OPERATOR'S MANUAL and PARTS LIST

MC–2018

JOY®

TWISTAIR®

SCREW COMPRESSOR

MODELS

TA–007

TA–010

TA–015

FORM NO. MC–2018

the non-stop air line

Joy Twistair®
Screw Compressor

OPERATOR'S MANUAL
AND
PARTS BOOK

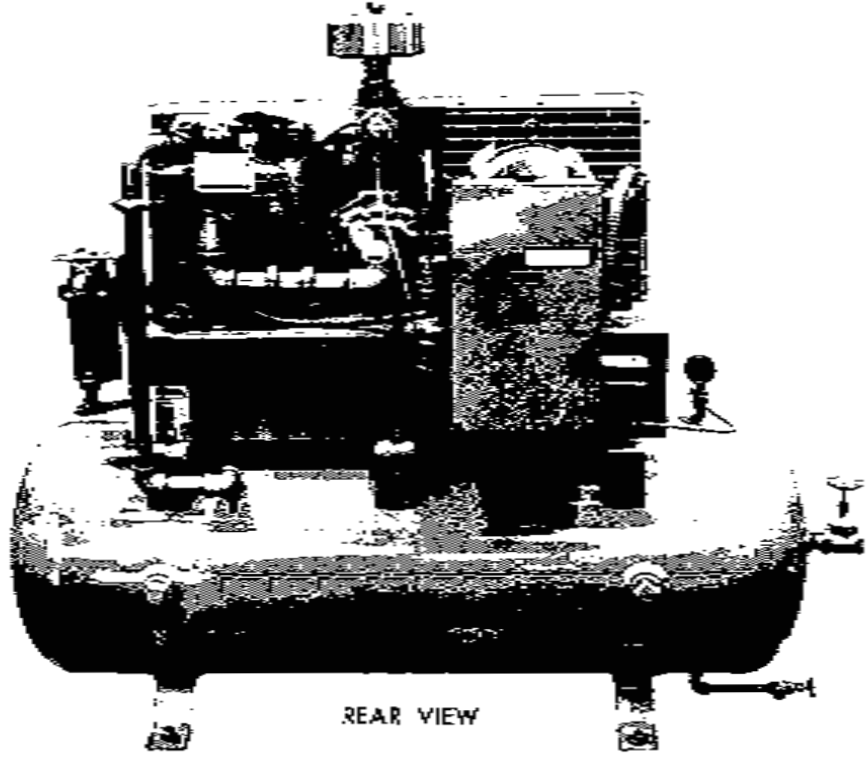
7½-10-15 HORSEPOWER

JOY MANUFACTURING COMPANY
AIR POWER DIVISION
Michigan City, Indiana 46360

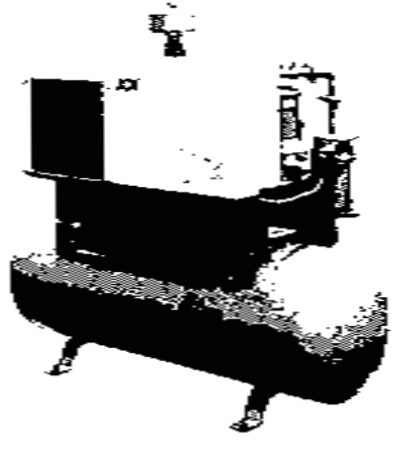
Price $5.00
FORM MC-2018 8/70

PRINTED IN U.S.A.

JOY TWISTAIR SCREW COMPRESSOR



REAR VIEW



FRONT VIEW

TABLE OF CONTENTS

OPERATOR'S MANUAL
JOY
TWISTAIR COMPRESSOR

GENERAL DESCRIPTION

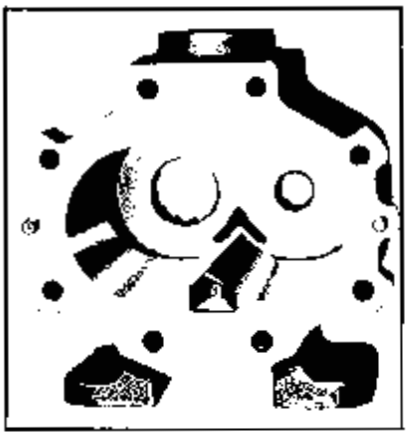


FIGURE 1 66-51
Housing (Stator)

The Joy Twistair Compressor is a positive displacement, flood lubricated, screw type compressor that employs a single stage of compression to achieve the specified pressure and capacity. The compressor consists of a housing (stator) figure 1, two screws (rotors) figure 2, bearings, bearing housing and end covers. In operation the male rotor, 1 figure 2, turns at its rated speed, however, the female rotor, 2 figure 2, turns at only two-thirds the speed of the speed of the male rotor. This is because the male rotor has 4 lobes while the female has 6.

Compression is obtained by trapping air between the threads or lobes of the two rotors. As the rotors turn, the lobes mesh, reducing the volume in the pockets and thus compressing the trapped air. The compressed air is discharged through the discharge port just as it reaches discharge pressure.

The principle of screw type compression is illustrated in figure 3.

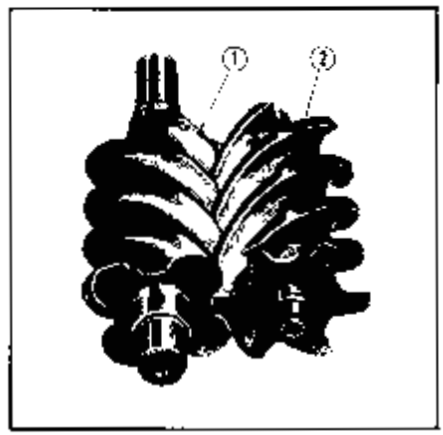


FIGURE 2 66-52
Screws (Rotors)
1. Male Rotor 2. Female Rotor

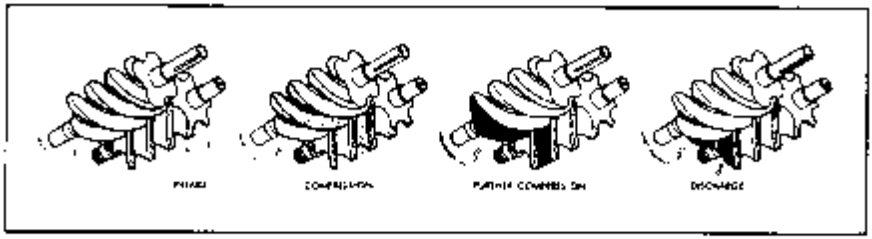


FIGURE 3 66-53

Principle of Operation of Screw Type Compressor

This series of Joy Twistair compressors is available in 3 sizes, 7½, 10 and 15 Horsepower. Other models of Joy Twistair compressors are available in sizes from 20 horsepower up through 300 horsepower.

The Twistair compressors covered in this manual have capacities ranging from 26.0 C.F.M. to 55.5 C.F.M. and are rated at 100 PSIG service discharge pressure. They are designed to deliver a maximum of 125 PSIG. All three models are available either as base mounted or tank mounted units. The 7½ and 10 horsepower tank mounted units are mounted on 80 gallon air receiver while the 15 horsepower unit is mounted on a 120 gallon tank. Oversize tanks are available as optional equipment, refer to accessory section of this manual for sizes.

INSTALLATION

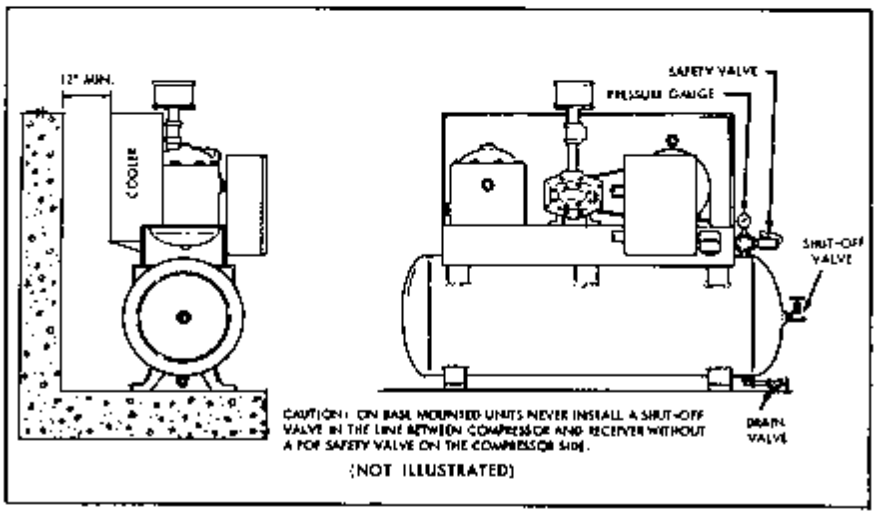


FIGURE 4 66-16

Typical Installation

LOCATION

The Joy Twistair Compressor is designed for indoor operation with ambient air for intake and cooling ranging from 50° F. to 105° F. In order to avoid excessive pressure loss through use of extended pipe or hose lines, the compressor should be located as close as possible to the point where the compressed air is to be used. In selecting the location it is important that the compressor has an ample supply of cool, well circulated air. Do not set the unit with the oil cooler side closer than 12 inches from a wall or other obstruction which would restrict the free flow of air through the cooler. A good circulation of air through the cooler is very important.

