



# SERVICE BULLETIN

ENGINE - NO.4 BEARING COMPARTMENT - PROVIDE A NO.4 BEARING COOLING DUCT AND HEATSHIELD WITH IMPROVED SEALING FEATURES - CATEGORY CODE 7 - MOD.ENG-72-0097

## 1. Planning Information

### A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines before Serial No.V0202

### B. Reason

#### (1) Condition

There may not be sufficient means to prevent engine debris and dirt from entering the No.4 Bearing Compartment Carbon Seal.

#### (2) Background

Development engine testing has indicated the potential for dirt and debris in the No.4 Bearing Compartment Carbon Seal Area.

#### (3) Objective

To introduce a Rear No.4 Bearing Compartment Cooling Air Duct and compatible Rear Heatshield which will protect the No.4 Bearing Compartment from ingesting debris.

#### (4) Substantiation

Similar designs on other engine programs have proved successful in preventing debris and dirt from entering the bearing compartment.

#### (5) Effects of 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. Description

- (1) A new No.4 Bearing Compartment Cooling Air Duct and compatible Heatshield are introduced featuring improved design which will prevent debris ingestion and protect the No.4 Bearing Carbon Seal.

D. Approval

The Part Number Changes and/or part modifications described in Section 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. Compliance

Category Code 7.

Accomplish when the supply of superseded parts has been depleted.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
-------	--------------------

- |                 |                |
|-----------------|----------------|
| (1) In service  | Not applicable |
| (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

Special tools are not required to accomplish Sub-division 2 of this Service Bulletin.

I. Weight and Balance

- |                   |       |   |
|-------------------|-------|---|
| (1) Weight change | .. .. | None  |
| (2) Moment arm    | .. .. | No effect   |
| (3) Datum         | .. .. | Engine front mount Centerline<br>(Powerplant station P.P.S.100) |

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J. Electrical Load Data

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

K. References

- (1) Internal Reference No.

89VA057

- (2) Other References

V2500 Engine Illustrated Parts Catalog.

V2500 Standard Practices Manual.

V2500 Engine Manual.

L. Other Publications Affected

- (1) The V2500 Engine Illustrated Parts Catalog Chapter/Section 72-43-30, Figure 1, to add the new parts.
- (2) The V2500 Engine Manual Chapter/Section 72-43-30, Cleaning, to add the new parts.
- (3) The V2500 Engine Manual Chapter/Section 72-43-30, Inspection, to add the new parts.
- (4) The V2500 Engine Manual Chapter/Section 72-43-30., Repair, to add the new parts. Also VRS3123 and VRS3125 repairs are added for the new No.4 Bearing Heatshield Assembly.



