



Date: Jan.15/97

Subject: Transmittal of Revision 3 to Service Bulletin Number  
V2500-ENG-72-0122

Service Bulletin Revision History:

<u>Event</u>	<u>Date</u>
Basic Issue	Jul.17/92
Revision 1	Sept.18/92
Revision 2	Mar.3/94
Revision 3	Jan.15/97

Reasons For Issuance Of Revision:

- (1) To amend step (1) (c) of Paragraph C. by changing the quantity of 2A1152 Stage 2 Vane Assemblies from "36" to "34".

Effect On Past Compliance:

None

List Of Effective Pages:

	<u>Bulletin</u> <u>Page No.</u>	<u>Rev.</u> <u>No.</u>	<u>Effective</u> <u>Date</u>
R	1	3	Jan.15/97
	2 to 10	Basic	Jul.17/92
R	11	3	Jan.15/97
	12 to 16	2	Mar.3/94
	17 to 18	Basic	Jul.17/92
	19	2	Mar.3/94

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Transmittal  
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# International Aero Engines SERVICE BULLETIN

ENGINE - HP TURBINE ROTOR AND STATOR ASSEMBLY - PROVIDE  
NEW STAGE 2 HPT VANE ASSEMBLIES, STAGE 2 AIR SEALING  
RING SEGMENT ASSEMBLIES AND STAGE 2 HPT SEALS

## MODEL APPLICATION

V2500-A1

## BULLETIN INDEX LOCATOR

72-45-00

## Compliance Category Code

8

## Internal Reference No.

88VA347B



# International Aero Engines SERVICE BULLETIN

ENGINE - HP TURBINE ROTOR AND STATOR ASSEMBLY - PROVIDE NEW STAGE 2 HPT VANE ASSEMBLIES, STAGE 2 HPT AIR SEALING RING ASSEMBLIES AND AND STAGE HPT SEALS

## 1. Planning Information

### A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines before Serial No.V0267\*

\*The Serial Number data shown 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.

Part 2 of this Service Bulletin must be incorporated at the same time as or subsequent to V2500-ENG-72-0124. This is not mandatory if you only do Part 1 of this Service Bulletin.

### B. Reason

#### (1) Condition

The new parts specified in this Service Bulletin will decrease the flow of cooling air to the Second Stage HPT Vane Clusters and Outer Air Seals. 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 to the second stage HPT Vane Clusters and Outer Air Seals.

#### (4) Substantiation

Satisfactory engine testing.

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(5) Effects of Bulletin on Workshop Procedures:

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

Part 1

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

- (a) A new one-piece Stage 2 HPT Seal (featherseal) which is installed between the inner platforms of the vanes.
- (b) A new longer Stage 2 Air Sealing Ring Segment Assembly and Seal (featherseal).

Part 2

(2) The changes introduced by this Service Bulletin are as follows:

- (a) A new Stage 2 Vane Cover with a directional flow cavity.
- (b) A new one-piece Stage 2 HPT Seal (featherseal) which is installed between the inner platforms of the vanes.
- (c) A smaller metering hole in the rear outer leg of the Vane.
- (d) A new longer Stage 2 Air Sealing Ring Segment Assembly and Seal (featherseal).

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.

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## F. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

<u>Venue</u>	<u>Estimated Manhours</u>
(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 2 HPT Ring Segment And Vane Cluster Assy. ..	<u>45 Minutes</u>
	TOTAL: 45 Minutes

## 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 .. .. Plus 2.09 lbs (0.95 kg.)
- (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) IAE V2500 Service Bulletins:  
  
V2500-ENG-72-0124 - Engine - Hp Turbine Rotor and Stator Assembly -  
Provide New HPT Band Segment Assemblies and New HPT Duct Support  
Assemblies
- (2) V2500 Engine Illustrated Parts Catalog.
- (3) V2500 Engine Manual.
- (4) V2500 Standard Practices Manual.

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## L. Other Publications Affected

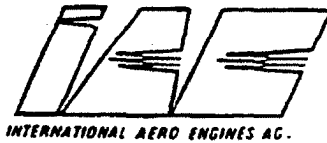
- (1) The V2500 Engine Illustrated Parts Catalog, Chapter/Section 72-45-24, Figure 2, to add the new parts.
- (2) The V2500 Engine Manual, Chapter/Section 72-45-24, Cleaning, to add the new parts.
- (3) The V2500 Engine Manual, Chapter/Section 72-45-24, Inspection, to add the new parts.
- (4) The V2500 Engine Manual, Chapter/Section 72-45-24, Repair, to add the new parts.
- (5) The V2500 Engine Manual, Chapter/Section 72-45-20, Disassembly, to add the new parts.
- (6) The V2500 Engine Manual, Chapter/Section 72-45-20, Assembly to add the new parts.