CAUTION

IF CONTAMINATED AIR CONTAINING ACID, PAINT OR CORROSIVE MATTER IS PRESENT, THEN AN OUTSIDE SOURCE OF AIR MUST BE PROVIDED FOR THE COMPRESSOR AIR INTAKE.

ELECTRICAL CONNECTIONS

Have electrical connections to the power source made by a competent electrician in accordance with local codes. It is extremely important that the wiring is accomplished to assure proper rotation of the compressor as indicated by the direction of rotation arrow on the discharge end bearing cap.

The electrical circuit must have the same characteristics and voltage as indicated on the motor nameplate and as is called for in the controllers and wiring diagram. See figure 5, Page 5.

UNIT MUST BE GROUNDED. *Ground from ground connection on base to water pipe or other good ground. Use #8 wire or larger.*

AIR SUPPLY

A clean air supply is desirable for the satisfactory operation of your Joy Compressor. Intake air temperature should range from 50° F. to 105° F. Where alternate sources of intake air are available, select the source supplying the cleanest air. The standard air filter with which the compressor is equipped is of sufficient size and design to meet all normal operating conditions if serviced regularly, in accordance with the service schedule given on Page 16.

NOTE

IF THE COMPRESSOR IS TO OPERATE IN AN AREA WHERE CONSIDERABLE LINT, DUST, DIRT OR

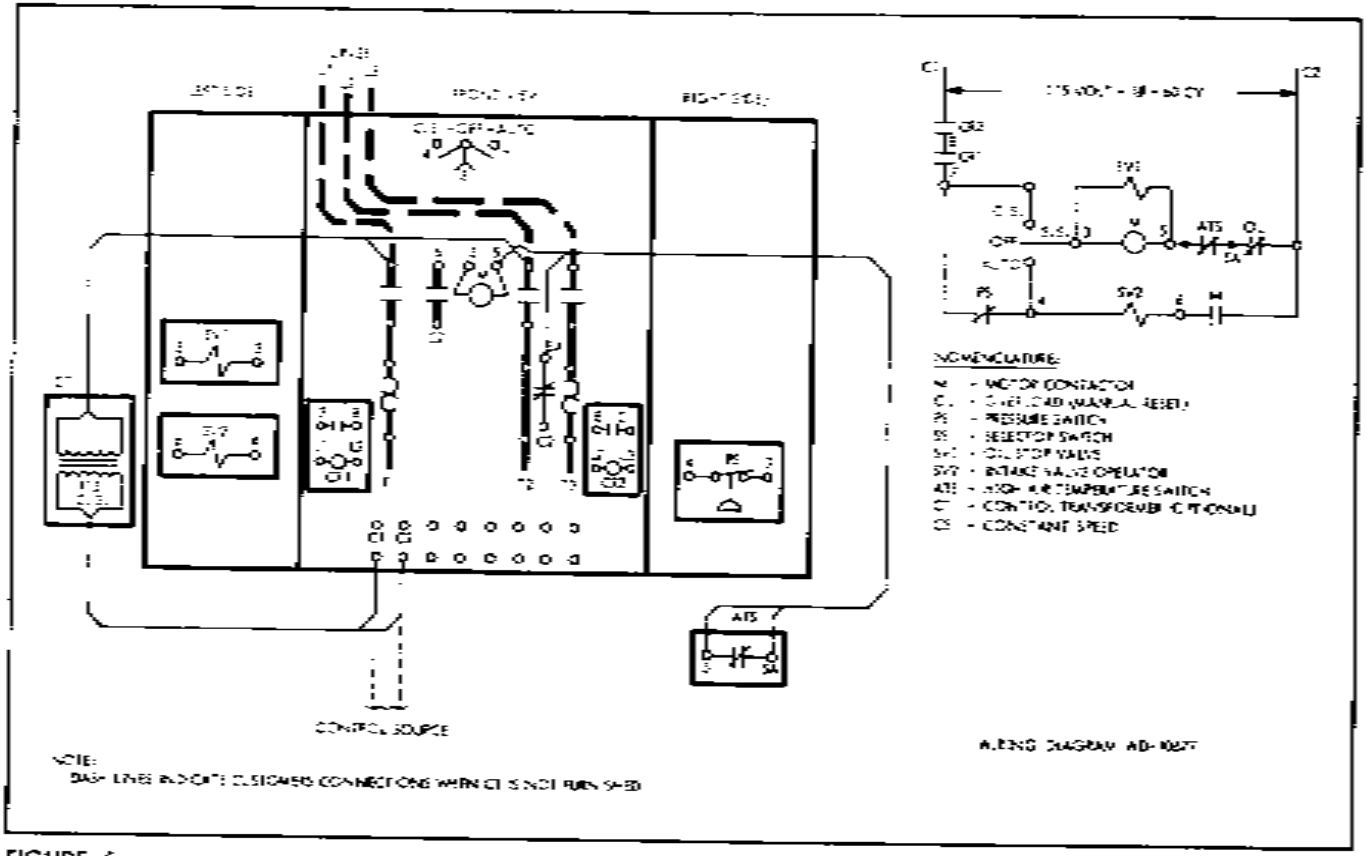


FIGURE 5
Wiring Diagram

OTHER CONTAMINATES ARE PRESENT, IT IS SUGGESTED THAT AN AIR FILTER RECOMMENDED FOR THE SPECIFIC ENVIRONMENT BE SUBSTITUTED FOR THE STANDARD FILTER. AN ALTERNATE TO THE SPECIAL FILTER WOULD BE A MORE FREQUENT MAINTENANCE SCHEDULE FOR THE STANDARD FILTER. THE FREQUENCY FOR THE MAINTENANCE OF THE STANDARD FILTER MAY HAVE TO BE ESTABLISHED AFTER A PERIOD OF USAGE.

PIPING FOR OUTSIDE SOURCE OF AIR

When an outside source of air is to be supplied, the following rules should be followed:

1. Protect intake from the weather, rain and snow.
2. Keep intake pipe away from steam, gas, or engine exhaust. Vapors will be drawn into the compressor whether there is a filter or not.
3. Take outside air from at least 6 feet above ground or roof level. This is to minimize picking up dirt and litter in the intake.
4. If possible, locate the intake on the shady (usually north) side of the building and, if possible, under an overhang, as the air is cooler in these locations.
5. Install the intake pipe from the compressor outward. Make the pipe the same size or larger than the compressor intake opening. As a rule of thumb, increase the pipe diameter 2 inches for every 15 feet of piping.
6. Support intake lines with hangers, clamps and floor columns to keep weight of lines off compressor.
7. Intake piping should include a section of hose or flexible tubing.
8. Interior of added inlet piping must be corrosion resistant.

DISCHARGE PIPING

As previously stated, the compressor should be located as closely as possible to the point of compressed air usage. However, whatever piping is used in the distribution system should be constructed to offer a minimum amount of resistance to air flow between the receiver and point of use. Long radius elbows and pipe of sufficient size should be used. In no case should the piping be of smaller size than the receiver discharge opening.

NOTE

IN CASES WHERE THE COMPRESSOR IS CONNECTED IN THE SAME LINE AS A RECIPROCATING COMPRESSOR, A SURGE VOLUME CHAMBER AND A CHECK VALVE MUST BE INSTALLED IN THE AIR LINE BETWEEN THE TWO COMPRESSORS.

THE CHECK VALVE SHOULD BE LOCATED BETWEEN COMPRESSOR DISCHARGE AND SURGE CHAMBER. THIS APPLIES ONLY TO BASE MOUNTED UNITS. ON TANK MOUNTED UNITS THE RECEIVER ACTS AS A SURGE CHAMBER.

LUBRICATION

The operating principle of the compressor is such that the pressure circulated oil in the system serves three purposes:

1. Lubricates the rotating parts and bearings.
2. Serves as cooling agent for the compressed air to maintain the discharge air temperature within 100° F. of ambient temperature provided it is properly maintained.
3. Assures high efficiency and maximum air delivery by helping to seal the running clearance in the screws.

COMPRESSOR OIL SPECIFICATIONS

Joy Twistair compressors under normal operating conditions can use either a 10 weight premium heavy-duty motor oil or 10 weigth premium quality heavy-duty industrial type oil. However under extremely humid operating conditions the 10 weight heavy-duty industrial type oil is the preferred choice.

Viscosity of the oil should be 160 to 210 SSU at 100°F. and the oil should contain rust and oxidation inhibitors and foam suppressors. The flash point of the oil must be 400°F. minimum.

CAUTION

IF DIFFERENT BRANDS AND TYPES OF OIL ARE MIXED THERE IS A DISTINCT POSSIBILITY THAT SOME OF THE ADDITIVES OF ONE BRAND WILL REACT WITH THE ADDITIVES OF THE OTHER BRAND. FOR THIS REASON THE MIXING OF DIFFERENT BRANDS OF OIL MUST BE AVOIDED.

LUBRICATION SYSTEM

Cooled oil under pressure is directed from the oil cooler to the compressor, where it serves as a lubricant, cooling agent and seal. As it passes through the compressor it mixes with the air being compressed and discharges with the compressed air into the oil sump, where nearly all the oil in the air drops out due to impingment and velocity change. Most of the remaining additional traces of oil are removed as the air passes through the special oil separator device. The oil thus separated returns to the sump, and the air leaves the sump at the discharge opening. The hot filtered oil from the sump returns through the air-cooled oil cooler for re-circulation through the compressor completing the cycle.

