

IDC Pro Pocket Guide

Pocket Guide

Generated 2026-08-10 — always regenerated from the live site, never edited directly.

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Cleaning and Maintenance

Annual Cleaning and Maintenance

1. Annual Inspection

On a yearly basis, perform an annual inspection in addition to the daily, weekly, monthly, and quarterly procedures. To perform the annual inspection, remove the IDC Pro's splash and cold plate cover to clean and sanitize the cold plate surface.

Bi-Annual Cleaning and Maintenance

1. Clean and Sanitize Syrup Line Tubing and BIB Connectors

On a bi-annual basis, perform the daily and weekly cleaning procedures, as well as cleaning and sanitizing the syrup lines and cleaning the hopper.

To clean and sanitize the syrup line tubing and BIB connectors, follow this procedure.

2. Clean BIB Disconnects

Remove all the quick disconnects from the BIB containers, and submerge them in a soapy water solution. Clean them with a nylon bristle brush (not a wire brush). Rinse them with clean, potable water.

3. Sanitize BIB Disconnects

Next, rinse the cleaned BIB connections in a 5-gallon pail of sanitizing solution. Attach sanitizing fittings to each BIB disconnect so that sanitizing solution can be drawn through the disconnect.

Place all BIB disconnects in the sanitizing solution. Open the valves and allow them to flow until sanitizer flows from the valves. Sanitizer should remain in the tubing lines for 15 minutes.

4. Clean Nozzle and Diffusers

Remove all nozzles and syrup diffusers and clean them in a mild soap solution. Rinse the nozzles and diffusers, and reassemble them onto the valves.

5. Reconnect BIB Disconnects

Remove the sanitized fittings from the BIB disconnects and connect the disconnects to the appropriate BIB container.

Open the valves and let sanitizer flow until all the sanitizer has been flushed from the system and only syrup is flowing.

6. Clean Hopper

To clean the hopper, first remove all the ice. Then clean and sanitize the entire interior surface of the hopper. Be sure to use the brush provided with the IDC Pro to clean the cold plate surface. To do so, the brush must be extended through the opening in the bottom of the hopper and/or the cold plate access panel located behind the splash panel and on top of the cold plate.

Daily Inspection and Cleaning Procedure

1. Daily Inspection - CO2

On a daily basis, inspect the following:

If not using a bulk tank, check the level of the backroom CO2 supply.

Make sure the bulk CO2 or CO2 cylinder regulator gauge indicator is not in the shaded "change CO2 cylinder" part of the dial. If it is in the shaded area, the cylinder is almost empty and must be replaced.

2. Daily Inspection - Drip Tray

Remove debris from the drip tray to prevent drain blockage.

Clean the vending area and check for proper water drainage from the drip tray.

3. Remove Cup Rest

Remove the cup rest from the drip tray and clean it with warm, soapy water. Rinse it with clean water and allow it to air dry.

4. Screen Cleaning Lockout

Select the Screen Cleaning Lockout button to enable the Screen Cleaning Lockout. Then wipe down the display screen while the countdown timer is disabling the display.

Note: Use a soft cloth with warm water followed by a soft dry cloth to dry and remove streaks. Do not use any chemicals or cleaners!

5. Wipe Down Exterior

Wipe down the exterior of the IDC Pro with warm, soapy water. Rinse it with clean water and allow it to dry.

6. Clean Nozzle and Diffusers

Remove the nozzles and diffusers and wash them in warm, soapy water. Clean them with the nylon bristle brush provided. Rinse the nozzles and diffusers in clean water, followed by approved sanitizer and allow them to air dry.

Note: Do not allow the nozzles and diffusers to soak in the sanitizer for more than 2 minutes! Make sure you properly install the gasket prior to installing the diffuser. Re-install each diffuser by pushing vertically upward, making sure it aligns with the key-slot. Re-install the nozzle by rotating it clockwise. Do not cross-thread the nozzle.

7. Remove Ice Chute

Remove the ice chute for cleaning. To remove the ice chute, open the display panel.

8. Release Locking Tabs

Release the locking tabs outward on each side as shown.

Then lift the chute upwards to remove it.

Clean the interior of the ice chute using warm, soapy water and the brush provided with the IDC Pro.

Rinse the ice chute with clean water, and let it air dry. Then spray the inside of the chute with sanitizer.

Allow it to air dry.

