

How To Replace Solenoid Plunger Tips on MFV Valve

IDC Pro 255



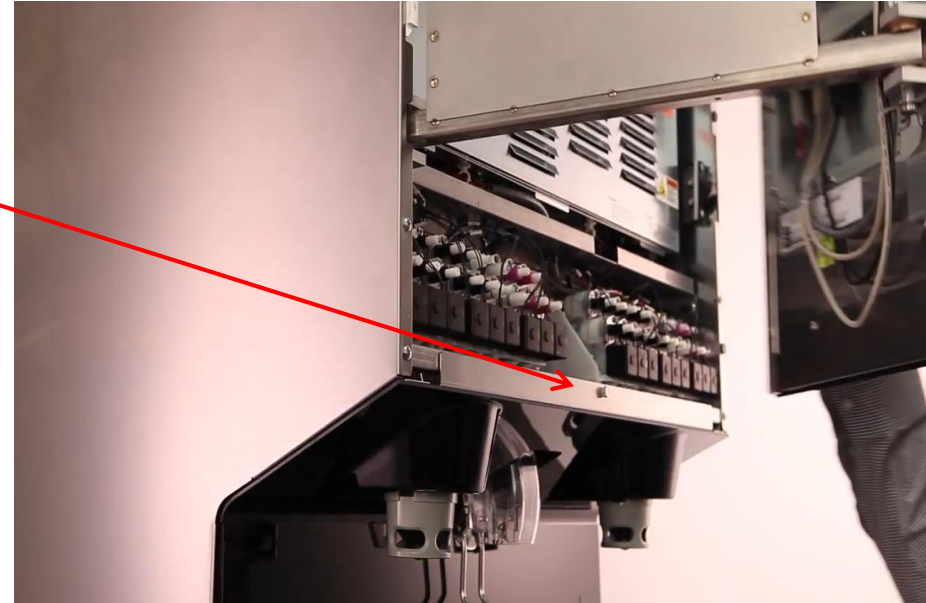
The only tool needed to perform this procedure!



Removing the Upper Splash Panel

**** This must be removed to gain access to the MFV shutoffs****

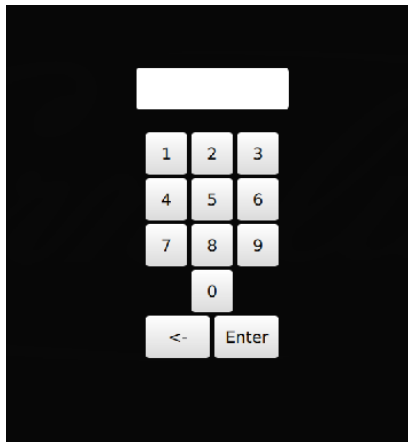
- Remove the thumb screw behind the door
- Pull the panel up and forward to release. Guide the panel down making sure to clear ice dispense lever and nozzles
- **NOTE:** Re-insert thumb screw to avoid losing it.



Accessing the Service Screen on IDC Pro



1. Display the keypad screen by tapping each corner of the video screen starting in the upper right corner and continuing to tap each corner in a counterclockwise direction, in the form of a “C”.



