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OEMTOOLS 24444

OEMTOOLS 24444 AirEvac Cooling System Refiller Kit User Manual

Model: 24444 | Brand: OEMTOOLS

INTRODUCTION

The OEMTOOLS 24444 Coolant System Refiller Kit is designed to efficiently purge trapped air, check for vacuum leaks, and facilitate quick and easy refilling of vehicle cooling systems. This comprehensive kit simplifies the cooling system service process by utilizing a vacuum to remove air, then drawing coolant into the engine block and radiator, thereby preventing air pockets and potential engine damage.

IMPORTANT SAFETY INFORMATION

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Always wear appropriate personal protective equipment, including eye protection and gloves, when handling automotive fluids and operating this tool. Ensure proper ventilation in your work area.

PRODUCT COMPONENTS

The OEMTOOLS 24444 AirEvac Cooling System Refiller Kit includes the following components:

- Cooling System Refiller Kit Main Assembly (Gauged Valve Assembly, Venturi Adapter)
- 5 Rubber Bushings (31mm, 35mm, 40mm, 42mm, 45mm)
- Tapered Universal Cone Adapter
- Antifreeze Pick-up Hose with Filter
- Sturdy Storage Case



Figure 1: Complete OEMTOOLS 24444 AirVac Cooling System Refiller Kit, showing the main assembly, various adapters, hoses, and the storage case.

COMES IN STURDY CARRYING CASE



Figure 2: The kit components neatly organized within the sturdy green carrying case for convenient storage and transport.

