

CENTRAL PNEUMATIC®

AIR VACUUM PUMP WITH R134A & R12/22

Model 96677

SET UP AND OPERATING INSTRUCTIONS



⚠ DANGER

To prevent explosion, serious injury, and death:

- Service of air conditioning systems must be done only by trained and experienced technician to avoid overfilling.
- Technicians opening refrigeration circuit in automotive air conditioning systems **MUST** be certified in refrigerant recovery and recycling procedures in compliance with section 609 of Clean Air Act Amendments of 1990. For additional information regarding ozone depletion and air conditioning service regulations, visit EPA's website: www.epa.gov/ozone

Diagrams within this manual may not be drawn proportionally.

Due to continuing improvements, actual product may differ slightly from the product described herein.

Distributed exclusively by Harbor Freight Tools®.

3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: <http://www.harborfreight.com>



**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

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For technical questions or replacement parts, please call 1-800-444-3353.

SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

GENERAL SAFETY RULES



WARNING! Read all instructions

Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury. The term “pneumatic tool” in all of the warnings listed below refers to your pneumatic powered Air Vacuum Pump.

SAVE THESE INSTRUCTIONS

1. **Work area safety**

- a. Keep work area clean and well lit. *Cluttered or dark areas invite accidents.*
- b. **Keep children and bystanders away while operating a pneumatic tool.** *Distractions can cause you to lose control.*

2. **Personal safety**

- a. Stay alert, watch what you are doing and use common sense when operating a pneumatic tool. Do not use a pneumatic tool while you are tired or under the influence of drugs, alcohol or medication. *A moment of inattention while operating pneumatic tools may result in serious personal injury.*



- b. **Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, work gloves, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.**
- c. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. *Loose clothes, jewelry or long hair can be caught in moving parts.*
- d. If devices are provided for the connection of chemical vapor extraction and collection facilities, ensure these are connected and properly used. *Use of these devices can reduce vapor-related hazards.*

3. **Pneumatic tool use and care**

- a. Do not force the pneumatic tool. Use the correct pneumatic tool for your application. *The correct pneumatic tool will do the job better and safer at the rate for which it was designed.*
- b. **Disconnect the tool from the air source before making any adjustments, changing accessories, or storing.**

- c. **Store idle pneumatic tools out of the reach of children and do not allow persons unfamiliar with the pneumatic tool or these instructions to operate it. *Pneumatic tools are dangerous in the hands of untrained users.***
 - d. Maintain pneumatic tools. Check for misalignment or breakage of parts and any other condition that may affect the pneumatic tools operation. If damaged, have it repaired before use. *Many accidents are caused by poorly maintained tools.*
 - e. Use the pneumatic tool in accordance with these instructions and in the manner intended for the particular type of tool, taking into account the working conditions and the work to be performed. *Use of the pneumatic tool for operations different from those intended could result in a hazardous situation.*
4. **Service**
- a. Have your pneumatic tool serviced by a qualified repair person using only identical replacement parts. *This will ensure that the safety of the tool is maintained.*

SPECIFIC SAFETY RULES

- 1. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 2. Avoid unintentional starting. Prepare to begin work before turning on the tool
- 3. Do not leave the tool unattended when it is plugged into a pneumatic outlet, unplug it before leaving.
- 4. This product is not a toy. Keep it out of reach of children.
- 5. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. Caution is necessary when near coil, spark plug cables, or distributor of running engine. Engine should be off during vacuum evacuation.
- 6. **WARNING:** The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). (California Health & Safety code § 25249.5, *et seq.*)
- 7. **NEVER use this product to vent refrigerants into the air. It is illegal to do so, harmful to the environment, and poses a serious health risk.**
- 8. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be

understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



SAVE THESE INSTRUCTIONS.

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 / Sea Level @ 90 Psi
Run Time	Recommended 10 Minutes
Air Inlet	1/4"-18 NPT
Vacuum Ports	R-134A & R-12/22

UNPACKING

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

OPERATING INSTRUCTIONS



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

General operating instructions

NOTE: While not required for operation, it is advisable to mount a quick release air fitting to the Air Fitting. This will make it easier to quickly attach and detach the air supply hose from this tool.

Warning. It is unlawful and hazardous to discharge refrigerants into the atmosphere. Before beginning work with this tool, safely capture refrigerants using an approved refrigerant recovery system and dispose of them properly. Contact the EPA for important certification regulations and other regulations that apply (see front cover).

1. Turn vehicle and AC system "OFF".
2. Attach shop A/C Refrigerant Recovery System. Drain refrigerant. After reaching 26 to 28 in/hg. vacuum, stop and disconnect the Shop Recovery System. Attach

this Air Vacuum Pump and run for 10 minutes to further raise the vacuum level in the A/C system.

3. Attach an air pressure hose (not included) to the Air Fitting either by threading it directly on, or by using a quick release fitting.
4. As appropriate, attach the R-134a or R12/22 manifold fitting to the AC drain port of the vehicle. This is a quick release fitting. The drain port is generally the lower of the two R-134a or R12/22 manifold ports and will be located downstream from the compressor in the vehicle. Refer to the vehicle's owners manual for vehicle-specific information. Tightly cap the unused port.
5. Turn on the Air Vacuum Pump by activating the air compressor (not included). Recommended running PSI is 75.
6. The vacuum will build for approximately 2 minutes, before reaching full power. Allow the pump to draw vacuum on the system for approximately 10 minutes to thoroughly remove all moisture and any gas from the system.
7. The gauge (not included) should show negative pressure and maintain that reading for 10 minutes. If it rises back towards 0, there may be a leak in the system.
8. Turn off the air supply before disconnecting the hose from the vacuum fitting.
9. Store the tool indoors out of children's reach.

MAINTENANCE AND SERVICING

▲WARNING

Unplug the tool from the air outlet before performing any inspection, maintenance, or cleaning procedures.

Damaged equipment can fail, causing serious personal injury. Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, maintenance, and lubrication

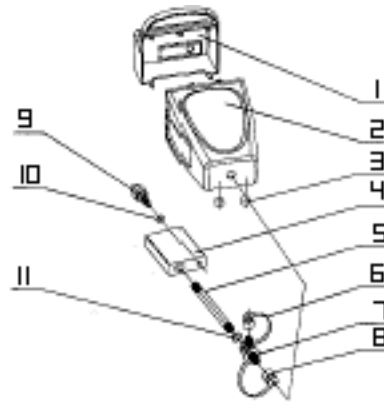
1. **BEFORE EACH USE**, inspect the general condition of the tool. Check for loose screws, cracked or broken parts, and any other condition that may affect its safe operation.
2. **AFTER USE**, clean external surfaces of the tool with clean, moist cloth.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

PARTS LIST & ASSEMBLY DIAGRAM

Part	Description	Qty
1	Cover	1
2	Housing	1
3	Cushion	4
4	Aluminum Block	1
5	Tube M10	1
6	Seal Cap R12	1
7	Vac Fitting R12/R134a	1
8	Seal Cap R134a	1
9	Air Fitting	1
10	O-ring	1
11	Washer 10	1



Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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