

SERVICE BULLETIN REVISION NOTICE

ENGINE — CASE, DIFFUSER, ASSEMBLY — MODIFICATION OF THE DIFFUSER CASE
ASSEMBLY REAR OUTER FLANGE

Turbojet Engine Service Bulletin No. V2500-ENG-72-0709 Revision No. 1 dated February 20, 2020.

Revision History

Original Issue December 13, 2019

Revision 1 dated February 20, 2020

Reason for the Revision

To add additional part numbers to allow additional flange replacements and to add a note that defines “shop visit” requirements.

To add editorial changes that do not affect the technical content of this Service Bulletin.

Effect of Revision on Prior Compliance

None.

This is a Complete Revision (Not Applicable to the SGML version)

The contents are in accordance with the list of effective pages. All pages have the current revision number. Technical changes are marked with black bars.

MODEL APPLICATION

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

BULLETIN ISSUE SEQUENCE

V2500 Series 72-0709

Page

Revision No.

Date

1 thru 29

1

February 20/20

A copy of this Revision Notice and any future revision notices must be filed as a permanent record with your copy of the subject bulletin.

V2500-ENG-72-0709

Page 1 of 1

SERVICE BULLETIN

ENGINE — CASE, DIFFUSER, ASSEMBLY — MODIFICATION OF THE DIFFUSER
CASE ASSEMBLY REAR OUTER FLANGE

MODEL APPLICATION

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

BULLETIN ISSUE SEQUENCE

V2500 Series 72-0709

ATA NUMBER

72-42-11

IAE PROPRIETARY INFORMATION

This document is the property of International Aero Engines (IAE). You may not possess, use, copy or disclose this document or any information in it, for any purpose, including out limitation to design, manufacture, or repair parts, or obtain FAA or other government approval to do so, out IAE's express written permission. Neither receipt nor possession of this document alone, from any source, constitutes such permission. Possession, use, copying or disclosure by anyone out IAE's express written permission is not authorized and may result in criminal and/or civil liability.

WARNING – This document contains technical data the export of which is or may be restricted by the Export Administration Act and the Export Administration Regulations (EAR), 15 C.F.R. parts 730-774. Diversion contrary to U.S. law is prohibited. The export, re-export, transfer or re-transfer of this technical data to any other company, entity, person, or destination, or for any use or purpose other than that for which the technical data was originally provided by IAE, is prohibited out prior written approval from IAE and authorization under applicable export control laws.

Export Classification: Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

Compliance Category

3

IAE Distribution Code

V2500

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 1 of 29

Summary

The purpose of this Service Bulletin is to provide instructions to perform flange replacement/modification of the diffuser case assembly rear outer "M" flange. This Service Bulletin will also introduce new part numbers to re-identify the diffuser case assembly after the modification. The diffuser case assembly rear outer flange must have this modification performed at an interval of 20,000 flight cycles or less.

Planning Information

Effectivity Data

Engine Models Applicable

All flange replacements performed using the previous version of this Service Bulletin are in compliance.

V2500-A1

Engine Serial Nos. — All Engines Diffuser Case Assembly listed in Table 1.

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5

Engine Serial Nos. — All Engines Diffuser Case Assembly listed in Table 1.

V2525-D5, V2528-D5

Engine Serial Nos. — All Engines Diffuser Case Assembly listed in Table 1.

TABLE 1: DIFFUSER CASE ASSEMBLY PART NUMBERS

Diffuser Case Assembly Part Numbers				
Old PN	First Modification	Second Modification	Third Modification	Fourth Modification
2A2891-01	2A2891-101	2A2891-201	2A2891-301	2A2891-401
2A2897-01	2A2897-101	2A2897-201	2A2897-301	2A2897-401
2A2885-01	2A2885-101	2A2885-201	2A2885-301	2A2885-401
2A2581-01	2A2581-101	2A2581-201	2A2581-301	2A2581-401
2A2081-01	2A2081-101	2A2081-201	2A2081-301	2A2081-401
2A2883-01	2A2883-101	2A2883-201	2A2883-301	2A2883-401
2A3132	2A3132-001	2A3132-002	2A3132-003	2A3132-004
2A2889-01	2A2889-101	2A2889-201	2A2889-301	2A2889-401
2A2896-01	2A2896-101	2A2896-201	2A2896-301	2A2896-401
2A0051	2A0051-001	2A0051-002	2A0051-003	2A0051-004

Concurrent Requirements

There are no concurrent requirements.

Reason

1. Condition: This modification will lessen the possibility of the diffuser case assembly rear outer flange crack(s) propagating and causes a rupture of the diffuser case

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 2

IAE PROPRIETARY INFORMATION

©IAE International Aero Engines AG (date as above). All rights reserved.

Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

assembly. This modification Service Bulletin introduces a flange replacement of the diffuser case assembly rear outer flange at an interval of 20,000 flight cycles or less.

2. Background: Cracks have been observed on the diffuser case assembly rear outer flange. Cracks initiates in the bolt hole inner diameter of "M" Flange and propagate into the diffuser case assembly wall which may result in a rupture of the diffuser case.
3. Objective: Replace the diffuser case rear outer flange at an interval of 20,000 flight cycles or less and re-identify the diffuser case assembly part number as specified in the Accomplishment Instructions.
4. Substantiation: Replacing the diffuser case assembly rear outer flange at an interval of 20,000 flight cycles or less reduces risk to be in acceptable levels.
5. Effects of Bulletin on:
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.

Description

Modify the diffuser case assembly rear-outer flange, to be referred to as M-flange, as specified in the Accomplishment Instructions.

Compliance

Category 3

Do at an interval of 20,000 flight cycles or less on the diffuser case assembly rear outer flange.

Approval Data

The part number changes and/or part modifications specified in the Accomplishment Instructions and Material Information sections of this Service Bulletin have been shown to comply the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model(s) given.

The aircraft Type Certificate (TC) holder has been informed of this modification inspection.

Manpower

1. In Service

..... Not Applicable.

2. At Overhaul

..... Not Applicable.

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 3

IAE PROPRIETARY INFORMATION

©IAE International Aero Engines AG (date as above). All rights reserved.
Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

Weight and Balance

1. Weight Change

None.

2. Moment Arm

No Effect.

3. Datum

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

Electrical Load Data

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

Software Accomplishment Summary

Not Applicable.

References

NOTE: In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, a Technical Publications conversion table is provided in the Appendix.

1. V2500 Standard Practices and Processes, P&W Ref. PN 2A4414, Chapter/Section 70-11-00, 70-11-03, 70-11-08, 70-11-26, 70-23-03, 70-23-08, 70-26-01, 70-31-02, 70-31-03, 70-31-13, 70-37-32.
2. V2500-A1 Series Illustrated Parts Catalog, P&W Ref. PN 2A4427, Chapter/Section 72-42-11.
3. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 72-42-11.
4. V2500-D5, Series Illustrated Parts Catalog, P&W Ref. PN 2A4426, Chapter/Section 72-42-11.
5. V2500 A1/A5 Series Time Limits Manual, P&W Ref. PN 2A4408, Chapter/Section 05-10-00.
6. V2500-D5 Series Time Limits Manual, P&W Ref. PN 2A4417, Chapter/Section 05-10-00.
7. Service Bulletin No. V2500-ENG-72-0166, Engine — Diffuser Case Assembly — Remove The Stage 1 HP Turbine Cooling Air Pressure Sensing Tubes.
8. Service Bulletin No. V2500-ENG-70-0457.
9. Service Bulletin No. V2500-ENG-72-0221, Engine — Diffuser And Combustion Group — Introduction Of A New Diffuser Case Assembly.
10. TDP19VA014.

Other Publications Affected

NOTE: In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, a Technical Publications conversion table is provided in the Appendix.

