ENGINE - POWER PLANT - INCORPORATION OF MODIFICATION REQUIREMENTS FOR THE E.E.C. AND IGNITION SUPPLY HARNESS - CATEGORY CODE 4 - MOD.ENG-71-0107

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engine prior to Serial No. V0146

B. Reason

(1) Condition

(a) Chafing of the E.E.C. and ignition supply harness may occur in the region of the bifurcation panel, between clipping points 0252 and 0544.

(b) A foul may occur between the fan cowl No.4 latch and the fuel metering unit limb of the E.E.C. harness.

(c) Engine vibration may cause a foul between the union nut on the P2/T2 tube and the limb from the E.E.C. harness to the relay box connector, 4100KS-A.

(d) A foul may occur between clipping point 1082 and the limb from the E.E.C. harness to the fuel temperature sensor connector 4017KS-A.

(2) Background

The potential chafing and fouls have been observed in service.

(3) Objective

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

(4) Substantiation

Due to previous experience with chafing of harnesses no testing was carried out.

Tests have been carried out which confirm all fouls will be cleared after incorporation of the changes introduced by this Service Bulletin.

(5) Effect of Bulletin on workshop procedures

Removal/Installation	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) A continuous length of spiral wrapping is installed on the E.E.C. and double ignition harnesses between clipping points 0544 and 0252 extending to a point midway between clipping points 0252 and 0254. The wrapping is applied to two individual limbs on the E.E.C. harness, one limb feeding connector 4008VC-A and the other feeding connectors 4018KS-A and 4018KS-B. The additional spiral wrapping prevents chafing of the harnesses in this area.

(2) A re-clipping of the fan harness between clipping points 1043 and 0538 at the bottom of the engine.

(3) Clipping points 1044, 1095, 1046 and 0539 are deleted as they are no longer required.

(4) Clipping point 1048 is amended by deleting the harness clip.

(5) Five new clipping points have been added, clipping points 1123, 1124 and 1125 are attached to the I.D.G. oil pipe and 1126 and 1127 are bolted to a new drains mast support bracket.

(6) As clipping point 0539 has been deleted the harness support raceway has been modified with the deletion of a brazed clip at this location.

(7) Clipping point 0540 has been defined as the new datum position.

(8) The existing spiral wrapping anti-chafe sleeving has been extended towards clipping point 0538.

(9) The limb from the E.E.C. fan harness to the relay box connector 4100KS-A, now "breaks out" before clipping point 0766 i.e. between clipping point 0765 and 0766.

(10) The 90 deg backshell of the fuel temperature sensor connector 4017KS-A is reorientated towards the fan case by 22.5 deg.

D. Approval

The part number changes and/or part modifications described in section 2 and 3 of this modification 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 4

Accomplish at the first visit of an engine or module to a maintenance base capable of compliance with the accomplishment instructions regardless of the planned maintenance action or the reason for the engine removal.

F. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

Venue		Estimated Manours
(1)	In Service	TOTAL 2 hours 17 minutes
	(a) To gain access	
	(i) Open fan cowls ..	7 minutes
	(ii) Open 'C' ducts ..	9 minutes
	(iii) Install warning notices ..	5 minutes
	(b) To embody	
	(i) Remove the harness	18 minutes
	(ii) Rework the harness	23 minutes
	(iii) Rework the bracket	6 minutes
	(iv) Refit the harness	39 minutes
	(c) To return the engine to flyable status	
	(i) Close 'C' ducts ..	12 minutes
	(ii) Close fan cowls ..	8 minutes
	(iii) Remove warning notices	5 minutes

(iv) Record the repair 5 minutes

(2) At overhaul TOTAL 29 minutes

(a) To gain access Not applicable
(Parts are accessible at overhaul)

(b) To embody

(i) To rework harness .. 23 minutes

(ii) To rework the
brakcet .. .. .. 6 minutes

Remarks: No additional time is required to maintain the new clipping points.

G. Material - Price and Availability

(1) Modification kit not required.

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

H. Tooling - Price and Availability

Special tools are not required.

I. Weight and Balance

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

(2) Moment Arm .. .. None

(3) Datum .. .. Engine front mount centerline
(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.

EC90VR015

EC90VR007

EC90VR007A

EC9OVRO07C

EC9OVRO15B

(2) Other references

Aircraft Maintenance Manual

V25OO Standard Practices/Processes Manual, 7O-41-OO, Torque tightening technique

L. Other Publications Affected

(1) V25OO Engine Illustrated Parts Catalog, 24-21-49, 71-51-41, 71-51-44, 71-51-5O, 72-6O-4O, 73-11-49.

(2) V25OO Engine Manual, 72-OO-32, Removal/Installation, 72-OO-6O Removal/Installation.

2. Accomplishment Instructions

A. Prerequisite Instructions

(1) On the aircraft panel 115VU put a warning notice to tell persons not to start the engine.

(2) Make sure that the engine has been shutdown for at least 5 minutes.

(3) On the aircraft panel 50VU make sure that the ON legend of the ENG FADEC GND PWR push button switch is OFF and install a warning notice.

(4) Open the left and right fan cowl doors with the instructions in the A320 Aircraft Maintenance Manual, TASK 71-13-00-010-010.

(5) Open the left and right thrust reverser halves with the instructions in the A320 Aircraft Maintenance Manual, TASK 78-32-00-010-010.

B. Removal Instructions

(1) Find the clipping points CP1043, CP1044, CP1095, CP1046, CP1048 and CP0539 (refer to Fig.4).

(2) Remove the 4W0103 bolt, 5W1086 washer, TA025074-06 or AS61904 clamp and the 4W0001 nut from the clipping point 1043.

(3) Remove the 4W0103 bolt, 5W1086 washer, TA025074-06 or AS61904 clamp and the 4W0001 nut from the clipping point 1044.

(4) Remove the 4W0103 bolt, 5W1086 washer, TA025074-06 or AS61904 clamp, 400WSS10 clip, and the 4W0001 nut from the clipping point 1095.

(5) Remove the 4W0103 bolt, 5W1086 washer, TA025074-06 or AS61904 clamp and the 4W0001 nut from the clipping point 1046.

(6) Remove the 4W0105 bolt, K8831 washer, TA025074-06 or AS61904 clamp and the 4W0001 nut from the clipping point 1048.

(7) Remove the 4W0104 bolt, 5W1086 washer, TA025074-17 or AS61915 clamp and the 4W0001 nut from the clipping point 0539.

(8) Find the clipping points CP0544, CP1086, CP0248, CP0249, CP0250, CP0251, CP0252 and CP0254 (refer to Fig.1 (Sheet 1 of 2) and Fig.2).

(9) Remove the 4W0103 bolt, 5W1086 washer, TA025074-15 or AS61913 clamp and the 4W0001 nut from the clipping point 0544.

(10) Remove the 4W0104 bolt, 5W1086 washer, TA025074-15 or AS61913 clamp and the 4W0001 nut from the clipping point 1086.

(11) Remove the 4W0110 bolt, 5W1086 washer, TA025074-14 or AS61912 clamp, 5W1030 spacer and the 4W0001 nut from the clipping point 0248.

(12) Remove the 4W0103 bolt, 5W1086 washer, TA025074-14 or AS61912 clamp and the 4W0001 nut from the clipping point 0249.

(13) Remove the 4W0103 bolt, 5W1086 washer, TA025074-14 or AS61912 clamp and the 4W0001 nut from the clipping point 0250.

(14) Remove the 4W0103 bolt, 5W1086 washer, TA025074-14 or AS61912 clamp and the 4W0001 nut from the clipping point 0251.

(15) Remove the 4W0111 bolt, 5W1086 washer, TA025074-14 or AS61912 clamp, ST1698D41 spacer and the 4W0001 nut from the clipping point 0252.

(16) Remove the 4W0103 bolt, 5W1086 washer, TA025074-14 or AS61912 clamp and the 4W0001 nut from clipping point 0254.

(17) Find the clipping point 0766 (refer to Fig.20).

(18) Cut the lockwire and remove the harness fuel temperature thermocouple connection from the fuel temperature sensor.

(19) Remove the 4W0107 bolt, 5W1086 washer, TA0250743-19 or AS61917 clamp and the 4W0001 nut from the clipping point 0766.

(20) Find drains mast support bracket 740-5709-509 (refer to Fig.4).

(21) Remove the 4W0002 nuts (2) MS9321-10 washers (2) and drains mast support bracket.

C. Rework Instructions

(1) Rework 5A0392, Harness assembly, E.E.C. fan (Refer to 71-51-41, Fig.1 Item 01-005) and 5A0279, harness assembly, ignition supply (Refer to 71-51-44, Fig.1 Item 01-0005).

Standard Equipment

Basic workshop tools

Consumable Materials

CoMat 02-148 Adhesive tape (Electrical)

	Procedure	Supplementary Information
(a)	Wind the E.E.C. fan harness wires, 2 off, with anti-chafe tape. The wires to be single wound and must touch to form a continuous cover	See Figure 2. Use 3302698, tape, Spiratemp 2P
(b)	Attach tape	Thread end of tape through the group of wires, turn tape 2 times round a single wire
(c)	Shape the cut ends of tape	See Figure 3
(d)	Wind the ignition supply harness wires with anti-chafe tape. The wire to be single wound and must touch to form a continuous cover	See Figures 2 and 3. Use Spiratemp 1P, binding spiral
(e)	Attach tape	
(f)	Shape the cut ends of tape	See Figure 3
(g)	Cancel the old part number and identify with the new part number	Old Part Number — New Part Number 5A0279 — 6A4395 Apply 2 turns of CoMat 02-148, adhesive tape and mark new loom part number using a black ball point pen

(2) Rework 5A0392, harness assembly, E.E.C. fan (Refer to 71-51-41, Figure 1 Item 01-005).

Standard Equipment

Basic workshop tools

Consumable Materials

CoMat 02-148 Adhesive tape (Electrical)

	Procedure	Supplementary Information
(a)	Make a mark on harness, E.E.C. fan, both ends to identify the area to be reworked	See Figures 5 and 12. Use applicable marker
(b)	Remove 5A0276, spiral wrapping	See Figure 4

(c)	Attach harness, E.E.C. fan, at junction point using 5A9215, lacing tape	See Figures 12, 14 and 15
(d)	Wind 5A0276, spiral wrapping between the two marks on the harness assembly, E.E.C. fan and attach ech end with 5A9215, lacing tape	See Figures 12, 13 and 16

(3) Rework harness assembly, E.E.C. fan (Refer to 71-51-41, Figure 1 Item 01-005).

