1/2 HP OIL FREE AIR COMPRESSOR

MODEL: HP00P001S1

INSTRUCTION MANUAL

Heavy duty rubber feet for rough terrain on job sites

DANGER!

Breathable Air Warning

This compressor/pump is NOT equipped and should NOT be used "as is" to supply breathing quality air. For any application of air for human consumption, you must fit the air compressor/pump with suitable in-line safety and alarm equipment. This additional equipment is necessary to properly filter and purify the air to meet minimal specifications for Grade D breathing as described in Compressed Gas Association Commodity Specification G 7.1 – 1966, OSHA 29 CFR 1910. 134, and/or Canadian Standards Associations (CSA).

DISCLAIMER OF WARRANTIES

In the event the compressor is used for the purpose of breathing air application and proper in-line safety and alarm equipment is not simultaneously used, existing warranties are void,and Hulk air force technology & AIRBASE Industries, LLC disclaims any liability whatsoever for any loss, personal injury or damage.

CALIFORNIA PROPOSITION 65

WARNING!

This product or its power cord may contain chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

- **READ INSTRUCTION MANUAL BEFORE OPERATING**
- **RISK OF FIRE OR EXPLOSION**–DO NOT SPRAY COMBUSTIBLE/FLAMMABLE LIQUID IN A CONFINED AREA. SPRAY AREA MUST BE WELL VENTILATED. DO NOT SMOKE WHILE SPRAYING OR SPRAY WHERE SPARK OR FLAME IS PRESENT. ARCING PARTS – KEEP COMPRESSOR AT LEAST 20 FEET AWAY FROM SPRAYING AREA AND ALL EXPLOSIVE VAPORS.
- **RISK OF INJURY**– DO NOT DIRECT AIR STREAM AT BODY. USE EYE PROTECTION. COMPRESSOR STARTS AUTOMATICALLY. MOVING PARTS. DO NOT TOUCH. KEEP GUARDS IN PLACE. COMPRESSOR DOES NOT SUPPLY BREATHABLE AIR.
- **RISK OF BURSTING**– DO NOT ADJUST REGULATOR TO RESULT IN OUTPUT PRESSURE GREATER THAN MARKED MAXIMUM PRESSURE OF ATTACHMENT. IF A REGULATOR HAS NOT BEEN INSTALLED.

USE ONLY ATTACHMENT RATED AT 200 PSI ORHIGHER. DO NOT WELD ON OR REPAIR TANK – REPLACE. DO NOT OPERATE WITHOUT PROPER ASME SAFETY VALVE IN PLACE.

- **RISK OF ELECTRICAL SHOCK** – HAZARDOUS VOLTAGE: DISCONNECT FROM POWER SOURCE BEFORE SERVICING. COMPRESSOR MUST BE GROUNDED. DO NOT USE GROUNDING ADAPTORS. DO NOT EXPOSE TO RAIN. STORE INDOORS.

IF CONNECTED TO A CIRCUIT PROTECTED BY FUSES, USE TIME-DELAY FUSE MARKED "D"

COMPLIES WITH CCR462 (L)(2).

DO NOT USE BELOW GARAGE FLOOR OR GRADE LEVEL

DRAIN TANK EVERYDAY TO PREVENT CORROSIONAND POSSIBLE INJURY DUE TO TANK DAMAGE

HULK LIMITED WARRANTY FOR THIS 1/2 HP AIR COMPRESSOR	2 Year limited warranty on pumps 1 Year limited warranty on parts & labor

PROOF OF PURCHASE

Please keep your dated proof of purchase for warranty and servicing purposes.

REPLACEMENT PARTS

Replacement parts for this tool are available at our authorized HULK service centers across USA. For servicing, contact or return to the retailer where you purchased your product along with your proof of purchase. Please use the 10 digit part numbers listed in this manual for all part orders where applicable.

LIMITED TOOL WARRANTY

HULK makes every effort to ensure that this product meets high quality and durability standards. HULK warrants to the original retail consumer a 2-year limited warranty as of the date the product was purchased at retail and that each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations and lack of maintenance. HULK shall not be liable for death, injuries to persons or property or for incidental, special or consequential damages arising from the use of our products. To take advantage of this warranty, the manufacturer part must be returned for examination by the retailer. Shipping and handling charges may apply. If a defect is found, HULK will either repair or replace the product.

