



ENGINE - LP COMPRESSOR - ADDITIONAL PLATE NUT ON THE NO.1 STRUT FAIRING PANEL FOR FIRE SHIELD - CATEGORY CODE 8 - MOD.ENG-72-0216

Printed in Great Britain

1. Planning Information

A. Effectivity

- (1) Aircraft:
 - (a) Airbus A319
 - (b) Airbus A320
 - (c) Airbus A321
- (2) Engine:
 - (a) V2500-A1 Engines prior to serial number V0362.
 - (b) V2522-A5 Engines prior to serial number V10131.
 - (c) V2524-A5 Engines prior to serial number V10131.
 - (d) V2527-A5 Engines prior to serial number V10131.
 - (e) V2527E-A5 Engines prior to serial number V10131.
 - (f) V2530-A5 Engines prior to serial number V10131.

B. Concurrent Requirements

- (1) This service bulletin must be incorporated subsequent to accomplishment of the IAE service bulletin No. V2500-ENG-72-0024 ENGINE - INCORPORATION OF FIRE SHIELDS ON THE NO.1 STRUT FAIRING PANEL A/O.
- (2) This service bulletin must be incorporated prior to, or in conjunction with the IAE service bulletin No. V2500-ENG-72-0230 ENGINE - SEAL, NO.1 STRUT FIRE SHIELD REPLACEMENT.

C. Reason

(1) Condition

The existing fire shield is secured by bolts and nuts with washers on the No.1 fairing panel, but this installation is difficult to remove the fire shield at the on-wing condition, because of hard access to the nuts and washers.

(2) Background

This condition has been observed during engine maintenance.

(3) Objective

Replace the current nuts and washers with plate nuts to enable the fire shield to be replaceable at the on-wing condition.

(4) Substantiation

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Analytically substantiated.

(5) Effects of Bulletin on Workshop Procedures:

Removal/Installation	Not affected
Disassembly/Assembly	Affected (See Supplemental Information)
Cleaning	Not affected
Inspection/Check	Not affected
Repair	Not affected
Testing	Not affected

(6) Supplemental Information

- (a) The Disassembly/Assembly of the post-service bulletin configuration requires instructions for fire shield.

D. Description

(1) The changes introduced by this service bulletin are as follows;

- (a) Four plate nuts are introduced at the four screw positions on the No.1 strut fairing panel to revise the current nuts and washers (see Figure 1).
- (b) The rivets which secure the plate nut are introduced at the eight positions on the No.1 strut fairing panel (See Figure 3).

NOTE: The alternative rivet is utilized to secure the plate nut with special tools and these special tools are defined by what type of rivet you are going to use.

- (2) The existing No.1 strut fairing panel can be reworked to a new configuration (See Figure 2 and Figure 3).

E. Approval

The part number changes and part modifications described in sections 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.

F. Compliance

Category Code 8

Accomplish base upon experience with the prior configuration.

G. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

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Venue	Estimated Manhours
(1) In service	Not applicable
(2) Rework of No.1 strut fairing panel	1 hour 8 minutes
Total	1 hour 8 minutes

H. Material - Price and Availability

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

I. Tooling - Price and availability

- (1) Special tools are required to accomplish the Service Bulletin.
- (2) The following Standard Equipment is required to accomplish this Service Bulletin when reworking the existing No.1 Fairing Panel.

Equipment Name	TYPE	Identification No.
Riveter, Power	G784	RB 022
Pulling Head	H681-3C	RB 023
Riveter, Power	G746	RB 024
Pulling Head	H955-3	RB 025
Pulling Head	H9055-3	RB 033
Adapter	680B46	RB 034

NOTE: For Identification No's. and detail information refer to Facilities Equipment Manual.

J. Weight and Balance

- (1) Weight change None
- (2) Moment arm No effect
- (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. Reference

- (1) Internal Reference No.

V2500-ENG-72-0216



EC94VJ059

(2) Other References

V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-32-03.

V2500 Power Plant Illustrated Parts Catalog, Chapter/Section 72-32-03.

V2500 Engine Manual (E-V25001-1A), Chapter/Section 72-32-00, Disassembly-02 (for V2500-A1 and V2500-A5), Assembly-14 Config-1 (for V2500-A1) and Config-2 (for V2500-A5).

V2500 Standard Practices/Processes Manual (SPP-V2500-1IA), Chapter/Section 70-03-00 Special handling of materials and solutions-01.

