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V2500-A1/A5/D5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits Revision 5 to Service Bulletin V2500-ENG-72-0369 and the Initial Issue of the Supplement

Document History

Service Bulletin Revision Status		Supplement Revision Status	
Initial Issue	Apr. 7/00		
Revision 1	May 12/00		
Revision 2	Jul.27/00		
Revision 3	Nov.30/01		
Revision 4	Nov.14/02	Initial Issue	Nov.14/02

Bulletin Revision 5

Remove	Incorporate	Reason for change
All pages of the Service Bulletin	Pages 1 to 47 of the Service Bulletin	To correct a VRS repair number in section 3. Accomplishment Instructions.

V2500-ENG-72-0369

Transmittal - Page 1 of 2

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
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Supplement Revision 1

Remove

Incorporate

Reason for change

All pages of the
Supplement

Page 1

Updated prices.

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V2500-ENG-72-0369
Transmittal - Page 2

MODIFICATION SERVICE BULLETIN – ENGINE – HP COMPRESSOR RING CASES – INTRODUCTION OF
HP COMPRESSOR STAGE 6, 7 AND 8 ROTOR PATHS WITH REVISED ABRADABLE LINING

1. Planning Information

A. Effectivity

- (1) Airbus A319
 - (a) V2522-A5, V2524-A5 Engines prior to Serial No.V10799
- (2) Airbus A319CJ
 - (a) V2527M-A5 Engines prior to Serial No.V10799
- (3) Airbus A320
 - (a) V2500-A1 Engines prior to Serial No.V0362
 - (b) V2527-A5, V2527E-A5 Engines prior to Serial No.V10799
- (4) Airbus A321
 - (a) V2530-A5, V2533-A5 Engines prior to Serial No.V10799
- (5) Boeing Long Beach Division MD-90
 - (a) V2525-D5, V2528-D5 Engines prior to Serial No.V20286
- (6) ATA Location
72-41-00

B. Concurrent Requirements

None.

C. Reason

(1) Problem

Disbonding of the V2500-A5 HP compressor rotor path stages 6, 7 and 8 abradable linings may occur, debris from which may cause damage to HP Compressor airfoils.

The problem has been attributed to galvanic corrosion degrading the bond between the liner material and the rotor path ring, which is typical of engines being stored or operated in a particularly humid environment.

(2) Background

The problem has been observed on V2500-A5 engines in service.

(3) Objective

Incorporation of this Service Bulletin (Modification) is designed to maintain reliability.

(4) Substantiation

The changes introduced by this Service Bulletin have been the subject of satisfactory engineering assessment, extensive laboratory testing and have been successfully tested on a development engine which has completed 150 hours endurance running and 5000 short cycles.

(5) Effect of Bulletin on Workshop Procedures:

(a) Removal/Installation

Not affected

(b) Disassembly/Assembly

Affected (See Supplemental Information)

(c) Cleaning

Affected (See Supplemental Information)

(d) Inspection/Check

Affected (See Supplemental Information)

(e) Repair

Affected (See Supplemental Information)

(f) Testing

Not affected

D. Supplemental Information

- (1) The parts introduced by this Service Bulletin must be fitted as a complete engine set.

New procedures (for the SB 72-0369 Configuration) will be published in a subsequent transmittal of the Engine Manual.

E. Description

(1) The changes introduced are:

- (a) A revised HP compressor stage 6 rotor path segment, stage 7 cone and rotor path assembly and stage 8 rotor path and case assembly are introduced similar to the existing items except for the abradable lining material which has been changed from Metco 313 to Metco 320.
- (b) Rework standards of stage 7 and stage 8 rotor paths rings have also been introduced similar to the existing items except for a change in abradable lining material from Metco 313 to Metco 320.

(2) Existing components may be reworked. See Fig.2 to Fig.13

(3) This Service Bulletin is in parts for V2500-A5 and D5 engines only, as follows:

Part 1

Full embodiment of HP compressor stage 6 rotor path segments, stage 7 cone and rotor path assembly and stage 8 rotor path and case assembly.

Part 2

Embodiment of HP compressor stage 6 rotor path segments only

NOTE: New production engines fully embodying this Service Bulletin will not be annotated with a mod part and can be considered equivalent to Part 1.

F. Compliance

Category Code 6

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

G. Approval

The part number changes 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 Models listed.

H. Manpower

Estimated manhours to incorporate the full intent of this bulletin:

(1) In Service

Not applicable

(2) At Overhaul

(a) To rework rotor path linings stages 7 and 8 (A1 Engines)

7 hours

(b) To rework rotor path linings stages 6, 7 and 8 (A5/D5 Engines)

10 hours

(c) Total: 17 hours

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

I. Weight and Balance

(1) Weight Change

None

(2) Moment Arm

None

(3) Datum

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

J. Electrical Load Data

Not affected

K. Software Accomplishment Summary

Not affected

L. References

(1) This Service Bulletin supersedes the following IAE V2500 Service Bulletin:

(a) V2500-ENG-72-0235

Engine - HP compressor - Introduction of stage 6, 7 and 8 rotor path liners with revised abradable lining. IAE Engineering Change 94VR033

(2) IAE V2500 Reference Service Bulletins:

(a) V2500-ENG-72-0296

Engine - HP compressor - Introduction of integral front support cone/stage 7 rotor path and revised heatshield and fastener configuration. IAE Engineering Change 97VR005

(b) V2500-ENG-72-0343

Engine - HP compressor - Introduction of combined HP compressor casings and rotor paths. IAE Engineering Change 98VR009

(c) V2500-ENG-72-0358

Engine - HP compressor - Introduction of revised HP compressor stage 7 and 10 case assemblies with reduced quantity of bleed slots. IAE Engineering Change 99VR007

(3) Internal Reference No.

IAE Engineering Change Number 00VR003

M. Other Publications Affected

- (1) Illustrated Parts Catalog (S-V2500-1IA), Chapter/Section 72-41-21, 72-41-31
- (2) Illustrated Parts Catalog (S-V2500-2IA), Chapter/Section 72-41-21, 72-41-31
- (3) Illustrated Parts Catalog (S-V2500-3IA), Chapter/Section 72-41-21, 72-41-31
- (4) Engine Manual (E-V2500-1IA), Chapter/Section 72-41-21, Cleaning, Inspection and Repair
- (5) Engine Manual (E-V2500-1IA), Chapter/Section 72-41-31, Cleaning, Inspection and Repair
- (6) Engine Manual (E-V2500-3IA), Chapter/Section 72-41-21, Cleaning, Inspection and Repair
- (7) Engine Manual (E-V2500-3IA), Chapter/Section 72-41-31, Cleaning, Inspection and Repair
- (8) Engine Manual (E-V2500-1IA), Chapter/Section 72-41-20, Disassembly/Assembly
- (9) Engine Manual (E-V2500-3IA), Chapter/Section 72-41-20, Disassembly/Assembly

N. Interchangeability of Parts

The HP compressor stage 6 rotor path segments are only interchangeable with the existing parts as a complete set.

2. Material Information

A. Kits associated with this Bulletin:

None.

B. Parts affected by this Bulletin:

Applicability: For each V2500 engine to incorporate this Bulletin:

A1 Models

72-41-21

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
03-450	6A7626	1	Ring, rotor path - HP compressor, stage 7	6A5992	(A)(S2)(1D)
03-600	6A7627	1	Ring, rotor path - HP compressor, stage 8	6A5993	(A)(S2)(1D)

A5 and D5 Models

Part 1

For engines incorporating SB 72-0235, but not incorporating SB 72-0296 or SB 72-0343

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
03-450	6A7623	1	Ring, rotor path - HP compressor, stage 7	6A5995	(S2)(1D)
03-600	6A7625	1	Ring, rotor path - HP compressor, stage 8	6A5996	(S2)(1D)

For engines incorporating 72-0235

01-705	6A7576	4	Segment, rotor path - HP compressor, stage 6	6A5994	(A)(S1)(1D)
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For engines incorporating 72-0296

03-300	6A7577	1	Cone and rotor path assembly HP compressor, stage 7	6A6540	(A)(S2)(1D)
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For engines incorporating SB 72-0343 but not incorporating SB 72-0358

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
03-500	6A7624	1	Case assembly, rotor path, stage 8 - HP compressor	6A6548	(S2)(1D)

For engines incorporating SB 72-0358

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	OLD PART NO.	INSTR DISP
03-500	6A7578	1	Case assembly, rotor path, stage 8 - HP compressor	6A7529	(A)(S2)(1D)

Part 2

For all engines incorporating SB72-0235

72-41-31

01-705	6A7576	4	Segment, rotor path - HP compressor stage 6	6A5994	(A)(S1)(1D)
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C. Instruction Disposition Codes

(A) New part will be made available from May 2000.

(S1) Old and new parts are only interchangeable as a set.

(S2) Old and new parts are freely and fully interchangeable.

(1D) Old parts may be reworked and re-identified to the new part number.

NOTE: The unit prices, if shown, are an estimate and they are given for the purposes of planning only. For actual prices, refer to the IAE Price Catalog or contact IAE's spare parts sales department.

3. Accomplishment Instructions

A. Rework Instructions

(1) Rework the following parts (for A1 Engine Marks)

6A5992 HP compressor rotor path ring, stage 7 (refer to 72-41-21, Fig/Item 03-450)

(2) Consumable Materials

CoMat 01-025 Nitric acid HN03

CoMat 01-041 Alkaline rust remover

CoMat 02-198 Adhesive tape (masking metal spray)

CoMat 03-036 Metal spray wire

CoMat 03-038 Metal spraying powder

CoMat 03-457 Aluminum silicon boron nitride

CoMat 05-001 Abrasive medium

(3) Standard Equipment

Chemical cleaning equipment

Penetrant crack test equipment

Lathe

Dial test indicator

Air operated grinder

Rotary burr

Abrasive blast equipment

Polythene bottle

Workshop inspection equipment

Metal spray equipment

Hardness testing equipment

Standard workshop equipment

Vibro-engraving equipment

PROCEDURE	RELATED DATA
(a) Chemically clean	Refer to SPP TASK 70-11-03-300-503. Use chemical cleaning equipment
(b) Do a crack test	Refer to SPP TASK 70-23-02-230-501. Use penetrant crack test equipment. Cracks are not permitted
(c) Remove the abradable lining from the HP compressor rotor path ring, stage 7	

PROCEDURE	RELATED DATA
(i) Assemble the fixture on the machine	See Fig.1, Fig.2 and Fig.3. Use IAE3R18232 lifting tool, 1 off and IAE3R18570 turning fixture, 1 off with a lathe. Set to turn correctly. Use a dial test indicator
(ii) Assemble the rotor path ring on to the turning fixture and machine to remove the abradable lining	See Fig.1, Fig.2 and Fig.3. Turn to remove the abradable lining. You must not remove material from the ring

PROCEDURE	RELATED DATA
(d) Remove the remaining lining material	See Fig.1, Fig.2 and Fig.3. Use an air operated grinder with a rotary burr or applicable alternatives. You must not remove material from the ring

NOTE: This operation is an alternative to operation (e).

(e) Chemically remove the bond coat from the HP compressor rotor path ring, stage 7	See Fig.1, Fig.2 and Fig.3. Refer to SPP TASK 70-33-59-300-503, SUBTASK 70-33-59-300-002. Use CoMat 01-025 nitric acid HN03 with chemical cleaning equipment. Put the assembly into the nitric acid and keep below the surface until the bubbles stop
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NOTE: This operation is an alternative to operation (d).

PROCEDURE

RELATED DATA

- | | |
|--|--|
| (f) Abrasive blast to remove the bond coat that remains | See Fig.1, Fig.2 and Fig.3.
Refer to SPP TASK 70-12-02-120-501.
Use CoMat 05-001 abrasive medium with abrasive blast equipment |
| (g) Cold ferric chloride etch the repaired area | Refer to SPP TASK 70-11-39-300-503,
SUBTASK 70-11-39-300-001.
Use a polythene bottle |
| (h) Visually examine and measure the dimensions of the repaired area | See Fig.1, Fig.2 and Fig.3.
Use workshop inspection equipment |
| (i) Do a crack test | Refer to SPP TASK 70-23-02-230-501.
Use penetrant crack test equipment.
Cracks are not permitted |
| (j) Chemically clean the HP compressor rotor path ring, stage 7 | Refer to SPP TASK 70-11-01-300-503.
Use chemical cleaning equipment |
| (k) Apply the surface protection as necessary | Refer to VRS6161, TASK
72-41-21-300-004 |
| (l) Seal the areas not to be sprayed | See Fig.1, Fig.2 and Fig.4.
Use CoMat 02-198 adhesive tape (masking metal spray) or locally made fixture |

NOTE: The adhesive tape (Masking metal spray) permits the blasting and the sprayed coating to be done in the one operation.