9. Re-Install Ice Chute

NOTE: To re-install the ice chute, make sure the pin of the ice gate is through the hole of the encapsulated magnet. The screen door should be closed to test operation.

10. Warm Water Down Drain

Pour warm water down the drain to keep it clean and flowing properly.

Note: Do not pour excessively hot water down the drain. If it is too hot to put your hand into - do not use it!

Reinstall the cup rest into the drip tray and pour all the remaining sanitizer solution down the drain to help keep it clear.

Quarterly Cleaning and Maintenance

1. Empty Ice

Note: Prior to removing power you will have to empty the ice. You can use a clean bucket to capture the ice through the ice chute or you can slowly pour warm water into the hopper to help melt the ice.

2. Remove Power and Clear Drain Trough

Quarterly Cleaning Procedures include the daily and weekly cleaning and maintenance procedures, in addition to cleaning and sanitizing the hopper. Prior to sanitizing the hopper, remove power from the IDC Pro and remove any debris from the drain trough.

3. Clean Cold Plate

Once the ice is melted, pour the warm water through the hopper opening to clean the cold plate.

4. Wash Down Hopper

Then wash down the surfaces of the hopper from top to bottom, using a soft cloth soaked with warm soapy water. For manual-fill ice units, wipe down the hopper cover with warm soapy water. Rinse the cold plate with warm potable water.

For manual ice units, also rinse the hopper cover with warm potable water.

5. Sanitize Hopper

Spray the upper and lower cold plate access areas with sanitizing solution and let the IDC Pro air dry.
Rinse the cold plate surfaces by slowly pouring leftover sanitizer solution through the hopper opening.

Weekly Cleaning and Maintenance

1. Weekly Cleaning

On a weekly basis, perform the daily cleaning procedure, in addition to cleaning the splash panels and drip tray cover. Wipe the splash panel and nozzle cover down with warm, soapy water. Rinse them with clean water and allow them to air dry.

Note: Perform the wipe down with a soft, dry cloth to remove streaks.

Operation

Accessing Service Screens

1. How to Access

To access the Service menu, tap each corner of the merchandiser portion of the screen in a counter- clockwise direction, starting in the upper right corner, to form a "C."

Note: The screen will momentarily flash white when it is tapped in the correct spot.

Wait for the video display to come back, and continue to the next corner. If instead of white, a black square appears momentarily, it indicates that the software is an outdated version and requires updating.

2. Service Level PIN

Once the number pad shows up, type in your service level pin to access the Service screen.

Default passcode 1111 displays the Operator's Level (access level 1 only)

Default passcode 2222 displays the Manager's Level (access levels 1 and 2)

Default passcode 3333 displays the Technician Level (access levels 1, 2, and 3)

Note: Follow the same sequence for all software to enter the Service UI

ADA Keypad

1. ADA Keypad

The ADA keypad is located on the lower right side of the splash panel, and allows the following options:

Activate the ADA keypad by pushing the top button.

Press the top button (arrows pointing left and right) to navigate between the left and right drink selection / dispense point.

Press the circle to select the brand and press the circle again to dispense the drink.

Select the circle back arrow to go back to the previous setting.

Control Board

1. Number of Control Boards

There are 3 control boards total in the electrical box: 2 MFV boards and 1 agitator/carbonation board (on the far right).

2. Control Board Location

The left MFV board controls dispensing on the left. The right MFV controls dispensing on the right. The left and right MFV boards are identical.

3. Control Board Dip-switches

The dip-switches on the left side of each board (identified here) must be set correctly. The dip-switches on the left MFV board are switched to the right, and the dip switches on the right MFV board are switched to the left.

4. USB Cable Signal

The MFV boards receive a signal from the USB cable between the screen and the board as the user selects and dispenses the beverage.

When the MFV board receives the signal, it sends 30 VDC to the solenoids required to dispense the selected beverage.

5. Agitation/Carbonation Board

The agitation/carbonation board is located on the far-right side of electrical box.

6. Agitation Board Adjustment

The agitation board controls the automatic agitation of ice in the hopper as well as agitation of ice when dispensing. Automatic ice agitation timing can be changed with the blue diodes on the board.

Note: If using cubed ice it will not require any adjustment. When using soft ice adjust the OFF TIME to its max of 3 hours rotated all the way to the right; adjust ON TIME to its minimum (.5 sec.) by rotating it all the way to the left.

