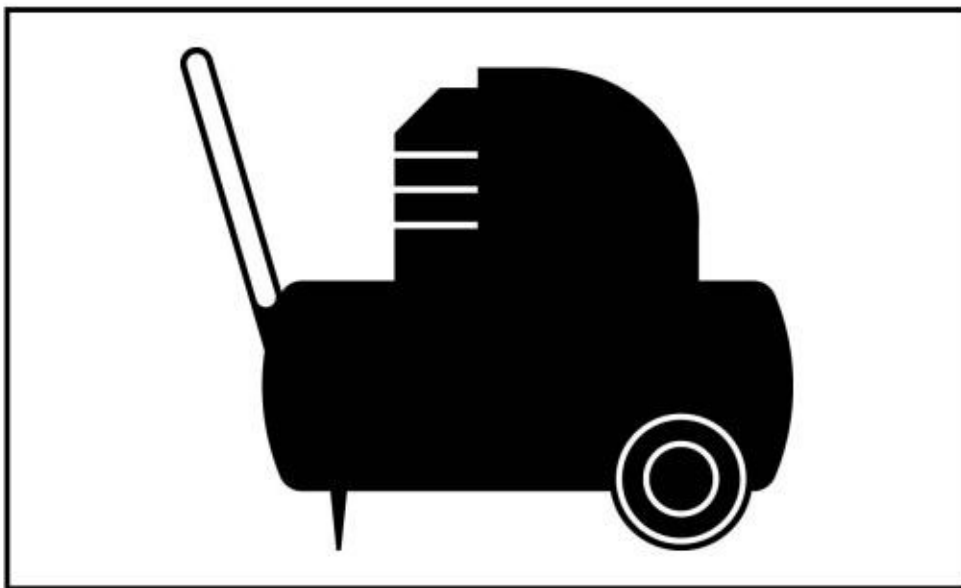


OIL LUBE - DIRECT DRIVE

AIR COMPRESSOR

OPERATING INSTRUCTION



IMPORTANT :

**PLEASE READ CAREFULLY BEFORE STARTING OPERATIONS.
THE CONTENTS ARE FOR GENERAL INFORMATION OF ALL THE
SIMILAR MODELS.**

Record these numbers in the space below and retain for future reference :

Power source : _____ V _____ Hz 1 Phase

Model No : _____

Serial No : _____

Purchased Date: _____

TABLE OF CONTENTS

PAGE

1 · IMPORTANT SAFETY INSTRUCTION	-----	3-4
2 · GENERAL DESCRIPTION	-----	5
3 · ON RECEIPT INSPECTION	-----	5
4 · GENERAL REQUIREMENT	-----	5
5 · INSTALLATION	-----	5-7
6 · COMPRESSOR PUMP LUBRICATION	-----	8
7 · START UP PROCEDURE	-----	8
8 · MAINTENANCE CHECK LIST	-----	9
9 · STORAGE	-----	9
10 · TROUBLE SHOOTING	-----	10-11
11 · LIMITED WARRANTY	-----	12

1 · IMPORTANT SAFETY INSTRUCTION

IMPROPER OPERATION OR MAINTENANCE OF THIS PRODUCT COULD RESULT IN SERIOUS INJURY AND PROPERTY DAMAGE.



WARNING



PLEASE READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE USING YOUR AIR COMPRESSOR.
KEEP THIS BOOKLET FOR FUTURE REFERENCE.

1-1 : RISK OF FIRE



- DO NOT SPRAY COMBUSTIBLE OR FLAMMABLE LIQUID OR PAINT WITHIN A CONFINED AREA. SPRAY AREA MUST BE WELL VENTILATED.
- DO NOT SMOKE WHILE SPRAYING OR SPRAY WHERE SPARK OR FLAME IS PRESENT.
- KEEP COMPRESSOR AT LEAST 12 ~ 18 FEET AWAY FROM SPRAYING AREA AND ALL EXPLOSIVE VAPORS.

