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V2500-A1/A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits Revision 2 to Service Bulletin EV2500-71-0219

Document History

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 Initial Issue Sep.18/98
 Revision 1 Apr.10/99

Supplement Revision Status

Bulletin Revision 2

Remove
 Pages 1 to 26 of the
 Service Bulletin

Incorporate
 Pages 1 to 28 of the
 Service Bulletin

Reason for change
 To add Mod. Kit MKV801701
 part number to 1.H. and
 editorial changes. All
 pages re-issued to
 establish document history
 from new data system.

V2500-ENG-71-0219

Transmittal - Page 1 of 2

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED

If any have not been received please advise Publication Services, Rolls-Royce plc, Derby, England

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LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin following incorporation of Revision 2 are as follows:

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POWER PLANT - ELECTRICAL HARNESSSES - EEC HARNESS - FAN - INTRODUCTION OF REVISED
ENGINE DEDICATED ALTERNATOR (EDA) CONNECTORS (REWORK)

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R 1. Planning Information

R A. Effectivity:

R (1) Airbus A319

R V2522-A5, V2524-A5 Engines prior to Serial No. V10550

R (2) Airbus A320

R (a) V2500-A1 Engines prior to Serial No. V0362

R (b) V2527-A5, V2527E-A5 Engines prior to Serial No. V10550

R (3) Airbus A321

R V2530-A5, V2533-A5 Engines prior to Serial No. V10550

R (4) ATA Location 71-51-00

R B. Concurrent Requirements

R This Service Bulletin must only be installed to engines which have had IAE
R V2500 Service Bulletin ENG 73-0138 embodied. (Refer to 1.L.(1)).

R C. Reason

R (1) Problem

R Pin burning of the electrical connectors for the Engine Dedicated
R Alternator (EDA) can occur.

R The problem is caused by the design of the interface connectors for Loom-A
R and Loom-B, which cannot resist the vibrations that occur at this
R location.

R (2) Background

R The problem has been found on in-service engines.

R (3) Substantiation

R A satisfactory engineering analysis has been done on the changes
R introduced by this Service Bulletin. In addition, a similar modification
R has been successfully embodied on V2500-D5 engines.



R (4) Objective

R The purpose of this Service Bulletin is to maintain reliability.

R (5) Effect of Bulletin on:

R (a) Operation

R Not affected.

R (b) Maintenance

R Not affected.

R (c) Overhaul

R Affected.

R (d) Repair Schemes

R Not affected.

R (e) Interchangeability

R Affected. (Refer to 2.C.).

R (f) Fits and Clearances

R Not affected.

R D. Description

R (1) A revised EEC Fan Harness assembly is introduced with the changes that
R follow:

R (a) Revised connectors are introduced at positions 4005EV-A and 4005EV-B.
R To prevent Backing-Off the revised connectors have a finer locking
R mechanism.

R (b) The quantity of contact sockets is increased from 10 to 12.

R (c) The quantity of blanking plugs at connector 4005EV-A is increased from
R 4 to 6 on the A1 engines and from 2 to 4 on the A5 engines.

R (d) The quantity of blanking plugs at connector 4005EV-B is increased from
R 2 to 4.

R (e) Revised backshells are introduced to match the revised connectors.

R (2) Existing EEC fan harness assemblies can be reworked. (Refer to Section 3.,
R Figures 1 to 10).



R E. Compliance

R Category Code 6.

R Accomplish when the subassembly (That is modules, accessories, components,
R build groups) is disassembled sufficiently to get access to all the affected
R parts.

R F. Approval

R The part number changes and/or part modifications are given in Sections 2 and 3
R of this Service Bulletin. They comply with the applicable Federal Aviation
R Regulations and are FAA-APPROVED for the engine models listed.

R G. Manpower

R Estimate of man-hours necessary to embody this Service Bulletin in full:

R (1) In Service

R 1 Hour 36 Minutes

R (2) At Overhaul

R 1 Hour 36 Minutes

R NOTE: It is possible to get access to the parts affected by this Service
R Bulletin at overhaul.

R H. Material Price and Availability

R (1) A modification kit MKV801701 is necessary for this Service Bulletin.

R This Modification Kit is available at a 50% discount to all affected
R operators until December 31 2001.

R Operators must send a purchase order for the applicable quantity of kits.
R The purchase order must give the Serial Number of all affected engines and
R the IAE tracking number S 393 UI must be put on all purchase orders.

R The purchase orders must be sent to:

R IAE Spares Division, 400 Main Street, M/S 121-10, East Hartford, CT06108,
R USA.

R (2) The sales department will advise operators about delivery schedules thirty
R days after the purchase orders have been received.



(3) Mod. Kit MKV801701 consists of:

IAE Part Number	Rolls-Royce plc Part No.	Qty	Keyword
ESC65E12	1014139	2	Clamp, backshell
ESC30S20BC	1013344	24	Contact, socket
ESC36-20	1023818	10	Plug, sealing
ESC10SE61212SN0	1013339	1	Connector
ESC10SE61212S60	1014476	1	Connector

(4) Refer to 2. Material Information for the prices and availability of future spares.

I. Tooling Price and Availability

Special tools are not necessary.

J. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

Not affected.

(3) Datum

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

K. Electrical Load Data

The aircraft electrical load is not affected by this Service Bulletin.

L. References

(1) Internal Reference No.

EC98VR017



R (2) Other References

R (a) IAE V2500 Service Bulletin:

R ENG73-0138 Engine fuel and control – Stator – Introduction of an
R engine dedicated alternator with revised electrical connectors.

R (b) Aircraft Wiring Manual (AWM), Chapter/Sections 20-71-20 and 20-71-21.

R (c) Electrical, Harnesses and Cables (EHC) Component Maintenance Manual
R (CMM), TASK 71-51-41-700-301.

R (d) Standard Practice Manual (SPP), TASK 70-09-00-400-501, SUBTASK
R 70-09-00-400-002.

R (e) Airbus aircraft modification No. 28065.

R M. Other Publications Affected

R (1) Component Maintenance Manual (CMM), Chapter/Section 71-51-41 Cleaning and
R Inspection/Check.

R (2) Engine Manual (EM), Chapter/Section 72-00-32 Removal-02 and
R Installation-04 CONFIG-1 A1 or CONFIG-2 A5.

R (3) Illustrated Parts Catalogue (IPC), Chapter/Section 71-51-41.

R 2. Material InformationR A. Kits necessary for this Service Bulletin:

R Modification Kit MKV801701

R B. New Production Parts:

R A1 Models

R	PART NO.	QTY	UNIT PRICE
R	ESC10SE61212S60	1	229.00
R	ESC10SE61212SN0	1	382.00
R	ESC30S20BC	24	2.33
R	ESC36-20	10	2.20
R	ESC65E12	2	143.00
R	6A7440	1	46480.00
R	6A7441	1	46480.00
R	6A7442	1	46480.00
R	6A7443	1	46480.00

R A5 Models

R	PART NO.	QTY	UNIT PRICE
R	ESC10SE61212S60	1	229.00
R	ESC10SE61212SN0	1	382.00
R	ESC30S20BC	24	2.33
R	ESC36-20	8	2.20
R	ESC65E12	2	143.00

R A5 Models (but not V2533-A5 Model)

R	PART NO.	QTY	UNIT PRICE
R	6A7444	1	54900.00
R	6A7445	1	54900.00
R	6A7446	1	54900.00
R	6A7447	1	54900.00
R	6A7448	1	54900.00

R V2533-A5 Model

R	PART NO.	QTY	UNIT PRICE
R	6A7447	1	54900.00

R NOTE: The unit prices if shown, are an estimate and they are given for the
R purpose of planning only. For actual prices, refer to the IAE Price
R Catalogue or contact IAE's spare part sales department.

