

CHAMPION

OPERATION/MAINTENANCE
MANUAL & PARTS LIST

 **WARNING**

THIS MANUAL CONTAINS IMPORTANT SAFETY INFORMATION AND SHOULD ALWAYS BE AVAILABLE TO THOSE PERSONNEL OPERATING THIS UNIT.
READ, UNDERSTAND AND RETAIN ALL INSTRUCTIONS BEFORE OPERATING THIS EQUIPMENT TO PREVENT INJURY OR EQUIPMENT DAMAGE.

TWO STAGE/TWO CYLINDER DUPLEX AIR COMPRESSOR UNIT

**MODEL
CADRSASP12
CADRSASP13**

MAINTAIN COMPRESSOR RELIABILITY AND PERFORMANCE WITH GENUINE CHAMPION COMPRESSOR PARTS AND SUPPORT SERVICES

Champion Compressor genuine parts, manufactured to design tolerances, are developed for optimum dependability – specifically for Champion compressor systems. Design and material innovations are the result of years of experience with hundreds of different compressor applications. Reliability in materials and quality assurance are incorporated in our genuine replacement parts.

Your authorized Champion Compressor distributor offers all the backup you'll need. A worldwide network of authorized distributors provides the finest product support in the air compressor industry. Your authorized distributor can support your Champion air compressor with these services:

1. Trained parts specialists to assist you in selecting the correct replacement parts.
2. A full line of factory tested CHAMPLUB™ compressor lubricants specifically formulated for use in Champion compressors.
3. Repair and maintenance kits designed with the necessary parts to simplify servicing your compressor.

Authorized distributor service technicians are factory trained and skilled in compressor maintenance and repair. They are ready to respond and assist you by providing fast, expert maintenance and repair services.

To Contact Champion or locate your local distributor:

visit: www.championpneumatic.com

or

call: (877)-790-8511

INSTRUCTIONS FOR ORDERING REPAIR PARTS

When ordering parts, specify Compressor MODEL, HORSEPOWER and SERIAL NUMBER (see nameplate on unit). All orders for Parts should be placed with the nearest authorized distributor.

Order by part number and description. Reference numbers are for your convenience only.

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SAFETY AND OPERATION PRECAUTIONS

Because an air compressor is a piece of machinery with moving and rotating parts, the same precautions should be observed as with any piece of machinery of this type where carelessness in operation or maintenance is hazardous to personnel. In addition to the many obvious safety rules that should be followed with this type of machinery, the additional safety precautions as listed below must be observed:

1. Read all instructions completely before operating air compressor or unit.
2. For installation, follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).
3. Electric motors must be securely and adequately grounded. This can be accomplished by wiring with a grounded, metal-clad raceway system to the starter; by using a separate ground wire connected to the bare metal of the motor frame; or other suitable means.
4. Protect the power cable from coming in contact with sharp objects. Do not kink power cable and never allow the cable to come in contact with oil, grease, hot surfaces, or chemicals.
5. Make certain that the power source conforms to the requirements of your equipment.
6. Pull main electrical disconnect switch and disconnect any separate control lines, if used, before attempting to work or perform maintenance on the air compressor or unit. "Lock out" or "Tag out" all power sources.
7. Do not attempt to remove any compressor parts without first relieving the entire system of pressure.
8. Do not attempt to service any part while machine is in an operational mode.
9. Do not operate the compressor at pressures in excess of its rating.
10. Do not operate compressor at speeds in excess of its rating.
11. Periodically check all safety devices for proper operation. Do not change pressure setting or restrict operation in any way.
12. Be sure no tools, or rags or loose parts are left on the compressor or drive parts.
13. Do not use flammable solvents for cleaning the air inlet filter or element and other parts.
14. Exercise cleanliness during maintenance and when making repairs. Keep dirt away from parts by covering parts and exposed openings with clean cloth or Kraft paper.
15. Do not operate the compressor without guards, shields and screens in place.
16. Do not install a shut-off valve in the discharge line, unless a pressure relief valve, of proper design and size, is installed in the line between the compressor unit and shut-off valve.
17. Do not operate compressor in areas where there is a possibility of ingesting flammable or toxic fumes.
18. Be careful when touching the exterior of a recently run motor - it may be hot enough to be painful or cause injury. With modern motors this condition is normal if operated at rated load - modern motors are built to operate at higher temperatures.
19. Inspect unit daily to observe and correct any unsafe operating conditions found.
20. Do not "play around" with compressed air, nor direct air stream at body, because this can cause injuries.
21. Compressed air from this machine absolutely must not be used for food processing or breathing air without adequate downstream filters, purifiers and controls.
22. Always use an air pressure regulating device at the point of use, and do not use air pressure greater than marked maximum pressure of attachment.
23. Check hoses for weak or worn condition before each use and make certain that all connections are secure.
24. Always wear safety glasses when using compressed air gun.

The user of any air compressor package manufactured by **Champion** – A Gardner Denver Co., is hereby warned that failure to follow the preceding Safety and Operation Precautions can result in injuries or equipment damage. However, **Champion** – A Gardner Denver Co., does not state as fact or does not mean to imply that the preceding list of Safety and Operating Precautions is all inclusive, and further that the observance of this list will prevent all injuries or equipment damage.

EXPLANATION OF SAFETY INSTRUCTIONS SYMBOLS AND DECALS



Indicates immediate hazards which will result in severe injury or death.



Indicates hazards or unsafe practice which could result in severe injury or death.



Indicates hazards or unsafe practice which could result in damage to the Champion compressor or minor injury.

NOTICE

Notice is used to notify people of installation, operation or maintenance information which is important but not hazard-related.

SAFETY AND OPERATION PRECAUTIONS

OBSERVE, UNDERSTAND AND RETAIN THE INFORMATION GIVEN IN THE SAFETY PRECAUTION DECALS AS SHOWN IN THE PARTS LIST SECTION



This reciprocating compressor must not be used for breathing air. To do so will cause serious injury whether air is supplied direct from the compressor source or to breathing tanks for later use. Any and all liabilities for damage or loss due to injury, death and/or property damage including consequential damages stemming from the use of this compressor to supply breathing air, will be disclaimed by the manufacturer.



The use of this compressor as a booster pump and/or to compress a medium other than atmospheric air is strictly non-approved and can result in equipment damage and/or injury. Non-approved uses will also void the warranty.



This unit may be equipped with special options which may not be included in this manual. User must read, understand and retain all information sent with special options.

INTRODUCTION

Champion R Series compressor are the result of advanced engineering and skilled manufacturing. To be assured of receiving maximum service from this machine the owner must exercise care in its operation and maintenance. This book is written to give the operator and maintenance department essential information for day-to-day operation, maintenance and adjustment. Careful adherence to these instructions will result in economical operation and minimum downtime.

Champion Five Year Warranty "R" Series Compressors

CHAMPION warrants each new compressor pump manufactured by **CHAMPION**, mounted on a factory assembled unit, to be free from defects in material and workmanship under normal use and service for a period of sixty (60) months from date of installation or sixty-six (66) months from date of shipment by **CHAMPION** or **CHAMPION** distributor, whichever may occur first. **Applies to the compressor pump only, excluding head valves. Valves, controls and accessories are warranted for the first year only.** Compressor pumps purchased separately would carry a one year warranty.

This five year extended warranty will be prorated over the 5 years as follows:

First Year	-	100% Allowance, Parts and Labor
Second Year	-	90% Allowance, Parts and Labor
Third Year	-	80% Allowance, Parts and Labor
Fourth Year	-	70% Allowance, Parts and Labor
Fifth Year	-	60% Allowance, Parts and Labor

Applies to CHAMPION logo, tank or base mounted complete compressors only.

Express Limited Warranty

CHAMPION warrants each new air compressor unit manufactured by **CHAMPION** to be free from defects in material and workmanship under normal use and service for a period of twelve (12) months from date of installation or eighteen (18) months from date of shipment by **CHAMPION** or **CHAMPION** distributor, whichever may occur first.

CHAMPION makes no warranty in respect to components and accessories furnished to **CHAMPION** by third parties, such as **ELECTRIC MOTORS, GASOLINE ENGINES** and **CONTROLS**, which are warranted only to the extent of the original manufacturer's warranty to **CHAMPION**. To have warranty consideration, electric motors must be equipped with thermal overload protection.

The extended five year warranty will apply to ASME air receivers provided they are installed on rubber vibro isolator pads.

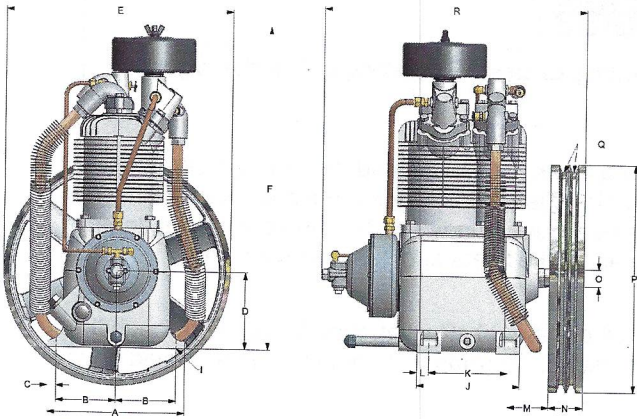
When a compressor pump, or component is changed or replaced during the warranty period, the new/replaced item is warranted for only the remainder of the original warranty period.

Repair, replacement or refund in the manner and within the time provided shall constitute **CHAMPION'S** sole liability and your exclusive remedy resulting from any nonconformity or defect. **CHAMPION SHALL NOT IN ANY EVENT BE LIABLE FOR ANY DAMAGES, WHETHER BASED ON CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, INCLUDING WITHOUT LIMITATION ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES, ARISING WITH RESPECT TO THE EQUIPMENT OR ITS FAILURE TO OPERATE, EVEN IF CHAMPION HAS BEEN ADVISED OF THE POSSIBILITY THEREOF.**

CHAMPION MAKES NO OTHER WARRANTY OR REPRESENTATION OF ANY KIND, EXCEPT THAT OF TITLE, AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY DISCLAIMED. NO SALESMAN OR OTHER REPRESENTATIVE OF CHAMPION HAS AUTHORITY TO MAKE ANY WARRANTIES.

TWO STAGE AIR COMPRESSOR - R15B PUMP

DIMENSIONS



ITEM	R15B	
A	Base-Width	10"
B	Bolt Down-Width	4-3/8"
C	Bolt Down to Edge	5/8"
D	Base to Crank Ctr	5-1/2"
E	Overall Width	18"
F	Overall Height	23-1/4"
I	Bolt Down Hole Dia.	15/32"
J	Base-Depth	7-1/2"
K	Bolt Down Depth	5-3/4"
L	Bolt Down to Edge	7/8"
M	Bolt Hole to Wheel (Max.)	3-5/8"
N	Flywheel Width	2-1/2"
O	Crank Diameter	1-5/16"
P	Flywheel Diameter	16-1/2"
Q	Flywheel Grooves	2VB
R	Overall Depth	20"

C416-B
(Ref. Drawing)

NOTE: H.P. Exhaust Opening 3/4" Tubing.

Flywheel Rotation – Clockwise when viewed from front, flywheel to rear.

SPECIFICATIONS

MODEL	BORE & STROKE (INCHES)	NO. OF CYLINDERS	OIL CAPACITY (QTS.)	WEIGHT (LBS)	PRESSURE (PSIG)	CU FT./REV.	MIN./MAX. RPM
R15B	4-5/8 & 2-1/2 x 3	2	2	109	175	.02914	400/990

PERFORMANCE

PUMP	PRESSURE (PSIG)	MOTOR H.P.	PUMP RPM	DISPLACEMENT (CFM)	COOLING AIR FLOW (CFM)	HEAT REJECTION (BTU/HR)	APPROX. PULLEY O.D. (INCHES)
R15B	175	5	710	20.7	820	12,000	7.00

All data is based on 1725 RPM electric motors as a power source.

