

DELLA®

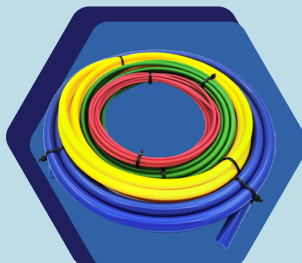
At DELLA, we're dedicated to empowering our customers with flexible solutions that cater to their needs. Whether you're a hands-on enthusiast or simply want to avoid the cost of professional installation, our DELLA install Kit is the perfect choice for you!



Vacuum Pump



6 ft Vacuum Hose



Copper Pipe
Bender Kit



Digital Vacrometer
(Micron Gauge)



Vacuum Pump
Oil Bottle



Valve Core Removal Tool
(5/16" & 1/4")



Torque Wrench

RENTAL KIT USER GUIDE



Save on Installation

Install it yourself with professional tools and clear instructions. No contractor needed.



Protect Your Investment

Proper tools, better vacuum, tighter seals, longer-lasting performance.



Rent & Return

No need to buy, just rent what you need and return when done.

FULL INSTALLATION DEMO

Get familiar with the process and tools by reviewing this step-by-step installation video.



WORKING PROCESS

01

COMPLETE SYSTEM SETUP

Finish mounting the indoor and outdoor units. Connect copper line set and wiring according to your system's manual.



02

BEND COPPER LINESET

Use the copper pipe bender kit with the bender strips to form smooth curves on the lineset. Insert the strip inside the copper pipe before bending to prevent kinks or cracks. Bend slowly and evenly to maintain proper refrigerant flow.



03

TIGHTEN FLARE NUTS

Use the adjustable torque wrench to secure all flare nuts on the lineset. Follow your mini-split manufacturer's torque specifications to avoid leaks or over-tightening.



04

PREPARE THE VACUUM PUMP

Fill with oil: Open the oil fill port on the vacuum pump and pour in the vacuum pump oil until it reaches the proper level on the sight glass.

IMPORTANT: Never run the pump without oil, doing so will damage it.



05

REMOVE VALVE CORE

Choose the appropriate valve core removal tool:

#MGAVCR for 5/16" systems

#MGAVCT for 1/4" systems

Remove the valve cores to improve vacuum flow and speed.



06

CONNECT THE VACUUM HOSE

Attach the 6 ft vacuum hose from the pump to the opened service port of the outdoor unit (after core removal). Ensure connections are secure and leak-free.



07

MONITOR VACUUM LEVEL

Connect the micron gauge to monitor pressure. Evacuate the system to 500 microns or lower. Turn off the pump and perform a hold test: monitor pressure for 10-15 minutes to confirm no leaks.



EVACUATE THE SYSTEM

Turn on the vacuum pump to begin the evacuation process. Run the pump until you reach 350-500 microns. There is no exact time required, it depends on pump and length of lineset.



08

RE-INSERT VALVE CORES

if the vacuum holds steady, reinstall the valve core using the valve core removal tool without breaking the vacuum.