CAUTION: TO PREVENT CONTAMINATION, DO NOT TOUCH THE SURFACE WHICH IS CLEANED FOR REPAIR.

CAUTION: TOO MUCH ABRASIVE BLAST CAN CAUSE DETERIORATION OF THE PREPARED SURFACE CONDITION AND MUST BE PREVENTED.

- | | |
|--|--|
| (m) Abrasive blast the areas to be sprayed | See Fig.1, Fig.2 and Fig.4.
Refer to SPP TASK 70-12-02-120-501.
Use CoMat 05-001 abrasive medium with abrasive blast equipment |
|--|--|

PROCEDURE

RELATED DATA

- (n) Apply the bond coat to the HP compressor rotor path ring, stage 7

See Fig.1, Fig.2 and Fig.4.
Refer to SPP TASK 70-34-01-340-501, SUBTASK 70-34-01-340-025 or SUBTASK 70-34-01-340-010.
For powder feed plasma spray gun, use CoMat 03-038 metal spraying powder.
Alternatively for wire feed combustion spraying, use CoMat 03-036 metal spraying wire.
Pre-heat the seal ring to 221 deg. F. to 257 deg. F. (105 deg. C. to 125 deg. C.).
Use metal spray equipment

- (o) Apply the abradable lining to the HP compressor rotor path ring, stage 7

See Fig.1, Fig.2 and Fig.4.
Refer to SPP TASK 70-34-01-340-501.
For the metal spray parameters, see Fig.14.
Use CoMat 03-457 aluminum silicon boron nitride with metal spray equipment.
Spray a sufficient thickness to allow for machining.
Also spray a test piece to check the spray hardness

- (p) Remove the masking tape

- (q) Examine the HP compressor rotor path ring, stage 7

PROCEDURE

RELATED DATA

- (i) Visually examine the sprayed coating on the ring

Refer to SPP TASK 70-34-01-340-501

- (ii) Measure the dimensions of the repaired area

See Fig.1, Fig.2 and Fig.4.
Use workshop inspection equipment

- (iii) Hardness test the sprayed coating on the test piece

Refer to SPP TASK 70-34-01-340-501, SUBTASK 70-34-01-340-004.
Use hardness testing equipment.
Average hardness must be 45 to 70 R15Y, outer limits 35 minimum, 80 maximum

PROCEDURE

RELATED DATA

- (r) Remove the overspray

See Fig.1, Fig.2 and Fig.4.
Use standard workshop equipment

PROCEDURE

RELATED DATA

- | | |
|--|--|
| (s) Remove sharp edges | See Fig.1, Fig.2 and Fig.4.
Use standard workshop equipment |
| (t) Visually examine and measure the dimensions of the repaired area on the HP compressor rotor path ring, stage 7 | See Fig.1, Fig.2 and Fig.4.
Use workshop inspection equipment |
| (u) Cancel the old Part No. and identify with the new Part No. | Refer to SPP TASK 70-09-00-400-501, SUBTASK 70-09-00-400-001.
Use vibro-engraving equipment |

Existing	Re-number
6A5992	6A7626

(4) Rework the following parts

6A5993 HP compressor rotor path ring, stage 8 (refer to 72-41-21, Fig./Item 03-600)

(5) Consumable Materials

CoMat 01-025 Nitric acid HN03

CoMat 01-041 Alkaline rust remover

CoMat 02-198 Adhesive tape (masking metal spray)

CoMat 03-036 Metal spray wire

CoMat 03-038 Metal spraying powder

CoMat 03-457 Aluminum silicon boran nitride

CoMat 05-001 Abrasive medium

(6) Standard Equipment

Chemical cleaning equipment

Penetrant crack test equipment

Lathe

Dial test indicator

Air operated grinder

Rotary burr

Abrasive blast equipment

Polythene bottle

Workshop inspection equipment

Metal spray equipment

Hardness testing equipment

Standard workshop equipment

Vibro-engraving equipment

PROCEDURE

RELATED DATA

- | | |
|--|--|
| (a) Chemically clean | Refer to SPP TASK 70-11-03-300-503.
Use chemical cleaning equipment |
| (b) Do a crack test | Refer to SPP TASK 70-23-02-230-501.
Use penetrant crack test equipment.
Cracks are not permitted |
| (c) Remove the abradable lining from the HP compressor rotor path ring,
stage 8 | |

PROCEDURE

RELATED DATA

- | | |
|---|--|
| (i) Assemble the fixture on the
machine | See Fig.1, Fig.2 and Fig.3.
Use IAE3R18232 lifting tool 1 off and
IAE3R18570 turning fixture 1 off with
a lathe.
Set to turn correctly.
Use a dial test indicator |
| (ii) Assemble the rotor path
ring on to the turning
fixture and machine to
remove the abradable lining | See Fig.1, Fig.2 and Fig.5.
Turn to remove the abradable lining.
You must not remove material from the
ring |

PROCEDURE

RELATED DATA

- | | |
|---|--|
| (d) Remove the remaining lining material | See Fig.1, Fig.2 and Fig.5.
Use an air operated grinder with a rotary burr or applicable alternatives.
You must not remove material from the ring |
|
 | |
| (e) Chemically remove the bond coat from the HP compressor rotor path ring, stage 8 | See Fig.1, Fig.2 and Fig.5.
Refer to SPP TASK 70-33-59-300-503, SUBTASK 70-33-59-300-002.
Use CoMat 01-025 nitric acid HNO ₃ with chemical cleaning equipment.
Put the assembly into the nitric acid and keep below the surface until the bubbles stop |
|
 | |
| (f) Abrasive blast to remove the bond coat that remains | See Fig.1, Fig.2 and Fig.5.
Refer to SPP TASK 70-12-02-120-501.
Use CoMat 05-001 abrasive medium with abrasive blast equipment |
|
 | |
| (g) Cold ferric chloride etch the repaired area | Refer to SPP TASK 70-11-39-300-503, SUBTASK 70-11-39-300-001.
Use a polythene bottle |
|
 | |
| (h) Visually examine and measure the dimensions of the repaired area | See Fig.1, Fig.2 and Fig.5.
Use workshop inspection equipment |
|
 | |
| (i) Do a crack test | Refer to SPP TASK 70-23-02-230-501.
Use penetrant crack test equipment.
Cracks are not permitted |
|
 | |
| (j) Chemically clean the HP compressor rotor path ring, stage 8 | Refer to SPP TASK 70-11-01-300-503.
Use chemical cleaning equipment |
|
 | |
| (k) Apply the surface protection as necessary | Refer to VRS6146, TASK 72-41-21-300-059 |

PROCEDURE

RELATED DATA

- (l) Seal the areas not to be sprayed

See Fig.1, Fig.2 and Fig.6.
Use CoMat 02-198 adhesive tape (masking metal spray) or locally made fixture

NOTE: The adhesive tape (masking metal spray) permits the blasting and the sprayed coating to be done in the one operation.

CAUTION: TO PREVENT CONTAMINATION, DO NOT TOUCH THE SURFACE WHICH IS CLEANED FOR REPAIR.

CAUTION: TOO MUCH ABRASIVE BLAST CAN CAUSE DETERIORATION OF THE PREPARED SURFACE CONDITION AND MUST BE PREVENTED

PROCEDURE

RELATED DATA

- (m) Abrasive blast the areas to be sprayed

See Fig.1, Fig.2 and Fig.6.
Refer to SPP TASK 70-12-02-120-501.
Use CoMat 05-001 abrasive medium with abrasive blast equipment

- (n) Apply the bond coat to the HP compressor rotor path ring, stage 8

See Fig.1, Fig.2 and Fig.6.
Refer to SPP TASK 70-34-01-340-501, SUBTASK 70-34-01-340-025 or SUBTASK 70-34-01-340-010.
For powder feed plasma spray gun, use CoMat 03-038 metal spraying powder.
Alternatively for wire feed combustion spraying, use CoMat 03-036 metal spraying wire.
Pre-heat the seal ring to 221 deg. F. to 257 deg. F. (105 deg. C. to 125 deg. C.).
Use metal spray equipment

- (o) Apply the abradable lining to the HP compressor rotor path ring, stage 8

See Fig.1, Fig.2 and Fig.6.
Refer to SPP TASK 70-34-01-340-501.
For the metal spray parameters, see Fig.14.
Use CoMat 03-457 aluminum silicon boron nitride with metal spray equipment.
Spray a sufficient thickness to allow for machining.
Also spray a test piece to check the spray hardness

(p) Remove the masking tape

(q) Examine the HP compressor rotor path ring, stage 8

PROCEDURE	RELATED DATA
(i) Visually examine the sprayed coating on the ring	Refer to SPP TASK 70-34-01-340-501
(ii) Measure the dimensions of the repaired area	See Fig.1, Fig.2 and Fig.6. Use workshop inspection equipment
(iii) Hardness test the sprayed coating on the test piece	Refer to SPP TASK 70-34-01-340-501, SUBTASK 70-34-01-340-004. Use hardness testing equipment. Average hardness must be 45 to 70 R15Y, outer limits 35 minimum, 80 maximum

PROCEDURE	RELATED DATA
(r) Remove the overspray	See Fig.1, Fig.2 and Fig.6. Use standard workshop equipment
(s) Remove sharp edges	See Fig.1, Fig.2 and Fig.6. Use standard workshop equipment
(t) Visually examine and measure the dimensions of the repaired area, on the HP compressor rotor path ring, stage 8	See Fig.1, Fig.2 and Fig.6. Use workshop inspection equipment
(u) Cancel the old Part No. and identify with the new Part No.	Refer to SPP TASK 70-09-00-400-501, SUBTASK 70-09-00-400-001. Use vibro-engraving equipment
	Existing Re-number
	6A5993 6A7627

B. Rework instructions (for A5/D5 Engine Marks)

(1) Rework the following parts:

6A5994 HP compressor rotor path ring, stage 6 (refer to 72-41-31, Fig./Item 01-705).

(2) Consumable Materials

CoMat 01-025 Nitric acid HN03



CoMat 01-041 Alkaline rust remover
CoMat 02-198 Adhesive tape (masking metal spray)
CoMat 03-036 Metal spray wire
CoMat 03-038 Metal spraying powder
CoMat 03-457 Aluminum silicon boron nitride
CoMat 05-001 Abrasive medium

(3) Standard Equipment

Chemical cleaning equipment
Penetrant crack test equipment
Abrasive blast equipment
Polythene bottle
Workshop inspection equipment
Metal spray equipment
Hardness testing equipment
Standard workshop equipment
Vibro-engraving equipment

PROCEDURE

RELATED DATA

- | | |
|---|--|
| (a) Chemically clean | Refer to SPP TASK 70-11-03-300-503.
Use chemical cleaning equipment |
| (b) Do a crack test | Refer to SPP TASK 70-23-02-230-501.
Use penetrant crack test equipment.
Cracks are not permitted |
| (c) Chemically remove the
abradable lining from the HP
compressor rotor path ring,
stage 6 | See Fig.1, Fig.7 and Fig.8.
Refer to SPP TASK 70-33-59-300-503,
SUBTASK 70-33-59-300-003.
Use CoMat 01-041 alkaline rust
remover with chemical cleaning
equipment |

PROCEDURE

RELATED DATA

- | | |
|---|---|
| (d) Chemically remove the bond coat from the HP compressor rotor path ring, stage 6 | See Fig.1, Fig.7 and Fig.8.
Refer to SPP TASK 70-33-59-300-503, SUBTASK 70-33-59-300-002.
Use CoMat 01-025 nitric acid HNO ₃ with chemical cleaning equipment. Put the assembly into the nitric acid and keep below the surface until the bubbles stop |
| (e) Abrasive blast to remove the bond coat that remains | See Fig.1, Fig.7 and Fig.8.
Refer to SPP TASK 70-12-02-120-501.
Use CoMat 05-001 abrasive medium, with abrasive blast equipment |
| (f) Cold ferric chloride etch the repaired area | Refer to SPP TASK 70-11-39-300-503, SUBTASK 70-11-39-300-001.
Use a polythene bottle |
| (g) Visually examine and measure the dimensions of the repaired area | See Fig.1, Fig.7 and Fig.8.
Use workshop inspection equipment |
| (h) Do a crack test | Refer to SPP TASK 70-23-02-230-501.
Use penetrant crack test equipment.
Cracks are not permitted |
| (i) Chemically clean the HP compressor rotor path ring, stage 6 | Refer to SPP TASK 70-11-01-300-503.
Use chemical cleaning equipment |
| (j) Seal the areas not to be sprayed | See Fig.1, Fig.7 and Fig.9.
Use CoMat 02-198 adhesive tape (masking metal spray) or locally made fixture |

NOTE: The adhesive tape (masking metal spray) permits the blasting and the sprayed coating to be done in the one operation.

