

### **SERVICE BULLETIN**

ENGINE - HP TURBINE ROTOR AND STATOR ASSEMBLY - PROVIDE A NEW STAGE 1 HPT HUB METERING PLUG WITH A SMALLER METERING HOLE AND TRANSFER THE HUB DETAILS TO THE STAGE 1 TURBINE ROTOR ASSEMBLY - CATEGORY CODE 8 - MOD.ENG-72-0123

#### 1. Planning Information

#### A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engines before Serial No.V0267\*

\*The Serial Number data is of a preliminary nature and is provided for advanced planning only. A future revision to this Service Bulletin will confirm final serial number effectivity.

This Service Bulletin must be incorporated at the same time as or after V2500-ENG-72-0121 and V2500-ENG-72-0095.

### B. Reason

(1) Condition

The new parts specified in this Service Bulletin will decrease the flow of cooling air through the First Stage Turbine Disk Air Metering Plugs. This modification will result in improved engine performance.

(2) Background

Not considered necessary.

(3) Objective

To provide increased engine operating efficiency by reducing required cooling air flow through the first stage turbine disk air metering plugs.

(4) Substantiation

Satisfactory engine testing.

(5) Effects of Bulletin on Workshop Procedures:



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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. <u>Description</u>

- (1) The changes introduced by this Service Bulletin are as follows:
  - (a) A new Stage 1 HPT Hub Metering Plug with a smaller metering hole.
  - (b) Move the Stage 1 Turbine Hub Assembly details to the Stage 1 Turbine Rotor Assembly location.

### D. Approval

The Part Number Changes and/or part modifications described in Section 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 8.

Accomplish based upon experience with the prior configuration.

### 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 the modification and identification of the Stage 1 Turbine
    Assembly ..... 10 Minutes
    TOTAL: 10 Minutes



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- G. Material Price and Availability
  - (1) Modification Kit not required.
  - (2) See "Material Information" section for prices and availability of future spares.
- H. Tooling Price and Availability

None.

- I. Weight and Balance
  - (1) Weight change .. .. None
  - (2) Moment arm .. .. No effect
  - (3) Datum .. .. Engine front mount Centerline (Powerplant station P.P.S.100)
- J. Electrical Load Data

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

#### K. Reference

(1) Internal Reference No.

88VA347C

(2) Other References

IAE V2500 Service Bulletins:

V2500-ENG-72-0095 - HP Turbine Rotor and Stator Assembly - Provide A New HPT Retaining Nut.

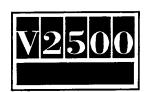
V2500-ENG-72-0121 - HP Turbine Rotor and Stator Assembly - Provide A New Stage 2 HPT Seal Assembly

V2500 Engine Manual.

V2500 Standard Practices Manual.

#### L. Other Publications Affected

(1) The V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-45-00, Figure 1, 72-45-10, Figure 1, and 72-45-11 Figure 1 to add the new parts.



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- (2) The V2500 Engine Manual, Chapter/Section 72-45-11, Cleaning, to add the new parts.
- (3) The V2500 Engine Manual, Chapter/Section 72-45-11, Inspection, to add the new parts.
- (4) The V2500 Engine Manual, Chapter/Section 72-45-11, Repair, to add the new parts.



### 2. Accomplishment Instructions

- A. Rework Instructions
  - (1) There are no rework instructions necessary to accomplish this Service Bulletin.
- B. Assembly Instructions
  - (1) Assemble the Stage 1 Turbine Rotor Assembly by the approved procedure in Reference (2), chapter/Section 72-45-10, Assembly, Figure 1, and as follows:
    - (a) Replace the 2A1040 Stage 1 HPT Metering Plugs with the 2A2181 Stage 1 HPT Metering Plugs (12 off).
    - (b) Remove the Stage 1 Turbine Hub Assembly part number (2A2021, 2A2121 or 2A2221) by the approved procedure given in Reference (3), Chapter/Section 70-09-00, Marking of Parts. Use the vibration peen method.
    - (c) Identify the Stage 1 Turbine Rotor Assemblies as follows:
      - 1 Mark the new part number adjacent to the old part number by the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
      - 2 Use the vibration peen method.

