

## **SERVICE BULLETIN**

# NON-MODIFICATION SERVICE BULLETIN – TURBINE COOLING AIR (TCA) TUBES – INSPECTION FOR CABLE OR LOCKWIRE INSTALLATION

## MODEL APPLICATION

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

## **BULLETIN ISSUE SEQUENCE**

V2500 Series 75-0124

ATA NUMBER

75-23-49

## IAE PROPRIETARY INFORMATION

This document is the property of International Aero Engines (IAE). You may not possess, use, copy or disclose this document or any information in it, for any purpose, including without limitation to design, manufacture, or repair parts, or obtain FAA or other government approval to do so, without IAE's express written permission. Neither receipt nor possession of this document alone, from any source, constitutes such permission. Possession, use, copying or disclosure by anyone without IAE's express written permission is not authorized and may result in criminal and/or civil liability.

Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

**Compliance Category** 

3

P&W Distribution Code

V2500

December 3/15



## Summary

The purpose of this Service Bulletin is to visually inspect the Turbine Cooling Air (TCA) tube bolts at four locations to ensure cable or lockwire is installed and is not broken. If the cable is broken, correct the condition per the Standard Practice Manual (SPM) Reference 2 and report it to the local IAE Field Service Representative.

#### Planning Information

#### **Effectivity Data**

#### **Engine Models Applicable**

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5 Engine Serial No. V15001 and Up

#### Concurrent Requirements

There are no concurrent requirements.

#### Reason

- 1. Condition: Turbine Cooling Air (TCA) tube flange bolts that attach the tubes to the High Pressure Turbine (HPT) Case have become loose on first run engines while in-service.
- Background: The cable was found broken and the TCA tube flange bolt at the HPT
  case was found loose or had backed out on a number of in-service engines. In some
  cases, bolt liberation resulted in thrust reverser damage.
- 3. Objective: Visually inspect the four (4) each TCA tube bolts that are installed and secured correctly with cable or lockwire at four (4) locations on the HPT case. This NMSB provides instructions to inspect the four (4) locations for broken cable.
- Substantiation: A visual inspection will ensure that the bolts are properly secured by cable or lockwire.
- 5. Effects of Bulletin on:

Removal/Installation: Not affected.

Disassembly/Assembly: Not affected.

Cleaning: Not affected.

Inspection/Check: Not Affected.

Repair: Not affected.

Testing: Not affected.

Supplemental Information

None.

## Description

This Non-Modification Service Bulletin introduces an inspection method to ensure the TCA tube flange bolts are properly secured with cable or lockwire.

#### Compliance

Category 3

Accomplish at or before the next aircraft "A" check and at each subsequent "C" check.

December 3/15



## Approval Data

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

The aircraft Type Certificate holder has been informed of this inspection.

#### Manpower

1.	In Service	
2.	At Overhaul	
		Not Applicable.

#### Weight and Balance

Weight Change

None.

Moment Arm

No Effect.

3. Datum

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

## **Electrical Load Data**

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

#### Software Accomplishment Summary

Not Applicable.

#### References

NOTE:

In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, a Technical Publications conversion table is provided in the Appendix.

- 1. ATA Locator 75-23-49.
- 2. V2500 Standard Practices and Processes, P&W Ref. PN 2A4414, Chapter/Section 70-42-05,400-501, 70-42-08, 400-501.
- 3. A319/320/321 Aircraft Maintenance Manual, Chapter/Section 75-23-49, Installation of the Turbine Cooling Air (TCA) Tubes.
- 4. A319/320/321 Aircraft Maintenance Manual, Chapter/Section 70-40-11, Install Lockwire.

#### Other Publications Affected

None.

## Interchangeability of Parts

Not Applicable

December 3/15



## 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.
- 2. There is no kit provided to do this Service Bulletin.

## Tooling — Price and Availability

Special tools are not required to accomplish this Service Bulletin.

## Reidentified Parts

Not Applicable.