RISK OF EXPLOSION OR FIRE
WHAT CAN HAPPEN

It is normal for electrical contacts within the motor and pressure switch to spark.

If electrical sparks from the compressor come in contact with flammable vapors, they may ignite, causing fire or explosion. Restricting any of the compressor ventilation openings will cause serious overheating and could cause fire.

Unattended operation of this compressor could result in personal injury or property damage.

HOW TO PREVENT

Always operate the compressor in a well ventilated area free of combustible materials, gasoline or solvent vapors. If spraying flammable materials, locate the compressor at least 20 feet away from the spray area. An additional length of hose may be required.
Store flammable materials in a secure location away from the compressor.
Never place objects against or on top of the compressor. Operate compressor in an open area at least 12 inches away from any wall or obstruction that would restrict the flow or fresh air to the ventilation openings.
Operate compressor in a clean, dry and well ventilated area. Do not operate compressor indoors in a confined area.
Always remain in attendance with the compressor when it is operating.

RISK OF BURSTING
WHAT CAN HAPPEN

1. Failure to properly drain condensed water from the tank, causing rust and thinning of the steel tank.
2. Modifications or attempted repairs to the tank.
3. Unauthorized modifications to the unloader valve, safety valve or any other components which control tank pressure.
4. Excessive vibration can weaken the air tank and cause rupture or explosion.
5. Attachments & Accessories; Exceeding the operating pressure of air tools can cause them to explode.

HOW TO PREVENT

Drain tank daily or after every use. If the tank develops a leak, replace tank or get a new air compressor. Never drill into, weld or make any modifications to the tank or its attachments.

The tank is designed to withstand specific operating pressures. Never make adjustments or parts substitutions to alter the factory set operating pressures.

For essential control of air pressure, you must install a pressure regulator and pressure gauge to the air outlet.

RISK OF BURNS
WHAT CAN HAPPEN

Touching exposed metal such as the compressor head or outlet tubes, can result in serious burns.

HOW TO PREVENT

Never touch any exposed metal parts on compressor during or immediately after operation. The compressor will remain hot several minutes after use.

Do not reach around protective shrouds or attempt maintenance until the compressor has cooled down completely.

RISK OF PROPERTY DAMAGE WHEN TRANSPORTING COMPRESSOR
WHAT CAN HAPPEN

Oil can leak or spill and could result in fire or breathing hazard, serious injury or death can result. Oil leaks will damage carpet, paint or other surfaces in vehicles or trailers.

HOW TO PREVENT

Always place compressor on a protective mat when transporting to protect against damage to vehicle from leaks. Remove compressor from vehicle immediately apon arrival.

SPECIFICATIONS

Model	HP00P001S1
Voltage	110V
Horsepower	1/2
Amperage	5A
RPM (no load speed)	3,470
Phase	1
Hertz	60Hz
Operating pressure	115 PSI
Tank size	1.5 GALLON

WARNING

ALL ELECTRICAL INSTALLATIONS MUST BE PERFORMED BY A QUALIFIED ELECTRICIAN. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY! ALL ADJUSTMENTS OR REPAIRS MUST BE PERFORMED WITH THE COMPRESSOR DISCONNECTED FROM THE POWER SOURCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY!

POWER SUPPLY

WARNING: YOUR COMPRESSOR MUST BE CONNECTED TO A 110V, WITH A MINIMUM 15-AMP. BRANCH CIRCUIT. FAILURE TO CONNECT IN THIS WAY CAN RESULT IN INJURY FROM SHOCK OR FIRE.

GROUNDING

Your compressor must be properly grounded. Not all outlets are properly grounded. If you are not sure if your outlet is properly grounded, have it checked by a qualified electrician.

WARNING: IF NOT PROPERLY GROUNDED, THIS COMPRESSOR CAN CAUSE ELECTRICAL SHOCK, PARTICULARLY WHEN USED IN DAMP LOCATIONS. TO AVOID SHOCK OR FIRE, IF THE POWER CORD IS WORN OR DAMAGED IN ANY WAY, HAVE IT REPLACED IMMEDIATELY.

If this compressor should malfunction or breakdown, grounding provides a path of least resistance for electric current, to reduce the risk of electric shock. This compressor is equipped with a cord having an grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
WARNING: TO MAINTAIN PROPER GROUNDING, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER.