Standard Equipment

Basic workshop tools

Consumable Materials

CoMat 02-148 Adhesive tape (Electrical)

Procedure		Supplementary Information
(a)	Find CP0539 on raceway assembly	See Figures 4 and 19
(b)	Cut back lug to align with tube	See Figure 19. Use basic workshop tools
	NOTE: Follow steps to prevent damage to tube.	
(c)	Make a mark on harness, E.E.C. fan, to identify the position to be reworked	See Figure 20. Use applicable marker
(d)	Remove 5A9215, lacing tape, this will release relay box wires	See Figure 20. Use basic workshop tools
(e)	Attach wires which go to relay box to harness, E.E.C. fan, use 5A9215 lacing tape, 32 mm (1.26in.) from CP0766	See Figures 14, 15, and 19
(f)	Make a mark on harness, E.E.C. fan, both ends, to identify the area to be reworked	See Figures 5 and 12. Use applicable marker
(g)	Remove 5A0276, spiral wrapping	See Figure 4

(h)	Attach harness, E.E.C. fan, at junction point, and tie off harness using 5A9215, lacing tape	See Figures 12, 13, 14, 15 and 17
(i)	Wind 5A0276, spiral wrapping between the two marks on the harness assembly, E.E.C. fan and attach each end with 5A9215 lacing tape	See Figures 12, 13 and 16
(j)	Cancel the old part number and identify with the new part number	Old Part Number: 5A0392 — New Part Number: 6A4394 See Figure 18. Apply two turns of CoMat 02-148 adhesive tape and mark new loom part number using a black ball point pen

(4) Rework 740-5709-509. Drains mast support bracket (Refer to 72-60-40, Fig/Item 01-056).

Standard Equipment

Basic workshop tools
Vibro-engraving tool

Consumable Materials

None required

	Procedure	Supplementary Information
(a)	Drill the two holes to new size	See Figure 22. Use a 5,20 mm (0.205in.) drill and basic workshop tools
(b)	Break sharp edges	See Figure 22. Use basic workshop tools
(c)	Examine	Make sure holes are correctly drilled
(d)	Cancel the old part number and identify with the new part number	Old Part Number: 740-5709-509 — New Part Number: 740-5709-511 See Figure 22. Use vibro-engraving tool

D. Assembly Instructions

(1) Secure the harness assy 6A4394 to the I.D.G. oil pipe at new clipping point 1123, using clamp TA025074-07 (or alternative clamp AS61905), clip 400WSS12, bolt 4W0104, washers - 2 off K8831 and nut 4W0001 (Refer to Figures 5 and 9).

(2) Secure the harness assembly 6A4394 to the I.D.G. oil pipe at new clipping point 1125, using clamp TA025074-07 (or alternative clamp AS61905), clip 400WSS12, bolt 4W0104, washers - 2 off K8831 and nut 4W0001 (Refer to Figures 5 and 10).

(3) Secure the harness assembly 6A4394 to the I.D.G. oil pipe at new clipping point 1125, using clamp TA025074-07 (or alternative clamp AS61905), clip 400WSS12, bolt 4W0104, washers - 2 off K8831 and nut 4W0001 (Refer to Figures 5 and 10).

(4) Fit new drains mast support bracket 740-5709-511 using existing washers - 2 off MS9321-10 and nut 4W0002 (Refer to Figures 5, 10 and 11). Torque both nuts PN 4W0002 to 85-105 lbinf (10/12 Nm).

(5) Secure the harness assembly 6A4394 to the new drains mast support bracket 740-5709-511 at new clipping point 1126 using clip 400WSS10, bolt 4W0103, washer K8831 and nut 4W0001 (Refer to Figures 5 and 10).

(6) Secure the harness assembly 6A4394 to the new drains mast support bracket 740-5709-511 at new clipping point 1127 using clip 400WSS10, bolt 4W0103, washer K8831 and nut 4W0001 (Refer to Figures 5 and 11).

(7) Secure the harness assy 6A4394 at re-positioned clipping point 1043 using clamp TA 025074-06 (or alternative clamp AS61904), 4W0103 bolt, 5W1086 washer and 4W0001 nut (refer to Fig.5).

(8) Deletion of clipping point 1048 for harness assembly 6A4394 requires a new bolt 4W0104 to be fitted at this clipping point, using existing washer K8831 and nut 4W0001 (Refer to Figures 4, 5 and 8), refer to 3. Material Information, for material disposition.

(9) Deletion of clipping points 1044, 1095, 1046 and 0539, refer to 3. Material Information, for material disposition.

(10) Reorientation of the fuel temperature sensor connector 4017KS-A. Refer to Figure 21.

(a) Fit the fuel temperature thermocouple connection of harness assembly 6A4394 to the fuel temperature sensor.

(b) Slacken off the backshell locknut of the thermocouple connection and reposition the connection by 22.5 deg towards the fan case, tighten backshell locknut.

(c) Wirelock sensor connector and harness connection, using lockwire MS20995C20.

(11) Secure the 6A4394 EEC harness assy and 6A4395 ignition harness assy at existing clipping point 0254 using TA025074-14 clamp (or AS61912 alternative clamp), 4W0103 bolt, 5W1086 washer and 4W0001 nut (refer to Fig.2).

(12) Secure the 6A4394 EEC harness assy and 6A4395 ignition harness assy at existing clipping point 0252 using TA025074-14 clamp (or AS61912 alternative clamp), 4W0111 bolt, 5W1086 washer and 4W0001 nut (refer to Fig.2).

(13) Secure the 6A4394 EEC harness assy and 6A4395 ignition harness assy at existing clipping point 0251 using TA025074-14 clamp (or AS61912 alternative clamp), 4W0103 bolt, 5W1086 washer and 4W0001 nut (refer to Fig.2).

(14) Secure the 6A4394 EEC harness assy and 6A4395 ignition harness assy at existing clipping point 0250 using TA025074-14 clamp (or AS61912 alternative clamp), 4W0103 bolt, 5W1086 washer and 4W0001 nut (refer to Fig.2).

(15) Secure the 6A4394 EEC harness assy and 6A4395 ignition harness assy at existing clipping point 0249 using TA025074-14 clamp (or AS61912 alternative clamp), 4W0103 bolt, 5W1086 washer and 4W0001 nut (refer to Fig.2).

(16) Secure the 6A4395 EEC harness assy and 6A4395 ignition harness assy at existing clipping point 0248 using TA025074-14 clamp (or AS61912 alternative clamp), 4W0110 bolt, 5W1086 washer, 5W1030 spacer and 4W0001 nut (refer to Fig.2).

(17) Secure the 6A4394 EEC harness assy and 6A4395 ignition harness assy at existing clipping point 1086 using TA025074-15 clamp (or AS61913 alternative clamp), 4W0104 bolt, 5W1086 washer and 4W0001 nut (refer to Fig.2).

(18) Secure the 6A4394 EEC harness assy and 6A4395 ignition harness assy at existing clipping point 0544 using TA025074-15 clamp (or AS61913 alternative clamp), 4W0103 bolt, 5W1086 washer and 4W0001 nut (refer to Fig.2).

(19) Secure the 6A4394 EEC harness assy at existing clipping point 0766, using TA025074-19 clamp (or AS61917 alternative clamp), 4W0107 bolt, 5W1086 washer and 4W0001 nut (refer to Fig.20).

(20) At clipping points 1123, 1124, 1125, 1126, 1127, 1043, 1048, 0254, 0252, 0251, 0250, 0249, 0248, 1086, 0544 and 0766 torque each 4W0001, nut to 36-45 lbinf (4 to 5Nm) refer to Standard Practices Manual, Chapter/Section 70-41-00.

E. Post-requisite Instructions

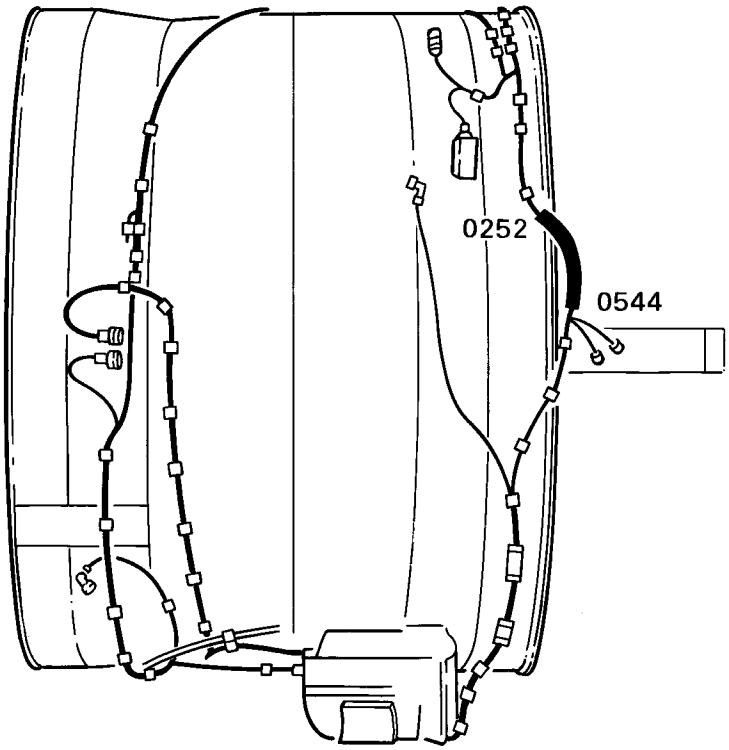
(1) Close the left and right thrust reverser halves with the instructions in the A320 Aircraft Maintenance Manual, TASK 78-32-00-410-010.

(2) Close the left and right fan cowl doors with the instructions in the A320 Aircraft Maintenance Manual, TASK 71-13-00-410-010.

(3) Remove the warning notices from the aircraft panels 115VU and 50 VU.

F. Recording Instructions

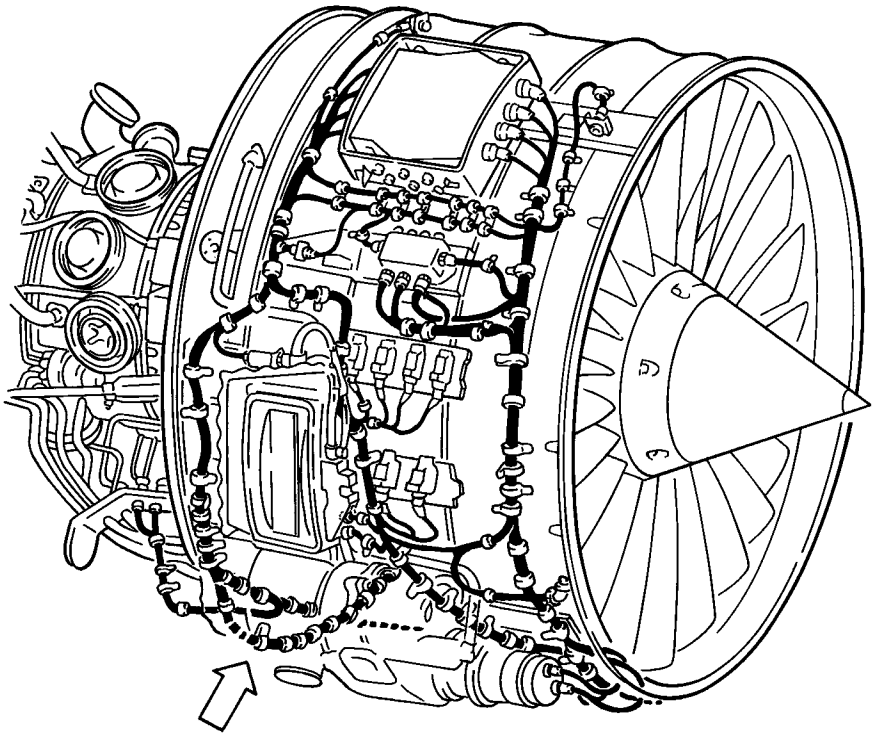
(1) A record of accomplishment is necessary.



