

How To Replace Solenoid Plunger Tips on Cornelius QSP

QuickServe Pro 175

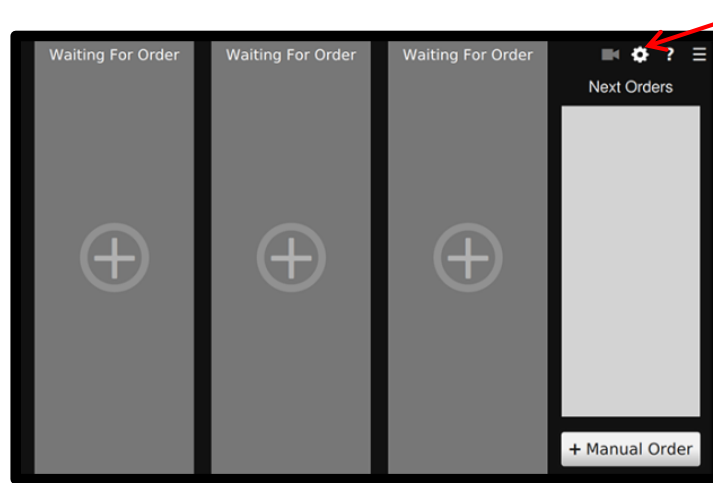


The only tool necessary to perform this procedure!

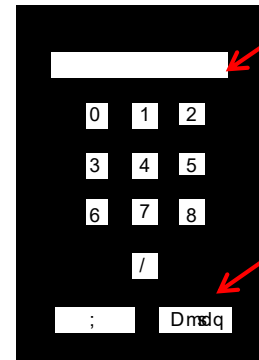


To Enter The Service Mode on QSP

Access the Service UI



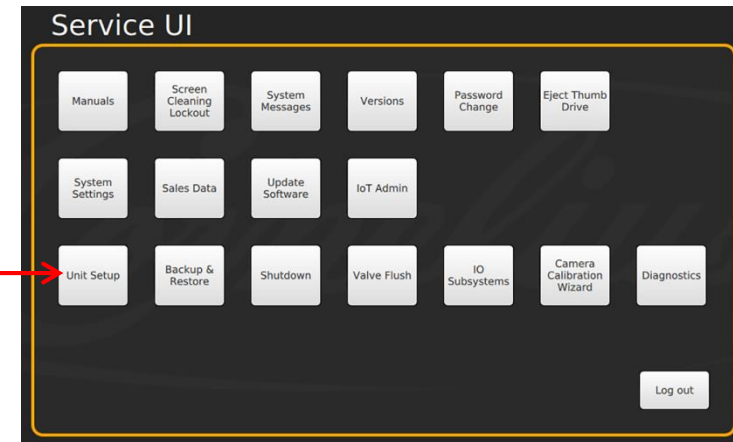
User Interface Screen – select the Gear icon



Enter an Access Code (default values)

- **Service Technician (3333)**
- Supervisor (2222)
- Operator (1111)
- ... and press Enter.