The oil-air flow schematic figure 6, illustrates the circulation of air and oil in the system.

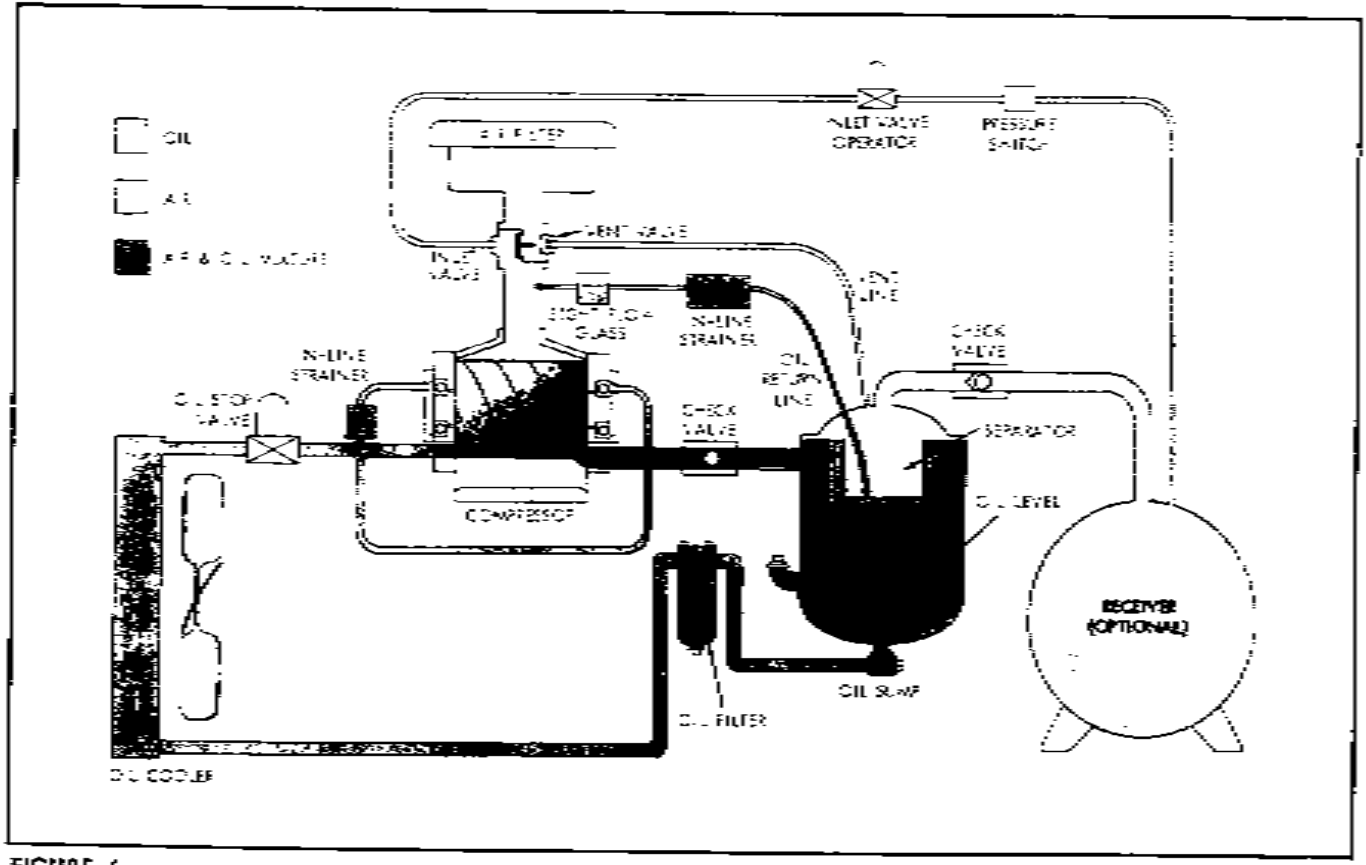


FIGURE 6
Oil-Air Flow Schematic

OIL SUMP

The oil sump contains all the oil required for the compressor operation. Oil is added through the fill fitting, see figure 7.

CAUTION

DO NOT REMOVE PLUG FROM OIL FILL FITTING OR ATTEMPT TO ADD OIL WHEN THE COMPRESSOR IS OPERATING OR SUMP IS UNDER PRESSURE. TO ASSURE THAT THE COMPRESSOR WILL NOT AUTOMATICALLY START, PUT SELECTOR SWITCH ON CONTROL CENTER IN "OFF" POSITION AND PULL MAIN DISCONNECT SWITCH. SUMP PRESSURE IS AUTOMATICALLY RELIEVED WHEN COMPRESSOR IS STOPPED. TO INSURE NO LEAKAGE BACK FROM RECEIVER, ENTIRE SYSTEM CAN BE BLOWN DOWN BY CLOSING SERVICE LINE VALVE AND THEN OPENING RECEIVER DRAIN VALVE.

NOTE

ALLOW 5 MINUTES FOR COMPLETE DEPRESSURIZATION OF THE SYSTEM.

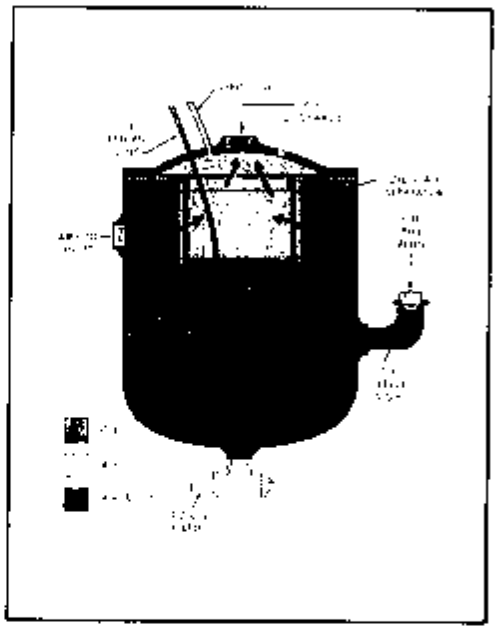


FIGURE 7 68-4

Cross Section Oil Sump and Air-Oil Separator

OIL SUMP CAPACITIES

7½	Horsepower unit	1¾ Gallons
10	Horsepower unit	2 Gallons
15	Horsepower unit	3 Gallons

CONTROLS

The Joy Twistair Compressor has a Dual Control System. This system provides for Automatic Start and Stop operation or Constant Speed operation. A selector switch mounted on the top of the Control Center is provided so that the operator can select the type of operation required.

CONTROL SELECTION

The method of control may be selected by placing the selector switch on the Control Center to the desired position.

The center position (toggle up) is the switch "off" position.

The left position (toggle left) marked "Const" is the constant speed position. In this position the compressor will continue compressing air until it reaches the pressure switch setting at which time it "unloads" (stops compressing air) but continues running at reduced power. When the pressure in the receiver drops to the low point pressure switch setting (100 PSIG with standard pressure switch and factory setting) the compressor starts compressing air and continues until the air pressure in the receiver again reaches the high limit setting. (120 PSIG)

The right position (toggle right) marked "Auto" is the automatic position (start-stop control). In this position the compressor will continue compressing air until it reaches the pressure switch setting at which time the compressor stops. *Caution should be exercised when machine is not running since it might start without warning when switch is in this position.* The compressor will remain off until the receiver drops to the low point pressure switch setting at which time the compressor will start again and continue running until it reaches the high limit of the pressure switch setting.

NOTE

IF OPERATING CONDITIONS ARE SUCH THAT THE INTERVALS OF MOTOR STARTS ARE MORE THAN FOUR TIMES AN HOUR, THEN THE SELECTOR SWITCH SHOULD BE MOVED TO CONSTANT SPEED POSITION.

METHOD OF CONTROL OPERATION

A. The following Components make up the control system:

1. Pressure switch—adjustable means of controlling high and low limits of pressure in air receiver. Normally closed.
2. Inlet valve operator—(A solenoid operated valve) directs receiver air to and from the inlet valve.
3. Compressor inlet valve.

4. Vent valve—an integral part of the inlet valve vents air pressure in sump. Normally closed.
5. Oil stop valve—Solenoid operated valve prevents oil from entering compressor when stopped. Normally closed (de-energized).
6. High Discharge Air Temperature Switch—protects unit against high discharge air temperature—adjustable.

B. When selector switch is moved to "Const" (constant speed):

1. Compressor starts to run.
2. Inlet valve opens.
3. Vent valve closes.
4. Oil stop valve opens.

Compressor reaches max. set receiver pressure, unloads and continues running (not compressing). At unload, the following happens:

1. Inlet valve closes preventing air from entering.
2. Vent valve opens—vents sump pressure through the inlet valve.
3. Oil stop valve remains open supplying unloaded compressor with lubricating oil.

When receiver drops to preset minimum pressure:

1. Inlet valve opens starting compression.
2. Vent valve closes.

When compressor is stopped:

1. Inlet valve closes.
2. Vent valve opens venting sump.
3. Oil stop valve closes preventing oil from entering compressor.