0ld	Part	Number	New	Part	Number
	2A49	921	2	2A8021	l
	2A21	121	2	2A5821	l
	2A25	521	2	2A6021	l
	2A44	¥21	2	2A7321	l
	2A27	721	2	2A6121	l
	2A45	521	2	2A7421	l
	2A63	321	2	2A7521	l
	2A64	¥21	2	2A7621	l
	2A68	321	2	2A7821	l
	2A69	921	2	2A7921	l

- (2) Assemble the HPT Rotor and Stator Assembly Module by the approved procedure in Reference (2), Chapter/Section 72-45-00, Assembly and and Figure 1.
- (3) For Engines incorporating V2500-ENG-72-0013, V2500-ENG-72-0011, V2500-ENG-72-0046, V2500-ENG-72-0075, and V2500-ENG-72-0111.
  - (a) Install the 2A8021 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.

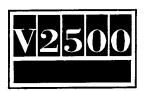


- (b) Identify the 2A4400 HPT Rotor and Stator Assembly Module as 2A6700.
  - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
  - 2 Use the vibration peen method.
- (4) For Engines incorporating V2500-ENG-72-0013, V2500-ENG-72-0046, V2500-ENG-72-0075, and V2500-ENG-72-0111 but not incorporating V2500-ENG-72-0011.
  - (a) Install the 2A8021 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
  - (b) Identify the 2A4400 HPT Rotor and Stator Assembly Module as 2A6700.
    - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
    - 2 Use the vibration peen method.
- (5) For Engines incorporating V2500-ENG-72-0013, V2500-ENG-72-0011, V2500-ENG-72-0046 and V2500-ENG-72-0075, but not incorporating V2500-ENG-72-0111.
  - (a) Install the 2A5821 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
  - (b) Identify the 2A1700 HPT Rotor and Stator Assembly Module as 2A5800.
    - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
    - 2 Use the vibration peen method.
- (6) For Engines incorporating V2500-ENG-72-0013, V2500-ENG-72-0046 and V2500-ENG-72-0075, but not incorporating V2500-ENG-72-0011 and V2500-ENG-72-0111.
  - (a) Install the 2A5821 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
  - (b) Identify the 2A1700 HPT Rotor and Stator Assembly Module as 2A5800.
    - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
    - 2 Use the vibration peen method.



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- (7) For Engines incorporating V2500-ENG-72-0013, V2500-ENG-72-0011 V2500-ENG-72-0046, but not incorporating V2500-ENG-72-0075 and V2500-ENG-72-0111.
  - (a) Install the 2A6O21 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
  - (b) Identify the 2A1700 HPT Rotor and Stator Assembly Module as 2A5800.
    - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
    - 2 Use the vibration peen method.
- (8) For Engines incorporating V2500-ENG-72-0013, V2500-ENG-72-0011, V2500-ENG-72-0046 and V2500-ENG-72-0111 but not incorporating V2500-ENG-72-0075.
  - (a) Install the 2A7321 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
  - (b) Identify the 2A4400 HPT Rotor and Stator Assembly Module as 2A6700.
    - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
    - 2 Use the vibration peen method.
- (9) For Engines incorporating V2500-ENG-72-0013 and V2500-ENG-72-0046 but not incorporating V2500-ENG-72-0011, V2500-ENG-72-0075 and V2500-ENG-72-0111.
  - (a) Install the 2A6121 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
  - (b) Identify the 2A1700 HPT Rotor and Stator Assembly Module and 2A5800.
    - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
    - 2 Use the vibration peen method.
- (10) For Engines incorporating V2500-ENG-72-0013, V2500-ENG-72-0046 and V2500-ENG-72-0111, but not incorporating V2500-ENG-72-0011 and V2500-ENG-72-0075.
  - (a) Install the 2A7421 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
  - (b) Identify the 2A4400 HPT Rotor and Stator Assembly Module as 2A6700.

