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V2500-A1/A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin EV2500-72-0458 and the Initial Issue of the Supplement

Bulletin Initial Issue

Remove Incorporate Reason for change

Page 1 and 2 of the Initial issue

Summary

Pages 1 to 8 of the Initial issue

Service Bulletin

Supplement Initial Issue

Remove Incorporate Reason for change

Page 1 Initial issue

V2500-ENG-72-0458

Printed in Great Britain

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<u>ENGINE - MAIN GEARBOX ASSEMBLY - INTRODUCTION OF REDESIGNED TRANSPORTATION PLUGS AND COVERS</u>

SUMMARY

1. PLANNING

A. EFFECTIVITY

Engine

V2500-A1 V2500-A5

B. CONCURRENT REQUIREMENTS

None.

C. REASON/PROBLEM

Problem

The cast aluminium covers and the steel plug assemblies, for Hydraulic Pump and Integrated Drive Generator, used for the transportation of the gearbox, are expensive and used only for production of the new gearbox assembly modules.

Evidence

The covers and plugs are discarded by the engine maker and are not used any more.

Substantiation

Only Pre-SB ENG-70-0718 covers and plug assemblies resist engine test temperatures and ensure oil tightness.

Objective

To introduce the plastic covers for transportation and to limit the use of Pre-SB ENG-70-0718 covers and plugs only for engine test.

D. DESCRIPTION

This Service Bulletin introduces gearbox plugs and covers designed in a plastic material which are used for transportation only. The metal plugs and covers are now used for engine test only.

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E. COMPLIANCE

Category Code 7

Accomplish when supply of superseded parts has been depleted.

F. MANPOWER

In service - Not applicable.

At overhaul - Not affected.

G. INTERCHANGEABILITY OF PARTS

Not affected.

2. MATERIAL INFORMATION

A. PARTS PRICES

		Unit Price
Part No.	Description	US Dollars
AS3209-123	Packing	4.49
AS3209-129	Packing	8.95
4A0138	Plug	951.00
4A0163	Plug	967.00
4G0088	Cover	128.00
4G0089	Cover	140.00
4G0090	Plug	9.50
4P0134	Housing	428.00
4P0135	Plug	420.00
4P0136	Ring	4.82
4P0137	Packing	3.41
4P0139	Cover	389.00
4P0140	Cover	424.00
4P0164	Retainer	429.00
4P0166	Ring	5.29
4P0167	Plug	430.00
4W0004	Nut	6.49

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<u>ENGINE - MAIN GEARBOX ASSEMBLY - INTRODUCTION OF REDESIGNED TRANSPORTATION PLUGS AND COVERS</u>

1. Planning Information

A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5, V2527M-A5 Engines

- (2) Airbus A320
 - (a) V2500-A1 Engines
 - (b) V2527E-A5, V2527-A5 Engines
- (3) Airbus A321

V2530-A5, V2533-A5 Engines

B. <u>Concurrent Requirements</u>

None.

C. Reason

(1) Problem

The cast aluminium covers and the steel plug assemblies, for Hydraulic Pump and Integrated Drive Generator, used for the transportation of the gearbox, are expensive and used only for production of the new gearbox assembly modules.

The more economic covers introduced by SB ENG-70-0718 were not used.

(2) Evidence

The covers and plugs are discarded by the engine maker and are not used any more.

(3) Objective

To introduce the plastic covers for transportation and to limit the use of Pre-SB ENG-70-0718 covers and plugs only for engine test.

(4) Substantiation

Only Pre-SB ENG-70-0718 covers and plug assemblies resist engine test temperatures and ensure oil tightness.

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- (5) Effect of Bulletin on:
 - (a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. <u>Description</u>

- (1) The changes introduced with this Service Bulletin are as follows:
 - (a) The IDGS Drive Plain Cover P/N 4P0140 (72-00-03, 01-060) Pre-SB ENG-70-0718 will be transferred in the new IPC Chapter 72-60-60 External Gearbox Non-Modular Parts, and used for engine test only. (See Figure 1).
 - (b) The IDGS Drive Shaft Plug Assembly, P/N 4A0163 (72-00-03, 01-400) will be transferred in the new IPC Chapter 72-60-60 External Gearbox Non-Modular Parts, and used for engine test only. (See Figure 1).
 - (c) The HYD Pump Plain Cover P/N 4P0139 (72-00-03, 01-090) Pre-SB ENG-70-0718 will be transferred in the new IPC Chapter 72-60-60 External Gearbox Non-Modular Parts, and used for engine test only. (See Figure 1).
 - (d) The HYD Pump Shaft Plug Assembly, P/N 4A0138 (72-00-03, 01-290) will be transferred in the new IPC Chapter 72-60-60 External Gearbox Non-Modular Parts, and used for engine test only. (See Figure 1).