Service UI for the Service Technician

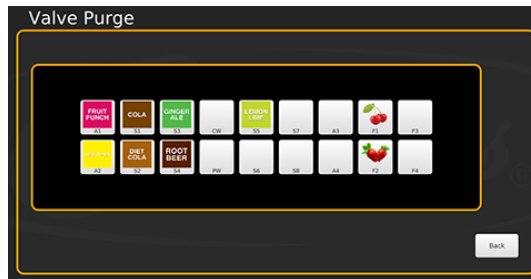


Select Unit Setup - Service Technician Only

Locating the Correct Valves

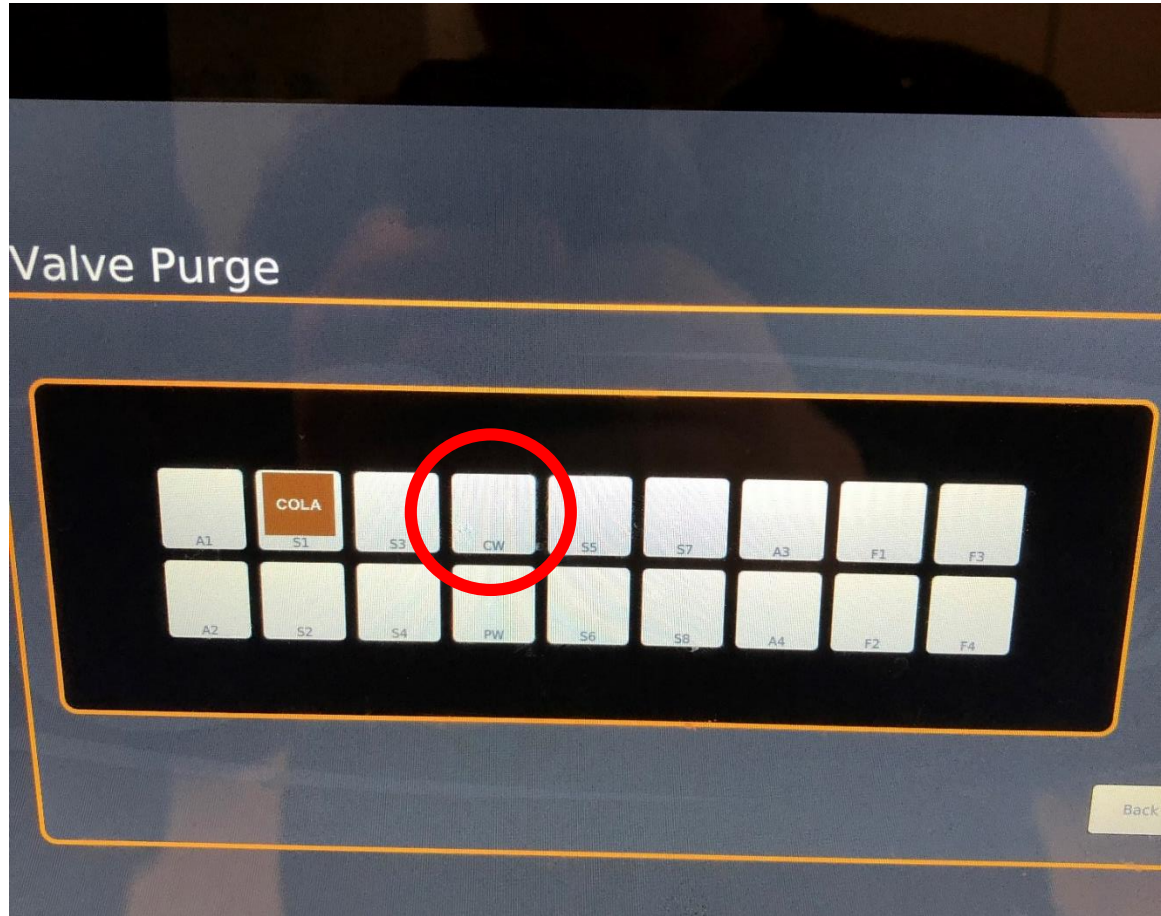


While in Unit Setup - select Valve Purge



The valve layout on the screen is laid out the same orientation of the physical valves. If you were to take the valve purge screen and lay it over the valves it will show you what valve is what. EX: you are working on valve CW; it is the 4th valve from the left on the top.

Make sure you view the Valve Purge screen to locate the CW (Carb Water) valve



Remove splash
panel



MFV Shut offs

Procedure to remove an individual MFV module

1) Look for round spindles (white tab) behind the valves; there will be one per valve that controls flow to both flow controls. Locate the correct valves. To shut off the flow, these spindles must be pushed **down** for the QSP.