CAUTION: TO PREVENT CONTAMINATION, DO NOT TOUCH THE SURFACE WHICH IS CLEANED FOR REPAIR.

CAUTION: TOO MUCH ABRASIVE BLAST CAN CAUSE DETERIORATION OF THE PREPARED SURFACE CONDITION AND MUST BE PREVENTED.

PROCEDURE	RELATED DATA
(k) Abrasive blast the areas to be sprayed	See Fig.1, Fig.7 and Fig.9. Refer to SPP TASK 70-12-02-120-501. Use CoMat 05-001 abrasive medium, with abrasive blast equipment
(l) Apply the bond coat to the HP compressor rotor path ring, stage 6	See Fig.1, Fig.7 and Fig.9. Refer to SPP TASK 70-34-01-340-501, SUBTASK 70-34-01-340-025 or SUBTASK 70-34-01-340-010. For powder feed plasma spray gun, use CoMat 03-038 metal spraying powder. Alternatively for wire feed combustion spraying, use CoMat 03-036 metal spraying wire. Pre-heat the seal ring to 221 deg. F. to 257 deg. F. (105 deg. C. to 125 deg. C.). Use metal spray equipment
(m) Apply the abradable lining to the HP compressor rotor path ring, stage 6	See Fig.1, Fig.7 and Fig.9. Refer to SPP TASK 70-34-01-340-501. For the metal spray parameters, see Fig.14. Use CoMat 03-457 aluminum silicon boron nitride, with metal spray equipment. Spray sufficient thickness to allow for machining. Also spray a test piece to check the spray hardness
(n) Remove the masking tape	
(o) Examine the HP compressor rotor path ring, stage 6	

PROCEDURE	RELATED DATA
(i) Visually examine the sprayed coating on the ring	Refer to SPP TASK 70-34-01-340-501
(ii) Measure the dimensions of the repaired area	See Fig.1, Fig.7 and Fig.9. Use workshop inspection equipment
(iii) Hardness test the sprayed coating on the test piece	Refer to SPP TASK 70-34-01-340-501, SUBTASK 70-34-01-340-004. Use hardness testing equipment. Average hardness must be 45 to 70 R15Y, outer limits 35 minimum, 80 maximum

PROCEDURE

RELATED DATA

(p) Remove the overspray	See Fig.1, Fig.7 and Fig.9. Use standard workshop equipment
(q) Remove sharp edges	See Fig.1, Fig.7 and Fig.9. Use standard workshop equipment
(r) Visually examine and measure the dimensions of the repaired area on the HP compressor rotor path ring, stage 6	See Fig.1, Fig.7 and Fig.9. Use workshop inspection equipment
(s) Cancel the old Part No. and identify with the new Part No.	Refer to SPP TASK 70-09-00-400-501, SUBTASK 70-09-00-400-001. Use vibro-engraving equipment
	Existing Re-number
	6A5994 6A7576

(4) Rework the following parts:

6A5995 HP compressor rotor path ring, stage 7 (refer to 72-41-21, Fig./Item 03-450) or 6A6540 HP compressor rotor path ring, stage 7 (refer to 72-41-21, Fig./Item 03-300), as necessary.

(5) Consumable Materials

CoMat 01-025 Nitric acid HN03
CoMat 01-041 Alkaline rust remover
CoMat 02-198 Adhesive tape (masking metal spray)
CoMat 03-036 Metal spray wire
CoMat 03-038 Metal spraying powder
CoMat 03-457 Aluminum silicon boran nitride
CoMat 05-001 Abrasive medium

(6) Standard Equipment

Chemical cleaning equipment
Penetrant crack test equipment
Lathe

Dial test indicator

Air operated grinder

Rotary burr

Abrasive blast equipment

Polythene bottle

Workshop inspection equipment

Metal spray equipment

Hardness testing equipment

Standard workshop equipment

Vibro-engraving equipment

PROCEDURE

RELATED DATA

- | | |
|---|--|
| (a) Chemically clean | Refer to SPP TASK 70-11-03-300-503.
Use chemical cleaning equipment |
| (b) Do a crack test | Refer to SPP TASK 70-23-02-230-501.
Use penetrant crack test equipment.
Cracks are not permitted |
| (c) Remove the abradable lining from the HP compressor rotor path ring, stage 7 | |

PROCEDURE

RELATED DATA

- | | |
|--|---|
| (i) Assemble the fixture on the machine | See Fig.1, Fig.7 and Fig.10.
For 6A5995, use IAE3R18232 lifting tool, 1 off and IAE3R19081 turning fixture, 1 off.
For 6A6540, use locally manufactured tools, with a lathe.
Set to turn correctly.
Use a dial test indicator |
| (ii) Assemble the rotor path ring on to the turning fixture and machine to remove the abradable lining | See Fig.1, Fig.7 and Fig.10.
Turn to remove the abradable lining.
You must not remove material from the ring |

PROCEDURE

RELATED DATA

- (d) Remove the remaining lining material

See Fig.1, Fig.7 and Fig.10.
Use an air operated grinder with a rotary burr or applicable alternatives.
You must not remove material from the ring

NOTE: This operation is an alternative to operation (e).

- (e) Chemically remove the bond coat from the HP compressor rotor path ring, stage 7

See Fig.1, Fig.7 and Fig.10.
Refer to SPP TASK 70-33-59-300-503, SUBTASK 70-33-59-300-002.
Use CoMat 01-025 nitric acid HNO₃ with chemical cleaning equipment.
Put the assembly into the nitric acid and keep below the surface until the bubbles stop

NOTE: This operation is an alternative to operation (d).

- (f) Abrasive blast to remove the bond coat that remains

See Fig.1, Fig.7 and Fig.10.
Refer to SPP TASK 70-12-02-120-501.
Use CoMat 05-001 abrasive medium, with abrasive blast equipment

- (g) Cold ferric chloride etch the repaired area

Refer to SPP TASK 70-11-39-300-503, SUBTASK 70-11-39-300-001.
Use a polythene bottle

- (h) Visually examine and measure the dimensions of the repaired area

See Fig.1, Fig.7 and Fig.10.
Use workshop inspection equipment

- (i) Do a crack test

Refer to SPP TASK 70-23-02-230-501.
Use penetrant crack test equipment.
Cracks are not permitted

- (j) Chemically clean the HP compressor rotor path ring, stage 7

Refer to SPP TASK 70-11-01-300-503.
Use chemical cleaning equipment

R

- (k) Apply the surface protection as necessary

Refer to VRS6161, TASK 72-41-21-300-004

PROCEDURE

RELATED DATA

- (l) Seal the areas not to be sprayed

See Fig.1, Fig.7 and Fig.11.
Use CoMat 02-198 adhesive tape (masking metal spray) or locally made fixture

NOTE: The adhesive tape (masking metal spray) permits the blasting and the sprayed coating to be done in the one operation.

CAUTION: TO PREVENT CONTAMINATION, DO NOT TOUCH THE SURFACE WHICH IS CLEANED FOR REPAIR.

CAUTION: TOO MUCH ABRASIVE BLAST CAN CAUSE DETERIORATION OF THE PREPARED SURFACE CONDITION AND MUST BE PREVENTED.

PROCEDURE

RELATED DATA

- (m) Abrasive blast the areas to be sprayed

See Fig.1, Fig.7 and Fig.11.
Refer to SPP TASK 70-12-02-120-501.
Use CoMat 05-001 abrasive medium, with abrasive blast equipment

- (n) Apply the bond coat to the HP compressor rotor path ring, stage 7

See Fig.1, Fig.7 and Fig.11.
Refer to SPP TASK 70-34-01-340-501, SUBTASK 70-34-01-340-025 or SUBTASK 70-34-01-340-010.
For powder feed plasma spray gun, use CoMat 03-038 metal spraying powder.
Alternatively for wire feed combustion spraying, use CoMat 03-036 metal spraying wire.
Pre-heat the seal ring to 221 deg. F. to 257 deg. F. (105 deg. C. to 125 deg. C.).
Use metal spray equipment

- (o) Apply the abradable lining to the HP compressor rotor path ring, stage 7

See Fig.1, Fig.7 and Fig.11.
Refer to SPP TASK 70-34-01-340-501.
For the metal spray parameters, see Fig.14.
Use CoMat 03-457 aluminum silicon boron nitride with metal spray equipment.
Spray a sufficient thickness to allow for machining.
Also spray a test piece to check the spray hardness

(p) Remove the masking tape

(q) Examine the HP compressor rotor path ring, stage 7

PROCEDURE	RELATED DATA
(i) Visually examine the sprayed coating on the ring	Refer to SPP TASK 70-34-01-340-501
(ii) Measure the dimensions of the repaired area	See Fig.1, Fig.7 and Fig.11. Use workshop inspection equipment
(iii) Hardness test the sprayed coating on the test piece	Refer to SPP TASK 70-34-01-340-501 SUBTASK 70-34-01-340-004. Use hardness testing equipment. Average hardness must be 45 to 70 R15Y, outer limits 35 minimum 80 maximum

PROCEDURE	RELATED DATA
(r) Remove the overspray	See Fig.1, Fig.7 and Fig.11. Use standard workshop equipment
(s) Remove sharp edges	See Fig.1, Fig.7 and Fig.11. Use standard workshop equipment
(t) Visually examine and measure the dimensions of the repaired area, on the HP compressor rotor path ring, stage 7	See Fig.1, Fig.7 and Fig.11. Use workshop inspection equipment
(u) Cancel the old Part No. and identify with the new Part No.	Refer to SPP TASK 70-09-00-400-501, SUBTASK 70-09-00-400-001. Use vibro-engraving equipment
	Existing Re-number
	6A5995 6A7623
	6A6540 6A7577

(7) Rework the following parts

6A5996 HP compressor rotor path ring, stage 8 (refer to 72-41-21, Fig./Item 03-600) or 6A6548 HP compressor rotor path ring, stage 8 (refer to 72-41-21, Fig./Item 03-500) or 6A7529 compressor rotor path ring, stage 8 (refer to 72-41-21, Fig./Item 03-500), as necessary.

(8) Consumable Materials

CoMat 01-025 Nitric acid HN03



CoMat 01-041 Alkaline rust remover

CoMat 02-198 Adhesive tape (masking metal spray)

CoMat 03-036 Metal spray wire

CoMat 03-038 Metal spraying powder

CoMat 03-457 Aluminum silicon boron nitride

CoMat 05-001 Abrasive medium

(9) Standard Equipment

Chemical cleaning equipment

Penetrant crack test equipment

Lathe

Dial test indicator

Air operated grinder

Rotary burr

Abrasive blast equipment

Polythene bottle

Workshop inspection equipment

Metal spray equipment

Hardness testing equipment

Standard workshop equipment

Vibro-engraving equipment

PROCEDURE

(a) Chemically clean

RELATED DATA

Refer to SPP TASK 70-11-03-300-503.
Use chemical cleaning equipment

PROCEDURE

RELATED DATA

- | | |
|---|--|
| (b) Do a crack test | Refer to SPP TASK 70-23-02-230-501.
Use penetrant crack test equipment.
Cracks are not permitted |
| (c) Remove the abradable lining from the HP compressor rotor path ring, stage 8 | |

PROCEDURE

RELATED DATA

- | | |
|--|--|
| (i) Assemble the fixture on the machine | See Fig.1, Fig.7 and Fig.12.
For 6A5996, use IAE3R18232 lifting tool, 1 off and IAE3R19081 turning fixture, 1 off.
For 6A6548 and 6A7529 use locally manufactured tools with a lathe.
Set to turn correctly.
Use a dial test indicator |
| (ii) Assemble the rotor path ring on to the turning fixture and machine to remove the abradable lining | See Fig.1, Fig.7 and Fig.12.
Turn to remove the abradable lining.
You must not remove material from the ring |

PROCEDURE

RELATED DATA

- | | |
|--|--|
| (d) Remove the remaining lining material | See Fig.1, Fig.7 and Fig.12.
Use an air operated grinder with a rotary burr or applicable alternatives.
You must not remove material from the ring |
|--|--|

NOTE: This operation is an alternative to operation (e).