VACUUM PUMPING STEPS



Single Zone System

Multi Zone System
with Master Valve

Multi Zone System
without Master Valve

Multi Zone System
Adding Indoor Unit
to Existing System

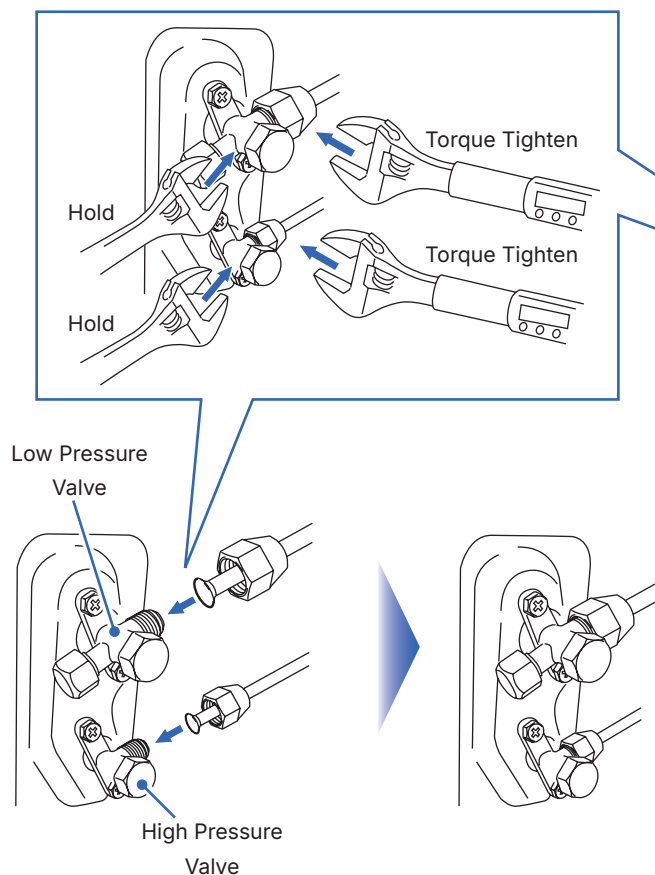
Follow
Single Zone Guide

Follow
Multi Zone with
Master Valve Guide

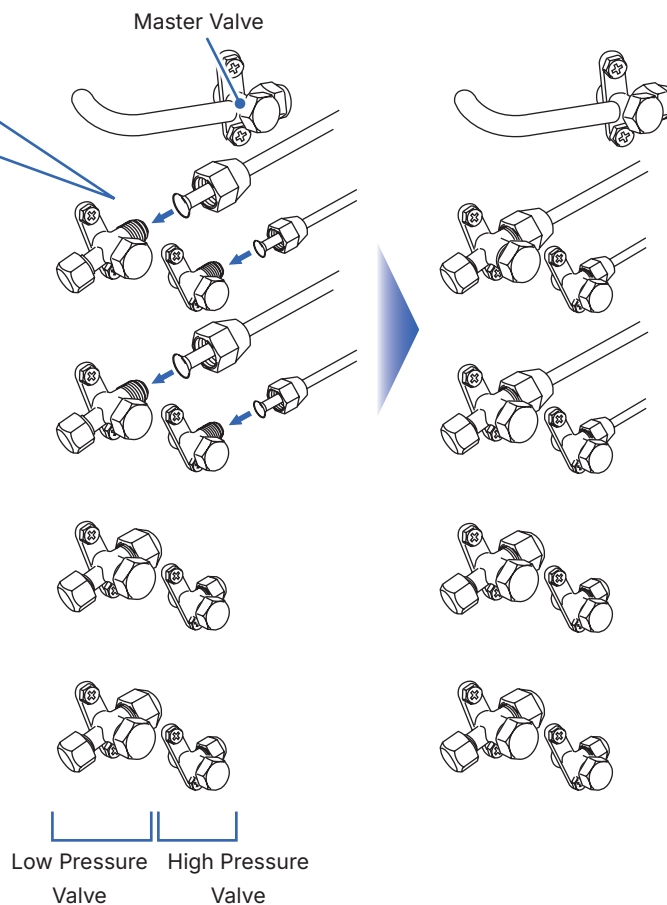
Follow
Multi Zone Individual
Lineset Group Guide

1

Single Zone



Multi Zones

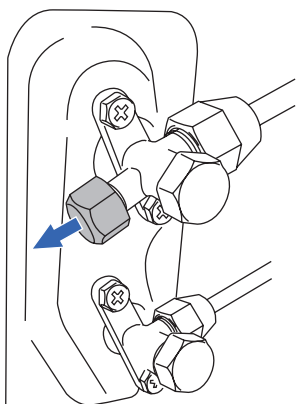


Connect copper line set

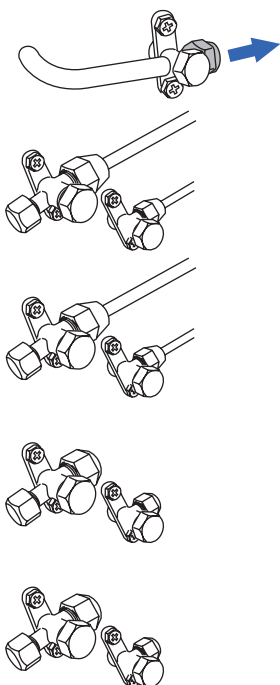
1. Align the refrigerant pipes straight to the outdoor unit valve ports.
2. Tighten the nuts by hand.
3. Use a torque wrench to tighten the nuts according to the torque requirement.

