

SURE-FILL LEVER REPLACEMENT INSTALLATION KIT

The kit contains the following components. Refer to FFV kit assembly diagram for location of parts listed. Contact *Wilshire* Customer Service if any parts are missing.

| <u>Item</u> | <u>Description</u> | <u>Wilshire Part No</u> |
|-------------|--|-------------------------|
| 1 | Sure-Fill Lever | 83903-005 |
| 2 | Screw 6-32x3/16 | 60003-095 |
| 3 | Lever Spring | 23746-001 |
| 3A | Plastic Stabilizer Spacer | 84997 |
| 4 | O-Ring | 31525-020 |
| 5 | Washer, Nylon | 27176-001 |
| 6 | Countersunk Washer, Nylon, 10-32 | 60068-052 |
| 7 | Screw, Nylon, 10-32x1/2 | 60068-051 |
| 18 | Valve Cover Mounting Bracket | 82463-101 |
| * | Installation Instructions (Kits 85603, 85603-005, 85603-006) | 85603-001 |
| * | Silicone | 60544 |

*Not shown on assembly diagram attached.

Tools required:

3/8" Wrench or Nut Driver
Screwdriver with 5/16" Blade

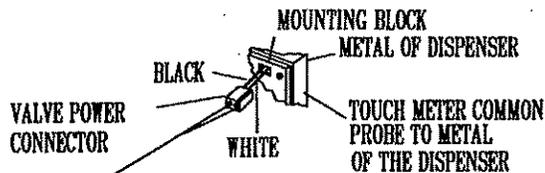
Screwdriver with 1/4" Blade
Screwdriver with 1/8" Blade

IMPORTANT:

The gray wire from the control module and valve switch (see diagram on page 6, Items 8 and 9) are assembled at the factory and coated to protect against moisture which could affect performance. When the lever or switch are replaced, the exposed electrical connections (i.e., screw on the lever; quick-connects on the switch) must be sealed with a light coat of silicone sealant. The switch used on this assembly is a specially sealed switch, Wilshire part number 18054-002, CCUSA part number not applicable.

24 VAC Check Points for Wire Shorts:

1. Measure the input voltage to the valve. It must be between 21 to 27 VAC.
2. Verify that no 24 VAC supply wires are shorted to the dispenser using the following procedure:
 - A. Shutoff 24 VAC power to valves.
 - B. Remove the valve input connector from the dispenser connector. Attach one lead of the ohmmeter to a metal surface on the dispenser and touch the other lead to the black wire and then to the white wire of the dispenser connector. If zero is indicated on the ohmmeter, it is an indication that a 24 VAC power lead is shorted to the dispenser valve mounting plate or cabinet. See diagram below.



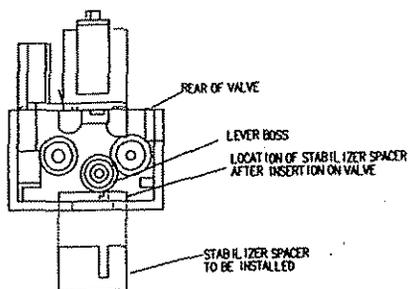
CHECK EACH OF THE POWER WIRES FOR SHORTS TO THE DISPENSER BY ATTACHING THE OTHER OHMMETER LEAD TO EACH OF THE TWO WIRE SOCKETS IN THE POWER CONNECTOR HOUSING.

INSTALLATION INSTRUCTIONS

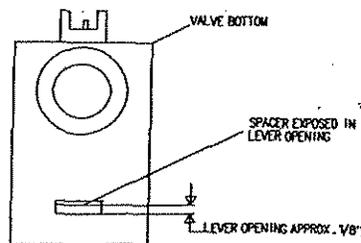
Refer to assembly diagram attached.

1. Remove valve cover and shut off the syrup and water at the valve mounting block.
2. Purge dispensing valve of syrup and water.
3. Disconnect 24VAC wire connection. Remove the Sure-Fill valve from the dispenser valve mounting block to install FFV Sure-Fill Lever Replacement Kit. Check the mounting block o-rings and replace, if necessary.
4. Remove the two (2) nuts at the top of the valve cover mounting bracket (Item 18). Remove valve cover mounting bracket, retainer bail, gray lead wire on top of the lever, lever screw, counter-sunk nylon washer, lever o-ring, stainless steel washer and the green spring.
5. Insert the stabilizer spacer into the space below the lever mounting boss (see diagram below). Make sure that stabilizer spacer is positioned so that the cutout is aligned with lever opening. Position the slot in the stabilizer spacer so that it is held in place by the rib in the center of the lever mounting boss. Push stabilizer spacer forward into valve body until the end of the slot contacts the end of the rib. Approximately 1/8" of the stabilizer spacer will show through the bottom of the lever opening when positioned correctly.

