Storehouse LLC

720B
Rev O

FDV2 installation instructions for Beechcraft

1) Drain the fuel cell to reduce risk of fuel spillage and for personal safety.

2) Remove the old hose clamp from the fuel cell drain nipple and allow time for the nipple to relax.

3) Measure the length of the drain nipple. Standard drain nipples are between 5/8 to 3/4 of an inch in length measured from the base of the fuel cell to the end. Trim longer nipples to approximately 5/8 of an inch so that the nipple will not bottom out on washers during installation. The old hose clamp can be used as a straight edge during trimming.

4) Remove the old valve. If the nipple is stiff, a hot moist cloth may be applied to soften it enough for easier valve removal.

5) Determine which method of safety wiring will be used. If the standard safety wire method is desired, install the rivnut and fillister screw outboard of the drain opening away from drain hole doubler and spar area in accordance with AC43.13-1B. Skip this step if when there is another acceptable anchor point available or using another safety wire method.

6) Insert the new drain valve into the drain nipple so that the top of the valve is no higher than level with the internal bottom of the fuel cell. NOTE: Under insertion will leave excessive threads showing beyond the check nut. The amount of insertion is best judged by checking to see that several threads show through the washer and spacer on the bottom of the wing before proceeding.

7) If installing a new fuel cell, insert cell into cavity and push the valve adaptor through the drain hole at inboard aft corner.

8) Slide the rubber spacer followed by the stainless steel washer onto the valve. Install the check nut on valve to hold the spacer and washer in place against the wing skin. Tighten the check nut until the washer and spacer are just snug against the wing skin. The valve should have only (1-2) threads showing beyond the check nut. If using the double check nut method, the valve threading should be fairly flush with the bottom of the second check nut.

9) After the valve depth has been adjusted, remove the check nut(s), washer and spacer. Install the hose clamp on the nipple and tighten. After an hour, preferably longer, retighten to allow for rubber adjusting and to avoid future leaks.

10) Reinstall the spacer, washer and check nut and tighten until the washer and spacer are just snug against the wing.

11) If installing a new fuel cell, finish installation in accordance with the appropriate service manual for the aircraft.

12) Fuel aircraft, let stand for at least one hour, inspect assembly for leaks. If the valve is leaking at the visible o-ring tighten the screw on the valve. This screw should be snug. Over tightening will cause the o-ring to bulge and become damaged. If the valve is leaking internally, remove the screw and clean or replace the o-ring. If leakage appears to be above the valve, tighten the hose clamp.

13) When no leaks are detected, install second check nut or safety-wire in accordance with AC43.13-1B.

Instructions for Continued Airworthiness and Use

Maintenance:	Inspect at the aircraft's required inspection intervals for security, leaks and damage. Replace o-rings as necessary. Overhaul kits available for other parts.
Troubleshooting:	For leaks, first check o-ring seals for debris or deterioration then hose clamp tightness.
Removal:	Drain fuel, remove; safety wire, check nut, washer, spacer, clamp then valve.
Control:	Use with pin type fuel sampler and follow the original aircraft manufacturer's sumping procedures. Check safety wire during preflight for security.

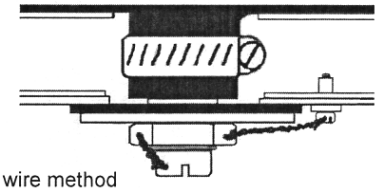
Parts Listing

Description	Part Number
TSO Fuel Drain Valve	FDV2
PMA Rubber Spacer	7220
PMA 303SS Washer	7230
Drilled Check Nut	NAS1423-8
Hose Clamp	100-10H
Rivnut	NAS1329-A6K75
Fillister screw	MS35265-28

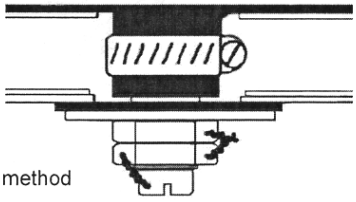
Replacement O-rings

For Poppet	M83248/01-006
For Screw	M83248/01-010

(Valves are manufactured with Viton o-rings however MS25988/01 Fluorosilicone or MS29513 (Nitrile) may be used.)



Standard safety wire method



Double check nut method