2

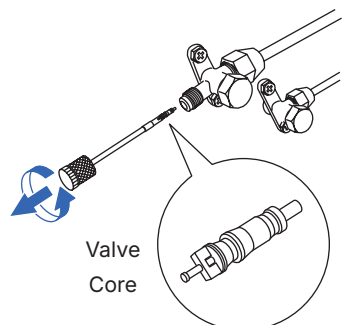
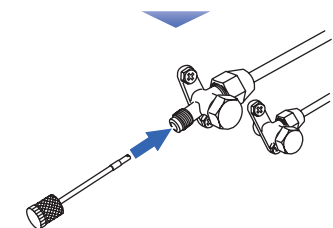
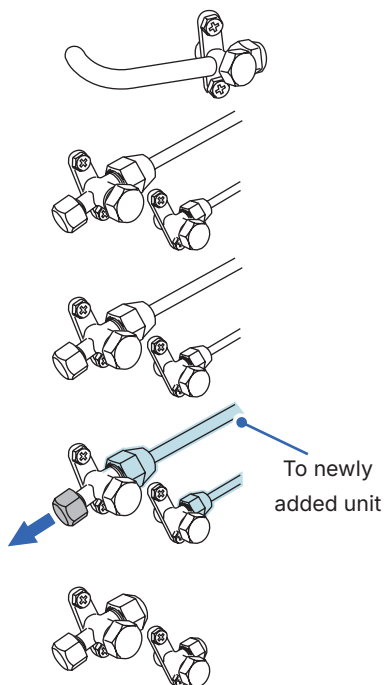
Single Zone



Multi Zones Master Valve



Individual Lineset Service Port

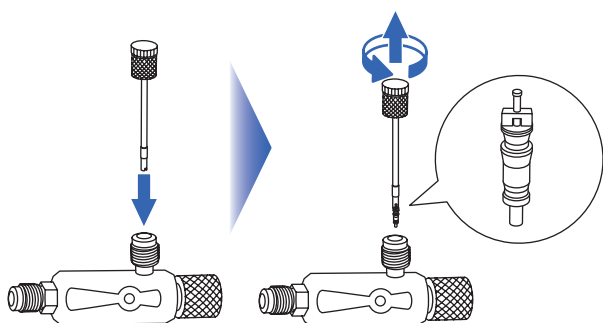


Remove valve core

1. Remove protective cap.
2. Remove valve core from the service port using valve core removal tool.

NOTE: If your unit does not have a master valve, you must evacuate each lineset group individually.

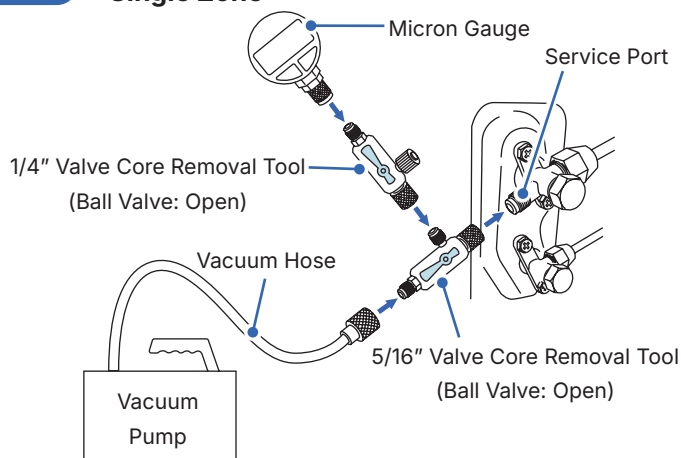
3



1. Remove valve core from the 5/16 inch valve core removal tool's side port.

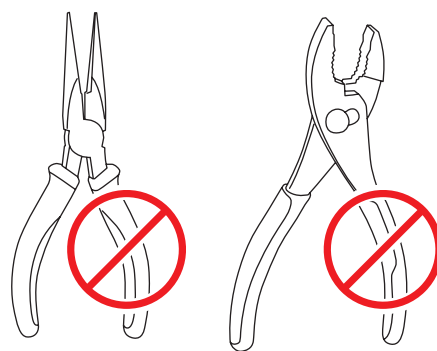
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Single Zone