Solenoid Valves

1. Number of Solenoid Valves

The IDC Pro has 36 solenoids, with 18 on each side; there are 10 solenoids for brands, 4 for water and 4 for flavors. (In that order)

2. Flow Controls

The black flow controls are for brands, white flow controls are for water, and purple flow controls are for flavor shots. The solenoid opens and closes to allow or stop the flow of water and/or syrup.

3. Ohm and Voltage Values

Solenoid Coil Ohm and Voltage Values: 9.1 Ohms +/- 10% Initial Solenoid activation voltage – 30 VDC

Turning on the IDC Pro

1. Turning on the IDC Pro

If the IDC Pro has already been configured during installation (Loaded from the USB), then the IDC Pro will automatically display the Home screen upon powering up. From the Home screen, the unit is ready to dispense beverages.

If the Skip Settings option was selected during the initial configuration process, the Configuration screen will display each time the machine is started. Refer to Initial Startup in Installation for configuration details.

Troubleshooting

ADA Keypad Non-Responsive

1. Keypad Location

The ADA keypad is located on the right-hand side, behind the splash panel. It is powered by the screen.

There is a black USB that feeds power from the screen to the ADA, and communication from the ADA to the screen.

Every time the board is power cycled, it calibrates for a microsecond. You should see the top arrows flash quickly.

2. Check Connection

Check for proper connection at the ADA board.

Remove the splash panel and check the connection on the upper left hand corner of the board.

Make sure that the black USB is plugged in.

3. Check USB Cables

Note: If both connections are properly connected and you still have no response unplug the black USB and one of the gray USB cables. Then plug the black USB cable into the USB port you just remove the gray USB cable from. If the ADA touchpad now works this indicates you have a bad ADA power USB port and may need a new SBC board.

Beverage Does Not Dispense

1. Check Water and Water Pressure

If the beverage does not dispense, follow these troubleshooting steps. First, identify what exactly does not dispense - Syrup, Carbonated Water, Plain Water, or Both. Make sure the water is turned on and water pressure is appropriate. Note: Appropriate water pressure is 50 psi-60 psi. If you have low water pressure a water booster will be required. The booster will boost the water pressure up to 90 psi-110 psi. A water regulator will be required. Reference installation portion.

2. Check Carbonator Pump

If water is on and plumbing is routed and connected properly, check the following:

If carbonated water is not dispensing (only syrup dispenses) check that the carbonator pump is plugged in and the power switch is on.

If the carbonator pump is on, check if it is engaging properly as you dispense. The carbonator motor should engage periodically as you dispense carbonated water.

3. Carbonator Level Probes

If the carbonator is running constantly, it indicates that the level probes in the carbonation tank are faulty, not satisfied, or there is not sufficient water flow.

4. No Water out of Nozzle

If nothing but Co2 (air) comes out of the nozzle when dispensing, it indicates there is no water.

5. No Water Error

If the carbonator is not running at all, make sure the pump is plugged in and the power switch is on.

If the switch is on and there is proper water pressure, the problem could be a "no water" error. This occurs when the level probes are dry for two minutes or more.

6. Power Cycle IDC Pro

When the "no water" error occurs, an error is sent to the agitation board, preventing the motor and pump from running dry.

To clear this error, safely shut down the screen and power cycle the IDC Pro. Reference Shutdown Reboot and Restart in service level 1.

Upon start-up you should hear the agitator motor engage.

7. Check Plumbing and Pressure

If plain water is not dispensing (only syrup dispenses), check the plumbing and pressure.

Follow the troubleshooting process for the solenoid valves (covered in the upcoming steps).

8. BIB Level and Connection

If syrups are not dispensing (only CW or PW dispenses), check the BIB level and connection. Also check BIB pump pressures.

Note: Reference Engaging CO2 in installation portion to find correct CO2 pressures.

9. Touch Screen Response

If the beverage does not dispense at all, check for touch screen response.

Does the IDC Pro allow you to select a beverage?

10. Solenoid Activation

If you can select a beverage, you should hear the solenoids activate (listen for a click) when you attempt to dispense.

11. Valve Purge

If you do not hear the solenoids click, enter the Menu, Unit setup, Valve purge, and press a Beverage icon (which will highlight) to see if it dispenses.

