

International Aero Engines

SERVICE BULLETIN

OIL - AIR COOLED OIL COOLER AIR MODULATING VALVE - ACTUATOR ASSEMBLY- INTRODUCTION OF IMPROVED SEALING - CATEGORY CODE 7 - MOD.ENG-79-0043

1. Planning Information

A. Effectivity

(1) Aircraft: (a) Airbus A320

(b) Airbus A321

(2) Engine: (a) V2500-A1 Engines prior to Serial No.V0362

(b) V2527-A5 Engines prior to Serial No.V10109

(c) V2530-A5 Engines prior to Serial No.V10109

(3) Air Cooled Oil Cooler Air Modulating Valves : All TY1558-51

B. Concurrent Requirements

None

C. Reason

(1) Condition

Non-availability of the existing Actuator piston rod seals.

(2) Background

The Polyphosphozene elastomer used to manufacture the Actuator piston rod seals is no longer procurable.

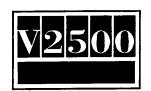
(3) Objective

This Bulletin introduces new piston rod seals, at the same time new piston rod bearings are introduced in an improved Actuator configuration to improve the performance of the Actuator Assembly.

(4) Substantiation

The changes introduced by this Service Bulletin have shown during testing to improve the performance of the Actuator assembly.

(5) Effect of Bulletin on Workshop Procedures:



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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

D. <u>Description</u>

- (1) This Service Bulletin introduces Actuator piston rod seals manufactured from Viton in lieu of Polyphosphozene.
- (2) New piston rod bearings are also introduced in an improved configuration, and better retention of the link assembly is achieved by machining a slot in the piston for tab washer deformation.
- (3) Units incorporating this Service Bulletin will be identified by the type number TY1558-51.
- (4) Units incorporating this Service Bulletin will be identified by the type number TY1558-52 when embodied along with 1558-79-L1558-6 and 1558-79-L1558-8.

E. Approval

The part number changes and/or part modification described in Section 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 Model listed.

F. Compliance

Category Code 7

Accomplish when supply of superseded parts has been depleted.

G. Manpower

Estimated manhours to incorporate the full intent of this bulletin:

Venue Estimated Manhours

(1) In Sevice Not applicable

(2) At Overhaul Not affected



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- H. Material Price and Availability
 - (1) Modification kit not required.
 - (2) Refer to Lucas Service Bulletin 1558-79-L1558-7.
- I. Tooling Price and Availability

Special tools are not required to accomplish this Service Bulletin.

- J. Weight and Balance
 - (1) Weight change None
 - (2) Moment arm No effect
 - (3) Datum Engine front mount centerline (Power Plant Station (PPS) 100)
- K. Electrical Load Data

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

- L. References
 - (1) Internal Reference No.

EC94VR006

EC94VROO6A

ECM94VR006-01

ECM94VR006A-02

(2) Other References

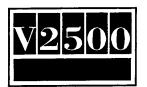
Lucas Modification L1558-7 (Introduction of improved sealing of the Actuator Assembly).

Lucas Modification L1558-6 (To improve the linkage assembly).

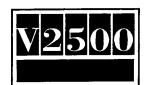
Lucas Modification L1558-8 (Introduction of an improved Linear Variable Differential Transformer).

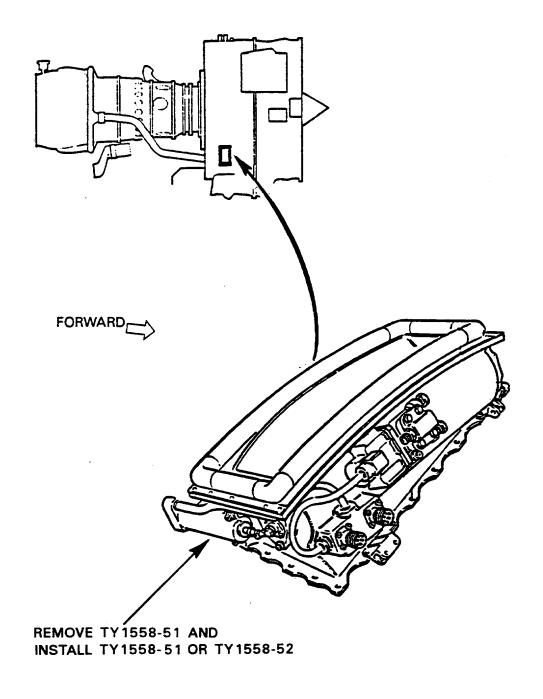
V2500 Engine Manual (E-V2500-1IA).

- M. Other Publications Affected
 - (1) V2500 Engine Illustrated Parts Catalog, 79-21-51 will be revised.



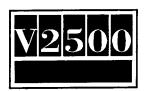
(2) Lucas Component Maintenance Manual, Chapter 79-21-51.





E3498

Location of Air Modulating Valve (A1 and A5 Engines) Fig.1



2. Accomplishment Instructions

- A. Rework Instructions
 - (1) Incorporate the intent of Lucas Service Bulletin 1558-79-L1558-7.
- B. Installation Instructions
 - (1) Install new or re-identified TY1558-52 Air Modulating Valve by use of approved procedures. Refer to V2500 Engine Manual (E-V2500-1IA), 72-00-32, Installation.
- C. Recording Instructions
 - (1) A record of accomplishment is necessary.



3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. <u>Kits associated with this Bulletin:</u>

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
TY1558-51 (79-21-51)	1		Air Cooled Oil Cooler Air Modulating Valve		(C)
TY1558-52 (79-21-51)	1		Air Cooled Oil Cooler Air Modulating Valve		(A)(B)(1D) (S1)

C. <u>Instructions/Disposition Code Statement:</u>

- (A) New part is currently available
- (B) Old part is no longer available
- (C) Old part is capable of being reworked, but not re-identified if both Lucas Service Bulletins 1558-79-L1558-6 and 1558-79L1558-8 have not been embodied.
- (1D) Old part is capable of being reworked and re-identified as new part number
- (S1) Old and new parts coded (S1) are freely and fully interchangeable
- NOTE: The estimated 1994 unit price shown is provided for planning purposes only and does not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales

 Department for information concerning firm prices.