C. When selector switch is moved to "Auto" (automatic):

1. Compressor starts to run.
2. Inlet valve opens.
3. Vent valve closes.
4. Oil stop valve opens.

When compressor reaches maximum set receiver pressure the motor stops and:

1. Inlet valve closes.
2. Vent valve opens.
3. Oil stop valve closes.

When receiver pressure drops to preset minimum:

1. Motor starts.
2. Inlet valve opens.
3. Vent valve closes.
4. Oil stop valve opens.

DRIVE

The Joy Twistair Compressor drive is equipped with Dodge Dyna-V belts. Because of their high horsepower rating, they must be operated at higher tensions than A, B, C, D and E belts. However, due to the flexibility of the small cross section, they may not feel as tight as would be expected for the tension they carry. Refer to procedure and the table on page 13 following for proper tensioning.

Proper V-belt tension and sheave alignment is extremely important to belt life, bearing life and power transmission. Correct tensioning and alignment was provided at time of shipment from the factory, however it is recommended that sheave alignment and V-belt tensioning be checked before initial start up. Belt tension should be checked several times during first 50 hours of operation and periodically thereafter.

Replacing V-Belts

To replace the drive V-belts, first loosen motor hold-down bolts (1). Then loosen locknut (3) and adjustment screws (2) figure 8. Slide the motor toward the compressor to provide sufficient slack for belt removal and replacement. Tension belts by using motor adjustment screws (2). Check sheave alignment, adjust as necessary and then tighten hold down bolts (1) securely.

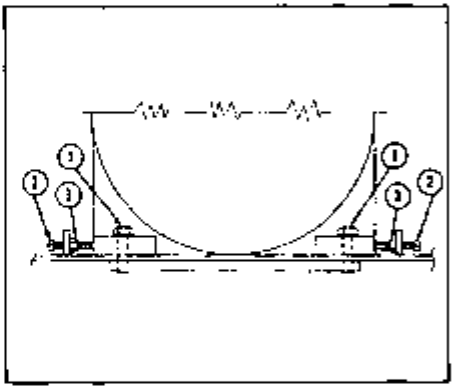


FIGURE 8 66-57
V-Belt Removal and Tensioning

Belt Tensioning Procedure

1. Place the belts in the sheave grooves and adjust motor adjustment screws, (2) figure 8. until belts are seated. Pull drive through by hand to equalize tension.
2. Measure the span length K, see figure 9.
3. Apply the force (perpendicular to span at center of the span) required to deflect the belt 1/64" per inch of span length (K). See figure 9. The force can be applied by means of a simple spring scale.
4. Compare the force required with the values given in Table I, page 13. The force required should be within the minimum and maximum values shown.

NOTE

A NEW SET OF BELTS SHOULD BE INITIALLY TENSIONED 1/3 GREATER THAN THE MAXIMUM VALUES SHOWN. SEE TABLE I BELOW.

5. Recheck tension of new belts two or three times in the first 50 hours of operation and adjust if necessary.

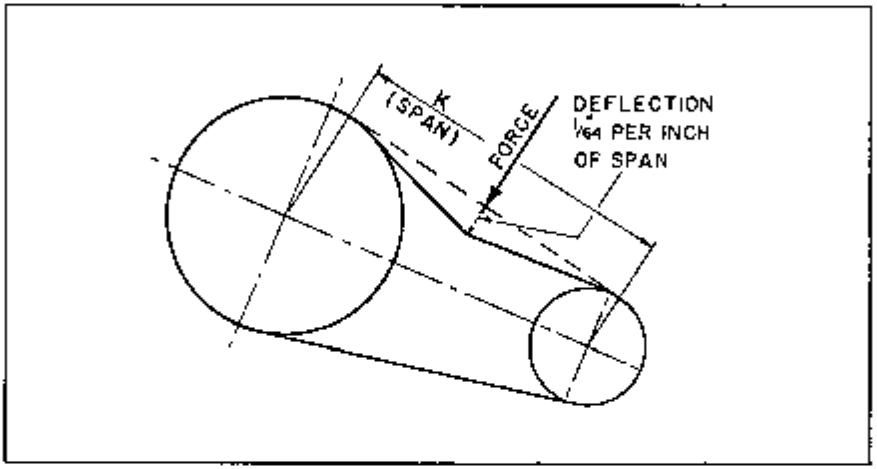


FIGURE 9 68-5
Measuring Forces

Table I

Belt Tension Forces

H.P.	Deflection Inches	Initial Tensioning Force LBS.	Normal Force LBS.	
			Min.	Max.
7.5	13/64	5-2/3	3	4-1/4
10	13/64	5-2/3	3	4-1/4
15	13/64	5-2/3	3	4-1/4

Tension Testing Tool

A tension testing tool is available. This tool facilitates checking belt tensions. Scales are provided on the tool for reading both the required force and the distance of belt deflections which are used in properly tensioning belts as described above. Order by part number 543217.

Sheave Alignment

To align the sheaves, place a long steel straight edge across the rims of both sheaves. Always align the motor sheave to the compressor sheave. The straight edge must be flat across the compressor sheave. Horizontal alignment is determined by placing the straight edge close to the sheave's center. Swing the straight edge to the top and bottom of the motor sheave to determine vertical alignment.

COMPRESSOR OPERATION

Every Joy Compressor is operated and thoroughly tested at the factory before shipment. The test assures that the compressor will deliver its rated capacity and is in good working order. However, regardless of the care taken at the factory, there is the possibility that damage may occur in shipment. For this reason, it is recommended that the unit be carefully inspected for evidence of possible damage in shipment. During the first few hours of operation the machine should be observed for any possible malfunction.

CAUTION

DO NOT SET AIR PRESSURE SWITCH TO ALLOW THE COMPRESSOR TO RUN IN EXCESS OF 125 PSI.

PREPARATION FOR INITIAL START-UP

1. Put selector switch located on control center in "off" position and pull main disconnect switch to assure that no power is going to the unit.

NOTE

THE STANDARD MACHINE UTILIZES TWO VOLTAGE SOURCES OF POWER FOR OPERATION:

1. 115 VOLTS FOR CONTROL.
2. 230 or 460 VOLTS FOR MOTOR.

AN INTER-LOCK BETWEEN THE TWO CIRCUITS IS PROVIDED AS STANDARD EQUIPMENT.

CAUTION: DO NOT RUN 230 VOLT MOTOR ON 208 VOLTS (208 or 575 VOLT MOTORS ARE AVAILABLE AS OPTIONAL EQUIPMENT).

2. Inspect unit and assembly for any visible signs of damage that could have occured in shipment or during installation.
3. Fill sump to center line of fill fitting with oil as specified in Oil Specifications Page 8. If sump is over-filled, drain to proper level.

NOTE

TIGHTEN FILL FITTING PLUG SECURELY.
REMEMBER THIS IS A PRESSURIZED VESSEL.

4. Reconnect main disconnect switch.

CAUTION

JOG COMPRESSOR TO CHECK FOR PROPER DIRECTION OF ROTATION AS INDICATED BY DIRECTION ARROW ON DISCHARGE END BEARING CAP. IF DIRECTION OF ROTATION IS WRONG, CORRECT BY RE-CONNECTING THE MOTOR LEADS TO OBTAIN PROPER ROTATION DIRECTION.

5. Close receiver discharge valve and move selector switch to desired operating position. Constant speed setting is recommended for initial start-up.
6. With receiver discharge valve closed, let machine pump up to operating pressure; at this stage the automatic controls will take over.
7. Open receiver discharge valve.
8. After unit has run for several minutes, shut it down and check oil level. It may be necessary to add oil to compensate for the amount of oil needed to fill the entire system.

NOTE

NO BREAK-IN PERIOD IS REQUIRED. THE MACHINE CAN BE PUT IN FULL OPERATION IMMEDIATELY.

EMERGENCY SHUT-DOWN

To manually shut down the compressor in case of an emergency, put selector switch located on electrical Control Center to "off" position.

RESTART AFTER POWER FAILURE

If unit shuts down due to power failure, first check for blown fuse then restart by resetting starter button.

PERIODIC MAINTENANCE SCHEDULE

In order to obtain continued satisfactory performance, the following maintenance schedule should be observed. As with all machinery, a properly maintained maintenance schedule must be followed.

NOTE

THE FOLLOWING SCHEDULE IS BASED UPON NORMAL OPERATING CONDITIONS. IN AREAS OF UNUSUAL ENVIRONMENT, THE MAINTENANCE SCHEDULE SHOULD BE ADJUSTED TO ALLOW FOR EXISTING CONDITIONS.

CAUTION

BEFORE ATTEMPTING ANY OF THE FOLLOWING, BE SURE TO PULL MAIN DISCONNECT SWITCH TO ASSURE THAT NO POWER IS GOING TO THE UNIT.

Daily:

1. Drain condensate from receiver.
2. Read the separator differential indicator to observe the condition of the air-oil separator element. The amount of red showing indicates the degree of restriction across the oil-air separator. When indicator shows all red, the separator element should be changed.
3. Observe the oil return line sight glass to determine if oil is flowing. A light air-oil mist is normal.

Weekly:

1. Through bulls-eye sight glass in oil fill elbow check sump oil level, add oil as required. Check only when unit is warm. If compressor has not been in operation, run for several minutes to warm up. When adding oil do not mix different types and brands of oil.
2. Check pressure switch adjustment by observing receiver pressure gauge. Adjust if necessary.

Each 30 Days:

1. Clean accumulated dust and lint from oil cooler fins.
2. Clean and service air cleaner. If element is damaged, replace.
3. Test air temperature switch. It should shut down the unit at discharge air temperature of 200° F. See page 19 for test procedure.

