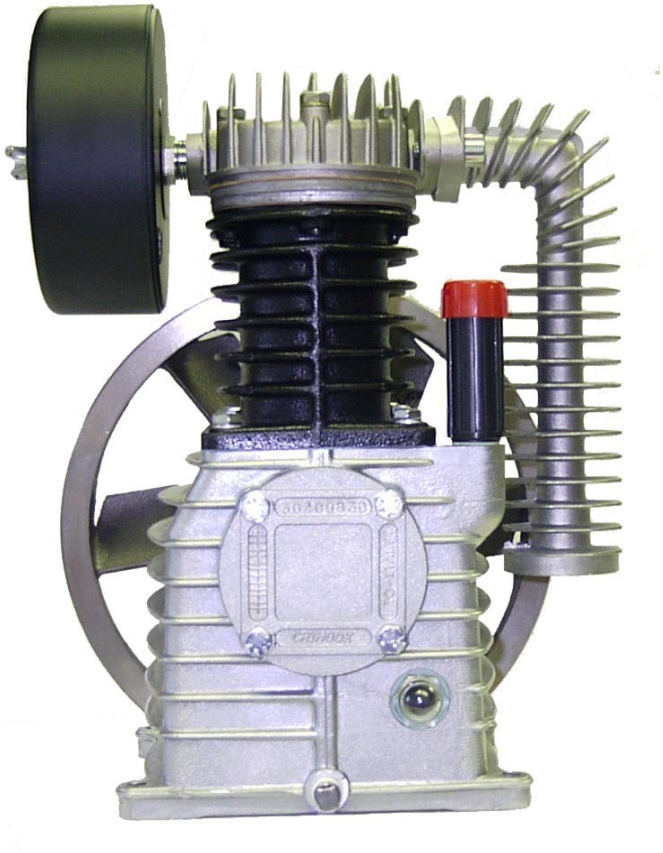
CHINOOK PUMP
OWNER'S MANUAL



READ ALL INSTRUCTIONS CAREFULLY
BEFORE INSTALLING PUMP!

DISTRIBUTED BY:

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UNPACKING INSTRUCTIONS

Your compressor was inspected at the factory and packaged to protect against shipping damage. Inspect your unit for damage or missing parts. If any damage occurs or parts are missing as a result of shipping, a notation to that effect should be made on the Delivery Receipt. Claims should be settled directly with the transportation company.

LUBRICATION

Prior to initial start-up, fill the crankcase to the designated level with a single viscosity, non-detergent oil. The oil sight gauge should be filled up to ¾ full. You should be able to see a small bubble at the top of the sight gauge. Be sure not to fill above the indicated level. **DO NOT USE A DETERGENT OIL!** All models are splash lubricated by means of dippers on the connecting rods. The pump must be operated in a level position for proper lubrication.

BELTS

Install belts on compressor and motor pulleys. Belt tension should be adjusted to allow 3/8" to ½" deflection with normal thumb pressure.

DRIVE PULLEYS

Drive pulleys must be properly aligned and belt drive tension set to specifications. Improper pulley alignment and belt tension can cause motor overloading, excessive vibration and premature belt and/or bearing failure. As the compressor starts, check the rotation of the flywheel. The direction of the rotation must be counter-clockwise when facing the flywheel. Should the rotation be incorrect, disengage the power supply and check the motor wiring.

***SPECIAL NOTE: Compressor flywheel has left-hand thread. Remove nut by turning clockwise.**

To determine the correct motor pulley, use the formula below:

$$\text{Motor Pulley} = \frac{\text{Flywheel O.D. x Compressor RPM}}{\text{Motor RPM}}$$

GUARDS

Guards should be designed to achieve the required degree of protection and still allow full air flow from the compressor sheave across the unit. When the compressor is installed, make sure the guard side is at least 18" away from a wall to provide adequate cooling of the motor and pump. **DO NOT RUN COMPRESSOR WITHOUT BELT GUARD INSTALLED!**

OIL CAPACITY

Pump Model #	Oz's. of Oil	Pump Model #	Oz's. of Oil
PMP11K3	6	PMP22K25	61
PMP11K8	12	PMP22K28	48
PMP12K11	17	PMP22K30	47
PMP12K12	15	PMP22K35	48
PMP12K17	34	PMP22K50	59
PMP12K18	34	PMP24K60	98
PMP22K22	61	PMP24K100	127
PMP22K24	61		

MAINTENANCE

Regular maintenance insures trouble-free operation. Your new compressor represents the finest engineering and construction available. However, even the finest machinery requires periodic maintenance. A good maintenance program will add years of service to your air compressor. The following is recommended as a minimum maintenance program. For your protection, disconnect power supply after each day's operation and drain air from system before any maintenance.

