

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



8 Gallon Air Compressor

Model: 8550, 38468

1-YEAR LIMITED WARRANTY FOR NON-COMMERCIAL USE



**DO NOT RETURN THIS
PRODUCT TO THE RETAILER!**

Replacement parts:

Replacement parts for this tool are available at our authorized services centers across the USA. For servicing, contact us at the email address or 800# below. Please be prepared to provide the model# located below the pump on the product (directly above the UPC code) and purchase date along with your proof of purchase. Please use the 4 digit number listed in the parts breakdown diagram for all parts orders (where applicable).

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.

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, the air compressor/pump will need to be fitted 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).

Important Safety Instructions

RISK OF EXPLOSION OR FIRE:

It is normal for electrical contacts within the motor and pressure switch to spark. Always operate the compressor in a well ventilated area free of combustible materials such as gasoline and solvent vapors. If spraying flammable materials, place the compressor at least 20 feet away from the spray area (an additional length of hose may be required).

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

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

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.

Unattended operation of this compressor could result in personal injury or property damage. Always remain with the compressor when it is operating.

RISK OF BURSTING

Failure to properly drain condensed water from the tank can cause rust and thinning of the tank. 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. Never make any unauthorized modifications to the unloader valve, safety valve or any other components which control tank pressure. The tank is designed to withstand specific operating pressures. Never make any adjustments or parts substitutions to alter the factory set operating pressures.

Excessive vibration can weaken the air tank and cause rupture or explosion. Exceeding the operating pressure of air tools can cause them to explode. For essential control of air pressure, you must regulate the air using an air regulator (or install one if not provided) on the air outlet.

RISK OF BURNS

Touching exposed metal such as the compressor head or outlet tubes can result in serious burns. Never touch any exposed metal parts or compressor during or immediately after operation. The compressor will remain hot for several minutes after use. Do not touch areas around protective shrouds or attempt maintenance until the compressor has cooled down completely.

RISK OF PROPERTY DAMAGE WHEN TRANSPORTING

Oil can leak or spill and could result in fire or breathing hazards, serious injury, or death. Oil leaks will damage carpet, paint or other surfaces in vehicles or trailers. Always place compressor on a protective mat when transporting to protect against damage to vehicle from leaks. Remove compressor from vehicle immediately upon arrival.

AIR COMPRESSOR SPECIFICATIONS AND ELECTRICAL INFORMATION

Specifications:

| | |
|---------------------------|--------|
| Voltage..... | 120V |
| Peak Horsepower..... | 1.5 |
| Amperage..... | 13A |
| RPM (no load speed) | 3200 |
| Phase | Single |
| Hertz..... | 60Hz |
| Max operating pressure | 125psi |

POWER SUPPLY

WARNING: YOUR COMPRESSOR MUST BE CONNECTED TO A 120V BRANCH CIRCUIT WITH A MINIMUM 15-AMP. 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 and if you are unsure if your outlet is or not, contact a qualified electrician.

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

If this compressor malfunctions or breaks down, grounding provides a path of least resistance for the electric current and reduces the risk of shock. This cut-off is equipped with a cord that has a grounding conductor and plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

TO MAINTAIN PROPER GROUNDING, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MATTER.

120V OPERATION

Your compressor is ready to run using a 120V electrical supply straight from the factory. 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, they are not in accordance with local codes and ordinances. Never use in Canada.

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 that have

3-prong grounding type plugs and 2-hole receptors.

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.

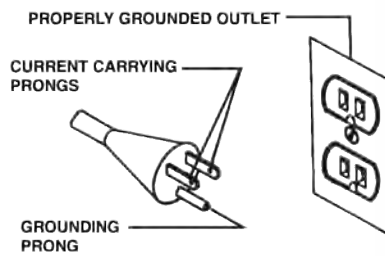


FIGURE 1

| LENGTH OF CONDUCTOR | WIRE SIZES REQUIRED (AMERICAN WIRE GAUGE) 120V 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 down stroke, 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.

COOLING SYSTEM

This compressor contains an advanced cooling fan. The cooling fan is working when air is being expelled.

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 pressurized air to remain inside the air tank.