INSTALLATION OF LEVER STABILIZER SPACER



LEVER OPENING WITH SPACER INSTALLED



6. Insert the green lever spring and nylon washer and hold in place with one hand. With the other hand, slide the valve lever (Item 1) into place. The hole at the top of the lever for the gray wire screw (Item 2) should be positioned as shown in the assembly diagram, attached. The stabilizer spacer will contact the lever at the lever tabs on either side of the lever to limit side twist of the lever. Take care not to damage the coating on the lever during this process.
7. **NOTE:** This spring (P/N 23746-001) is a special spring required for Sure-Fill light lever actuation force. Do not replace with standard valve spring.

Utilizing nylon screw, nylon countersunk washer and o-ring (Items 4 through 7 in kit), fasten the lever in place. Use a 5/16" blade screwdriver to install the nylon screw. Tighten screw only enough to seal o-ring but not so tight that the plastic head breaks off.

8. Check that switch actuating arm (Item 8) is pointing upwards and is not damaging the valve lever black nylon coating. Check switch operation:

Holding the valve in the vertical position, push cup lever and listen for the switch to "click". Lever operation should be smooth and lever must return to the "rest" position after activation.

9. Insert the valve retaining bail (Item 16) into the valve body with the finger loops facing the rear of the valve. The lever must be positioned so it is in front of the retainer bail when installation is complete.
10. Place the new valve cover mounting bracket (Item 18) (new bracket is ¼ inch shorter than original bracket), supplied with the kit, on the coil hold-down screws. Reinstall the electronic module (Item 9) into place on the top of the red coil. NOTE: The gray wire must be located in the area between the red and pink coils prior to securing the electronic module (see diagram Page 6). Fasten the ground connector (terminal lug with white wires, Item 9A) on top of pink coil using the coil retaining nut. NOTE: If ground wire lug is attached as shown in alternate method of grounding on Page 5, do not move the lug.
Attach the gray module wire to the top of the lever as shown, using a screw (Item 2). Be sure the screw head (Item 2) is facing toward the rear of the valve. NOTE-IMPORTANT: Coat the screw head and the threads on the back side of the lever screw and ring terminal of gray wire with silicone sealant provided in kit. There must be enough slack in the wire for the lever to move freely and be sure wire is not pinched. Make sure that gray lever wire is located between the two solenoid coils.
11. Check that the gray wire coming from the lever has a slight loop above the lever and is not restrained or pinched when the coils were reassembled to the valve body. If this wire is pulled tight, it will not allow the lever to move freely and the valve will not function properly.
12. Lubricate o-rings on mounting block and reinstall valve on mounting block on dispenser. Check gray wire again, as outlined in Step 11.
13. Check that valve has a star nozzle. If not, install one.
14. With the power lead from the dispenser pulled through the middle of the retainer bracket (Item 16) and pulled forward until the lead clears the front of the control (Item 9), reconnect valve to 24VAC connector. The lead length extending forward must be a minimum of 4½ inches long.

Seal the end of the power connectors where the wires exit from the connector with silicone sealant. Wrap the end of the connectors with electrical tape after sealing with silicone. Item 10A indicates a portion of the power connector that requires sealing with tape. The mating dispenser connector must also be sealed with silicone and wrapped with electrical tape.

If the dispenser lead wires are the correct length, move the connector and its lead in wires to the front of the valve and tuck them under the control (Item 9) so that dispenser connector mates with the control connector under the front bottom corner of the control. This orientation will prevent leakage current caused by moisture from interfering with the Sure-Fill module function.

CAUTION: Verify that the valve power wires are not restricting the lever mechanical operation when the valve is mounted on the mounting block.