1-2 : RISK OF ELECTRICAL SHOCK



- DISCONNECT COMPRESSOR FROM ELECTRICAL SUPPLY CIRCUIT BEFORE SERVICING.
- DO NOT EXPOSE COMPRESSOR TO RAIN OR OPERATE IN A WET AREA.
- NEVER USE THE AIR COMPRESSOR WITHOUT CONNECTION TO A PROPERLY GROUNDED OUTLET WITH THE SPECIFIED VOLTAGE AND FUSE PROTECTION.
- IMPROPER GROUNDING CAN RESULT IN ELECTRICAL SHOCK.

1-3 : RISK OF EXPLOSION



- DRAIN TANK DAILY. CONDENSED WATER WILL CAUSE RUSTING AND RISK OF TANK RUPTURE OR EXPLOSION.
- DO NOT REPAIR, MODIFY OR WELD TANK. RETURN TO AUTHORIZED SERVICE CENTER IF REPLACEMENT IS REQUIRED.
- DO NOT ADJUST REGULATOR TO RESULT IN OUTPUT PRESSURE GREATER THAN MARKED MAX. PRESSURE OF ATTACHMENT.
- PRESSURE SWITCH IS SET AT THE FACTORY FOR OPTIMUM PERFORMANCE OF YOUR PARTICULAR MODEL. NEVER BYPASS OR REMOVE PRESSURE SWITCH AS SERIOUS DAMAGE TO EQUIPMENT OR PERSONAL INJURY COULD RESULT FROM TOO HIGH OF PRESSURE.
- BEFORE STARTING COMPRESSOR, PULL SAFETY VALVE RING TO MAKE SURE THE VALVE MOVES FREELY. THE SAFETY VALVE IS FACTORY INSTALLED TO PREVENT THE AIR RECEIVER FROM DAMAGE SHOULD MALFUNCTION OCCUR IN THE PRESSURE SWITCH. IT IS FACTORY SET AT A SPECIFIC LIMIT FOR YOUR PARTICULAR MODEL, AND SHOULD NEVER BE TAMPERED WITH. ADJUSTMENT BY USER WILL AUTOMATICALLY VOID WARRANTY.

1-4 : RISK OF BURNS



- HOT SURFACE CAN CAUSE SERIOUS INJURY. NEVER TOUCH ANY EXPOSED METAL PARTS ON COMPRESSOR DURING OR IMMEDIATELY AFTER OPERATION. TOUCHING THESE AREAS MAY CAUSE SEVERE BURNS.
- DO NOT REACH AROUND PROTECTIVE SHROUNDS OR ATTEMPT MAINTENANCE UNTIL UNIT HAS BEEN ALLOWED TO COOL.

1-5 : RISK TO HEALTH



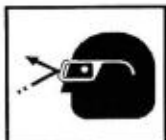
- DO NOT USE COMPRESSED AIR FOR BREATHING. WHEN SPRAYING USE RESPIRATORY PROTECTION IN A WELL VENTILATED AREA.
- COMPRESSOR AIR FROM THE UNIT MAY CONTAIN POISONOUS VAPOURS WHICH IS NOT SUITABLE FOR INHALEING AND COULD BE HARMFUL TO YOUR HEALTH.
- WORK IN AN AREA WITH GOOD VENTILATION.

1-6 : RISK FROM MOVING PARTS



- UNIT STARTS AUTOMATICALLY. DO NOT OPERATE WITH GUARDS OR COVERS REMOVED OR BROKEN.
- ANY REPAIR REQUIRED ON THE PRODUCT SHOULD BE PERFORMED BY AUTHORIZED SERVICE CENTER PERSONNEL.
- DO NOT TOUCH MOVING PARTS.

1-7 : RISK FROM FLYING OBJECTS



- ALWAYS WEAR ANSI Z87.1 APPROVED SAFETY GLASSES WITH SIDE SHIELDS WHEN USE THE AIR COMPRESSOR. ALWAYS WEAR PROPER SAFETY EQUIPMENT WHILE USING COMPRESSED AIR.
- DO NOT DIRECT AIR STREAM TOWARD ANY PARTS OF THE BODY OR AT OTHER PEOPLE.
- UNPLUG POWER CORD AND DRAIN ALL AIR PRESSURE FROM TANK BEFORE SERVICING AND AFTER EACH USE.