December 13/19

V2500-ENG-72-0709

REVISION NO. 1 - February 20/20

Page 4

IAE PROPRIETARY INFORMATION

©IAE International Aero Engines AG (date as above). All rights reserved.
Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

1. V2500-A1 Series Illustrated Parts Catalog, P&W Ref. PN 2A4427, Chapter/Section 72-42-11.
2. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 72-42-11.
3. V2500-D5, Series Illustrated Parts Catalog, P&W Ref. PN 2A4426, Chapter/Section 72-42-11.
4. V2500 A1/A5 Series Time Limits Manual, P&W Ref. PN 2A4408, Chapter/Section 05-10-00.
5. V2500-D5 Series Time Limits Manual, P&W Ref. PN 2A4417, Chapter/Section 05-10-00.

Interchangeability of Parts

Not Applicable.

Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (Yes)

Added Data (Yes)

Revision to Table of Limits (No)

Inspection Procedures (No)

Material Information

Material — Price and Availability

1. Part prices were not available at the time of Service Bulletin publication. Contact IAE Spares Management & Logistics for firm quotations.
2. There is no kit provided to do this Service Bulletin.
3. Part availability information is provided in material data Instructions — Disposition.

Industry Support Program

Not Applicable.

The material data that follows is for each engine.

Not Applicable.

For V2500-A1 Engines:

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
2A0051-001	1	*	CASE – DIFFUSER, ASSY OF	2A0051 (72-42-11-01A-010)	(1)(M)(NP)
2A0051-002	1	*	CASE – DIFFUSER, ASSY OF	2A0051-001	(1)(M)(NP)
2A0051-003	1	*	CASE – DIFFUSER, ASSY OF	2A0051-002	(1)(M)(NP)
2A0051-004	1	*	CASE – DIFFUSER, ASSY OF	2A0051-003	(1)(M)(NP)
OR					
2A2896-101	1	*	CASE – DIFFUSER, ASSY OF	2A2896-01 (72-42-11-01A-010)	(1)(M)(NP)
2A2896-201	1	*	CASE – DIFFUSER, ASSY OF	2A2896-101	(1)(M)(NP)
2A2896-301	1	*	CASE – DIFFUSER, ASSY OF	2A2896-201	(1)(M)(NP)
2A2896-401	1	*	CASE – DIFFUSER, ASSY OF	2A2896-301	(1)(M)(NP)
OR					

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 6

IAE PROPRIETARY INFORMATION

©IAE International Aero Engines AG (date as above). All rights reserved.
Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
2A2889-101	1	*	CASE – DIFFUSER, ASSY OF	2A2889-01 (72-42-11-01A-010 A)	(1)(M)(NP)
2A2889-201	1	*	CASE – DIFFUSER, ASSY OF	2A2889-101	(1)(M)(NP)
2A2889-301	1	*	CASE – DIFFUSER, ASSY OF	2A2889-201	(1)(M)(NP)
2A2889-401	1	*	CASE – DIFFUSER, ASSY OF	2A2889-301	(1)(M)(NP)
OR					
2A3132-001	1	*	CASE – DIFFUSER, ASSY OF	2A3132 (72-42-11-01A-010 C)	(1)(M)(NP)
2A3132-002	1	*	CASE – DIFFUSER, ASSY OF	2A3132-001	(1)(M)(NP)
2A3132-003	1	*	CASE – DIFFUSER, ASSY OF	2A3132-002	(1)(M)(NP)
2A3132-004	1	*	CASE – DIFFUSER, ASSY OF	2A3132-003	(1)(M)(NP)
OR					
2A2883-101	1	*	CASE – DIFFUSER, ASSY OF	2A2883-01 (72-42-11-01A-010 B)	(1)(M)(NP)
2A2883-201	1	*	CASE – DIFFUSER, ASSY OF	2A2883-101	(1)(M)(NP)
2A2883-301	1	*	CASE – DIFFUSER, ASSY OF	2A2883-201	(1)(M)(NP)
2A2883-401	1	*	CASE – DIFFUSER, ASSY OF	2A2883-301	(1)(M)(NP)
OR					

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 7

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
2A2891-101	1	*	CASE – DIFFUSER, ASSY OF	2A2891-01 (72-42-11-01-010)	(1)(M)(NP)
2A2891-201	1	*	CASE – DIFFUSER, ASSY OF	2A2891-101	(1)(M)(NP)
2A2891-301	1	*	CASE – DIFFUSER, ASSY OF	2A2891-201	(1)(M)(NP)
2A2891-401	1	*	CASE – DIFFUSER, ASSY OF	2A2891-301	(1)(M)(NP)

The material data that follows is for each engine.

For V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5 Engines:

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
2A2889-101	1	*	CASE – DIFFUSER, ASSY OF	2A2889-01 (72-42-11-01A-010 D)	(1)(M)(NP)
2A2889-201	1	*	CASE – DIFFUSER, ASSY OF	2A2889-101	(1)(M)(NP)
2A2889-301	1	*	CASE – DIFFUSER, ASSY OF	2A2889-201	(1)(M)(NP)
2A2889-401	1	*	CASE – DIFFUSER, ASSY OF	2A2889-301	(1)(M)(NP)
OR					
2A2081-101	1	*	CASE – DIFFUSER, ASSY OF	2A2081-01 (72-42-11-01A-010)	(1)(M)(NP)
2A2081-201	1	*	CASE – DIFFUSER, ASSY OF	2A2081-101	(1)(M)(NP)
2A2081-301	1	*	CASE – DIFFUSER, ASSY OF	2A2081-201	(1)(M)(NP)

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 8

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
2A2081-401	1	*	CASE – DIFFUSER, ASSY OF	2A2081-301	(1)(M)(NP)
OR					
2A2581-101	1	*	CASE – DIFFUSER, ASSY OF	2A2581-01 (72-42-11-01A-010 A)	(1)(M)(NP)
2A2581-201	1	*	CASE – DIFFUSER, ASSY OF	2A2581-101	(1)(M)(NP)
2A2581-301	1	*	CASE – DIFFUSER, ASSY OF	2A2581-201	(1)(M)(NP)
2A2581-401	1	*	CASE – DIFFUSER, ASSY OF	2A2581-301	(1)(M)(NP)
OR					
2A2885-101	1	*	CASE – DIFFUSER, ASSY OF	2A2885-01 (72-42-11-01A-010 C)	(1)(M)(NP)
2A2885-201	1	*	CASE – DIFFUSER, ASSY OF	2A2885-101	(1)(M)(NP)
2A2885-301	1	*	CASE – DIFFUSER, ASSY OF	2A2885-201	(1)(M)(NP)
2A2885-401	1	*	CASE – DIFFUSER, ASSY OF	2A2885-301	(1)(M)(NP)
OR					
2A2897-101	1	*	CASE – DIFFUSER, ASSY OF	2A2897-01 (72-42-11-01A-010 B)	(1)(M)(NP)
2A2897-201	1	*	CASE – DIFFUSER, ASSY OF	2A2897-101	(1)(M)(NP)
2A2897-301	1	*	CASE – DIFFUSER, ASSY OF	2A2897-201	(1)(M)(NP)

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 9

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
2A2897-401	1	*	CASE – DIFFUSER, ASSY OF	2A2897-301	(1)(M)(NP)
OR					
2A2891-101	1	*	CASE – DIFFUSER, ASSY OF	2A2891-01 (72-42-11-01A-010 E) (72-42-11-01A-010 F)	(1)(M)(NP)
2A2891-201	1	*	CASE – DIFFUSER, ASSY OF	2A2891-101	(1)(M)(NP)
2A2891-301	1	*	CASE – DIFFUSER, ASSY OF	2A2891-201	(1)(M)(NP)
2A2891-401	1	*	CASE – DIFFUSER, ASSY OF	2A2891-301	(1)(M)(NP)

The material data that follows is for each engine.

