Coolant Refill/Air Purge Tool
User Instructions

The Schwaben Coolant Refill/Air Purge Tool is a universal tool which uses the Venturi method to draw a vacuum on the entire cooling system, ensuring that no air pockets are left in the cooling system while refilling. This tool comes complete with all of the fittings and adapters you will need, and it comes in a custom molded case for easy storage. This tool requires access to a standard air compressor with a minimum rating of 90 PSI (6.2 bar). A convenient, though not required part to complete the job is a container large enough to hold the entire coolant mixture capacity for your vehicle. This will dramatically reduce the risk of any unwanted air being drawn into the system.

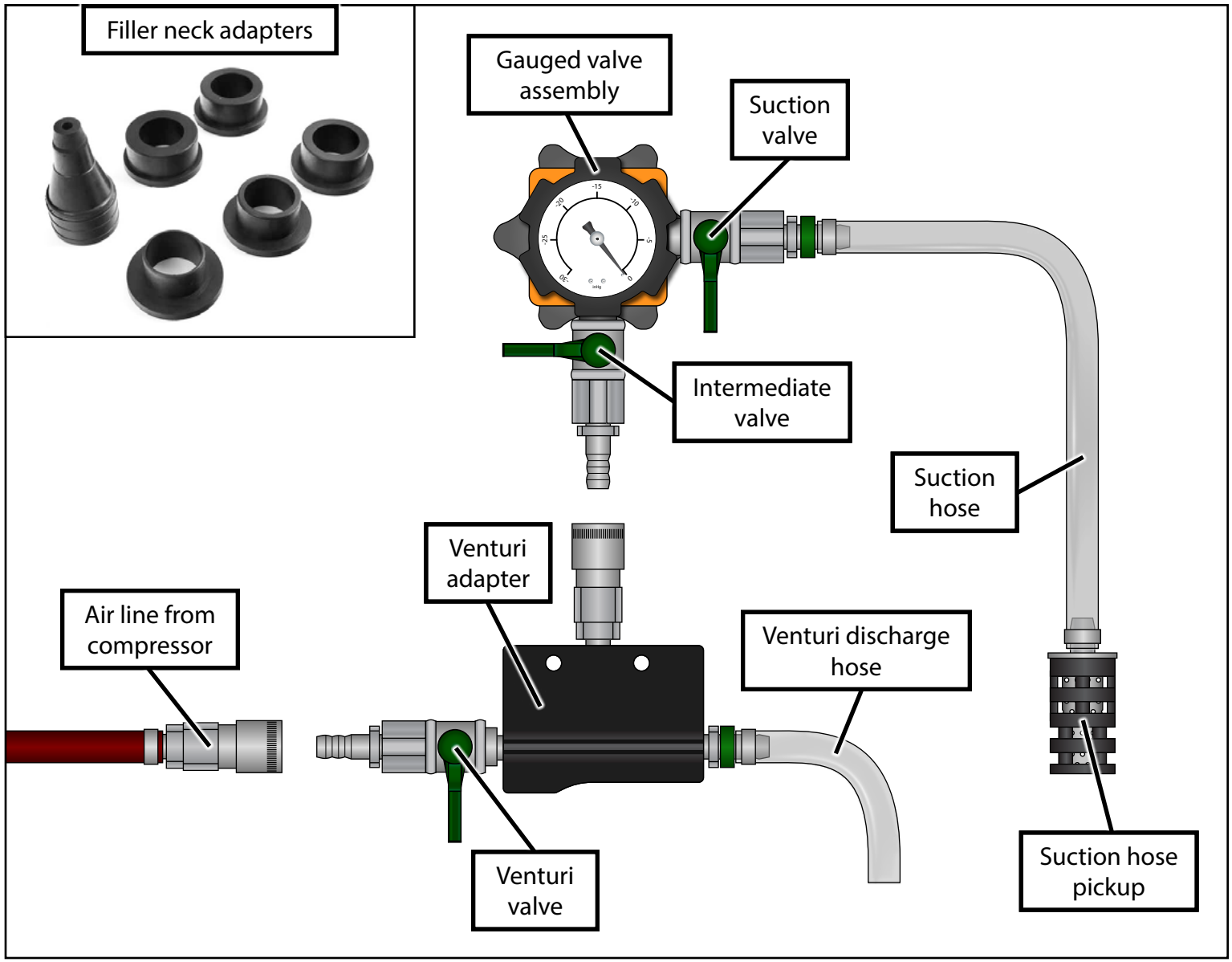
NOTE: This tool is designed to refill the cooling system **AFTER** it has been drained.