1-8 : RISK OF PROPERTY DAMAGE WHEN TRANSPORTING COMPRESSOR



- ALWAYS PLACE COMPRESSOR ON A PROTECTIVE MAT WHEN TRANSPORTING TO PROTECT AGAINST DAMAGE TO VEHICLE FROM LEAKS.
- NEVER OPERATE COMPRESSOR ON A ROOF OR OTHER ELEVATED POSITIONS.
- ALWAYS OPERATE COMPRESSOR IN A STABLE POSITION TO PREVENT ACCIDENTAL MOVEMENT OF THE UNIT.

2 · GENERAL DESCRIPTION OF AIR COMPRESSOR

The air compressor pump works with the up and down of a piston in the cylinder. During the down-stroke of the piston, ambient air is drawn in through the inlet valve, while the discharge valve remains closed. During the up-stroke, the air is forced into the compressor tank through the discharge valve and the check valve. Through this controlled action, air is forced into the tank to a preset pressure. The pressure switch regulates the pressure and controls the stop/start of motor. Working air is not available until the pressure in the air tank built up. The air inlet filter openings must be kept clear of obstructions.

All tools require specific air pressure to operate properly. Consult your air tool manual for those requirements and safety instructions. There are a variety of air tools available that will operate efficiently with this air compressor. For best results, always compare the air tool requirements to your compressor output specifications. A tool that requires a lot of continuous air, such as a sander, will not operate effectively with a small tank compressor. A tool that requires little air, such as a brad nail gun, will operate with a small tank compressor very effectively. Learn your air tool power requirements, match your air tools to your compressor correctly and this compressor will perform effectively.

3 · ON RECEIPT INSPECTION

Each air compressor outfit is carefully tested and inspected before shipment. Every attempt is made to ensure safe and complete shipment of our products. It is the responsibility of the receiver of the goods to ensure the product has been shipped in full and has arrived in suitable condition. If there are any mechanical issues with your compressor, please contact us for service.

4 · GENERAL REQUIREMENT

It is your responsibility to ensure that the air compressor is properly readied for use, as well as maintained and serviced on a regular basis. Information has been included in this booklet outlining the suggested air compressor maintenance schedules and a trouble shooting guide. Be sure to follow the instructions in section 6.1 before turning your compressor on. It is important that you read this information and keep it in a safe place for future reference.

5 · INSTALLATION

5-1 : MECHANICAL

Use the compressor in a clean, dry and well ventilated area. The compressor should be located 12 ~ 18 inches from a wall or any other obstruction that would interfere with the air flow cooling function. Place the air compressor on a firm and level surface. The air compressor is designed with heat dissipation fins that allow for proper cooling. Keep the fins and other parts that collect dust or dirt clean. A clean compressor runs cooler and promotes longer life. Allow room for easy access to the air compressor for maintenance and service work.



**DO NOT OPERATE
ON UNLEVEL SURF ACES**



**DO NOT PLACE
IN A WET AREA**



**DO NOT EXPOSE
TO RAIN**

5-2 : ELECTRICAL

It is your responsibility to ensure that the air compressor is connected to power source in a safe and correct manner. Any electrical work should be carried out by a licensed electrician and installed in a way that meets all applicable codes and regulations. Failure to connect the air compressor correctly to power source may result in serious personal injury or damage to the equipment.

Please note that under normal conditions, the air compressor will operate intermittently. Should it be necessary to service your air compressor, ensure the power source has been shut down. This must be done to prevent personal injury or damage to the unit.

