleted from the EEC Fan and Ignition Supply harness in the affected region.

The following clip points are revised: CP1447, CP1448, CP1449 and CP1450.

A revised fancase raceway is introduced, similar to the existing item except for a reduction in the hole diameter of four lug positions and a revised profile.

E. COMPLIANCE

Category 7

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Accomplish when supply of superseded parts has been depleted.

F. MANPOWER

(1) In Service

Not applicable.

(2)At Overhaul

Not affected.

2. MATERIAL INFORMATION

Part Prices

Part No.	Description	Unit Price US Dollars
4w0110	Bolt	7.20
AS62212	Clip	34.30
UP10479	Spacer	16.40
4w0001	Nut	3.97
4W0104	Bolt	6.93
6A8470	Tube, Raceway Assy	1,189.00
UP11155	Bracket, Inter Tube Support	5.75



POWER PLANT - ELECTRICAL HARNESS - EEC HARNESS - FAN - DELETION OF LIGHTNING STRIKE PROTECTION SLEEVES - MOD 71-0294

1. Planning Information

A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V12125.

(2) Airbus A320

V2527-A5, V2527E-A5 Engines prior to Serial No. V12125.

(3) Airbus A321

V2530-A5, V2533-A5 Engines prior to Serial No. V12125.

B. Concurrent Requirements

This IAE V2500 Service Bulletin can only be fitted to engines which incorporate Service Bulletin ENG-71-0288.

C. Reason

(1) Problem

A design review has indicated that with the introduction of Service Bulletin ENG-71-0288, the combined EEC Fan and Ignition Supply harness is adequately protected from induced voltages from lightning strikes and therefore the lightning strike protection sleeves can be deleted.

(2) Evidence

See (1) Problem.

(3) Substantiation

The changes introduced by this Service Bulletin have been the subject of extensive engineering analysis and a successful trial fit on a mock-up engine.

(4) Objective

Incorporation of this Service Bulletin is designed to facilitate engine build.

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

Not affected.

(b) Maintenance

Affected.

(c) Overhaul

Affected.

(d) Repair Schemes

Not affected.

(e) Interchangeability

Affected (see Interchangeability of Parts (1.P)).

(f) Fits and Clearances

Not affected.

D. <u>Description</u>

- (1) The changes introduced are:
 - (a) The four lightning strike protection sleeves are deleted.
 - (b) The anti-frettage tape and packing tape is deleted from the EEC Fan and Ignition Supply harness in the affected region.
 - (c) The following clip points are revised: CP1447, CP1448, CP1449 and CP1450.
 - (d) A revised fancase raceway is introduced, similar to the existing item except for:
 - (i) A reduction in the hole diameter of four lug positions.
 - (ii) A revised profile.

E. Compliance

Category Code 7

Accomplish when the supply of superseded parts has been depleted.

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F. Approval

The part number changes and/or part modifications specified in the Accomplishment Instructions and Material Information sections of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine models given.

G. Manpower

(1) In service

Not applicable.

(2) At overhaul

Not affected.

<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.

For prices and availability of future spares see supplement to this bulletin.

I. Tooling Price and Availability

Special tools are not required.

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

Not applicable.

K. Weight and Balance

(1) Weight Change

Minus 0.09kg (0.2lb).

(2) Moment Arm

305mm (12 in.) Forwards of Datum.

(3) Datum

Power Plant Station (PPS)100.

L. Electrical Load Data

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

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M. Software Accomplishment Summary

Not applicable.

N. References

- (1) Internal Reference No. 04VR003
- (2) ATA Locator 71-51-00
- (3) IAE V2500 Service Bulletin:

ENG-71-0288: Power Plant - Electrical Harnesses- Introduction of a Combined EEC Fan and Ignition Supply Harness.

- (4) Engine Manual, Chapter/Section 72-00-32, Removal, Installation.
- (5) Aircraft Maintenance Manual, Chapter/Section 71-51-42, Removal/Installation.

