International Aero Engines

SERVICE BULLETIN

Jan.12 /00

Subject: Transmittal of Revision 1 to Service Bulletin V2500-ENG-72-0347.

Service Bulletin Revision History:

Event	Date
Basic Issue	Aug 12/99.
Revision 1	Jan.12/00

Reason for Revision:

(1) To revise 1. A. (2) Engine Incorporation and add Group A Part Life information for Stage 9-12 Disk Assembly (72-41-12,01-600) (INTREF TS-EM-036-99 refers)

Effect on Past Compliance:

None.

List of Effective Pages:

Page No.	Revision No.	Effective Date
1 and 2	Revision 1	Jan.12/00
3	Initial Issue	Aug.12/99
4	Revision 1	Jan.12/00
4A and 4B	Revision 1	Jan.12/00
5 to 28	Initial Issue	Aug. 12/99

International Aero Engines
SERVICE BULLETIN

ENGINE - HP COMPRESSOR DISKS (STAGES 9-12) - INTRODUCTION OF REVISED HP COMPRESSOR STAGE 9-12 DISK ASSEMBLY WITH INCREASED ABRASIVE LINING BOND COAT THICKNESS

MODEL APPLICATION

V2500-A1
V2522-A5
V2524-A5
V2527-A5
V2527E-A5
V2527M-A5
V2530-A5
V2533-A5
V2525-D5
V2528-D5

BULLETIN INDEX INDICATOR

72-41-12

Compliance Category Code

7

Internal Reference No.

98VR036

Aug.12/99
Revision 1 Jan.12/00

V2500-ENG-72-0347

ENGINE - HP COMPRESSOR DISKS (STAGES 9-12) - INTRODUCTION OF REVISED HP COMPRESSOR STAGE 9-12 DISK- ASSEMBLY WITH INCREASED ABRASIVE LINING BOND COAT THICKNESS

1. Planning Information

A. Effectivity

(1) Aircraft

(a) Airbus A319

(b) Airbus A319CJ

(c) Airbus A320

(d) Airbus A321

(e) Boeing - Douglas Product Division MD-90

(2) Engine:

R (a) V2500-A1 Engines prior to serial number V0362

R (b) V2522-A5 Engines prior to serial number V10653 onwards but excluding
R V10647 to V10650 and V10652.

R (c) V2524-A5 Engines prior to serial number V10653 onwards but excluding
R V10647 to V10650 and V10652.

R (d) V2527-A5 Engines prior to serial number V10653 onwards but excluding
R V10647 to V10650 and V10652.

R (e) V2527E-A5 Engines prior to serial number V10653 onwards but excluding
R V10647 to V10650 and V10652.

R (f) V2527M-A5 Engines prior to serial number V10653 onwards but excluding
R V10647 to V10650 and V10652.

R (g) V2530-A5 Engines prior to serial number V10653 onwards but excluding
R V10647 to V10650 and V10652.

R (h) V2533-A5 Engines prior to serial number V10653 onwards but excluding
R V10647 to V10650 and V10652.

(i) V2525-D5 Engines prior to serial number V20286

(j) V2528-D5 Engines prior to serial number V20286

B. Concurrent Requirements

None

C. Reason

(1) Problem

De-bonding of the abrasive ceramic coating on the HP Compressor stage 9 to 12 disc assemblies can occur.

The problem is attributed to the insufficient thickness of the bond coat combined with a thick top layer.

(2) Background

The problem has been seen on engines in-service at strip on overhaul.

(3) Objective

Incorporation of this Service Bulletin is designed to keep maintenance reliability.

(4) Substantiation

The changes introduced by this Service Bulletin have been the subject of extensive engineering assessment together with successful completion of a 337-hour endurance test and 5000 short cycles of a representative disc assembly on V2500 development engine 804/18.

(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Scheme

Affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. Description

(1) The HP Compressor stage 9 to 12 disc assembly has been revised, the changes are as follows:

(a) The bond coat thickness is increased from 0,1015mm plus or minus 0,0255mm to 0,225mm plus or minus 0,025mm, however the overall thickness of the bond coat and abradable lining is maintained at 0,45mm plus or minus 0,10mm.

(b) An alternative bond coat '95/5 nickel/aluminium' is introduced to the existing'80/20 nickel/aluminium' material.

(2) Existing HP Compressor stage 9 to 12 disc assemblies can be reworked – refer to figures 1 to 10.

R (3) For the effect on declared life, the Time Limits Manual, 05-10-01, Group A Parts Lives will be updated to include the following :

R A1 Model only

R	PART NUMBER	6A7545
R	Approved life (Flight Cycles)	15,000
R	Bump usage (up to 5 percent)	0 to 750
R	Certified life up to 5 percent Bump usage	15,000
R	Bump usage cycles (up to 15 percent)	751 to 2250
R	Certified life up 15 percent Bump usage	15,000
R	Bump usage cycles (up to 30 percent)	2251 to 4500
R	Certified life up to 30 percent Bump usage	15,000
R	Bump usage cycles (up to 100 percent)	4501 to 15,000
R	Certified life up to 100 percent Bump usage	15,000

R	A5 Model (V2527E and V2530) not incorporating SB72-0273	
R	Stage 9 to 12 Disk	6A7547
R	(72-41-12,01-600)	
R	Approved life (Flight Cycles)	12,000
R	A5 Model (V2522,V2524 and V2527) not incorporating SB72-0273	
R	Stage 9 to 12 Disk	6A7547
R	(72-41-12,01-600)	
R	Approved life (Flight Cycles)	14,300
R	A5 Model (V2533) not incorporating SB72-0273	
R	Stage 9 to 12 Disk	6A7547
R	(72-41-12,01-600)	
R	Approved life (Flight Cycles)	8,000
R	A5 Model (All Marks) SB72-0273	
R	Stage 9 to 12 Disk	6A7546
R	(72-41-12,01-600)	
R	Approved life (Flight Cycles)	20,000
R	D5 Model (V2525) not incorporating SB72-0273	
R	Stage 9 to 12 Disk	6A7547
R	(72-41-12,01-600)	
R	Approved life (Flight Cycles)	15,700
R	D5 Model (V2528) not incorporating SB72-0273	
R	Stage 9 to 12 Disk	6A7547
R	(72-41-12,01-600)	
R	Approved life (Flight Cycles)	13,200
R	D5 Model (All Marks) SB72-0273	
R	Stage 9 to 12 Disk	6A7546
R	(72-41-12,01-600)	
R	Approved life (Flight Cycles)	20,000

R NOTE : The Time Limits Manual 05-10-01 is scheduled to incorporate the Part Service Life
R Limits related to this Service Bulletin and will take precedence over the Service
R Bulletin.

E. Approval

The part number changes and/or part modification described in Section 2 and 3 of this Modification Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Models listed.

F. Compliance

Category Code 7

Accomplish when the supply of superseded parts has been depleted

G. Manpower

Estimated Man-hours to incorporate the full intent of this bulletin.

