

## TIRE PRESSURE & PERFORMANCE

Maintaining proper tire pressure plays a vital role in the performance and safety of your tires. Vehicle manufacturers specify recommended tire pressures that increase gas mileage, tire wear, handling and safety at highway speeds. Off the highway, reduced tire pressure can often greatly improve the traction and flotation capabilities of your tires. Figure 1 illustrates the increase in footprint size caused by reduced pressure.

Reduced pressure allows the tire to conform to irregular surfaces and spreads the vehicle weight over a larger area, allowing the tire to float more easily over loose or soft surfaces.

Proper tire pressure varies greatly by vehicle as well as terrain and speed, so always take the specific characteristics of your vehicle as well as the conditions into consideration when airing down. Never air down to low pressure unless you have a source of compressed air to reinflate your tires before high speed highway travel.

### Tire Pressure vs. Temperature-

An increase in tire temperature will always result in a higher tire pressure. The physical relationship between pressure, volume and temperature can be calculated by using the gas law, which can be expressed as follows:  $P_1 \times V_1 / T_1 = P_2 \times V_2 / T_2$  (P= Pressure, V= Volume, T= Temperature) Increases in tire temperature can be caused by an increase in ambient temperature as well as by friction between the tire and road.

### Altitude vs. Inflation Times-

Tire inflation times at high altitude will often be longer than those at sea level. This is due to the difference in atmospheric pressure. The atmospheric pressure at low altitude is considerably higher, resulting in a faster inflation time. The low pressure at high altitude causes inflation times to be longer, because the air being compressed is at a lower pressure to begin with.



contact area: 20.6 sq. in.  
contact area pressure: 50.2 lbs./sq. in.

30 psi



contact area: 30.5 sq. in.  
contact area pressure: 34.0 lbs./sq. in.

15 psi



contact area: 43.3 sq. in.  
contact area pressure: 23.9 lbs./sq. in.

7 psi

## LIMITED WARRANTY

Every QuickAIR2 is thoroughly inspected and tested before leaving the factory. It is warranted to be free from defects in workmanship or materials for a period of ONE YEAR from the provided date of purchase.

Any SUN Performance product which is defective will be repaired or replaced without charge to the buyer.

The warranty shall be considered void if the unit has suffered any physical damage either internal or external, and does not cover damage arising from misuse or use in an unsuitable environment. This warranty will not apply where the product has been misused, improperly installed, or repaired by anyone other than the manufacturer. To qualify for the warranty, this product must not be disassembled or modified without prior authorization by SUN Performance.

IN NO EVENT SHALL SUN PERFORMANCE PRODUCTS BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE SALE OR USE OF THIS PRODUCT.

THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

SUN PERFORMANCE DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A SPECIFIC PURPOSE AFTER THE ONE YEAR TERM OF THIS WARRANTY.

You must obtain a return authorization number from SUN Performance before returning the QuickAIR2 directly to the manufacturer.

In order to obtain a return authorization, the following information will need to be provided:

- A description of the problem
- Date of purchase
- Your name, address and phone number
- Serial Number for the unit (The serial number is located on the base plate)
- Name and address of the dealer from which the unit was purchased

It is always best to return the product to the place of purchase. If you are unable to contact your dealer, contact SUN Performance directly.



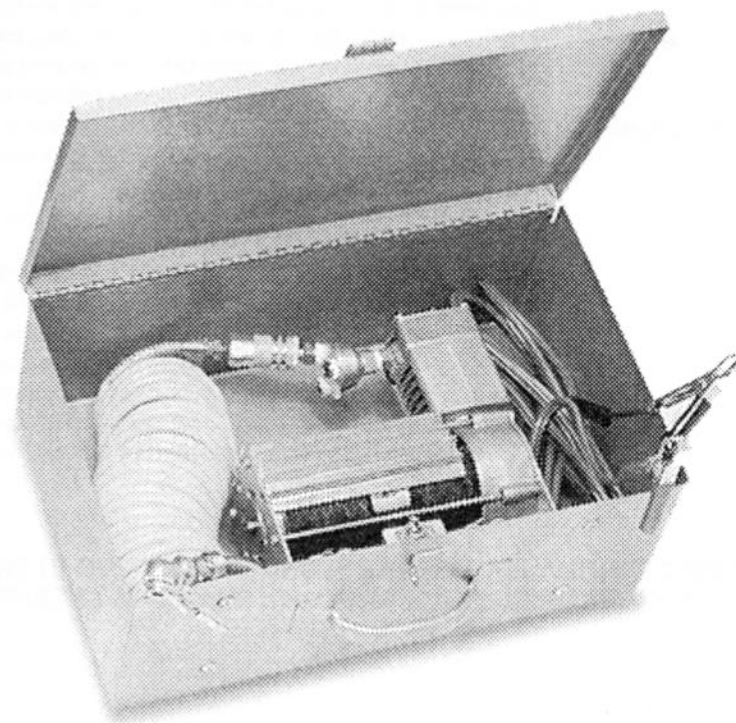
17 Musick • Irvine • CA • 92618 • Phone (714) 588-8567 • Fax (714) 588-0142

