



*Beckett Aero LLC*

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Michael Beckett A&P # [REDACTED]  
[REDACTED]

## **Inspection Report**

Date & Time: 2-16-2020

Location: [REDACTED] Spanaway, Wa 98387

Aircraft: N4673R

Scope: Attempt engine start

In order to attempt an engine start the nose of the aircraft had to be lifted and blocks placed under the fuselage to ensure prop clearance due to the nose gear being damaged. This was accomplished using an excavator. The excavator was then placed behind the tail of the aircraft and the tail was attached to the excavator to secure it from moving forward.

I then pulled the propeller through all 4 compression cycles and found all cylinders to have adequate compression for start. A short piece of tubing was attached to the right wing fuel line and the other end of the tubing was put in a jerry can of fuel. The electric fuel pump was turned on and the fuel system primed.

In preparation to attempt an engine start the fuel primer was pumped 4-6 times, it felt like it wasn't developing pressure and pumping fuel. That is when we noticed that fuel was leaking from the number 2 cylinder primer line at the fitting where it connects to the T fitting. It didn't appear to be a cracked line, it was leaking from under the fitting, possibly a loose fitting. The leak was significant, most of the fuel pressure was coming out of the fitting and not entering the cylinders when priming. I decided to leave it alone and attempt to start the engine as is.

The engine was then started, after the initial start it felt like it was misfiring on one cylinder but it soon smoothed out. I increased RPMs to around 1500 RPM and then shut the engine down. We then ensured the aircraft was secure and restarted, this time the engine ran much smoother after the initial start, I then ran the engine up to a high RPM and then back down and eventually back up again to full static.

### **Conclusion:**

The engine ran well and was able to idle and produce full static RPM. Oil and fuel pressures were within spec. I attribute the initial roughness after start to the engine sitting for 4 months since the accident and possibly having a sticky valve.