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

5HP 80 GALLON TWO STAGE COMPRESSOR

Models: 7654

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.

CAUTION:

FOR YOUR OWN SAFETY READ INSTRUCTION MANUAL COMPLETELY AND CAREFULLY BEFORE OPERATING THIS COMPRESSOR.

Failure to follow all instructions as listed below may result in electrical shock, fire, and/or serious personal injury.

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).

DISCLAIMER:

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 use, existing warranties are void, and all warranties and liabilities whatsoever for any loss, personal injury, or damage.

SPECIFICATIONS:

Tank Size: 80 Gallons

PUMP RPMs: 650 RPM

CFM: 20 CFM @ 40 PSI

Max Pressure: 175 PSI

Thermal overload protection

Two Stage cast iron oil lubricated

SAFETY WARNINGS

Disconnect power and release all pressure from the system before attempting to install, relocate, service or perform any maintenance on this compressor.

Never store flammable liquids or gases near the compressor. Electric arcs can be produced by the electric motor and pressure switch.

Do not operate the compressor without the belt guard in place. Moving parts can cause serious injuries.

1) Follow all electrical and safety codes along with National Electrical Codes (NEC) and Occupational Safety and Health Act (OSHA).

2) Electric motors and starters must be securely and properly grounded.

3) Do not allow the cable to come into contact with oil, grease, chemicals or sharp objects. Do not allow kinks to form in the cable.

4) Do not exceed the pressure limits for any component in or connected to the system.

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

5) Inspect the compressor to make sure that all the fittings, bolts, etc., are tight and secure before starting the compressor.

6) Do not touch the compressor or motor while it is in operation. These parts become HOT during normal operation. Allow the unit to cool completely before performing maintenance or repairs.

7) Do not increase the settings on control components. These settings provide safety against over pressurization. The pressure switch settings are preset at the factory for normal operating conditions and increasing the settings will result in compressor and motor damage.

8) Regularly inspect the hoses, plugs, fittings, piping, wires, etc., for signs of damage, weakness or leakage before starting and using the compressor.

9) Fast moving air can stir up dust and debris, which may be harmful. Release the air slowly when draining moisture or depressurizing the unit.

10) Tanks rust and weaken with moisture. Ensure the tank is drained daily to avoid rust formation.

11) Inspect the air tank for rust, pin holes, cracks (especially in rear welds), bulges and other changes in the tank.

12) Never weld or drill holes in the air tank.

13) Keep others at a safe distance from the work area.

SPRAYING PRECAUTIONS

1) Always wear a respirator and safety glasses when spraying.

2) Always spray in an open, well-ventilated area to prevent fumes from accumulating and causing fire and health hazards. Fumes are dangerous.

3) Do not spray materials near open flames and electrical equipment.

4) Do not smoke while spraying insecticides, paint or other flammable substances.

5) Do not direct paint or other sprayed material at the compressor. Make sure the compressor is as far away from the spraying area as possible to minimize overspray accumulation on the compressor.

6) When spraying solvents or chemicals, follow the instructions that are provided by the manufacturer.

7) Never use air pressurized accessories or parts in the air system that are not suitable for 150 PSI.

When high humidity is present or when a compressor is used for an extended period of time, moisture will collect in the tank. This condensation can cause water droplets to appear in paint that is sprayed. To eliminate this moisture, drain the tank often to reduce the buildup. A filter in the air line can help eliminate this moisture when it is located as near to the gun as possible.

INSTALLATION

In order to receive maximum performance and long life from your compressor, the following instructions should be read carefully and all points regarding installation and operation of the unit should be noted and observed. Carefully reading this manual before connecting anything to the motor or compressor is necessary for optimum trouble-free operation.

INSPECTION

Check for possible damage from transit and test the pulley by turning it freely with your hands. **Report and damage to the delivery carrier immediately.**

LOCATION

Select a clean, dry, and well-lit location. In cold climates, the compressor should be installed in a heated building. Insulate cold water or other low temperature pipes that pass overhead to avoid possible collection and dripping condensate onto the compressor motor that could cause rust and/or motor shorting. **DO NOT** install the compressor in a boiler room, paint spray room, or area where sandblasting occurs. If acid or dust is in the air where the compressor is operating, the compressor intake should be piped to the outside. This intake pipe should be increased one pipe size for every twenty (20) feet of run and the intake filter should be installed at the end of the pipes with a hood to protect them from the elements. Special size filters are required for pipe away.

If the compressor has to be located where the motor will be

exposed to appreciable quantities of water, oil, dirt, acid, or alkaline fumes, the motor must be of special construction to avoid rapid deterioration; I.e. TEFC.

