

Instruction Manual

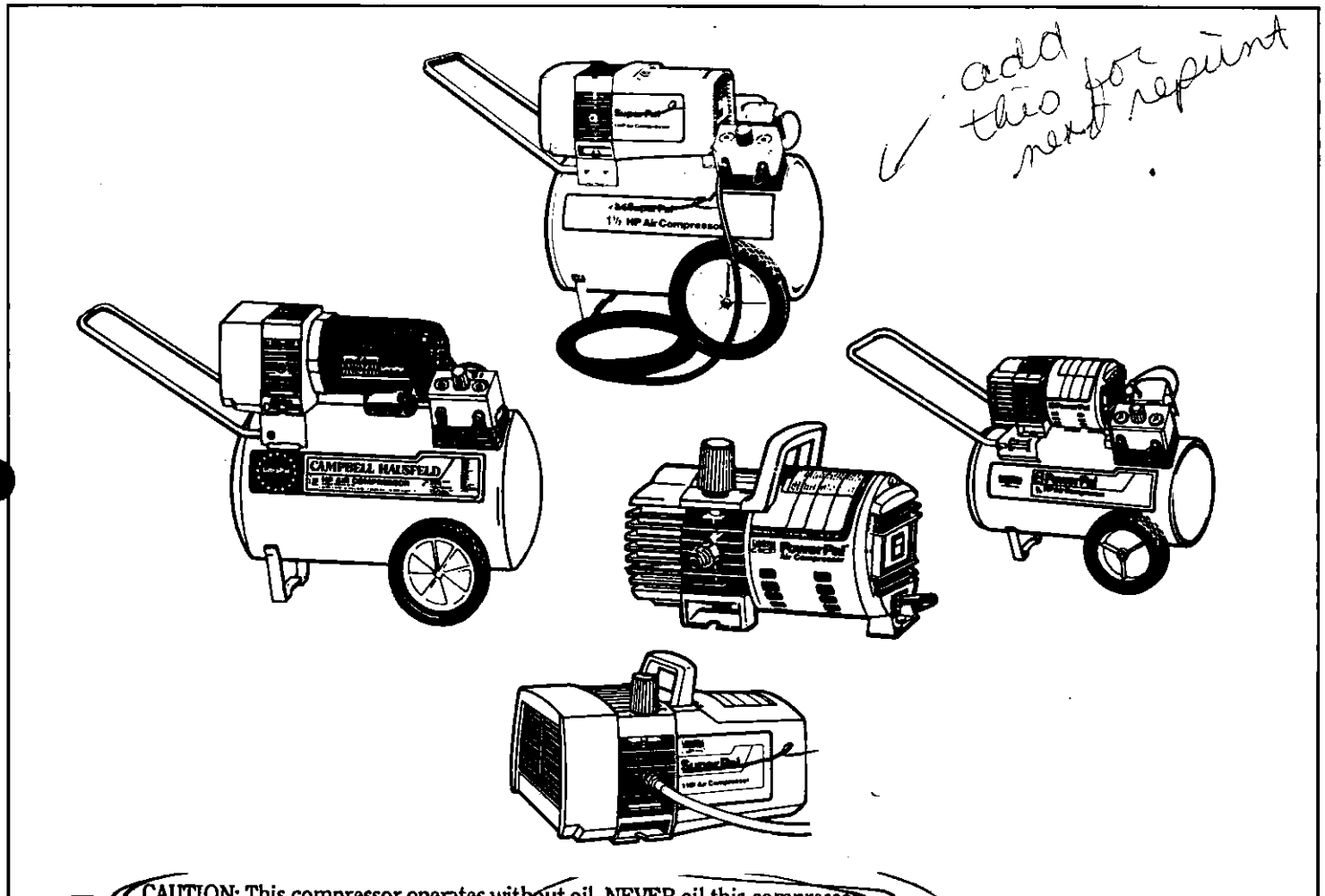
Guide d utilisation

● **M** **instrucciones**



Since 1836

PowerPal[®], SuperPal[®], UltraPal[®] & 3-in-1 PowerPal[®]



AVISO: Este compresor funciona sin aceite. Nunca use aceite en este compresor.

AVERTISSEMENT: Ce compresseur marche sans huile. N'Utiliser pas huile dans se compresseur.

Carefully Read (and Save) These Instructions Before Operating This Compressor

Lire Attentivement (Et Conserver) Ce Mode D Emploi Avant D Utiliser Cet Appareil

Lea Cuidadosamente (Y Conserve) Estas Instrucciones Antes De Utilizar Este Compresor

(Model No. / N de Modele / Modelo No.)

(Serial No. / N de Seire / Serie No.)

Before you begin using your air compressor, carefully read this owner's manual. It contains important information regarding safety, operation and maintenance.

If you should have any questions regarding the operation of this air compressor, please call toll-free 1-800-543-6400 between 8 am and 12 noon or between 1 pm and 5 pm (EST), Monday through Friday for assistance. Ohio, Hawaii, Alaska and Canada call collect 1-513-367-1182.

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SAFETY

Read these instructions before using your compressor.

