

Please carefully read and save these instructions before attempting to assemble, maintain, install, or operate this product. Observe all safety information to protect yourself and others. Failure to observe the instructions may result in property damage and/or personal injury. Please keep instructions for future reference.

Important Operating Instructions



20 GALLON BELT DRIVEN COMPRESSOR

Model: 51647

CALIFORNIA PROPOSITION 65

WARNING: You can create dust when you cut, sand, drill or grind materials such as wood, paint, metal, concrete, cement, or other masonry. This dust often contains chemicals known to cause cancer, birth defects, or other reproductive harm. Wear protective gear.

WARNING: This product or its power cord may contain chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

Important!

When using equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating manual with due care. Keep this manual in a safe place, so that the information is available at all times. If you give the equipment to any other person, give them these operating instructions as well. We accept no liability for damage or

accidents which arise due to non-observance of these instructions and the safety information herein.

SPECIFICATIONS

Motor: 2 HP Dual Voltage
120V/240V, Belt Driven

Tank: 20 Gallons

Pump: Cast iron

Max Pressure: 135 PSI

CFM: 6.6 @ 40 PSI

Tires: 10 inches

CAUTION:
**FOR YOUR OWN SAFETY,
READ INSTRUCTION MANUAL
COMPLETELY AND
CAREFULLY BEFORE
OPERATING THIS
COMPRESSOR.**

**Any failures made in following
the safety regulations and
instructions may result in an
electric shock, fire, and/or
serious injury.**

SAFETY INSTRUCTIONS

The air compressor should be operated on a dedicated 20-amp circuit. If the circuit does not have 20 free amps available, a larger circuit must be used. Always use more air hose before utilizing extension cords. Low voltage could cause damage to the motor.

If the air compressor is in operation, all guards and covers should be attached or installed correctly. If any guard or cover has been damaged, do not operate the equipment until the proper personnel have correctly repaired the equipment. The power cord should be free of any moving parts, twisting and/or crimping while in use and while in storage.

Surfaces on your air compressor can be hot in operation and can cause serious burns if touched. The equipment should be allowed time to cool before any maintenance is attempted. Items such as the compressor pump and the outlet tube are normally hot during and after operation.

For warranty purchases, please keep your dated proof of purchase. File or attach to the manual for safekeeping.

Operation of the air compressor should always be in a position that is stable. Never use the air compressor on a rooftop or elevated position that could allow the unit to fall or be tipped over. Use additional air hose for elevated jobs.

Always wear approved safety glasses with side shields when the air compressor is in use. Turn off the air compressor and drain the air tank before performing any type of maintenance or disassembly of the hoses or fittings. Never point any nozzle or sprayer toward any part of the body or at other people or animals.

Avoid using the air compressor in confined areas. Always have adequate space (1 foot) on all sides of the air compressor. Also keep children, pets, and others out of the area of operation. This air compressor does not provide breathable air for anyone or any auxiliary breathing device. Spraying material will always need to be in another area away from the air compressor to not allow intake air to damage the air compressor filter.

Never utilize the air compressor in the rain or wet conditions. Any electrical issues or repairs should be performed by authorized personnel such as an electrician and should comply with all national and local electrical codes. The air

compressor should also have the proper three prong grounding plug, correct voltage, and adequate fuse protection.

Never operate the compressor near combustible materials, gasoline or solvent vapors. If spraying flammable materials, locate the air compressor at least 50m away from the spray area. Never operate the air compressor indoors or in a confined area.

Always drain the air compressor tank daily or after each use. If the tank develops a leak, then replace the air compressor. Never use the air compressor after a leak has been found or tried to make any modifications to the tank. Never modify the air compressor's factory settings which control the tank pressure or any other function.

ASSEMBLY

Regulator Assembly:

1) Remove the plugs from the plastic bag. Apply thread sealant tape to the threads.

