



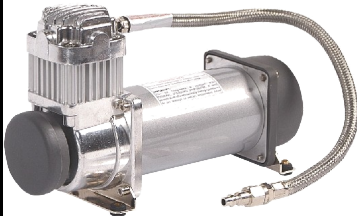
MODEL NUMBER:
400H – HARDMOUNT AIR COMPRESSOR
450H – HARDMOUNT AIR COMPRESSOR

IMPORTANT:

It is essential that you and any other operator of this product read and understand the contents of this manual before installing and using this product.

SAVE THIS MANUAL FOR FUTURE REFERENCE

400H



450H



USER MANUAL

IMPORTANT SAFETY INSTRUCTIONS

CAUTION - To reduce risk of electrical shock or electrocution:

- Do not disassemble. Do not attempt repairs or modifications. Refer to qualified service agencies for all service and repairs.
- Do not use this product in or area where it can fall or be pulled into water or other liquids.
- Do not reach for this product if it has fallen into liquid.
- Use this compressor with 12-volt DC systems only.
- This product should never be left unattended during use.

WARNING - To prevent injury:

- Never allow children to operate this compressor. Close supervision is necessary when this compressor is being used near children.
- This compressor will become very HOT during and immediately after use. Do not touch any part of this compressor with bare hands other than the ON/OFF switch, during and immediately after use.
- Do not use this product near flames or explosive materials or where aerosol products are being used.
- Do not operate this product where oxygen is being administered.
- Do not pump anything other than atmospheric air.
- Never use this product while sleepy or drowsy.
- Do not use any tools or attachments without first determining maximum air pressure for that tool or attachment.
- Never point any air nozzle or air sprayer toward another person or any part of the body.
- This air compressor is equipped with Automatic Reset Thermal Protector, and can automatically restart after the thermal protector resets. Always cut off power source when thermal protector becomes activated.
- Wear safety glasses or goggles when operating this product.
- Use only in well ventilated areas.

INSTALLATION

This air compressor is ideal for mounting under the hood or even inside your vehicle. The compact size of this compressor requires minimal space, and oil-less design permits mounting in many different areas of your vehicle. Please read and follow these Installation Instructions carefully to avoid injury or damage to the compressor or your vehicle.

Each of our air compressors and parts have been carefully produced and packaged. Before you begin installation, please familiarize yourself with Installation Parts List (Fig. 1) of this manual.

Guidelines for Selecting Mounting Location:

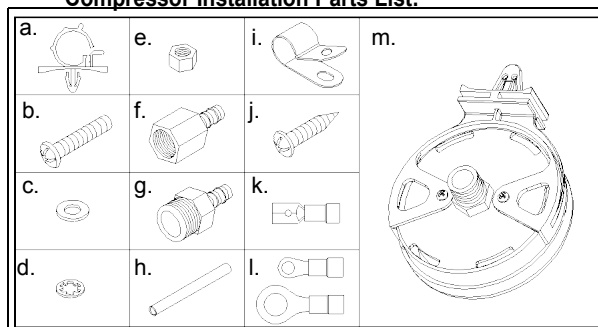
The selection of proper mounting location for your air compressor will help ensure a long and trouble free compressor service life. Please pay close attention to the following guidelines:

1. Select a **FLAT AND SECURE** location where the compressor can be mounted by using the mounting brackets provided.
2. Choose a location where the 10 ft. positive wire provided is long enough to reach the battery and where there is an appropriate chassis grounding point to be reached by the 2ft. ground wire.
3. To maximize air compressor performance and minimize amp draw, locate compressor as **CLOSE TO THE BATTERY** as possible so that the length of positive lead wire required is at a minimum.
4. Choose a mounting location that is **AS COOL AS POSSIBLE AND AWAY FROM HEAT SOURCES**. The cooler the ambient temperature (air temperature surrounding the air compressor), the less chance the compressor will overheat.
5. This compressor is moisture & splash resistant, but **NOT WATERPROOF**. **DO NOT MOUNT COMPRESSOR IN LOCATIONS WHERE THE UNIT IS LIKELY TO COME IN CONTACT WITH WATER**.
6. Select a compressor mounting location where air line can be routed from compressor air inlet to remote inlet air filter. Make sure Remote Inlet Air Filter is located in a dry location, away from water splashes.
7. You will also want to select a compressor mounting location where the leader hose bracket can be mounted to secure the 1.5 ft. leader hose.
8. If it is necessary to mount the air compressor further away from the battery, such as inside your vehicle or in the bed of your pickup, the 10ft. positive wire may not be long enough. Use a longer minimum 8 AWG positive lead wire for remote installation.
9. Do not mount compressor near areas where flammable liquids are stored.

