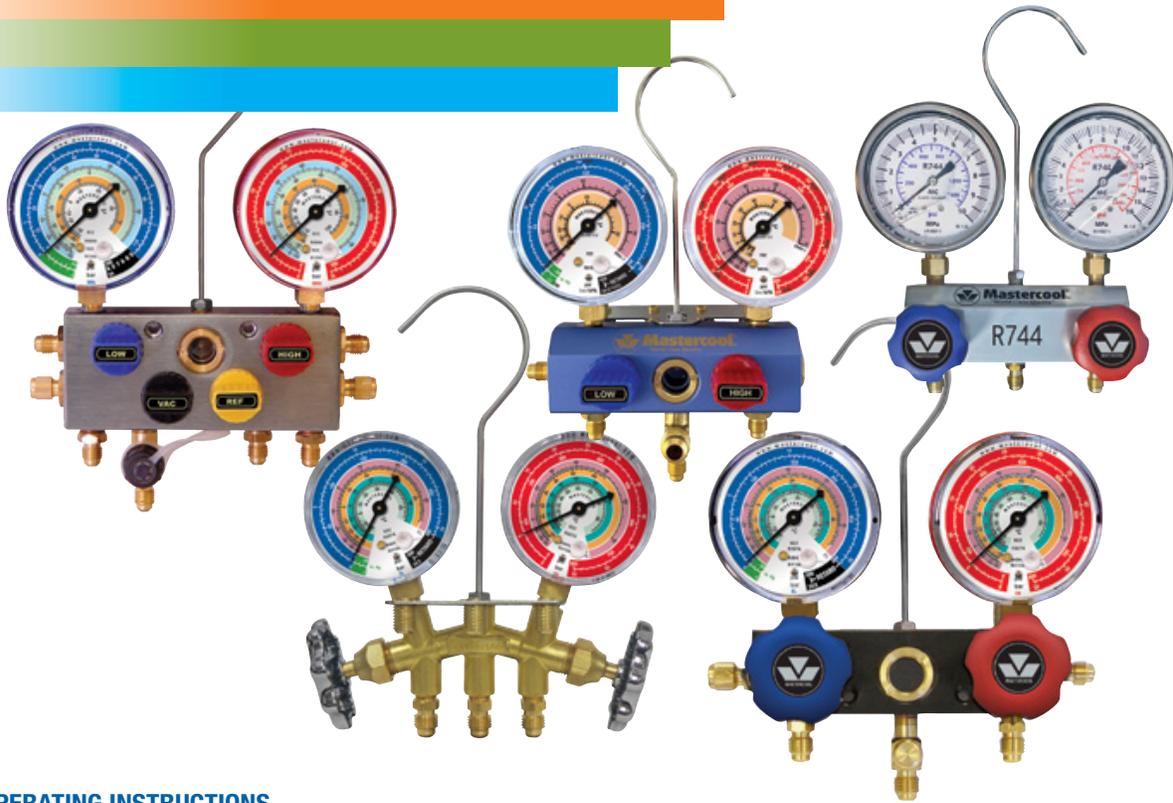




**Mastercool**<sup>®</sup> Inc.  
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OPERATING INSTRUCTIONS

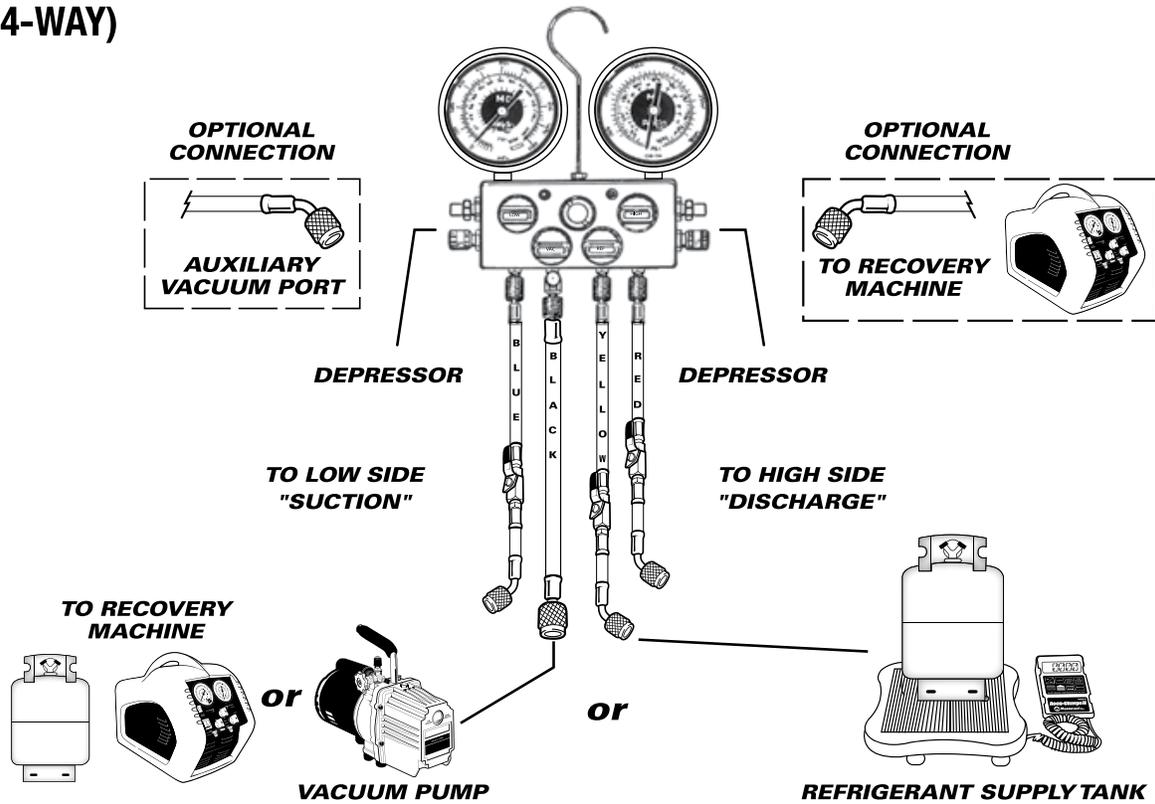


