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DATE: Nov. 8/06

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V2500-A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits Revision 1 to Service Bulletin EV2500-72-0535

<u>Document History</u>

Service Bulletin Revision Status Supplement Revision Status

Initial Issue Oct.16/06

Bulletin Revision 1

Remove Incorporate Reason for change
All pages of the Pages 1 to 9 of the To revise the Effectivity.

Service Bulletin Service Bulletin

V2500-ENG-72-0535

Printed in Great Britain

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LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin following incorporation of Revision 1 are as follows:

<u>Page</u>		Revision N	<u> Revision Date</u>
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SERVICE BULLETIN

<u>ENGINE - COMPRESSOR NON MODULAR - INTRODUCTION OF A CABLE FEED - THROUGH ADAPTER FOR</u> THE FUEL LAQUER AND TEMPERATURE SURVEY INVESTIGATION

1. Planning Information

A. Effectivity

(1) Airbus A320

V2527-A5, V2527E-A5 Engines which do have the Service Bulletin V2500-ENG-75-0081 standard incorporated.

For Engine Serial Numbers: V10957, V11042, V11139 and V11146.

B. Concurrent Requirements

(1) The Flight Test Modification Bulletin (FTMB) that follows must be installed at the same time as this Service Bulletin:

FTMB 5011 - FLIGHT TEMPERATURE SURVEY IN SUPPORT OF FUEL LACQUER INVESTIGATION

C. Reason

(1) Problem

As part of the investigation of fuel lacquering problems on the Variable Stator Vane Actuator (VSVA), Booster Stage Bleed Valve Master Actuator (BSBMA) and the Active Clearance Control Actuator (ACC Actuator) a temperature survey during a revenue service flight will be performed. A number of thermocouples will be fitted onto and close to the VSVA, BSBMA and ACC Actuator to gain a better understanding of the temperature involved in the formation of fuel lacquer. The thermocouple wires will be routed through an adaptor, which is fitted to a vacant position on the bifurcation panel.

(2) Evidence

The problem has been experienced on engines in service.

(3) Substantiation

The changes introduced by this Service Bulletin have been the subject of satisfactory engineering analysis.

(4) Objective

Incorporation of this Service Bulletin is designed to perform an temperature survey on the engines.

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(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Schemes

None.

(e) Interchangeability

None.

(f) Fits and Clearances

None.

D. Description

International Aero Engines (IAE) is planning to perform a temperature survey on some coremounted accessories during a revenue service flight. Pratt & Whitney will provides the thermocouples and instrumentation cables. Rolls-Royce will provide a cable lead-through adaptor on the bifurcation panel.

E. Compliance

This Service Bulletin is released for purposes of Controlled Service Introduction within United Airlines (UAL) only. The Controlled Service Introduction ends on September 30th 2007.

F. Approval

The part number changes and/or part modification are 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.



G. Manpower

(1) In Service

1 Hour.

(2) At Overhaul

Not affected.

H. Material Price and Availability

Not applicable. Parts will be provided by IAE.

I. Tooling Price and Availability

Special tools are not required.

J. <u>Industry Support Information</u>

Not applicable.

K. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

No effect.

(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.

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N. <u>References</u>

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- (1) Aircraft Maintenance Manual, Chapters 70-23-11, 70-30-00 and 71-13-00.
- (2) Engine Manual, Chapter 72-38-00, Disassembly/Assembly.
- (3) Internal Reference No.

 Engineering Change No. 06VR006-01.
- (4) ATA Locator 72-38-25.

0. Other Publications Affected

(1) For effect on Illustrated Parts Catalogue (IPC), refer to 2. Material Information.

P. Interchangeability of Parts

Not affected.



2. Material Information

A. The kit required consists of the following parts:

None.

B. Parts to be reworked:

None.

C. New production parts:

All Engines

72-38-25

FIG	NEW	QTY	PART TITLE	MAT	OLD	INSTR
ITEM	PART				PART	DISP
NO.	NO.				NO.	
01-290	6A9099	1	Adapter, Instrumentation	_	LK62478	(A)
01-292	4W0165	2	Bolt	_	4W0163	(1D)
01-293	4W2622	2	Washer	-		(B)

D. <u>Redundant parts:</u>

None.

- E. <u>Instruction disposition codes:</u>
 - (A) The old part was identified as cover.
 - (B) Additional.
 - (1D) Old part may be used on other applications.

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3. Accomplishment Instructions

- A. Rework Instructions
 - (1) None.
- B. Assembly Instructions
 - (1) General

CAUTION:

IN ORDER TO REDUCE THE POTENTIAL FOR MULTIPLE ENGINE IN-FLIGHT SHUT DOWN, POWER LOSS, OR OTHER ANOMALIES DUE TO MAINTENANCE ERROR, IAE RECOMMENDS THAT OPERATORS AVOID PERFORMING MAINTENANCE ON MULTIPLE ENGINES INSTALLED ON THE SAME AIRCRAFT AT THE SAME TIME. IF IT IS NOT POSSIBLE TO AVOID MAINTENANCE ON MORE THAN ONE ENGINE AT THE SAME TIME, IAE RECOMMENDS THAT ADDITIONAL CONTROLS BE APPLIED IN ORDER TO ENSURE THAT MAINTENANCE TASKS HAVE BEEN COMPLETED AS DEFINED. MAINTENANCE GUIDELINES SHOULD BE REVISED WHERE POSSIBLE, TO PROMOTE THIS RECOMMENDATION.