V2500 Standard Practices/Processes Manual (SPP-V2500-1IA), Chapter/Section 70-11-26 Solvent cleaning-03.

Facilities Equipment Manual (FE-V2500-1IA).

Service Bulletin V2500-ENG-72-0024 ENGINE - INCORPORATION OF FIRE SHIELDS ON THE NO.1 STRUT FAIRING PANEL A/O.

Service Bulletin V2500-ENG-72-0230 ENGINE - SEAL, NO.1 STRUT FIRE SHIELD REPLACEMENT.

Aircraft Modifications 21948 and 24259

M. Other publications affected

- (1) V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-32-03
- (2) V2500 Power Plant Illustrated Parts Catalog, Chapter/Section 72-32-03.
- (3) V2500 Engine Manual (E-V25001-1A), Chapter/Section 72-32-00, Disassembly-02 (for V2500-A1 and V2500-A5), Assembly-14 Config-1 (for V2500-A1) and Config-2 (for V2500-A5).
- (4) V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-32-03, Cleanig-02, Config-1.
- (5) V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-32-03, Inspection/Check-02, Config-1.
- (6) V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-32-03, Repair, VRS1209, VRS1901, VRS1903.

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2. Accomplishment Instructions

A. Rework Instructions

- (1) Rework the 5A0212 and 5A1411 No.1 strut fairing panel (Ref. 72-32-03, Fig/Item No. 02-300) and reidentify as follows;

WARNING: YOU HAVE TO MAKE SURE THE STANDARD PRACTICES/PROCESSES MANUAL (SPM) TASK 70-03-00-100-501, SPECIAL HANDLING OF MATERIALS AND SOLUTIONS-01 BEFORE YOU DO STEP (f) BECAUSE THE PART MATERIAL IS TITANIUM ALLOY.

Procedure	Supplementary Information
(a) Set-up and make sure the drilling positions (eight positions)	Refer to Figure 2, requirements
(b) Drill the applicable holes for one position (two holes in each) and do a same modification on other three positions (six holes) on the No.1 strut fairing panel	Refer to Figure 2, Use a 0.098 to 0.101 in. (2,50 to 2,56 mm.) drill
(c) Examine	Make sure holes are correctly drilled
(d) Countersinks the eight drilled holes where shown	Refer to Figure 2, Use standard workshop equipment
(e) Remove all sharp edges from the new holes and make a smooth surface	Use standard workshop equipment
(f) Clean the affected areas	Refer to SPM TASK 70-11-26-300-503 solvent cleaning-03
(g) Do a crack test the affected areas	Refer to SPM TASK 70-23-05-230-501 penetrant inspection
(h) Attach the plate nut onto the applicable four positions of the No.1 strut fairing panel	Use MS21076L04N, plate nut Refer to Figure 3
(i) Install rivets into the plate nut through the holes at eight positions	Use CR2662-3-03 or CR2672-3-03 blind rivet and the formed rivet must have no cracks and must be tight Refer to Figure 3



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NOTE (1): The alternative rivet is utilized to secure the plate nut with standard equipment and these standard equipment are defined by what type of rivet you are going to use.

NOTE (2): If you are going to use the CR2662-3-03 rivet, you have to use the standard equipment, G784 and H681-3C, but if you are going to use the CR2672-3-03 rivet, you have to use the standard equipment, G784, 680B46 and H9055-3 or G746 and H955-3. Refer to I.Tooling section.

(j) Make a mark of the new part No. on the No.1 strut fairing panel adjacent to the old part No., make two lines (==) on the old part No. to erase it

Use the Vibro-Peen method, Refer to Figure 1 (Sheet 2 of 2)

