

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.



AIR VACUUM PUMP

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 Air Operated Vacuum Pump if broken, bent, cracked or damaged parts (including labels) are noted. Any Air Operated Vacuum Pump that appears damaged in any way, operates abnormally or is missing parts should be removed from service immediately. If you suspect that the engine 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 guidelines to help you operate your Air Operated Vacuum Pump 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.



AIR VACUUM PUMP

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 machine is designed for certain applications only. OEMTOOLS cannot be responsible for issues arising from modification. We strongly recommend this machine 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 machine until you have first contacted OEMTOOLS to determine if it can or should be performed on the product.



IMPORTANT INSTRUCTIONS AND SAFETY RULES

- Keep bystanders, children, and visitors away while operating the Air Operated Vacuum Pump. Distractions can cause you to lose control. Protect others in the work area from injury.
- Stay alert. Watch what you are doing, and use common sense when operating the Air Operated Vacuum Pump. Do not use the tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool may result in serious personal injury.
- Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the power tool in unexpected situations.
- Use safety equipment.
- Wear ANSI-approved safety glasses underneath a full face safety shield. Nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.
- Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- Maintain tools with care.
- Keep tools dry and clean.
- Properly maintained tools are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
- Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation.
- If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- 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.
- Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 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.
- 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.
- Maintain labels and nameplates on this product. These carry important information. If unreadable or missing, contact OEM for a replacement.
- Keep the handle dry, clean, and free from brake fluid, oil, and grease.
- 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.
- To reduce the risk of discomfort, illness, or death, read, understand, and follow the following safety instructions. Avoid breathing A/C refrigerant and lubricant vapor mist. Exposure may irritate eyes, nose, and throat. To remove R134a from the A/C system, use service equipment certified to meet the requirements of SAE J2788--R134a recycling equipment. Additional health and safety information may be obtained from refrigerant and lubricant manufacturers.



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- 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.
- 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.
- Be alert for hot engine parts to avoid accidental burns.
- When under pressure, refrigerants become liquid. When accidentally released from the liquid state they evaporate and become gaseous. As they evaporate, they can freeze tissue very rapidly. When these gases are breathed in, the lungs can be seriously damaged. If sufficient quantities are taken into the lungs, death can result. If you believe you have exposed your lungs to released refrigerant, seek immediate medical assistance. Refrigerants can cause frostbite and severe burns to exposed skin. Refrigerants are under pressure and can be forcibly sprayed in all directions if carelessly handled. Avoid contact with refrigerants and always wear protective gloves and make certain other exposed skin is properly covered. Refrigerants can also severely injure or cause permanent blindness to unprotected eyes. Avoid contact with refrigerants and always wear safety goggles.
- Avoid accidental fire and/or explosion. Do not smoke near engine fuel and battery components.
- 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.
- 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.

DISPOSAL

At the end of the useful life of the Air Operated Vacuum Pump, dispose of the components according to all state, federal, and local regulations

All technicians opening the refrigeration circuit in automotive air conditioning systems must now be certified in refrigerant recovery and recycling procedures to be in compliance with Section 609 of the Clean Air Act Amendments of 1990.

PURPOSE

The 24533 Air Operated Vacuum Pump is a Venturi-type vacuum pump powered by compressed air and designed for air conditioning service



The 1990 amendments to the United States Clean Air Act mandate that all personnel who service refrigerant systems must be trained and certified. Fines are in place for violations and compliance is not being monitored by the U.S. EPA.

Do Not Vent Refrigerant to the Atmosphere. Use Appropriate Recovery Equipment.

This pump is designed to remove air and moisture from an AC System. The system must be empty before using this Vacuum Pump.

Do not connect to a system under pressure. Any system found to be under pressure, by law must be fully evacuated with approved recovery equipment. Only after the system is completely emptied of all refrigerant can the pump be used.

Note: Use a quick-disconnect fitting on the "Air Input" fitting for fast, easy connections to the air supply

PRODUCT SPECIFICATIONS

| | |
|---------------------------------|---------------------------|
| Air Pressure Range | 75-180 PSI |
| Recommended Air Pressure | 75 PSI |
| Air Consumption | 4.2 CFM @ 90 PSI |
| Vacuum Capacity | 28.3" of Mercury @ 90 PSI |
| Run Time Recommended | 10-20 Minutes |