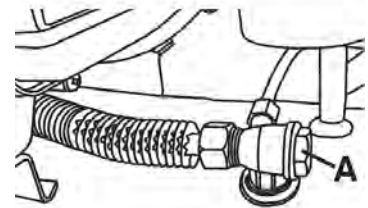


FIGURE 3

DRAIN VALVE (A) FIG.4

The drain valve is located at the bottom center of the air tank and is used to drain condensation from the tank at the end of each use. Turn valve clockwise to drain condensation.

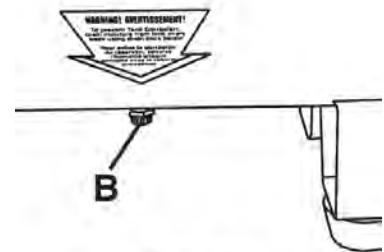


FIGURE 4

ON/AUTO-OFF SWITCH (C) FIG.5

Turn this switch ON to provide power to the automatic pressure switch and OFF to remove power at the end of each use.

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' or maximum pressure.

REGULATOR (E & F) FIG.5

The air pressure coming from the air tank is controlled by the regulator (E). To unlock the regulator, turn the regulator lock ring (F) counterclockwise and then turn the regulator clockwise to increase pressure and counterclockwise to decrease pressure, tighten the regulator lock ring to relock it into position. 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. This process may require expelling air from the air outlet, hose, tool, or accessory.

OUTLET PRESSURE GAUGE(G) 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 (H) FIG. 5.

The tank pressure gauge indicates the air pressure in the tank.

SAFETY VALVE (I) FIG. 5. If the pressure switch does not shut off the air compressor at its cutout pressure setting, this safety valve will protect against high pressure by popping out at its 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. Daily pull the ring 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.

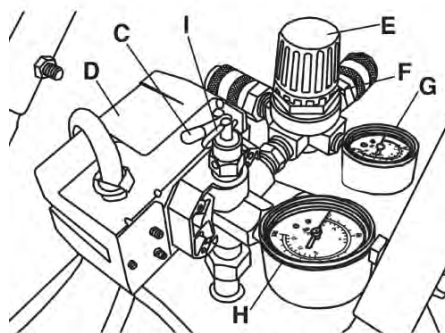


FIGURE 5

MOTOR THERMAL OVERLOAD PROTECTOR (RESET (J) FIG. 6).

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 (J) after 15 minutes.

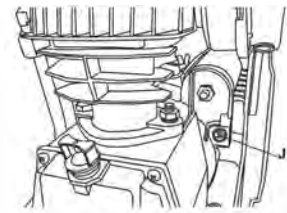


FIGURE 6

MOTOR THERMAL OVERLOAD PROTECTOR (RESET (J) FIG. 6).

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 (J) after 15 minutes.

ASSEMBLY AND LOCATION OF THE AIR COMPRESSOR

Your compressor requires some assembly. Install intake filter (A) Fig.7 to the cylinder cover. Remove plastic cap and install the oil breather cap (B) to the crankcase cover. Install both wheels (C) using the large hex. bolts, spring washers and hex. nuts supplied. Then install the 2 rubber feet (D) using the small hex. bolts, washers, spring washers and hex. nuts. Install handle (E) and the storage compartment (not shown) to the tank using hex. bolts, washers, spring washers and hex. nuts. where applicable.

Operate the air compressor in a cool, dry, clean and 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.

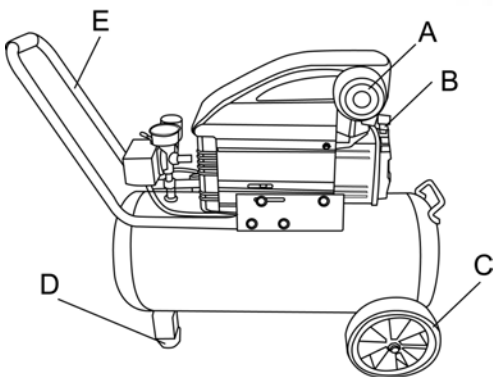


FIGURE 7

BREAK-IN PROCEDURES

NOTE: MAKE SURE THAT YOU HAVE FILLED THE CRANKCASE WITH COMPRESSOR OIL UP TO THE CENTER DOT OF THE OIL LEVEL AS DESCRIBED IN THE MAINTENANCE SECTION AND THAT ALL ASSEMBLY INSTRUCTIONS ABOVE HAVE BEEN FOLLOWED BEFORE

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

- A. Set the pressure switch to the OFF position.
- B. Plug the power cord into the correct branch circuit receptacle.
- C. Turn the drain valve (B) Fig. 4 clockwise, opening it fully, to prevent air pressure build-up in the tank.
- D. Move the pressure switch to ON/AUTO. 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.
- F. After 15 minutes, close the drain valve by turning the knob. The air receiver will fill to cut-out pressure and the motor will stop. The air compressor is now ready for use.

