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DATE: Feb. 20/09

V2500-A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin V2500-ENG-72-0584 and the Initial Issue of the Supplement

Service Bulletin Initial Issue

Remove Incorporate Reason for change

Pages 1 to 15 of the Service Bulletin Page 1 of the

ge 1 of the Initial Issue.

Initial Issue.

Supplement

V2500-ENG-72-0584
Transmittal - Page 1 of 1

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ENGINE - LP COMPRESSOR - TO APPLY THE MULTI-RATING ENGINE IDENTIFICATION PLATE TO ALL A5 ENGINE MODELS

1. Planning Information

A. Effectivity

- (1) Airbus A319
 - (a) V2522-A5, V2524-A5, V2527M-A5 Engines (A5 Standard and A5 SelectOne™ Retrofit and Production Standard).
- (2) Airbus A320
 - (a) V2524-A5, V2527-A5, V2527E-A5 Engines (A5 Standard and A5 SelectOne™ Retrofit and Production Standard).
- (3) Airbus A321
 - (a) V2530-A5, V2533-A5 Engines (A5 Standard and A5 SelectOne™ Retrofit and Production Standard).

B. Concurrent Requirements

None.

C. Reason

(1) Condition

Current multi-rating Engine Identification Plate can not be used on SelectOne™ Engines or Bump Rated Engines because Data Entry Plug (DEP) Variant and Bump Rating Index are initially marked on the Engine Identification Plate.

The Plate needs change to allow for:

- Thrust Enhancements (DEP Variant and Rating Index)

V2500-A5 or V2500-A5 SelectOne™ configuration (DEP Variant)

(2) Background

V2533-A5 SelectOneTM Engine Operators have requested thrust enhancements within specific areas of the take off envelope. Refer to V2500-ENG-73-0209 for the details. It is necessary to prepare the Engine Identification Plate with the flexibility for selection of the SelectOneTM engines and Bump Rated Engines.

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(3) Objective

To announce the availability of the multi-rating Engine Identification Plate for the V2500-A5 or V2500-A5 SelectOne™ engines and Bump Rated Engines.

(4) Substantiation

Analytically substantiated.

- (5) Effect of Bulletin on:
 - (a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not Affected.

(f) Fits and Clearances

Not affected.

(6) Supplementary Information

None.

D. <u>Description</u>

- (1) The change introduced by this Service Bulletin is as follows:
 - (a) New Engine Identification Plate has the blanks for marking of Data Entry Plug (DEP) variant and Bump Rating. (Refer to Figure 2)
- (2) Existing Engine Identification Plate, P/N 5A1875 can not be reworked to the new Engine Identification Plate because DEP variant and Bump Rating Index are initially marked on the existing Engine Identification Plate and they can not be rewritten.

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(3) For relationship with other Service Bulletins, refer to 1.N. References and Figure 5 Family Tree.

NOTE: The Accomplishment Instruction of this Service Bulletin is divided into two INSTRUCTIONs as follows:

INSTRUCTION I - Applicable for engines 'IN SERVICE'

INSTRUCTION II - Applicable for engines 'AT OVERHAUL/SHOP VISIT'

E. Compliance

Category Code 7

Accomplish when 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.

The authorising IAE documents are EC 08VJ021 and 08VJ021A.

G. Manpower

Estimated Man-hours to incorporate the full intent of this Service Bulletin:

- (1) In Service
 - (a) To gain access

20 minutes

(b) To embody

8 minutes

(c) Return the aircraft to a serviceable status

20 minutes

Total - 48 minutes

- (2) At Overhaul
 - (a) To embody

8 minutes

Total - 8 minutes

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H. Material Price and Availability

Modification kit is not required.

For prices and availability of future spares, refer to the Supplement to this Service Bulletin.

I. Tooling Price and Availability

Special tools are not required.

J. Industry Support Information

Not applicable.

K. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

No effect.

(3) Datum

Engine Front Mount Centreline (Power Plant Station (PPS) 100).

L. Electrical Load Data

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

M. Software Accomplishment Summary

Not applicable.