Old Part No.	New Part No.
5A0212	5A1692
5A1411	5A1713

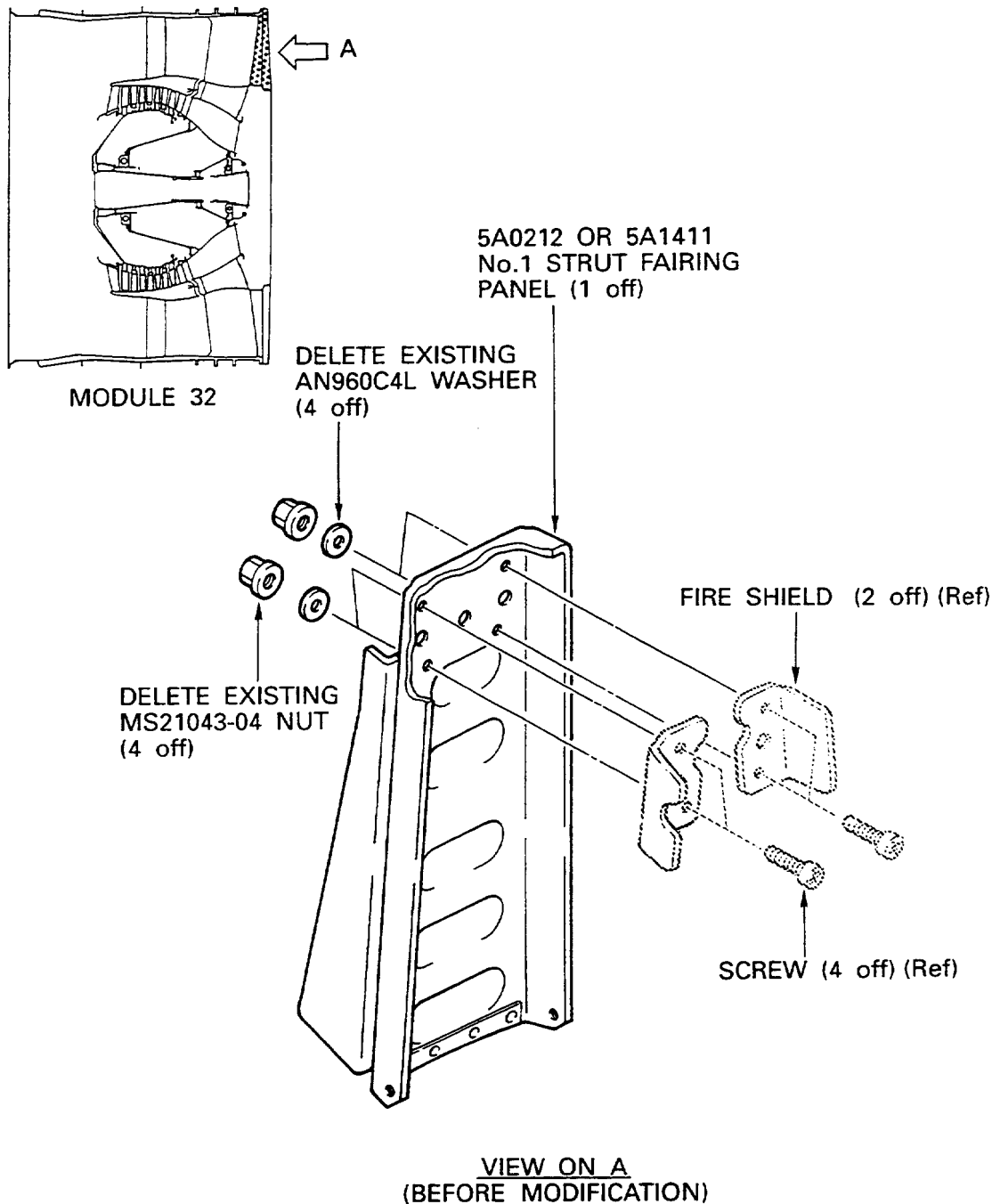
B. Assembly Instructions

(1) Install the two fire shields to the new 5A1692 or 5A1713, No.1 strut fairing panel. Refer to Engine Manual (E-V2500-1IA), Chapter/Section 72-32-00, Assembly-14 Config-1 (for V2500-A1) or Config-2 (for V2500-A5).

