

PFC

PROTECTION FIRST CLASS

THE ULTIMATE RUST PROTECTION

5 GAL PRO SYSTEM

(BPFC-PROSYS5)



INSTRUCTIONS FOR USE



The Berkebile Oil Company, Inc.

WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine / equipment. Failure to read understand and follow the instructions given in this manual may result in serious personal injury or death.

The owner of this machine / equipment is sole responsible for its safe use. This responsibility includes but is not limited to the proper installation in a safe environment, personal training and usage authorization, proper inspection, maintenance, manual availability and comprehension, application of safety devices, and the usage off personal protection equipment.

The manufacturer will not be held liable for injury or property damage from negligence, training, misuse, or machine modifications. Work in a well-ventilated area, and work with approved safety equipment.



The Berkebile Oil Company, Inc.
(814) 443-1656 | PO BOX 715 Somerset, PA
WWW.BERKEBILEOIL.COM/PFC

CAUTION! This system is not intended for use with highly abrasive or corrosive materials. Only use PROTECTION FIRST CLASS liquid in this system.

Never operate under the influence of drugs or alcohol.

IMPROPER OPERATION OR MAINTENANCE OF THIS PRODUCT COULD RESULT IN SERIOUS INJURY AND PROPERTY DAMAGE. READ AND UNDERSTAND ALL WARNING AND OPERATING INSTRUCTIONS BEFORE USING EQUIPMENT. SAVE THESE INSTRUCTIONS

WARNING! Disconnect all air lines when cleaning / maintaining this system.

AIR COMPRESSOR SYSTEM THAT CAN PRODUCE A MINIMUM OF 90PSI IS REQUIRED TO OPERATE THIS SYSTEM.

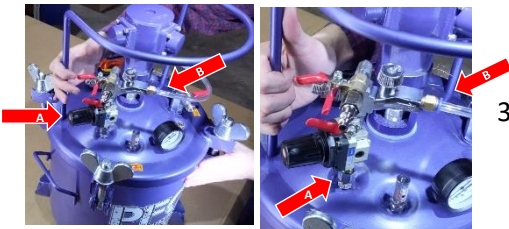
ASSEMBLY INSTRUCTIONS



1. Unpackage all items from inside of pressure tank, remove smaller items from bubble wrap / boxes.



2. Replace liner tank and lid, tighten down wing nuts to seal lid.



3. Install regulator assembly (a) & Mixer Air Supply (b)



4. Install material feed (BLACK) hose to tank



5. Install air feed (ORANGE) hose to tank



6. Attach material feed (BLACK) and air supply (ORANGE) hoses to the spray gun as shown.

THINGS TO KNOW BEFORE USE

Suggested Pressures:

These pressures are only a suggested starting point. The best operating pressures are slightly different for each unique system, and will require fine tuning. Never exceed 60psi in tank or 90psi from air supply.

**AIR COMPRESSOR
/ AIR SUPPLY**

80-90psi

**TANK
REGULATOR**

40-50psi

Tank Pressure Regulator Function: The regulator on this system is used to regulate the air pressure inside the tank / the pressure being applied to the PFC liquid. NOT the pressure going to the spray gun.

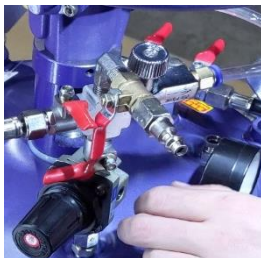
To regulate air supply pressure going into tank an additional regulator may be added between your air source and (Included) tank pressure regulator.

WARNING! Before connecting an air source to the system make sure all valves are closed and regulators are turned down to 0.

AUTO MIXER OPERATION:

SET AIR SUPPLY TO 70psi BEFORE OPERATING AUTO-MIXER. NEVER SUPPLY MORE THAN 75psi TO THE SYSTEM WHEN USING THE AIR POWERED AUTO-MIXER

1. Remove tank lid and fill tank liner with Protection First Class liquid
2. Place lid back on tank and hand tighten wing nuts to seal tank



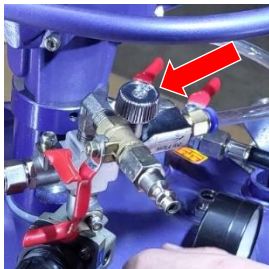
3. Ensure all air valves are off as shown in the picture to the left & all regulators are fully closed before connecting air supply.