PRESSURE GAUGE

**ON/OFF
VACUUM VALVE**

**ON/OFF ANTIFREEZE
UPTAKE VALVE**

**VENTURI VALVE
QUICK CONNECT**

**EXPANDING
RINGWHEEL**

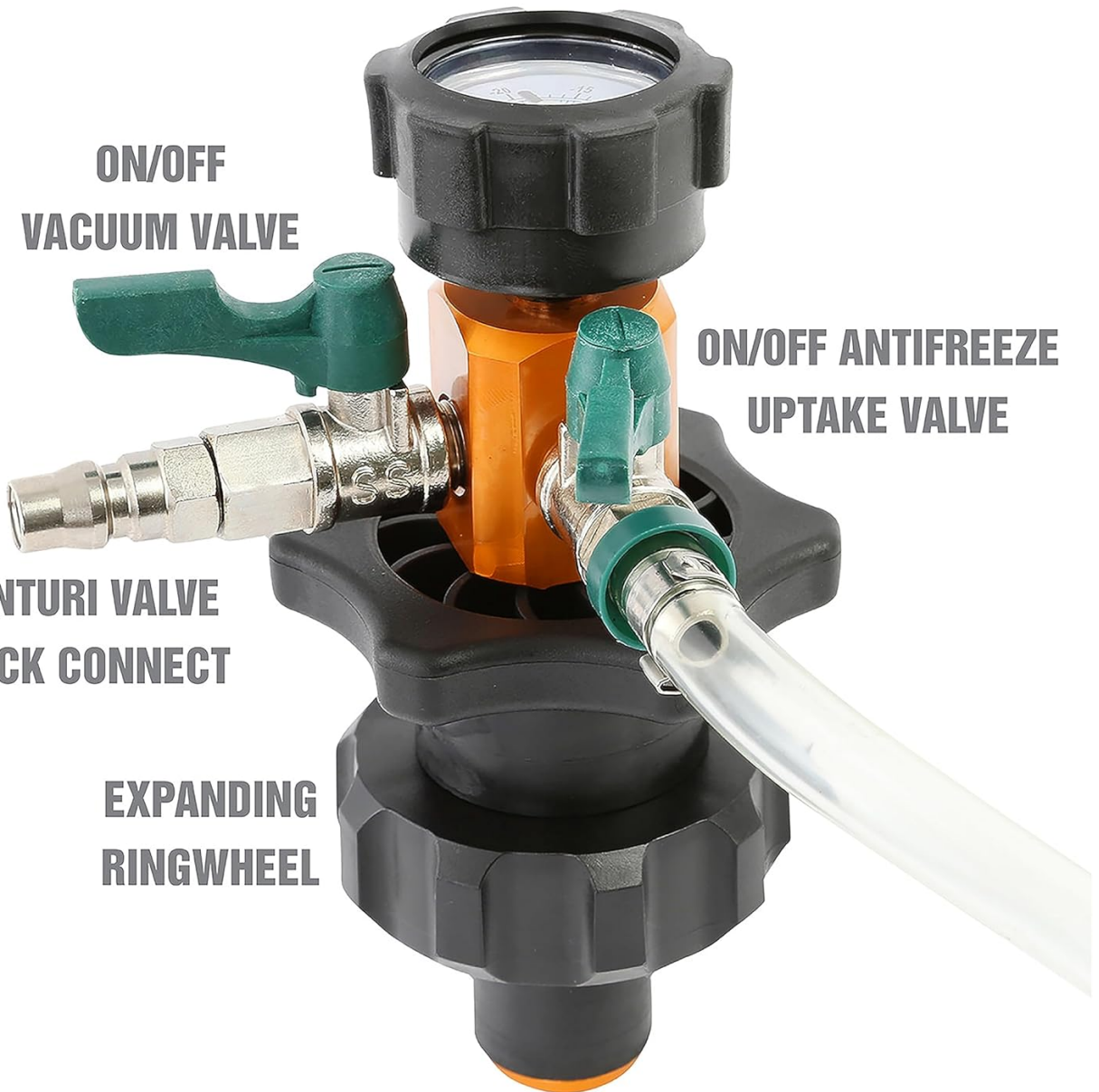


Figure 3: Detailed view of the main gauged valve assembly, highlighting the pressure gauge, control valves, and connection points.