For V2525-D5, V2528-D5 Engines:

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
2A2889-101	1	*	CASE – DIFFUSER, ASSY OF	2A2889-01 (72-42-11-01-010)	(1)(M)(NP)
2A2889-201	1	*	CASE – DIFFUSER, ASSY OF	2A2889-101	(1)(M)(NP)
2A2889-301	1	*	CASE – DIFFUSER, ASSY OF	2A2889-201	(1)(M)(NP)
2A2889-401	1	*	CASE – DIFFUSER, ASSY OF	2A2889-301	(1)(M)(NP)
OR					
2A2081-101	1	*	CASE – DIFFUSER, ASSY OF	2A2081-01 (72-42-11-01-010)	(1)(M)(NP)
2A2081-201	1	*	CASE – DIFFUSER, ASSY OF	2A2081-101	(1)(M)(NP)

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 10

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
2A2081-301	1	*	CASE – DIFFUSER, ASSY OF	2A2081-201	(1)(M)(NP)
2A2081-401	1	*	CASE – DIFFUSER, ASSY OF	2A2081-301	(1)(M)(NP)
OR					
2A2581-101	1	*	CASE – DIFFUSER, ASSY OF	2A2581-01 (72-42-11-01-010)	(1)(M)(NP)
2A2581-201	1	*	CASE – DIFFUSER, ASSY OF	2A2581-101	(1)(M)(NP)
2A2581-301	1	*	CASE – DIFFUSER, ASSY OF	2A2581-201	(1)(M)(NP)
2A2581-401	1	*	CASE – DIFFUSER, ASSY OF	2A2581-301	(1)(M)(NP)
OR					
2A2885-101	1	*	CASE – DIFFUSER, ASSY OF	2A2885-01 (72-42-11-01-010)	(1)(M)(NP)
2A2885-201	1	*	CASE – DIFFUSER, ASSY OF	2A2885-101	(1)(M)(NP)
2A2885-301	1	*	CASE – DIFFUSER, ASSY OF	2A2885-201	(1)(M)(NP)
2A2885-401	1	*	CASE – DIFFUSER, ASSY OF	2A2885-301	(1)(M)(NP)
OR					
2A2897-101	1	*	CASE – DIFFUSER, ASSY OF	2A2897-01 (72-42-11-01-010)	(1)(M)(NP)
2A2897-201	1	*	CASE – DIFFUSER, ASSY OF	2A2897-101	(1)(M)(NP)

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 11

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
2A2897-301	1	*	CASE – DIFFUSER, ASSY OF	2A2897-201	(1)(M)(NP)
2A2897-401	1	*	CASE – DIFFUSER, ASSY OF	2A2897-301	(1)(M)(NP)
OR					
2A2891-101	1	*	CASE – DIFFUSER, ASSY OF	2A2891-01 (72-42-11-01-010 B)	(1)(M)(NP)
2A2891-201	1	*	CASE – DIFFUSER, ASSY OF	2A2891-101	(1)(M)(NP)
2A2891-301	1	*	CASE – DIFFUSER, ASSY OF	2A2891-201	(1)(M)(NP)
2A2891-401	1	*	CASE – DIFFUSER, ASSY OF	2A2891-301	(1)(M)(NP)

Modification and Spares Information

Parts Modification Conditions

Estimated part prices are provided when they are available at time of publication. The Estimate of Unit Price is only for planning purposes and does not constitute a firm quotation. An asterisk (*) is shown where part pricing information was unavailable. In either case, contact IAE Spares for firm quotations.

(1) The new part can be obtained by modification of the old part as specified in the Accomplishment Instructions.

Spare Parts Availability

(M) It is possible to get the new part only by modification.

(NP) The part is an item that is usually not procured as a spare item.

Vendor Services or Special Components/Materials

1. The Source Demonstration requirements of this modification mean that any facility not authorized to accomplish these instructions either utilize the Authorized Vendors listed below or contact the IAE Manager Maintenance Operations to determine if a qualification program can be initiated at their facility.
 - A. The designation by IAE of an authorized vendor indicates that the vendor has demonstrated the necessary capability to enable it to carry out the listed work. However, IAE makes no warranties or representations concerning the qualifications or quality standards of the vendors to carry out the work, and accepts no responsibility whatsoever for any work that may be carried out by a

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 12

IAE PROPRIETARY INFORMATION

©IAE International Aero Engines AG (date as above). All rights reserved.
Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

vendor, other than when IAE is listed as the vendor. Authorized vendors do not act as agents or representatives of IAE.

- B. This modification needs a locally manufactured detail. The vendor completing this modification will be responsible for obtaining the necessary forging and will be responsible for machining the forging to meet the modification requirements.

2. Recording Instructions

- A. A record of accomplishment is required.

Vendor Services or Special Components/Materials

Authorized Vendor:
Pratt & Whitney PSD, Inc.
275 E. Robinson
Springdale, AR 72764
USA
Mail Stop 958-00
TEL: (479) 927-5001
FAX: (479) 750-5263
Vendor Code: 1DVS1

Authorized Vendor:
Lufthansa Technik AG
Weg BEIM Jaeger 193
22335 Hamburg
Germany
TEL: 49 40-5070 3700
FAX: 49 40-5070 4952
Vendor Code: C1008

NOTE: EXCEPT FOR WORK OR SUPPLIES TO BE PERFORMED OR FURNISHED BY IAE, IT IS UNDERSTOOD THAT IAE DOES NOT ENDORSE THE WORK PERFORMED BY THE COMPANY OR COMPANIES NAMED HEREIN OR ANY OTHER COMPANY AND DOES NOT ACCEPT RESPONSIBILITY TO ANY DEGREE FOR THE SELECTION OF SUCH COMPANY OR COMPANIES FOR THE PERFORMANCE OF ANY WORK OR PROCUREMENT OF SUPPLIES.

Tooling — Price and Availability

Special tools are not required to accomplish this Service Bulletin.

Reidentified Parts

The diffuser case assembly can return to service after completion of this Service Bulletin. The part number must be changed per the Reidentified Parts Data table. The modified flange must not exceed 20,000 flight cycles as specified in Reference 5, V2500 A1/A5 Series Time Limits Manual, P&W Reference, PN 2A4408, Chapter/Section 05-10-00, and Reference 6, V2500-D5 Series Time Limits Manual, P&W Ref. PN 2A4417, Chapter/Section 05-10-00. Up to four modifications of the diffuser case assembly rear outer "M" flange are allowed. Contact IAE if you request more than four modifications.

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 13

IAE PROPRIETARY INFORMATION

©IAE International Aero Engines AG (date as above). All rights reserved.
Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

Reidentified Parts Data

Diffuser Case Assembly Part Numbers				
Old PN	First Modification	Second Modification	Third Modification	Fourth Modification
2A2891-01	2A2891-101	2A2891-201	2A2891-301	2A2891-401
2A2897-01	2A2897-101	2A2897-201	2A2897-301	2A2897-401
2A2885-01	2A2885-101	2A2885-201	2A2885-301	2A2885-401
2A2581-01	2A2581-101	2A2581-201	2A2581-301	2A2581-401
2A2081-01	2A2081-101	2A2081-201	2A2081-301	2A2081-401
2A2883-01	2A2883-101	2A2883-201	2A2883-301	2A2883-401
2A3132	2A3132-001	2A3132-002	2A3132-003	2A3132-004
2A2889-01	2A2889-101	2A2889-201	2A2889-301	2A2889-401
2A2896-01	2A2896-101	2A2896-201	2A2896-301	2A2896-401
2A0051	2A0051-001	2A0051-002	2A0051-003	2A0051-004

Other Material Information Data

Not Applicable.

Accomplishment Instructions

1. For Diffuser Case Assemblies Base PN (2A0051, 2A2081-01, 2A2581-01, 2A2883-01, 2A2885-01, 2A2889-01, 2A2891-01, 2A2896-01, 2A2897-01, or 2A3132).

NOTE: Diffuser case assemblies in-shop that meet one or more conditions below and have 20,000 flight cycles or more on the rear outer flange cannot return to service until the rear outer flange is replaced as specified in this Service Bulletin:

1. Diffuser case assemblies at a piece-part level.
2. Diffuser case assemblies in-shop with the M-flange exposed (hardware removed from M-flange).
3. Diffuser case assemblies in-shop at Level 2.3 overhaul or greater.

