

# Instruction Manual: Power Tank CO2 Sidearm Systems

Congratulations on the purchase of one of our most innovative products for automotive and commercial use. Because CO2 vapor has the same thermo-expansion rate as nitrogen this makes it a great air system to have on your belt at trackside for air tools and tire inflation. And because of CO2's inertness and high volume characteristics it is the perfect air source to run nail guns while maximizing mobility and speed on the jobsite.

**Please read these instructions carefully and fully understand them before attempting to use your new Sidearm System.**

## Contents: (#PTC01-3160)

Sidearm COMP Regulator (160 PSI)  
(6) 20 oz. CO2 bottles with on/off valves  
(6) Valve Protector Caps  
Carry Holster with Carabiner

Straight Jacket Carry Sleeve  
10' Braided SuperFlex Coiled Air Hose w/ fittings  
(2) Storage Case  
Ball Air chuck / Pressure Gauge

**Please read and understand all safety and use instructions before using this product. This compressed air system can be very dangerous if used or assembled improperly.**

## Safety Information:

- The bottles and components in this system are all designed to work with CO2 only. No other gas can be used with these components.
- Do not fill our CO2 bottles with any other gas besides CO2.
- Do not use our regulators with any other gas or gas bottle other than CO2.
- The Sidearm Regulators are designed to fit only #323 style valves. They are not designed to fit CGA-320 CO2 valves.
- Always wear safety glasses when handling CO2 equipment.
- It is advised to wear hearing protection when handling CO2 equipment.
- It is advised to wear gloves when handling CO2 equipment.
- Wearing leather gloves is mandatory when filling cylinders.
- CO2 bottles should be stored in an upright position when not in use.
- CO2 bottles should not be exposed to temperatures above 130°F (54°C) as you run the risk of rupturing the safety pressure release burst disk.
- If bottles are stored inside a vehicle make sure the vehicle is well ventilated in case the burst disk ruptures and releases its contents. CO2 is an asphyxiate and can suffocate if allowed to fill an occupied enclosed space.
- Always remove the regulator from the bottle while not in use if you are using "pin" valves. This will ensure that the CO2 will not leak out during storage. If you are using "on/off" valves you do not have to remove the regulator. Just turn the valve off when not in use.
- Always use the system with the bottle in the vertical position to keep from dispensing liquid CO2 through the regulator. This can be harmful to the regulator and components.

1. The bottles in the kit are empty so the first thing you will need to do is get your CO2 bottles filled. The easiest place to get them filled is at a paintball supplier. You can find them by going on-line to a search engine like yellowpages.com and typing in "paintball". From this list of paintball suppliers make some phone calls to find the location that can fill your bottles with CO2. Whenever your CO2 bottles are without the regulator make sure the fragile threads are being protected by the valve protector caps. One drop and the valve will need to be replaced.

2. Once your bottles are filled, you can screw the Sidearm Regulator clockwise onto the bottle valve. (Before installing the Sidearm Regulator make sure its top adjustment knob is closed by turning it clockwise until it bottoms. Do not bottom the knob too tight or it may damage the seat assembly. Two fingers are



all it takes.) It is the last ½ turn of the regulator onto the valve that depresses the center valve pin and opens the valve. You'll feel the slight resistance. Tighten the regulator onto the bottle until it is very snug. The sealing surface is at the valve o-ring so wrenching the regulator too tight onto the valve will not help seal the pressure. Listen for leaks.

3. Install the hose to the Sidearm Regulator QR coupler. Listen for leaks. If you hear any leaks repair them or return the leaking parts to Power Tank for repair.

4. If there are no leaks, connect the hose to your pneumatic tool.

5. Turn the On/Off valve on the bottle counterclockwise to open it. Now you can turn the Sidearm Regulator adjustment knob counterclockwise (out) to introduce pressure to the hose. You will see the pressure rise on the regulator pressure gauge. Set the pressure to the desired amount. Do not exceed the tool's recommended pressure (see your tool's operating manual).

