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## V2500-A5/D5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Revision 2 of Service Bulletin V2500-ENG-72-0471.

**NOTE:** If one of the previous issues of this Service Bulletin is already incorporated and a mixed standard of High Pressure (HP) compressor stage 6 blades is installed, further action in accordance with the Instruction /Disposition Codes of this Revision is recommended to install a complete set of HP compressor stage 6 blades.

### Document History

#### Service Bulletin Revision Status

Initial Issue                      May 20/04

Revision 1                         Jul.27/05

### Service Bulletin Revision 2

Remove All pages of the Service Bulletin.	Incorporate Pages 1 to 7 of the Service Bulletin.	Reason for change To revise the Compliance. To revise the Instruction/Disposition codes.
All pages of the Supplement.	Page 1 of the Supplement.	To revise the prices.

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**CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED**  
If any have not been received please advise IAE International Aero Engines AG

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ENGINE – HP COMPRESSOR BLADES – INTRODUCTION OF STAGE 6 AND 7 BLADES WITH REVISED  
MATERIAL

1. Planning Information

A. Effectivity

(1) Airbus A319

R V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V11998 (A5  
R Standard).

(2) Airbus A320

R V2527-A5, V2527E-A5 Engines prior to Serial No. V11998 (A5 Standard).

(3) Airbus A321

R V2530-A5, V2533-A5 Engines prior to Serial No. V11998 (A5 Standard).

R (4) Boeing MD-90

R V2525-D5, V2528-D5 Engines prior to Serial No. V20286.

R NOTE: Engines of post Service Bulletin V2500-ENG-72-0565 standard (SelectOne™  
R Retrofit Standard) are not affected.

B. Concurrent Requirements

None.

C. Reason

(1) Problem

R A design review of the HP Compressor has indicated that manufacture of the  
Stage 6 and 7 rotor blades may be optimized.

(2) Evidence

See Problem.

(3) Substantiation

The changes introduced by this Service Bulletin have been the subject of  
satisfactory engineering analysis.

(4) Objective

R  
R

Incorporation of this Service Bulletin (Modification) is designed to simplify manufacture. The new blade material has 70% improved material strength and is more resistant to impact damage and airfoil fractures.

(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Affected.

(c) Overhaul

Affected.

(d) Repair Schemes

Affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. Description

(1) The changes introduced are:

- (a) Revised HP Compressor Stage 6 and 7 blades are introduced similar to the existing items except for a change in material from IMI829 to TI6242.

E. Compliance

R For Part 1 of this Service Bulletin:

R Category Code 6

R Accomplish when the subassembly (i.e. modules, accessories, components, build  
R groups) is disassembled sufficiently to afford access to the affected part and  
R to all affected spare parts.

R For Part 2 of this Service Bulletin:

Category Code 7

Accomplish when the supply of superseded parts has been depleted.

F. 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 models listed.

G. Manpower

In service

Not applicable.

At overhaul

Not affected.

NOTE: The parts affected by this Service Bulletin are accessible at overhaul.

H. Material Price and Availability

Modification kit is not required; parts supplied as single line items.

I. Tooling Price and Availability

Special tools are not required.

J. Industry Support Information

None.

K. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

No Effect.

(3) Datum

Engine Front Mount Centreline (Power Plant Station PPS100).

**L. Electrical Load Data**

The aircraft electrical load is not affected by this Service Bulletin.

**M. Software Accomplishment Summary**

Not applicable.

**N. References**

(1) Engine Manual, Chapter/Section 72-41-10, Removal and Assembly.

R (2) Engineering Change Number EC03VR019 and 03VR019A.

(3) ATA Locator 72-41-15.

**O. Other Publications Affected**

(1) Illustrated Parts Catalogue (IPC) Chapter/Section 72-41-15, will be revised.

(2) Engine Manual, Chapter/Section 72-41-15, Cleaning, Inspection and Repair.

**P. Interchangeability of Parts**

Not Affected.

## 2. Material Information

### A. The kit required consists of the following parts:

None.

### B. Parts to be reworked:

None.

### C. New production parts:

All Engines

72-41-15

R R R	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
R	Part 1						
R R	02170	6A8322	2	.Blade, Stage 6, L/H locking - HP Compressor	-	6A7406	(A)(B)(S2)
R R	02185	6A8323	2	.Blade, Stage 6, R/H locking - HP Compressor	-	6A7407	(A)(B)(S2)
R R	02200	6A8320	52	.Blade, Stage 6 Nominal - HP Compressor	-	6A7405C01	(A)(B)(S2)
R R	02215	6A8320	23	.Blade, Stage 6 Nominal - HP Compressor	-	6A7405C01	(A)(B)(S2)
R R	02217	6A8321	23	.Blade, Stage 6 Undersized- - HP Compressor	-	6A7405C02	(A)(B)(S2)
R	Part 2						
R R	02270	6A8314	2	.Blade, Stage 7, L/H locking - HP Compressor		6A6462	(B)(S1)
R R	02285	6A8315	2	.Blade, Stage 7, R/H locking - HP Compressor	- -	6A6463	(B)(S1)
R R	02300	6A8312	63	.Blade, Stage 7 Nominal - HP Compressor	-	6A6469C01	(B)(S1)
R R	02315	6A8312	26	.Blade, Stage 7 Nominal - HP Compressor	-	6A6469C01	(B)(S1)



R	FIG	NEW	QTY	PART TITLE	MAT	OLD	INSTR
R	ITEM	PART				PART	DISP
R	NO.	NO.				NO.	
R	02317	6A8313	26	.Blade, Stage 7 Undersized-		6A6469C02 (B)(S1)	
R				- HP Compressor			

D. Instruction Disposition Codes:

- R (A) It is necessary to replace all old parts with new parts during the  
R accomplishment of this Service Bulletin.
- (B) Old part becomes redundant upon embodiment of this modification.
- (S1) Old and new parts are freely and fully interchangeable.
- R (S2) Old and new parts are not interchangeable, but the new part can be fitted  
R as a complete set in lieu of the old part, but not vice versa.



### 3. Accomplishment Instructions

#### A. Rework Instructions

None.

#### B. Assembly Instructions

For the correct assembly instructions refer to Engine Manual (EM),  
Chapter/Section 72-41-10, Assembly.

#### C. Recording Instructions

R A record of the accomplished part is necessary.



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SUPPLEMENT – PRICES AND AVAILABILITY

The prices (if shown) are for estimating purposes only and as such are given in good faith, without commercial liability for advanced planning purposes only. Refer to IAE Spares and/or current price catalogue for current prices.

1. Modification Kit:

Not applicable.

2. Parts required:

	Part No.	Description	Unit Price US Dollars
R	6A8312	Blade, Stg. 7	444.00
R	6A8313	Blade, Stg. 7	444.00
R	6A8314	Blade, Stg. 7	513.00
R	6A8315	Blade, Stg. 7	513.00
R	6A8320	Blade, Stg. 6	444.00
R	6A8321	Blade, Stg. 6	444.00
R	6A8322	Blade, Stg. 6	513.00
R	6A8323	Blade, Stg. 6	513.00

