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DATE: Apr. 7/05

V2500-A1/A5/D5 SERIES PROPULSION SYSTEM SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin EV2500-75-0095 and the Initial Issue of the Supplement

**Bulletin Initial Issue** 

Remove Incorporate Reason for change

Pages 1 to 6 of the Initial issue

Service Bulletin

<u>Supplement Initial Issue</u>

Remove Incorporate Reason for change

Page 1 Initial issue

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## ENGINE - LP TURBINE - INTRODUCTION OF SPACER PLATES WITH INCREASED DIAMETER

### 1. Planning Information

### A. Effectivity

(1) Airbus A319/A320/A321

Boeing Douglas Product Division MD90

(2) Engine

V2500-A1 Engines prior to Serial No. V0362

V2522-A5 Engines prior to Serial No. V12015

V2524-A5 Engines prior to Serial No. V12015

V2527-A5 Engines prior to Serial No. V12015

V2527E-A5 Engines prior to Serial No. V12015

V2527M-A5 Engines prior to Serial No. V12015

V2530-A5 Engines prior to Serial No. V12015

V2533-A5 Engines prior to Serial No. V12015

V2525-D5 Engines prior to Serial No. V20286

V2528-D5 Engines prior to Serial No. V20286

# B. Concurrent Requirements

None.

# C. Reason

#### (1) Problem

The V2500 Production engine suffer from excessive wear at the ACC rearmount

### (2) Evidence

The rear flange of the ACC manifolds and the ACC support bridges have to be replaced very often.

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(3) Substantiation

Testing has shown that the increased contact area on the ACC rear flanges reduces the rate of material abrasion on the ACC rear flanges considerably. The contact pressure will decrease as the effective contact surface between spacers and flanges will increase when the spacers and the flanges adjust to each other over time.

(4) Objective

Introduction of spacer plate with increased diameter from 0.63 to 0.87 in. (16mm to 22mm) to provide a considerable increase in contact area.

- (5) Effect of Bulletin on:
  - (a) Operation

Affected (see Supplementary Information)

(b) Disassembly/Assembly

Not affected

(c) Cleaning

Affected

(d) Inspection/Check

Affected.

(e) Repair Schemes

Not affected.

(f) Testing

Not affected.

(6) Supplemental Information

As a result of a series of assembly tests the required ACC adjustments can be achieved without rearranging the spacer plates at the aft location. The arrangement of the spacer plates at the aft location is now fixed at 2 above and 2 below the respective ACC location flange (previously variable as required) in order to simplify the adjustment process.



### D. <u>Description</u>

- (1) The changes introduced are:
  - (a) Introduction of spacer plates with increased diameter.
  - (b) Fixed arrangement of spacer plates at the aft location.

## E. Compliance

Category Code 6

Accomplish when the subassembly (i.e. modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected spare parts.

#### F. Approval

The part number changes and/or part modification described in Section 2 and 3 of this Service Bulletin has been shown to comply with the applicable Federal Aviation Regulations and is FAA- APPROVED for the Engine Models listed.

#### G. Manpower

(1) In service

Not applicable

(2) At overhaul

Not applicable

#### H. Material Price and Availability

Modification kit not required; parts supplied as single line items.

For prices and availability of future spares see Supplement.

# I. Tooling Price and Availability

Not applicable

#### J. Industry Support Information

Not applicable

# K. Weight and Balance

(1) Weight Change

None.

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(2) Moment Arm

None.

(3) Datum

Engine front mount centreline (Power Plant Station PPS 100).

## L. Electrical Load Data

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

## M. Software Accomplishment Summary

Not applicable

### N. References

- (1) Engineering Changes 01VM001, 01VM001-01
- (2) V2500 Engine Illustrated Parts Catalogue
- (3) V2500 Component Maintenance Manual Tubes, Hoses and Ducts THD-V2500-1IA and THD-V2500-3IA
- (4) ATA Locator 75-24-49

## O. Other Publications Affected

- (1) Illustrated Parts Catalogue will be revised
- (2) The V2500 Component Maintenance Manual, THD-V2500-1IA and THD-V2500-3IA Cleaning, Inspection, Repair to add the new part number
- (3) V2500 Aircraft Maintenance Manual Removal/Installation
- (4) AIPC will be revised

# P. Interchangeability of Parts

Refer to section 2 Material Information



## 2. Material Information

A. The kit required consists of the following parts:

Not applicable.

- B. New production parts:
- C. Parts affected by this Bulletin:

75-24-49

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
02-050	3A2827	12	Spacer, Plate	-	3A0167	(A)(B) (S1)(S2)
03-050	3A2827	12	Spacer, Plate	-	3A0167	(A)(B) (S1)(S2)
04-040	3A2827	4	Spacer, Plate	-	3A0167	(A)(B) (S1)(S2)
04-440	3A2827	4	Spacer, Plate	-	3A0167	(A)(B) (S1)(S2)

## D. <u>Instructions disposition codes:</u>

- (A) New part is available for sale
- (B) Old part will not continue to be supplied
- (S1) Old and new parts are not interchangeable.
- (S2) New part must be fitted as a set. Mixing of old and new parts is not permissible



## 3. Accomplishment Instructions

A. Rework Instructions

Not applicable

B. Assembly Instructions

For installation instructions refer to Engine Manual TASK 72-00-50-420-000

The arrangement of the spacer plates at the aft location has been fixed by this bulletin at 2 above and 2 below the respective ACC locating flange.

C. Recording Instructions

A record of accomplishment is required



## ENGINE - LP TURBINE - INTRODUCTION OF SPACER PLATES WITH INCREASED DIAMETER

## SUPPLEMENT - PRICES AND AVAILABILITY

The prices if shown are for estimating purposes only and as such are given in good faith, without commercial liability for advanced planning purposes only. Refer to IAE Spares and/or current price catalogue for current prices.

## 1. Modification Kit:

Not applicable.

# 2. New Production Parts:

Unit Price

Part No. Desc. US Dollars

3A2827 Spacer, Plate 32.70

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