Unless the base is exactly level, shims will probably be required. Any space between base and foot should be shimmed rather than drawing the foot down thus placing strain on the unit. When unit is properly shimmed, vibration will be at a minimum.

Allow sufficient space around the compressor so that it is accessible from all sides for maintenance. Mount the unit with the pulley towards the wall at leas 18 inches between pulley & wall.

POWER SUPPLY & WIRING

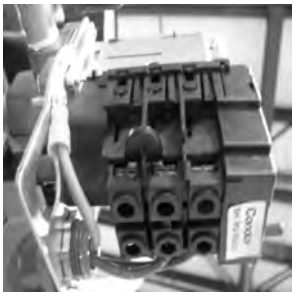
WARNING: Installation should be executed by a licensed electrician.

NOTE: All electrical connections must be tightened before starting. This includes connections to the motor junction as well as the Condor Switch or Magnetic Starter. This shall include all factory connections. **Repeat:** Check ALL electrical connections before startup.

Wiring should be installed by a licensed electrician who is familiar with requirements of the National Board of Fire Underwriters and of what the local inspectors recommend. Consult your local electrical contractor regarding electric codes and recommended wire sizes.

SINGLE PHASE MOTORS:

Hook your hot leads to the wiring terminals opposite of the motors wires. Hook one hot lead to 1L1. Another hot lead to 3L2. Hook ground wire to our ground wire.



THREE PHASE MOTORS:

Hook one hot lead to 1L1 lug, hook another to the 3L2 lug and then hook the third to 5L3. Run ground wire to our ground lug. Start compressor and check for rotation. If rotation is reversed, shut off power and switch two (2) of the hot leads. This will reverse the polarity and the motor will run the opposite direction.

Note: Make sure that your power supply and internal wiring are adequate and that the available frequency and voltage correspond to the motor nameplate and starter. A 230 volt motor will not work sufficiently on a nominal 208 volt system. Even if the actual voltage is up to 208 volts, the 10-12 volt drop during start-up (this is average, but not a high figure for commercial buildings) may cause the motor to labor and blow fuses or heater elements. Do not accept the nominal figure for line voltage, but rather measure it with a voltmeter during a period of maximum power demand.

AIR INTAKE

The compressor is equipped with an intake filter that requires no piping. If it is necessary to pipe the intake outdoors, see the instructions in this manual.

PIPE CONNECTION

A flexible connector should be used between the compressor tank and the building piping or connection to after cooler or other similar equipment in order to minimize noise, vibration, vibration damage, and wear and tear.

CAUTION: Never install a shut-off valve (e.g. glove or gate valve) between the compressor discharge opening and the receiver unless a safety valve is installed in the line between this valve and the compressor.

Never operate the pump at a pressure or speed in excess of those recommended by the factory.

TANK

Tank feet should be placed on vibration isolator pads (1/4” thick or less) available through your dealer. Anchor bolts should be gently snug, **but not tight,** to allow for vibration. Remember, the bolt is only a guide to hold the compressor in place. Do not

over tighten the legs of the tank against the pads, it will damage your tank.**CAUTION:** DO not store tank on dirt or on an uneven surface. Over time, the tank will tilt causing the pump to fail from lack of lubrication.

STARTING

• Check oil level before starting. The oil should be in the center of the sight glass.

• Turn the compressor over a few revolutions by hand to make sure that everything is free.

• Check belt tension. (Should be 1/2” of play.)

• Remove rags, tools, and any other objects from the vicinity of the compressor.

• Never put hands on the belts of an idle unit unless you are sure the main motor switch is off.

• Note the direction of the arrow stated on the belt guard and be sure rotation is the same direction when running. Correct direction is counter-clockwise when standing facing the flywheel. Air should be drawn through the intercooler onto the cylinders for maximum cooling.

OPERATION & CARE

SERVICE

All units are shipped with break-in oil. Oil should be changed within the first 50 hours or 30 days of use (whichever comes first). Use a Mobil RARUS 427 which is available through your dealer or any non-detergent 30W air compressor oil. **WARNING: DO NOT USE AUTOMOTIVE TYPE OIL.**

• Oil should be changed every 90 days. Oil level should be halfway level in the sight glass.

• If oil is milky an oil change will be required.

• Inspect air filters weekly and clean or change as needed.

BELT ADJUSTMENT

Always pull the motor disconnect switch before working on the belts so the motor cannot start up unexpectedly. When belt tension is adjusted properly, the belts can be depressed at a point midway between the motor pulley and the flywheel approximately one half inch. Loose belts will slip on the motor pulley and cause excessive heating and wear. A belt that is too tight will overload the bearings. Adjustments can be made by sliding the motor along its base. When installing new belts, it is necessary that the motor bolts be loosened and the motor moved toward the compressor. The new belts can be installed without damage or strain. Over time belts stretch and it is recommended that all belts be changed at the same time. To adjust the belts, loosen the four motor frame nuts and adjust the single bolt head on the belt tensioner. (Figure 1)

Figure 1

DAILY CARE

• Check oil level in crankcase and, if necessary, add sufficient oil to bring to (but not above) halfway level in the sight glass (without the motor running).