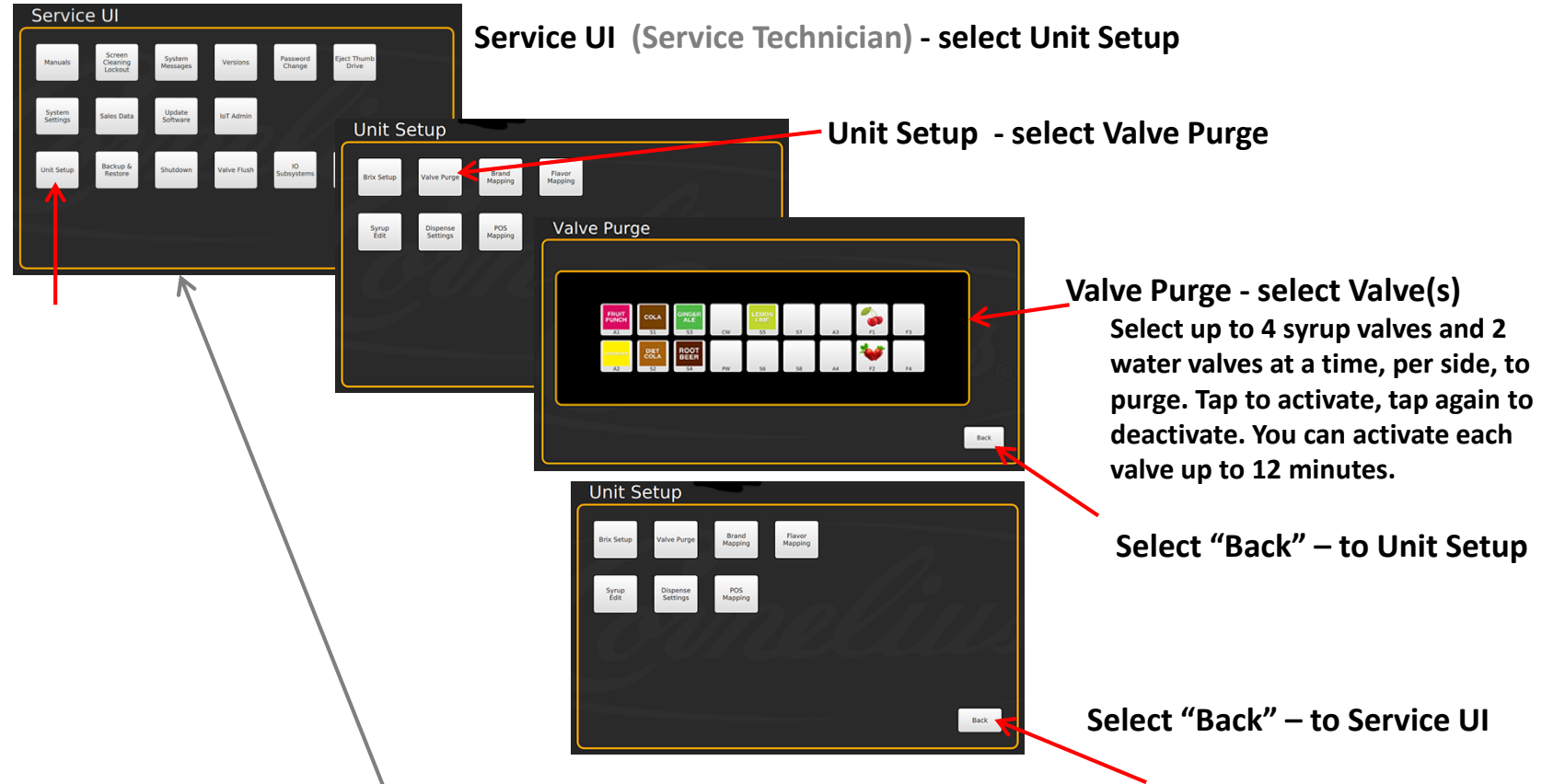
2) Once spindles are depressed you should activate the valves in the valve purge screen to release back pressure before depressing the dovetails, then deactivate the valves before proceeding. Steps for purging on the next page.

3) Once the round spindles are pushed down and pressure is relieved, push the black dovetails (between the white spindles) down to release the entire valve module from the back block.



