

SERVICE BULLETIN

<u>ENGINE - IGNITION - INTRODUCE NEW IGNITION EXCITER MOUNTING BRACKETS - CATEGORY CODE 7 - MOD.ENG-74-0001</u>

1. Planning Information

A. Effectivity

(1) Aircraft: (a) Airbus A320

(b) Airbus A321

(2) Engine: (a) V2527-A5 Engines prior to Serial No.V10092

(b) V2530-A5 Engines prior to Serial No.V10092

B. Concurrent Requirements

None

C. Reason

(1) Condition

See (2) Background.

(2) Background

This Service Bulletin introduces a new ignition exciter mounting system with additional bracketry rigidity and improved method of manufacture.

(3) Objective

To improve the integrity of the ignition exciter mounting system.

(4) Substantiation

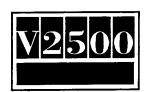
A trial assembly of the new ignition exciter mounting system on a mock up engine has demonstrated the clearance to be satisfactory.

(5) Effect of Bulletin on Workshop Procedures:

Removal/Installation Affected (see Supplemental Information)

Disassembly/Assembly
Cleaning
Inspection/Check
Repair
Testing
Not Affected
Not Affected
Not Affected
Not Affected

(6) Supplemental Information



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(a) The Removal/Installation will be revised to add the new configuration of this Service Bulletin.

D. <u>Description</u>

This bulletin introduces a V-section central support system which is supported by 4 angle brackets from the HP compressor front case split line. Longer bolts are instructed where necessary.

The igniter boxes are mounted on rafts, supported by a central support and 2 two piece brackets which run along the engine axis at the outerside of the igniter box rafts.

The mounting position of the igniter boxes is unchanged and all clipping point brackets which are mounted on the igniter box brackets have been modified to retain existing clipping points.

E. Approval

The part number changes and or part modification 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 Models listed.

F. Compliance

Category Code 7

Accomplish when supply of superseded parts have been depleted.

G. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

Venue Estimated Manhours

(1) In Service Not applicable

(2) At Overhaul Not affected

H. Material - Price and Availability

- (1) Modification Kit not required.
- (2) See "Material Information" section for prices and availability of future spares.

I. <u>Tooling - Price and Availability</u>

Special tools are not required.



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J. Weight and Balance

(1) Weight change Minus 0.5 lb (0,238 kg)

(2) Moment arm 12.0 in (304,8 mm) rearward of datum

(3) Datum Engine front mount centerline (Power Plant Station (PPS) 100)

K. Electrical Load Data

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

L. References

(1) Internal Reference No.

93VR050, A, B, C, D, E, F, G

M. Other Publications Affected

- (1) The V2500 Engine Illustrated Parts Catalog (S-V2500-2IA), Chapter/Section 72-41-00 and 74-11-38.
- (2) The V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-00-40, Installation-08, 09 CONFIG-2.
- (3) The V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-00-40, Removal-03, O2 CONFIG 2.
- (4) The V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-41-00, Cleaning-05, 08.
- (5) The V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-41-00, Inspection/Check-08.
- (6) The V2500 Engine Maintenance Manual (M-V2500-1IA), Chapter/Section 74-11-38.



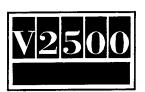
2. Accomplishment Instructions

A. Rework Instructions

There are no rework instructions necessary to accomplish this Service Bulletin.

