



Bradley Miller
Aviation Accident Investigator
AS-CEN

Date: July 31, 2025

Subject: CEN24FA212 - Maintenance Review Summary

The following maintenance documentation was obtained during the investigation:

Airframe logbook: February 10, 1997 to August 21, 2023

Engine logbook: February 10, 1997 to August 1, 2023

Propeller logbook: February 10, 1997 to August 1, 2023

Professional Aircraft Services Documents: November 14, 2022 to June 6, 2024

A review of the maintenance documentation showed the last annual inspection entries for the airframe, engine, and propeller; were dated August 1, 2023, roughly eleven months before the accident, at an airplane total time of 6,091.2 hours.

The annual inspection was performed by Professional Aircraft Services. John Berens, an inspector for the Federal Aviation Administration (FAA), Denver Flight Standards District Office (FSDO), was contacted on July 31, 2025. He stated that he had interacted with the shop frequently and he believed them to be competent, well equipped, and had no issues with them.

Using maintenance entries between August 16, 2016, and August 21, 2023, the aircraft total times indicated the airplane had flown 170 hours in the 7 years preceding the last annual inspection.

A review of the preceding five years of maintenance entries showed one entry specifically related to the turbocharger system which noted that the technician had inspected the V-band clamps on the last annual inspection.

The most recent maintenance actions performed on the accident airplane were completed the day before the accident. The airplane had been dropped off on Monday, the week of the accident, for an oil change.

The following written statements were provided by the maintenance technicians who performed the work. See Figure 1.

N150WR. Randy Knox Jr. Drained engine oil. Removed and inspected oil filter, nothing found suspect in oil filter. I replaced 4 bolts, washers and nuts on the front muffler clamp, and torqued as required. I replaced 2 bolts, washers and nuts on the R/H side exhaust mount brackets connected on to the front muffler clamps, and torqued as required. I replaced 3 bolts, washers and nuts on the muffler rear ball joint flange, and torqued as required. I replaced 3 bolts, washers and nuts on the turbo flange to exhaust manifold housing, and torqued as required by removing 1 bolt at a time, replacing, and torquing before moving to the next bolt. All torque specs were referenced using the applicable aircraft maintenance manual. I replaced the engine air filter with new. I performed a full ground power run-up, no defects were noted. Engine was visually leak checked post engine run-up, no leaks or defects noted.

Randy Knox Jr. A&P [REDACTED] 6/13/2024

N150WR. Terry Cecil. Our customer, Tom Sawyer, had scheduled an oil change to be completed on Tuesday, June 4th 2024. He delivered his airplane to our shop on Monday, the afternoon of the 3rd of June 2024. We completed the oil and filter change as per the aircraft maintenance and engine manuals from our Veyron(formerly known as ATP) publication website. We routinely inspect engines and engine compartment visually for any defects. I spoke with my technician, Randy Knox Jr., about the few discrepancies he had noted. He completed the corrective actions for these discrepancies. I visually inspected the engine and engine compartment including the work accomplished for any defects, no defects noted. The aircraft was cleaned and test run including full power run-up satisfactory. Leak checks, none found. We completed our work order paperwork. Aircraft was returned to the customer Thursday June 6 2024 at mid day.

Terry Cecil A&P [REDACTED] 6/13/2024

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Figure 1. Statements from maintenance technicians.

To better understand where on the engine the bolts mentioned in the preceding statements were located the following diagrams were constructed using the technician's statements, the shop work orders, and the illustrated parts catalog (IPC) for the accident airplane. See Figures 2-5.

