

International Aero Engines

SERVICE BULLETIN

ENGINE - HP COMPRESSOR - INTRODUCTION OF 12 SPACERS ON THE REAR PISTON RING SEAL - CATEGORY CODE 6 - MOD.ENG-72-0038

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500 A1 Engines prior to serial No.V0127 except V0124 and

V0125

B. Reason

(1) Condition

Pitting and metal pickup on the flange of the piston seal outer member underneath the 12 bolt heads.

(2) Background

An audit strip revealed that metal pickup had occurred under the 12 bolt heads clamping directly to the rear piston ring seal flange on the outer member. At the other 60 positions on the same flange, the bolts also clamp the cross key plate and a spacer is fitted under the bolt heads. Metal pick-up was not observed at these positions.

(3) Objective

Incorporation of this Service Bulletin (Modification) is designed to maintain engine reliability.

(4) Substantiation

Engineering assessment concludes that the items introduced by this modification will be satisfactory.

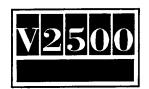
(5) Effects of Service Bulletin on workshop procedures:

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

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C. <u>Description</u>

- (1) The changes introduced by this Service Bulletin are as follows:
 - (a) Twelve spacers are introduced at the twelve bolt positions on the rear piston ring seal where previously no spacers were utilized.
 - (b) The twelve existing bolts have been deleted and are now common with the existing sixty longer bolts to accommodate the extra clamped thickness.

D. Approval

The part number changes and/or 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.

E. <u>Compliance</u>

Category Code 6

Accomplish when the subassembly (ie. Modules, Accessories, Components, Build Groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

F. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

Venue Estimated Manhours

(1) In service Not applicable

- (2) At Overhaul (Note: the parts affected by this Service Bulletin are accessible at overhaul)
 - (a) To replace existing bolts and fit additional spacers Refer to Engine Manual, (See Para K (1))

G. Material - Price and Availability

- (1) Modification Kit not required. Parts supplied as single line items.
- (2) See "Material Information" section for Prices and availability of future spares.

H. Tooling - Price and Availability

Special tools are not required.

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I. Weight and Balance

(1) Weight Change Plus 0.1 lb (0,05 kg)

(2) Moment Arm 27.400in. (696 mm)

(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.

88VR168

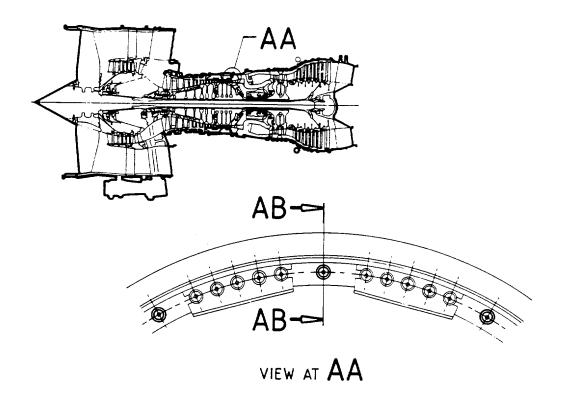
(2) Other references

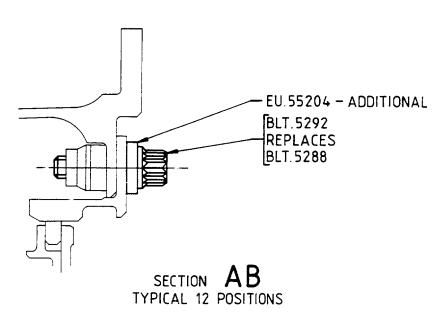
V2500 Engine Manual, 72-41-00, Assembly

L. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalogue, 72-41-00.
- (2) V2500 Engine Manual, 72-41-00, Assembly, disassembly, Inspection/Check and Cleaning.

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View showing bolt and spacer on rear piston ring seal – After alteration Fig.1 $\,$

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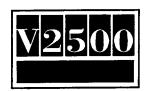
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2. Accomplishment Instructions

- A. Rework Instructions
 - (1) None
- B. Assembly Instructions

The new EU55204 spacers and additional BLT 5292 bolts introduced by this Service Bulletin are interchangeable with in use spacers and bolts. Assemble by use of approved procedures, Engine Manual, 72-41-00, Assembly.

- C. Recording Instructions
 - (1) A record of accomplishment is required



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3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. <u>Kits associated with this Bulletin:</u>

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
BLT5292	72	3.02	Bolt (0.250 dia. x	BLT5292	(S1)(A)
(72-41-00)			0.898)	(01-364)	
EU55204	12	13.80	Spacer		(S1)(A)
(72-41-00)				(01-367)	
_	12	_	Bolt	BLT5288	(B1)
(72-41-00)				(01-384)	

C. Instruction Disposition Code Statements:

- (S1) Additional Quantity increased to 72.
- (B1) Old part can be retained but has no immediate requirement on V2500 application.
- (A) New part currently available.

NOTE: The estimated 1990 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.