BOTTOM OF THE LP COMPRESSOR/INTERMEDIATE CASE MODULE

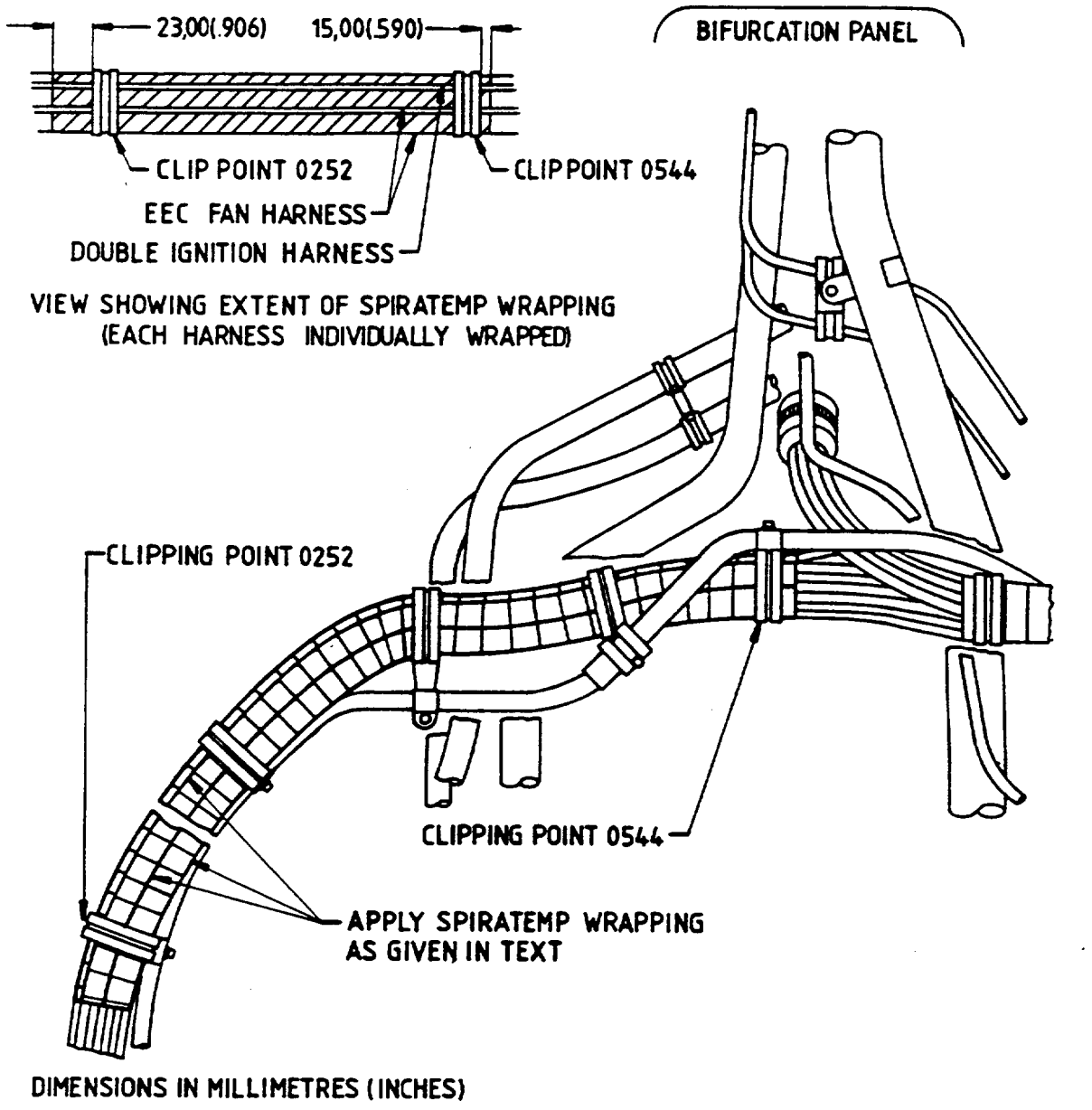
B3021A

Location of spiral wrapping
Fig.1 (Sheet 1 of 2)



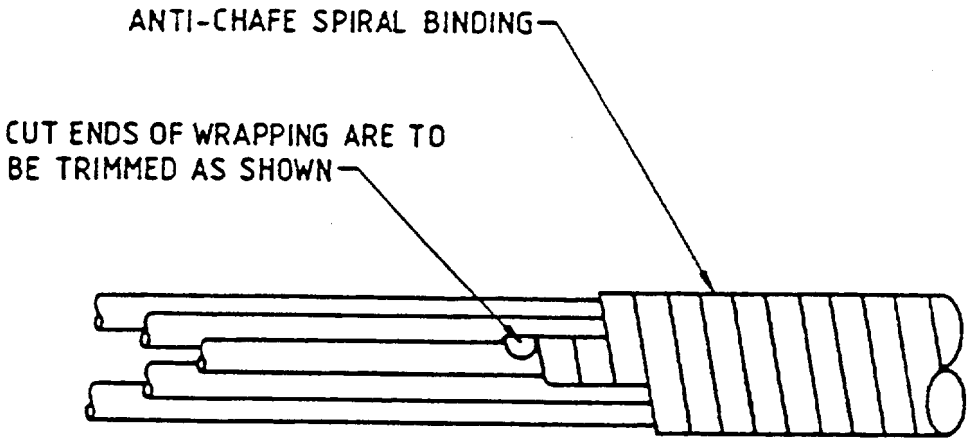
B3014

Location of E.E.C. harness and ignition supply harness
Fig.1 (Sheet 2 of 2)



ded0000228

View showing rework of E.E.C. and ignition supply harness
Fig.2



PROCEDURE.

ANTI-CHAFE BINDING TO BE SINGLE WRAPPED AND BUTTED TO FORM CONTINUOUS COVER.

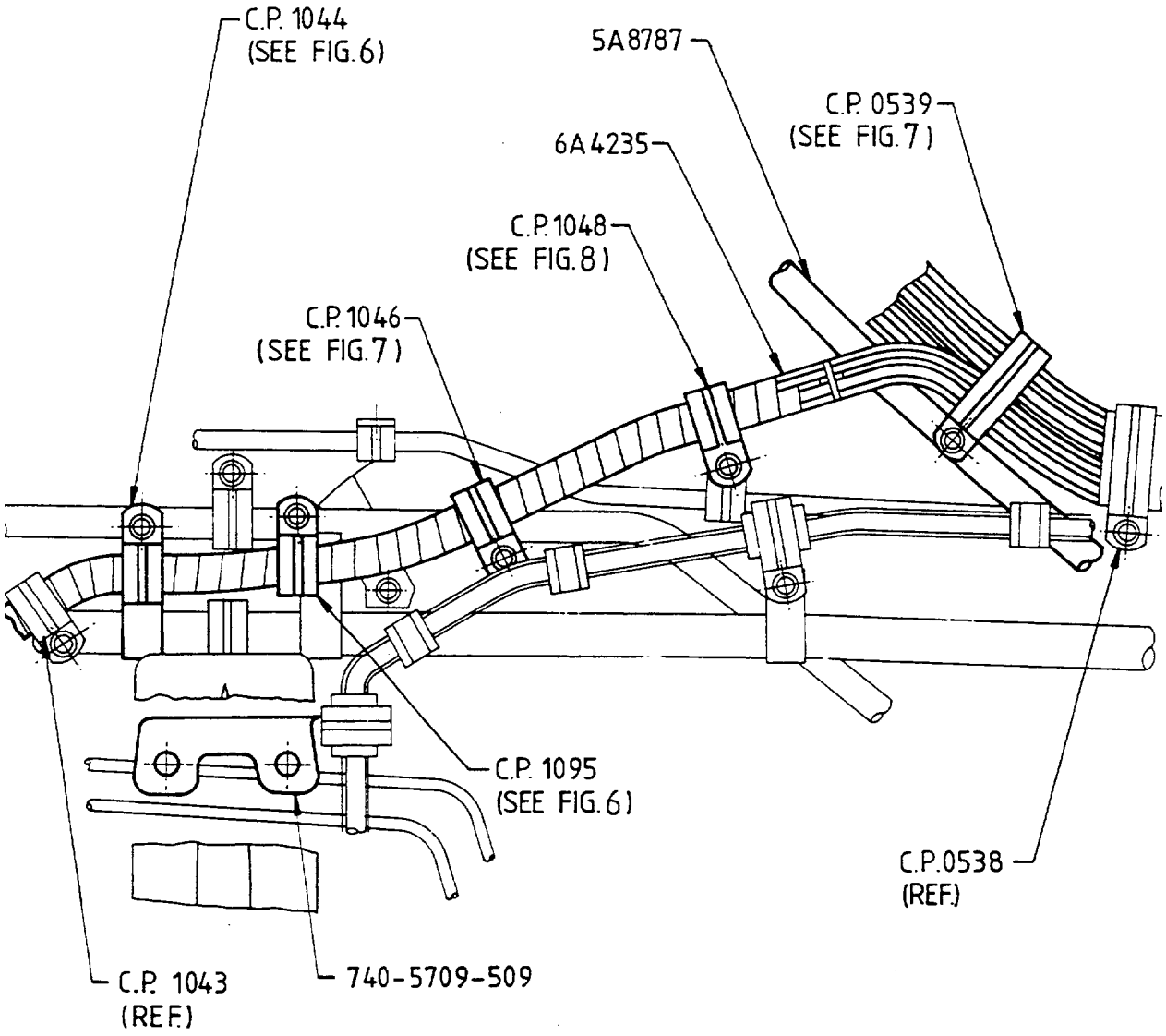
BINDING TO BE SECURED BY PASSING THE END THRU THE BUNDLE AND TAKING TWO TURNS ROUND A SINGLE WIRE AS SHOWN.

SHARP CORNERS OF CUT ENDS TO BE REMOVED.

EXTENT OF ANTI-CHAFE SPIRAL BINDING SHOWN ON FIG 2.

