



# SERVICE BULLETIN

ENGINE - REMOVE MATERIAL FROM THE LEADING EDGE OF STAGE 2.0 COMPRESSOR BLADES TO IMPROVE CLEARANCE - CATEGORY CODE 6 - MOD.ENG-72-0001

## 1. Planning Information

### A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engine, Serial No.s V0014 through V0027

### B. Reason

#### (1) Condition

Insufficient clearance may exist between the Stage 2.0 LP Compressor Blades and the Stage 1.5 LP Compressor Vanes.

#### (2) Background

Current clearances have been evaluated in terms of engine operation.

#### (3) Objective

To avoid the potential interference between the Stage 2.0 LP Compressor Blades and the Stage 1.5 LP Compressor Vanes and to maintain the engine reliability.

#### (4) Substantiation

Substantiation is not required

#### (5) Effect of Bulletin on the following shop functions:

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

### C. Description

Current Blades must be replaced or reworked to satisfy the minimum axial clearance.

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D. Approval

The Part Number Change and/or part modification 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 parts 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 accomplish rework and reidentify Blades STG 2.0 LPC	
Total: 26 mins	

G. Material Price and Availability

- (1) Modification Kit not required
- (2) Refer to 3. "Material Information".

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 (PPS 100))

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J. Electrical Load Data

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

K. Reference

- (1) Internal Reference No.

EC87VJ403

- (2) Other References

V2500 Illustrated Parts Catalog

V2500 Engine Manual

V2500 Standard Practices/Procedures Manual

V2500 Facilities Equipment Manual

L. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalog, Chapter 72-32-82, Figure 01 to add the new parts.



## 2. Accomplishment Instructions

CAUTION: SPECIAL HANDLING OF TITANIUM COMPONENTS (REFER TO STANDARD PRACTICES/PROCESSES MANUAL, TASK 70-03-00-300-503).

### A. Prerequisite Instructions

Not applicable if current blade is replaced with the new blade.

### B. Rework Instructions

- (1) Rework 5R7105, Blade, STG 2.0 LPC (See Reference (1), 72-32-82, Fig/Item No.01-250) and reidentify as follows.

Procedure	Supplementary Information
(a) Set-up and machine the platform of Blade	Refer to Figure 1, 2 and 3
(b) Finish the machined area	Refer to Figure 3 and 4. Break sharp edges 0.004 to 0.011in. (0,1 to 0,3 mm). Tool: RB010, Grinder, hand held pneumatic or equivalent

NOTE: Silicone carbide type wheels, stone and abrasive papers are to be used.

Aluminum oxide type papers must not be used.