NOTE: If the cycles on the diffuser case rear outer flange cannot be determined, you must use the total cycles on the diffuser case.

NOTE: If the cycles on the diffuser case cannot be determined, you must use the total engine cycles if it can be documented that the diffuser case was always with the engine.

NOTE: If the cycles on the diffuser rear outer flange cannot be determined, based on any of the above criteria, then you must replace the diffuser case rear outer flange.

A. Modify the Diffuser Case Assembly.

- (1) Send the diffuser case assembly to a vendor listed in the "Vendor Services or Special Components/Materials" section of this Service Bulletin.
- (2) Replace the rear outer flange. Refer to Reference 10, TDP19VA014.

B. Re-identify the Diffuser Case Assembly Part Number.

- (1) Refer to TDP19VA014 for remarking instructions.
- (2) Modify the part number at the designated area. Refer to Figure 1, Figure 2, and Reference 10, TDP19VA014.

C. Recording Instructions

- (1) A record of accomplishment is required.

2. For Diffuser Case Assemblies with Modified Part Numbers.

A. Modify the Diffuser Case Assembly within an interval of 20,000 flight cycles.

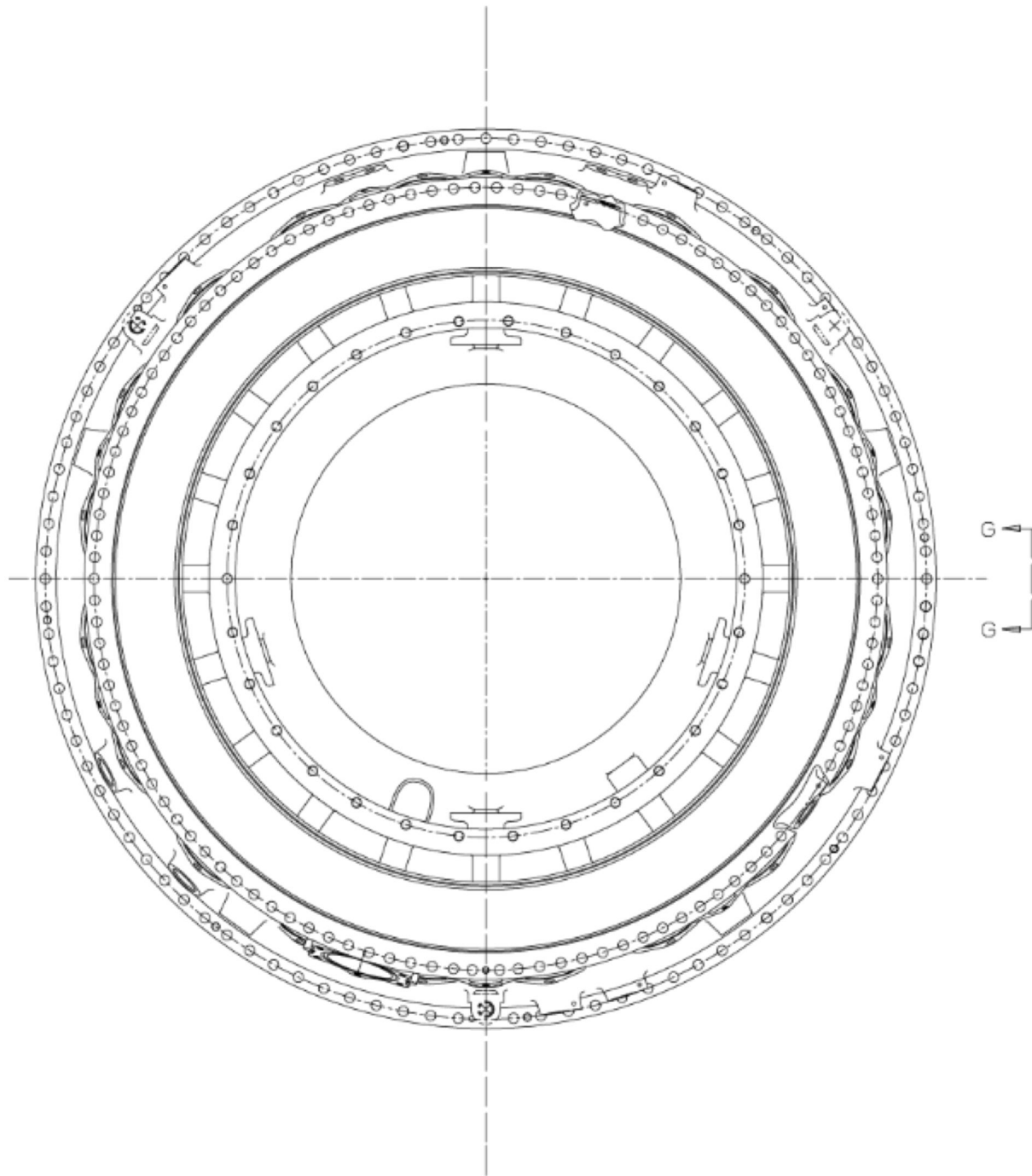
- (1) Send the diffuser case assembly to a vendor listed in the "Vendor Services or Special Components/Materials" section of this Service Bulletin.
- (2) Replace the rear outer flange. Refer to TDP19VA014.

B. Re-identify the Diffuser Case Assembly Part Number.

- (1) Refer to TDP19VA014 for remarking instructions.
- (2) Modify the part number at the designated area. Refer to Figure 1 Diffuser Case Assembly Forward Looking Aft, Figure 2 Diffuser Case Assembly Part Marking Locations, and TDP19VA014.

C. Recording Instructions.

- (1) A record of accomplishment is required.



B529137

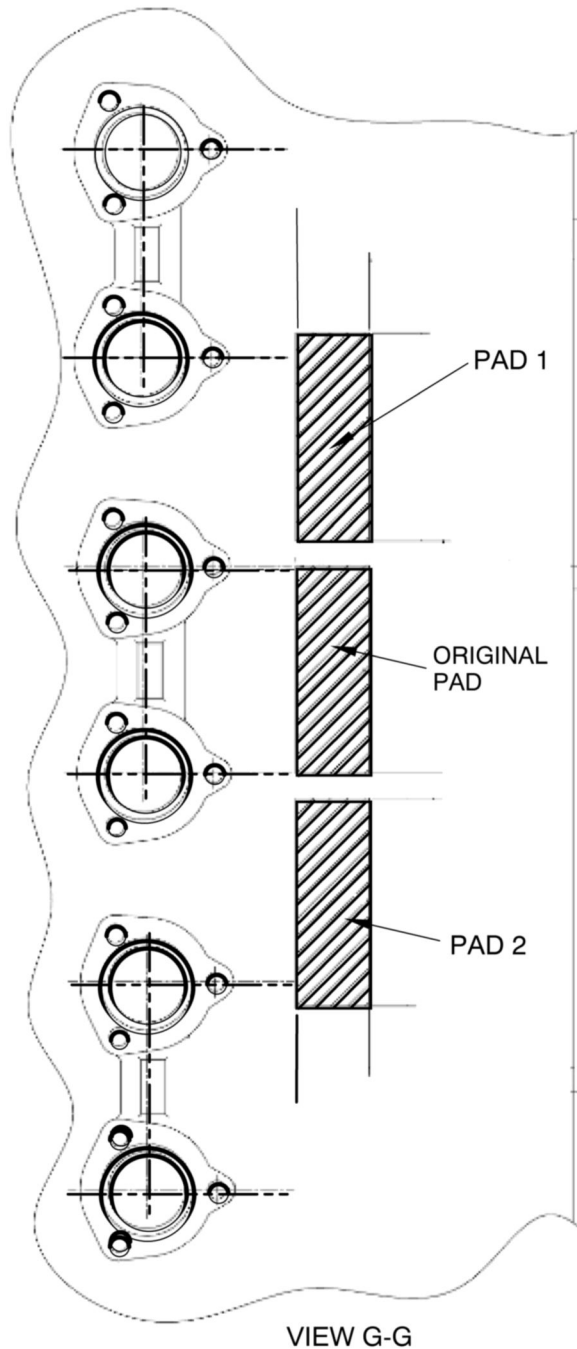
DIFFUSER CASE ASSEMBLY FORWARD LOOKING AFT
FIGURE 1

