



ENGINE - BIFURCATION PANEL - ADDITION OF STIFFENER PLATES AT RIVETED JOINT BETWEEN
UPPER AND LOWER PANELS - CATEGORY CODE 6 - MOD.ENG-72-0088

1. Planning Information

A. Effectivity

- (1) Part 1: (a) Aircraft : Airbus A320
(b) Engine : V2500-A1 Engines prior to Serial No.V0162
- (2) Part 2: (a) Aircraft : Airbus A320
(b) Engine : V2500-A1 Engines, Serial Nos.V0172, V0176, V0180,
V0192, V0193, V0194, V0196, V0197, V0199, V0201, V0204,
V0212, V0219 and V0223
- (3) Part 3: (a) Aircraft : Airbus A320
(b) Engine : V2500-A1 Engines, Serial Nos.V0162 through V0229

B. Reason

(1) Condition

Handling damage to the bifurcation panel can result in an ineffective fire/fume seal.

(2) Background

The bifurcation panel incorporates a rubber 'P' seal which provides a fire/fume seal with the 'C' ducts between the fan zone 1 and core zone 2. The lower vertical portion of the panel acts as a hinge and can be used as a handhold. Handling damage may cause permanent deformation to take place resulting in an inadequate seal.

(3) Objective

To reduce damage to the panel and maintain an effective seal.

(4) Substantiation

There is no change to the effectiveness of the panel as a seal and a vibration survey showed that the new panel vibration characteristics were acceptable.

A trial installation confirmed that there were no clearance or access problems.

(5) Effect of Bulletin on Workshop Procedures:

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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) Part 1

(a) The changes introduced by this Service Bulletin are:

- (i) The lower portion of the bifurcation panel has been modified such that two stiffening plates have been riveted between the lower and upper panel edges to maintain seal efficiency and strengthen the panel.
- (ii) The opportunity is also taken to delete an unused hole in the panel which was originally required for an instrumentation lead. The associated blanking plate and attaching parts become redundant.

(2) Part 2

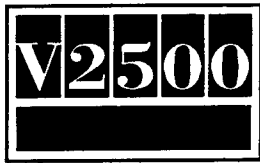
(a) The changes introduced by this Service Bulletin are:

- (i) Spare engines and spare bifurcation panel assemblies were delivered to operators with incorrect standard of stiffening plates fitted to the bifurcation panel.
- (ii) Bifurcation panels can be reworked.

(3) Part 3

(a) The changes introduced by this Service Bulletin are:

- (i) Engines with incorrect standard of stiffening plates were reworked to Service Bulletin Part 2 instructions.
- (ii) Visual inspection of the stiffening plates and bifurcation panel part numbers are necessary to confirm that the part numbers were altered after rework.



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D. Approval

The part number changes and/or part modifications described in Section 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 6

Accomplish when the sub-assembly (i.e. modules accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

F. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
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Part 1

(1) In Service	Not applicable
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(2) At Overhaul	TOTAL: 1 hour 54 minutes
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NOTE: The parts affected by this Service Bulletin are accessible at Overhaul.

(a) To gain access	Not applicable
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(b) To embody	1 hour 54 minutes
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(c) To return to overhaul condition	..	Not applicable
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TOTAL 1 hour 54 minutes

Part 2

(1) In Service	TOTAL : 1 hour 56 minutes
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(a) To gain access	26 minutes
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(b) To embody	1 hour
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(c) To return to overhaul condition	..	30 minutes
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TOTAL: 1 hour 56 minutes

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(2) At Overhaul TOTAL : 1 hour

(a) To gain access Not applicable

(b) To embody 1 hour

(c) To return to
overhaul condition .. Not applicable

TOTAL 1 hour

Part 3

(1) In Service TOTAL : 1 hour 1 minute

(a) To gain access 26 minutes

(b) To embody 5 minutes

(c) To return to
overhaul condition .. 30 minutes

TOTAL 1 hour 1 minute

(2) At Overhaul TOTAL : 5 minutes

(a) To gain access Not applicable

(b) To embody 5 minutes

(c) To return to
overhaul condition .. Not applicable

TOTAL 5 minutes

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, however use of a locally manufactured template will assist in rework operations, refer to Figure 3 and Accomplishment Instructions.

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

- | | | | |
|-------------------|----|----|---|
| (1) Weight change | .. | .. | Plus 0.1 lb (0,045 kg) |
| (2) Moment arm | .. | .. | 9.5in. (241 mm) rearward |
| (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.

EC89VR012/012C

EC91VR009

- (2) Other References

The V2500 Standard Practices/Processes Manual, 70-09-00, Marking of Parts, TASK 70-09-00-400-501.