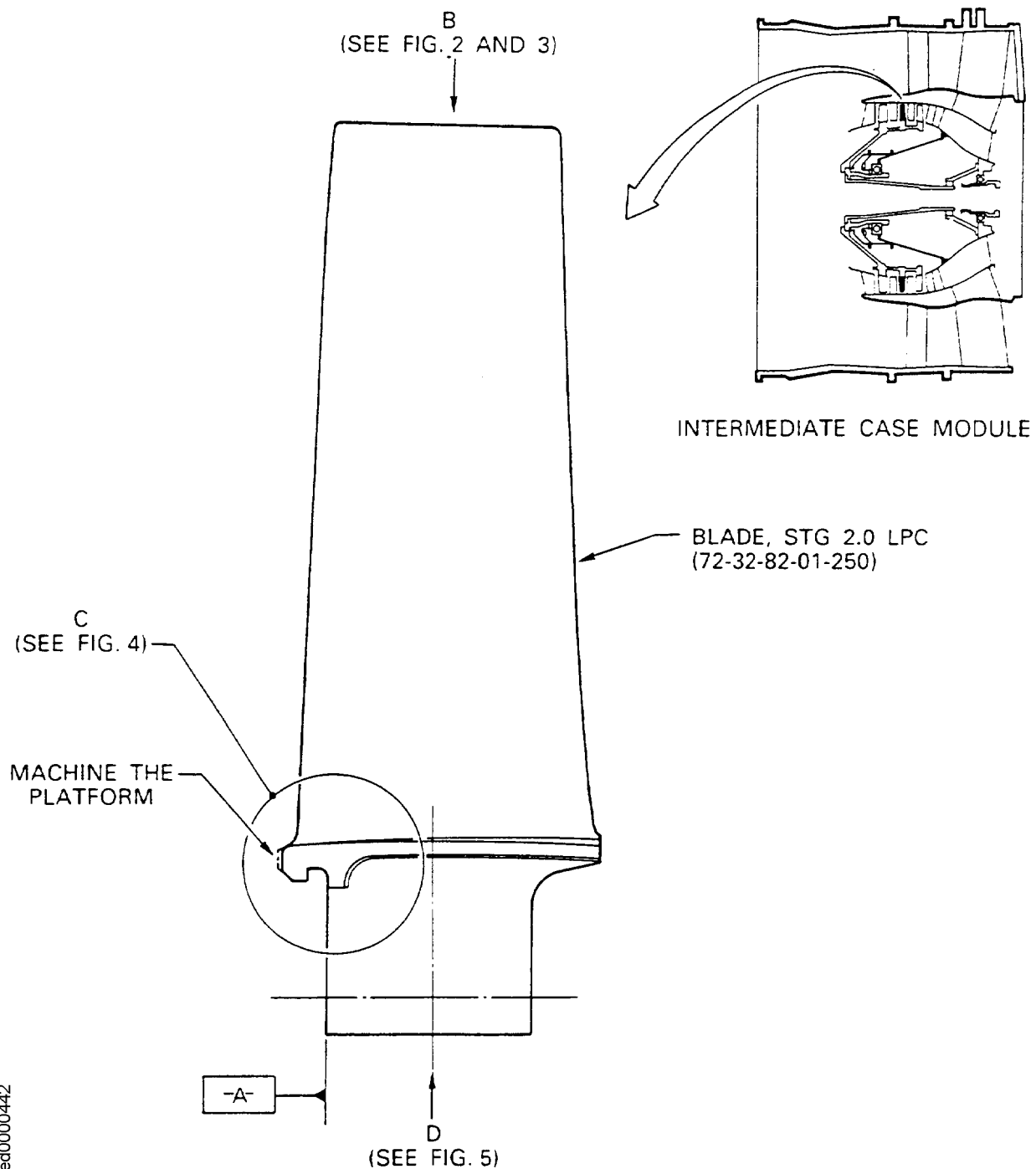
(c) Delete existing Part Number with a single line and renumber New Part Number	Refer to Figure 5 and 6. Mark by vibro-peen, Ident No.AD005 or equivalent
	Old Part Number      New Part Number
	5R7105                      5R0023

- NOTE: 1. Marking locations 'G' and 'H' are permissible to mark if location 'E' does not have a sufficient area for marking.
2. Refer to Standard Practices/Processes Manual TASK 70-09-00-400-501.
3. All raised metal which exceeds 0.0009in. (0,025 mm) must be removed.

