



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

January 12, 2021

CARBURETOR EXAMINATION

WPR18LA042

This document contains 5 embedded photos.

A. PRELIMINARY REPORT

On December 3, 2017, about 1325 Pacific standard time, a Cessna 152, N714TD, sustained substantial damage during a forced landing after a loss of engine power near Snohomish County Airport - Paine Field (PAE) Everett, Washington. The certified flight instructor and student pilot sustained minor injuries. The airplane was registered to Morcom Aviation Services Inc., and operated by Regal Air under the provisions of 14 Code of Federal Regulations Part 91 as an instructional flight. Visual meteorological conditions prevailed and no flight plan was filed for the local flight. The flight departed PAE about 1240.

According to the flight instructor, after conducting local area work, they returned to the airport to conduct practice touch and go landings. On the first approach, the airplane was high on the glide path and a go-around was initiated. During the go-around, about 150 ft above ground level, the engine sputtered and lost power. The flight instructor stated that they were unable to make the runway and elected to land in a nearby field. During the landing sequence, the airplane struck a tree and a utility pole.

Postaccident examination of the airplane by the Federal Aviation Administration, revealed substantial damage to the wings. The airplane was recovered to a secure storage facility for further examination.

B. EXAMINATION PARTICIPANTS:

Andrew Swick
Aviation Accident Investigator
National Transportation Safety Board
Phoenix, Arizona

C. SUMMARY

Examination of the carburetor took place at the above investigator's field office in Phoenix, Arizona on January 12, 2021. The examination of the carburetor revealed no evidence of preexisting malfunctions or failures that would have precluded normal operation.

D. DETAILS OF THE INVESTIGATION

1.0 Examination

The carburetor shipment was intact and sealed. The carburetor was removed from the shipping material and was undamaged. The throttle valve and linkage moved freely by hand and no fuel exited from the accelerator pump jet. The mixture lever moved freely by hand with no restrictions. The throttle body valve and internal surfaces were dark in color.

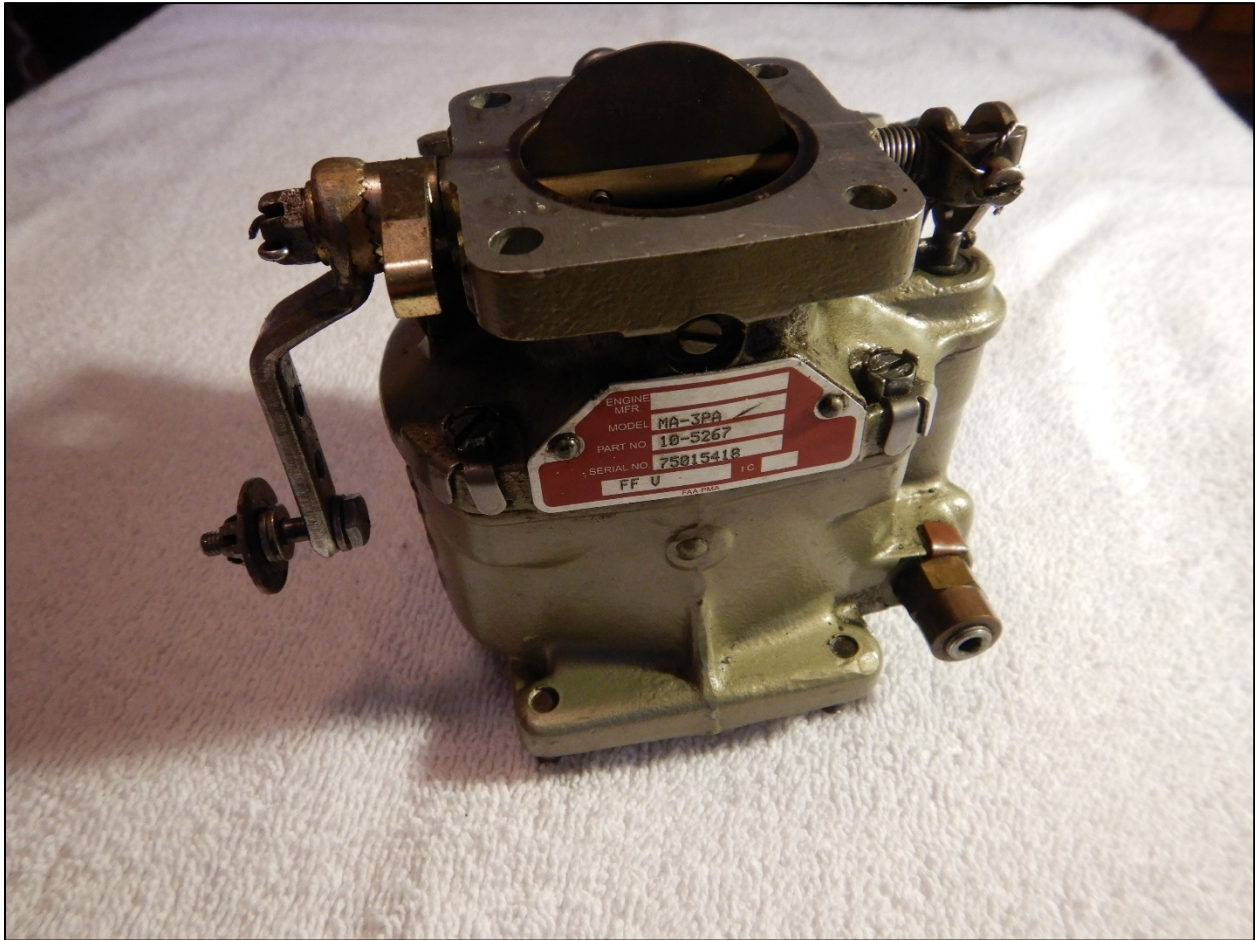


Figure 1-Carburetor assembly.