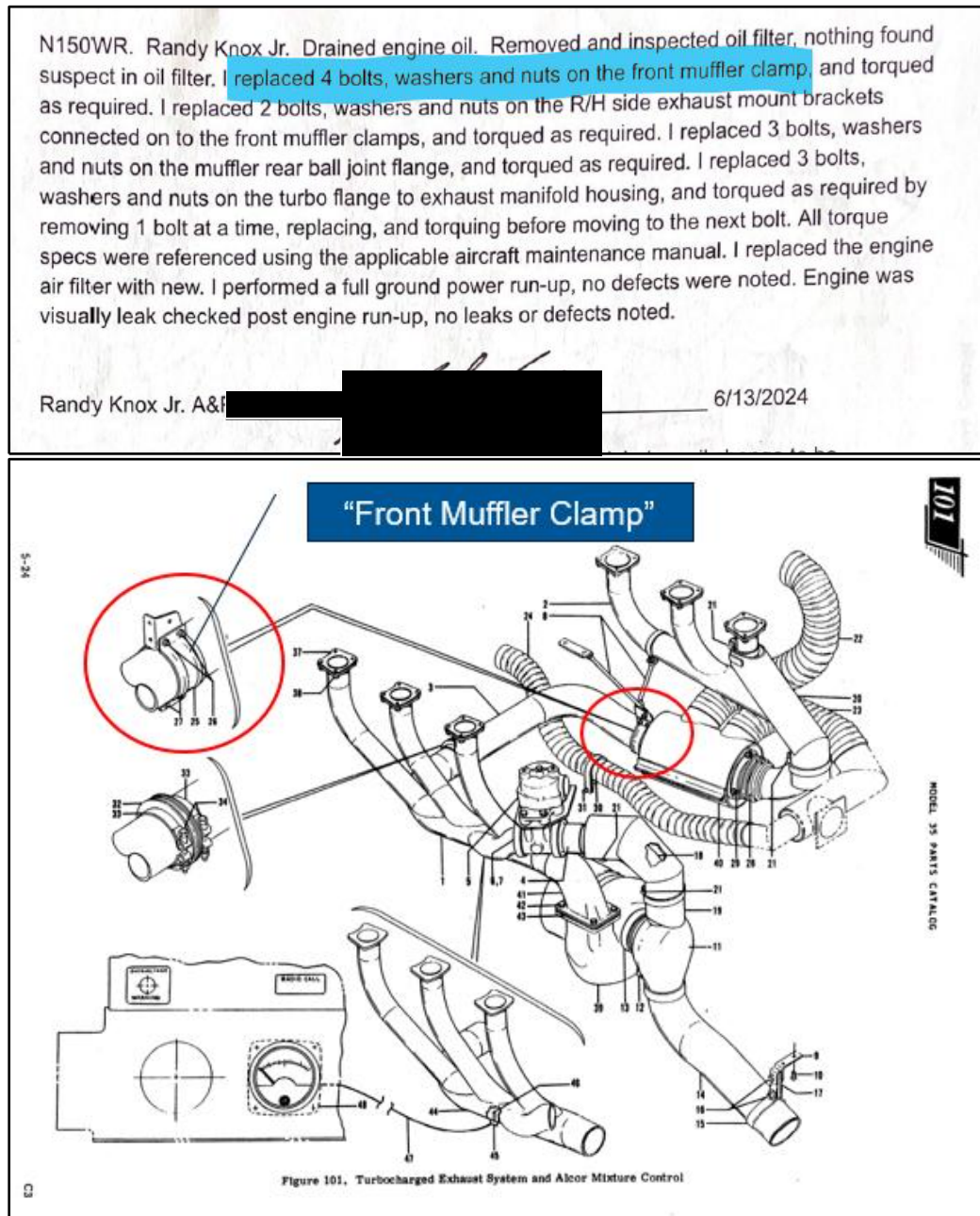


Figure 2. Front muffler clamp hardware.