B. Assembly Instructions

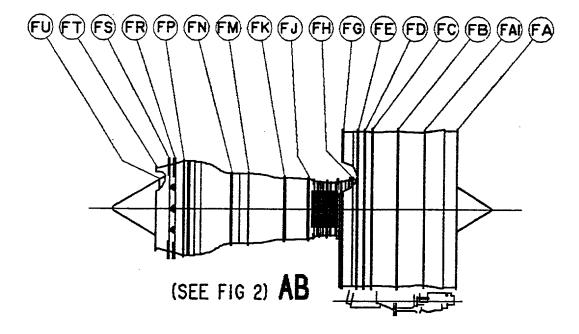
- (1) At casing split line remove 4W0003 bolts (2 off) LK69059 washer (2 off) and AS22614 nuts (2 off). Refer to Figures 1, 2, 3, 4 and 5.
- (2) At casing split line install 6A5970 brackets (2 off) using AS21116 bolts (2 off) and U128455 nuts (2 off). Torque the nuts to 180 to 220 lbfin (20 to 25 Nm). Refer to Figures 8, 11 and 12.
- (3) At casing split line install 6A5968 and 6A5969 brackets using AS21116 bolts (2 off) and U128445 nuts (2 off). Torque the nuts to 180 to 220 lbfin (20 to 25 Nm). Refer to Figures 8, 11 and 12.
- (4) Assemble 6A5971 bracket to 6A5970 brackets (2 off) using 4W0163 bolts (2 off) and 4W0044 clipnuts (2 off). Torque the bolts to 85 to 105 lbfin (10 to 12 Nm). Refer to Figures 8, 11 and 12.
- (5) Assemble 6A5971 bracket to 6A5968 and 6A5969 brackets using 4W0163 bolts (2 off) and 4W0044 clipnuts (2 off). Torque the bolts to 85 to 105 lbfin (10 to 12 Nm). Refer to Figures 8, 11 and 12.
- (6) Install 6A5972 and 6A5973 brackets to flange face using existing nuts, bolts and washers. Torque to 85 to 105 lbfin (10 to 12 Nm). Refer to Figures 2, 8 and 13.
- (7) Install 6A5628 and 6A5747 brackets to flange 'FJ' using existing nuts and bolts. Torque to 180 to 220 lbfin (20 to 25 Nm). Refer to Figures 2, 7 and 8.
- (8) Assemble 6A5628 bracket to 6A5972 bracket using 4W0163 bolt and 4W0044 clipnut, for 6A5747 and 6A5973 brackets repeat assembly procedure. Torque the bolts to 85 to 105 lbfin (10 to 12 Nm). Refer to Figures 8 and 14.
- (9) Assemble 6A5768 and 6A5769 brackets to 6A5971 bracket using 4W0163 bolts (2 off) and 4W0044 clipnuts (2 off). Torque the bolts to 85 to 105 lbfin (10 to 12 Nm). Refer to Figures 8 and 10.
- (10) Assemble 6A5768 and 6A5769 brackets to 6A5971 bracket using 4W0164 bolts (2 off) and 4W0044 clipnuts (2 off). Torque the bolts to 85 to 105 lbfin (10 to 12 Nm). Refer to Figures 8, 11 and 12.



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- (11) Assemble 6A5768 and 6A5769 brackets to 6A5628 and 6A5747 brackets using 4W0164 bolts (4 off). Torque the bolts to 85 to 105 lbfin (10 to 12 Nm). Refer to Figures 8 and 9.
- C. Recording Instructions

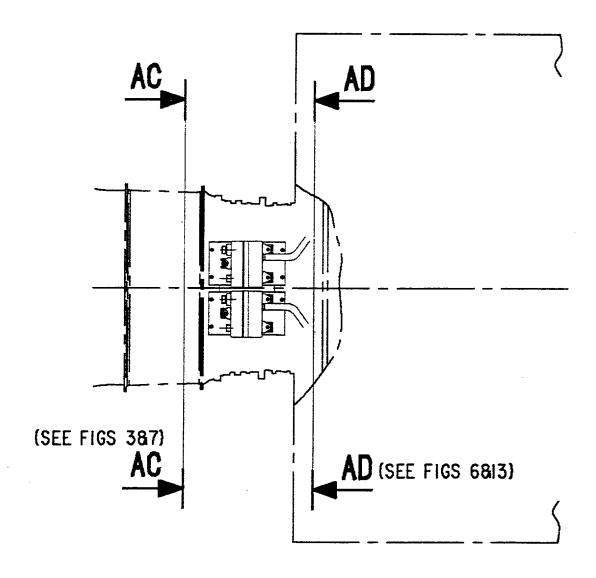
A record of accomplishment is necessary.