KEEP WORK AREA SAFE

- Keep work area clean. Sharp objects, chemical spills, oil, solvents and wet floors will damage hoses as well as create shock hazards.
- Never store flammable liquids or gasses in work area.
- Keep other people at a safe distance from work area.

DRESS PROPERLY

- Always wear safety glasses and hearing protection.
- Remove jewelry. Fasten hair out of way. Do not wear loose fitting clothes, scarves or neck ties because they can become caught in the moving parts of the equipment. Never work barefooted.

KEEP UNIT GROUNDED

- Wiring and electric motors must be properly grounded. Improperly grounded motors are shock hazards. Wiring and fuses must be sized to comply with local electrical codes and to meet proper current capacity. Wiring must be installed by an electrician.

CHECK FOR WORN OR DAMAGED PARTS

- Examine hoses, plugs, wires and tubes for signs of wear or damage.
- Have an Authorized Service Center replace or repair any damaged parts. Call toll-free 1-800-543-8622 from 8 am to 12 noon or from 1 pm to 5 pm (EST), Monday through Friday to find the location of the nearest Service Center.
- Check the air tank regularly for tiny pin holes, rust or weak spots at welds. Do not attempt to repair a tank yourself. An imperfect tank is unsafe and must be replaced. Never weld or drill holes in tank.

- Never reset any switches or valves. They have been preset at the factory. These parts provide safety from overpressurizing the pump and tank.

DRAIN TANK

- Drain moisture from tank after each use to prevent rust formation. Tank pressure should be 10 psi / (.7 bar) or less when draining tank.
- Relieve pressure from tank slowly when depressurizing your compressor. Fast moving air will stir up dust and debris which may be harmful.

HOT COMPRESSOR PARTS

- Keep hands off compressor when unit is or has been running. Metal surfaces, including hose outlets are hot and can cause burns.
- Allow unit to cool before doing maintenance, repairs or storing.
- Use gloves and tools if it is necessary to disconnect the hose while the unit is still hot. Never use bare hands.

DISCONNECT POWER

- Disconnect power and depressurize tank before beginning repairs or maintenance.
- Turn unit off before moving it to a new location.

OBSERVE ALL SAFETY PRECAUTIONS

- Do not overinflate balls or rubber toys because they could burst and cause injury.
- This compressor is not designed for commercial applications.

CAUTION: The pressure switch and/or motor (depending on the model) produces electric arcs which could cause flammable materials to ignite.

SPRAYING PRECAUTIONS

- Spray paint or other liquids in an open, well ventilated area away from flames or electrical equipment.
- Do not smoke when using spray equipment.
- Use a mask when spraying.
- Locate compressor as far away from the painting area as possible by using extra hose, not extension cord. This minimizes the chance of accidentally spraying paint on the compressor which would reduce the cooling capacity of the metal surfaces. The intake filter would also become clogged with paint, reducing the pumping capacity and the life of the compressor pump.
- Follow the instructions provided by the chemical manufacturer when spraying with solvent and/or toxic chemicals.

WARNING

BREATHABLE AIR WARNING

Air from this compressor, as equipped, is not safe for breathing. To provide safe breathable air, a compressor must be capable of producing at least Grade D breathing air as described in Compressed Gas Association

Commodity Specification G7.1-1966. For this purpose, special filtering, purifying and associated alarm equipment must be used to convert the compressor to a "Breathing Air" type compressor. Other special precautions must also be taken. Refer to OSHA 29CFR 1910.134 for details of the necessary equipment and special precautions.

DISCLAIMER OF WARRANTY

If this compressor is used to produce breathing air, the special equipment and precautions as detailed in OSHA 29CFR 1910.134 must be used or any warranties are void and Campbell Hausfeld Company, Harrison, OH 45030 disclaims any liability whatsoever for loss, personal injury or damage.

DESCRIPTION OF PRODUCT

COMPRESSOR PUMP

A piston inside the pump compresses air by moving left to right in the cylinder head. As the piston moves to the left, air enters the chamber through the intake valve. As the piston moves to the right, the intake valve closes and the piston compresses the air. The compressed air is sent through the outlet valve to the tank.

MOTOR

The motor provides the electric power to keep the piston moving.

AUTO/OFF SWITCH (Tank-Mounted units only, except 3-in-1)

The Auto/Off switch is also known as the pressure switch. In the "AUTO" position, the compressor will pump air into the tank and will shut off automatically when the tank reaches a preset, maximum pressure. In the "off" position, the compressor will not operate. The Auto/Off switch should be in the "off" position when connecting or disconnecting the power cord from the electrical outlet or when changing air tools.

IMPORTANT: ALWAYS START AND STOP THE UNIT AT THE AUTO/OFF SWITCH. DO NOT STOP THE UNIT BY REMOVING THE PLUG FROM THE SOCKET. IF THIS OCCURS, PLACE THE AUTO/OFF SWITCH IN THE "OFF" POSITION BEFORE ATTEMPTING A RESTART.

REGULATOR

The regulator allows you to control the amount of air pressure released at the hose outlet. Turn the regulator knob clockwise to increase pressure and counterclockwise to decrease pressure.