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## 2. Accomplishment Instructions

### A. Rework Instructions

- (1) Do a modification to the 2A0172 Stage 2 Ring Segment And Vane Cluster Assembly (Reference (2), Chapter/Section 72-45-24, Figure/Item No. 02-050 to 02-096) and identify as follows:

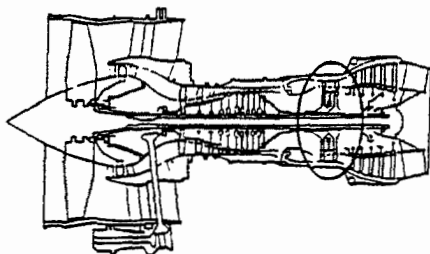
<u>Procedure</u>	<u>Supplementary Information</u>				
(a) Remove the 2A0088-01 Stage 2 HPT Air Sealing Ring Segment Assy.	Refer to Figure 1 and Reference (3), Control No./TASK No. 72-45-24-300-007.				
(b) Install the 2A1106-01 Stage 2 HPT Air Sealing Ring Segment Assys. (17 off).	Refer to Figure 1 and Reference (3), Control No./TASK No. 72-45-24-300-007.				
1 Replace the 2A0054 and 2A0055 Stage 2 HPT Seals with the 2A0544 Stage 2 HPT Seals (17 off).					
(e) Mark the new part number adjacent to the old part number. Use the vibration peen method.	<table><tr><td><u>Old Part No.</u></td><td><u>New Part No.</u></td></tr><tr><td>2A0172</td><td>2A2772</td></tr></table> See Reference (4), Control No./TASK No. 70-09-00-400-501.	<u>Old Part No.</u>	<u>New Part No.</u>	2A0172	2A2772
<u>Old Part No.</u>	<u>New Part No.</u>				
2A0172	2A2772				

- (2) Do a modification to PN 2A1072 Stage 2 Ring Segment And Vane Cluster Assembly (Reference (2), Chapter/Section 72-45-24, Figure/Item No. 02-260 to 02-296) and identify as follows:

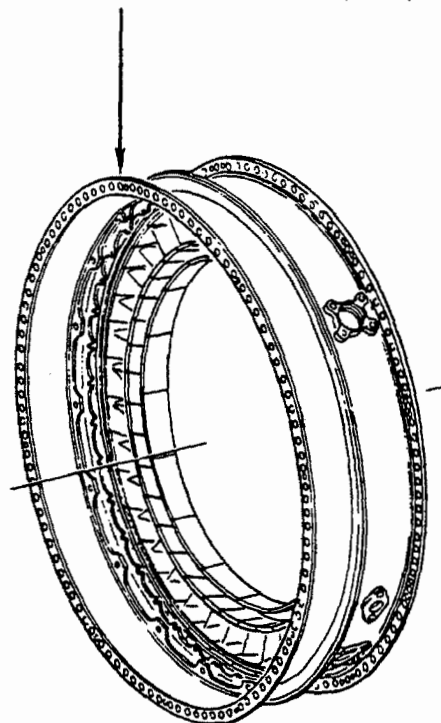
<u>Procedure</u>	<u>Supplementary Information</u>				
(a) Remove the 2A0088-01 Stage 2 Air Sealing Ring Segment.	Refer to Figure 1 and Reference (3), Control No./TASK No. 72-45-24-300-007.				
(b) Install the 2A1106-01 Stage 2 HPT Air Sealing Ring Segment (2 off).	Refer to Figure 1 and Reference (3), Control No./TASK No. 72-45-24-300-007.				
1 Replace the 2A0054 and 2A0055 Stage 2 HPT Seals with the 2A0544 Stage 2 HPT Seals (2 off).					
(e) Mark the new part number adjacent to the old part number. Use the vibration peen method.	<table><tr><td><u>Old Part No.</u></td><td><u>New Part No.</u></td></tr><tr><td>2A1072</td><td>2A2872</td></tr></table> See Reference (4), Control No./TASK No. 70-09-00-400-501.	<u>Old Part No.</u>	<u>New Part No.</u>	2A1072	2A2872
<u>Old Part No.</u>	<u>New Part No.</u>				
2A1072	2A2872				

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\* REMOVE THE APPLICABLE TURBINE CASE AND VANE ASSEMBLY, DO A MODIFICATION AND INSTALL AS THE APPLICABLE TURBINE CASE AND VANE ASSEMBLY (1 off)



**\* PART 1**

<u>REMOVE</u>	<u>INSTALL</u>
2A1357	2A2445
2A1764	2A2446

**\* PART 2**

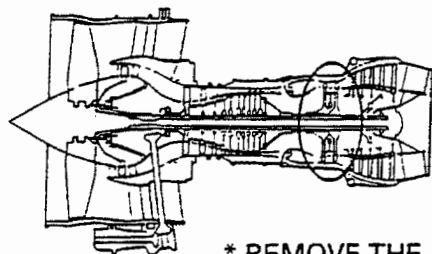
<u>REMOVE</u>	<u>INSTALL</u>
2A1357	2A1718
2A1764	2A2188

B5173

Location of The Turbine Case And Vane Assembly And The  
Stage 2 HPT Ring Segment And Vane Cluster Assembly  
Figure 1 (Sheet 1)