External view on engine right hand side Fig.1

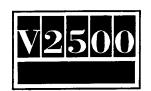
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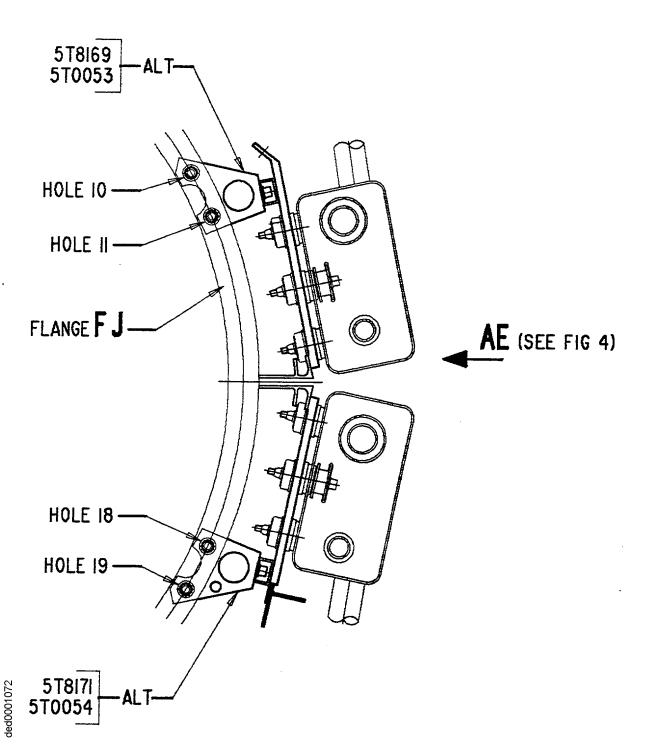
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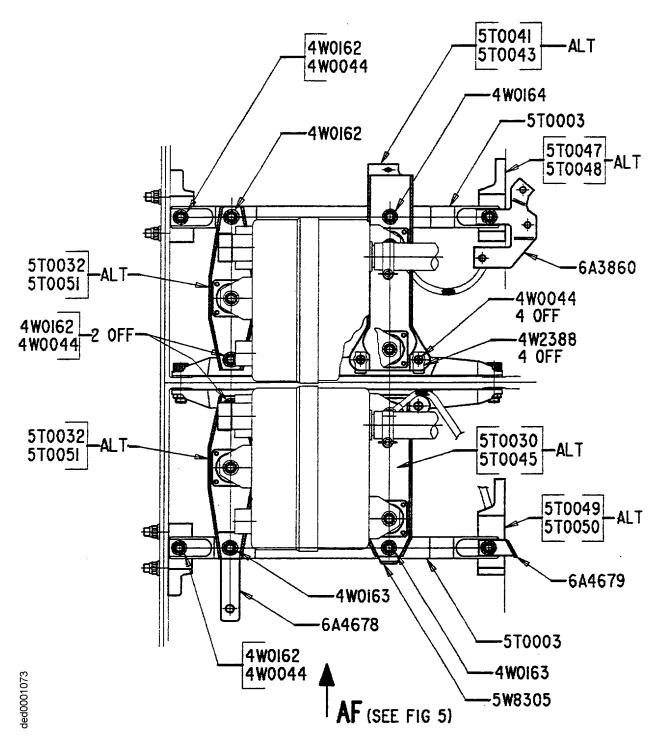
Enlarged view at AB (see Figure 1) Fig.2