Pulley Dia. (approx.) = $\frac{\text{Compressor RPM} \times \text{Flywheel Dia.}}{\text{Motor or Engine RPM}}$

INSTALLATION

WARNING

Do not operate unit if damaged during shipping, handling or use. Operating unit if damaged may result in injury.

1. Permanently installed compressors must be located in a clean, well ventilated dry room so compressor receives adequate supply of fresh, clean, cool and dry air. It is recommended that a compressor, used for painting, be located in a separate room from that area wherein body sanding and painting is done. Abrasive particles or paint, found to have clogged the air intake filters and intake valves, shall automatically void warranty.
2. Compressors should never be located so close to a wall or other obstruction that flow of air through the fan bladed flywheel, which cools the compressor, is impeded. Permanently mounted units should have flywheel at least 12" from wall.
3. Place stationary compressor on firm level ground or flooring. Permanent installations require bolting to floor. Bolt holes in tank or base feet are provided. Before bolting or lagging down, shim compressor level. Avoid putting a stress on a tank foot by pulling it down to floor. This will only result in abnormal vibration, and possible cracking of Air Receiver.

The vibro-isolator pads which came with the unit will need to be installed on the unit. Tanks bolted directly to a concrete floor without padding will not be warranted against cracking. Champion vibro-isolators must be used for extended warranty to apply to ASME air receivers.

DANGER

Do not install isolating valves between compressor outlet and air receiver. This will cause excessive pressure if valve is closed, and cause injury and equipment damage.

WARNING

Always use an air pressure regulating device at the point of use. Failure to do so can result in injury or equipment damage.

CAUTION

- Do not install in an area where ambient temperature is below 32 degrees F or above 100 degrees F.
- Do not install unit in an area where air is dirty and/or chemical laden.
- Unit is not to be installed outdoors.

INSTALLATION (CONT'D)

AIR LINE PIPING

Connection to air system should be of the same size, or larger, than discharge pipe out of unit. The table gives recommended minimum pipe sizes. A union connection to the unit and water drop leg is recommended. Install a flexible connector between the discharge of the unit and the plant air piping. Plant air piping should be periodically inspected for leaks using a soap and water solution for detection on all pipe joints. Air leaks waste energy and are expensive.

**Minimum Pipe Sizes For Compressor Air Lines
(Based on clean Smooth Schedule 40 Pipe)**

MODEL	25'	50'	100'	200'	300'
R15B	1"	1"	1"	1-1/4"	1-1/4"



Never use plastic pipe or improperly rated metal pipe. Improper piping material can burst and cause injury or property damage.

ELECTRICAL POWER SUPPLY

It is essential that the power supply and the supply wiring are adequately sized and that the voltage corresponds to the unit specifications. Branch circuit protection must be provided at installation as specified in the National Electrical Code (NEC).

All wiring should be performed by a licensed electrician or electrical contractor. Wiring must meet applicable codes for area of installation.

All models require a properly sized magnetic starter as specified in the NEC.

DUPLEX OPERATION

Unit is equipped with a factory installed Duplex Control Panel. It is necessary only to bring lines from a properly sized disconnect switch to the Duplex Control Panel.

Refer to FIGURE 1 for wiring diagram. See pages 10–15 for wiring instructions.

Unit is equipped with a factory installed Duplex Control Panel. It is necessary only to bring lines from a properly sized disconnect switch to the Duplex Control Panel.

LINE TERMINALS

1L1	1L2	1L3
-----	-----	-----

CONTROL TERMINALS

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

NOTES:

- 1) SEE MOTOR NAMEPLATE FOR HORSEPOWER AND AMPS.
- 2) SEE TRANSFORMER NAMEPLATE FOR WIRING DETAILS.
- 3) 10L DENOTES CONTROL TERMINAL BLOCK.
- 4) 2PS SET TO PSI BELOW 1PS.
- 5) T.O.A. (TEST-OFF-AUTO, SPRING RETURN FROM TEST TO OFF) SELECTOR SWITCH IS STANDARD. H.O.A. (HAND-OFF-AUTO, MAINTAINED CONTACT) SELECTOR SWITCH IS OPTIONAL AND REPLACES THE T.O.A. SELECTOR SWITCH.
- 6) CHAMPION WIRING SCHEMATIC REPRESENTS CONTROL PANEL FUNCTION AND IS FOR REFERENCE ONLY. MANUFACTURER'S WIRING SCHEMATIC (AND LADDER LOGIC DIAGRAM IF PANEL CONTAINS A PROGRAMMABLE RELAY) IS THE OFFICIAL SCHEMATIC AND SHOULD BE USED FOR CONNECTIONS AND TROUBLESHOOTING. MANUFACTURER'S WIRING SCHEMATIC MAY VARY IN APPEARANCE DUE TO USE OF PROGRAMMABLE RELAYS, NUMBERING OF TERMINALS, ETC. MANUFACTURER'S WIRING SCHEMATIC TAKES PRECEDENCE. SHOULD ANY QUESTIONS ARISE.

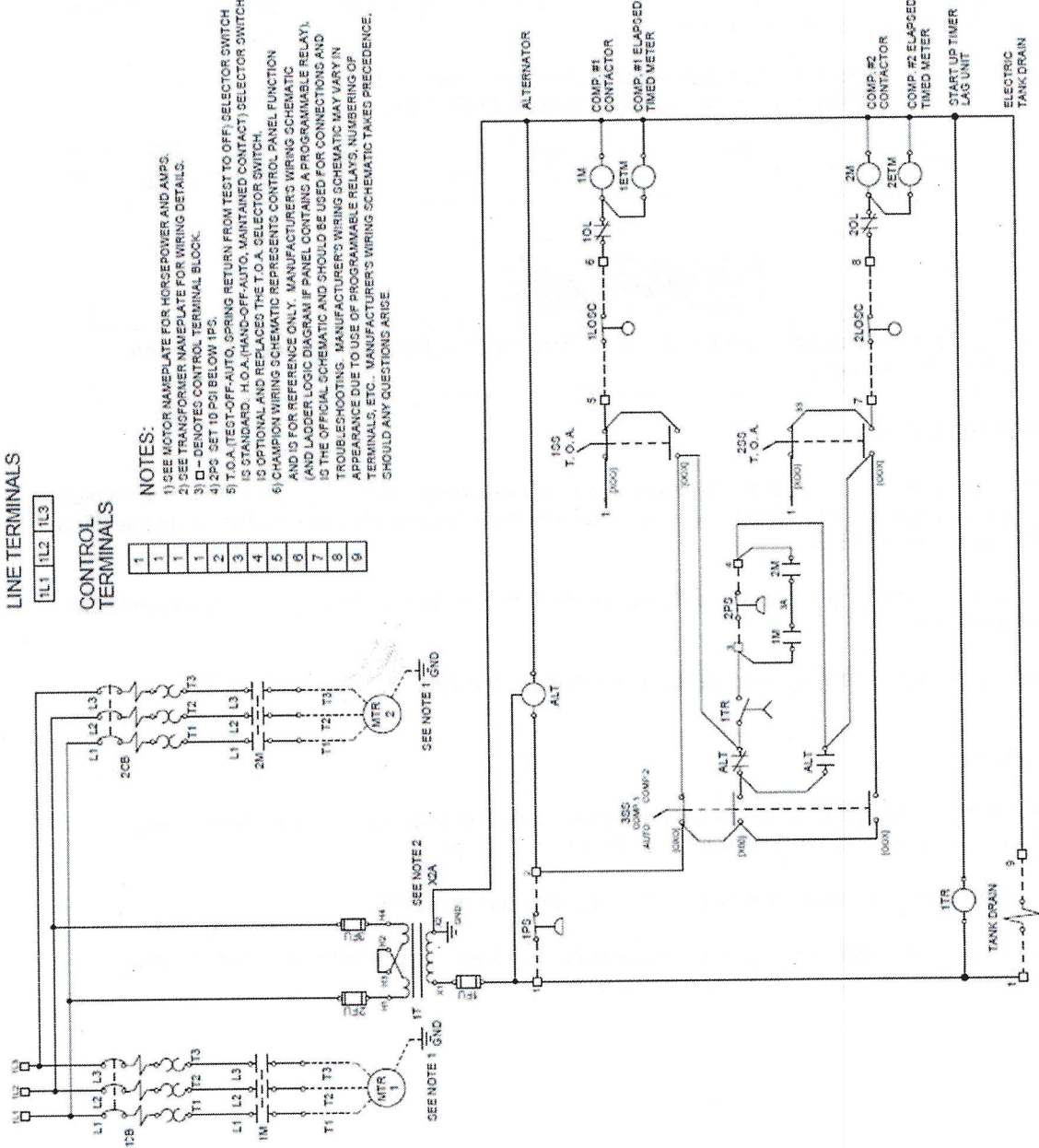


FIGURE 1 - DUPLEX CONTROL PANEL WIRING DIAGRAM

INSTALLATION (CONT'D)

INCOMING POWER – SEE FIGURE 2

NOTICE

Upstream protection fusible disconnect or circuit breaker must be provided by installer.

“LOCK OUT” OR “TAG OUT” ALL SOURCES OF POWER.

1. Connect wire for one incoming power line to L1.
2. Connect wire for one incoming power line to L2.
3. Connect wire for one incoming power line to L3.

SINGLE POINT
INCOMING POWER
CONNECTIONS
TERMINALS
L1,L2,L3

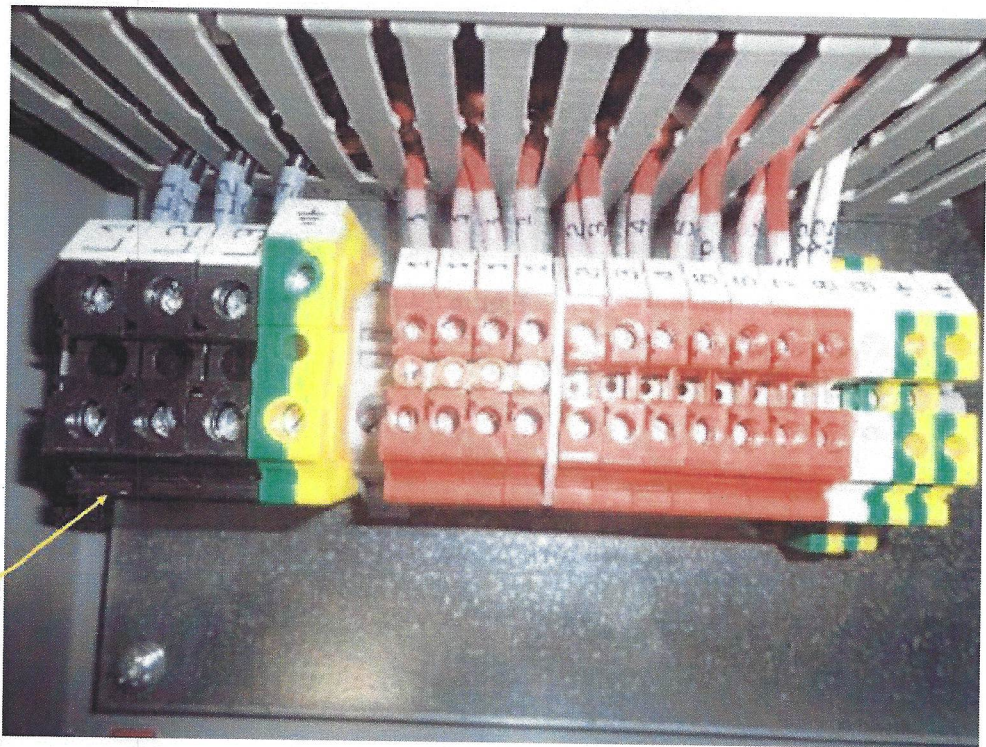


FIGURE 2 – COMPRESSOR POWER CONNECTIONS

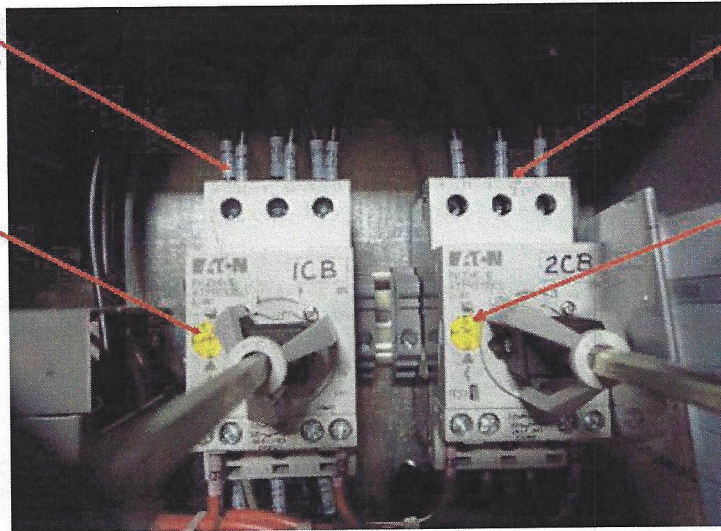
INSTALLATION (CONT'D)