- | | |
|---|---|
| (e) Chemically remove the bond coat from the HP compressor rotor path ring, stage 8 | See Fig.1, Fig.7 and Fig.12.
Refer to SPP TASK 70-33-59-300-503, SUBTASK 70-33-59-300-002.
Use CoMat 01-025 nitric acid HN03 with chemical cleaning equipment.
Put the assembly into the nitric acid and keep below the surface until the bubbles stop |
|---|---|

NOTE: This operation is an alternative to operation (d).

PROCEDURE	RELATED DATA
(f) Abrasive blast to remove the bond coat that remains	See Fig.1, Fig.7 and Fig.12. Refer to SPP TASK 70-12-02-120-501. Use CoMat 05-001 abrasive medium with abrasive blast equipment
(g) Cold ferric chloride etch the repaired area	Refer to SPP TASK 70-11-39-300-503, SUBTASK 70-11-39-300-001. Use a polythene bottle
(h) Visually examine and measure the dimensions of the repaired area	See Fig.1, Fig.7 and Fig.12. Use workshop inspection equipment
(i) Do a crack test	Refer to SPP TASK 70-23-02-230-501. Use penetrant crack test equipment. Cracks are not permitted
(j) Chemically clean the HP compressor rotor path ring, stage 8	Refer to SPP TASK 70-11-01-300-503. Use chemical cleaning equipment
(k) Apply the surface protection as necessary	Refer to VRS6146, TASK 72-41-21-300-059
(l) Seal the areas not to be sprayed	See Fig.1, Fig.7 and Fig.13. Use CoMat 02-198 adhesive tape (masking metal spray) or locally made fixture

NOTE: The adhesive tape (masking metal spray) permits the blasting and the sprayed coating to be done in the one operation.

CAUTION: TO PREVENT CONTAMINATION, DO NOT TOUCH THE SURFACE WHICH IS CLEANED FOR REPAIR.

CAUTION: TOO MUCH ABRASIVE BLAST CAN CAUSE DETERIORATION OF THE PREPARED SURFACE CONDITION AND MUST BE PREVENTED.

PROCEDURE	RELATED DATA
(m) Abrasive blast the areas to be sprayed	See Fig.1, Fig.7 and Fig.13. Refer to SPP TASK 70-12-02-120-501. Use CoMat 05-001 abrasive medium with abrasive blast equipment

PROCEDURE

RELATED DATA

- (n) Apply the bond coat to the HP compressor rotor path ring, stage 8

See Fig.1, Fig.7 and Fig.13.
Refer to SPP TASK 70-34-01-340-501, SUBTASK 70-34-01-340-025 or SUBTASK 70-34-01-340-010.
For powder feed plasma spray gun, use CoMat 03-038 metal spraying powder.
Alternatively for wire feed combustion spraying, use CoMat 03-036 metal spraying wire.
Pre heat the seal ring to 221 deg. F. to 257 deg. F. (106 deg. C. to 125 deg. C.).
Use metal spray equipment

- (o) Apply the abradable lining to the HP compressor rotor path ring, stage 8

See Fig.1, Fig.7 and Fig.13.
Refer to SPP TASK 70-34-01-340-501. For the metal spray parameters, see Fig.14.
Use CoMat 03-457 aluminum silicon boron nitride, with metal spray equipment.
Spray a sufficient thickness to allow for machining.
Also spray a test piece to check the spray hardness

- (p) Remove the masking tape

- (q) Examine the HP compressor rotor path ring, stage 8

PROCEDURE

RELATED DATA

- (i) Visually examine the sprayed coating on the ring

Refer to SPP TASK 70-34-01-340-501

- (ii) Measure the dimensions of the repaired area

See Fig.1, Fig.7 and Fig.13.
Use workshop inspection equipment

- (iii) Hardness test the sprayed coating on the test piece

Refer to SPP TASK 70-34-01-340-501, SUBTASK 70-34-01-340-004.
Use hardness testing equipment
Average hardness must be 45 to 70 R15Y, outer limits 35 minimum 80 maximum

PROCEDURE

RELATED DATA

- | | |
|---|--|
| (r) Remove the overspray | See Fig.1, Fig.7 and Fig.13.
Use standard workshop equipment |
| (s) Remove sharp edges | See Fig.1, Fig.7 and Fig.13.
Use standard workshop equipment |
| (t) Visually examine and measure the dimensions of the repaired area, on the HP compressor rotor path ring, stage 8 | See Fig.1, Fig.7 and Fig.13.
Use workshop inspection equipment |
| (u) Cancel the old Part No. and identify with the new Part No. | Refer to SPP TASK 70-09-00-400-501,
SUBTASK 70-09-00-400-001
Use vibro-engraving equipment |

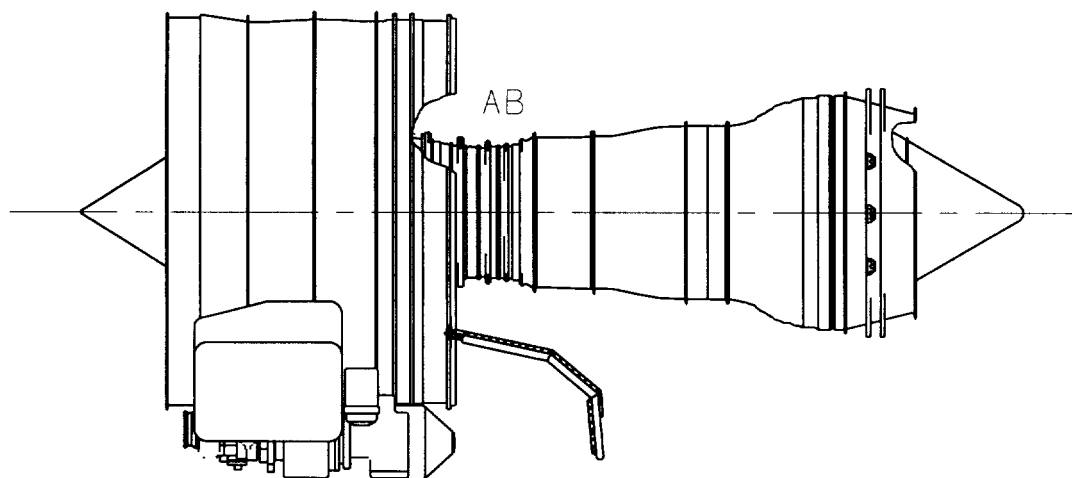
Existing	Re-number
6A5996	6A7625
6A6548	6A7624
6A7529	6A7578

C. Assembly Instructions

- (1) The new 6A7626 and 6A7627 stages 7 and 8 rotor rings (A1 Engines) also the new 6A7576, 6A7623 or 6A7577 and 6A7625 or 6A7624 or 6A7578 stages 6, 7 and 8 rotor segments and rings (A5/D5 Engines) introduced by this Service Bulletin must be fitted as a COMPLETE SET in place of old parts.
- (2) Assemble new or reworked 6A7626 and 6A7627 stages 7 and 8 rotor rings (A1 Engines) also the new 6A7576, 6A7623 and 6A7577 and 6A7625 or 6A7624 or 6A7578 stages 6, 7 and 8 rotor segments and rings (A5/D5 Engines) by use of approved procedures Engines Manual, 72-41-20 Assembly.

D. Recording Instructions

- (1) A record of accomplishment is necessary.

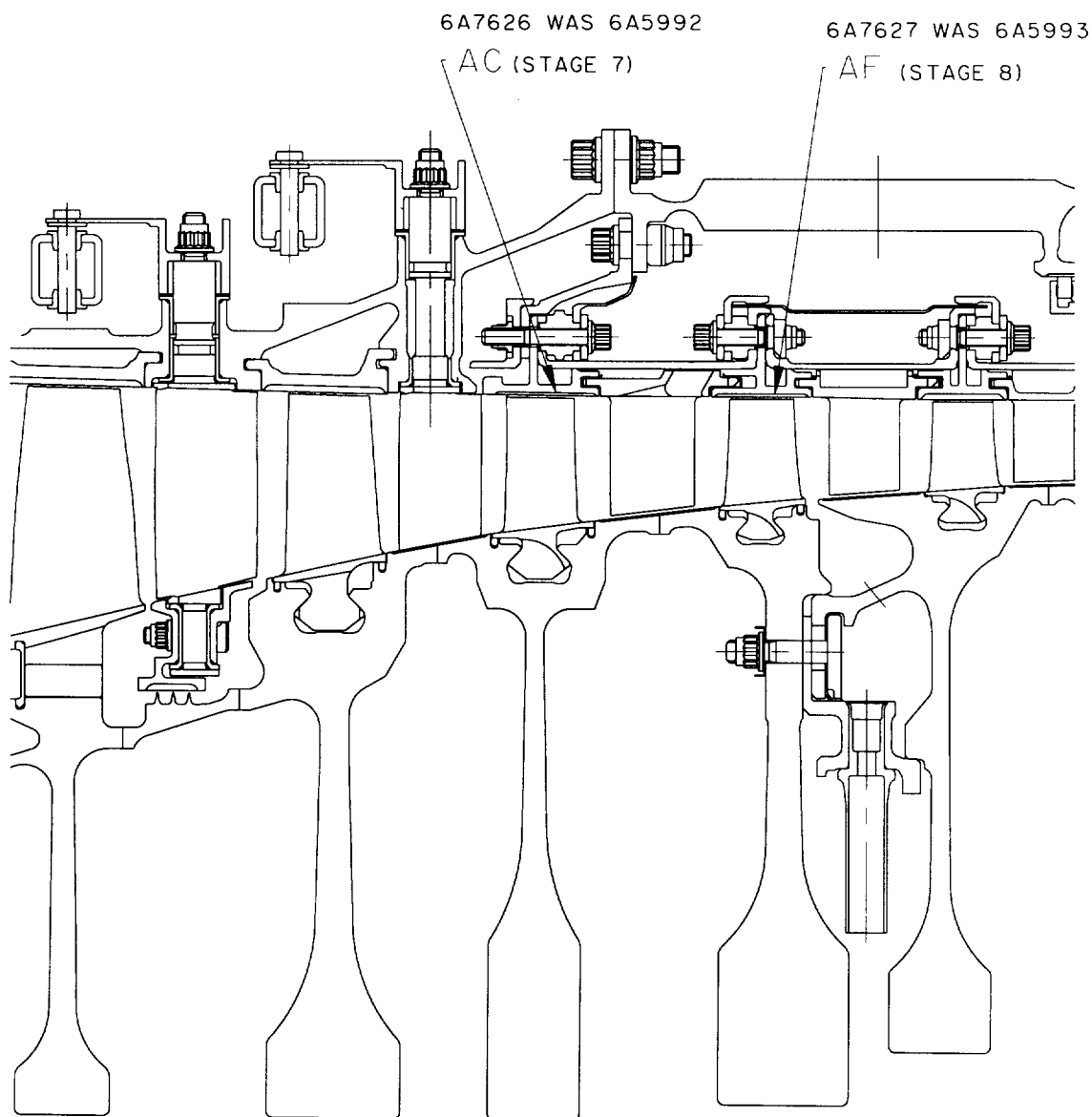


VIEW ON ENGINE EXTERIOR
TYPICAL ALL ENGINES

MACHINE WHERE MARKED ✓
SURFACE FINISH TO BE 250 MICROINCHES
(6.3 MICROMETRES) UNLESS SPECIFIED DIFFERENTLY
GEOMETRIC SYMBOLS CONFORM TO ISO R1101-1969