ASME SAFETY VALVE

This valve automatically releases air if the tank pressure exceeds the preset maximum. Check this valve monthly by pulling the ring by hand. Replace the valve if air leaks after the ring has been pulled or the valve is stuck and the ring will not return or air is not released.

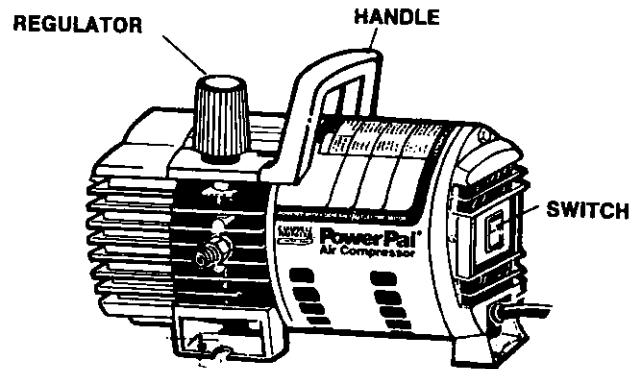


Figure 1

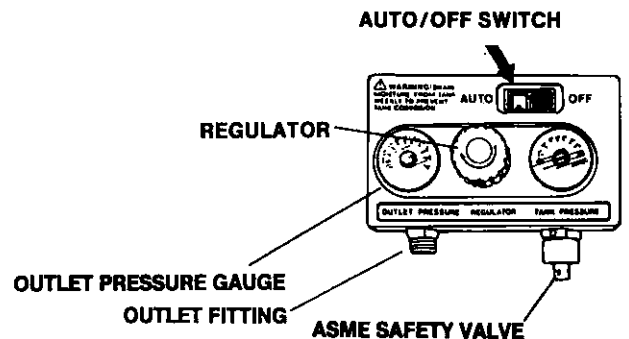


Figure 2

OUTLET PRESSURE GAUGE

This gauge tells you the pressure at the hose outlet or globe valve outlet. Check that this gauge reads 0 psi before changing air tools or disconnecting hose from outlet.

AIR INLET FILTER/BAFFLE

Located behind the end cap, this filter removes dirt and dust from air before entering the compressor unit. This filter should be cleaned regularly. See Maintenance. Operating the air compressor without an air filter is abuse of the product and voids the warranty.

ON/OFF SWITCH (3-in-1 and all units except Tank-Mounted)

The switch to turn the unit on and off. Note: Do not turn unit on until you have read and fully understand the instructions.

PRESSURE REGULATOR

The regulator allows you to adjust the amount of air pressure to be used for a particular job such as inflating tires, spraying latex paint and more. The maximum pressure this unit will produce is 100 PSI / (7 bar). Always check the pressure as described by the manufacturer of the inflatable item or spray equipment, do not exceed this pressure as risk of bursting is possible.

PRESSURE REGULATOR GUIDE (Tank-Mounted units only)

The color-coded guide located on the compressor unit shows the recommended range of pressure settings used for various tools and jobs, this allows you to adjust the pressure regulator accordingly.

■ CHECK VALVE (Tank-Mounted units only)

A one-way valve that allows air to enter the tank from the compressor unit, but prevents air in tank from flowing back into the compressor. Do not remove from tank.

■ TANK PRESSURE GAUGE

Indicates the amount of air pressure in the tank. Do not exceed maximum pressure indicated on your unit.

■ AIR SHUT OFF/TANK FILL VALVE (3-in-1 Power Pal only)

This manually operated valve keeps the air pressure in the tank so that you can use the tank as a carry or purge tank. There is also an easy fill, Shrader-type, air valve located in the end of this valve so that you can use any air source to refill the tank. Do not exceed 125 PSI / (9 bar) if using another air source.

■ DRAIN PETCOCK (Tank-Mounted units only)

Valve located on the bottom of the tank used to drain moisture caused from condensation and humidity. The tank should be drained after each use. See Maintenance.

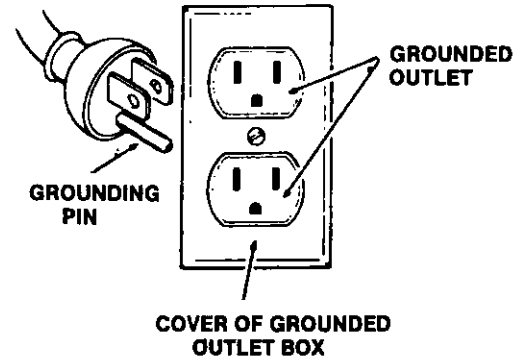


Figure 3

Note: This unit is designed to operate on a 115 volt, 15 amp circuit. The following conditions must be met to operate a 115 volt, 15 amp unit on a standard household 115 volt, 15 amp circuit:

1. No other electrical appliances or lights are connected to the same branch circuit.
2. Voltage supply is normal.
3. Extension cords are of at least the minimum gauge specified in this instruction manual.
4. Circuit is equipped with a 15 amp circuit breaker or a 15 amp slow blow fuse type T.