OPERATING PROCEDURES

Preparation for use:

1. Before attaching air hose or accessories, make sure the OFF/AUTO is set to OFF and the air regulator is closed.
2. Attach hose and accessories.

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 OFF/AUTO to ON and allow tank pressure to build. Motor will stop when tank pressure reaches cut-out pressure.
4. Open the regulator by turning lock ring to unlock it and then turning the regulator 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 a spray gun operating area.

After Use:

6. Set the switch to OFF.
7. Lift then turn the regulator button counterclockwise to set the outlet pressure to zero and finally push the button down again to lock in place.
8. Remove the air tool or accessory.
9. Pull ring on safety valve (I) Fig. 5, allowing air to bleed from the tank until tank pressure is approximately 20psi. Release safety valve ring.
10. Drain water from air tank. Turn drain valve (B) Fig. 4, clockwise to open.

WARNING!: WATER WILL CONDENSE IN THE AIR TANK. IF NOT DRAINED 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 (I) Fig. 5, and hold until air pressure has been released. The valve can then be removed, cleaned, and reinstalled.

ALL ADJUSTMENTS OR REPAIRS MUST BE DONE WITH THE COMPRESSOR DISCONNECTED FROM THE POWER SOURCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY.

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. With the compressor on a relatively level surface, check oil level. Oil level should be centered with the red dot.
2. Drain condensation from tank.
3. Check for any unusual noise or vibration.
4. 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.

250 hours of use or six months (whichever comes first)

1. Change compressor oil. See following instructions.

2. Replace oil more often if compressor is used near paint spraying operations or in dusty environments.

CHANGING OIL

To change oil, oil must be drained from the crankcase by removing oil sight glass (A) Fig.8. Drain oil into a small receptacle and replace oil sight glass. To fill the crank case with oil, first unscrew and remove oil breather cap (B), **pour approximately 300ml of air compressor oil (SAE 10W30 or SAE 10W20 non detergent oil)** into crankcase oil opening (C) until the oil level reaches the center red dot on the oil sight glass. Retighten oil breather cap (B).

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

If your compressor fails to start, check to make sure the plug is properly connected to the outlet. Also, check for blown fuses or open circuit breakers in the line. If using an extension cord, try using a longer air hose instead and try restarting the compressor.

STORAGE

1. Set the OFF/AUTO button to OFF
 2. Lift and turn the regulator counterclockwise to set the outlet pressure to zero.
 3. Remove the air tool or accessory .
 4. Pull ring on safety valve (I) 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 (B) Fig. 4, clockwise, to open.
- NOTE: If drain valve is plugged, pull ring on safety valve (I) 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. Protect the electrical cord and air hose from damage by winding them loosely around the air compressor.
 8. Store the air compressor in a clean and dry location.

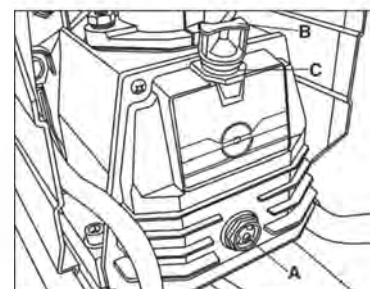


FIGURE 8

Troubleshooting Guide

| Symptom | Possible Cause(s) | Corrective Action |
|------------------------|---|--|
| Not starting | <ul style="list-style-type: none"> -Fuse blown or circuit breaker tripped -Loose electrical connections -Overheated motor | <ul style="list-style-type: none"> -Check voltage, eliminate extension cord or reset -Check wiring connections -Press the reset button or wait for automatic reset (15 minutes) |
| Low pressure | <ul style="list-style-type: none"> -Air leak in safety valve -Restricted air filter -Defective check valve | <ul style="list-style-type: none"> -Check valve manually by pulling upwards on ring. If condition persists replace valve -Clean or replace as necessary -Replace check valve |
| Safety valve releasing | <ul style="list-style-type: none"> -Defective pressure switch or improper adjustment | <ul style="list-style-type: none"> -Check for proper adjustment and if problem persists, replace pressure switch |
| Oil discharge in air | <ul style="list-style-type: none"> -Improper oil viscosity -Too much oil in crankcase -Compressor overheated -Restricted air filter | <ul style="list-style-type: none"> -Replace oil with SAE 10W30 or SAE 10W20 non detergent oil (300ML) -Drain crankcase and fill to proper level -Air pressure regulated too high - Replace filter |