2. Accomplishment Instructions

A. Rework Instructions

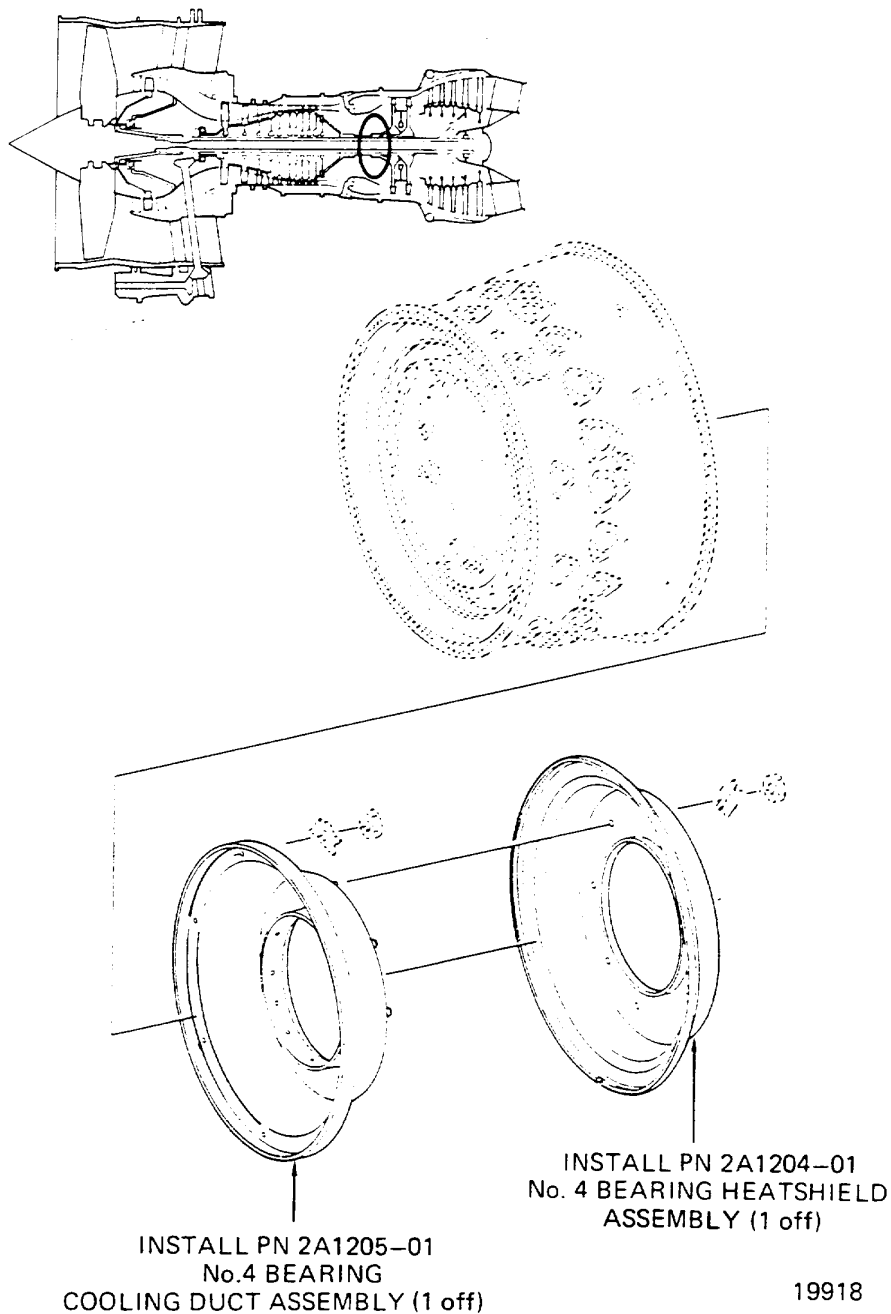
- (1) There are no rework instructions necessary to accomplish this Service Bulletin.

B. Assembly Instructions

- (1) Install the 2A1204-01 No.4 Bearing Heatshield Assembly (1 off) and 2A1205-01 No.4 Bearing Cooling Duct Assembly (1 off). Use the approved procedure in Reference (3), Chapter/Section 72-00-43, Installation-01.

C. Recording Instructions

- (1) A record of accomplishment is necessary.



Location of the No.4 Bearing Heatshield and Cooling Duct Assemblies  
Fig.1

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3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None.

B. Parts affected by this Bulletin:

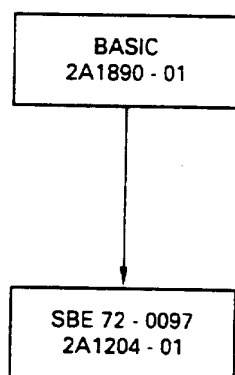
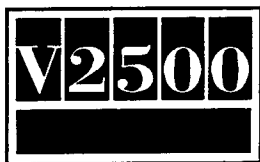
New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
2A1204-01 (72-43-30)	1	5937.00	Heatshield, No.4 Bearing Assembly	2A890-01 (01-080)	(S1) (A) (B)
2A1205-01 (72-43-30)	1	8842.00	Duct-Cooling, No.4 Bearing, Rear, Assembly	2A0891-01 (01-010)	(S1) (A) (B)

C. Instruction/Disposition Code Statements:

- (S1) New Parts coded S1 must replace Old Parts coded S1 as a COMPLETE SET per engine except the new 2A1204-01 Heatshield Assembly can be used with 2A0891-01 No.4 Bearing Cooling Duct Assembly.
- (A) New part is currently available.
- (B) Old part will no longer be available.

NOTE: The estimated 1992 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.

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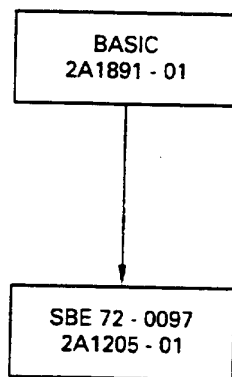
Family tree - No.4 bearing heatshield assembly  
Fig.4

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Family tree- No.4 bearing cooling duct assembly  
Fig.5

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