C. Record Instructions

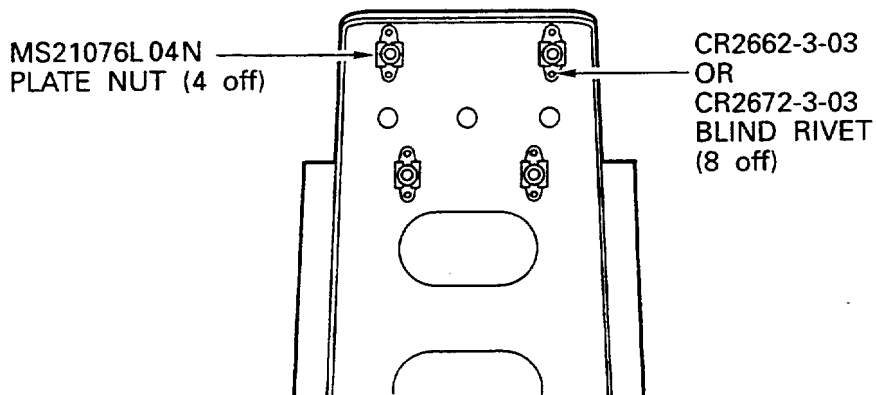
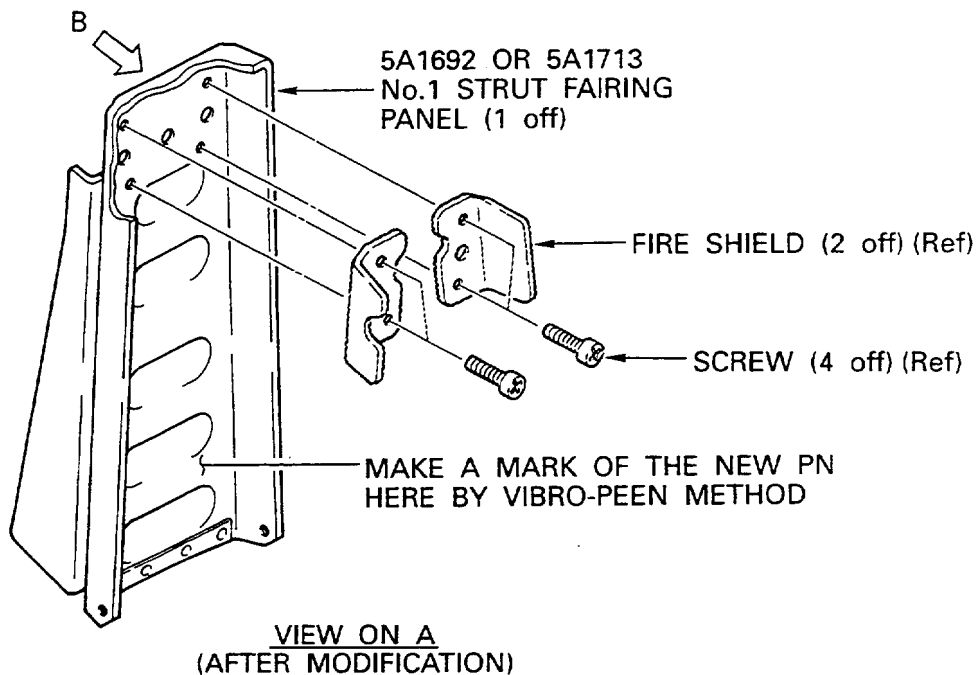
A record of accomplishment is necessary.

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Before and after modification of the No.1 strut fairing panel
Fig.1 (Sheet 1 of 2)

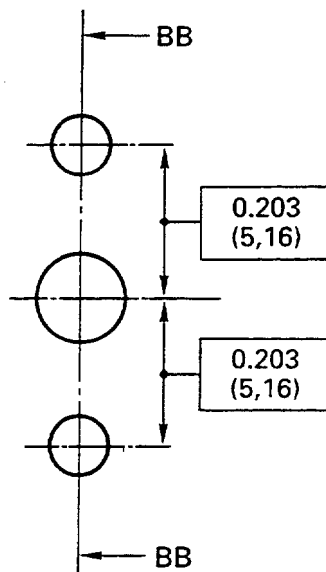
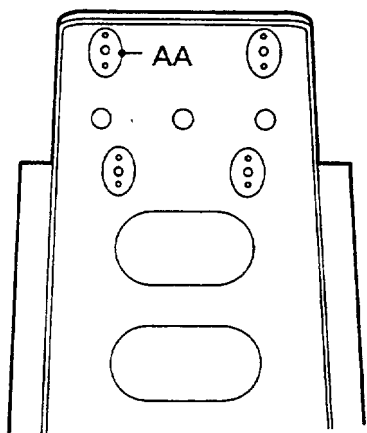
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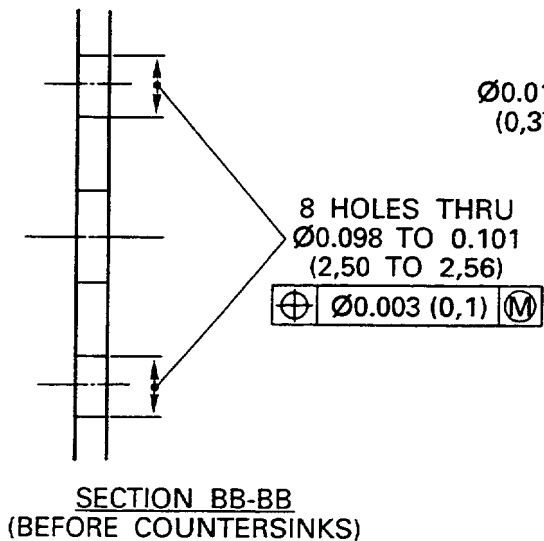
VIEW ON B
*VIEW ON THE No.1 STRUT FAIRING PANEL
WHEN YOU LOOK FROM THE FRONT OF THE ENGINE