R C. Parts affected by this Service Bulletin:

R A1 Models

R 71-51-41

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FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
03-490	ESC76E12	1	Clamp backshell (VU1653)	92H1-13- 8JCCAD	(A)(S1)(2D)
03-490	-	1	Clamp, backshell assembly (VU0419)	388HS104 E13	(2D)
03-490	-	1	Clamp, backshell assembly (VU2824)	272E13	(2D)
03-510	ESC65E12	1	Clamp, backshell assembly (VU1653)	92H1-13- 8JCCAD	(A)(S1)(2D)
03-510	-	1	Clamp, backshell assembly (VU0419)	388HS104 E13	(2D)
03-510	-	1	Clamp, backshell assembly (VU2824)	272E13	(2D)
04-490	ESC10SE6- 1212SNO	1	Connector (VU1653)	T3K121398 SN1259	(A)(S1)(2D)
04-490	-	1	Connector assembly (V14283)	MT938T13K 98S901	(2D)
04-495	ESC30S20BC	12	Contact, socket (VU1653)	5A9290	(A)(S1)(2D) (5D)
04-495	-	10	Contact, socket (V14283)	5100-101- 0120	(2D)
04-509	ESC36-20	6	Plug, sealing (VU1653)	MS27488-20	(A)(S1)(3D)
04-510	ESC10SE6- 1212S60	1	Connector (VU1653)	T3K121398 SA1259	(A)(S1)(2D)
04-510	-	1	Connector assembly (V14283)	1017689	(2D)
04-515	ESC30S20BC	12	Contact, socket (VU1653)	5A9290	(A)(S1)(2D) (5D)
04-515	-	10	Contact, socket (V14283)	5100-101- 0120	(2D)
04-529	ESC36-20	4	Plug, sealing (VU1653)	MS27488-20	(A)(S1)(2D) (4D)

R For Engines that have had ENG-71-0107 embodied but not ENG-70-0156:

R 71-51-41

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
01-005	6A7440	1	Harness assembly - EEC fan	6A4394	(S1)(1D)



R For Engines that have had ENG-70-0156 embodied but not ENG-71-0111:

R 71-51-41

R	FIG	NEW			OLD	
R	ITEM	PART			PART	INSTR
R	NO.	NO.	QTY	PART TITLE	NO.	DISP
R	01-005	6A7441	1	Harness assembly - EEC fan	6A4715	(S1)(1D)

R For Engines that have had ENG-71-0111 embodied but not ENG-70-0367:

R 71-51-41

R	FIG	NEW			OLD	
R	ITEM	PART			PART	INSTR
R	NO.	NO.	QTY	PART TITLE	NO.	DISP
R	01-005	6A7442	1	Harness assembly - EEC fan	6A5553	(S1)(1D)

R For Engines that have had ENG-70-0367 embodied:

R 71-51-41

R	FIG	NEW			OLD	
R	ITEM	PART			PART	INSTR
R	NO.	NO.	QTY	PART TITLE	NO.	DISP
R	01-005	6A7443	1	Harness assembly - EEC fan	6A5651	(S1)(1D)

R All A5 Models

R 71-51-41

R	FIG	NEW			OLD	
R	ITEM	PART			PART	INSTR
R	NO.	NO.	QTY	PART TITLE	NO.	DISP
R	03-490	ESC65E12	1	Clamp, backshell (VU1653)	92H-13-	(A)(S1)(2D)
R					8JCCAD	
R	03-490	-	1	Clamp, backshell assembly	388HS104	(2D)
R				(VU0419)	E13	
R	03-490	-	1	Clamp, backshell assembly	272E13	(2D)
R				(VU2824)		
R	03-510	ESC65E12	1	Clamp, backshell assembly	92H1-13-	(A)(S1)(2D)
R				(VU1653)	8JCCAD	
R	03-510	-	1	Clamp, backshell assembly	388HS104	(2D)
R				(VU0419)	E13	
R	03-510	-	1	Clamp, backshell assembly	272E13	(2D)
R				(VU2824)		



R	FIG	NEW			OLD	
R	ITEM	PART			PART	INSTR
R	NO.	NO.	QTY	PART TITLE	NO.	DISP
R	04-490	ESC10SE6-	1	Connector (VU1653)	T3K121398	(A)(S1)(2D)
R		1212SN0			SN1259	
R	04-490	-	1	Connector assembly (V12483)	MT938T13K	(2D)
R					98S901	
R	04-495	ESC30S20BC	12	Contact, socket (VU1653)	5A9290	(A1)(S1)(2D)
R						(5D)
R	04-509	ESC36-20	4	Plug, sealing (VU1653)	MS27488-20	(A)(S1)(4D)
R	04-510	ESC10SE6-	1	Connector (VU1653)	T3K121398	(A)(S1)(2D)
R		1212S60			SA1259	
R	04-510	-	1	Connector assembly (V14283)	1017689	(2D)
R	04-515	ESC30S20BC	12	Contact, socket (VU1653)	5A9290	(A)(S1)(2D)
R						(5D)
R	04-529	ESC36-20	4	Plug, sealing (VU1653)	MS27488-20	(A)(S1)(2D)
R						(4D)

R A5 Models Only (But not V2533-A5 Model)

R For Engines that have had ENG-73-0071 embodied but not ENG-71-0183:

R 71-51-41

R	FIG	NEW			OLD	
R	ITEM	PART			PART	INSTR
R	NO.	NO.	QTY	PART TITLE	NO.	DISP
R	01-005	6A7444	1	Harness assembly - EEC fan	6A6429	(S1)(1D)
R	01-005	6A7445	1	Harness assembly - EEC fan	6A6430	(S1)(1D)
R	01-005	6A7446	1	Harness assembly - EEC fan	6A6431	(S1)(1D)

R For Engines that have had ENG-71-0183 embodied but not ENG-71-0216:

R 71-51-41

R	FIG	NEW			OLD	
R	ITEM	PART			PART	INSTR
R	NO.	NO.	QTY	PART TITLE	NO.	DISP
R	01-005	6A7447	1	Harness assembly - EEC fan	6A6439	(S1)(1D)
R	01-005	6A7448	1	Harness assembly - EEC fan	6A6441	(S1)(1D)

R

R

R

R



R For V2533-A5 Model Only

R 71-51-41

R	FIG	NEW			OLD	
R	ITEM	PART			PART	INSTR
R	NO.	NO.	QTY	PART TITLE	NO.	DISP
R	01-005	6A7447	1	Harness assembly - EEC fan	6A6439	(S1)(1D)

R D. Instruction Disposition Codes:

R (A) New part will be available from October 1998.

R (1D) Old part can be reworked and re-identified to the new part number.

R (S1) Old and new parts are not interchangeable.

R (2D) Old part can be used on other applications.

R (3D) Quantity increased from 4 to 6.

R (4D) Quantity increased from 2 to 4.

R (5D) Quantity increased from 10 to 12.

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R 3. Accomplishment Instructions

R A. Assembly Instructions

R (1) For the correct removal/installation procedures refer to the manuals that
R follow:

R (a) A1/A5 Engine Manuals, Chapter/Section 72-00-32, Removal-02 and
R Installation-04 CONFIG-1, A1 or CONFIG-2, A5.

R B. Rework Instructions (for A1 Engine Marks)

R (1) Consumable Materials

R CoMat 02-148 Adhesive tape (electrical)

R CoMat 06-131 Marking pen

R (2) Standard Equipment

R Standard workshop equipment

R Cable stripper

R Contact extraction/insertion tool

R Contact crimping tool

R (3) Rework the parts that follow (A1 Models only):

R 6A4394, EEC Harness Assembly, SB 71-0107, (Refer to 71-51-41, Fig./Item
R 01-005)

R 6A4715, EEC Harness Assembly, SB 70-0156, (Refer to 71-51-41, Fig./Item
R 01-005)

R 6A5553, EEC Harness Assembly, SB 71-0111, (Refer to 71-51-41, Fig./Item
R 01-005)

R 6A5651, EEC Harness Assembly, SB 70-0367, (Refer to 71-51-41, Fig./Item
R 01-005)

R CAUTION: MAKE SURE THAT THERE IS SUFFICIENT HARNESS LENGTH TO ALLOW THE
R REWORK TO BE CARRIED OUT.

