

# **VIAIR**<sup>®</sup>

*Your Vital Air Source*

## **380C PLUG-N-PLAY ON-DEMAND PORTABLE**

w/ ALLIGATOR CLAMPS  
**PART NO. 38034**

w/ 7-WAY POWER ACCESS  
**PART NO. 38035**

### **USER MANUAL**



#### **IMPORTANT:**

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

**SAVE THIS MANUAL FOR FUTURE REFERENCE**



## 380C PLUG-N-PLAY ON-DEMAND PORTABLE

This is a 12V DC portable air compressor designed to be powered from your vehicle's battery or the 7-Way socket, commonly known as the trailer hitch plug. It can be used for tire inflation, blowing tasks, and to power air tools. **The engine MUST be running while using this compressor.**

### IMPORTANT SAFETY INSTRUCTIONS:

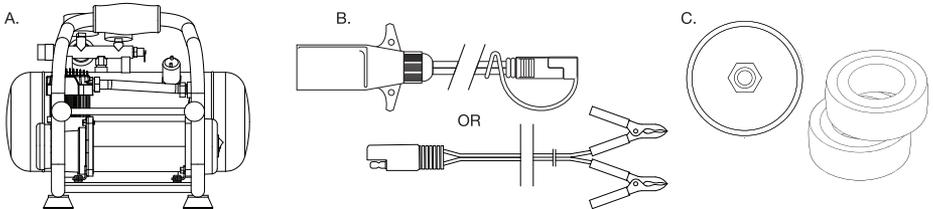
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1. Do not attempt to disassemble, repair, or modify this unit.
2. Never allow children to operate this compressor.
3. Do not touch any parts other than the ON/OFF switch and carry handle with bare hands. This compressor becomes HOT during and immediately after use.
4. Use in dry, well-ventilated environments only. Protect the unit from rain, snow, and other sources of heavy moisture.
5. Do not leave the compressor running unattended.
6. Do not pump anything other than atmospheric air.
7. Do not operate the compressor near fire, flammable gas or liquid.
8. Never carry the compressor by the hose or power cord.
9. Never point the air nozzle towards another person or any part of the body.
10. Be sure the unit's power switch is in the OFF position when not in use.
11. Do not use any air tools or attachments without first determining the maximum pressure for that tool or attachment.
12. Always release excess pressure from the tank and hose after use.
13. Do not reach for this product if it has fallen into liquid.
14. Use this compressor with 12-Volt DC systems only.

### PRODUCT OVERVIEW:

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Please familiarize yourself with the components list in this manual before you begin to use your compressor.



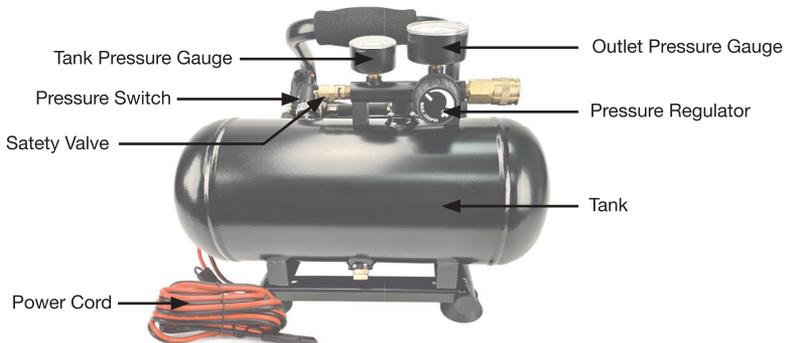
A. VIAIR® PLUG-N-PLAY ON DEMAND AIR SYSTEM (PN 38034 or PN 38035)

B. 2-Pin SAE connector attachment w/ Alligator Clamps (PN 38034) or 7-Way Power Access (PN 38035)

C. Air Filter housing with (2) replacement air filter elements

### PRE-INSTALLED PARTS

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# 380C PLUG-N-PLAY ON-DEMAND PORTABLE

## PRE-INSTALLED PARTS (CONT'D)

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**Pressure switch:** Cuts power and stops the compressor when the air tank pressure reaches the factory set "cut-off" pressure. (Cut-on pressure: 165 PSI, Cut-off pressure: 200 PSI).

**Safety Valve:** Protects against over-pressurization by releasing air at a factory set pressure in the event of pressure switch failure.

**Tank pressure gauge:** Indicates the reserve air pressure in the tank.

**Outlet pressure gauge (pressure regulator):** The outlet pressure gauge indicates the air pressure available at the outlet side of the regulator. This pressure is controlled by the regulator and is always less than or equal to the tank pressure.

## OPERATING INSTRUCTIONS:

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**IMPORTANT: Engine MUST be running while using this compressor.**

### BEFORE USE:

- **Make sure the air filter is installed**, this is a vital component to the longevity of your compressor.
- Make sure the ON/OFF switch is in the OFF (0) position before connecting the compressor to power.