### C. Recording Instructions

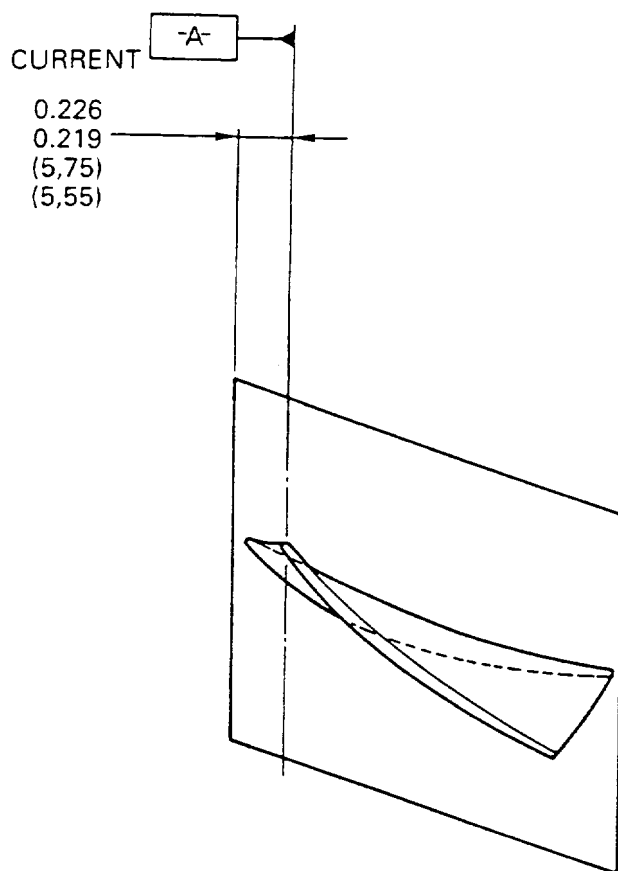
- (1) A record of accomplishment is necessary.

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Outline of rework  
Fig.1

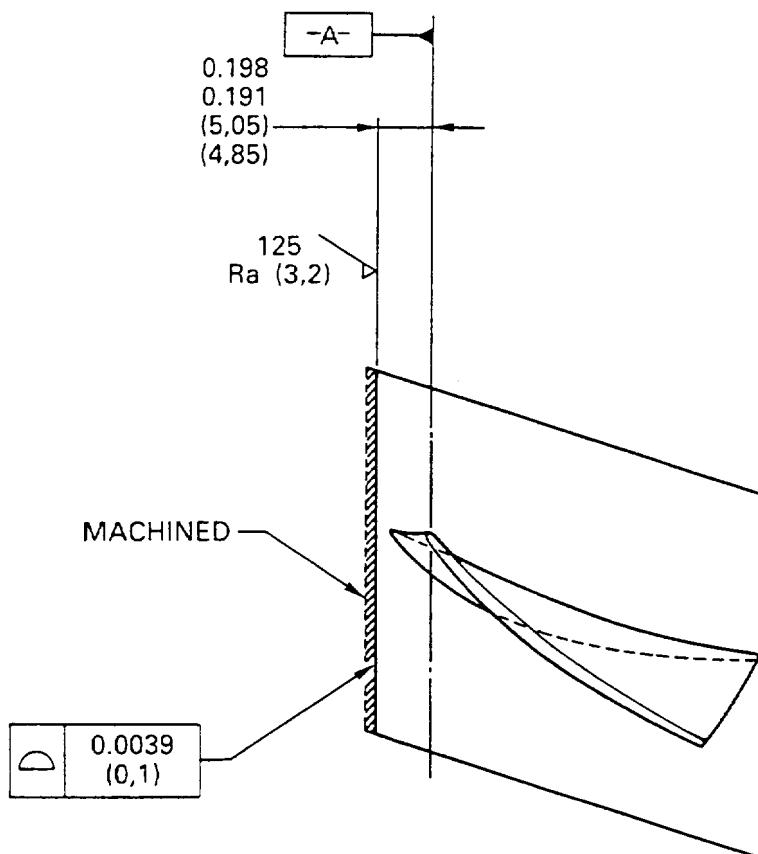
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VIEW ON ARROW B (SEE FIG. 1)

