

International Aero Engines

SERVICE BULLETIN

ENGINE - L. P. COMPRESSOR - INTRODUCTION OF NEW HIGH TENSION BOLT FOR
NO.2 BEARING SUPPORT FLANGE

MODEL APPLICATION

V2500-A1
V2522-A5
V2524-A5
V2527-A5
V2527E-A5
V2530-A5
V2533-A5
V2525-D5
V2528-D5

BULLETIN INDEX LOCATOR

72-32-00

COMPLIANCE CATEGORY CODE

5

INTERNAL REFERENCE NO.

98VJ011

Feb. 7, 2000

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ENGINE - L. P. COMPRESSOR - INTRODUCTION OF NEW HIGH TENSION BOLT FOR
NO.2 BEARING SUPPORT FLANGE

1. Planning Information

A. Effectivity

(1) Aircraft:

- (a) Airbus A319
- (b) Airbus A320
- (c) Airbus A321
- (d) Boeing Douglas MD-90

(2) Engine:

- (a) V2500-A1 Engines prior to Serial Number V0362
- (b) V2522-A5 Engines prior to Serial Number V10720
- (c) V2524-A5 Engines prior to Serial Number V10720
- (d) V2527-A5 Engines prior to Serial Number V10720
- (e) V2527E-A5 Engines prior to Serial Number V10720
- (f) V2530-A5 Engines prior to Serial Number V10720
- (g) V2533-A5 Engines prior to Serial Number V10720
- (h) V2525-D5 Engines prior to Serial Number V20286
- (i) V2528-D5 Engines prior to Serial Number V20286

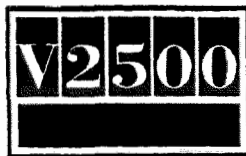
B. Reason

(1) Condition

The extension of bolts that join the No.2 bearing support and the Fan Frame was experienced on V2500-A1, V2500-A5 and V2500-D5 engines that had a fan blade-off.

(2) Background

Analysis shows that the fan blade-off load causes the extension of the bolt.



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(3) Objective

The purpose of this Service Bulletin is to prevent the bolt from extending in the unlikely event of another fan blade-off incident.

(4) Substantiation

A satisfactory engineering analysis has been done on the change introduced by this Service Bulletin.

(5) Effect of Bulletin on the following shop functions:

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

The changes introduced by this Service Bulletin are follows:

The material of bolts that connect the No.2 Bearing Support to the Fan Frame has been changed from steel to nickel alloy.

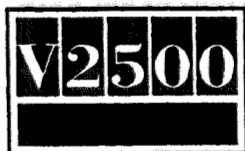
D. Approval

The part number changes described in this Bulletin have been shown to comply with the applicable Federal Aviation Regulation and are FAA-APPROVED for Engine Model Listed.

E. Compliance

Category Code 5

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



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F. Manpower

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

<u>Venue</u>	<u>Estimated man-hours</u>
In-Service	Not applicable
At Overhaul	No additional time is necessary to embody this Service Bulletin

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

G. Material - Price

- (1) Modification Kit not required.

H. Tooling - Price and Availability

- (1) Tool not required.

I. Weigh and Balance

- | | |
|------------------|------------------------------------------------------------------|
| (1) Weigh change | Plus 0.111lbs (0,05Kg) |
| (2) Moment arm | No affect |
| (3) Datum | Engine front mount Centerline
(Power Plant Section (PPS) 100) |

J. Electrical Load Data

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

K. References

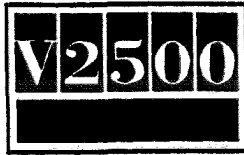
- (1) IAE V2500 Engine Manual (E-V2500-1IA); 72-30-00 Assembly-03 and Assembly-04
- (2) IAE V2500 Engine Manual (E-V2500-3IA); 72-30-00 Assembly-03 and Assembly-04
- (3) IAE Overhaul Process and Consumable Index
- (4) IAE Standard Practices/Procedures manual
- (5) IAE V2500 Service Bulletin No:

V2500-ENG-72-0333 ENGINE - LP COMPRESSOR - INCORPORATION OF STRONGER
BOLTS FOR THE LPC BLEED DUCT TO FAN FRAME

Feb. 7, 2000

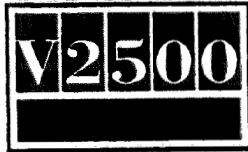
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L. Other Publications Affected

- (1) IAE V2500 Engine Illustrated Parts Catalog (S-V2500-1IA), 72-32-00, to add new parts.
- (2) IAE V2500 Engine Illustrated Parts Catalog (S-V2500-2IA), 72-32-00, to add new parts.
- (3) IAE V2500 Engine Illustrated Parts Catalog (S-V2500-3IA), 72-32-00, to add new parts.
- (4) IAE V2500 Engine Illustrated Parts Catalog (S-V2500-5IA), 72-32-00, to add new parts.
- (5) IAE V2500 Engine Illustrated Parts Catalog (S-V2500-6IA), 72-32-00, to add new parts.
- (6) IAE V2500 Engine Illustrated Parts Catalog (S-V2500-7IA), 72-32-00, to add new parts.



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2. Accomplishment Instruction

A. For V2500-A1 and V2500-A5 Engines:

(1) Rework Instructions

None

(2) Assembly Instructions

Install new 5A1836 bolt (6 off) and new 5A1841 bolt (14 off) to the No.2 Bearing Support Assembly by the procedure given in reference (1), Engine Manual (E-V2500-1IA), 72-30-00, Assembly-03 and Assembly-04.

(3) Recording Instructions

A record of accomplishment is necessary.

B. For V2500-D5 Engines:

(1) Rework Instructions

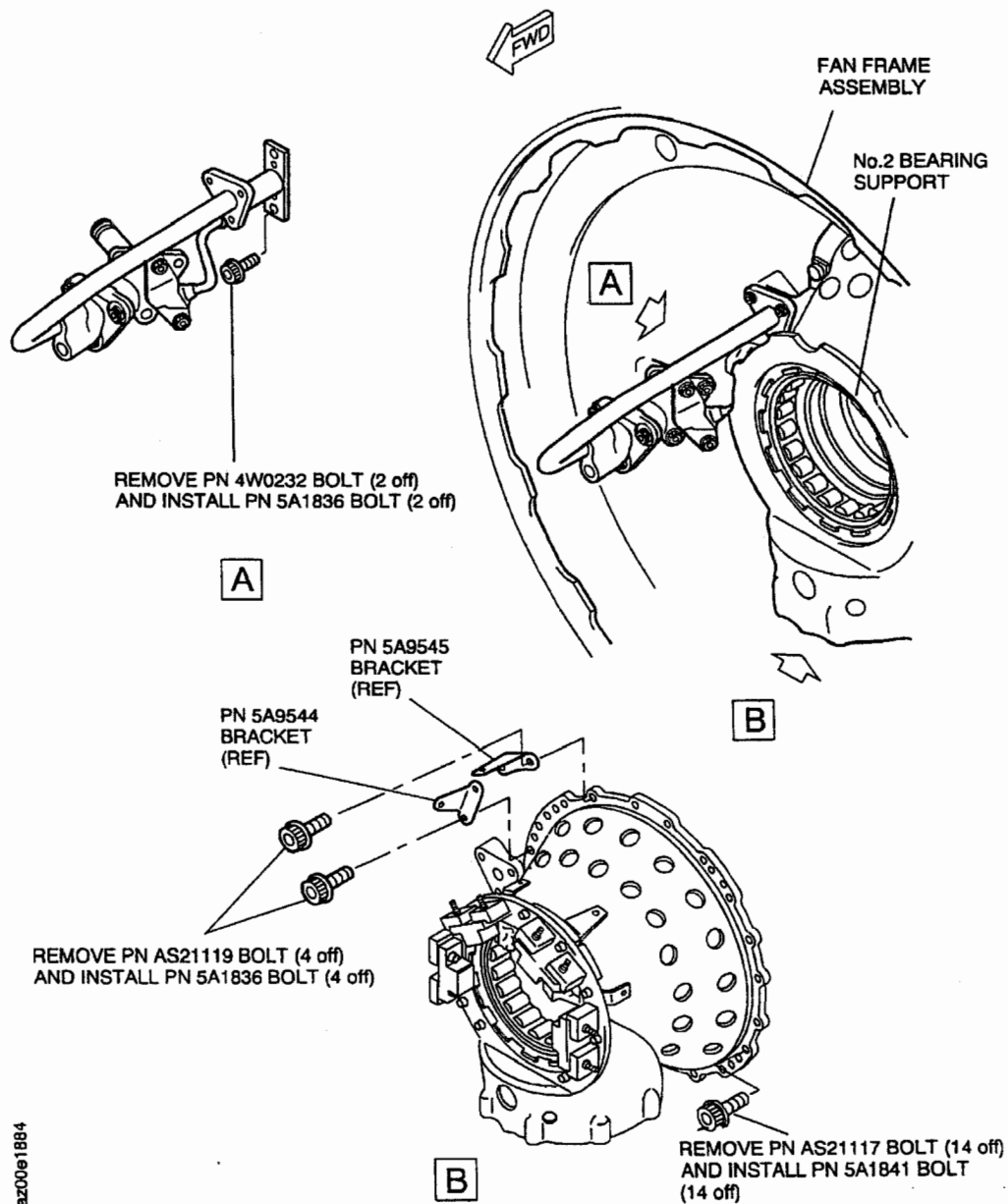
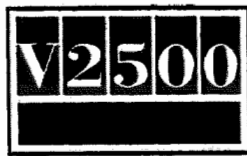
None