# QuickAIR<sup>2</sup>

## HIGH OUTPUT AIR COMPRESSOR

## OWNERS MANUAL

Portable Unit - Model #QA201



### IMPORTANT!

To get the most out of your compressor, it must be used properly. Please read the operation instructions in this manual carefully before using your new compressor. Failure to follow instructions may result in personal injury, damage to your compressor or damage to your vehicle.

## **SAFETY PRECAUTIONS**

QuickAIR2 has been designed to provide rapid air delivery for inflating tires. It is also a versatile tool to be used for numerous other purposes or areas which might require a supply of compressed air. Please read and understand the following information and instructions carefully to prevent possible hazardous accidents.

### **CAUTION**

#### **To prevent injury**

1. Never allow children to operate this product. The compressor gets extremely hot during and immediately after use.
2. Do not touch any part of the compressor other than the switch with bare hands during and immediately after use.
3. Never use this product while sleepy or drowsy.
4. Do not use this product near flames.
5. Do not use this product where aerosol products are being used.
6. Do not pump anything other than atmospheric air.
7. Never point any air nozzle toward another person or any part of the body.
8. Never operate this product where oxygen is being used.
9. Do not use any tools or attachments without first determining the allowable pressure for that tool or attachment.

### **WARNING**

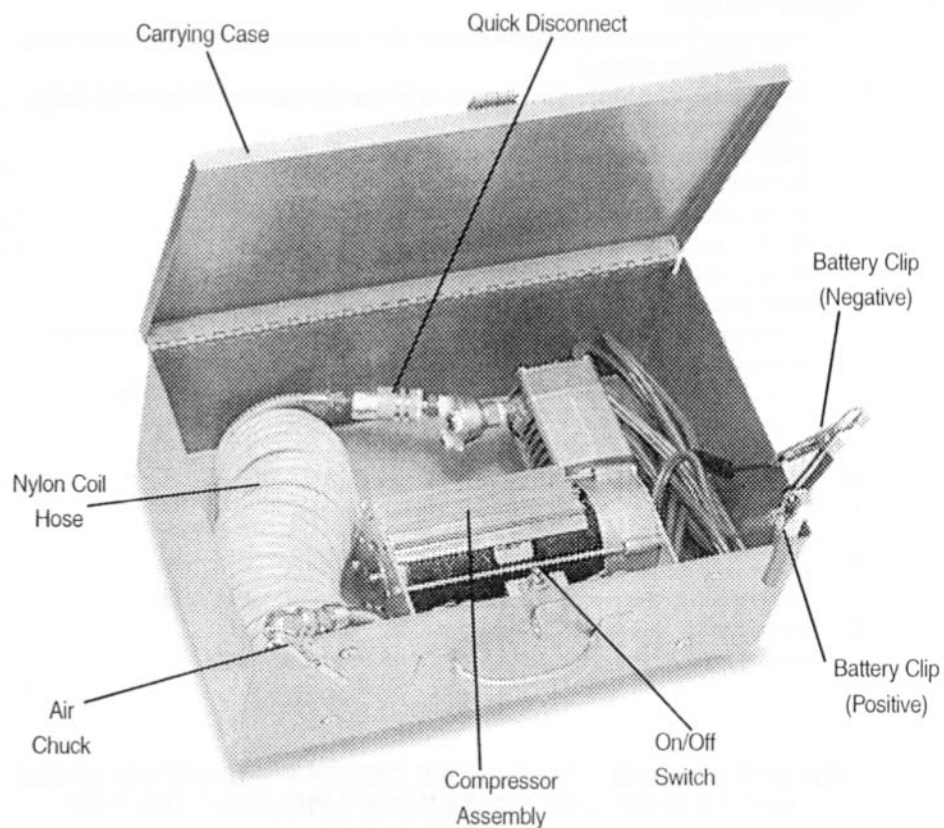
#### **To reduce the risk of electrical shock or electrocution**

1. This product should never be left unattended during use.
2. Use with 12 volt DC systems only!
3. Always keep fuse or circuit breaker in place.
4. Do not reach for this product if it has fallen into water or any other liquid.
5. Do not attempt to disassemble, modify or repair the compressor.  
Have all services and repair performed by qualified personnel only.