CIRCUIT BREAKERS

1. Factory wired. No wiring required.

LEAD COMPRESSOR
POWER CONNECTIONS
L1, L2, L3

SET FOR MOTOR
FULL LOAD AMPS



LAG COMPRESSOR
POWER CONNECTIONS
L1, L2, L3

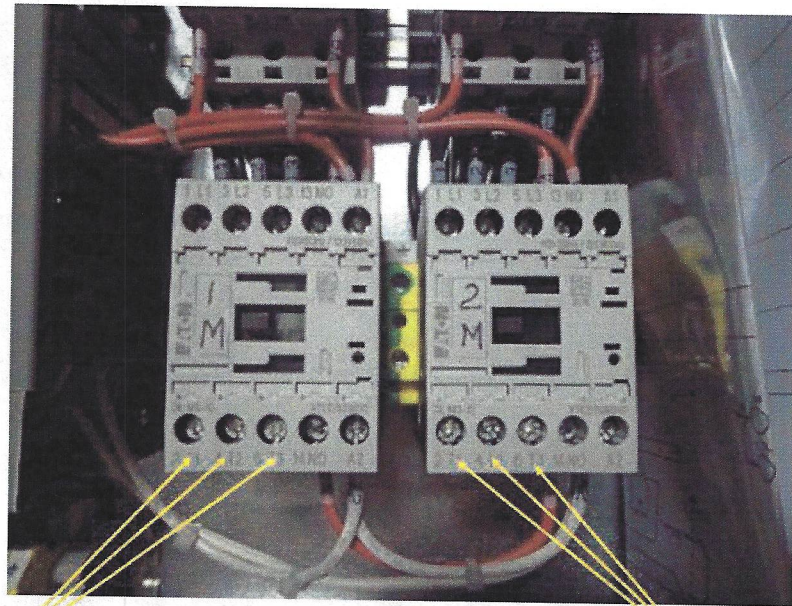
SET FOR MOTOR
FULL LOAD AMPS

Figure 3 – Circuit Breaker

INSTALLATION (CONT'D)

MOTOR CONTACTORS

1. Factory wired. No wiring required.



LEAD COMPRESSOR
MOTOR CONNECTION
T1, T2, T3

LAG COMPRESSOR
MOTOR CONNECTION
T1, T2, T3

FIGURE 4 – MOTOR CONTACTORS

INSTALLATION (CONT'D)

PRESSURE SWITCHES – SEE FIGURES 4 & 5.

1. Factory wired. No wiring required.

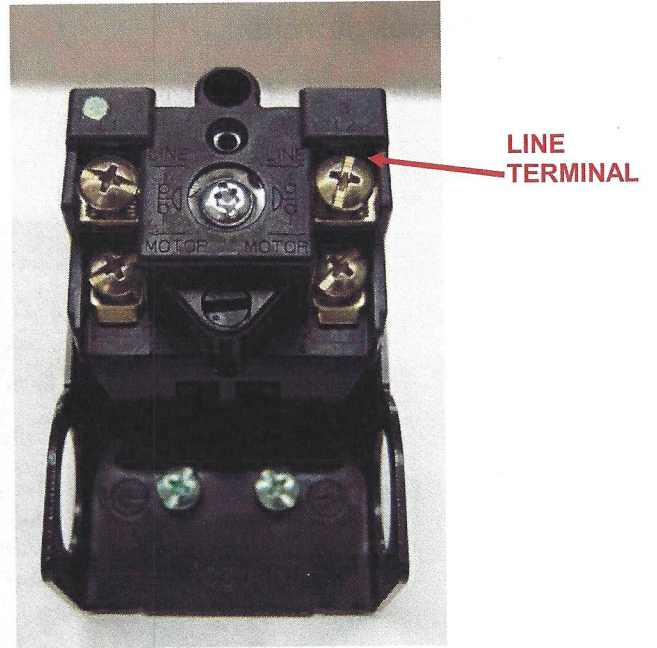
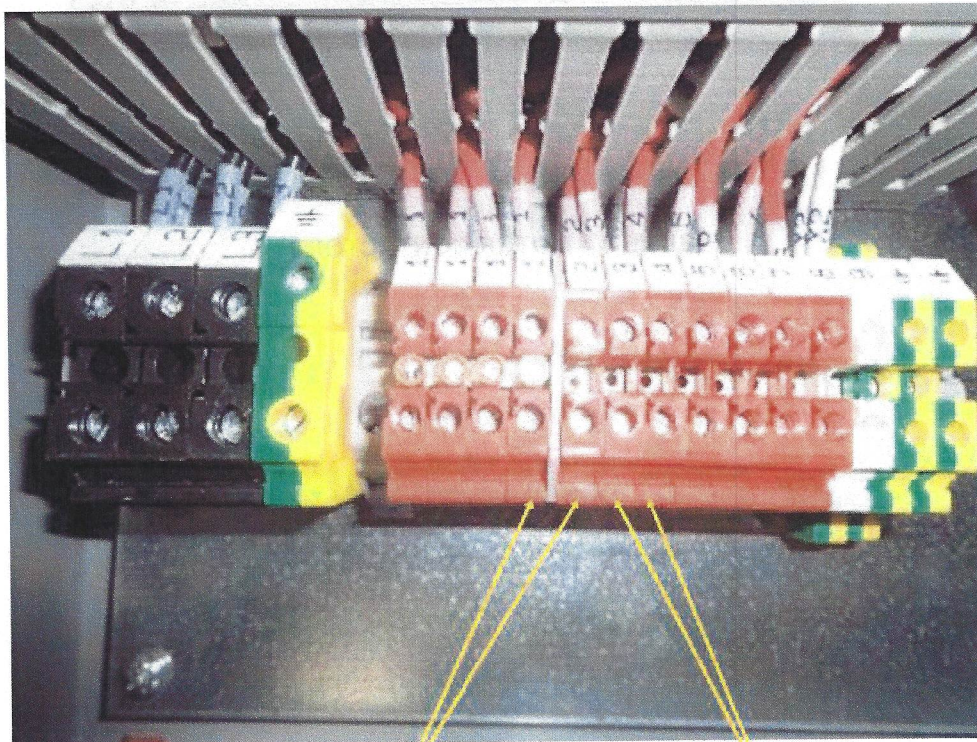


FIGURE 4 – PRESSURE SWITCH



LEAD PRESSURE SWITCH
CONNECTIONS
TERMINALS 1 & 2

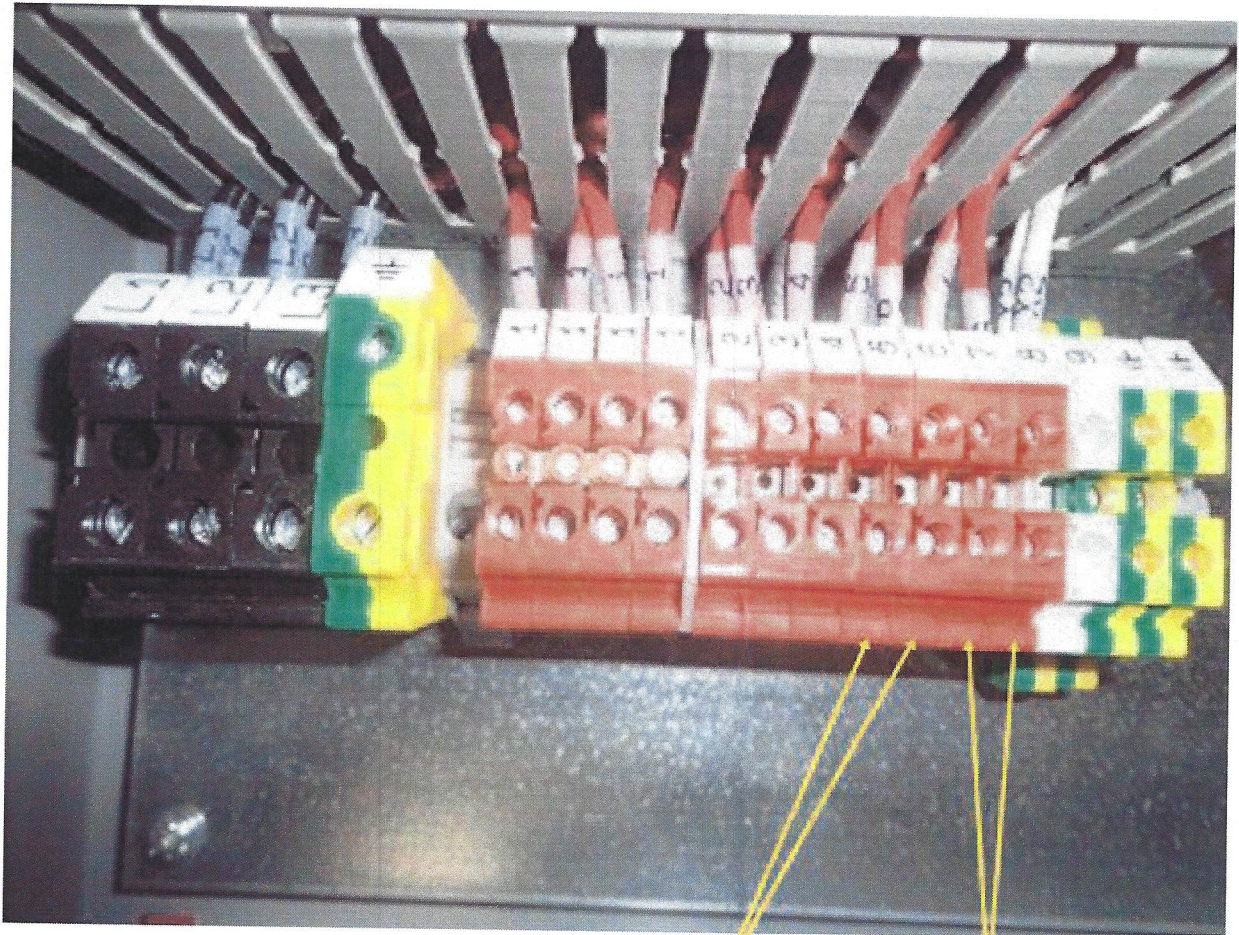
LAG PRESSURE SWITCH
CONNECTIONS
TERMINALS 3 & 4

FIGURE 5 – PRESSURE SWITCH CONNECTIONS

INSTALLATION (CONT'D)