12. Voltage at Soleroid

If it does not dispense, check for voltage at the solenoid. 30 VDC should be sent to the solenoid. If voltage is correct, check the resistance, which should be 9.1 ohms +/- 10%. If there is proper voltage and proper resistance, follow the steps to disassemble the flow control and check for blockages.

Note: If voltage is not present check for voltage at the MFV board. If voltage is not present at the board please reference troubleshooting MFV board and power supplies.

13. Check Plunger Tips

If the flow control checks out, follow valve disassembly procedures to check plunger tips for deformities.

Beverage is Too Sweet

1. Check Flow Rates

If the beverage is too sweet, check flow rates for either too little water or too much syrup.

2. Check Brix Setup

Water should be set to 10 ounces in 4 seconds:

CW1=7oz PW1=7oz

CW2=3oz PW2=3oz

CW3=7oz PW3=7oz

CW4=3oz PW4=3oz

Syrup should be set to follow manufacturer's recommendations and standards, which is typically 2 oz./4 sec.

Carbonator Motor Timing Out

1. Shut Down Screen

The carbonator times out after 2 minutes of the carbonator probes not sensing water. The carbonator sends an error to the agitator/carbonator board. When this occurs, power cycle the IDC Pro.

First, safely shut down the screen, and then power cycle the IDC Pro by unplugging and plugging back in.

2. Check for Voltage

Remove both probes and J4 on the agitation board which should cause the carbonator motor to engage. If it does not engage this indicates a bad harness or bad agitation/carbonation board or motor.

Check for voltage at the motor, you should have 120 VAC. If you have voltage replace the motor. If you do not have voltage replace the board.

Drink Selection Not Available or Not Displayed

1. Unplug Gray Cables

If the drink selection is not available or not displayed, unplug the gray cables on the back of the screen for 10 seconds before plugging them back in.

2. Check Board Connections

If the drink selection is still not available, check the connections on the board.

The gray USB is routed through the machine and connects to the MFV board. If it is not connected, "not available" will display.

3. Check Voltage

Next, check voltage for the power supply feeding the MFV boards. The power supply is located in the E-box.

Voltage should be 120 VAC incoming and 30 VDC outgoing.

If there is 30 VDC outgoing, check the voltage at the MFV board.

4. MFV Boar Voltage Check

Voltage at the MFV board can be checked at the main connection located at the upper right hand corner. Between the black and yellow you should receive 30 VDC. Between the black and red you should receive 12 VDC. The 12 VDC powers the board while the 30 VDC passes through as needed to send power to the valve solenoids.

Ice Dispenses Continuously

1. Ice Dispenses Continuously

If ice dispenses continuously, check the ice gate mechanism, which may be stuck in the open position. Inspect the gasket for proper positioning. Make sure the ice gate is able to slide freely behind the lower ice chute. You may have to clean the back of the ice chute.

Note: If the ice gate is stuck open it can cause the reed switch to stay closed which will cause continuous agitation and dispensing of ice.

Ice Does Not Dispense

1. Check for Ice

Make sure there is ice in the hopper. If there is no ice maker on the IDC Pro you can remove the hopper lid to check. If there is a top mounted ice maker, you can open the manual fill lid located on the front of the hopper lid to check. If ice does not dispense, ensure that the door is closed all the way and that the hopper lid is properly in place.

2. Lid Magnet

If the agitator does not agitate when you close the door, check for proper position of the hopper lid and make sure the magnet located on the inside front lip of the hopper lid has not fallen off.

3. Locate Magnet

If you cannot see the magnet due to a top mounted ice maker you can use a small screw driver to slowly run along the inside of the lip.

Note: If there is a top mounted ice maker you will have to open the screen to gain access to the bottom front lip of the hopper lid.

If you can make it from side to side with no obstruction, it indicates the magnet is missing. Order a new hopper lid. (PN: 620061537)

4. Check for Agitation

If the motor agitates when the door is shut, it indicates that the sensor is good, the harness is properly sending the signal to the board, the board is good, and the motor is good.

Note: As long as the hopper lid is properly installed with the manual fill door and warning sticker facing the front and the magnet in place, the agitator motor will agitate every time the door is closed.

5. Check Agitation Connection

If the magnet and hopper lid are properly installed and the door is shut, but still not agitating, the next step is to check the connection of the sensor harness. If the quick connect is disconnected reconnect, close the door and check for agitation.

