

85-06-04 PIPER: Amendment 39-5021. Applies to all Models of J-3, J-4, J-5, PA-11, PA-12, PA-14, PA-15, PA-16, PA-17, PA-18, PA-18A, PA-20, and PA-22 series airplanes (all serial numbers) certificated in any category.

Compliance: Required within the next 100 hours time-in-service after the effective date of this AD or at the next annual inspection, whichever occurs first, unless fuel tank quick drain valves have previously been installed except that the placard described in paragraph (e) must be installed in these airplanes.

To prevent engine stoppage or malfunction due to the accumulation of water or other contaminants in the fuel system, accomplish the following:

(a) For Models J-3, J-4 (S/N 4-1 through 4-1377, 4-1379 through 4-1384), PA-15 and PA-17 series airplanes with fuselage fuel tanks and 3/8 National Pipe Thread (NPT) drain boss:

(1) Drain fuel tank.

(2) Remove fuel tank drain plug, Piper Part Number 70151, from the lower aft portion of the fuel tank.

(3) Install elbow, Piper Part Number 458-883, (AN915-3D) reducer/adaptor, Piper Part Number 453-618, (AN912-3D) and drain valve, Piper Part Number 22179-00 or FAA approved equivalents per Figure 1 of this AD.

(4) Install clear plastic tube 1/4 inch I.D. x 3/8 inch O.D. (Available from Piper Aircraft Corporation as P/N 189543 in one foot length increments.) The tubing shall be long enough to extend from the drain valve to a minimum of 1 inch below the lower fuselage skin.

(5) Add appropriate clamp to the tube at the drain valve and secure plastic tube to the existing fuel feed line and/or adjacent airplane structure.

(6) Route the tube clear of the rudder pedals or pilots feet and drill a 5/8 inch hole in the fuselage bottom skin near the centerline if the engine has two exhaust tailpipes or on the side opposite the engine exhaust tailpipe if it has only one.

(7) Install 3/8 inch I.D. grommet (AN931-6-10 or equivalent) in the lower fuselage skin where the clear plastic drain tube exits the fuselage.

(8) Add fuel, check for leaks and assure that the fuel drains clear of the airplane.

(b) For Model PA-16 series airplanes which have a wing tank with a 1/4 NPT drain boss and a fuselage tank with a 3/8 NPT drain boss, install quick drain valves, Piper P/Ns 22179-00 and 491-806 or FAA approved equivalents in accordance with the following procedure:

(1) Install fuselage quick drain Piper P/N 22179-00 by repeating the procedure set forth in paragraph (a) steps (1) through (8).

(2) Drain wing fuel tank.

(3) Remove the inspection cover located approximately 4 inches outboard of the butt rib and approximately 5 inches forward of the rear spar.

(4) Remove the fuel tank drain plug, Piper Part Number 70151.

(5) Install reducer adapter Piper P/N 453-616 (AN912-1D) and fuel drain valve 491-806 or FAA approved equivalent per Figure 2 of this AD.

(6) Add a 3/4 inch diameter hole in the inspection cover at the quick drain location.

(7) Add fuel, check for leaks, check for proper quick drain operation and install inspection cover.

(c) For Models J-4 (S/N 4-1378, 4-1385 and up), J-5, PA-12 and PA-14 series airplanes with wing tanks incorporating a 3/8 NPT drain boss inside the wing, install drain valve, Piper P/N 491-806 or FAA approved equivalent in accordance with the following procedure:

(1) Drain fuel tank.

(2) Remove the inspection cover located approximately 4 inches outboard of the butt rib and approximately 5 inches forward of the rear spar.

(3) Remove the fuel tank drain plug.

(4) Install special Piper adapter, Piper P/N 453-618 (AN912-3D) and fuel drain valve P/N 491-806 or FAA approved equivalents per Figure 2 of this AD.

(5) Add 3/4 inch diameter hole in the inspection cover at the quick drain location.

(6) Add fuel, check for leaks, check for proper operation of the quick drain valves and install inspection cover.