(1) In Service

Not applicable

(2) At overhaul

No more time is necessary to do this Service Bulletin

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

H. Material Price and Availability

(1) Modification kit is not required.

(2) See "Material Information" section for prices and availability of future spares.

I. Tooling Price and Availability

Special tools are not required.

J. Industry Support Information

Not applicable.

K. Weight and Balance

(1) Weight Change

Plus 0.1lb (0,05kg).

(2) Moment Arm

24.7in (627mm) rearwards.

(3) Datum

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

L. Electrical Load Data

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

M. Software Accomplishment Summary

Not applicable.

N. References

(1) Service Bulletin V2500-ENG-72-0273 (Engine – H.P. compressor discs (stages 9-12) Introduction of a revised H.P. compressor stage 9-12 disc assembly

O. Other Publications Affected

(1) V2500 Engine Illustrated Parts Catalogue (IPC) Chapter/Section 72-41-12.

(2) V2500 Engine Manual, Chapter/Section 72-41-12, Cleaning-02, Inspection/Check-02 and Repair

(3) V2500 Engine Manual, Chapter/Section 72-41-10, Disassembly and Assembly-02

P. Interchangeability of Parts

Not affected.

2. Accomplishment Instructions

A. Rework Instructions

This Service Bulletin, is Source Demonstrated, refer to VRS6008, for more information.

Authorized Repair Vendors that can accomplish this SB 72-0347, are listed below:

GENERAL PLASMA INC.
12 THOMPSON ROAD
EAST WINDSOR CT 06088

ATTN. DIRECTOR, QUALITY ASSURANCE

MTU MAINTENANCE GMBH
FLUGHAFEN HANNOVER
MUNCHNER STRASSE 31
POSTFACH 1720
D3012 LANGENHAGEN
GERMANY

ATTN. MANAGER. QUALITY ASSURANCE

ROLLS-ROYCE
AERO-ENGINE SERVICES LTD.
COMPONENT REFURBISHMENT
MAVOR AVENUE
NERSTON
EAST KILBRIDE
GLASGOW G74 4PY
SCOTLAND

ATTN. BUSINESS MANAGER. COMPONENT REFURBISHMENT

ISHIKAWAJIMA - HARIMA HEAVY INDUSTRIES CO. LTD.,
AERO-ENGINE & SPACE OPERATIONS,
MIZUHO AERO - AERO WORKS,
229, TONOGAYA,
MIZUHO - MACHI,
NISHITAMA - GUN,
TOKYO, 190-12,
JAPAN

ATTN. MANAGER, ENGINE COMPONENT REPAIR DEVELOPMENT.

B. The designation by IAE of an Authorized Repair Vendor indicates that the Repair Vendor has demonstrated the necessary capability to enable it to carry out the listed repair work. However IAE make no warranties or representations concerning the qualification of quality standards of the Repair Vendors to carry out the repair work and accept no responsibility whatsoever for any work that may be carried out by a Repair Vendor other than when IAE is listed as the Repair Vendor. Authorized Repair Vendors do not act as agents or representatives of IAE.

(1) Consumable Materials

CoMat 01-025	Nitric acid HNO3
CoMat 02-001	Masking tape
CoMat 03-037	Metal spraying powder metco 404NS
CoMat 03-043	Metal spraying powder metco 105NS
CoMat 03-416	Metal spraying powder Ni, AI (95/5)
CoMat 05-001	Abrasive

(2) Standard Equipment

Chemical cleaning equipment
Abrasive blast equipment
Penetrant crack test equipment
Standard workshop tools
Metal spraying equipment
NC Lathe
Dial test indicator
Vibro-engraving equipment

(3) Rework the parts that follow, (A1 Engines only).

6A4131, HP. Compressor Stage 9 to 12 Disks Shaft Assembly, (Refer to 72-41-12, Fig/Item 01-600).

PROCEDURE	SUPPLEMENTARY INFORMATION

CAUTION: YOU MUST DO THIS MODIFICATION SB. 72-0347, IN FULL IF ONLY THE STAGE 11 RUBSTRIP IS TO BE REPLACED, IN ACCORDANCE WITH VRS6513, TASK 72-41-12-300-024.

(a) Chemically clean	Refer to TASK 72-41-12-100-000. Use chemical cleaning equipment

(b) Loosen the Top Coat Lining at Each Stage

CAUTION: REMOVE THE TOP COAT ONLY. THE BLAST OPERATION MUST STOP WHEN THE WHITE TOP COAT IS REMOVED. FAILURE TO STOP THE BLAST OPERATION AS SPECIFIED MAY RESULT IN SUBSEQUENT ENGINE FAILURE.

NOTE: It is permitted to loosen the top coat lining in part, to allow the Nitric Acid by capillary action, to release both top and bond coats at each stage.

PROCEDURE	SUPPLEMENTARY INFORMATION
(i) Seal all surfaces not to be blasted	See Figure 1 Use CoMat 02-001 masking tape or Refer to operation 3. A. for approved vendor tools
(ii) Lightly dry blast to loosen top coat lining at each stage	See Figure 1. Refer to SPM TASK 70-12-02-120-501 Use CoMat 05-001 abrasive with abrasive blast equipment
(iii) Remove the masks	
(c) Chemically Remove the Linings at Each Stage	
(i) Remove the lining at each stage	See Figure 1 and Figure 3 Refer to SPM TASK 70-33-59-300-503 Use CoMat 01-025 nitric acid HNO3 with chemical cleaning equipment. Put the assembly into nitric acid solution and keep below surface until bubbles stop
(d) Visually Examine Surfaces for Repair	
(i) Visually examine	See Figure 3 and Figure 4 Make sure all the lining material has been removed. If not do operation (b) and operation (c) again as necessary
(e) Do a Crack Test	
(i) Do a penetrant crack test	Refer to SPM TASK 70-23-04-230-501. Use penetrant crack test equipment Discard the assembly if cracked

PROCEDURE	SUPPLEMENTARY INFORMATION
(f) Dimensionally Examine Surfaces for Repair	
CAUTION: ASSEMBLIES WHICH ARE NOT ACCEPTED AND CANNOT BE REPAIRED ARE TO BE DISCARDED.	
(i) Dimensionally examine the radial depth of the groove for the lining at each stage	See Figure 3 and Figure 4 Use standard workshop tools. The depth of the groove must not be more than 0.016in. (0,40mm.)
(g) Seal all Surfaces not to be Repaired	
(i) Seal applicable surfaces	See Figure 1 Use CoMat 02-001 masking tape. Alternatively refer to operation 3. A. for approved vendor tools
(h) Prepare Surfaces for Repair	
CAUTION: 1. DO NOT TOUCH AREAS TO BE REPAIRED AFTER THEY ARE CLEANED. 2. TOO MUCH ABRASIVE BLAST CAN CAUSE DETERIORATION OF THE PREPARED SURFACE CONDITION AND MUST BE PREVENTED.	
(i) Lightly dry blast to prepare surfaces for the lining	Refer to SPM TASK 70-12-02-120-501 Use CoMat 05-001 abrasive with abrasive blast equipment