NOTE

THESE TWO STEPS MUST BE PERFORMED MORE FREQUENTLY IF COMPRESSOR IS OPERATING IN AN ENVIRONMENT THAT HAS AN EXTREMELY LARGE AMOUNT OF DIRT OR LINT PREVAILING.

Twice Yearly or Every 1000 Hours:

Whichever comes first:

1. Change oil in sump.
2. Change oil filter element.
3. Check oil-air separator element and change if damaged or extremely dirty.
4. Remove and inspect drive bearing lube line strainer element. Clean by blowing out with a reverse flow of air. If damaged or badly contaminated, replace with new element.
5. Remove and inspect oil return line strainer element. Clean by blowing out with reverse flow of air. If damaged or badly contaminated replace with new element.

Motor Lubrication

Grease lubricated motors are properly lubricated at the time of manufacture and it is not necessary to re-lubricate prior to initial start-up. However, if motor has not been run for a period of 6 months or longer, it is recommended that it be lubricated before starting.

For the type of lubricant to use and the method of lubrication contact local motor manufacturer's representative. See motor nameplate for motor identification.

CLEANING AIR FILTER ELEMENT

Wash filter element in warm water solution of household detergent. Do not oil or clean with gasoline, kerosene, or any other volatile liquid.

REPLACING OIL-AIR SEPARATOR ELEMENT

1. Disconnect vent line, oil return line and discharge line from sump.
2. Remove head from sump.
3. Lift off gaskets and lift out oil-air separator element.
4. Install new oil-air separator element and new gaskets.
5. Replace sump head and tighten.
6. Reconnect vent line, oil line and discharge line.

REPLACING OIL FILTER ELEMENT

1. Drain oil from sump at "T" fitting below oil filter.
2. Remove filter base.
3. Replace filter element with gasket end up.
4. Replace filter base.
5. Refill oil sump. (See Instructions Page 9)

INSTALLING OIL SEAL

When installing new oil seal on rotor shaft, make sure garter spring is toward the compressor. These parts are illustrated in

figure 17 of the Parts List Section, Page 36. To protect oil seal, oil shaft and place a piece of shim stock or similar material over the keyway when sliding seal onto shaft.

PRESSURE SWITCH ADJUSTMENT

Range Adjustment—The "On" and "Off" pressures at which the switch has been set will be found marked on the nameplate on the cover. If it is desired to raise the "On" and "Off" settings, turn the screw, item "B", clockwise. Turning the screw counter-clockwise will lower the "On" and "Off" settings.

Differential—The differential is the difference between the "On" and "Off" settings. This setting is made at the factory and should require no further adjustment. If the "On" and "Off" settings are decreased, the differential will increase slightly. Varying the differential adjustment does not affect this "Cut-out" pressure setting. The differential can be increased or decreased slightly if necessary. Turn nut item "A" clockwise to increase the "Cut-in" pressure setting and counter-clockwise to decrease the "Cut-in" pressure setting. Do not over adjust the differential setting.

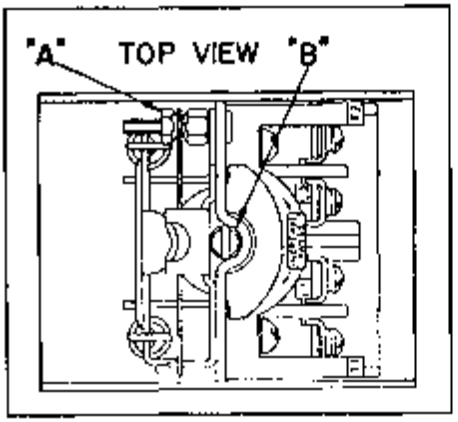


FIGURE 10 60-140
Pressure Switch Adjustment

CARE

1. No special maintenance is required.
2. The silver contact tips should not be filed or dressed. Renew the complete set of contacts and springs before the silver tips have worn away.
3. Do not lubricate any part of this switch.

NOTE

SOME UNITS MAY BE EQUIPPED WITH A PRESSURE SWITCH THAT HAS A DIFFERENT ADJUSTMENT PROCEDURE THAN THAT DESCRIBED ABOVE. IN THIS CASE, ADJUSTMENT PROCEDURES WILL BE FOUND ON INSIDE OF CONTROL CENTER DOOR.

NOTE

IF OPERATING CONDITIONS ARE SUCH THAT THE INTERVALS OF MOTOR STARTS ARE MORE THAN FOUR TIMES AN HOUR, THEN THE SELECTOR SWITCH SHOULD BE MOVED TO CONSTANT SPEED POSITION.

TESTING HIGH AIR TEMPERATURE SWITCH

To test the high air temperature switch loosen lock nut under adjusting knob (turn counter clockwise), manually and set it to a temperature of approximately 125°F., start machine and see if it shuts the machine down.

After shut down by this switch, reset manually to proper 200°F. setting and tighten lock nut under adjusting knob (turn clockwise). To restart the machine, procede as follows:

1. Move selector switch to "Off" position.
2. Push re-set button on top of switch.
3. Move selector switch to desired position.

TROUBLE SHOOTING

In checking out any malfunction, check out obvious and simplest steps first.

WARNING

WHEN CONTROL IS SET FOR AUTOMATIC START AND STOP OPERATION, PERSONNEL SHOULD BE CAUTIONED THAT THE UNIT MAY START ANY TIME.

CAUTION

NEVER SERVICE OR WORK AROUND MACHINE WITHOUT PUTTING SELECTOR SWITCH IN OFF POSITION AND DISCONNECTING MAIN POWER SWITCH.

SYMPTOM	PROBABLE CAUSE
Failure to Start	1. Power Failure 2. Blown Fuse 3. Faulty Start Switch or Connection 4. Overloads Out* 5. Reset Button on High Air Temperature Switch Requires Resetting.
Shut Down	1. Power Failure 2. Blown Fuse 3. Overloads Out* 4. 230V. Installation with 460V. Motor Wiring 5. 460V. Installation with 230V. Motor Wiring 6. High Discharge Air Temperature

*High ambient operating temperatures in some cases may cause overload relays to kick-out. These relays have an adjustment of up to 15% to compensate for this condition.

(Continued next page)

TROUBLE SHOOTING CONT'D

SYMPTOM	PROBABLE CAUSE
Low Receiver Pressure	1. Excessive Air Demand 2. Open Air Service Line 3. Leak in Air Service Line 4. Faulty Pressure Switch 5. Inlet Valve Not Operating 6. Safety Valve Leaking 7. Leak in Air Receiver 8. Vent Valve Open or Faulty 9. Receiver Drain Valve Open or Faulty 10. Faulty Discharge Check Valve 11. Faulty Sump-to-Receiver Check Valve
High Receiver Pressure	1. Faulty Pressure Control Switch 2. Inlet Valve Not Closing 3. Faulty Vent Valve
High Discharge Air Temperature	1. Insufficient Air Circulation at Oil Cooler Due to Poor Location 2. Oil Cooler Fins Dirty or Plugged 3. Low Oil Level in Sump 4. Plugged Oil Filter or Oil Line 5. Bent Fan Blades
Excessive Oil Consumption or Oil in Service Line	1. Defective or Plugged Oil-Air Separator Assembly 2. Plugged Oil Return Line 3. Oil Sump Overfilled 4. Operating Below Rated Pressure
Frequent Oil-Air Separator Element Plug-Up	1. Improper Grade Lube Oil 2. Dirty and Contaminated Oil 3. Defective or Improper Air Intake Filter
Oil Seal Leaks or Flips	1. Check Compressor Discharge Check Valve for possible malfunction

AIR COMPRESSOR OPERATING AND SAFETY PRECAUTIONS

Because an Air Compressor is a high speed, rotating piece of machinery, the same common-sense safety 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, we are suggesting additional safety precautions as listed below:

Pull main disconnect switch and disconnect any separate control lines, if used, before attempting to work or perform maintenance on the unit.

Do not attempt to remove any compressor parts without first relieving the entire system from pressure.

Do not attempt to service any part while machine is operating.

Do not operate the compressor at pressures in excess of its rating as indicated on the Compressor Nameplate.

Do not operate the compressor at speeds in excess of its rating as indicated on the Compressor Nameplate.

Do not remove any guard shields or screens while the compressor is operating.

Observe terminal pressure gauge daily to be sure automatic control system is governing compressor operation within proper limits.

Periodically check all safety devices for proper operation.

Inspect all hoses regularly. Replace if becoming brittle.

Do not play with compressed air. Pressurized air can cause serious injury to personnel.

Be sure no tools, rags or loose parts are left on the compressor or drive parts.

Do not use flammable solvents for cleaning parts.

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.

Do not operate the compressor without guard shields or screens in place.

Do not install a shut-off valve in the discharge line, without installing a safety relief valve in the line between the shut-off valve and the compressor discharge.

Do not use compressed air for air breathing unless it is known to be properly purified for such use.

Do not operate compressor in areas where there is a possibility of ingesting flammable or toxic fumes.

Pressure vessels (Receivers, Aftercoolers, Intercoolers) may require ASME code stamping to meet local codes. Investigate code requirements before operation to make sure all requirements have been met.

The owner, lessor, or operator of the Compressor is hereby notified and forewarned that any failure to observe these Safety Precautions may result in damage or injury.