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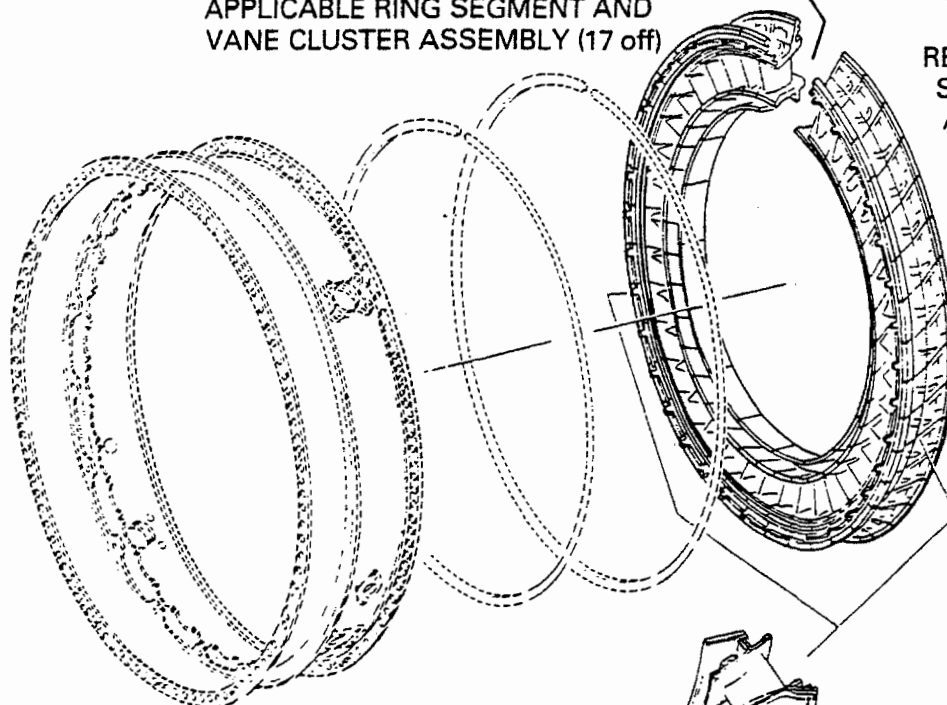


\* REMOVE THE APPLICABLE RING SEGMENT AND VANE CLUSTER ASSEMBLY AND INSTALL THE APPLICABLE RING SEGMENT AND VANE CLUSTER ASSEMBLY (17 off)

REMOVE THE 2A0055 STAGE 2 HPT SEAL AND INSTALL THE 2A0544 STAGE 2 HPT SEAL (19 off)

REMOVE THE 2A0054 STAGE 2 HPT SEAL

REMOVE THE 2A0060 STAGE 2 HPT SEAL AND INSTALL THE 2A2345 STAGE 2 HPT SEAL (19 off)



**\*PART 1**

<u>REMOVE</u>	<u>INSTALL</u>	<u>REMOVE</u>	<u>INSTALL</u>
2A0172	2A2772	2A1072	2A2872

**\*\*PART 1**

**\*PART 2**

<u>REMOVE</u>	<u>INSTALL</u>	<u>REMOVE</u>	<u>INSTALL</u>
2A0172	2A2072	2A1072	2A2172

**\*\*PART 2**

\*\* REMOVE THE APPLICABLE RING SEGMENT AND VANE CLUSTER ASSEMBLY AND INSTALL THE APPLICABLE RING SEGMENT AND VANE CLUSTER ASSEMBLY (2 off)

NOTE : 2A0544 IS A ONE-PIECE SEAL THAT REPLACES TWO SEALS

B5174

Location of The Turbine Case And Vane Assembly And The Stage 2 HPT Ring Segment And Vane Cluster Assembly  
Figure 1 (Sheet 2)