PROCEDURE	SUPPLEMENTARY INFORMATION
(I) Apply the New Linings	
(i) Apply the bond coat at each stage	See Figure 1, 5, 6 and 9 Refer to SPM TASK 70-34-01-340-501 SUBTASK 70-34-01-340-007 Use CoMat 03-037 metal spray powder or CoMat 03-416 metal spray powder with metal spraying equipment. Apply a thickness of 0.008 to 0.010in.(0,203 to 0,254mm.)
(ii) Apply the top coat at each stage	See Figure 1, 5, 6 and 9 Refer to SPM TASK 70-34-01-340-501 SUBTASK 70-34-01-340-013 Use CoMat 03-043 metal spray powder with metal spraying equipment Apply a layer of sufficient thickness to get the correct dimensions after assembly is machined
(iii) Remove the masks	
(j) Visually Examine	
(i) Visually examine the new linings	Refer to SPM TASK 70-34-01-340-501 SUBTASK 70-34-01-340-002
(k) Machine the Linings, Assembly	
(i) Set up the disk assembly to be machined	See Figure 1, 5, 6, and 9 Use NC lathe and dial test indicator Refer to operation 3. A. for approved vendor tools
(ii) Machine the linings	See Figure 1, 5, 6, and 9 Machine at 200 feet/min (60 metres per min.)

PROCEDURE	SUPPLEMENTARY INFORMATION
(L) Visually and Dimensionally Examine the Repair	
(i) Visually examine repaired area	See Figure 1, 5, 6 and 9 Refer to SPM TASK 70-34-01-340-501 SUBTASK 70-34-01-340-002
(ii) Dimensionally examine the repaired linings at each stage	See Figure 1, 5, 6 and 9 Use standard workshop tools
(m) Clean the Assembly	
(i) Chemically clean	Refer to TASK 72-41-12-100-000. Use Chemical cleaning equipment
(n) Cancel the existing part number and identify with the new part number.	See Figure 10 Use vibro engraving equipment Refer to the Standard Practices Manual (SPM) TASK 70-09-00-400-501 SUBTASK 70-09-00-400-001

Existing Part No.	New Part No.
6A4131	6A7545

(1) Rework the parts that follow (A5/D5 Engines only)

Consumable Materials

CoMat 01-025	Nitric acid HNO3
CoMat 02-001	Masking tape
CoMat 03-037	Metal spraying powder metco 404NS
CoMat 03-043	Metal spraying powder metco 105NS
CoMat 03-416	Metal spraying powder Ni AI (95/5)
CoMat 05-001	Abrasive

PROCEDURE SUPPLEMENTARY INFORMATION

(2) Standard Equipment

Chemical cleaning equipment
Abrasive blast equipment
Penetrant crack test equipment
Standard workshop tools
Metal spraying equipment
NC Lathe
Dial test indicator
Vibro-engraving equipment

(3) Rework the parts that follow, (A5/D5 Engines only).

6A6546 and 6A4156, HP. Compressor Stage 9 to 12 Disks Shaft Assembly, (Refer to 72-41-12, Fig/Item 01-600).

CAUTION: YOU MUST DO THIS MODIFICATION SB. 72-0347, IN FULL IF ONLY THE STAGE 11 RUBSTRIP IS TO BE REPLACED, IN ACCORDANCE WITH VRS6513, TASK 72-41-12-300-024.

(a) Chemically clean — Refer to TASK 72-41-12-100-000. Use chemical cleaning equipment

(b) Loosen the Top Coat Lining at Each Stage

CAUTION: REMOVE THE TOP COAT ONLY. THE BLAST OPERATION MUST STOP WHEN THE WHITE TOP COAT IS REMOVED. FAILURE TO STOP THE BLAST OPERATION AS SPECIFIED MAY RESULT IN SUBSEQUENT ENGINE FAILURE.

NOTE: It is permitted to loosen the top coat lining in part, to allow the Nitric Acid by capillary action, to release both top and bond coats at each stage.

(i) Seal all surfaces not to be blasted — See Figure 2. Use CoMat 02-001 masking tape or Refer to operation 3. A. for approved vendor tools

PROCEDURE	SUPPLEMENTARY INFORMATION
(ii) Lightly dry blast to loosen top coat lining at each stage	See Figure 2 Refer to SPM TASK 70-12-02-120-501 Use CoMat 05-001 abrasive with abrasive blast equipment
(iii) Remove the masks	

(c) Chemically Remove the Linings at Each Stage

(i) Remove the lining at each stage	See Figure 2 and Figure 3. Refer to SPM TASK 70-33-59-300-503 Use CoMat 01-025 nitric acid HNO3 with chemical cleaning equipment. Put the assembly into nitric acid solution and keep below surface until bubbles stop

(d) Visually Examine Surfaces for Repair

(i) Visually examine	See Figure 3 and Figure 4 Make sure all the lining material has been removed. If not do operation (b) and operation (c) again as necessary

(e) Do a Crack Test

(i) Do a penetrant crack test	Refer to SPM TASK 70-23-04-230-501. Use penetrant crack test equipment Discard the assembly if cracked

(f) Dimensionally Examine Surfaces for Repair

CAUTION: ASSEMBLIES WHICH ARE NOT ACCEPTED AND CANNOT BE REPAIRED ARE TO BE DISCARDED.

(i) Dimensionally examine the radial depth of the groove for the lining at each stage	See Figure 3 and Figure 4 Use standard workshop tools The depth of the groove must not be more than 0.016in. (0,40mm.)

PROCEDURE	SUPPLEMENTARY INFORMATION
(g) Seal all Surfaces not to be Repaired	
(i) Seal applicable surfaces	See Figure 2 Use CoMat 02-001 masking tape Alternatively refer to operation 3. A. for approved vendor tools
(h) Prepare Surfaces for Repair	
CAUTION: 1. DO NOT TOUCH AREAS TO BE REPAIRED AFTER THEY ARE CLEANED. 2. TOO MUCH ABRASIVE BLAST CAN CAUSE DETERIORATION OF THE PREPARED SURFACE CONDITION AND MUST BE PREVENTED.	
(i) Lightly dry blast to prepare surfaces for the lining	Refer to SPM TASK 70-12-02-120-501 Use CoMat 05-001 abrasive with abrasive blast equipment
(I) Apply the New Linings	
(i) Apply the bond coat at each stage	See Figure 2, 7, 8 and 9 Refer to SPM TASK 70-34-01-340-501 SUBTASK 70-34-01-340-007 Use CoMat 03-037 metal spray powder or CoMat 03-416 metal spray powder with metal spraying equipment Apply a thickness of 0.008 to 0.010in.(0,203 to 0,254mm)
(ii) Apply the top coat at each stage	See Figure 2, 7, 8 and 9 Refer to SPM TASK 70-34-01-340-501 SUBTASK 70-34-01-340-013 Use CoMat 03-043 metal spray powder with metal spraying equipment Apply a layer of sufficient thickness to get the correct dimensions after assembly is machined
(iii) Remove the masks	

