



OPERATION/MAINTENANCE  
MANUAL & PARTS LIST

**Gasoline Engine Driven Two Stage Air  
Compressor Featuring the R15BHU Compressor**

**⚠ 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.

**MODELS**

<b>HGR3-3</b>	<b>HGR7-6K</b>
<b>HGR3-LP</b>	<b>HGR7-6H</b>
<b>BGR7K</b>	<b>HGR7-8K</b>
<b>BGR7H</b>	<b>HGR7-8H</b>
<b>HGR7-3K</b>	<b>HGR7-LPK</b>
<b>HGR7-3H</b>	<b>HGR7-LPH</b>



**MAINTAIN COMPRESSOR RELIABILITY AND PERFORMANCE WITH  
GENUINE GARDNER DENVER® COMPRESSOR  
PARTS AND SUPPORT SERVICES**

Gardner Denver® Compressor genuine parts, manufactured to design tolerances, are developed for optimum dependability – specifically for Gardner Denver 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 Gardner Denver 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 Gardner Denver air compressor with these services:

1. Trained parts specialists to assist you in selecting the correct replacement parts.
2. 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 Gardner Denver or locate your local distributor:**

**Visit: [www.contactgd.com/compressors](http://www.contactgd.com/compressors)**

**Or**

**Call: (217)222-5400**

**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

# TABLE OF CONTENTS

---

<b>Subject</b>	<b>Page</b>
Maintain Compressor Reliability And Performance .....	1
Safety And Operation Precautions.....	3
Explanation Of Safety Instruction Symbols And Decals .....	4
Introduction.....	5
Warranty.....	5
Dimensions And Specifications.....	6
Installation .....	7 thru 10
Operation.....	11, 12
Maintenance.....	13 thru 15
Compressor Pilot Valve Differential Pressure Adjustment.....	15
Compressor Oil Specifications .....	16
Lubricant.....	16
Torque Valves .....	16
Trouble Shooting Guide .....	17
Unit Repair Parts List .....	18 thru 34
Compressor Repair Parts List.....	35 thru 39
Unit Hazard Decals .....	40
Pump Hazard Decals .....	41
Record Of Maintenance Service .....	42, 43

## **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 safety codes, as well as the Occupational Safety and Health Act (OSHA).
3. Do not attempt to remove any compressor parts without first relieving the entire system of pressure.
4. Do not attempt to service any part while machine is in an operational mode.
5. Do not operate the compressor at pressures in excess of its rating.
6. Do not operate compressor at speeds in excess of its rating.
7. Periodically check all safety devices for proper operation. Do not change pressure setting or restrict operation in any way.
8. Be sure no tools, or rags or loose parts are left on the compressor or drive parts.
9. Do not use flammable solvents for cleaning the air inlet filter or element and other parts.
10. 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.
11. Do not operate the compressor without guards, shields and screens in place.
12. 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.
13. Do not operate compressor in areas where there is a possibility of ingesting flammable or toxic fumes.
14. Be careful when touching the exterior of a recently run engine - it may be hot enough to be painful or cause injury.
15. Inspect unit daily to observe and correct any unsafe operating conditions found.
16. Do not "play around" with compressed air or direct air stream at body, because this can cause injuries.
17. Compressed air from this machine absolutely must not be used for food processing or breathing air without adequate downstream filters, purifiers and controls.
18. 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.
19. Check hoses for weak or worn condition before each use and make certain that all connections are secure.
20. Always wear safety glasses when using a compressed air blow gun.

The user of any air compressor package manufactured by Gardner Denver is hereby warned that failure to follow the preceding Safety and Operation Precautions can result in injuries or equipment damage. However, Gardner Denver 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 INSTRUCTION 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 Gardner Denver 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.



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

---

Gardner Denver R Series compressors 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.

### **Gardner Denver Five Year Warranty "R" Series Compressors**

**Gardner Denver, Inc. ("the Company")** warrants each new compressor pump manufactured by the Company, 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 the Company or the Company 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 the Company logo, tank or base mounted complete compressors only.**

#### **Express Limited Warranty**

The Company warrants each new air compressor unit manufactured by the Company 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 the Company or the Company distributor, whichever may occur first.

The Company makes no warranty in respect to components and accessories furnished to the Company 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 the Company. 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 or approved equivalent.

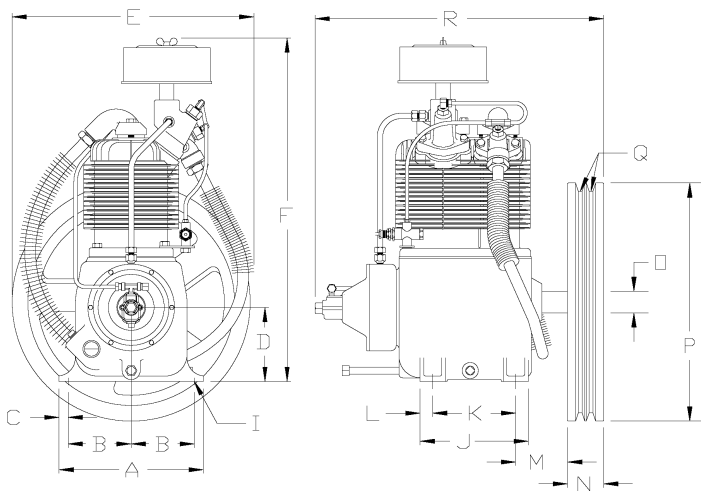
When a compressor pump, or component is changed or replaced during the warranty period, the new/replaced item is warranted for only the remainder of the original warranty period.

Repair, replacement or refund in the manner and within the time provided shall constitute the Company's sole liability and your exclusive remedy resulting from any nonconformity or defect. THE COMPANY 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 THE COMPANY HAS BEEN ADVISED OF THE POSSIBILITY THEREOF.

THE COMPANY 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 THE COMPANY HAS AUTHORITY TO MAKE ANY WARRANTIES.

## TWO STAGE AIR COMPRESSORS - MODEL R15BHU

### DIMENSIONS



**C-593-B**  
(Ref. Drawing)

	ITEM	R15BHU
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"

**NOTE:**

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

### SPECIFICATIONS

MODEL	BORE & STROKE (INCH)	NO. of CYLINDERS	OIL CAPACITY (QTS)	WEIGHT (LBS)	MAXIMUM PRESSURE (PSIG)	CU FT./REV.	MIN./MAX. RPM.
R15BHU	4-5/8" & 2-1/2" x 3"	2	2	109	175	.02914	400/1050

## **INSTALLATION**



**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 blade flywheel, which cools the compressor, is impeded. Permanently mounted units should have flywheel at least 12" from wall.
3. Place stationary compressors on firm level ground or flooring. Permanent installations require bolting to floor or truck bed. 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. It is recommended that unit be set on optional vibro-isolator pads. Tanks bolted directly to a floor without isolators will not be warranted against cracking. Gardner Denver vibro-isolators or approved equivalent must be installed for extended warranty to apply to ASME receivers.
4. If installing base mounted unit, make certain the pressure limiting controls are properly installed and operational. The unloading system requires a control air pressure line from the air receiver to be connected to the pilot valve fitting on the pump.
5. Gas engine driven units installed indoors must have proper engine exhausting out of building.
6. Battery and Wiring Recommendations:
  - A. If engine is connected to a dedicated battery
    1. The battery should have a minimum capacity of 24 AH and at least 350 CCA rating
    2. The wire size must be a minimum of #4 AWG. If the positive cable is longer than 5 feet or the negative cable is longer than 7.5 feet the wire size should be increased so that the maximum voltage drop from the battery to the unit connection does not exceed 0.5 volts while cranking. The battery location should be selected to keep the connecting leads as short as possible.
    3. Care should be taken when routing battery leads to insure that the leads are properly supported and insulated.
    4. The positive lead should be color coded RED and all connections should be enclosed by non-conducting covers. See Figure 1 for Kohler connection. See Figure 2 for Honda connection.
    5. The negative lead should be connected directly to the engine using one of the four 3/8" diameter mounting foot studs.
    6. Electrical connections should be regularly inspected to insure that they are clean and tight.

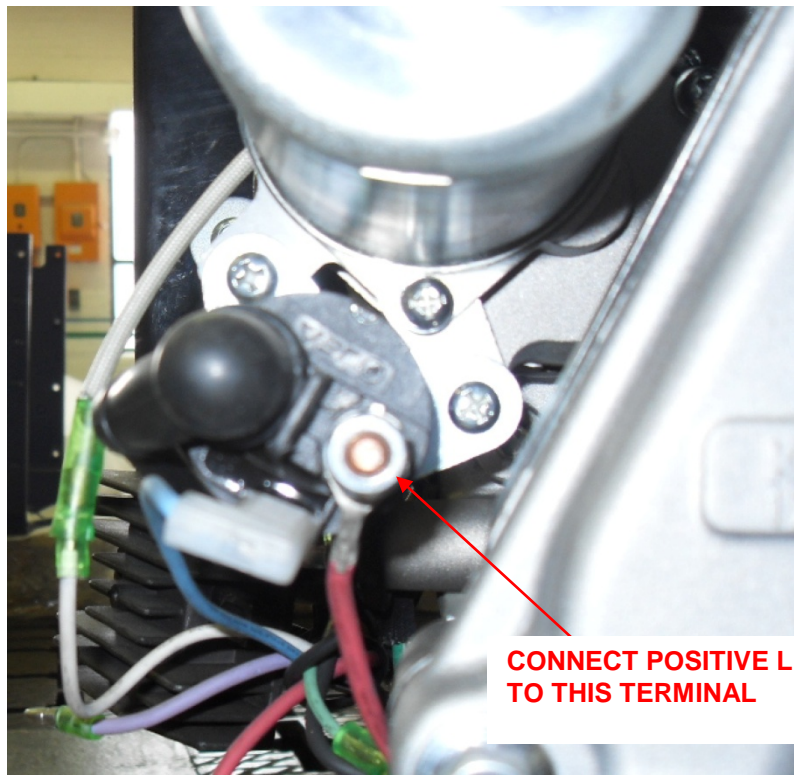


Figure 1

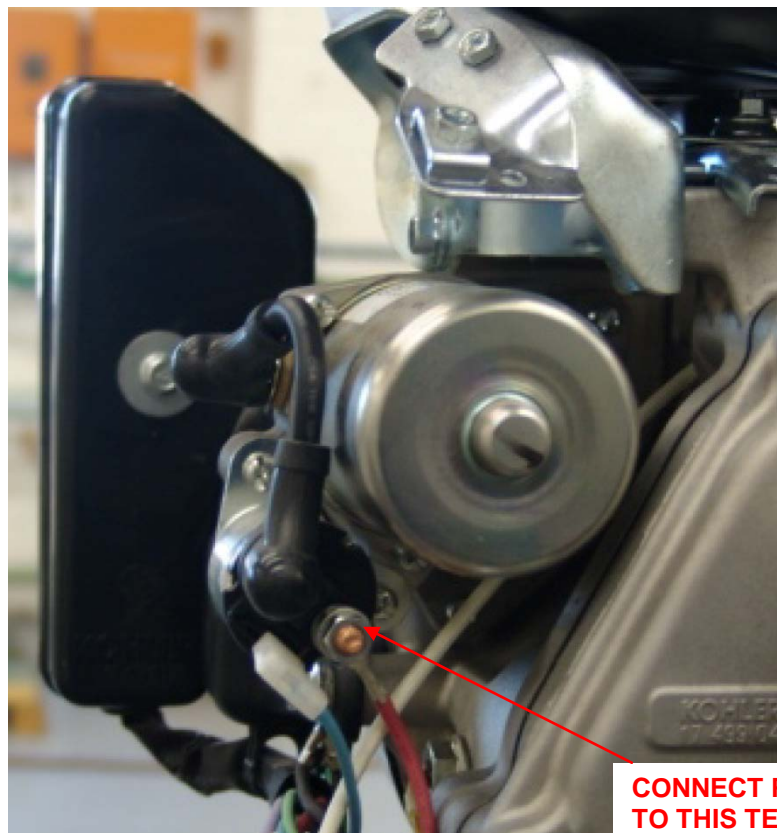


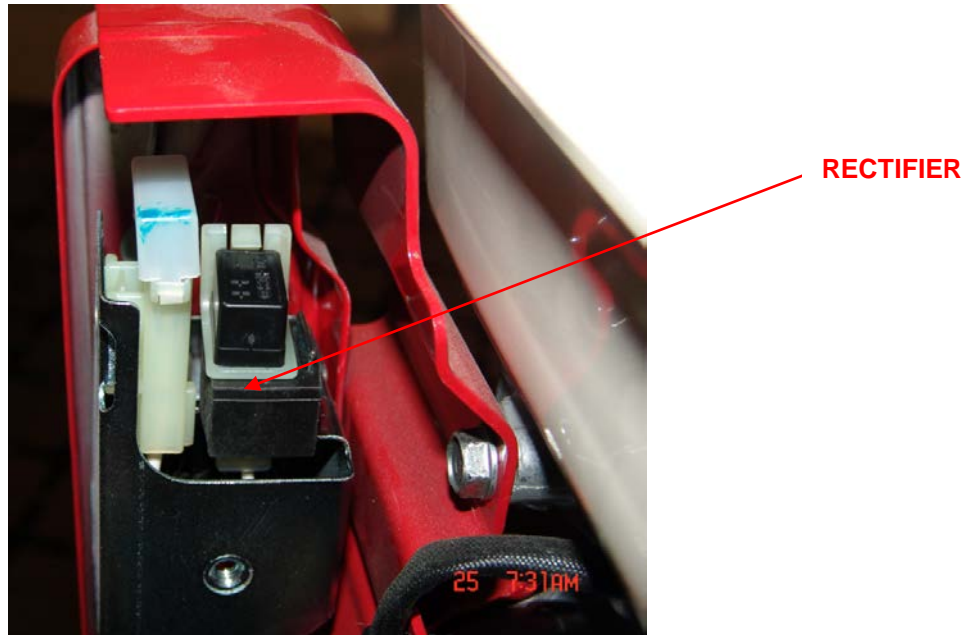
Figure 2

- B. HONDA ENGINE ONLY: If engine is connected to the vehicle battery.
1. The vehicle battery should have a minimum capacity of 24 AH and at least 350 CCA rating.
  2. The wire size must be a minimum of #4 AWG. If the positive cable is longer than 5 feet or the Negative cable is longer than 7.5 feet the wire size should be increased so that the maximum voltage drop from the battery to the unit connection does not exceed 0.5 volts while cranking. The battery location should be selected to keep the connecting leads as short as practical.
  3. The Honda engine's charging system should be disabled to prevent the damage from the vehicles charging system. This is done by removing the rectifier diode that is located in the key switch box.
    - a) Remove the Phillips head screw holding the black plastic cover on the back of the key switch box See Figure 3.