4. Ensure fluid feed valves are also closed before continuing.



5. Connect Air source to tank using the quick release fitting on the tank. (See Photo)



6. Slowly turn the agitator air supply knob in the “Open” direction as displayed on the valve to start sending air to the agitator.

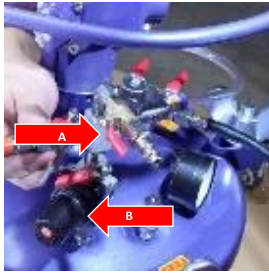
7. Open the valve until the agitator reaches the desired speed.
8. Let agitator run until PFC Liquid is thoroughly mixed and viscous.
9. To stop the agitator simply turn the knob on agitator air supply valve in the opposite of the “Open” direction until the valve is fully closed.
10. Once the auto-mixer air supply valve is fully closed you can increase your air supply psi to 85-90psi if desired.

IF NOT USING AUTO-MIXER OR ABOVE INSTRUCTIONS WEREN'T FOLLOWED PREPARE THE TANK BY COMPLETING THE FOLLOWING THREE STEPS:



1. Ensure all valves are closed and tank regulator is set to 0
2. Set air compressor / air supply regulator (if using one) to 80-90 psi DO NOT EXCEED 90psi from air source.
3. Connect Air source to tank using the quick release fitting on the tank. (See Photo)

OPERATION / TUNING INSTRUCTIONS:



1. Open the valve (a) from the air supply fitting, pressurizing the tank. Then set your tank pressure using the included regulator (b). (See Photo) **DO NOT OPEN THE VALVE SUPPLYING AIR TO THE SPRAY GUN**



2. Open the valve for the material feed hose.

IF SETTING UP FOR THE FIRST TIME YOU MUST SET THE SPRAY GUNS FLOW RATE BY FOLLOWING THE NEXT 2 STEPS. IF FLOW RATE HAS PREVIOUSLY BEEN SET, DISREGARD THE NEXT TWO STEPS.

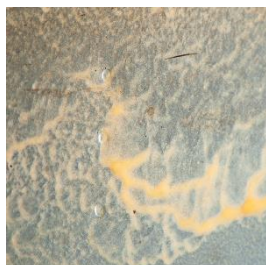
3. Point the gun into a garbage can or area you do not mind spraying Protection First Class and pull the trigger. A narrow, long stream of PFC should shoot out of the spray gun, the stream should not be overly powerful. If the gun is held at level horizontally, when sprayed, the stream should arc and hit the ground between 6-12" away



4. To lessen the intensity of the stream, turn down the tank pressure using the tank pressure regulator, to increase the strength of the stream dial the tank pressure up. **DO NOT EXCEED 60PSI TANK PRESSURE!** You can fine tune the flow rate / stream strength with the "Flow Volume Knob" located on the back of the spray gun. (See picture)



5. Open the spray gun air feed valve to send air to the spray gun. (See picture). Test spray gun into a garbage can or on a scrap piece of cardboard.



6. Spray PFC in long sweeping motions, ensuring an even coat on the complete undercarriage of a vehicle. At the desired treatment level, the coating should achieve an "orange peel" effect as seen in the picture. **DO NOT OVER TREAT**, if coating is dripping off treated surfaces, you have used too much.

MAINTENANCE AND STORAGE:

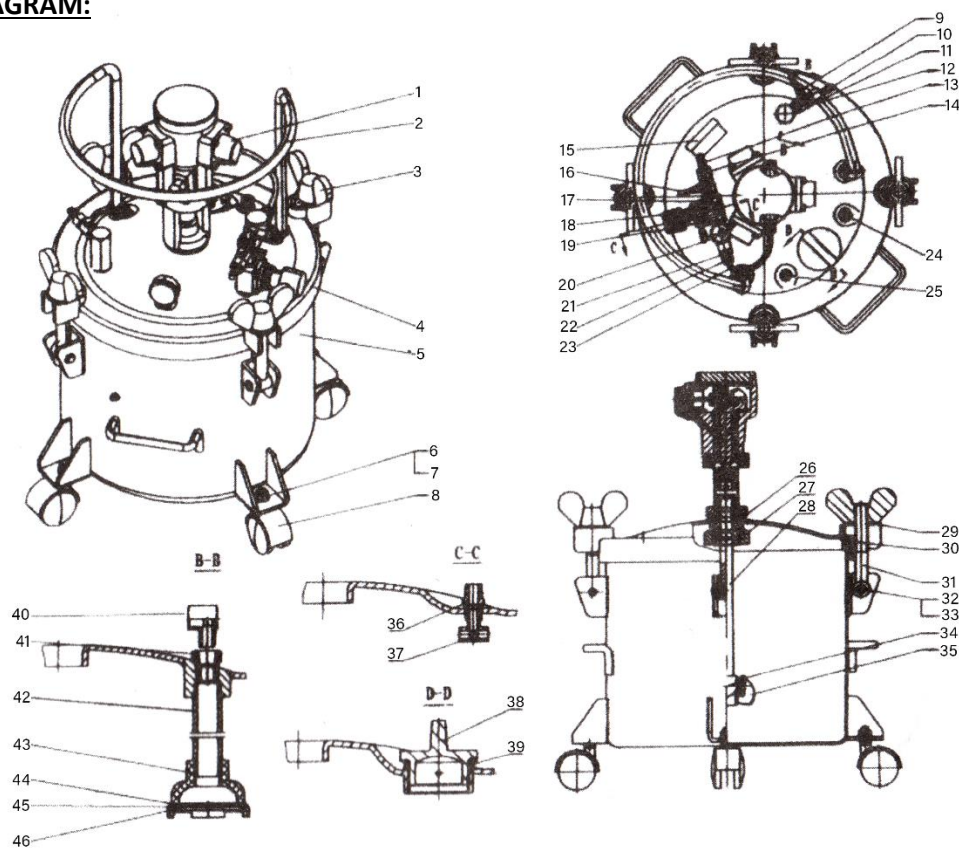
IF YOU PLAN ON USING YOUR UNDERCOATING SYSTEM AGAIN IN THE NEXT FEW DAYS NO CLEANING IS REQUIRED. SIMPLY WIPE AN OVERSPRAY AWAY FROM THE EXTERIOR OF THE SYSTEM AFTER REMOVING AIR SUPPLY AND BLEEDING OFF TANK PRESSURE.

1. Close air supply valve and detach air supply from system
2. Bleed off tank pressure by using the safety valve located on the lid of the tank or by spraying the gun into a garbage can until the pressure is gone.
3. Once tank pressure has been released, loosen wing nuts and remove lid.
4. Remove Tank liner and dump unused product back into its original container and seal.
5. Rinse liner & the inside of the lid off with hot soapy water, dish detergents or degreasers work best, but harsh solvents are not necessary.
6. Save some of the soapy / degreaser water in the bottom of the tank liner (Approx. 1.5 gal) and install the liner back into the tank.
7. Place lid back onto the tank and tighten down the wing nuts.
8. Ensure all valves are closed and regulators are set to zero on the system, then reattach the air supply (90PSI MAX).
9. Open the air supply valves on the tank as well as the fluid feed valve.
10. Spray the gun into a trash bag or down a drain, the soapy water will clean out the fluid feed hose and the spray gun, if suds become a problem use only hot water.
11. Once all of the left-over PFC liquid has been evacuated from the gun follow steps 1-3 to depressurize tank for storage.

TROUBLE SHOOTING:

PROBLEM	PROBABLE CAUSE	SOLUTION
System is Whistling	The lid is not tightened enough on all sides	Ensure lid is seated correctly and all wing nuts are tightened fully / equally