PROCEDURE	SUPPLEMENTARY INFORMATION
(j) Visually Examine	
(i) Visually examine the new linings	Refer to SPM TASK 70-34-01-340-501 SUBTASK 70-34-01-340-002
(k) Machine the Linings, Assembly	
(i) Set up the disk assembly to be machined	See Figure 2, 7, 8 and 9 Use NC lathe and dial test indicator Refer to operation 3 A, for approved vendor tools
(ii) Machine the linings	See Figure 2, 7, 8 and 9 Machine at 200 feet/min (60 metres per min.)
(l) Visually and Dimensionally Examine the Repair	
(i) Visually examine repaired area	See Figure 2, 7, 8 and 9 Refer to SPM TASK 70-34-01-340-501 SUBTASK 70-34-01-340-002
(ii) Dimensionally examine the repaired linings at each stage	See Figure 2, 7, 8 and 9 Use standard workshop tools
(m) Clean the Assembly	
(i) Chemically clean	Refer to TASK 72-41-12-100-000 Use Chemical cleaning equipment
(n) Cancel the existing part number and identify with the new part number.	See Figure 10 Use vibro engraving equipment Refer to the Standard Practices Manual (SPM) TASK 70-09-00-400-501 SUBTASK 70-09-00-400-001

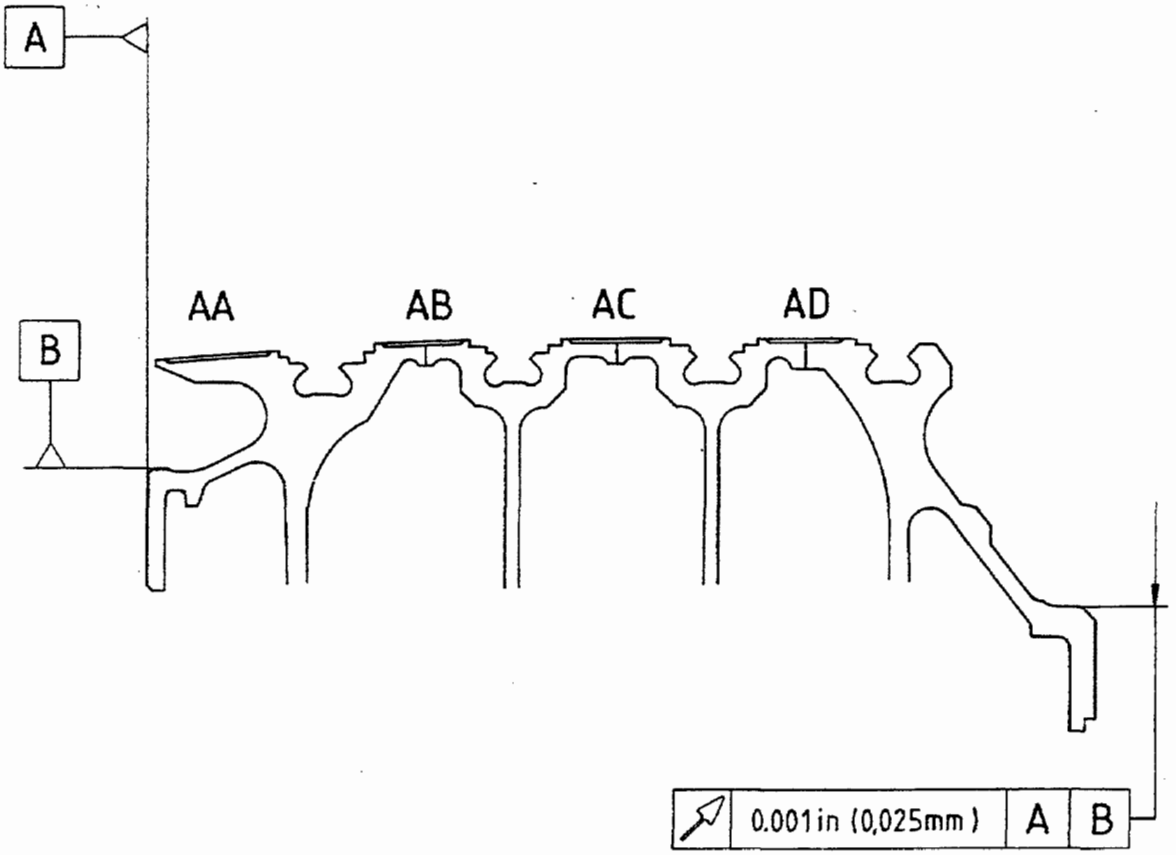
Existing Part No.	New Part No.
6A6546	6A7546
6A4156	6A7547

B. Assembly Instructions

(1) For the correct removal/installation procedure, refer to Engine Manual Chapter/Section 72-41-10, Disassembly and Assembly-02

C. Recording Instructions

A record of accomplishment is necessary.