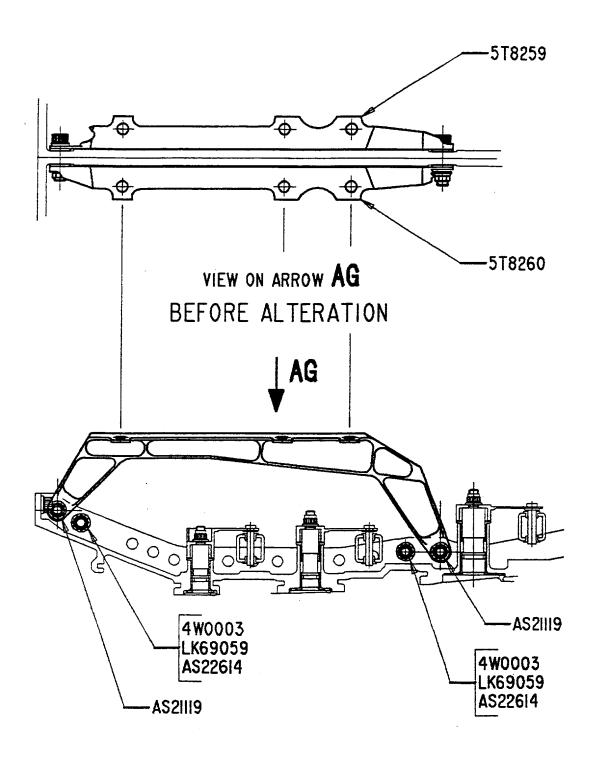


Section AC (see Figure 2) - Before alteration Fig.3



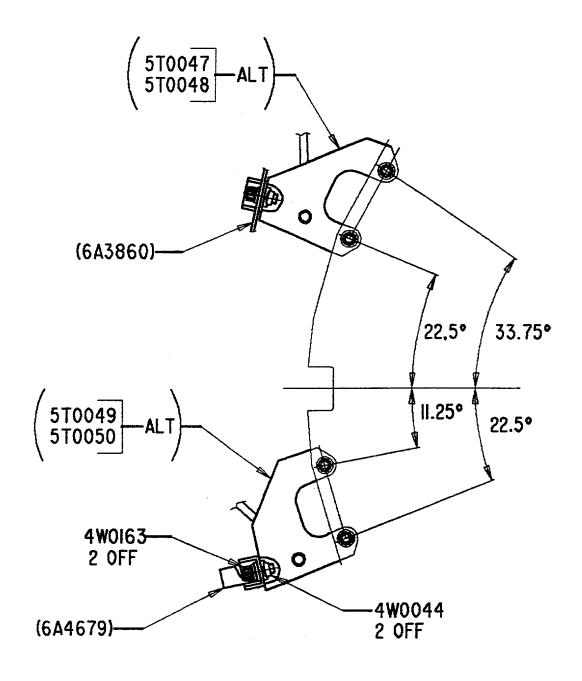


View on arrow AE (see Figure 3) - Before alteration Fig.4



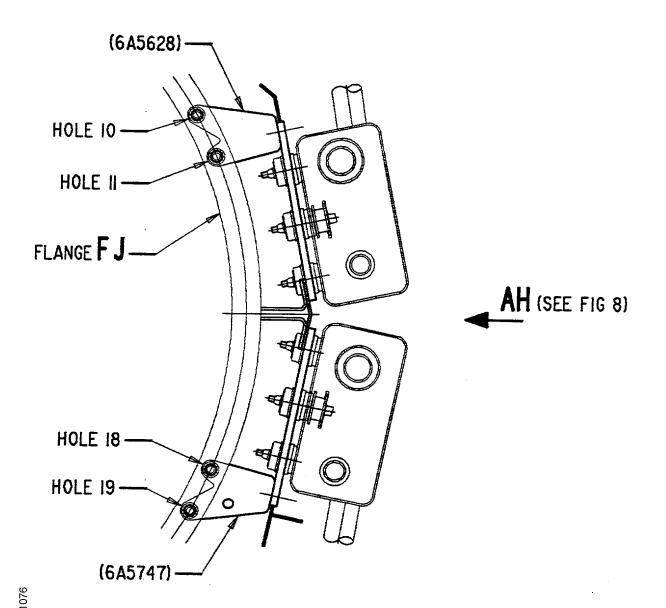
View on arrow AF and AG (see Figure 4) - Before alteration Fig.5



