



Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, Florida, U.S.A. 32960

SERVICE NO. 1141 LETTER

Date: April 27, 2011

(S) (M)

MAINTENANCE ALERT

SUBJECT:

GASCOLATOR MAINTENANCE PROCEDURES

MODELS AFFECTED:

J-2 Series
J-3 Series
J-4 Series
NE-1, L-4
PA-11 Series
PA-15/17 Series
PA-16 Series
PA-18 Series
PA-20 Series
PA-22 Series
PA-23 Apache
PA-23-160 Apache
PA-23-235 Aztec
PA-23-250 Aztec
PA-E23-250 Aztec

PA-24 Comanche
PA-24-250 Comanche
PA-24-260 Comanche
PA-24-400 Comanche
PA-28-140 Cherokee Cruiser

PA-28-150 Cherokee
PA-28-160 Cherokee
PA-28-180 Cherokee

PA-28S-160 Cherokee
PA-28S-180 Cherokee

PA-28-235 Cherokee

PA-28-236 Dakota

PA-28-151 Warrior
PA-28-161 Cadet

SERIAL NUMBERS AFFECTED:

ALL
ALL
ALL
ALL
ALL
ALL
ALL
ALL
ALL
ALL
23-1 through 23-1182 (except 23-1177)
23-1177, 23-1183 through 23-2046
27-505 through 27-622
27-1 through 27-4916, 27-7304917 through 27-8154030
27-2505 through 27-4916;
27-7304917 through 27-7554168
24-1 through 24-3687
24-1, 24-103 through 24-3687
24-3642, 24-4000 through 24-5034
26-2 through 26-148
28-20001 through 28-26946;
28-7125001 through 28-7725290
28-03; 28-1 through 28-4377 and 28-1760A
28-03; 28-1 through 28-4377 and 28-1760A
28-03; 28-671 through 28-5859;
28-7105001 through 28-7205318
28-1 through 28-1760 and 28-1760A
28-671 through 28-5859;
28-7105001 through 28-7105234
28E-11; 28-10001 through 28-11378;
28-7110001 through 28-7710089
28-7911001 through 28-8611008;
2811001 through 2811050
28-7415001 through 28-7715314
2841001 through 2841365

ATA: 2800

(OVER)

MODELS AFFECTED: (continued)

PA-28-161 Warrior II
 PA-28-161 Warrior III
 PA-28-180 Archer
 PA-28-181 Archer II
 PA-28-181 Archer III
 PA-28-201T Turbo Dakota
 PA-28R-180 Arrow
 PA-28R-200 Arrow
 PA-28R-200 Arrow II
 PA-28R-201 Arrow III
 PA-28R-201T Turbo Arrow III
 PA-28RT-201 Arrow IV
 PA-28RT-201T Turbo Arrow IV
 PA-34-200 Seneca
 PA-34-200T Seneca II
 PA-38-112 Tomahawk

SERIAL NUMBERS AFFECTED:

28-7716001 through 28-8616057; 2816001 through 2816109
 2816110 through 2816119; 2842001 through 2842305
 28-E13; 28-7305001 through 28-7505260
 28-7690001 through 28-8690062;
 2890001 through 2890205
 2890206 through 2890231; 2843001 through 2843672
 28-7921001 through 28-7921095
 28R-30002 through 28R-31270;
 28R-7130001 through 28R-7130013
 28R-35001 through 28R-35820;
 28R-7135001 through 28R-7135229
 28R-7235001 through 28R-7635545
 28R-7737002 through 28R-7837317;
 2837001 through 2837061; 2844001 through 2844138
 28R-7703001 through 28R-7803374;
 2803001 through 2803012
 28R-7918001 through 28R-8218026
 28R-7931001 through 28R-8631005;
 2831001 through 2831038
 34-E4; 34-7250001 through 34-7450220
 34-7570001 through 34-8170092
 38-78A0001 through 38-82A0122

COMPLIANCE TIME:

Initial compliance to coincide with the next regularly scheduled maintenance event, but not to exceed the next fifty (50) hours time in service.

Thereafter, perform the following recurring maintenance procedure at intervals of every ninety (90) calendar days or every fifty (50) hours of operation, whichever comes first, unless this maintenance interval is specified otherwise in the applicable Maintenance Manual.