6. Bypass Sensor

If the agitator still doesn't agitate we will now bypass the sensor. Locate the black sensor on the back top center of the screen.

There are two black wires attached to the sensor which feed directly into a quick-connect that is connected to a red and black wire feeding back to the agitation board located in the E-box.

7. Rewire the Connection

Disconnect the quick-connect and insert the wire into the connection side with the red and black wires so the switch will close.

If the agitator agitates, it indicates that the harness to the board is sending the signal properly, and the agitator motor and board are working properly.

8. Replace Reed Switch

Note: The agitator should briefly agitate as soon as it's bypassed. If the agitator agitates while bypassing the sensor with the small wire, the magnet is properly on the hopper lid and the hopper lid is installed properly, this indicates the sensor is bad. Replace the reed switch as required (PN: 620314527).

You can also place a magnet on the sensor on the back of the door and it should activate the agitator. This indicates that the sensor is good, the harness is properly sending the signal to the board, the board is good and the motor is good.

9. Check Safety Connection

If the agitator still does not agitate when jumping out/ bypassing the sensor, check the safety connection on the agitation board. Remove the e-box cover, and locate J9 on the agitation board. If it is connected, disconnect it and place the wire into J9.

If the agitator agitates, this indicates you have a bad harness between the sensor and board.

Note: There is no risk of shock by jumping J9.

10. Check Chute Assembly

With the door shut, or sensor jumped out, if the sensor is bad or for troubleshooting purposes, attempt to dispense ice.

If it does not dispense, check the ice chute assembly.

11. Check Chute Installation

Check for an improperly installed upper ice chute assembly, which may prevent the reed switch from activating. Check that the tongue of the upper ice chute engages into the back of the lower chute, and that the upper chute engages outside the lower chute. Ensure the front of the chute is snapped into place.

12. Check Ice Gate Pin

Ensure that the pin on the top of the ice gate is engaged properly.

If the pin is not engaged properly, the magnet on the ice chute will fall forward and will not be within proximity of the reed switch mounted above the ice chute.

To engage the ice gate pin properly, the upper ice chute has to be removed and reassembled.

13. Bypass Ice Chute Sensor

Note: You must have the door open in order to check proper ice chute assembly. Remember to close the door after making adjustments when attempting to dispense ice.

If you have determined that the sensor, harness, board and the motor work properly you can bypass the sensor to troubleshoot the ice chute assy while the door is open. Do not leave bypassed for any reason besides troubleshooting.

14. Check Reed Switch

If the ice chute is assembled properly, then check the reed switch for proper placement and operation. Locate the reed switch and follow the 2 small black wires that feed to the quick connect for the reed switch located above the ice chute.

15. Insert Small Wire

Insert a small wire into the connection side feeding back to the agitation board and listen for agitation. The agitator will agitate constantly, indicating that the harness, motor, and board are all good.

Check assembly of the ice chute and replace the reed switch if necessary.

16. Check Voltage

If everything checks out so far, the agitator motor should be receiving 120 VAC.

Note: Voltage can be checked at blue and brown wire on the harness. You should receive 120VAC.

If there is voltage to the motor, but it does not activate, the motor is bad.

17. Replace Motor

If there is 120 VAC at the motor, check resistance and replace the motor as required.

Note: You can check resistance between the red and yellow wires on the motor side of the harness. Resistance should read 16.6 ohms +/- 10%.

Non-Responsive Screen

1. Locate Reset Button

If the touch screen will not respond to touch, follow these steps.

First, locate the reset button on the back of the screen. Press and hold the button for 5-7 seconds until the screen turns black. At this point power-cycle the IDC Pro by unplugging and then plugging it back in.

2. Remove Touch Controller Panel

If there is still no touch response, remove the touch controller panel to check the connections.

The panel is located in the upper right-hand corner on the back of the screen.

Remove the 4 screws on the panel to access the touch control board.

3. Check Wires

Check the two wires; one is a power connection and one is the micro-USB.

4. LED Check Lights

After checking the connections, power cycle the screen. You should see 1 amber light at all times. A green LED should illuminate when you touch the screen.

If you have 2 amber LED lights this indicates that the touch controller could be bad. Remove power and the micro USB, plug back in and power cycle the IDC pro. Check for touch response.

5. Check Voltage

Check voltage on the power supply feeding the SBC board and the backlight of the screen. This is the gold-colored power supply in the E-box.