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 16



B529138

DIFFUSER CASE ASSEMBLY PART MARKING LOCATIONS
FIGURE 2

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 17

Appendix

Parts Progression To Show the Changed Part in Relation to Other Parts

December 13/19

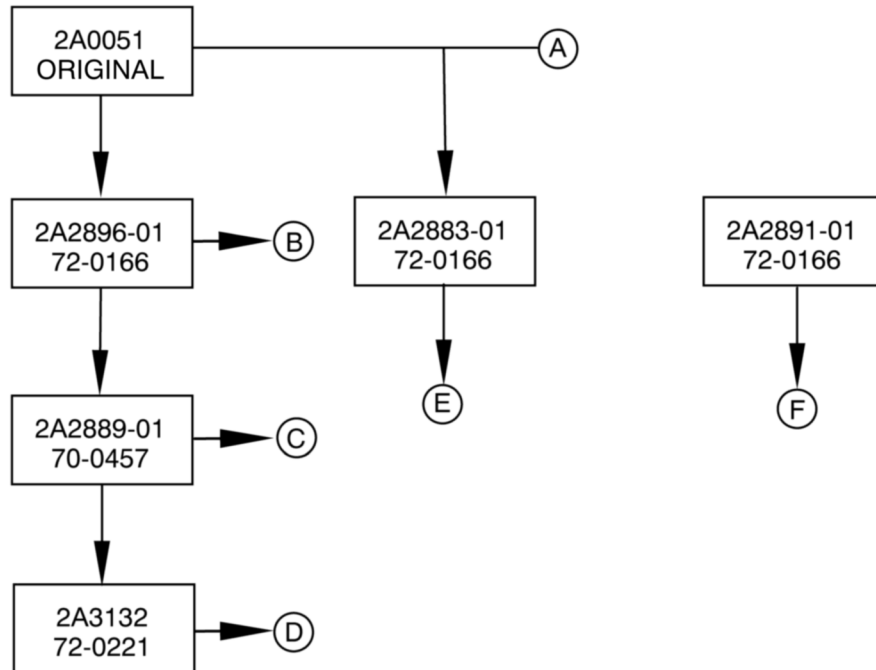
REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 18

IAE PROPRIETARY INFORMATION

©IAE International Aero Engines AG (date as above). All rights reserved.
Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).



B529261

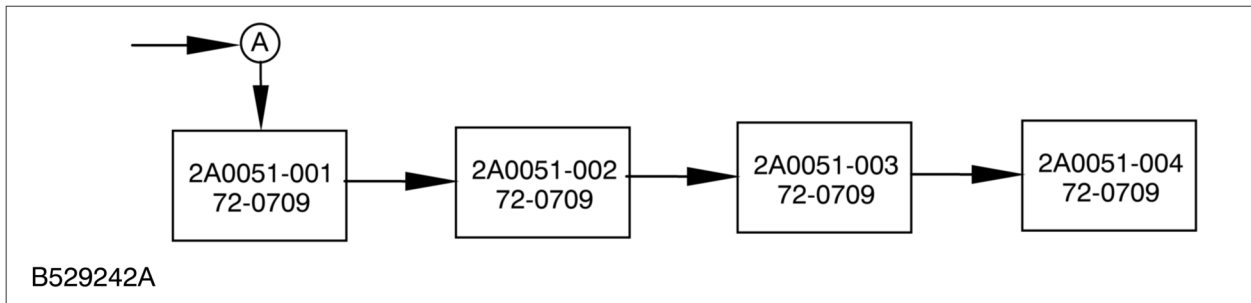
V2500-A1 DIFFUSER CASE ASSEMBLY
FIGURE 3, SHEET 1

December 13/19

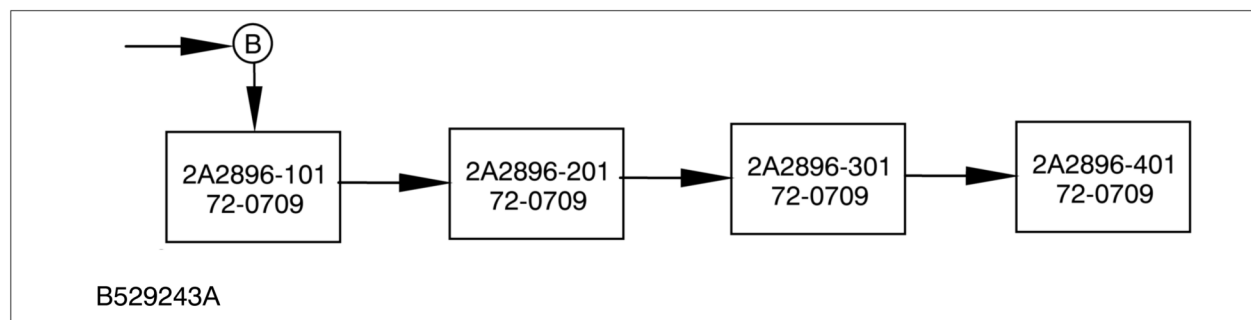
REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

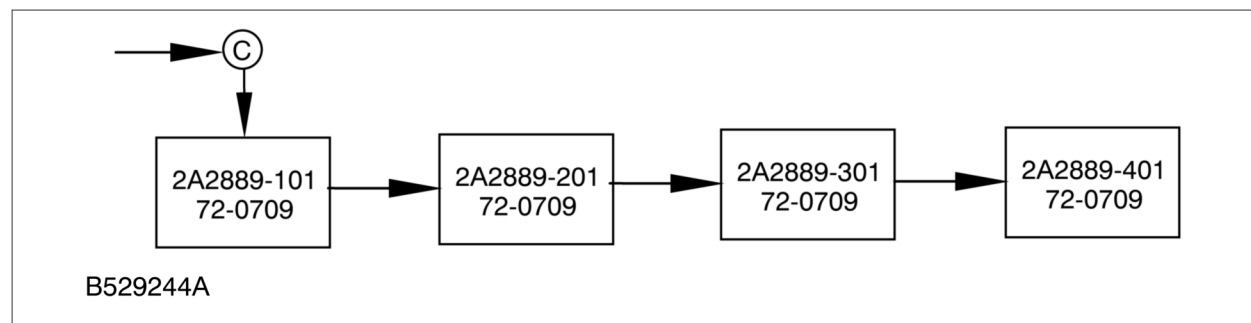
Page 19



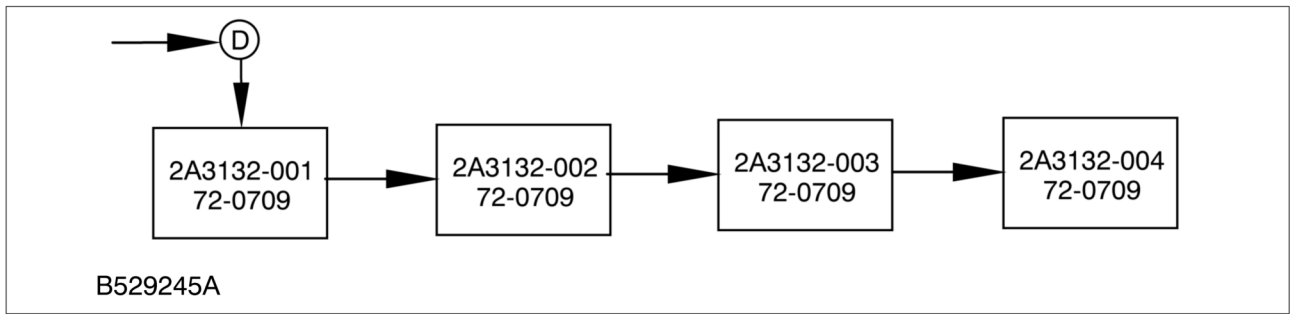
V2500-A1 DIFFUSER CASE ASSEMBLY OF
FIGURE 3, SHEET 2