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- (e) The IDGS Drive Plain Cover P/N 4G0086 (72-00-03, 01-060) introduced with SB ENG-70-0718 and made in sheet metal, will be deleted and replaced with a new Cover P/N 4G0089 made in plastic material and used for transportation only.
- (f) The Spacer P/N 4G0087 (72-00-03, 01-065) used with the IDGS sheet metal Cover, will be deleted.
- (g) The HYD Pump Plain Cover P/N 4G0085 (72-00-03, 01-090) introduced with SB ENG-70-0718 and made in sheet metal, will be replaced with a new Cover P/N 4G0088 made in plastic material and used for transportation only.
- (h) The Spacer P/N 4G0087 (72-00-03, 01-095) used with the HYD sheet metal Cover, will be deleted.
- (i) The Deaerator Plug P/N 7G0046-05 (72-00-03, 01-090) made in metallic material will be replaced with a new Plug made in plastic material.
- (2) Transportation of gearbox modules will be done with the new plastic covers.

E. Compliance

Category Code 7

Accomplish when supply of superseded parts has been depleted.

F. 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.

G. Material Price and Availability

- (1) There is no kit provided to do this Service Bulletin.
- (2) Part availability information is provided in material data Instructions Disposition.

H. <u>Industry Support Program</u>

Not applicable.

I. References

- (1) IAE Engineering Change Nos 97VF008, 97VF008A, 02VF002.
- (2) ATA Locator -72-60-00.



J. General Information

Material Information section of this Service Bulletin gives the latest information about the availability of the affected parts.

K. Other Publications Affected

(1) The V2500 Engine Illustrated Parts Catalogue, Chapter/Section 72-60-03, will be revised and Chapter 72-60-60 will be added.

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2. <u>Material Information</u>

A. The material data that follows is for each engine.

For V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5 Engines:

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FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
01-060	4G0089	1	.Cover, plain IDGS — drive	-	4G0086	(A)(B)
01-065	-	1	.Spacer, IDGS and HP covers	-	4G0087	(B)
01-090	4G0088	1	.Cover, plain HYD pump	-	4G0085	(A)(B)
01-095	-	1	.Spacer, IDGS and HP covers	-	4G0087	(A)(B)
01-090	4G0090	1	.Plug, deaerator	_	7G0046-05	(A)(B)
01–290	-	1	.Plug, assy shaft Hyd.	-	4A0138	(1D)
01-295	_	1	Packing	-	AS3209-123	(1D)
01–300	-	1	Nut, Self Locking Dbl Hex	-	4W0004	(1D)
01-310	_	1	Plug, Shaft	_	4P0135	(1D)
01-320	_	1	Packing	_	4P0137	(1D)
01-330	_	1	Ring, Retaining	-	4P0136	(1D)
01-340	-	1	Housing, Retaining Ring	-	4P0134	(1D)
01-400	-	1	.Plug Assy Shaft IDGS Drive	-	4A0163	(1D)
01-410	_	1	Packing	-	AS3209-129	(1D)
01-420	-	1	Nut, Self Locking Dbl Hex	-	4W0004	(1D)
01-430	_	1	Plug, Shaft	-	4P0197	(1D)
01-440	_	1	Packing	-	4P0137	(1D)
01-450	_	1	Ring, Retaining	-	4P0166	(1D)
01-460	-	1	Retainer, Plug Shaft	-	4P0164	(1D)