LOW OIL LEVEL MONITOR

1. Factory wired. No wiring required.



LEAD COMPRESSOR
OIL LEVEL MONITOR
CONNECTIONS
TERMINALS 5 & 6

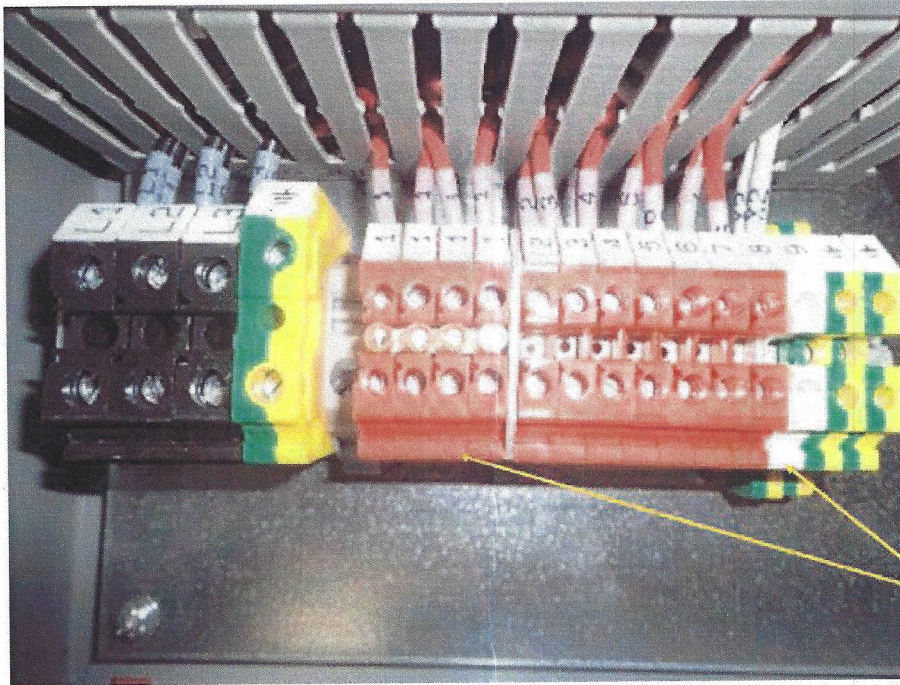
LAG COMPRESSOR
OIL LEVEL MONITOR
CONNECTIONS
TERMINALS 7 & 8

FIGURE 6 - LOW OIL LEVEL MONITOR

INSTALLATION (CONT'D)

ELECTRIC TANK DRAIN

1. Factory wired. No wiring required.



ELECTRIC TANK DRAIN
CONNECTIONS
TERMINALS
1 & 9

FIGURE 7 – ELECTRIC TANK DRAIN

INSTALLATION (CONT'D)

CAUTION

Wiring must be such that when viewing compressor from opposite shaft end, rotation of shaft is clockwise as shown by arrow on guard. Wrong direction rotation for any length of time will result in damage to compressor.

GROUNDING INSTRUCTIONS

This product should be connected to a grounded, metallic, permanent wiring system, or an equipment-grounding terminal or lead on the product.

OPERATION

This compressor has been inspected, thoroughly tested and approved at the factory. For this unit to give long satisfactory service it must be installed and operated properly. This compressor has been designed for a 80%/ON – 20%/OFF duty cycle.

Duplex units have lead and lag pressure switches and an automatic alternating system to evenly distribute the load between the two compressors. The pressure switches sense changes in receiver pressure and automatically start and stop the compressor at preset pressure levels. If the receiver pressure falls below the cut-in pressure setting of the lead pressure switch but remains above the cut-in pressure setting of the lag pressure switch, only one compressor will run until receiver pressure reaches the cut-out pressure of the lead pressure switch. The next time the pressure in the receiver drops, the system automatically starts the compressor that was idle. If the receiver pressure falls below the cut-in pressure setting of the lag pressure switch, both compressors run until receiver pressure reaches the cut-out pressure setting of the lead pressure switch.

To manually set lead compressor, set Auto-Comp1-Comp2 switch to Comp1 or Comp2 for corresponding compressor to be lead.

To disable power to a compressor set its corresponding disconnect switch to off, set its corresponding TOA switch to off and set the Auto-Comp1-Comp2 to the opposite compressor.

Initial Start Up

1. Inspect unit for any visible signs of damage that would have occurred in shipment or during installation.
2. Pull main disconnect switch to unit to assure that no power is coming into the unit. "Lock Out" or "Tag Out" switch. Verify voltage corresponds to unit specifications.

WARNING

Do not attempt to operate compressor on voltage other than that specified on order or on compressor motor.

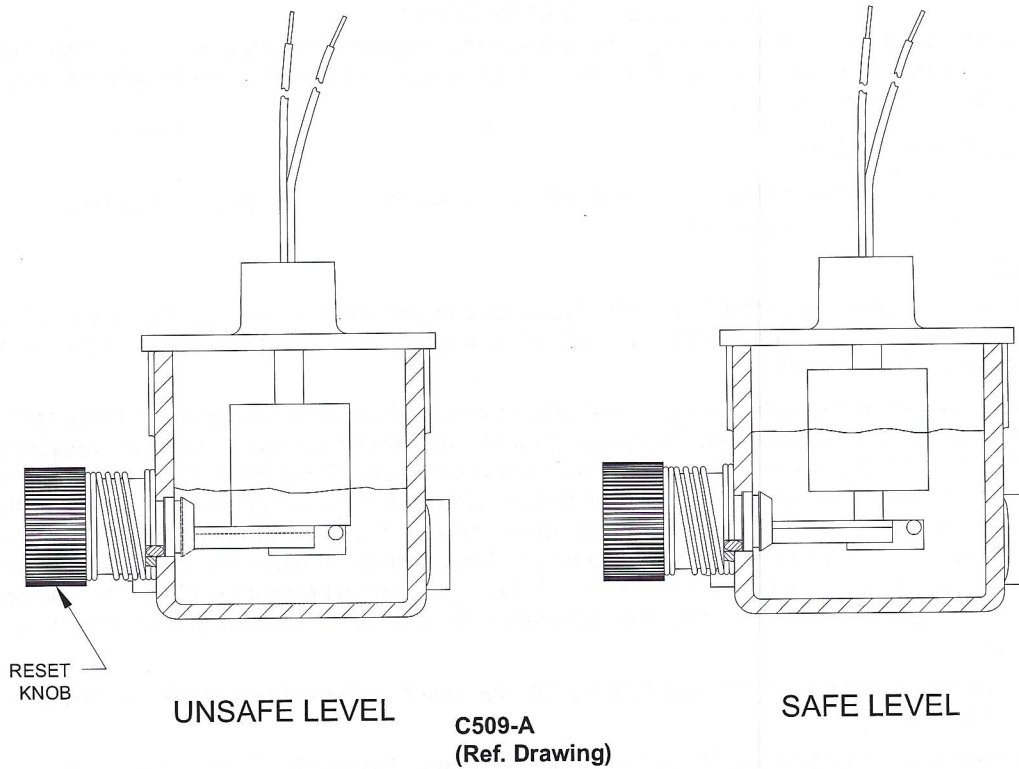
3. Check compressor oil level. Add oil as required. See "Compressor Oil Specifications" Section.
NOTE: Do not mix oil type, weights or brands.
4. Activate main disconnect switch.
4. "Jog" motor and check for proper rotation by direction arrow. If rotation is wrong, reverse input connections on the magnetic starter.
5. Close discharge valve and start.
6. With discharge valve closed, let machine pump up to operating pressure. At this stage the automatic controls will take over. Check for proper cycling operation.
7. Check for proper operation of any options. Refer to individual option instruction sheet.
8. When the initial run period has shown no operating problems, shut unit down and recheck oil level.
9. Open discharge valve. The air compressor unit is now ready for use.

WARNING

This unit can start automatically without warning.

OPERATION CONT'D

OIL MONITOR



OIL MONITOR.

The oil monitor must be used in conjunction with the control panel (see wiring diagram page 9 for details). The oil monitor is installed on the outside of the air compressor crankcase with a port that allows oil to feed into it's float bowl chamber and maintain the same level as in the crankcase. The float moves vertically up or down as the oil level changes. If the oil level is below minimum allowable operating level, the reed switch will open, thus stopping the motor. A magnet holds the float and prevents the compressor from starting.

IMPORTANT NOTE: The Oil Monitor does not eliminate the compressor owner's responsibility for periodically checking oil level.

NOTICE

Do not disassemble LOSC switch. Disassembly will void warranty.

GUIDE TO MAINTENANCE

To obtain reliable and satisfactory service, this unit requires a consistent preventive maintenance schedule. Maintenance schedule pages are included in the back of this manual to aid in keeping the proper records.

⚠ WARNING

Before performing any maintenance function, switch main disconnect switch to "off" position to assure no power is entering unit. "Lock Out" or "Tag Out" all sources of power. Be sure all air pressure in unit is relieved. Failure to do this may result in injury or equipment damage.

DAILY MAINTENANCE

1. Check oil level of both compressor and engine if so equipped. Add quality lubricating oil as required. See Section on "Oil Specifications".
2. Drain moisture from tank by opening tank drain valve located in bottom of tank. Do not open drain valve if tank pressure exceeds 25 PSIG.
3. Check operation of electric tank drain by pushing manual test button located on drain.
4. Turn off compressor at the end of each day's operation. Turn off power supply at wall switch.

WEEKLY MAINTENANCE

1. Clean dust and foreign matter from cylinder head, motor, fan blade, air lines, intercooler and tank.
2. Remove and clean intake air filters.

⚠ WARNING

Do not exceed 15 PSIG nozzle pressure when cleaning element parts with compressed air. Do not direct compressed air against human skin. Serious injury could result. Never wash elements in fuel oil, gasoline or flammable solvent.

3. Check V-belts for tightness. The V-belts must be tight enough to transmit the necessary power to the compressor. Adjust the V-belts as follows:
 - a. Remove bolts and guard to access compressor drive.
 - b. Loosen mounting hardware which secures motor to base. Slide motor within slots of baseplate to desired position.
 - c. Apply pressure with finger to one belt at midpoint span. Tension is correct if top of belt aligns with bottom of adjacent belt. Make further adjustments if necessary.
 - d. Check the alignment of pulleys. Adjust if necessary.
 - e. Tighten mounting hardware to secure motor on base.
 - f. Re-install guard and secure with bolts.

⚠ WARNING

Never operate unit without belt guard in place. Removal will expose rotating parts which can cause injury or equipment damage.

EVERY 90 DAYS OR 500 HOURS MAINTENANCE

1. Change crankcase oil. Use type and grade oil as specified in the section on "Compressor Oil Specifications".
2. Check entire system for air leakage around fittings, connections, and gaskets, using soap solution and brush.
3. Tighten nuts and capscrews as required.
4. Check and clean compressor valves, replace springs, discs and seats when worn or damaged.



Valves must be reinstalled in original position. Valve gaskets should be replaced each time valves are serviced.

5. Pull ring on all pressure relief valves to assure proper operation.

GENERAL MAINTENANCE NOTES

PRESSURE RELIEF VALVE: The pressure relief valve is an automatic pop valve. Each valve is properly adjusted for the maximum pressure permitted by tank specifications and working pressure of the unit on which it is installed. If it should pop, it will be necessary to drain all the air out of the tank in order to reseat properly. Do not readjust.

MANUAL TANK DRAIN VALVE: Drain valve is located at bottom of tank. Open drain valve daily to drain condensation. Do not open drain valve if tank pressure exceeds 25 PSIG. The automatic tank drain equipped compressor requires draining manually once a week.

PRESSURE SWITCH: The pressure switch is automatic and will start compressor at low pressure and stop when the maximum pressure is reached. It is adjusted to start and stop compressor at the proper pressure for the unit on which it is installed. Do not readjust.

BELTS: Drive belts must be kept tight enough to prevent slipping. If belts slip or squeak, see V-belt maintenance in preceding section.