If the above conditions cannot be met, the circuit breaker will trip. In this case, it is necessary to operate the compressor from a 115 volt, 20 amp circuit.

ELECTRICAL INFORMATION

For MX Series, please see parts list.

This product should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing a path for the electric current.

This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a certified electrician. The plug on the electrical cord of your unit is illustrated in Figure 3.

DANGER: Improper installation of the grounding plug can result in a risk of electrical shock.

Service Center Note: If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to either flat blade terminal. The grounding wire is the insulated wire that is either green or green with yellow stripes.

Check with a certified electrician if you do not completely understand the grounding instructions or if you are unsure if the product is properly grounded.

DANGER: Do not use a grounding adapter.

■ EXTENSION CORDS

Note: To avoid power loss and overheating, it is better to use additional air hose than an extension cord.

If an extension cord is necessary, use a 3-wire extension cord containing a 3-prong grounding plug and a 3-slot outlet.

Make sure your extension cord is in good condition and heavy enough to carry the current that your product will draw. An undersized extension cord will cause a drop in line voltage, resulting in loss of power and overheating.

Table 1 shows the correct gauge to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge.

NOTE: The smaller the gauge number, the heavier the cord.

MINIMUM GAUGE FOR EXTENSION CORDS
A.W.G. (mm²)

AMPERE RATING RANGE	VOLTS	LENGTH OF CORD IN FEET				
		25 ft.	50 ft.	100 ft.	150 ft.	200 ft.
8-10	115	18 (1.0)	14 (1.5)	12 (1.5)	10 (2.5)	8 (4)
14-16	115	12 (1.5)	10 (2.5)	10 (2.5)	8 (4)	6 (4)

Table 1

PREPARATION FOR USE

■ INSTALLATION

Your compressor must be placed in a clean well-ventilated area away from any spraying or chemical application. Your compressor should be located at least 18 inches from any wall or other obstruction that will impede the flow of air through the fan.

Your compressor should be as near as possible to your work to avoid using long air hoses. Do not place your compressor in areas which will become hot such as near a boiler or furnace.

Your compressor should be placed on a firm, level floor.

■ ASSEMBLY FOR TANK MOUNTED MODELS

Tools Needed: Block of wood 3" high, 2 adjustable wrenches, and a hammer. FIGURE 4.

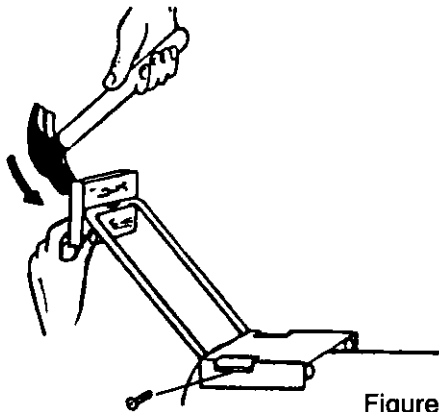


Figure 4

Handle (Tank-Mounted units only, except 3-in-1)

WARNING: Never use the handle to lift the unit completely off the ground. Use the handle to lift only one end so the wheels may be used to move the unit.

- Insert handle into special openings on both sides of the tank baseplate at the motor end.
- Place short piece of wood against the end of the handle.
- Tap it with a hammer to drive handle into baseplate until the hole in the handle and baseplate line up.
- Assemble and tighten the screw (from the parts package) through the hole in the baseplate into the handle.

Note: The notch at the top of your handle provides a place to hang a spray gun or other tool equipped with a hook. Simply fit the tip of the hook into the notch.

Wheels (if not assembled)

- Place a 3" high block of wood under the tank leg.
- Place the side of the wheel with a longer center hub against the axle iron. Put axle bolt through center of wheel, then through top hole in axle iron. Secure it with hex nut.

- For models with axles on axle iron, place wheel with a longer center hub against axle. Put retainer clip on axle and push against wheel to secure.

Rubber Feet

- The three types of rubber feet are described below:
 1. Slide rubber feet over the tank leg and position them.
 2. Place rubber feet under tank leg and secure with pan head screw.
 3. Spread the openings in the feet, slip them over the tank leg and position them.

USING YOUR PAL SELECTOR GUIDE

The pressure regulator on your Pal Compressor is used to control the air pressure for your tools and the project you are doing. A low number, such as 10, indicates low pressure. A high number, such as 100, indicates high pressure.

Your Pal unit has a selector guide on the top of the unit for your convenience. It is color coded for quick reference.