N. References

(1) V2500 Service Bulletins:

V2500-ENG-70-0622 - ENGINE - LP COMPRESSOR - TO ANNOUNCEMENT OF THE ENGINE IDENTIFICATION PLATE WITH NEW IAE LOGO

V2500-ENG-72-0378 - ENGINE - LP COMPRESSOR - TO ANNOUNCE THE AVAILABILITY OF NEW ENGINE IDENTIFICATION PLATE WITH DESIGNATION OF ALL A5 MODEL RATINGS

V2500-ENG-73-0209 - ENGINE - FUEL AND CONTROL - INTRODUCTION OF 33K BUMP RATING, MODIFICATION OF THE DATA ENTRY PLUG AND NEW ENGINE IDENTIFICATION PLATE

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- (2) Airbus A319/A320/A321 Aircraft Maintenance Manual, Chapter/Section 71-13-00.
- (3) IAE V2500 Engine Illustrated Parts Catalogues (S-V2500-2IA, S-V2500-2IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, S-V2500-7IB), Chapter/Section 72-32-85 Figure 3.
- (4) IAE V2500 Engine Illustrated Parts Catalogues (S-V2500-2SA, S-V2500-2SB, S-V2500-5SA, S-V2500-5SB, S-V2500-6SA, S-V2500-6SB, S-V2500-7SA, S-V2500-7SB), Chapter/Section 72-32-85 Figure 3.
- (5) IAE V2500 Standard Practices/Procedure Manual (SPP-V2500-1IA), Chapter/Sections 70-09-00, Procedures to make Permanent Identification and Location Marks and 70-39-03, Riveting.
- (6) Internal Reference No.

Engineering Change No. 08VJ021 and 08VJ021A.

(7) ATA Locator - 72-32-85.

0. Other Publications Affected

- (1) IAE V2500 Engine Illustrated Parts Catalogues (S-V2500-2IA, S-V2500-2IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, S-V2500-7IB), Chapter/Section 72-32-85 Figure 3 will be revised to include the new part numbers (Refer to 2. Material Information).
- (2) IAE V2500 Engine Illustrated Parts Catalogues (S-V2500-2SA, S-V2500-2SB, S-V2500-5SA, S-V2500-5SB, S-V2500-6SA, S-V2500-6SB, S-V2500-7SA, S-V2500-7SB), Chapter/Section 72-32-85 Figure 3 will be revised to include the new part numbers (Refer to 2. Material Information)..

P. Interchangeability of Parts

Affected (Refer to paragraph 2.E. Instruction disposition codes).

2. Material Information

A. Kits required consists of the following parts:

Modification kit is not required.

B. Parts to be reworked:

None.

C. New production parts:

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
72-32-8	35					
03–120	5A1942	1	.Plate, engine identification	-	5A1875	(A)(B)(C) (E)(F)(1D) (S1)(S2)(S3)

D. Redundant parts:

None.

E. <u>Instruction disposition codes:</u>

- (A) The new parts can be obtained through your IAE International Aero Engines AG Representative.
- (B) New parts are currently available.
- (C) Old parts will continue to be supplied until existing supplies have been depleted.
- (E) New parts will not be incorporated to the new Production Engines and will be supplied as a spare part only.
- (F) New parts are alternative parts to the old parts.
- (1D) Old parts can not be reworked to new parts.
- (S1) Old and new parts are interchangeable, if the old part is replaced with the new part.
- (S2) Old and new parts are not interchangeable, if the new part is replaced with the old part and the DEP variant and Bump Rating index are NOT EQUAL as premarked on the old part.

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(S3) Old and new parts are interchangeable, if the new part is replaced with the old part and the DEP variant and Bump Rating index are EQUAL as premarked on the old part.

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3. Accomplishment Instructions

- A. Rework Instructions
 - (1) None.
- B. Assembly Instructions

INSTRUCTION I - APPLICABLE FOR ENGINES 'IN SERVICE'

- (1) General
 - (a) Obey all the WARNINGS and CAUTIONS in the procedures that are referred to.
 - (b) Consumable Materials
 - Refer to the related Manual tasks given in this instruction.
 - (c) Tools and Equipment
 - (i) Refer to the related Manual tasks given in this instruction.
- (2) Pre-Requisite Instructions
 - (a) Open the fan cowl doors (Refer to the Aircraft Maintenance Manual, Chapter 71-00-00).
- (3) Replace the Engine Identification Plate (Refer to Figures 1, 2, 3 and 4)
 - NOTE: If required, the replacement Engine Identification Plate MUST be obtained from your IAE International Aero Engines AG
 Representative, and the old Engine Identification Plate MUST be returned to this same Representative who shall in turn return the plate to the IAE Manager Production Certificate (via IAE Customer Support, if desired).
 - <u>NOTE</u>: Data Plates may only be replaced or remarked by persons working under the authority of a repair station certificate or an air carrier operating certificate, or by an IAE Product Support Representative.
 - (a) Remove the four bolts, P/N 4W0102 and the four nuts, P/N 4W0001 that hold the Engine Identification Plate to the bracket.
 - (b) Permanently deface the old Engine Identification Plate, P/N 5A1875 and return it to your IAE International Aero Engines AG representative. Engine Model and Serial Number must retain visible in order to allow verification by IAE Quality Assurance. Recommended technique is to vibro peen a wavy line through the Type Certificate and Production Certificate Numbers.