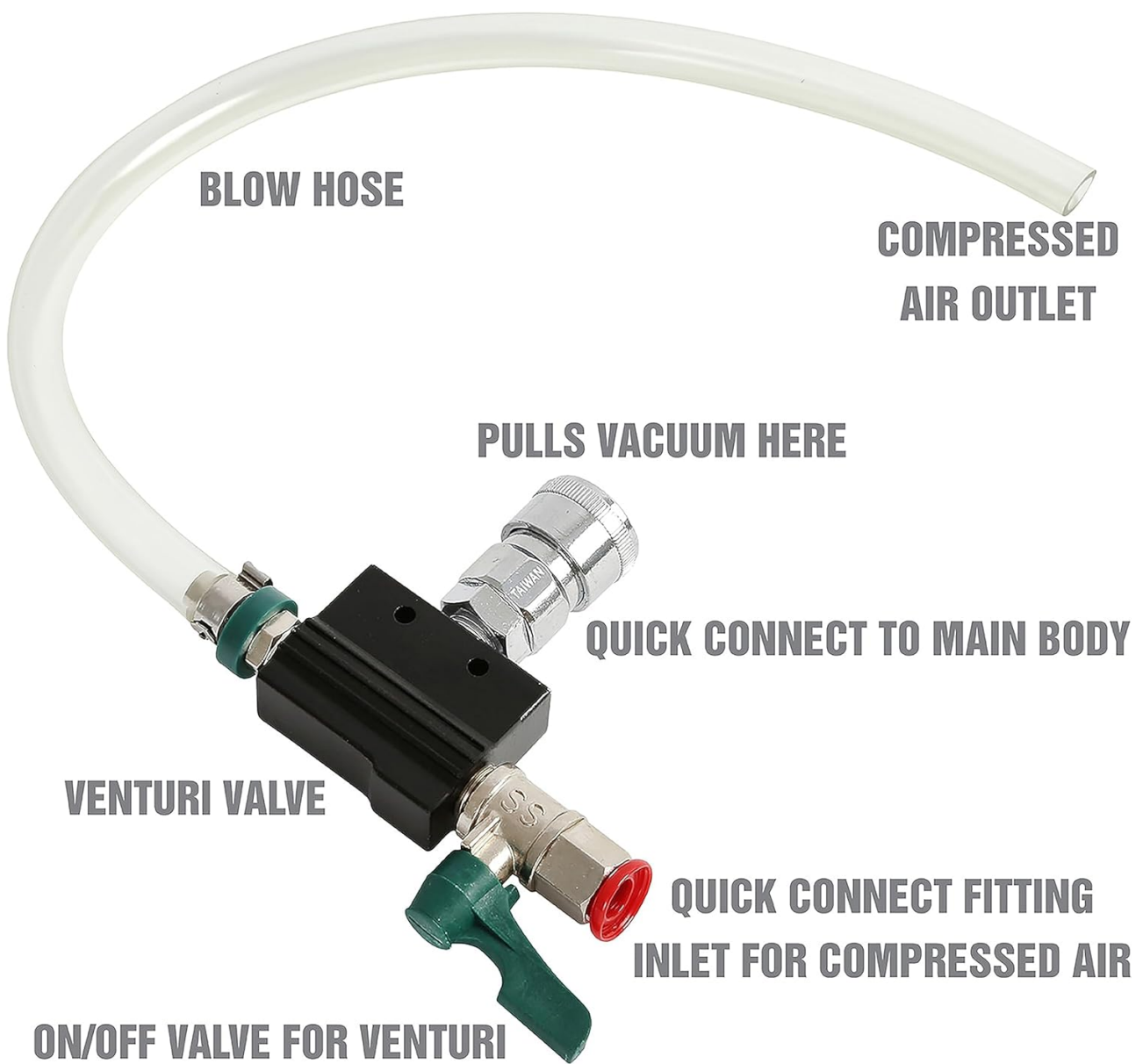


Figure 4: The Venturi valve assembly, showing connections for compressed air input and vacuum output.

RADIATOR/COOLANT TANK ADAPTERS



Figure 5: Selection of radiator/coolant tank adapters, including various sized bushings and a universal tapered cone.

ANTIFREEZE PICK UP HOSE

68"
LENGTH

FILTER

HOSE IS CLEAR SO YOU CAN SEE
THAT THE FLUID IS FLOWING

Figure 6: The clear antifreeze pick-up hose with an integrated filter, allowing visual confirmation of fluid flow.

SETUP

Before beginning, ensure the vehicle's engine is cool and the cooling system is depressurized. Have your coolant mixture (typically 50/50 coolant and distilled water) ready.

1. **Select Correct Adapter:** Choose the correct size rubber filler neck adapter or tapered cone adapter that fits snugly into your vehicle's coolant reservoir or radiator neck.
2. **Install Gauged Valve Assembly:** Install the gauged valve assembly into the coolant reservoir using the selected adapter. Hold the assembly still and turn the knob clockwise until it is snug and creates a tight seal.
3. **Attach Venturi Adapter:** Attach the Venturi adapter to the gauged valve assembly via the built-in quick connector.
4. **Connect Air Line:** Attach the air line from your air compressor to the 1/4" air fitting on the Venturi adapter. Ensure your air compressor can provide 70-110 PSI working pressure.

5. **Position Discharge Hose:** Point the Venturi discharge hose downward and away from any electrical components or sensitive areas.



Figure 7: Proper attachment of the refiller kit to the vehicle's cooling system reservoir.

OPERATING INSTRUCTIONS

1. Prepare the Coolant Refiller

1. Ensure that all of the valves (Venturi Valve, Intermediate Valve, and Suction Valve) are in the CLOSED position.
2. Attach the air line from the air compressor to the 1/4" air fitting on the Venturi adapter.
3. Point the Venturi discharge hose downward and away from any electrical components.

Your browser does not support the video tag.

Video 1: Official OEMTOOLS 24444 AirVac Coolant Refiller Instructional Video. This video demonstrates the complete process of using the tool, from setup to filling the cooling system.