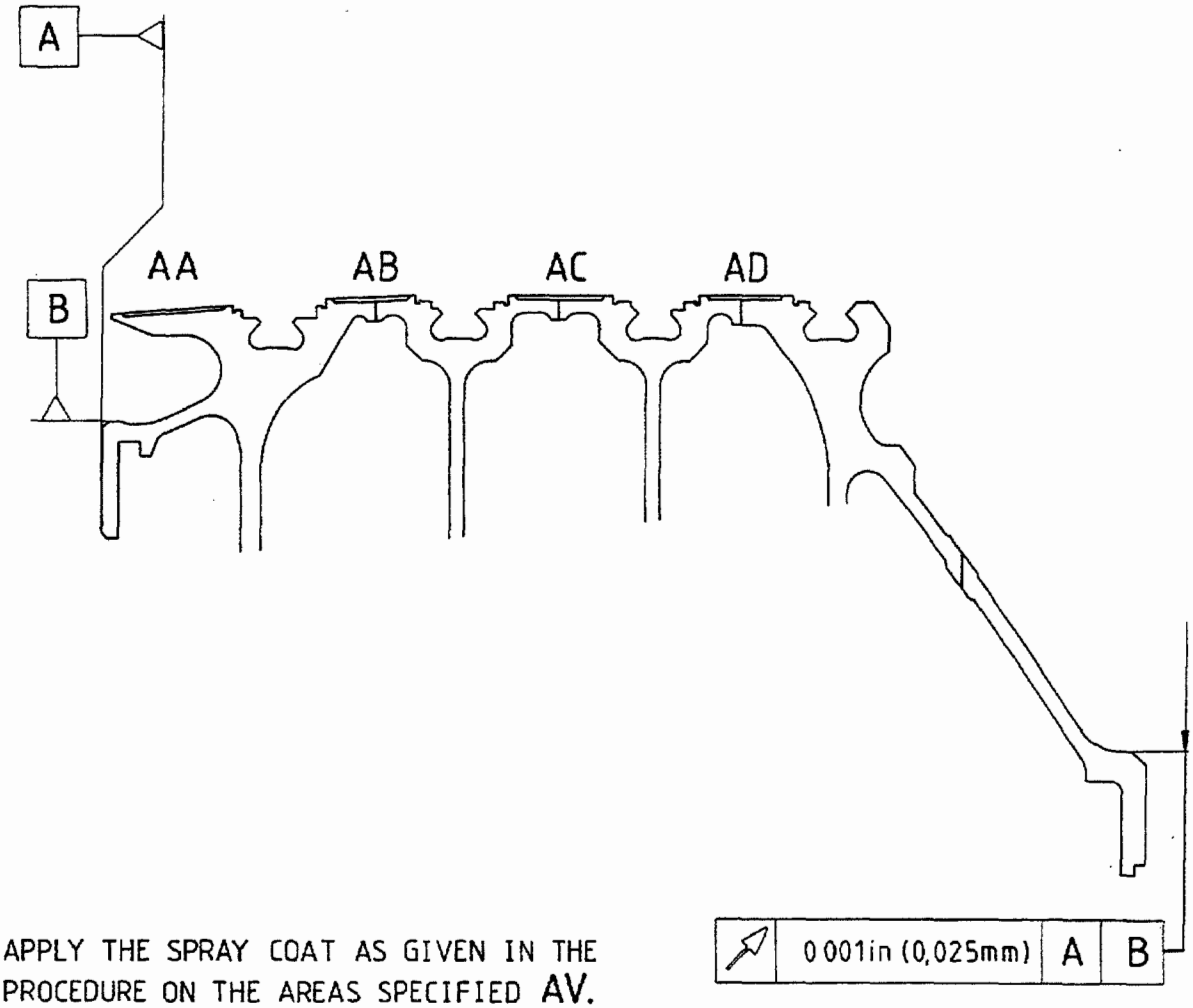
APPLY THE SPRAY COAT AS GIVEN IN THE PROCEDURE ON THE AREAS SPECIFIED **AV.**
THE SURFACES SPECIFIED **AU** TO HAVE A MACHINED SURFACE FINISH OF 125 TO 250 MICROINCHES (3,2 TO 6,4 MICROMETRES).

SECTION THROUGH DISC ASSEMBLY-STAGES 9 TO 12

MACHINE WHERE MARKED $\sqrt{}$.
REMOVE THE SHARP EDGES 0.012 ± 0.008 in (0,30 ± 0,20 mm) UNLESS SPECIFIED DIFFERENTLY.
THE MACHINED SURFACE FINISH TO BE 63 MICROINCHES (1,6 MICROMETRES).
THE GEOMETRIC SYMBOLS ARE GIVEN IN THE I.S.O. MANUAL (1101).

dem0000080

Repair details and dimensions - (A1 Engine only)
Figure 1



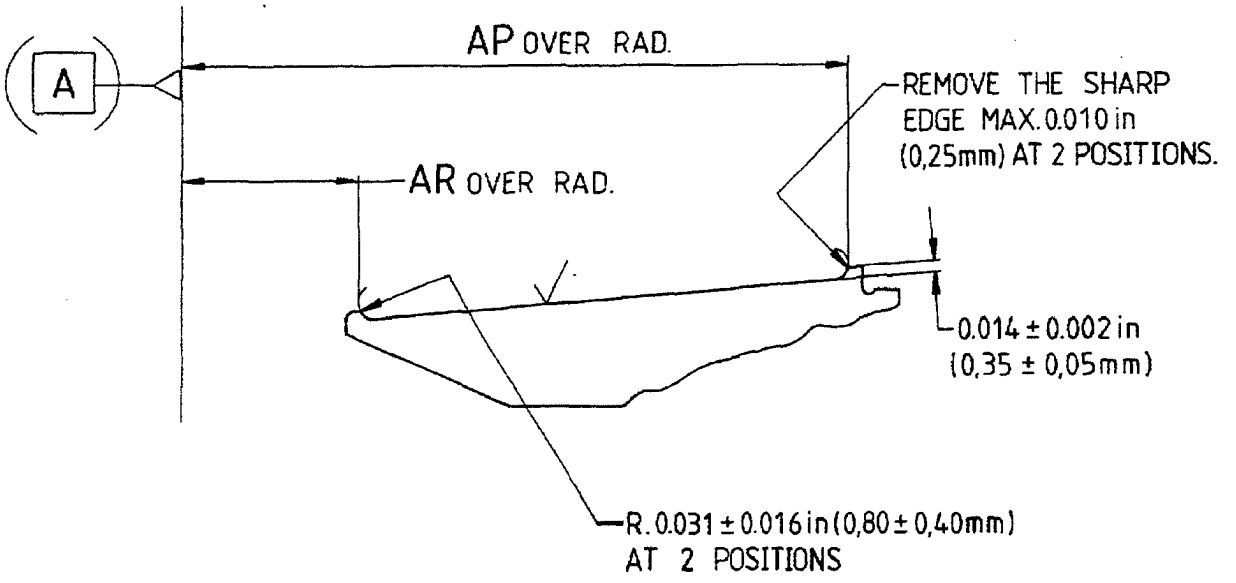
APPLY THE SPRAY COAT AS GIVEN IN THE PROCEDURE ON THE AREAS SPECIFIED AV.
THE SURFACES SPECIFIED AU TO HAVE A MACHINED SURFACE FINISH OF 125 MICROINCHES (3,2 MICROMETRES).

SECTION THROUGH DISC ASSEMBLY-STAGES 9 TO 12

MACHINE WHERE MARKED ☑.
REMOVE THE SHARP EDGES 0.012 ± 0.008 in (0,30 ± 0,20 mm) UNLESS SPECIFIED DIFFERENTLY.
THE MACHINED SURFACE FINISH TO BE 63 MICROINCHES (1,6 MICROMETRES).
THE GEOMETRIC SYMBOLS ARE GIVEN IN THE I.S.O. MANUAL (1101).