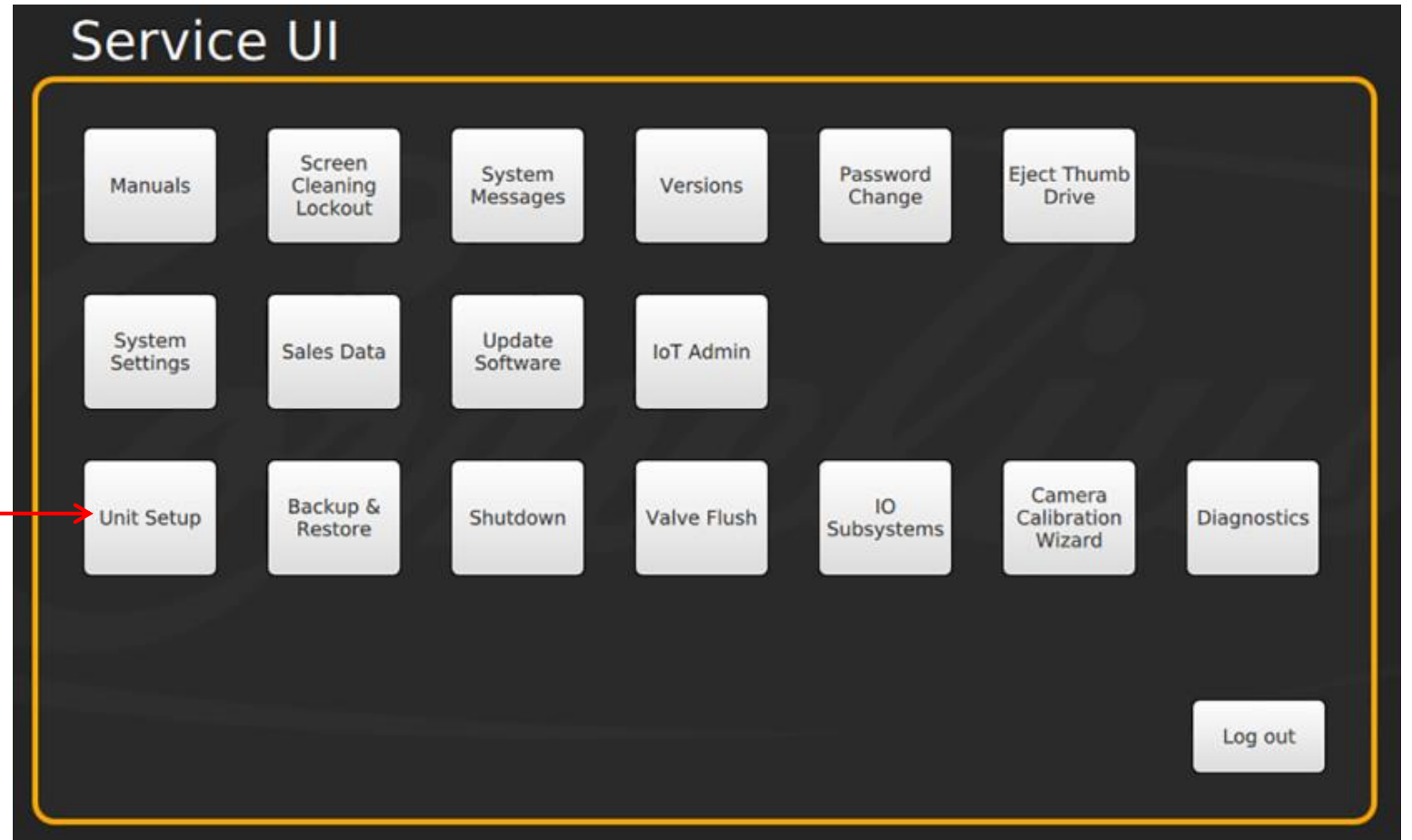
2. A keypad will appear

Enter an Access Code (default values)