	Seal under lid is damaged or worn	Replace Seal
Fluid leak from system lid	The lid is not tightened enough on all sides	Ensure lid is seated correctly and all wing nuts are tightened fully / equally
	Seal under lid is damaged or worn	Replace Seal
Safety Valve Constantly Popping	Tank pressure too high	Reduce tank pressure
Jerky, inconsistent spray	<ol style="list-style-type: none"> 1. Material level low 2. PFC not viscous enough 3. Air entering material feed tube 4. Blockage in material feed passage 5. Loose or broken material feed tube 	<ol style="list-style-type: none"> 1. Add more material 2. Run auto-mixer to mix / thin product 3. Level container 4. Flush feed tubes with hot water 5. Inspect and tighten all material feed tubes and fittings
Dry / overly misty spray pattern	<ol style="list-style-type: none"> 1. Not enough material flow 2. Air pressure too high 3. Air pressure to gun too high 	<ol style="list-style-type: none"> 1. Loosen the fluid flow adjustment screw on the back of the spray gun to the last thread and increase tank pressure. 2. Reduce air pressure from air supply. 3. Add regulator to spray gun air supply valve or close it partially.
Excessive over-spray or mist	<ol style="list-style-type: none"> 1. Air pressure too high 2. Air pressure to gun too high 3. Gun too far from coating surface 	<ol style="list-style-type: none"> 1. Reduce air pressure from air supply. 2. Add regulator to spray gun air supply valve or close it partially. 3. Hold gun closer to surfaces to be coated
Spraying too thick	<ol style="list-style-type: none"> 1. Too much material flow 2. Air Pressure too low 	<ol style="list-style-type: none"> 1. Tighten down the fluid flow adjustment on the back of the spray gun. 2. Increase tank pressure

PARTS DIAGRAM:

Part #	Description	Part #	Description	Part #	Description
1	Automatic Assembly	17	Air Inlet Seat	33	Pin
2	Handle	18	Air Hose Seat	34	Bolt
3	Nut	19	Pressure Seat Assembly	35	Blade
4	Cover	20	Valve Assembly	36	Air Inlet Connector
5	Tank Shell	21	Air Inlet Connector	37	Air Commutator
6	Nut	22	Nut	38	Choke Plug
7	Spring Washer	23	Air Hose	39	Sealing Washer
8	Wheel	24	Safe Valve Assembly	40	Paint Connector
9	Air Valve	25	Air Relief Valve	41	Paint Connector
10	Paint Connector	26	Sealing Ring	42	Paint Tube
11	Connector Nut	27	Nut	43	Filter Seat
12	Paint Outlet Connect Nozzle	28	Rocker	44	Filter Washer
13	Nut	29	Washer	45	Filter
14	Nut	30	Sealing Ring	46	Filter Spring
15	Pressure	31	Screw	47	
16	Air Valve	32	Snap Retainer	48	

PROTECTION FIRST CLASS

- PARTS LIST -

SYSTEMS:



COMPONENTS:



CONSUMABLES:



PFC LIQUID:



1 (814) 443-1656 | WWW.BERKEBILEOIL.COM | INFO@BERKEBILEOIL.COM



90-DAY LIMITED WARRANTY



This PFC Professional Undercoating System, manufactured by The Berkebile Oil Co., Inc., is warranted to the original purchaser to be free from defects in material or workmanship for a period of ninety (90) days from the date of original retail purchase.

This warranty does not cover defects or damage due to improper installation, alteration, accident or any other event beyond the control of the manufacturer. Defects or damage resulting from misuse, abuse or negligence will void this warranty. This warranty does not cover cosmetic damage that may result from normal usage.

This warranty is nontransferable and is expressly limited to the repair or replacement of the defective product. During the warranty period, The Berkebile Oil Co. Inc., shall repair, service, or replace defective parts at no cost to the purchaser.

The Berkebile Oil Co., Inc., reserves the right to make substitutions to warranty claims if parts become unavailable or obsolete.

The Berkebile Oil Co., Inc., shall not be liable for loss of use of the product or other consequential or incidental costs, expenses, or damages incurred due to use of this product. The user assumes all risk of injury and damage when using this system.

All warranty claims must be made through the original retailer where the Undercoating System was purchased. A purchase receipt or invoice is required to process all warranty claims. Other proof of purchase including date of purchase MAY be accepted.

PLEASE FILL OUT THE FORM, ATTACH PROOF OF PURCHASE INCLUDING DATE & SUBMIT TO ORIGINAL RETAILER.

Information may also be sent to The Berkebile Oil, Co Inc., via email: customerservice@berkebileoil.com or fax: (814) 443-2873

PFC PRO SYSTEM WARRANTY CLAIM FORM

NAME: _____

BUSINESS ADDRESS: _____

CONTACT PHONE: _____

CONTACT EMAIL: _____

PURCHASE LOCATION: _____

DATE OF PURCHASE: _____