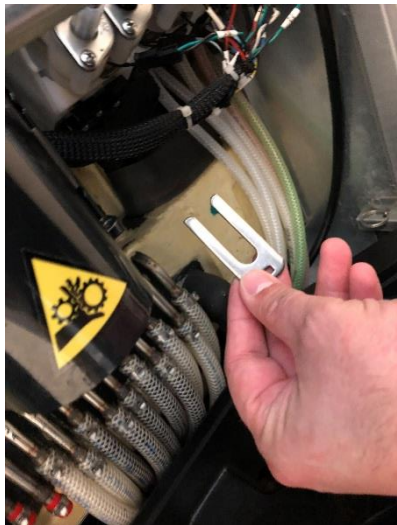
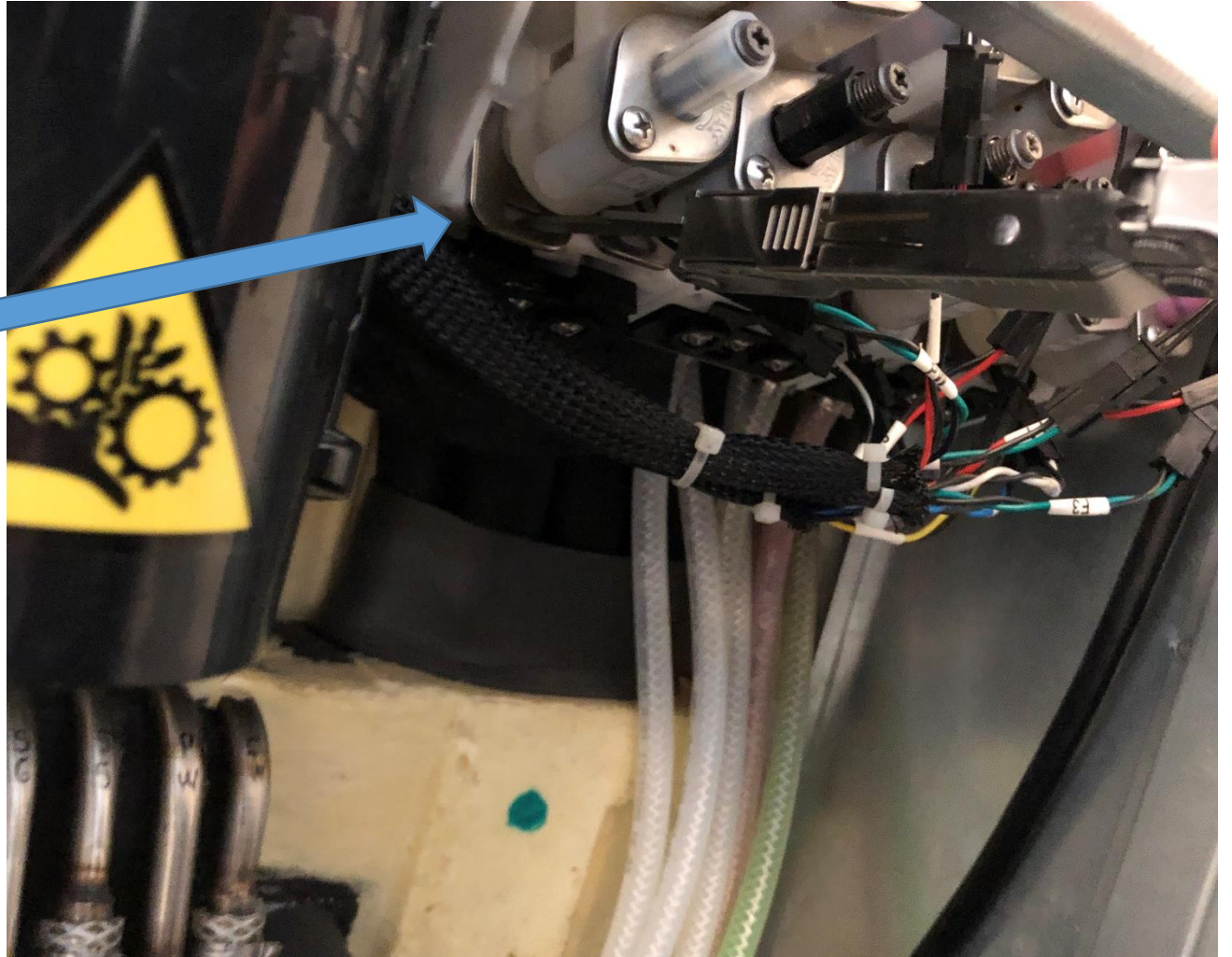
Purging valves

Purge Water & Syrup Lines



Removal of the valve.

With the valve spindle in the off position and the valve bank removed from the back block it is now time to remove the valve. Remove the silver retaining clip, one per valve with a screwdriver. These clips are at the bottom of the valve on the QSP.



Picture of a QSP

You do not have to remove the MFV module all the way out of the machine

*The next step in this guide will have the valve and valve bank removed.
This is to show you in more detail of how to remove the valve from the
valve bank and the solenoid from the valve.*