### CONNECTING TO POWER:

- Alligator clamps: connect the compressor's SAE power cord to the 2-pin SAE battery clamp attachment. Then connect the Red clamp to the Positive (+) terminal of the battery, and Black clamp to the Negative (-) terminal of the battery.
- 7-Way power access: connect the compressor's SAE power cord to the 7-Way Plug. Then connect the 7-Way plug into the vehicle's 7-Way socket (trailer hitch plug)
- **Engine must be running for optimal compressor performance.**

### USING THE COMPRESSOR:

1. Turn the switch to the ON (I) position, the compressor will start filling the tank.
2. Monitor the Tank Pressure Gauge, the compressor will shut off when pressure reaches 200 PSI.
3. Once the tank is filled, adjust the Outlet Pressure Gauge to the desired pressure.
4. Connect an appropriately rated hose to the outlet.
5. Connect an appropriately rated air tool to the end of the hose.
6. **Always release excess pressure from the tank and hose after use.**

### INFLATION INSTRUCTIONS:

- Filling Tires and other inflatable items: Adjust the regulator to the highest output pressure (200psi) for maximum airflow.
- Using Air tools: Adjust the regulator to the recommended pressure of the tool's manufacturer's rating. Over-pressurizing the tool may cause bursting, abnormal operation, breakage of the tool or serious injury to the person.

### 7-Way POWER ACCESS WARNING:

- **It is the owner's responsibility to check the vehicle's manual and/or fuse box to confirm the tow charge/accessory circuit is rated to handle the compressor's max current draw of 23-Amps.**
- Some vehicles do not come equipped with an accessory circuit fuse. Check owner's manual for proper fuse rating, type, and location. Add a fuse if needed.
- We recommend having the vehicle's engine running during compressor operation.
- Some vehicles may require the brake pedal to be pressed for power to be sent to the 7-Way socket.

# 380C PLUG-N-PLAY ON-DEMAND PORTABLE

## OPERATING NOTES AND PRECAUTIONS

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### COMPRESSOR:

- Always operate the compressor WITHIN THE MAXIMUM PRESSURE RATING (200 PSI)
- Always observe the MAXIMUM DUTY CYCLE OF THE COMPRESSOR (30min @ 200 PSI)
- Your air compressor is equipped with an AUTOMATIC THERMAL OVERLOAD PROTECTOR. This feature automatically cuts power to the air compressor should the internal operating temperature of the motor rise above safe levels during excessive use.
- If your air compressor automatically shuts off any time during use, do not attempt to restart the air compressor, turn the power OFF. The thermal overload protector will automatically reset when the internal temperature drops to safe operating levels. Allow the air compressor to cool down for about 30min, then resume operation.
- To prevent discharge of your vehicle's battery and enhance the air compressor performance, we recommend that you keep the vehicle's engine running during operation.

### AIR TANK:

- The air tank is rated for 200 PSI max pressure. **Do not overfill.**
- This tank is not meant to be used as a breathing device.
- Always wear ANSI approved safety glasses when operating an air tank.
- Drain the tank before servicing or adding any attachments.
- **Drain the tank after each use. Failure to remove condensation will cause the tank to rust prematurely.**
  - a) Bleed pressure from tank until it's below 20 PSI.
  - b) Drain excess moisture by opening the drain cock valve.
  - c) If drain cock valve is plugged: release pressure from the tank, remove and clean drain cock.
  - d) After moisture has been removed, reinstall and close the drain cock.

## COMPRESSOR MAINTENANCE & REPAIRS

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- a. Drain the tank after each use.
- b. Replace compressor 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.
- c. Regularly clean dust and dirt from compressor cooling fins and/or motor housing.
- d. Your air compressor is equipped with a permanently lubricated, maintenance-free motor. Never try to lubricate the compressor.
- e. All repairs should be performed by Manufacturer or Manufacturer's Authorized Service Agencies only.
- f. For complete information regarding VIAIR® Warranty, please visit: [www.viaircorp.com/warranty](http://www.viaircorp.com/warranty)

## RECOMMENDED COMPONENTS

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- PN 00043 - Inflation Kit w/ 2.5" Mechanical Gauge Tire Gun, 160 PSI, 30' Hose, Carry Bag
- PN 00044 - Inflation Kit w/ 2.5" Digital Tire Gun, Reads Up to 180 PSI, 30' Hose, Carry Bag
- PN 00040 - High Pressure Air Blow Gun
- PN 00045 - Rubber-Tipped Blow Gun (1/4" Quick Connect Stud)
- PN 00055 - TLC Tire Inflator, 120 PSI
- PN 00056 - TLC Tire Inflator, 160 PSI

# 380C PLUG-N-PLAY ON-DEMAND PORTABLE

## SPECIFICATIONS

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38034/38035 – 380C PLUG-N-PLAY ON-DEMAND PORTABLE: (CE Certified)

Motor Voltage:	12-Volts
Max. Current Consumption:	23-Amps
Recommended Fuse:	30-Amps
Motor Type:	Permanent Magnetic
Horsepower:	1/4
Max. Working Pressure:	200 PSI*
Max. Duty Cycle (@72°F & 200 PSI):	55%
Minutes On/Off (@72°F & 100 PSI):	Continuous
Max. Ambient Temperature:	158°F
Min. Ambient Temperature:	-40°F
Auto. Reset Thermal Protection:	Yes
Dimensions:	14”L x 14”W x 12”H
Net Weight:	23.25Lbs.