dem0000081

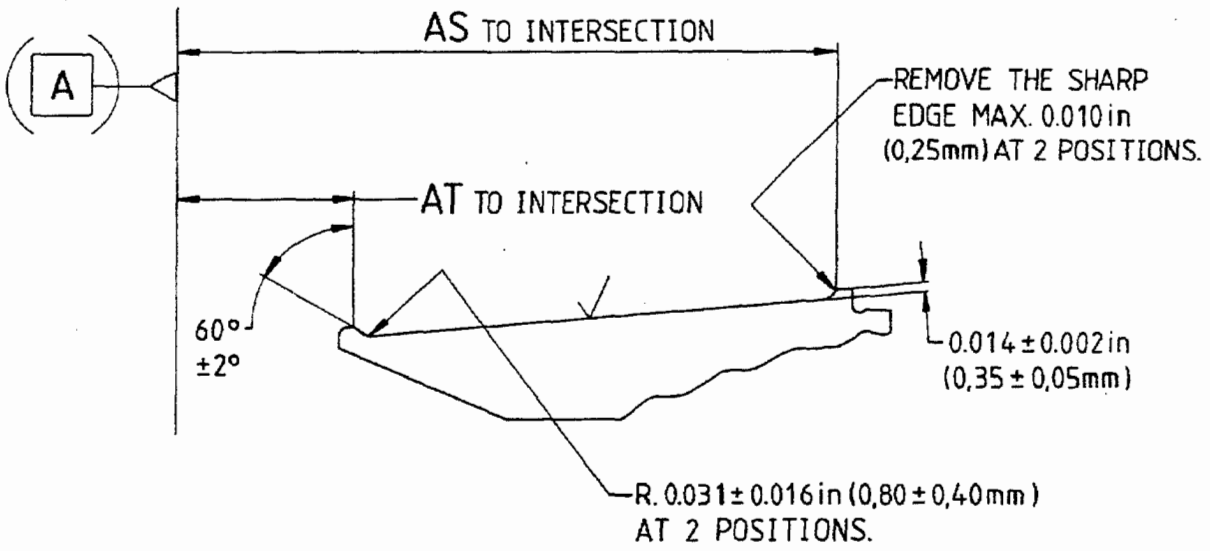
Repair details and dimensions - (A5/D5 Engines only)
Figure 2



POSITION	DIMENSION AR	DIMENSION AP
AA	0.110 ± 0.010 in (2,79 ± 0,25mm)	1.216 ± 0.010 in (30,89 ± 0,25mm)
AB	2.171 ± 0.010 in (55,14 ± 0,25mm)	3.004 ± 0.010 in (76,30 ± 0,25mm)
AC	3.950 ± 0.010 in (100,33 ± 0,25mm)	4.899 ± 0.010 in (124,43 ± 0,25mm)
AD	5.815 ± 0.010 in (147,70 ± 0,25mm)	6.618 ± 0.010 in (168,10 ± 0,25mm)

dem0000082

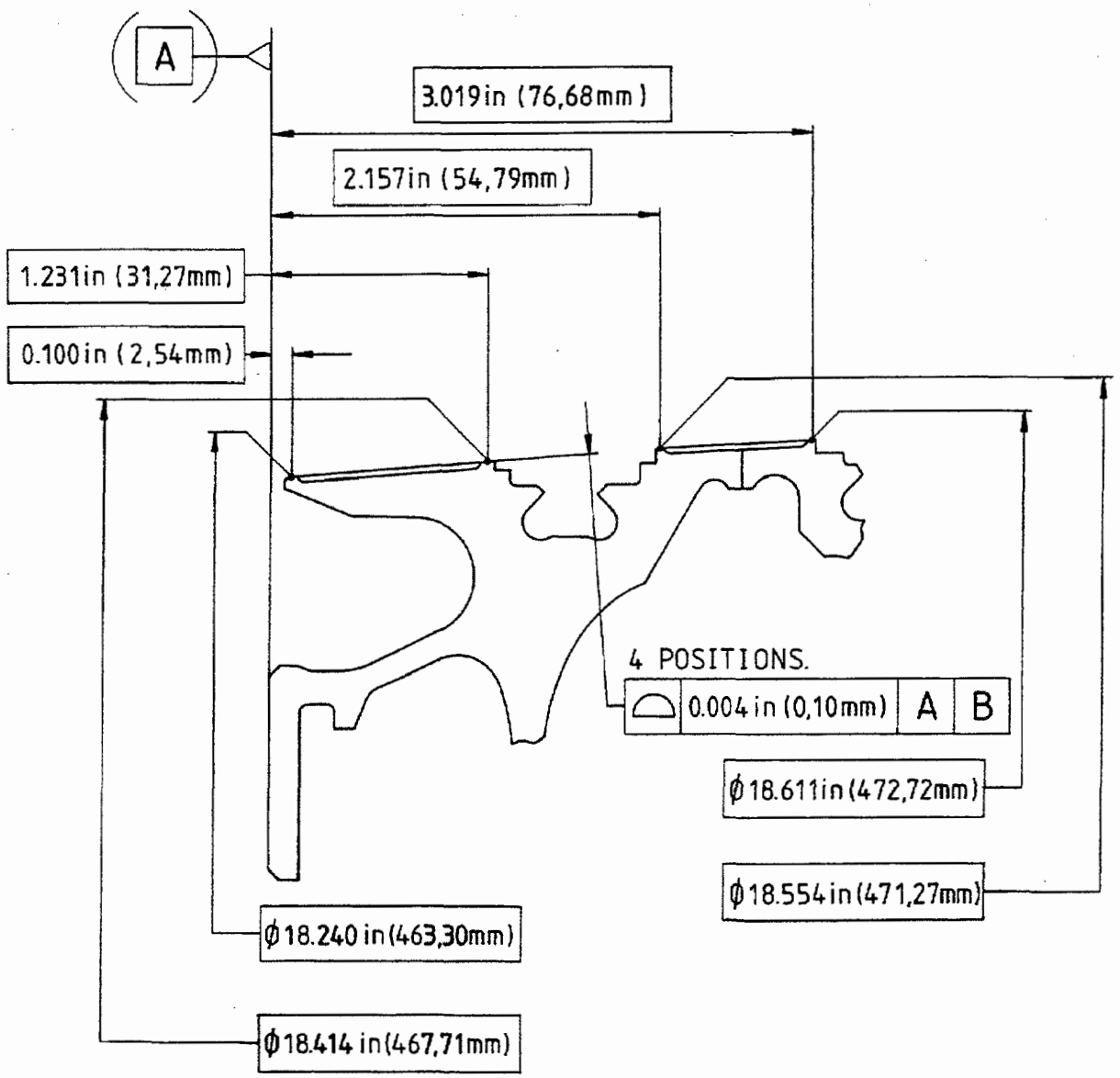
Repair details and dimensions - (All Marks)
Figure 3



POSITION	DIMENSION AT	DIMENSION AS
AA	0.110 ± 0.010 in (2,79 ± 0,25mm)	1.216 ± 0.010 in (30,89 ± 0,25mm)
AB	2.171 ± 0.010 in (55,14 ± 0,25mm)	3.008 ± 0.010 in (76,40 ± 0,25mm)
AC	3.954 ± 0.010 in (100,43 ± 0,25mm)	4.908 ± 0.010 in (124,66 ± 0,25mm)
AD	5.823 ± 0.010 in (147,90 ± 0,25mm)	6.635 ± 0.010 in (168,53 ± 0,25mm)