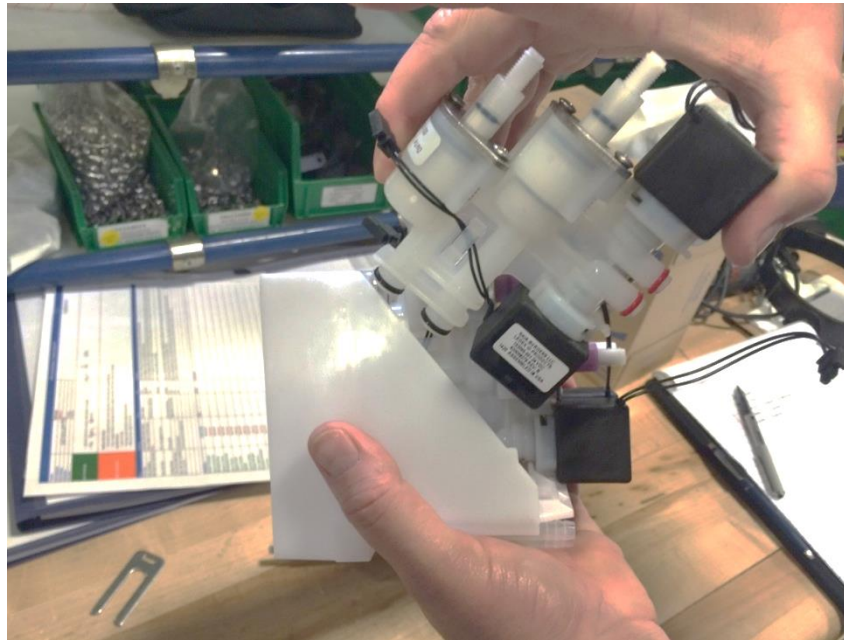
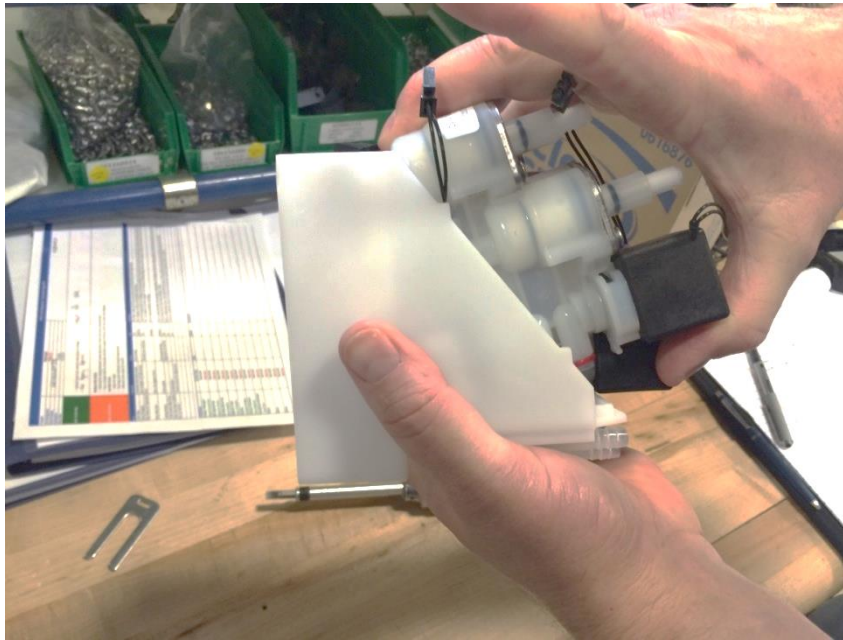
Disassembly of MFV for service



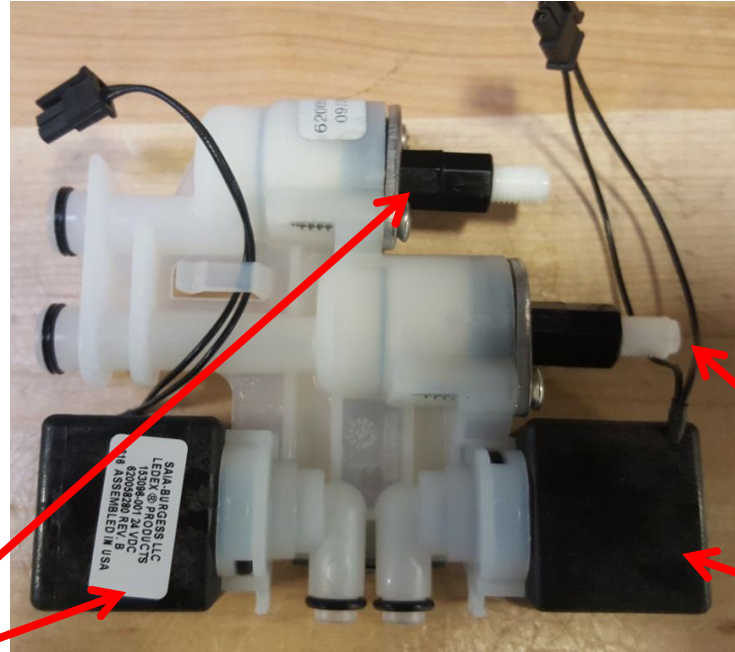
- **NOTE: YOU DO NOT HAVE TO DISCONNECT BEVERAGE TUBING OR WIRING FROM THE VALVE / VALVE BANK TO REMOVE AN INDIVIDUAL VALVE.**
- Make note of wire harness locations before unplugging (if needed) as there is 6 connections per module. You can use the valve purge screen to assist with wiring.
- Using a screwdriver or needle nose pliers, pry up on the stainless steel retaining clip and remove.

