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DATE: Dec. 6/12

V2500-A5 SERIES PROPULSION SYSTEM NON-MODIFICATION SERVICE BULLETIN

This document transmits the Initial Issue of Non-Modification Service Bulletin V2500-ENG-74-0006.

Non-Modification Service Bulletin Initial Issue

Remove Incorporate Reason for change

Pages 1 to 7 of the Non-Modification Service Bulletin.

Initial Issue.

V2500-ENG-74-0006

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED If any have not been received please advise IAE International Aero Engines AG



NON-MODIFICATION SERVICE BULLETIN - IGNITION - INSTALLATION REQUIREMENTS FOR IGNITER PLUGS OF SERVICE BULLETIN V2500-ENG-70-1003 STANDARD

1. Planning Information

A. Effectivity

- (1) Airbus A319
 - (a) V2522-A5, V2524-A5, V2527M-A5 Engines from Serial No. V16456 to Serial No. V16541.
- (2) Airbus A320
 - (a) V2527-A5, V2527E-A5 Engines from Serial No. V16456 to Serial No. V16541.
- (3) Airbus A321
 - (a) V2530-A5, V2533-A5 Engines from Serial No. V16456 to Serial No. V16541.

B. Concurrent Requirements

None.

C. Reason

(1) Condition

Service Bulletin V2500-ENG-70-1003 introduced a new ignition plug, P/N CH31964, and Service Bulletin V2500-ENG-70-1004 introduced a new ignition lead, P/N 512090-1. It has been found that if the new ignition lead, P/N 512090-1, is installed together with the new Champion ignition plug, P/N CH31964, and cooling shrouds, P/N 5U0065, a potential for misalignment of the cooling shrouds is given. Misalignment of the cooling shrouds will lead to incorrect installation causing a partial blocking of the cooling holes on the ignition lead. The unblocked cooling holes will vent cooling air into the core zone. This will reduce the cooling of the igniter plug.

(2) Background

To accommodate larger cooling air outlet holes and changes to the ferrule assembly, the new ignition lead has an increased height 90 degree elbow and fitting. With the increased height the current cooling shroud, P/N 5U0065, can be installed incorrectly when the engine is equipped with the new Champion igniter plug, P/N CH31964, together with the new ignition lead, P/N 512090-1.

Dec. 6/12

Dec. 6/12 Initial Issue

V2500-ENG-74-0006

Page 1 of 7



(3) Objective

To ensure that igniter plugs of Service Bulletin V2500-ENG-70-1003 standard will not be installed on engines listed under 1.A. Effectivity.

(4) Substantiation

The actions instructed by this Non-Modification Service Bulletin were the subject of satisfactory engineering analysis. This Non-Modification Service Bulletin complies with the applicable engine certification basis.

D. <u>Description</u>

This Non-Modification Service Bulletin provides additional installation requirements to install the NGK igniter plug P/N JS100A1 with the new igniter lead, P/N 512090-1, and the current cooling shroud, P/N 5U0065.

E. Compliance

Category Code 7

Accomplish when the supply of superseded parts has been deleted.

F. Approval

The compliance statement in paragraph 1.E. and the procedures in section 3 Accomplishment Instructions of this Non-Modification Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Models listed.

G. Manpower

Estimated Man-hours:

(1) In Service

Applicable (Hours not affected).

(2) At Overhaul

Applicable (Hours not affected).

H. Material Price and Availability

Not applicable.

I. Tooling Price and Availability

Special tools are not required.

V2500-ENG-74-0006

Page



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

None.

K. Electrical Load Data

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

L. Software Accomplishment Summary

Not applicable.

M. References

- (1) IAE V2500 Engine Manual (1IA), Chapter 72-00-40.
- (2) Airbus A319/A320/A321 Aircraft Maintenance Manual, Chapter 74-21-41.
- (3) EIPC, Chapter 74-21-41.
- (4) IAE V2500 Service Bulletins:

V2500-ENG-70-1003 - INFORMATION - IGNITION - INTRODUCTION OF A NEW IGNITER PLUG

V2500-ENG-70-1004 - INFORMATION - IGNITION - INTRODUCTION OF A MODIFIED IGNITION LEAD TO ADDRESS DEGRADATION/CRACKING

(5) Internal Reference No.

Engineering Change No. 12VR771.

- (6) ATA Locator 74-21-41.
- N. Other Publications Affected

None.

0. <u>Interchangeability of Parts</u>

Affected.

Dec. 6/12
Dec. 6/12 Initial Issue

V2500-ENG-74-0006



2. <u>Material Information</u>

None.

