International Aero Engines

SERVICE BULLETIN

ENGINE - FAN CASE ASSEMBLY - PROVIDE SHORTER FAN EXIT GUIDE VANE BOLT TO ELIMINATE INTERFERENCE BETWEEN BOLT AND EEC MOUNT BRACKET - CATEGORY CODE 4 - MOD.ENG-72-0140

1. PLANNING INFORMATION

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engines Serial Nos. V0204 through V0290.

B. Reason

(1) Condition

The potential interference between fan case bolt and EEC mount bracket.

(2) Background

To solve interference problem.

(3) Objective

It was determined that the length of bolts which secure the Fan Exit Guide Vanes (FEGV) to the Fan Case Assembly, would be shortened in order to prevent potential interference with the EEC mount bracket.

(4) Substantiation

None.

(5) Effects of Bulletin on Workshop Procedures:

Removal/Installation	Not applicable
Disassembly/Assembly	Not applicable
Cleaning	Not applicable
Inspection/Check	Not applicable
Repair	Not applicable
Testing	Not applicable

(6) Supplemental Information

None.

C. Description

(1) To introduce new shorter bolts to prevent interference problem.

NOTE: Existing 4W1252 bolt length is 1.125in (28,6mm) and new introduced bolt length is 1.000in (25,4mm).

D. Approval

The part number changes described in section 2 and 3 or 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 4

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

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
(1) In service	
(a) To gain access	16 minutes
(b) To embody	2 hours 20 minutes
(c) To return engine to flyable status	20 minutes
TOTAL	2 hour 56 minutes
(2) At overhaul	Not applicable

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

None.

I. Weight and Balance

(1) Weight change — None

(2) Moment arm — No effect

(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.

EC92VJ023

EC92VJ023-01

EC92VJ023-02

(2) Other References

The V2500 Engine Illustrated Parts Catalog.

The V2500 Power Plant Illustrated Parts Catalog.

The V2500 Aircraft Maintenance Manual.

IAE Service Bulletin No. V2500-ENG-72-0103.

L. Other Publications Affected

(1) The V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-32-00.

(2) The V2500 Power Plant Illustrated Parts Catalog, Chapter/Section 72-32-00.

2. Accomplishment Instruction

A. Prerequisite Instructions

WARNING: BE CAREFUL WHEN YOU WORK ON THE ENGINE COMPONENTS IMMEDIATELY AFTER THE ENGINE IS SHUTDOWN. THE ENGINE COMPONENTS CAN STAY HOT FOR UP TO ONE HOUR AND CAN CAUSE INJURY.

(1) Make sure that the engine has been shutdowm for at least five minutes.

(2) Open the fan cowls by the approved procedures in Reference (3), Chapter/Section 71-13-00, Maintenance Practices.

(3) Open the thrust reverser halves by the approved procedures in Reference (3), Chapter/Section 78-32-00, Maintenance Practices.

(4) Put a workmat in position in the fan case.

NOTE: Make sure that the workmat has sufficient dimensions to give full protection to the lower half of the fan case.

(5) Remove the inlet cone by the approved procedures in Reference (3), Chapter/Section 72-38-11, Removal.

(6) Remove the 22 stage 1 fan blades and annulus fillers by the approved procedures in Reference (3), Chapter/Section 72-31-11, Removal.

(7) Put the IAE1J12187, protection cover on to the LP compressor bleed duct screen and put the covers on all of other openings in the fan case and the fan frame (Refer to Figure 1).

B. Replacement Instructions

(1) Find the outer platforms of the FEGV that is installed on the engine.

(2) Remove the 20 4W1252, Bolts which attach the FEGV to the Fan Case Assembly refere to Reference (3), Chapter/Section 72-32-88, Removal (Refer to Figure 2).

(3) Install the new 20 4W1250, Bolts refer to Reference (3), Chapter/Section 72-32-88, Installation (Refer to Figure 2).

(4) Torque the Bolts to 85 to 105 lbfin (10,00 to 12,00 Nm).

(5) Remove the 40 4W1252, Bolts which attach the FEGV to the Fan Case Assembly refer to Reference (3), Chapter/Section 72-32-88, Removal (Refer to Figure 2).

(6) Install the new 40 4W1250, Bolts refer to Reference (3), Chapter/Section 72-32-88, Installation (Refer to Figure 2).

(7) Torque the Bolts to 85 to 105 lbfin (10,00 to 12,00 Nm).