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- (c) Get the new Engine Identification Plate from your IAE International Aero Engines AG Representative.
- (d) Mark the Engine Identification Plate with the appropriate Take-Off Rating-Bump No. and Variant No.. (Refer to SPP 70-09-00, Procedure to make Permanent Identification and Location Marks and Figure 3 and 4). Use the vibration peen method.
- (e) Get the Engine Rating Indicator (73-22-36, 01-100), P/N 5A1857 (IAE Rivet) and attached.
- (f) Install the Engine Rating Indicator, P/N5A1857 (IAE Rivet) in the Engine Identification Plate at the appropriate 'TAKE-OFF RATING/VARIANT' position.
 - (i) Drill a hole 0.098 0.101in. (2,5 2,56 mm) diameter at the circle marked on the Engine Identification Plate at the designated rating, and deburr the hole.
 - (ii) Install the Engine Rating Indicator, P/N 5A1857 (IAE Rivet) through the Engine Identification Plate, P/N 5A1875 at the designated rating and squeeze with the power riveter.
- (g) Install the re-usable Engine Identification Plate and the bracket as per Reference (1), Service Bulletin V2500-ENG-72-0378.
 - (i) Install the new Engine Identification Plate, P/N 5A1942 with the four bolts, P/N 4W0102 and the four nuts, P/N 4W0001.
 - (ii) Torque the four bolts between 36 45 lbfin. (4,0 5,0 Nm).
- (h) Make sure that the work area is clean and clear of tools, equipment and other unwanted materials.
- (4) Post-Requisite Instructions
 - (a) Close the fan cowl doors (Refer to the Aircraft Maintenance Manual, Chapter 71-13-00).

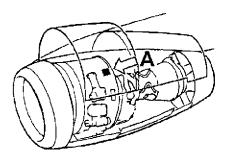
INSTRUCTION II - APPLICABLE FOR ENGINES 'AT OVERHAUL/SHOP VISIT'

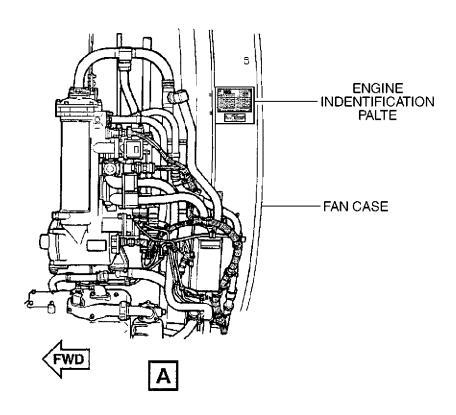
- (1) General
 - (a) Obey all the WARNINGS and CAUTIONS in the procedures that are referred to.
 - (b) Consumable Materials
 - (i) Refer to the related Manual tasks given in this instruction.



- (c) Tools and Equipment
 - (i) Refer to the related Manual tasks given in this instruction.
- (2) Replace the Engine Identification Plate (Refer to Figures 1, 2, 3 and 4)

 Refer to paragrap 3.B.(3)
- C. Recording Instructions
 - (1) A record of accomplishment is necessary.





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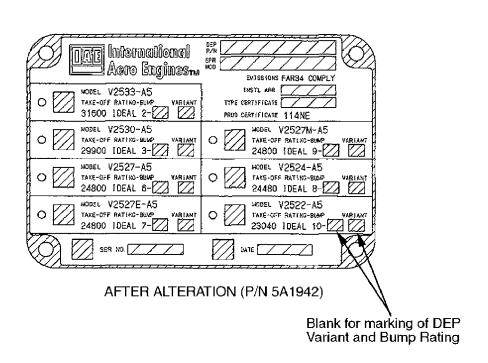
Location of the Engine Identification Plate Figure 1