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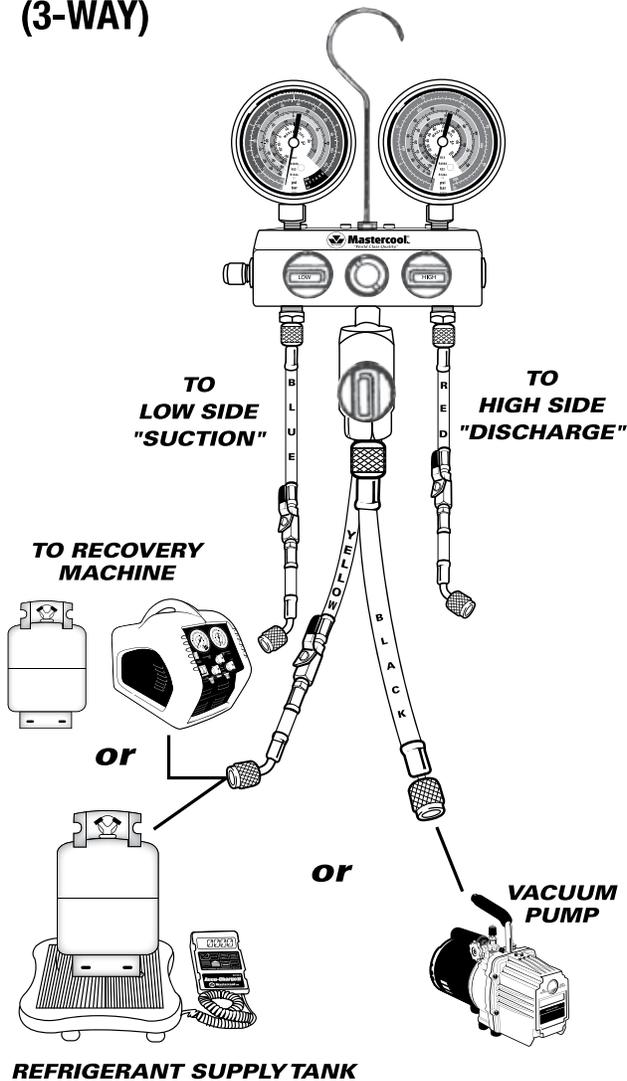
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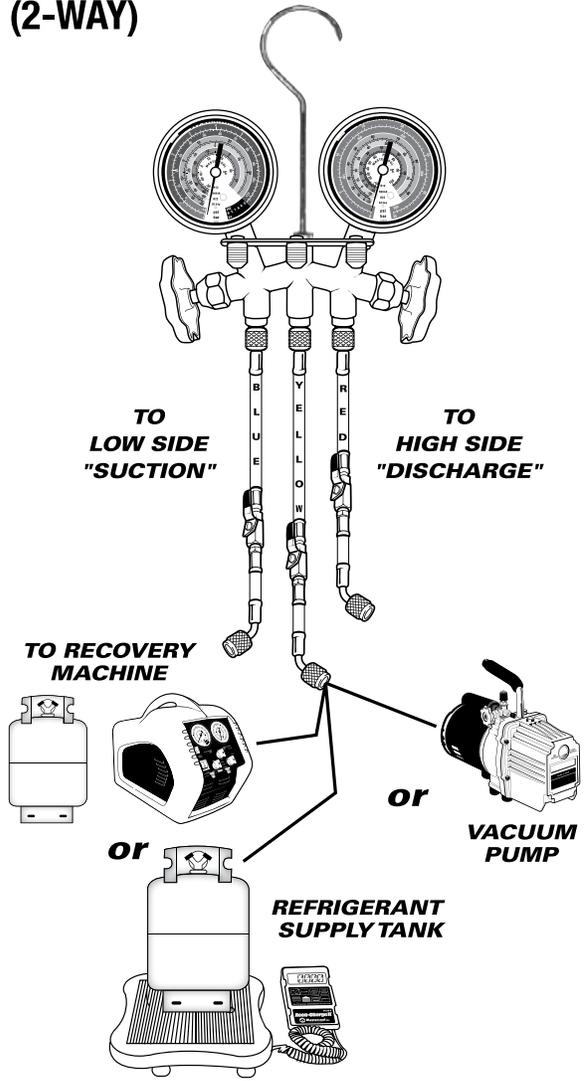
# (4-WAY)