To use the selector guide, simply locate the number across from the project you intend to begin. For example, basketballs; you will locate this in the light blue color. The pressure setting is 10-15. Turn the regulator until you read 10, inflate the basketball. The unit will automatically "bleed off" if you are using the Pal compressor alone. If you have the tank

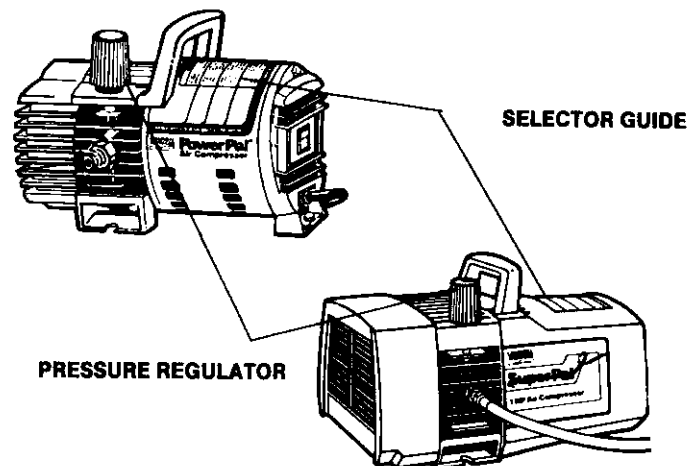


Figure 5

attached, you will need to check the pressure with a pressure gauge to assure proper inflation level.

NOTE: Overinflating is possible regardless of the suggested regulator setting; care must be used when using this guide. If you need to check the pressure, use a separate pressure gauge. This is only a guide and some variance is necessary. Always try the lower number of the suggested pressures on the selector guide first, if satisfactory results are not achieved, try the next higher number.

OPERATION

■ TANK MOUNTED MODELS (except 3-in-1)

1. Turn regulator knob completely clockwise, this allows air to escape tank.
2. Turn switch to "Off" position. Plug in power cord.
3. Turn switch to "Auto" position and run unit for 10 minutes to "break-in" parts.
4. Turn regulator knob fully counterclockwise. Compressor will build to maximum preset pressure and shut off motor. The regulator knob controls the amount of air sent to the tool. To increase the amount of air, turn the regulator knob clockwise. To decrease or shut off the air, turn the regulator knob counterclockwise.
5. Attach tire chuck or other tool to open end of hose.
6. Turn regulator clockwise until the recommended pressure is indicated on the outlet pressure gauge.
7. Apply a soap and water solution around the hose fittings to check for leaks. A leak exists when bubbles form. If you have a leak, tighten the connection and check it again. The compressor is ready for operation when there are no leaks and the connections are secure.

■ NON-TANK MOUNTED MODELS

1. Install air hose to outlet fitting.
2. Set regulator knob to start position.
3. Turn unit on.

IMPORTANT: AIR TRAPPED IN A CYLINDER MAY PREVENT THE MOTOR FROM STARTING PROPERLY. ALWAYS TURN THE REGULATOR KNOB TO THE "START" POSITION TO RELEASE PRESSURE IN THE CYLINDER BEFORE YOU TURN THE UNIT ON.

■ 3-IN-1 POWER PAL

Note: Check the owner's manual of the tool you intend to use for the pressure setting recommended by the manufacturer.

1. Attach 4 rubber feet in parts pack to tank legs.
2. Attach 11" exhaust hose as shown in Figure 6. Tighten snugly with self-attached socket tool.
3. Attach air hose to hose connector as shown in Figure 6. Tighten snugly with wrench.
4. Attach air tool that you have chosen to air hose. Some tools may need an adapter in order to attach to the end of the hose.

5. Set the regulator to the "Start" position.
6. Plug power cord into any standard 115 volt household outlet.
7. Turn On/Off Switch to "ON" position.
8. Adjust regulator to pressure recommended on Selector Guide for the air tool you are using.

■ REMOVING POWER PAL FROM TANK ON YOUR 3-IN-1 UNIT

1. Remove exhaust hose from compressor and tank.

CAUTION: Fitting may be hot if compressor has been running.

2. Loosen 4 prong knob to release clamp from foot of compressor. Lift the compressor unit from the tank.
3. Attach the air hose to the hose connection on the compressor unit.
4. Attach air tool or accessory to the hose.
5. Set the regulator to the "Start" position.
6. Plug the power cord into a standard 115 volt household outlet.
7. Turn the On/Off Switch to "ON" position.
8. Adjust regulator to pressure recommended on Selector Guide for the air tool you are using.

■ USING TANK AS AIR CARRY (PURGE) TANK (3-in-1 only)

1. To fill the tank, the exhaust hose must be connected to the compressor unit and tank. Turn unit on and allow to run until the tank pressure gauge reads the maximum 100 PSI/ (7 bar).
2. Turn On/Off Switch to "OFF" position.
3. Remove the exhaust hose from the compressor unit using the socket tool that is self-attached to the hose. Then, remove exhaust hose from check valve on tank.

CAUTION: Do not remove check valve.

4. Remove the 2 hex locknuts with a 9/16" wrench. Lift the compressor unit from the tank.
5. Attach the air hose to the hose connection on the air tank.
6. Attach the air tool or accessory to the hose.

The carry tank can be used for inflating, spraying, caulking, stapling or drain cleaning. When you have used the reserved air in the tank, you can repressurize the tank with any available air source; your portable PowerPal or a service station. On the manifold, use the valve in the center of the Air Shut Off/Tank Fill Valve to fill the tank with any standard tire chuck. Caution: Maximum tank pressure is 100 PSI/ (7 bar).