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FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
01-100	4A0138	1	.Plug, Assy Shaft	_	_	(A)(B)(S1)
01-110	AS3209-123	1	Packing	-	-	(A)(B)(S2)
01-120	4W0004	1	Nut, Self	-	-	(A)(B)(S3)
			Locking Dbl Hex			
01-130	4P0135	1	Plug, Shaft	_	-	(A)(B)(S4)
01-140	4P0137	1	Packing	-	-	(A)(B)(S5)
01-150	4P0136	1	Retaining Ring	-	-	(A)(B)(S6)
01-160	4P0134	1	Housing,	-	-	(A)(B)(S7)
			Retaining Ring			
01–170	4A0163	1	Plug Assy Shaft IDGS Drive	-	-	(A)(B)(S8)
01-180	AS3209-129	1	Packing	_	_	(A)(B)(S9)
01-190	4W0004	1	Nut, Self	_	_	(A)(B)(S10)
070		•	Locking Dbl Hex			(,,, (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
01-200	4P0167	1	Plug, Shaft	_	_	(A)(B)(S11)
01-210	4P0137	1	Packing	_	_	(A)(B)(S12)
01-220	4P0166	1	Ring, Retaining	_	_	(A)(B)(S13)
01-230	4P0164	1	Retainer, Plug	_	_	(A)(B)(S14)
			Shaft			
01-240	4P0139	1	.Cover, Plain HYD	_	_	(A)(B)
			Pump			
01-250	4P0140	1	.Cover, Plain IDGS - Drive	-	-	(A)(B)

B. <u>Instructions Disposition Codes</u>

- (A) New part will be available from November 2003.
- (B) Old parts will not be available.
- (1D) Old part is not required for transportation. It will be transferred in Chapter 72-60-60 and used only for engine test.
- (S1) Transferred from ATA 72-60-03-01-290
- (S2) Transferred from ATA 72-60-03-01-295
- (\$3) Transferred from ATA 72-60-03-01-300
- (\$4) Transferred from ATA 72-60-03-01-310
- (\$5) Transferred from ATA 72-60-03-01-320

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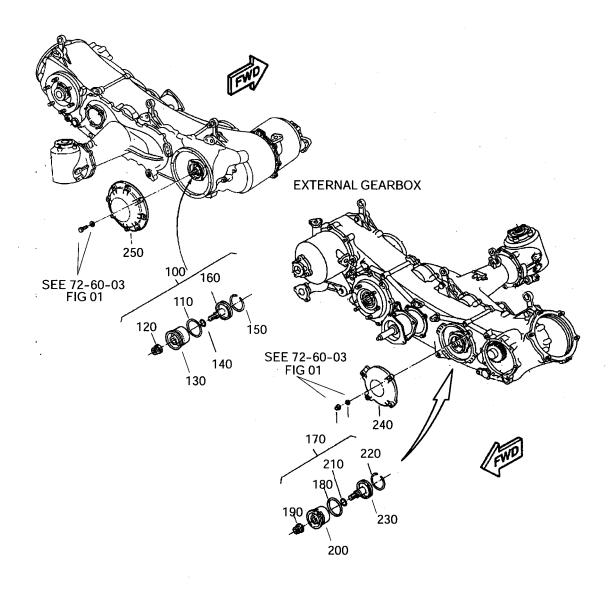


- (S6) Transferred from ATA 72-60-03-01-330
- (S7) Transferred from ATA 72-60-03-01-340
- (\$8) Transferred from ATA 72-60-03-01-400
- (\$9) Transferred from ATA 72-60-03-01-410
- (\$10) Transferred from ATA 72-60-03-01-420
- (S11) Transferred from ATA 72-60-03-01-430
- (\$12) Transferred from ATA 72-60-03-01-440
- (\$13) Transferred from ATA 72-60-03-01-450
- (\$14) Transferred from ATA 72-60-03-01-460

3. Accomplishment Instructions

A. None

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New EIPC Chapter 72-60-60 - External Gearbox Non-Modular Parts Figure 1

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<u>ENGINE - MAIN GEARBOX ASSEMBLY - INTRODUCTION OF REDESIGNED TRANSPORTATION PLUGS AND COVERS</u>

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.

2. Parts required:

		Unit Price
Part No.	Description	US Dollars
AS3209-123	Packing	4.49
	•	
AS3209-129	Packing	8.95
4A0138	Plug	951.00
4A0163	Plug	967.00
4G0088	Cover	128.00
4G0089	Cover	140.00
4G0090	Plug	9.50
4P0134	Housing	428.00
4P0135	Plug	420.00
4P0136	Ring	4.82
4P0137	Packing	3.41
4P0139	Cover	389.00
4P0140	Cover	424.00
4P0164	Retainer	429.00
4P0166	Ring	5.29
4P0167	Plug	430.00
4W0004	Nut	6.49

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