110V OPERATION

As received from the factory, your compressor is ready to run for 110V operation. This machine is intended for use on a circuit that has an outlet and a plug which looks like the one illustrated in Fig.1.

WARNING: DO NOT USE A TWO-PRONG ADAPTOR FOR THEY ARE NOT IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES. NEVER USE IN USA.

EXTENSION CORDS

The use of any extension cord will cause some loss of power. IT IS RECOMMENDED TO USE A LONGER AIR HOSE INSTEAD OF AN EXTENSION CORD. If you do not have a choice, use the table in Fig.2 to determine the minimum wire size (A.W.G-American Wire Gauge) extension cord. Use only 3-wire extension cords which have 3-prong grounding type plugs and 3-hole receptacles which accept the tool's plug.

For circuits that are further away from the electrical circuit box, the wire size must be increased proportionately in order to deliver ample voltage to the compressor motor. Refer to Fig.2 for wire length and size.

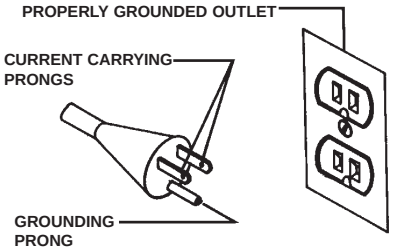


FIGURE 1

LENGTH OF CONDUCTOR	WIRE SIZES REQUIRED (AMERICAN WIRE GAUGE) 110V LINES
0-25 FEET	NO.12
26-50 FEET	NO.12
51-100 FEET	NO.10

FIGURE 2

AIR COMPRESSOR PUMP. To compress air, the piston moves up and down in the cylinder. On the downstroke, air is drawn in through the intake valves. The exhaust valves remain closed. On the upstroke of the piston, air is compressed. The intake valves close and compressed air is forced out through the exhaust valves.

CHECK VALVE (A) FIG.3. When the air compressor is operating, the check valve is “open”, allowing compressed air to enter the air tank. When the air compressor reaches “Cut-Out” pressure, the check valve “closes”, allowing air pressure to remain inside the air tank.

ON/AUTO-OFF SWITCH (A) FIG.6. Turn this switch ON by lowering lever and lift to turn compressor OFF.

PRESSURE SWITCH (D) FIG.5. The pressure switch automatically starts the motor when the tank pressure drops below the factory set “Cut-In” pressure. It also stops the motor when the air tank pressure reaches the factory set “Cut-Out” pressure.

REGULATOR (B) FIG.5. The air pressure coming from the air tank is controlled by the regulator. Turn the regulator knob clockwise to increase pressure and counterclockwise to decrease pressure. To avoid minor readjustment after making a change in the pressure setting, always approach the desired pressure from a lower pressure. When reducing from a higher to a lower setting, first reduce the pressure less than that desired, then bring it up to the desired pressure. Depending on the air requirements of each particular accessory, the outlet regulated air pressure may have to be adjusted while operating the accessory.

OUTLET PRESSURE GAUGE (C) FIG.5. The outlet pressure gauge indicates the air pressure available at the outlet side of the regulator. The pressure is controlled by the regulator and is always less than or equal to the tank pressure.

TANK PRESSURE GAUGE (A) FIG. 5. The tank pressure gauge indicates the reserve air pressure in the tank.

COOLING SYSTEM. This compressor contains an advanced design cooling system. The cooling system works when air is being expelled.

DRAIN VALVE (A) FIG. 4. The drain valve is located at the base of the air tank and is used to drain condensation from the tank to prevent corrosion. Drain tank at the end of each use.

MOTOR THERMAL OVERLOAD PROTECTOR (RESET (A) FIG. 7). The electric motor has an automatic thermal overload protector. If the motor overheats for any reason, the thermal overload protector will shut off the motor. The motor must be allowed to cool before restarting. Press the reset button (A).

PRESSURE RELEASE VALVE. The pressure release valve located on the side of the pressure switch, is designed to automatically release compressed air from the compressor head and the outlet tube when the air compressor reaches “Cut-Out” pressure or is shut off. The pressure release valve allows the motor to restart freely. When the motor stops running, air will be heard escaping from this valve for a few seconds. No air should be heard leaking when the motor is running, or continuous leaking after unit reaches “Cut-Out” pressure.