**Figure 3**

- b) Remove the black plastic cover from the back of the key switch box. Locate the black rectangular rectifier diode. It is on the side closet to the engine. Gently pry back the white plastic retainer clip on top of the diode closest to the key switch end and remove the diode. See Figure 4



**Figure 4**

- c) Replace the black plastic cover on the back of the key switch box. Insure rubber wire grommet is installed correctly in the slot.
- d) Tighten Phillips head screw.
4. Care should be taken when routing battery leads to insure that the leads are properly supported and insulate.
  5. The positive lead should be color coded RED and all connections should enclosed by non-conducting covers. See Figure 2
  6. The negative lead should be connected directly to the Honda engine using one of the four 3/8" diameter mounting foot studs.
  7. Electrical connections should be regularly inspected to insure that they are clean and tight.

**⚠ 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.**

## 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 is recommended. Install a flexible connector between the discharge of the unit and the air piping. 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'
R15BHU	3/4"	3/4"	3/4"	1"	1"



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

## 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 an 80%/ON – 20%/OFF duty cycle.

R15B models are equipped with a pilot valve and head unloaders to provide continuous run capabilities. The pilot valve acts as an automatic air switch allowing air to flow from the receiver to the head unloader mechanism, thus actuating it. The pilot valve senses receiver pressure. When the receiver pressure reaches the cut-out pressure setting of the pilot valve, the pilot valve opens and air is released to the unloader mechanism. The compressor stops compressing air and runs unloaded until the cut-in pressure setting of the pilot valve has been reached. At this time air is released from the unloader mechanism and the compressor starts compressing again.

### Initial Start Up

1. Inspect unit for any visible signs of damage that would have occurred in shipment or during installation.
2. Check compressor oil level. Add oil as required. See "Compressor Oil Specifications" Section. **NOTE:** Do not mix oil type, weights or brands.
3. Check engine oil level. Add oil as required. Consult engine manual for oil specifications.
4. Close receiver outlet valve.
5. Flip toggle lever on pilot valve to the "Manual Unload" position. See Figure 5.

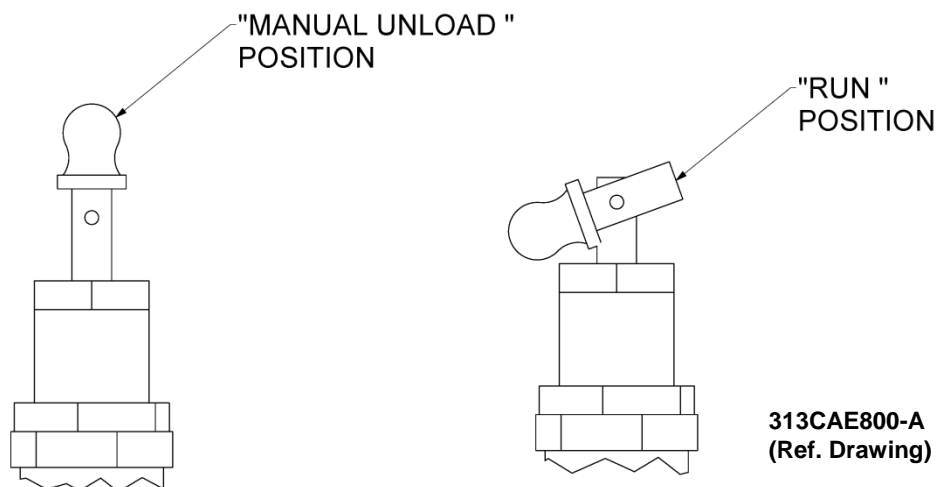


Figure 5

6. Start engine. Allow engine to warm up.
7. Flip toggle lever on pilot valve to the "Run" position. See Figure 5
8. With receiver outlet valve closed, let unit pump up to operating pressure. At this point, the automatic controls will take over. Check system pressure. Check for proper cycling operation.
9. When the initial run period has shown no operating problems, shut unit down and recheck oil level
10. Open receiver outlet valve. The air compressor unit is now ready for use.

### **Daily Starting**

1. Check compressor and engine oil level.
2. Drain liquid from receiver.
3. Close receiver outlet valve.
4. Flip toggle lever on the pilot valve to the "Manual Unload" position. See Figure 5.
5. Start engine. Allow engine to warm up.
6. Flip toggle level on pilot valve to "Run" position. See Figure 5.
7. When unit reaches operation pressure, open receiver outlet valve.

## **GUIDE TO MAINTENANCE**

For Service contact an authorized Gardner Denver distributor. All requests should include model number and serial number. To obtain reliable and satisfactory service, this unit requires a consistent preventive maintenance schedule. Maintenance schedule form is included to aid in keeping the proper records, See Pages 42 & 43

### **WARNING**

**Before performing any maintenance function, be sure all air pressure in unit is relieved. Failure to do this may result in injury or equipment damage.**

### **WARNING**

**Never add fuel to the fuel tank of a hot engine. Spilled fuel may ignite and cause injury or equipment damage.**

## **DAILY MAINTENANCE**

1. Check oil level of compressor. Add Champlub recip lubricant as required. See “Compressor Oil Specifications” Section. **NOTE:** Do not mix oil type, weight, or brands.
2. Check oil level of engine. Consult engine manual for manufacturer’s recommended oil.
3. Drain moisture from tank by opening tank drain cock located in bottom of tank. Do not open drain valve if tank pressure exceeds 25 PSIG.

## **WEEKLY MAINTENANCE**

1. Clean dust and foreign matter from cylinder head, engine, 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 belt guard bracket and open top half of belt guard.
  - b. Loosen engine mounting plate fasteners (3 Bolts & 1 Nut)
  - c. Use belt adjustment bolt at end of base plate to adjust belt tension.
  - d. 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.
  - e. Check the alignment of pulleys. Adjust if necessary.
  - f. Tighten engine mounting plate fasteners
  - g. Close top half of belt guard and re-install belt guard bracket.

### **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 compressor crankcase oil and oil filter. Use only AEON recip lubricant.
2. Check entire system for air leakage around fittings, connections, and gaskets, using soap solution and brush.
3. Tighten nuts and cap screws as required.
4. Check and clean compressor valves as required. Replace when worn or damaged parts.



**Valves must be replaced 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 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, or drop pressure in line. 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.

**CENTRIFUGAL UNLOADER AND 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 engine 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 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. 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.



**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.**

## GENERAL MAINTENANCE (Cont'd.)

**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 AEON 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.

**PILOT VALVE:** The pilot valve actuates the head unloader mechanism to provide a means of stopping or starting the compression of air by the compressor without stopping or starting the electric motor.

**GAS ENGINE:** For service refer to separate engine manual.

### COMPRESSOR PILOT VALVE PRESSURE ADJUSTMENT

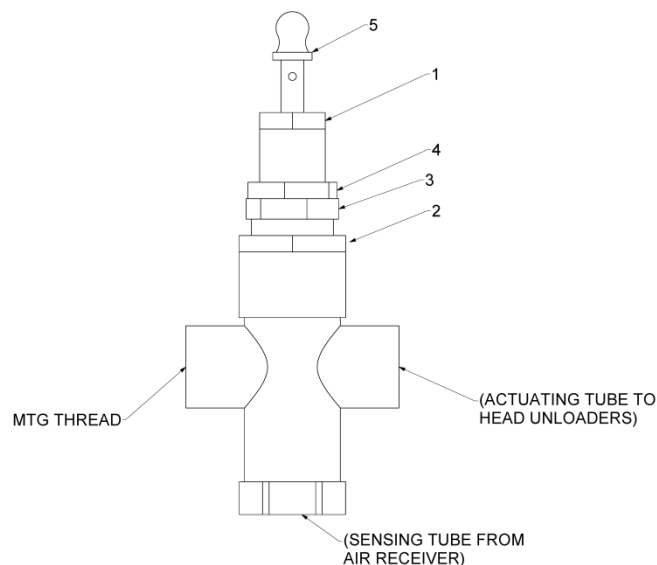
Proceed with the following instructions while compressor is running:

1. Loosen locknut (4) and back off several turns. Do not turn differential pressure adjustment nut (3).
2. Check reading on the tank pressure gauge. Set the compressor maximum pressure by turning the threaded cap (1) clockwise to increase pressure or counter clockwise to decrease pressure.
3. After pressure is set, tighten locknut (4). Be careful not to move threaded cap (1).

### COMPRESSOR PILOT VALVE DIFFERENTIAL PRESSURE ADJUSTMENT

Proceed with the following instructions while compressor is running:

1. Loosen locknut (2) and back off several turns.
2. Check reading on the tank pressure gauge. Set the pressure to 30 psig differential (unload at 170 psig, reload at 140 psig). Turn nut (3) clockwise to increase differential pressure or counterclockwise to decrease differential pressure.
3. After pressure is set, tighten locknut (2). Be careful not to move nut (3).



**312CAE800-A**  
**(Ref. Drawing)**

## **COMPRESSOR OIL SPECIFICATIONS**

Compressors are factory filled with AEON 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.

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



**Do not mix oil types, weights or brands.**



**“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 Gardner Denver Customer Service, can be grounds to deny warranty.”**

### **NOTES:**

1. Normal break-in period of Gardner Denver 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 AEON 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.

### **LUBRICANT**

#### **AEON**

DESCRIPTION	PART NUMBER
1 – Quart Case (12/case)	28H213
1 – Gallon Case (4/case)	28H212
5 – Gallon Pail	28H211
55 – Gallon Drum	28H210

#### **AEON SYNTHETIC**

DESCRIPTION	PART NUMBER
1 – Quart Case (12/case)	28H216
1 – Gallon Case (4/case)	28H215
5 – Gallon Pail	28H214

### **TORQUE VALVES**

SPECIFIC APPLICATION	FASTENER SIZE & THREAD	TORQUE	INCH-POUNDS
BEARING HOUSING BOLT	7/16 – 20		540
CYLINDER FLANGE BOLT	1/2 – 13		900
CONNECTING ROD BOLT	7/16 – 20		400
MANIFOLD BOLT	7/14 – 14		230
FLYWHEEL BOLT	7/16 – 20		600

## TROUBLE SHOOTING CHART FOR COMPRESSOR



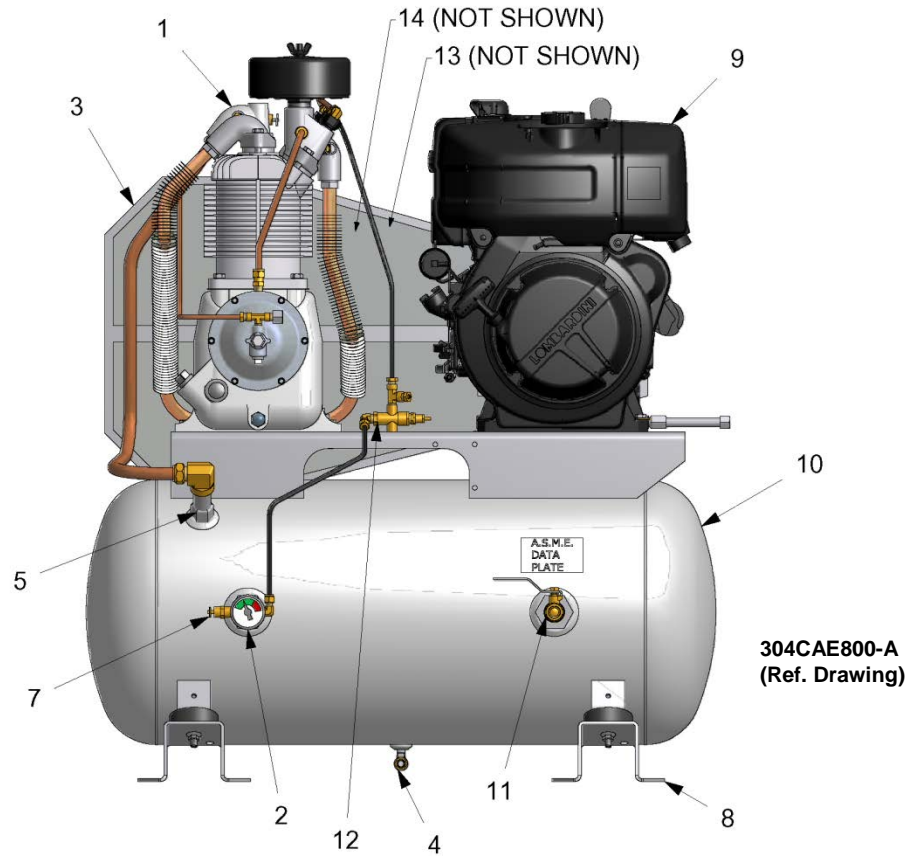
**Always shut off unit and relieve all pressure from air tank before performing any maintenance. Failure to do so may result in equipment damage or injury.**