If belts are too tight, overload will be put on motor and motor bearings.

COMPRESSOR VALVES: If compressor fails to pump air or seems slow in filling up tank, disconnect unit from power source and remove valves and clean thoroughly, using compressed air and a soft wire brush. After cleaning exceptional care must be taken that all parts are replaced in exactly the same position and all joints must be tight or the compressor will not function properly. When all valves are replaced and connections tight, close hand valve at tank outlet for final test. Valve gaskets should be replaced each time valves are removed from pump.

GENERAL MAINTENANCE (Cont'd.)

CENTRIFUGAL UNLOADER AND UNLOADER PRESSURE RELEASE VALVE:

The centrifugal unloader is operated by two governor weights. It is totally enclosed and lubricated from the crankcase of the compressor. When compressor starts, the governor weights automatically open compressing the main spring, allowing the unloader pressure release valve to close. When the compressor stops, the main spring returns the governor weights to normal position opening the unloader pressure release valve and unloading the compressor. This prevents overloading the motor when starting. If air continues to escape through the governor or unloader pressure release valve while operating, this is an indication that the unloader pressure release valve is not closing tightly and may be held open by foreign substance which has lodged on the seat. In order to correct this, remove the governor release valve cap, giving access to unloader pressure release valve spring and ball. Clean thoroughly and return parts in the same order in which they were removed. Loose drive belts can also cause unloader to leak by preventing the compressor from reaching proper speed. (See "BELTS" above).

CHECK VALVE: The check valve closes when the compressor stops operating, preventing air from flowing out of the tank through the pressure release valve. After the compressor stops operating, if air continues to escape through the release valve, it is an indication that the check valve is leaking. This can be corrected by removing check valve and cleaning disc and seat. If check valve is worn badly, replace same.

 **WARNING**

Before removing check valve be sure all air is drained out of tank and power is disconnected. Failure to do so may result in injury or equipment damage.

THE INTERSTAGE PRESSURE RELIEF VALVE is provided to protect against interstage over pressure and is factory set for maximum pressure of 75 PSIG. **DO NOT RESET**
If the pressure relief valve pops, it indicates trouble. Shut down the unit immediately and determine and correct the malfunction. Inspect the head valves. Serious damage can result if not corrected and can lead to complete destruction of the unit. Tampering with the interstage pressure relief valve, or plugging the opening destroys the protection provided and voids all warranty.

COMPRESSOR LUBRICATION: Fill crankcase to proper level as indicated by oil sight gauge. Keep crankcase filled as required by usage. It is recommended that only Champlub recip lubricant be used. This is a 30-weight, non-detergent industrial oil with rust and oxidation inhibitors specially formulated for reciprocating compressors. Do not mix oil types, weights or brands.

MOTOR LUBRICATION: Long time satisfactory operation of an electric motor depends in large measure on proper lubrication of the bearings. Bearing grease will lose its lubricating ability overtime, not suddenly. Refer to the motor manufacturer's instructions for the type of grease and lubrication intervals.

COMPRESSOR OIL SPECIFICATIONS

Compressors are factory filled with CHAMPLUB hydrocarbon based recip lubricant. This is an ISO 100 non-detergent industrial lubricant with rust and oxidation inhibitors specially formulated for reciprocating compressors. It is recommended this compressor be maintained using this oil for ambient temperatures above 32°F.

CHAMPLUB synthetic is a premium grade diester based synthetic lubricant providing excellent performance in high temperature applications.

⚠ CAUTION

Do not mix oil types, weights or brands.

⚠ CAUTION

“Emulsification of oil (white milky substance) indicates unsafe accumulation of moisture and may be evidence compressor is oversized for application. Failure to promptly consult your local distributor, or Champion Customer Service, can be grounds to deny warranty.”

NOTES:

1. Normal break-in period of Champion air compressors is 25 hours.
2. For the first 100 hours of compressor operation, a careful and regular check of the oil level should be made. Maintain oil level at the full line.

CHANGING TO SYNTHETIC LUBRICANT

(Applies to diester based synthetic lubricant only)

If changing to synthetic lubricant, the following steps must be completed.

1. Compressor must run for a 25 hour break-in period using ChampLub ISO 100 oil.
2. Thoroughly drain existing oil from crankcase.
3. Fill crankcase with a full charge of synthetic lubricant.
4. Run compressor for 200 hours.
5. Stop compressor and thoroughly drain the synthetic lubricant.
6. Add a full charge of synthetic lubricant.
7. Compressor now ready to run for extended period before next lubricant change. made. Maintain oil level at the full line.

LUBRICANT

CHAMPLUB	
DESCRIPTION	PART NUMBER
1 – Quart Case (12/case)	P09479A
1 – Gallon Case (4/case)	P08909A
5 – Gallon Pail	P08908A
55 – Gallon Drum	P08907A
CHAMPLUB SYNTHETIC	
DESCRIPTION	PART NUMBER
1 – Quart Case (12/case)	P13179A
1 – Gallon Case (4/case)	P13180A
5 – Gallon Pail	P11506A
55 – Gallon Drum	P13181A

TORQUE VALUES

SPECIFIC APPLICATION	FASTENER SIZE & THREAD	TORQUE	INCH-POUNDS
BEARING HOUSING BOLT	3/8 – 16		400
CYLINDER FLANGE BOLT	7/16 – 20		400
CONNECTING ROD BOLT	5-16 – 18		230
MANIFOLD BOLT	3/8 – 16		200
FLYWHEEL BOLT	1/2 – 13		600

TROUBLE SHOOTING CHART FOR COMPRESSOR

Always disconnect unit from power supply and relieve all pressure from air tank before performing any maintenance. Failure to do so may result in equipment damage or injury. A "Lock Out" or "Tag Out" all power sources.




Never operate unit without belt guard in place.

Never use gasoline or flammable solvent on or around compressor unit. Explosion may result.

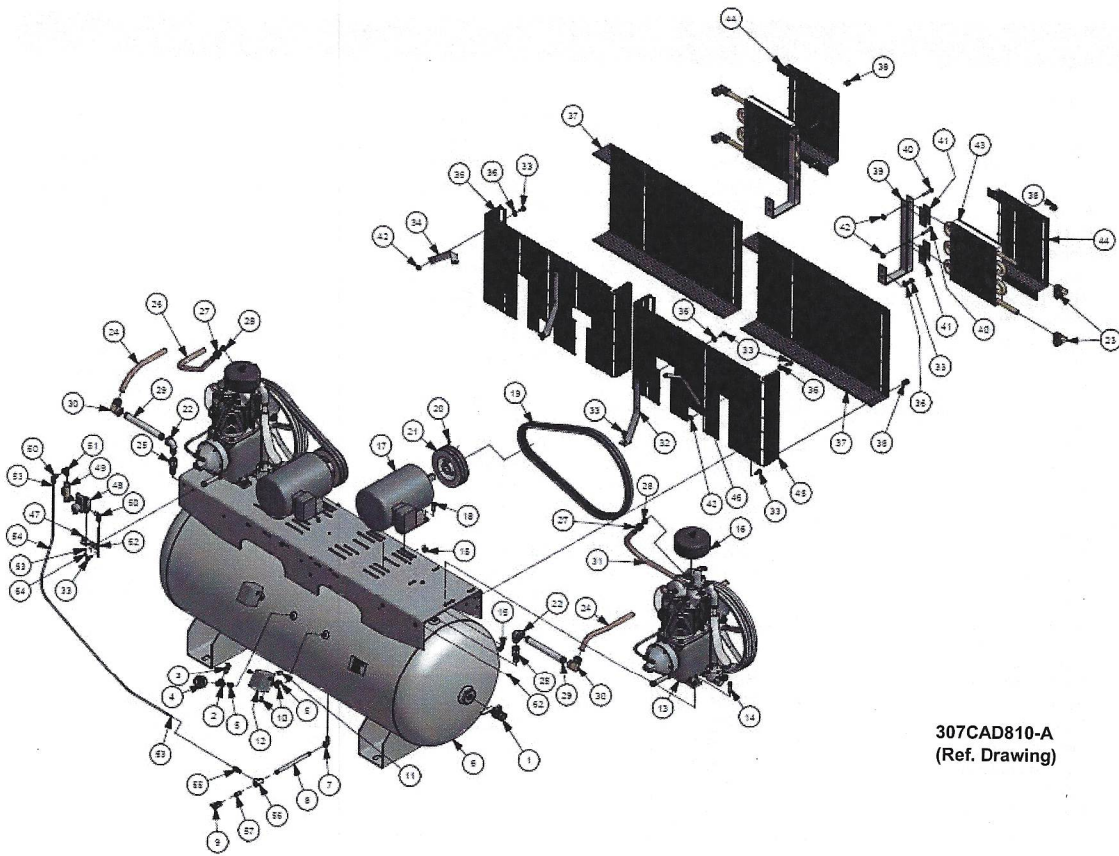
Troubleshooting Chart

Symptom	Possible Cause(s)	Corrective Action
Motor will not start.	<ol style="list-style-type: none"> 1. Main switch and fuses open. 2. Starter heater coils open. 3. Starter tripped 4. Defective pressure switch-contacts will not close 5. Low voltage. 	<ol style="list-style-type: none"> 1. Check all fuses and switches. Check for loose or faulty wires. 2. Check heaters in starter. Reset starter. 3. Reset starter. If starter trips repeatedly, have electrical system inspected by an electrician. 4. Repair or replace pressure switch. <p> Warning – Relieve tank pressure before servicing.</p> <ol style="list-style-type: none"> 5. Check with voltmeter. Be sure voltage corresponds to unit specifications.
Starter trips repeatedly.	<ol style="list-style-type: none"> 1. Improperly adjusted pressure switch. 2. Faulty check valve. 3. Incorrect fuse size or magnetic starter heaters. 4. Low voltage. 5. Defective motor. 	<ol style="list-style-type: none"> 1. Adjust or replace. <p> Warning – Relieve tank pressure before servicing.</p> <ol style="list-style-type: none"> 2. Clean or replace <p> Warning – Relieve tank pressure before servicing.</p> <ol style="list-style-type: none"> 3. Be sure that fuses and heaters are properly rated. 4. Check with voltmeter. Be sure voltage corresponds to unit specifications. 5. Replace motor.
Tank pressure builds up slowly.	<ol style="list-style-type: none"> 1. Air leaks. 2. Dirty air filter. 3. Defective compressor valves 	<ol style="list-style-type: none"> 1. Tighten fittings. 2. Clean or replace. 3. Install new valve plate assembly.
Tank pressure builds up quickly.	<ol style="list-style-type: none"> 1. Excessive water in tank. 	<ol style="list-style-type: none"> 1. Drain tank.
Discharge pressure relief valve pops off while compressor is running.	<ol style="list-style-type: none"> 1. Wrong pressure switch setting. 2. Defective ASME relief valve. 	<ol style="list-style-type: none"> 1. Adjust to correct setting. 2. Replace valve. <p> Warning – Relieve tank pressure before servicing.</p>
Excessive belt wear.	<ol style="list-style-type: none"> 1. Pulley out of alignment. 2. Belts too tight or too loose. 	<ol style="list-style-type: none"> 1. Realign motor pulley. 2. Adjust belt tension.
Compressor runs hot.	<ol style="list-style-type: none"> 1. Improper flywheel rotation 2. Defective compressor valves. 3. Dirty air filter. 4. Dirty cylinder and/or intercooler. 	<ol style="list-style-type: none"> 1. Check for correct rotation. (Counter clockwise when viewed from drive side.) 2. Install new valve plate assembly. 3. Clean or replace. 4. Clean cylinder fins and/or intercooler.
Interstage pressure relief valve pops off.	<ol style="list-style-type: none"> 1. Defective compressor valves. 	<ol style="list-style-type: none"> 1. Install new valves.
Excessive oil consumption.	<ol style="list-style-type: none"> 1. Dirty air filter. 2. Wrong oil viscosity. 3. Oil leaks. 4. Worn piston rings. 5. Scored cylinder 	<ol style="list-style-type: none"> 1. Clean or replace. 2. Refill with proper viscosity oil. 3. Tighten bolts. Replace gaskets. 4. Replace rings. 5. Replace cylinder.