2) The assembly is designed to be attached only to the pressure switch outlet (see Fig 1 on page 6) by inserting the pipe nipple (see Fig 2) and turning the assembly clockwise. Tighten until snug. The gauge should be oriented the same as the gauge already on the pressure switch (see Fig 1). Attach the hose and tire

chuck. Check for leaks with soapy water.

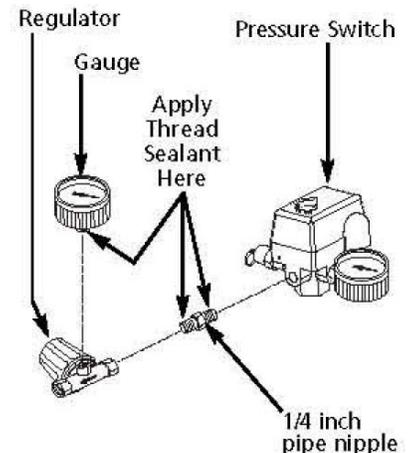


Figure 2

Handle Assembly:

1) Remove the handle screw from the base plate, if preinstalled.

2) Insert the handle into both sides of the base plate. Squeeze handle to fit into the special openings in the plate (Fig 3).

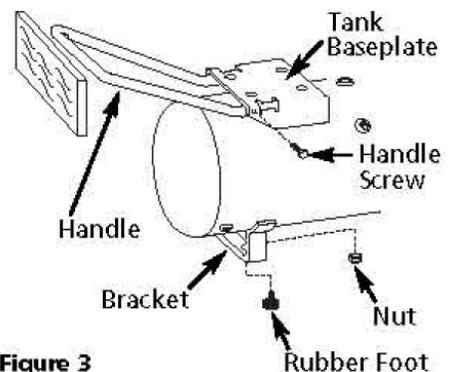


Figure 3

3) Place a short piece of wood against the end of the handle and tap with a mallet or hammer until the hole in the handle lines up with the hole in the base plate.

4) Insert and tighten the handle screw into the hole in the base plate and through the

handle. Ensure the screw goes all the way through the handle.

Wheel Assembly:

1) Insert the shoulder bolt through the wheel hub with the bolt head on the opposite side of the protruding section.

2) For the 8 inch diameter wheels, insert the shoulder bolt into the lowest hole of the tank axle iron and secure tightly with a locknut.

3) For the 10 inch diameter wheels, insert the shoulder bolt into the upper hole in the tank axle iron and tightly secure with the locknut.

4) Repeat step 3 or 4 on the opposite side.

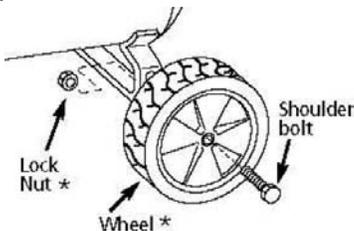


Figure 4 - Wheel Assembly

When the unit is assembled, the tank should slope slightly towards the drain valve to allow the tank to drain properly.

Breather Installation:

Remove the cap from the oil fill opening. Install the breather (Fig 5)



Figure 5

Oil Addition:

The oil capacity of this unit is approximately 8.5 ounces. Synthetic oil is recommended. Use 10W30 100% non detergent synthetic oil for best results. Single viscosity, ISO100 (SAE 30) non-detergent compressor oil can also be used.

DO NOT use petroleum based automotive oil with this unit. It will cause carbon deposits which will require the unit to be serviced more frequently and reduce the life of the unit.

OPERATION

Note: This compressor must be filled with oil before startup.

CAUTION: Do not attach air tools to the compressor until startup is completed and the unit checks OK.

- 1) Check for proper oil level.
- 2) Turn the regulator knob clockwise to open air flow.
- 3) Turn the pressure switch lever or knob to OFF position and plug in power cord.

