

International Aero Engines

SERVICE BULLETIN

<u>ENGINE - LP COMPRESSOR - LPC BLEED DUCT WITH REDUCED 44 SQUARE INCHES EXIT THROAT AREA - CATEGORY CODE 7 - MOD.ENG-72-0044</u>

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engines prior to Serial V0097

B. Reason

(1) Condition

Because of excessive LPC bleed duct exit throat area, position of the LPC bleed valve was set for "half open" under the power condition requiring maximum bleed.

(2) Background

New LPC bleed duct with reduced exit throat area was designed to change the valve position from "half open to "full open: under the power condition requiring maximum bleed. New design exit throat area from 66 square inches to 44 square inches.

(3) Objective

The changes in configuration recommended in this Service Bulletin are designed to improve the reliability of LPC bleed system.

(4) Substantiation

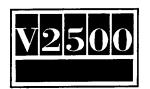
Analytically Substantiated.

(5) Effects of Bulletin on the following shop functions:

Removal/Installation	Not affect	ed
Disassembly/Assembly	Not affect	ed
Cleaning	Not affect	ed
Inspection/Check	Not affect	ed
Repair	Not affect	ed
Testing	Not affect	ed

(6) Supplemental Information

None



C. <u>Description</u>

- (1) The changes introduced by this Service Bulletin are as follows:
 - (a) New 5W2080 LPC bleed duct assembly supersedes old 5W2038 LPC bleed duct assembly.
 - (b) A new module part number, 5W0102 is given for the LPC/intermediate case module containing 5W2080 LPC bleed duct assembly.
 - (c) 5A9210 Backshell assembly and 5A9298 Data entry plug assembly can be reidentified as 5A0367 Backshell assembly and 5A0357 Data entry plug assembly without material change. Modification necessary to do the above reidentification is only rewiring in accordance with Reference (2), Chapter/Section 71-00-00 Testing-11. Also 5A9288 Contact is added on as required basis.
- (2) This Service Bulletin must be accomplished with Serice Bulletin V2500-ENG-73-0007. An LPC/intermediate case module which is Post S.B.V2500-72-0044 configuration must be used with an Electronic Engine Control which is a Post S.B.V2500-ENG-73-0007 configuration.

D. Approval

The part number changes 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.

E. Compliance

Category Code 7

Accomplish when supply of superseded parts has been depleted.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue Estimated Manhours

(1) In service Not applicable

(2) In shop Not applicable

G. Material - Price and Availability

- (1) Modification Kit not required.
- (2) See "Material Information" section for prices and availability of future spares.



International Aero Engines

SERVICE BULLETIN

H. Tooling - Price and Availability

Special tools are not required.

I. Weight and Balance

- (1) Weight change None
- (2) Moment arm No effect
- (3) Datum Engine front mount centreline (Powerplant Section (P.P.S) 100))

J. Electrical Load Data

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

K. References

(1) Internal Reference No.

88VJ592

(2) Other references

V2500 Engine Illustrated Parts Catalog; 72-32-00, 72-32-60 and 73-22-35.

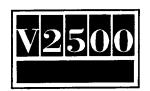
V2500 Engine Manual; 71-00-00 Testing, 72-32-00 Disassembly and Assembly.

V2500 Engine Service Bulletin; V2500-ENG-72-0007.

V2500 Standard Practices/Processes Manual; 70-09-00 Marking of Parts.

L. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalog; 72-32-00, 72-32-60 and 73-22-35.
- (2) V2500 Engine Manual; 72-32-60 Cleaning, Inspection/Check and Repair.



2. Accomplishment Instructions

A. Assembly Instructions

- (1) Install the 5W2080 LPC bleed duct assembly by the approved procedure in Reference (2), Chapter/Section 72-32-00 Assembly, Figure 1.
- (2) Reidentify 5W0016 LPC/Intermediate case module as 5W0102 LPC/Intermediate case module by the approved procedures in Reference (4), Chapter/Section 70-09-00, Marking of Parts, Figure 2. Use blank 5A2189 Module identification plate (72-32-85, 03-100) and translate the data from existing Module indentification plate except the module part number, if necessary.