SAFETY VALVE (E) FIG. 5. If the pressure switch does not shut off the air compressor at its “Cut-Out” pressure setting, the safety valve will protect against high pressure by “popping out” at it’s factory set pressure (slightly higher than the pressure switch “Cut-Out” setting).

WARNING!: If the safety valve does not work properly, over pressurization may occur, causing air tank rupture or an explosion. Pull the ring daily on the safety valve to make sure that the safety valve operates freely. If the valve is stuck or does not operate smoothly, it must be replaced with the same type of valve before operating again.

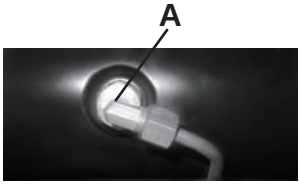


FIGURE 3

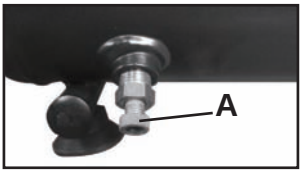


FIGURE 4

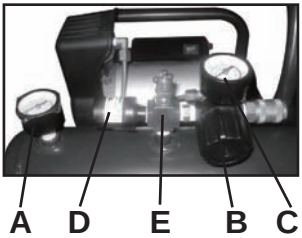


FIGURE 5

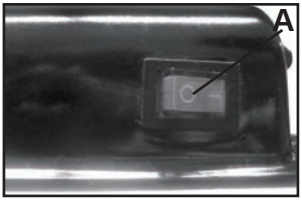


FIGURE 6

FIGURE 7

LOCATION OF THE AIR COMPRESSOR

Your compressor comes almost completely assembled, the air filter must be installed. Operate the air compressor in a dry, clean, cool, well ventilated area. The air compressor pump and case are designed to allow for proper cooling. Clean or blow off dust or dirt that collects on the air compressor. A clean air compressor runs cooler and provides longer service. The ventilation openings on your air compressor are necessary to maintain proper operating temperature. Do not place rags or other containers on or near these openings.

ADDITIONAL REGULATORS AND CONTROLS

Since the air tank pressure is usually greater than that which is needed, a regulator is employed to control the air pressure ahead of any individual driven device. Separate air transformers which combine the function of air regulation, moisture and dirt removal should be used where applicable.

BREAK-IN PROCEDURES

NOTE: SERIOUS DAMAGE MAY RESULT IF THE FOLLOWING BREAK-IN INSTRUCTIONS ARE NOT CLOSELY FOLLOWED. THIS PROCEDURE IS REQUIRED BEFORE THE AIR COMPRESSOR CAN BE PUT INTO SERVICE, AFTER REPLACING THE CHECK VALVE, AND WHEN THE PISTON OR THE CYLINDER SLEEVE IS REPLACED.

A. Set the pressure switch lever to the “OFF” position.
B. Plug the power cord into the correct 110V branch circuit receptacle.
C. Fully open the drain valve (A) Fig. 4, by turning it counterclockwise, to prevent air pressure build-up in the tank.
D. Move the pressure switch lever to “ON”. The compressor will start.
E. Run the compressor for 15 minutes. Make sure the drain valve is open and there is no tank pressure build-up by watching the tank pressure gauge.
F. After 15 minutes, close the drain valve by turning clockwise.The air receiver will fill to “Cut-Out” pressure and the motor will stop. The compressor is now ready for use.

OPERATING PROCEDURES

Preparation for use:
1. Before attaching an air hose or accessories, make sure the OFF lever is set to “OFF” and the air regulator is closed. Once this is done, you can now attach a hose or an accessory.

WARNING: Too much air pressure causes a hazardous risk of bursting. Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating of the tool being used.
3. Turn the “ON/OFF” lever to “ON” and allow tank pressure to build. Motor will stop when tank pressure reaches “Cut-Out” pressure.
4. Open the regulator by turning it clockwise. Adjust the regulator to the correct pressure setting. The compressor is ready for use.
5. Always operate the air compressor in well ventilated areas; free of gasoline or other solvent vapors. Do not operate the compressor near the spray area.

After Use:
6. Set the “ON/OFF” lever to “OFF”.
7. Turn the regulator counterclockwise to set the outlet pressure to zero.
8. Disconnect the air tool or accessory.
9. Pull ring on safety valve (E) Fig. 5, allowing air to bleed from the tank until tank pressure is approximately 20 psi. Release safety valve ring.
10. Drain water from air tank. Turn drain valve (A) Fig. 4, counterclockwise to open.