Removing valve module

Lift up on the front solenoid to separate the valve from the valve module



Identifying Top and Bottom Flow Controls



Rear solenoid is the top flow control

Front solenoid is bottom flow control

Removing solenoid coil, plunger and spring

Rotate solenoid ¼ counterclockwise and remove to service the solenoid, plunger and spring.

****Make note of the routing of the coils and wires so they can be placed back into their original orientation.****



- Use caution when removing and replacing spring so you won't lose or bend it

Remove the existing plunger tip



PN: 620070041 - water plunger tip

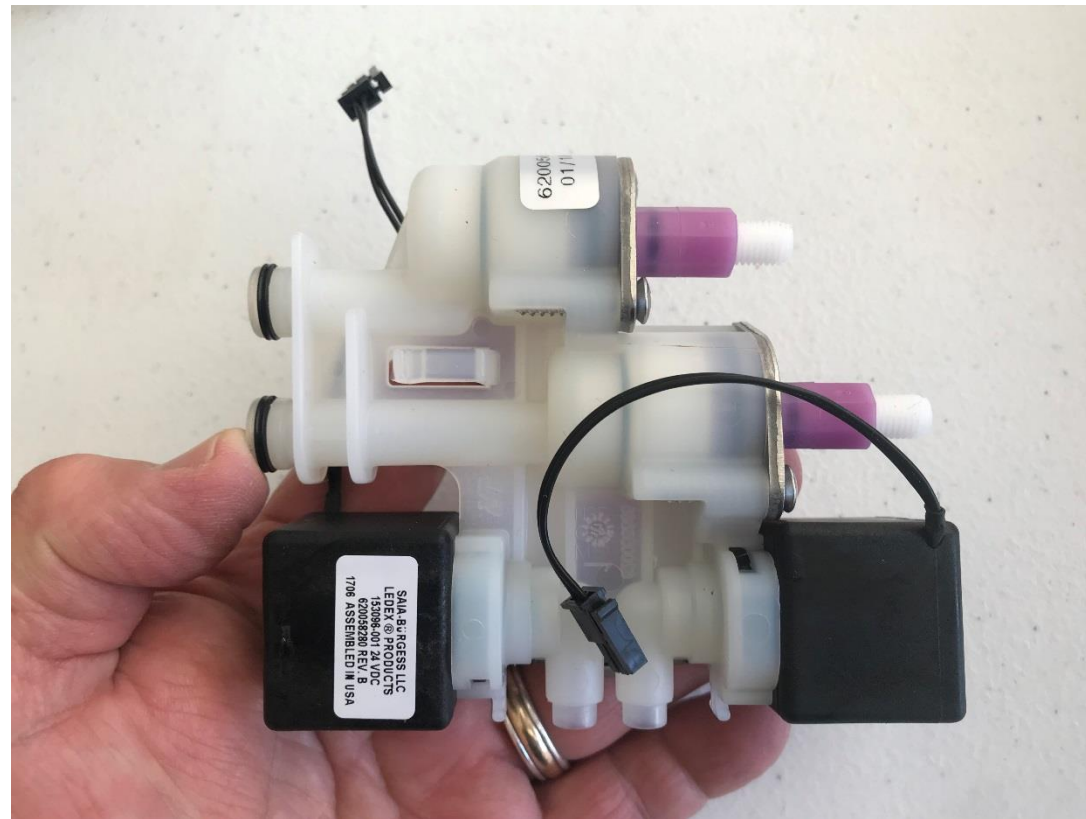
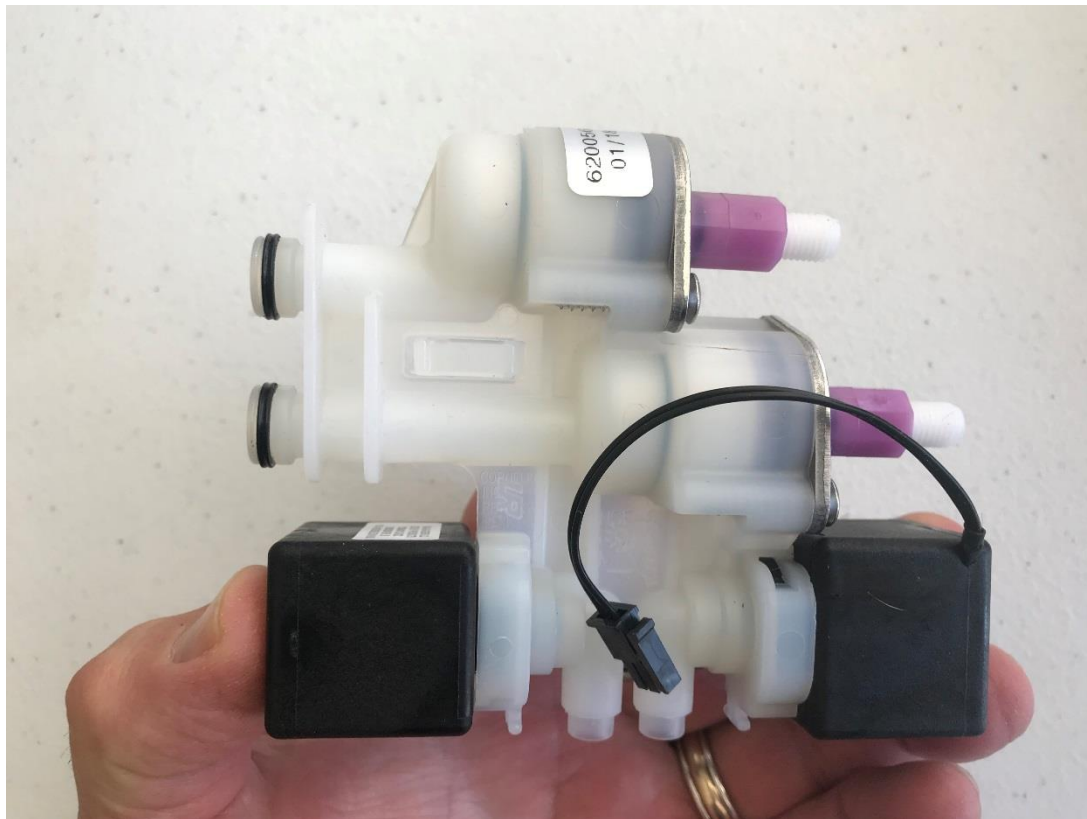
PN: 620711132 - syrup plunger tip