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Randy Knox Jr. A&P

6/13/2024

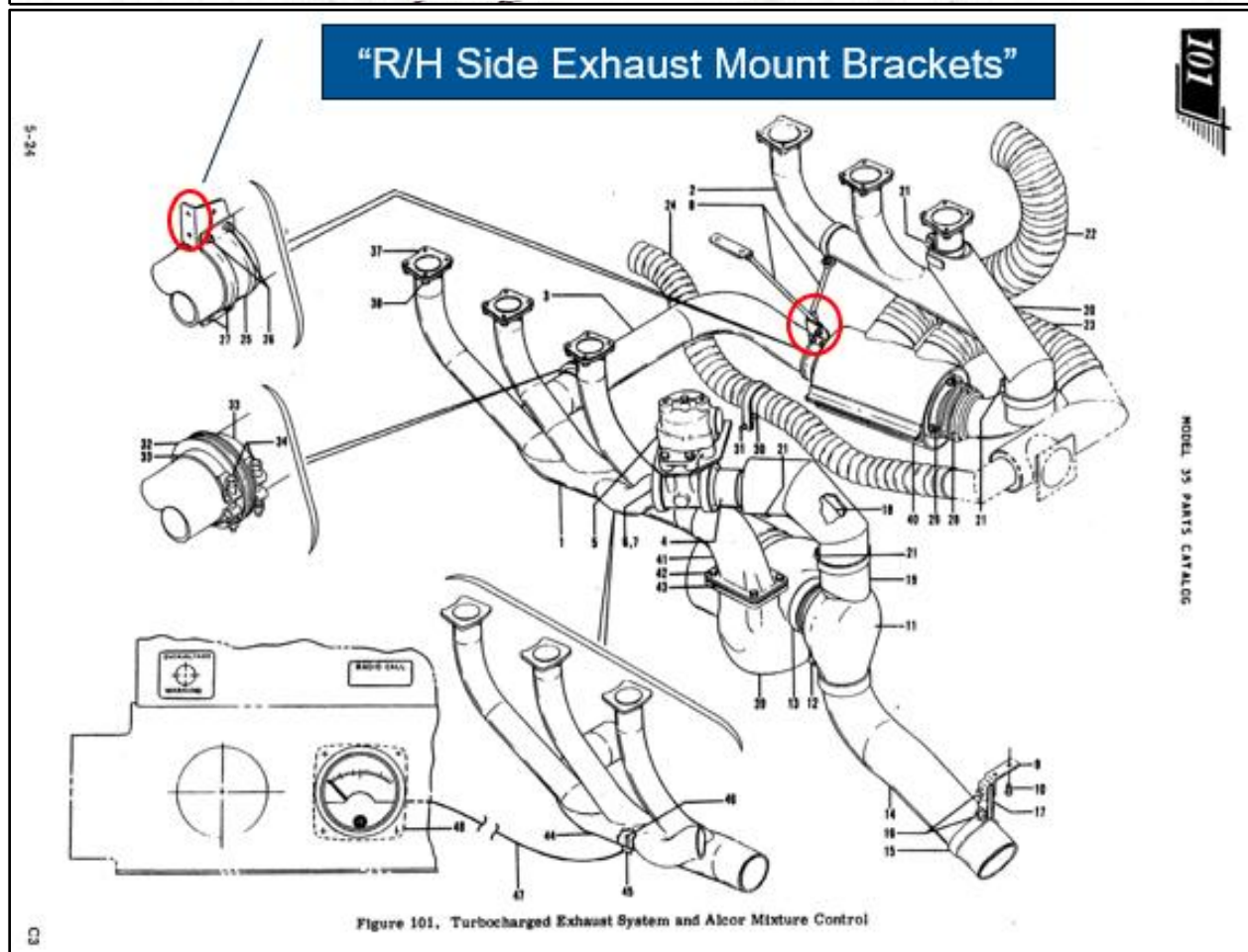


Figure 3. Exhaust mount brackets hardware.

