

SERVICE BULLETIN

NON MODIFICATION SERVICE BULLETIN — ENGINE — NO. 4 BEARING, COOLING AIR DUCT, REAR — INSPECT AND REPLACE IF SUSPECT DUCTS ARE FOUND

MODEL APPLICATION

V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5

BULLETIN ISSUE SEQUENCE

V2500 Series 72-0640

ATA NUMBER

72-43-30

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Compliance Category

6

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Summary

The purpose of this Non-Modification Service Bulletin is to give instructions to do an inspection of the No. 4 Bearing rear cooling air duct to find suspect production lot numbers. If found, replace with a non-suspect cooling air duct.

Planning Information

Effectivity Data

Engine Models Applicable

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5

Engine Serial No. V10791

Engine Serial No. V10851

Engine Serial No. V11099

Engine Serial No. V11410

Engine Serial No. V11412

Engine Serial No. V12069

Engine Serial No. V12180

Engine Serial No. V12292

Engine Serial No. V12622

Engine Serial No. V12646

Engine Serial No. V16494

Engine Serial No. V16496

Engine Serial No. V16497

Engine Serial No. V16502

Engine Serial No. V16504

Engine Serial No. V16506

Engine Serial No. V16508

Engine Serial No. V16510

Engine Serial No. V16512

Engine Serial Nos. V16514 thru V16645

Concurrent Requirements

There are no concurrent requirements.

Reason

1. Condition: There is a suspect population of 151 V2500-A5 Engines that have No. 4 Bearing Rear Cooling Air Ducts, PN 2A3808-01 installed, which have a quantity of improperly fabricated studs, PN 2A0085-05, (8 Quantity per unit assembly). The stud is a detail part of No. 4 Bearing Rear Cooling Air Duct. The studs conform to the OEM dimensional requirements, and cannot be visually identified as non-conforming. The suspect lot numbers which contain these non-conforming studs are: 405215-0, 405604-0, and 408310-0.
2. Background: The subject studs were produced from an improper parent material which is non-conforming.
3. Objective: This Non-Modification Service Bulletin provides the procedure to remove, inspect, and replace the suspected No. 4 Bearing Rear Cooling Air Duct, PN 2A3808-01 from the Engines provided in Table 1 at the next exposure. If a No. 4 Bearing Rear Cooling Air Duct is installed which has a lot number 405215-0, 405604-0 or 408310-0 marked adjacent to the part number, then the part must be replaced with a conforming No. 4 Bearing Rear Cooling Air Duct. If the present subject part is not from the suspect lot number group, then the removed No. 4 Bearing Rear

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Cooling Air Duct can be re-installed on the engine after re-identifying the part with the NMSB "72-0640" number.

4. Substantiation: The impact of the non-conformance is the reduced strength capability of the stud made from the improper material. However the threaded portion of the stud will not be distressed during assembly or in operation, thus the non-conformance does not directly affect the part performance.
5. Effects of Non-Modification Bulletin on:
 - 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.

Description

Remove, inspect and replace the No. 4 Bearing Rear Cooling Air Duct per the procedure provided in Accomplishment Instructions.

Compliance

Category 6

Accomplish when the subassembly (i.e. modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

Approval Data

The compliance statement and the procedures described in this Non-Modification Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model listed.

Manpower

1. In Service
 - Not Applicable.
2. At Overhaul
 - A. To remove the No. 4 Bearing Rear Cooling Air Duct 0.4
 - B. To inspect and mark the part..... 0.2
 - C. To install the No. 4 Bearing Rear Cooling Air Duct 0.4
3. Total Necessary Man-hours 1.0

Weight and Balance

1. Weight Change

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None.

2. Moment Arm

No Effect.

3. Datum

Engine Front Mount Centerline (Power Plant Station (PPS) 100)

Electrical Load Data

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

Software Accomplishment Summary

Not Applicable.