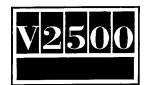


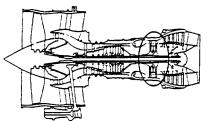
- 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
- 2 Use the vibration peen method.
- (11) For Engines incorporating V2500-ENG-72-0046, but not incorporating V2500-ENG-72-0013, V2500-ENG-72-0011, V2500-ENG-72-0075 and V2500-ENG-72-0111.
  - (a) Install the 2A7521 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
  - (b) Identify the 2A5100 HPT Rotor and Stator Assembly Module as 2A6200.
    - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
    - 2 Use the vibration peen method.
- (12) For Engines incorporating V2500-ENG-72-0011 and V2500-ENG-72-0046, but not incorporating V2500-ENG-72-0013, V2500-ENG-72-0075 and V2500-ENG-72-0111.
  - (a) Install the 2A7621 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
  - (b) Identify the 2A5200 HPT Rotor and Stator Assembly Module as 2A6300.
    - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
    - 2 Use the vibration peen method.
- (13) For Engines incorporating V2500-ENG-72-0046 and V2500-ENG-72-0111, but not incorporating V2500-ENG-72-0013, V2500-ENG-72-0011 and V2500-ENG-72-0075.
  - (a) Install the 2A7821 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
  - (b) Identify the 2A5400 HPT Rotor and Stator Assembly Module as 2A6500.
    - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
    - 2 Use the vibration peen method.
- (14) For Engines incorporating V2500-ENG-72-0011, V2500-ENG-72-0046 and V2500-ENG-72-0111, but not incorporating V2500-ENG-72-0013 and V2500-ENG-72-0075.



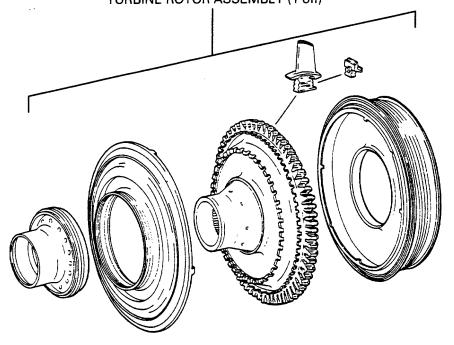
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- (a) Install the 2A7921 Stage 1 Turbine Rotor Assembly by the approved procedure given in Reference (2), Chapter/Section 72-45-00, Assembly.
- (b) Identify the 2A5500 HPT Rotor and Stator Assembly Module as 2A6600.
  - 1 Use the approved procedure in Reference (3), Chapter/Section 70-09-00, Marking of Parts.
  - 2 Use the vibration peen method.
- C. Recording Instructions
  - (1) A record of accomplishment is necessary.





\* REMOVE THE APPLICABLE STAGE 1 TURBINE ROTOR ASSEMBLY AND INSTALL THE APPLICABLE STAGE 1 TURBINE ROTOR ASSEMBLY (1 off)



DEMOVE	INICTALI	
* <u>REMOVE</u>	<u>INSTALL</u>	
2A4921	2A8021	
2A2121	2A5821	
2A2521	2A6021	
2A4421	2A7321	
2A2721	2A6121	
2A4521	2A7421	
2A6321	2A7521	
2A6421	2A7621	
2A6821	2A7821	
246921	2A7921	B5190

Location of Stage 1 turbine Rotor Assembly Fig.1



### 3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

### A. <u>Kits associated with this Bulletin:</u>

None.

### B. Parts affected by this Bulletin:

New		Est'd		Old	
Part No.		Unit		Part No.	Instructions
(ATA No.)	Qty.	Price (\$)	Keyword	(IPC No.)	Disposition

Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0013, V2500-ENG-72-0011, V2500-ENG-72-0046, V2500-ENG-72-0075 and V2500-ENG-72-0111.

2A6700	1	_	Rotor and Stator	2A4400	(S1) (1D) (A)
(72-45-00)			Assy - HPT Module	(01-001)	
2A8021	1	_	.Turbine Rotor -	2A4921	(S1) (1D) (A)
(72-45-10)			Stage 1, Assy	(01-010)	
-		-	Hub Assy Turbine -	2A2221	(S1) (B)
(72-45-11)			Stage 1	(01-010)	
2A2181	12	22.40	Metering Plug HPT	2A1040	(S1) (C) (E)
(72-45-11)			Hub, Stage 1	(01-040)	
-		-	Hub Turbine,	2A1801	(S1) (F)
(72-45-11)			Stage 1	(01-011)	
2A1801	1	_	Hub Turbine,	-	(S1) (G)
(72-45-11)			Stage 1	(01-011)	

Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0013, V2500-ENG-72-0046, V2500-ENG-72-0075 and V2500-ENG-72-0111, but does not incorporate V2500-ENG-72-0011.

