



ENGINE - HP COMPRESSOR SPLIT CASES - INTRODUCTION OF REVISED STAGE-5 AND 6 BLANKING
PLUG WITH ADDITIONAL FASTENER AND INCREASED STEM DIAMETER - CATEGORY CODE 6 -
MOD.ENG-72-0338

Printed in Great Britain

1. Planning Information

A. Effectivity

- (1) Aircraft: (a) Airbus A320.
- (2) Engines: (a) V2500-A1 Engines prior to Serial No. V0362.

B. Concurrent Requirements

None

C. Reason

(1) Problem

IAE V2500 Service bulletin ENG 72-0265 introduced a revised standard of Stage-5 and 6 boroscope blanking-plug for the HP compressor which was secured with a single bi-hexagonal head bolt. Premature deterioration of this standard of boroscope can occur, which in extreme conditions can cause the stem to break off.

The primary cause of the problem is an air leak through the non-bolted side of the blanking-plug. This causes the stem to vibrate, which then results in High Cyclic Fatigue (HCF). In addition, because only a single fastener secures the blanking plug, there is a higher risk of the component being affected by static stress.

(2) Evidence

There has been one reported incident on in-service A1 engines.

(3) Substantiation

A satisfactory engineering analysis has been done on the changes introduced by this Service Bulletin.

(4) Objective

The purpose of this Service Bulletin is to maintain engine reliability.

(5) Effect of Bulletin on:

- (a) Operation

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Not affected.

(b) Maintenance

Affected.

(c) Overhaul

Affected.

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. Description

(1) The Stage-5 and 6 boroscope blanking-plug for the HP compressor has been revised, the changes are as follows:

(a) the quantity of holes to attach the blanking plug to the case is increased from one to two. Both holes are modified so that countersunk screws can be installed.

(b) The stem diameter is increased from 3,0 mm to 6,8 mm nominally.

(c) The angle at the base of the penny is deleted.

(d) The bolt that attaches the blanking-plug to the case is replaced by two countersunk screws.

E. Approval

The part number changes and/or part modifications are given in Section 2 and 3 of this Service Bulletin. They comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine models listed.

F. Compliance

Category Code 6.

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SERVICE BULLETIN

Accomplish when the sub-assembly (That is, modules, accessories, components, build groups) is disassembled sufficiently to get access to all affected parts.

G. Manpower

Estimate of manhours necessary to embody this Service Bulletin in full:

(1) In Service

(a) To gain access	16 Minutes
(b) To install revised blanking-plug	15 Minutes
(c) To return the engine to a serviceable status	20 Minutes
Total	51 Minutes

(2) At Overhaul

(a) To embody	15 Minutes
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NOTE: It is possible to get access to the parts affected by this Service Bulletin at overhaul.

H. Material - Price and Availability

- (1) A modification kit is not necessary.
- (2) Refer to 2. Material Information for prices and availability of future spares.

I. Tooling - Price and Availability

Special tools are not necessary.

J. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

Not affected.

(3) Datum

Engine front mount centreline (Power Plant Station (PPS) 100).

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K. Electrical Load Data

The aircraft electrical load is not affected by this Service Bulletin.

L. References

- (1) Internal Reference No.

EC98VR023A

- (2) Other References

This modification must only be installed to engines which do not embody the IAE V2500 Service Bulletin that follows:

ENG 72-0027 HP COMPRESSOR FRONT CASE STAGE 5 BOROSCOPE ACCESS
REPOSITIONED.

A1 Engine Manual (EM), Chapter/Section 72-41-30, Disassembly and Assembly.

A320 Aircraft Maintenance Manual (AMM), Chapter/Section 72-00-00,
Removal/Installation.

M. Other Publications Affected

- (1) Illustrated Parts Catalogue (IPC), Chapter/Section 72-41-31.
- (2) A1 Engine Manual (EM), Chapter/Sections 72-41-30 Disassembly and Assembly and 72-41-31, Cleaning, Inspection/Check and Repair.
- (3) A1 Engine Manual (EM), Chapter/Section 72-41-31,
- (4) A320 Aircraft Maintenance Manual (AMM), Chapter/Section 72-00-00, Inspection/Check.



SERVICE BULLETIN

2. Material Information

A. Kits necessary for this Service Bulletin:

None.

B. Parts affected by this Service Bulletin:

NEW PART No. (ATA No.)	QTY	EST'D UNIT PRICE (\$)	PART TITLE	OLD PART No. (IPC No.)	INSTR DISP
6A7455	1	274.00	.Plug, blanking - Stage-5 and 6	6A6477	(A)(B)
(72-41-31)			boroscope.	(01-140)	(S1)
AS51010	2	14.00	.Screw, Countersunk head.	AS21010	(C)(S1)
(72-41-31)			(.250-28UNJF x .625)	(01-142)	(1D)(2D)

NOTE: The unit prices, if shown, are an estimate and they are given for the purposes of planning only. For actual prices, refer to the IAE Price Catalogue or contact IAE's spare parts sales department.

C. Instruction disposition codes:

- (1) (A) New part will be available for future releases.
- (2) (B) Old part will be discontinued.
- (3) (C) New part is available.
- (4) (S1) New parts coded (S1) must replace old parts coded (S1) as a complete engine set.
- (5) (1D) Old part can be used on other applications.
- (6) (2D) Quantity increased from one to two.

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3. Accomplishment Instructions

A. Rework Instructions

None.

B. Assembly Instructions

(1) For the correct removal/installation procedures, refer to the manuals that follow:

(a) A1 Engine Manual (EM), Chapter/Section 72-41-30, Disassembly and Assembly.

or

(b) A320 Aircraft Maintenance Manual (AMM), Chapter/Section 72-00-00. Removal/Installation.

C. Recording Instructions

A record of accomplishment is necessary.