• Drain moisture from air receiver. (Figure 2)

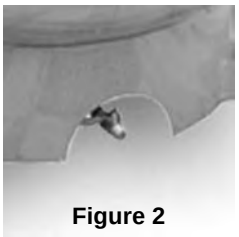


Figure 2

• Stop, look, and listen for unusual noises, failure to compress, overheating, vibration, or belt slippage. Correct before damage occurs.

MAINTENANCE

Before starting maintenance, ensure the air compressor is turned off, disconnected from the power source, the tank is drained and the compressor is cooled down completely.

Never repair a cracked tank or personal injury could occur.

Daily:

- Check oil level

- Drain accumulated liquid from tank

- Check for oil leaks

- Check for unusual noise and/or vibrations

- Check all fasteners are secure

Weekly:

- Check safety relief valve. DO NOT DISSASEMBLE THE VALVE WITH AIR IN TANK.

- Inspect and clean air filter

- Clean breather holes on oil check dipstick

Monthly:

- Check for air leaks by applying a solution of soapy water around joints. Look for air bubbles around joints when the compressor reaches the pressure cut-out limit and pump turns off.

- Check all nuts and bolts are tight

Six months or 250 operating hours:

- Change compressor oil

Replace oil more frequently when used in dusty operating environments.

CHANGING THE OIL

1) Place oil drain pan below the oil drain plug.

2) Remove oil cap to allow the air to enter the crankcase.

3) Remove oil drain plug.

4) Allow oil to drain completely.

5) Clean and replace oil drain plug.

6) Refill crankcase with SAE 20 or SAE 30 weight non-detergent oil to the red dot on the oil level sight glass. Be careful not to overfill the tank.

Do not use multi-grade, ATF, hydraulic fluid, two-cycle oil or any other improper oils because it will void the warranty. Using automotive engine oils may cause carbon deposits on valves and can shorten valve life.

Changing Filter

Never run the compressor without an intake air filter or with a clogged intake air filter. Use compressed air to blow the filter clean. If the filter

Symptom	Possible Cause(s)	Possible Solutions
Slow pumping or insufficient pressure	Clogged inlet filter	Disassemble and clean thoroughly
	Leaks in air lines, valves, fittings, etc.	Locate by using soapy water if necessary; replace or tighten threaded parts
	Compressor too small for equipment application	Check air requirements vs. compressor capacity and consult dealer
	Leaking head valves	remove hold-down covers then remove valve for inspection. Repair or replace faulty valves.
	If the power network in the building is 208 volts, order a 208 volt motor. If the starting voltage is less than 90% of the motor nameplate voltage, the motor cannot be expected to start	The interior building wire must be corrected.
Compressor overheating	Pump running backwards	Reverse direction. Proper rotation is counter-clockwise when facing the flywheel
	One or more head valves are failing to seal properly	Check seals
	Blown cylinder head gasket	Replace cylinder head gasket
	Lack of oil	Check oil level
	Dirt in intercooler fans or cylinder fans	Blow out dirt with air
	Poor ventilation and ambient temperature too high where the compressor is stored	Store compressor in a cool, dry location