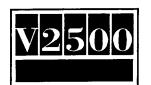


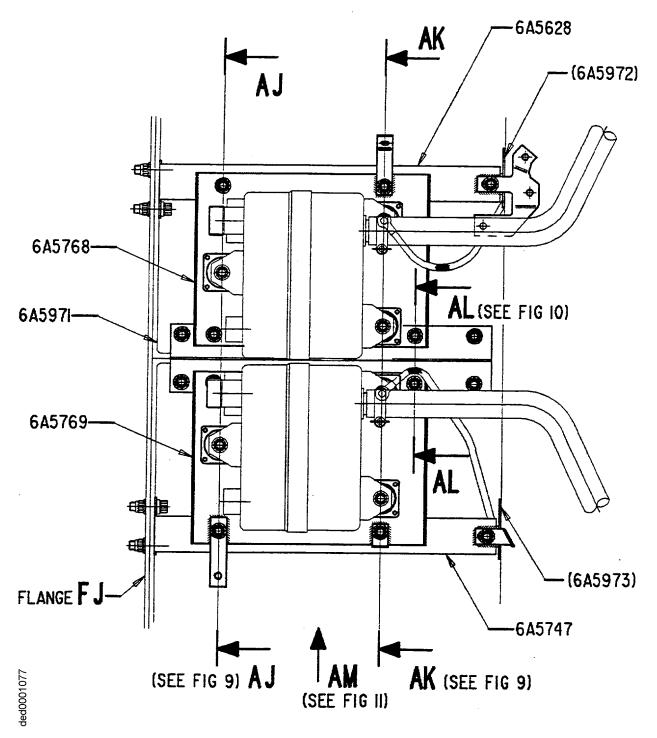
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Section AD, (see Figure 2) - Before alteration Fig.6

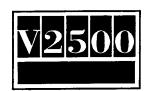


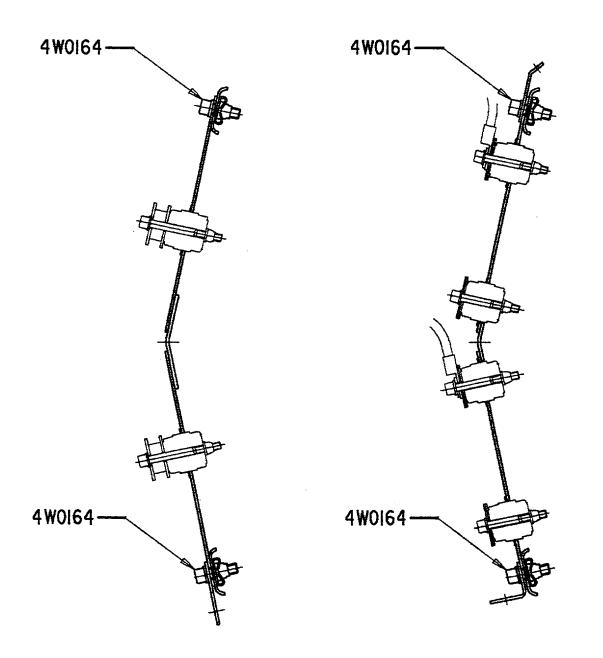
Section AC (see Figure 2) - After alteration Fig.7





View on arrow AH (see Figure 7) - After alteration Fig.8





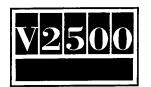
SECTION AJ (SEE FIG 8)

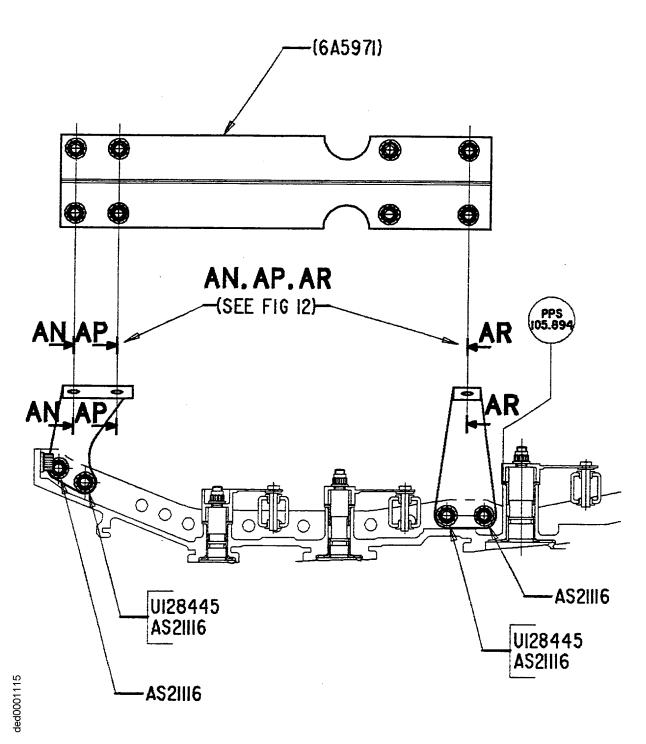
SECTION AK (SEE FIG 8)