Vacuum Pump Connection

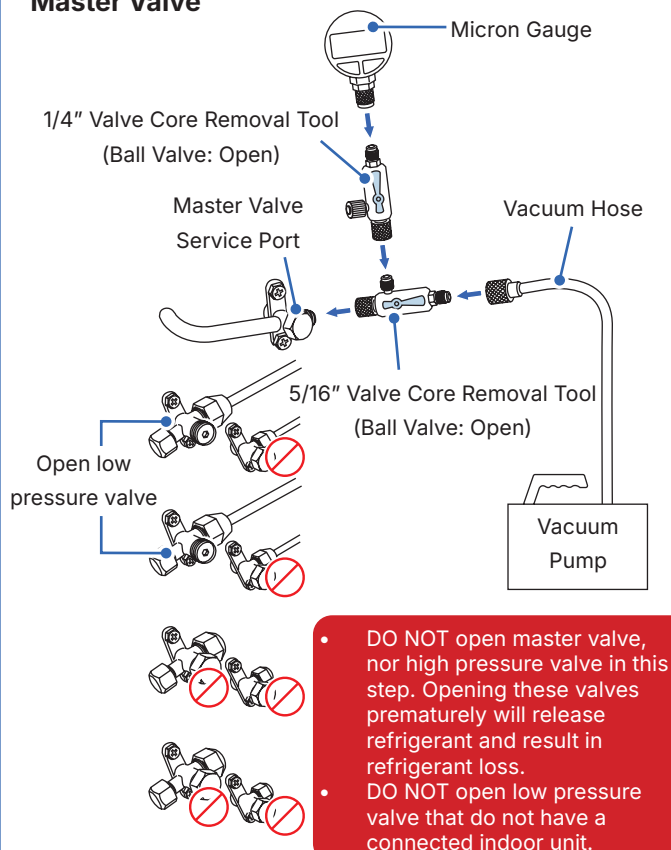
1. Connect the vacuum pump, vacuum hose, and 5/16" valve core removal tool to the service port.
2. Attach the micron gauge on 1/4" valve core removal tool, and then to the side port of 5/16" valve core removal tool.



- Valve core removal tools, vacuum hose, and micron gauge should be hand tighten ONLY.
- DO NOT use pliers or wrenches on the tools as they might cause damages.

Multi Zones

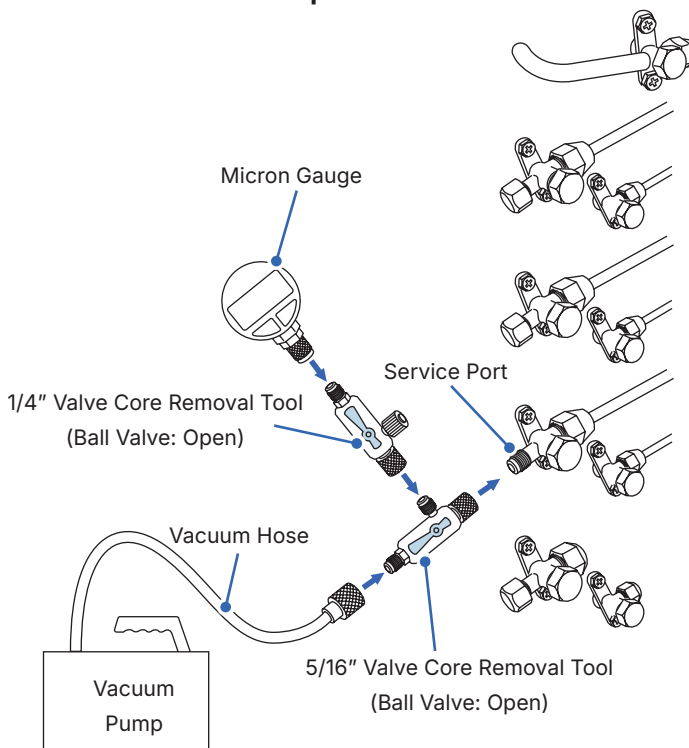
Master Valve



Vacuum Pump Connection (To Master Valve)

1. Connect the vacuum pump, vacuum hose, and 5/16" valve core removal tool to the master valve service port.
2. Attach the micron gauge on 1/4" valve core removal tool, and then to the side port of 5/16" valve core removal tool.
3. Open connected low pressure valve.