WARNING!: WATER WILL CONDENSE IN THE AIR TANK. IF NOT DRAINED REGULARLY, WATER WILL CORRODE AND WEAKEN THE AIR TANK CAUSING A RISK OF AIR TANK RUPTURE.
NOTE: If drain valve is plugged, pull ring on safety valve (E) Fig. 5, and hold until air pressure has been released. The valve can then be removed, cleaned, and reinstalled.

11. After the water has been completely drained, turn drain valve to close. The air compressor can now be stored.

MAINTENANCE
Before doing any maintenance or adjustments to your air compressor, the following safety precautions should be taken:
- Disconnect electrical power.
- Drain air tank of pressure.

Daily or before each use

1. Drain condensation from tank.
2. Check for any unusual noise or vibration.
3. Be sure all nuts and bolts are tight.

Monthly

1. Inspect air system for leaks by applying soapy water to all joints. Tighten those joints if leakage is observed.

KEEP TOOL CLEAN
Periodically blow out all air passages with dry compressed air. Clean all plastic parts with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material.
CAUTION: Wear safety glasses while using compressed air.

FAILURE TO START
Should your compressor fail to start, check to make sure the prongs on the cord plug are making good contact in the outlet. Also, check for blown fuses or open circuit breakers in the line.

STORAGE

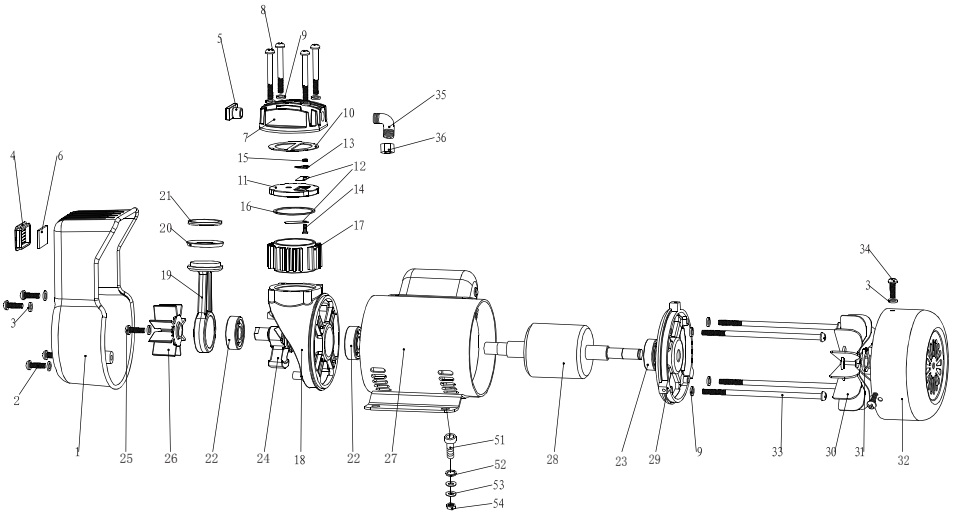
1. Set the “ON/OFF” lever to “OFF”.
2. Turn the regulator counterclockwise to set the outlet pressure to zero.
3. Remove any air tools or accessories.
4. Pull ring on safety valve (E) Fig. 5, allowing air to bleed from the tank, until tank pressure is approximately 20psi. Release safety valve ring.
5. Drain water from air tank. Turn drain valve (A) Fig. 4, counterclockwise, to open.

NOTE: If drain valve is plugged, pull ring on safety valve (E) Fig. 5, and hold until air pressure has been released. The valve can then be removed, cleaned, and reinstalled.

6. After the water has been completely drained, turn drain valve to close. The air compressor can now be stored.
7. Store the air compressor in a clean and dry location.