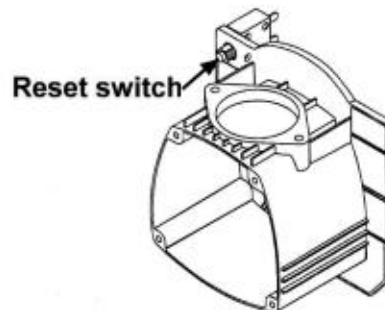
If the supply cord is damaged, it must be replaced by your dealer or all warranties and liabilities are void.

5-2-1 : MOTOR

Wiring must be done in a manner that the full voltage nameplate $\pm 10\%$ is available at the motor terminals during startup. Use of an incorrect power source will result in premature motor failure and is not covered by this compressor or motor manufacture's warranty.

5-2-2 : RESET SWITCH

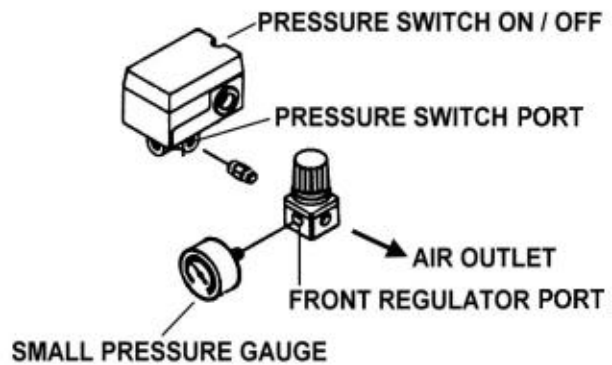
Ensure that all guards and shrouds are in place before pressing reset switch to restart the motor. If the motor shuts down because of overload, wait 10-15 minutes for the motor to cool down, then press the reset switch to restart motor. The reset switch button is located on the motor housing.



5-2-3 : PRESSURE SWITCH

The pressure switch acts as a pilot device activating the motor. The pressure switch cut in/cut out has been preset at the factory, do not tamper with the settings. Never bypass or remove this switch, as serious damage to equipment or personal injury could result from improper pressure setting. Consult your local distributor or service center if the switch malfunctions.

5-2-3-1 : This pressure switch control the on/off of the compressor, it can be turn off manually but when it is in the AUTO position, it allows the compressor to start or shut down automatically without warning upon air demand. Always set this switch to OFF when the compressor is not in use and before unplugging compressor.



5-2-4 : AIR PRESSURE REGULATOR

The air pressure regulator enables you to adjust outlet pressure to the tool in use. Never exceed maximum working pressure of the tool. To adjust, turn clockwise to increase pressure, or turn counterclockwise to decrease pressure to the tool. Turn the thread nut against knob to lock in place.

5-2-5 : GROUNDING INSTRUCTIONS

Do not modify the plug that has been provided. If it does not fit the available outlet, the correct outlet should be installed by a qualified electrician. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes. If these grounding instructions are not completely understood or if in doubt as to whether the compressor is properly grounded, have the installation checked by a qualified electrician.

5-2-5-1 : This product is for use on a nominal 115 or 230 volt circuit, as applicable. A cord with a grounding plug as shown here must be used. Make sure that the product is connected to an outlet that matches the plug. No adapter should be used with this product.
(FOR AREA OTHER THAN USA, PLEASE CHECK THE LOCAL CODE.)

5-2-6 : EXTENSION CORDS

The use of any extension cord will cause some drop in voltage and loss of power. Do not use an extension cord unless absolutely necessary. It is better to use a long air hose to reach area where work is being performed. If use of an extension cord can not be avoided, refer to the following guidelines before using.

Use only 3-wire extension cord that has a 3-blade grounding plug. Make sure your extension cord is in good condition. Be sure gauge is sufficient to carry the current the unit will draw. Note that the smaller the gauge the heavier the cord. Example: Gauge 10 is heavier than gauge 12. Do not use 14 or 16 AWG for extension cord.

6 · COMPRESSOR LUBRICATION

Do not add or change oil while the compressor is in operation.

Use the recommended 30 Weight non-detergent compressor oil only.

6-1 : Oil Filling

6-1-1 : Remove the oil filler plug.

