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Eastern Region

Date: March 18, 2025

Subject: ERA25FA020 Alternator Bench Test

Contact: David Swartzendruber, B&C Specialty Products

The alternator from N510G was sent to the manufacturer in Newton, Kansas for a functional bench test. The bench test was conducted by Mr. Swartzendruber with NTSB investigator Ryan Enders present.

The alternator was installed on a belt driven test bench. Continuity through the alternator output leads was established. A continuity test of the leads to the alternator case did not reveal any short circuits. With the motor operating at 3500RPM, the circuit showed 14.43V with an amperage output of 1.1A. When additional 3A loads were applied to the circuit, the alternator was capable of producing 9A and maintained 14V. The alternator rated output is 8A.