MOUNTING AND WIRING

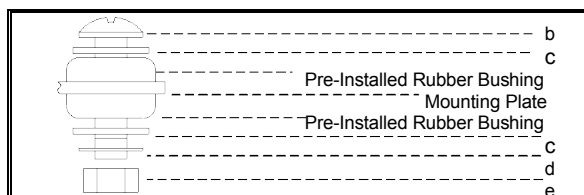
1. Disconnect ground cable from vehicle's battery.
2. Temporarily position the air compressor in the location where it will be mounted. Route the positive wire to the positive post of the battery. Measure and cut positive wire to the appropriate length and use appropriate inline fuse.
3. Route ground wire to the negative post of the battery or to an appropriate chassis grounding point and cut ground wire to length as needed.
4. Mount the air compressor by using the pair of anti-vibration mounting brackets and four sets of 13/64" (5mm) bolts, nuts, washers, and locking washers provided. Use 13/64" drill bit to drill holes for the first set of brackets. Mount this first bracket with screws, flat washers, locking washers and nuts provided. (Refer to Fig. 2 for placement of washers.)
5. Place compressor into mounted bracket. Place second set of bracket under the air compressor, make sure that the compressor sits snugly in between the two brackets. Mark off holes to be drilled using the second set of brackets as guides. Drill holes, and place compressor snugly between brackets and mount the second bracket.
6. Refer to Remote Air Filter Installation Instructions included in the Remote Inlet Air Filter Pack for installation of Remote Inlet Air Filter.
7. This air compressor comes equipped with a 1.5 ft. heavy duty heat resistant leader hose with $\frac{1}{2}$ -inch fittings. This leader hose is designed to provide easy access for air hose attachment and to prolong the life of your extension hose as well as minimizing wear to the compressor air outlet. Do not remove this leader hose from the air compressor.
8. Please note, the leader hose that comes with your compressor may have a built-in inline check valve installed. Do not remove inline check valve from leader hose.
9. Select a proper location to mount leader hose with hose bracket provided. Avoid locations where leader hose may become tangled with wires and other hoses.
10. To mount hose bracket, drill hole with 3/16" drill bit and push self-anchoring hose bracket pin into hole. Route leader hose through hose bracket and secure hose by pressing bracket clamp into locked position.
11. To remove hose from the hose bracket, simply press down on the hose clamp release tab to release bracket clamp. (Fig. 3)
12. Attach ground wire to the negative post of the battery or chassis grounding point. Check to make sure that the air compressor's ON/OFF switch is in the OFF position. Attach positive wire to positive terminal of the battery.
13. Re-check to make sure that all connections are made securely.

(Fig. 1) 400H/450H Hardmount Air Compressor Installation Parts List:



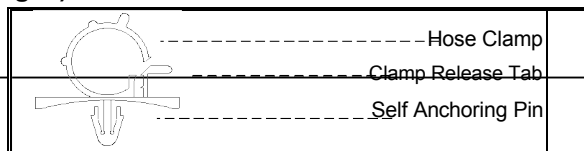
- a. Hose Bracket (1)
- b. Mounting Bolts (4)
- c. Flat Washers (8)
- d. Locking Washer (4)
- e. Nuts (4)
- f. 1/4" F x 3/8" Tube Fitting (1)
- g. 1/4" M x 3/8" Tube Fitting (1)
- h 3/8" Air Line (1)
- i. Air Line Clips (3)
- j. Screws (3)
- k. Positive (Red) Ring Terminal
- l. Ground (Black) Ring Terminals (2 Sizes)
- m. Remote Inlet Air Filter with Filter Element (1)

(Fig. 2) Compressor Mounting Hardware



- b. Mounting Bolt
- c. Flat Washer
- d. Locking Washer
- e. Nut

(Fig. 3) Leader Hose Bracket



OPERATING INSTRUCTIONS

IMPORTANT:

1. Always operate the compressor at or below the **MAXIMUM PRESSURE RATING** of the compressor. Refer to Compressor Application and Specifications sections of this manual for details.
2. Always observe the **MAXIMUM DUTY CYCLE** of the air compressor. Refer to Compressor Applications and Specifications sections of this manual for details. Operations exceeding maximum pressure ratings and/or duty cycle will result in damage to air compressor.
3. Your air compressor is equipped with an **AUTOMATIC THERMAL OVERLOAD PROTECTOR**. This feature is designed to protect the air compressor from overheating and causing permanent damage to your air compressor. The thermal overload protector will automatically cut power to your air compressor should the internal operating temperature of the air compressor rise above safe levels during excessive use.
4. Should at any time during use, your air compressor automatically shuts off; do not attempt to restart the air compressor. Turn power switch to the air compressor to the OFF position. The automatic thermal overload protector will automatically reset when internal temperature of the air compressor drops below safe levels. Allow air compressor to cool off for about 30 minutes, before resuming use of the air compressor.
5. Keep the vehicle engine running while using the air compressor to prevent discharge of your vehicle's battery.
6. **ONLY OPERATE THE AIR COMPRESSOR IN WELL-VENTILATED AREAS.**
7. Compressor performance is also enhanced when operating compressor with vehicle's engine running.

TIRE INFLATION

This air compressor comes with 1.5 feet heavy duty heat-resistant leader hose with 1/4" industrial series quick connect stud. By attaching an air hose with 1/4" industrial series quick coupler to the leader hose, your air compressor is ready to inflate tires. Read and follow tire inflation instructions carefully to avoid personal injury and damage to air compressor or vehicle.

