International Aero Engines

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V2500-A1/A5 PROPULSION SYSTEM SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin EV2500-79-0082

Bulletin Initial Issue

Remove Incorporate Pages 1 to 7 of the

Service Bulletin

Reason for change Initial issue

V2500-ENG-79-0082

Printed in Great Britain

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LIST OF EFFECTIVE PAGES

The effective pages to this Service Bulletin are as follows:

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OIL - AIR COOLED OIL COOLER MODULATING VALVE - INTRODUCTION OF AN AIR MODULATING VALVE SUPPLIED BY WOODWARD AIRCRAFT ENGINE SYSTEMS

1. Planning Information

A. Effectivity

(1) Airbus A319

V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V11260.

- (2) Airbus A320
 - (a) V2500-A1 Engines prior to Serial No. V0362.
 - (b) V2527-A5, V2527E-A5 Engines prior to Serial No. V11260.
- (3) Airbus A321

V2530-A5, V2533-A5 Engines prior to Serial No. V11260.

(4) ATA locator 79-21-51

B. Concurrent Requirements

None

C. Reason

(1) Condition

There is a need to install an Air Modulating Valve (AMV) supplied by Woodward Aircraft Engine Systems (WAES) in place of the unit supplied by TRW Lucas Aerospace.

(2) Background

TRW have decided to leave the AMV business, it is therefore necessary to procure the unit from an alternative source which in this case is WAES. TRW will continue to provide full support for their existing units in service.

(3) Objective

Incorporation of the changes introduced by this Service Bulletin (Modification) is designed to provide continuity in the supply of AMV units for production and spares supply, and therefore to satisfy customer requirements.

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(4) Substantiation

The changes introduced by this Service Bulletin have been the subject of satisfactory engineering assessment, successful rig testing, development engine testing, including a 1000 hour/1500 cycle endurance type test, and a successful flight test.

- (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. Description

The current engine heat management system employs an AMV supplied by TRW Lucas Aerospace. This Service Bulletin replaces it with a similar unit supplied by Woodward Aircraft Engine Systems located in the same position on the propulsion system. Whilst the new unit has minor physical differences, all attaching parts are unchanged.

E. Compliance

Category Code 7

Accomplish when supply of superseded parts has been depleted.



F. Approval

The part number changes and/or part modifications 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

In service

Not affected

At overhaul

Not affected

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

H. Material Price and Availability

Modification kit not required; parts supplied as single line items.

For prices and availability of future spares refer to Woodward Aircraft Engine Services.

I. Tooling Price and Availability

Special tools are not required

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

None

K. Weight and Balance

(1) Weight Change

Minus 0.6lb (-0,29kg)

(2) Moment Arm

2.5 in (318mm) forwards of datum

(3) Datum

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

L. <u>Electrical Load Data</u>

The aircraft electrical load is not affected by this Service Bulletin

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M. <u>Software Accomplishment Summary</u>

Not applicable

N. References

- (1) Engine Manual, 72-00-32, Removal-04 and Installation-02, Removal-14 and Installation-14.
- (2) Aircraft Maintenance Manual, 79-21-51, Removal/Installation.
- (3) Internal reference 01VI002
- (4) Aircraft Modification No.32000, to AMM 79-21-51.

O. Other Publications Affected

- (1) Illustrated Parts Catalogue (IPC) 1IA, 2IA, 2IB, 5IA, 5IB, 6IA, 6iB, 7IA, 7IB will be revised.
- (2) Woodward Aircraft Engine Systems CMM, 79-21-51.

P. Interchangeability of Parts

Not affected.

2. Material Information

A. Vendor units affected by this bulletin:

Applicability: - For each V2500 engine to incorporate this bulletin

The type of equipment affected by this Service Bulletin is listed below for information only:

All Engines

79-21-51

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
01100	8910-620	1	Valve, air modulating (V66503)	-	TY1558-52	(A) (S1)

B. <u>Instructions disposition codes:</u>

- (A) New standard of unit will be made available from January 2002
- (S1) Old and new units are freely and fully interchangeable.



3. Accomplishment Instructions

A. Rework Instructions

None

B. Assembly Instructions

The revised part introduced by this Service Bulletin is interchangeable with existing. Remove and install in accordance with current overhaul procedures and maintenance practices (Engine Manual, 72-00-32 Removal-02, Installation-02, Removal-14 and Installation-14 and Aircraft Maintenance Manual, 79-21-51, Removal/Installation).

C. Recording Instructions

A record of accomplishment is necessary.



V2500-A1 & V2500-A5 Air Modulating Valve Family Tree *

Service Bulletin Number **Unit Mod Plate Endorsement BASELINE** NONE TY1558-51 TRW Lucas Aerospace. V2500-ENG-79-0043 NONE TY1558-52 Air Modulating Valve -Introduction of improved sealing V2500-ENG-79-0059 L1558-9 Introduction of a Air Modulating TY1558-52 Valve with revised standard of 'P' seal V2500-ENG-79-0080 L1558-10 Introduction of an Air Modulating Valve TY1558-52 with revised actuator end cap retaining washers V2500-ENG-79-0082 NONE 8910-620 Introduction of an Air Modulating Valve supplied by Woodward Aircraft Engine Systems (WAES)

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V2500-A1 and V2500-A5 air modulating valve family tree Fig 1

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^{*} This family tree is not intended to represent the combination of modifications fitted to units in service

