

Teardown Inspection Report

Subject: Hartzell Turbocharger Teardown Inspection

Inspection Date: August 22, 2024

Inspection Location: Continental Aerospace Technologies
[REDACTED]
Mobile, Alabama 36615

Inspector: Rodney J. Doll

Introduction

This report details the findings from the teardown inspection of a Hartzell turbocharger. The turbocharger was internally coated with oil, and no defects were identified during the inspection.

Turbocharger Details

Model: Hartzell 406610-9029

Serial Number: H-5GR00047

Operating Hours: Unknown

Date of Manufacture: Unknown

Inspection Objectives

The primary objectives of this teardown inspection were to:

- Assess the internal condition of the turbocharger.
- Identify any defects or irregularities.
- Verify the integrity and functionality of the internal components.

Inspection Procedure

Disassembly:

The turbocharger was disassembled all components were carefully removed and inspected for signs of wear, damage, or contamination. Components were covered in a thick coat of oil and debris. Each internal component, including the rotor assembly, bearings, and housing, was inspected visually. No visible signs of damage or wear, the inspection focused on identifying cracks, erosion, excessive wear, and any foreign materials.

Findings

Oil Coating:

The internal surfaces of the turbocharger were coated with a layer of burnt oil and debris.

Component Condition:

Rotor Assembly:

No visible defects, corrosion, or signs of imbalance. The rotor blades and shaft exhibited normal wear patterns.

Bearings:

Bearings showed no evidence of excessive wear, scoring, or damage.

Housing:

The housing was free from cracks, dents, or signs of structural failure.

Conclusion

The teardown inspection of the Hartzell turbocharger revealed no defects. The internal oil coating was consistent with oil evacuation from the turbocharger exhaust. All components were in satisfactory condition.



Rodney J Doll
Aviation Safety Inspector
Federal Aviation Administration