Before accomplishment of S.B.  
Fig.2

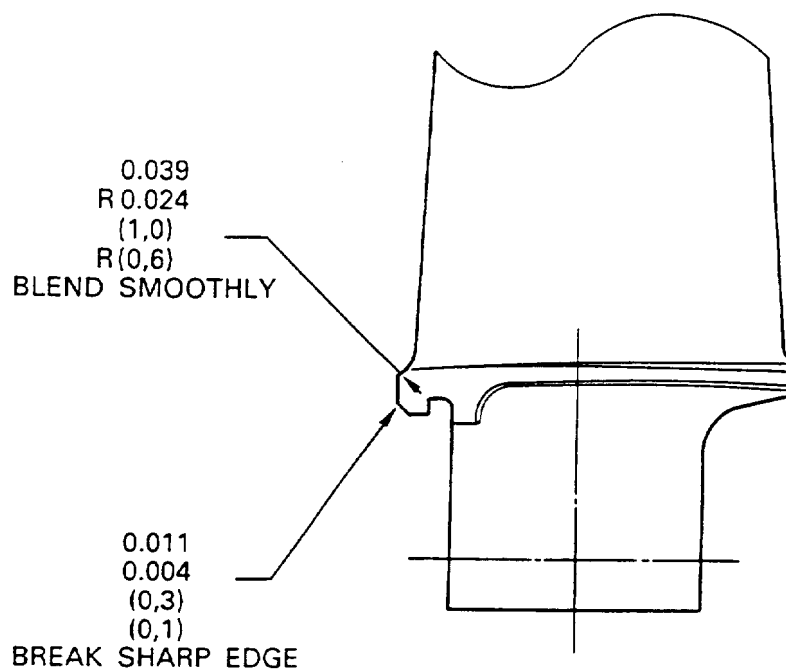
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REPEAT VIEW ON ARROW B (SEE FIG. 1)

After accomplishment of S.B.  
Fig.3

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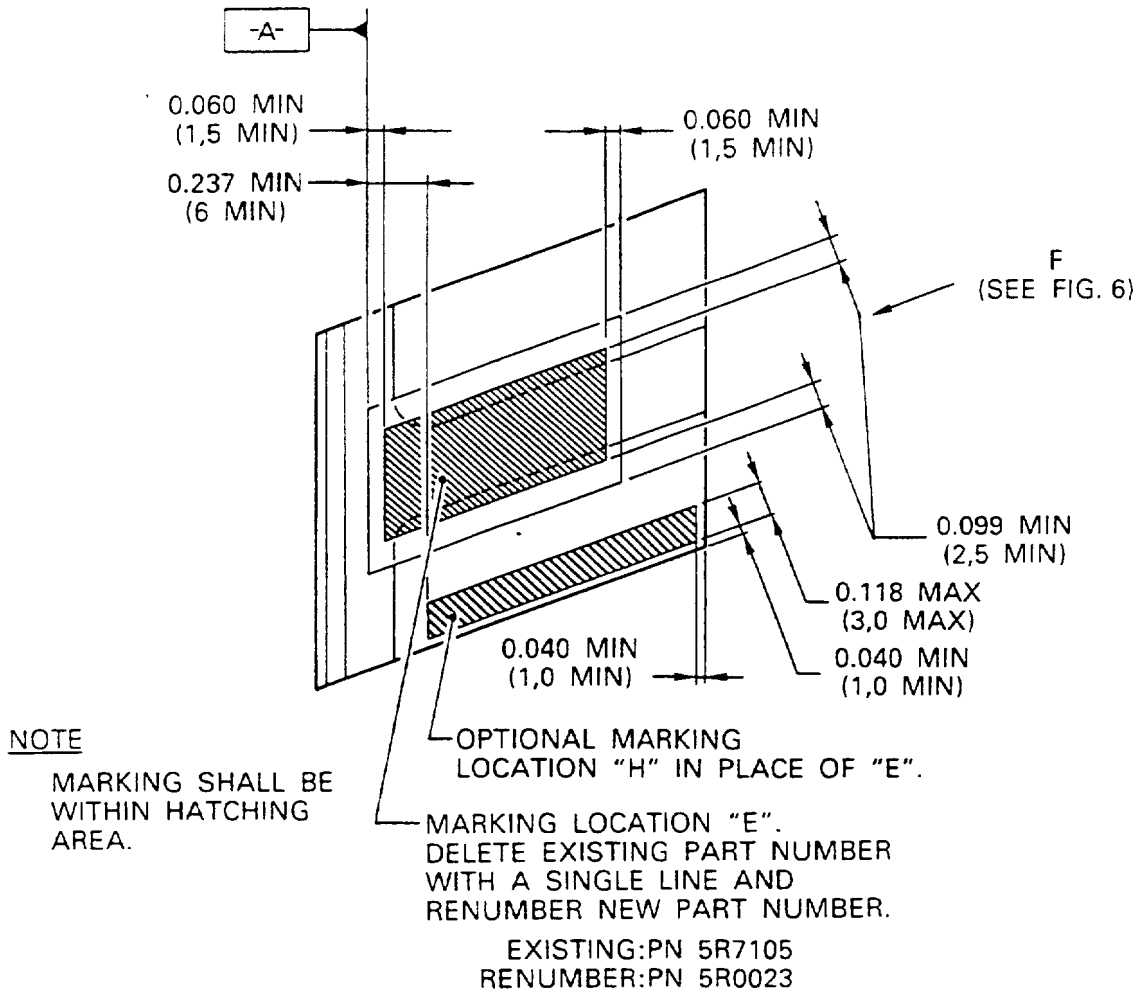