TROUBLE SHOOTING

TROUBLE	POSSIBLE CAUSE	CORRECTIVE ACTION
No start condition	Fuse blown or circuit breaker tripped Loose electrical connections Overheated motor	Check voltage or eliminate extension cord or reset Check wiring connections Press the reset button or wait for automatic reset
Low pressure	Air leak in safety valve Restricted air filter Defective check valve	Check valve manually by pulling upwards on ring. If condition persists replace valve Clean or replace as necessary Replace check valve
Safety valve releasing	Defective pressure switch or improper adjustment	Check for proper adjustment and if problem persists, replace pressure switch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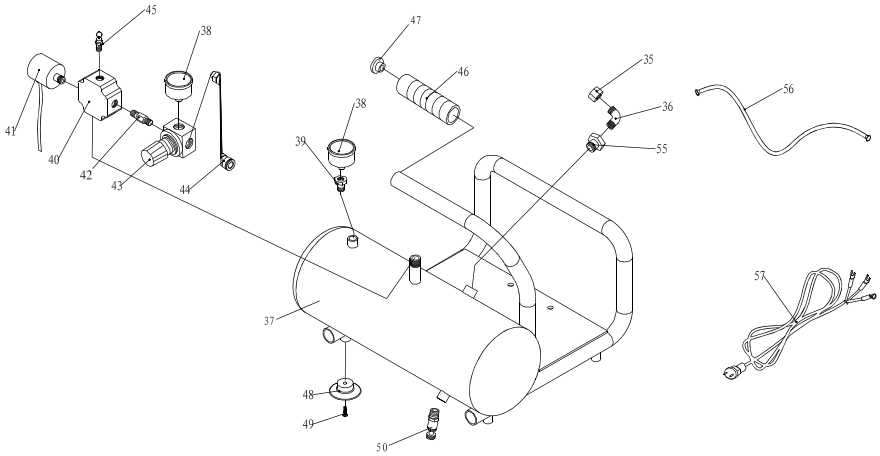
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PARTS LIST MODEL: HP00P001S1

No.	Part Number	Description	Qty
1	SH50105010	SHROUD	1
2	BO30325012	BOLT	4
3	LW30502050	LOCK WASHER	7
4	AF50902009	EXTERIOR PART OF AIR FILTER	1
5	AF50902010	INNER PART OF AIR FILTER	1
6	FE50902011	FILTER ELEMENT	1
7	CH00150001	CYLINDER HEAD	1
8	BO30205050	BOLT	4
9	LW30502050	LOCK WASHER	8
10	GA40501100	GASKET	1
11	VF40208000	VALVE PLATE	1
12	FV40208001	FINGER VALVE	2
13	VP40208002	VALVE RETAINER	1
14	BO30315001	BOLT	1
15	NU30405000	NUT	1
16	GA40502090	GASKET	1
17	CY00611001	CYLINDER	1
18	CR00215000	CRANKCASE	1
19	CR00811000	CONNECTING ROD	1
20	PR41601000	PISTON RING- OILER	1
21	PR41602000	PISTON RING- COMPRESSION	1
22	BE30704000	BEARING	2
23	BE30704001	BEARING	1
24	CR00904002	CRANKSHAFT	1
25	BO30315032	BOLT	1
26	FA40710001	FAN	1
27	ST10305000	STATOR	1
28	AR10103200	ARMATURE	1
29	BC00510005	BACK COVER	1

No.	Part Number	Description	Qty
30	FA40710000	FAN	1
31	SW30504130	SPRING WASHER	1
32	MC50108000	MOTOR COVER	1
33	BO30205060	BOLT	4
34	BO30314001	BOLT	3
35	NU50703005	NUT	1
36	CO50703005	90 DEGREE CONNECTOR	1
37	TA25600400	1.5 GALLON TANK	1
38	PG50301002	PRESSURE GAUGE	2
39	CO50702006	CONNECTOR	1
40	CO50704015	FOUR WAY CONNECTOR	1
41	QD50208000	QUICK DISCONNECT	1
42	CO50702003	CONNECTOR	1
43	RE50401018	REGULATOR	1
44	QC50501005	QUICK COUPLER	1
45	SV50402024	SAFETY VALVE	1
46	RH51002008	RUBBER HANDLE	1
47	HP51002100	HANDLE PLUG	1
48	RG51001000	RUBBER GASKET	4
49	BO30315032	BOLT	4
50	DV50403000	DRAIN VALVE	1
51	BO30106021	BOLT	4
52	LW30501061	LOCK WASHER	4
53	WA30502060	WASHER	4
54	NU30406011	NUT	4
55	CV50405013	CHECK VALVE	1
56	EP50835011	EXHAUST PIPE	1
57	PC50601003	POWER CORD	1

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