dem0000083

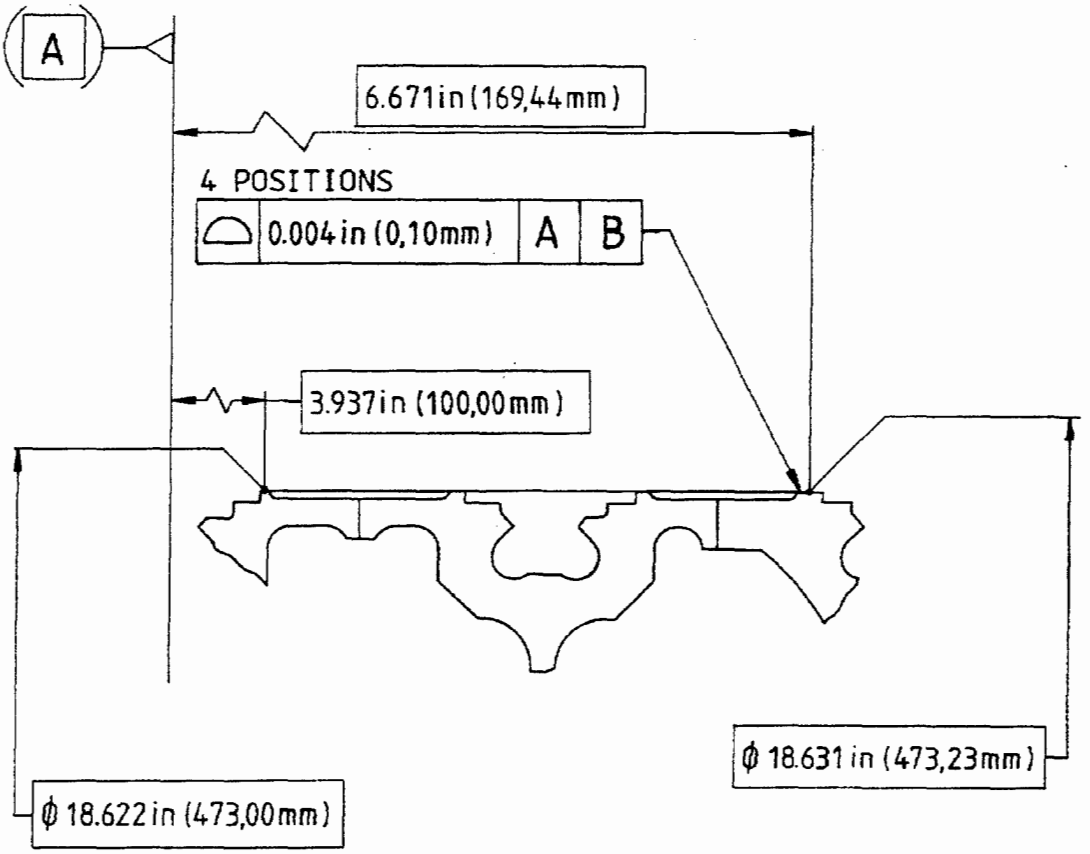
Repair details and dimensions - (All Marks)
Figure 4



dem0000084

DETAIL AT AA AND AB.

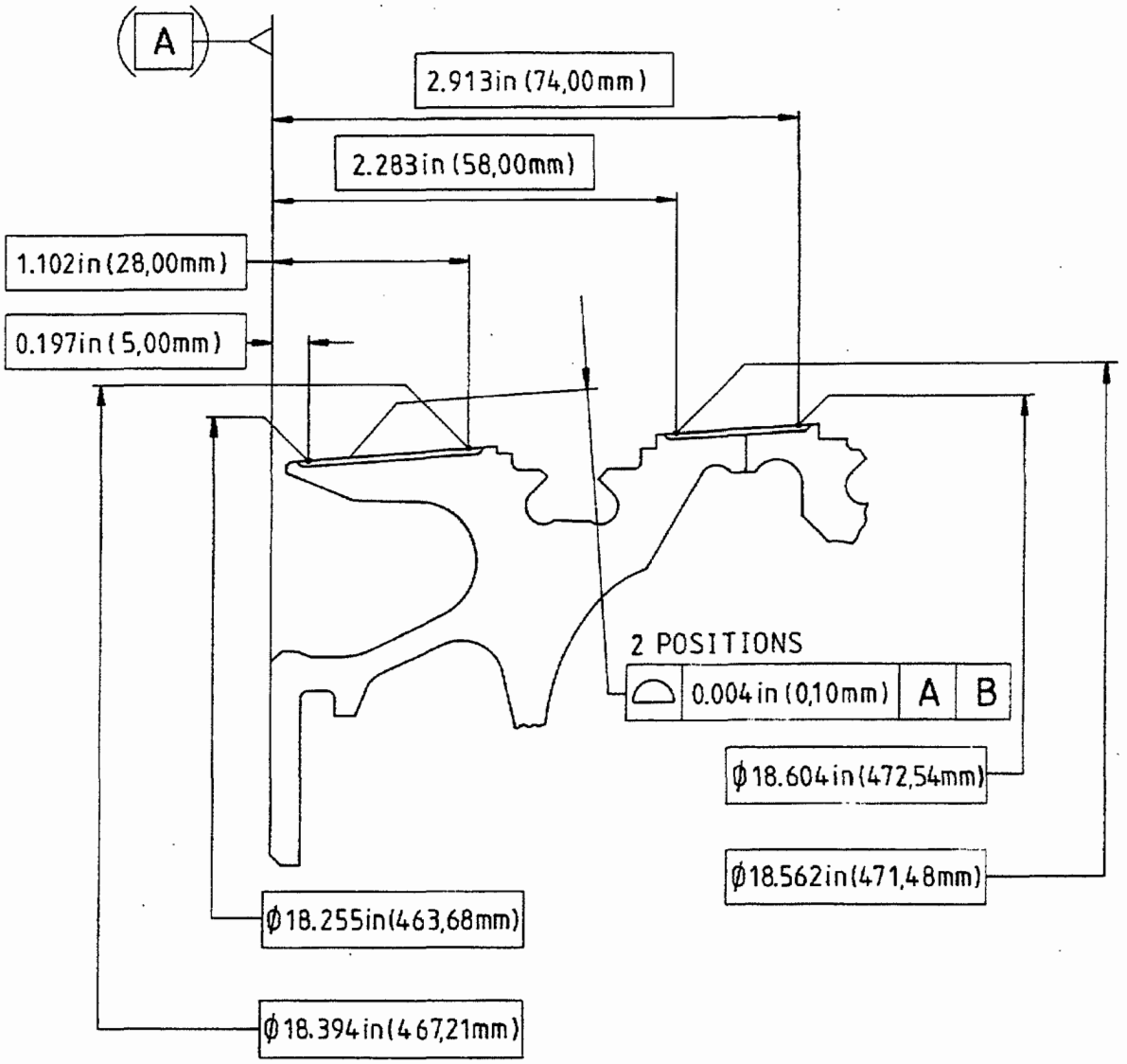
Repair details and dimensions - (A1 Engine only)
Figure 5



DETAIL AT AC AND AD.