2A6700 (72-45-00)	1	-	Rotor and Stator Assy – HPT Module	2A4400 (01-001)	(S1) (1D) (A)
2A8021 (72-45-10)	1	-	.Turbine Rotor - Stage 1, Assy	2A4921 (01-010)	(S1) (1D) (A)
- (72-45-11)		-	Hub Assy Turbine - Stage 1	2A2221 (01-010)	(S1) (B)
2A2181 (72-45-11)	12	22.40	Metering Plug HPT Hub, Stage 1	2A1040 (01-040)	(S1) (C) (E)
- (72-45-11)		-	Hub Turbine, Stage 1	2A1801 (01-011)	(S1) (F)
2A1801 (72-45-11)	1	-	Hub Turbine, Stage 1	- (01-011)	(S1) (G)



Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0013, V2500-ENG-72-0011, V2500-ENG-72-0046 and V2500-ENG-72-0075, but does not incorporate V2500-ENG-72-0111.

2A5800	1	_	Rotor and Stator	2A1700	(S1)	(1D)
(72-45-00)			Assy - HPT Module	(01-001)	(A)	
2A5821	1		.Turbine Rotor -	2A2121	(S1)	(1D)
(72-45-10)			Stage 1, Assy	(01-010)	(A)	
-		-	Hub Assy Turbine -	2A2221	(\$1)	(B)
(72-45-11)			Stage 1	(01-010)		
2A2181	12	22.40	Metering Plug HPT	2A1040	(\$1)	(C)
(72-45-11)			Hub, Stage 1	(01-040)	(E)	
-		-	Hub Turbine,	2A1801	(S1)	(F)
(72-45-11)			Stage 1	(01-011)		
2A1801	1	_	Hub Turbine,	_	(S1)	(G)
(72-45-11)			Stage 1	(01-011)		

Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0013, V2500-ENG-72-0046 and V2500-ENG-72-0075, but does not incorporate V2500-ENG-72-0011 and V2500-ENG-72-0111.

2A5800 (72-45-00	1	-	Rotor and Stator Assy — HPT Module	2A1700 (01-001)	(S1) (1D) (A)
2A5821 (72-45-10)	1		.Turbine Rotor - Stage 1, Assy	2A2121 (01-010)	(S1) (1D) (A)
- (72-45-11)		-	Hub Assy Turbine - Stage 1	2A2221 (01-010)	(S1) (B)
2A2181 (72-45-11)	12	22.40	Metering Plug HPT Hub, Stage 1	2A1040 (01-040)	(S1) (C) (E)
- (72-45-11)		-	Hub Turbine, Stage 1	2A1801 (01-011)	(S1) (F)
2A1801 (72-45-11)	1	-	Hub Turbine, Stage 1	(01-011)	(S1) (G)

Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0013, V2500-ENG-72-0011 and V2500-ENG-72-0046, but does not incorporate V2500-ENG-72-0075 and V2500-ENG-72-0111.



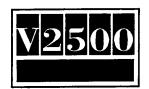
2A5800	1	_	Rotor and Stator	2A1700	(S1) (1D)
(72-45-00			Assy - HPT Module	(01-001)	(A)
2A6021	1		.Turbine Rotor -	2A2521	(S1) (1D)
(72-45-10)			Stage 1, Assy	(01-010)	(A)
-		_	Hub Assy Turbine -	2A2021	(S1) (B)
(72-45-11)			Stage 1	(01-010)	
2A2181	12	22.40	Metering Plug HPT	2A1040	(S1) (C) (E)
(72-45-11)			Hub, Stage 1	(01-040)	
-		_	Hub Turbine,	2A1901	(S1) (F)
(72-45-11)			Stage 1	(01-011)	
2A1901	1	_	Hub Turbine,	_	(S1) (G)
(72-45-11)			Stage 1	(01-011)	

Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0013, V2500-ENG-72-0011 and V2500-ENG-72-0046, and V2500-ENG-72-0111, but does not incorporate V2500-ENG-72-0075.

