

Frank D. Napolitano A&P I/A

BRIGHTON, MI.48114

Dated completed 05-16-2024

Owner:

Aircraft N N29TM SN. /Aircraft model: Long EZ

Aircraft TT: UNKNOWN Tach T UNKNOWN

Engine Type : Lycoming : Model O 320 A3B SN: L-5398-27 TSMOH: UNKNOWN

One this Day 05-16-2024 this ENGINE was inspected IAW & REF. TO, PART 43 APPENDIX D 100 HR INSPECTION.

I was requested by Brain Rutt with the NTSB to perform a 100 inspection on a Lycomming O 320 A3B engine on Experimental aircraft N29TM . I was accompanied by Bruce Arthurs, Aviation Safety Inspector East Michigan FSDO.

Unfortunately do to the current condition of the aircraft at this time a proper inspection was not viable. The visual inspection showed the engine was mostly intact with the Magneto and oil filter removed, the propeller was broken .

Removed the 4 DENSO IWM27 top spark pluges to gain access to inner cylinder, pistons and valves.

Performed Bore scope inspection of all 4 cylinders , corrosion and scoring was found in all the cylinders, all valves where intact.

Removed all 4 rocker cover to expose rocker arms and push rods, no failures noted.

Rotated the propeller to witness that each cylinder functions properly, pistons moved full stork, valves opened and closed and push rods moved and rotated as they should.

Performed cold compression leak down check using 80 psi air pressure.

Cyl # 1(20 / 80) #2 (20/80) #3 (50/80) #4 (10/80)

While performing the compression check it was noted the engine was binding while rotating the prop.

The low compression results are most likely due to not being run for approximately 1 year and the condition it has been stored.

The engine still had approx. 7Qt of oil in the crank case.

Performed Oil Filter inspection, Cut the oil filter open and inspect the paper element for metal, non was found.

The fuel injection system appeared to be intact , but due the condition of the aircraft we where unable properly inspect the system. This fuel injection system is a experimental fuel system, this engine comes from Lycoming as a carbureted engine .

E MAG. P MODEL # P113 / SN# 613 AND MAG E113 SN# 466 , where removed and sent back to the manufacture for inspection function , No problems where found by the manufacture and the Magnetos where returned to the aircraft.

If additional information is need please don't hesitate to contact me.

**Frank D. Napolitano
A&P/IA**