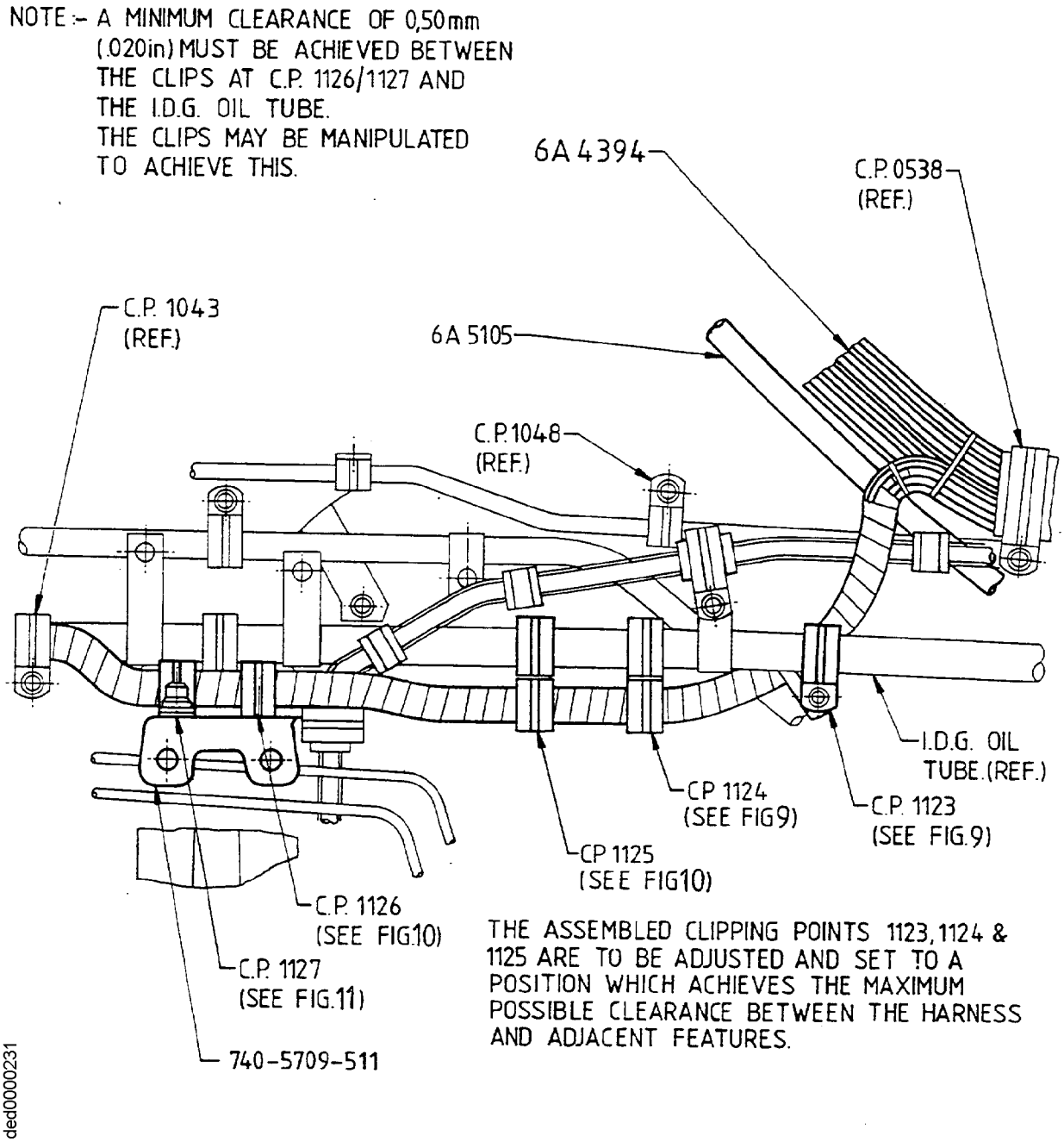
ded0000229

Application of spiratemp wrapping
Fig.3

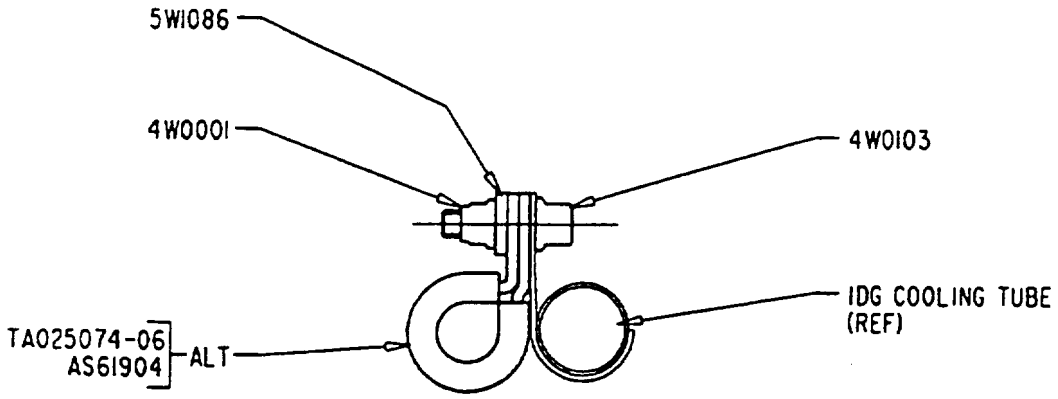


ded0000230

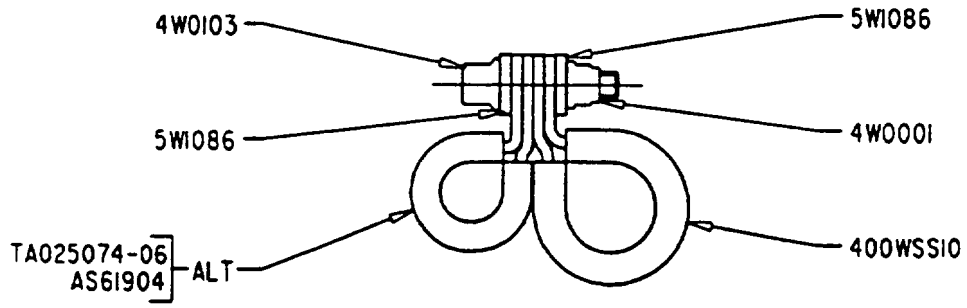
View on E.E.C. fan harness - Before alteration
Fig.4