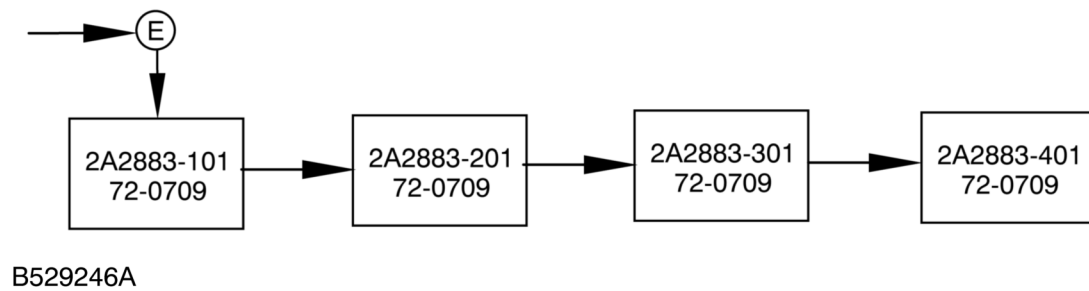
V2500-A1 DIFFUSER CASE ASSEMBLY
FIGURE 3, SHEET 3



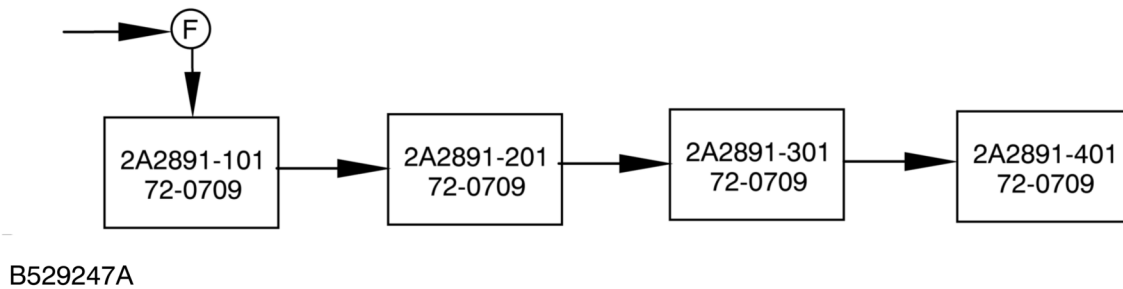
V2500-A1 DIFFUSER CASE ASSEMBLY
FIGURE 3, SHEET 4



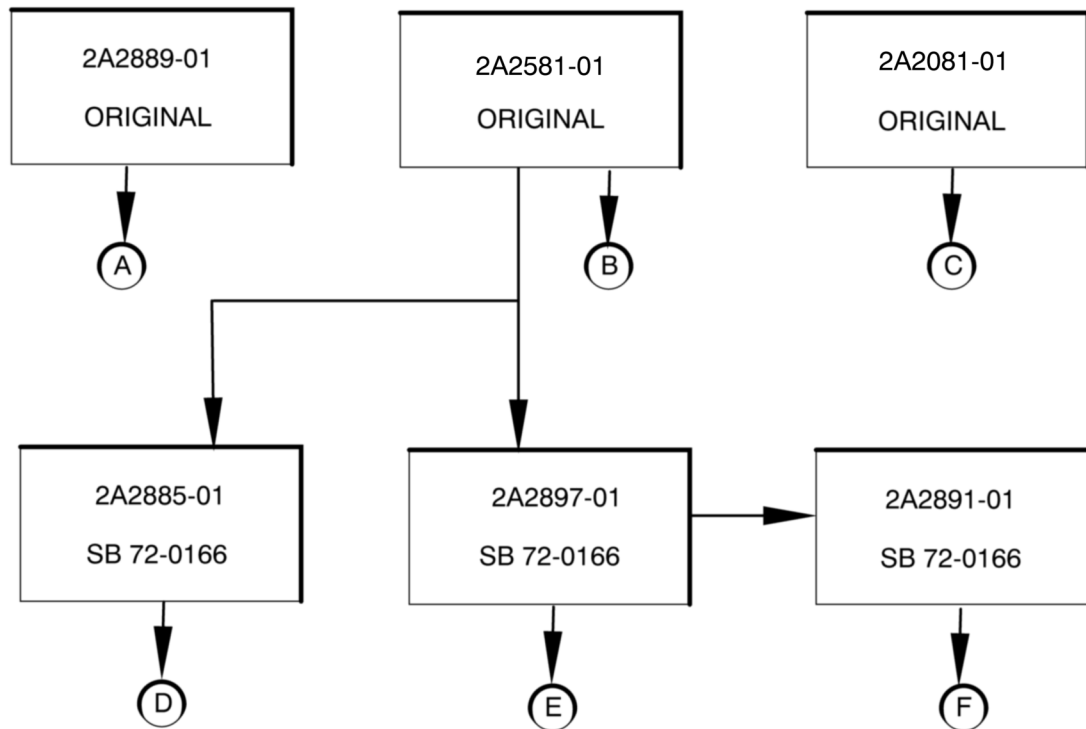
V2500-A1 DIFFUSER CASE ASSEMBLY
FIGURE 3, SHEET 5



V2500-A1 DIFFUSER CASE ASSEMBLY
FIGURE 3, SHEET 6



V2500-A1 DIFFUSER CASE ASSEMBLY
FIGURE 3, SHEET 7



B529290

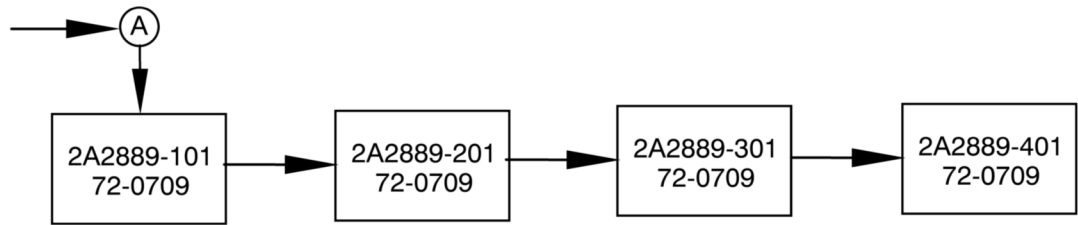
V2500-A5 DIFFUSER CASE ASSEMBLY
FIGURE 4, SHEET 1

