



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

October 26, 2021

FUEL SERVO EXAMINATION

WPR21LA119

This document contains 3 embedded photos.

A. ACCIDENT

Location:	Livermore, California
Date:	February 23, 2021
Aircraft:	Mooney, M20E, N3254F
NTSB Investigator-in-Charge:	Tealeye Cornejo

B. PARTICIPANTS

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

Charles W. Estes
Accessories Dept. Manager
Ly-Con Aircraft Engines
Visalia, California

C. SUMMARY

The examination of the fuel servo revealed extensive corrosion and debris in the regulator body preventing normal operation.

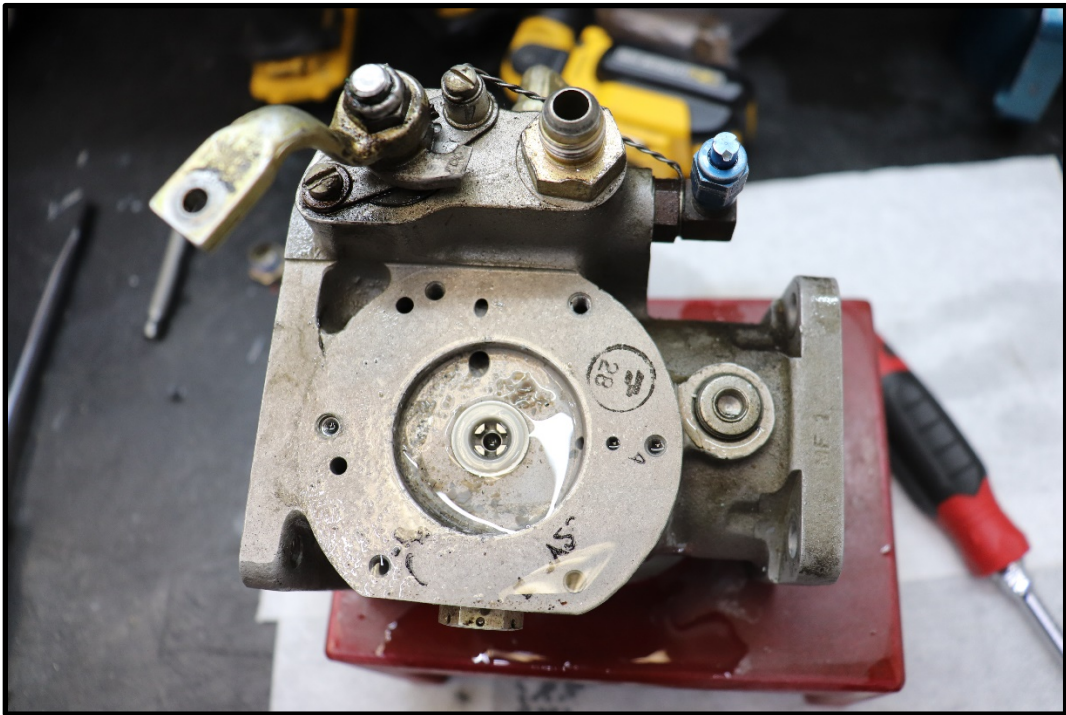
D. DETAILS OF THE INVESTIGATION

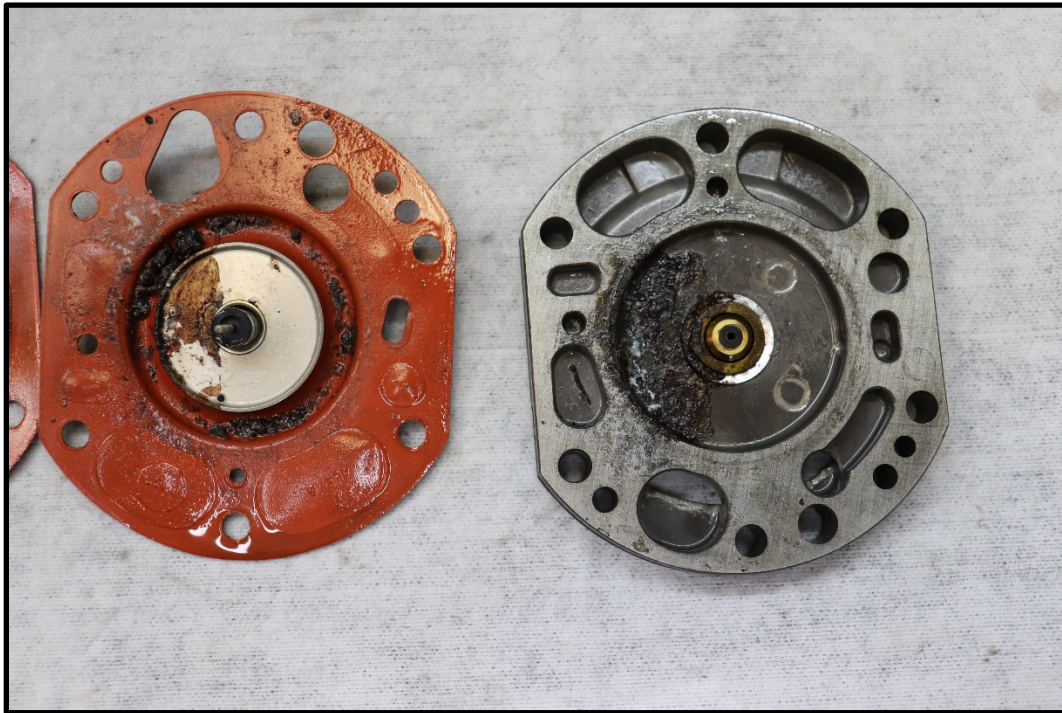
1.0 Fuel Servo

Manufacturer: Precision Airmotive Corporation
Part Number: 2524054-11
Model Number: RSA-5AD1
Serial Number: 70058502

A visual examination of the recovered fuel servo revealed that, the fuel servo was intact and undamaged. The throttle and mixture levers were intact, undamaged, and moved freely from stop to stop when manually manipulated. The fuel servo inlet fuel screen was removed, and debris was observed.

The fuel servo was connected to a test stand, and a functional test was attempted; however, no fuel flowed through the servo during the flow test. The fuel servo was removed from the test stand and disassembled. Extensive corrosion and debris were observed in the regulator center body and diaphragm assembly, which prevented normal operation. As a result of the corrosion in the regulator center body further functional tests were not possible.





Submitted by: Eric M. Gutierrez