BLEEDING THE COOLING SYSTEM - SCHWABEN AIR PURGE TOOL

Overview:

Take a moment to familiarize yourself with the components which make up the Schwaben Air Purge Tool. We will be referring to each of these components by name during these instructions.

To begin, select the correct size rubber filler neck adapter to fit into your coolant reservoir, install the gauged valve assembly into the coolant reservoir and hold the entire assembly stationary while you turn the knob clockwise until it is snug. Attach the venturi adapter to the gauged valve assembly via the built in quick connector.



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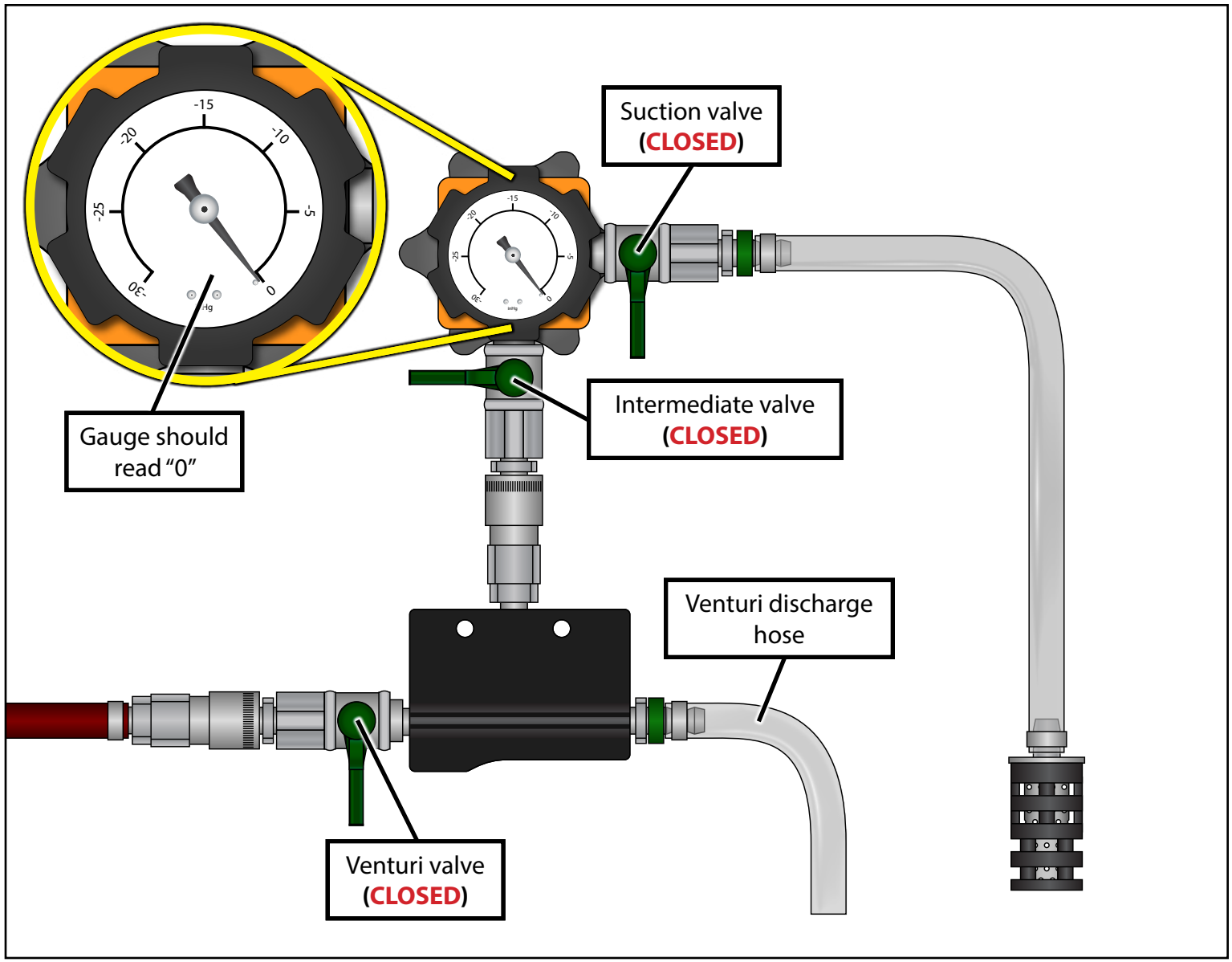
Step 1:

Ensure that all of the valves are **CLOSED** on both the venturi adapter and the gauged valve assembly. Attach the air line from the air compressor to the ¼" air fitting on the venturi adapter.