(2) Assembly Instructions

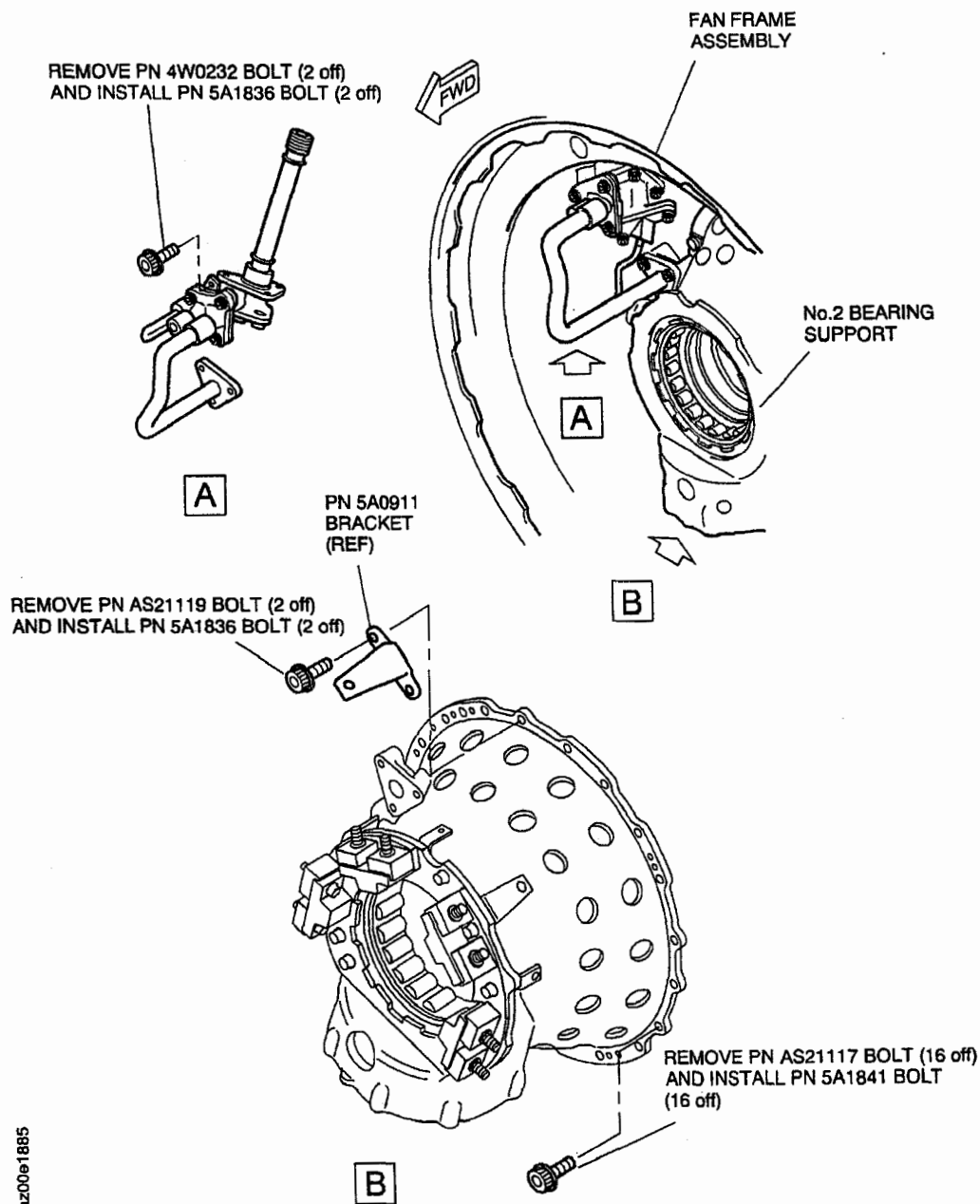
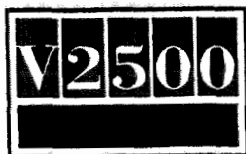
Install new 5A1836 bolt (4 off) and new 5A1841 bolt (16 off) to the No.2 Bearing Support Assembly by the procedure given in reference (2), Engine Manual (E-V2500-3IA), 72-30-00, Assembly-03 and Assembly-04.

(4) Recording Instructions

A record of accomplishment is necessary.

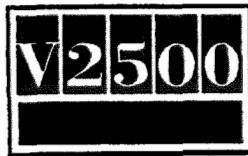


Location of the bolts that connect the No.2 Bearing Support to the Fan Frame for V2500-A1 and V2500-A5
Figure 1



Location of the bolts that connect the No.2 Bearing Support to the Fan Frame for V2500-D5

Figure 2



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3. Material Information

Applicability: For each V2500 engine for which this Service Bulletin is applicable.

A. Kits necessary for this Service Bulletin.

None

B. Parts affected by this Service Bulletin:

New Part No. (ATA No.)	Qty.	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	INSTRUCTIONS DISPOSITION
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For V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2530-A5 and V2533-A5 engines

5A1836 (72-32-00)	2		. Bolt	4W0232 (02-350)	(S1) (A) (B)
5A1836 (72-32-00)	4		. Bolt	AS21119 (02-472)	(S1) (A) (B)
5A1841 (72-32-00)	14		. Bolt	AS21117 (02-480)	(S1) (A) (B)

For V2525-D5 and V2528-D5 engines

5A1836 (72-32-00)	2		. Bolt	4W0232 (02-350)	(S1) (A) (B)
5A1836 (72-32-00)	2		. Bolt	AS21119 (02-472)	(S1) (A) (B)
5A1841 (72-32-00)	16		. Bolt	AS21117 (02-480)	(S1) (A) (B)

NOTE: The unit prices, if shown, are an estimate and they are given for the purpose 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:

- (S1) Old and new parts are freely and fully interchangeable.
- (A) New part is currently available for sale.
- (B) Old part can be used up on the other applications.

