



## MEMORANDUM OF RECORD

**Eric Alleyne**  
**Air Safety Investigator**  
**National Transportation Safety Board**  
**Office of Aviation Safety - Eastern**  
**Region**

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**NTSB Case Number: ERA16LA268**

**Subject: Engine run up and Fuel pump examination**

**Parties: FAA inspector and Continental Motors investigator**

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The initial run indicated the engine was running significantly richer than specified by the TSIO-550-C overhaul and maintenance manual; the indicated fuel flow was approximately 43 gallons per hour at 35.5" manifold pressure versus the specified 37.3 gallons per hour. When the engine was accelerated past the max manifold pressure specified of 35.5", the indicated fuel flow went above 50 gallons per hour with a manifold pressure of approximately 38"; the engine would then completely lose engine power. After the initial run the engine fuel system was adjusted for a leaner mixture. With the fuel system adjusted for a fuel flow of 34.2 gallons per hour at 35.5" manifold pressure the engine would run normally at 35.5" manifold pressure as well if the engine was operated while being over-boosted by not throttle limiting the manifold pressure.

After adjustment of the engine fuel system for proper fuel flow at full throttle there were no anomalies noted that would have prevented normal operation or production of rated horsepower.

The fuel pump was shipped with the drive coupling and the drive coupling remained intact. The fuel pump was undamaged and there were no signs of fuel leaks noted with the fuel pump. The fuel pump was placed on a production test bench and was tested at idle RPM as well as full power RPM. The fuel pump operated normally and there were no anomalies noted with the fuel pump.