Joy Manufacturing Company expressly disclaims responsibility or liability for any injury or damage caused by failure to observe these specified precautions or by failure to exercise that ordinary caution and due care required in operating or handling the Compressor, even though not expressly specified above.

PARTS LISTING

INTRODUCTION

This Parts Book has been designed to furnish you a method to identify and order replacement parts for your Joy Twistair Compressor. Each part on the machine is identified and called out in the following pages of this book.

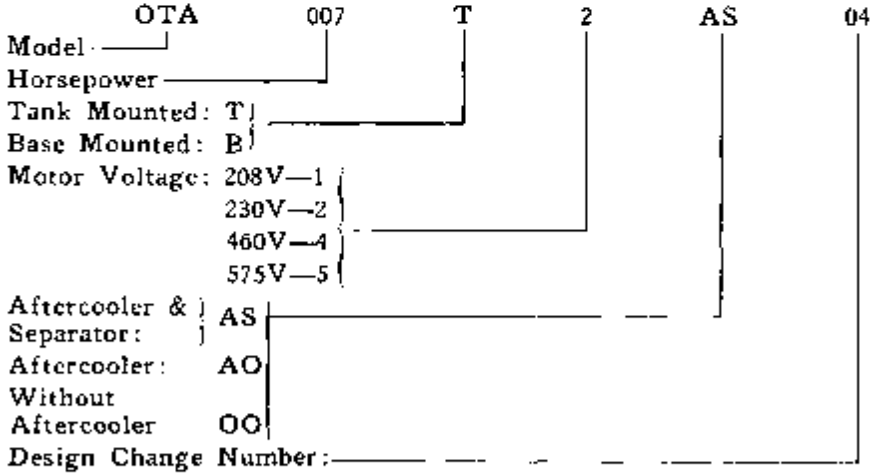
HOW TO USE PARTS BOOK

Using the index below, determine the assembly group in which the part is located, and the page on which the group illustration and listing is shown. Locate the part on the illustration, its reference number in the parts listing will give you the description and number of the part. Be sure to obtain part number from its proper model number column. If in doubt of model number refer to nameplate on the machine.

MODEL DESIGNATION

The model number includes the class, horsepower, whether tank or base mounted, voltage and design change number.

Example:



HOW TO ORDER PARTS

When ordering parts, be sure to include model and shop number of machine for which the parts are required. Give part number and description of each part or assembly needed. Do not order by "sets" or "pairs" unless specifically noted as such in the parts listing. Do not use illustration reference numbers when ordering parts.

IMPORTANT NOTICE

Orders for parts will not be accepted at the factory. All parts orders should be placed with your Joy Twistair Compressor Distributor or nearest Joy District Office. If you do not have your distributor's name, or location, it can be obtained from the Joy District Office serving your area.

Joy District Offices are located in the cities listed below. Addresses can be found in their respective telephone directories.

Atlanta, Georgia
Bellevue, Washington
Cleveland, Ohio
Dallas, Texas
Denver, Colorado
Devon, Pennsylvania
Hillhouse Company, Birmingham, Ala.
Hillside, Illinois
Knoxville, Tennessee
Linden, New Jersey
Los Angeles, California
Marrick Company, Louisville, Ky.
Minneapolis, Minnesota
New York, New York
Oak Park, Michigan
St. Louis, Missouri
Salt Lake City, Utah
San Francisco, California
Wilmington, Massachusetts

Repair Parts Catalog

TABLE OF CONTENTS

208V(T1)/230V(T2)	460V(T4)/575V(T5)	H.P.	TANK	A	B	C	D	E	H	L	W
MODEL NUMBERS		UNIT DIMENSIONS – STANDARD TANK									
TA007T1-0004 TA007T2-0004	TA007T4-0004 TA007T5-0004	7-1/2	80	36	18-1/2	6-1/8	12-3/4	1	55-1/4	63	27-1/4
TA010T1-0004 TA010T2-0004	TA010T4-0004 TA010T5-0004	10	80	36	18-1/2	5-7/8	12-3/4	1	55-1/4	63	28-1/2
TA015T1-0004 TA015T2-0004	TA015T1-0004 TA015T5-0004	15	120	42	24	4-1/8	15-3/4	1-1/4	60	66	29-3/4
MODEL NUMBERS		UNIT DIMENSIONS – OVERSIZE TANK									
TA007T1-0004 TA007T2-0004	TA007T4-0004 TA007T5-0004	7-1/2	120	42	18	6-1/8	15-1/2	1	60	66	27-1/4
TA010T1-0004 TA010T2-0004	TA010T4-0004 TA010T5-0004	10	120	42	18	6-1/8	15-1/2	1	60	66	28-1/2
TA015T1-0004 TA015T2-0004	TA015T4-0004 TA015T5-0004	15	200	44	22 1/2	4 7/8	19-3/8	1-1/4	67	72	29-3/4

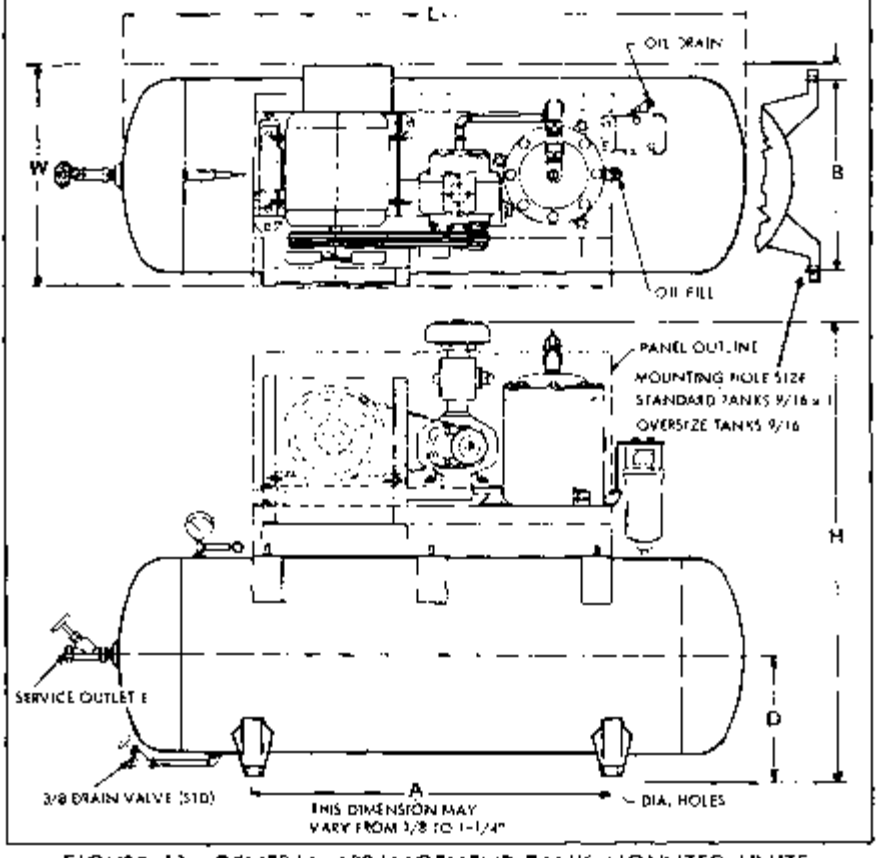


FIGURE 11. GENERAL ARRANGEMENT TANK MOUNTED UNITS

DATA	MODELS		
208V	TA007B1-0004	TA010B1-0004	TA015B1-0004
230V	TA007B2-0004	TA010B2-0004	TA015B2-0004
460V	TA007B4-0004	TA010B4-0004	TA015B4-0004
575V	TA007B5-0004	TA010B5-0004	TA015B5-0004
H.P.	7-1/2	10	15
L	43-3/8	47-3/8	51-5/8
H	32-1/4	32-1/4	32-1/4
W	27	28-1/2	29-3/4
O	1	1	1-1/4
A	17	17	21
B	9-3/8	11-3/8	13-3/8
C	12	13-1/2	14
D	5-7/8	6-7/8	7-7/8
E	2-3/4	1/8	2-1/2
F	21-1/4	21-3/4	22-5/8
G	11-1/4	12-1/4	13-1/4
J	36	40	44-1/4
K	9-5/16	8-1/16	8-1/16