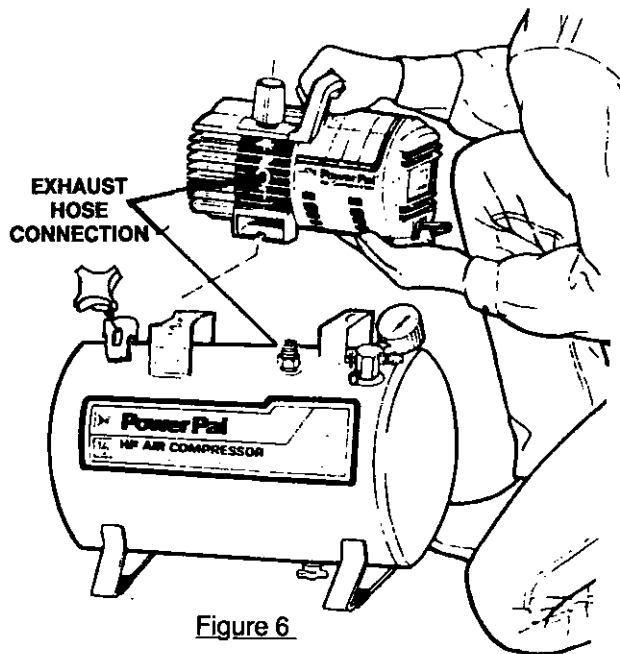
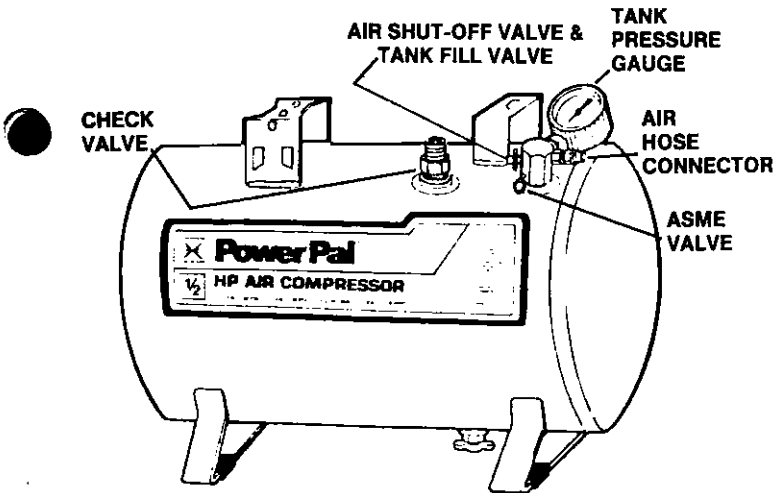


Figure 6

AIR TOOLS

CAMPBELL HAUSFELD produces many quality air tools that help DIYers attain professional results with automotive and household jobs. **CAMPBELL HAUSFELD** air tools are easy to attach to your compressor and simple to use.

The tools you plan to use determine the size of compressor you need. Tools that consume more air — measured in cubic feet per minute, or “CFM” — require a larger, more powerful compressor than tools that consume less air.

Refer to your air tool manual for specific instructions. Always wear safety glasses and hearing protection when using a compressed-air powered tool.

TO CHANGE AIR TOOLS

Your Pal compressor unit must be turned off. Depressurize the air hose and the tank before attaching or removing air tools. Connections may be hot if compressor unit has been running. Use gloves and tools whenever necessary.

MAINTENANCE

Make sure engine is shut off (motor is unplugged) and all pressure is relieved from the tank before performing any type of maintenance.

PERIODICALLY

Operation	Daily	Weekly	Monthly
Drain tank	•		
Check air filter		•	
Check safety valve			•
Blow dirt from inside of motor			•

Table 2

DRAIN TANK

Drain tank after each use. Moisture caused from condensation of compressed air and humidity will cause rust and weaken tank. To drain moisture from tank, open the drain petcock underneath the tank. Tank air pressure should be 10 PSI or less before opening petcock.

FILTER

Check and clean the filter weekly or after each use. You can see the sponge-type filter through the slots in the end cap of your PowerPal compressor unit.

If your unit is used under dusty conditions or when spraying paint, keep unit located as far from the work area as the air hose will allow to avoid overspray and dust from accumulating on and in the compressor unit. This reduces the life and efficiency of your compressor.

TO REMOVE AND CLEAN FILTER (FIGURE 7)

1. Turn unit off and unplug from electrical outlet.
2. Remove the Phillips Head screws which attach the end cap to the unit.
3. Lift off the end cap and lay it upside down.
Note: the fiber safety guard held in place by the top two end cap screws will come off when the end cap is removed. It should be set aside until ready to reassemble.
4. Remove the filter retainer by pressing inward on one of the straight sides of the retainer until it “pops” away from the end cap as shown.
5. Pull the filter out of the end cap.
6. Clean the filter by washing it with warm soapy water. Rinse in clear water and squeeze dry, do not twist. Allow filter to air dry before reassembling. If filter cannot be cleaned with soapy water, it must be replaced, do not use unit without a filter.