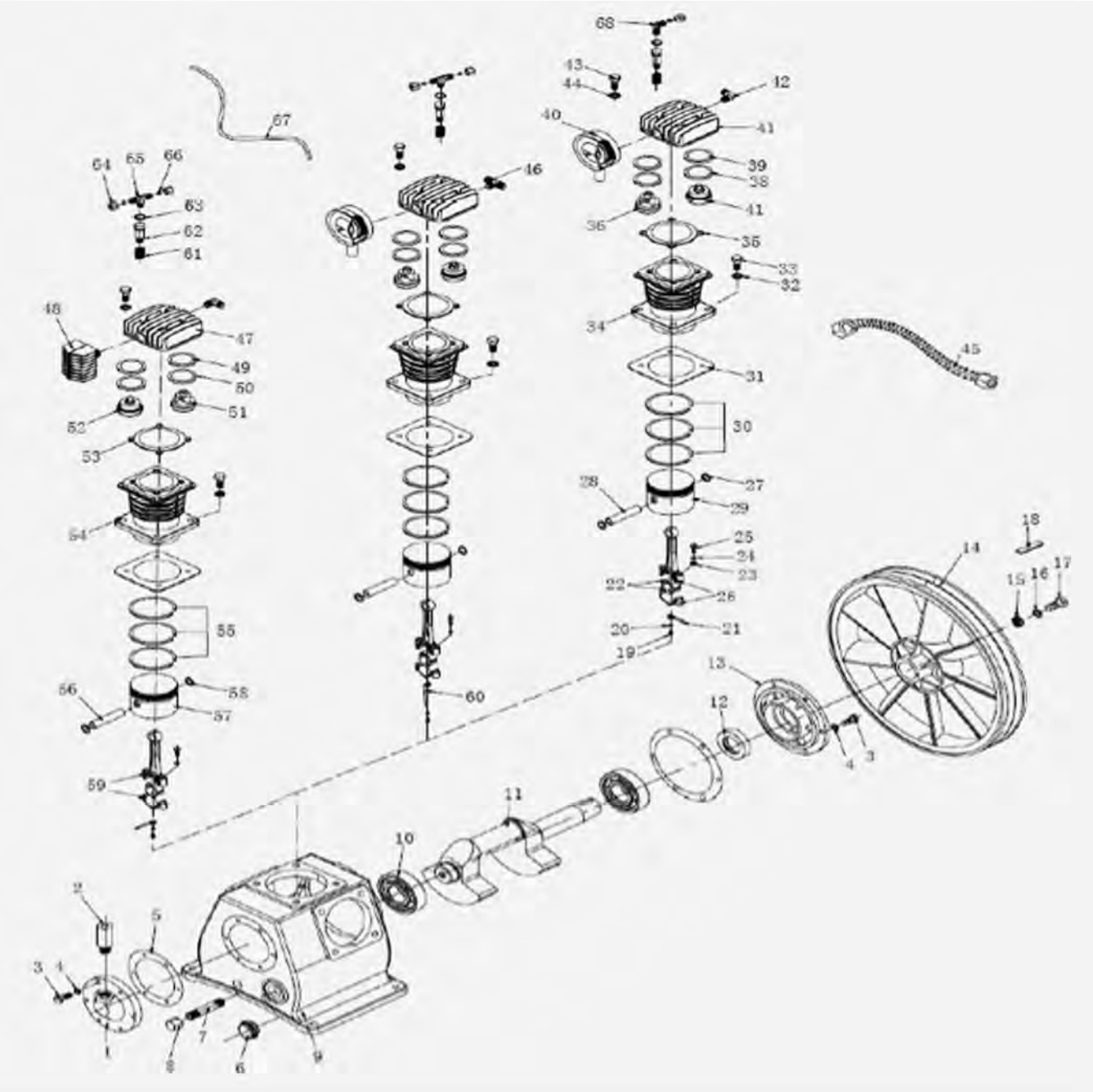
Limited Manufacturer Warranty

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 2-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. NATI 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

Parts List Models: 7654



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

No.	Description	Qty	No.	Description	Qty
1	Rear Cover	1	35	Cover	2
2	Breather	1	36	Inlet Valve	2
3	Bolt	8	37	Exhaust Valve	2
4	Washer	8	38	Copper Backing	4
5	Gasket	2	39	O-Ring	4
6	Oil Sight Glass	1	40	Air Filter	2
7	Oil Drain Pipe	1	41	Cylinder Cover	2
8	Drain Plug	1	42	Elbow	2
9	Crank Case	1	43	Washer	12
10	Bearing	2	44	Bolt	12
11	Crank Shaft	1	45	Exhaust Pipe	2
12	Oil Seal	1	46	T-tee	1
13	Front Cover	1	47	Cylinder Cover	1
14	Pulley	1	48	Cooler	1
15	Nut	1	49	O-Ring	2
16	Washer	1	50	Copper Backing	2
17	Bolt	1	51	Inlet Valve	1
18	Bond	1	52	Exhaust Valve	1
19	Screw	3	53	Cylinder Gasket	1
20	Wasehr	3	54	Cylinder	1
21	Oil Splasher	2	55	Piston Ring Set	1
22	Bearing Bush	6	56	Wrist Pin	1
23	Nut	6	57	Piston	1
24	Wasehr	6	58	Clip	2
25	Bolt	6	59	Connecting Rod	1
26	Connecting Rod	2	60	Oil Splasher (straight)	1
27	Clip	4	61	Spring	3
28	Wrist Pin	2	62	Plunger Piston	3
29	Piston	2	63	O-Ring	3
30	Piston Ring Set	2	64	Hold-Down Nut	5
31	Cylinder Lower Gasket	3	65	Retainer Ring	5
32	Washer	12	66	T-Coupling	2
33	Bolt	12	67	Inlet Unloading Tube	2
34	Cylinder	2	68	L-Coupling	1