Troubleshooting Chart (Cont'd)

Symptom	Possible Cause(s)	Corrective Action
Air escapes from centrifugal unloader when unit is running	1. Centrifugal unloader release valve dirty or defective.	1. Clean or replace valve
Air escapes from centrifugal unloader when unit is stopped.	1. Check valve stuck in open position.	1. Replace check valve.  Warning – Relieve tank pressure before servicing.
System does not alternate	1. Starter tripped. 2. Loose wiring. 3. Defective alternator. 4. Defective motor.	1. Reset starter. If starter trips repeatedly, have electrical system inspected by an electrician. 2. Check and tighten all wiring connections. 3. Replace alternator. 4. Replace motor.

PARTS ILLUSTRATION
MODEL: CADRSASP12



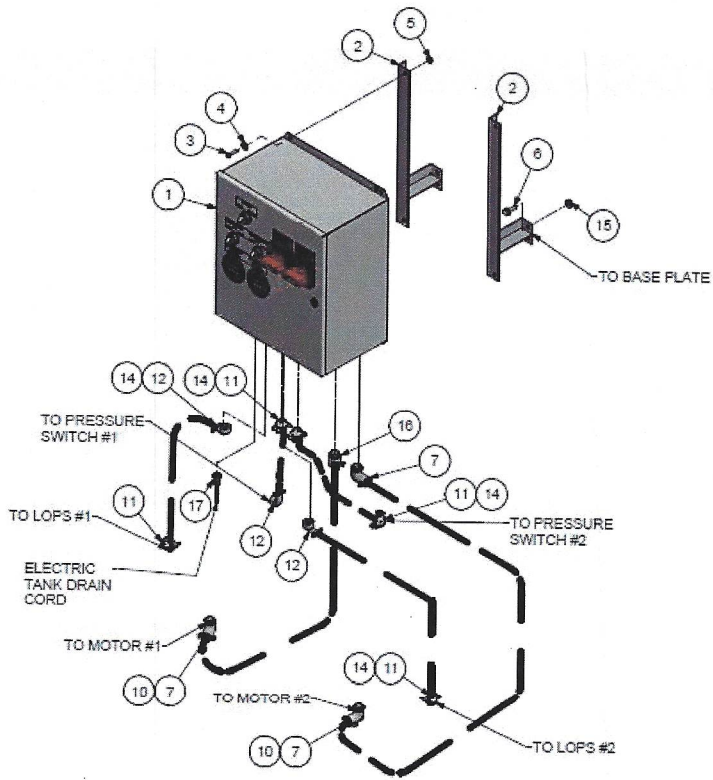
307CAD810-A
(Ref. Drawing)

PARTS ILLUSTRATION

CADRSASP12

Ref. No.	Description	Qty.	Part No.	Ref. No.	Description	Qty.	Part No.
1	Ball Valve	1	CQM3756	36	Washer	6	M3056
2	Tee	1	M3012	37	Beltguard Front	2	CC1055728
3	Pressure Relief Valve	1	M2843	38	Beltguard Clip	20	P10005A
4	Pressure Gauge	1	M519C	39	Aftercooler Bracket	2	CC1055729
5	Nipple	2	M3011	40	Screw	4	M2627
6	Receiver	1	P14130D	41	Isolator	8	M1367
7	Elbow	1	M980B	42	Nut	6	M3485
8	Nipple	1	M3487	43	Aftercooler	2	P14477B
9	Ball Valve	1	VP1022988	44	Aftercooler Beltguard	2	P14072C
10	Pipe Plug	6	64AA5	45	Beltguard Back	1	CC1057890
11	Knockout Plug	2	M2352	46	Beltguard Bracket	1	CC1060114
12	Pressure Switch	2	P14202A	47	Bracket	1	P14418B
13	Compressor	2	Z2412	48	Electric Drain	1	P14240A
14	Screw	8	M3460	49	Strainer	1	P13749A
15	Nut	16	M3483	50	Tube Fitting	2	86A40
16	Filter	2	P04999A	51	Elbow	1	M3088
17	Motor	2	24CA6647	52	Drain Tube	.05 FT	M2471
18	Screw	8	M3440	53	Tube Insert	2	P10118A
19	V-Belt	4	5L680	54	Tubing	5.25 FT	P10117A
20	Screw	2	M568	55	Tube Fitting	1	M2862
21	Pulley	2	M7009D	56	Tee	1	M1003B
22	Elbow	2	M1296	57	Nipple	1	P08798A
23	Tube Fitting	4	M2288	63	Lockwasher	2	M3691
24	Discharge Tube	1 FT	M2474	64	Screw	2	M923A
25	Check Valve	2	P05822A				
26	Discharge Tube	1	CC1069064				
27	Compression Nut	2	SE541				
28	Compression Ferrule	2	SE542				
29	Nipple	2	M3654				
30	Tube Fitting	2	M2398				
31	Discharge Tube	1	CC1069229				
32	Beltguard Bracket	2	P09985B				
33	Screw	14	M1454				
34	Beltguard Bracket	1	P14085B				
35	Beltguard Back	1	CC1055727				

DUPLEX CONTROL PANEL MOUNTING



305CAD810-A
(Ref. Drawing)

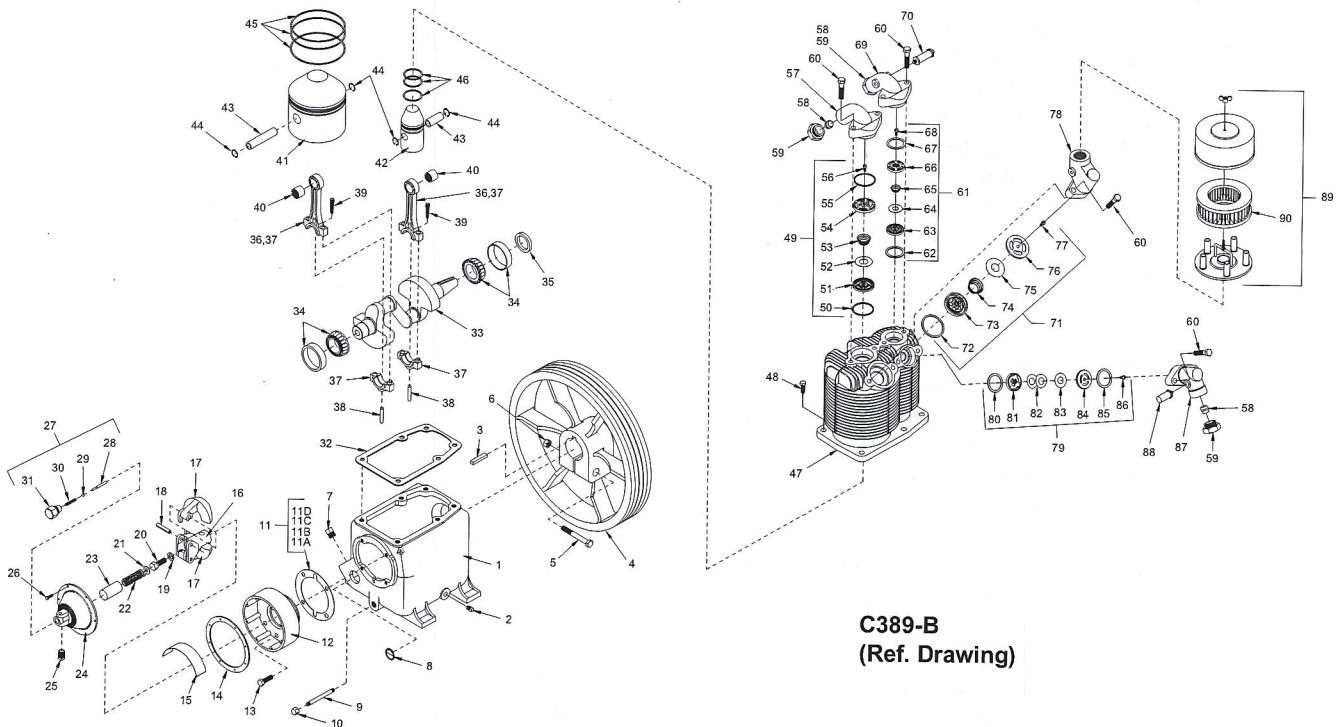
PARTS ILLUSTRATION

CADRSASP12

Ref. No.	Description	Part No.	Qty.
1	DCP,5HP/460/3/60	VP1159723	1
2	Bracket	304CAD017	2
3	Screw	M3471	4
4	Washer	M3481	4
5	Nut	M3424	4
6	Screw	75LM97	4
7	Conduit Conn	M1883	3
8	Wire	M2444	11.0FT
9	Wire	M3753	7.0FT
10	Conduit, Flex	M2461	5.0FT
11	Conduit Conn.	M1757	3
12	Conduit Conn.	M1606	1
13	Wire	M2438	5.0FT
14	Conduit,Extra Flex	CC1019312	2.0FT
15	Nut	M3485	4
16	Conduit Conn.	P04131A	1
17	Fitting	P13259A	1

Compressor Repair Parts Illustration

Model: R15B



Repair Parts List

Compressor Model R15B

Ref. No.	Description	Part No.	Qty.
1	Crankcase	M1820	1
2	Pipe plug	64AA5	1
3	Key	U8	1
4	Flywheel	NR7A	1
5	Hex head cap screw	M738	1
6	Hex nut	M2955	1
7	Pipe plug	64A5	1
8	Oil level gauge	RE714	1
9	Pipe nipple	M492	1
10	Pipe cap	M461	1
11	Governor housing gasket set (includes, 11A, 11B, 11C & 11D)	Z130	1
11A	Governor housing gasket (.032" Thick)	SE1430	1
11B	Governor housing gasket (.005/.007" Thick)	SE1430A	1
11C	Governor housing gasket (.010" Thick)	SE1430B	1
11D	Governor housing gasket (.015" Thick)	SE1430C	1
12	Governor housing	NR80A	1
13	Hex head cap screw	M2343	4
14	Governor housing cover gasket	SE1489	1
15	Baffle plate	NR104	1
16	Governor weight spindle	SE583B	1
17	Governor weight	SE582B	2
18	Governor weight pin	SE592A	1

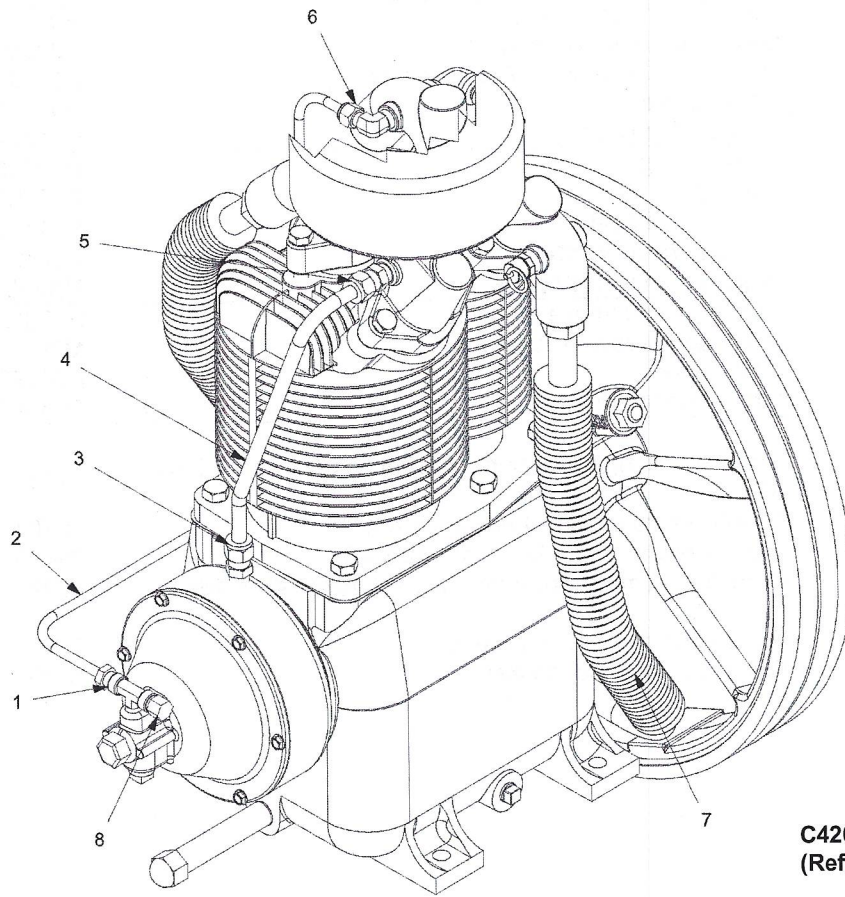
**Repair Parts List
Compressor Model R15B**