View on E.E.C. fan harness - After alteration
Fig.5

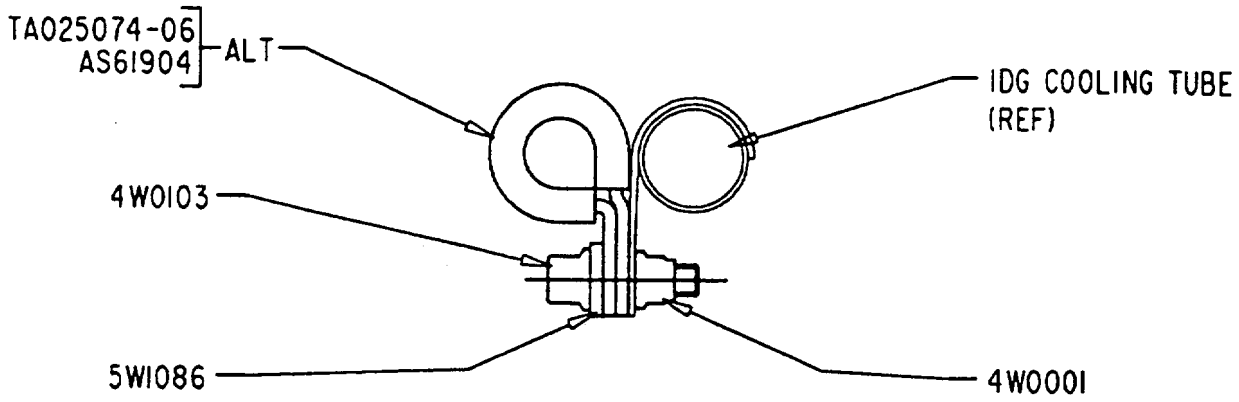


CLIPPING POINT 1044
DELETED

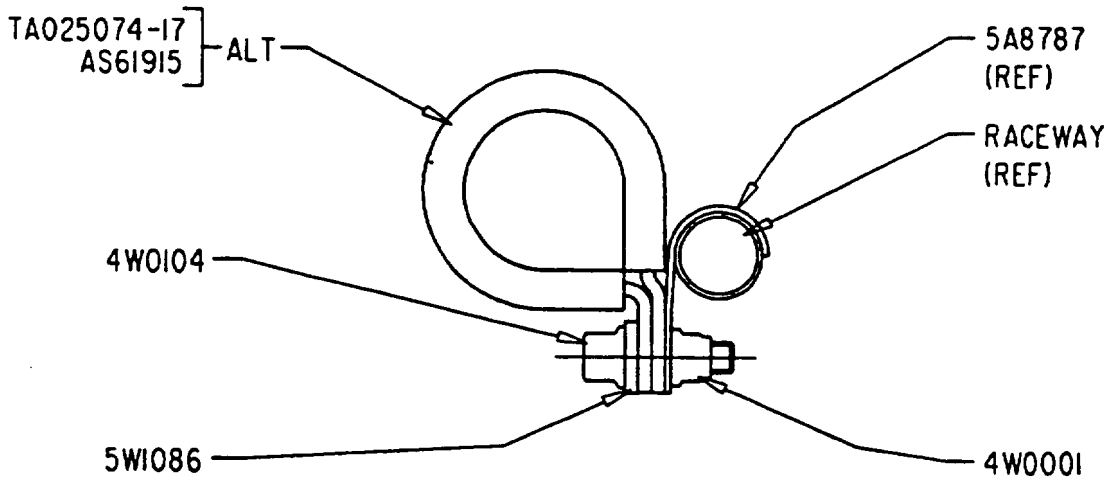


ded0000232

Clipping point 1095 deleted
Fig.6

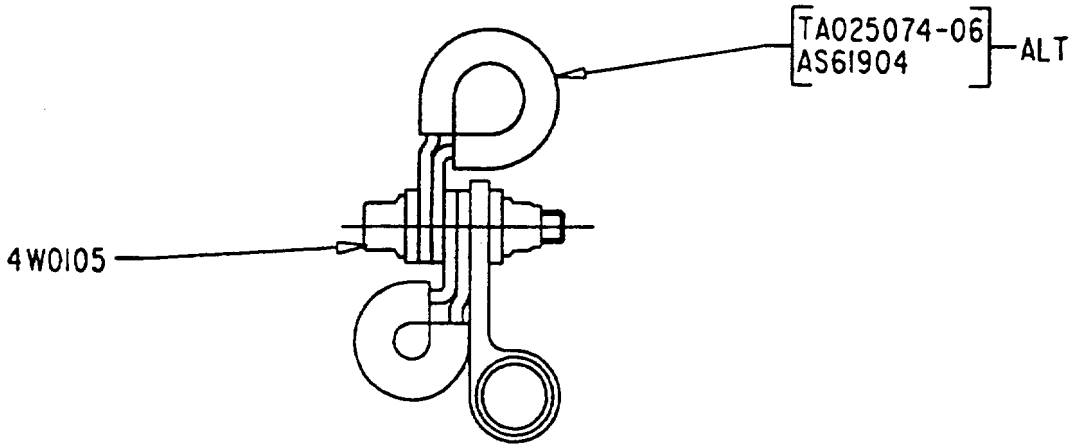


CLIPPING POINT 1046
DELETED

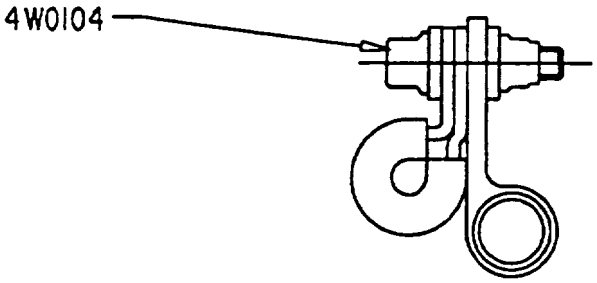


ded0000233

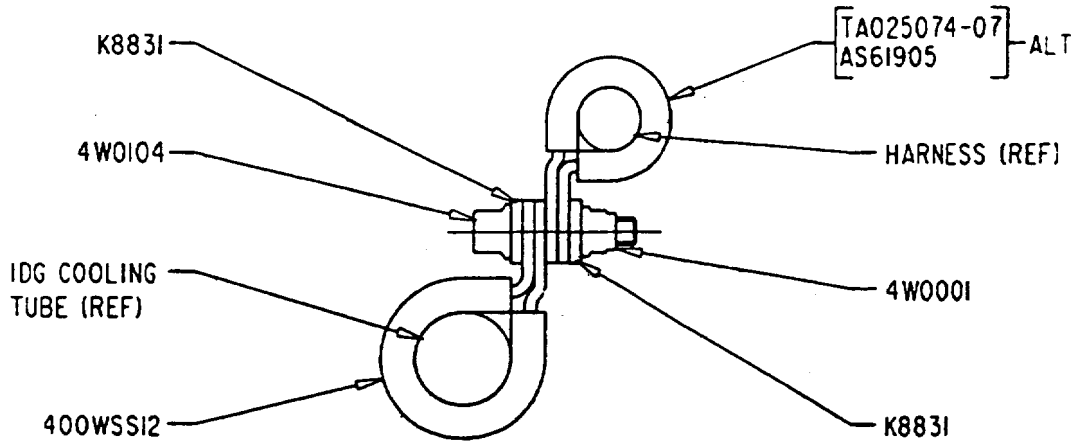
Clipping point 0539 deleted
Fig.7



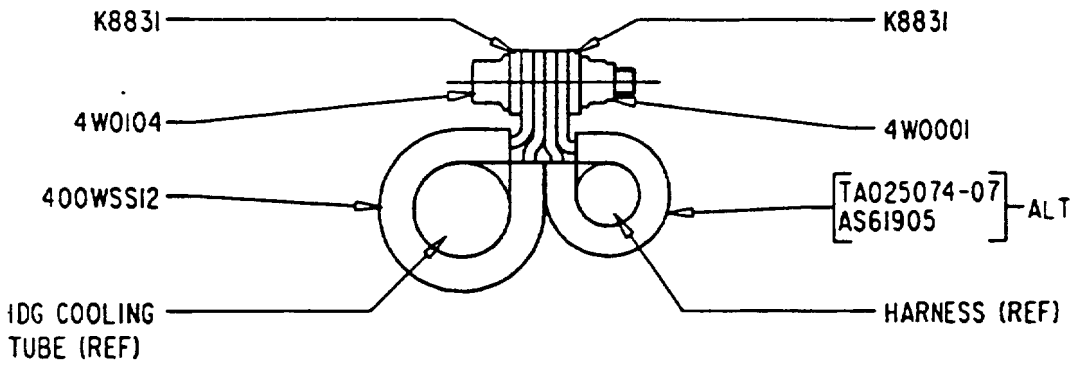
CLIPPING POINT 1048
BEFORE ALTERATION



Clipping point 1048 - After alteration
Fig.8

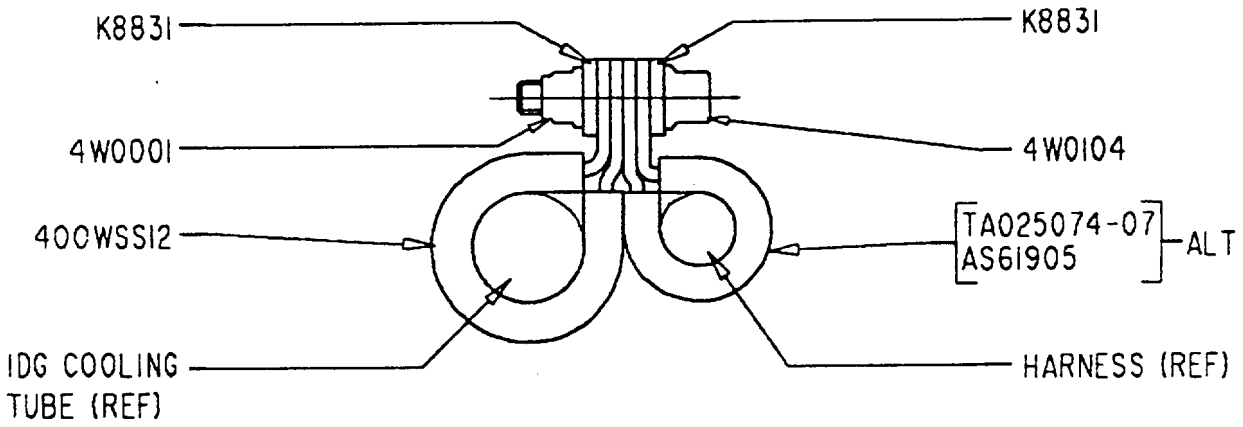


CLIPPING POINT 1123
ADDITIONAL

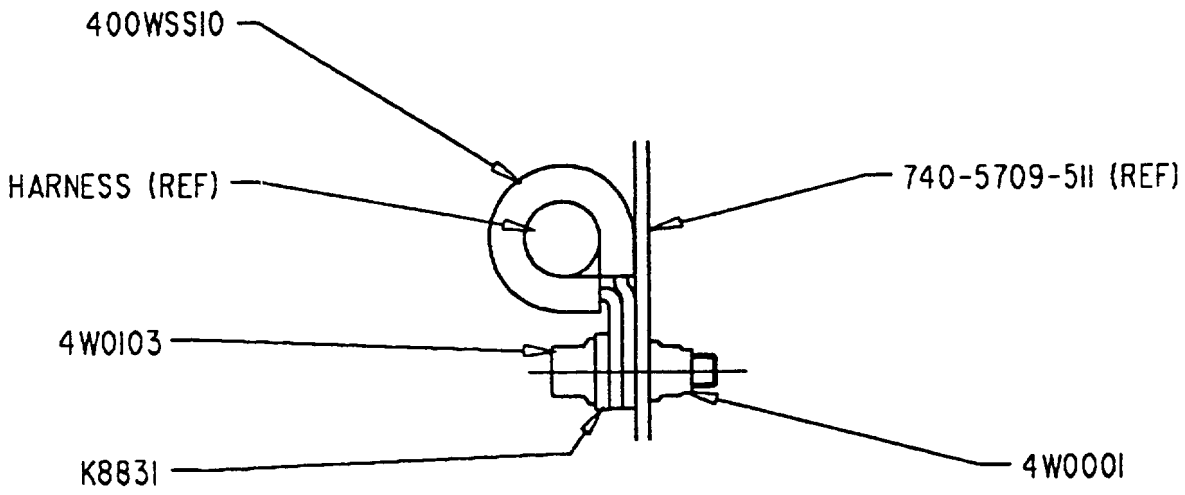


ded0000235

Clipping point 1124 additional
Fig.9

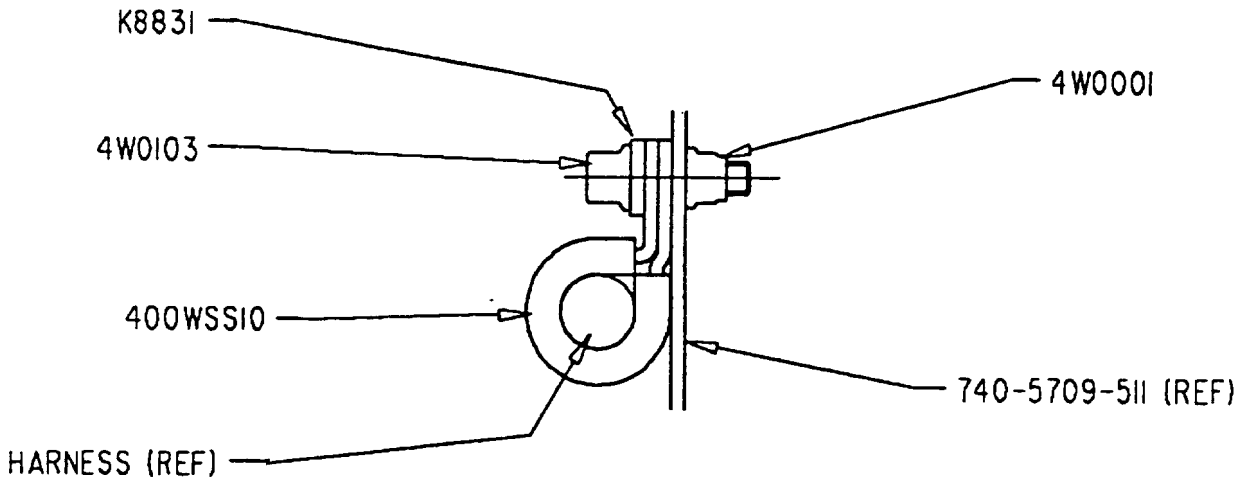


CLIPPING POINT 1125
ADDITIONAL



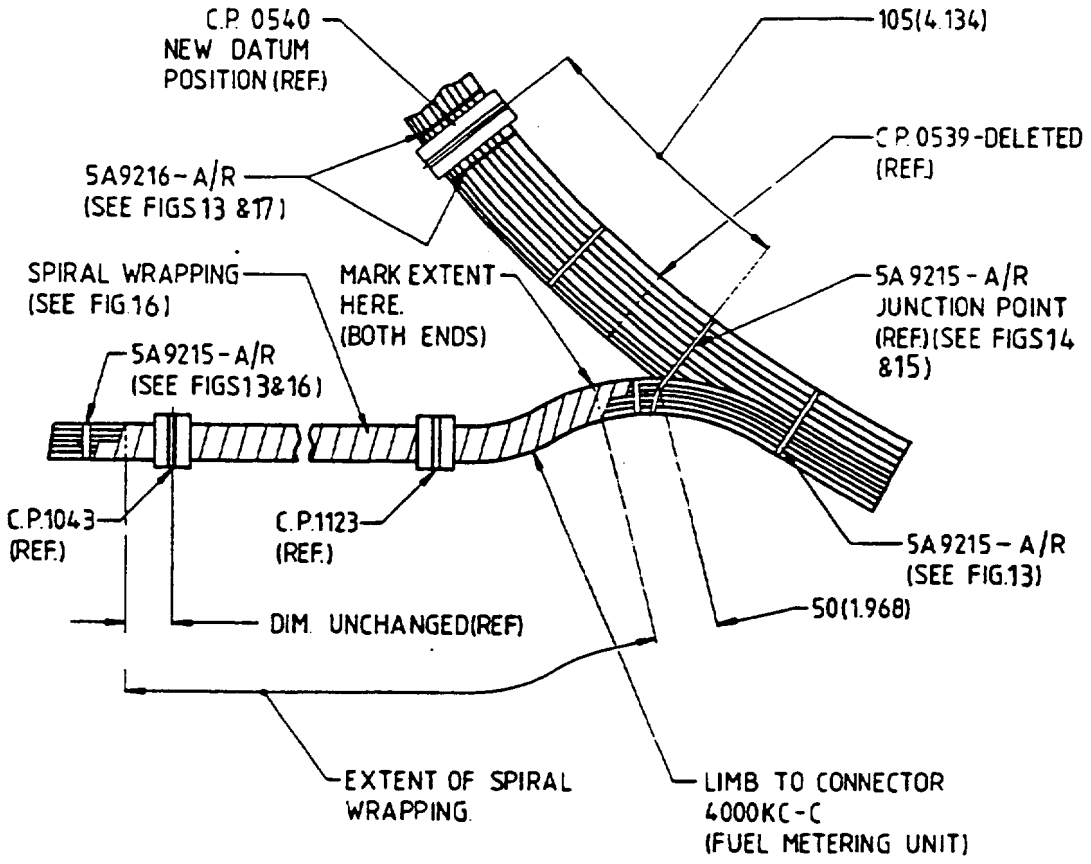
ded0000236

Clipping point 1126 additional
Fig.10



ded0000237