PROCEDURE

RELATED DATA

R (a) Remove the contacts from the
R harness connector 4005EV-A and
R 4005EV-B

Use the applicable
extraction/insertion tool.
Refer to Figure 3 and/or Figure 5



- (b) Cut off the old sockets A, B, E, F, G and J for the harness connector 4005EV-A and sockets A, B, C, D, E, F, G and J for the harness connector 4005EV-B
- Use standard workshop equipment.
Refer to Figure 3 and/or Figure 5
- (c) Inspect the metal braiding
- Make sure the braid is not damaged and has sufficient length for the new backshell
- CAUTION:** MAKE SURE THAT YOU USE THE CORRECT LOCATOR AND THAT THE CRIMP TOOL IS SET CORRECTLY. IF NOT, THE LEAD OR CONTACT CAN BE DAMAGED OR THE CONTACT INCORRECTLY ATTACHED TO THE LEAD.
- (d) For harness connector 4005EV-A, install the contact sockets to the leads for contact positions 4, 5, 6, 7, 8 and 9
- Use ESC30-S20BC, contact socket 6 off, 04-495.
Use a contact crimping tool (Daniels M22520/1 or equivalent).
Refer to Figure 4 and/or Figure 6
- (e) For harness connector 4005EV-B, install the contact sockets to the leads for contact positions 4, 5, 6, 7, 8, 9, 10 and 11
- Use ESC30-S20BC, contact socket, 8 off, 04-515.
Use a contact crimping tool (Daniels M22520/1 or equivalent).
Refer to Figure 4 and/or Figure 6.
- (f) Install the sockets and blanking plug(s) to the positions not in use.

PROCEDURE

RELATED DATA

- (i) For harness connector 4005EV-A at 1, 2, 3, 10, 11 and 12
- Use ESC36-20, sealing plug, 6 off, 04-529 and ESC30-S20BC, contact socket, 6 off, 04-495
- (ii) For harness connector 4005EV-B at 1, 2, 3 and 12
- Use ESC36-20, sealing plug, 4 off, 04-509 and ESC30-S20BC, contact socket, 4 off, 04-515.
Use a contact crimping tool (Daniels M22520/1 or equivalent).
Refer to Figure 4 and/or Figure 6
- (g) Do a check on the crimped joint
- To make sure that it is satisfactorily attached to the wiring, pull the contact socket
- CAUTION:** MAKE SURE THAT YOU USE THE CORRECT LOCATOR AND THAT THE CRIMP TOOL IS SET CORRECTLY. IF NOT, THE LEAD OR CONTACT CAN BE DAMAGED OR THE CONTACT INCORRECTLY ATTACHED TO THE LEAD.



- R (h) Install the contact sockets into the harness connector and backshell 4005EV-A. Terminate the cable grounds into the backshell. Use ESC10SE61212SN0, connector, 1 off, 04-490 and ESC65E12, clamp, backshell assembly, 1 off, 03-490. Use the applicable contact extraction/insertion tool. Refer to Figure 4 and/or Figure 6
- R (i) Install the contact sockets into the harness connector and backshell 4005EV-B. Terminate the cable grounds into the backshell. Use ESC10SE61212S60, connector, 1 off, 04-510 and ESC65E12, clamp, backshell assembly, 1 off, 03-510. Use the applicable contact extraction/insertion tool. Refer to Figure 4 and/or Figure 6
- R (j) Make sure that the new contact sockets and the connector/backshell have been installed correctly. Carry out the tests that follow: Continuity test on the electrical contacts and the backshell, and an insulation resistance test. Use electrical test equipment. Refer to the Aircraft Wiring Manual (AWM), Chapter/Sections 20-71-20 and 20-71-21 or Electrical Harnesses and Cables (EHC) Component Maintenance Manual (CMM), TASK 71-51-41-700-301
- R (k) Cancel the old part number and re-identify with the new part number. Use CoMat 02-148 adhesive tape (electrical) and CoMat 06-131 marking pen. Refer to the Standard Practices Manual (SPP), TASK 70-09-00-400-501, SUBTASK 70-09-00-400-002.
- | Existing | Re-number |
|----------|-----------|
| 6A4394 | 6A7440 |
| 6A4715 | 6A7441 |
| 6A5553 | 6A7442 |
| 6A5651 | 6A7443 |
- R (4) Rework the parts that follow (A5 Models only, but not V2533-A5):
- R 6A6429, EEC Harness Assembly, SB 73-0071, (Refer to 71-51-41, Fig./Item 01-005)
- R 6A6430, EEC Harness Assembly, SB 73-0071, (Refer to 71-51-41, Fig./Item 01-005)
- R 6A6431, EEC Harness Assembly, SB 73-0071, (Refer to 71-51-41, Fig./Item 01-005)



6A6439, EEC Harness Assembly, SB 71-0183, (Refer to 71-51-41, Fig./Item 01-005)

6A6441, EEC Harness Assembly, SB 71-0183, (Refer to 71-51-41, Fig./Item 01-005)

CAUTION: MAKE SURE THAT THERE IS SUFFICIENT HARNESS LENGTH TO ALLOW THE REWORK TO BE CARRIED OUT.

PROCEDURE

RELATED DATA

- (a) Remove the contacts from the harness connector 4005EV-A and 4005EV-B Use the applicable extraction/insertion tool. Refer to Figure 7 and/or Figure 9
- (b) Cut off the old sockets A, B, E, F, G and J for the harness connector 4005EV-A and sockets A, B, C, D, E, F, G and J for the harness connector 4005EV-B Use standard workshop equipment. Refer to Figure 7 and/or Figure 9
- (c) Inspect the metal braiding Make sure the braid is not damaged and has sufficient length for the new backshell
- CAUTION:** MAKE SURE THAT YOU USE THE CORRECT LOCATOR AND THAT THE CRIMP TOOL IS SET CORRECTLY. IF NOT, THE LEAD OR CONTACT CAN BE DAMAGED OR THE CONTACT INCORRECTLY ATTACHED TO THE LEAD.
- (d) For harness connector 4005EV-A, install the contact sockets to the leads for contact positions 4, 5, 6, 7, 8, 9, 10 and 11 Use ESC30-S20BC, contact socket, 8 off, 04-495. Use a contact crimping tool (Daniels M22520/1 or equivalent). Refer to Figure 8 and/or Figure 10
- (e) For harness connector 4005EV-B, install the contact sockets to the leads for contact positions 4, 5, 6, 7, 8, 9, 10 and 11 Use ESC30-S20BC, contact socket, 8 off, 04-515. Use a contact crimping tool (Daniels M22520/1 or equivalent). Refer to Figure 8 and/or Figure 10
- (f) Install the sockets and blanking plug(s) to the positions not in use.

PROCEDURE

RELATED DATA

- (i) For harness connector 4005EV-A at 1, 2, 3 and 12 Use ESC36-20, sealing plug, 4 off, 04-529 and ESC30-S20BC, contact socket, 4 off, 04-495



- R (ii) For harness connector Use ESC36-20, sealing plug, 4 off and
R 4005EV-B at 1, 2, 3 and 12 ESC30-S20BC, contact socket, 4 off,
R 04-515.
R Use a contact crimping tool (Daniels
R M22520/1 or equivalent).
R Refer to Figure 8 and/or Figure 10
- R (g) Do a check on the crimped To make sure that it is
R joint satisfactorily attached to the
R wiring, pull the contact socket
- R **CAUTION:** MAKE SURE THAT YOU USE THE CORRECT LOCATOR AND THAT THE CRIMP
R TOOL IS SET CORRECTLY. IF NOT, THE LEAD OR CONTACT CAN BE DAMAGED
R OR THE CONTACT INCORRECTLY ATTACHED TO THE LEAD.
- R (h) Install the contact sockets Use ESC10SE61212SN0, connector, 1
R into the harness connector and off, 04-490 and ESC65E12, clamp,
R backshell 4005EV-A. Terminate backshell assembly, 1 off, 03-490.
R the cable grounds into the Use the applicable contact
R backshell extraction/insertion tool.
R Refer to Figure 8 and/or Figure 10
- R (i) Install the contact sockets Use ESC10SE61212S60, connector, 1
R into the harness connector off, 04-510 and ESC65E12, clamp,
R and backshell 4005EV-B. backshell assembly, 1 off, 03-510.
R Terminate the cable grounds Use the applicable contact
R into the backshell extraction/insertion tool.
R Refer to Figure 8 and/or Figure 10
- R (j) Make sure that the new contact Carry out the tests that follow:
R sockets and the Continuity test on the electrical
R connector/backshell have been contacts and the backshell, and an
R installed correctly insulation resistance test.
R Use electrical test equipment. Refer
R to the Aircraft Wiring Manual (AWM),
R Chapter/Sections 20-71-20 and
R 20-71-21 or Electrical Harnesses and
R Cables (EHC), Component Maintenance
R Manual (CMM), TASK 71-51-41-700-301
- R (k) Cancel the old part number and Use CoMat 02-148 adhesive tape
R re-identify with the new part (electrical) and CoMat 06-131 marking
R number pen.
R Refer to the Standard Practice Manual
R (SPP), TASK 70-09-00-400-501, SUBTASK
R 70-09-00-400-002.