2. Drawing a Vacuum

1. Open the Intermediate Valve and the Venturi Valve. You will hear air flowing and the gauge will begin to drop, indicating vacuum is being drawn.

Note: Some fluid may vent out of the Venturi discharge hose during this process.

2. Wait until the gauge reading stabilizes. Then, continue to draw vacuum for another 20-30 seconds to ensure you achieve the maximum possible vacuum for your system.

Note: The achievable vacuum can vary, typically ranging from -15 in-Hg to -27 in-Hg. It will not reach -30 in-Hg.

3. Close the Intermediate Valve **FIRST**, then close the Venturi Valve.
4. Watch the gauge for 2-5 minutes. If the gauge reading does not fluctuate (i.e., the vacuum holds steady), you can proceed with filling the system. If the gauge drops, it indicates a leak in the cooling system that needs to be addressed before refilling.
5. You may now disconnect the air hose and remove the Venturi adapter from the gauged valve assembly.

3. Filling the System

1. Place the suction hose (the clear hose with the filter) into your 50/50 mixture of coolant and distilled water.
2. With the pickup submerged, open the Suction Valve to pull coolant into the system. The vacuum will draw the fluid in.
3. If the level in the coolant container is getting low but the gauge has not dropped to zero (indicating the system is not yet full), close the Suction Valve, refill the container, then reopen the Suction Valve again.
4. The system is full once the gauge reads zero.
5. Drain any excess coolant from the tubing and remove the tool from the engine bay.
6. Top off the mixture in the coolant reservoir if it is low, then replace the cap securely.

MAINTENANCE

To ensure the longevity and proper function of your OEMTOOLS 24444 AirEvac Kit:

- After each use, clean all components, especially the hoses and adapters, with water to remove any coolant residue.
- Dry all parts thoroughly before storing.
- Store the kit in its original sturdy carrying case in a clean, dry place to protect it from dust and damage.
- Regularly inspect hoses for cracks or kinks and fittings for wear or damage. Replace any damaged components immediately.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Tool does not pull a vacuum.	<p>Insufficient air pressure from compressor.</p> <p>Poor seal at the radiator/reservoir neck.</p> <p>Open overflow hole in the cooling system.</p> <p>Damaged Venturi valve or hoses.</p>	<p>Ensure air compressor provides 70-110 PSI.</p> <p>Verify correct adapter is used and tightened securely.</p> <p>Plug or seal any overflow openings in the cooling system.</p> <p>Inspect components for damage and replace if necessary.</p>
Vacuum gauge is not working or appears damaged.	<p>Gauge malfunction.</p> <p>Physical damage to the gauge.</p>	Contact OEMTOOLS customer support for assistance or replacement.
Coolant is not being drawn into the system.	<p>Suction valve is closed.</p> <p>No vacuum in the system.</p> <p>Suction hose not submerged in coolant.</p>	<p>Ensure Suction Valve is open.</p> <p>Re-establish vacuum in the system.</p> <p>Ensure the suction hose filter is fully submerged in the coolant mixture.</p>

SPECIFICATIONS

Feature	Detail
Model Number	24444
Item Weight	4.27 pounds
Product Dimensions	5.04 x 11.97 x 11.73 inches
Country of Origin	Taiwan
Size	12" x 5" x 11.7"
Color	Green
Material	Blend
Item Package Quantity	1
Included Components	Cooling System Refiller Kit, 5 Adapters
Compatible Devices	OEMTOOLS
UPC	076812244444

WARRANTY AND SUPPORT

The OEMTOOLS 24444 AirEvac Cooling System Refiller Kit comes with a **Limited One Year Warranty** from OEMTOOLS.

For technical support, warranty claims, or replacement parts, please contact OEMTOOLS customer service directly. Refer to the official OEMTOOLS website or product packaging for the most current contact information.

You can also visit the [OEMTOOLS Store on Amazon](#) for more product information and support resources.