The V2500 Standard Practices/Processes Manual, 70-36-02 Bonding and Moulding, TASK 70-36-02-360-501.

L. Other Publications Affected

- (1) The V2500 Illustrated Parts Catalog, 72-38-25.
- (2) The V2500 Engine Manual, 72-38-25, Disassembly, Assembly, Cleaning, Inspection/Check and Rework.
- (3) Repair schemes VRS 6373 and VRS 6377 will be applicable to parts introduced by this Service Bulletin.

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2. Accomplishment Instructions

A. Rework Instructions

(1) Part 1

- (a) Rework 6A3361, panel A/O (Refer to 72-38-25, Fig./Item 01-300) and identify as follows:

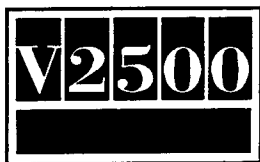
Standard Equipment

Basic workshop tools
Vibro-engraving equipment

Consumable Materials

CoMat 08-013 Silcoset 152

Procedure	Supplementary Information
(i) Remove the applicable parts of the sealing retaining strips by removal of rivets	See Figure 3 and Figure 4. Use basic workshop tools
(ii) Remove the applicable section of rubber seal	See Figure 3. Use a sharp knife. Cut along the glue line
(iii) Locate template through the two holes of the panel, 6A3361	See Figure 3. Use locally made template. Use basic workshop tools
(iv) Mark the applicable three holes on each side of the panel, 6A3361	See Figure 3. Use basic workshop tools
(v) Remove template	
(vi) Drill the applicable three pilot holes on each side of the panel, 6A3361	See Figure 3. Use basic workshop tools
(vii) Examine	Make sure holes are correctly drilled
(viii) Clamp the stiffening plates, 6A4657 and 6A4658, onto panel 6A3361 and drill sixteen rivet holes as shown	See Figure 2 and Figure 3. Use basic workshop tools



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- | | | | | | |
|--|---|--------------|--------------|--------|--------|
| (xi) Countersink the six holes where shown | See Figure 5.
Use basic workshop tools | | | | |
| (x) Remove all sharp edges from new holes | Use basic workshop tools | | | | |
| (xi) Assemble stiffening plates, 6A4657 and 6A4658, to panel 6A3361. Fit rivets into countersunk holes | See Figure 3 and Figure 5.
Use AS16487 rivets, solid countersunk head, six off.
Use basic workshop tools | | | | |
| (xii) Fit rivets into holes at foot location | See Figure 2, Figure 3 and Figure 4. Use AS16087 rivets, solid universal head, six off.
Use basic workshop tools | | | | |
| (xiii) Replace rubber seal sections and bond in place | See Figure 3. Refer to Standard Practices/Processes Manual TASK 70-36-02-360-501, SUBTASK 70-36-02-360-020.
Use CoMat 08-013 Silcoset 152.
Use basic workshop tools | | | | |
| (xiv) Replace seal retaining strips and secure with rivets | See Figure 3 and Figure 4.
Use AGS3920-0411 rivets, blind snaphead, sixteen off.
Use basic workshop tools | | | | |
| (xv) Examine | Make sure rivets are tight | | | | |
| (xvi) Cancel the old part number and identify with the new part number | <table border="0"> <tbody> <tr> <td>Old Part No.</td> <td>New Part No.</td> </tr> <tr> <td>6A3361</td> <td>6A4624</td> </tr> </tbody> </table> <p>Refer to Standard Practices/Processes Manual TASK 70-09-00-400-501, SUBTASK 70-09-00-400-001.
Use vibro-engraving equipment</p> | Old Part No. | New Part No. | 6A3361 | 6A4624 |
| Old Part No. | New Part No. | | | | |
| 6A3361 | 6A4624 | | | | |

(2) Part 2

- (a) Rework 6A4106, panel A/0 (Refer to 72-38-25, Fig/Item 01-300) and identify as follows:

Standard Equipment

Basic workshop tools
Vibro-engraving equipment

Consumable Materials

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None required

Procedure

Supplementary Information

- CAUTION: 1. TITANIUM COMPONENT – SILICON CARBIDE TYPE ABRASIVE WHEELS, STONES AND PAPERS MUST BE USED TO DRESS, BLEND AND POLISH THIS COMPONENT.
2. TITANIUM COMPONENT – DO NOT USE FORCE WITH MECHANICAL CUTTERS OR THE MATERIAL WILL BECOME TOO HOT.
3. TITANIUM COMPONENT – IF THE MATERIALS SHOWS A CHANGE IN COLOR, TO DARKER THAN A LIGHT STRAW COLOUR, THE COMPONENT IS TO BE DISCARDED.