6-1-2 : Slowly pour the proper oil into the pump crankcase.

6-1-3 : Always keep oil level between the marks "High" and "Low" level on the oil dipstick (or on the red circle of the sight glass).



6-2 : OIL CHANGE

Change oil after the first 8 hours of compressor operation, then change oil after every 300 working hours or 3 months whichever comes first.

6-2-1 : Remove the oil drain plug and allow oil to drain out.

Used oil should be handled by recycle agents.

6-2-2 : Replace the oil drain plug. The use of a sealing compound or Teflon tape to avoid leakage is recommended.

6-2-3 : Refill with the recommended oil to the proper level.

7 · START UP PROCEDURE

Do not attempt to operate the air compressor without first checking the oil level in the pump.

Add oil as required. Serious damage may result from running without oil.

7-1 : Check to see that nuts and bolts are all snug.

7-2 : Check that compressor is on a strong, stable level base.

7-3 : Check that air filter is clean.

7-4 : Do not place any materials on or against the compressor.

7-5 : Open the drain valve at the bottom of the tank.

7-6 : Turn the pressure switch lever to "AUTO".

7-7 : Ensure air is escaping from the drain valve. Allow the unit to operate for a minimum of twenty minutes under no load condition.

7-8 : After running the compressor for twenty minutes, close the drain valve and allow the unit to reach maximum operating pressure. Ensure that the compressor shuts down at the preset maximum pressure. Notice that the head pressure is released through the unloading valve of the pressure switch.

7-9 : Check the air compressor and piping systems for leakages.

7-10 : Recheck the oil level in the crankcase. Add oil as required.

7-11 : Your compressor is ready for use.

8 · MAINTENANCE CHECK LIST

⚠ WARNING

Before doing any maintenance or adjustments to your air compressor, the following safety precautions should be taken.

(1) : DISCONNECT ELECTRICAL POWER.

(2) : MAKE SURE NO PRESSURE IN AIR RECEIVER.

8-1 : Daily checklist

8-1-1 : Check oil level.

8-1-2 : Drain condensation from air tank.

8-1-3 : Check for any unusual noise or vibration.

8-1-4 : Be sure all nuts and bolts are tight.

8-2 : Weekly checklist

8-2-1 : Clean air filter. Replace air filter if necessary.

8-3 : Quarterly or 300 hour checklist

8-3-1 : Change compressor oil and air filter element.

8-3-2 : Check safety valve.

8-3-3 : Check pressure switch unloads to ensure compressor head unloads whenever motor shuts down.

8-3-4 : Clean and blow off pump fins and motor.

8-3-5 : Inspect air system for leaks by applying soapy water to all joints.

9 · STORAGE :

WHEN YOU HAVE FINISHED USING THE AIR COMPRESSOR :

9-1 : Set the switch to "OFF" and unplug the cord.

9-2 : Be sure to drain the water from the air tank.

9-3 : Protect the electrical cord and air hose from damage.

9-4 : Store the air compressor in a clean and dry location.

10 · TROUBLE SHOOTING :