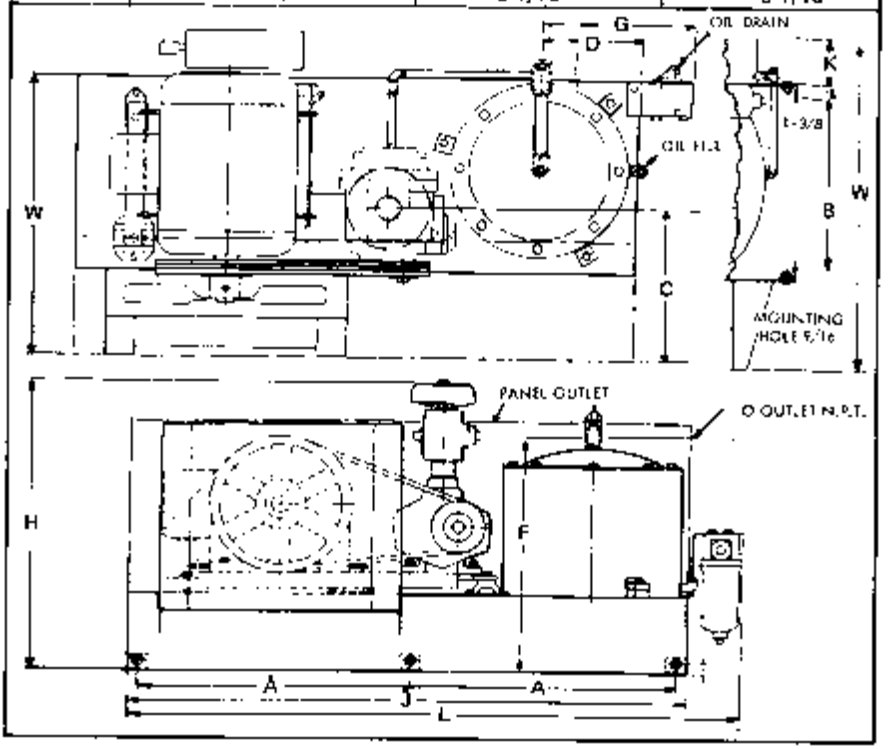


FIGURE 12. GENERAL ARRANGEMENT BASE MOUNTED UNITS

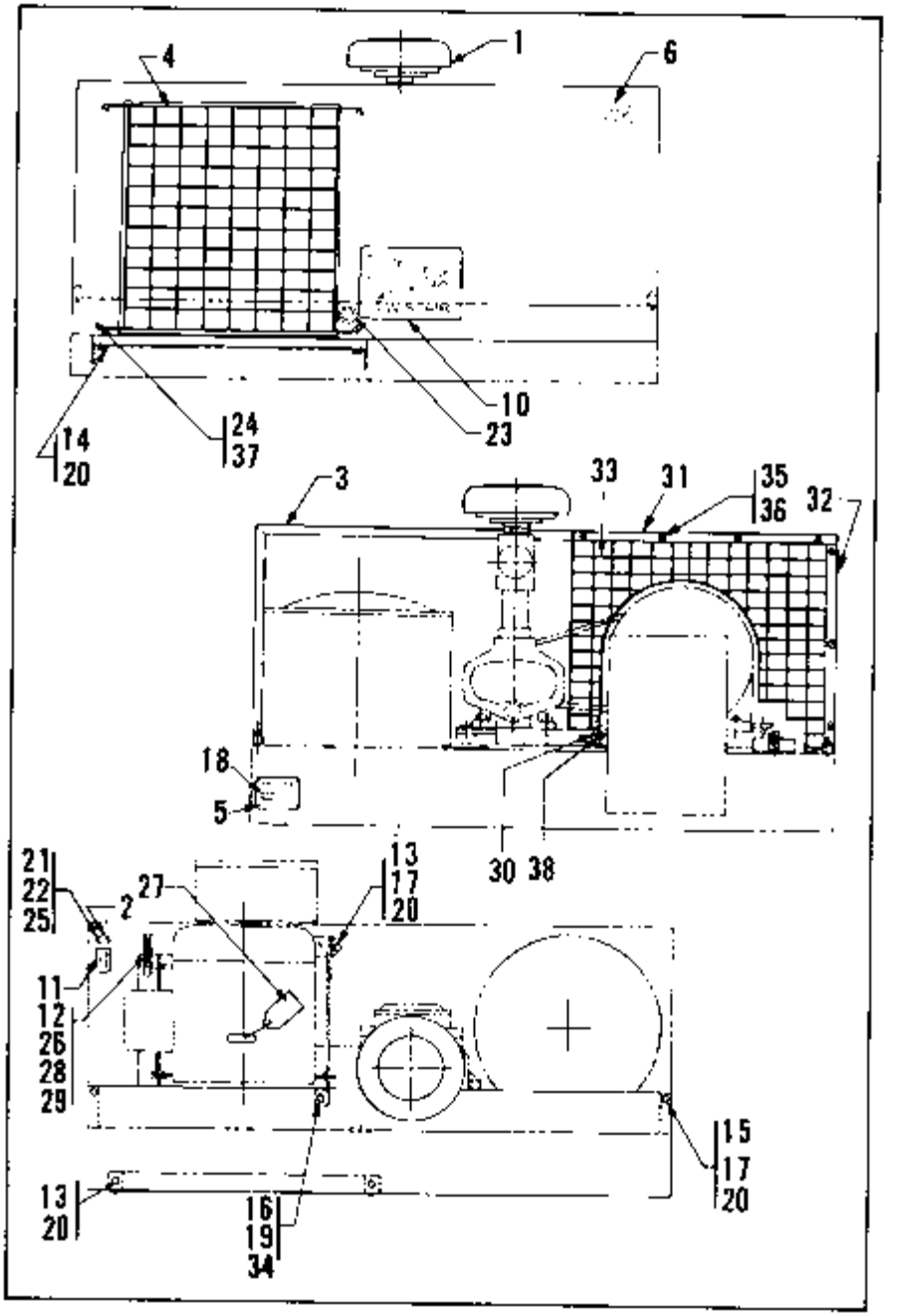
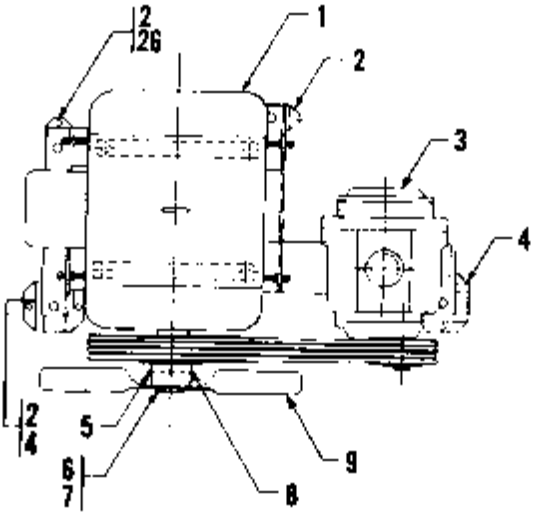


FIGURE 13. FINAL ASSEMBLY PARTS

PARTS LIST FOR FIGURE 13. FINAL ASSEMBLY PARTS

Ref. No.	Description	Qty	MODELS TA007B TA007T	TA010B TA010T	TA015B TA015T
—	FINAL ASSEMBLY PARTS	1	707063-13	707063-14	707063-15
1	. AIR FILTER	1	543176	543176	543176
—	. . FILTER ELEMENT	1	1660263	1660263	1660263
—	. . FILTER HOOD	1	543201	543201	543201
2	. GROUND LUG	1	600704-217	600704-217	600704-217
3	. PANEL ASSEMBLY	1	3660844	3660845	3660846
4	. GRILLE	1	3660312-1	3660312-2	3660312-3
5	. NAMEPLATE	1	1660327	1660327	1660327
6	. DECAL - JOY WORLD	1	1660364	1660364	1660364
7	. DECAL - HOT OIL	1	1660369	1660369	1660369
8	. DECAL - HIGH VOLTAGE	1	1660370	1660370	1660370
9	. DECAL - MAINTENANCE	1	1660988	1660988	1660988
10	. DECAL - TWISTAIR	1	1660412	1660412	1660412
11	. DECAL - ELECTRICAL GROUND	1	1660477	1660477	1660477
12	. GROUND STRAP	1	1660689	1660689	1660689
13	. CAPSCREW	9	900020-3	900020-3	900020-3
14	. CAPSCREW	2	900020-3	900020-3	900020-3
15	. CAPSCREW	2	900020-13	900020-13	900020-13
16	. HEX NUT	1	900160-2	900160-2	900160-2
17	. HEX NUT	10	900160-4	900160-4	900160-4
18	. DRIVE SCREW	4	900258-13	900258-13	900258-13
19	. LOCK WASHER	1	900302-1	900302-1	900302-1
20	. LOCK WASHER	14	900302-3	900302-3	900302-3
21	. MACHINE SCREW	1	900337-126	900337-126	900337-126
22	. HEX NUT	1	900401-14	900401-14	900401-14
23	. GROMMET	1	901413-16	901413-16	901413-16
24	. TRUSS HEAD SCREW	4	905498-60	905498-60	905498-60
25	. LOCK WASHER	1	905630-6	905630-6	905630-6
26	. CAPSCREW	1	900020-13	900020-13	900020-13
27	. TAG	1	543220	543220	543220
28	. LOCKWASHER	1	905630-20	905630-20	905630-20
29	. LOCKWASHER	1	905630-26	905630-26	905630-26
30	. GUARD SUPPORT	1	1660710	1660710	1660710
31	. GUARD BRACE	1	1660713-3	1660713-5	1660711-2
32	. GUARD BRACE	1	1660713-4	1660713-6	1660713-7
33	. FAN GUARD	1	1660714	1660715	1660716
34	. CAPSCREW	1	900020-390	900020-390	900020-390
35	. MACHINE SCREW	6	905498-84	905498-84	905498-84*
36	. SPEED NUT	6	909088-2	909088-2	909088-2
37	. SPEED NUT	4	909115-8	909115-8	909115-8
38	. INSULATION BUSHING	1	901418-1	901418-1	901418-1

*Quantity is 7.