(i) Mark off area for removal

See Figure 6.
Use basic workshop tools

(ii) Remove excess material

Use basic workshop tools

(iii) De-burr and remove sharp edges

See Figure 6.
Use basic workshop tools

(iv) Examine

See Figure 6
Measure the dimension and ensure that the edges are smooth

(v) Cancel the old part number and re-identify with new part number.

Old Part No.	New Part No.
6A4106	6A4624

Refer to Standard Practices/Processes Manual TASK 70-09-00-400-501, SUBTASK 70-09-00-400-001. Use vibro-engraving equipment

(3) Part 3

- (a) Visually inspect stiffener plates and bifurcation panel part numbers.

Standard Equipment

Vibro-engraving equipment

Procedure

Supplementary Information

(i) Visually inspect stiffener plates and bifurcation panel part numbers

See 3. Material Information

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- (ii) If necessary, cancel the old part numbers and re-identify with the new part numbers

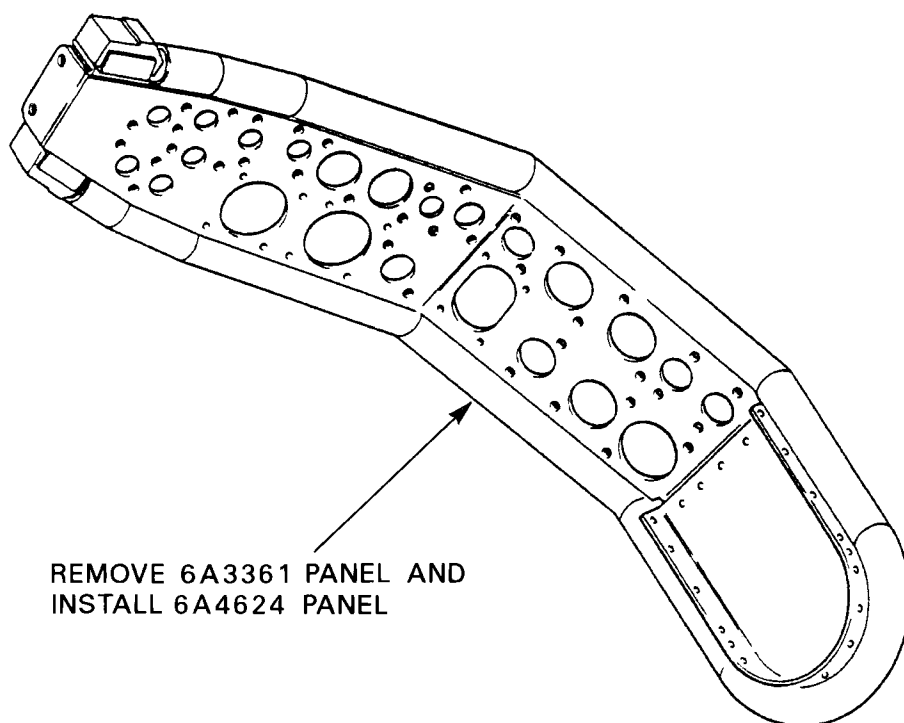
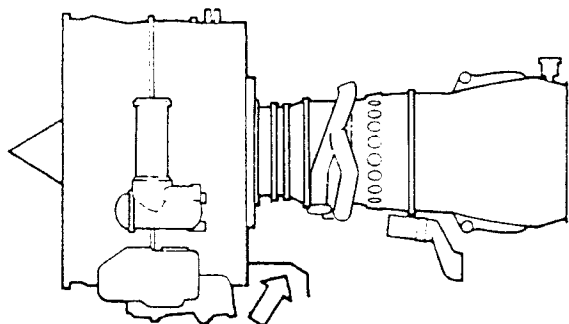
Refer to Standard Practices/Processes Manual TASK 70-09-00-400-501, SUBTASK 70-09-00-400-001.
Use vibro-engraving equipment

B. Assembly Instructions

- (1) New 6A4624 panel assembly is interchangeable with in use panel assembly.
- (2) Assemble new or re-identified 6A4624 panel assembly by use of approved procedures, Engine Manual, 72-38-25, Assembly.

C. Recording Instructions

- (1) A record of accomplishment is necessary.