1	_	Rotor and Stator	2A4400	(S1) (1D) (A)
		Assy - HPT Module	(01-001)	
1	_	.Turbine Rotor -	2A4421	(S1) (1D) (A)
		Stage 1, Assy	(01-010)	
	-	Hub Assy Turbine -	2A2O21	(S1) (B)
		Stage 1	(01-010)	
12	22.40	Metering Plug HPT	2A1040	(S1) (C) (E)
		Hub, Stage 1	(01-040)	
	-	Hub Turbine,	2A1901	(S1) (F)
			(01-011)	
1	_	Hub Turbine,	_	(S1) (G)
		Stage 1	(01-011)	
	1 1 12	1 -	Assy - HPT Module  1 - Turbine Rotor - Stage 1, Assy - Hub Assy Turbine - Stage 1  12 22.40Metering Plug HPT Hub, Stage 1 - Hub Turbine, Stage 1 1 - Hub Turbine,	Assy - HPT Module (01-001)  1Turbine Rotor - 2A4421 Stage 1, Assy (01-010)Hub Assy Turbine - 2A2021 Stage 1 (01-010)  12 22.40Metering Plug HPT 2A1040 Hub, Stage 1 (01-040)Hub Turbine, 2A1901 Stage 1 (01-011)  1Hub Turbine, -

Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0013 and V2500-ENG-72-0046, but does not incorporate V2500-ENG-72-0011, V2500-ENG-72-0075 and V2500-ENG-72-0111.

2A5800 (72-45-00)	1	-	Rotor and Stator Assy — HPT Module	2A1700 (01-001)	(S1) (1D) (A)
2A6121 (72-45-10)	1		.Turbine Rotor - Stage 1, Assy	2A2721 (01-010)	(S1) (1D) (A)
- (72-45-11)		-	Hub Assy Turbine - Stage 1	2A1121 (01-010)	(S1) (B)
2A2181 (72-45-11)	12	22.40	Metering Plug HPT Hub, Stage 1	2A1040 (01-040)	(S1) (C) (E)
- (72-45-11)		-	Hub Turbine, Stage 1	2A1101 (01-011)	(S1) (F)
2A1101 (72-45-11)	1	-	Hub Turbine, Stage 1	- (01-011)	(S1) (G)



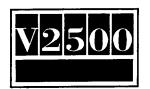
Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0013, V2500-ENG-72-0046 and V2500-ENG-72-0111, but does not incorporate V2500-ENG-72-0011 and V2500-ENG-72-0075.

2A6700	1	_	Rotor and Stator	2A4400	(S1) (1D)
(72-45-00)	•		Assy - HPT Module	(01-001)	(A)
2A7421	1	_	.Turbine Rotor -	2A4521	(S1) (1D)
(72-45-10)			Stage 1, Assy	(01-010)	(A)
-		-	Hub Assy Turbine -	2A1121	(S1) (B)
(72-45-11)			Stage 1	(01-010)	
2A2181	12	22.40	Metering Plug HPT	2A1040	(S1) (C)
(72-45-11)			Hub, Stage 1	(01-040)	(E)
-		_	Hub Turbine,	2A1101	(S1) (F)
(72-45-11)			Stage 1	(01-011)	
2A1101	1	-	Hub Turbine,	-	(S1) (G)
(72-45-11)			Stage 1	(01-011)	

Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0046, but does not incorporate V2500-ENG-72-0013, V2500-ENG-72-0011, V2500-ENG-72-0075 and V2500-ENG-72-0111.

2A6200	1	_	Rotor and Stator	2A5100	(S1)	(1D)
(72-45-00)			Assy - HPT Module	(01-001)	(A)	
2A7521	1	_	.Turbine Rotor -	2A6321	(S1)	(1D)
(72-45-10)			Stage 1, Assy	(01-010)	(A)	
-		-	Hub Assy Turbine -	2A1121	(S1)	(B)
(72-45-11)			Stage 1	(01-010)		
2A2181	12	22.40	Metering Plug HPT	2A1040	(S1)	(C)
(72-45-11)			Hub, Stage 1	(01-040)	(E)	
-		-	Hub Turbine,	2A1101	(S1)	(F)
(72-45-11)			Stage 1	(01-011)		
2A1101	1	_	Hub Turbine,	-	(S1)	(G)
(72-45-11)			Stage 1	(01-011)		

Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0011, and V2500-ENG-72-0046, but does not incorporate V2500-ENG-72-0013, V2500-ENG-72-0075 and V2500-ENG-72-0111.