**Never operate unit without belt guard in place.**

Symptom	Possible Cause(s)	Corrective Action
Engine will not start.	<ol style="list-style-type: none"> <li>1. No fuel in fuel tank.</li> <li>2. High tank pressure.</li> <li>3. Refer to separate engine manual for other causes.</li> </ol>	<ol style="list-style-type: none"> <li>1. Add fuel</li> <li>2. Reduce tank pressure to 130 PSIG or less.</li> </ol>
Tank pressure builds up slowly.	<ol style="list-style-type: none"> <li>1. Air leaks.</li> <li>2. Dirty air filter.</li> <li>3. Defective compressor valves</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten fittings.</li> <li>2. Clean or replace.</li> <li>3. Install new valve plate assembly.</li> </ol>
Tank pressure builds up quickly.	<ol style="list-style-type: none"> <li>1. Excessive water in tank.</li> </ol>	<ol style="list-style-type: none"> <li>1. Drain tank.</li> </ol>
Discharge pressure relief valve pops off while compressor is running.	<ol style="list-style-type: none"> <li>1. Wrong pressure switch setting.</li> <li>2. Defective ASME relief valve.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust to correct setting.</li> <li>2. Replace valve.</li> </ol> <p> <b>Warning</b> – Relieve tank pressure before servicing.</p>
Compressor will not unload	<ol style="list-style-type: none"> <li>1. Wrong pilot valve setting.</li> <li>2. Defective pilot valve.</li> <li>3. Lack of air to pilot valve..</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust to correct sitting</li> <li>2. Replace pilot valve.</li> <li>3. Check piping from tank to pilot valve for leaks.</li> </ol>
Excessive belt wear.	<ol style="list-style-type: none"> <li>1. Pulley out of alignment.</li> <li>2. Belts too tight or too loose.</li> </ol>	<ol style="list-style-type: none"> <li>1. Realign engine pulley.</li> <li>2. Adjust belt tension.</li> </ol>
Compressor runs hot.	<ol style="list-style-type: none"> <li>1. Improper flywheel rotation</li> <li>2. Defective compressor valves.</li> <li>3. Dirty air filter.</li> <li>4. Dirty cylinder and/or intercooler.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check for correct rotation. (Counter clockwise when viewed from drive side.</li> <li>2. Install new valve plate assembly.</li> <li>3. Clean or replace.</li> <li>4. Clean cylinder fins and/or intercooler.</li> </ol>
Interstage pressure relief valve pops off.	<ol style="list-style-type: none"> <li>1. Defective compressor valves.</li> </ol>	<ol style="list-style-type: none"> <li>1. Install new valves.</li> </ol>
Excessive oil consumption.	<ol style="list-style-type: none"> <li>1. Dirty air filter.</li> <li>2. Wrong oil viscosity.</li> <li>3. Oil leaks.</li> <li>4. Worn piston rings.</li> <li>5. Scored cylinder</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or replace.</li> <li>2. Refill with proper viscosity oil.</li> <li>3. Tighten bolts. Replace gaskets.</li> <li>4. Replace rings.</li> <li>5. Replace cylinder.</li> </ol>
Air escapes from centrifugal unloader when unit is running.	<ol style="list-style-type: none"> <li>1. Centrifugal unloader release valve dirty or defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or replace valve.</li> </ol>
Air escapes from centrifugal unloader when unit is stopped.	<ol style="list-style-type: none"> <li>1. Check valve stuck in open position.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace check valve.</li> </ol> <p> <b>Warning</b> – Relieve tank pressure before servicing.</p>

# UNIT REPAIR PARTS ILLUSTRATION

MODELS: HGR3-3B

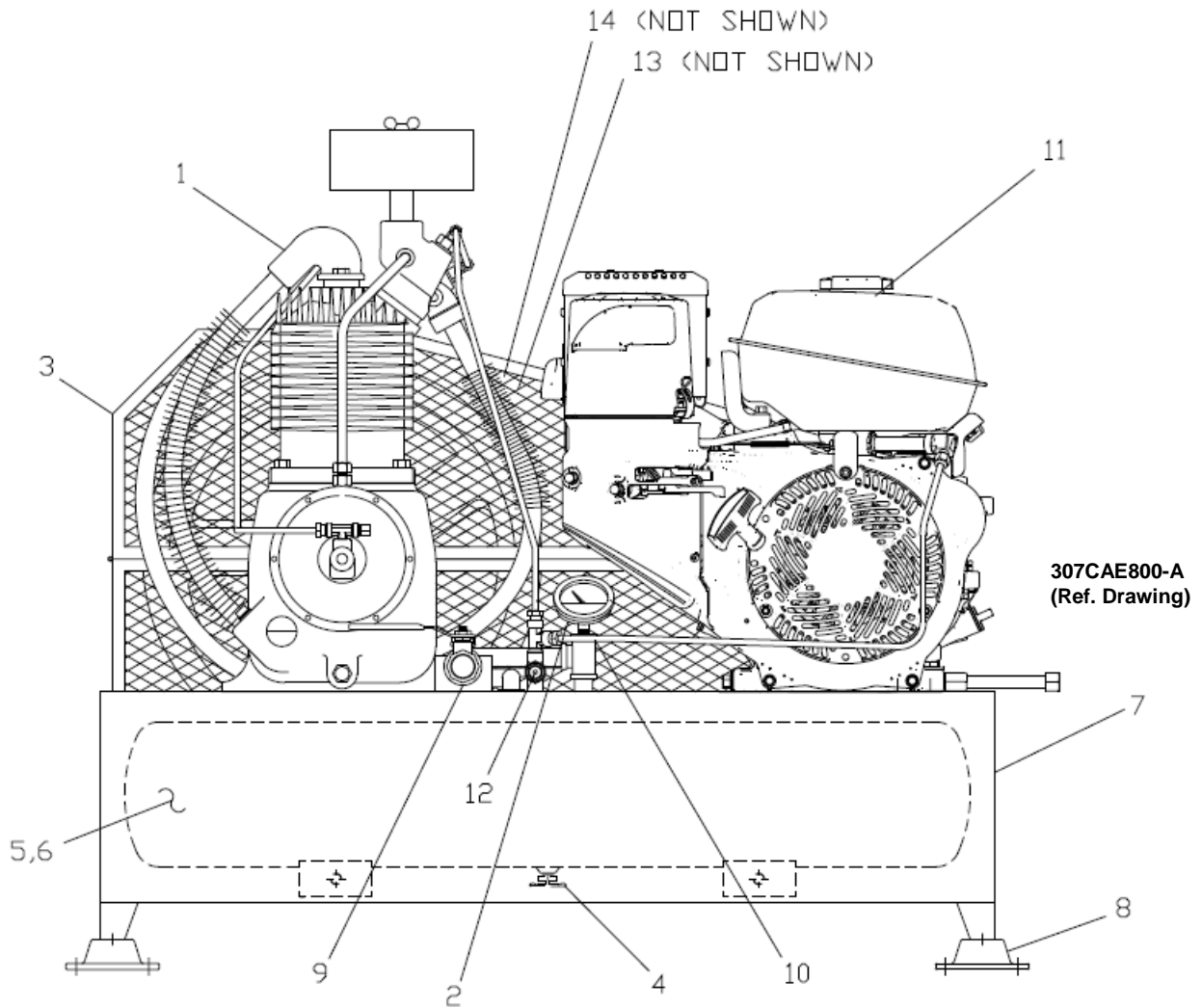


304CAE800-A  
(Ref. Drawing)

## REPAIR PARTS LIST

		HGR3-3B
1	Pump	R15BHU
2	Pressure Gauge	M519C
3	Belt Guard	CQZ13160
4	Drain Valve	VP1022988
5	Check Valve	P05822A
7	Pressure Relief Valve	M2843
8	Vibration Isolators	Z5123
9	Engine	8 HP
10	Tank	P13706D
11	Isolation Valve	M3590
12	Pilot valve	M2853
13	Pulley	VP1041597 Pulley P09799A Bushing
14	Belts	B73 (2)

**UNIT REPAIR PARTS ILLUSTRATION**  
**MODELS: HGR3-LP**

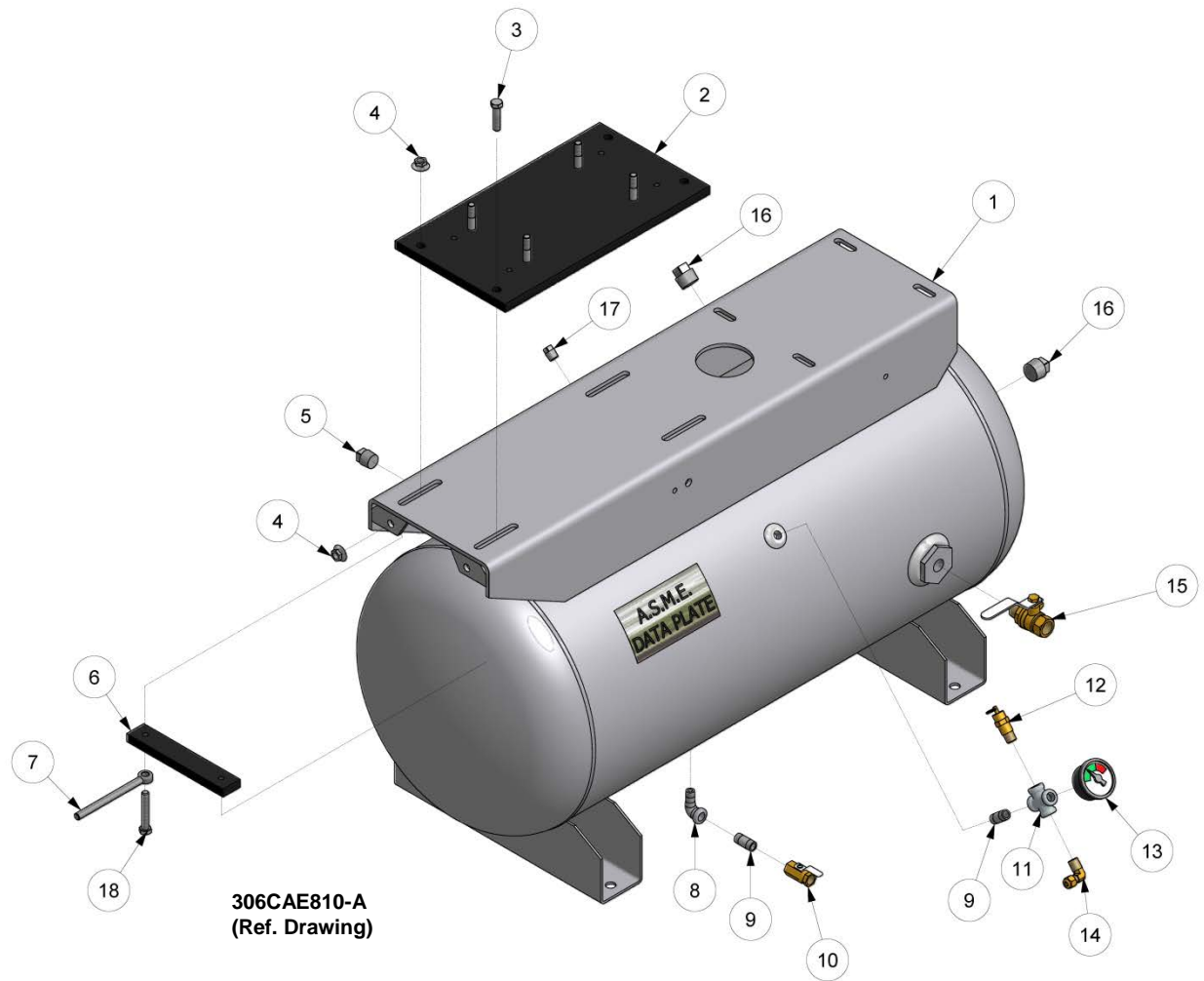


**REPAIR PARTS LIST**

		<b>MODEL</b>
		HGR3-LP
1	Pump	R15BHU
2	Pressure Gauge	M519C
3	Belt Guard	Z5280
4	Drain Valve	M521
5	Tank	P09502D
6	Check Valve	P05822A
7	Base Plate	P14449D
8	Vibration Isolators	P09808A
9	Isolation Valve	M3590
10	Pressure Relief Valve	M2843
11	Engine	8 HP
12	Pilot Valve	M2853
13	Pulley	VP1041597 Pulley P09799A Bushing
14	Belts	B73 (2)