**FAILURE TO OBSERVE THE ABOVE SAFETY PRECAUTIONS COULD  
RESULT IN SERIOUS BODILY INJURY, INCLUDING DEATH IN  
EXTREME CASES.**

**SAVE THIS OWNERS MANUAL!**

## PARTS IDENTIFICATION



Dimensions: .....14.75" x 9.5" x 5.5"  
Weight: .....20 lbs.  
Power Cord Length: ..10 ft.  
Air Hose Length: .....25 ft.

## OPERATION

In order to operate your QuickAIR2 safely and efficiently, follow the instructions below.

- 1) The QuickAIR2 draws 22-28 Amps during use. It is highly recommended that your vehicles engine is running during use to prevent discharge of the battery.
- 2) Place the compressor on a flat surface within reach of the battery connectors. (10ft.) Open the carrying case and make sure that the on/off switch is in the off position.
- 3) Attach the positive battery clip (red wire) to the positive post of the battery and attach the negative battery clip (black wire) to the negative post of the battery.
- 4) Pull the nylon coil hose out from the case and attach the air chuck to the valve stem of the tire to be inflated. Be sure that the air chuck is securely clipped onto the valve stem.
- 5) Turn the on/off switch to the on position. The QuickAIR2 will start to inflate the tire.
- 6) When the tire reached the desired pressure, remove the air chuck from the valve stem and move on to the next tire to be inflated.
- 7) When finished, turn the on/off switch to the off position. Disconnect the battery connectors and air chuck and return them to the carrying case.

**NOTE:** The circuit breaker may stop the compressor if the temperature gets too hot due to excessive use or high ambient temperature. If the compressor stops during prolonged use, turn off the switch and allow the unit to cool for 10-15 minutes before restarting.

## CAUTION

The QuickAIR2 gets very hot during normal use. Never touch the compressor or quick disconnect during or immediately after use. Use caution when returning the air hose and battery connectors to the carrying case.

Never leave the compressor running unattended. Always monitor the condition of the compressor and the tire being inflated. Excessive tire pressure may cause tire damage or explosion resulting in personal injury or death in extreme cases.

Use only the air chuck that was included with your QuickAIR2. Use of a closed end tire chuck will cause excessive pressure buildup when the air chuck is not attached to a valve stem. Excessive pressure may result in damage to the compressor or explosion of the air hose.

Do not attempt to disassemble, modify or repair the compressor. Such attempts will void the warranty.

Always operate the QuickAIR2 within its maximum pressure. Exceeding the maximum pressure may cause damage to the compressor or personal injury.

Always observe the duty cycle of the QuickAIR2. The number of tires that you can inflate at a time varies depending on the size of tires, inflation pressure and ambient temperature. Although the QuickAIR2 is capable of running for 40 minutes at 40 psi, the life of the compressor can be extended by limiting continuous use to about 30 minutes of inflating tires to 30-35 psi.

## MAINTENANCE AND REPAIR

### 1) Air Chuck/Air Hose-

Occasionally check the air chuck and air hose connections for tightness. Loose connections may cause air leaks and reduced performance.

### 2) Battery Connectors-

Keep battery clips clean to assure good electrical connection.

### 3) Lubrication-

The QuickAIR2 is oil-less in design. Never try to lubricate the compressor.

### Repair:

All repairs should be performed by the manufacturer or by qualified service agencies only. Unqualified attempts to disassemble or repair the unit may void the manufacturers warranty.

## SPECIFICATIONS

Voltage: .....12V DC

Motor: .....1/4 HP Permanent Magnet Motor

Maximum Pressure:..105 psi

Flow Rate & Current Consumption:

PERFORMANCE & AMP DRAW								
PSI		0	20	40	60	80	100	105
Flow Rate	cfm	2.18	1.76	1.45	1.20	0.99	0.85	0.77
	lpm	62	50	41	34	28	24	22
Current Consumption	Amp	22	22	24	24	26	26	28

*(test conducted at 13.8 volts)*

Duty Cycle: .....40 Min. @ 40 psi, 15 Min. @ 80 psi, 5 Min. @ 105 psi

Piston Ring: .....Teflon Impregnated

Valves: .....Poppet Exhaust

Air Filter: .....Washable Sponge

Circuit Breaker: .....40A Auto Reset

The information given is representative of average technical data and test results. Tests are conducted using standard production units manufactured to nominal tolerances and operated at standard atmospheric conditions. It is intended to be used as a guide for product suitability only. Suitability of this product is the responsibility of the user and assumes all risk and liability whatsoever in connection with application. SUN Performance Products does not warrant, guarantee or assume any obligation or liability in connection with this information.