2A6300	1	_	Rotor and Stator	2A5200	(S1) (1D)
(72-45-00)			Assy - HPT Module	(01-001)	(A)
2A7621	1	_	<pre>.Turbine Rotor -</pre>	2A6421	(S1) (1D)
(72-45-10)			Stage 1, Assy	(01-010)	(A)
-		-	Hub Assy Turbine -	2A1121	(S1) (B)
(72-45-11)			Stage 1	(01-010)	
2A2181	12	22.40	Metering Plug HPT	2A1040	(S1) (C) (E)
(72-45-11)			Hub, Stage 1	(01-040)	
-		_	Hub Turbine,	2A1101	(S1) (F)
(72-45-11)			Stage 1	(01-011)	
2A1101	1	_	Hub Turbine,	_	(S1) (G)
(72-45-11)			Stage 1	(01-011)	

Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0046 and V2500-ENG-72-0111 but does not incorporate V2500-ENG-72-0013, V2500-ENG-72-0011 and V2500-ENG-72-0075.

2A6500 (72-45-00)	1	-	Rotor and Stator Assy — HPT Module	2A5400 (01-001)	(\$1)	(1D) (A)
2A7821 (72-45-10)	1	22.40	.Turbine Rotor - Stage 1, Assy	2A6821 (01-010)	(\$1)	(1D) (A)
- (72-45-11)		-	Hub Assy Turbine - Stage 1	2A1121 (01-010)	(\$1)	(B)
2A2181 (72-45-11)	12	-	Metering Plug HPT Hub, Stage 1	2A1040 (01-040)	(\$1)	(C) (E)
- (72-45-11)		-	Hub Turbine, Stage 1	2A1101 (01-011)	(\$1)	(F)
2A1101 (72-45-11)	1	-	Hub Turbine, Stage 1	- (01–011)	(S1)	(G)

Applicability: For each V2500 Engine to incorporate this Bulletin which incorporates V2500-ENG-72-0011, V2500-ENG-72-0046 and V2500-ENG-72-0111, but does not incorporate V2500-ENG-72-0013 and V2500-ENG-72-0075.

2A6600 (72-45-00)	1	-	Rotor and Stator Assy — HPT Module	2A5500 (01-001)	(S1) (1D) (A)
2A7921 (72-45-10)	1	-	.Turbine Rotor - Stage 1, Assy	2A6921 (01-010)	(S1) (1D) (A)
- (72-45-11)		_	Hub Assy Turbine - Stage 1	2A1121 (01-010)	(S1) (B)
2A2181 (72-45-11)	12	22.40	Metering Plug HPT Hub, Stage 1	2A1040 (01-040)	(S1) (C) (E)
- (72-45-11)		-	Hub Turbine, Stage 1	2A1101 (01-011)	(S1) (F)
2A1101 (72-45-11)	1	-	Hub Turbine, Stage 1	- (01-011)	(S1) (G)



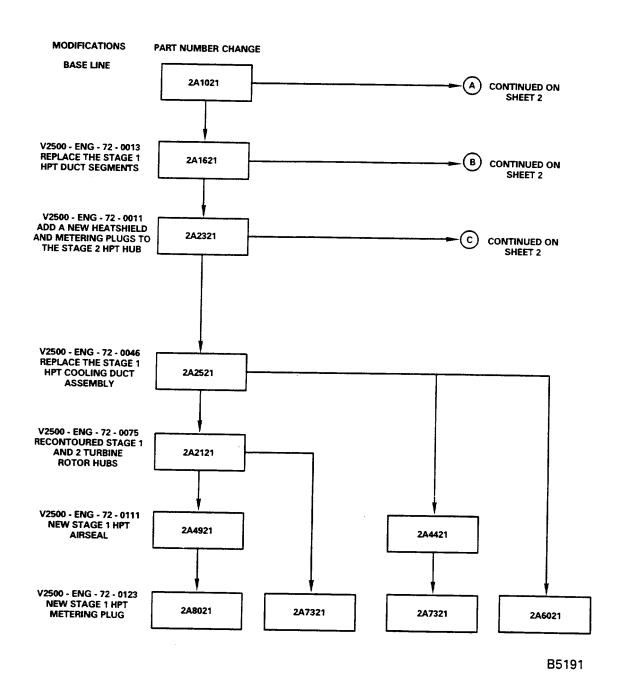
### SERVICE BULLETIN

#### C. <u>Instruction/Disposition Code Statements:</u>

- (S1) New parts coded (S1) must replace old parts coded (S1) as a COMPLETE SET per engine.
- (1D) Rework the Old part number and identify as the New part number.
- (A) Part is a major assembly not normally stocked or sold as a spare.
- (B) Old part will no longer continue to be supplied.
- (C) New part is currently available for sale.
- (E) Old part will continue to be available for sale.
- (F) Old part will continue to be supplied and is listed as a detail of a higher assembly.
- (G) New part is available as a detail of the next higher assembly as the Stage 1 Turbine Hub Assembly is cancelled.

