



SERVICE No. 827A BULLETIN

Piper Aircraft Corporation
Vero Beach, Florida, U.S.A.

* PIPER CONSIDERS *
* COMPLIANCE MANDATORY *

Date November 4, 1988 M

(Service Bulletin No. 827A supersedes and voids Service Bulletin No. 827 dated April 12, 1986.)

This Service Bulletin is divided into TWO (2) PARTS. Check each PART for specific Subject, Compliance Time and Instructions.

Reason for Revision: Add PART II and Revise Instructions in PART I.

APPROVAL: The technical contents of this Service Bulletin have been approved by the F.A.A.

PART I

SUBJECT: Fuel System Draining Procedure - Water Contamination.

MODELS AFFECTED: PA-23-150/160 Apache
SERIAL NUMBERS AFFECTED: 23-1 through 23-2046

COMPLIANCE TIME: To be accomplished at each Pre-Flight Inspection.

PURPOSE: The fuel strainers are at the low point of the fuel system for each engine. However, opening the quick drain on the fuel strainer only drains the tank and fuel lines on the selected tank. Therefore, it is necessary to drain the system successively in all configurations, (i.e. with the selector on each main tank and each auxiliary tank).

The accumulation of water and/or sediment in the fuel tanks and related lines could cause rough engine operation or complete power interruption. Strict adherence to the preventive practice specified below will keep water accumulation to a minimum and prevent power interruption due to fuel system contamination.

INSTRUCTIONS:

NOTE: The following sections of the Service Bulletin refer to the Owner's Handbook and /or Pilot's Operating Manual. Therefore this Service Bulletin must be included with the applicable aircraft operating paperwork.

INSTRUCTIONS: Cont.Aircraft Systems Operating Instructions:

1. Fuel cells should be kept full of fuel during storage and the aircraft refueled as soon as possible after each flight to prevent accumulation of moisture and deterioration of the cells.
2. The fuel system must be drained daily prior to first flight and after refueling to avoid the accumulation of water and/or sediment using the following procedure.
3. The main fuel strainers are located in the inboard sides of the main wheel wells. They are fitted with quick drains and must be drained regularly through their access ports.
4. To drain main (and auxiliary fuel cells if installed), open the fuel strainer quick drain with the fuel selector on the main cell. Drain as required to produce one-half (1/2) pint or more of fuel, per cell. After completion of draining the main cell, select the auxiliary fuel cell (if installed) and repeat draining process. Repeat procedure on both left and right wing main (and auxiliary) fuel cells.
5. The crossfeed line drain valve control is mounted on the front face of the fuel control panel. To drain the crossfeed line, open the crossfeed valve and line drain, turn on the righthand electric fuel pump and allow to drain for a minimum of ten (10) seconds. Close crossfeed valve and turn off fuel pump. Open the line drain and turn on the lefthand electric fuel pump and allow to drain for a minimum of ten (10) seconds.

CAUTION: Aircraft must be in normal ground attitude on a level surface for proper draining. Fuel should be collected in a container and examined for water contamination. If water is present, repeat the above procedures until all water is removed. If it is observed that any fuel cell is draining slower than normal, a complete check of the system should be carried out to determine the cause before flight. Ice formation may cause slow fuel drainage when the aircraft has been exposed to below freezing temperatures. If this is the case, the aircraft should be placed in a warm hangar until normal fuel drainage is attained and all water removed.

Handling and Servicing:

6. Piper Service Bulletin No. 340 dated May 24, 1971 addresses fuel cell vent/drain lines, fuel cell caps and fuel cell filler compartment access cover seals. Compliance with Service Bulletin No. 340 annually or at each one-hundred (100) hours of operation is mandatory.
7. To minimize water contamination of the fuel during cleaning operations, avoid directing water into the vents, drain tubes, around sealed cover plates and filler cap access openings.

MATERIAL REQUIRED:

Not Applicable.

PART II

SUBJECT: Apache Dual - Fuel Drain Installation.

MODELS AFFECTED: SERIAL NUMBERS AFFECTED:

PA-23-150/160 Apache

23-1 through 23-2046

COMPLIANCE TIME: At the next regularly scheduled maintenance event but not to exceed the next one-hundred (100) hours of operation.

PURPOSE: PART II of this Service Bulletin announces the availability of an Apache Dual - Fuel Drain Installation Kit. Installation of this kit on the above listed aircraft, will aid in compliance with PART I of this Service Bulletin by installation of individual fuel cell drains. Instruction 4 of Part I can now be performed outside the aircraft by eliminating the need to individually select each fuel cell.

INSTRUCTIONS: All instructions necessary to accomplish this installation are contained in the Apache Dual - Fuel Drain Installation Kit, Piper Part Number 765-363.

MATERIAL REQUIRED: One (1) each Apache Dual - Fuel Drain Installation Kit, Piper Part Number 765-363, per aircraft.

AVAILABILITY OF PARTS: Your Piper Field Service Facility.

EFFECTIVITY DATE: This Service Bulletin is effective upon receipt.

SUMMARY: This Service Bulletin is issued to provide detailed instructions for fuel draining procedures and should be complied with as indicated.

NOTE: If you are no longer in possession of this aircraft, please forward this information to the current owner/operator and notify the factory of address/ownership corrections. Changes should include aircraft model, serial number, current owner's name and address.

Corrections/Changes should be directed to:

Piper Aircraft Corporation
Attn: Customer Services
P.O. Box 1328
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