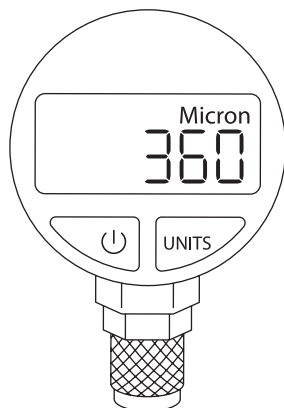
Individual Lineset Group



Vacuum Pump Connection (To Individual Lineset)

1. Connect the vacuum pump, vacuum hose, and 5/16" valve core removal tool to the service port.
 2. Attach the micron gauge on 1/4" valve core removal tool, and then to the side port of 5/16" valve core removal tool.
- NOTE: When adding unit to an existing multi-zone system, there is no need to shut off the master valve, simply evacuate the corresponding refrigerant line.

5



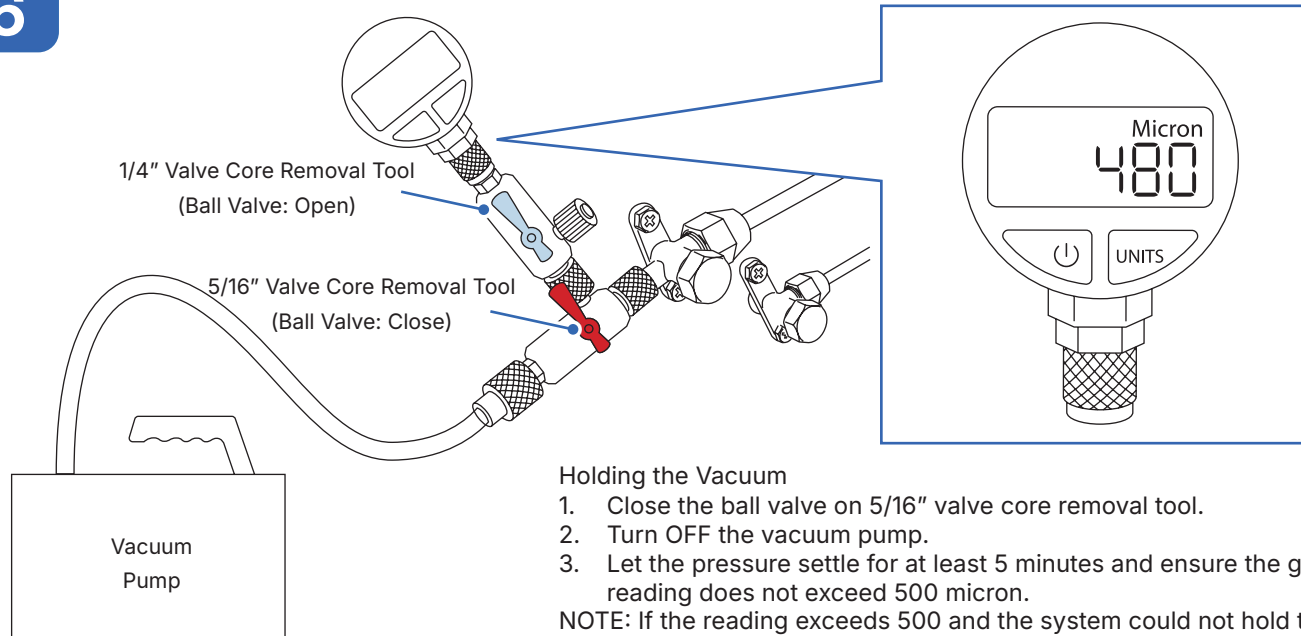
Evacuation

1. Turn ON the vacuum pump.
2. Run the vacuum pump until the micron gauge reads 500 microns or less. (Ideally close to 360)

once the vacuum is achieved, continue evacuation for 5 minutes.