# UNIT REPAIR PARTS ILLUSTRATION

MODEL: HGR7-3K, HGR7-3H

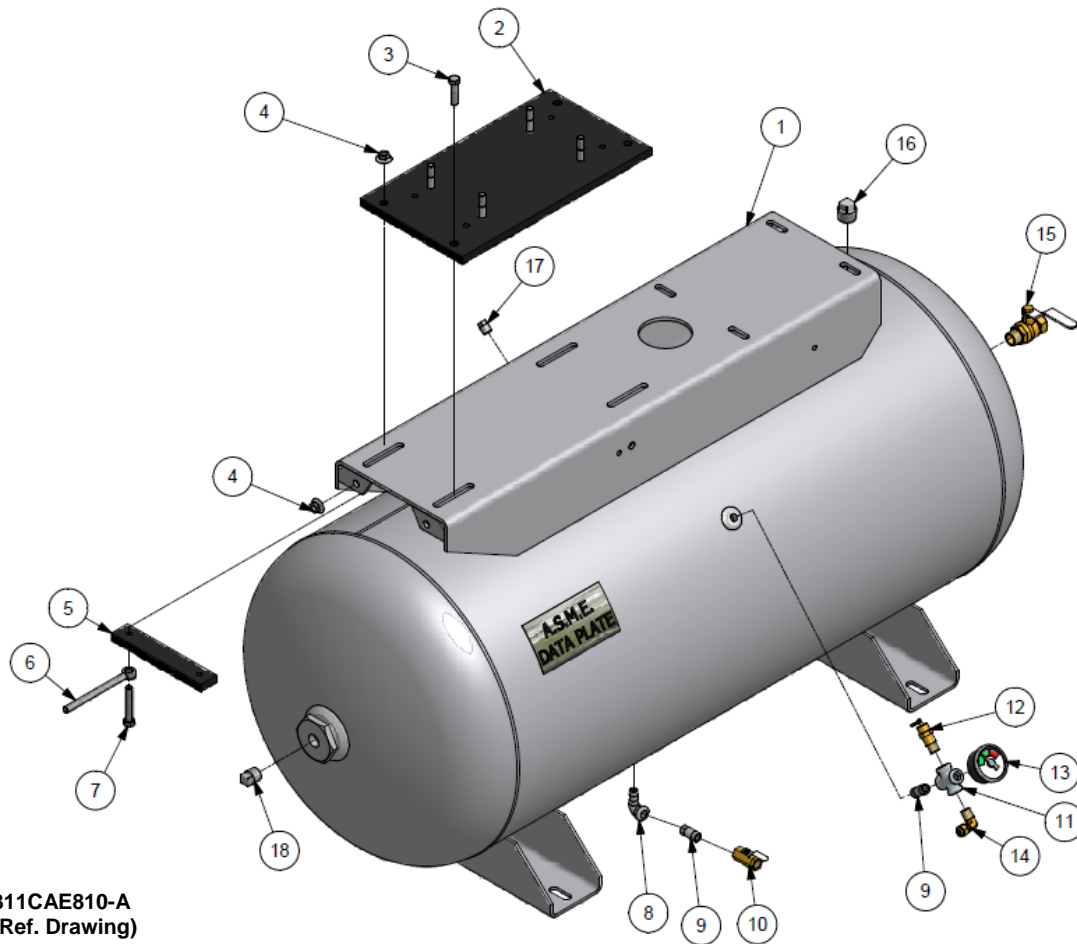


## 30 GALLON TANK ASSEMBLY

Ref. No.	Description	Part Number	Qty.
1	Receiver	CC1089338	1
2	Mounting Plate	300CAE4017	1
3	Screw	M3460	3
4	Nut	M3483	2
5	Plug	M998B	1
6	Motor Mounting Bracket	300CAE145	2
7	Eye Bolt	VP1096404	1
8	Elbow	M980B	1
9	Nipple	P08798A	2
10	Ball Valve	VP1022988	1
11	Cross	64K1	1
12	Pressure Relief Valve	M2843	1
13	Pressure Gauge	M519C	1
14	Elbow	86A40	1
15	Ball Valve	M3590	1
16	Plug	64A5	2
17	Plug	64AA5	1
18	Screw	655ED09AZ	1

# UNIT REPAIR PARTS ILLUSTRATION

MODEL: HGR7-6K, HGR7-6H



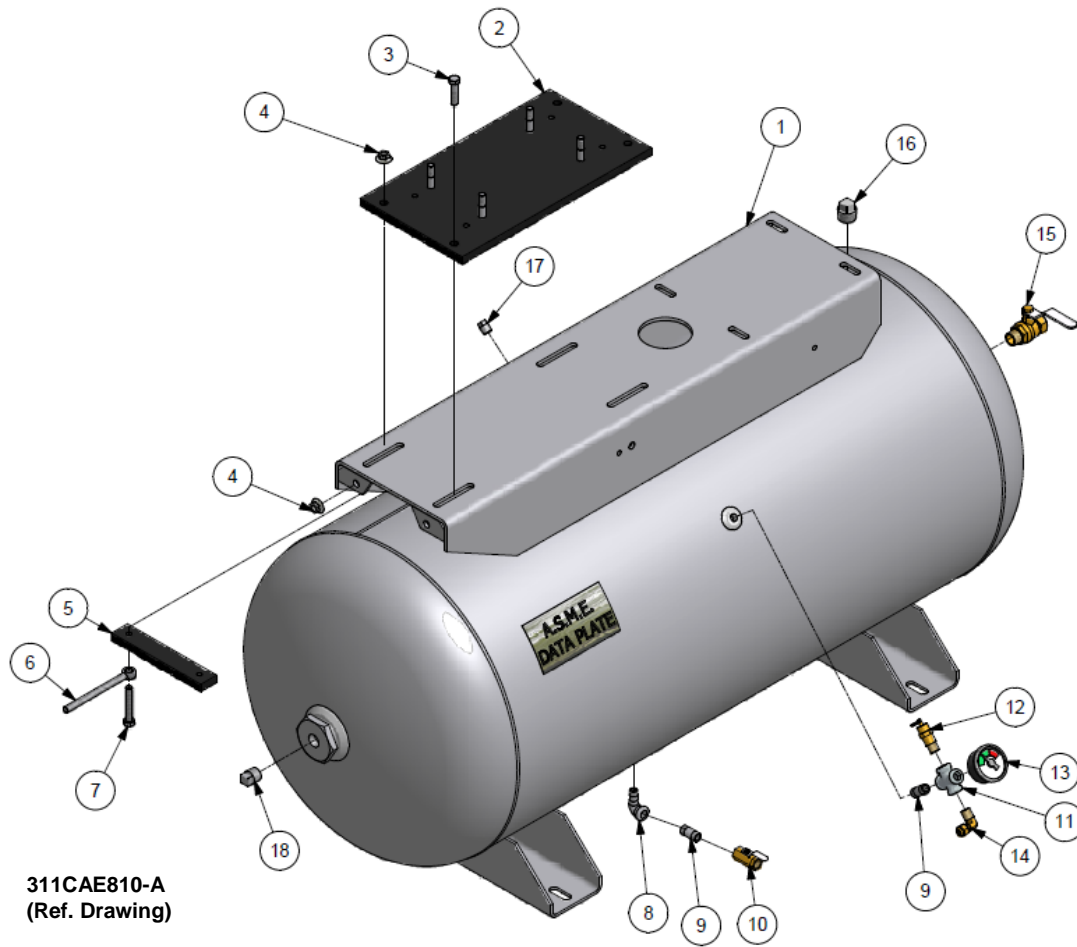
311CAE810-A  
(Ref. Drawing)

## 60 GALLON TANK ASSEMBLY

Ref. No.	Description	Part Number	Qty.
1	Receiver	CC1096721	1
2	Mounting Plate	300CAE4017	1
3	Screw	M3460	3
4	Nut	M3483	2
5	Motor Mounting Bracket	300CAE145	2
6	Eye Bolt	VP1096404	1
7	Screw	655ED09AZ	1
8	Elbow	M980B	1
9	Nipple	P08798A	2
10	Ball Valve	VP1022988	1
11	Cross	64K1	1
12	Pressure Relief Valve	M2843	1
13	Pressure Gauge	M519C	1
14	Elbow	86A40	1
15	Ball Valve	M3590	1
16	Plug	64A5	1
17	Plug	64AA5	1
18	Plug	M998B	1

# UNIT REPAIR PARTS ILLUSTRATION

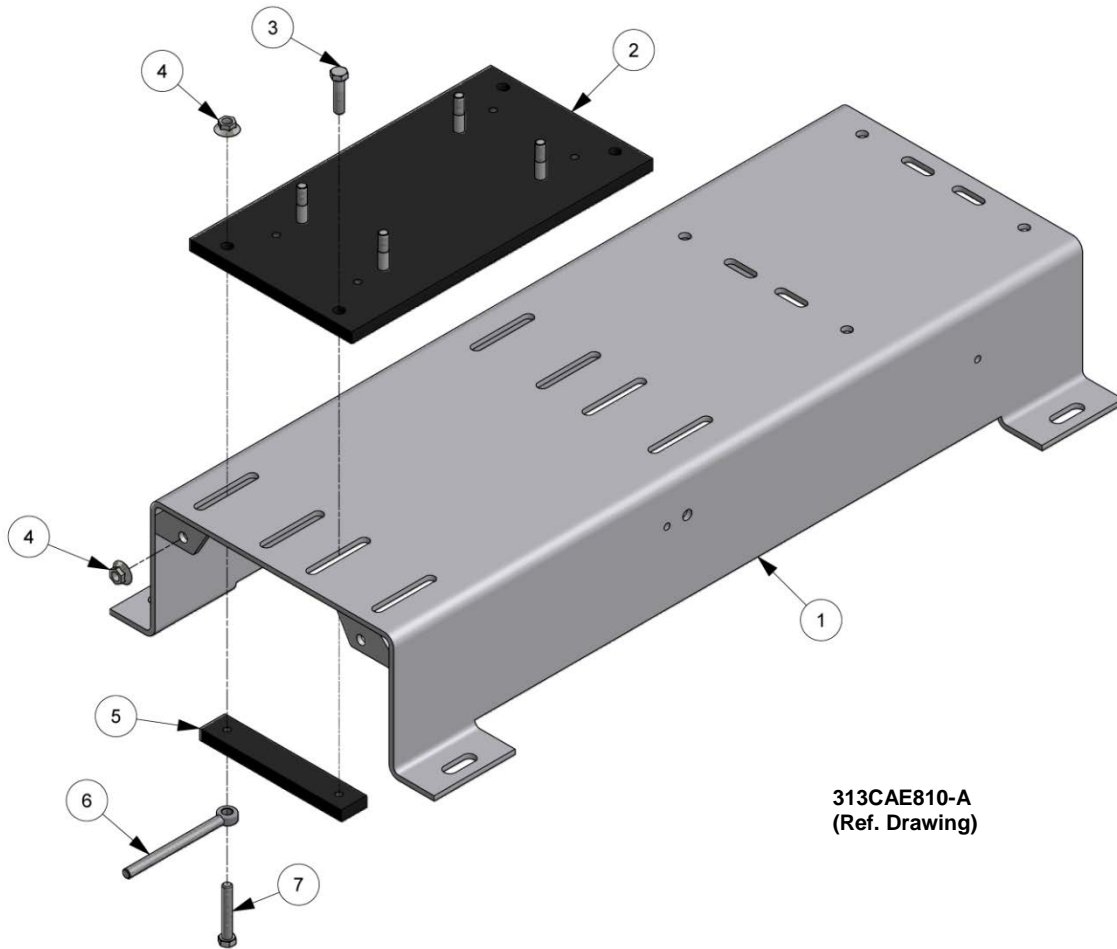
MODEL: HGR7-8K, HGR7-8H



## 80 GALLON TANK ASSEMBLY

Ref. No.	Description	Part Number	Qty.
1	Receiver	CC1096723	1
2	Mounting Plate	300CAE4017	1
3	Screw	M3460	3
4	Nut	M3483	2
5	Motor Mounting Bracket	300CAE145	2
6	Eye Bolt	VP1096404	1
7	Screw	655ED09AZ	1
8	Elbow	M980B	1
9	Nipple	P08798A	2
10	Ball Valve	VP1022988	1
11	Cross	64K1	2
12	Pressure Relief Valve	M2843	1
13	Pressure Gauge	M519C	1
14	Elbow	86A40	1
15	Ball Valve	M3590	1
16	Plug	64A5	1
17	Plug	64AA5	1
18	Plug	M998B	1