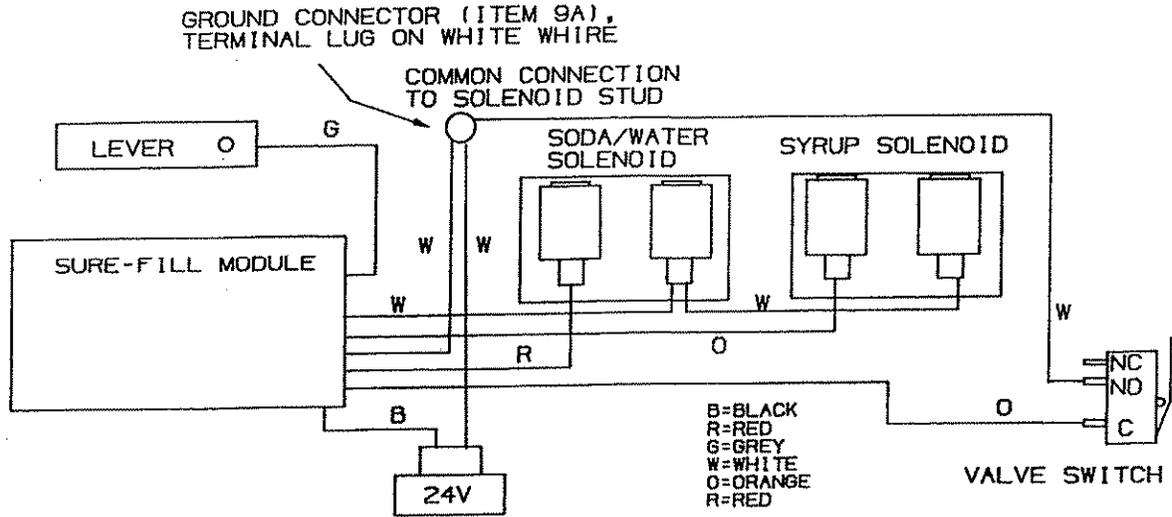
15. Turn on syrup and water at the valve mounting block. Check for and repair any leaks.

The Sure-Fill valve is most efficient when the cup rest is inclined towards the splash plate of the dispenser. The incline must be 14 degrees to ensure that the foam (or liquid) will contact the lever when the cup is full. Standard option cup grids for Sure-Fill are inclined 14 degrees.

16. Test valve operation by pressing the cup against the lever and releasing the cup. When foam (or liquid) touches the lever, the valve will shut off. After the foam settles, the valve will top-off the drink and repeat this top-off cycle one more time before shutting off.

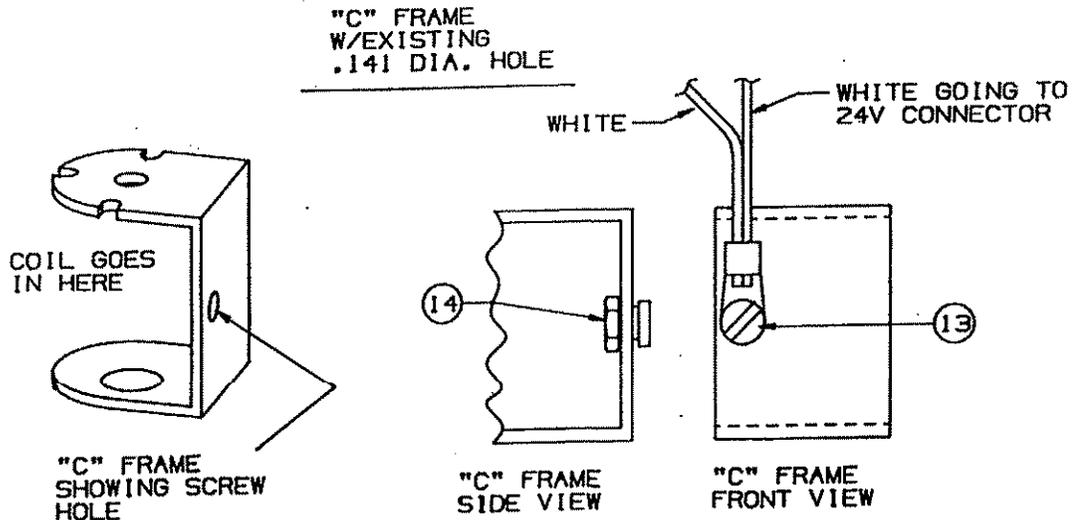
NOTE: When using the FFV Sure-Fill valve, it is recommended to use a minimum of 1/3 cup of ice and wait approximately one second before releasing cup. This will ensure enough weight is in the cup to hold the lever back and the valve will operate properly.

SURE-FILL WIRING DIAGRAM



ALTERNATE METHOD OF GROUNDING

ALTERNATE METHOD FOR ATTACHING SUREFILL COMMON WIRE RING TERMINAL TO THE VALVE TO PROVIDE PROPER GROUND RETURN FOR CONTROL CIRCUIT



NOTE: FOR C-FRAMES THAT DO NOT HAVE A HOLE AS SHOWN DRILL .141 DIA. HOLE AS SHOWN AND ATTACH AS SHOWN.