References

1. ATA Locator — 72-43-30.
2. Internal Reference No. — EA 13VC016.
3. V2500 Standard Practices/Processes Manual (E-V2500-1IA), Chapter/Section 70-09-00.
4. V2500 Engine Illustrated Parts Catalogs (S-V2500-2IA, S-V2500-2IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, S-V2500-7IB), Chapter/Section 72-43-30.
5. V2500 Engine Illustrated Parts Catalogs (S-V2500-2SA, S-V2500-2SB, S-V2500-2NA, S-V2500-2NB, S-V2500-5SA, S-V2500-5SB, S-V2500-5NA, S-V2500-5NB, S-V2500-6SA, S-V2500-6SB, S-V2500-6NA, S-V2500-6NB, S-V2500-7SA, S-V2500-7SB, S-V2500-7NA, S-V2500-7NB), Chapter/Section 72-43-30.
6. V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-00-43.

Other Publications Affected

None.

Interchangeability of Parts

Old and new parts are directly interchangeable.

Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (No)

Added Data (Yes)

Revision to Table of Limits (No)

Inspection Procedures (No)

Material Information

Material — Price and Availability

1. There is no new material cost to do this Service Bulletin when the part modification procedure is used.

Industry Support Program

Not Applicable.

The material data that follows is for each engine.

For V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5 Engines:

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
	1	*	DUCT, COOLING AIR NO. 4 BEARING	2A3808-01 (72-43-30-01-010A)	(4)(X)

Instructions/Disposition Code Statements:

Parts Modification Conditions

Estimated part prices are provided when they are available at time of publication. The Estimate of Unit Price is only for planning purposes and does not constitute a firm quotation. An asterisk (*) is shown where part pricing information was unavailable. In either case, contact IAE Spares for firm quotations.

- (4) Do an inspection as specified in the Accomplishment Instructions.

Spare Parts Availability

- (X) See Reference 4, or 5., Illustrated Parts Catalog for applicable replacement part.

Vendor Services or Special Components/Materials

Vendor Services or Special Components/Materials

IAE Designation	Vendor Designation	Name	Vendor Name & Address
2A3808-01	2A3808-01	No. 4 Bearing Rear Cooling Air Duct	Pratt & Whitney Aircraft Customer Satisfaction Clinic Building 220, Well 4, Column D-16 Aircraft Road Middletown, CT 06457 USA Attention: Gerry Griffin

Tooling — Price and Availability

Special tools are not required to accomplish this Service Bulletin.