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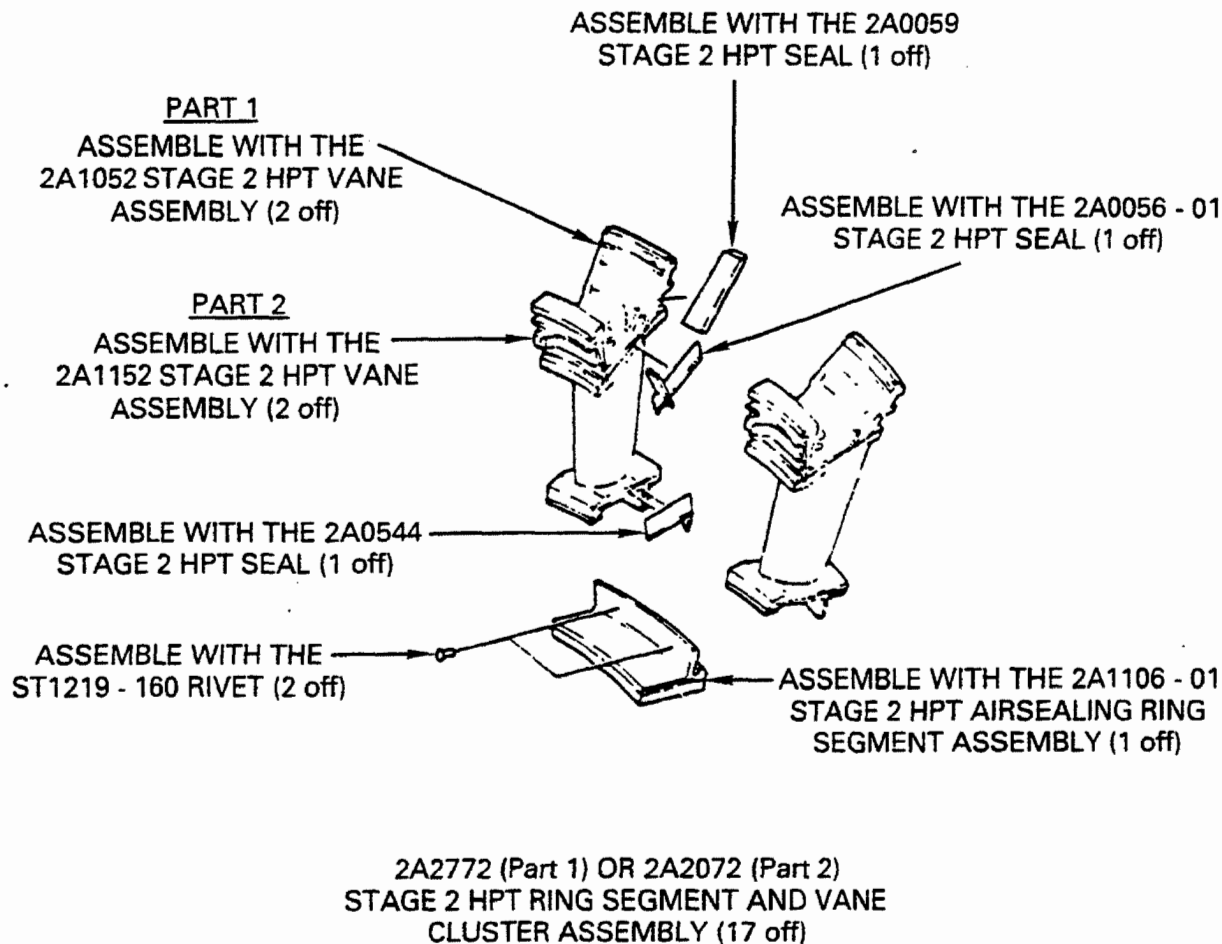
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NOTE : QUANTITIES GIVEN ARE FOR ONE STAGE 2 HPT  
RING SEGMENT AND VANE CLUSTER ASSEMBLY

B5175

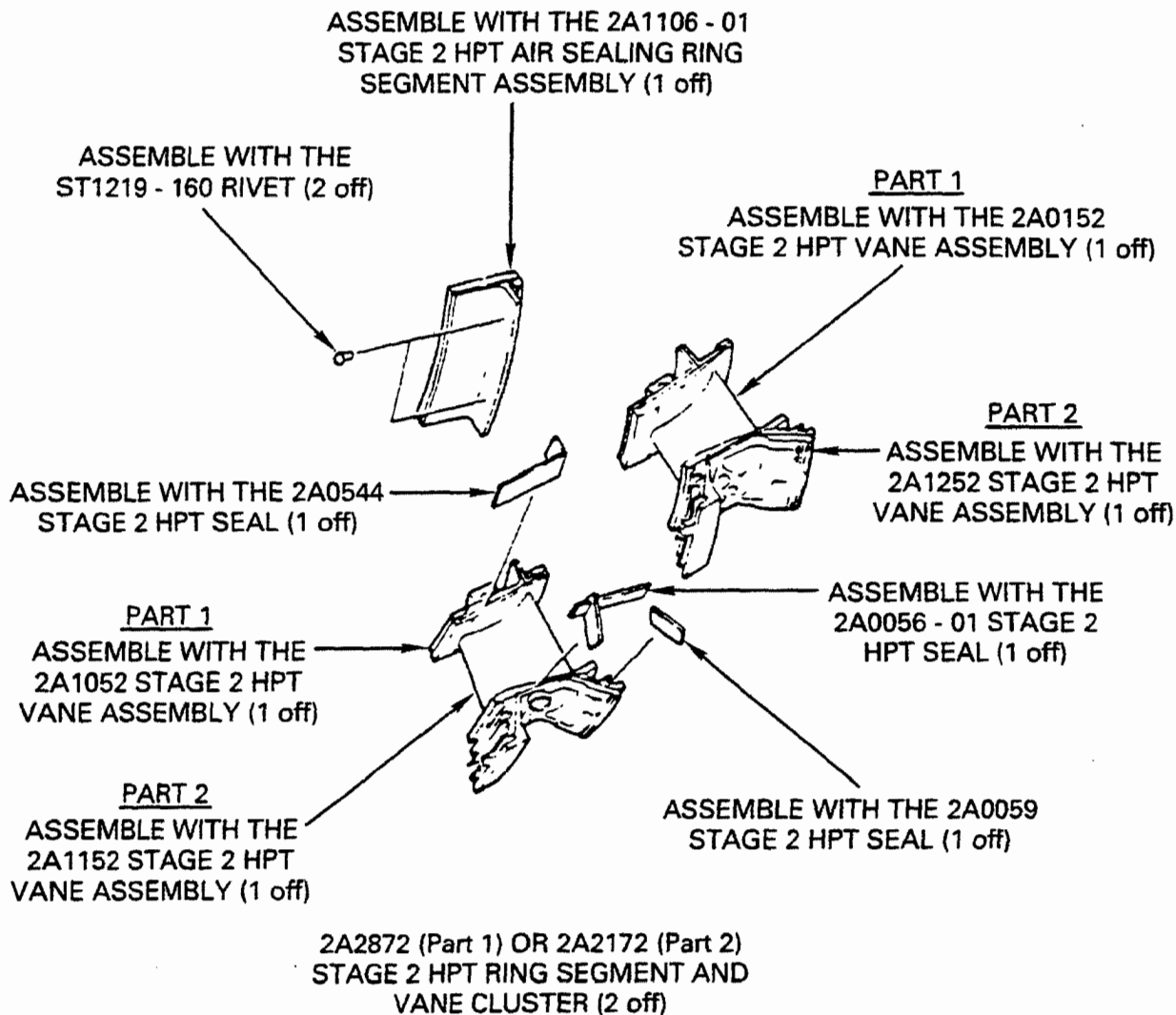
Location of The Turbine Case And Vane Assembly And The  
Stage 2 HPT Ring Segment And Vane Cluster Assembly  
Figure 1 (Sheet 3)