R	Existing	Re-number
R	6A6429	6A7444
R	6A6430	6A7445



R	Existing	Re-number
R	6A6431	6A7446
R	6A6439	6A7447
R	6A6441	6A7448

R (5) Rework the parts that follow (V2533-A5 Model only):

R 6A6439, EEC Harness Assembly, SB 73-0071, (Refer to 71-51-41, Fig./Item
R 01-005)

R **CAUTION:** MAKE SURE THAT THERE IS SUFFICIENT HARNESS LENGTH TO ALLOW THE
R REWORK TO BE CARRIED OUT.

PROCEDURE

RELATED DATA

- R (a) Remove the contacts from the
R harness connector 4005EV-A and
R 4005EV-B
Use the applicable
extraction/insertion tool.
Refer to Figure 7 and/or Figure 9
- R (b) Cut off the old sockets A, B,
R C, D, E, F, G and J, for the
R harness connector 4005EV-A and
R sockets A, B, C, D, E, F, G
R and J for the harness
R connector 4005EV-B
Use standard workshop equipment.
Refer to Figure 7 and/or Figure 9
- R (c) Inspect the metal braiding
R
R Make sure the braid is not damaged
and has sufficient length for the new
backshell
- R **CAUTION:** MAKE SURE THAT YOU USE THE CORRECT LOCATOR AND THAT THE
R CRIMP TOOL IS SET CORRECTLY. IF NOT, THE LEAD OR CONTACT CAN
R BE DAMAGED OR THE CONTACT INCORRECTLY ATTACHED TO THE LEAD.
- R (d) For harness connector
R 4005EV-A, install the contact
R sockets to the leads for
R contact positions 4, 5, 6, 7,
R 8, 9, 10 and 11
Use ESC30-S20BC, contact socket, 8
off, 04-495.
Use a contact crimping tool (Daniels
M22520/1 or equivalent).
Refer to Figure 8 and/or Figure 10
- R (e) For harness connector
R 4005EV-B, install the contact
R sockets to the leads for
R contact positions 4, 5, 6, 7,
R 8, 9, 10 and 11
Use ESC30-S20BC, contact socket, 8
off, 04-515.
Use a contact crimping tool (Daniels
M22520/1 or equivalent).
Refer to Figure 8 and/or Figure 10



- R (f) Install the sockets and blanking plug(s) to the positions not in use

PROCEDURE

RELATED DATA

- R (i) For harness connector 4005EV-A at 1, 2, 3 and 12
R Use ESC36-20, sealing plug, 4 off, 04-529 and ESC30-S20BC, contact
R socket, 4 off, 04-495
- R (ii) For harness connector 4005EV-B at 1, 2, 3 and 12
R Use ESC36-20, sealing plug, 4 off, 04-509 and ESC30-S20BC, contact
R socket, 4 off, 04-515.
R Use a contact crimping tool (Daniels M22520/1 or equivalent).
R Refer to Figure 8 and/or Figure 10
- R (g) Do a check on the crimped joint
R To make sure that it is satisfactorily attached to the
R wiring, pull the contact socket
- R **CAUTION:** MAKE SURE THAT YOU USE THE CORRECT LOCATOR AND THAT THE CRIMP
R TOOL IS SET CORRECTLY. IF NOT, THE LEAD OR CONTACT CAN BE DAMAGED
R OR THE CONTACT INCORRECTLY ATTACHED TO THE LEAD.
- R (h) Install the contact sockets into the harness connector and
R backshell 4005EV-A. Terminate the cable grounds into the
R backshell
R Use ESC10SE61212SN0, connector, 1 off, 04-490 and ESC65E12, clamp,
R backshell assembly, 1 off, 03-490. Use the applicable contact
R extraction/insertion tool. Refer to Figure 8 and/or Figure 10
- R (i) Install the contact sockets into the harness connector and
R backshell 4005EV-B. Terminate the cable grounds into the
R backshell
R Use ESC10SE6121S60, connector, 1 off, 04-510 and ESC65E12, clamp, backshell
R assembly, 1 off, 03-510. Use the applicable contact
R extraction/insertion tool. Refer to Figure 8 and/or Figure 10
- R (j) Make sure that the new contact sockets and the
R connector/backshell have been installed correctly
R Carry out the tests that follow: Continuity test on the electrical
R contacts and the backshell, and an insulation resistance test.
R Use electrical test equipment. Refer to the Aircraft Wiring Manual (AWM),
R Chapter/Sections 20-71-20 and 20-71-21 or Electrical Harnesses and
R Cables (EHC), Component Maintenance Manual (CMM), TASK 71-51-41-700-301



- R (k) Cancel the old part number and Use CoMat 02-148 adhesive tape
R re-identify with the new part (electrical) and CoMat 06-131 marking
R number pen.
R Refer to Standard Practices Manual
R (SPP), TASK 70-09-00-400-501, SUBTASK
R 70-09-00-400-002.
- | Existing | Re-number |
|----------|-----------|
| 6A6439 | 6A7447 |
- R C. Recording Instructions
- R A record of accomplishment is necessary.

**Baseline**

5A0278

IG-71-0050Incorporation of rerouting and
modification requirements

5A0356

ENG-71-0055Introduction of modification
requirements for EEC fan
harness

5A0392

ENG-71-0107Introduction of modification
requirements for EEC fan harness
and ignition supply harness

6A4394

ENG-70-0156Alternative source of electrical
harness connectors

6A4715

R

ENG-71-0111Deletion of clipping at VSVA
& PMA harness and introduction
of wire locked connectors