NOTE: As the vacuum will settle after the pump is OFF, the gauge reading will rise. It is important to allow a margin for the pressure increase.

6

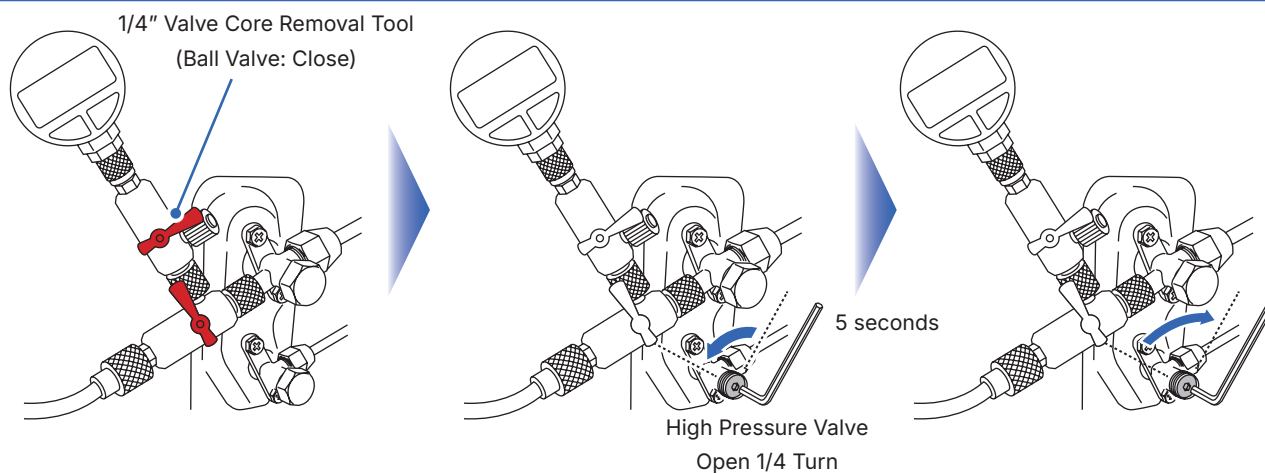


Holding the Vacuum

1. Close the ball valve on 5/16" valve core removal tool.
2. Turn OFF the vacuum pump.
3. Let the pressure settle for at least 5 minutes and ensure the gauge reading does not exceed 500 micron.

NOTE: If the reading exceeds 500 and the system could not hold the vacuum, check all the connections again and run vacuum pump again.

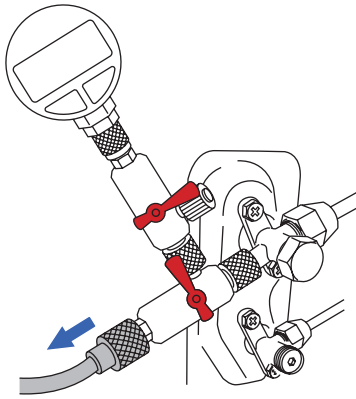
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Raising Lineset Pressure