Section AJ and AK (see Figure 8) - After alteration Fig.9

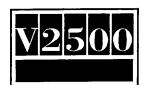
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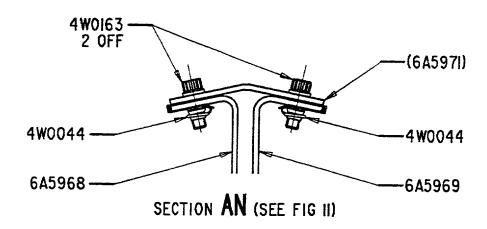
Section AL (see Figure 8) - After alteration Fig.10

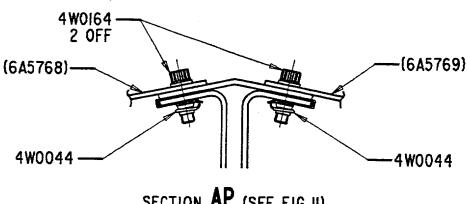




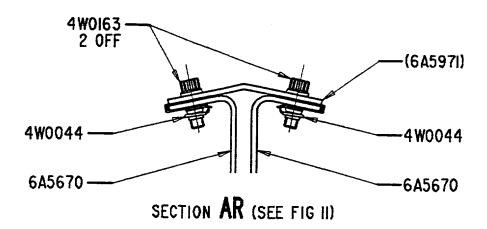
View on arrow AM (see Figure 8) - After alteration Fig.11









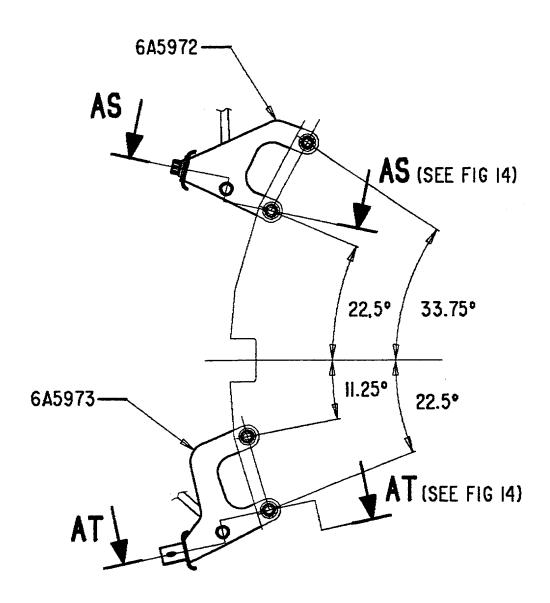


Section AN, AP and AR (see Figure 11) - After alteration Fig.12

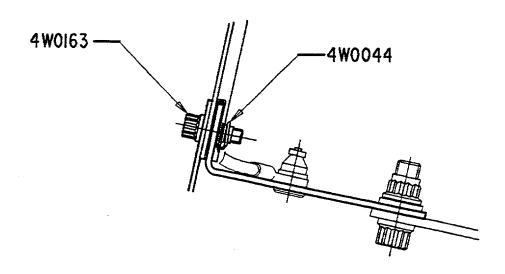
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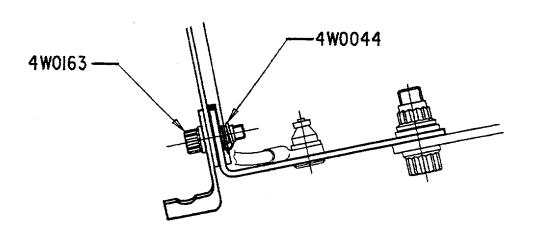