6A5553

ENG-70-0288Vendor number identification
for harness connectors
and pins

6A5553

ENG-70-0324Introduction of alternative
cables

6A5553

ENG-70-0367Introduction of replacement
backshells, cables and
bushes

6A5651

ded0003033

ENG-71-0219Introduction of revised
engine dedicated alternator
connectors

6A7443

6A7442

6A7441

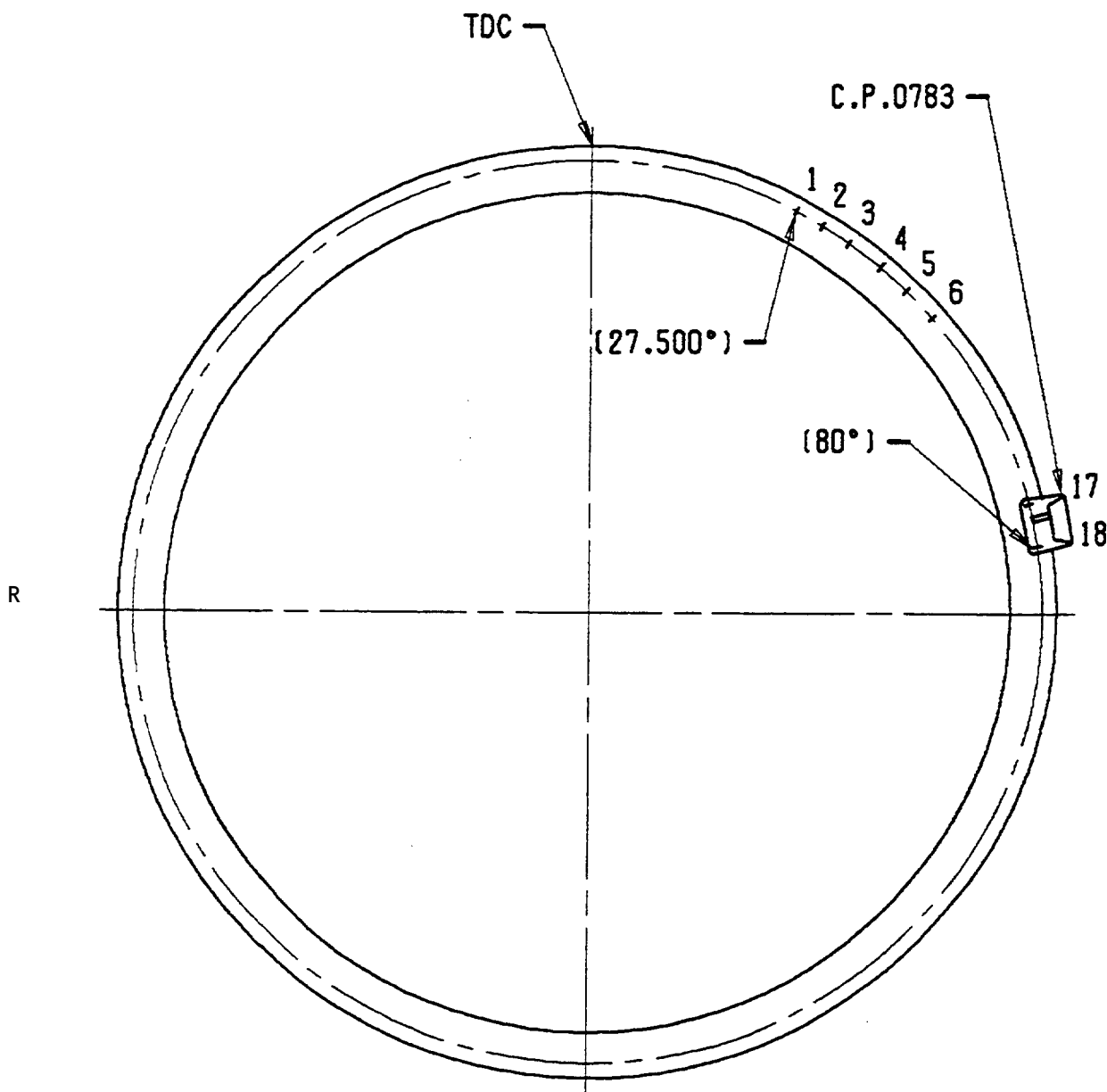
6A7440

Family tree - Harness assembly - EEC fan - A1 engines only

Figure 1

R

R



ANGULAR DIMENSIONS IN DEGREES
AND DECIMAL PARTS OF A DEGREE

Family tree - Harness assembly - EEC fan - A5 engines (Except V2533-A5)
Figure 2

V2500-ENG-71-0219

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R Apr. 7/00

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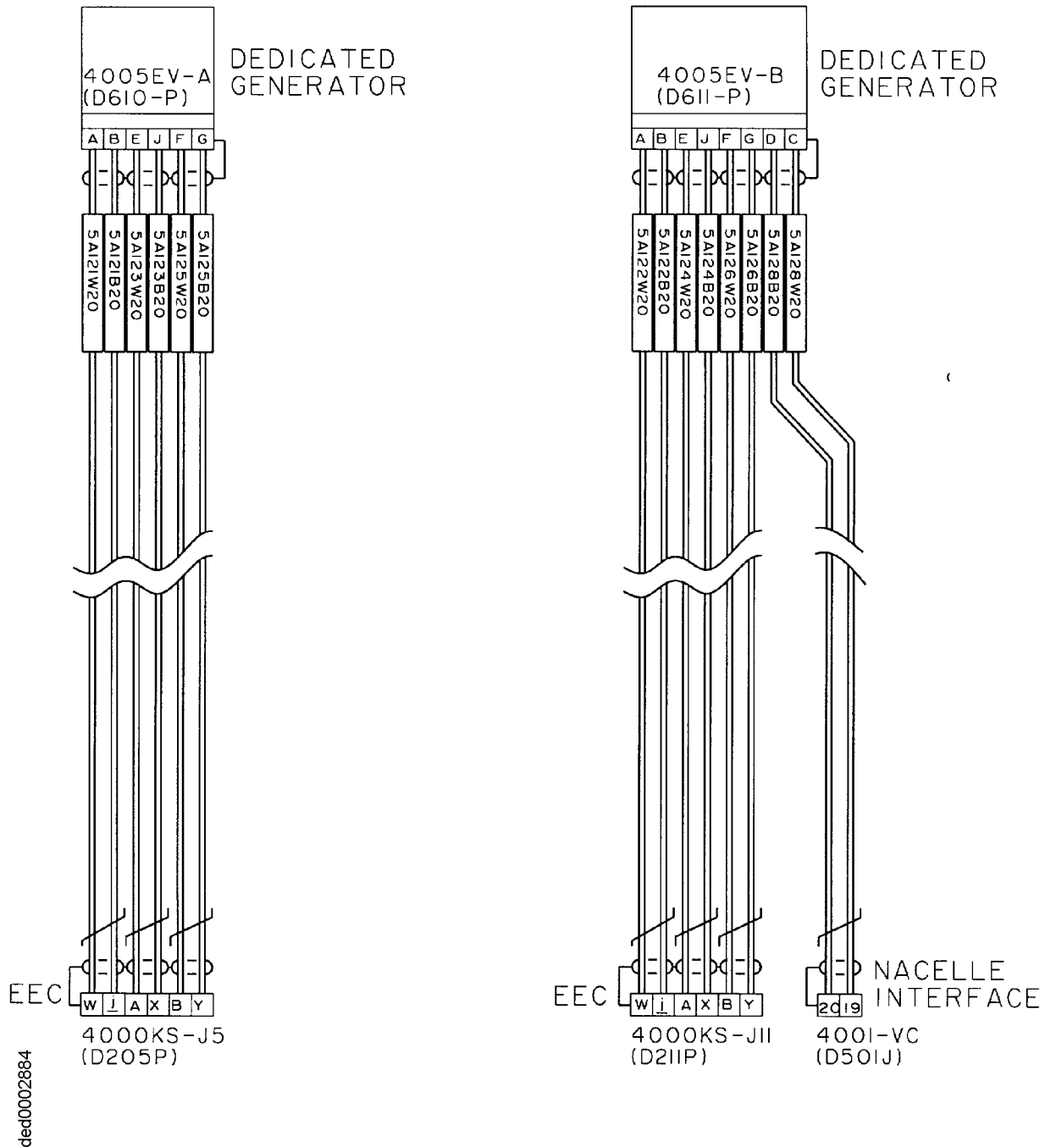
Page 20