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Randy Knox Jr. A&P [REDACTED]

6/13/2024

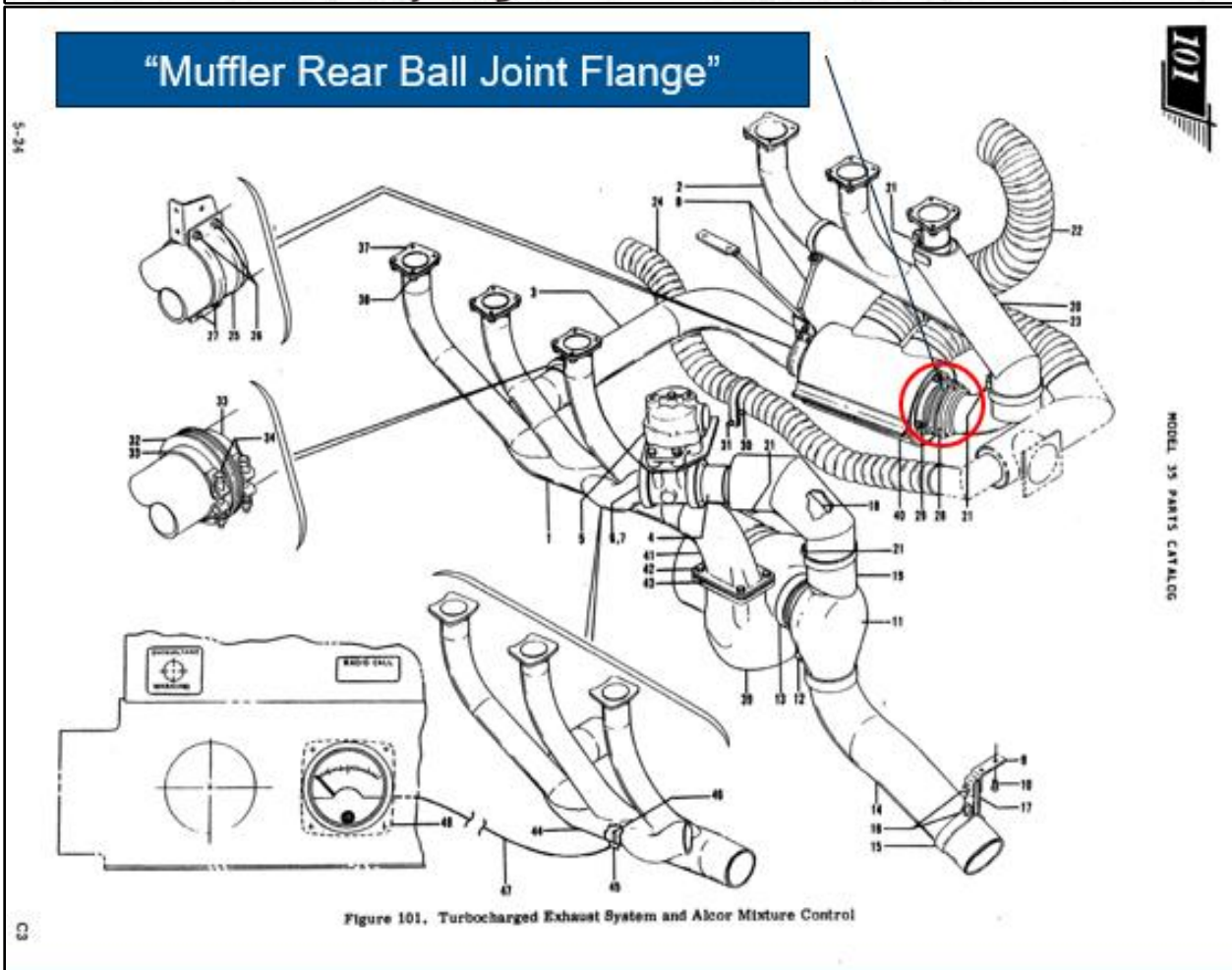


Figure 4. Muffler rear ball joint flange hardware.