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

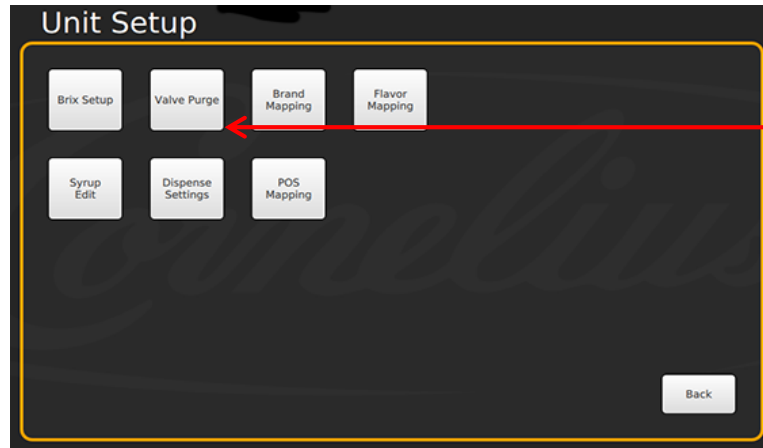
Accessing Unit Setup

Select Unit Setup - Service Technician
Only

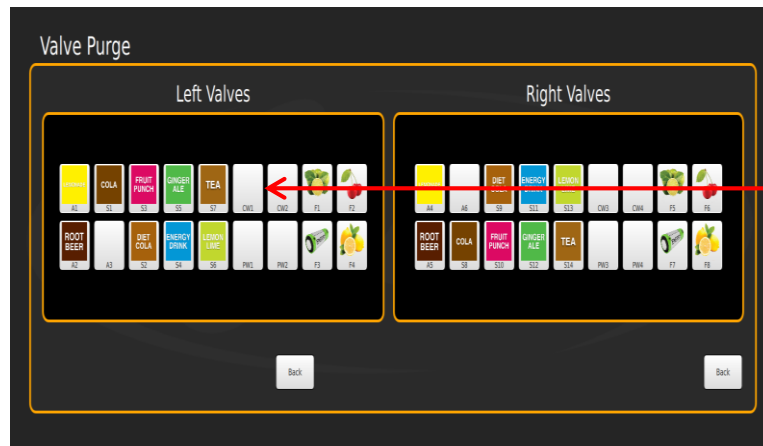


Locating the Correct Valves

*****We will use the valve purge option to identify the correct valve*****



While in Unit Setup - select Valve Purge

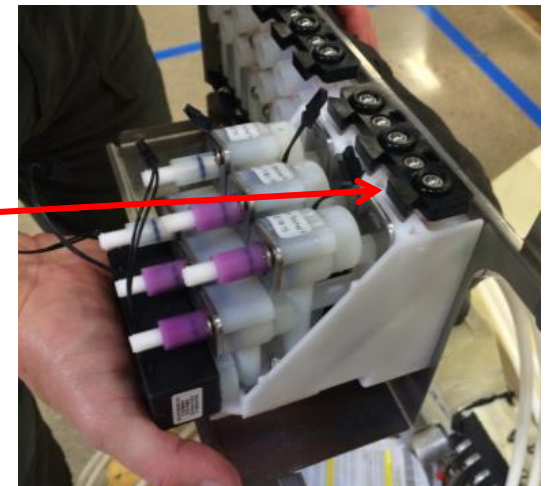
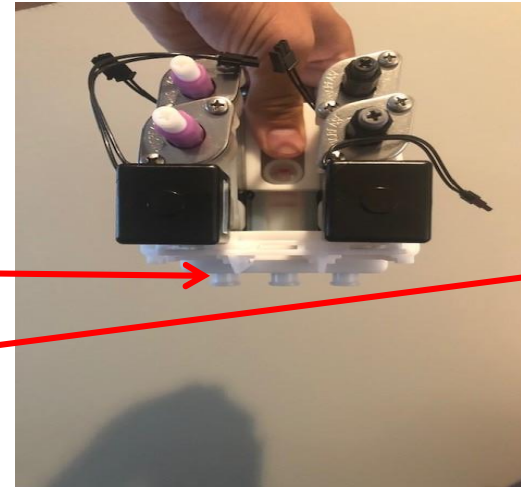


The valve layout on the screen is laid out the same orientation of the physical valves. If you were to take the valve purge screen and lay it over the valves it will show you what valve is what. EX: you are working on valve CW1; it is the 6th valve from the left on the top.

MFV Shut offs

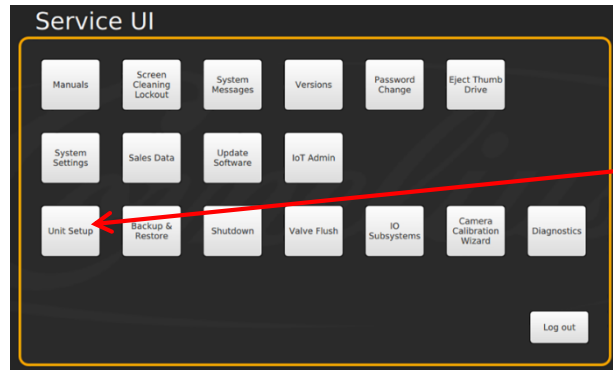
Procedure to remove an individual MFV module

1. Look for round spindles (white tab) on the bottom back of the valves; there will be one per valve that controls flow to the top and bottom flow controls. Locate the correct valves. **To shut off flow to the valve, these spindles must be pushed UP.** You will see a black spindle pop up from the top of the valve indicating it is shut off.
2. ***Once spindles are pushed up, you should activate the valves in the valve purge screen to release pressure on the backblock before depressing the dovetails, then deactivate the valves before proceeding. This will also confirm you have the correct valve shut off. Steps for purging on the next page.***
3. Once the white spindles are pushed up and pressure is relieved, push the black dovetails (between the white spindles) up to release the entire valve module from the valve block.