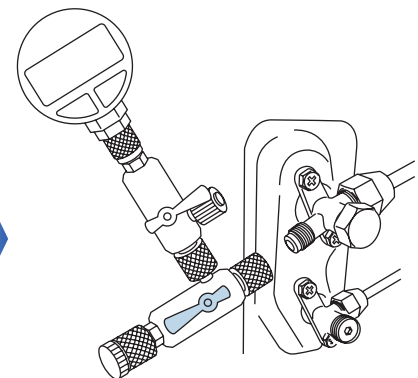
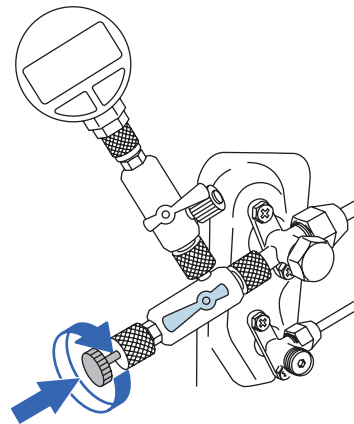
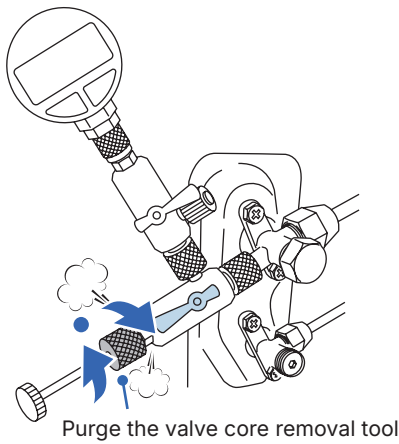
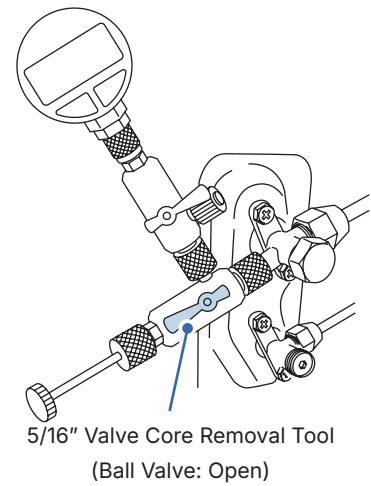
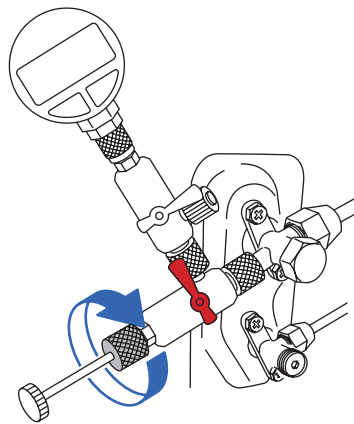
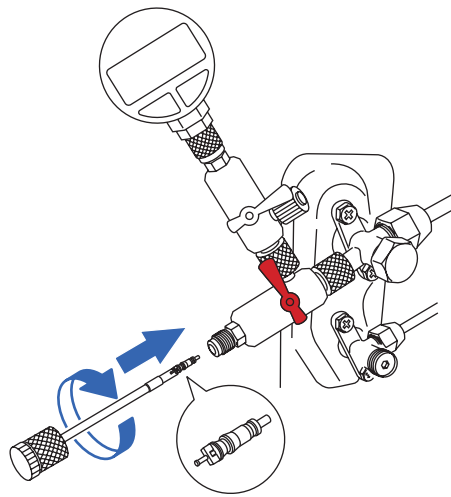
1. Isolate the micron gauge by closing the 1/4" valve core removal tool ball valve.
2. Open the high pressure valve for 1/4 turn. After 5 seconds, close the valve again.

NOTE: For multi-zone unit, perform this procedure on all connected high pressure valve.



Removing Vacuum Hose

1. Ensure all valve core removal tools' ball valve are closed.
2. Disconnect the vacuum hose from the valve core removal tool.

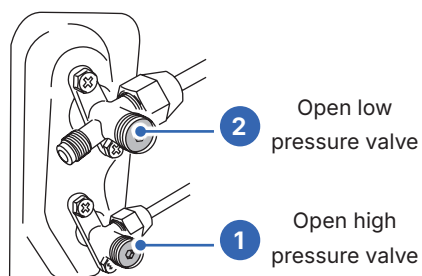


Re-installing Valve Core

1. Insert the valve core removal stem with the valve core at the end into the tool's main body.
2. Hand tighten the end cap.
3. Open the ball valve on the valve core removal tool.
4. Purge the valve core removal tool by slightly opening the end cap. Once you hear gas coming out, tighten the end cap again.
5. Screw the valve core back into the service port.
6. Remove valve core removal tool from the service port.