ENLARGED VIEW AT C (SEE FIG. 1)

Fig.4

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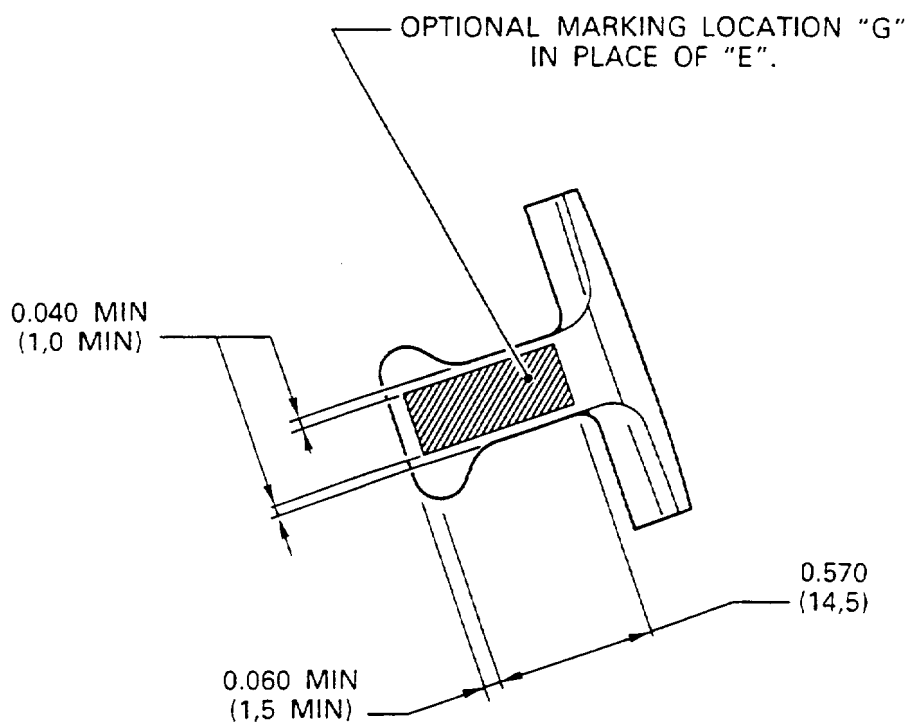


VIEW ON ARROW D (SEE FIG. 1)

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Marking location  
Fig.5

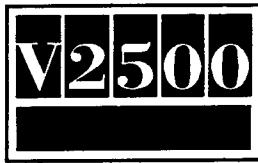
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VIEW ON ARROW F (SEE FIG. 5)

Marking Location  
Fig.6

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3. Material Information

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
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Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

5R0023	68	316.00	Blade	5R7105	(S1)(1D)
(72-32-82)				(01-250)	(A)

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

C. Instruction/Disposition Code Statements:

- (S1) New Part Coded (S1) must replace Old Part Coded (S1) as a complete set per engine.
- (1D) Old Part can be reworked and reidentified to the New Part Number.
- (A) New Part is currently available.

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