Relieving pressure between backblock and valve

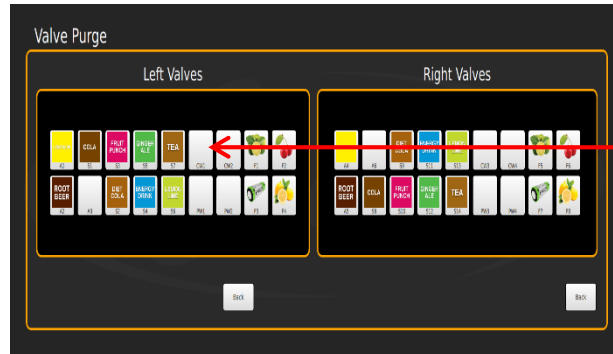
*****This step will confirm you have the correct valve shut off.*****



Select Unit
Setup - Service
Technician Only



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 CW1; it is the 6th valve from the left on the top.

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

*The next steps in this guide will have the valve and valve bank removed.
This will provide a better view and show you in more detail how to
remove the valve from the valve bank and the solenoid from the valve.*

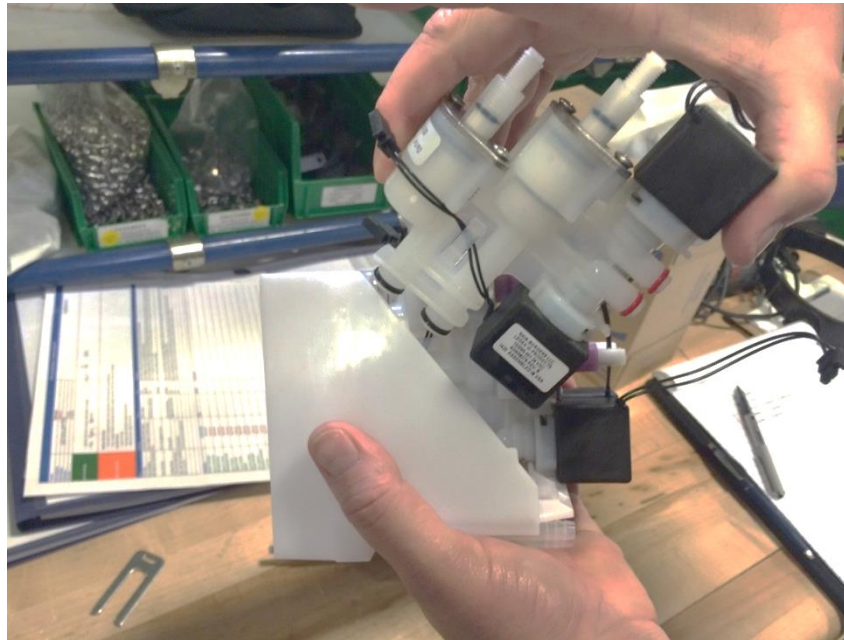
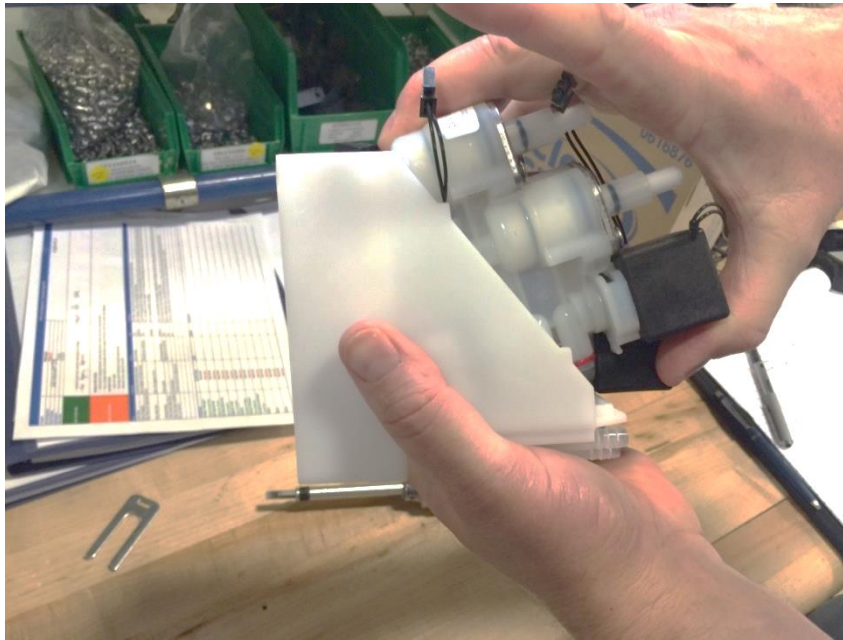
Disassembly of MFV for service