Replace with a new, shiny black plunger tip for water and a burgundy plunger tip for syrup.

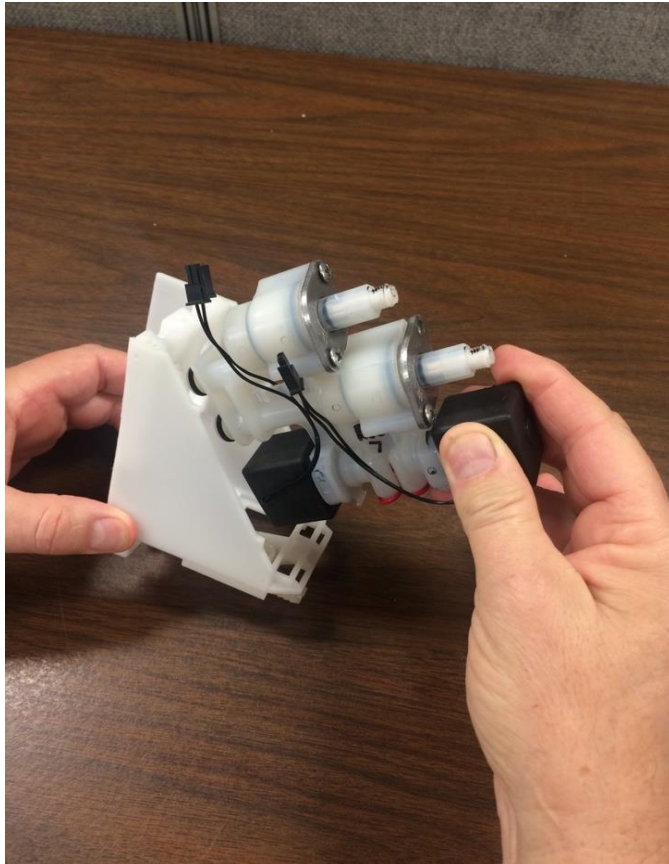


Insert the solenoid back into the valve and rotate $\frac{1}{4}$ turn clockwise to lock it in. Also, ensure that the coils and wires are in their original orientation.



Re-installing module

Place the valve into the valve into the valve bank.



Start the solenoid at a 45 degree angle and ensure that the rear flange of the valve fits behind the wall of the valve bank. The valve should slide easily into place, do not force it.