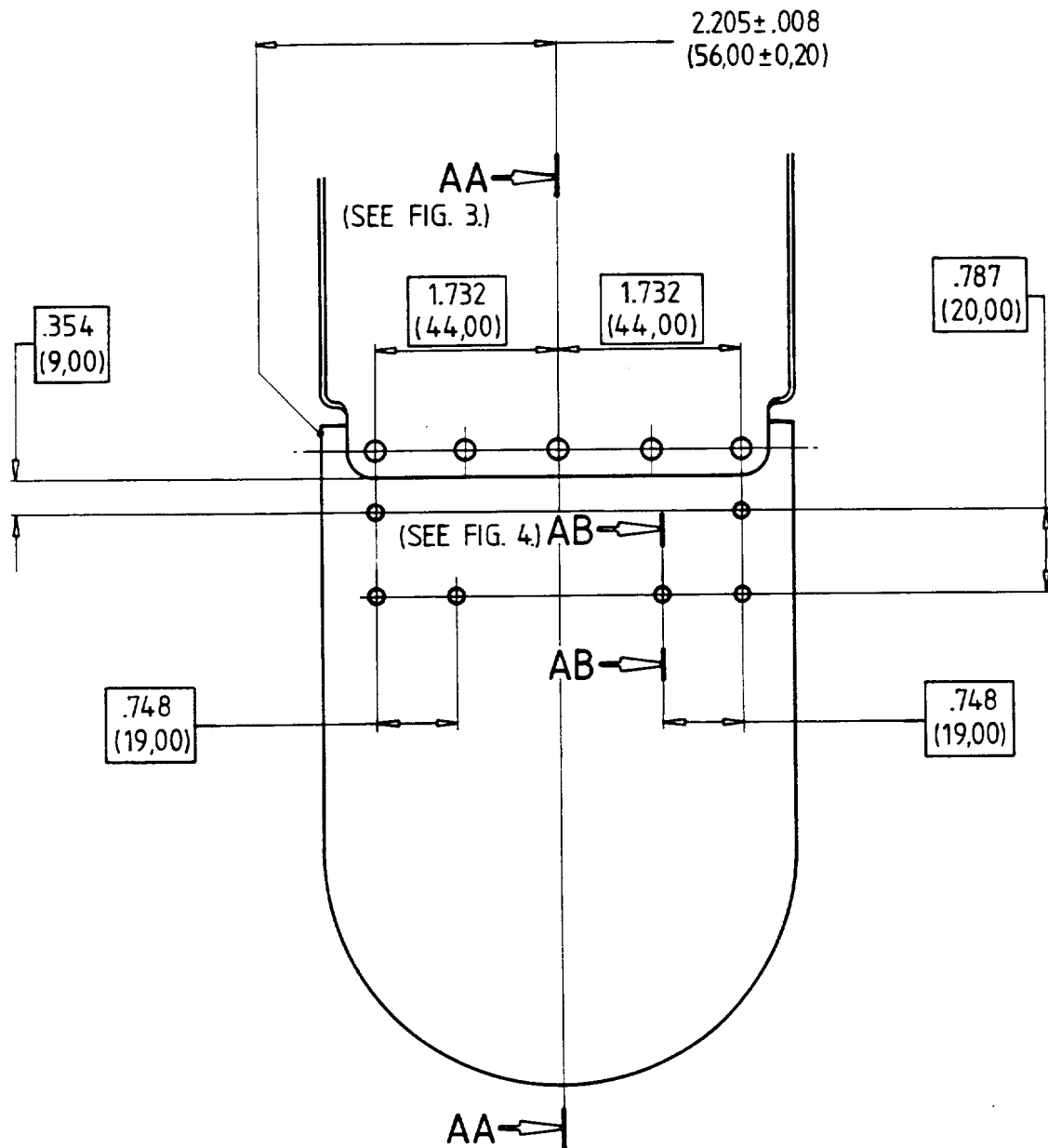


REMOVE 6A3361 PANEL AND
INSTALL 6A4624 PANEL

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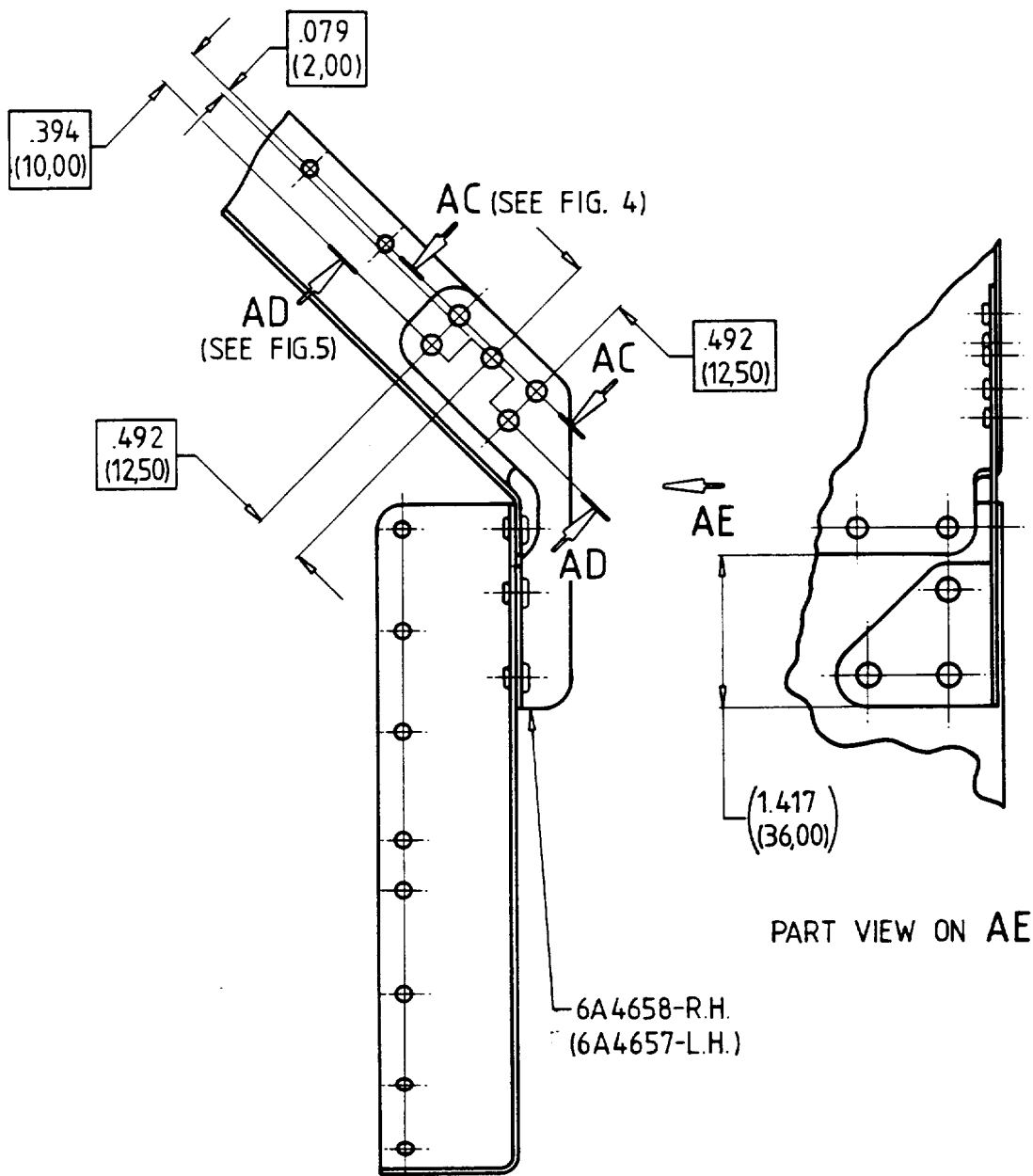
Part 1 Location of bifurcation panel
Fig.1

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REMOVE THE SHARP EDGES $.012 \pm .008$ (0.30 ± 0.20).
 DIMENSIONS ARE IN INCHES WITH MILLIMETRE CONVERSIONS IN PARENTHESES
 GEOMETRIC SYMBOLS CONFORM TO I.S.O. R1101-1969.
 VIEW SHOWING REWORKING OF EXISTING PANELS.
 STIFFENING BRACKETS REMOVED FOR CLARITY.
 SCALE: SIZE PART 1

