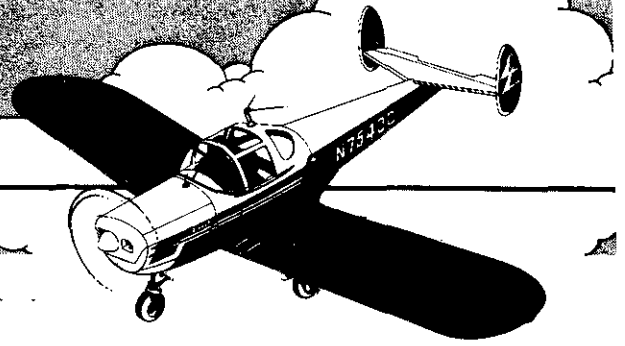


SERVICE BULLETIN

Forney



No. 111

Date February 8, 1960

F.A.A. APPROVED

Subject: Fuel System Modification For Drainage, Pertinent To
All Airplanes Serial No. 113 To 5714 Inclusive

Problem:

Several airplanes have encountered engine failure due to water contamination in the fuel system. Water will accumulate due to condensation, seepage of rain water around fuel caps and through the vent hole, and during refueling if fuel loading systems are contaminated. Laboratory tests have revealed that water cannot be effectively drained by the gascolator to assure that water will not reach the carburetor. Water collected in the fuselage tank will not drain from the tank to the gascolator until a considerable amount of fuel has been drained, and due to the relatively flat bottom in the fuselage tank, water can be retained though the entire tank is drained of fuel.

Recommended Correction:

The Model F-1A airplane has a drainable sump area in the fuselage tank. The sump area holds approximately 3/4 quart and can be drained off external to the airplane. Fuel to the carburetor is taken off at a higher level in the tank where fuel is not likely to be contaminated. Small amounts of water can be safely held in the sump area of the fuselage tank and drained off during pre-flight check.

A Forney Modification Kit (FMK #29) is available which provides the necessary parts, instructions, and installation drawing (F48215S) to modify all fuselage tanks (Serial #113 to #5714 inclusive). This kit contains a new finger strainer, tank flanged fitting, fuel line, quick drains, and the necessary mounting brackets and sealing compound. The kit provides for effective drainage of the fuselage tank and wing tanks by the use of quick drain fixtures. (If the airplane already has quick drains in each wing tank, this part of the modification will be omitted from the kit upon request.) It will also provide approximately a 3/4 quart sump area in the fuselage tank as on the Model F-1A and fuel to the carburetor will be taken off at a higher level in the tank to decrease the possibility of engine failure due to water contaminated fuel.

This modification is one of great importance in that it will definitely improve the safety characteristics of the airplane. The modification is not complicated to perform, but it is recommended that the work be done by a qualified aircraft mechanic.