Limited Manufacturer Warranty

North American Tool Industries (NATI) makes every effort to ensure that this product meets high quality and durability standards. NATI 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, NATI will either repair or replace the product at its discretion.

DO NOT RETURN TO STORE

For Customer Service:

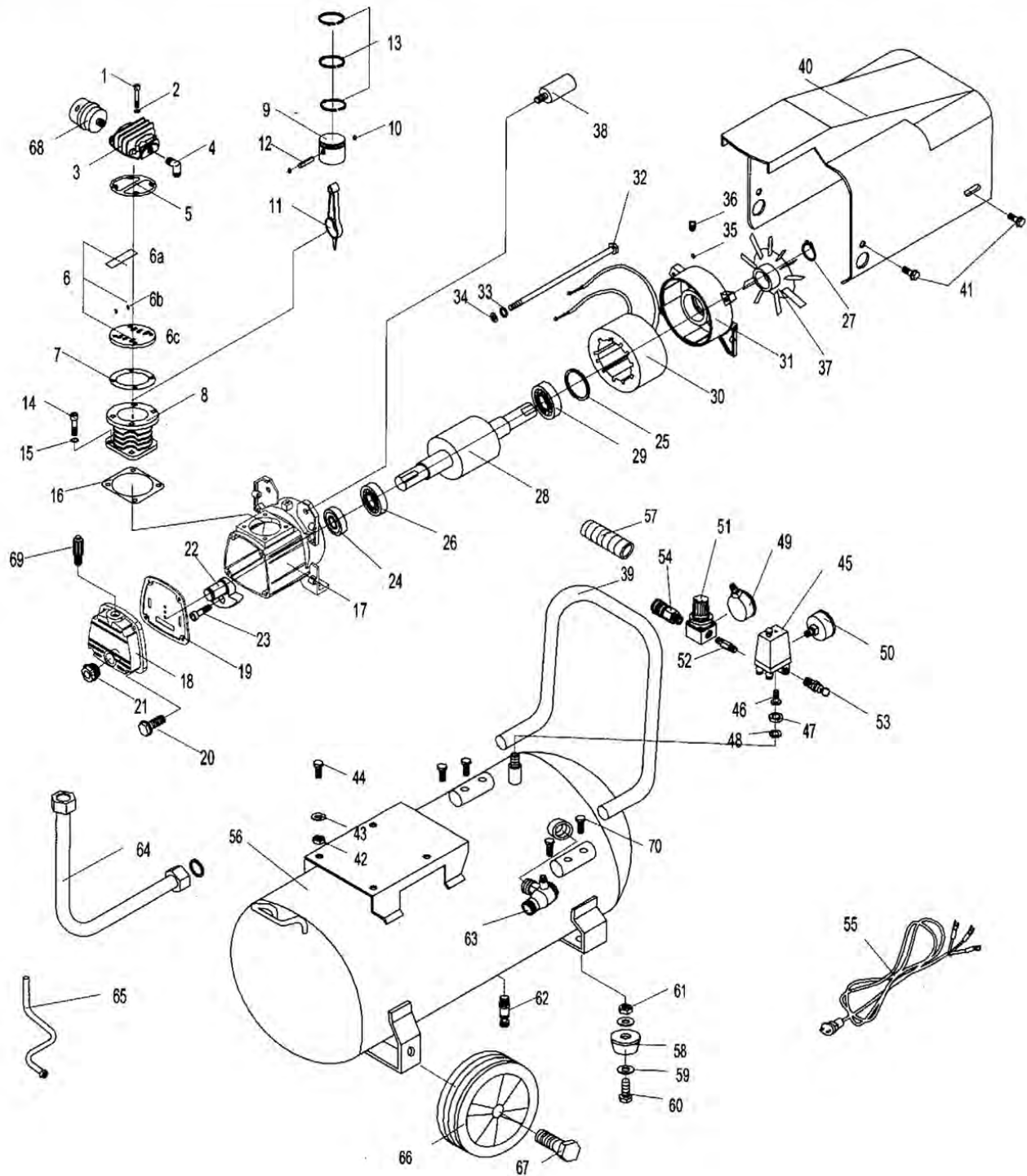
Email: feedback@natitools.com or Call 1-800-348-5004