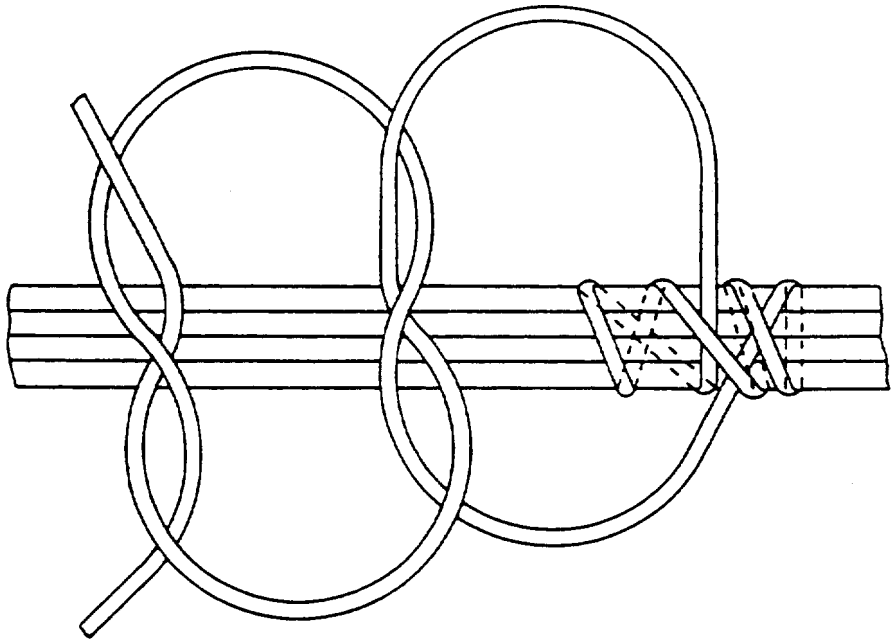
Clipping point 1127 additional
Fig.11



DIMENSIONS IN MILLIMETRES(INCHES)
TOLERANCE ON DIMENSIONS 2,54(.1) U.O.S.

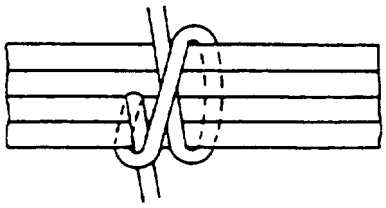
ded0000238

Rework of existing E.E.C. harnesses
Fig.12

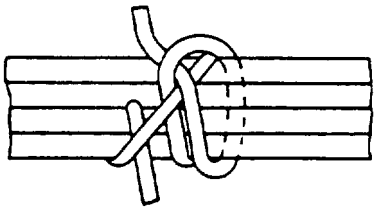


ded0000239

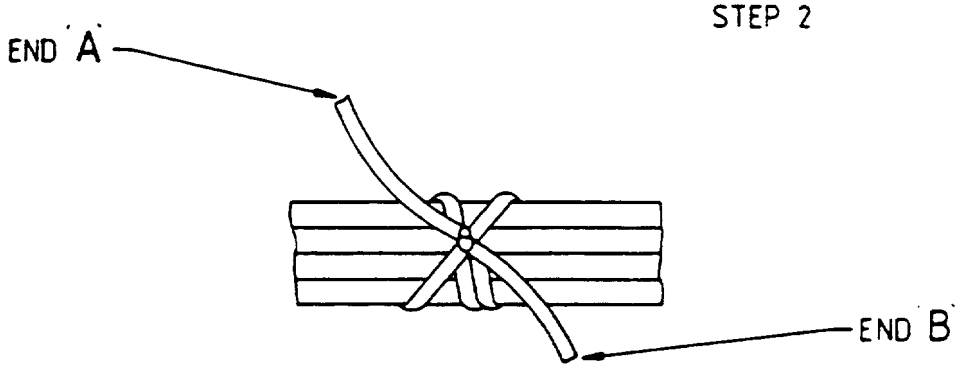
Rework of existing E.E.C. harnesses showing procedure for fastening lacing tape to harness
Fig.13



STEP 1



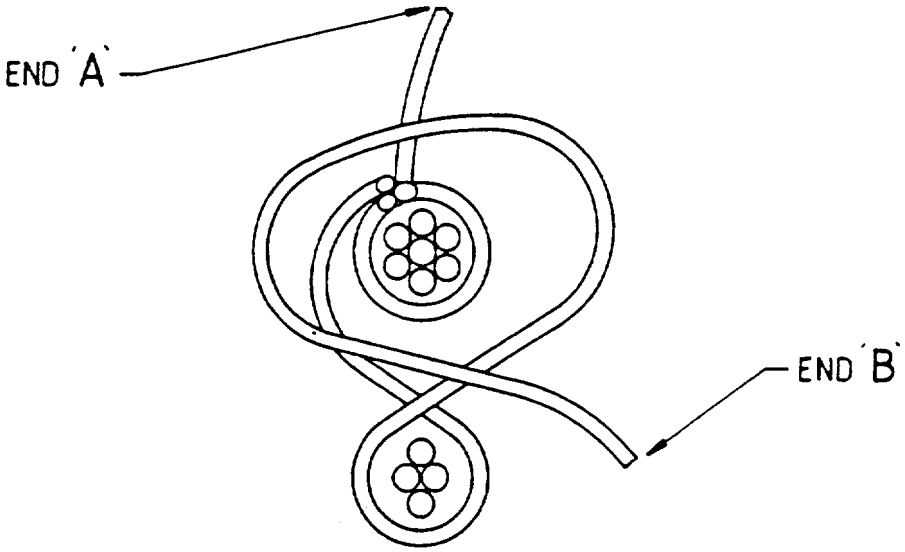
STEP 2



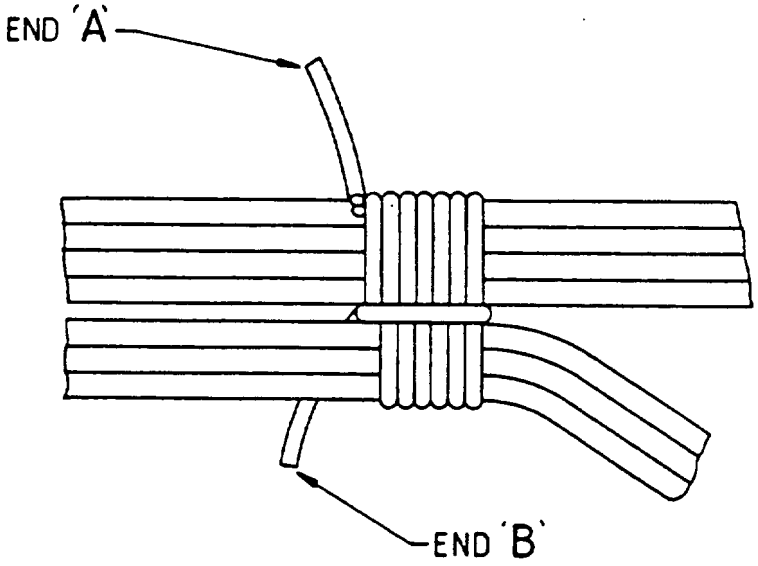
STEP 3

ded0000384

Rework of existing E.E.C. harnesses showing procedure for fastening lacing tape at harness junction
Fig.14



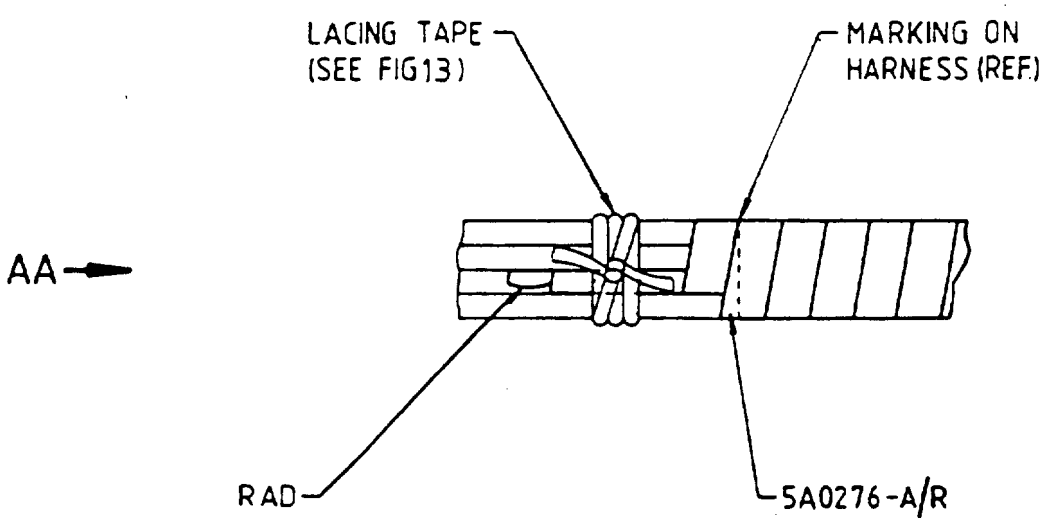
STEP 4



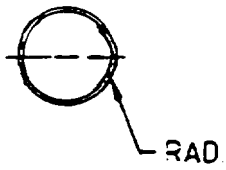
STEP 5

ded0000240

Rework of existing E.E.C. harnesses showing procedure for fastening lacing tape at harness junction
Fig.15