O. Other Publications Affected

- (1) Illustrated Parts Catalogue will be revised.
- (2) Engine Manual, Chapter/Section 72-00-32, Removal and Installation.
- (3) Aircraft Maintenance Manual, Chapter/Section 71-51-42, Removal/Installation.
- (4) Component Maintenance Manual, Chapter/Section 71-51-41, Cleaning, Inspection/Check.

P. Interchangeability of Parts

It is essential that the parts introduced by this Service Bulletin are fitted as a complete engine set.



2. <u>Material Information</u>

A. The kit required consists of the following parts:

None.

B. Parts to be reworked:

None.

C. New production parts:

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FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
02795	4W0110	1	.Bolt, (See Appendix 5) (0.150 dia x 0.938) (CP1447)	-	4W0165	(A)(B) (S1)
02798	AS62212	1	.Clip (CP1447)	-	FEC3002-24	4B(A)(D) (S1)
02800	UP10479	1	.Spacer (10mm) (CP1447)	_	_	(A)(C)
02802	4W0001	1	.Nut, (See Appendix 5) (0.190 dia) (CP1447)	-	4W0002	(A)(B) (S1)
02803	4W0104	1	.Bolt, (See Appendix 5) (0.190 dia x 0.562) (CP1448)	-	4W0165	(A)(B) (S1)
02806	AS62212	1	.Clip (CP1448)	-	FEC3002-24	4B(A)(D) (S1)
02810	4W0001	1	.Nut (0.190 dia) (CP1448)	-	4W0002	(A)(B) (S1)
02811	4W0104	1	.Bolt, (See Appendix 5) (0.190 dia x 0.562) (CP1449)	-	4W0165	(A)(B) (S1)
02814	AS62212	1	.Clip (CP1149)	-	FEC3002-24	4B(A)(D) (S1)
02818	4W0001	1	.Nut, (See Appendix 5) (0.190 dia) (CP1449)	-	4W0002	(A)(B) (S1)
02819	4W0104	1	.Bolt, (See Appendix 5) (0.190 dia x 0.562) (CP1450)	-	4W0165	(A)(B) (S1)
02822	AS62212	1	.Clip (CP1450)	-	FEC3002-24	4B(A)(D) (S1)
02826	4w0001	1	.Nut, (See Appendix 5) (0.190 dia) (CP1450)	-	4W0002	(A)(B) (S1)

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	71-51-50)					
	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
	01500	6A8470	1	.Tube, Raceway Assy	-	6A6233	(A)(D)
	01614	UP11155	4	Bracket, Inter Tube Support	-		(S1) (A)(1D)
D. <u>Redundant Parts</u>							
	71-51-41						
	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
	01490 01514 02796 02804 02812 02820	- - - - -	2 2 1 1 1	.Split, Sleeve .Split, Sleeve .Washer (CP1447) .Washer (CP1448) .Washer (CP1449) .Washer (CP1450)	- - - -	5A9345 5A9345 5W1088 5W1088 5W1088 5W1088	(D) (D) (B) (B) (B)
	71-51-50						
	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
	01618	_	4	Lug, Brazed	-	5W8491	(B)(E)

E. <u>Instruction Disposition Codes:</u>

- (A) New part is currently available.
- (B) Old part may be used up on other applications.
- (C) Additional.
- (D) Old part will be discontinued.
- (E) Part of Raceway 01500.
- (S1) Old and new parts are not interchangeable.
- (1D) Quantity increased from 8 to 12.

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3. <u>Accomplishment Instructions</u>

A. Rework Instructions

None.

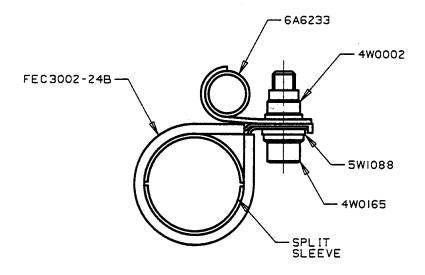
B. Assembly/Disassembly Instructions

For the Removal and Installation Instructions refer to Engine Manual, Chapter/Section 72-00-32, Removal and Installation and Aircraft Maintenance Manual, Chapter/Section 71-51-42, Removal/Installation.