**UNIT REPAIR PARTS ILLUSTRATION**  
**MODEL: BGR7K, BGR7H**

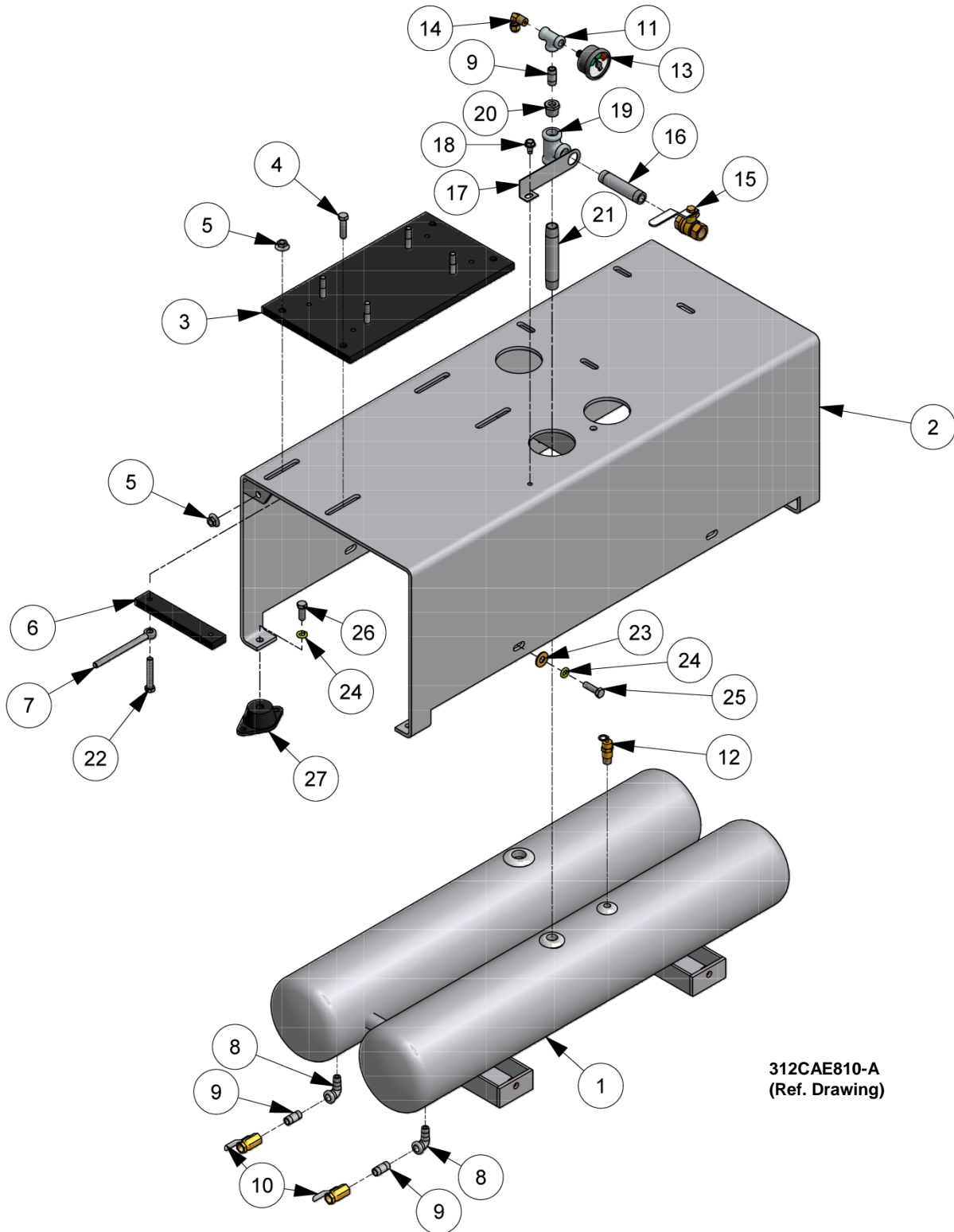


313CAE810-A  
 (Ref. Drawing)

**BASE PLATE GROUP**

Ref. No.	Description	Part Number	Qty.
1	Base plate	300CAE285	1
2	Mounting Plate	300CAE4017	1
3	Screw	M3460	3
4	Nut	M3483	2
5	Motor Mounting Bracket	300CAE145	2
6	Eye Bolt	VP1096404	1
7	Screw	655ED09AZ	1

**UNIT REPAIR PARTS ILLUSTRATION**  
**MODEL: HGR7-LPK, HGR7-LPH**



312CAE810-A  
(Ref. Drawing)

**LOW PROFILE TANK ASSEMBLY**

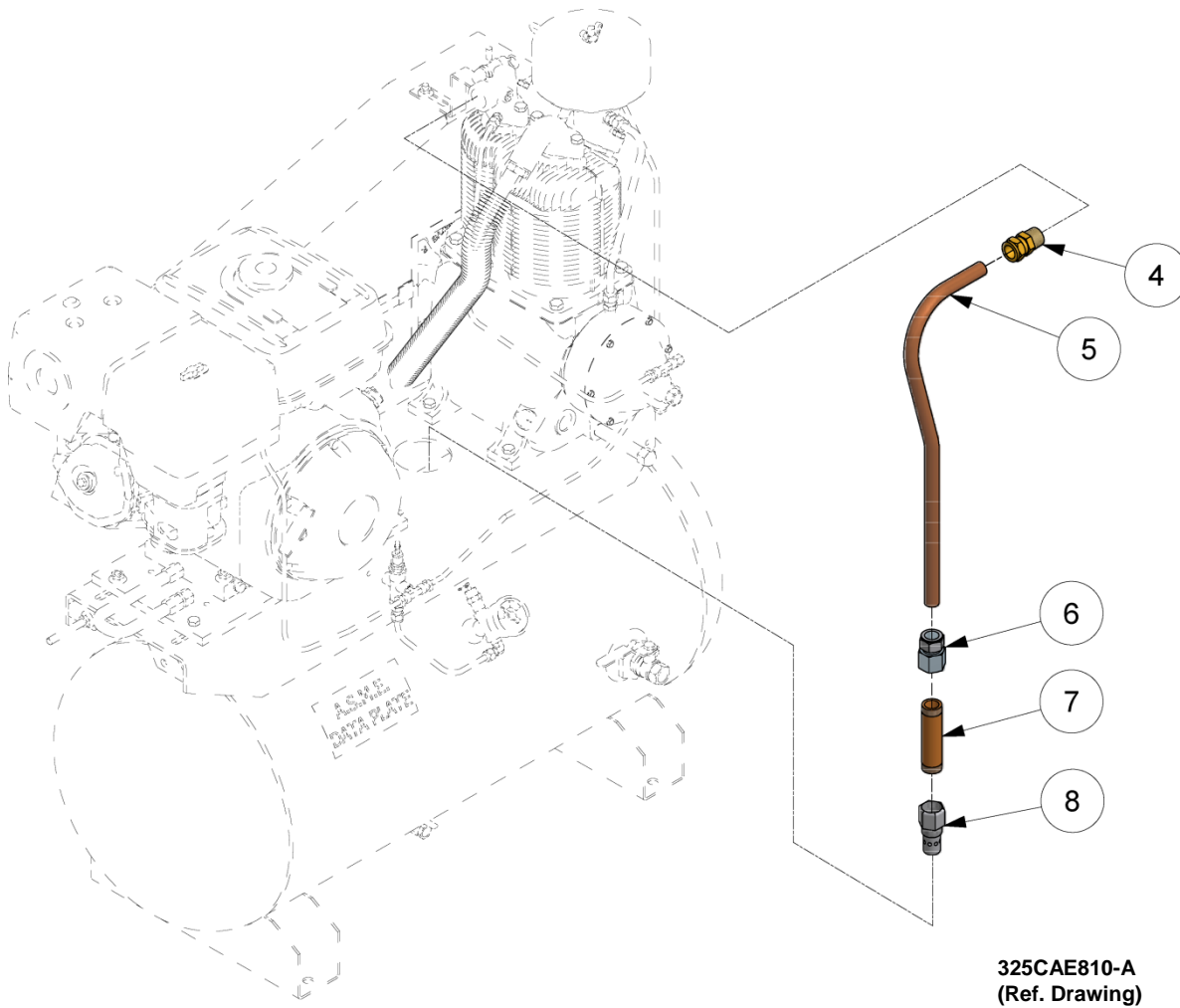
**REPAIR PARTS LIST**  
**MODEL: HGR7-LPK, HGR7-LPH**

Ref. No.	Description	Part Number	Qty.
1	Receiver	CC1097097	1
2	Base	301CAE285	1
3	Mounting Plate	300CAE4017	1
4	Screw	M3460	3
5	Nut	M3483	2
6	Motor Mounting Bracket	300CAE145	2
7	Eye-Bolt	VP1096404	1
8	Elbow	M980B	2
9	Nipple	P08798A	3
10	Ball Valve	VP1022988	1
11	Pipe Tee	M1003B	1
12	Pressure Relief Valve	M2843	1
13	Pressure Gauge	M519C	1
14	Elbow	86A40	1
15	Ball Valve	M2685	1
16	Nipple	M1051B	1
17	Bracket	P08733A	1
18	Screw	M1454	1
19	Tee	M934B	1
20	Bushing	M1318	1
21	Nipple	63F39	1
22	Screw	655ED09AZ	1
23	Washer	M3055	4
24	Lock Washer	M3052	8
25	Hex Head Cap Screw	M3460	4
26	Screw	655ED040Z	4
27	Vibration Isolator	P09808A	4



# UNIT REPAIR PARTS ILLUSTRATION

MODELS: HGR7-3-K, HGR7-3H, HGR7-6K, HGR7-6H, HGR7-8K, HGR7-8H

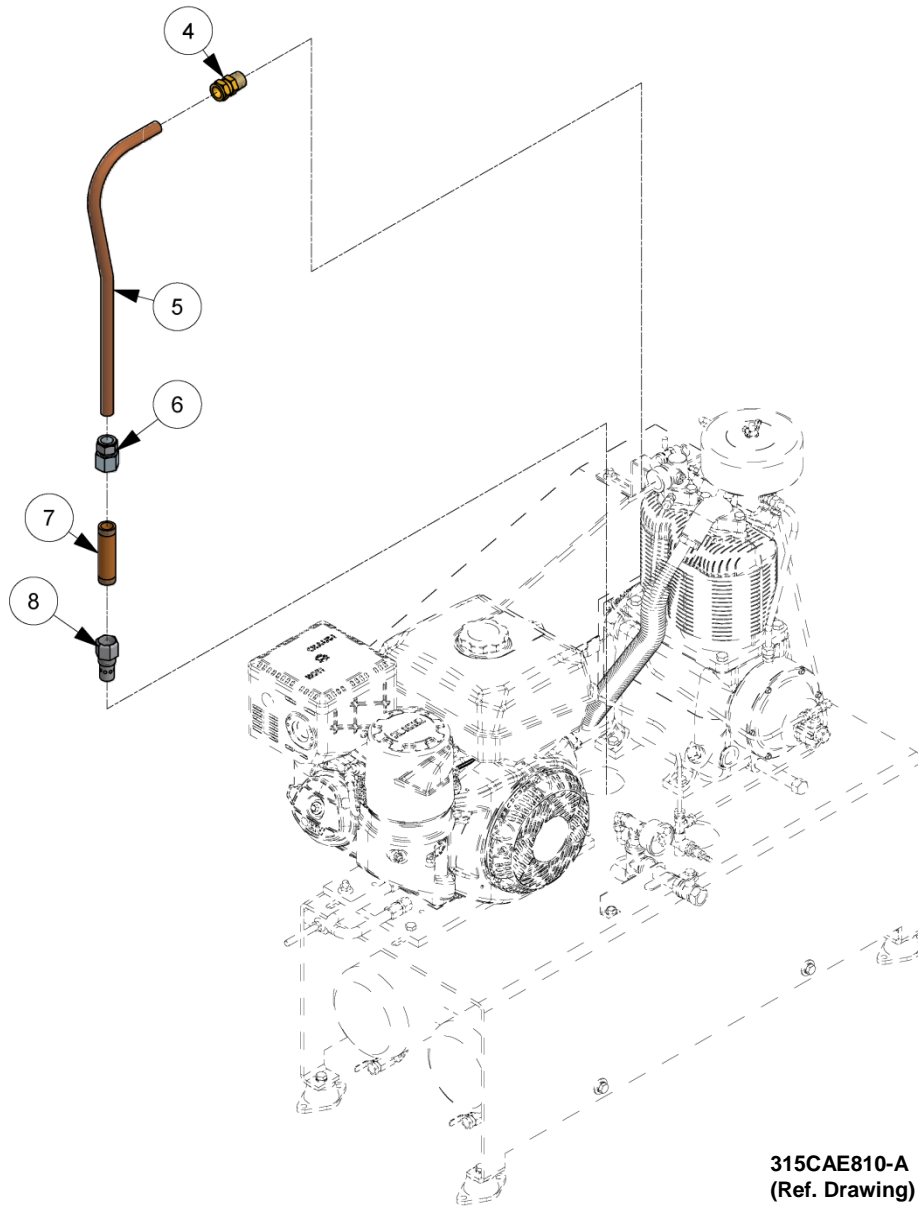


## DISCHARGE GROUP

Ref. No.	Description	Part Number	Qty.
4	Tube Fitting	M2867	1
5	Discharge Tube	300CAE857	1
6	Tube Fitting	86E279	1
7	Nipple	M478	1
8	Check Valve	P05822A	1