Section AD (see Figure 2) - After alteration Fig.13



SECTION AS (SEE FIG 13)

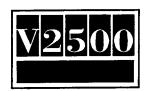


SECTION AT (SEE FIG 13)

Section AS and AT (see Figure 13) - After alteration Fig.14

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3. Material Information

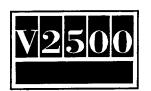
Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

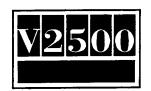
B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
U128445 (72-41-00)	2	6-22	Nut, reduced hex, thin	- (01–101)	(A)(1D)(E) (S2)
- (72-41-00)	2		Nut, self locking double hex	4W0003 (01-102)	(C)(2D)
- (72-41-00)	2		Washer	LK69059 (01-104)	(C)(2D)
- (72-41-00)	2		Bolt, close tol, bi-hex hd	AS22614 (01-108)	(C)(2D)
AS21116 (72-41-00)	4	8-74	Bolt, bi-hex hd	AS21119 (01-112)	(A)(1D)(C) (S1)(S2)
- (72-41-00)	1		Bracket, upper rear	5T8169 (03-280)	(B)
- (72-41-00)	1		Bracket	5T0053 (03-280)	(B)
- (72-41-00)	1		Bracket, lower rear	5T8171 (03-310)	(B)
- (72-41-00)	1		Bracket	5T0054 (03-310)	(B)
6A5968 (72-41-00)	1	206-00	Bracket, support	5T8259 (04-600)	(A)(B) (S1)(S2)
6A5970 (72-41-00)	1	190-00	Bracket	- (04–620)	(A)(E) (2)
6A5969 (72-41-00)	1	206-00	Bracket	5T8260 (04-650)	(A)(B) (S1)(S2)



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6A5970 (72-41-00)	1	190-00	Bracket	- (04-670)	(A)(E) (S2)
6A5972 (72-41-00)	1	168-00	Bracket	- (01–170)	(A)(E) (S2)
4W0163 (74-11-38)	1	8-14	Bolt, machine double hex	- (01–172)	(A)(E) (S2)
4W0044 (74-11-38)	1	4-70	Nut, a/o self locking	- (01–174)	(A)(E) (S2)
6A5628 (74-11-38)	1	778-00	Bracket	- (01–180)	(A)(E) (S2)
6A5768 (74-11-38)	1	1466-00	Bracket	5T0032 (01-200)	(A)(B) (S1)(S2)
- (74-11-38)	1		Bracket	5T0051 (01-200)	(B)
4W0164 (74-11-38)	1	5-01	Bolt, machine double hex	4W0162 (01-210)	(A)(C) (S1)(S2)
4W0164 (74-11-38)	1		Bolt, machine double hex	_ (01–212)	(A)(E) (S2)
4W0164 (74-11-38)	1		Bolt, machine double hex	- (01–214)	(A)(E) (S2)
4W0044 (74-11-38)	1		Nut, a/o self locking	_ (01–215)	(A)(E) (S2)
4W0163 (74-11-38)	1		Bolt, machine double hex	- (01–216)	(A)(E) (S2)
- (74-11-38)	1		Bolt, machine double hex	4W0162 (01-220)	(C)
- (74-11-38)	1		Nut, a/o self locking	4W0044 (01-225)	(C)
- (74-11-38)	1		Bracket (CP 5776)	5T0041 (01-270)	(B)
- (74-11-38)	1		Bracket (CP 5776)	5T0043 (01-270)	(B)
- (74-11-38)	1		Bolt, machine double hex	4W0164 (01-280)	(C)

