

# SERVICE BULLETIN

ENGINE - LP TURBINE - PROVIDE A NEW LP TURBINE SHAFT THAT ELIMINATES NITRIDING ON THE SPLINE - CATEGORY CODE 7 - MOD.ENG-72-0117

## 1. Planning Information

### A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines prior to Serial Number V0252

### B. Reason

#### (1) Condition

This Service Bulletin introduces a new LP Turbine Shaft that eliminates nitriding on the spline.

#### (2) Background

The manufacturing process for the LP Turbine Shaft has been revised.

#### (3) Objective

The change introduced by this Service Bulletin is designed to ease manufacturing process.

#### (4) Substantiation

The change introduced by this Service Bulletin has been substantiated by analytical review based on rig testing results.

#### (5) Effects of Bulletin on workshop procedure:

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

### C. Description

- (1) The changes introduced by this Service Bulletin are as follows.

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(a) New LP Turbine Shaft which is not nitrided on the spline has been introduced (See Figure 1).

(2) New LP Turbine Shaft will be available for future replacement purposes.

D. Approval

The Part Number changes and 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 7

Accomplish when supply of superseded parts has been depleted.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

Modification Kit is not required. Part is supplied as single line item.

H. 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 (Power Plant Station (P.P.S.) 100)

J. Electrical Load Data

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

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**SERVICE BULLETIN****K. References**

- (1) Internal Reference No.

EC90VJ017

- (2) Other References

V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-50-41.

V2500 Engine Manual, 72-50-00, Assembly-01, Assemble the LP Turbine Module, Install the LP Turbine Shaft.

**L. Other Publications Affected**

- (1) V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-50-41.

- (2) V2500 Engine Manual, 72-50-00, Assembly-01, Assemble the LP Turbine Module, Install the LP Turbine Shaft.

**L. Other Publications Affected**

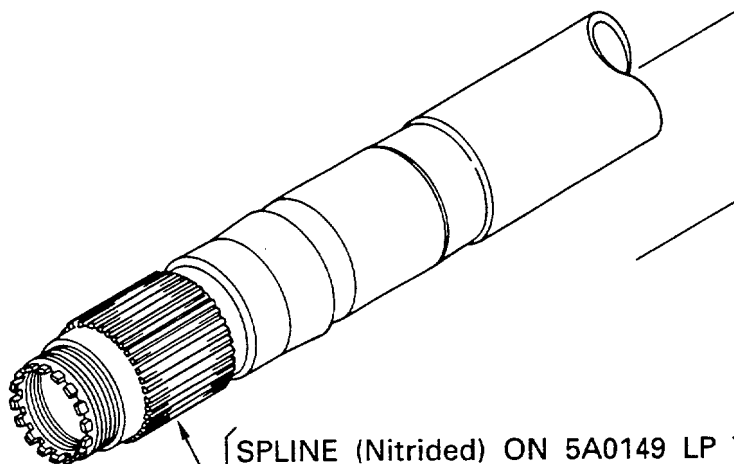
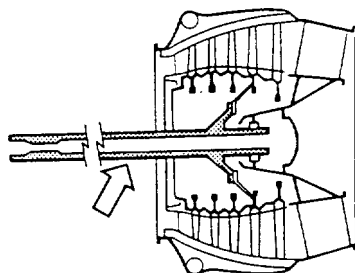
- (1) V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-50-41.

- (2) V2500 Engine Manual, 72-50-41, LP Turbine Shaft, Cleaning-00, -03 Inspection/Check-00, -03 and Repair 001 (VRS1492), 002 (VRS1493), 003 (VRS1497), 004 (VRS1498), 005 (VRS1499), 007 (VRS1497), 008 (VRS1502), 011 (VRS1495), 012 (VRS1494).

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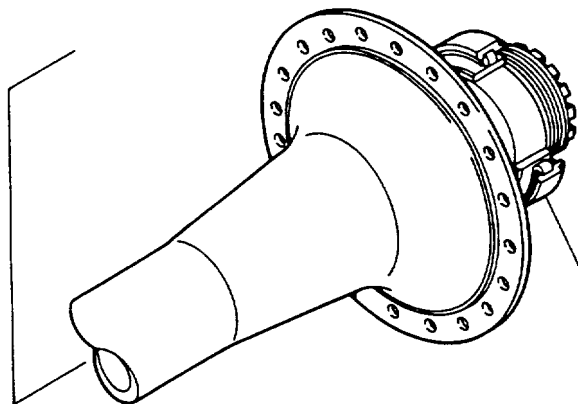
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SPLINE (Nitrided) ON 5A0149 LP TURBINE SHAFT  
- BEFORE ALTERATION

SPLINE (Not nitrided) ON 5A0892 LP TURBINE SHAFT  
- AFTER ALTERATION



← FORWARD

SEE 72-50-42  
FIG. 01

LP Turbine Shaft - Before and After Alteration  
Fig.1



2. Accomplishment Instructions

A. Rework Instructions

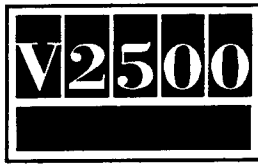
There are no rework instructions necessary to accomplish this Service Bulletin.

B. Assembly Instructions

- (1) Install 5A0892, LP Turbine Shaft, to the LP Turbine Module by the approved procedures in the Engine Manual, 72-50-00, Assembly-01, TASK 72-50-00-430-001 (Refer to 1.K. (2)).

C. Recording Instructions

- (1) A record of accomplishment is necessary.



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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
5A0892 (72-50-41)	1		.Shaft, LP Turbine	5A0149 (01-200)	(A)(B)S1)

NOTE: The estimated 1992 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.

C. Instruction/Disposition Code Statements:

- (A) New Part is currently available for sale.
- (B) Old Part will no longer be available for sale.
- (S1) Old and New Part is freely and fully interchangeable, both physically and functionally.

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