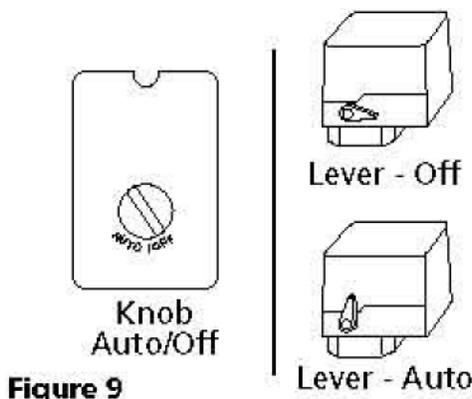


Figure 9

4) Turn the pressure switch lever or knob to AUTO and run the unit for 30 minutes to break in the pump parts (Fig 9).

5) Turn the regulator knob fully counterclockwise. The unit will build to maximum preset pressure and automatically shut off.

6) Turn the regulator knob clockwise to cause air to bleed off. The unit will restart at preset pressure.

7) Turn the pressure switch lever or knob to OFF and unplug the power cord. Slowly turn the regulator knob clockwise to allow the air pressure to be released. DO NOT proceed to the next step until the tank pressure gauge reads zero.

8) Attach an air hose (not included) and then add an air chuck or other tool (not included) to the open end of the hose. Use teflon tape to eliminate air leaks when attaching tools or air hose. Plug in the power cord. Turn the pressure switch lever to AUTO position. When the full pressure is reached, turn the regulator knob clockwise until desired outlet pressure is achieved.

9) After use, turn the pressure switch lever or knob to OFF.

10) If the compressor is not used for an extended period of time, bleed the air from the line and use the drain valve to drain water from the tank.

NOTE: Electric models are equipped with a pressure switch that automatically turns the motor OFF when the tank reaches a preset level. After air is used from the tank and it drops to a preset low level, the pressure switch will automatically turn the motor back on.

MAINTANANCE

WARNING: Disconnect the unit from the power source and tools and release all pressure from the tank before attempting to perform any maintenance or service to the unit.

Perform the following test to verify the operation of the safety valve weekly and follow the maintenance schedule below.

1) Pull the ring on the safety valve and allow the ring to snap back into its normal position. This valve automatically releases air if the tank pressure exceeds the preset maximum.

CAUTION: A large amount of fast moving air will be released if the safety valve is pulled with air pressure in the tank.

WARNING: Do not attempt to tamper with this valve. It should be checked before each use. If air leaks after the ring as been released or the valve is stuck and cannot be actuated by the ring, the valve must be replaced. DO NOT use the unit until the ring has been replaced.

2) With the motor OFF and unplugged, clean debris from the motor, flywheel, tank, air lines and pump cooling fins.

Drive Belt

Belts will stretch with normal use. Properly adjusted, a 5 pound pressure is applied to the belt between the motor pulley and the pump and it will deflect the belt approximately 1/2 inch.

STORAGE

1) When not in use, the hose and compressor should be stored in a cool, dry place.

2) Tanks should be drained of moisture and the hose disconnected and hung with open ends down to allow moisture to drain.

3) Protect the cord from possible damage by winding the cord loosely around the handle of the unit or coiling the cord up.

Moisture in Compressed Air

Moisture in compressed air will form droplets as it comes from an air compressor pump. When humidity is high or when the unit is run for an extended period of time, moisture will collect in the tank. If a sandblaster or paint spray gun is used, water could be mixed in with the spray material. A filter or air dryer in the air line will help eliminate moisture

when placed as close to the gun as possible.

Maintenance Schedule

Maintenance will need to be performed more frequently if the compressor is used in high humidity or dusty situations.