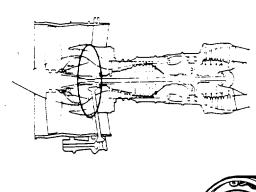
B. Rework Instructions

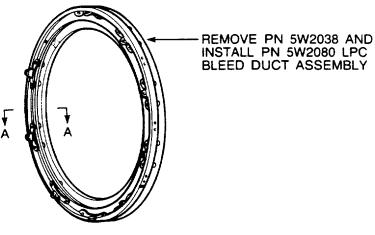
- (1) Rewire jumpers of 5A9298 Data entry plug assembly in accordance with the wiring requirements for 5A0357, Reference (2), Chapter/Section 71-00-00 Testing-11.
 - NOTE: Do not change the data on 5A9298 data entry plug assembly when jumpers are rewired in accordance with the wiring requirement for 5A0357. Rewiring is necessary for only the engine rating data.
 - (a) Read the engine rating data from 5A9298 Data entry plug assembly.
 - (b) Rewire jumpers for the engine rating data in accordance with wiring rule for 5AO357 Data entry plug assembly.
- (2) Reidentify 5A9298 Data entry plug assembly as 5A0357 Data entry plug assembly and 5A9210 Backshell assembly as 5A0367 Backshell assembly by the approved procedure in Reference (4), Chapter/Section 70-09-00, Marking of Parts refer to reference (2), Chapter/Section 71-00-00 Testing-11.
- (3) Reidentify the EEC program plug identification on 5A9036 Engine identification plate (72-32-85, 03-120).
 - (a) Reidentify the EEC program plug identification from "5A9298" to "5A0357" by the approved procedures in Reference (4), Chapter/Section 70-09-00, Marking of Parts, Figure 2. Use blank 5A9036 Engine identification plate (72-32-85, 03-120) and translate the data from existing Engine identification plate except the EEC program plug identification number, if necessary.

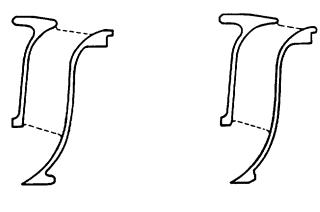
C. Recording Instructions

(1) A record of accomplishment is necessary.







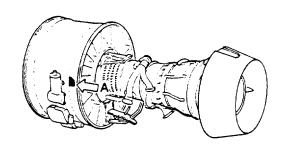


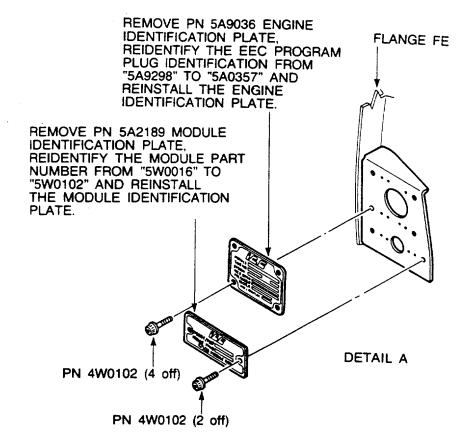
PN 5W2038

PN 5W2080

SECTION A-A

Replacement of LPC bleed duct assembly Fig.1





Reidentification of the LPC/intermediate case module and the EEC program plug identification
Fig.2



3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

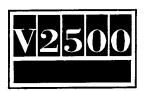
None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
5W0102 (72-32-00)	1	-	Module - LPC/intermediate case assembly	5W0016 (01-001)	(S3)(A)(B)
5W2O8O (72-32-06)	1	15,700.00	Duct - A/O, LPC bleed	5w2038 (01-250)	(S1(A)(B)
5A0357 (73-22-35)	1	-	Data entry plug assembly	5A9298 (01-100)	(S2)(2D) (A)(B)
5A0367 (73-22-35)	1	-	Backshell assembly	5A9210 (01-130)	(S2)(2D) (A)(B)
5A9288 (71-52-44)	AR	_	Contact	- (01–121)	(ID)
5A2189 (72-32-85)	1	17.50	Plate, module identification	5A2189 (03-100)	(3D)
5A9036 (72-32-85)	1	17.50	Plate, engine identification	5A9036 (03-120)	(3D)

C. Instruction/Disposition Code Statements:

- (S1) New parts coded (S1) and (S2) must replace old parts as a COMPLETE SET per engine.
- (S2) Old parts must be reidentified after modifications in this Service Bulletin accomplished. New parts coded (S1) and (S2) must replace old parts as a COMPLETE SET per engine.
- (S3) New parts coded (S3) is necessary to be reidentified. This must be reidentified after new detail parts coded (S1) installed.
- (A) New parts will be available after existing stock of old parts are exhausted.
- (B) Old parts will continue to be supplied until exhaustion.
- (ID) Newly added parts. New parts will be available.
- (2D) A modification can be done to the Old Part and it can then be reidentification as the New Part Number.
- (3D) Parts coded (3D) are necessary to do reidentification shown in this Service Bulletin if required. Parts are currently available.



NOTE: The estimated 1990 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.