C. Postrequisite Instructions

(1) Install the 22 stage 1 fan blades and annulus fillers to their initial positions by the approved procedures in Reference (3), Chapter/Section 72-31-11, Installation.

(2) Install the inlet cone by the approved procedures in Reference (3), Chapter/Section 72-38-11, Installation.

(3) Remove the cover from all of the openings in the fan case and the fan frame (Refer to Figure 1).

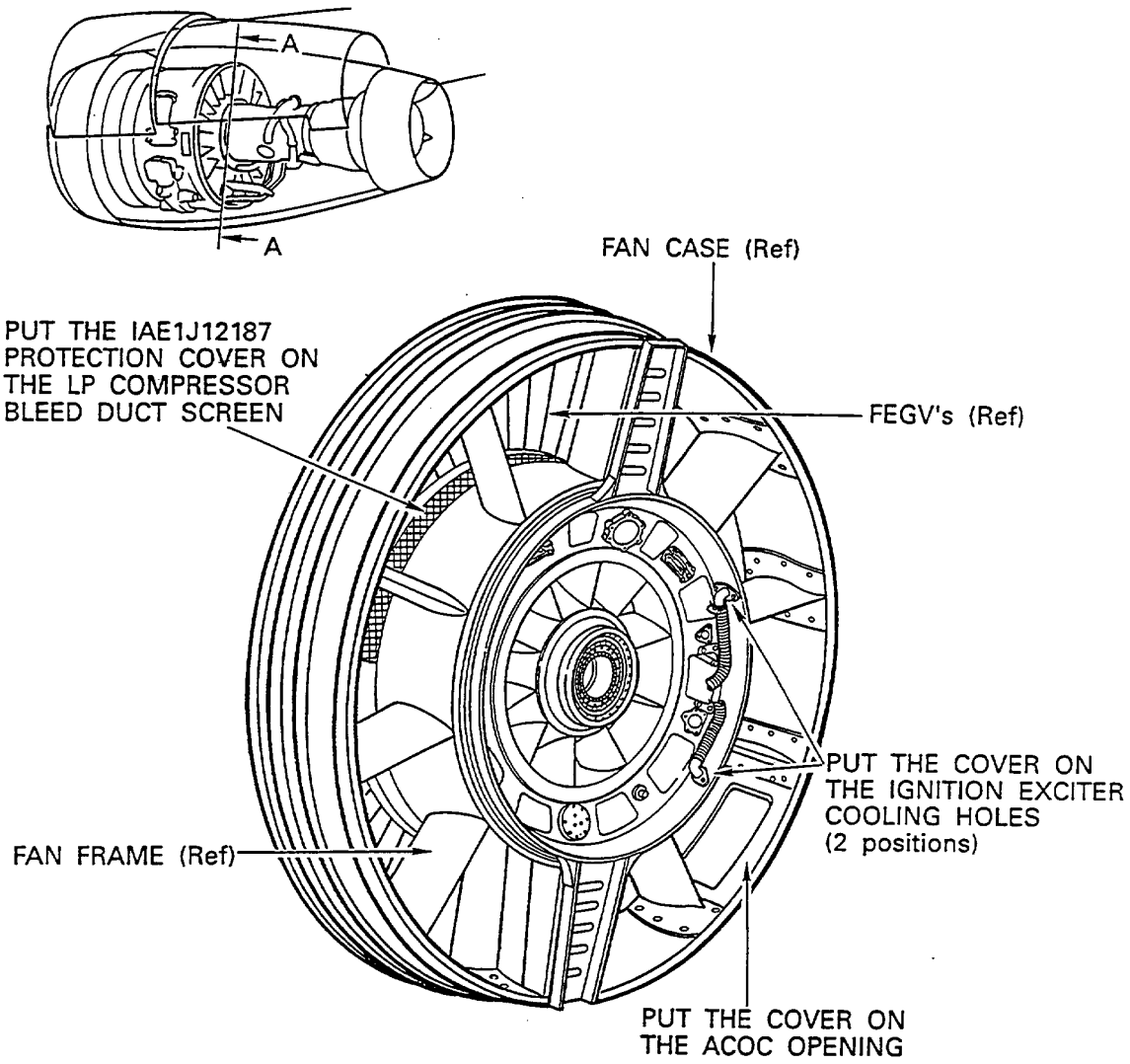
(4) Remove the workmat from the fan case.

(5) Close the thrust reverser halves by the approved procedures in Reference (3), Chapter/Section 78-32-00, Maintenance Practices.