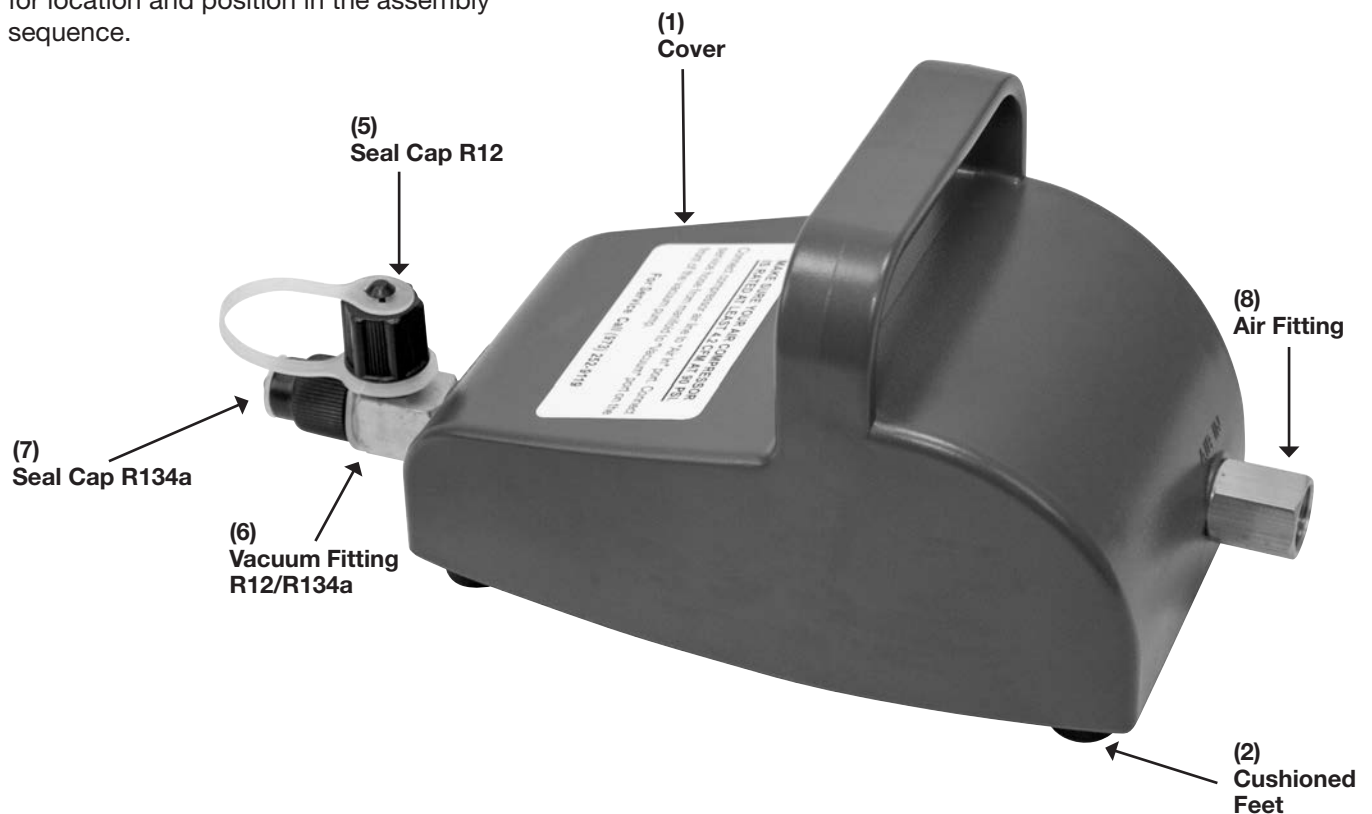


AIR VACUUM PUMP

| Figure | Description | Quantity |
|----------|-------------------------------|----------|
| 24533-1 | Cover | 1 |
| 24533-2 | Cushion Feet (Not shown) | 4 |
| 24533-3 | Aluminum Block (Not shown) | 1 |
| 24533-4 | Tube M10 (Not shown) | 1 |
| 24533-5 | Seal Cap R12 | 1 |
| 24533-6 | Vacuum Fitting R12/R134a | 1 |
| 24533-7 | Seal Cap R134a | 1 |
| 24533-8 | Air Fitting | 1 |
| 24533-9 | O-ring (Not shown) | 1 |
| 24533-10 | Washer (Not shown) | 1 |

NOTE

Not all components of the Air Operated Vacuum Pump are replacement items, but are illustrated as a convenient reference for location and position in the assembly sequence.





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Always wear safety glasses and gloves!

OPERATING INSTRUCTIONS

1. Connect user supplied A/C Manifold to system. (Be sure all manifold valves are closed before connecting)
2. Connect the center hose of the Manifold Gauge Set to the "Vacuum" tee fitting (either R-12 or R-134a) on the front of the pump. Tightly cap the port not used.
3. Open both valves on the manifold
4. Connect compressed air supply to Vacuum Pump Inlet. The low side gauge should drop below zero and continue falling. Once gauge reaches its lowest point, let the vacuum pump run for at least 10 and preferably 20 minutes.
5. Closed both manifold valves and disconnect air supply from the vacuum pump.
6. Let system stand for at least 5 minutes to ensure the system is not leaking. If the gauge does not move, no leaks exist.
7. Follow manufacturer's instructions to recharge AC System.

MAINTENANCE

1. Always store the Air Operated Vacuum Pump Set 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 Air Operated Vacuum Pump clean for better and safer performance.