Point the venturi discharge hose downward and away from any electrical components (some fluid may vent out of this hose during the process of drawing a vacuum on the system).

Leave all of the valves closed, the gauge should read "0".



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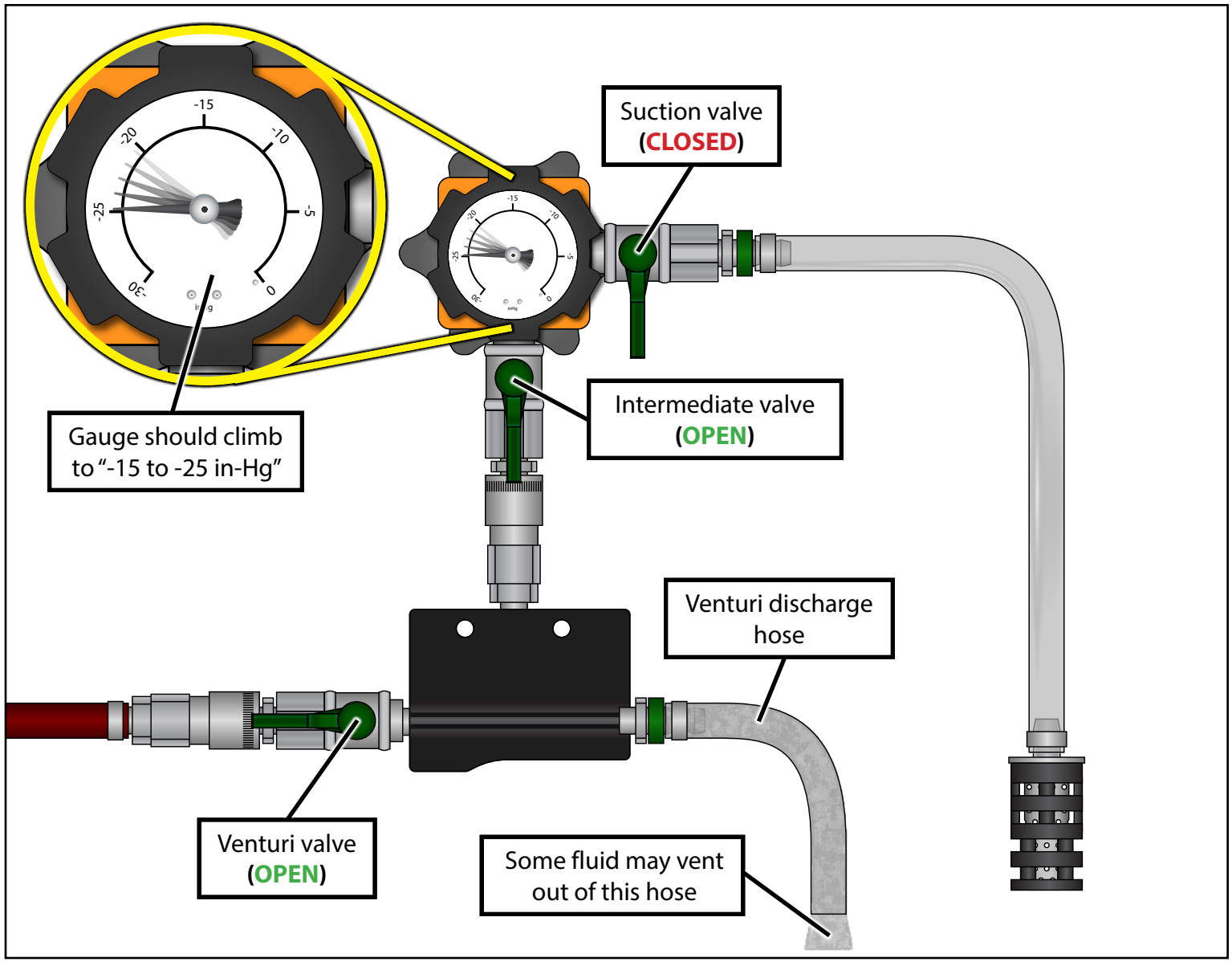
Step 2:

Open the venturi valve and the intermediate valve, this will cause air to rush out of the open ended hose (this can be quite loud) and the gauge reading should begin to climb. You should notice that the radiator hoses will collapse inward, this is normal.

Wait until the gauge reading stabilizes, then continue to draw vacuum for another 20-30 seconds to be sure you have the maximum vacuum you can achieve (this can be as low as -15 in-Hg, and as high as -27 in-Hg, you will ***NOT*** be able to reach -30 in-Hg).