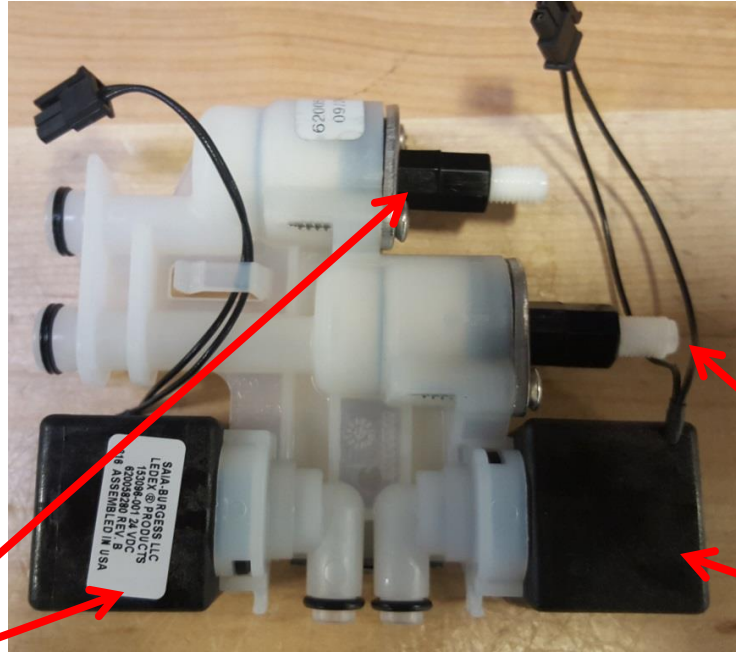
- **NOTE: YOU DO NOT HAVE TO DISCONNECT BEVERAGE TUBING OR WIRING FROM THE VALVE / VALVE BANK TO REMOVE AN INDIVIDUAL VALVE.**
- Make note of wire harness locations before unplugging (if needed) as there is 6 connections per module. You can use the valve purge screen to assist with wiring.
- Using a 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 $\frac{1}{4}$ 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



