

Please read and save these instructions. Read through this owner's manual carefully before using product. Protect yourself and others by observing all safety information, warnings, and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.



AIRVAC COOLING SYSTEM REFILLER

UNPACKING

After unpacking unit, inspect carefully for any damage that may have occurred during transit. Check for loose, missing, or damaged parts. If any damage is observed, a shipping damage claim must be filed with carrier. Do not use the Airvac Cooling System Refiller if broken, bent, cracked or damaged parts (including labels) are noted. Any Airvac Cooling System Refiller that appears damaged in any way, operates abnormally or is missing parts should be removed from service immediately. If you suspect that the Airvac Cooling System Refiller was subjected to a shock load (a load that was dropped suddenly, unexpectedly, etc.) immediately discontinue use until it has been checked by a factory authorized service center.



⚠ WARNING

The following safety information is provided as a guideline to help you operate your Airvac Cooling System Refiller under the safest possible conditions. Any tool or piece of equipment can be potentially dangerous to use when safety or safe handling instructions are not known or not followed. The following safety instructions are to provide the user with the information necessary for safe use and operation. Please read and retain these instructions for the continued safe use of your service system. Failure to follow instructions listed below may result in serious injury. In addition, make certain that anyone that uses the equipment understands and follows these safety instructions as well.

Explanation of Safety Signal Words

⚠ WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION: Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTES: Provide clarity and helpful information.

Thank you very much for choosing an OEMTOOLS Product!

For future reference, please complete the owner's record below:

Model: _____ **Purchase Date:** _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it. This product is designed for certain applications only. OEMTOOLS cannot be responsible for issues arising from modification. We strongly recommend this product is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the product until you have first contacted OEMTOOLS to determine if it can or should be performed on the product.



AIRVAC COOLING SYSTEM REFILLER



IMPORTANT INSTRUCTIONS AND SAFETY RULES

1. Know your tool. Read this manual carefully. Learn the tool's applications and limitations, as well as, potential hazards specific to it.
2. Keep work area clean and well lit. Cluttered or dark work areas invite accidents.
3. Keep children away. All children should be kept away from the work area. Never let a child handle a tool without strict adult supervision.
4. Do not operate this tool if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to operate.
5. Use safety equipment. Eye protection should be worn at all times when operating this tool. Use ANSI approved safety glasses. Everyday eyeglasses are NOT safety glasses. Dust mask, non-skid safety shoes, hard hat or hearing protection should be used in appropriate conditions.
6. Wear proper apparel. Loose clothing, gloves, neck-ties, rings, bracelets or other jewelry may present a potential hazard when operating this tool. Keep all apparel clear of the tool.
7. Don't overreach. Keep proper footing and balance at all times when operating this tool.
8. Check for damage. Check your tool regularly. If part of the tool is damaged it should be carefully inspected to make sure that it can perform its intended function correctly. If in doubt, the part should be repaired. Refer all servicing to a qualified technician. Consult your dealer for advice.
9. Keep away from flammables. Do not attempt to operate this tool near flammable materials or combustibles. Failure to comply may cause serious injury or death.
10. Store idle tools out of the reach of children and untrained persons. Tools may be dangerous in the hands of untrained users.
11. Maintain tools with care.
12. Keep tools dry and clean.
13. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
14. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.
15. Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
16. When servicing a tool, use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.
17. Maintain a safe working environment. Keep the work area well lit. Make sure there is adequate surrounding workspace. Keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use this product in a damp or wet location.
18. Maintain labels and nameplates on this product. These carry important information. If unreadable or missing, contact OEMTOOLS for a replacement.
19. Before use, read and understand all warnings, safety precautions, and instructions as outlined in the vehicle manufacturer's service manual. It is beyond the scope of this manual to properly describe the correct procedure and test data for each vehicle.
20. Always perform vehicle service in a properly ventilated area. Never run an engine without proper ventilation for its exhaust. Stop work and take necessary steps to improve ventilation in the work area if you develop momentary eye, nose, or throat irritation as this indicates inadequate ventilation.