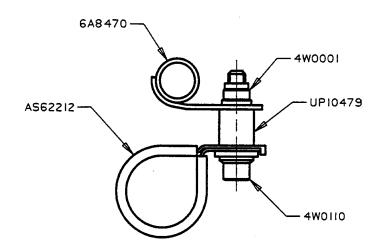
C. Recording Instructions

A record of accomplishment is necessary.





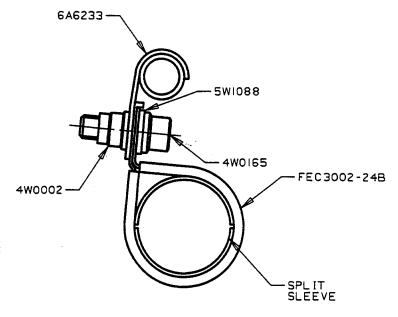
CLIPPING POINT 1447 PRIOR TO MODIFICATION



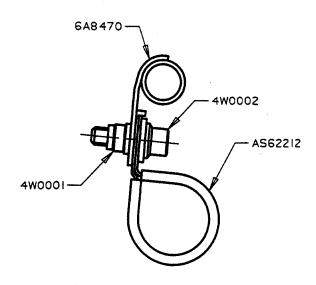
CLIPPING POINT 1447 AFTER MODIFICATION

Clipping point 1447 - Before and after modification Fig.1

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CLIPPING POINT 1448 PRIOR TO MODIFICATION

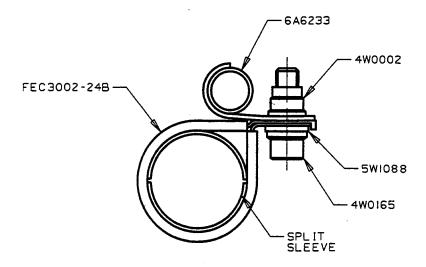


CLIPPING POINT 1448 AFTER MODIFICATION

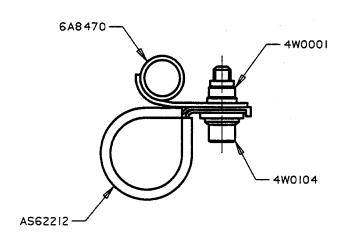
Clipping point 1448 - Before and after modification Fig.2

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CLIPPING POINT 1449 PRIOR TO MODIFICATION

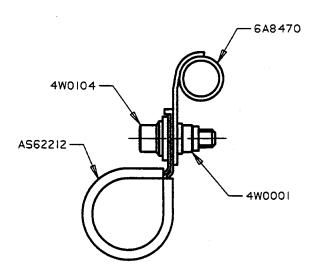


CLIPPING POINT 1449 AFTER MODIFICATION

Clipping point 1449 - Before and after modification Fig.3

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CLIPPING POINT 1450 PRIOR TO MODIFICATION



CLIPPING POINT 1450 AFTER MODIFICATION

Clipping point 1450 - Before and after modification Fig.4

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POWER PLANT - ELECTRICAL HARNESS - EEC HARNESS - FAN - DELETION OF LIGHTNING STRIKE PROTECTION SLEEVES - MOD 71-0294

SUPPLEMENT - PRICES AND AVAILABILITY

The prices (if 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 catalogue for current prices.

1. Modification Kit:

Not applicable.

2. Parts required:

Part No.	Description	Unit Price US Dollars
4w0110	Bolt	7.20
AS62212	Clip	34.30
UP10479	Spacer	16.40
4W0001	Nut	3.97
4W0104	Bolt	6.93
6A8470	Tube, Raceway Assy	1,189.00
UP11155	Bracket, Inter Tube Support	5.75