December 13/19

REVISION NO. 1 - February 20/20

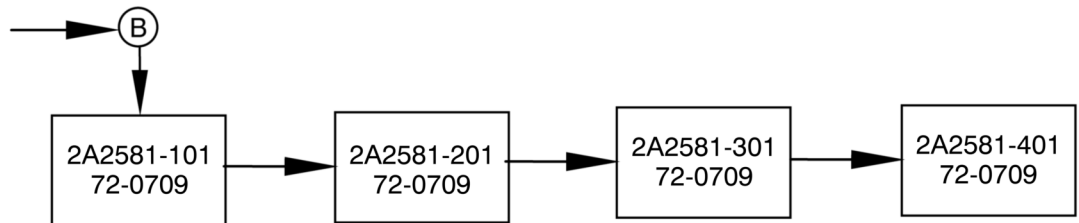
V2500-ENG-72-0709

Page 22



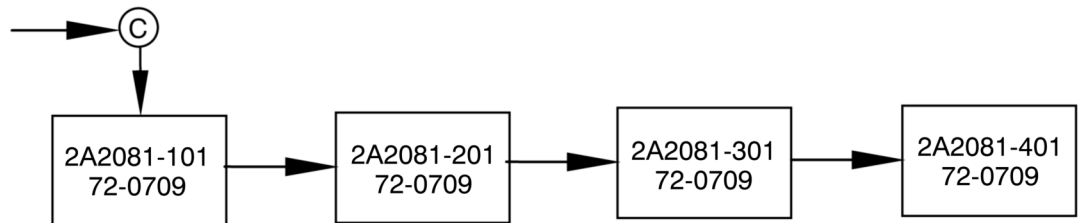
B529248A

V2500-A5 DIFFUSER CASE ASSEMBLY
FIGURE 4, SHEET 2



B529249A

V2500-A5 DIFFUSER CASE ASSEMBLY
FIGURE 4, SHEET 3



B529250A

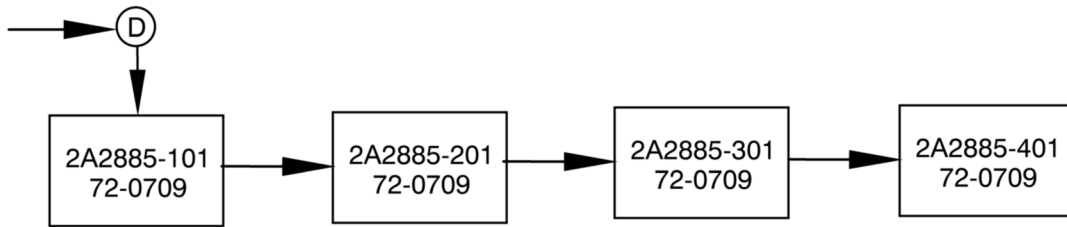
V2500-A5 DIFFUSER CASE ASSEMBLY
FIGURE 4, SHEET 4

December 13/19

REVISION NO. 1 - February 20/20

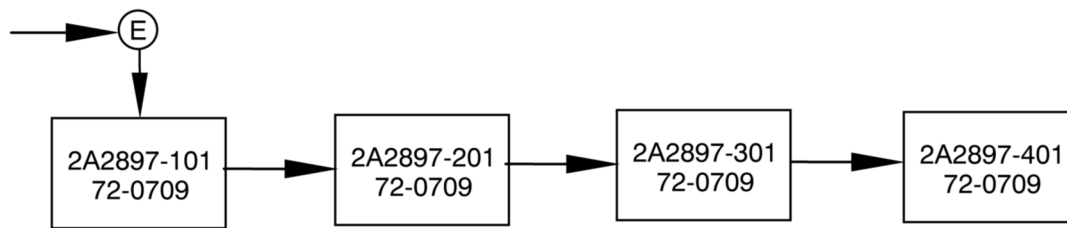
V2500-ENG-72-0709

Page 23



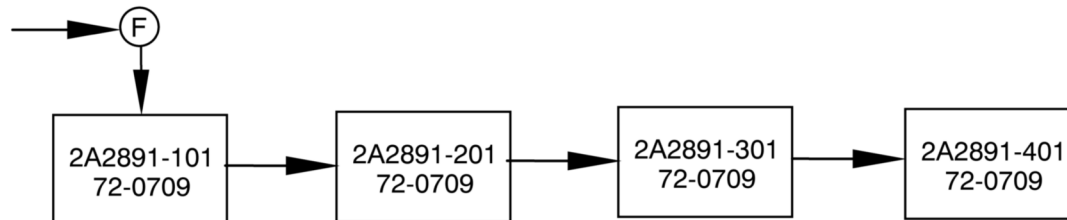
B529251A

V2500-A5 DIFFUSER CASE ASSEMBLY
FIGURE 4, SHEET 5



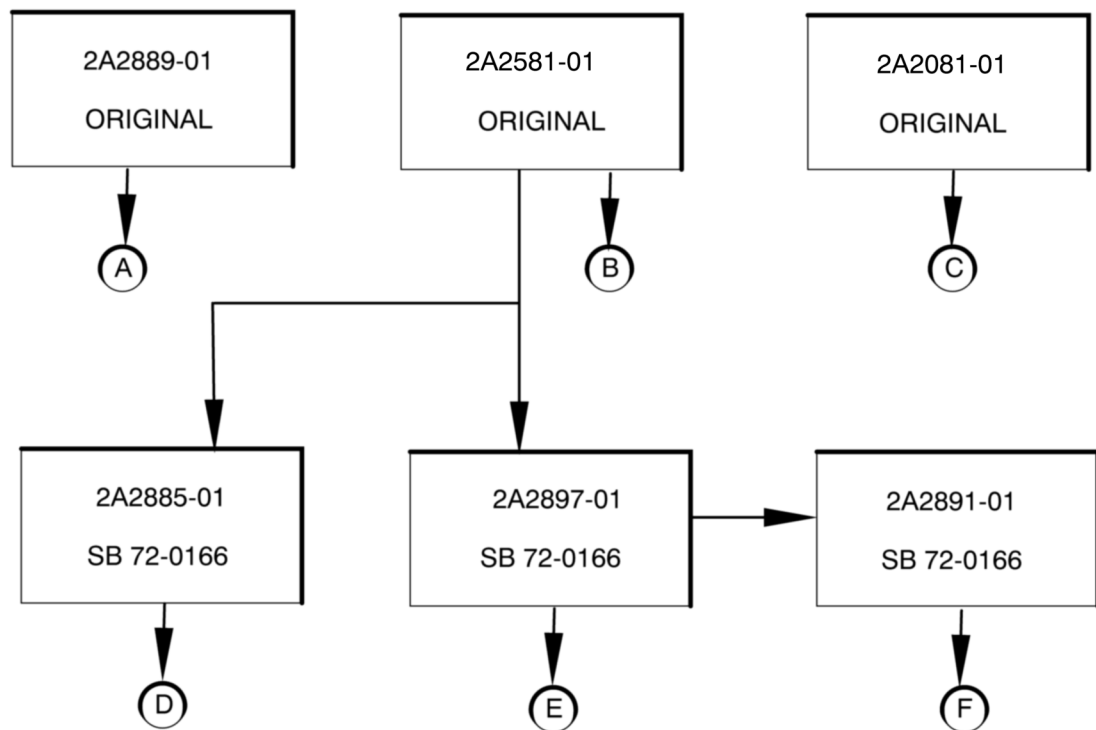
B529252A

V2500-A5 DIFFUSER CASE ASSEMBLY
FIGURE 4, SHEET 6



B529253A

V2500-A5 DIFFUSER CASE ASSEMBLY
FIGURE 4, SHEET 7



B529291

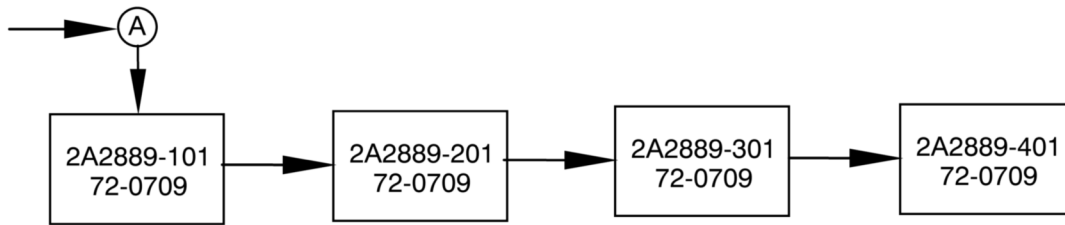
V2500-D5 DIFFUSER CASE ASSEMBLY
FIGURE 5, SHEET 1