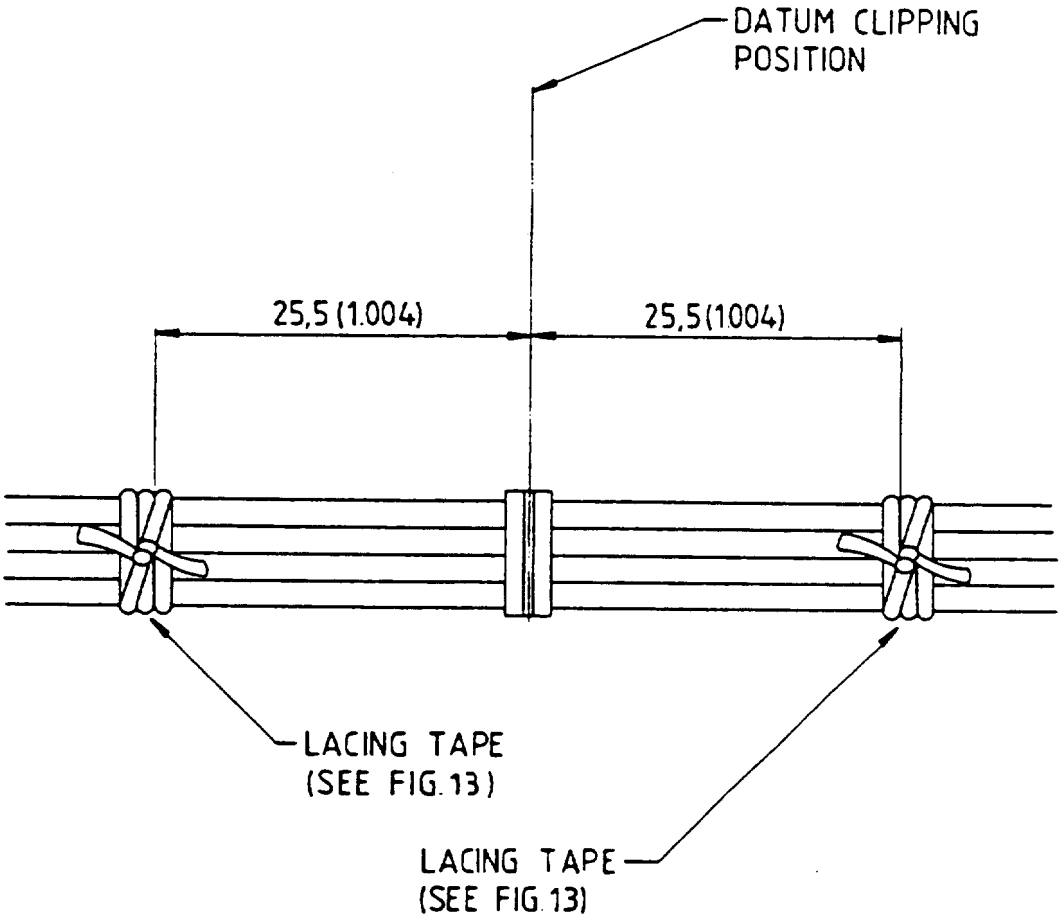
VIEW SHOWING METHOD OF FASTENING SPIRAL WRAPPING



VIEW AA

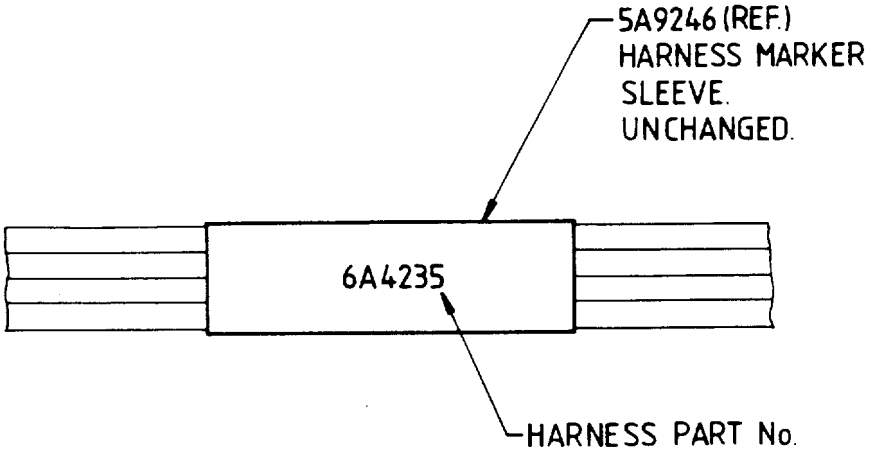
ded0000241

View showing method of fastening spiral wrapping
Fig.16

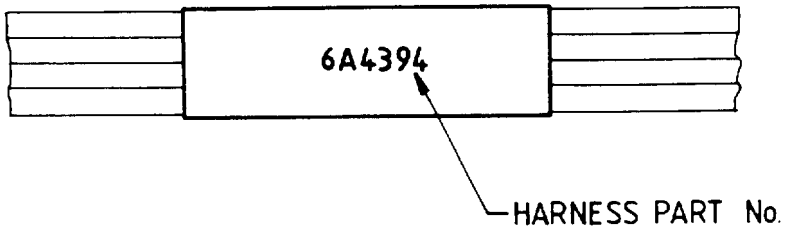


ded0000242

Rework of existing E.E.C. harnesses showing procedure for marking datum clipping position
Fig.17



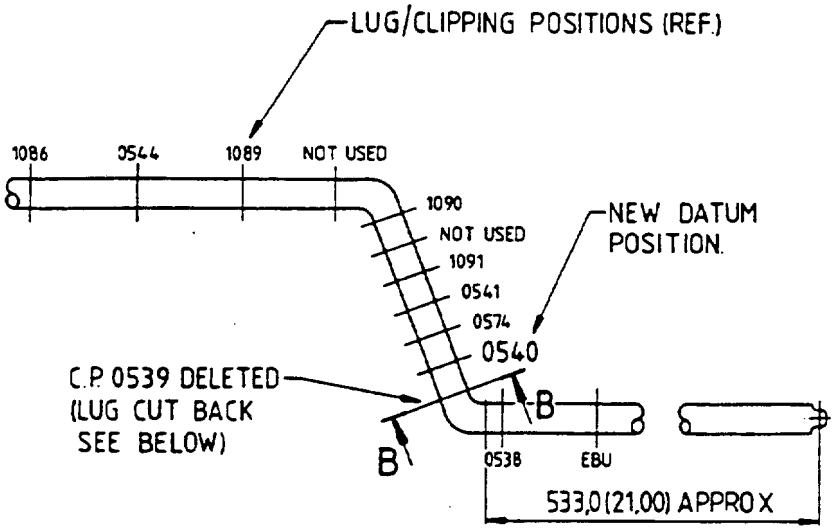
VIEW ON HARNESS MARKER SLEEVE
BEFORE ALTERATION



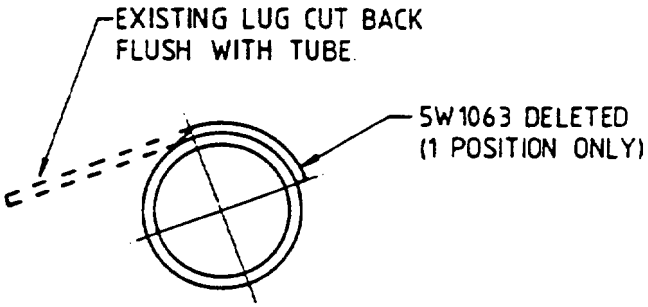
View on harness marker sleeve - After alteration
Figure 18

ded0000243

View on harness marker sleeve - After alteration
Fig.18



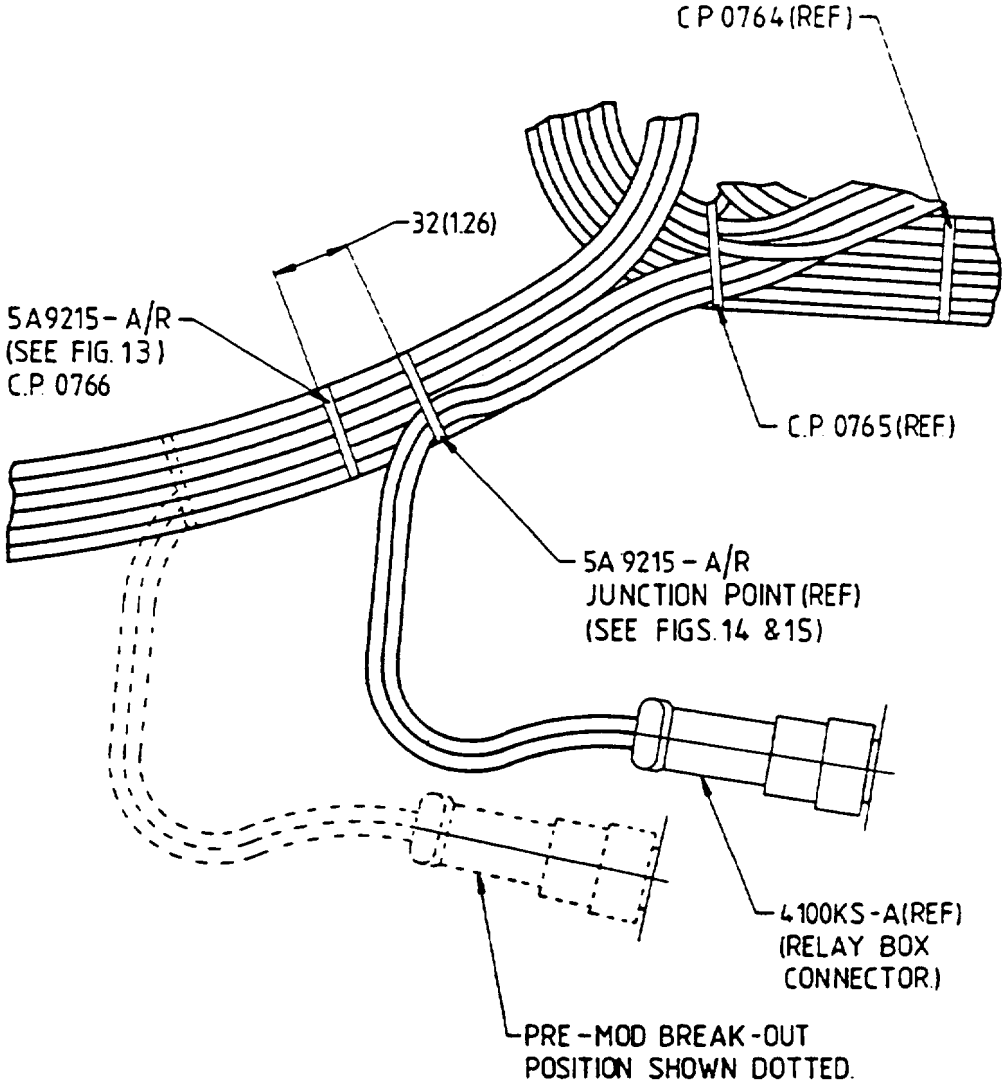
REWORK OF EXISTING RACEWAY ASSY SHOWING POSITION OF DELETED LUG.



NOTE:-CARE MUST BE TAKEN TO AVOID DAMAGE TO TUBE.