BREAK-IN PERIOD

Your new pump does not come filled with oil. By using the chart below, select the type of oil that best fits your application:

TEMPERATURE	0° - 32°	32° - 55°	56° & ABOVE
NON-DETERGENT OIL	10 WT	20 WT	30 WT

IMPORTANT: Replace the oil after the first 50 hours (2 weeks) of operation. Re-torque the head bolts after the first 200 hours (4 weeks) of operation.

MAINTENANCE SCHEDULE

DAILY	1. Check oil level and fill as needed.
EVERY 2 WEEKS OR 100 HOURS	1. Repeat daily procedure. 2. Replace oil after first 50 hours of operation. 3. Check drive belt and adjust if necessary.
MONTHLY OR 200 HOURS	1. Repeat above procedures. 2. Change compressor oil. 3. Check for air and oil leaks and correct. 4. Tighten all hardware.
ANNUALLY OR 2000 HOURS	1. Repeat monthly procedures. 2. Check the valves in the compressor and replace if damaged or worn.

TROUBLESHOOTING & SOLUTIONS

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Knocking	1. Lack of oil in crankcase	1. Add oil
	2. Worn piston pin	2. Replace pin
	3. Worn main bearings	3. Replace bearings
	4. Worn connecting rod	4. Replace inserts or rod assembly
	5. Excessive crankshaft end play	5. Take to Service Center
	6. Dirty or defective check valve	6. Clean or replace
	7. Piston hitting head due to foreign matter or carbon deposits.	7. Inspect, repair or replace valves & pistons
Overheating Compressor	1. Poor ventilation	1. Move compressor to allow for better ventilation
	2. Dirty cooling surfaces	2. Clean compressor pump
	3. Dirty or defective check valve	3. Clean or replace
	4. Restricted air intake	4. Replace filter
	5. Low oil level	5. Add non-detergent, single viscosity oil
	6. Unit not run on level surface	6. Level unit
	7. Dirty or defective reed valve	7. Clean valve plate and replace valves
Low Discharge Pressure or Pumps Slowly	1. Air leaks	1. Check system for air leaks.
	2. Broken or dirty valves	2. Replace or clean valves & valve plates
	3. Restricted air intake	3. Replace filter element
	4. Blown gaskets	4. Replace gaskets
	5. Defective gauges	5. Replace gauges
	6. Dirty or defective check valve	6. Clean or replace check valve
	7. Compressor too small for application	7. Consult dealer for larger ROLAIR compressor
Compressor Fails to Attain Proper RPM's	1. Defective check valve	1. Repair or replace check valve
	2. Defective pilot valve	2. Repair or replace pilot valve
Oil in the Discharge Air	1. Worn piston rings	1. Replace rings
	2. Compressor air intake restricted	2. Replace filter
	3. Restricted crankcase breather	3. Clean crankcase breather
	4. Excessive oil in basic compressor pump	4. Check gauge and adjust to proper oil level
	5. Wrong oil viscosity	5. Drain & replace with non-detergent single viscosity oil
Excessive Oil Consumption	1. Restricted or dirty air filter	1. Clean or replace air filter
	2. Crankcase is over-filled with oil	2. Drain oil & refill to proper oil level
	3. Valves not seating properly	3. Clean crankcase breather
	4. Worn piston rings	4. See ROLAIR Service Center
Water in Crankcase	1. Compressor does not run long enough to get hot and vaporize the moisture	1. Consult dealer about smaller ROLAIR compressor
	2. Compressor too large for application	2. Consult ROLAIR dealer
	3. Incorrect or inferior grade of oil	3. Change oil in compressor

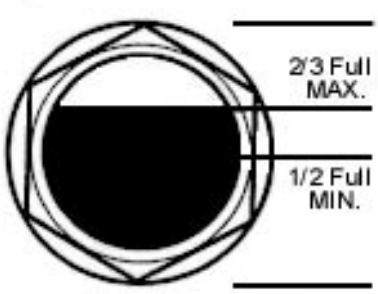
AIR COMPRESSOR OPERATION

LUBRICATION

Prior to daily operation, make a habit of checking the oil level in your compressor pump. A sight gauge on the outside of the pump's crankcase is provided to make the job easier. Always maintain the oil level to read 2/3 full on the sight gauge. Oil levels over this amount will result in oil blowing past the rings or through the crankcase breather. Lower amounts of oil will result in insufficient lubrication of moving parts.

Reciprocating compressors will consume a certain amount of oil under normal operation. If you are concerned about your oil consumption, monitor and record oil consumption daily and consult your local dealer. When filling your crankcase with oil, be sure to use a single viscosity, non-detergent oil. **DO NOT USE A DETERGENT OIL!!**

OIL SIGHT GAUGE



Oil Type Table

Temperature	0° - 32°	33° - 55°	56° & Above
Non-detergent Straight Weight	10 WT	20 WT	30 WT

IMPORTANT

Unit must be level when in operation.