TO REASSEMBLE FILTER

1. Position the filter inside the end cap under the plastic tabs.
2. Check that the fiber safety guard is in place before attaching the entire assembly to the unit with the Phillips Head screws.

■ CONDENSATION

Moisture in compressed air will form into droplets as it comes from an air compressor pump. When humidity is high or when a compressor is in continuous use for an extended period of time, this moisture will collect in the tank. When using a paint spray gun or sandblast gun, this water will be carried from the tank, through the hose, and out of the gun as droplets mixed with the material you are spraying. **IMPORTANT:** This condensation will cause water spots in a paint job, especially when spraying other than water based paints. If sandblasting, it will cause the sand to cake and clog the gun rendering it ineffective. A filter in the air line, located as near to the gun as possible, will help eliminate this moisture. The 150 psi Air Line Belt Filter, designed to hang on the user's belt, is available from your **CAMPBELL HAUSFELD** Retailer. It is the best answer to this moisture problem.

■ STORAGE

Store hose and compressor in a cool dry place. Disconnect hose and hang open ends down to allow any moisture to drain. Drain moisture from tank.

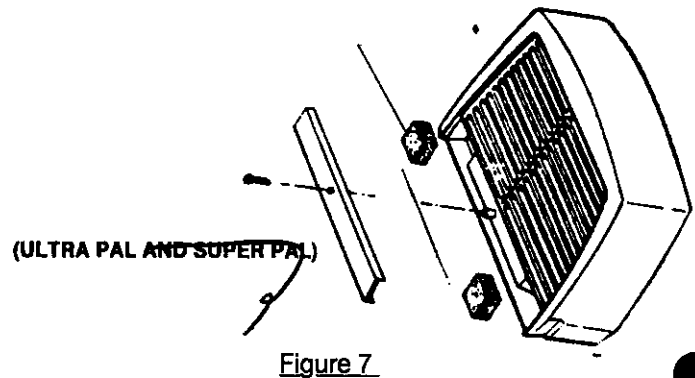
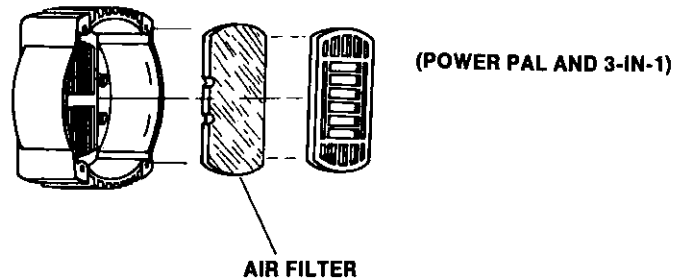
SERVICE

■ SERVICE LOCATIONS

If you should ever need to have your compressor repaired or parts replaced, take the unit to your nearest Authorized Service Center. To find the location of the center closest to you, call Toll-Free 1-800-543-8622 from 8 am to 5 pm (EST), Monday through Friday for assistance. Our friendly Customer Service Representatives are waiting to assist you.

■ TECHNICAL INFORMATION

If you have questions regarding the operation of your compressor, please call Toll-Free 1-800-543-6400 from 8 am to 12 noon and 1 pm to 5 pm (EST), Monday through Friday. Ohio, Alaska and Canada call collect 1-513-367-1182. Our trained Service Technicians are waiting to assist you.



TROUBLESHOOTING GUIDE

PROBLEM	CAUSES	CORRECTIONS
1. Motor hums or runs slowly when first turned on, but compressor does not start. Motor then stops humming.	1. Light duty extension cord being used.	1. Use additional hose instead of extra extension cord or use heavier gauge extension cord. (See Electrical Information) Check circuit breaker, fuse and thermal overload protector before trying to restart compressor.
	2. Compressed air in the cylinder.	2. Put the auto/off switch in the "off" position for 15 seconds, then move it to "auto".
	3. Too many lights or appliances being operated on the same circuit as the compressor (circuit overload).	3. Try another circuit or remove the other appliances or lights from circuit being used.
	4. Defective check valve.	4. Replace or repair.
	5. Low voltage.	5. Check with voltmeter.
	6. Incorrect size fuse or circuit breaker	6. Check for proper fuse.
	7. Defective motor.	7. Replace motor.
	8. Lack of proper ventilation / room temperature.	8. Move compressor to well ventilated area.
- Fuses blow - Circuit breakers trip - Motor Thermal Overload Protector trips		