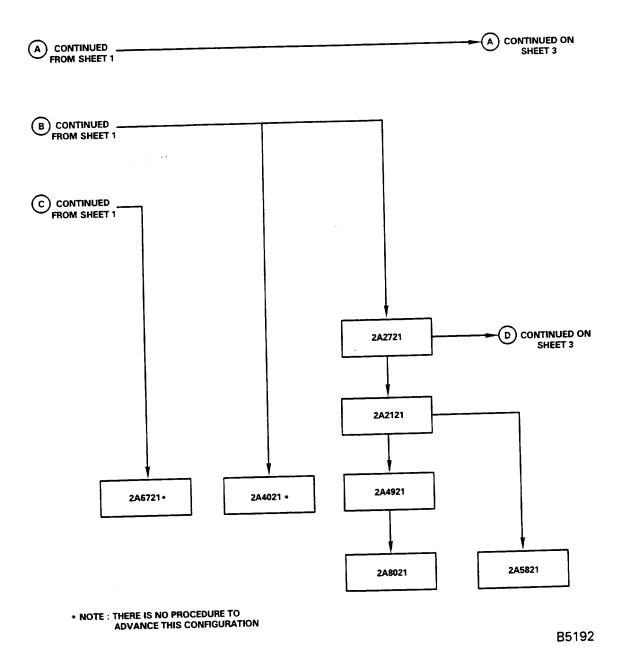
NOTE: The estimated 1992 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.





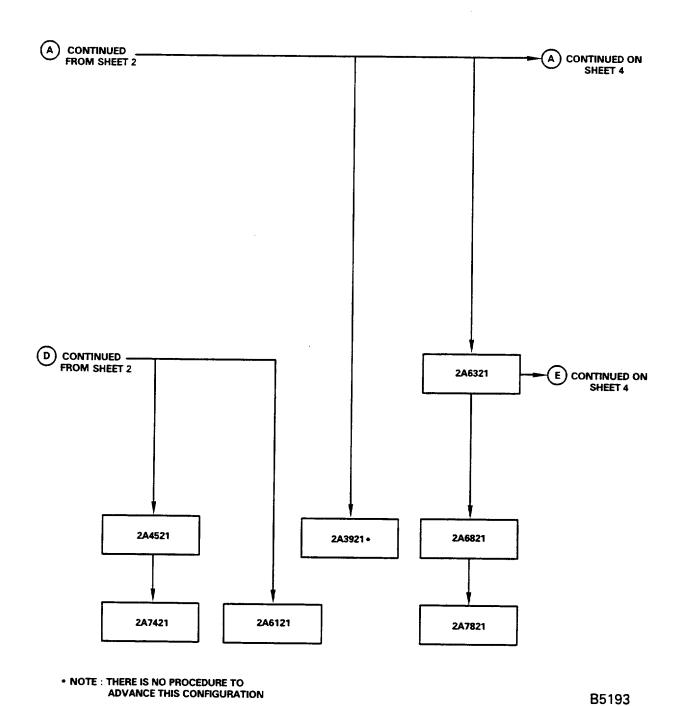
Family tree - Stage 1 Turbine Rotor Assembly Fig.2 (Sheet 1)