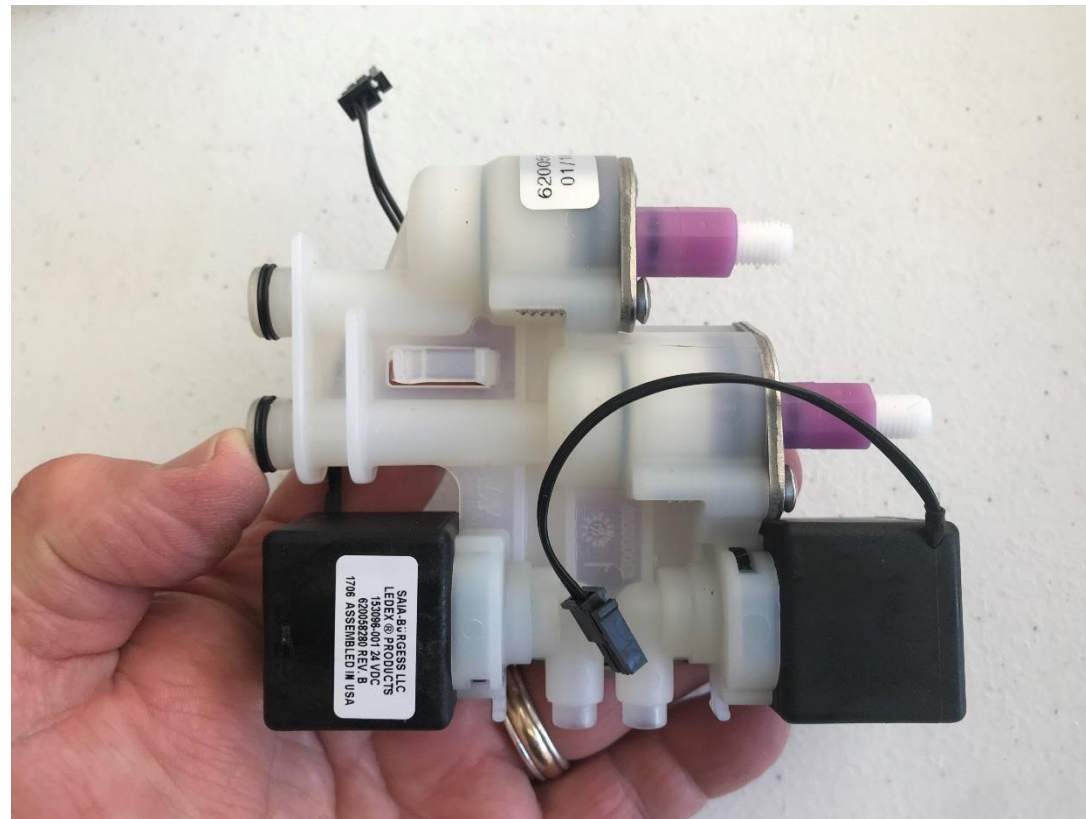
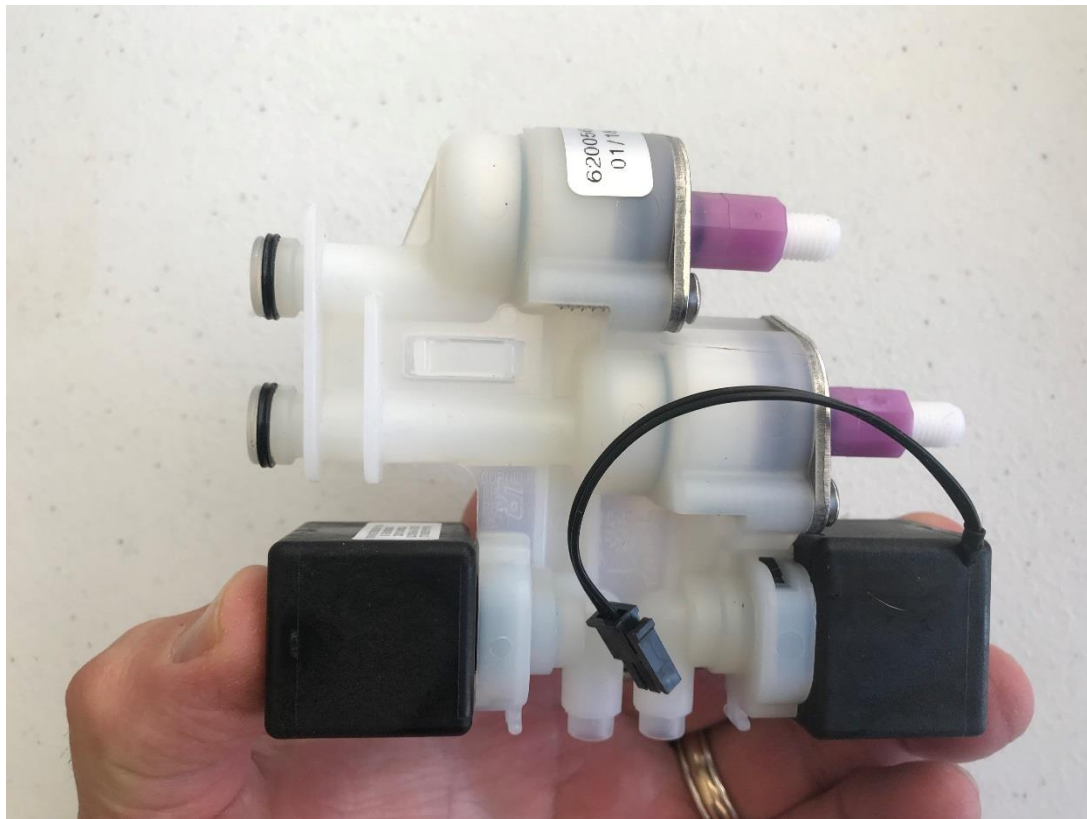
SN Cut in:
62A1942RP018