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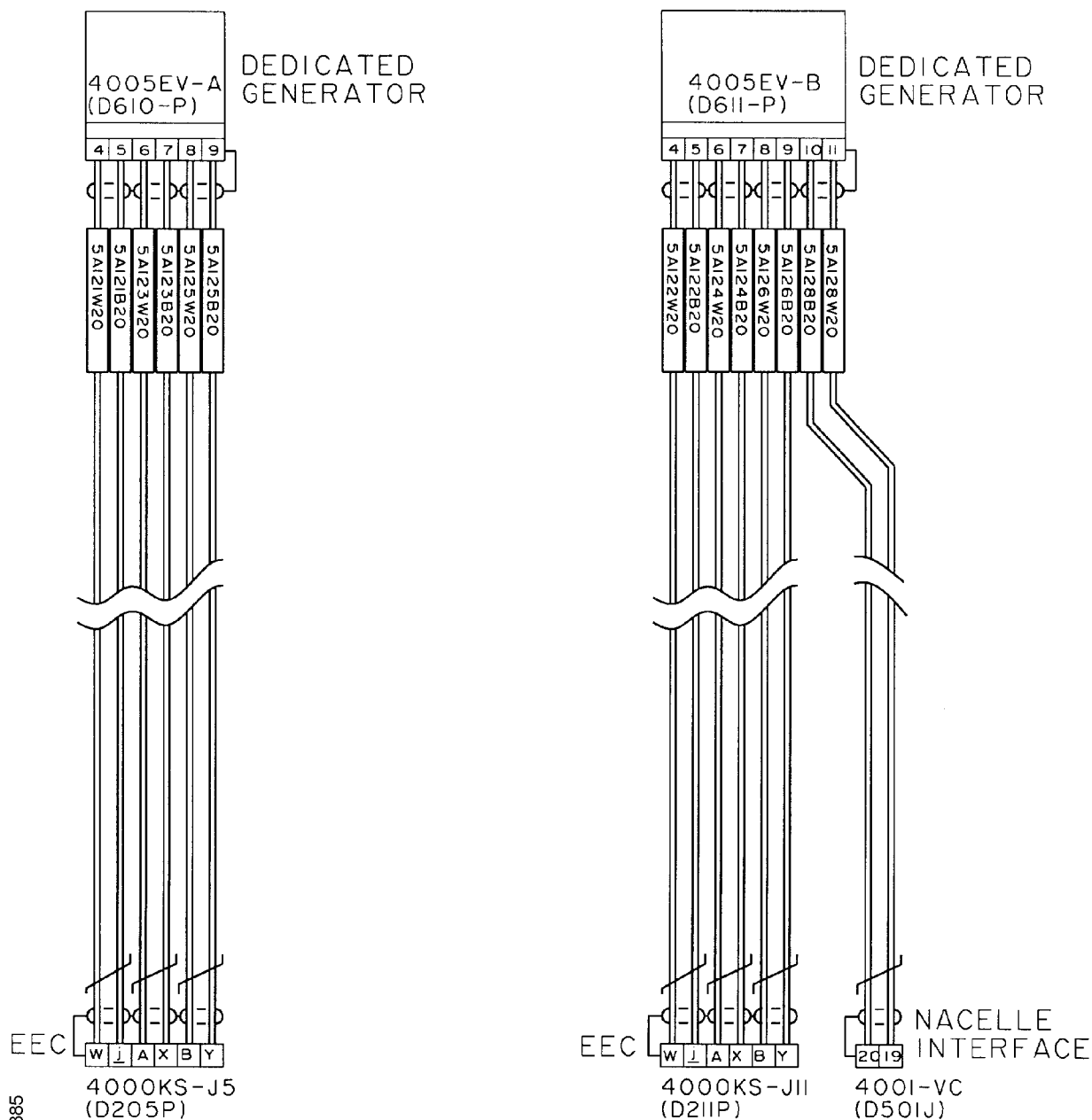
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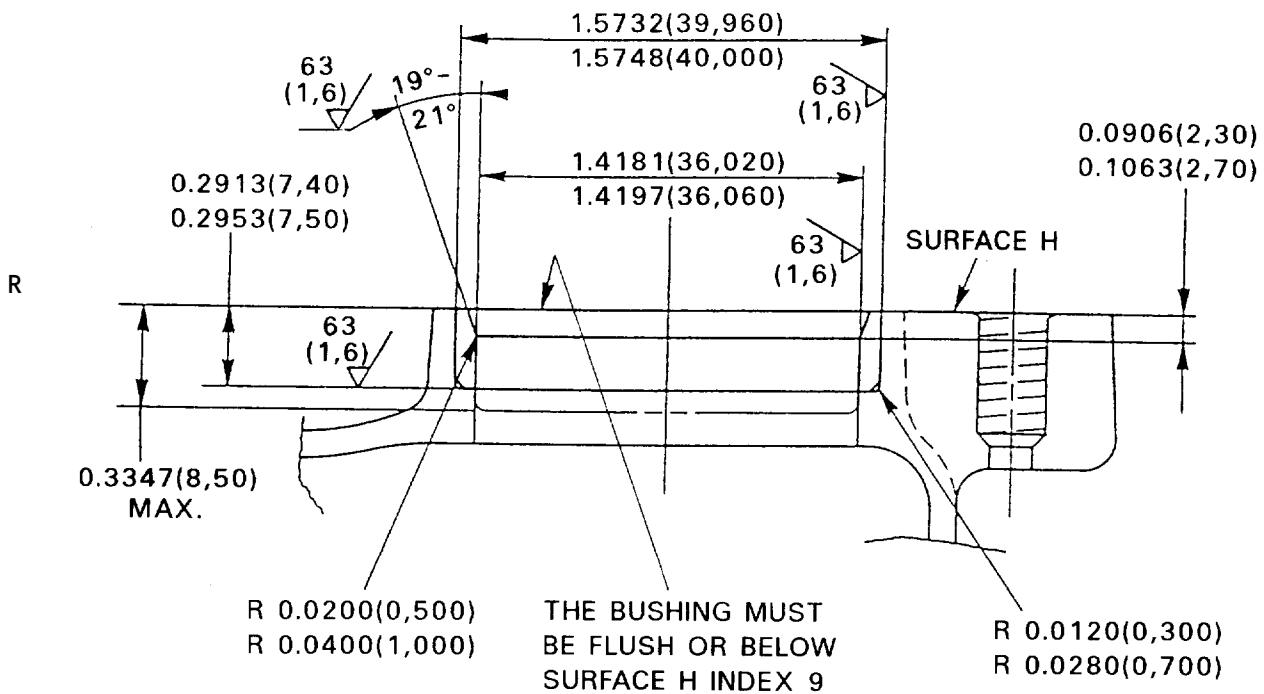


A1 engines wiring diagram - 5A parts - Before alteration
Figure 3



A1 Engines wiring diagram - 5A parts - After alteration
Figure 4

V2500-ENG-71-0219



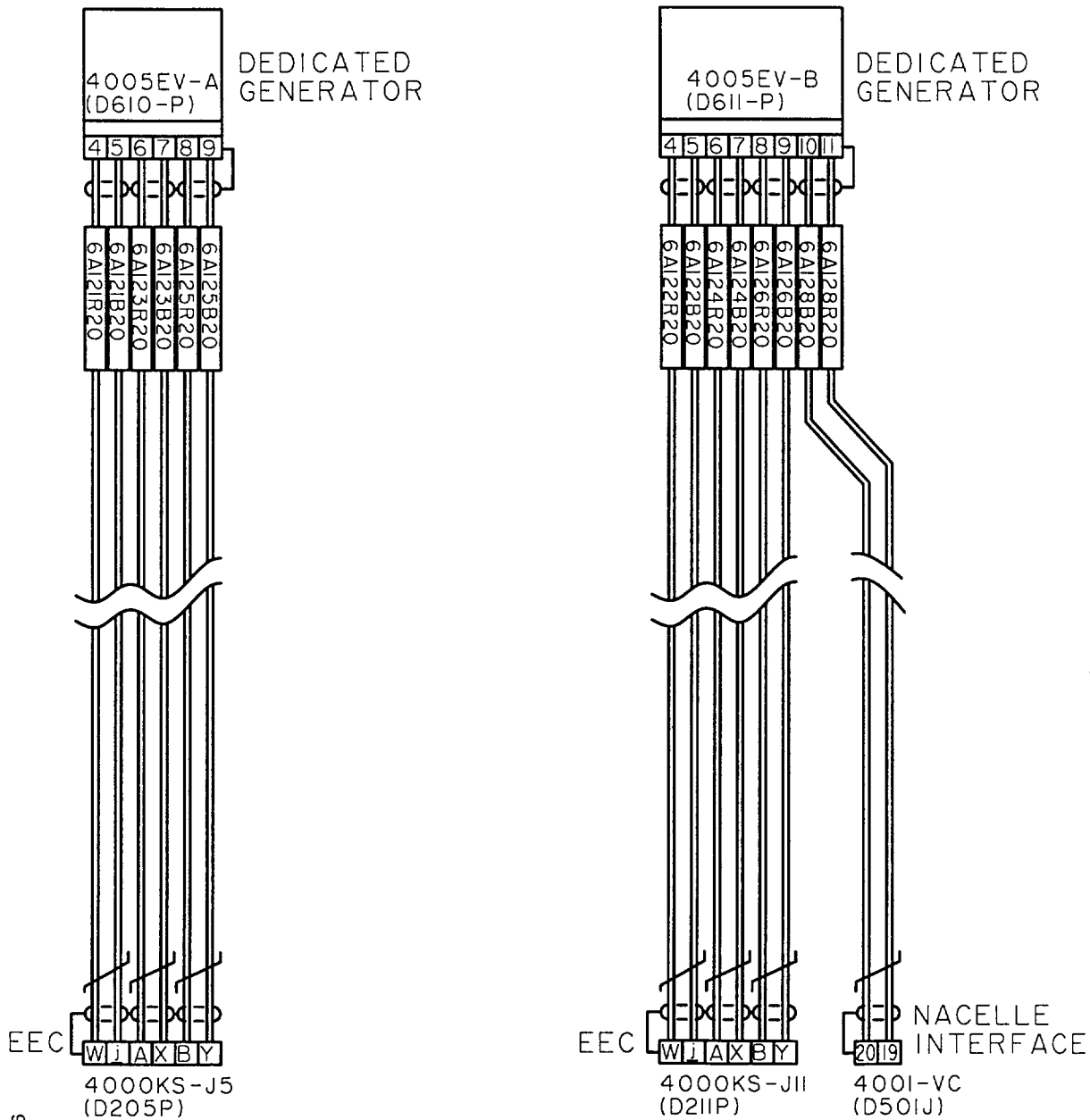
DETAIL ON AA

DIMENSIONS ARE IN IN.(MM)