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NOTE : QUANTITIES GIVEN ARE FOR ONE STAGE 2  
HPT RING SEGMENT AND VANE CLUSTER  
ASSEMBLY

B5176

Location of The Turbine Case And Vane Assembly And The  
Stage 2 HPT Ring Segment And Vane Cluster Assembly  
Figure 1 (Sheet 4)

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## Part 1

### B. Assembly Instructions (When you do not incorporate the new Stage 2 HPT Vane Assembly)

- (1) Assemble the Turbine Case and Vane Assembly by the approved procedure given in Reference (3), Chapter/Section 72-45-20, Assembly-01. Refer to Figure 1.
  - (a) Use the 2A2772 Stage 2 Ring Segment And Vane Cluster Assemblies (17 off) and the 2A2872 Stage 2 Ring Segment And Vane Cluster Assemblies (2 off).
  - (b) Use the 2A0544 Stage 2 HPT Seals (19 off) and the 2A2345 Stage 2 HPT Seals (19 off).
- (2) Identify the 2A1357 Turbine Case and Vane Assemblies as 2A2445.
  - (a) Mark the new part number adjacent to the old part number.
  - (b) Use the vibration peen method.
  - (c) Refer to Reference (4), Chapter/Section 70-09-00, Marking Of Parts.
- (3) Identify the 2A1764 Turbine Case and Vane Assemblies as 2A2446.
  - (a) Mark the new part number adjacent to the old part number.
  - (b) Use the vibration peen method.
  - (c) Refer to Reference (4), Chapter/Section 70-09-00, Marking Of Parts.

## Part 2

### C. Assembly Instructions (When you incorporate the new Stage 2 HPT Vane Assembly)

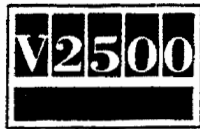
- (1) Assemble the 2A2072 Stage 2 HPT Ring Segment And Vane Cluster Assemblies (17 off) and the 2A2172 Stage 2 HPT Ring Segment And Vane Cluster Assemblies (2 off). Use the approved procedure in Reference (3) Chapter/Section 72-45-24, Repair-007 and Figure 1 to assemble as follows:
  - (a) Use the 2A0544 Stage 2 HPT Seals (19 off).
  - (b) Use the 2A1106-01 Stage 2 HPT Air Sealing Ring Assembly (19 off).
  - (c) Use the 2A1152 Stage 2 HPT Vane Assemblies (34 off) and the 2A1252 Stage 2 HPT Vane Assemblies (2 off).