Reidentified Parts

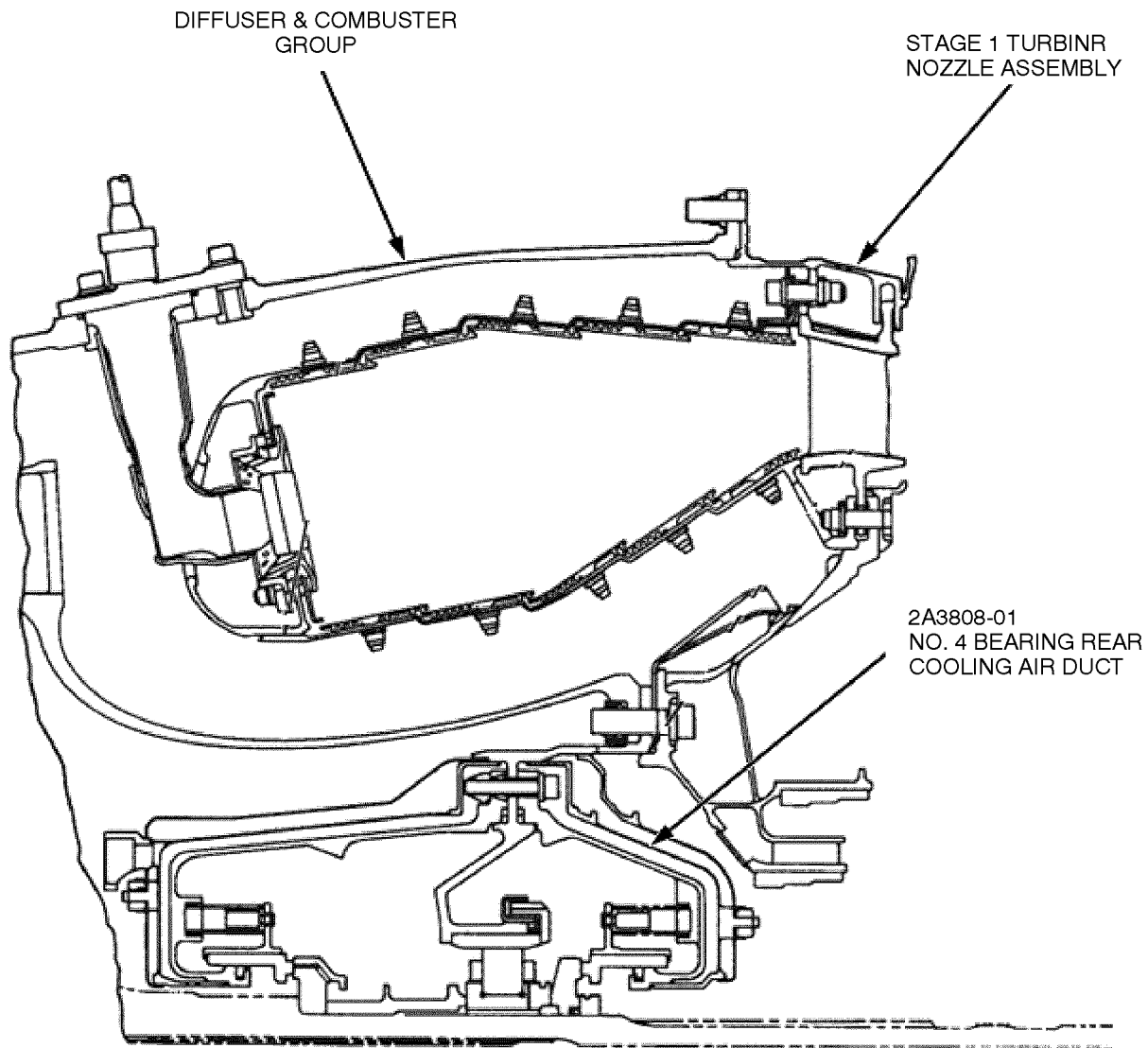
Not Applicable.

Other Material Information Data

Not Applicable.

Accomplishment Instructions

1. Remove the No. 4 Bearing Rear Cooling Air Duct, PN 2A3808-01 from the No. 4 Bearing and Rear Compartment. Refer to Reference 6, Engine Manual Task 72-00-43-020-001. See Figure 1 (Sheets 1 and 2).
 - A. Locate the lot number on the No. 4 Bearing Rear Cooling Air Duct marked adjacent to the part number. See Figure 1 (Sheet 2) for location of the lot number.
 - B. If the lot number marked is 405215-0, 405604-0 or 408310-0, remove the part from service and return to the Vendor listed in Vendor Services or Special Components/Materials Section. Obtain a conforming No. 4 Bearing Rear Cooling Air Duct, PN 2A3808-01.
 - C. Mark the conforming part (or) re-installed part at the location shown in Figure 1, Sheet 2 with this Non-Modification Service Bulletin number as "72-0640". See Reference 3, Standard Practices Manual, Chapter/Section 70-09-00, Marking of Parts. Approved marking methods are deep electrolytic etch, vibropeen, engrave (manual or mechanical), drag impression or deep dot peen.
 - D. If the lot number marked was other than 405215-0, 405604-0 or 408310-0, then re-install the removed No. 4 Bearing Rear Cooling Air Duct, PN 2A3808-01 after marking the part.
2. Install the No. 4 Bearing Rear Cooling Air Duct PN 2A3808-01 on the No. 4 Bearing and Rear Compartment. Refer to Reference 6, Engine Manual Task 72-00-43-420-001.
3. Recording Instructions
 - A. A record of accomplishment is required.