ded0003533

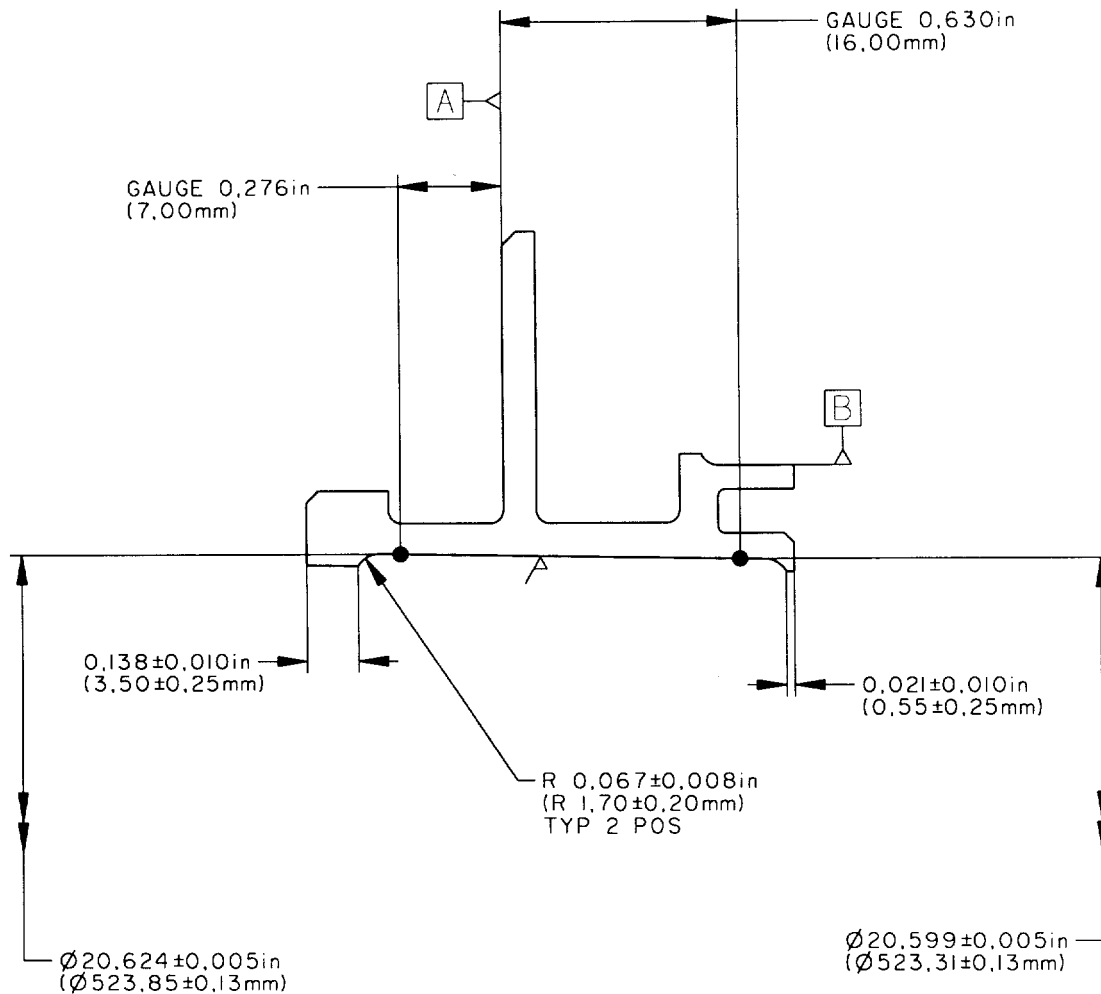
View on engine exteriors A1, A5 and D5 engines
Fig.1



VIEW AT AB
A1 ENGINE ONLY

View at AB (A1 engines only)
Fig.2

ded0003534



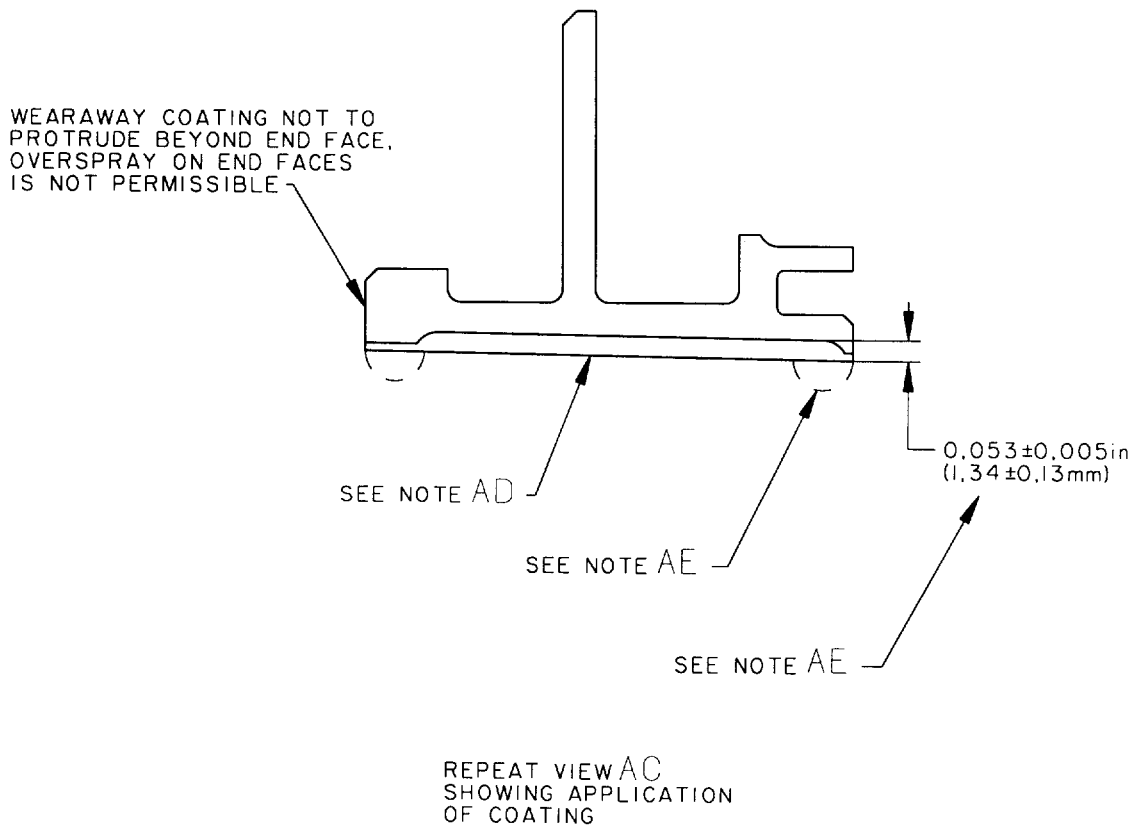
VIEW AT AC
SHOWING MACHINING REQUIRED PRIOR
TO APPLICATION OF HARD COATING

ded0003535

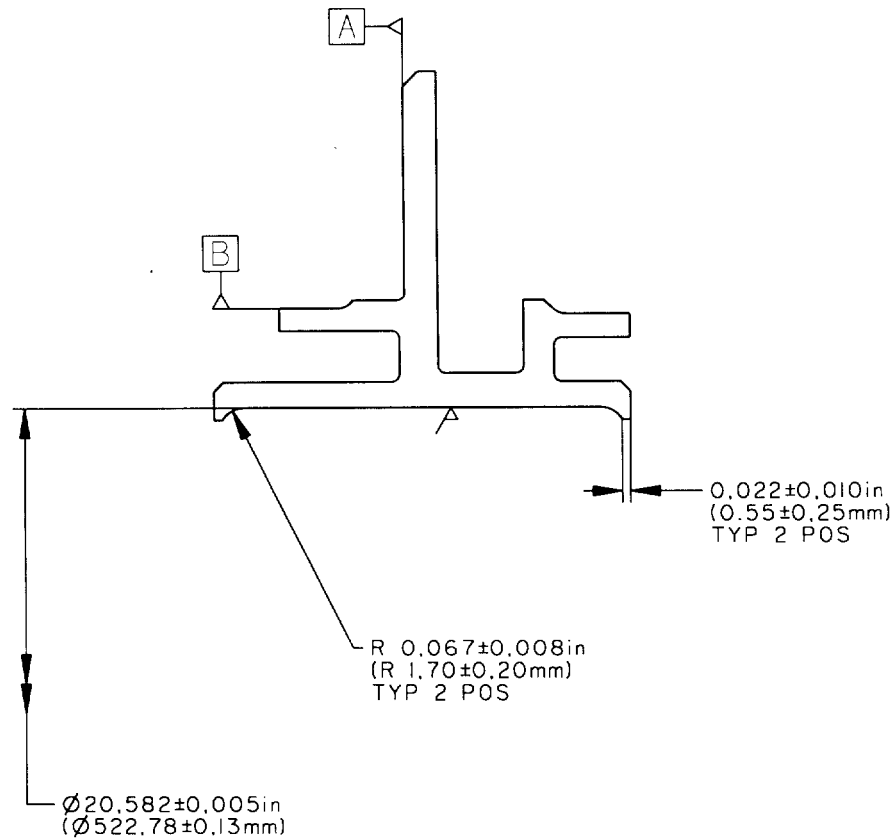
Reworking of existing stage 7 rotor path liners
Fig.3

NOTE AD
APPLY BOND COAT 0.004 ± 0.001 in (0.105 ± 0.025 mm) THICK, THEN APPLY WEARAWAY COATING IN ACCORDANCE WITH ACCOMPLISHMENT INSTRUCTIONS

NOTE AE
SURFACE UNDULATIONS DUE TO PRODUCTION PROCESSES ARE ACCEPTABLE. SEE MACHINING ASSEMBLY



Reworking of existing stage 7 rotor path liners
Fig.4



VIEW AT AF
SHOWING MACHINING REQUIRED PRIOR
TO APPLICATION OF HARD COATING

ded0003537

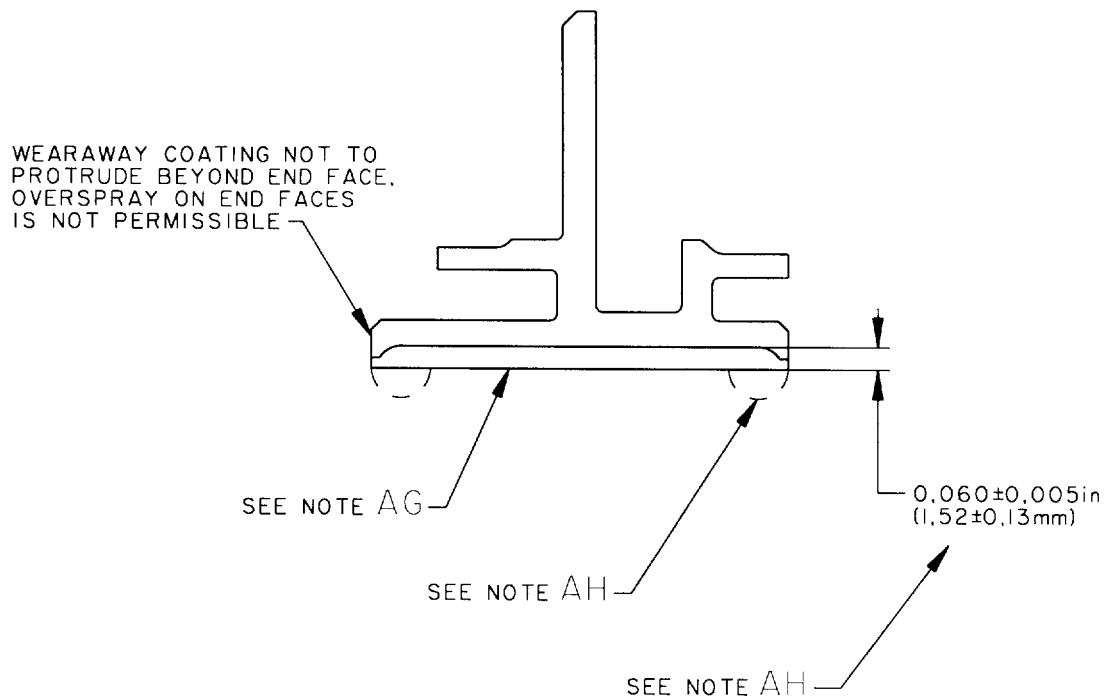
Reworking of existing stage 8 rotor path liners
Fig.5