# UNIT REPAIR PARTS ILLUSTRATION

MODELS: HGR7-LPK, HGR7-LPH



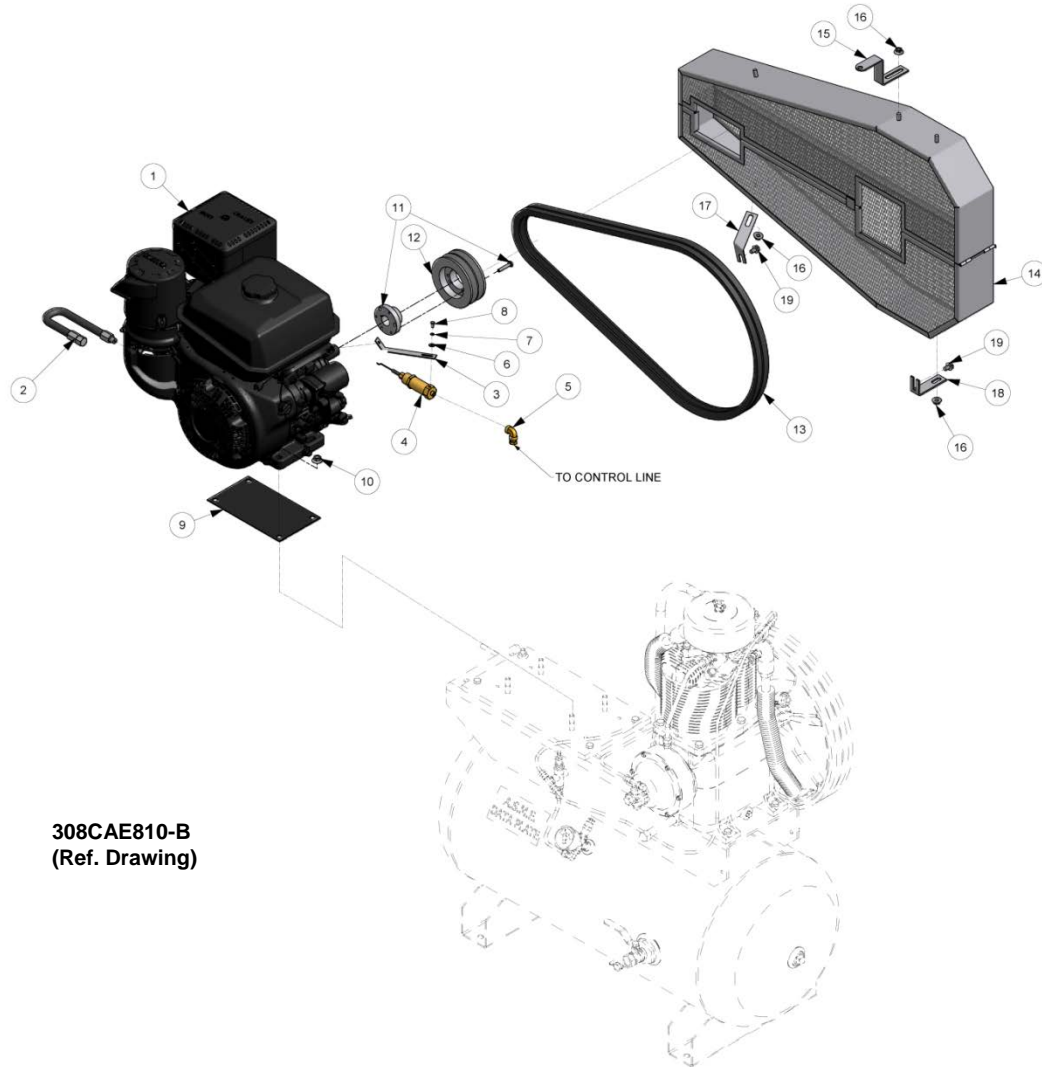
315CAE810-A  
(Ref. Drawing)

## DISCHARGE GROUP

Ref. No.	Description	Part Number	Qty.
4	Tube Fitting	M2867	1
5	Discharge Tube	301CAE857	1
6	Tube Fitting	86E279	1
7	Nipple	M478	1
8	Check Valve	P05822A	1

## UNIT REPAIR PARTS ILLUSTRATION

MODELS: HGR7-3K, HGR7-6K, HGR7-8K, HGR7-LPK, BGR7K

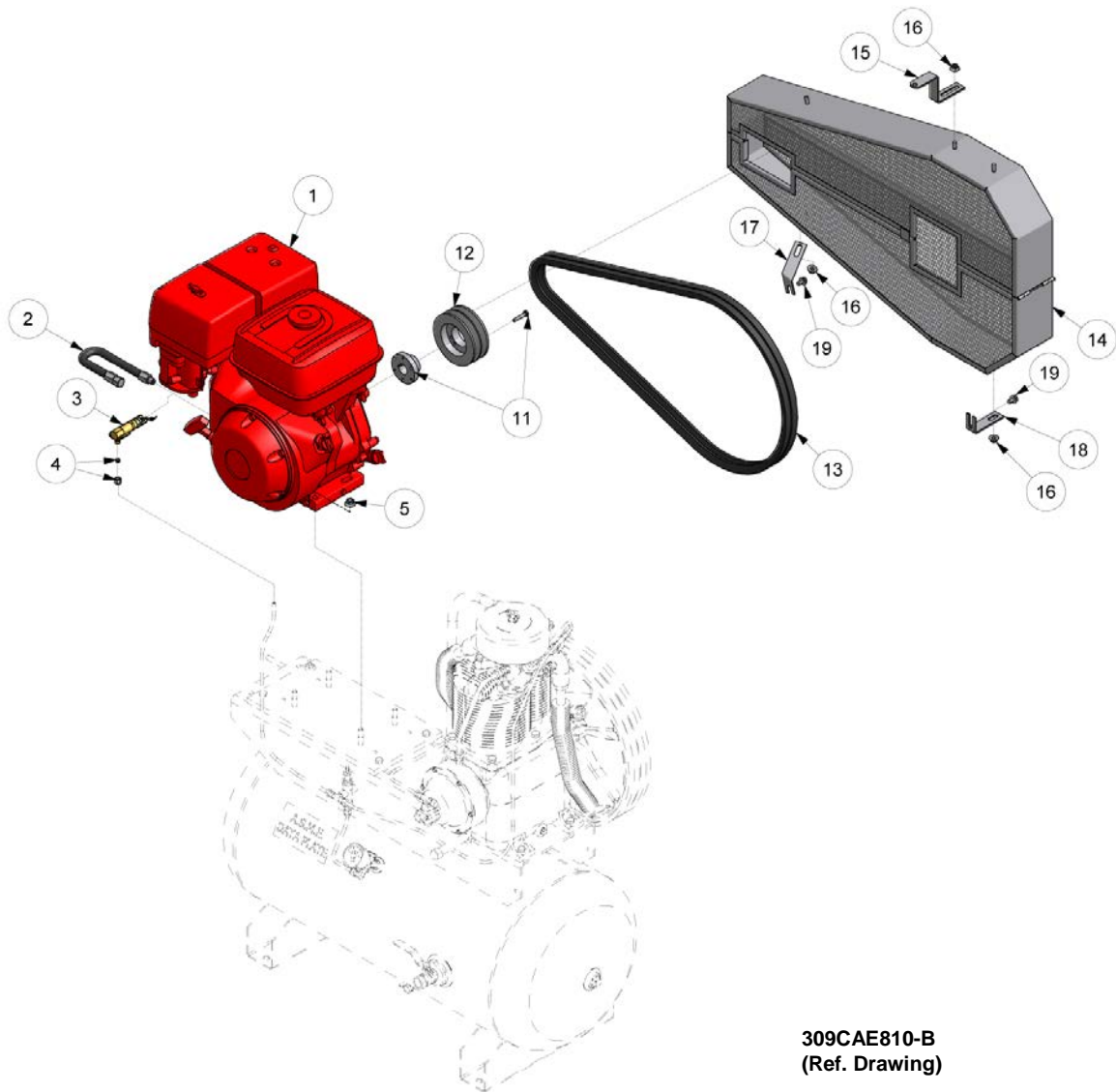


### ENGINE, DRIVE & BELT GUARD GROUP

Ref. No.	Description	Part Number	Qty.
1	Engine	301CAE4013	1
2	Oil Drain	VP1096045	1
3	Throttle Control Bracket	300CAE017	1
4	Throttle Control	VP1096613	1
5	Tube Fitting	86E229	1
6	Washer	1210972	1
7	Lock Washer	95B13Z	1
8	Screw	VP1096937	1
9	Motor Shim	301CAE247	1
10	Nut	M3483	4
11	Bushing	22F16SDS	1
12	Pulley	VP1045266	1
13	Belt	13E544	2
14	Belt Guard	304CAE120	1
15	Bracket	M855	1
16	Nut	M3485	3
17	Belt	P05517A	1
18	Bracket	M856	1
19	Screw	M1454	2

## UNIT REPAIR PARTS ILLUSTRATION

MODELS: HGR7-3H, HGR7-6H, HGR7-8H, HGR7-LPH, BGR7H

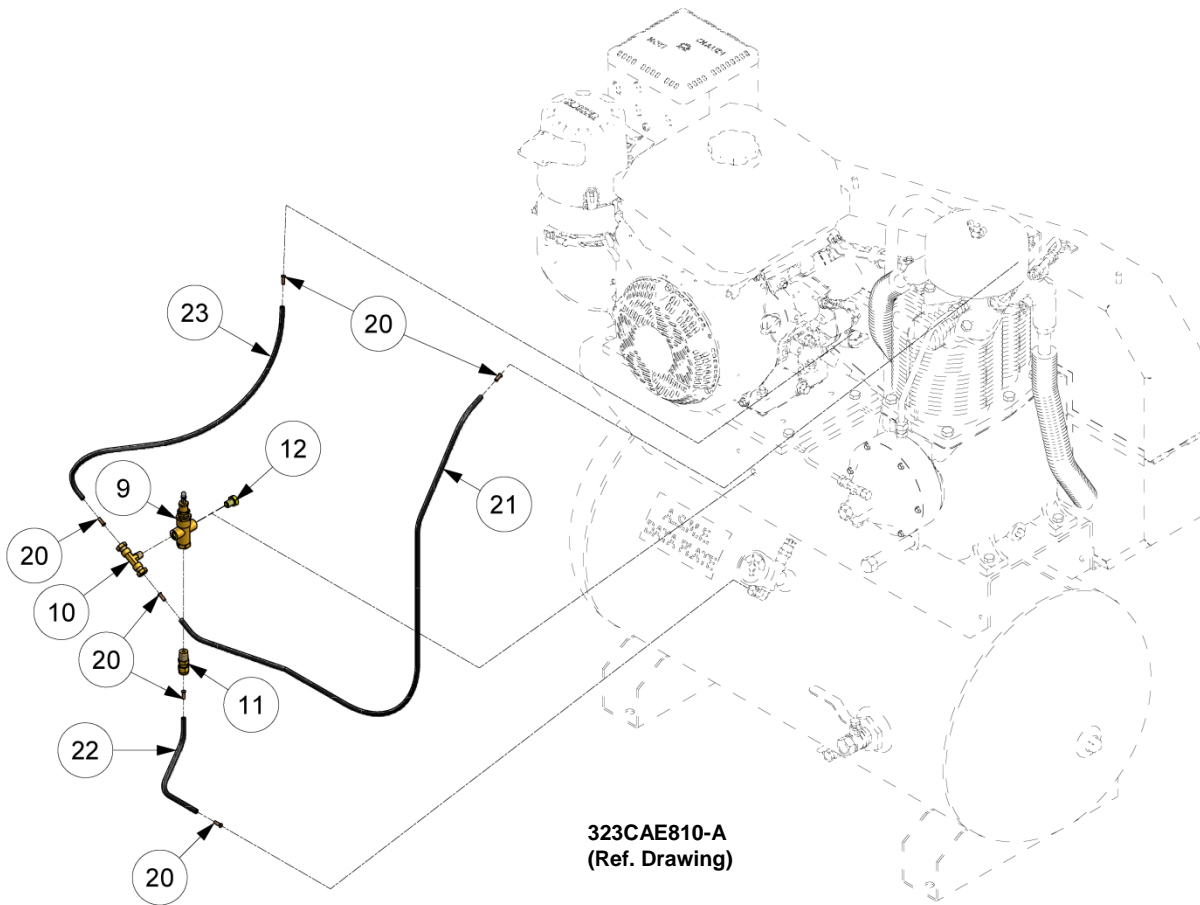


309CAE810-B  
(Ref. Drawing)

### ENGINE, DRIVE & BELT GUARD GROUP

Ref. No.	Description	Part Number	Qty.
1	Engine	303CAE4013	1
2	Oil Drain	VP1097010	1
3	Throttle Control	VP1096614	1
4	Nut & Ferrule	M2959	1
5	Nut	M3483	4
11	Bushing	22F16SDS	1
12	Pulley	VP1045266	1
13	Belt	13E544	2
14	Belt Guard	304CAE120	1
15	Bracket	M855	1
16	Nut	M3485	3
17	Belt	P05517A	1
18	Bracket	M856	1
19	Screw	M1454	2