Ref. No.	Description	Part No.	Qty.
19	Lock washer	M3468	1
20	Hex head cap screw	M2345	1
21	Flat washer	M912A	1
22	Governor spring	SE590	1
23	Spring sleeve	SE587	1
24	Governor housing cover	RE10100A	1
25	Unloader muffler assembly	Z4593	1
26	Hex head machine screw	M3473	6
27	Release valve assembly	Z12414A	1
28	Release valve plunger	SE586B	1
29	Release valve ball	P07841A	1
30	Release valve spring	SE591	1
31	Release valve body	NR101	1
32	Cylinder flange gasket	NR29A	1
33	Crankshaft	R155	1
34	Main Bearing	ZNR16	2
35	Oil seal	OSN4	1
36	Connecting rod assembly (includes items 37 thru 40)	Z750	2
37	Connecting rod (not sold separately)	---	--
38	Oil dipper	R1524	2
39	Connecting rod bolt	M1583	4
40	Piston pin bearing	R1037	2
41	Low pressure piston with pin (includes items 43 & 44)	ZR154	1
42	High pressure piston with pin (includes items 43 & 44)	ZP02709C	1
43	Piston pin	R1021	2
44	Piston pin retaining ring	R10102	4
45	Low pressure piston ring set	Z798	1
46	High pressure piston ring set	Z797	1
47	Cylinder	P12237D	1
48	Hex head cap screw	M2345	6
49	Low pressure discharge valve assembly	Z813	1
50	Valve gasket	P04135A	1
51	Discharge valve seat	M2097	1
52	Valve disc	RE1061	1
53	Valve spring	RE1059	1
54	Discharge valve cage	M2099	1
55	Valve gasket	P04135A	1
56	Hex head machine screw	M3220	1
57	Low pressure discharge manifold	RE102E	1
58	Ferrule	SE542	3
59	Compression nut	SE541	3
60	Hex head cap screw	P05005A	8
61	High pressure discharge valve assembly	Z115	1
62	Valve gasket	P04137A	1
63	Discharge valve seat	RE757A	1
64	Valve disc	RE1062	1
65	Valve spring	RE760	1
66	Hex head machine screw	M3220	1
67	Gasket, Valve, HPEX	CQP14869A	1
68	Discharge valve cage	M2100	1
69	High pressure discharge manifold (Non-Base Mount Units)	P12303B	1
70	Pressure relief valve	P09704A	1
71	Low pressure intake valve assembly	Z812	1

**Repair Parts List
Compressor Model R15B**

Ref. No.	Description	Part No.	Qty.
72	Gasket, Valve, LPIN, R10-30	CQP14832A	1
73	Intake valve cage	M2098	1
74	Valve spring	RE1458	1
75	Valve disc	RE1470	1
76	Intake valve seat	RE1471	1
77	Hex head machine screw	P04544A	1
78	Low pressure intake manifold	P09669C	1
79	High pressure intake valve assembly	Z11937	1
80	Valve gasket	P09171A	1
81	Intake valve cage	P14224B	1
82	Valve spring	P13866A	2
83	Valve disc	P13865A	1
84	Intake valve seat	P14118B	1
85	Gasket, Valve, HPIN	CQP14870A	1
86	Hex head machine screw	M3220	1
87	High pressure intake manifold	P12302B	1
88	Interstage pressure relief valve	M3685	1
89	Intake filter	P04999A	1
90	Intake filter element	P05050A	1
	Complete compressor pump gasket set (items 11,14 & 32)	Z764	1
	Low pressure piston kit (items 41 & 45)	Z9101	1
	High pressure piston kit (items 42 & 46)	Z9100	1
	Complete compressor pump ring set (items 45 & 46)	Z799	1
	Complete valve set w/gaskets	Z5155	1
	Complete valve set gaskets	Z5156	1

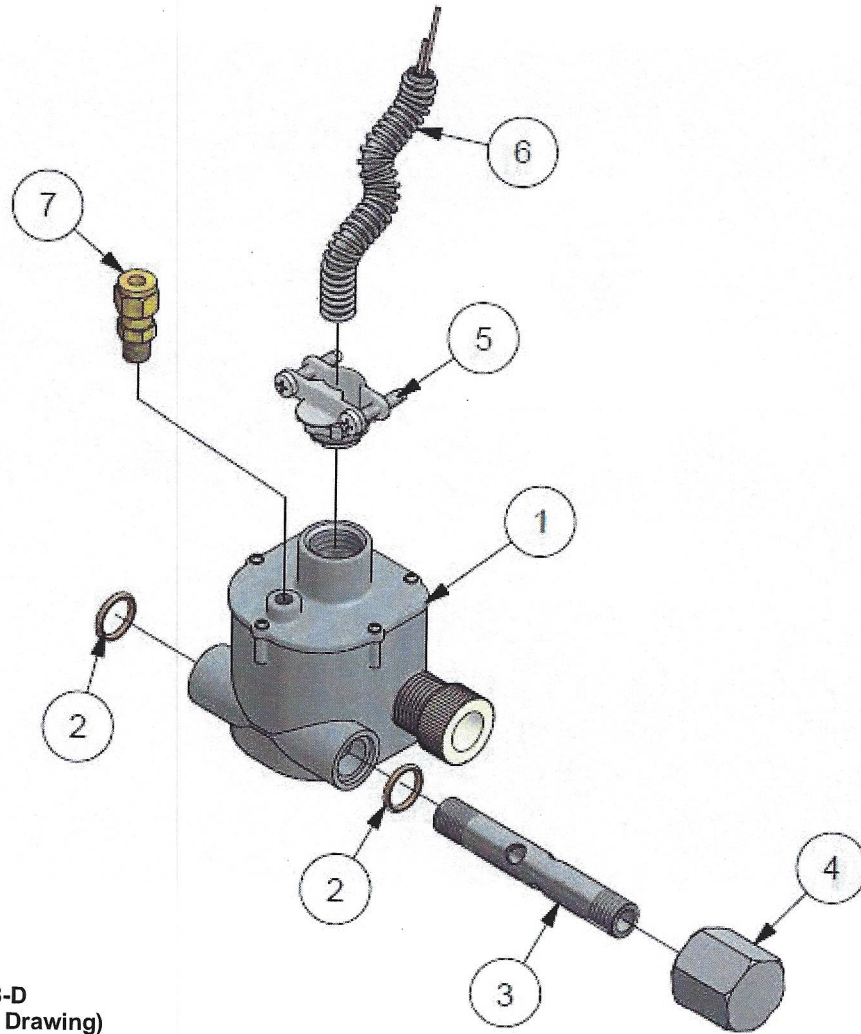
Compressor Repair Parts Illustration
Model: R15B



C420-B
(Ref. Drawing)

Ref. No.	Description	Part No.	Qty.
1	Compression Fitting	M2879	1
2	Tube, Unloading w/Fittings	ZSB250A	1
3	Compression Fitting	M2864	1
4	Breather Tube w/Fitting	ZUB375	1
5	Compression Fitting	M2864	1
6	Compression Fitting	86A40	1
7	Intercooler w/Fittings	Z9140	1
8	Compression Nut	VP106173	1

LOSC



C508-D
(Ref. Drawing)

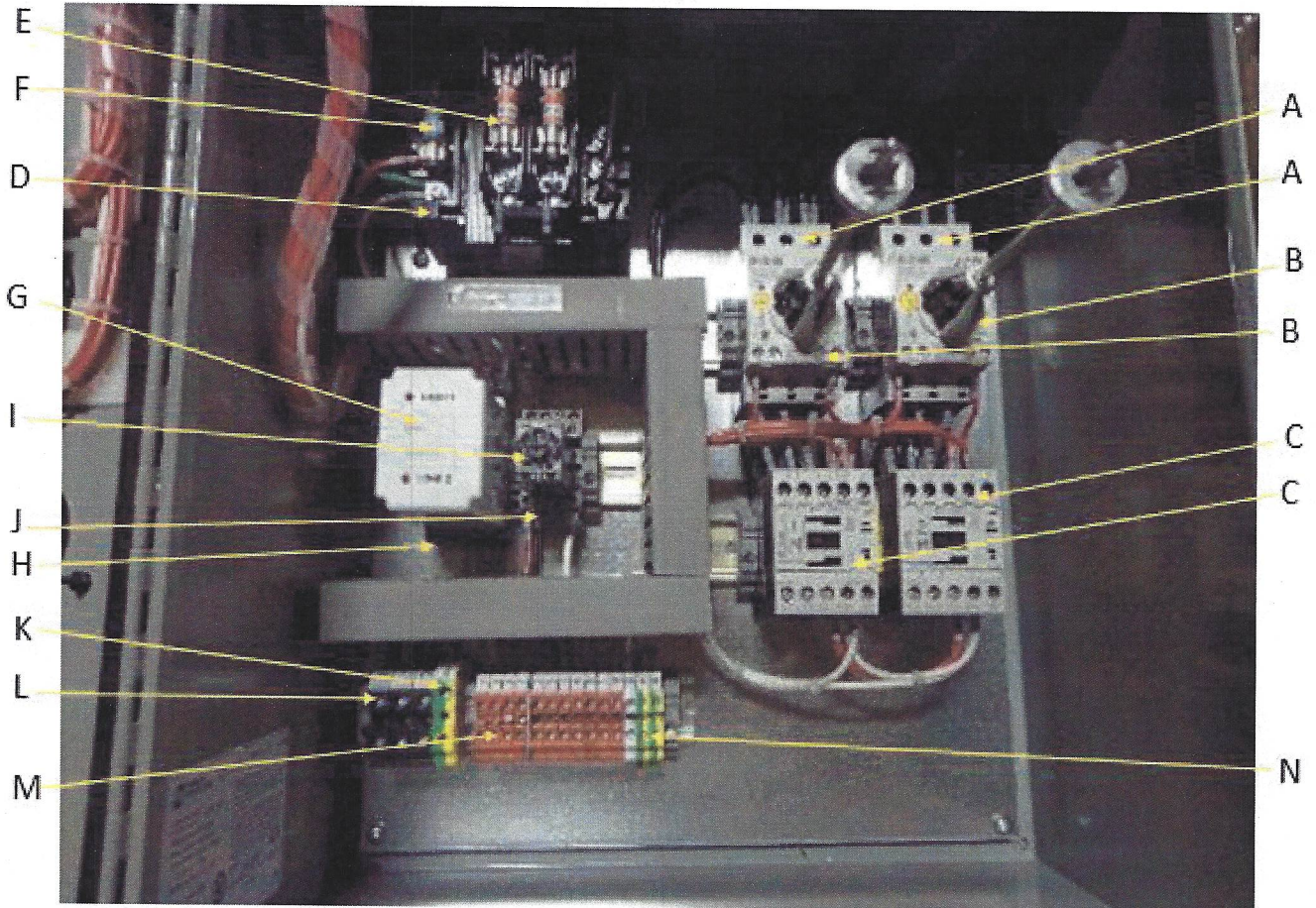
ITEM	DESCRIPTION	PART NO.	QTY.
1	Losc Switch	VP1153306	1
2	O-Ring	2009222	2
3	Tube, Oil	CC1153304	1
4	Cap	L030	1
5	Conduit Connector	M1757	1
6	Conduit	CC1019312	1 ft.
7	Compression Fitting	M2863	1