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- (2) Assemble the Turbine Case and Vane Assembly by the approved procedure given in Reference (3), Chapter/Section 72-45-20, Assembly-01. Refer to Figure 1.
  - (a) Use the 2A2072 Stage 2 Ring Segment And Vane Cluster Assemblies (17 off) and 2A2172 Stage 2 Ring Segment And Vane Cluster Assemblies (2 off).
  - (b) Use the 2A0544 Stage 2 HPT Seals (19 off) and the 2A2345 Stage 2 HPT Seals (19 off).
- (3) Identify the 2A1357 Turbine Case and Vane Assemblies as 2A1718.
  - (a) Mark the new part number adjacent to the old part number.
  - (b) Use the vibration peen method.
  - (c) Refer to Reference (4), Chapter/Section 70-09-00, Marking Of Parts.
- (4) Identify the 2A1764 Turbine Case and Vane Assemblies as 2A2188.
  - (a) Mark the new part number adjacent to the old part number.
  - (b) Use the vibration peen method.
  - (c) Refer to Reference (4), Chapter/Section 70-09-00, Marking Of Parts.

### **D. Recording Instructions**

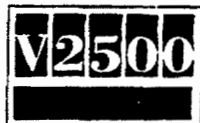
- (1) A record of accomplishment is necessary.

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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
Part 1 of Section 2 of this Service Bulletin (For engines that do not incorporate V2500-ENG-72-0092, but do incorporate V2500-ENG-72-0002)					
R 2A2445 (72-45-20)	1	-	Case and Vane Assy - Turbine	2A1357 (01-005)	(S1) (1D) (A) (B)
R 2A0544 (72-45-24)	19	5.00	.Seal - HPT, Stage 2	2A0054 (02-210) and 2A0055 (02-180)	(S1) (A) (F)
2A2345 (72-45-24)	19	2.50	.Seal - HPT, Stage 2	2A0060 (02-220)	(S1)(A) (E)
2A2772 (72-45-24)	17	-	.Ring Segment and Vane Cluster Assy - HPT, Stage 2 (Class 21-41)	2A0172 (02-050) to (02-096)	(S1) (1D)
R 2A1106-01 (72-45-24)	17	708.00	..Ring Segment Assy - HPT, Stage 2	2A0088-01 (02-120)	(S1) (A) (F)
R 2A0544 (72-45-24)	17	5.00	..Seal - HPT, Stage 2	2A0054 (02-110) and 2A0055 (02-111)	(S1) (A) (F)
2A2872 (72-45-24)	2	-	.Ring Segment and Vane Cluster Assy - HPT, Stage 2 (Class 21-41)	2A1072 (02-260) to (02-296)	(S1) (1D)
R 2A1106-01 (72-45-24)	2	708.00	..Ring Segment Assy - HPT, Stage 2	2A0088-01 (02-320)	(S1) (A) (F)
R 2A0544 (72-45-24)	2	5.00	..Seal - HPT, Stage 2	2A0054 (02-310) and 2A0055 (02-311)	(S1) (A) (F)

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New Part No. Instructions (ATA No.)	Qty.	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Disposition
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Part 1 of Section 2 of this Service Bulletin (For engines that incorporate V2500-ENG-72-0092 and incorporate V2500-ENG-72-0002)

2A2446 (72-45-20)	1	-	Case and Vane Assy - Turbine	2A1764 (01-005)	(S1) (1D) (A) (B)
R 2A0544 (72-45-24)	19	5.00	.Seal - HPT, Stage 2	2A0054 (02-210) and 2A0055 (02-180)	(S1) (A) (F)
2A2345 (72-45-24)	19	2.50	.Seal - HPT, Stage 2	2A0060 (02-220)	(S1) (A) (E)
2A2772 (72-45-24)	17	-	.Ring Segment and Vane Cluster Assy - HPT, Stage 2 (Class 21-41)	2A0172 (02-050) to (02-096)	(S1) (1D)
R 2A1106-01 (72-45-24)	17	708.00	..Ring Segment Assy - HPT, Stage 2	2A0088-01 (02-120)	(S1) (A) (F)
R 2A0544 (72-45-24)	17	5.00	..Seal - HPT, Stage 2	2A0054 (02-110) and 2A0055 (02-111)	(S1) (A) (F)
2A2872 (72-45-24)	2	-	.Ring Segment and Vane Cluster Assy - HPT, Stage 2 (Class 21-41)	2A1072 (02-260) to (02-296)	(S1) (1D)
R 2A1106-01 (72-45-24)	2	708.00	..Ring Segment Assy - HPT, Stage 2	2A0088-01 (02-320)	(S1) (A) (F)
R 2A0544 (72-45-24)	2	5.00	..Seal - HPT, Stage 2	2A0054 (02-310) and 2A0055 (02-311)	(S1) (A) (F)

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New Part No. (ATA No.)	Qty.	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
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Part 2 of Section 2 of this Service Bulletin (For engines that do not incorporate V2500-ENG-72-0092, but do incorporate V2500-ENG-72-0002)