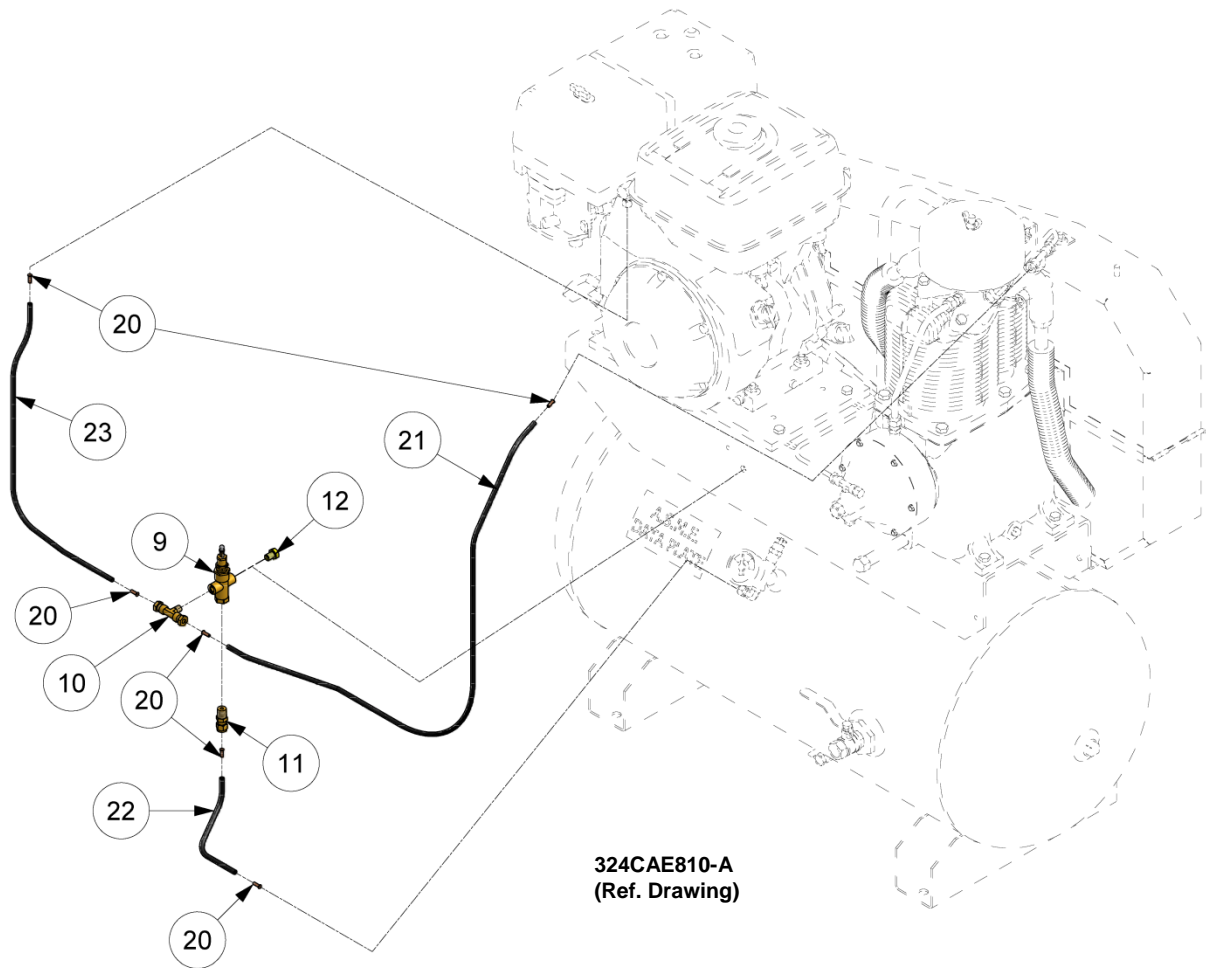
**UNIT REPAIR PARTS ILLUSTRATION**  
**MODELS: HGR7-3K, HGR7-6K, HGR7-8K, BGR7K**



**CONTROL GROUP**

Ref. No.	Description	Part Number	Qty.
9	Pilot Valve	VP1089041	1
10	Tee	M2879	1
11	Tube Fitting	M2862	1
12	Screw	M3465	1
20	Tube Insert	P10118A	6
21	Tubing	P10117A	3.4ft.
22	Tubing	P10117A	.65ft.
23	Tubing	P10117A	1.7ft.

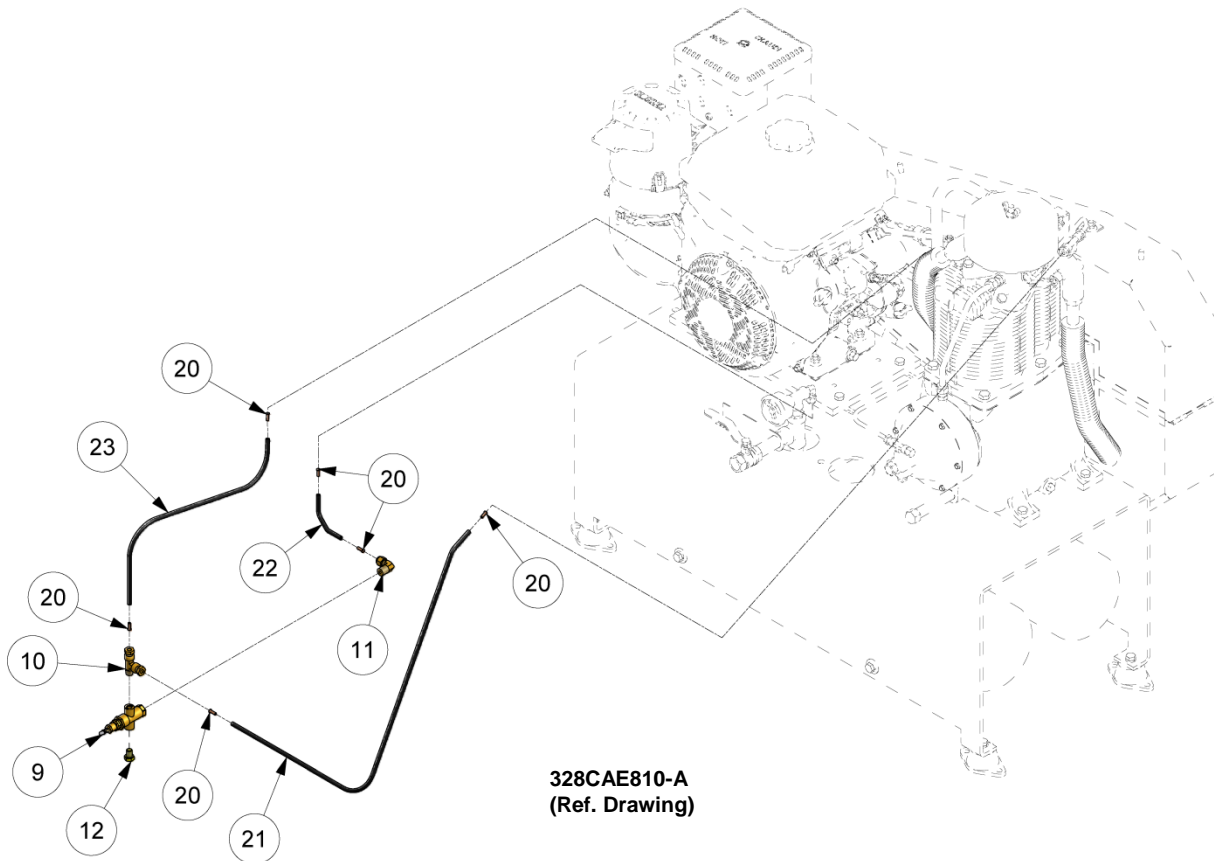
**UNIT REPAIR PARTS ILLUSTRATION**  
**MODELS: HGR7-3H, HGR7-6H, HGR7-8H, BGR7H**



**CONTROL GROUP**

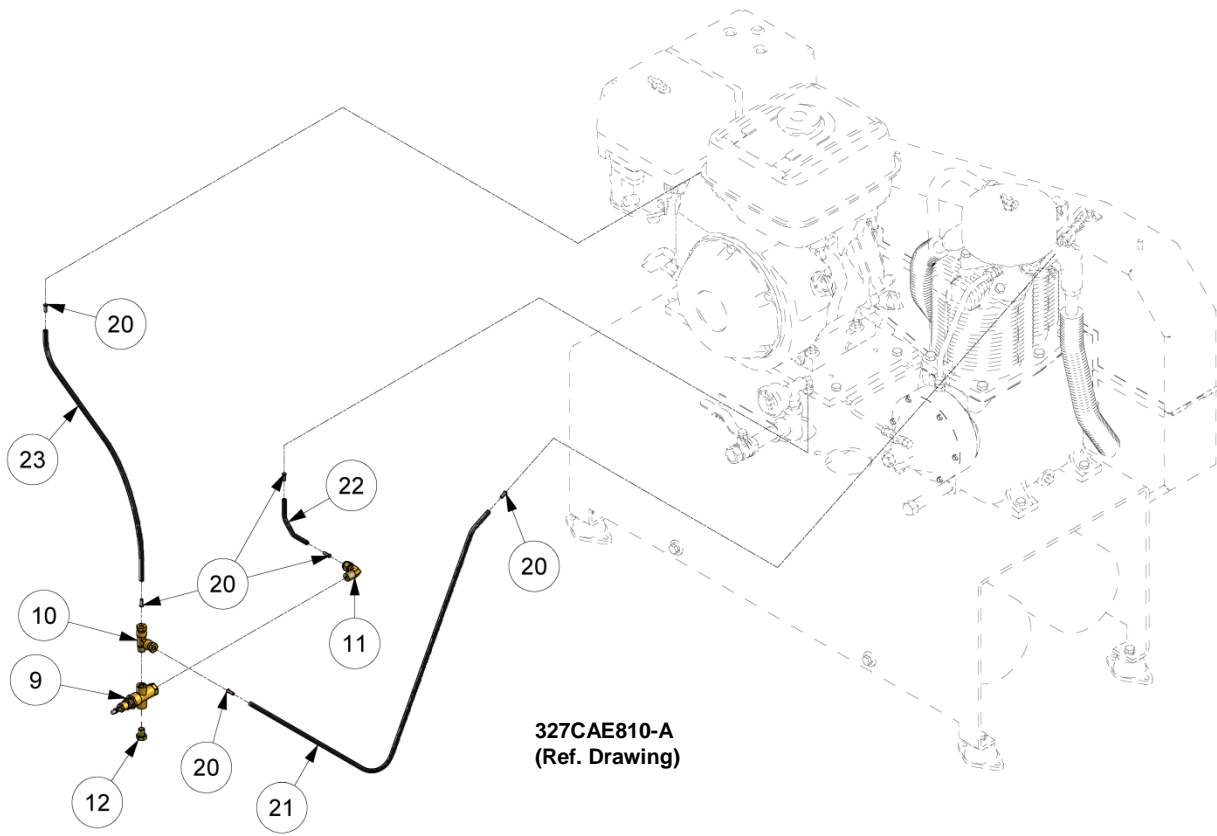
Ref. No.	Description	Part Number	Qty.
9	Pilot Valve	VP1089041	1
10	Tee	M2879	1
11	Tube Fitting	M2862	1
12	Screw	M3465	1
20	Tube Insert	P10118A	6
21	Tubing	P10117A	3.4ft.
22	Tubing	P10117A	0.65ft.
23	Tubing	P10117A	1.85ft.

**UNIT REPAIR PARTS ILLUSTRATION**  
**MODELS: HGR7-LPK**



Ref. No.	Description	Part Number	Qty.
9	Pilot Valve	VP1089041	1
10	Tube Fitting	86E235	1
11	Elbow	86A40	1
12	Screw	M3465	1
20	Tube Insert	P10118A	6
21	Tubing	P10117A	2.63ft.
22	Tubing	P10117A	0.34ft.
23	Tubing	P10117A	1.57ft.