PURPOSE:

The affected Piper Aircraft models use a Gascolator (also called a fuel strainer or fuel filter) to separate contaminants from the fuel system. It has been determined that the reliability of the Gascolator can be improved by following the maintenance procedures described in this Service Letter.

INSTRUCTIONS:**Part I. Identification of Gascolator Configuration**

1. Locate and examine the Gascolator, which is positioned in the engine compartment, typically mounted on the forward side of the firewall. Temporary removal of engine cowlings or access panels may be required.
2. Although the affected aircraft were delivered with the type of Gascolator shown in Figure 1, there are many FAA-approved types of Gascolators that have a configuration that differs from that shown in Figure 1. Compare the Gascolator that is installed in the aircraft with the Gascolator shown in Figure 1:
 - If the currently installed Gascolator matches the configuration shown in Figure 1, follow the maintenance procedures described in this Service Letter. Proceed to PART II Gascolator Maintenance.
 - If the currently installed Gascolator does not match the configuration shown in Figure 1, follow the Maintenance Manual procedures provided by the Gascolator manufacturer, at intervals specified by the applicable Piper Maintenance/Service Manual in Chapter 12 or Section II, respectively. Proceed to PART III Documentation of Compliance.

Part II. Gascolator Maintenance

NOTE: Refer to the applicable Piper Maintenance/Service Manual for any additional model-specific maintenance procedures that may apply.

1. Remove power from the aircraft by pulling the main power circuit breaker.
2. Confirm that the fuel selector valve is in the off position.

CAUTION: WHEN DRAINING ANY AMOUNT OF FUEL, CARE SHOULD BE TAKEN TO ENSURE THAT NO FIRE HAZARD EXISTS BEFORE STARTING ENGINE.

3. Place a container under the Gascolator drain. Operate drain to empty fuel in bowl.
4. Cut away and discard any existing safety wire from the Gascolator. Loosen the bail nut, move the bail wire to the side and remove the bowl.
5. Remove the gasket and screen from the strainer housing.
6. Clean and inspect the screen, gasket, bowl, strainer housing, bail wire and bail nut. Replace any worn or damaged components.
7. Reinstall gasket and screen.
8. Position the bowl and bail wire. Tighten the bail nut by hand, then continue tightening an additional one nut flat (i.e., 60 degrees) with a wrench. Do not over tighten.
9. Safety the Gascolator with MS20995-C32 Safety Wire as shown in Figure 1, using the “double twist” method, as described in FAA Advisory Circular AC 43.13-1B CHG 1, Chapter 7, Section 7, “SAFETYING”. This free document is available for download from the Federal Aviation Administration web site:
http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/99C827DB9BAAC81B86256B4500596C4E?OpenDocument&Highlight=43.13
10. Reset the main power circuit breaker.
11. Operate the fuel system and check for leaks.
12. Reinstall any cowling or access panels that were removed in order to accomplish this maintenance procedure.
13. Proceed to PART III Documentation of Compliance.

Part III. Documentation of Compliance:

Make a log book entry indicating compliance with this Service Letter.