(d) For Models PA-11, PA-16, PA-18, PA-18A, PA-20 and PA-22 series airplanes which have wing fuel tanks incorporating a 1/4 NPT drain boss, install drain valve Piper P/N 491-806 or FAA approved equivalent in accordance with the following procedures:

(1) Drain fuel tank.

(2) Remove the inspection cover located approximately 4 inches outboard of the butt rib and approximately 5 inches forward of the rear spar.

(3) Remove the fuel tank drain plug.

(4) Install reducer/adapter Piper P/N 453-616 (AN912-1D) and fuel drain valve P/N 491-806 or FAA approved equivalents per Figure 2 of this AD.

(5) Add a 3/4 inch diameter hole in the inspection cover at the quick drain location.

(6) Add fuel, check for leaks, check for proper operation of the quick drain valve and install inspection cover.

NOTE: Drain valve, Piper P/N 491-806, is designed for use with sample cup, Piper P/N 67728-00. Piper Service Spares Letter SP-6 dated February 5, 1960, pertains to this subject.

(e) For all aircraft models affected by this AD, after complying with paragraphs (a) through (d) above, install a permanent placard in the cockpit in a location visible to the pilot, using letters 1/8 inch minimum height. The placard must read as follows:

"DRAIN ALL FUEL SUMPS BEFORE FIRST FLIGHT OF EACH DAY"

(f) Airplanes may be flown in accordance with FAR 21.197 to a location where this AD may be accomplished.

(g) An equivalent method of compliance with this AD may be used when approved by the Manager, Atlanta Aircraft Certification Office, ACE-115A, FAA, Central Region, 1075 Inner Loop Road, College Park, Georgia 30337; telephone (404) 763-7428.

This amendment becomes effective on May 4, 1985.

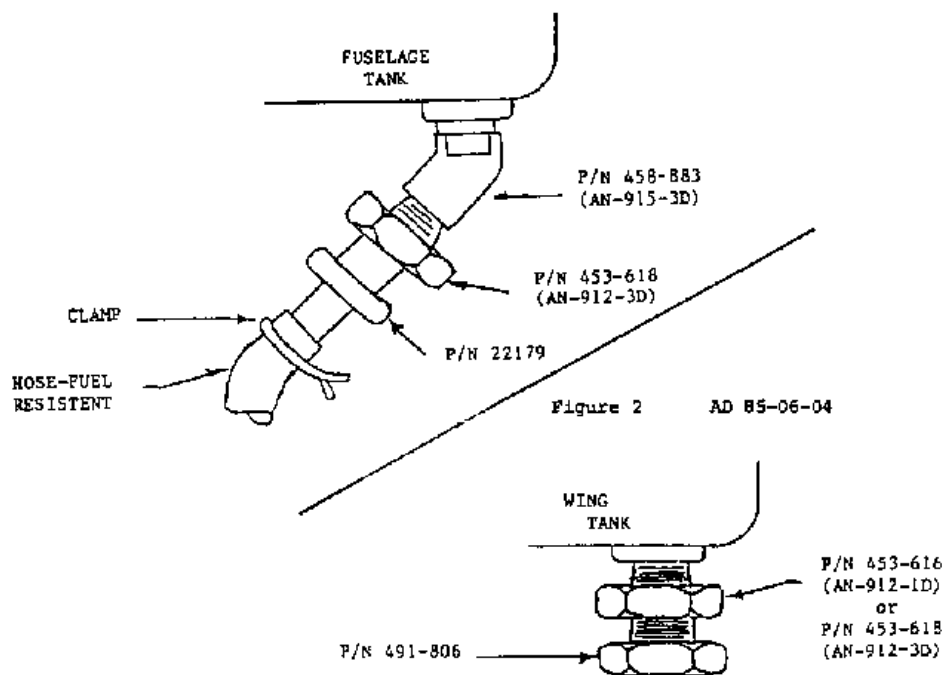


Figure 1
AD 85-06-04