# (3-WAY)



# (2-WAY)



**WARNING****Wear Safety Goggles****Avoid Contact with Refrigerant**

**NOTE (R744):** CO2 systems work under extremely high pressures. Only professional technicians are recommended to service these systems. Please use proper safety equipment while servicing.

**PRE-SERVICE INSTRUCTIONS**

1. Close both valves on the manifold gauge set by turning the high and low knobs clockwise.
2. The gauges are correctly calibrated at the factory before shipment. If calibration is required, remove the lens and insert a straight blade screwdriver into the adjusting screw on the gauge face (except liquid filled gauges.)
3. Connect the (red) hose to the high port and the (blue) hose to the Low port on the manifold gauge.

**TESTING AND CHARGING**

To properly diagnose the problem in the R/AC system, first check the system's overall performance. This includes monitoring the system's pressure as well as leak testing. Your manifold gauge set will give accurate readings of your system's pressure.

**NOTE:** Be sure that the hand valves on the manifold gauge set are in the closed position. Always wear gloves and safety goggles when working with refrigerant.

1. Remove the protective caps from the system ports. Check for leaks at the ports.
2. Connect the low side service hose (blue) to the suction side of the compressor. Connect the high side service hose (red) to the discharge side of the compressor.
3. If using adapters, make sure that they are fully tightened and piercing the access valve. Failure to properly access the valve core will prohibit refrigerant flow.

**IMPORTANT NOTES**

- A system that has been opened or one that is found to be excessively low on refrigerant pressure as a result of a leak, must be fully evacuated by means of recovery and deep vacuum. **NOTE:** Send recovered refrigerant for reclamation.
- A system that has been evacuated must be repaired, leak tested and evacuated to a required level of vacuum.
- If charging on the liquid or high side, use only the high side valve on the manifold gauge set. Make sure the low side valve is closed.
- After charging, test the system by turning it on and running the A/C with both valves closed on the manifold.
- After testing, disconnect the hoses from the system and make sure to use a recovery/recycling machine to evacuate any refrigerant remaining in the hoses or manifold.

**⚠ WARNING:** This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

<b>BRASS &amp; ALUMINUM GAUGE SET PARTS</b>					
<b>(2-WAY)</b>					
<b>Fig.</b>	<b>Description</b>	<b>Part#</b>	<b>Fig.</b>	<b>Description</b>	<b>Part#</b>
1.	Piston Seal Assembly w/ O-rings (2 pcs.)	<b>34216</b>	10.	Knob only	<b>93211</b>
2.	Piston Seal O-ring (2 pcs.)	<b>34215</b>	11.	Stem, Nut and Stem O-ring	<b>85218</b>
3.	Stem and Nut	<b>34218</b>	12.	Stem O-ring (2 pcs)	<b>85217</b>
4.	Handwheel	<b>34212</b>	13.	Piston Seal O-ring (4 pcs.)	<b>85215</b>
5.	Stem Assembly W/Knob (2 pcs.)	<b>34219</b>	14.	Piston Seal Assembly W/O-rings (2 pcs.)	<b>85216</b>
6.	High Side Gauge (Red) Low Side Gauge (Blue)	-----	<b>(4-WAY)</b>		
7.	O-ring for Shut Off Valve	<b>90336</b>	15.	Repair Kit for 4-Way Ball Valve Manifold	<b>95215</b>
8.	Gasket for Hose Assembly	<b>42010</b>	<b>(3-WAY)</b>		
9.	Stem Assembly w/Knob (2 pcs.)	<b>93210</b>	16.	Repair Kit for 3-Way Ball Valve Manifold	<b>58218</b>
<b>CO2 GAUGE SET</b>					
17.	Piston Assembly	<b>55103-A-FX</b>	20.	O-Ring 5 x 1.5	<b>55103-A-FX-07</b>
18.	Valve Stem	<b>55103-A-FX-05</b>	21.	70mm High Side Oil Filled Gauge for CO2	<b>55102-2400</b>
19.	Valve Stem Nut	<b>55103-A-FX-06</b>	22.	70mm Low Side Oil Filled Gauge for CO2	<b>55102-1400</b>