20 GALLON AIR COMPRESSOR

Model: 8550, 38468

Parts List



Call 1-800-348-5004 for assistance or replacement parts

Please provide the following information:

- Model number
- Part description and number as shown in parts list
- Serial number (if any)

Address any correspondence to:

North American Tool Industries
 84 Commercial Rd
 Huntington, IN 46750

| # | Description | QTY. | # | Description | QTY. |
|----|---------------------------|------|----|----------------------------|------|
| 1 | Socket Hex Screw | 4 | 35 | Lock Washer | 1 |
| 2 | Spring Washer | 4 | 36 | Earthling Mark | 1 |
| 3 | Cylinder Cover | 1 | 37 | Motor Fan (axial) | 1 |
| 4 | Elbow | 1 | 38 | Running Capacitor | 1 |
| 5 | Gasket of Cylinder Cover | 1 | 39 | Handle (U-Profile) | 1 |
| 6 | Reed Valve Assembly | 1 | 40 | Motor Cover | 1 |
| 6a | Spring Plate | 1 | 41 | Hex Flange Screw | 4 |
| 6b | Pin | 2 | 42 | Lock Nut | 4 |
| 6c | Valve Plate | 1 | 43 | Plain Washer | 4 |
| 7 | Top Gasket of Cylinder | 1 | 44 | Socket Hex Screw | 4 |
| 8 | Cylinder | 1 | 45 | Pressure Switch | 1 |
| 9 | Piston | 1 | 46 | Nipple of Pressure Switch | 1 |
| 10 | Circlip for Hole | 2 | 47 | Nut of Pressure Switch | 1 |
| 11 | Rod | 1 | 48 | Gasket of pressure Switch | 1 |
| 12 | Piston Pin | 1 | 49 | Pressure Gauge Radial - 40 | 1 |
| 13 | Piston Ring Assembly | 1 | 50 | Pressure Gauge Axial - 50 | 1 |
| 14 | Socket Hex Screw | 2 | 51 | Regulating Valve Assembly | 1 |
| 15 | Spring Washer | 2 | 52 | Switch Nipple | 1 |
| 16 | Bottom Gasket of Cylinder | 1 | 53 | Safety Valve (1/4" NPT) | 1 |
| 17 | Crank Case | 1 | 54 | Quick Coupler (Female) | 1 |
| 18 | Cover of Crank Case | 1 | 55 | Power Cable with Plug (UL) | 1 |
| 19 | Gasket of Crank Case | 1 | 56 | Tank | 1 |
| 20 | Hex Flange Screw | 4 | 57 | Sleeve of Handle | 1 |
| 21 | Oil Gauge | 1 | 58 | Rubber Foot | 2 |
| 22 | Crank Shaft | 1 | 59 | Plain Washer | 4 |
| 23 | Socket Hex Screw | 1 | 60 | Hex Screw | 2 |
| 24 | Shaft Lip Seal | 1 | 61 | Nut | 2 |
| 25 | Wave Spring Washer | 1 | 62 | Drain Valve | 1 |
| 26 | Bearing | 1 | 63 | Check Valve | 1 |
| 27 | Circllet for Shaft | 1 | 64 | Air Delivery Pipe | 1 |
| 28 | Rotor | 1 | 65 | Release Pipe | AR |
| 29 | Bearing | 1 | 66 | Wheel | 2 |
| 30 | Stator | 4 | 67 | Axle | 2 |
| 31 | Rear Bracket | 1 | 68 | Air Filter | 1 |
| 32 | Hex Screw | 4 | 69 | Breathe Nozzle | 1 |
| 33 | Spring Washer | 4 | 70 | Hex Screw | 4 |
| 34 | Plain Washer | 4 | | | |