dem0000085

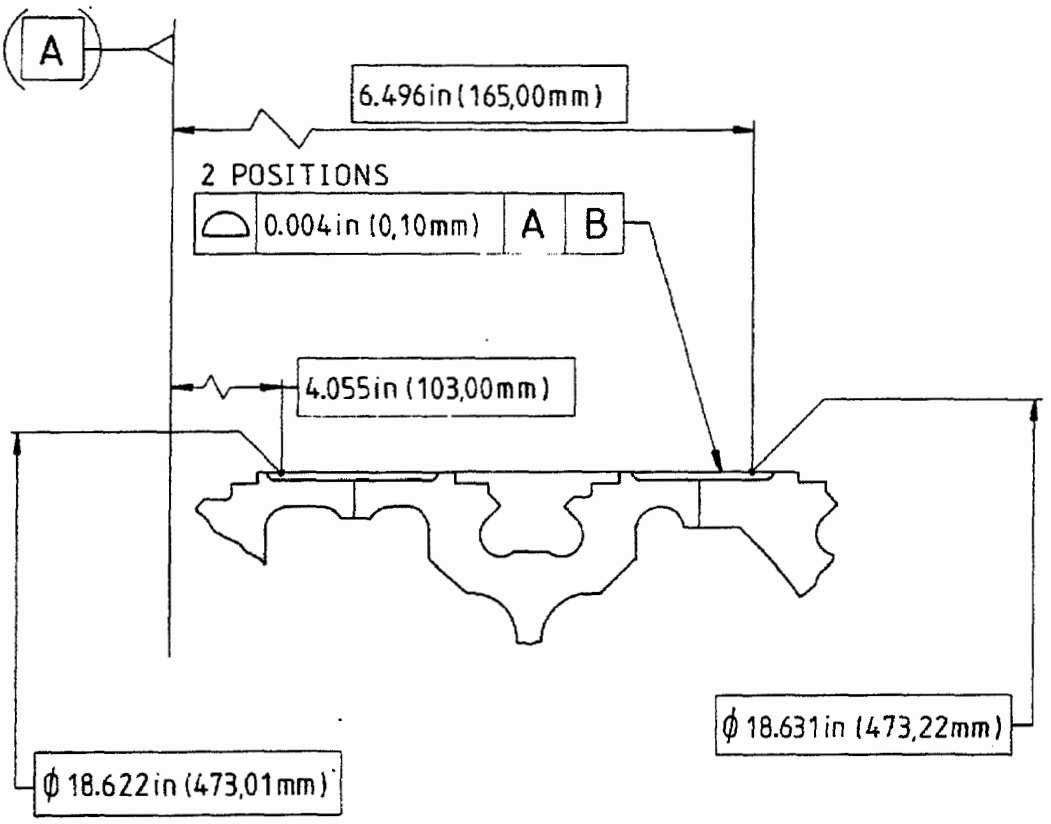
Repair details and dimensions - (A1 Engine only)
Figure 6



dem0000086

DETAIL AT AA AND AB.

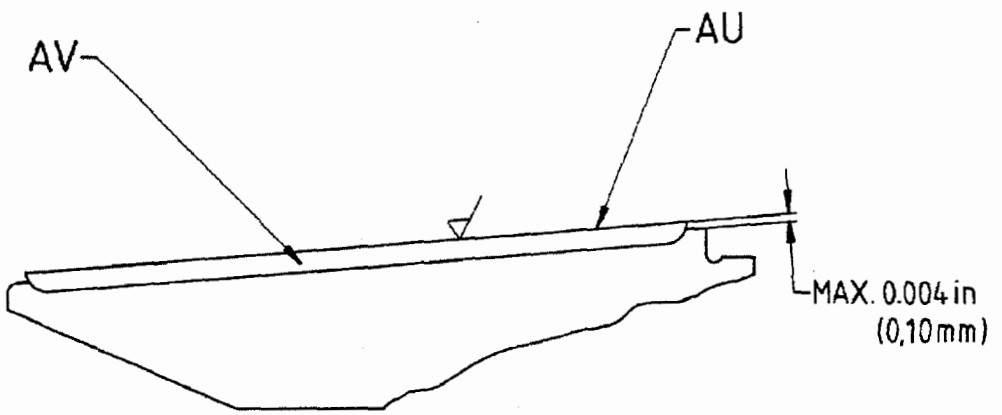
Repair details and dimensions - (A5/D5 Engines only)
Figure 7



DETAIL AT AC AND AD.

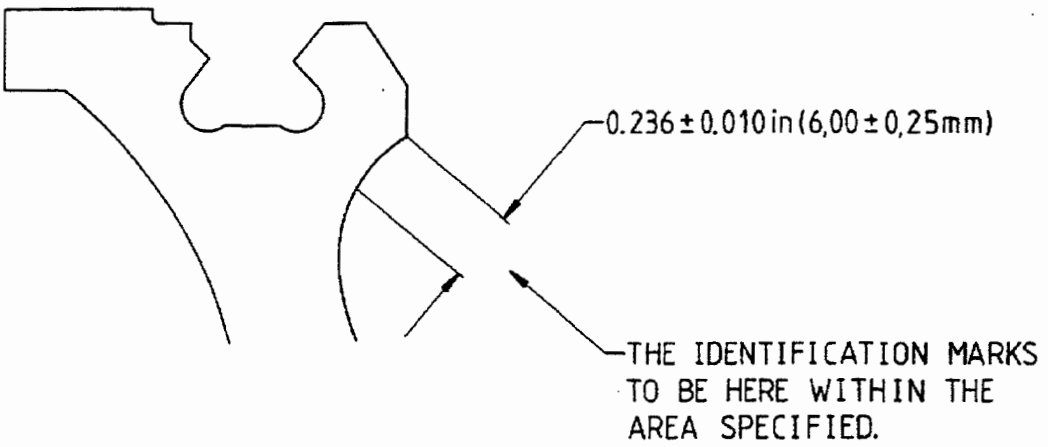
dem0000087

Repair details and dimensions - (A5/D5 Engines only)
Figure 8



dem0000088

Repair details and dimensions - (All Marks)
Figure 9



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Repair details and dimensions - (All Marks)
Figure 10

3. Material Information

NEW PART No. (ATA No.)	QTY	EST'D UNIT PRICE ($)	PART TITLE	OLD PART No. (IPC No.)	INSTR DISP
—					
Applicability : For each V2500 engine to incorporate this Bulletin.					
A. Kits associated with this Bulletin:-					
None					
B. Parts affected by this Bulletin:-					
A1 Model Only					
6A7545 (72-41-12)	1		.Disc Assy-Stages 9 to 12 HP Compressor	6A4131 (01-600)	(A) (S1) (1D)
For A5 & D5 Models Incorporating SB 72-0273					
6A7546 (72-41-12)	1		.Disc Assy - Stages 9 to 12 HP Compressor	6A6546 (01-600)	(A) (S1) (1D)
For A5 & D5 Models not Incorporating SB 72-0273					
6A7547 (72-41-12)	1		.Disc Assy - Stages 9 to 12 HP Compressor	6A4156 (01-600)	(S1) (1D)

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 Catalogue or contact IAE's spare parts sales department.

C. Instruction Disposition Codes

(A) New part will be made available from September 1999.
(S1) Old and new parts are freely and fully interchangeable.
(1D) Old part may be reworked and re-identified to the new part number.