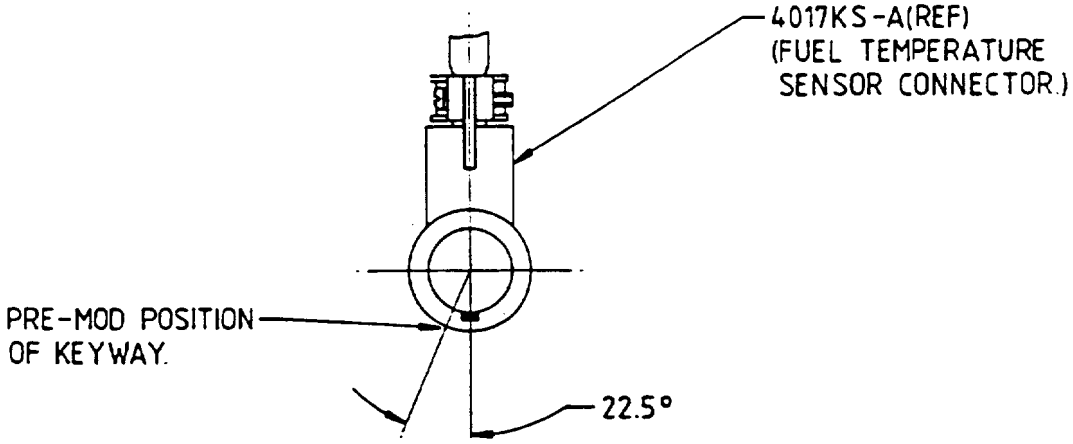
ded0000244

Enlarged section BB showing rework of existing raceway assembly
Fig.19



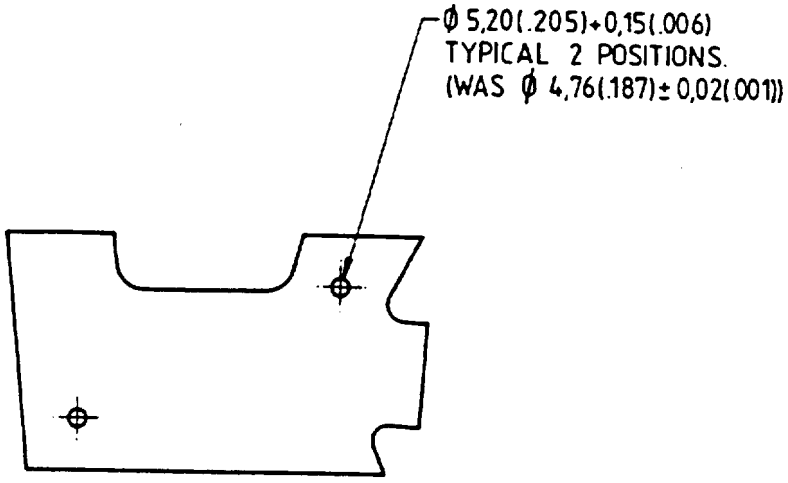
ded0000245

Reworking of existing E.E.C. harnesses showing re-positioned break-out of relay box connector
Fig.20



ded0000246

View on end of fuel temperature sensor connector showing repositioning of master keyway relative to the backshell
Fig.21



BREAK SHARP EDGES 0,13(.005) TO 0,25(.010) U.O.S.

ded0000247

Reworking of existing drains mast support brackets showing enlargement of existing holes
Fig.22

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:

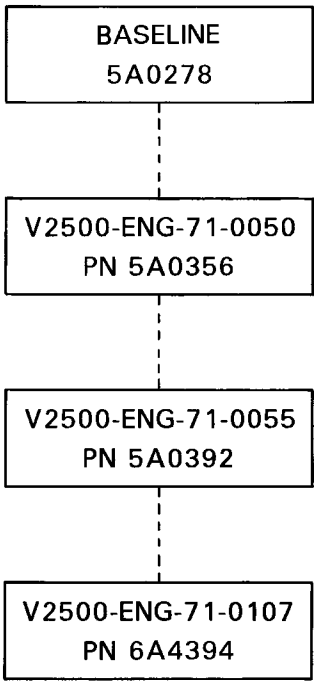
New Part No. (ATA No.)	Qty	Est'd Unit Price ($)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
3302698 (71-51-41)	A/R		Tape, Spiratemp 2P	- (03-960)	(A)(B)
6A4395 (71-51-44)	1		Harness assembly - Ignition supply	5A0279 (01-005)	(S1)
SPIRATEMP 1 (71-51-44)	A/R		Binding, spiral	- (03-960)	(A)(B)
4W0104 (24-21-49)	1		Bolt, CP1123	- (02-140)	(A)(5D)(C)
K8831 (24-21-49)	2		Washer, CP1123	- (02-141)	(A)(6D)(C)
400WSS12 (24-21-49)	1		Clip, loop type, CP1123	- (02-144)	(A)(5D)(C)
4W0001 (24-21-49)	1		Nut, CP1123	- (02-147)	(A)(5D)(C)
4W0104 (24-21-49)	1		Bolt, CP1124	- (02-150)	(A)(5D)(C)
K8831 (24-21-49)	2		Washer, CP1124	- (02-151)	(A)(6D)(C)
400WSS12 (24-21-49)	1		Clip, loop type, CP1124	- (02-154)	(A)(5D)(C)
4W0001 (24-21-49)	1		Nut, CP1124	- (02-157)	(A)(5D)(C)
4W0104 (24-21-49)	1		Bolt, CP1125	- (02-160)	(A)(5D)(C)
K8831 (24-21-49)	2		Washer, CP1125	- (02-161)	(A)(6D)(C)
400WSS12 (24-21-49)	1		Clip, loop type, CP1125	- (02-164)	(A)(5D)(C)
4W0001 (24-21-49)	1		Nut, CP1125	- (02-167)	(A)(5D)(C)
- (24-21-49)	1		Clip, loop type, CP1095	400WSS10 (02-544)	(1D)(3D)
6A4394 (71-51-41)	1		Harness assembly, E.E.C. fan	5A0392 (01-005)	(S1)(C)
- (71-51-41)	1		Bolt, CP0539	4W0104 (01-518)	(1D)(3D)

- (71-51-41)	1	Washer, CP0539	5W1086 (01-519)	(1D)(3D)
- (71-51-41)	1	Clamp, loop style cushion, CP0539	TA025074-17 (01-521)	(1D)(3D)
- (71-51-41)	1	Clamp, loop style cushion, CP0539	AS61915 (01-521)	(1D)(3D)
- (71-51-41)		Nut, CP0539	4W0001 (01-525)	(1D)(3D)
- (71-51-41)	1	Bolt, CP1044	4W0103 (02-183)	(1D)(3D)
- (71-51-41)	1	Washer, CP1044	5W1086 (02-184)	(1D)(3D)
- (71-51-41)	1	Clamp, loop style cushion, CP1044	TA025074-06 (02-186)	(1D)(3D)
- (71-51-41)	1	Clamp, loop style cushion, CP1044	AS61904 (02-186)	(1D)(3D)
- (71-51-41)	1	Nut, CP1044	4W0001 (02-190)	(1D)(3D)
- (71-51-41)	1	Bolt, CP1046	4W0103 (02-199)	(1D)(3D)
- (71-51-41)	1	Washer, CP1046	5W1086 (02-200)	(1D)(4D)
- (71-51-41)	1	Clamp, loop style cushion, CP1046	TA025074-06 (02-202)	(1D)(3D)
- (71-51-41)	1	Clamp, loop style cushion, CP1046	AS61904 (02-202)	(1D)(3D)
- (71-51-41)	1	Nut, CP1046	4W0001 (02-206)	(1D)(3D)
- (71-51-41)	1	Clamp, loop style cushion, CP1048	TA025074-06 (02-218)	(1D)(3D)
- (71-51-41)	1	Clamp, loop style cushion, CP1048	AS61904 (02-218)	(1D)(3D)
- (71-51-41)	1	Bolt, CP1048	4W0103 (02-397)	(1D)(3D)
- (71-51-41)	2	Washer, CP1095	5W1086 (02-398)	(1D)(4D)
- (71-51-41)	1	Clamp, loop style cushion, CP1095	TA025074-06 (02-400)	(1D)(3D)
- (71-51-41)	1	Clamp, loop style cushion, CP1095	AS61904 (02-400)	(1D)(3D)
- (71-51-41)	1	Nut, CP1095	4W0001 (02-404)	(1D)(3D)
TA025074-07 (71-51-41)	1	Clamp, loop style cushion, CP1123	- (02-464)	(A)(S2)(5D) (C)
AS61905	1	Clamp, loop style	-	(A)(S2)(5D)

(71-51-41)		cushion, CP1123	(02-464)	(C)
TA025074-07 (71-51-41)	1	Clamp, loop style cushion, CP1124	- (02-472)	(A)(S3)(5D) (C)
AS61905 (71-51-41)	1	Clamp, loop style cushion, CP1124	- (02-472)	(A)(S3)(5D) (C)
TA025074-07 (71-51-41)	1	Clamp, loop style cushion, CP1125	- (02-480)	(A)(S4)(5D) (C)
AS61905 (71-51-41)	1	Clamp, loop style cushion, CP1125	- (02-480)	(A)(S3)(5D) (C)
4W0103 (71-51-41)	1	Bolt, CP1126	- (02-486)	(A)(5D)(C)
K8831 (71-51-41)	1	Washer, CP1126	- (02-487)	(A)(5D)(C)
400WSS10 (71-51-41)	1	Clamp, loop type cushion, CP1126	- (02-488)	(A)(5D)(C)
4W0001 (71-51-41)	1	Nut, CP1126	- (02-492)	(A)(5D)(C)
4W0103 (71-51-41)	1	Bolt, CP1127	- (02-494)	(A)(5D)(C)
K8831 (71-51-41)	1	Washer, CP1172	- (02-495)	(A)(5D)(C)
400WSS10 (71-51-41)	1	Clamp, loop type cushion, CP1127	- (02-496)	(A)(5D)(C)
4W0001 (71-51-41)	1	Nut, CP1127	- (02-500)	(A)(5D)(C)
5A9215 (71-51-41)	A/R	Tape, lacing (white)	5A9215 (03-915)	(B)
5A9216 (71-51-41)	A/R	Tape, lacing (black)	5A9216 (03-916)	(B)
5A0276 (71-51-41)	A/R	Wrapping, spiral	5A0276 (03-950)	(B)
6A5105 (71-51-50)	1	Tube, A/O raceway clipping	5A8787 (01-100)	(S1)(C)
- (71-51-50)	1	Lug, brazed	5W1063 (01-214)	(2D)
740-5709-511 (72-60-40)	1	Bracket	740-5709-509 (01-056)	(S1)(C)
4W0104 (73-11-49)	1	Bolt, CP1048	4W0105 (22-549)	(1D)(C)

C. Instructions/Dispostion Code Statements:

(S1) Old and new parts are not interchangeable - Old part is capable of being reworked and re-identified as new part number - See accomplishment instructions.
(S2) Alternative parts.
(S3) Alternative parts.
(S4) Alternative parts.
(A) Additional.
(B) Stock item, will not be supplied as part of a modification kit, customers should use existing stock. Further supplies can be obtained from IAE and should be ordered separately.
(C) New part currently available.
(1D) Retain for spares for other applications.
(2D) Quantity decreased from 18 to 17.
(3D) Quantity decreased from 1 to 0.
(4D) Quantity decreased from 2 to 0.
(5D) Quantity increased from 0 to 1.
(6D) Quantity increased from 0 to 2.



B3022A

Family tree - Harness assembly, E.E.C. fan Illustrated parts Catalog Ref, 71-51-41, Fig.01 Item 005
Fig.23