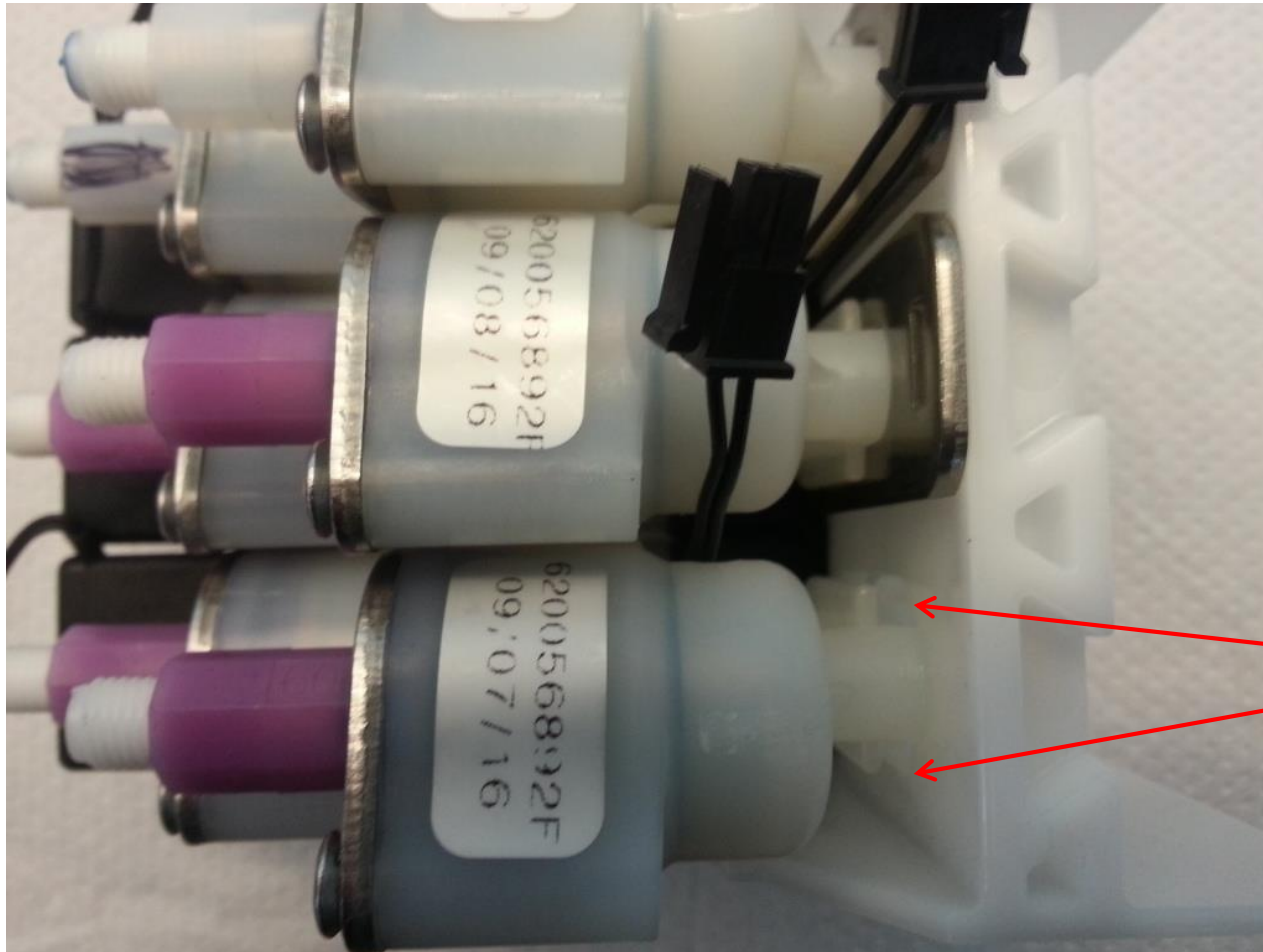


Ensure that the bottom **red** o-rings seat and are not pinched in the outlet barbs.



- Replacement of o-rings and lubrication with Dow 111 or equivalent is recommended
- O-rings rings are now red, but older units may have black o-rings.

The valve is back in position and ready to insert the stainless steel locking clip



Insert locking clip into the gap between the valve bank and valve. If it doesn't slide in easily, the valve may not be aligned.

Completing MFV valve install

- Place MFV Valve on the backblock (make sure wires are not pinched)
- Push the dovetail up for the QSP to lock valve
- Push spindles up to open shut offs
- Re-connect wire harnesses (if necessary)
- Check for leaks by activating the modified valves through the valve purge function
- Check flow rates to confirm ratio is still correct.



Technical support

Marmon Link – 1800.238.3600

Follow prompts for technical support