

(6) FUEL SELECTOR VALVE 400 HOUR INSPECTION.

In PA-28-140s S/N's 28-20002 thru 28-26783 and 28-26945 thru 28-7125595; PA-28-150/160/180s S/N's 28-1 thru 28-7105179; PA-28R-180s S/N's 28R-30001 thru 28R-7130007; and PA-28R-200s S/N's 28R-35001 thru 28R-7135163 for airplanes with the original equipment fuel selector valve still installed: each 400 hours time-in-service, annually, or whenever the selector is difficult to rotate, inspect and lubricate the fuel selector valve (P/N 11383-004) as follows:

NOTE: The tapered plug cock is subject to binding or "freezing" unless properly lubricated. Binding is typically 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).

- (a) With the valve removed from the aircraft, remove the valve cap and interior parts (see Figure 3-5).
- (b) 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 (P/N 756-645).
- (c) Check condition of plug cock and valve body for scored surfaces. The surfaces, if not badly scored, may be reconditioned 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.
- (d) 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.
- (e) With a 10X magnifying glass, inspect valve ports for cracks; if cracks are visible, replace valve.
- (f) 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, P/N 752-822.
- (g) Before reinstalling valve, it may be checked by attaching an air hose and demonstrating that it will hold 50 pounds of air pressure.

(7) INDUCTION AIR INLET DUCT AND ALTERNATE HEAT DUCT INSPECTION

NOTE: Installation of Piper Kit No. 760-634V, 760-635V, 760-638V, 760-639V, or 760-640V, as appropriate, relieves this inspection requirement.

In PA-28-140s S/N's 28-20001 thru 28-7225172; PA-28-150/160/180s S/N's 28-03, 28-1 thru 28-7305012; PA-28-235s S/N's 28-10001 thru 28-7310005; PA-28R-180s S/N's 28R-30002 thru 28R-7130013; PA-28R-200s S/N's 28R-35001 thru 28R-7235077; for airplanes which have not installed either Piper Kit No. 760-634V, 760-635V, 760-638V, 760-639V, or 760-640V per Piper Service Bulletin No. 360, each 50 hours time-in-service, conduct a visual inspection of the external surface of the subject ducts. Duct removal is not required. Inspect the ducts for evidence of deterioration as follows:

- (a) Inspect the external surface of the ducts for loose or broken strings.
- (b) Inspect the ducts for loose or displaced supporting wire.
- (c) Inspect the ducts for signs of wear or perforation.

Should any of the above conditions exist, remove and replace the affected duct or ducts prior to the next flight.

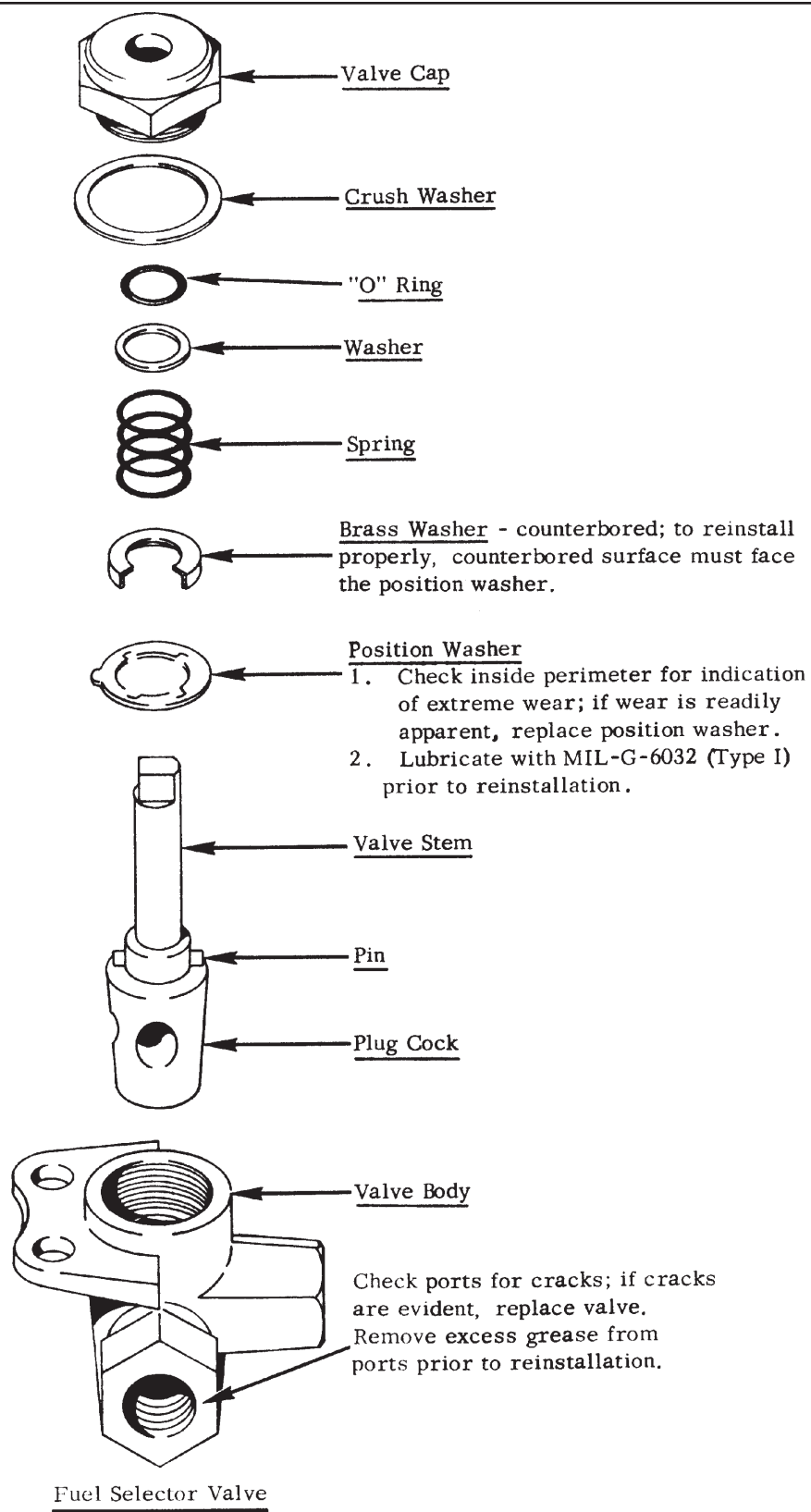


Figure 3-5. Fuel Selector Valve Inspection