



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

March 30, 2022

FUEL SYSTEM COMPONENTS EXAMINATION

WPR21LA140

This document contains 2 embedded photos.

A. ACCIDENT

Location:	Everett, Washington
Date:	March 23, 2021
Aircraft:	Cessna, 172, N2164Z
NTSB Investigator-in-Charge:	Maja Smith

B. PARTICIPANTS

Eric M. Gutierrez
Air Safety Investigator
National Transportation Safety Board
Federal Way, Washington

Peter Nielson
Product Support Manager
Precision Airmotive LLC
Arlington, Washington

C. SUMMARY

The examination of the fuel flow divider and servo did not reveal any mechanical failures or malfunctions that would have precluded normal operation.

D. DETAILS OF THE INVESTIGATION

1.0 Fuel Servo Examination

Manufacturer: Precision Airmotive
Model Number: RSA-5AD1
Part Number: 2576536-2
Serial Number: 70196302

Examination of the servo revealed that the throttle lever was intact and moved freely from stop to stop. The mixture control lever remained attached to the throttle body was damaged but moved freely from stop to stop. The fuel inlet screen was removed, and no debris was observed. The servo was connected to a test stand and performed within manufacturers specifications.

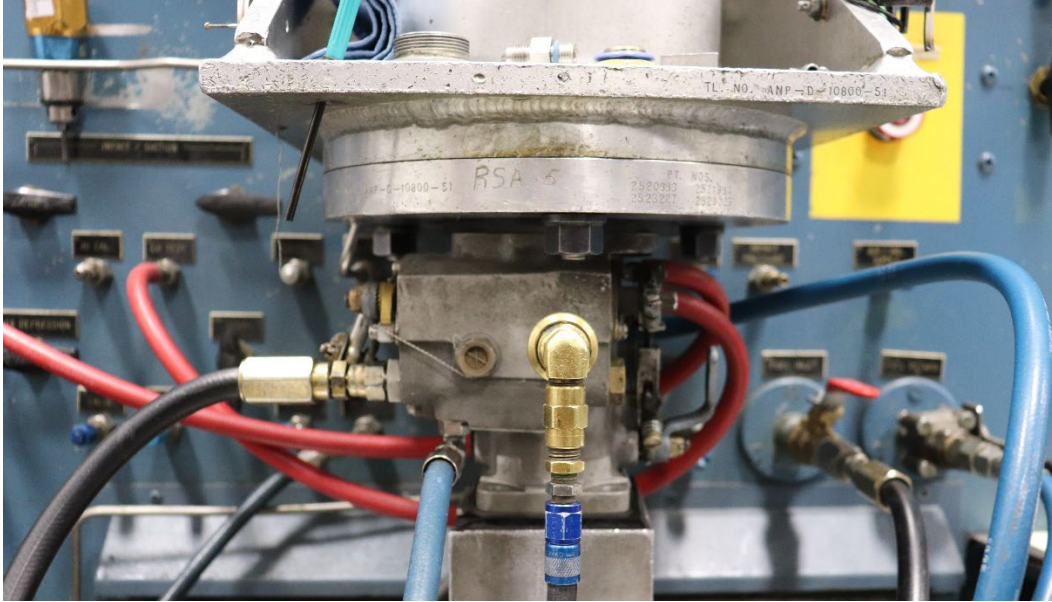


Figure 1: View of fuel servo on test stand (photo courtesy of the NTSB)

2.0 Fuel Flow Divider Examination

Examination of the fuel flow divider revealed it remained intact and undamaged. The fuel flow manifold valve was connected to a test stand and performed within manufacturers specifications when tested at low flow. When tested at a medium flow, one port was 6 pounds lower than the manufacturers specifications; however, the other 3 ports tested within manufacturers specifications at a medium flow. Per the manufacturer, the port that had the 6 lbs lower fuel flow output would not have an adverse effect on the engine ability to produce power.

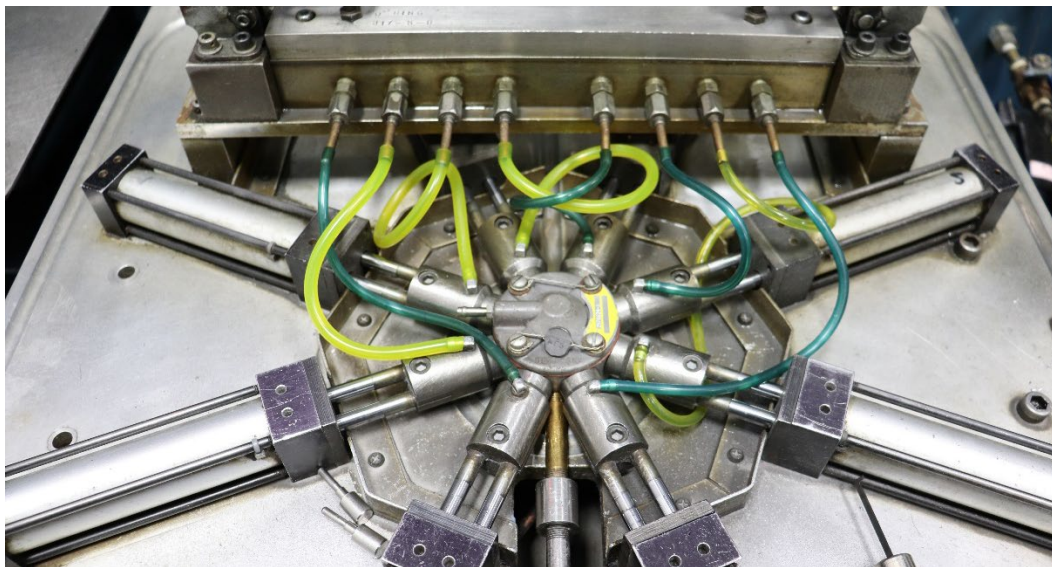


Figure 2: View of fuel flow divider on test stand (photo courtesy of the NTSB)

Submitted by: Eric M. Gutierrez