EXTERNAL COMPONENTS



ITEM	DESCRIPTION	PART NO.	QTY.
1	Auto-Comp1-Comp2 Switch	P12523A	1
2	Test-Off-Auto Switch	VP1095446	2
3	N/O Contact	TEN000977	6
4	N/C Contact	24CA7111	1
5	Elapsed Time Meter	TEN004553	2
6	Circuit Breaker Handle	TEN000784	2

INTERNAL COMPONENTS



ITEM	DESCRIPTION	PART NO.	QTY.
A	Circuit Breaker	TEN000369	2
B	Auxiliary Contact	TEN004557	2
C	Contactor	24CA6989	2
D	Transformer	TEN004560	1
E	Primary Fuse	P10956A	2
F	Secondary Fuse	TEN004559	1
G	Alternator	TEN001127	1
H	Base, Alternator	TEN001128	1
I	Timer, Lag Start	TEN004554	1
J	Base, Timer	TEN004555	1
K	Line Terminal Ground	24CA5989	1
L	Line Terminal	24CA6097	3
M	Terminal Block	24CA5984	11
N	Ground Terminal Block	24CA5986	2

RECEIVER DRAIN TIMER

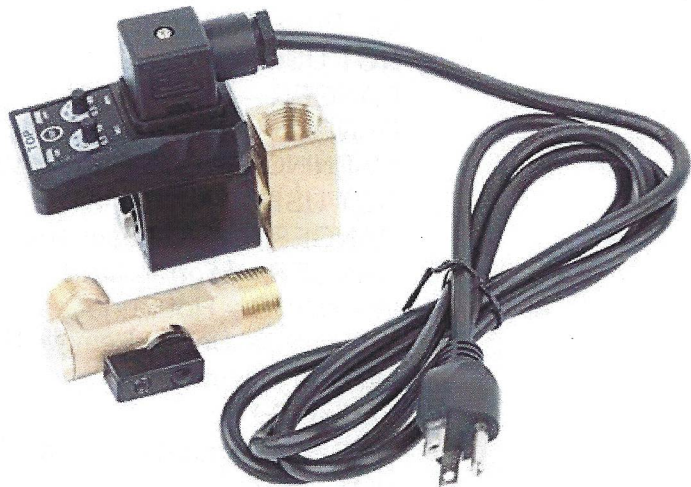
OPERATION

The Drain Timer is designed for trouble-free draining of un-wanted accumulations of condensate. The timer module initiates a drain cycle by energizing the valve coil that opens the valve and allows the condensate to drain. At the end of the cycle, the coil is de-energized and the valve is spring-returned to the closed position. At the beginning of drain cycle the ON light illuminates and the OFF light turns off. The lights switch at the end of a timer cycle.

First, when power is applied to the timer, the timer will immediately put power to the valve for the amount of time indicated by the setting of the ON TIME. Removing and reapplying power will again actuate the timing cycle.

Second, pushing the test button located on the front panel will actuate the valve for as long as the button is depressed.

Third, once the timer is plugged in the timing cycle will begin. The valve will be actuated at the interval of time that is indicated by the setting of the knob for the Off Time.



TESTING THE DRAIN TIMER

CAUTION

COMPRESSED AIR CAN BE DANGEROUS. Be sure the pressure vessel is depressurized prior to any attempt to install or remove the Drain Timer. **DO NOT REMOVE** the power cord or timer from the valve while the Drain Timer is plugged in. If the drain does not seem to be working properly, contact your distributor. Any attempt to repair the drain without authorization will **VOID WARRANTY**.

1. Fully drain the vessel by opening an auxiliary gate valve or push the test button on the timer. When all of the condensate has drained, set the OFF TIME to the maximum 45 minute setting and the ON TIME to the maximum 10 seconds.
2. Remove the valve guard strainer and inspect for debris and damage. Clean or replace as necessary.
3. Return prior to the time the drain is expected to open and check to see how long it takes for the valve to exhaust the liquid. If at the end of the drain open period, all the liquid has not been expelled, adjust the OFF TIME downward and repeat steps 1 & 2.
4. Set the ON TIME equal to the amount of time it takes to drain the vessel. We suggest increasing the time by 20% to compensate for small fluctuations in air system usage or climatic changes. The drain should be checked periodically to ensure a proper setting was achieved. In climates with large changes in humidity, the drain should be checked and reset accordingly.

UNIT HAZARD DECAL LISTING

<u>PAGE</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>
38	PRODUCT LIABILITY DECAL SHEET - MASTER	P10157A
	Unit Pressure Setting	1
	NOT USED	2
	DANGER – Breathing Air	3
	DANGER – Drain Tank Daily	4
	WARNING – Pressure/Safety Valve	5
	NOT USED	6
	DANGER – Valve Maintenance	7
	DANGER – High Voltage	8
	WARNING – Hot Surfaces	9
	WARNING – Do Not Remove Fan Guard	10
	NOTICE - Lubricant	11a
	NOT USED	11b
	DECAL – Synthetic or Food Grade Inserts	12
	NOT USED	13
	DECAL – Pressure Setting: 95-125 PSIG	14
	DECAL – Pressure Setting: 140-175 PSIG	14
	NOTICE – Read and Retain Manuals	15
	NOT USED	16
	DECAL – Rotation Direction	17
	NOT USED	18
	DECAL – Pressure Switch	P14677A

PUMP HAZARD DECAL LISTING

<u>PAGE</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>
39	PUMP DECAL SHEET – MASTER	P13805A
	NOT USED	A1
	NOTICE - Lubricants	A2
	DECAL – Rotation Direction	B
	NOTICE – Read and Retain Manuals	C
	DANGER – Breathing Air	D
	DECAL – Made in the United States of America	E
	IMPORTANT NOTICE – Motor Burn-Outs	F

**DO NOT CONNECT
INCOMING POWER
SUPPLY TO PRESSURE
SWITCH.**

P14677A

UNIT HAZARD DECALS

1

UNIT PRESSURE SETTING

UNIT PRESSURE FACTORY SET AT

1

UNIT PRESSURE SETTING

UNIT PRESSURE FACTORY SET AT

2



⚠ WARNING

DO NOT START ENGINE UNLESS TANK PRESSURE IS BELOW 130 PSIG. TO REDUCE TANK PRESSURE, OPEN VALVE ADJACENT TO THIS DECAL.

3



⚠ DANGER

Air from this compressor must not be used for food processing or breathing without adequate filtering. Failure to comply will result in injury or death.

4



⚠ DANGER

DRAIN THIS TANK DAILY!

Failure to drain moisture will corrode tank material and lead to tank failure which will cause equipment damage, injury, or death.

5



⚠ WARNING

• **RELIEVE TANK PRESSURE BEFORE SERVICING.** Failure to do so can result in injury. • **DO NOT ADJUST PRESSURE SWITCH, PILOT VALVE, OR SAFETY VALVES.** Exceeding factory settings can cause equipment damage and injury.

6

MODEL: _____

SERIAL NO: _____

12

FOOD GRADE

SYNTHETIC

13

AC-SY

AC-HC

AC-FG

18

RESET **RESET**

11a




⚠ NOTICE

Champ Plus

YOUR COMPRESSOR HAS BEEN TESTED AND SHIPPED WITH

FOR OPTIMUM PERFORMANCE USE ONLY SEWING MACHINERY PARTS AND LUBRICANTS. CONTACT LOCAL CHAMPION DISTRIBUTOR FOR ADDITIONAL LUBRICANT AND REPLACEMENT PARTS.

11b



⚠ NOTICE

AEON

YOUR COMPRESSOR HAS BEEN TESTED AND SHIPPED WITH

FOR OPTIMUM PERFORMANCE USE ONLY SEWING MACHINERY PARTS AND LUBRICANTS. CONTACT LOCAL GARDNER DENVER DISTRIBUTOR FOR ADDITIONAL LUBRICANT AND REPLACEMENT PARTS.

14

85-115 PSIG
95-125 PSIG
130-165 PSIG
140-170 PSIG
140-175 PSIG
215-250 PSIG
20-40 PSIG
60-80 PSIG
60-90 PSIG
70-90 PSIG
70-100 PSIG
80-100 PSIG

7



⚠ DANGER

Valves must be replaced in original position. Failure to do this will result in equipment damage, injury, or death. Do not disassemble valves.

9



⚠ WARNING

Do not touch hot surfaces! Contact with these surfaces can cause injury.

10



⚠ WARNING

DO NOT REMOVE BELT OR FAN GUARD

Removal will expose rotating parts which can cause severe injury and/or property damage.

8



⚠ DANGER

HIGH VOLTAGE

DISCONNECT POWER SOURCE BEFORE SERVICING.

9



⚠ WARNING

Do not touch hot surfaces! Contact with these surfaces can cause injury.

10



⚠ WARNING

DO NOT REMOVE BELT OR FAN GUARD

Removal will expose rotating parts which can cause severe injury and/or property damage.

15

⚠ NOTICE

Read, understand and retain all labels and Owners Manuals before using this equipment.

IMPORTANT: Please keep the operating instructions with this compressor unit.

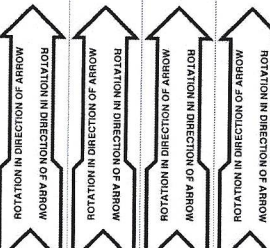
Master Decal Set
P/N P10157A

16

INSTRUCTIONS
DUAL CONTROL

This unit is equipped with a dual control valve. Open valve completely for continuous run operation. Close valve completely for start-stop operation.

17



PUMP HAZARD DECALS

A1

▲ NOTICE

THIS COMPRESSOR HAS BEEN
FACTORY FILLED WITH **AEON**
 AC-HC AC-FG
 AC-SY AC-FG
 DO NOT MIX OIL TYPES OR BRANDS.

A2

▲ NOTICE

THIS COMPRESSOR HAS BEEN
FACTORY FILLED WITH *Plenum Air*
 SYNTHETIC FOOD GRADE
 MINERAL
 DO NOT MIX OIL TYPES OR BRANDS.

B

↑
 ROTATION IN DIRECTION OF ARROW
 ↓
 ROTATION IN DIRECTION OF ARROW

C

▲ NOTICE


Read, understand, & retain all
Labels and Owners Manuals
before using this equipment.

D

▲ DANGER

AIR FROM THIS COMPRESSOR
MUST NOT BE USED FOR FOOD
PROCESSING OR BREATHING
WITHOUT ADEQUATE FILTERING.

E



Master Decal Set
P/N P13805A

F **IMPORTANT NOTICE!**

THIS UNIT IS WIRED FOR AN AC CIRCUIT OF

<input type="checkbox"/> 115 VOLT	<input type="checkbox"/> 60 CYCLE	<input type="checkbox"/> 1 PHASE
<input type="checkbox"/> 230 VOLT	<input type="checkbox"/> OTHER	<input type="checkbox"/> 3 PHASE
<input type="checkbox"/> 460 VOLT		

OTHER ELECTRICAL SPECS _____

P05257A

IMPORTANT

MOTOR BURN-OUTS ARE NOT COVERED BY
WARRANTY - Unless Motor is Equipped with
Factory Installed thermal overload protection
(in either motor or starting device)

P05257A




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CHAMPION

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