Part 1 Rework of bifurcation panel
 Fig.2



SECTION AA
(SEE FIG. 2)
TYPICAL BOTH SIDES.
PART 1

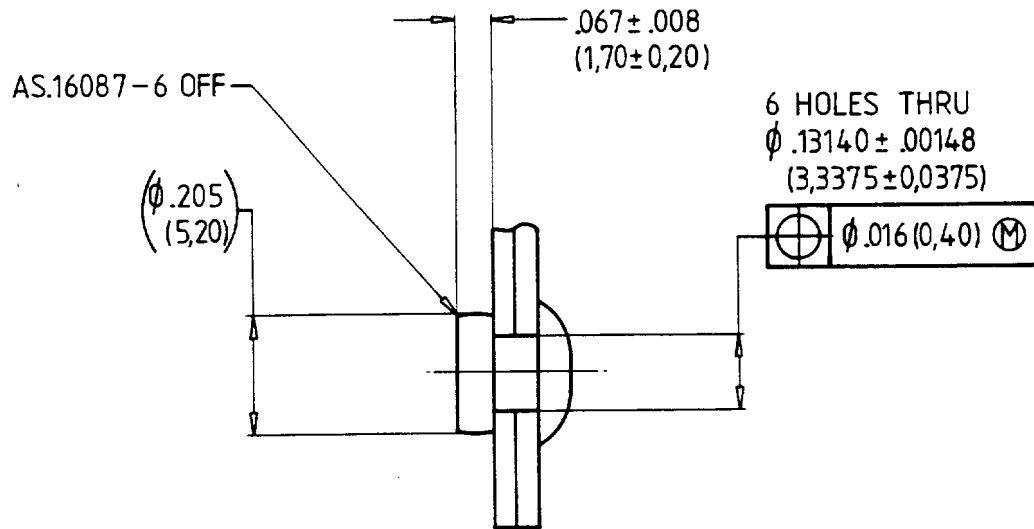
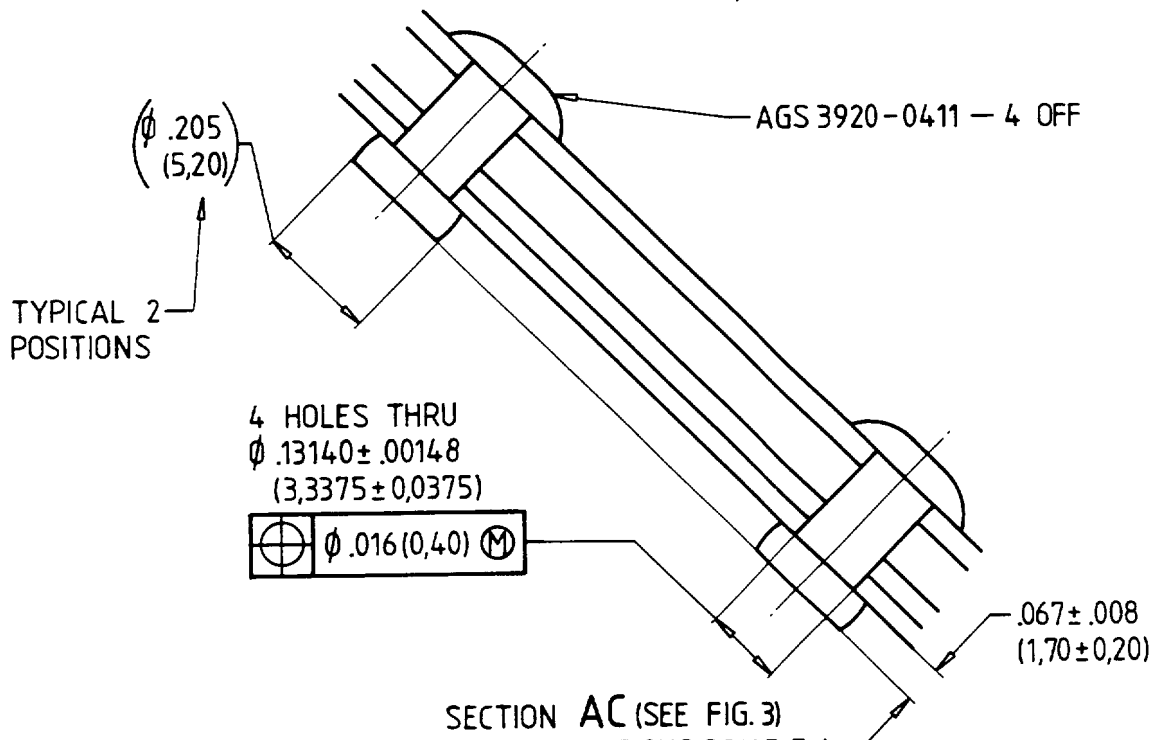
Rework of bifurcation panel
Fig.3