	2A1718 (72-45-20)	1	-	Case and Vane Assy - Turbine	2A1357 (01-005)	(S2) (A) (B)
R	2A2072 (72-45-24)	17	-	.Ring Segment and Vane Cluster Assy - HPT, Stage 2 (Class 21-41)	2A0172 (02-050) to (02-096)	(S2) (A) (F)
R	2A0544 (72-45-24)	17	5.00	..Seal - HPT, Stage 2	2A0054 (02-110) and 2A0055 (02-111)	(S2) (A) (F)
R	2A1106-01 (72-45-24)	17	708.00	..Ring Segment Assy - Airsealing, HPT, Stage 2	2A0088-01 (02-120)	(S2) (A) (F)
R	2A1152 (72-45-24)	34	-	..Vane Assy - HPT, Stage 2 (Class 21-41)	2A0152 (02-130) to (02-150)	(S2) (A) (F)
R	2A0544 (72-45-24)	19	5.00	.Seal - HPT, Stage 2	2A0054 (02-210) and 2A0055 (02-180)	(S2) (A) (F)
R	2A2345 (72-45-24)	19	2.50	.Seal - HPT, Stage 2	2A0060 (02-220)	(S2) (A) (F)
R	2A2172 (72-45-24)	2	-	.Ring Segment and Vane Cluster Assy - HPT, Stage 2 (Class 21-41)	2A1072 (02-260) to (02-296)	(S2) (A) (F)
R	2A0544 (72-45-24)	2	5.00	..Seal - HPT, Stage 2	2A0054 (02-310) and 2A0055 (02-311)	(S2) (A) (F)
R	2A1106-01 (72-45-24)	2	708.00	..Ring Segment Assy - Airsealing, HPT, Stage 2	2A0088-01 (02-320)	(S2) (A) (F)
R	2A1152 (72-45-24)	2	-	..Vane Assy - HPT, Stage 2 (Class 21-41)	2A0152 (02-350) to (02-370)	(S2) (A) (F)

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

2A1252	2	-	..Vane Assy - HPT,	2A1052	(S2) (A)
(72-45-24)			Stage 2 (Class 21-41)	(02-420)	(F)
				to	
				(02-440)	

Part 2 of Section 2 of this Service Bulletin (For engines that incorporate V2500-ENG-72-0092 and V2500-ENG-72-0002)

2A2188	1	-	Case and Vane Assy -	2A1764	(S2) (A)
(72-45-20)			Turbine	(01-005)	(B)
2A2072	17	-	..Ring Segment and Vane	2A0172	(S2) (A)
R (72-45-24)			Cluster Assy - HPT,	(02-050)	(F)
			Stage 2 (Class 21-41)	to	
				(02-096)	
2A0544	17	5.00	..Seal - HPT, Stage 2	2A0054	(S2) (A)
R (72-45-24)				(02-110)	(F)
				and	
				2A0055	
				(02-111)	
2A1106-01	17	708.00	..Ring Segment Assy.-	2A0088-01	(S2) (A)
R (72-45-24)			Airsealing, HPT,	(02-120)	(F)
			Stage 2		
2A1152	34	-	..Vane Assy - HPT,	2A0152	(S2) (A)
R (72-45-24)			Stage 2 (Class 21-41)	(02-130)	(F)
				to	
				(02-150)	
2A0544	19	5.00	..Seal - HPT, Stage 2	2A0054	(S2) (A)
R (72-45-24)				(02-210)	(F)
				and	
				2A0055	
				(02-180)	
2A2345	19	2.50	..Seal - HPT, Stage 2	2A0060	(S2) (A)
(72-45-24)				(02-220)	(E)
2A2172	2	-	..Ring Segment and Vane	2A1072	(S2) (A)
R (72-45-24)			Cluster Assy - HPT,	(02-260)	(F)
			Stage 2 (Class 21-41)	to	
				(02-296)	
2A0544	2	5.00	..Seal - HPT, Stage 2	2A0054	(S2) (A)
R (72-45-24)				(02-310)	(F)
				and	
				2A0055	
				(02-311)	
2A1106-01	2	708.00	..Ring Segment Assy -	2A0088-01	(S2) (A)
R (72-45-24)			Airsealing, HPT,	(02-320)	(F)
			Stage 2		

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# SERVICE BULLETIN

New Part No. (ATA No.)	Qty.	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
2A1152 (72-45-24)	2	-	..Vane Assy - HPT, Stage 2 (Class 21-41)	2A0152 (02-350) to (02-370)	(S2) (A) (F)
2A1252 (72-45-24)	2	-	..Vane Assy - HPT, Stage 2 (Class 21-41)	2A1052 (02-420) to (02-440)	(S2) (A) (F)

C. Expendables Required To Incorporate Part 1 Of This Bulletin (For Each Complete Set Of Vane Clusters To Be Modified)

<u>Part No.</u>	<u>ATA/IPC No.</u>	<u>Qty.</u>	<u>Keyword</u>
ST1219-160	72-45-24, 02-125	38	Rivet