ded0002866

R
R

A1 Engines wiring diagram - 6A parts - Before alteration
Figure 5

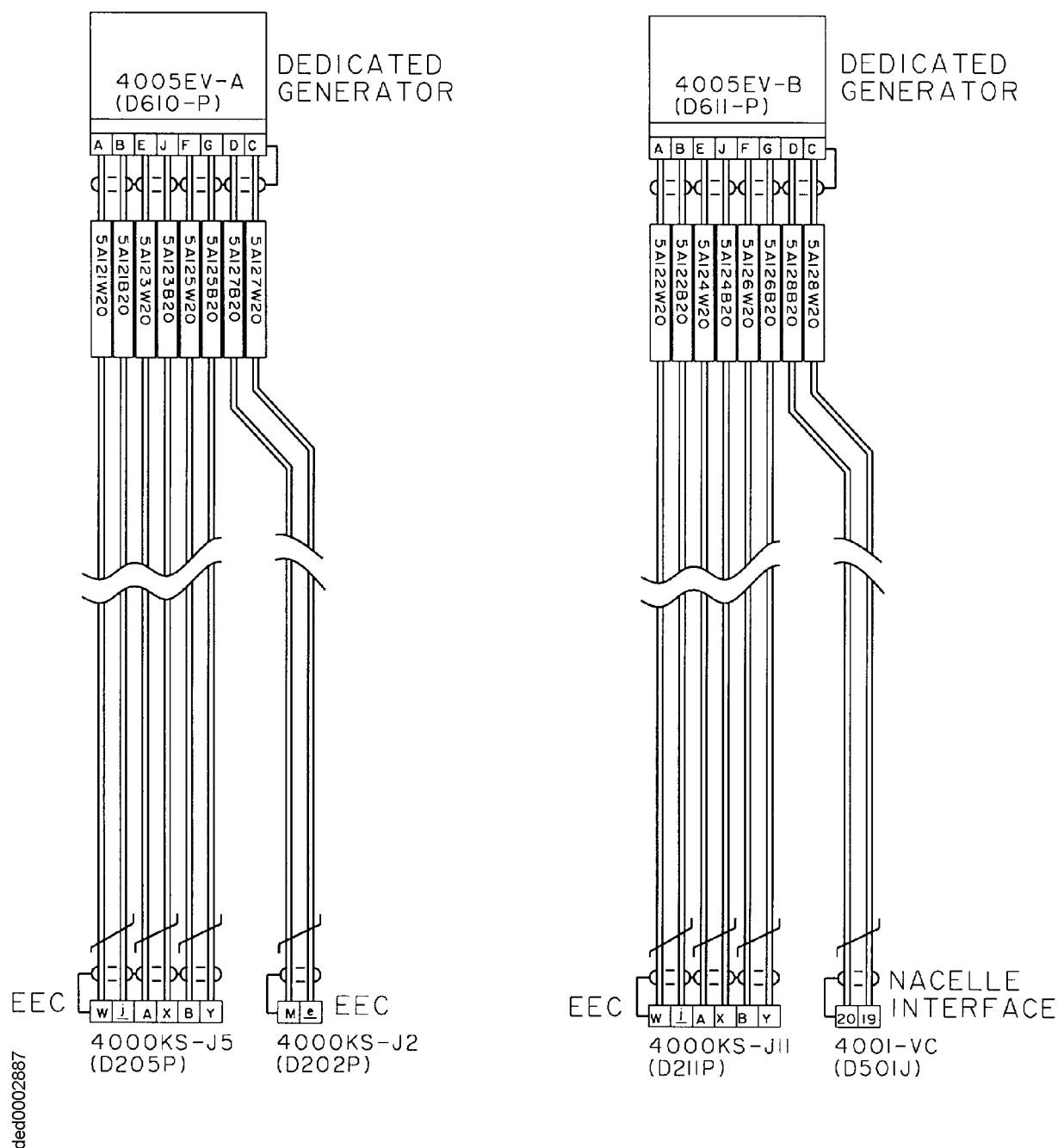


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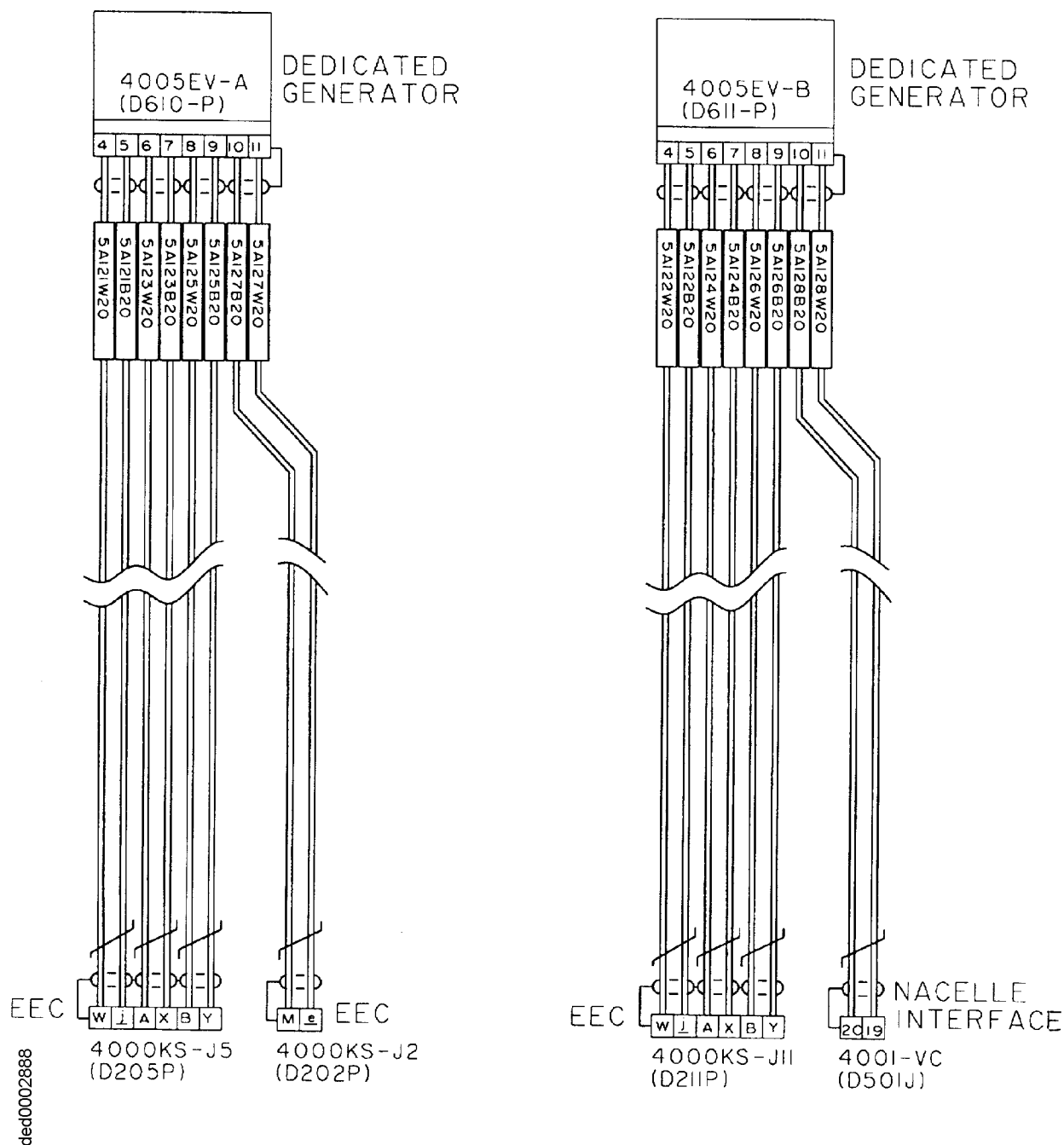
A1 Engines wiring diagram - 6A parts - After alteration
Figure 6

