

International Aero Engines

SERVICE BULLETIN

<u>ENGINE - MAIN GEARBOX ASSEMBLY - MODIFICATION OF O-RING FOR THE ANGLE GEARBOX SUPPORT - CATEGORY CODE 6 - MOD.ENG-72-0301</u>

1. Planning Information

A. Effectivity

(1) Aircraft: Boeing-Douglas MD-90

(2) Engine: V2525-D5 Engines prior to Serial No.20187

V2528-D5 Engines prior to Serial No.20187

B. Reason

(1) Condition

Damage to the toroidal sealing ring of the angle gearbox support can occur. The problem is caused by excessive compression to the sealing ring as a result of adverse tolerance conditions.

(2) Background

In extreme stack-up condition, the seal ring can be cut during assembly.

(3) Objective

The purpose of this Service Bulletin is to make assembly easier.

(4) Substantiation

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

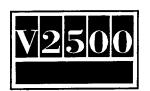
(5) Effect of Bulletin on workshop procedures:

Removal/Installation Not affected Disassembly/Assembly Not affected Inspection/Check Not affected Repair Not affected Testing Not affected

C. <u>Description</u>

This Service Bulletin introduces a revised toroidal sealing ring. To decrease the compression, the cross section of the sealing ring has decreased from 0.314 mm to 0.187 mm.

V2500-ENG-72-0301



International Aero Engines

SERVICE BULLETIN

D. Approval

The part number changes and part modifications are given in Section 3 of this Service Bulletin. They obey the applicable Federal Aviation Regulation and are FAA-APPROVED for the engine model listed.

E. Compliance

Category Code 6

This Service Bulletin can be done when the subassembly (that is modules, accessories, components, build groups) is disassembled sufficiently to get access to the affected parts.

F. Manpower

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

Venue Estimated Man-hours

(1) In service Not applicable

(2) At overhaul Not applicable (Parts are accessible at overhaul).

G. <u>Material - Price and Availability</u>

- (1) A modification kit is not necessary.
- (2) See 'Material Information' section for prices and availability of future spares.

H. Tooling - Price and Availability

Special tools are not necessary.

I. Weight and Balance

(1) Weight change Not affected

(2) Moment arm Not affected

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

J. Electrical Load Data

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

V2500-ENG-72-0301



International Aero Engines

SERVICE BULLETIN

K. References

(1) Internal Reference No.

EC97VF003

(2) Other References

The V2500-D5 Engine Manual (EM), (E-V2500-3IA) Chapter/Section 72-60-10, Disassembly/Assembly

L. Other Publications Affected

(1) V2500-D5 Engine Illustrated Parts Catalog (EIPC), (S-V2500-3IA) Chapter/Section 72-60-10.



SERVICE BULLETIN

2. Accomplishment Instructions

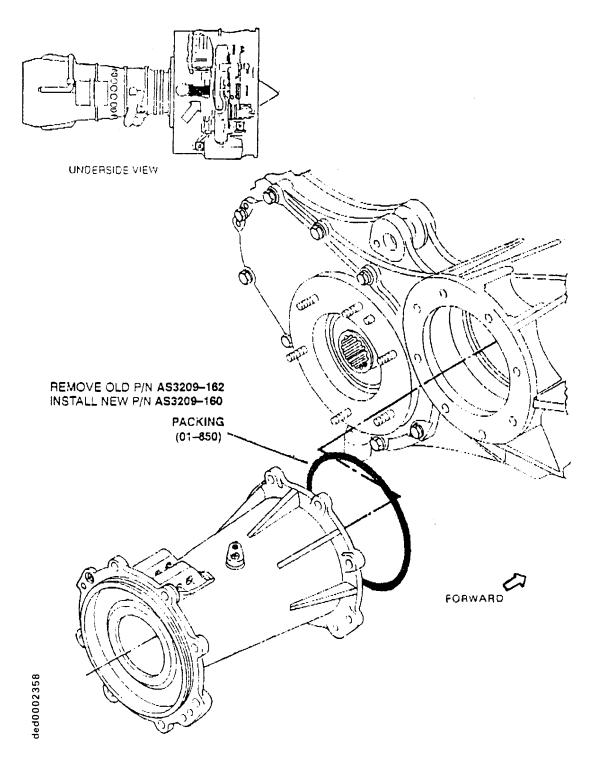
A. Rework Instructions

None.

- B. Disassembly Instructions
 - (1) Disassemble the Packing (Refer to V2500-D5 Engine Manual (EM), Chapter/Section 72-60-10, Disassembly/Assembly).
- C. Assembly Instructions (Refer to Figure 1)
 - (1) Install the new Packing AS3209-160 (Refer to V2500-D5 Engine Manual (EM), Chapter/Section 72-60-10, Disassembly/Assembly).
- D. Recording Instructions
 - (1) A record of accomplishment is necessary.

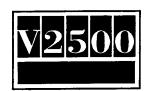


SERVICE BULLETIN



Angle Gearbox Support Fig.1

V2500-ENG-72-0301



SERVICE BULLETIN

3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

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 | |
|------------------------------|-----|-----------------------------|---------|------------------------------|-----------------------------|--|
| AS3209-160 (72-60-10) | 1 | | Packing | AS3209-162 (01-850) | (A)(B)(S1) | |

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. Instructions Disposition Codes

- (A) Parts are available for sale
- (B) Parts can be used on other applications
- (S1) Old and new parts are fully interchangeable