NOTE AG

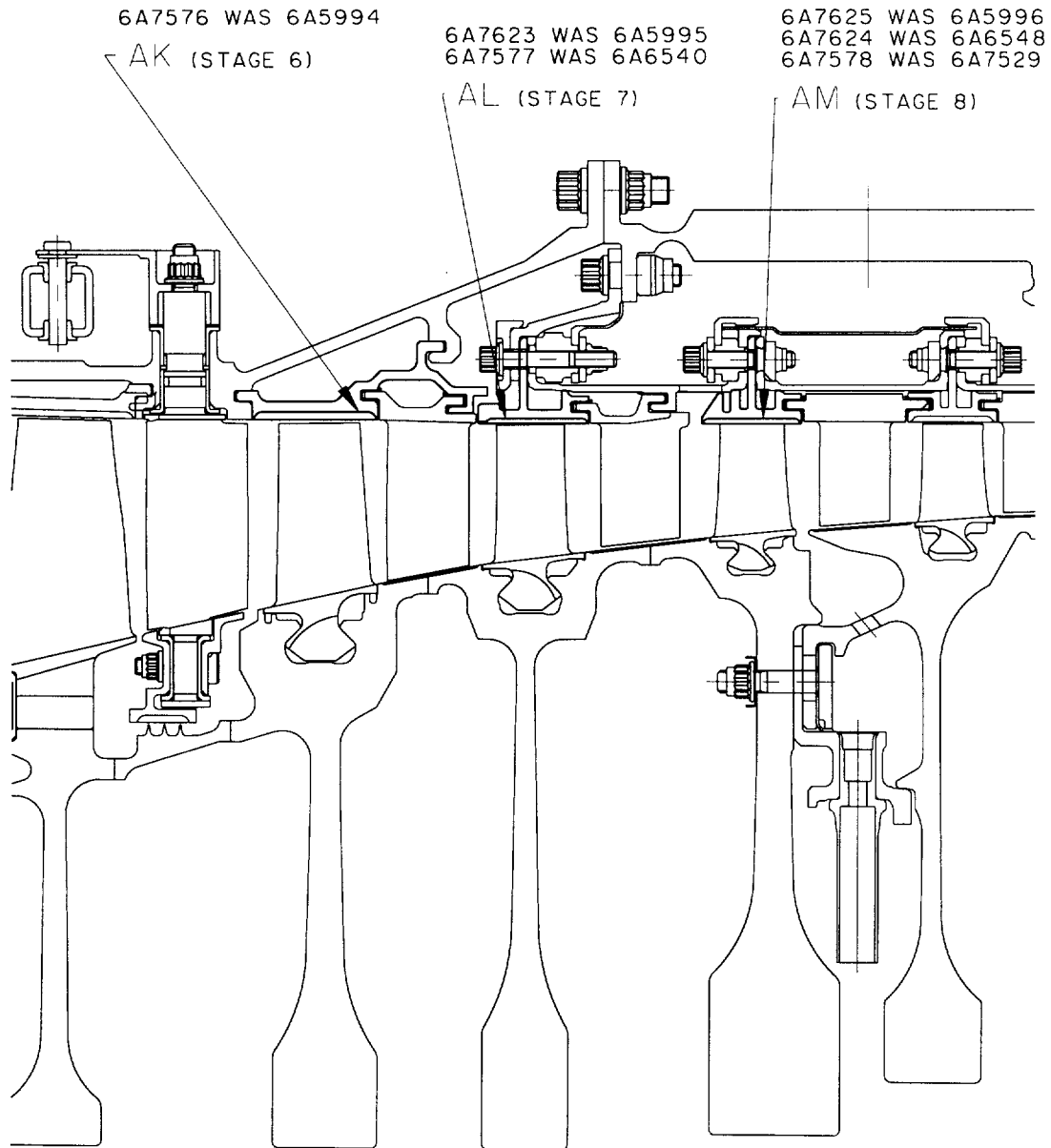
APPLY BOND COAT 0.004 ± 0.001 in (0.105 ± 0.025 mm) THICK, THEN APPLY WEARAWAY COATING IN ACCORDANCE WITH ACCOMPLISHMENT INSTRUCTIONS

NOTE AH

SURFACE UNDULATIONS DUE TO PRODUCTION PROCESSES ARE ACCEPTABLE
SEE MACHINING ASSEMBLY



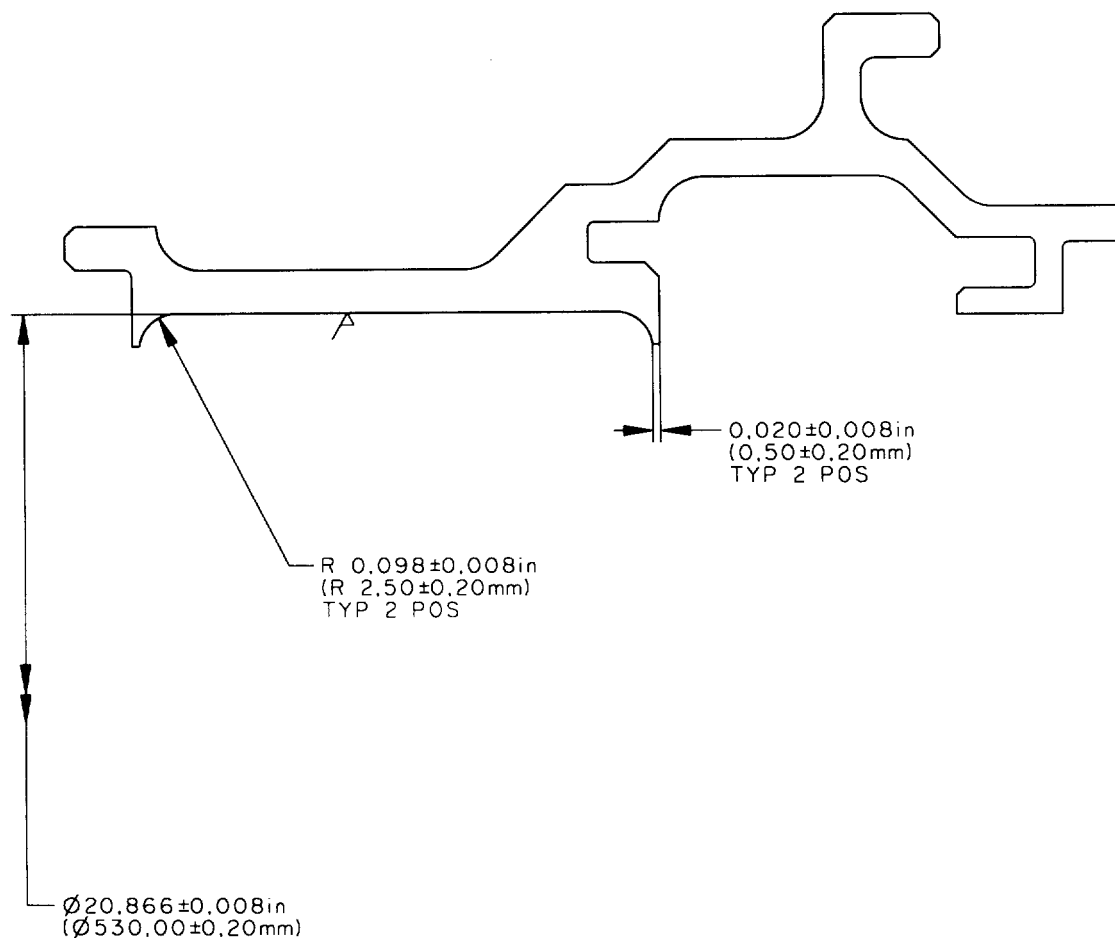
Reworking of existing stage 8 rotor path liners
Fig.6



VIEW AT AB
A5 AND D5 ENGINE

View at AB (A5 and D5 engines)
Fig.7

ded0003539

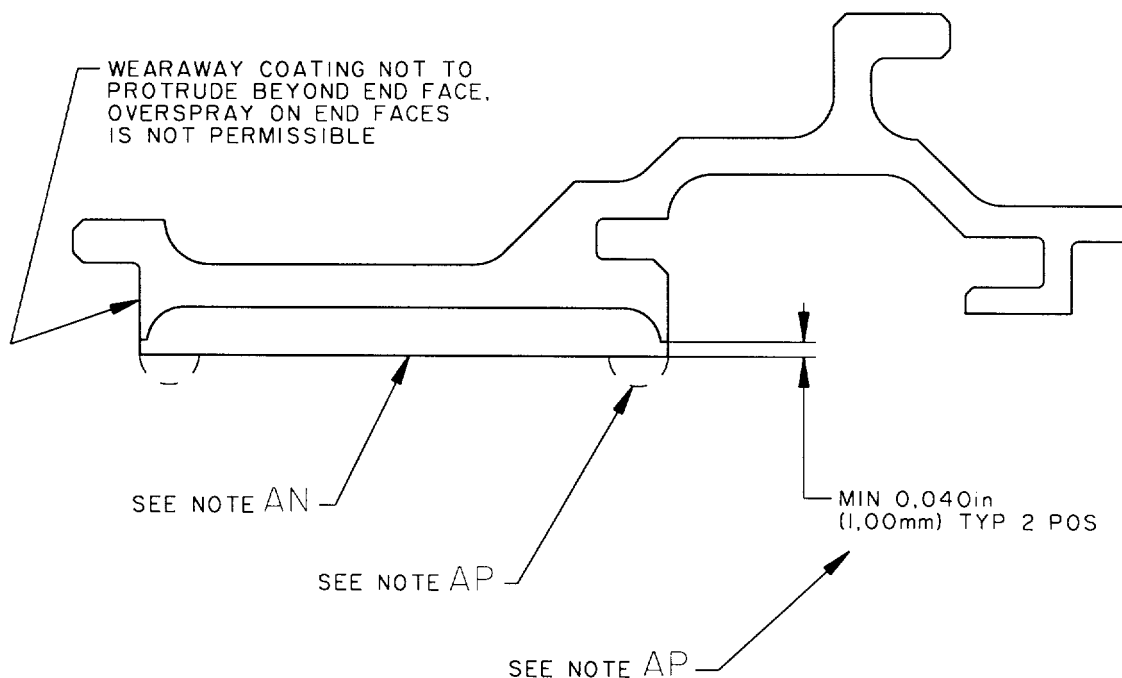


VIEW AT AK
SHOWING MACHINING REQUIRED PRIOR
TO APPLICATION OF HARD COATING

Reworking of existing stage 6 rotor path liners
Fig.8

NOTE AN
APPLY BOND COAT $0.004 \pm 0.001 \text{ in}$ ($0.105 \pm 0.025 \text{ mm}$) THICK, THEN APPLY WEARAWAY COATING IN ACCORDANCE WITH ACCOMPLISHMENT INSTRUCTIONS