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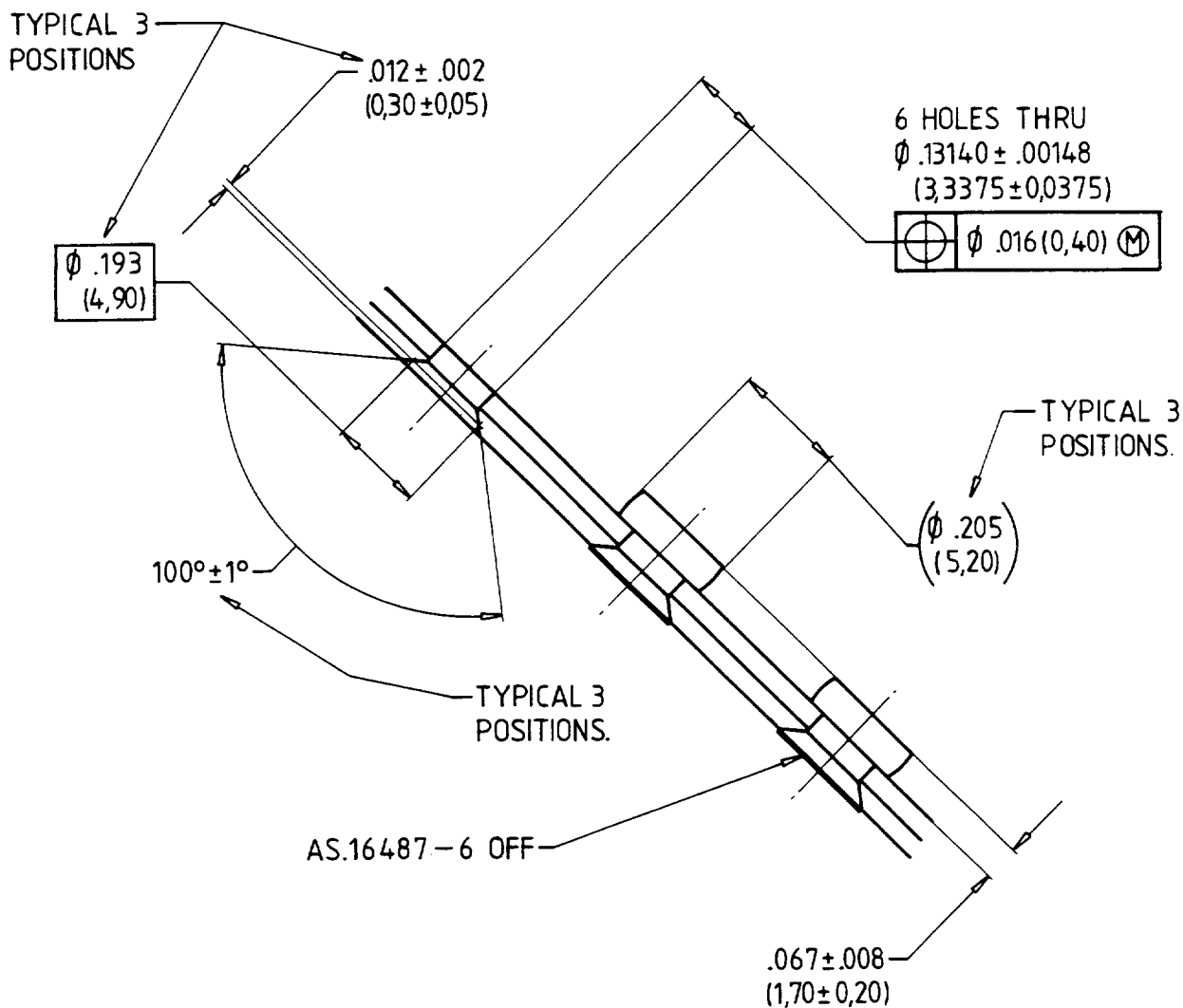
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SECTION AB (SEE FIG. 2)
TYPICAL 6 POSITIONS, SCALE 5:1.SECTION AC (SEE FIG. 3)
TYPICAL 2 POSITIONS, SCALE 5:1.
PART 1
Part 1Part 1 Rework of bifurcation panel
Fig.4