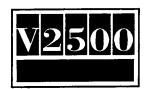


- (74-11-38)	2		Screw, 100 Degree C/S head	4W2388 (01-290)	(C)
- (74-11-38)	2		Nut, a/o self locking	4W0044 (01-295)	(C)
- (74-11-38)	1		Bracket	5T0047 (01-350)	(B)
- (74-11-38)	1		Bracket	5T0048 (01-350)	(B)
- (74-11-38)	1		Bracket (CP 5723, CP 5774, CP 5775)	6A3860 (01-351)	(B)
- (74-11-38)	1		Bracket	5T0003 (01-355)	(B)
-	1		Bolt, machine	4W0162	(C)
(74-11-38)			double hex	(01-365)	
- (74-11-38)	1		Nut, a/o self Locking	4W0044 (01-370)	(C)
- (74-11-38)	1		Bolt, machine double hex	4W0163 (01-375)	(C)
- (74-11-38)	1		Nut, a/o self locking	4W0044 (01-377)	(C)
6A5971 (74-11-38)	1	168-00	Bracket	- (01–470)	(A)(E) (S2)
4W0163 (74-11-38)	4		Bolt, machine double hex	- (01-472)	(A)(E) (S2)
4W0044 (74-11-38)	4		Nut, a/o self locking	- (01–473)	(A)(E) (S2)
4W0044 (74-11-38)	2		Nut, a/o self locking	- (01-474)	(A)(E) (S2)
6A5973 (74-11-38)	1	168-00	Bracket	- (01–570)	(A)(E) (S2)
4W0163 (74-11-38)	1		Bolt, machine double hex	- (01-572)	(A)(E) (S2)



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4W0044 (74-11-38)	1		Nut, a/o self locking	- (01-574)	(A)(E) (S2)
6A5747 (74-11-38)	1	266-00	Bracket	- (01–580)	(A)(E) (S2)
- (74-11-38)	1		Bracket (CP 5557)	6A4678 (01-590)	(B)
- (74-11-38)	1		Bracket (CP 5965)	5W8305 (01-595)	(B)
6A5769 (74-11-38)	1	1466-00	Bracket	5T0032 (01-600)	(A)(B) (S1)(S2)
- (74-11-38)	1		Bracket	5T0051 (01-600)	(B)
4W0164 (74-11-38	2		Bolt, machine double hex	- (01–610)	(A)(E) (S2)
4W0164 (74-11-38)	1		Bolt, machine double hex	- (01–612)	(A)(E) (S2)
4W0044 (74-11-38)	1		Nut, a/o self locking	- (01–613)	(A)(E) (S2)
4W0163 (74-11-38)	1		Bolt, machine double hex	- (01-614)	(A)(E) (S2)
- (74-11-38)	1		Bolt, machine double hex	4W0163 (01-620)	(C)
- (74-11-38)	1		Nut, a/o self locking	4W0044 (01-625)	(C)
- (74-11-38)	1		Bracket	5T0030 (01-670)	(B)
- (74-11-38)	1		Bracket	5T0045 (01-670)	(B)
- (74-11-38)	1		Bolt, machine double hex	4W0163 (01-680)	(C)
- (74-11-38)	2		Screw, 100 degrees c/s head	4W2388 (01-690)	(C)
- (74-11-38)	2		Nut, a/o self locking	4W0044 (01-695)	(C)



- (74-11-38)	1	Bracket (CP 5772)	6A4679 (01-740)	(B)
- (74-11-38)	1	Bracket	5T0049 (01-750)	(B)
- (74-11-38)	1	Bracket	5T0050 (01-750)	(B)
- (74-11-38)	1	Bracket	5T0003 (01-755)	(B)
- (74-11-38)	1	Bolt, machine double hex	4W0162 (01-765)	(C)
- (74-11-38)	1	Nut, a/o self locking	4W0044 (01-770)	(C)
- (74-11-38)	1	Bolt, machine double hex	4W0163 (01-775)	(C)
- (74-11-38)	1	Nut, a/o self locking	4W0044 (01-776)	(C)

- C. Instructions/Disposition Code Statements:
 - (A) New parts are currently available
 - (B) Old parts are no longer available
 - (C) Old parts may be used for other applications
 - (1D) Quantity increased to 4
 - (2D) Quantity decreased to 28
 - (E) Additional part
 - (S1) New parts may be used in place of old parts but not vice-versa
 - (S2) New parts must be fitted as a 'COMPLETE SET'

NOTE: The estimated 1996 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.