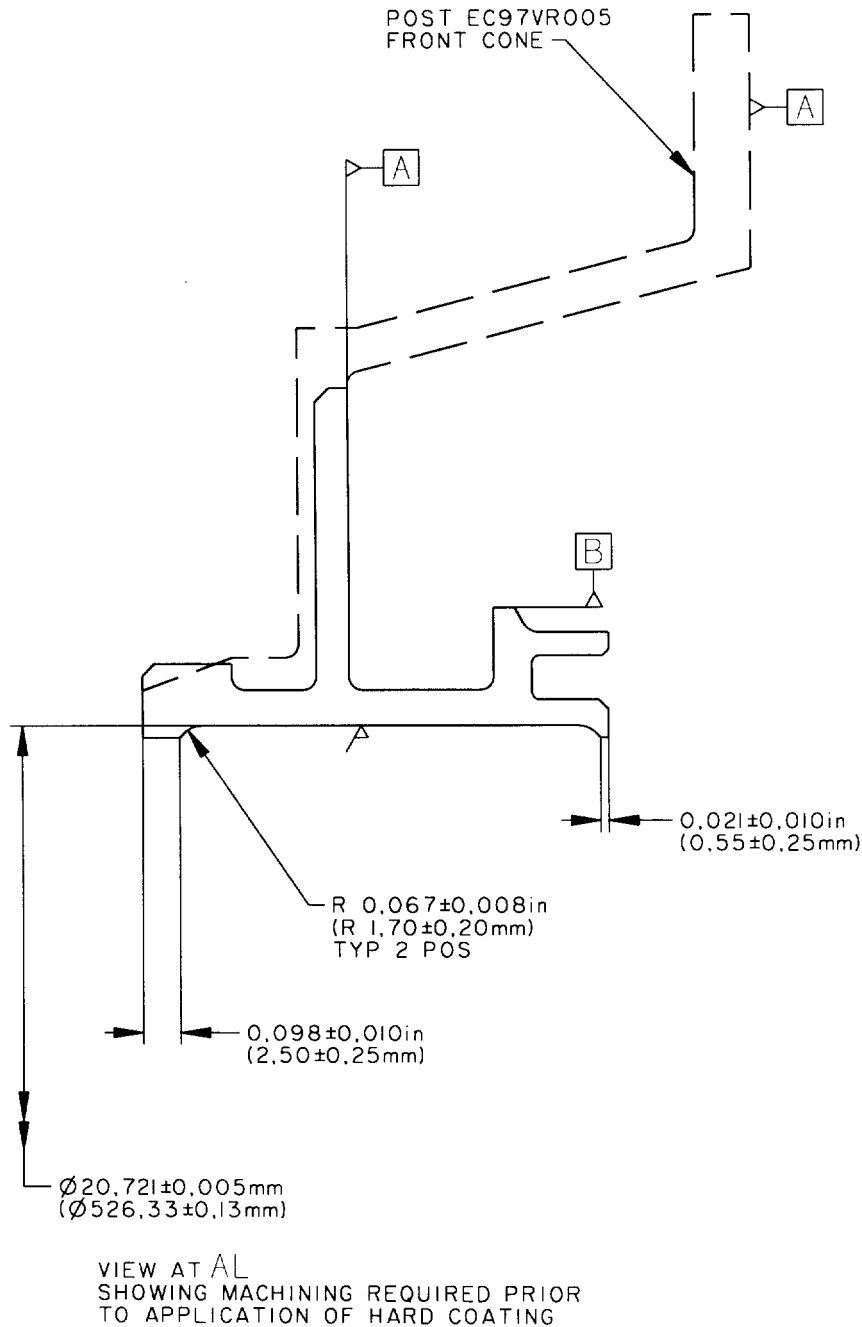
NOTE AP
SURFACE UNDULATIONS DUE TO PRODUCTION PROCESSES ARE ACCEPTABLE
SEE MACHINING ASSEMBLY



REPEAT VIEW AK
SHOWING APPLICATION
OF COATING

ded0003541

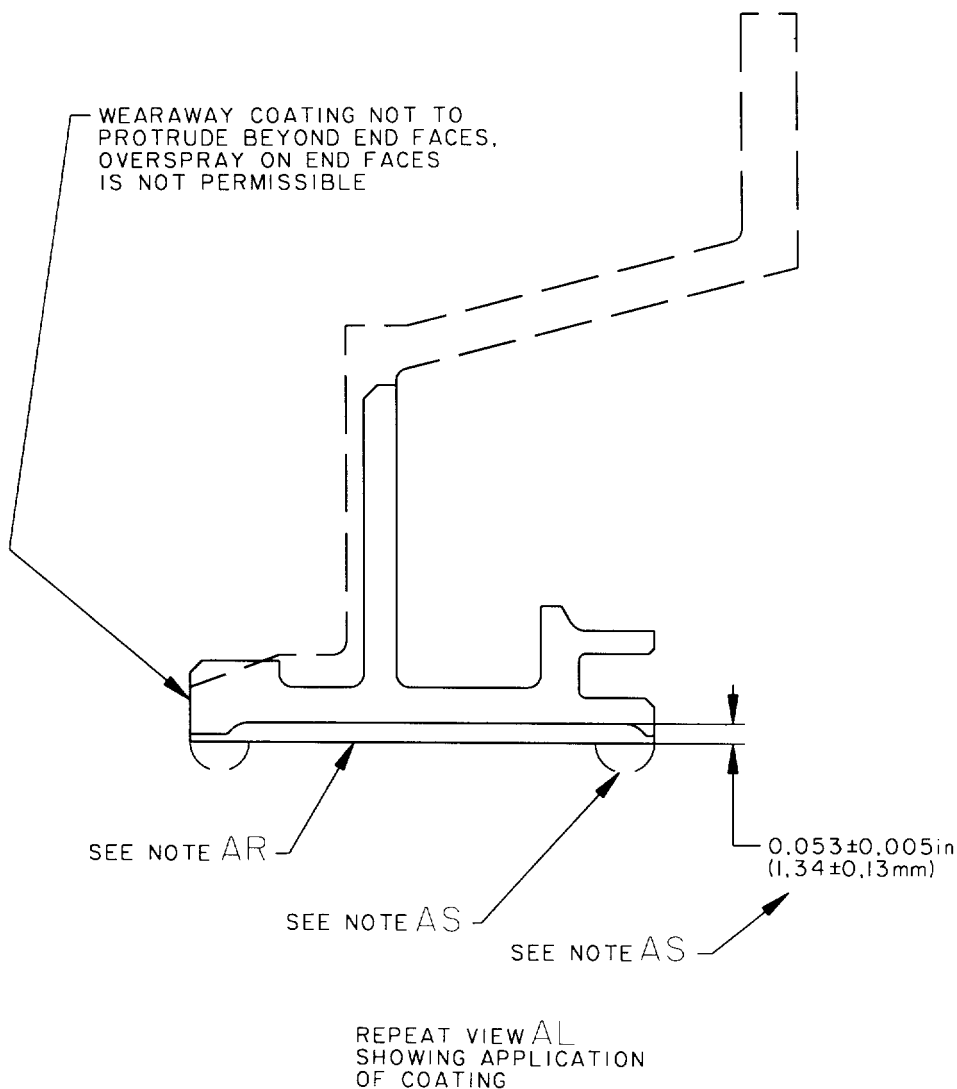
Reworking of existing stage 6 rotor path liners
Fig.9



Reworking of existing stage 7 rotor path liners
Fig.10

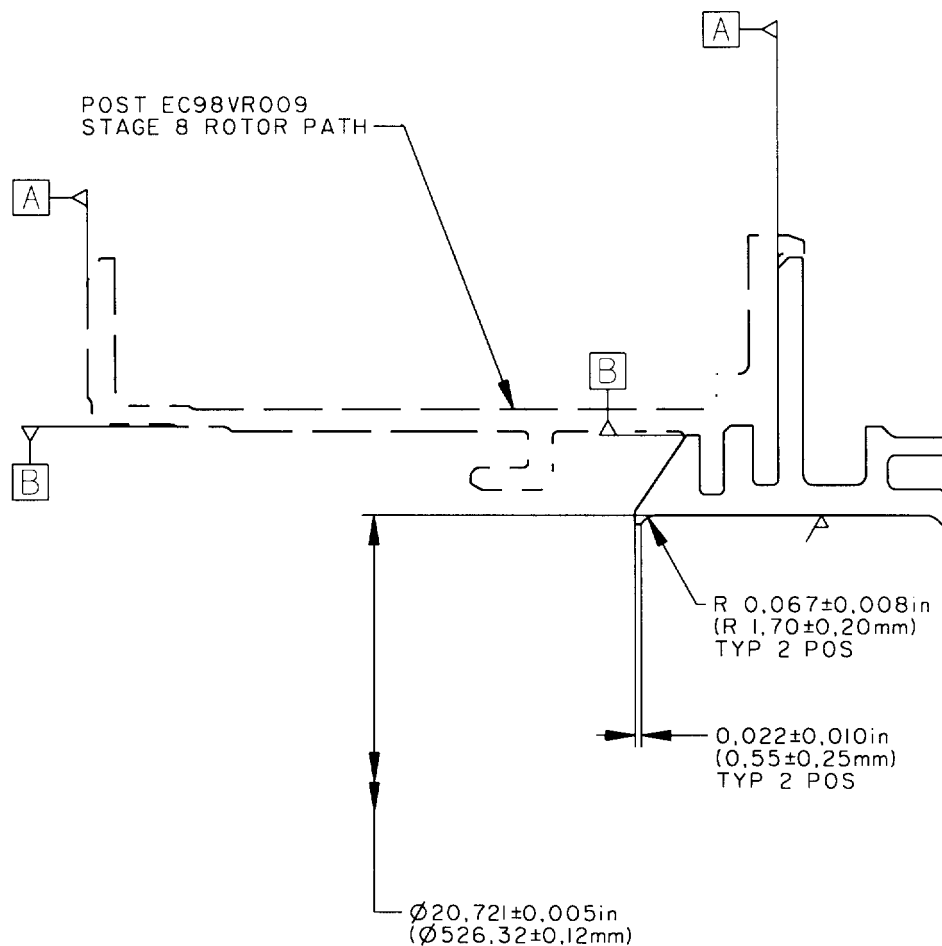
NOTE AR
APPLY BOND COAT $0.004 \pm 0.001 \text{ in}$ ($0.105 \pm 0.025 \text{ mm}$) THICK. THEN APPLY WEARAWAY COATING IN ACCORDANCE WITH ACCOMPLISHMENT INSTRUCTIONS

NOTE AS
SURFACE UNDULATIONS DUE TO PRODUCTION PROCESSES ARE ACCEPTABLE
SEE MACHINING ASSEMBLY



ded0003543

Reworking of existing stage 7 rotor path liners
Fig.11

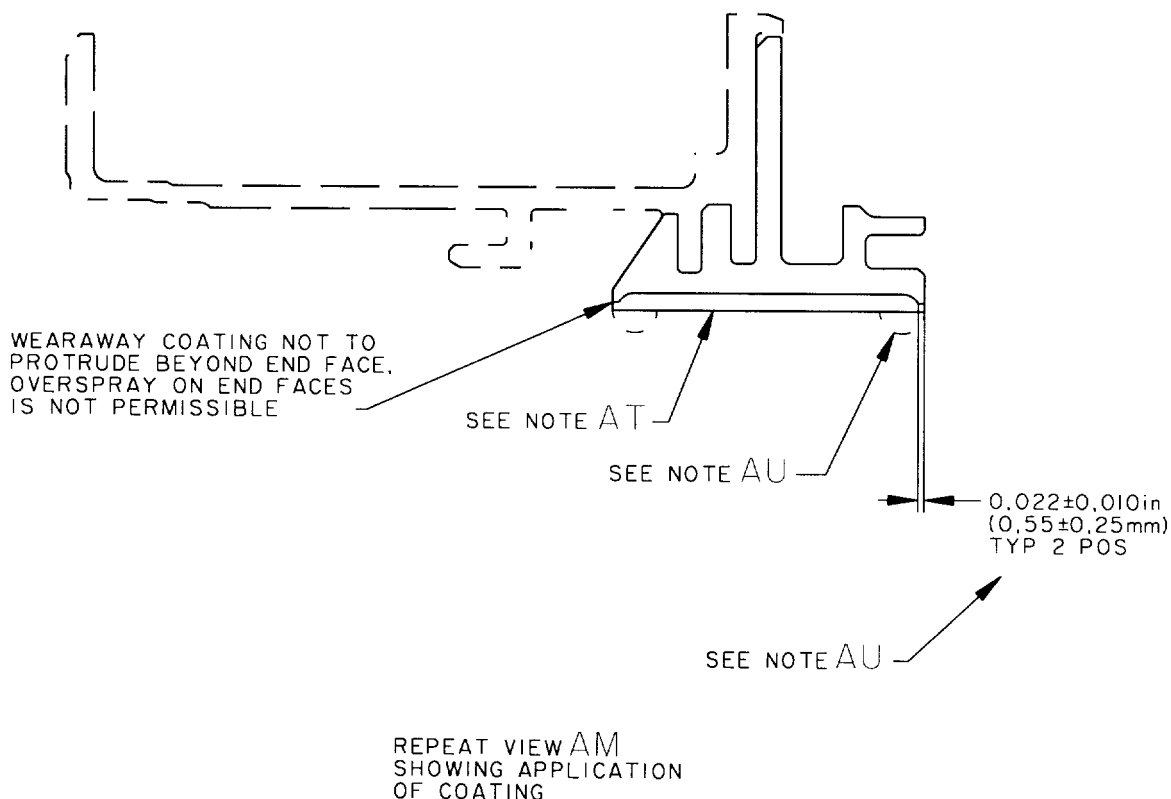


VIEW AT A-A
SHOWING MACHINING REQUIRED PRIOR
TO APPLICATION OF HARD COATING

Reworking of existing stage 8 rotor path liners
Fig.12

NOTE AT
APPLY BOND COAT 0.004 ± 0.001 in (0.105 ± 0.025 mm) THICK, THEN APPLY WEARAWAY COATING IN ACCORDANCE WITH ACCOMPLISHMENT INSTRUCTIONS