DAILY:

Check oil level and drain tank

WEEKLY:

Check air filter and safety valve

MONTHLY:

Blow dirt from inside motor and check belt tightness

3 MONTHS:

Change oil

Troubleshooting Guide

Problem	Possible Solution
Air leaks at the check valve or pressure relief valve	A defective check valve results in a constant air leak at the pressure release valve when there is pressure in the tank and the compressor is shut off. Drain the tank, then remove and clean or replace the check valve.
Air leaks between head and cylinder.	Be sure of proper torque on head bolts. If leak remains, contact a service technician.
Air leak from safety valve.	Operate the safety valve manually by pulling on the ring. If the valve continues to leak when in the closed position, it should be replaced.
Pressure reading on the regulated pressure gauge drops when an accessory is used.	If there is an excessive amount of pressure drop when the accessory is used, replace the regulator. NOTE: Adjust the regulated pressure under flow conditions (while accessory is being used). It is normal for the gauge to show minimal pressure loss during initial use of the tool.
Excessive tank pressure.	Move the Auto-On/Off lever to the Off position. If the unit doesn't shut off, unplug it from the power source and contact a service technician.
Motor will not start.	Make sure power cord is plugged in and the switch is on. Inspect for the proper size fuse in your circuit box. If the fuse was tripped reset it and restart the unit. If repeated tripping occurs, replace the check valve or contact your service technician.
Excessive moisture in the discharge air.	Remove the water in the tank by draining after each use. High humidity environments will cause excessive condensation. Utilize water filters on your air line. NOTE: Water condensation is not caused by compressor malfunction. Be sure the compressor's air output is greater than your tool's air consumption rate.
Air leaks from the tank body or tank welds.	Never drill into weld or otherwise modify the air tank or it will weaken. The tank can rupture or explode. Compressor cannot be repaired. Discontinue use of the air compressor.

Limited Manufacturer Warranty

North American Tool (NAT) Industries makes every effort to ensure that this product meets high quality and durability standards. NAT warrants to the original retail consumer a 1-year limited warranty from the date the product was purchased at retail and 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, or a lack of maintenance. NAT shall in no event be liable for death, injuries to persons or property, or for incidental, special, or consequential damages arising from the use of our products. To receive service under warranty, the original manufacturer part must be returned for examination by an authorized service center. Shipping and handling charges may apply. If a defect is found, NAT will either repair or replace the product at its discretion.

DO NOT RETURN TO STORE

For Customer Service:

Email: feedback@natitools.com or Call 1-800-348-5004

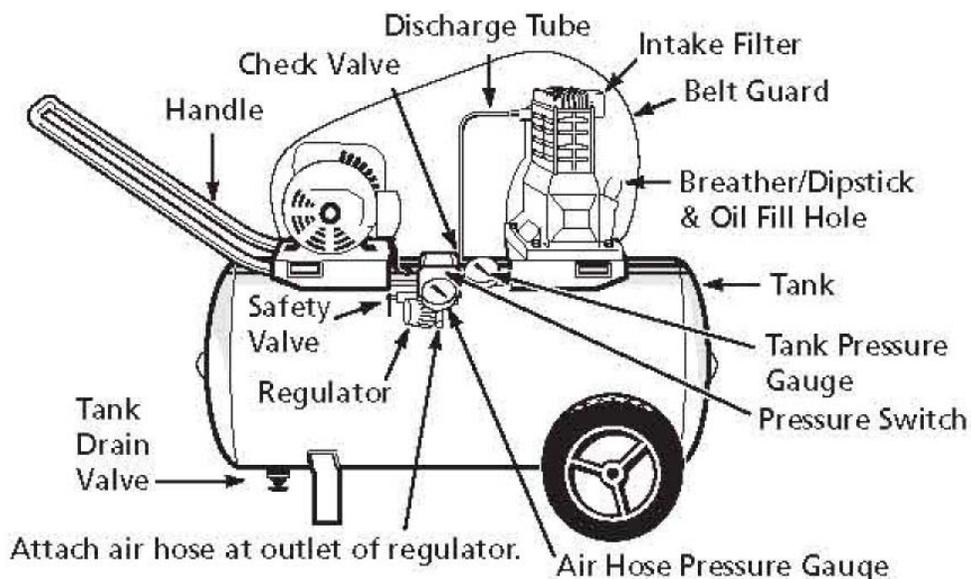


Figure 1