WARNING

- Engine parts that are in motion and unexpected movement of a vehicle can injure or kill. When working near moving engine parts, wear snug fit clothing and keep hands and fingers away from moving parts. Keep hoses and tools clear of moving parts. Always stay clear of moving engine parts. Hoses and tools can be thrown through the air if not kept clear of moving engine parts. The unexpected movement of a vehicle can injure or kill. When working on vehicles always set the parking brake or block the wheels.
- Avoid accidental fire and/or explosion. Do not smoke near engine fuel and battery components.
- For safety purposes and the prevention of damage to expensive components it is advised that the user have an understanding of basic automotive repair and a working knowledge of automotive systems.
- We believe the information contained herein to be reliable. However, general technical information is given by us without charge and the user shall employ such information at his own discretion and risk. We assume no responsibility for results or damages incurred from the use of such information in whole or in part. Always refer to specific instructions and technical information supplied by vehicle manufacturer.

NOTE: The manufacturer declines any and all responsibility for damage to vehicles or components if said damage is the result of unskillful handling by the operator or of failure to observe the basic safety rules set forth in the instruction manual.

WARNING

Read Rules for Safe Operation and Instructions Carefully.

IMPORTANT SAFETY INSTRUCTIONS

The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Used oil, antifreeze, brake fluid and transmission fluid contains chemical compounds that can be harmful to humans and other animals. When managed properly, used fluids may be of beneficial use. Used fluids may be blended and recycled as a heating or industrial fuel and also may be re-refined and made into new lubricants. Persons who perform maintenance on their own vehicles are responsible for managing the used fluids in a manner that is protective of human health and the environment and to follow all local laws and regulations concerning their disposal.

DISPOSAL

At the end of the useful life of the Airvac Cooling System Refiller, dispose of the components according to all state, federal, and local regulations.



AIRVAC COOLING SYSTEM REFILLER

PURPOSE

The OEMTOOLS Airvac Cooling System Refiller provides a quick and easy way to fill automotive cooling systems while preventing spills and trapped air. It uses shop air to create a vacuum and remove excess air from the system. It refills the entire cooling system in seconds, including the heater core. It also eliminates time consuming bleeding and purging while allowing the user to check for leaks while under vacuum. Adapters are included to fit radiators or surge tanks on most domestic and import cars and light trucks.

⚠ CAUTION

This equipment is intended only for professional use by personnel trained in performing the service functions for which it is has been designed.

This equipment is designed for servicing a variety of vehicles in a safe, convenient manner. However, differences in vehicle makes and models may make it impossible to use this equipment as it is intended.

DO NOT attempt to force the use of this equipment on an application for which it is not designed to perform. The procedures documented in this manual are to serve as guidelines for the use of this equipment.

In addition to these guidelines, always follow the manufacturer's recommended procedures when servicing each unique vehicle.

The use of this equipment is simple and straightforward if you follow the instructions. However, always keep in mind that you are working with a system that may be under pressure, with fluid that is just waiting to be expelled. When operating this equipment, use common sense, and always stop to think before disconnecting a hose or other component.

⚠ WARNING

Some vehicle manufacturers provide specific instructions to fill and bleed their cooling systems. It is important to understand and follow the vehicle manufacturer's instructions to prevent damage to components and possible injury.

NOTE: It is best if the vehicle cooling system is completely drained before starting.

NOTE: On some vehicles, it will be necessary to clamp overflow hoses to create a vacuum.

