



SERVICE BULLETIN

No. 355

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

"FAA DOA SO-1 Approved"

June 5, 1972 S

Subject: Fuel Selector Valve Lubrication

Models and Serial Numbers Affected:

Models Affected

PA-28-140 Cherokee

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

PA-28R-180 Cherokee Arrow

PA-28R-200 Cherokee Arrow

Serial Numbers Affected

28-20002 to 28-26783 incl., 28-26945 to 28-7125595 incl.

28-1 to 28-7105179 incl.

28R-30001 to 28R-7130007 incl.

28R-35001 to 28R-7135163 incl.

Compliance Time:

1. Within the next 10 hours of operation from Effectivity Date, below, check fuel selector valve for ease of rotation. Repeat at 100 hour intervals.
 - a. If selector is difficult to rotate, comply with provisions of Instructions on page 2.
 - b. If selector rotates easily, no further action is required at this time (see Compliance Time, Section 2, below).
2. Aircraft with 400 hours or more time in operation; within the next 100 hours of operation or one year's time from Effectivity Date, below, whichever occurs first. Comply with Instructions on page 2.

Aircraft with less than 400 hours time in operation; at 400 hours of operation or one year's time from Effectivity Date, below, whichever occurs first. Comply with Instructions on page 2.

The inspection/maintenance provisions of this Service Bulletin are to be repeated at every additional 400 hours of operation or annually, whichever occurs first.

This inspection/maintenance procedure must also be conducted whenever the Fuel Selector Valve is difficult to operate.

Purpose:

The fuel selector valve installed in the above referenced aircraft models is a three position type valve Piper part (over)

Purpose: (Continued)

number 11383-04. An integral part of the above valves is the tapered plug cock, which is the focal point of this Service Bulletin in the area of proper maintenance procedures.

The tapered plug cock unless properly lubricated, is subject to binding or "freezing", caused by (1) fuel coming in contact with the plug cock and gradually dissolving the film of lubricant, (2) presence of foreign material, and (3) hardened or congealed lubricants (usually, wrong type).

The primary objective of this Service Bulletin is to insure that these valves are periodically and properly inspected and lubricated, in accordance with Instructions, below.

Instructions:

1. With the valve removed from the aircraft, remove the valve cap and interior parts (see attached sketch for an exploded view of valve components).
2. Inspect position washer to ascertain that it will not allow the valve to rotate beyond its stop positions. Also, inspect position washer inner perimeter surface for indications of extreme wear; should this be evident, replace position washer (see Material Required, below).
3. Check condition of plug cock and valve body for scored surfaces. The surfaces, if not badly scored, may be conditioned by lapping with a fine grinding compound. Clean away all compound after lapping. If plug cock will not seat properly or if scoring remains evident, replace valve.
4. Check condition of valve stem in the area where the "O" ring seats. Should the stem be worn or damaged so that the "O" ring will not seal, replace valve.
5. With a 10X magnifying glass, inspect valve ports for cracks; if cracks are visible, replace valve.
6. Clean valve of all foreign matter, lubricate plug cock with a light film of MIL-G-6032 (Type I) grease, turn the plug several times in its seat and wipe off any excess, especially in the valve ports. Also, lubricate position washer with a light film of MIL-G-6032 (Type I) grease. Reassemble valve with a new "O" ring, Piper part number 752 822.
7. Before reinstalling valve, it may be checked by attaching an air hose and determining that it will hold 50 pounds of air pressure.

Material Required:

1. MIL-G-6032 Grease, Plug Valve (Type I), which may be procured locally under the brand names specified on the Qualified Products List (of products qualified under military specification MIL-G-6032) produced on pages 5 and 6.
2. One each per aircraft Position Washer, Piper part number 756 645.
3. One each per aircraft "O" ring, Piper part number 752 822.

Availability of Parts:

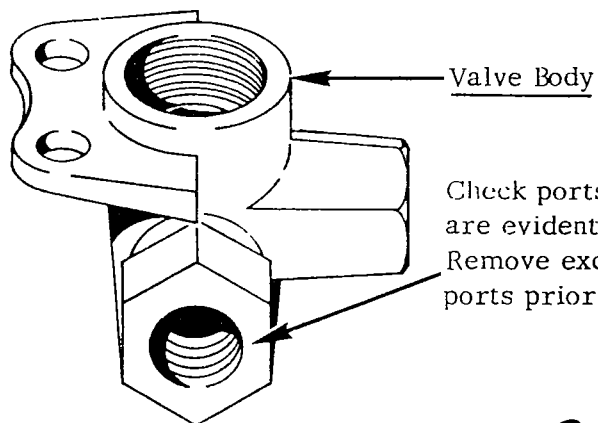
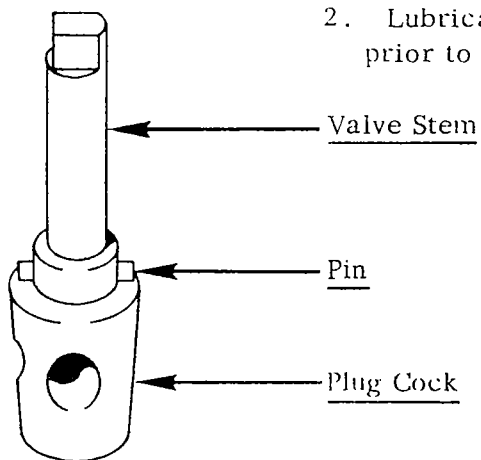
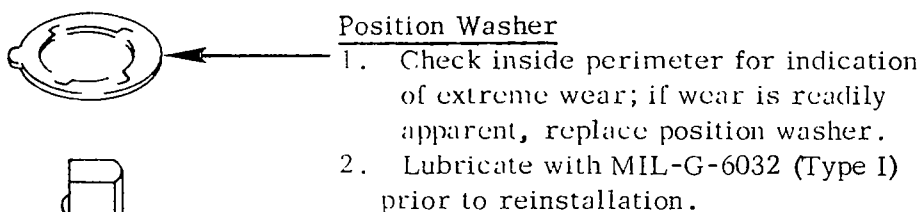
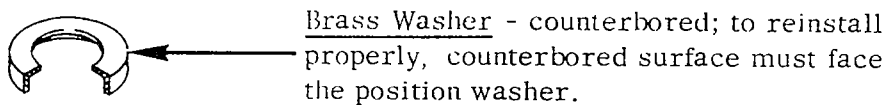
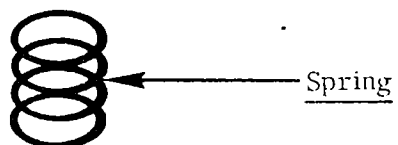
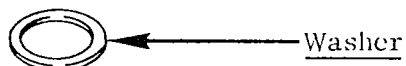
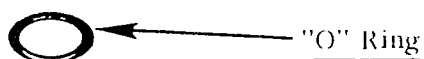
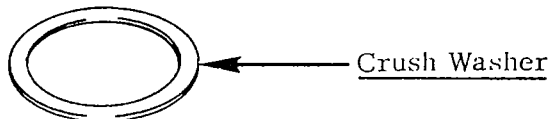
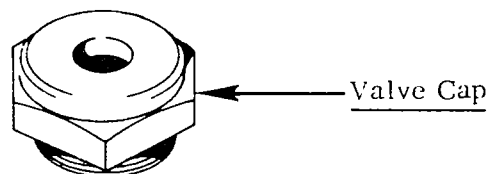
Your Piper Dealer.

Effectivity Date:

This Service Bulletin is effective June 9, 1972.

Summary:

Please contact your Piper Dealer to make arrangements for compliance with this Service Release, which is submitted in the interest of helping you maintain your fuel system in proper operating condition.



Check ports for cracks; if cracks are evident, replace valve. Remove excess grease from ports prior to reinstallation.

QPL-6032-10
2 December 1968
Superseding
QPL-6032-9
29 March 1968

QUALIFIED PRODUCTS LIST
OF
PRODUCTS QUALIFIED UNDER MILITARY SPECIFICATION

MIL-G-6032

FSC 9150

GREASE, PLUG VALVE, GASOLINE AND OIL RESISTANT

This list has been prepared for use by or for the Government in the procurement of products covered by the subject specification and such listing of a product is not intended to and does not connote indorsement of the product by the Department of Defense. All products listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This list is subject to change without notice; revision or amendment of this list will be issued as necessary. The listing of a product does not release the supplier from compliance with the specification requirements. Use of the information shown hereon for advertising or publicity purposes is expressly forbidden.

The activity responsible for this Qualified Products List is the Naval Air Systems Command.

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
BP Aero Grease 32 Type I	BP Aero Grease 32	Report No. AMD MA 768751 of 13 Dec 1967	BP Trading Limited Britannic House Moore Lane London, E. C. 2, England Plant: O. J. Schindler 315 Peine Hamburg, Germany
Type I (Code 16125)	Braycote No. 632B	AML Report No. 78487-66 of 20 Dec 1966	Distributed by: Bray Oil Company 1925 N. Marianna Ave. Los Angeles, Calif. 90032 Manufactured by: Southwest Grease & Oil Co., Inc. 220 West Waterman Wichita, Kansas 67202 Plant: Southwest Grease & Oil Co., Inc. Battenfeld Division 3148 Roanoke Road Kansas City, Mo. 64111
Type I (Royco 32)	Castrol PV	Report No. NAEC-AML-1890 of 13 Feb 1964	Distributed by: Castrol Oils Inc. Castrol Limited 254-266 Doremus Ave. Newark, N.J. 07105 Manufactured by: Royal Lubricants Co. River Road Hanover, N. J. 07936 Plant: Same address

QPL-6032-10
2 December 1968

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
Type I (L237)	L-237	Report No. NAFC-AML-1889 of 13 Feb 1964	Tenneco Chemicals, Inc. Nuodex Division P. O. Box 2 Piscataway, N.J. 08854 Plant: Chestertown, Md. 21620
Type I (Rockwell 950)	Rockwell 950 (Bulk)	Report No. NAEC-AML-1891 of 13 Feb 1964	Rockwell Mfg. Company 400 North Lexington Ave. Pittsburgh, Pa. 15208 Plant: Same address
Type II (Rockwell 950)	Rockwell 950 (Stick)		
Type I (Royco 32)	Royco 32	Report No. NAEC-AML-1890 of 13 Feb 1964	Royal Lubricants Company River Road Hanover, New Jersey 07936 Plant: Same address
Type I (Code 16125)	Ultra-Seal 125	AML Report No. 78487-66 of 20 Dec 1966	Southwest Grease and Oil Company, Inc. 220 West Waterman Wichita, Kansas 67202 Plant: Southwest Grease and Oil Company, Inc. Battenfeld Division 3148 Roanoke Road Kansas City, Mo. 64111
Type II (Code 16822)	Ultra-Seal 822	AMD Report No. 769352 of 10 Sep 1968	
Type I (E-Z Turn Lubricant)	E-Z Turn Lubricant	Report No. NAEC-AML-1887 of 13 Feb 1964	United Oil Mfg. Company Erie, Pennsylvania Plant: P. O. Box 1246 Erie, Pennsylvania