1. Use heat-resistant, minimum 200PSI-rated working pressure extension hose. Do not use aftermarket hoses with less than 200PSI working pressure. Some aftermarket hoses may not be suitable for use with this air compressor due to heat and pressure typically generated by this type of air compressors.
2. Use of our convenient 25ft. extension coil hose with in-line deflator and Built-in Pressure Gauge is recommended
(Part No. 00025, 5-in-1 Inline Inflator/Deflator).
3. Use of a close-ended tire chuck will cause excessive pressure buildup if tire chuck is not attached to tire valve stem while air compressor is in operation. Always use an Open-Ended tire chuck such as the tire chuck equipped on the Inflator/Deflator Coil Hose (P/N 00025) for tire inflation.
4. Always inflate tires to manufacturer's recommended tire pressures. Exercise extreme caution when driving with aired down tires. Re-inflate tires before high speed road way travel.

MAINTENANCE & REPAIRS

1. Periodically check all electrical and fitting connections. Clean and tighten or repair as needed.
2. Periodically check all mounting bolts. Tighten as needed.
3. Replace air filter element periodically. Replacement frequency depends on operating frequency and operating environment. For frequent use in dusty environment, we recommend that you replace air filter element at least once a month.
4. Regularly clean dust and dirt from compressor cooling fins and motor housing.
5. Your air compressor is equipped with a permanently lubricated, maintenance-free motor. Never try to lubricate compressor.
6. All repairs should be performed by Manufacturer or Manufacturer's Authorized Service Agencies only.

CAUTION:

Never touch the air compressor or fittings connected to the air compressor, with bare hands during or immediately after usage. The leader hose and fittings connected to the leader hose will become very HOT during and after use. If necessary, wear heat resistant gloves to handle fittings, air line, and leader hose.

SPECIFICATIONS

Part No. 40042 / 400H Air Compressor

Motor Voltage:	12 volts
Max. Current Consumption:	30 amps
Motor Type:	Permanent
	Magnetic
Horse Power:	4-Jan
Max. Working Pressure:	150 PSI
Max. Duty Cycle:	33%
(Min. On/Off @72°F & 100 PSI)	15 On / 30 Off
Max. Restart Pressure:	200 PSI
Max. Ambient Temperature:	158°F
Min. Ambient Temperature:	-40°F
Fuse:	40 amps
Auto. Reset Thermal Protection:	Yes
Housing:	Moisture & Dust
	Resistant
Dimensions:	11.25"x4.0"x7.0"
Net Weight:	8 lbs.

Part No. 45042 / 450H Air Compressor

Motor Voltage:	12 volts
Max. Current Consumption:	23 amps
Motor Type:	Permanent
	Magnetic
Horse Power:	4-Jan
Max. Working Pressure:	150 PSI
Max. Duty Cycle :	100%
(Min. On/Off @ 72°F & 100 PSI)	Continuous
Max. Restart Pressure:	200 PSI
Max. Ambient Temperature:	158°F
Min. Ambient Temperature:	-40°F
Fuse:	30 amps
Auto. Reset Thermal Protection:	Yes
Housing:	Moisture & Dust
	Resistant
Dimensions:	12.75"x4.0"x7.0"
Net Weight:	9.75 Lbs

TROUBLESHOOTING CHART

PROBLEM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Compressor will not run	<ol style="list-style-type: none">1. No power, or switch in OFF position2. Blown fuse3. Motor overheats	<ol style="list-style-type: none">1. Make sure compressor switch is ON2. Disconnect compressor from power source, replace fuse (Refer to Specifications section for correct fuse)3. Let compressor cool off for about 30 Minutes so thermal overload switch will reset.
Thermal Overload Protector cuts out repeatedly	<ol style="list-style-type: none">1. Lack of proper ventilation or ambient temperature is too high2. Compressor valves failed	<ol style="list-style-type: none">1. Move compressor to well ventilated area, or area with lower ambient temperature2. Repair or replace compressor
Excessive knocking or rattling	<ol style="list-style-type: none">1. Worn bearing on eccentric or motor shaft2. Cylinder or piston ring is worn	<ol style="list-style-type: none">1. Repair or replace compressor2. Repair or replace compressor
Compressor air flow lower than normal, or can not pump to higher pressures	<ol style="list-style-type: none">1. Worn piston ring or inlet valve	<ol style="list-style-type: none">1. Repair or replace compressor

LIMITED WARRANTY

VIAIR Corporation warrants this product, when properly installed and under normal conditions of use, to be free from defects in workmanship and materials for a period of one year from provided date of purchase. To receive a replacement or for repairs, return the complete unit to retailer from whom it was purchased along with proof of purchase.

Returns should be made within the time period and conditions of the retailer's policy for exchanges. If you are unable to contact your dealer, contact VIAIR directly for repairs or replacement at our option.

PLEASE NOTE:

THIS WARRANTY COVERS PRODUCT DEFECTS ONLY; IT DOES NOT COVER INCIDENTAL OR CONSEQUENTIAL DAMAGES AS RESULT OF MISUSE OR ABUSE.