December 13/19

REVISION NO. 1 - February 20/20

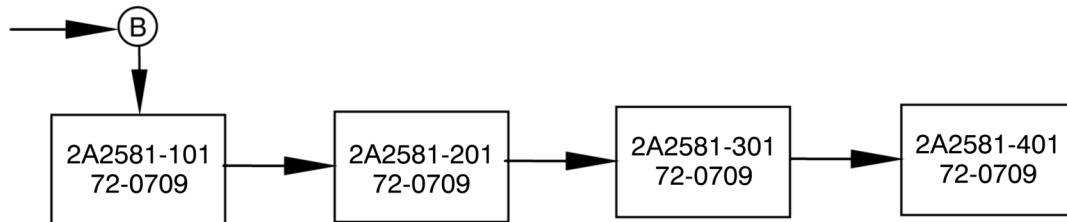
V2500-ENG-72-0709

Page 25



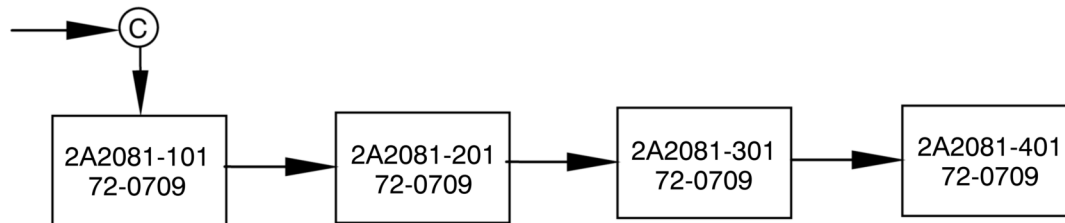
B529254A

V2500-D5 DIFFUSER CASE ASSEMBLY
FIGURE 5, SHEET 2



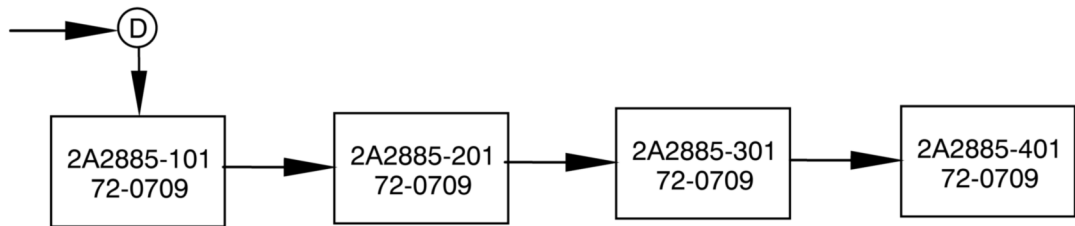
B529255A

V2500-D5 DIFFUSER CASE ASSEMBLY
FIGURE 5, SHEET 3



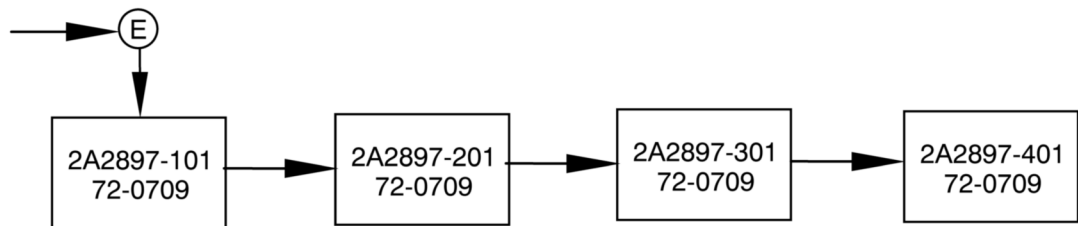
B529256A

V2500-D5 DIFFUSER CASE ASSEMBLY
FIGURE 5, SHEET 4



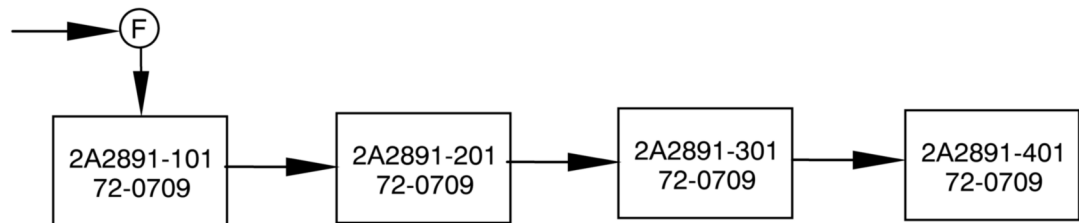
B529257A

V2500-D5 DIFFUSER CASE ASSEMBLY
FIGURE 5, SHEET 5



B529258A

V2500-D5 DIFFUSER CASE ASSEMBLY
FIGURE 5, SHEET 6



B529259A

V2500-D5 DIFFUSER CASE ASSEMBLY
FIGURE 5, SHEET 7

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC19VA014	BR/RD/RCM
1	EC19VA014A EC19VA014B EC19VA014C	BR/RD/RCM

Number values shown in parentheses adjacent to U.S. values are International System of units (SI) equivalents.

To calculate part life, include the hours and/or cycles since the part was made. Use the total hours or cycles to calculate life limits that are the result of part modification, a part used in an engine different thrust, or for some other reason.

NOTE: In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, the following Technical Publications cross reference table is provided.

Technical Publications Cross Reference Table

Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
ENGINE MANUAL — A1, A5	All	E-V2500-1IA	2A4407
CMM-EHC — A1, A5	All	EHC-V2500-1IA	2A4409
CMM-FN — A1, A5	All	FN-V2500-1IA	2A4410
CMM-MMC — A1, A5	All	MECH-V2500-1IA	2A4411
CMM-THD — A1, A5	All	THD-V2500-1IA	2A4412
TLM — A1, A5	All	T-V2500-1IA	2A4408
ENGINE MANUAL — D5	All	E-V2500-3IA	2A4416
CMM-EHC — D5	All	EHC-V2500-3IA	2A4418
CMM-FN — D5	All	FN-V2500-3IA	2A4419
CMM-MMC — D5	All	MECH-V2500-3IA	2A4420
CMM-THD — D5	All	THD-V2500-3IA	2A4423
TLM — D5	All	T-V2500-3IA	2A4417
SPPM (SPM) — A1, A5, D5	All	SPP-V2500-1IA	2A4414
EIPC — A1	V2500-A1102Q00	S-V2500-1IA	2A4427

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 28

IAE PROPRIETARY INFORMATION

©IAE International Aero Engines AG (date as above). All rights reserved.
Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
EIPC — A5	V2522/V2524/V2527M-AQ02	S-V2500-6IA	2A4428
	V2522/V2524/V2527M-AQ03	S-V2500-6IB	
	V2522/V2524/V2527M-SQ02	S-V2500-6SA	
	V2522/V2524/V2527M-SQ03	S-V2500-6SB	
	V2522/V2524/V2527M-SQ04	S-V2500-6NA	
	V2522/V2524/V2527M-SQ05	S-V2500-6NB	
	V2527/V2527E-AQ02	S-V2500-7IA	
	V2527/V2527E-AQ03	S-V2500-7IB	
	V2527/V2527E-SQ02	S-V2500-7SA	
	V2527/V2527E-SQ03	S-V2500-7SB	
	V2527/V2527E-SQ04	S-V2500-7NA	
	V2527/V2527E-SQ05	S-V2500-7NB	
	V2530-AQ02	S-V2500-2IA	
	V2530-AQ03	S-V2500-2IB	
	V2530-SQ02	S-V2500-2SA	
	V2530-SQ03	S-V2500-2SB	
	V2530-SQ04	S-V2500-2NA	
	V2530-SQ05	S-V2500-2NB	
	V2533-AQ02	S-V2500-5IA	
	V2533-AQ03	S-V2500-5IB	
	V2533-SQ02	S-V2500-5SA	
	V2533-SQ03	S-V2500-5SB	
	V2533-SQ04	S-V2500-5NA	
	V2533-SQ05	S-V2500-5NB	
EIPC — D5	V2525/V2528-AQ02	S-V2500-3IA	2A4426
	V2525/V2528-AQ03	S-V2500-3IB	
	V2525/V2528-AQ04	S-V2500-3IC	

December 13/19

REVISION NO. 1 - February 20/20

V2500-ENG-72-0709

Page 29

IAE PROPRIETARY INFORMATION

©IAE International Aero Engines AG (date as above). All rights reserved.
Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).