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A5 Engines wiring diagram - 5A parts - Before alteration
Figure 7

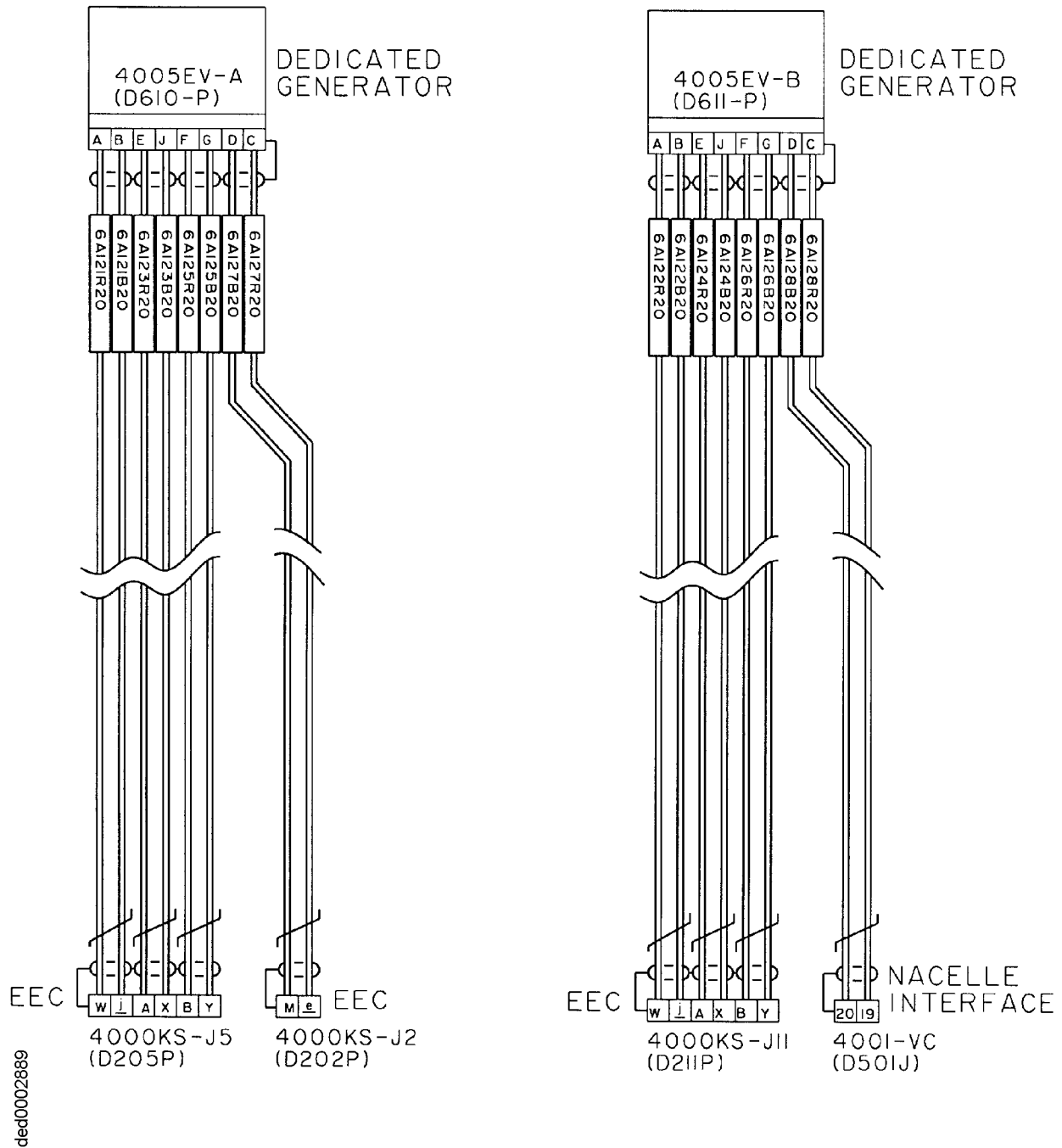


A5 Engines wiring diagram - 5A parts - After alteration
Figure 8

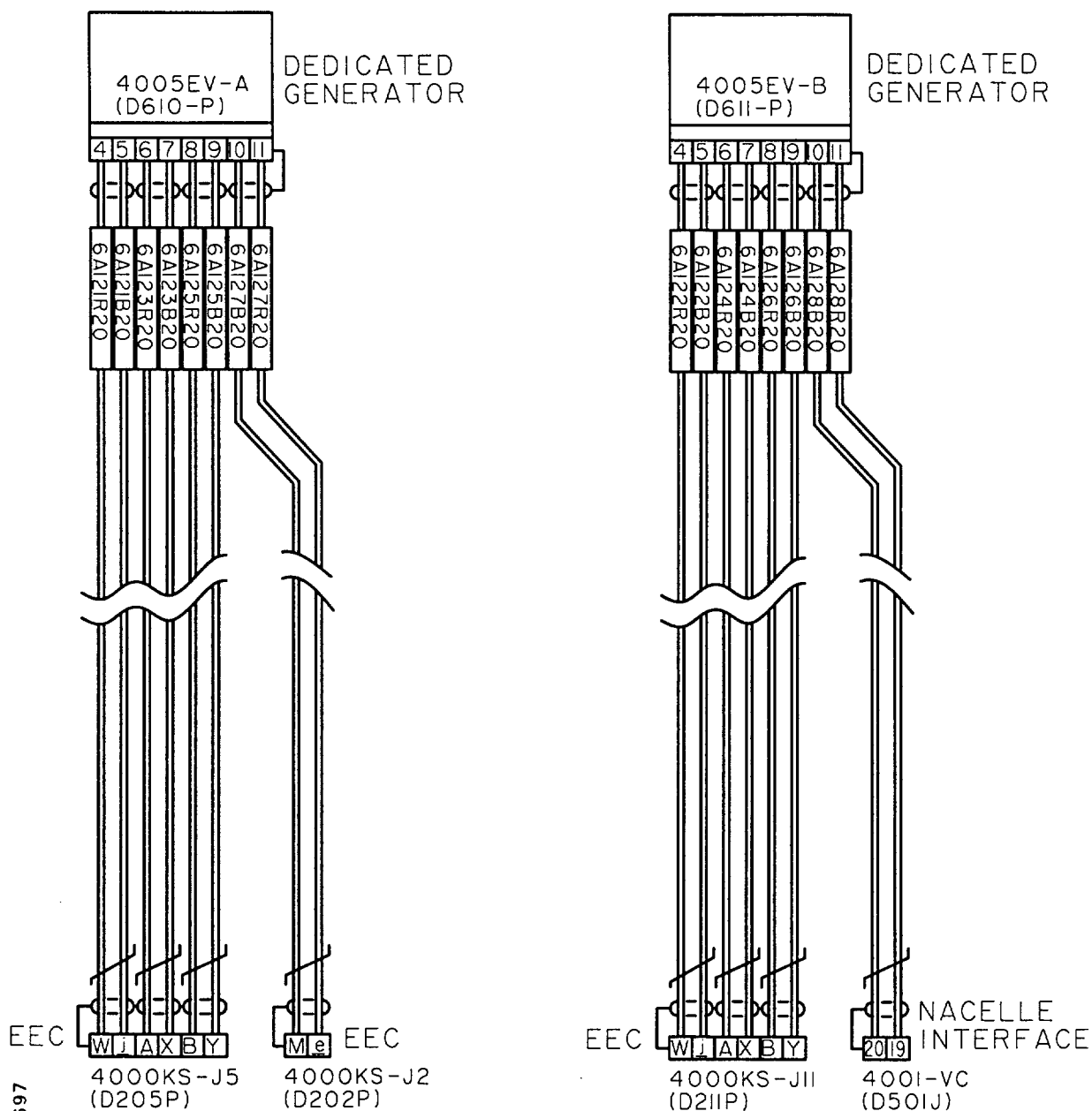
V2500-ENG-71-0219



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A5 Engines wiring diagram - 6A parts - Before alteration
Figure 9



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A5 Engines wiring diagram – 6A parts – After alteration
Figure 10

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