

## INTRODUCTION

Welcome to Advanced Air Systems, Inc.'s wonderful product the Power Tank – Comp Series. Power Tank is a unique and revolutionary air supply system that does much more than just air up tires. Featuring our SuperFlow HPX series regulator, it is more powerful and versatile than any other air supply system. It comes in three sizes.

1. PT-05 POWER TANK (5 lb. CO2)
2. PT-10 POWER TANK (10 lb. CO2)
3. PT-15 POWER TANK (15 lb. CO2)

It is also available as a regulator kit if you want to use your own certified CO2 tank.

The concept is simple. Liquid CO2 is stored in the POWER TANK and expelled as a vapor much like compressed air. Because CO2 is being stored in a liquid form much more vapor volume ("air") can be stored in a given tank. In other words, a POWER TANK can hold 50 times the energy volume of compressed air in liquid CO2 (based on 125 psi). And CO2 is non-flammable, non-combustible, and non-toxic. In fact, your body produces CO2 as a by-product of the air that you breathe.

The POWER TANK will save you time and do things that would be difficult or impossible with other air supply systems. Set a tire bead, run pneumatic tools like impact wrenches or die grinders, and air up your tires many times faster than the leading 12 volt compressor. Carry the Power Tank to another vehicle that needs help that otherwise would have been inaccessible with other air systems.

Most 4x4 users get several trips out of one fill of CO2. When the tank becomes empty, simply take it to your local welding supply shop, fire extinguisher service shop, or beverage carbonics supplier and get it refilled. We even have two tank systems so you always have a spare full tank to swap in whenever you might need it.

Some shops may require the tank to be sent out for refilling. Do not exchange our tank for another. You will be required to have the tank recertified (hydro tested) every five years by the same folks that give you refills. There is a mfg. date stamped on the bottle (see below).

We are sure you will enjoy many years of use from your new POWER TANK.

**Do not operate your POWER TANK until you have read your instruction sheet carefully and understand its full operation. If you have any questions, do not hesitate to call for technical info. (209) 366-2163.**

## WARNING:

A leak at the valve or regulator can cause asphyxiation. When your POWER TANK is not in use ALWAYS make sure the main valve is closed and that both pressure gauges show 0 psi. Always store in a safe place away from curious children.

DO NOT use your POWER TANK while the tank is in any position other than upright with the valve at the top. CO2 liquid through the regulator will damage it and void your warranty.

Mount your POWER TANK in a smart location where it can not get punctured or smashed or where the valve can be easily damaged. Also, make sure it is mounted in a place where it will stay clean and away from mud, dirt, and other foreign debris. Always have the regulator guard/handle securely fastened to tank neck and positioned around the regulator. Bolts should be tight.

When your POWER TANK is used extensively at one time the valve and regulator area can get extremely cold. Be careful of this when handling during use.

DO NOT heat your POWER TANK with a flame or similar means to increase pressures.

If the POWER TANK is full and is exposed to a substantial ambient temperature (130° F) it may cause pressure to build and be released from the pressure relief valve on the main tank valve. If this happens you will experience a loud noise and sudden sub-freezing spray of CO2. DO NOT be alarmed. It will cease on its own. Be aware of this and try to store tank away from objects that might be affected by this. (See instructions #3.) If this happens, take your tank to your CO2 supplier and have the pressure release disk replaced and tank refilled.

You may remove and replace the regulator with a wrench but DO NOT remove valve from cylinder. The valve sits atop the aluminum tank and has the main on/off knob. When the regulator is being replaced to the valve make sure that the CO2 washer is in place. (See instructions #1.) Also make sure valve and all surrounding fittings are clean and free of debris.

Before installation of the regulator, ALWAYS inspect for damaged threads, dirt, dust, oil or grease. Remove dust, dirt, and oils with a clean cloth. DO NOT ATTACH THE REGULATOR IF OIL, GREASE, OR DAMAGE IS PRESENT!

DO NOT use oil or lubricant of any kind on cylinders, valves, gauges, regulators or any other fittings, as such use is dangerous.