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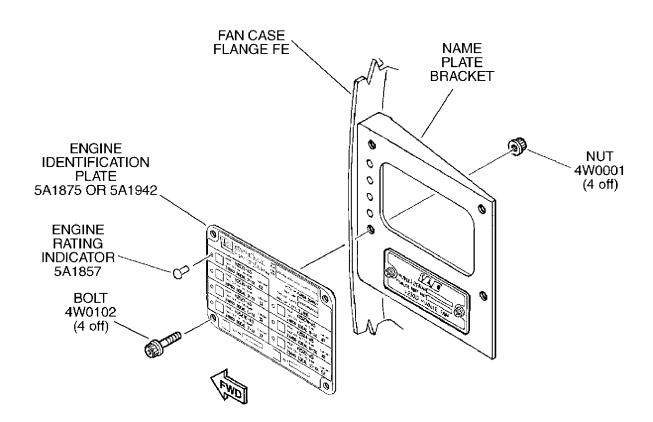
	DAE Internatio Aero Engi		PAR PAR SPR COMPLY EMISSIONS FAR34 COMPLY
0	MOSEL V2533-A5 TAKE-OFF RATINO-SUMP 31500 19EAL 2-00	VARIANT 02	CHSYL ARR TYPE SERVIFICATE PROD SERVIFICATE \$14NE
0	MOSEL V2530-A5 TAKE-OFF RATING-BUMP 29900 10EAL 3-00	variant 12	MODEL V2527M-A5 TAXE-OFF RATING-BLAP VARIANT 24800 18EAL 9-00 47
0	MODEL V2527-A5 TAKE-OFF RATING-BUMP 24800 10EAL 8-00	variant 32	MODEL V2524-A5 TAKE-OFF RATING-BLAP VARIANT 24480 IDEAL 8-00 42
0	MODEL V2527E-A5 TAKE-OFF RATERC-BURP 24800 10EAL 7-00	variant 37	MODEL V2522-A5 TAXE-OFF RATING-BLAP VARIANT 23040 IDEAL 10-00 52
	SER NO.		OATG ZZZ

BEFORE ALTERATION (P/N 5A1875)



Before and after alteration of the Engine Identification Plate Figure 2

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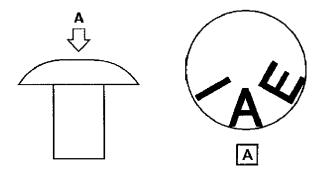


NOTE: Location of the Engine Rating Indicator above is example.

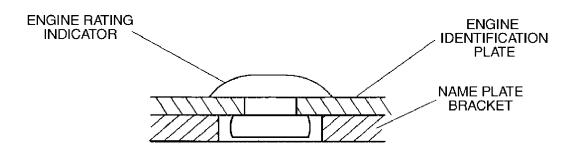
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Replacement of the Engine Identification Plate Figure 3

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ENGINE RATING INDICATOR AS SUPPLIED BY IAE



ENGINE RATING INDICATOR AS PLACED ON THE ENGINE IDENTIFICATION PLATE

Replacement of the Engine Rating Indicator Figure 4

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MODIFICATION

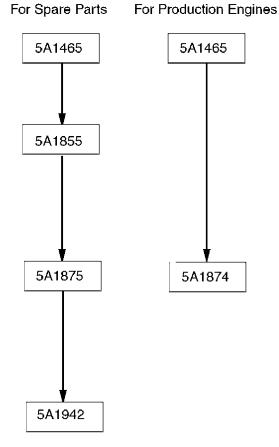
PART NUMBER CHANGE

BASE LINE

V2500-ENG-72-0378 ENGINE - LP COMPRESSOR -TO ANNOUNCE THE AVAILABILITY OF NEW ENGINE IDENTIFICATION PLATE WITH DESIGNATION OF ALL A5 MODEL RATINGS - CATEGORY 8

V2500-ENG-70-0622 ENGINE - LP COMPRESSOR -ANNOUNCEMENT OF THE ENGINE IDENTIFICATION PLATE WITH NEW IAE LOGO - CATEGORY 7

V2500-ENG-72-0584 ENGINE - TO APPLY THE MULTI-RATING ENGINE IDENTIFICATION PLATE TO ALL A5 ENGINE MODELS - CATEGORY 7



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Family Tree - Plate, Engine Identification (72-32-85, Fig 03 Item 120)
Figure 5

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ENGINE - LP COMPRESSOR - TO APPLY THE MULTI-RATING ENGINE IDENTIFICATION PLATE TO ALL A5 ENGINE MODELS

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. New Production Parts:

Unit Price

Part No. Description US Dollars

5A1942 .Plate, Engine P.O.A. Identification

P.O.A. - Price On Application

3. <u>Tools</u>

None.