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LOCATION OF NO. 4 BEARING COMPARTMENT AND MARKING LOCATION
FIGURE 1, SHEET 1

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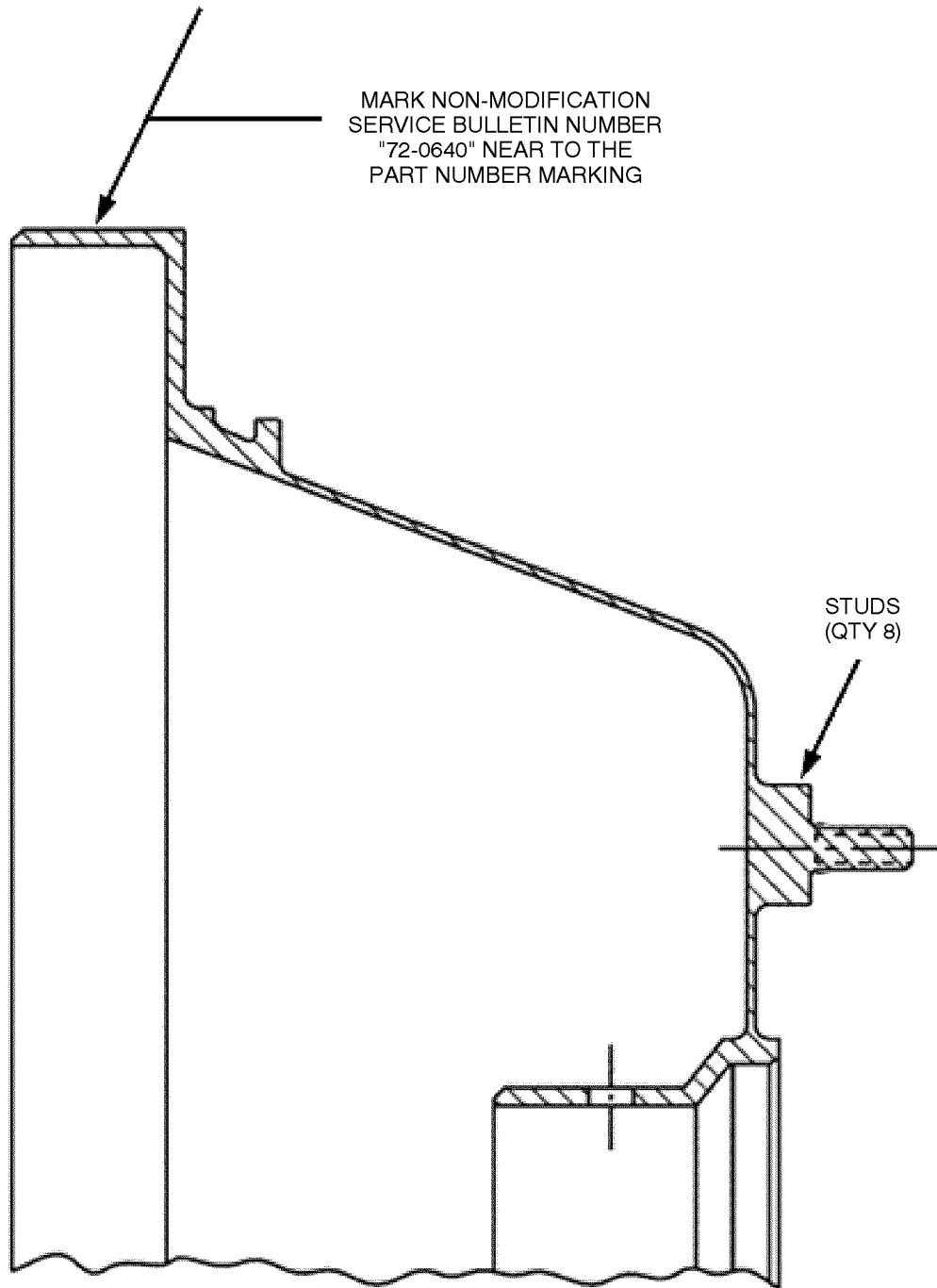
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LOT NUMBER MARKED HERE
(ADJACENT TO PART NUMBER MARKING)

MARK NON-MODIFICATION
SERVICE BULLETIN NUMBER
"72-0640" NEAR TO THE
PART NUMBER MARKING



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2A3808-01
NO. 4 BEARING REAR COOLING AIR DUCT

LOCATION OF NO. 4 BEARING COMPARTMENT AND MARKING LOCATION
FIGURE 1, SHEET 2

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Appendix

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EA13VC016	FS/CMS