9

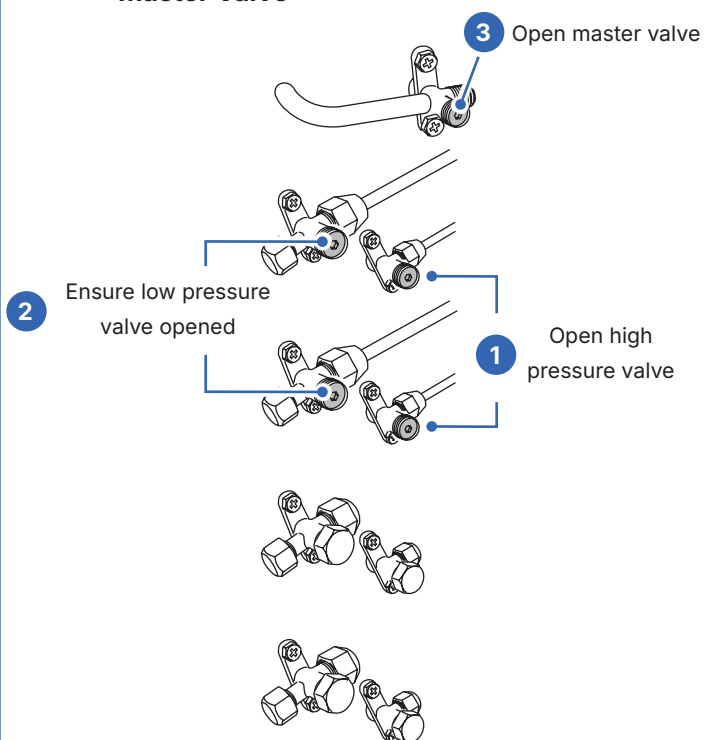
Single Zone / 2 Zones



Open pressure valve

1. Open high pressure valve.
2. Open low pressure valve.

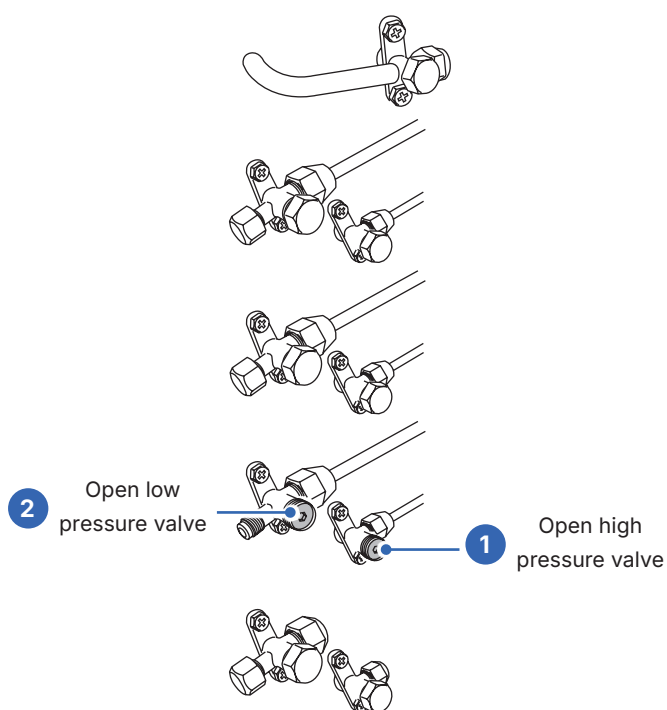
Multi Zones Master Valve



Open pressure valve

1. Open all connected high pressure valves.
2. Ensure all connected low pressure valves are opened.
3. Open the master valve.

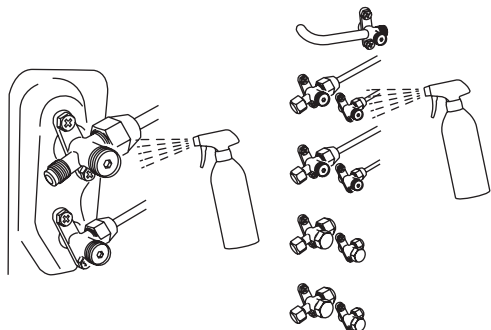
Individual Lineset Service Port



Open pressure valve

1. Open the newly connected high pressure valves.
2. Open the newly connected low pressure valves.

10



Leak Test

1. Check all connection with soapy water spray for any leakage.
2. Reattach all covering caps to their original places.



dellahome.com/pages/registration

Don't forget to film and submit your installation progress video using the Della Rental Kit to qualify for **lifetime warranty coverage**