Dec. 6/12 Dec. 6/12 Initial Issue V2500-ENG-74-0006



3. Accomplishment Instructions

<u>NOTE</u>: For traceability reasons and airworthiness requirements it is necessary to have this Non-Modification Service Bulletin to be accomplished in two Parts.

Part A limits the installation to NGK igniter plugs of Service Bulletin V2500-ENG-70-0276 standard for any required igniter plug replacement.

Part B instructs the replacement of the installed cooling shrouds with cooling shrouds of Service Bulletin V2500-ENG-70-1005 standard and ends the igniter plug limitation instructed with PART A.

<u>NOTE</u>: This Non-Modification Service Bulletin is fully accomplished once PART A and Part B are accomplished.

PART A

A. Igniter Plug limitation

- (1) Engines listed under 1.A. Effectivity are limited to the installation of the NGK igniter plug of Service Bulletin V2500-ENG-70-0276 standard for any required replacement.
 - (a) If an igniter plug has to be replaced ensure the correct installation of the cooling shrouds (Refer to Figure 1 and the CAUTION below)

NOTE: Figure 1 shows the installation of the NGK igniter plug, the current shroud standard together with the new ignition lead of Service Bulletin V2500-ENG-70-1004.

CAUTION: INSTALL THE COOLING SHROUD AS CLOSE AS POSSIBLE TO THE INNER RADIUS OF THE IGNITION LEAD ELBOW. MAKE SURE THAT THE COOLING AIR EXIT HOLES ARE NOT BLOCKED AND FULLY COVERED BY THE HOLLOW PART OF THE COOLING SHROUD.

(2) Record the incorporation of Non-Modification Service Bulletin V2500-ENG-74-0006 PART A in the applicable engine record.

PART B

B. Cooling shroud replacement

<u>NOTE</u>: IAE will inform the affected operators individually for the availability of the new cooling shroud required for the accomplishment of PART B of this Non-Modification Service Bulletin.

Dec. 6/12

Dec. 6/12 Initial Issue

V2500-ENG-74-0006

Page



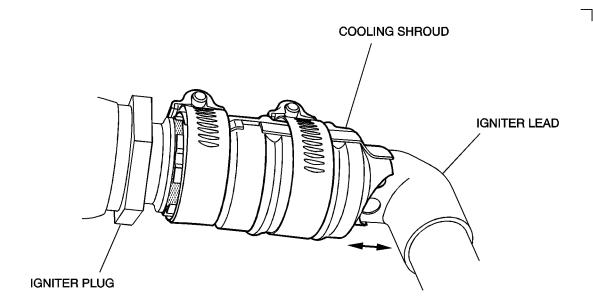
(1) Install the new cooling shrouds in accordance with Service Bulletin V2500-ENG-70-1005.

NOTE: Service Bulletin V2500-ENG-70-1005 will be available in 2013.

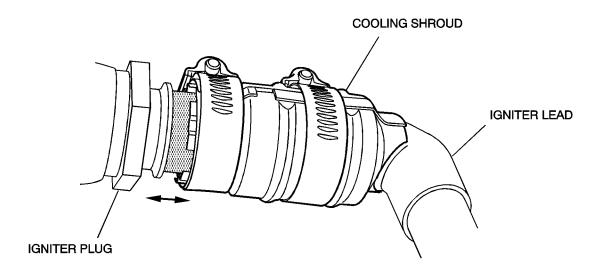
- (2) Record the incorporation of Non-Modification Service Bulletin V2500-ENG-74-0006 PART B in the applicable engine record.
- (3) Inform the local IAE office that PART A and PART B of Non-Modification Service Bulletin V2500-ENG-74-0006 have been accomplished and provide the local Field Representative with the engine serial number.

Dec. 6/12 V2500-ENG-74-0006
Page





INCORRECTLY INSTALLED COOLING SHROUD



CORRECTLY INSTALLED COOLING SHROUD

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Installation of the Cooling Shroud Figure 1

Dec. 6/12

Dec. 6/12 Initial Issue

V2500-ENG-74-0006

Page 7



SERVICE BULLETIN FEEDBACK FORM

1

1

1

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2

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2

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4

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If you have had difficulties to description of the issue:	perform this Service Bulle	etin please quote below the	area(s) and give a short
Planning Information Section:		Material Information Section:	Accomplishment Instruction Section:
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Please send the completed Service Bulletin Feedback Form to IAE, Customer Support. Email: GPIAECUSTCOM@IAEV2500.COM

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V2500-ENG-74-0006 Page 1 of 1

5

5

5