PROBLEM**CAUSES****CORRECTIONS**

2. Compressor will not operate.	<ol style="list-style-type: none"> 1. Power cord not plugged in. 2. On/Off Switch in "Off" position. 3. Motor thermal overload protector tripped. 4. Fuse blown and/or circuit breaker is tripped. 5. Defective motor. 	<ol style="list-style-type: none"> 1. Plug power cord in. 2. Switch to "On". 3. Turn On/Off Switch to the "Off" position and wait for unit to cool. Thermal overload protector will automatically reset motor when cooled. After unit has reset turn switch to "On" position. 4. Replace fuse or reset circuit breaker. 5. Replace or repair.
3. Noisy operation.	<ol style="list-style-type: none"> 1. Loose pump, motor fasteners, clamps, or accessories. 2. Piston hitting the head. 3. Worn main bearings, broken piston, worn wrist pins, wrist pin bearings, or loose connecting rod bolt. 	<ol style="list-style-type: none"> 1. Turn unit off and unplug. Tighten where necessary. 2. Take to Authorized Service Center. 3. Take to Authorized Service Center.
4. Excessive Vibrations.	<ol style="list-style-type: none"> 1. Bent crankshaft. 	<ol style="list-style-type: none"> 1. Take to Authorized Service Center.
5. Air blowing from inlet.	<ol style="list-style-type: none"> 1. Broken inlet (reed) valve. 	<ol style="list-style-type: none"> 1. Replace valve and gasket.
6. Insufficient pressure at tool or accessory being used.	<ol style="list-style-type: none"> 1. Leaks or restrictions. 2. Restricted air intake. (Filter clogged) 3. Hose or hose connectors too small. 4. Air tool requirements are higher than compressor output. 5. Regulator not turned up to high enough pressure. 	<ol style="list-style-type: none"> 1. Check for leaks or restrictions in hose or piping. Repair. 2. Clean or replace filter. 3. Replace with larger hose or connectors. 4. Limit the air pressure to the compressor's capacity. Either use a smaller tool or a larger capacity compressor. 5. Turn the regulator to proper level.
7. Tank loses pressure rapidly when compressor shuts off.	<ol style="list-style-type: none"> 1. Loose connection (pipe, drain petcock, tubing, fitting or hose) or leak. 2. Faulty check valve. 	<ol style="list-style-type: none"> 1. Turn unit off, unplug and tighten. 2. Take to Authorized Service Center.
8. Moisture in discharge air.	<ol style="list-style-type: none"> 1. Condensation or water in tank caused from humidity or compression of air. 2. Dirty or clogged filter. 3. Improper air ventilation around 	<ol style="list-style-type: none"> 1. Drain tank after every use. Drain tank more frequently in humid weather and use an air line filter. 2. Clean or replace filter. See Maintenance. 3. Keep compressor in well ventilated area.
9. Compressor runs continuously.	<ol style="list-style-type: none"> 1. Air tool requirements higher than compressor output. 	<ol style="list-style-type: none"> 1. Limit the air pressure to the compressor's capacity. Either use a smaller tool or a larger capacity compressor.

LIMITED WARRANTY

1. **DURATION:** One year from date of purchase by the original purchaser.
2. **WHO GIVES THIS WARRANTY (WARRANTOR):**
Campbell Hausfeld
A Scott & Fetzer Company
100 Production Drive, Harrison, Ohio 45030 U.S.A.
Telephone (513) 367-4811
3. **WHO RECEIVES THIS WARRANTY (PURCHASER):**
The original purchaser (other than for purposes of resale) of the Campbell Hausfeld product.
4. **WHAT PRODUCTS ARE COVERED BY THIS WARRANTY:**
Any Campbell Hausfeld portable air compressor, air tool accessory, or supplementary air accessory supplied or manufactured by the Warrantor.
5. **WHAT IS COVERED UNDER THIS WARRANTY:**
Defects in material and workmanship which occur within the duration of the warranty period.
6. **WHAT IS NOT COVERED UNDER THIS WARRANTY:**
 - A. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE. Some States do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
 - B. ANY INCIDENTAL, INDIRECT, OR CONSEQUENTIAL LOSS, DAMAGE or EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE, MALFUNCTION OF THE CAMPBELL HAUSFELD PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.
 - C. Any failure that results from an accident, purchaser's abuse, neglect or failure to operate the products in accordance with the instructions provided in the owner's manual(s) supplied with the product.

- D. Pre-delivery service, i.e. assembly, oil or lubricants, and adjustments.
- E. Normal adjustments which are explained in the owner's manuals provided with the product i.e., belts, pressure switch.
- F. Items or service that are normally required to maintain the product i.e., lubricants, filters and gaskets.

7. RESPONSIBILITIES OF WARRANTOR UNDER THIS WARRANTY:

Repair or replace, at Warrantor's option, products or components which have failed within the duration of the warranty period.

8. RESPONSIBILITIES OF PURCHASER UNDER THIS WARRANTY:

- A. Deliver or ship the Campbell Hausfeld product or component to the nearest Campbell Hausfeld Authorized Service Center. Freight costs, if any, must be borne by the purchaser.
- B. Use reasonable care in the operation and maintenance of the product as described in the owner's manual(s).

9. WHEN WARRANTOR WILL PERFORM REPAIR OR REPLACEMENT UNDER THIS WARRANTY:

- A. Repair or replacement will be scheduled and serviced according to the normal work flow at the servicing location, and depending on the availability of replacement parts.
- B. If the purchaser does not receive satisfactory results from the Authorized Service Center, the purchaser should contact the Campbell Hausfeld Customer Service Department (see Paragraph 2).

This Limited Warranty gives you specific legal rights and you may also have other rights which vary from State to State.

*CAMPBELL HAUSFELD 100 PRODUCTION DRIVE HARRISON, OHIO 45030
(513) 367-4811*