6. Check Power Supply

Check for incoming voltage of 120 VAC, and outgoing voltage of 12 VDC for the computer, and 24 VDC for the backlight of the screen.

If incoming voltage is present, but there is no outgoing voltage, the power supply is bad.

If there is no incoming voltage, check the path of incoming voltage to identify the source of the issue.

7. Call Tech Support

If you have incoming and outgoing voltage, call Cornelius tech support for additional assistance.

Call: 1-800-238-3600

Screen Non-Responsive in Beverage Area

1. Locate USB Cables

If there is no touch response in the beverage selection area, follow these steps.

Locate the gray USB cables on the back of the screen and unplug them for 10 seconds. At this time, "not available" will appear on the left and right-hand side. Plug the USB cables back in, and the drink selection should reappear.

Attempt to select a beverage.

2. Test ADA Keypad

Attempt to select a beverage using the ADA keypad. If you can select and dispense a beverage it indicates a bad connection on the touch controller and/or a bad touch control board.

3. Unplug Black USB Cable

If you still can't select a beverage, locate the black USB (ADA) on the back of the screen and unplug it. Attempt to select a beverage.

If you still can't select a beverage, follow Non-responsive Screen troubleshooting.

Slushy Ice or Water in the Hopper

1. Check Ice Quality

If slushy ice or water is in the hopper the first step is to check ice quality.

Poor ice quality may also be due to water quality or ice maker problems. Correct water quality issues and/or the ice maker.

2. Check Agitation Setting

Over-agitation may be the issue. Set ice agitation according to the type of ice.

All Cornelius dispensers come set for cubed ice to agitate 4 seconds/hour.

If dispensing soft ice, set the rate to 0.5 sec/3 hr.

3. Check for Blocked Drains

If you have good quality ice and water but still have slushy ice or water in the hopper you want to check for blocked drains in the cold plate.

Note: You may have to remove the rubber drain boots to clear blockage. Make sure to place the cable ties back on the drain boots.

Software/USB Issues

1. Update Software

Software updates are released periodically when we find issues or want to enhance our customer experience. We highly recommend having the latest software on the IDC Pro to ensure no issues.

When a software update is performed, the latest software must be downloaded from the Cornelius website. The software update takes 5 minutes or less and will not change any programming. It only adds enhancements.

Follow the Software Update instructions in the Operations section.

Temperature is Off

1. Effect on Quality

Temperature has a direct effect on the quality of the beverage. The colder the temperature, the more Co2 the drink retains.

Drinks should be dispensed at 40°F or below.

2. Dispensed Warm

If drinks are dispensed warm, make sure there is ice in the hopper and on the cold plate.

If no ice is in the hopper or on the cold plate, check the ice maker for proper performance.

If the ice maker is not working follow ice maker manufacturer repair procedures.

3. Fill Hopper

If the ice hopper requires manual filling, fill the hopper 4" to 6" below the top of the hopper and agitate the ice to cover the cold plate.

After covering the cold plate, allow 30 minutes for proper temperature pull down.

4. Descaling

If there is no agitation, follow troubleshooting procedures for Ice Does Not Dispense.

If the cold plate is covered with ice and the temperature is still warm, check for scale build up on the surface of the cold plate.

If the surface is covered with scale, use a safe cleaner for removal.

Valve Breakdown

1. Procedure

To replace, service, remove a valve, valve bank, solenoid and or solenoid plunger, use the following procedure. A Philips screw driver is the only tool you will need.

2. Remove Splash Panel

Next, remove the splash panel to access the valves.

Reference "Nozzle Cover" in the Installation section.

3. Round Spindles (White Tabs)

Look for the round spindles (white tabs) located on the bottom of the valve; there is 1 per valve that controls the flow to both the top and bottom flow controls in line with the spindle. Locate the specific valve(s) you are servicing and push up on the spindle to stop the flow of syrup or water.

4. Black Tabs

Locate the specific valve(s) you are servicing and push up on the spindle to stop the flow of syrup or water. When you push up on the white tab you will see a black tab pop up on the top indicating that the syrup or water is shut off.

5. Access Valve Purge

Enter the service UI screen using the password 3333. In the Unit Setup screen, select Valve Purge.

6. Valve Layout

The valve layout on the Valve Purge screen has the same layout as the physical valves.

