



Memorandum For Record

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NTSB Accident Number: ERA23LA231

Following recovery of the wreckage to the salvage facility, with NTSB oversight, an attempt to start the engine was unsuccessful.

During a follow-up investigation of the engine and its systems, the carburetor control was manipulated by hand and the carburetor accelerator pump sprayed from 2 nozzles into the carburetor throat. A shutoff valve on the fuel supply line from the fuel tank to the airframe fuel strainer in the cockpit was safety wired in the open position. The fuel supply system was from the center fuel tank through a shutoff valve in the cockpit, to an airframe fuel strainer, forward to an auxiliary fuel pump in the engine compartment, up to an engine-driven fuel pump, then up to the carburetor. No leaks were noted.

Inspection of the ignition system revealed all spark plugs had the same color with no lead noted. Testing of the spark plugs was not possible. The distributor cap was removed from the distributor and no carbon tracking was noted inside the cap. The rotor of the distributor was tightly secured. Battery power was turned on and electrical power to the distributor was confirmed but there was no electrical power to the ignition module. Inspection of the electrical connector at the distributor revealed the female spade electrical terminal connector of the red colored (power) electrical wire was separated from the plastic connector and also from its mating male connector at the distributor (Figure 1). The red colored electrical wire (power) goes from the distributor to the ignition module providing power to it. Closer inspection of the female spade electrical connector and plastic connector revealed there was no positive locking resistance of the female spade terminal electrical connector inside the plastic connector. The female spade electrical connector of the separated wire was placed on its mating male connector at the distributor and the connection was tight. Inspection of the length of wire from the ignition module revealed there was no clamp along its approximate 3-inch length.



Figure 1: Annotated AMF Aviation, LLC Digital Photograph. Arrow Points to Separated Red Colored Electrical Wire at Distributor. The Wire Provides Power to the Ignition Module.