- Note that the pressure on the gauge is the "static" pressure. On some tools like impact wrenches you want to set the pressure to the proper "flow" pressure or the pressure which the gauge reads as the air tool is using air. This "flow" pressure will be below the "static" pressure.
- For nailguns, however, the static pressure is what you will set your tools to as this is a tool where you are pressurizing a piston and "flow" pressure does not apply.
- For tire inflation you will simply set the pressure to maximum.

6. Air Shutdown\*: After each use, first shut off the On/Off valve on the bottle by turning clockwise (do not overtighten), then shut the regulator adjustment knob by turning it clockwise. You may hear air pressure leaking out. This is no cause for alarm as this is the auto purge feature which releases the pressure in the hose. This will release air pressure from the hose prior to disconnecting your air tool. Again, do not over tighten the knob shut. Two fingers are all it takes.

7. After the regulator knob is shut you can remove the hose. Then loosen the regulator from the bottle by twisting the regulator counterclockwise. Be sure not to break or bend the gauges or QR coupler when removing the regulator. You can do this by using a wrench if you find the regulator a bit too tight to remove by hand. A small shot of air will escape as the regulator leaves the valve.

**\*IMPORTANT! When changing from one air tool to another it is important that you follow step 6 ("Air Shutdown") before removing the first tool and connecting the next.**

#### **Instructions for Replacing CO2 Cylinders:**

1. When replacing one CO2 bottle for another, first shut off the On/Off valve on the bottle by turning clockwise (do not overtighten), then shut the regulator adjustment knob by turning it clockwise. You may hear air pressure leaking out. This is no cause for alarm as this is the auto purge feature which releases the pressure in the hose. This will release air pressure from the hose prior to disconnecting your air tool. Again, do not over tighten the knob shut. Two fingers are all it takes. Remove the hose.

2. After the regulator knob is shut and the hose is removed you can then loosen the regulator from the bottle by twisting the regulator counterclockwise. Be sure not to break or bend the gauges or QR coupler when removing the regulator. You can do this by using a wrench if you find the regulator a bit too tight to remove by hand. A small shot of air will escape as the regulator leaves the valve.



3. Screw the Sidearm Regulator clockwise onto the new bottle valve. (Before installing the Sidearm Regulator make sure its top adjustment knob is closed by turning it clockwise until it bottoms. Do not bottom the knob too tight or it may damage the seat assembly. Two fingers are all it takes.) It is the last ½ turn of the regulator onto the valve that depresses the center valve pin and opens the valve. You'll feel the slight resistance. Tighten the regulator onto the bottle until it is very snug. The sealing surface is at the valve o-ring so wrenching the regulator too tight onto the valve will not help seal the pressure. Listen for leaks.

**Trouble Shooting:**

Symptom	Problem	Solution
Little or no air is coming out of system to my tool.	Bottle is empty.	Change bottle
	Sidearm Regulator is not twisted onto the valve all the way.	Try to turn the Sidearm Regulator down further onto the bottle valve to depress the valve pin.
	Regulator adjustment knob needs to be turned out.	Turn the Sidearm Regulator knob counterclockwise to desired pressure.
	The bottle pressure release cap has blown and all of the CO2 was released.	Take bottle to CO2 supplier and have them replace the pressure release cap or return to Power Tank for service.
Air comes up to pressure but drops off fast then comes back slowly.	Sidearm Regulator is not twisted onto the valve all the way.	Try to turn the Sidearm Regulator down further onto the bottle valve to depress the valve pin fully.
	There is a restriction in the air line.	Check hose for debris or obstructions.
	The bottle is too cold or there is not enough heat at the bottle to warm it up.	Switch to a new bottle that is at least 50 degrees F. Warm up the other one slowly to no more than 120 degrees F. Do not use flame.
CO2 is leaking when the regulator is installed.	The regulator is not turned down all the way.	Try to turn the Sidearm Regulator down further onto the bottle valve to depress the valve pin fully.
	The valve O-ring is bad.	Replace the O-ring with a new one.
CO2 leaks at the bottle valve without the Sidearm regulator connected.	The bottle valve is not sealing.	Return to Power Tank for inspection.
	Bottle valve is not sealing at the valve threads.	Return to Power Tank for inspection.