CONDITION	CAUSE	CORRECTIVE
Compressor won't start	<ul style="list-style-type: none"> 1 : Loose electrical connection 2 : Motor overheated 	<ul style="list-style-type: none"> 1 : Check wiring connection 2 : Press reset button or wait for automatic reset
Low pressure	<ul style="list-style-type: none"> 1 : Air leak in safety valve 2 : Loose tube or fittings 3 : Restricted air filter 4 : Defective check valve 5 : Worn out rings 	<ul style="list-style-type: none"> 1 : Release safety valve manually by pulling outward on ring. If condition persists replace valve 2 : Tighten fittings 3 : Clean or replace 4 : Replace check valve 5 : Replace piston rings
Air is releasing from safety valve continuously	<ul style="list-style-type: none"> 1 : Defect pressure switch or improper adjustment 2 : Defective safety valve 	<ul style="list-style-type: none"> 1 : Check for proper adjustment and if problem persists replace pressure switch 2 : Replace safety valve
Oil discharge and excessive carbon formation or appearance of water and oil in the air lines	<ul style="list-style-type: none"> 1 : Improper oil viscosity 2 : Overfilling the crankcase with oil 3 : Restricted air intake filter 4 : Carbon on exhaust valves 5 : Worn valves 6 : Worn piston rings 7 : High ambient temperature and/or humidity 8 : High percentage of running time 	<ul style="list-style-type: none"> 1 : Replace oil with SAE 30 Weight non-detergent compressor oil 2 : Drain oil and fill to proper level 3 : Clean or replace filter 4 : Replace 5 : Replace 6 : Replace piston rings 7 : Install a moisture separator and/or oil filter 8 : Check for air leakage. If no leaks are found , you may need an additional compressor as your air demand is too much for the existing unit
Excessive noise	<ul style="list-style-type: none"> 1 : Loose valve 2 : Noisy only during start up, Check for loose belts 3 : Piping loose 4 : Unit operates on unlevel surface 5 : Improper grade of oil in crankcase 6 : Carbon or foreign material on piston 7 : Worn bearings 	<ul style="list-style-type: none"> 1 : Inspect valve 2 : Adjust for proper tension 3 : Tighten bolts and nuts as required 4 : Ensure that unit is on level surface 5 : Replace oil with SAE 30 Weight non- detergent compressor oil 6 : Clean piston. Check cylinder walls for scoring 7 : Replace main bearings

CONDITION	CAUSE	CORRECTIVE
Compressor over heating	1 : Undersized unit for air requirements 2 : Compressor location 3 : Air leaks in the system 4 : Restricted air filter 5 : Improper grade or level of oil 6 : Worn, damage, or carbon build up on valve 7 : Carbon build up at after-cooler tube or check valve	1 : Contact your dealer / distributor 2 : See installation section 3 : Fix leaks 4 : Clean or replace filter 5 : Replace with SAE 30 Weight non-detergent compressor oil 6 : Clean, repair or replace valves 7 : Clean or replace
Pressure switch unloading valve does not function or leak air when unit is operating or not operating	1 : Pressure switch unloading valve may be dirty or faulty 2 : Check valve may be dirty or faulty	1 : Clean, or replace unloading valve 2 : Clean, or replace check valve
Water in air tank	1 : Condensation in the air tank during normal usage	1 : Drain daily or install an automatic drain
Oil leaks or appearance of oil on the compressor	1 : Spillage of oil when filling 2 : Overfilling the crankcase 3 : Improper grade of oil 4 : Leak at oil filler plug 5 : Oil leak at gasket, cylinder or crankcase 6 : Loose plug 7 : Loose side or end plate 8 : Oil seal leak	1 : Wipe unit clean 2 : Drain oil and fill to proper level 3 : Replace with proper SAE 30 non-detergent compressor oil 4 : Tighten or replace oil filler plug 5 : Replace gaskets as required 6 : Tighten plug 7 : Tighten plates 8 : Replace oil seal

LIMITED WARRANTY

1 : Warranty conditions

The warranty period of this machine is one year from the day of purchase.

2 : Contents of warranty

In case of a trouble should occur during the warranty period and when it is determine that the trouble is causes clearly by our defective design, manufacture and/or execution of work, we repair or replace the parts free of charge without delay.

3 : Exceptions:

Even during the warranty period of this machine, we refuse warranty in the following case :

- a : Trouble caused by the natural disasters or accident beyond human control.
- b : Trouble caused by defective materials selected or supplied by you, or caused by an improper application designated by you.
- c : Trouble caused by a repair or modification conducted by you without notifying us of the fact.
- d : Trouble caused by not complying to the operating procedures, periodical inspections, maintenance and storage, etc., described in the specification sheets and instruction manuals issued by us.
- e : Trouble caused by defective foundation, building and/or equipment other than this machine.
- f : Reduction of production due to a trouble of this machine, production compensation during the shutdown, and all other losses.