

# SERVICE No. 1037 BULLETIN

## PIPER CONSIDERS COMPLIANCE MANDATORY

DATE: October 28, 1999

**SUBJECT:** 

Inspection for Gascolator Bowl Drain Security

**MODELS AFFECTED:** 

**SERIAL NUMBERS AFFECTED:** 

PA-28-161 Warrior III

2842048 through 2842059

PA-28-181 Archer III

2843231 through 2843274

PA-28R-201 Arrow

2844016 through 2844019

**COMPLIANCE TIME:** 

Prior to next flight and to coincide with the next scheduled maintenance event, but not to exceed the next fifty (50) hours time in service.

APPROVAL:

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

**PURPOSE:** It has been discovered that the drain valve located on the gascolator bowl just forward of the firewall may loosen due to usage. The drain valve is secured in a redundant manner using a seal nut tightened properly and by use of a chemical locking agent applied to the threads of the valve. The chemical locking agent was inadvertently left off, consequently there exists the potential for the drain valve to loosen and leak should the seal nut torque be compromised during ground use. Left uncorrected, fuel may leak into the engine compartment or overboard presenting a fire hazard and possible fuel starvation.

This Service Bulletin requires inspection of the fuel bowl gascolator drain valve for looseness and the application of a chemical locking agent to the threads of the drain valve for redundant security.

#### **INSTRUCTIONS:** (Refer to the Maintenance Manual as required.)

- 1. Prior to next flight, refer to the Pilot's Operating Handbook (POH) Section 7, locate and assure the aircraft fuel selector is in the on position with the mixture in cutoff. Turn on the aircraft battery master switch and engage the electric fuel pump switch. Examine the drain valve located on the gascolator bowl just forward of the firewall for leaks or evidence of fuel seepage around the seal nut. Turn off the fuel pump and the master switch.
- 2. Apply moderate pressure to rotate the drain valve in a counter clockwise direction, check to see if the drain valve is loose. (See Fig. 1.) If the drain valve is not loose and there are no fuel leaks, flight operations may continue until the next maintenance event but not to exceed the next fifty hours time in service. An appropriate logbook entry of compliance with instruction 2 must be made prior to next flight.

(OVER) ATA: 2824

#### **INSTRUCTIONS:** (Cont'd)

- 3. If the drain valve is loose/leaking or if the appropriate maintenance time has been achieved, immediate action must be taken.
- 4. Turn the fuel selector to the off position and drain the residual fuel from the gascolator bowl. Loosen the seal nut and remove the drain valve. (See Fig. 2.)
- 5. Remove the seal nut from the drain valve. Clean the threads of the drain valve, seal nut, and the blue elbow attached to the gascolator bowl. Install the seal nut on the drain valve as far as possible with the seal facing the thread end. (See Fig. 2.) Note: If drain valve was leaking out of the drain and not the connection, replace the drain valve before proceeding.
- 6. Use Loctite 290 per the manufacturers directions. Apply a one drop coating evenly to the 2nd, 3rd and 4th threads of the drain valve. Do not allow Loctite to enter the fuel system. Install the drain valve until tight. Holding the drain valve, tighten the seal nut firmly against the blue elbow with the seal fully engaged.
- 7. Turn the fuel selector to the on position and engage the aircraft battery master and electric fuel pump switches. Examine the drain valve for leaks. Check the drain valve for proper operation. Perform a brief ground run and re-check gascolator for leaks.
- 8. Make an appropriate logbook entry of compliance with this Service Bulletin.

**MATERIAL REQUIRED:** As required by inspection, an appropriate amount of Sealant, Loctite 290, per aircraft. Loctite must be obtained locally.

**AVAILABILITY OF PARTS:** Your Piper Field Service Facility.

**EFFECTIVITY DATE:** This Service Bulletin is effective upon receipt.

<u>SUMMARY:</u> Applicable Factory Participation is limited to new aircraft in warranty at the time of compliance. Factory Participation will remain in effect for a period of time, **not to exceed 180 days**, from the date of this Service Bulletin.

Please contact your factory authorized Piper Field Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the compliance time indicated, and to obtain additional information concerning any applicable factory participation.

NOTE:

If you are no longer in possession of this aircraft, please forward this information to the present 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:

The New Piper Aircraft, Inc. ATTN: Customer Services 2926 Piper Drive Vero Beach, FL 32960

### Typical Gascolator Bowl Location



Fig. 1

