



# SERVICE LETTER

No. 944

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

April 20, 1982 S

Subject: Fuel Selector Valve Inspection and Lubrication

Models Affected:

PA-18-150 Super Cub  
PA-38-112 Tomahawk

Serial Numbers Affected:

18-7909040 through 18-8109086  
38-78A0001 through 38-82A0023

NOTE: Service Letter No. 944 applies to any Piper aircraft in which plastic plug Fuel Selector Valve, Piper Part Number 77413-02, is installed and has accumulated 400 hours or more total time in service.

Compliance Time: If fuel selector valve has 400 hours or more total time in service, within the next one hundred (100) hours of aircraft operation and every four hundred (400) hours thereafter.

Purpose: An improperly maintained three-position fuel selector valve, Piper Part Number 77413-02, could become difficult to rotate; this could result in damage to the selector lever mechanism and/or inability to switch tanks.

This Service Release provides instructions for the periodic inspection and proper lubrication of the valves.

Instructions: (Refer to Sketch on Page 3 of 3.)

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. Check condition of plug and valve body for scored surfaces. The surfaces, if not badly scored, may be reconditioned by lapping with a fine polishing compound. Clean away all compound after lapping. If plug will not seat properly or if scoring remains evident, replace valve.
3. 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 valves.
4. With a 10x magnifying glass, inspect the valve plug for cracks. If cracks are visible, replace valve.
5. Clean valve of all foreign material, lubricate plug sparingly with Dow Corning Molykote No. FS-3452 (Piper Part Number 761 281) lubricant. Turn the plug several times in its seat, and wipe off any excess lubricant in the plug and valve ports. Lubricate the position washer and "O" rings with a light film of the above lubricant. Reassemble valve with new "O" rings, Piper Part Number 484 953 (MS29513-011) and 762 627 (MS29513-018).

Instructions: (continued)

6. Pressure check valve for leaks using 15 PSI of air pressure. If valve is submerged in water for test, be sure all water is removed.
7. Insuring proper selector positions; install valve in aircraft and inspect for fuel leaks.
8. Make proper logbook entry of compliance with this Service Release.

Material Required:

1. Dow Corning Molykote No. FS-3452, Piper Part No. 761 281.
2. MS29513-011 "O" Ring, Piper Part No. 484 953.
3. MS29513-018 "O" Ring, Piper Part No. 762 627.
4. ONLY if required per Instruction 3 or 4, Valve Replacement Kit 764 295.

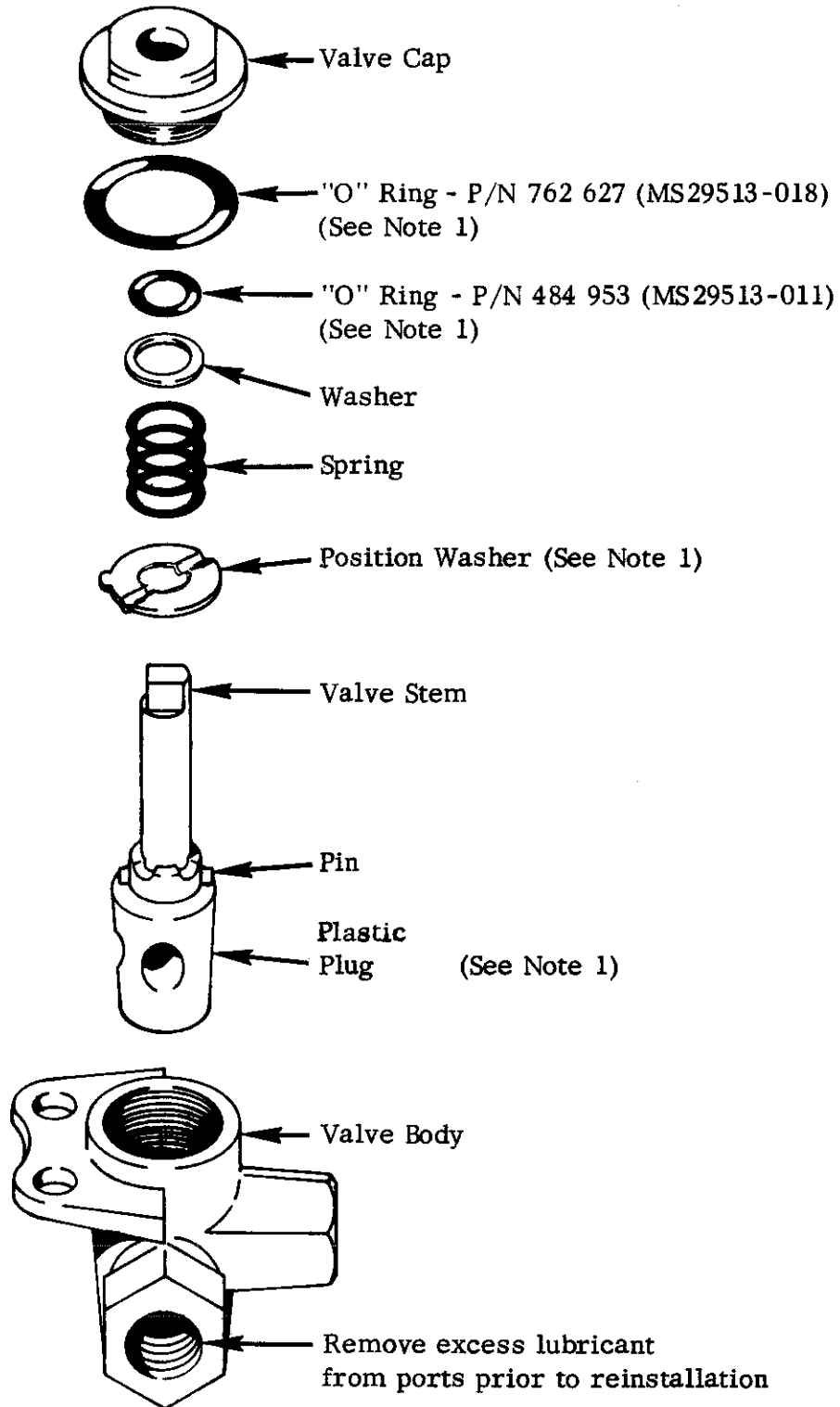
Availability of Parts: Your Piper Field Service Facility or a local supplier.

NOTE: Dow Corning Molykote FS-3452 is available in 2 oz. tubes as Piper Part No. 761 281.

Effectivity Date: This Service Release is effective upon receipt.

Summary: Please contact your Piper Field Service Facility to arrange for compliance with this Service Release in accordance with Compliance Time, above.

Any applicable Factory Participation will remain in effect for a period of time not to exceed 180 days from the date of this Service Letter.



Fuel Selector Valve

NOTE 1: Lubricate with Dow Corning.  
Molykote No. FS-3452, P/N 761 281.