During the disassembly of the carburetor, the float bowl gasket was attached to both the float bowl and the top side of the carburetor. A razor blade was used to separate the gasket from the carburetor. The carburetor float bowl gasket was damaged during its removal. The float bowl was empty of fuel and was free of contaminants and debris.

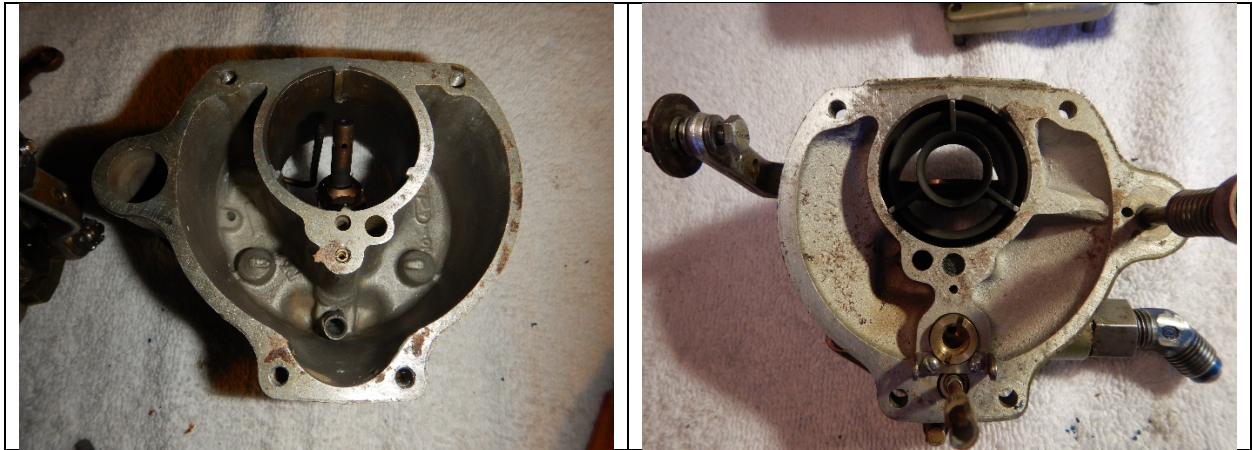


Figure 2-Carburetor bowl and top side.

The float and linkage assembly and the bowl gasket were removed. An oily residue was found on the interior surface of the top of the carburetor. The needle valve was removed and was unremarkable. The needle valve seat was visible and unremarkable. The gascolator inlet screen was removed and clear of debris. Jets and ports were unobstructed when air was introduced.

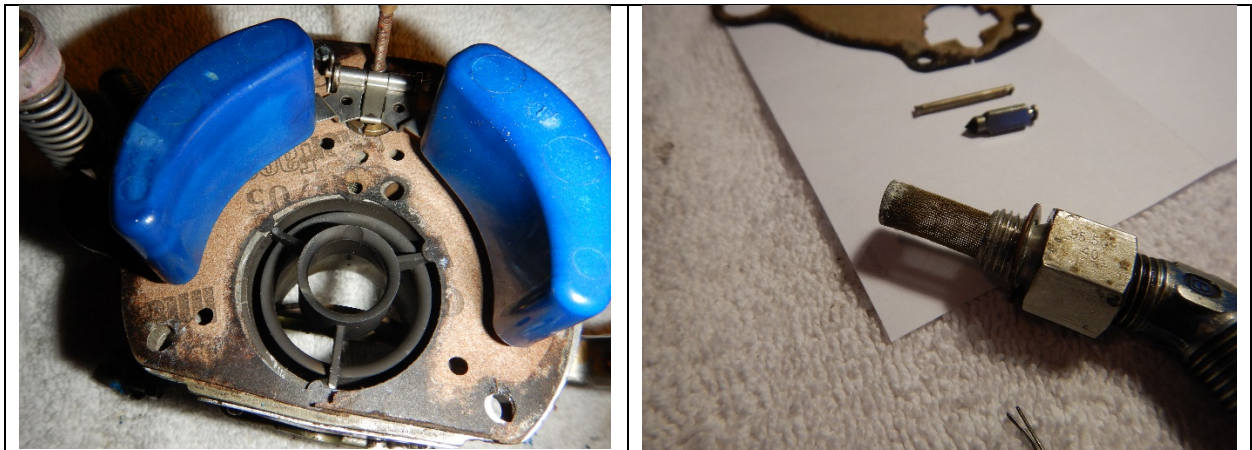


Figure 3-Float assembly and inlet fuel screen.

Submitted by: Andrew Swick