NOTE AU
SURFACE UNDULATIONS DUE TO PRODUCTION PROCESSES ARE ACCEPTABLE
SEE MACHINING ASSEMBLY



ded0003545

Reworking of existing stage 8 rotor path liners
Fig.13

Spray distance	150mm
Voltage	75V
Current	500A
Power	37.5kw
Powder feed rate	52.5g/min
Argon pressure	100psi
Argon flow	190
Hydrogen pressure	50psi
Hydrogen flow	6

NOTE: Powder port No 1 should be used.

ded0003550

Powder plasma data – METCO 7M and METCO 9M systems
Fig.14

V2500-A1 Family Tree

Baseline

V2500-72-0030

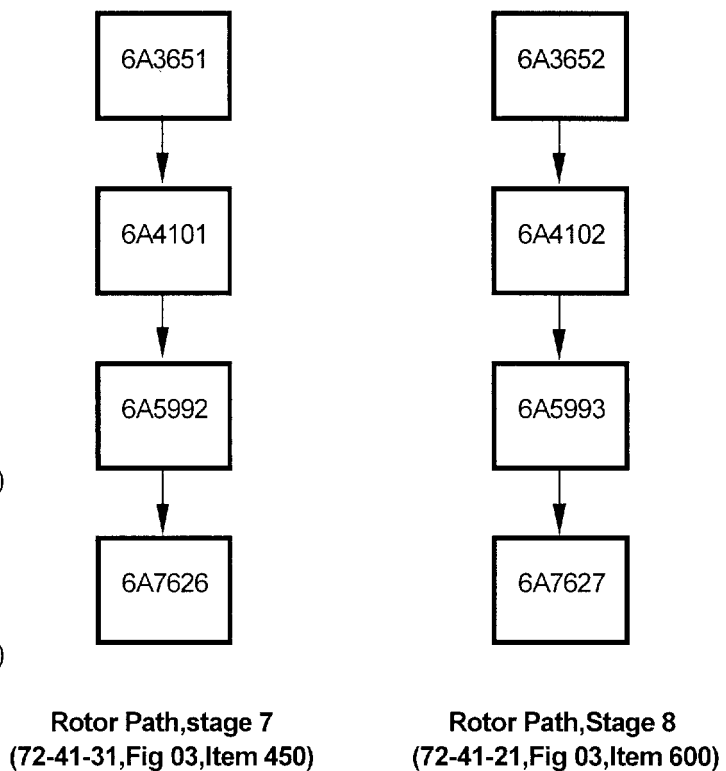
Introduction of HP Compressor stage 7 & 8 rotor path abradable lining with reduced spray thickness

V2500-ENG-72-0235

Introduction of HP Compressor stage 6, 7 & 8 rotor paths with revised abradable liners (Metco 313)

V2500-ENG-72-0369

Introduction of HP Compressor stage 6, 7 & 8 rotor paths with revised abradable liners (Metco 320)



Family tree (A1 engines)
Fig.15

V2500-A5 & D5 Family Tree

Baseline

V2500-ENG-72-0235

Introduction of HP Compressor stage 6, 7 & 8 rotor paths with revised abradable liners (Metco 313)

V2500-ENG-72-0296

Introduction of integral front support cone/stage 7 rotor path

V2500-ENG-72-0343

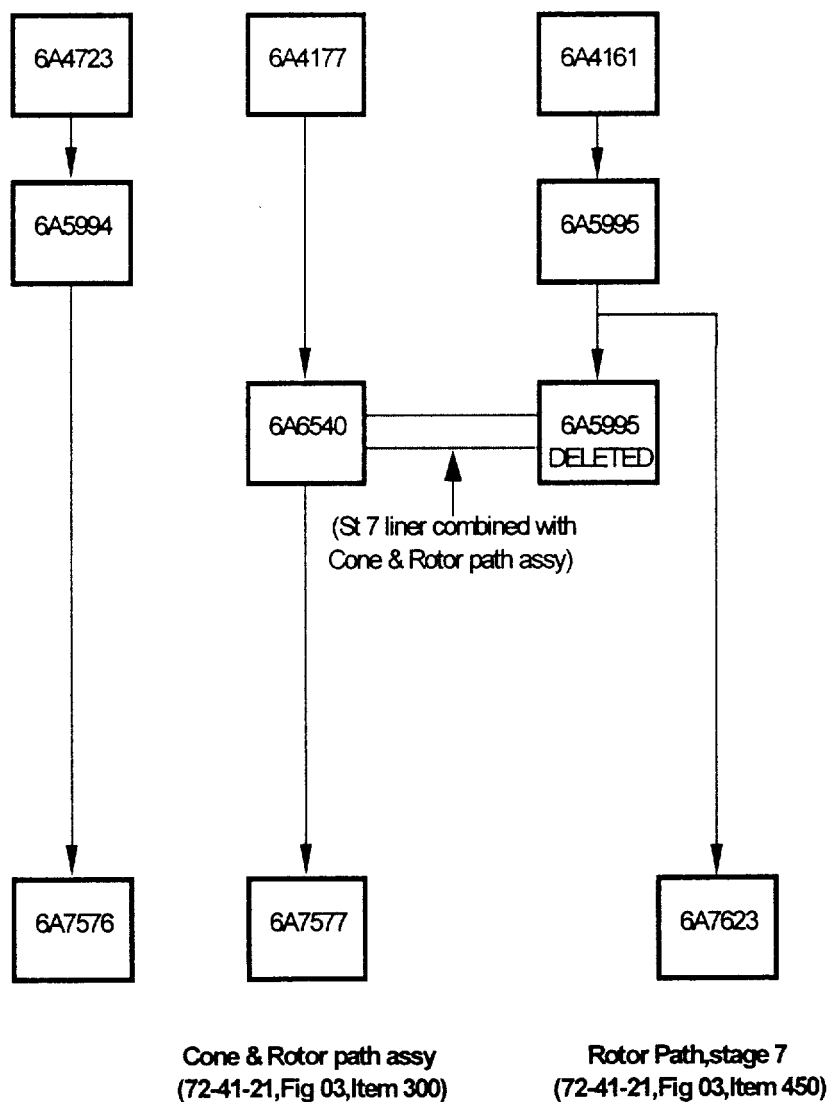
Introduction of combined HP Compressor casings and rotor Paths

V2500-ENG-72-0358

Introduction of revised HP Comp stage 7 & 10 case assemblies with reduced qty of bleed slots

V2500-ENG-72-0369

Introduction of HP Compressor stage 6, 7 & 8 rotor paths with revised abradable liners (Metco 320)



Family tree (A5 and D5 engines)
Fig.16 (Sheet 1)

V2500-A5 & D5 Family Tree

Printed in Great Britain

Baseline

V2500-ENG-72-0235

Introduction of HP Compressor stage 6, 7 & 8 rotor paths with revised abradable liners (Metco 313)

V2500-ENG-72-0296

Introduction of integral front support cone/stage 7 rotor path

V2500-ENG-72-0343

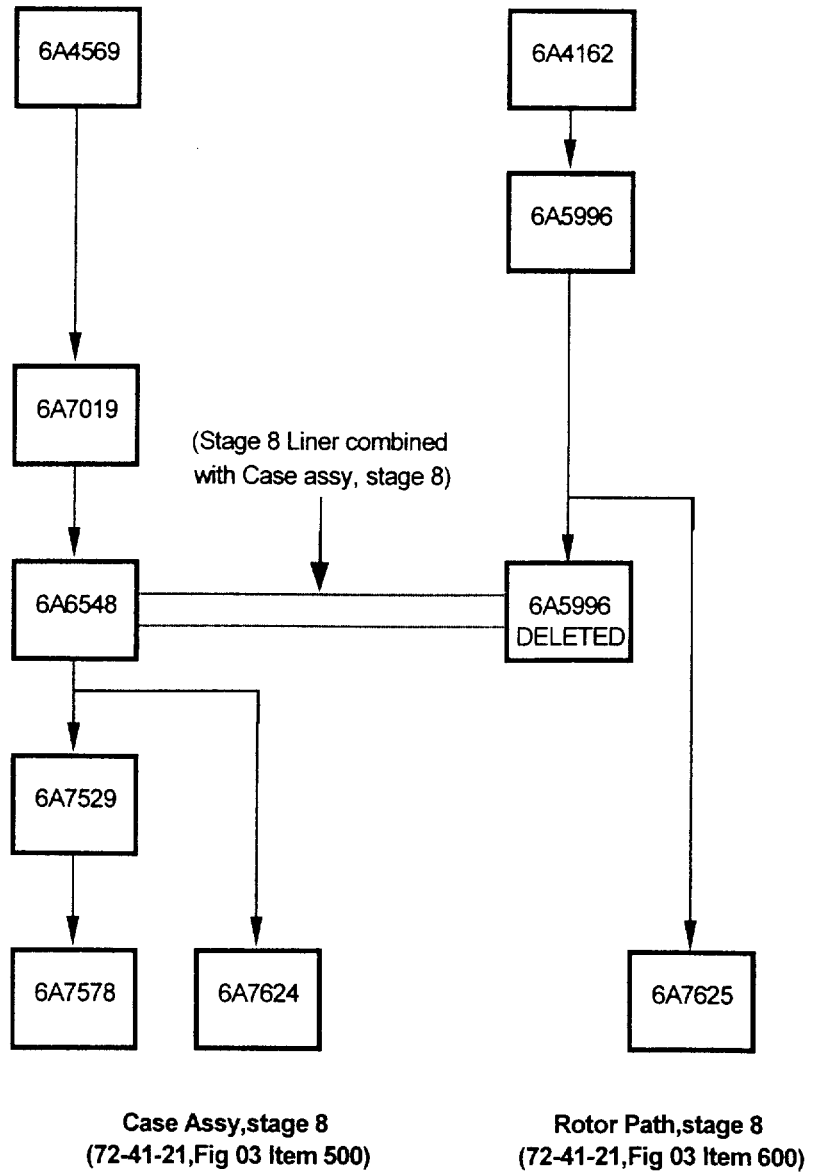
Introduction of combined HP Compressor casings and rotor Paths

V2500-ENG-72-0358

Introduction of revised HP Comp stage 7 & 10 case assemblies with reduced qty of bleed slots

V2500-ENG-72-0369

Introduction of HP Compressor stage 6, 7 & 8 rotor paths with revised abradable liners (Metco 320)



Ided0003548

Family tree (A5 and D5 engines)
Fig.16 (Sheet 2)

MODIFICATION SERVICE BULLETIN - ENGINE - HP COMPRESSOR RING CASES - INTRODUCTION OF
HP COMPRESSOR STAGE 6, 7 AND 8 ROTOR PATHS WITH REVISED ABRADABLE LINING

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. Parts supplied as single line items

2. New Production or Rework Parts

	Part No.	Desc.	Unit Price US Dollars
R	6A7576	Segment	2,549.00
R	6A7577	Cone assy	22,090.00
R	6A7578	Case assy	23,310.00
R	6A7623	Ring	7,030.00
R	6A7624	Case assy	23,312.00
R	6A7625	Ring	7,774.00
R	6A7626	Ring	6,129.00
R	6A7627	Ring	6,832.00