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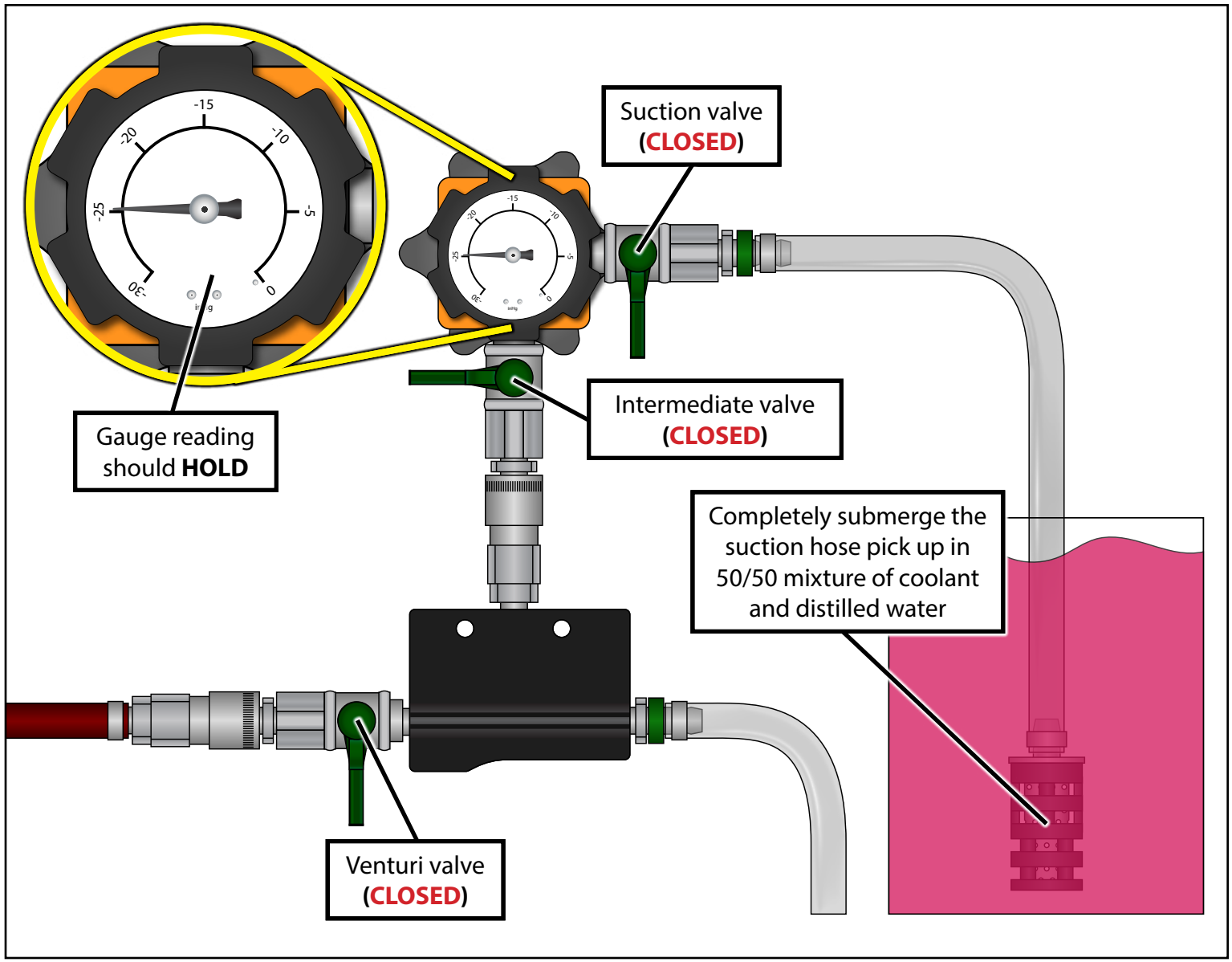
Step 3:

Close the intermediate valve **FIRST**, then close the venturi valve. Watch the gauge for 2-5 minutes, if the gauge reading begins to drop this indicates that you either have a leak in the system or the gauged valve assembly may not have a sufficient seal to the filler neck (using an incorrect adapter can cause this).

If the gauge reading does not fluctuate, you can disconnect the air line from the air compressor and proceed with filling the system

Insert the suction hose and pickup into a container filled with a 50/50 mixture of coolant and distilled water.