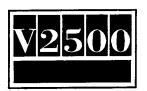


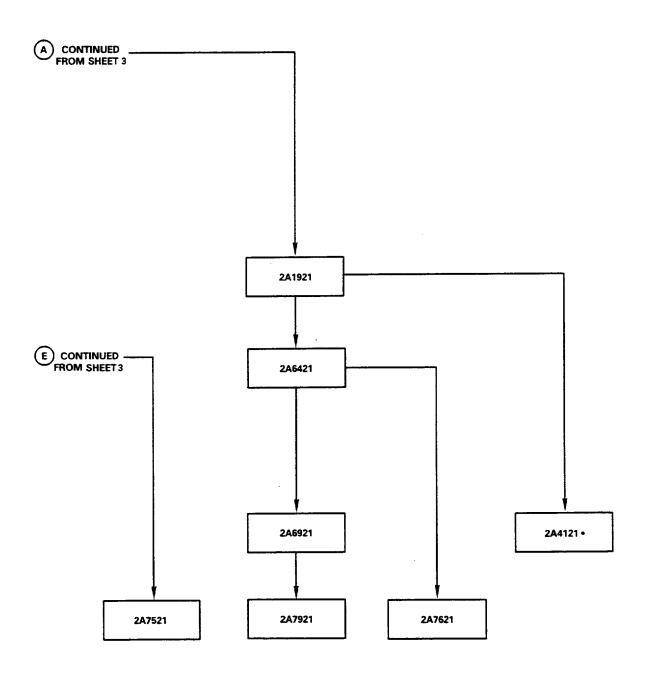
Family tree - Stage 1 Turbine Rotor Assembly Fig.2 (Sheet 2)





Family tree - Stage 1 Turbine Rotor Assembly Fig.2 (Sheet 3)

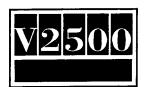


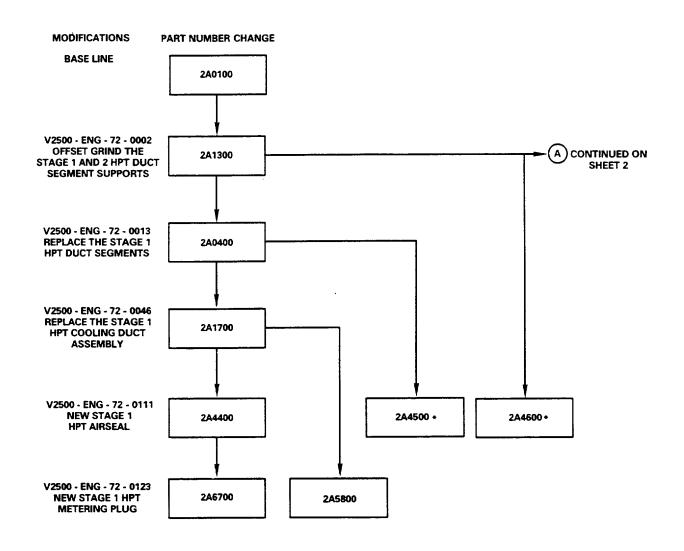


 NOTE : THERE IS NO PROCEDURE TO ADVANCE THIS CONFIGURATION

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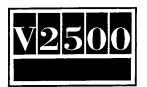
Family tree - Stage 1 Turbine Rotor Assembly Fig.2 (Sheet 4)

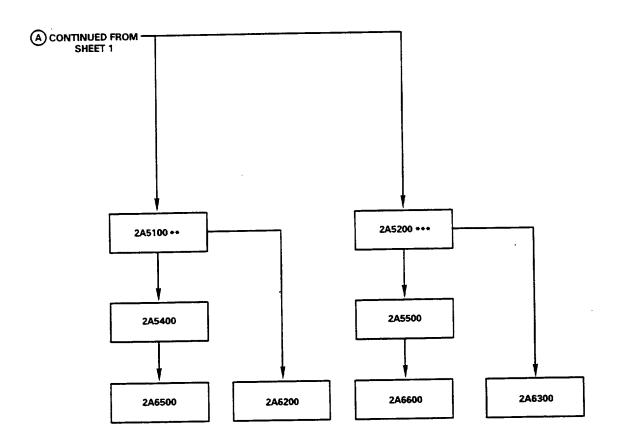




B5195

Family tree - Rotor and Stator Assembly Module Fig.3 (Sheet 1)





#### NOTE:

- THERE IS NO PROCEDURE TO ADVANCE THIS CONFIGURATION
- \*\* FOR ENGINES NOT INCORPORATING V2500 ENG 72 0011
- \*\*\* FOR ENGINES INCORPORATING V2500 ENG 72 0011

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Family tree - Rotor and Stator Assembly Module Fig.3 (Sheet 2)



## **SERVICE BULLETIN**