DO NOT disassemble regulator.

Before opening the Main Valve, turn the regulator adjusting knob clockwise until the regulator valve is closed (HP, HPf, HPX).

Stand to the side of the tank opposite the regulator when opening the main valve, keeping the tank between you and the regulator. Never stand in front of the regulator. CAREFULLY and SLOWLY open the Main Valve until the tank pressure is indicated on the tank pressure gauge.

The CO2 cylinder must be recertified (hydro-tested) every five (5) years from the date of manufacture. The manufacture date is stamped on the cylinder shoulder.

ALWAYS make sure that the Main Tank Valve at the top of the tank is closed and seated while not in use.

DO NOT attempt to fill your POWER TANK yourself. Take it to your local certified CO2 supplier. Many can fill your tank while you wait. For information on the nearest CO2 fill up station to you, look through your yellow pages under welding suppliers, fire equipment, or commercial beverage CO2 suppliers.

## SAFETY INSTRUCTIONS:

**DO NOT ATTEMPT TO OPERATE THIS APPARATUS UNTIL YOU HAVE READ AND UNDERSTAND ALL OF THE INSTRUCTIONS AND OPERATING PROCEDURES. CALL THE MANUFACTURER IF YOU HAVE ANY QUESTIONS.**

CYLINDER CARE:

1. Secure the POWER TANK to a solid surface or store tightly in a secured and ventilated box away from potential physical damage.
2. Wear eye protection and leather gloves during regulator installation. Inspect the cylinder for damaged threads, dirt, dust, oil or grease. Remove any and all contaminants with a clean cloth before use and assembly.  
DO NOT INSTALL REGULATOR IF DAMAGED THREADS.
3. Crack open the cylinder valve for an instant and close quickly before reinstalling the regulator. This will blow out any foreign matter that may be inside the valve port.  
CAUTION: If the cylinder valve is opened too much, the cylinder may tip due to the force of the escaping gas. Do not stand in front of the valve port and keep a tight grip on the knob and cylinder.

REGULATOR USE:

1. Inspect the regulator for damaged threads, dirt, dust, oil or grease. Remove any and all contaminants with a clean cloth.  
DO NOT USE THE REGULATOR IF DAMAGED.
2. Attach the regulator to the cylinder valve and tighten regulator nut with a wrench.
3. Before opening the main valve, turn the regulator adjust knob counter-clockwise until the spring pressure is released.
4. Stand to the side of the cylinder opposite the regulator when opening the cylinder valve, keeping the cylinder between you and the regulator. Carefully and slowly open the main valve until the cylinder pressure is indicated on the high pressure gauge.
5. Now you can turn the regulator knob counter-clockwise slowly to attain the desired outlet pressure.
6. To check for leaks, close the main valve and turn the pressure adjusting knob clockwise until shut. If the high pressure gauge reading drops, there is a leak in the cylinder valve, inlet fitting, or high pressure gauge. If the low pressure gauge drops, there is a leak in the hose, hose fitting, outlet fitting, low pressure gauge, or other apparatus connected downstream. Check for leaks using an approved leak detector solution (or soap and water). If a leak is detected or suspected get it repaired by an authorized station or return to factory.
7. Keep the cylinder valve closed at all times except when in use. When you are finished using the POWER TANK, close the cylinder main valve, then release all pressure from the regulator and hose. This can be done by simply turning your regulator adjustment knob clockwise and letting the self-purge feature release the pressure. You will hear the air hiss out. This will ensure that when you open the tank valve next time pressure cannot surge to the low pressure gauge and cause damage to it.

Note: The operating temperatures range shall be no greater than 150° F (70°C) and no less than 0°F (-18°C). Always use thread sealant such as Teflon tape when assembling fittings to the hose ends. Use 15-20 foot pounds of torque for assembly. Always leak test connections before putting into service. If temp. is 40°F or colder extra heat may need to be required to maintain tank pressure. You can add heat by placing the tank in front of a vehicle heater vent. Do not use flame or extreme heat source.

IMPORTANT! USE THIS REGULATOR ONLY FOR CO2.