WARNING:

DO NOT TOUCH THE ENGINE COMPONENTS FOR A SHORT TIME AFTER THE ENGINE IS SHUT DOWN. THE COMPONENTS STAY HOT AND CAN CAUSE INJURY.

- (a) Obey all the WARNINGS and CAUTIONS in the procedures that are referred to.
- (b) Consumable Materials
 - (i) Refer to the table that follows:

MATERIAL NO.	DESIGNATION
V01-031	Acetone
V08-013	Cold Curing Silicone Compound
V10-077	Engine Oil

For the details of the consumable material given in the table above refer to the Aircraft Maintenance Manual, Chapter 70-30-00.

- (c) Tools and Equipment
 - (i) Refer to the related Manual tasks given in this instruction.
- (d) Refer to the Aircraft Maintenance Manual, Chapter 70-23-11 for all torque procedures.
- (2) Get access to the lower rear area of the Low Pressure (LP) compressor case
 - (a) Open the fan cowls (Refer to the Aircraft Maintenance Manual, Chapter 71-13-00 Opening/Closing).

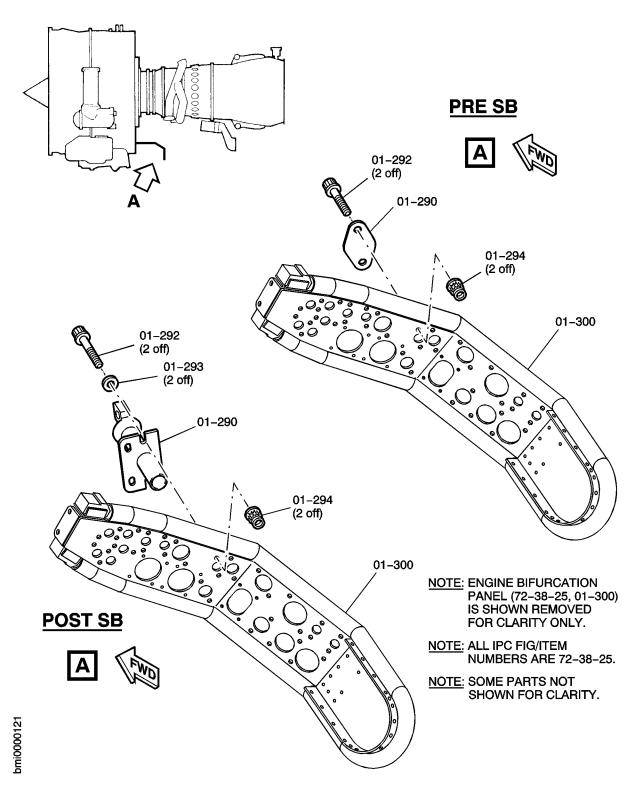


- (3) Replace the cover with the instrumentation adapter (Refer to Figure 1)
 - (a) Remove the blanking plate (72-38-25, 01-290)
 - (i) Remove the two nuts (72-38-25, 01-294) and the two old bolts (72-38-25, 01-292), P/N 4W0163 that attach the blanking plate (72-38-25, 01-290) to the engine bifurcation panel (72-38-25, 01-300).
 - (ii) Remove the old blanking plate (72-38-25, 01-290), P/N LK62478 from the engine bifurcation panel (72-38-25, 01-300).
 - (b) Install the instrumentation adapter (72-38-25, 01-290)
 - (i) Clean the mating surfaces of the instrumentation adapter (72-38-25, 01-290) and the engine bifurcation panel (72-38-25, 01-300). Use a clean cloth made moist with acetone (Material No. V01-031).
 - (ii) Apply a thin layer of cold curing silicone compound (Material No. VO8-O13) to the mating surface of the instrumentation adapter (72-38-25, O1-290).
 - (iii) Feed the thermocouple wire bundle through the orifice at the now vacant position in the engine bifurcation panel (72-38-25, 01-300) (Refer to Flight Test Modification Bulletin FTMB 5011).
 - (iv) Install the new instrumentation adapter (72-38-25, 01-290), P/N 6A9099 to the engine bifurcation panel (72-38-25, 01-300).
 - (v) Apply a thin layer of engine oil (Material No. V10-077) to the threads of the two new bolts (72-38-25, 01-292), P/N 4W0165 and the two nuts (72-38-25, 01-294).
 - (vi) Install the two new bolts (72-38-25, 01-292), P/N 4W0165, the two new washers (72-38-25, 01-293), P/N 4W2622 and the two nuts (72-38-25, 01-294) that attach the instrumentation adapter (72-38-25, 01-290) to the engine bifurcation panel (72-38-25, 01-300).
 - (vii) Torque the two nuts (72-38-25, 01-294) to between 85 and 105 lbf in. (10 and 12 Nm).
 - (viii) Remove any unwanted sealant compound from the joint area. Use a clean cloth made moist with acetone (Material No. VO1-O31).
- (4) Make sure that the work area is clean and clear of tools, equipment and other unwanted materials.



- (5) Close the access to the lower rear area of the LP compressor case
 - (a) Close the fan cowls (Refer to the Aircraft Maintenance Manual, Chapter 71-13-00 Opening/Closing).
- C. Recording Instructions
 - (1) A record of accomplishment is necessary.





Installation of the Instrumentation Adapter (72-38-25, 01-290) Figure 1

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