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

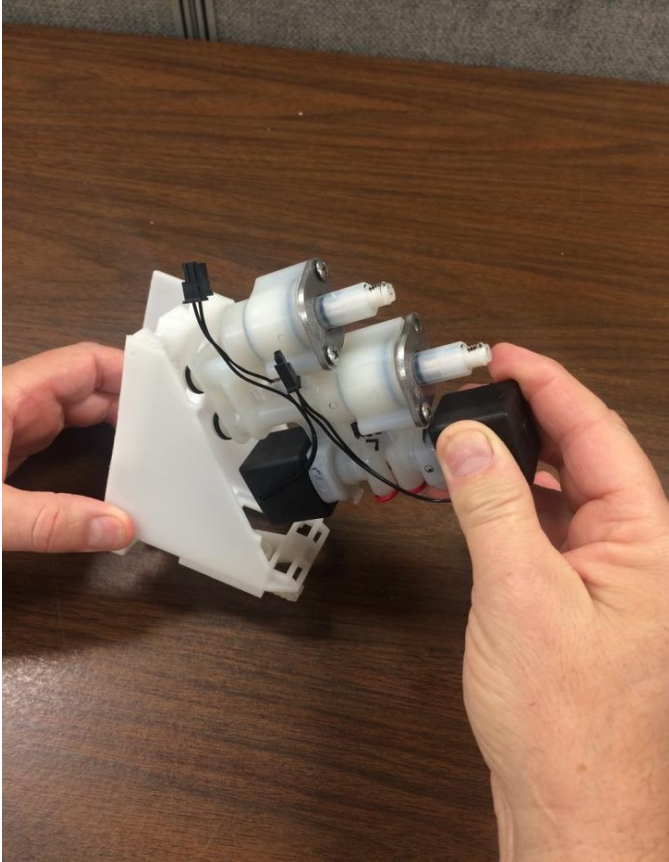


Insert the solenoid back into the valve and rotate $\frac{1}{4}$ turn clockwise to lock it in. Also, ensure that the coils and wires are in their original orientation.



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.