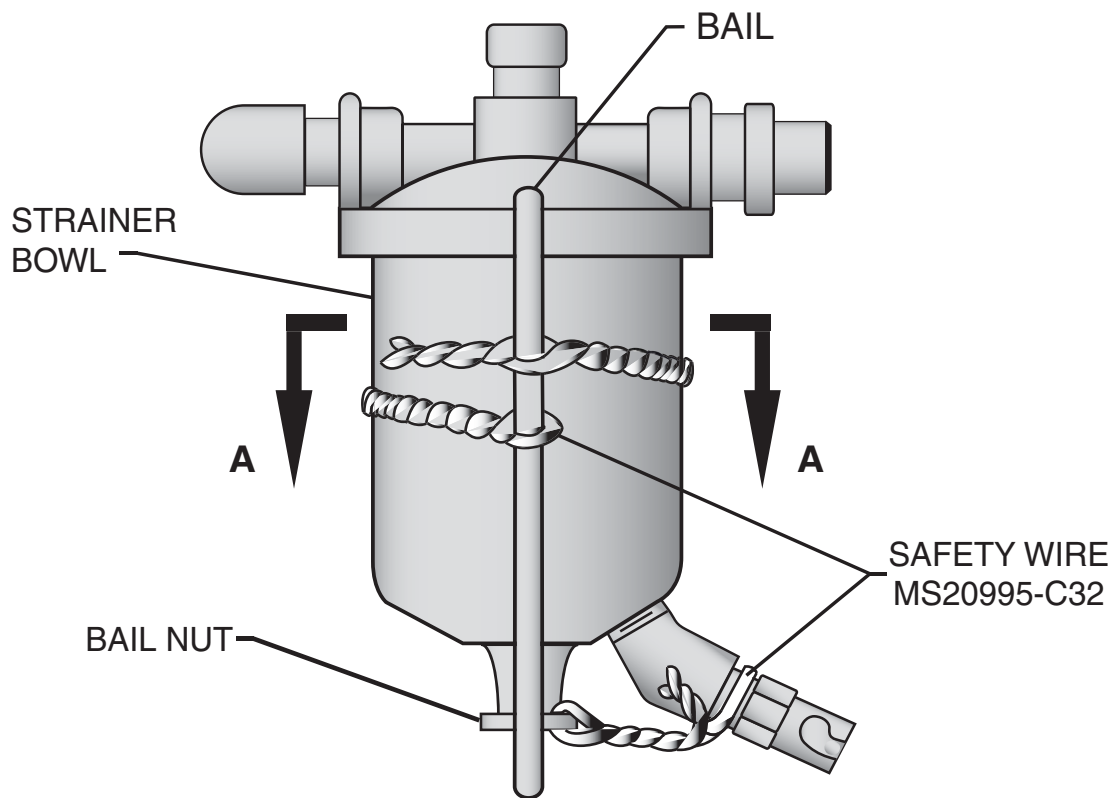
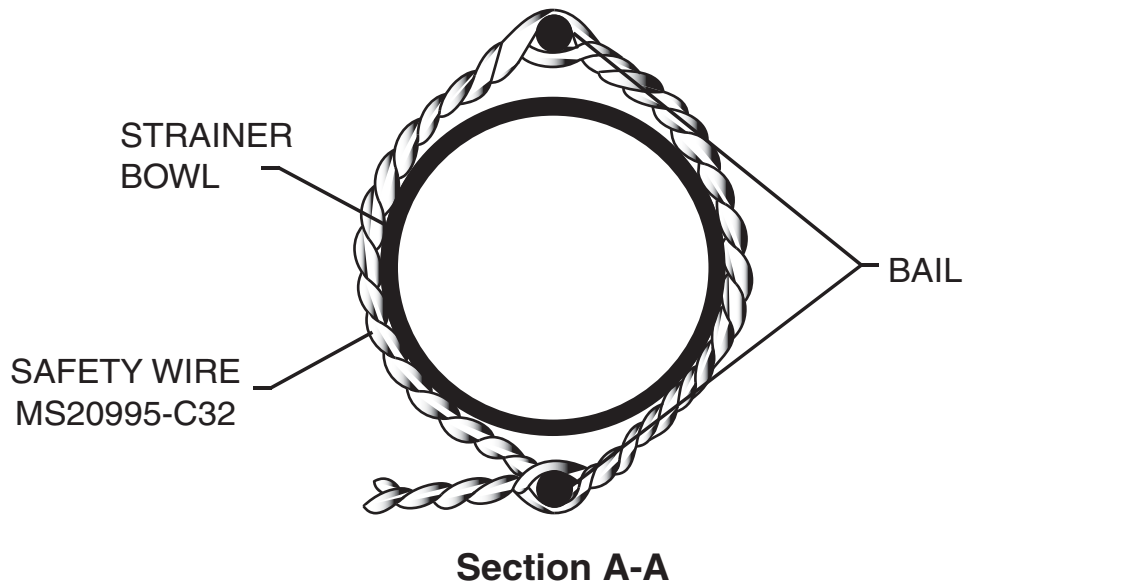


Figure 1
Typical Gascolator Installation

MATERIAL REQUIRED: Safety Wire - (MS20995-C32).

AVAILABILITY OF PARTS: Procure locally.

EFFECTIVITY DATE: This Service Letter is effective upon receipt.

SUMMARY: Please contact your Factory Authorized Piper Service Facility to make arrangements for compliance with this Service Letter in accordance with the compliance time indicated.

NOTE: Please notify the factory of any address/ownership corrections. Changes should include aircraft model, serial number, current owner's name and address.

Corrections and/or changes should be directed to:

PIPER AIRCRAFT, INC.
Attn: Customer Service
2926 Piper Drive
Vero Beach, FL 32960