## Other Material Information Data

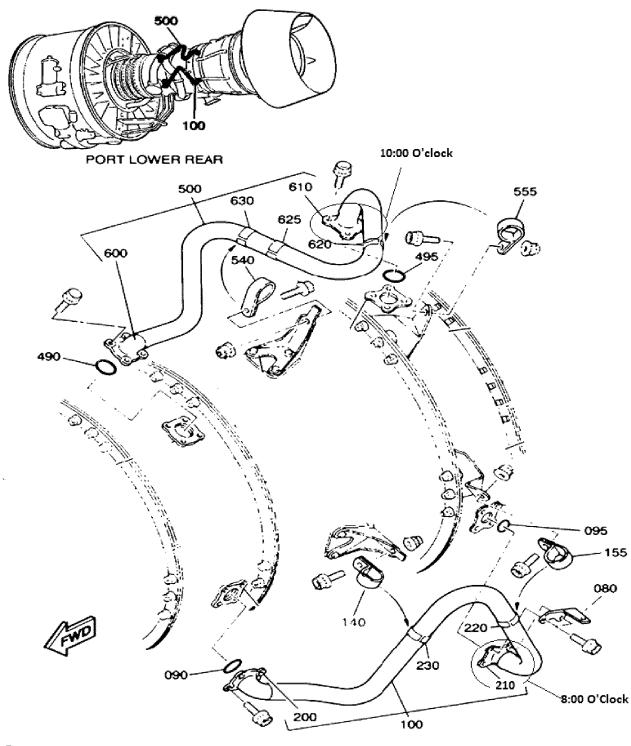
Not Applicable.



## Accomplishment Instructions

- 1. Visual Inspection
  - A. At "A" Check and each subsequent aircraft "C" check, visually inspect that four bolts are properly installed and secured with PN AS3510-02 Cable or lockwire at four locations on the outer diameter of the HPT case at 2:00, 4:00, 8:00 and 10:00 O'clock positions.
  - B. If PN AS3510-02 Cable or lockwire is found broken or loose, correct the condition per the SPM Reference 2 and report it to the local IAE Field Service Representative.
- 2. Recording Instructions
  - A. A record of accomplishment is required.



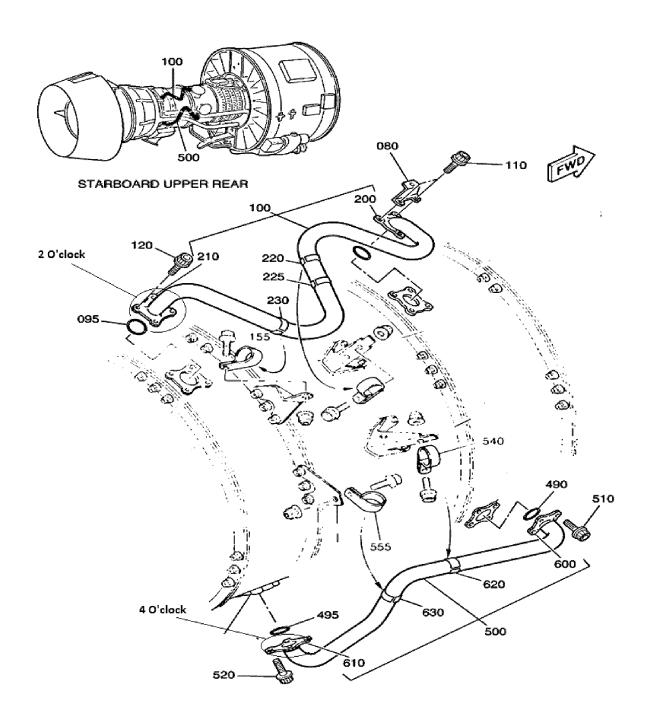


B526000

LOCATION OF THE TCA TUBE BOLTS 75-23-42 FIGURE 1

December 3/15





B526001

LOCATION OF THE TCA TUBE BOLTS 75-23-43 FIGURE 2

December 3/15



## **Appendix**

## Added Data

## Internal Reference Information

Revision No.	Reference Document	Origination
Original	EA15VC617	JO/IEL

## NOTE:

In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, the following Technical Publications cross reference table is provided.

## Technical Publications Cross Reference Table

Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
SPPM (SPM) — A1, A5, D5	All	SPP-V2500-1IA	2A4414