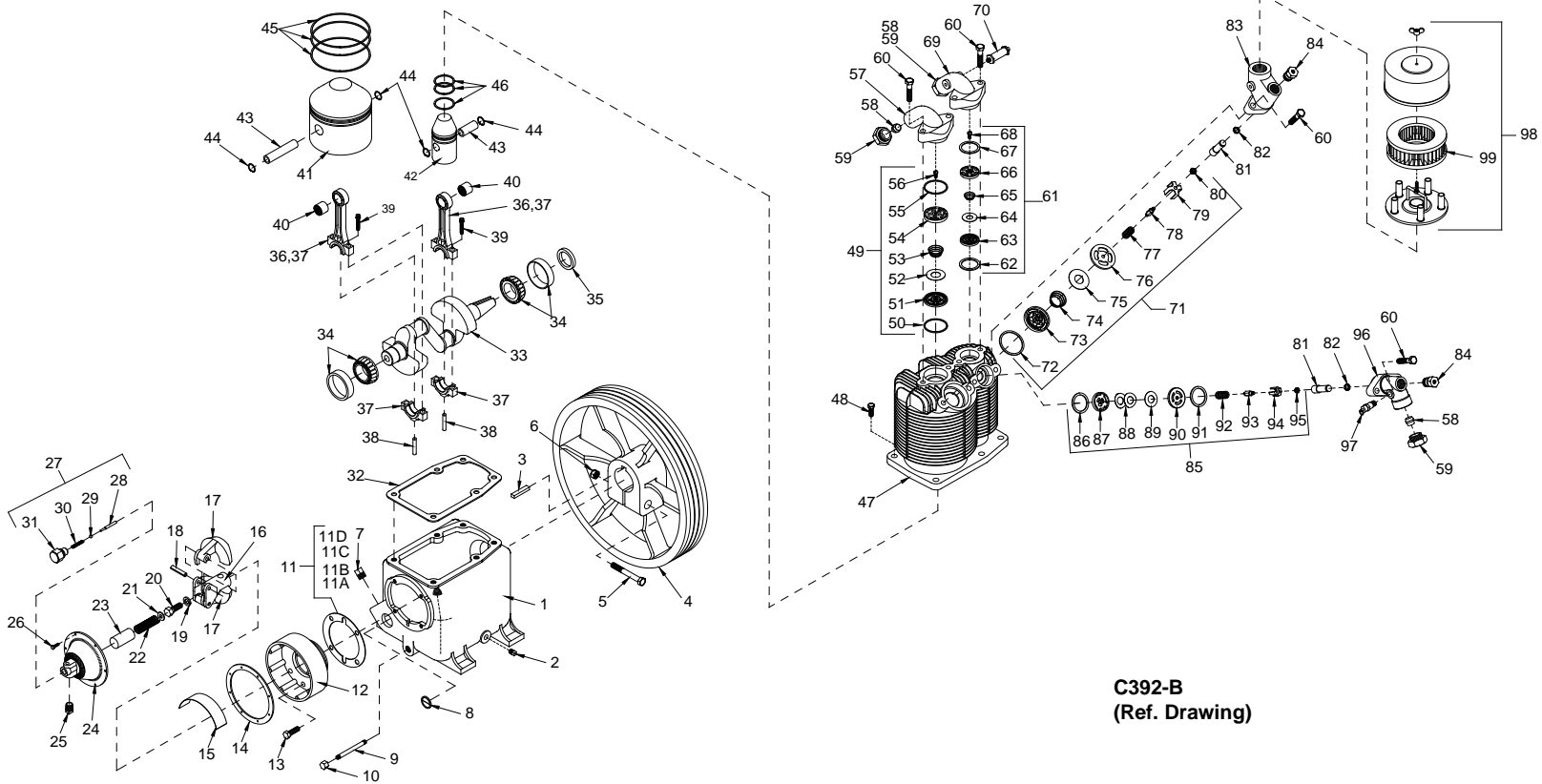
**UNIT REPAIR PARTS ILLUSTRATION**  
**MODELS: HGR7-LPH**



**CONTROL GROUP**

Ref. No.	Description	Part Number	Qty.
9	Pilot Valve	VP1089041	1
10	Tube Fitting	86E235	1
11	Elbow	86A40	1
12	Screw	M3465	1
20	Tube Insert	P10118A	6
21	Tubing	P10117A	2.63ft.
22	Tubing	P10117A	0.34ft.
23	Tubing	P10117A	1.79ft.

**COMPRESSOR REPAIR PARTS ILLUSTRATION**  
**Model: R15BHU**



**C392-B**  
**(Ref. Drawing)**

**Repair Parts List**  
**Compressor Models R10DHU & R15BHU**

Ref. No	Description	Part Number	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, items, 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	2
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	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 (Model R10D)	R105	1
33	Crankshaft (Model R15A)	R155	1
34	Main bearing	ZNR16	2
35	Oil seal	OSN4	1
36	Connecting rod assembly model R15B (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)	ZP2709C	1

**Repair Parts List**  
**Compressor Models R10DHU & R15BHU**

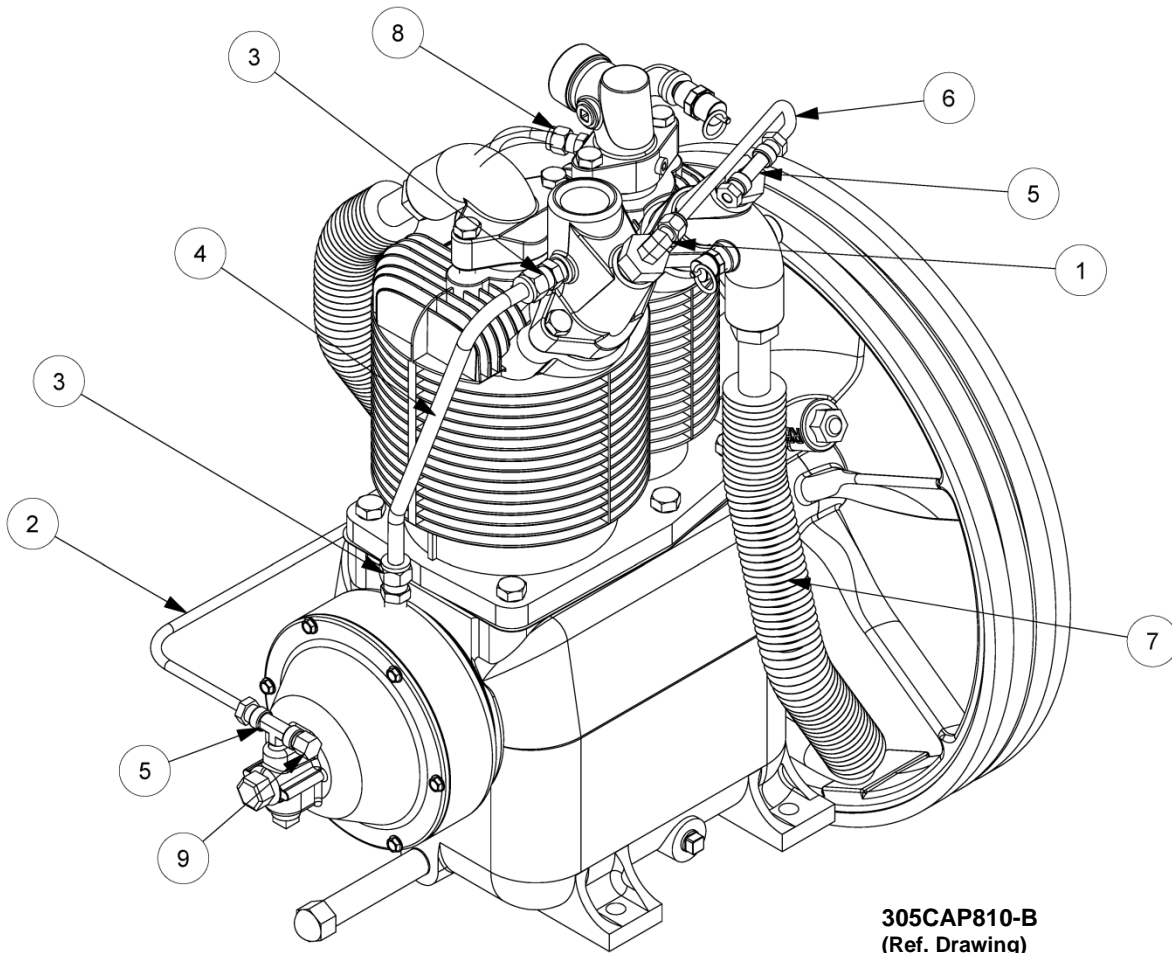
Ref. No.	Description	Part Number	Qty.
43	Piston pin	R1021	2
44	Piston pin retaining ring	R10102	4
45	Low pressure piston ring set	Z798	1
46	High pressure piston ring set	Z797	1
47	Cylinder	P12237D	1
48	Hex head cap screw	M2345	6
49	Low pressure discharge valve assembly	Z813	1
50	Valve gasket	P04135A	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	Discharge valve cage	M2100	1
67	Gasket, Valve	CQP14869A	1
68	Hex head machine screw	M3220	1
69	High pressure discharge manifold	M1717	1
70	Pressure relief valve	P09704A	1
71	Low pressure intake valve/unloader assembly	Z4877	1
72	Gasket, Valve	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	Unloader spring	P09084A	1
78	Guide stem	P09083A	1
79	Unloader finger	P09085A	1
80	Locking hex nut	P09086A	1
81	Unloader piston	P09923A	2
82	O-Ring	P02547A	2
83	Low pressure intake manifold	P09670C	1
84	Unloader cylinder	P02306B	2
85	High pressure intake valve/unloader assembly	Z11938	1
86	Valve gasket	P09171A	1
87	Intake valve cage	P14224B	1
88	Valve spring	P13866A	2
89	Valve disc	P13865A	1
90	Intake valve seat	P14118B	1

**Repair Parts List**  
**Compressor Models R10DHU & R15BHU**

Ref. No.	Description	Part Number	Qty.
91	Gasket, Valve	CPQ14870A	1
92	Unloader spring	P01882A	1
93	Guide stem	P09296A	1
94	Unloader finger	P14119A	1
95	Locking hex nut	P09086A	1
96	High pressure intake manifold	P12304B	1
97	Interstage pressure relief valve	M3685	1
98	Intake filter	P04999A	1
99	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	Z6795	1
	Complete valve gasket set	Z5156	1

# COMPRESSOR REPAIR PARTS ILLUSTRATION

Models: R15BHU



**305CAP810-B**  
(Ref. Drawing)

## Repair Parts List

Ref. No.	Description	Part Number	Qty.
1	Compression fitting	M2868	1
2	Tube, Unloading w/Fittings	ZSB250A	1
3	Compression Fitting	M2864	2
4	Breather Tube w/Fittings	ZUB375	1
5	Compression Fitting	M2879	2
6	Manifold Tube	Z9172	1
7	Intercooler w/Fittings	Z9140	1
8	Compression Fitting	M2868	1
9	Compression Nut	VP1061773	1


## UNIT HAZARD DECALS

**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: \_\_\_\_\_


**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.


**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.

**11a**




**NOTICE**

YOUR COMPRESSOR HAS BEEN TESTED AND SHIPPED WITH *Champion* LUBRICANT.

FOR OPTIMUM PERFORMANCE USE ONLY GENUINE CHAMPION PARTS AND LUBRICANTS. CHAMPION DISTRIBUTOR FOR ADDITIONAL LUBRICANT AND REPLACEMENT PARTS.

**11b**



**NOTICE**

YOUR COMPRESSOR HAS BEEN TESTED AND SHIPPED WITH *AEON* LUBRICANT.

FOR OPTIMUM PERFORMANCE USE ONLY GENUINE AEON DENVER PARTS AND LOCAL GARDNER DENVER DISTRIBUTOR FOR ADDITIONAL LUBRICANT AND REPLACEMENT PARTS.

**12**

**FOOD GRADE SYNTHETIC**

**13**

**AC-SY AC-FG**

**AC-HC**

**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

**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**

ROTATION IN DIRECTION OF ARROW

ROTATION IN DIRECTION OF ARROW

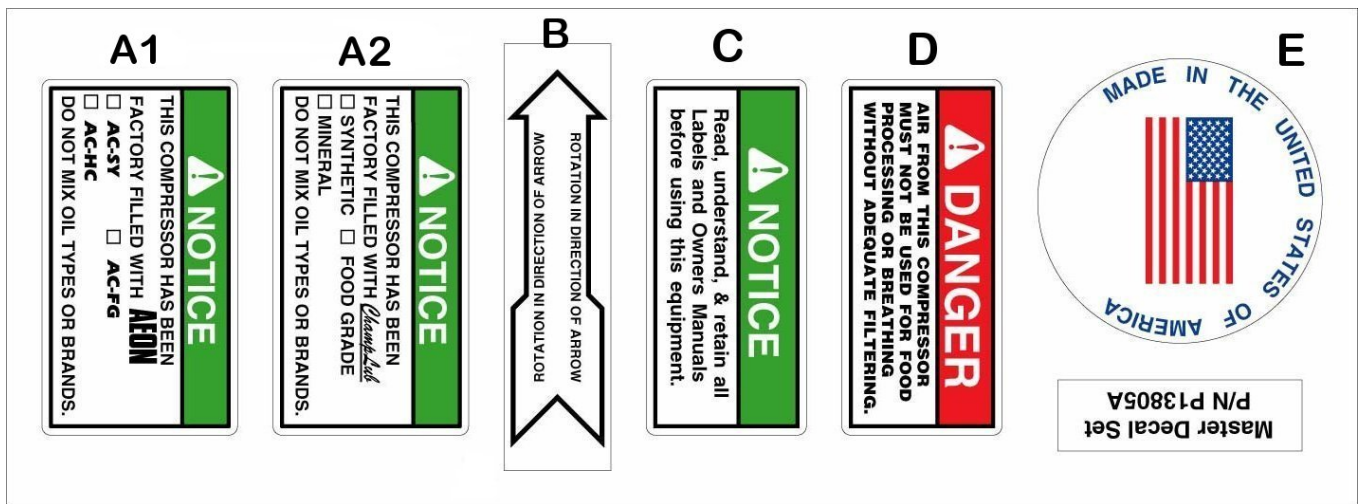
ROTATION IN DIRECTION OF ARROW

ROTATION IN DIRECTION OF ARROW

## PUMP HAZARD DECAL LISTING

DESCRIPTION	PART NO.
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

### PUMP HAZARD DECALS









\*CQGF3345VER00\*

# Gardner Denver<sup>®</sup>

For additional information, contact your local representative or visit:  
[www.contactgd.com/compressors](http://www.contactgd.com/compressors)

©2013 Gardner Denver, Inc. Printed in U.S.A.



Please recycle after use.