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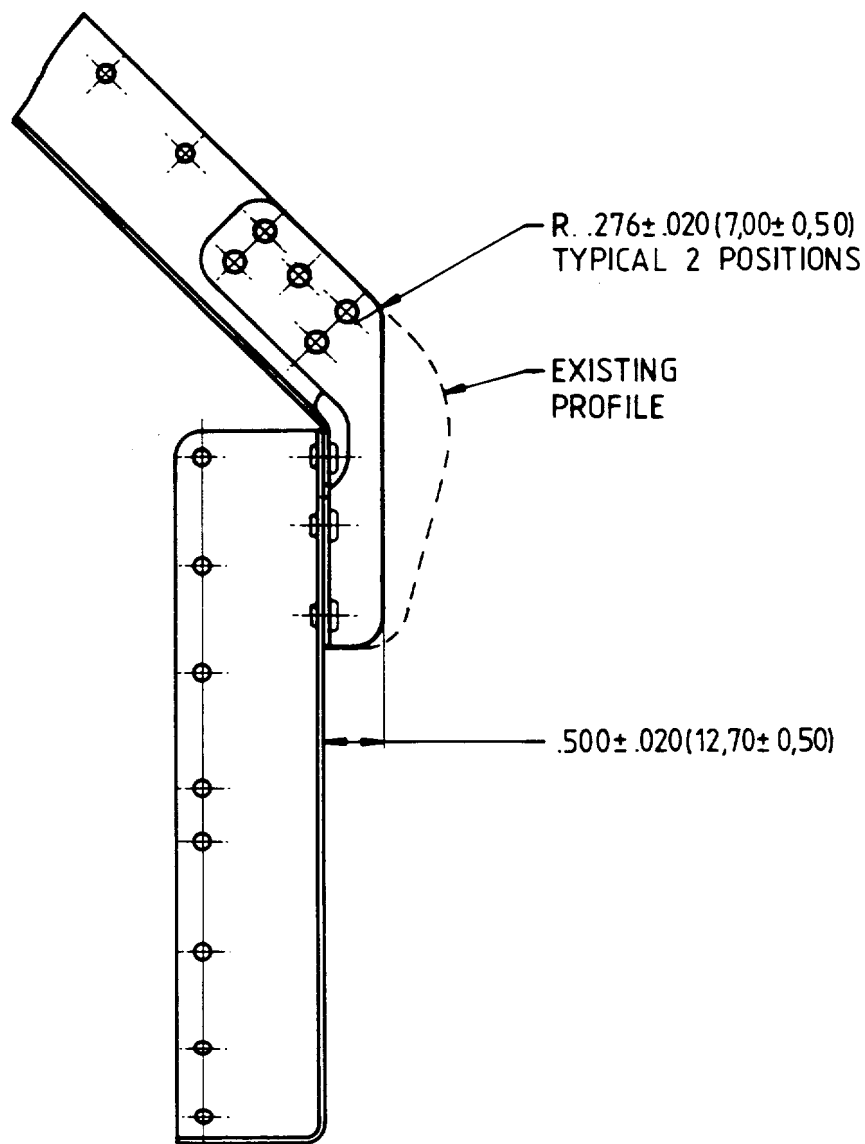
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SECTION AD (SEE FIG. 3)
TYPICAL 2 POSITIONS, SCALE 5:1.
RIVET & P-SEAL REMOVED FOR CLARITY.
PART 1

Part 1 Rework of bifurcation panel
Fig.5

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DIMENSIONS ARE IN INCHES WITH MILLIMETRE CONVERSIONS IN PARENTHESES.
REMOVE THE SHARP EDGES $.012 \pm .008$ (0,30 \pm 0,20)

VIEW SHOWING REWORKING OF EXISTING PANELS
TYPICAL FOR RIGHT & LEFT HAND STIFFENER PLATES
SCALE: SIZE
PART 2

52023

Part 2 Rework of bifurcation panel
Fig.6

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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

Part 1					
- (72-38-25)	1		Plate, blanking	UP10842 (01-280)	(3D)(F)
- (72-38-25)	2		Bolt, machine - Double hex	AS21009 (01-282)	(4D)(5D)
- (72-38-25)	2		Nut, self-locking - Double hex	4W0002 (01-284)	(4D)(5D)
6A4624 (72-38-25)	1		Panel A/O	6A3361 (01-300)	(S1)(2D) (E)(F)
AS16087 (72-38-25)	11		Rivet, solid - Universal head	AS16087 (01-432)	(1D)(C)
AGS3920-0411 (72-38-25)	A/R		Rivet, blind snaphead	AGS3920-0411 (01-440)	(B)
AS16487 (72-38-25)	6		Rivet, solid - C'sk head	- (01-444)	(A)(C)
6A4657 (72-38-25)	1		Plate, L.H.	- (01-604)	(A)(C)(E)
6A4658 (72-38-25)	1		Plate, R.H.	- (01-606)	(A)(C)(E)
Parts 2 and 3					
6A4624 (72-38-25)	1		Panel A/O	6A4106 (01-300)	(S2)(2D)

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6A4657 (72-38-25)	1	Plate, L.H.	6A4185 (01-604)	(S2)(2D)
6A4658 (72-38-25)	1	Plate, R.H.	6A4186 (01-606)	(S2)(2D)

C. Instructions/Disposition Code Statements:

- (A) Additional.
- (B) Replacement items required during rework.
- (C) Items required for rework only.
- (1D) Quantity increased from 5 to 11.
- (2D) Old part is capable of being reworked and re-identified as new part number.
- (3D) Quantity decreased from 1 to 0.
- (4D) Quantity decreased from 2 to 0.
- (5D) Retain for spares for other applications.
- (S1) Old and new parts coded (S1) are freely and fully interchangeable.
- (S2) Old and new parts coded (S2) are not interchangeable.
- (E) New parts currently available.
- (F) Old parts no longer available.

NOTE: The estimated 1992 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.

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