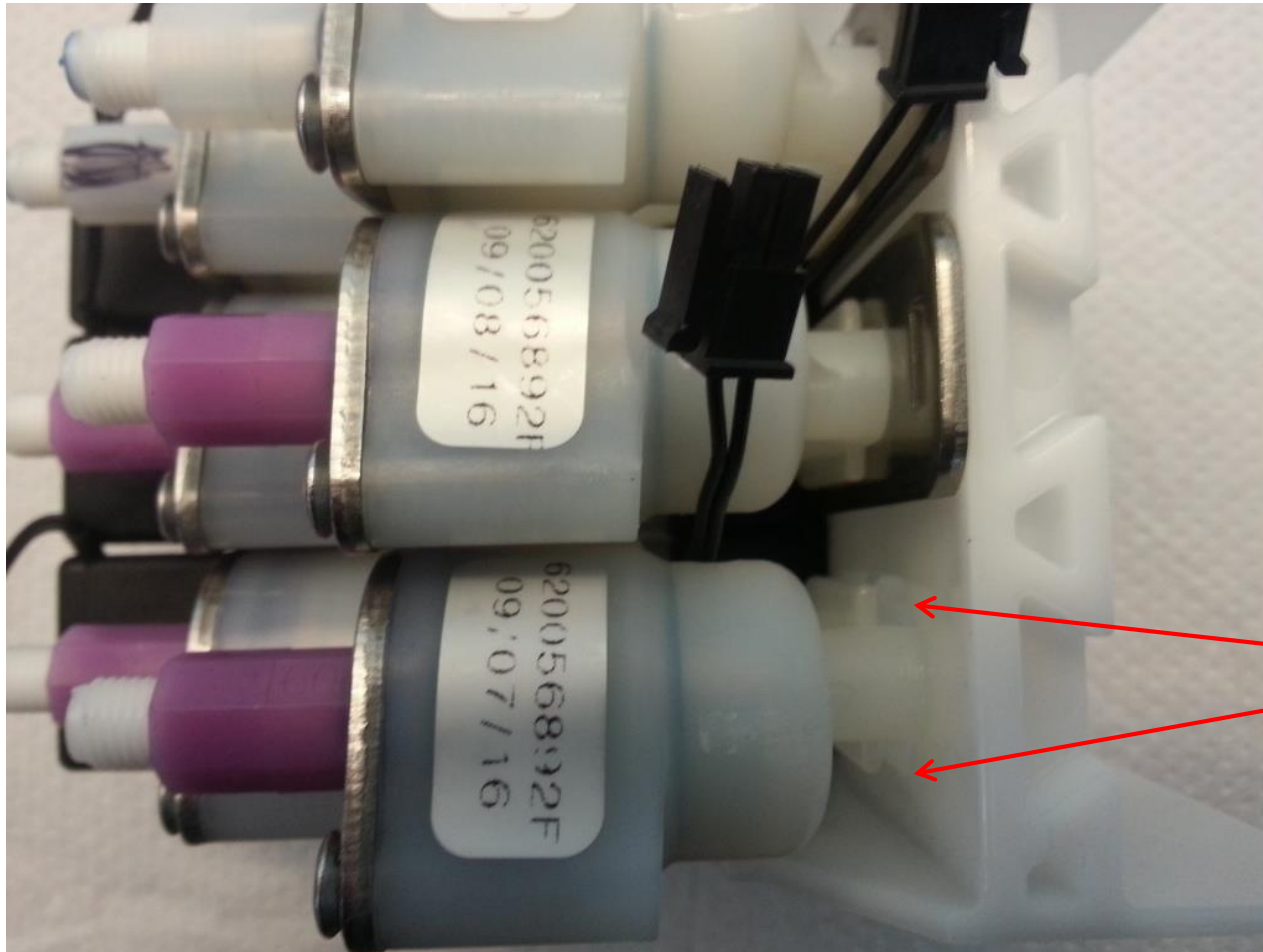


Ensure that the bottom **red** o-rings seat and are not pinched in the outlet barbs.



- 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.

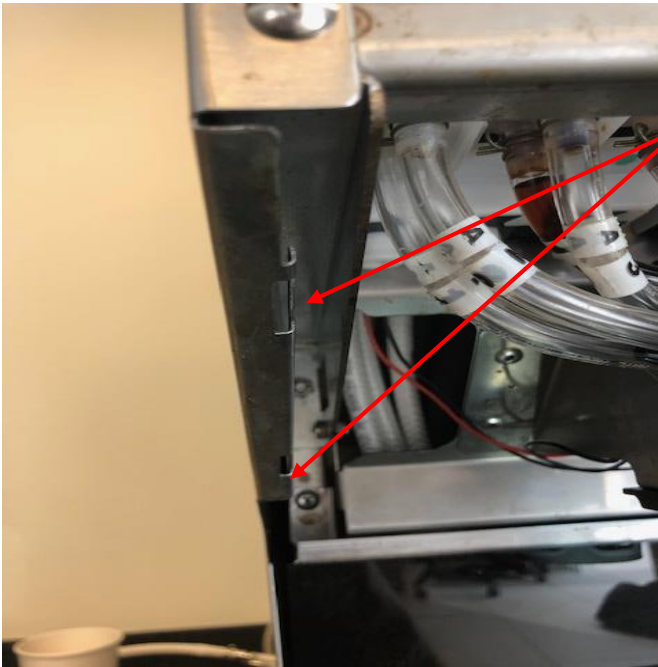
Completing MFV valve install

- Place MFV Valve on the backblock (make sure wires are not pinched)
- Push down on the dove tail to secure the valve
- Push spindles in the down to open shut offs and allow flow
- Re-connect wire harnesses (if necessary)
- Check for leaks by activating the modified valves through the valve purge function (see slide 8)
- Check flow rates to confirm ratio is still correct.



Installing the Upper Splash Panel

- Guide the upper splash panel up around the ice dispense lever and the dispensing nozzles.
 - Align the two hooks on each side of the upper splash panel with the two slots on the right side and left side of the cladding. Insert the hooks into the cladding and push down to ensure the hooks lock into place.
 - Insert the thumbscrew and tighten down.
 - Close the merchandiser and check for ice agitation and dispense.
- **Improperly installed upper nozzle cover can interfere with the touch screen closing completely.
This will prevent ice agitation and ice dispense



- Slots in cladding
- Hooks on nozzle cover



Technical support

Marmon Link – 1800.238.3600

Follow prompts for technical support