

Mike's Aircraft Fuel Metering Service



September 16, 2021

Mike Folkerts

National Transportation Safety Board, Central Region



Mr. Folkerts,

I have had a chance to tear down and visually inspect the condition of the Marvel Schebler carburetor that you sent to us from Accident Number CEN21LA211 (Model MA-4SPA, P/N 10-5217, S/N 75958110). It was reported to us that this was involved in an engine fire that occurred after landing. This was a teardown inspection only. I did not clean or do any additional inspection other than the visual teardown inspection. I will detail the various components below.

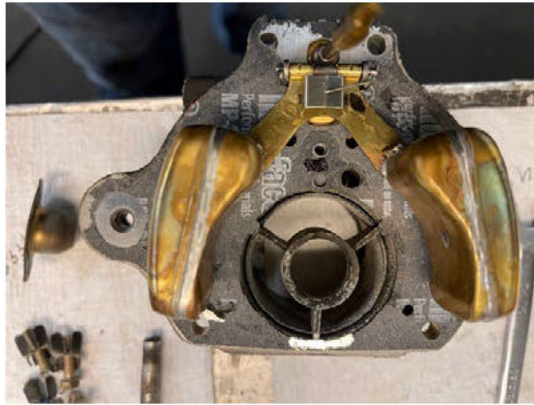
The exterior shows signs of some heat, soot, and extinguishing agent along with some common surface corrosion. All parts appeared to be assembled correctly and no signs of a leak.



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During disassembly, nothing abnormal was noted. It appeared to be assembled correctly. The inside of the bowl was clean and did not show any signs of discoloring from heat. The float appeared to be set correctly. This unit did have a PMA brass float installed instead of the Marvel Schebler blue epoxy float. The float appeared to be in serviceable condition. The venturi did show a small amount of blue fuel stain where it fits against the throat of the throttle body. This did not appear to be excessive; some is usually found on normal teardown of an in-service carburetor. The throttle shaft had some wear but was normal wear. The needle/seat assembly, mixture control shaft, nozzle, idle tube, and accelerator pump appeared to be in serviceable condition. The throttle lever appeared serviceable, but the mixture lever appeared to have some discoloration from the heat and/or soot. The 4 screws that attach the throttle body and bowl were tight and no movement was observed between the halves. All lock washer appeared locked and undisturbed. The finger screen on the inlet adapter was clean.



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In conclusion, I found nothing out of the normal visual wear and tear on the unit other than the signs of the fire. Due to the corrosion on the throat of the unit and the close proximity of an engine fire, I would recommend replacing versus trying to overhaul this unit.

Sincerely,

Kevin L. Felts

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