



MEMORANDUM FOR RECORD

Lynn L. Spencer
Air Safety Investigator
Eastern Region Aviation

October 12, 2018

Subject: ERA19LA004 Smithville, TN
Activity: Engine Teardown Inspection Summary, N8371P, Piper PA-24-180

This is the summary of the engine teardown inspections for N8371P, a Piper PA-24-180. The accident that occurred on October 3, 2018, at Smithville, TN. J. Mike Childers, Lycoming Engines, and William K. Keeney, FAA Aviation Safety Inspector, completed the inspection at AMF Aviation in Springfield, TN on October 11, 2018.

During the inspection the following items were removed from the engine and checked:

- Spark Plugs (8)
- Magnetos (2)
- Carburetor
- Engine drive fuel pump
- Electric fuel pump
- Propeller governor
- Engine oil filter
- Engine oil pickup screen

The 8 spark plugs were removed and visually checked, they appeared correctly with no damage present.

Both magnetos were removed and tested, with a drill. They appeared to function properly.

The carburetor was removed from the aircraft and disassembled. Fuel was present in the carburetor, all the components appeared serviceable no damage or debris found.

The engine driven fuel pump was removed; fuel was present in the pump. When manually actuated the inlet side produced suction. The pump was disassembled, no damage or debris found.

The firewall mounted electric fuel pump screen was removed; fuel was present in the pump, no debris or damage found.

The propeller governor was removed and checked, it appeared to function properly with no apparent damage.

The engine oil filter was removed and cut open, no debris or damage found.

The engine oil pickup screen was removed, no debris or damage found.

The fuel found in the carburetor and fuel pumps did not appear to contain any water or debris.

The engine was manually rotated, all 4 cylinders made compression when checked. Normal operation of the crankshaft, camshaft and valve train was observed when the engine was rotated. A borescope was used to view the pistons inside the cylinders, no piston or cylinder damage was present.

Summary: Nothing was found during the inspection that would have prevented the engine from operating normally.