OPERATION:

1. Select the proper sized Cooling System Adapter (2-6) that fits your cooling system. It should fit snug in the radiator or expansion tank opening.
2. Install the Cooling System Adapter on to the Expansion Adapter (9) on the Cooling System Adapter Assembly (7).
3. Insert the Cooling System Adapter Assembly into your radiator or expansion tank and turn the Expansion Knob (12) clockwise until snug, making sure all components are positively engaged to prevent leaks.
4. Close both Valves (13,14) on the Cooling System Adapter Assembly. Connect the Venturi Assembly (10) to the Airvac using the quick coupler.
5. Connect shop air to the Venturi Assembly using the quick coupler (not included).
6. Open the Ball Valve #3 (15) on the Venturi Assembly and Ball Valve #1 (13) on the Cooling System Adapter Assembly (Ball Valve #2 remains closed) and you will see the Gauge start to register a vacuum.
7. Once the system reaches full vacuum (at least 24 on the Gauge), close Ball Valve #1 on the Cooling System Adapter Assembly and disconnect shop air. After 20 seconds, the Gauge should not move. This indicates the system has no leaks under vacuum.
8. Place Pickup Tube into the coolant supply, open Ball Valve #2 (14) and coolant will begin to flow into the vehicle cooling system. Once the Gauge reaches zero, system is full.

NOTE: This works best if the coolant supply is at the same level as the Airvac unit. Be sure not to let the Pickup Tube come out of the coolant supply or you will let air into the system and you will have to start over.

9. Remove the Airvac Assembly from the vehicle by rotating the Expansion Knob counterclockwise.
10. Fill the expansion tank to the proper level and top off the radiator if necessary.

⚠ WARNING

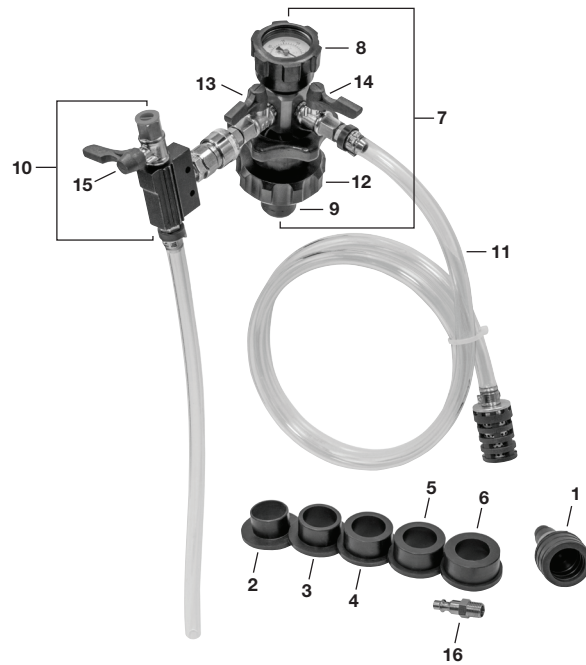
MAINTENANCE:

1. Always store the Airvac Cooling System Refiller in a well-protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements.
2. Keep the Airvac Cooling System Refiller clean for better and safer performance.



AIRVAC COOLING SYSTEM REFILLER

Figure	Description	Quantity
1	Adapter – Tapered Cone	1
2	Adapter – 31 mm	1
3	Adapter – 35 mm	1
4	Adapter – 40 mm	1
5	Adapter – 42 mm	1
6	Adapter – 45 mm	1
7	Cooling System Adapter Assembly	1
8	Gauge	1
9	Expansion Adapter	1
10	Venturi Assembly	1
11	Pickup Tube with Filter	1
12	Expansion Knob	1
13	Ball Valve #1	1
14	Ball Valve #2	1
15	Venturi Assembly Ball Valve #3	1
16	1/4" Male Plug	1



NOTE: Not all components of the Airvac Cooling System Refiller are replacement items, but are illustrated as a convenient reference for location and position in the assembly sequence.

Please read the following carefully.

OEMTOOLS and/or its distributors have provided the parts list and assembly diagram as a reference only. Neither OEMTOOLS and/or its distributors make any representation or warranty of any kind to the buyer and/or user of this tool that he or she is qualified to do any repairs or replace any parts of this product. OEMTOOLS and its distributors expressly state that all repairs or parts replacement should be done by certified or licensed technicians. The buyer assumes all risk and liability arising out of his or her repairs or parts replacement to the original production.