If you were to lay the Valve Purge screen over the valves, you can easily identify each valve. For example, valve CW1 is the 6th valve from the left on the top.

7. Activate Valve

Once the spindles are pushed up, you will activate the valve through the valve purge screen. This will relieve the pressure between the backblock and the valve bank, as well as ensure that you have shutoff the correct valve.

8. Select Valve

In the Valve Purge screen, select the valve(s) you are servicing. You should see only a few drops. If you have a steady stream this indicates that you do not have the correct spindle shutoff.

Once you relieve the pressure, tap the valve again to deactivate. You can stay in this screen as you will need it at the end of the procedure.

9. Release Valve Bank

Once the round spindles are pushed up and the valves are purged to relieve pressure, push the black dovetails (between the white spindles) up to release the entire valve bank from the back block.

Note: You do NOT have to remove the MFV module all the way out of the machine to service the valve, solenoid or solenoid plunger. The following slides will show the valve removed. This is to provide a better view.

10. Remove Retaining Clip

First, remove the silver retaining clip (one per valve) by prying up on the stainless steel valve locking clip.

11. Remove Valve Module

To remove the valve module, pull the front of the valve up, then rotate the valve upwards to remove it from the carrier.

Note: O-rings tend to stick in the valve bank. Make sure to place both o-rings back onto the valve prior to re-installation.

12. Remove Solenoid

To remove the solenoid, rotate the solenoid counter- clockwise and remove it to service the solenoid, plunger tip, and spring. Make note of coil and wire routing so they can be placed back into their original orientation (especially the rear coil wire).

Caution: Remove solenoid and plunger assembly carefully so the spring is not bent or lost.

13. Access Plunger Tip and Spring

You can now access the plunger tip and spring.

Water Plunger Tip (Black) PN: 620056892W

Syrup Plunger Tip (Tan) PN: 620711132

14. Re-insert Solenoid

Insert the solenoid back into the valve and rotate it a ¼ turn to the right to lock it in place. Ensure the coils and wires are in their original orientation.

Note: The sticker on the front solenoid should face the right. The sticker on the back solenoid should face the left.

15. Re-install Module

To re-install the module, place the valve into the valve carrier.

16. Valve Flange Fitment

Start inserting the valve at a 45° angle and ensure that the square section of the rear flange of the valve fits behind the wall of the carrier.

17. Seat O-Rings

Push the dual-barbed outlet fitting to the front of the carrier. Then push the valve back and down into the outlet fitting. Make sure that the bottom red o-rings seat fully into outlet fitting ports and are not pinched in the outlet barbs.

We recommend replacing o-rings (PN: 620059773) and lubricating them with Dow Molykote 111.

Note: Quad rings are black, but older units may have red rings.

18. Insert Locking Clip

At this point, the valve should be back in position and ready for the stainless steel locking clip to be inserted.

19. Complete MFV Installation

Complete the MFV valve installation by following this procedure:

Place the MFV valve on the backblock. Make sure wires are not pinched.

Push down on the dove tails to lock the valve.

Push the spindles down to open the shut-offs.

Re-connect the wire harness (if needed).

Check for leaks by activating the modified valves through the valve purge function.

20. Solenoid Values

Solenoid Coil Ohm and Voltage Values:

9.1 Ohms +/- 10%

Initial Solenoid activation voltage – 30 VDC

Water Filtration Issues

1. Water is the Base of Beverages

Water is the base of the beverage. The IDC Pro should be receiving filtered water to remove taste and odors.

Water should be run through a standard filter system.

Avoid using de-scalers or phosphate filters, since they inhibit carbonation.

Water Pressure Issues

1. Proper Pressure

The IDC Pro needs proper water pressure of 50-65 PSI. Each IDC Pro is sent with a 65 PSI water regulator, which needs to be installed within two feet of the inlet of the carbonator pump.

Note: High water pressure will cause the carbonator tank to flood and inhibit carbonation.

2. If Pressure Low

If water pressure is low, check for the following causes: Check for excessively long runs (over 100 ft) of 3/8" water supply line. Increase the line size to 1/2" if necessary.

3. Check for Plugged Filter

Also check for a plugged water filter, and change the water filter as needed.

4. Water Pressure Booster Pump

If water pressure is still low, it may be necessary to install a water pressure booster pump.

If a booster is already installed, check if the tank/ bladder has burst, and replace it.

Check the in-line water regulator for proper flow.