



ENGINE - H.P. TURBINE ROTOR AND STATOR ASSEMBLY - INCORPORATE NEW STAGE 1 DUCT SEGMENTS
WITH IMPROVED CERAMIC COATING - CATEGORY CODE 6 - MOD.ENG-72-0108

1. Planning Information

A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines prior to Serial No.V0165, except V0156,
V0160 and V0162

B. Reason

(1) Condition

Erosion and Spalling of the coating on the current Stage 1 HPT Duct Segments can cause unacceptable blade tip distress causing degradation of engine performance.

(2) Background

It has been determined that erosion and spalling can occur on the coating of the duct segments under some engine operating conditions.

(3) Objective

To improve the durability of Stage 1 HPT Duct Segment coating and enhance engine performance.

(4) Substantiation

Successful endurance testing on several test engines.

(5) Effect 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

V2500-ENG-72-0108

**C. Description**

- (1) A new Stage 1 HPT Duct Segment has been provided featuring improved coating to reduce erosion, spalling and blade tip distress which will enhance performance.

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. Compliance

Category Code 6.

Accomplish when the subassembly (i.e. 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	Not Applicable

G. Material – Price and Availability

- (1) Modification Kit not required.
- (2) See Material Information section for prices and availability of future spares.

Tooling – Price and Availability

Special tools are not required.

I. Weight and Balance

- | | | | | |
|-------------------|----|----|----|--|
| (1) Weight change | .. | .. | .. | None |
| (2) Moment arm | .. | .. | .. | No effect |
| (3) Datum | .. | .. | .. | Engine front mount centreline
(Powerplant Station (P.P.S.) 100) |

V2500–ENG–72–0108



J. Electrical Load Data

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

K. References

- (1) Internal Reference No.

EC88VA219D

- (2) Other References

V2500 Engine Illustrated Parts Catalog.

V2500 Engine Manual.

L. Other Publications Affected

- (1) The V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-45-23, Fig.1, to add the new part.
- (2) The V2500 Engine Manual, Chapter/Section 72-45-23, Cleaning, to add the new part.
- (3) The V2500 Engine Manual, Chapter/Section 72-45-23, Inspection/Check, to add the new part.
- (4) The V2500 Engine Manual, Chapter/Section 72-45-23, Repair, to add the new part.



2. Accomplishment Instructions

A.

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

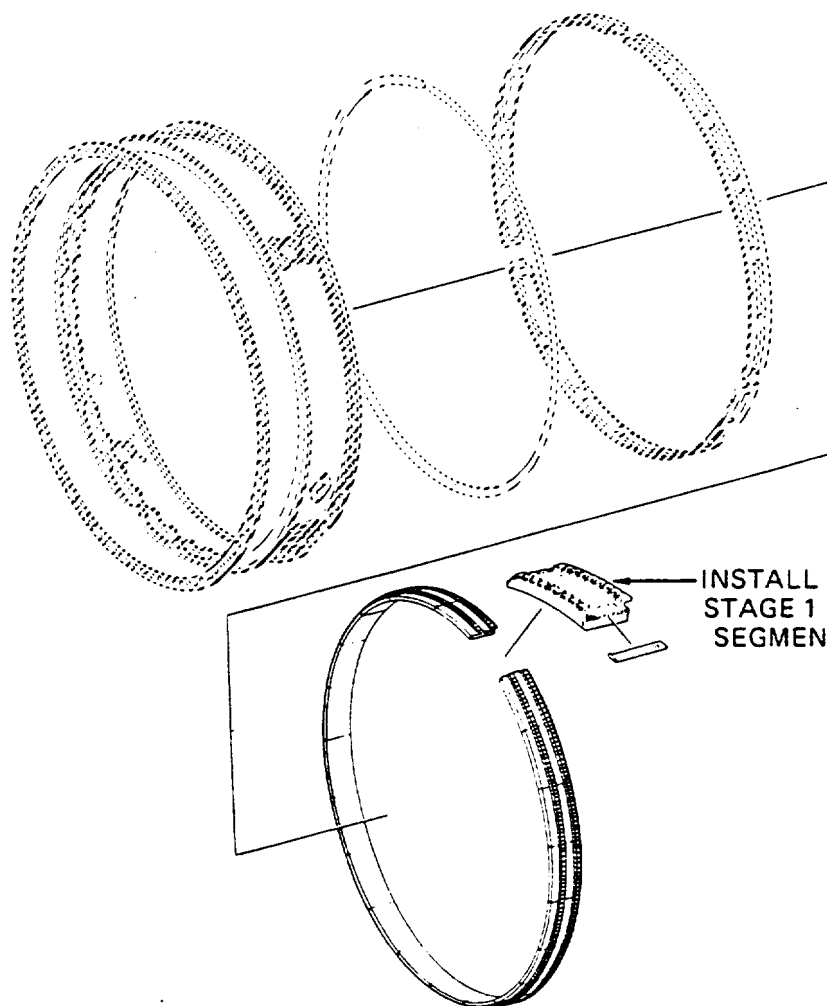
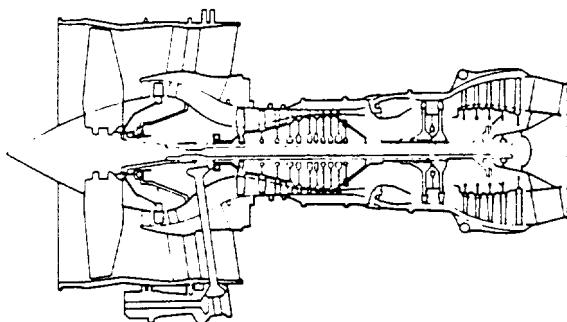
B. Assembly Instructions

- (1) Replace the 2A1115 Stage 1 HPT Duct Segments with 2A1945 Stage 1 HPT Duct Segments (19 off) by the approved procedure in Reference (2), Chapter/Section 72-45-20, Assembly-01.

NOTE: The new Stage 1 HPT Duct Segments must be replaced in complete sets only. Do not mix the new segments with the old segments.

C. Recording Instructions

- (1) A record of accomplishment is necessary.



19987

Location of Stage 1 HPT duct segments
Fig.1

V2500-ENG-72-0108



SERVICE BULLETIN

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
2A1945 (72-45-23)	19	-	Duct Segment - HPT, Stage 1	2A1115 (01-060)	(S1)(A)(B)

C. Instruction/Disposition Code Statements:

- (S1) New parts coded (S1) must replace old parts coded (S1) in a COMPLETE SET per engine.
- (A) New part is currently available.
- (B) Old part will no longer continue to be available.

NOTE: The estimated 1991 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.

V2500-ENG-72-0108