



Memorandum For Record

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Eastern Region

Date: June 14, 2022
NTSB Accident Number: ERA20LA322

An engine examination was performed by NTSB, along with a representative of the engine manufacturer, and Federal Aviation Administration (FAA) inspector on November 17, 2020. As part of the engine examination the following was noted:

- At the consent of the NTSB investigator-in-charge, the engine had been previously been removed with FAA oversight and was found suspended from an engine stand.
- Initial observations indicated that cylinder No. 2 was separated from the engine case and was being held on by the exhaust and air induction tubes.
- The remaining cylinders were found attached via their normal hardware
- No. 2 Cylinder removed
- Fractured No. 2 cylinder stud from 10 o'clock position found finger tight and could be backed all the way out with just fingers.
- Attempted to remove cylinders #3 & #4 but it appeared the cylinder skirts for both were peened over and would not allow removal.
- Drilled hole in upper case half above #3 cylinder to allow borescope into case. Observed the #4 connecting rod was separated.
- The Engine was not disassemble further after review of the engine monitor data.

The following parts of the engine were retained for examination by the NTSB Materials Laboratory:

- Fractured No. 2 cylinder stud from 10 o'clock position found finger tight
- Excised No. 2 cylinder stud from the 2 o'clock position (The FAA sent in the mating piece)
- Excised No. 2 cylinder stud from the 1 o'clock position
- Three cylinder hold down nuts from the No. 2 cylinder
- Excised No. 2 cylinder stud from the 11 o'clock position
- Excised No. 2 cylinder stud from the 4 o'clock position (found with nut)
- Fractured stud with attached nut found in cylinder
- Two fractured studs/bolts with attached nuts
- No. 2 cylinder minus piston and rings with section of crankcase still attached at the lower portion of the cylinder