\* Do not exceed compressor's max working pressure to prevent damage to the compressor.

## ABOUT COMPRESSOR DUTY CYCLE:

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Duty cycle refers to the amount of time a compressor can be operated in a given time period at 100 PSI, and a standard ambient temperature of 72° F. It is commonly expressed in percentage format:  $\text{Compressor on time} \div (\text{on time} + \text{off time}) = \text{Duty Cycle \%}$ .

### ONE-HOUR DUTY CYCLE (100 PSI @ 72°F)

### MINUTES ON / MINUTES OFF

9%	5 Min. On / 55 Min. Off
10%	6 Min. On / 54 Min. Off
15%	9 Min. On / 51 Min. Off
20%	12 Min. On / 48 Min. Off
25%	15 Min. On / 45 Min. Off
30%	18 Min. On / 42 Min. Off
33%	20 Min. On / 40 Min. Off
50%	30 Min. On / 30 Min. Off
100%	1 Hour Run Time

**NOTE:** All compressors, regardless of rated duty cycle, require sufficient rest time in between cycles to allow for partial or complete heat dissipation. Heat dissipation rates may vary depending on ambient temperatures and operating conditions.

### ABOUT RATED WORKING PRESSURE:

To ensure trouble free service life of your compressor, always operate compressor within rated working pressure of the compressor. Never use a pressure switch with a higher cut-off pressure than compressor's rated working pressure.

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## TROUBLESHOOTING GUIDE:

PROBLEM:	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Tank pressure drops when compressor(s) shut off	<ol style="list-style-type: none"><li>1. Loose drain cock</li><li>2. Loose connections</li></ol>	<ol style="list-style-type: none"><li>1. Tighten drain cock</li><li>2. Check all connections with soap and water solution and tighten</li></ol>
Compressor runs continuously and air flow lower than normal	<ol style="list-style-type: none"><li>1. Excessive air usage</li><li>2. Loose connections</li><li>3. Worn piston ring or inlet valve.</li><li>4. Clogged air filter element</li></ol>	<ol style="list-style-type: none"><li>1. Decrease air usage</li><li>2. Check all connections with soap and water solution and tighten.</li><li>3. Replace compressor</li><li>4. Replace air filter element</li></ol>
Compressor runs continuously causing safety valve (if equipped) to open	<ol style="list-style-type: none"><li>1. Defective pressure switch</li><li>2. Defective safety valve</li></ol>	<ol style="list-style-type: none"><li>1. Replace pressure switch</li><li>2. Replace safety valve</li></ol>
Excessive moisture in discharge	<ol style="list-style-type: none"><li>1. Excessive water in air tank</li><li>2. High humidity</li></ol>	<ol style="list-style-type: none"><li>1. Drain tank, tilt tank to drain. Drain tank more frequently</li><li>2. Move compressor to area with less humidity, or use air line filter.</li></ol>
Compressor will not run	<ol style="list-style-type: none"><li>1. No power, or power switch in OFF position</li><li>2. Blown fuse</li><li>3. Motor overheated</li><li>4. Pressure switch failure</li></ol>	<ol style="list-style-type: none"><li>1. Make sure compressor switch is ON</li><li>2. Disconnect compressor(s) from power source, replace fuse. (Refer to Specifications section for correct amperage rating)</li><li>3. Let compressors cool off for about 30 minutes to allow thermal overload switch to reset.</li><li>4. Replace pressure switch</li></ol>
Thermal overload protector cuts out repeatedly	<ol style="list-style-type: none"><li>1. Lack of proper ventilation or ambient temperature is too high</li><li>2. Compressor valves failed</li></ol>	<ol style="list-style-type: none"><li>1. Move compressor to well ventilated area, or area with lower ambient temperature</li><li>2. Repair or replace compressor</li></ol>
Excessive knocking or rattling	<ol style="list-style-type: none"><li>1. Loose or damaged mounting feet</li><li>2. Worn bearing on eccentric or motor shaft</li><li>3. Cylinder or piston ring is worn</li></ol>	<ol style="list-style-type: none"><li>1. Replace mounting feet</li><li>2. Replace bearing or piston assembly</li><li>3. Replace piston or compressor</li></ol>

**CAUTION: NEVER DISASSEMBLE SYSTEM WHILE TANK AND COMPRESSOR IS PRESSURIZED.**



### **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 its original date of purchase. To receive warranty service or repair, please contact VIAIR® Corporation.

Returns should be made within one year of the date of purchase, after a Return Goods Authorization (RGA) number has been assigned by VIAIR® Corporation. To obtain RGA, fax a copy of your receipt to (949) 585-0188. For complete warranty details, please visit: [www.VIAIRcorp.com/warranty](http://www.VIAIRcorp.com/warranty)

### **PLEASE NOTE:**

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

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