



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

February 27, 2020

ENGINE EXAMINATION SUMMARY

WPR20FA018

This document contains 6 embedded photos.

A. ACCIDENT

Location: Brawley, California
Date: October 31, 2019
Aircraft: Cessna 150A, N7158X
NTSB Investigator-in-Charge: Tealeye Cornejo

B. ATTENDEES

Joshua Cawthra
National Transportation Safety Board
Federal Way, Washington

Chris Lang
Continental Motors Inc.
Mobile, Alabama

C. DETAILS OF THE INVESTIGATION

1.0 Engine Examination

Examination of the recovered engine, a Continental Motors O-200-A – S/N: 253911, revealed that the engine remained attached to the engine mount, however, was separated from the airframe. The propeller and vacuum pump were separated from the engine. The crankshaft propeller flange exhibited impact damage. The number 1 and 3 upper ignition harnesses were impact damaged. The top spark plugs were removed along with the rocker box covers. The crankshaft was rotated by hand using a hand tool. Thumb compression was obtained on all 4 cylinders. Spark was obtained on all 8 ignition leads (1 and 3 were cut). Equal movement of the intake and exhaust rocker arms was observed when the crankshaft was rotated.

The carburetor remained partially attached by its cables, scat hose, airbox bracket, and fuel lines, however, was separated at its mounting flange. The inlet fuel screen was removed and found to be free of debris. The throttle and mixture arms moved from stop to stop by hand. The carburetor was disassembled. No debris was observed within the float bowl. The floats were intact. The needle valve appeared to be seating normally.

The upper spark plugs exhibited worn out – normal signatures with dark gray colored deposits within the electrode area.

The exhaust was impact damaged. The shrouds were removed, and no evidence of any exhaust leaks was observed.

The induction system was intact.

The airbox was impact damaged.

D. Photos



Photo 1: View of the engine.



Photo 2: View of the carburetor.

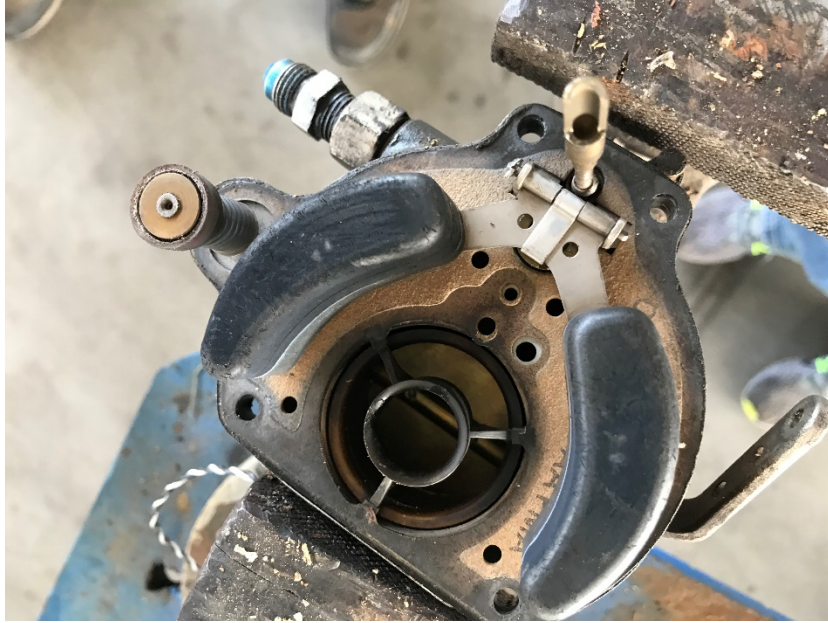


Photo 3: View of the carburetor floats.



Photo 4: View of the carburetor float bowl.



Photo 5: View of the carburetor fuel screen.



Photo 6: Upper spark plugs (1 through 4, left to right)

Submitted by: Joshua Cawthra