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Randy Knox Jr. A&P [REDACTED]

6/13/2024

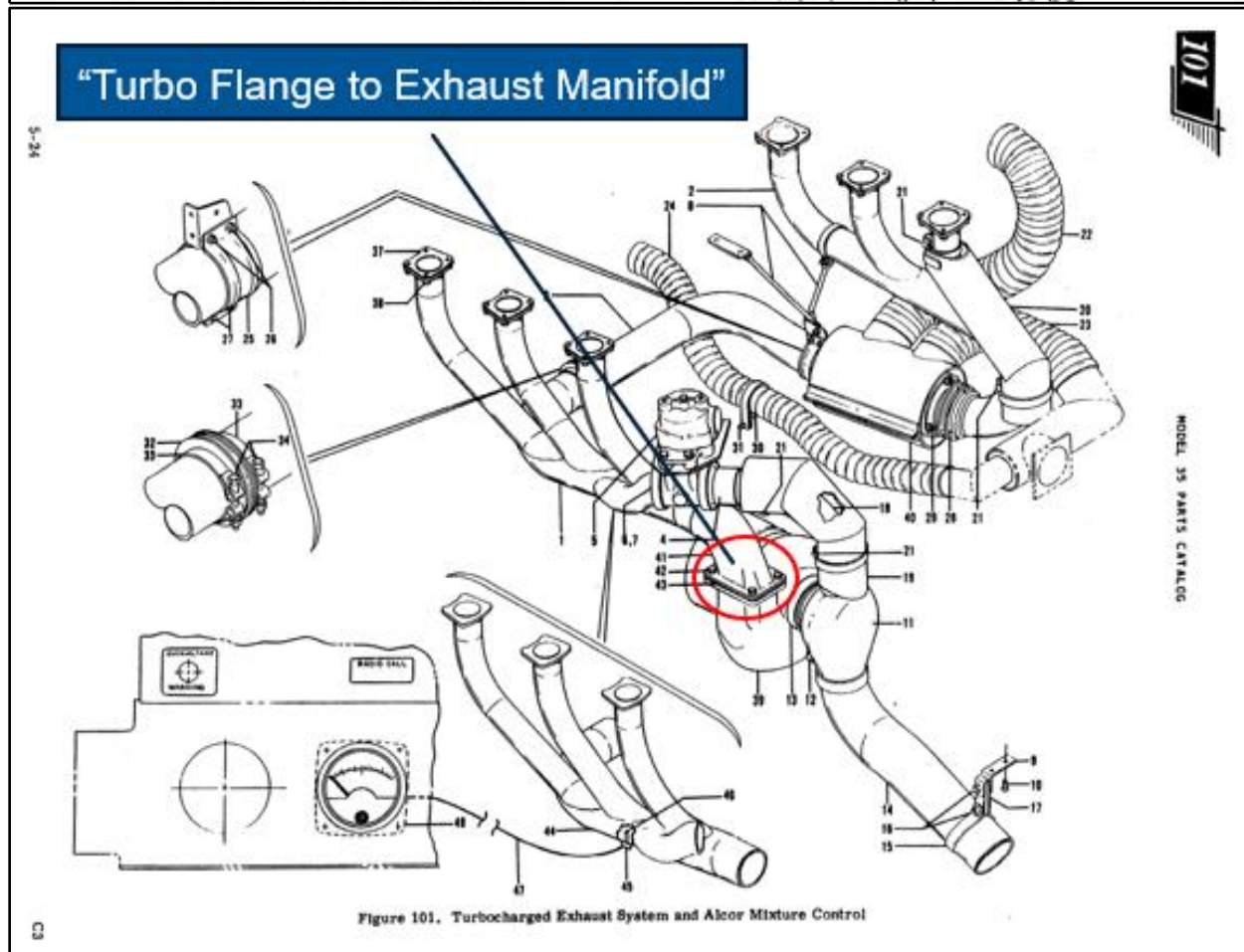


Figure 5. Turbo flange to exhaust manifold hardware.

During the wreckage layout examination, prior to talking to the technicians, three newer bolts were noted on the turbocharger exhaust flange that match the location described by the technicians. See Figure 6.



Figure 6. New bolts found during wreckage examination.