C. Instruction/Disposition Code Statements:

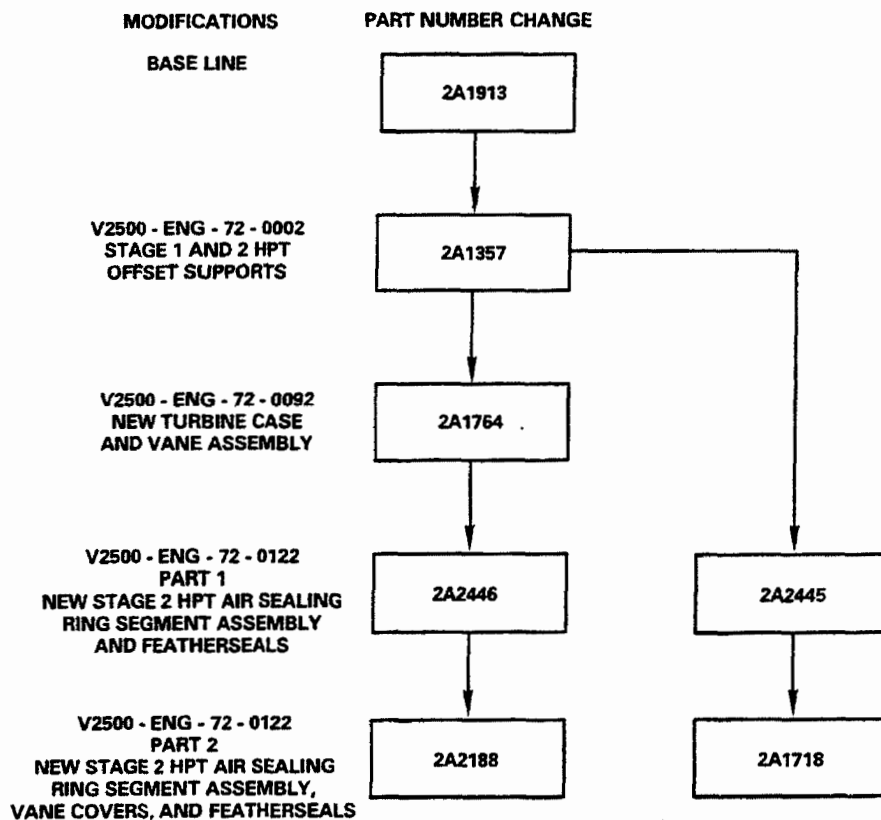
- (S1) New parts coded (S1) must replace old parts coded (S1) as a COMPLETE SET per engine.
- (S2) New parts coded (S2) must replace old parts coded (S2) as a COMPLETE SET per engine. The new Stage 2 HPT Vane Assemblies must be used with the new parts coded (S2) in the set and the new parts given in V2500-ENG-72-0124.
- (1D) Rework Old part number and identify to the New part number.
- (A) New part is currently available.
- (B) Old part will no longer continue to be available.
- (C) Old part will continue to be available.
- (E) Old part will continue to be available because of the interchangeability requirement.
- (F) Old part will continue to be available until the supply is used up.

**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.



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# SERVICE BULLETIN



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Family tree - Turbine Case And Vane Assembly  
Figure 4

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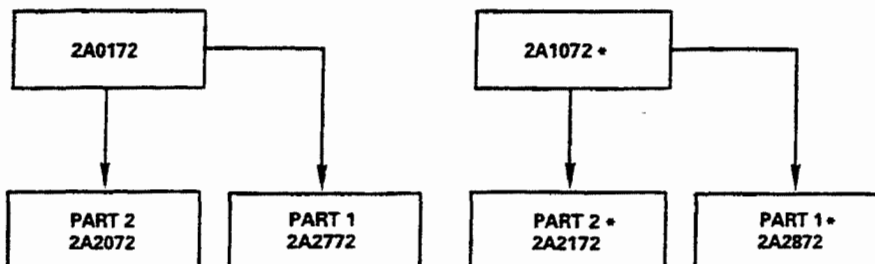
# International Aero Engines SERVICE BULLETIN

## MODIFICATIONS

### BASE LINE

V2500 - ENG - 72 - 0122  
REDUCES THE COOL AIR FLOW  
TO THE STAGE 2 HPT VANE  
CLUSTERS AND OUTER AIR  
SEALS TO INCREASE EFFICIENCY  
OF OPERATION

## PART NUMBER CHANGE



### PART 1

A NEW ONE PIECE STAGE 2 HPT SEAL (Featherseal)  
A NEW LONGER STAGE 2 HPT AIR SEALING RING SEGMENT ASSEMBLY AND SEAL (Featherseal)

### PART 2

A NEW ONE PIECE STAGE 2 HPT SEAL (Featherseal)  
A NEW LONGER STAGE 2 HPT AIR SEALING RING SEGMENT ASSEMBLY AND SEAL (Featherseal)  
A NEW STAGE 2 VANE COVER WITH A DIRECTIONAL FLOW CAVITY  
A NEW SMALLER METERING HOLE IN THE REAR OUTER LEG OF THE VANE

- NOTE : THIS PART NUMBER STAGE 2 HPT  
RING SEGMENT AND VANE CLUSTER  
ASSEMBLY CONTAINS A BORESCOPE  
ACCESS HOLE

B5177A

Family tree - Stage 2 Ring Segment  
And Vane Cluster Assembly  
Figure 5

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