(6) Close the fan cowls by the approved procedures in Reference (3), Chapter/Section 71-13-00, Maintenance Practices.

D. Recording Instructions

(1) A record of accomplishment is required.



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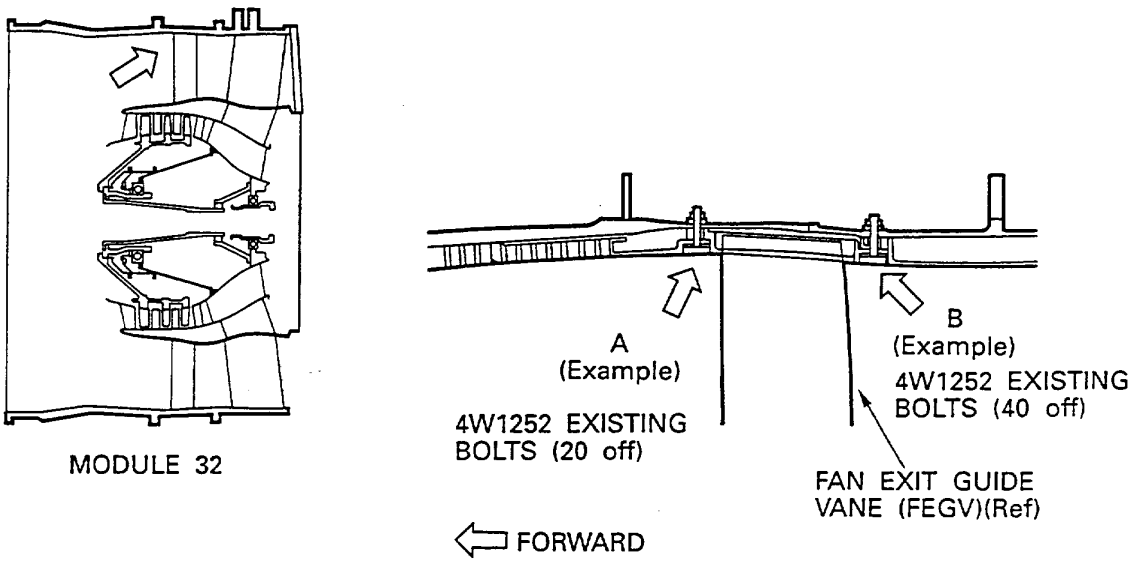
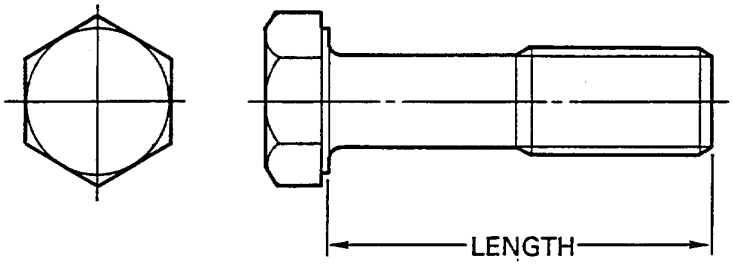
Location of the openings to be protected
Fig.1





*REMOVE 4W1252 (60 off) BOLTS FROM A AND B ALL POSITIONS AND INSTALL NEW 4W1250 (60 off) BOLTS TO THE A AND B ALL POSITIONS

*EXISTING BOLT LENGTH	1.125(28,6)
NEW BOLT LENGTH	1.000(25,4)

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Alteration of the FEGV Bolts
Fig.2

3. Material Information

Applicability: For each V2500-A1 engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price ($)	Keyword	Old Part No. (IPC No.)	Instructions/ Disposition
4W1250 (72-32-00)	20	4.82	.Bolt, Hex Head	4W1252 (01-335)	(A)(B)(S1) (S2)(S3)(1D)
4W1250 (72-32-00)	40	4.82	.Bolt, Hex Head	4W1252 (01-370)	(A)(B)(S1) (S2)(S3)(1D)

B. Instruction/Disposition Code Statements:

(A) New part is currently available.
(B) Old part will continue to be available.
(S1) New and old parts are not interchangeable either physically or functionally.
(S2) New part can be applied to Post S.B. V2500-ENG-72-0103 configuration.
(S3) Old part can be applied to Pre S.B. V2500-ENG-72-0103 configuration.
(1D) Mixing of old and new part is not permissible.

NOTE: The estimated 1994 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the IAE Price Catalogue or contact IAE's Spare Parts Sales Department for information concerning firm prices.