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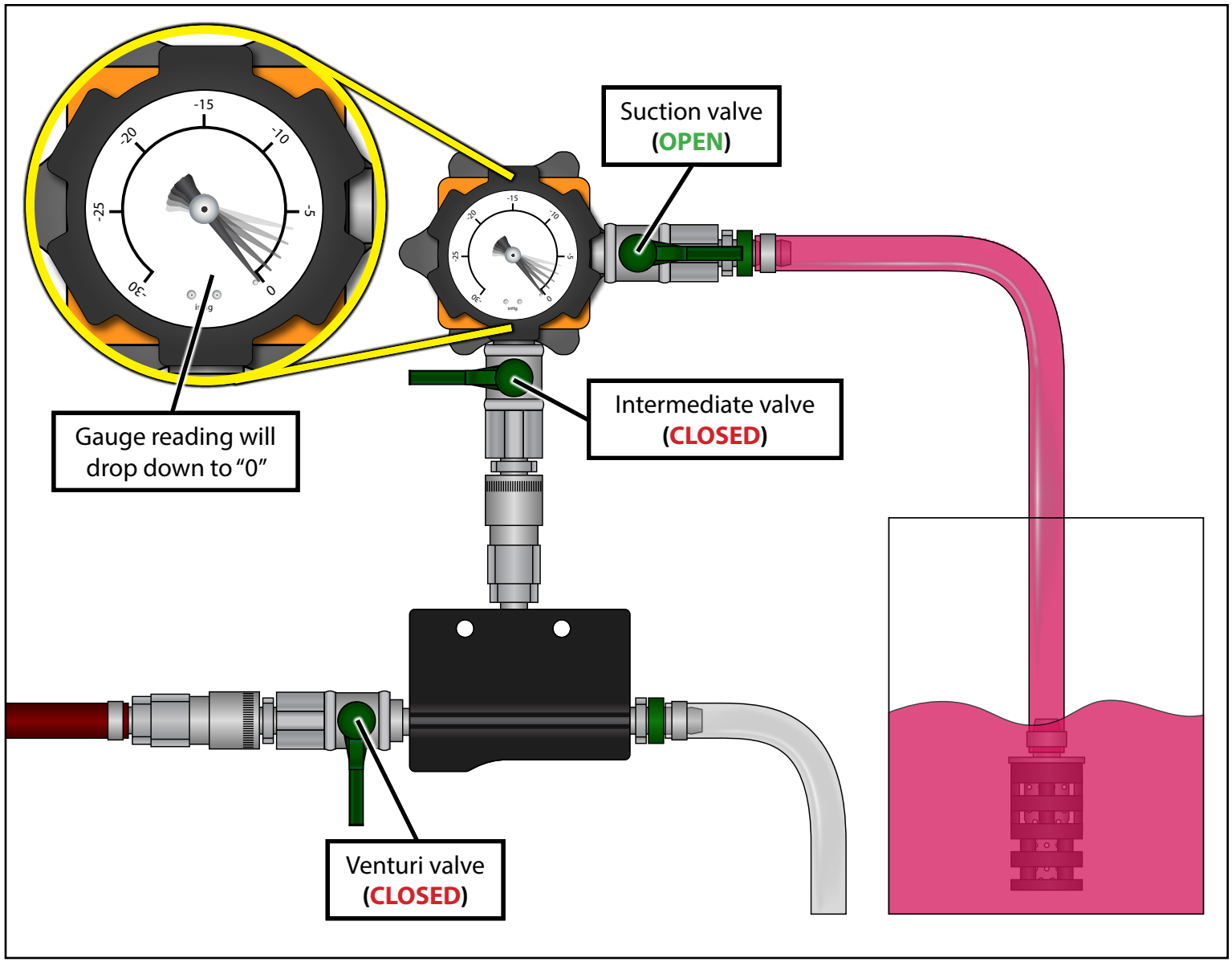
Step 4:

SLOWLY open the suction valve, you will see the coolant mixture begin to flow through the suction hose and into the system. Monitor the coolant mixture level inside the container, and ensure that the suction hose pickup is always completely submerged in the mixture, **DO NOT** allow the suction hose to draw any air into the system. If the level in the container is getting low but the gauge has not dropped to zero (0), close the suction valve, refill the container, then reopen the suction valve again.

Once the gauge reads zero (0), the system is full. Open the intermediate valve and remove the gauged valve assembly from the filler neck.



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Step 5:

Double check the coolant level in your system, top off the mixture if it is low, or use a turkey baster to remove any excess coolant if it is high. After any cooling system service has been performed, be sure to run the engine up to operating temperature to confirm temperature gauge and cooling fan operation.

Step 18:

We recommend flushing the Cooling System Refill/Air Purge Tool after every use with clean water, then allow the tool to air dry before placing it back into the molded case.

That's it! The air should now be purged from your cooling system.