Before and after modification of the No.1 strut fairing panel
Fig.1 (Sheet 2 of 2)

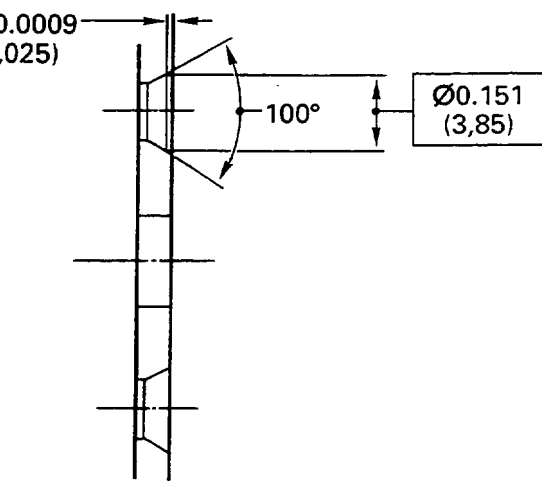
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DETAIL AA



SECTION BB-BB
(BEFORE COUNTERSINKS)



SECTION BB-BB
(AFTER COUNTERSINKS)

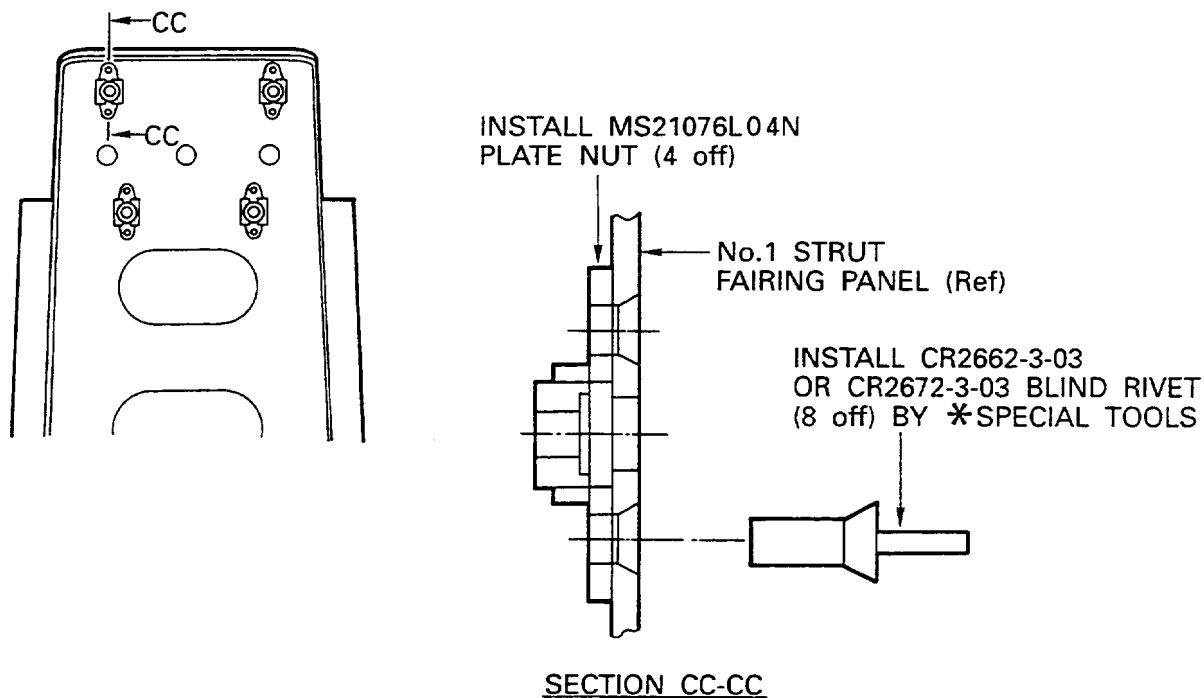
*DO A SAME MODIFICATION ON OTHER CIRCLE
MARKED AREAS (3 POSITIONS)

Drilling position of the No.1 strut fairing panel
Fig.2

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*THE SPECIAL TOOLS SHOULD BE USED TO INSTALL RIVET IN ORDER TO AS FOLLOWING LIST;

Type	Rivet	Special Tool
A	CR2662-3-03 (*1)	IAE3J12743 and IAE3J12744
B	CR2672-3-03 (*2)	IAE3J12743, IAE3J12793 and IAE3J12794

NOTE: (a) If you want to use (*1) rivet,
you have to use Type A tools.
(b) If you want to use (*2) rivet,
you have to use Type B tools.

Install the plate nut onto the No.1 strut fairing panel
Fig.3

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3. Material Information

Applicability: For each V2500-A1 and V2500-A5 Engines 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.)	Instruction/ Disposition

For V2500-A1 Engines					
5A1692 (72-32-03)	1	2032.00	.Panel, A/O Fairing No.1	5A0212 (02-300)	(A)(B) (S1)(1D)
5A1713 (72-32-03)	1		.Panel, A/O Fairing No.1	5A1411 (02-300)	(B)(S1) (1D)
MS21076L04N (72-32-03)	4		..Nut, Plate	----- (02-374)	(A)(E) (S1)
CR2662-3-03 (72-32-03)	8	5.06	..Rivet, Blind 100 DEG Flat Head	----- (02-376)	(A)(E) (S1)
CR2672-3-03 (72-32-03)	Ref		..Rivet, Blind 100 DEG Flat Head	----- (02-376)	(A)(E) (F)(S1)
----- (72-32-03)	2		.Nut	MS21043-04 (02-405)	(C)(S1)
----- (72-32-03)	2		.Nut	MS21043-04 (02-425)	(C)(S1)
----- (72-32-03)	2		.Washer	AN960C4L (02-407)	(C)(S1)
----- (72-32-03)	2		.Washer	AN960C4L (02-427)	(C)(S1)

For V2522-A5, V2524-A5, V2527-A5, V2527E-A5 and V2530-A5 Engines

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5A1692 (72-32-03)	1	2032.00	.Panel, A/O Fairing No.1	5A0212 (02-300)	(A)(B) (S1)(1D)
5A1713 (72-32-03)	1		.Panel, A/O Fairing No.1	5A1411 (02-300)	(B)(S1) (1D)
MS21076L04N (72-32-03)	4		..Nut, Plate	----- (02-374)	(A)(E) (S1)
CR2662-3-03 (72-32-03)	8	5.06	..Rivet, Blind 100 DEG Flat Head	----- (02-376)	(A)(E) (S1)
CR2672-3-03 (72-32-03)	Ref		..Rivet, Blind 100 DEG Flat Head	----- (02-376)	(A)(E) (F)(S1)
----- (72-32-03)	2		.Nut	MS21043-04 (02-405)	(C)(S1)
----- (72-32-03)	2		.Nut	MS21043-04 (02-425)	(C)(S1)
----- (72-32-03)	2		.Washer	AN960C4L (02-407)	(C)(S1)
----- (72-32-03)	2		.Washer	AN960C4L (02-427)	(C)(S1)

NOTE: The unit prices, if shown, are an estimate and they are given for the purposes of planning only. For information about actual prices, refer to the IAE Price Catalog or contact IAE's Spare Parts Sales Department.

C. Instruction/Disposition Code Statements:

- (A) New part is currently available for sale.
- (B) Old part will no longer be available for sale.
- (C) Old part is continue to be available for sale.
- (E) Additional item.
- (F) Alternative part with CR2662-3-03.
- (S1) New parts coded (S1) must replace old parts coded (S1) as a COMPLETE SET per Engine.
- (1D) Old part can be reworked and reidentify to a new configuration.