Instructions for Installing Fan Hub

1. Clean motor shaft and fan hub bore with solvent.
2. Assemble fan hub on shaft; do not lubricate.
3. Use Loctite type C (4-1) or equal in setscrew hole that engages shaft only. Do not use on key setscrew. Allow Loctite to seep onto shaft through hole.
4. Install setscrew and torque as follows:

7-1/2	H.P.	Unit	87 inch pounds
10	H.P.	Unit	165 inch pounds
15	H.P.	Unit	165 inch pounds

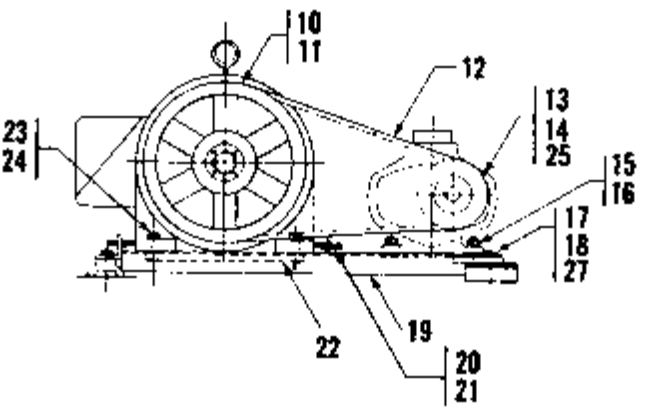
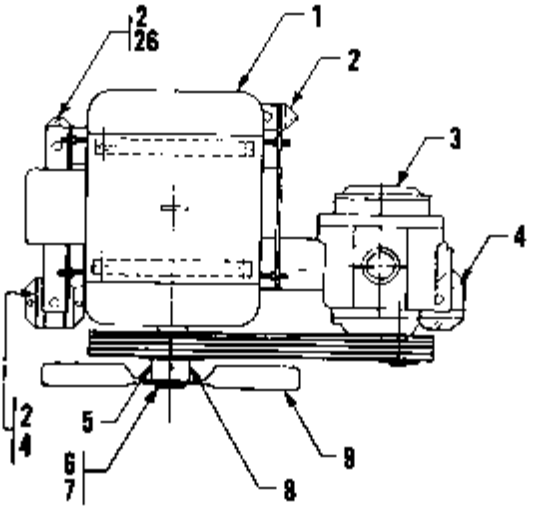


FIGURE 14. MOTOR AND COMPRESSOR (230 VOLTS-460 VOLTS)

PARTS LIST FOR FIGURE 14. MOTOR AND COMPRESSOR (230V-460V)

Ref. No.	Description	Qty	MODELS TA007B TA007T	TA010B TA010T	TA015B TA015T
—	MOTOR AND COMPRESSOR ASSEMBLY	1	543212-1	543212-2	543212-3
1	. SQUIRREL CAGE INDUCTION MOTOR	1	526398-161	526398-162	526398-163
2	. ISOLATOR	2	543207*	543214	543214
3	. COMPRESSOR ASSEMBLY	1	543077-8	543077-8	543077-8
4	. ISOLATOR	2	Not Used	543207	543207
5	. SCREW, SET SOCKET HEAD	2	900532-62	900532-91	900532-91
6	. MACHINE SCREW	4	900802-118	900802-118	900802-118
7	. LOCK WASHER	4	900302-57	900302-57	900302-57
8	. FAN HUB	1	1660663	1660707	1660682
9	. FAN	1	543026	543027	543028
10	. MOTOR PULLEY	1	1660652-2	1660652-3	1660652-6
11	. MOTOR BUSHING	1	527490-2	527489-1	A211184-9
12	. V-BELTS (Matched Set)	1	909120-335	909120-337	909120-345
13	. COMPRESSOR PULLEY	1	1660652-1	1660652-1	1660652-11
14	. BUSHING COMPRESSOR	1	527490-1	527490-1	527489-3
15	. HEX NUT	2	900160-5	900160-5	900160-5
16	. LOCK WASHER	2	900306-4	900306-4	900306-4
17	. CAP SCREW	4	900020-14	900020-14	900020-14
18	. LOCK WASHER	4	900302-4	900302-4	900302-4
19	. SUB BASE	1	3660685	3660684	3660681
20	. SET SCREW	4	900108-75	900108-75	900108-75
21	. HEX NUT	4	900160-4	900160-4	900160-4
22	. MOTOR RETAINER	2	1660686	1660682	1660682
23	. CAP SCREW	4	900020-33	900020-33	900020-33
24	. LOCK WASHER	4	900302-3	900302-3	900302-3
25	. SHAFT SPACER	1	1660700	1660700	1660700
26	. ISOLATOR	1	543214	Not Used	Not Used
27	. PLAIN WASHER	2	900317-5	Not Used	Not Used

*Quantity is 3.



Instructions for Installing Fan Hub

1. Clean motor shaft and fan hub bore with solvent.
2. Assemble fan hub on shaft; do not lubricate.
3. Use Loctite type C (4-1) or equal in setscrew hole that engages shaft only. Do not use on key setscrew. Allow Loctite to seep onto shaft through bore.
4. Install setscrew and torque as follows:

7-1/2	H.P.	Unit	87 inch pounds
10	H.P.	Unit	165 inch pounds
15	H.P.	Unit	165 inch pounds

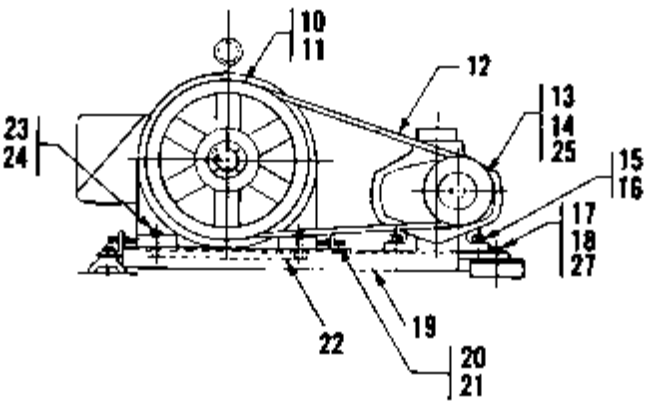


FIGURE 15. MOTOR AND COMPRESSOR (208 VOLTS – 575 VOLTS)

PARTS LIST FOR FIGURE 15. MOTOR AND COMPRESSOR (208V-575V)

Ref. No.	Description	Qty	MODELS					
			TA003B, TA003T 208 Volts	TA003B, TA003T 575 Volts	TA010B, TA010T 208 Volts	TA010B, TA010T 575 Volts	TA015B, TA015T 208 Volts	TA015B, TA015T 575 Volts
—	MOTOR AND COMPRESSOR ASSEMBLY	1	543212-E	543212-11	543212-7	543212-12	543212-8	543212-13
1	. SQUIRREL CAGE INDUCTION MOTOR	1	526396-213	526396-822	526396-214	526396-223	526396-215	526396-224
2	. ISOLATOR	3	543207*	543207*	543214	543214	543214	543214
3	. COMPRESSOR ASSY	1	543077-8	543077-8	543077-8	543077-8	543077-8	543077-8
4	. ISOLATOR	3	Not Used	Not Used	543207	543207	543207	543207
5	. SCREW, SET SKT. SD.	2	900532-62	900532-62	900532-91	900532-91	900532-93	900532-91
6	. MACHINE SCREW	4	900802-118	900802-118	900802-118	900802-118	900802-118	900802-118
7	. LOCK WASHER	4	900302-57	900302-57	900302-57	900302-57	900302-57	900302-57
8	FAN HUB	1	1660663	1660663	1660107	1660703	1660662	1660662
9	FAN	1	543026	543026	543027	543027	543028	543028
10	. MOTOR PULLEY	1	1660652-2	1660652-2	1660652-3	1660652-3	1660652-6	1660652-6
11	. MOTOR BUSHING	1	527490-2	527490-2	527489-1	527489-1	A211184-9	A211184-9
12	. V-BELTS (Matched Set)	1	909120-335	909120-335	909120-337	909120-337	909120-345	909120-345
13	. COMP. PULLEY	1	1660652-1	1660652-1	1660652-1	1660652-1	1660652-11	1660652-11
14	. BUSHING COMP.	1	527490-1	527490-1	527490-1	527490-1	527489-3	527489-3
15	. HEX NUT	2	900160-5	900160-5	900160-5	900160-5	900160-5	900160-5
16	. LOCK WASHER	2	900306-4	900306-4	900306-4	900306-4	900306-4	900306-4
17	. CAP SCREW	4	900020-14	900020-14	900020-14	900020-14	900020-14	900020-14
18	. LOCK WASHER	4	900302-4	900302-4	900302-4	900302-4	900302-4	900302-4
19	. SUB BASE	1	3660685	3660685	3660684	3660684	3660681	3660681
20	. SET SCREW	4	900108-75	900108-75	900108-75	900108-75	900108-75	900108-75
21	. HEX N. F.	4	900160-4	900160-4	900160-4	900160-4	900160-4	900160-4
22	. MOTOR RETAINER	2	1660667	1660660	1660682	1660682	1660682	1660682
23	. CAP SCREW	4	900020-33	900020-33	900020-33	900020-33	900020-33	900020-33
24	. LOCK WASHER	4	900302-3	900302-3	900302-3	900302-3	900302-3	900302-3
25	. SHAFT SPACER	1	1660900	1660700	1660700	1660700	1660700	1660700
26	. ISOLATOR	1	543214	543214	Not Used	Not Used	Not Used	Not Used
27	. PLAIN WASHER	2	900311-5	900311-5	Not Used	Not Used	Not Used	Not Used

*Quantity is 3.

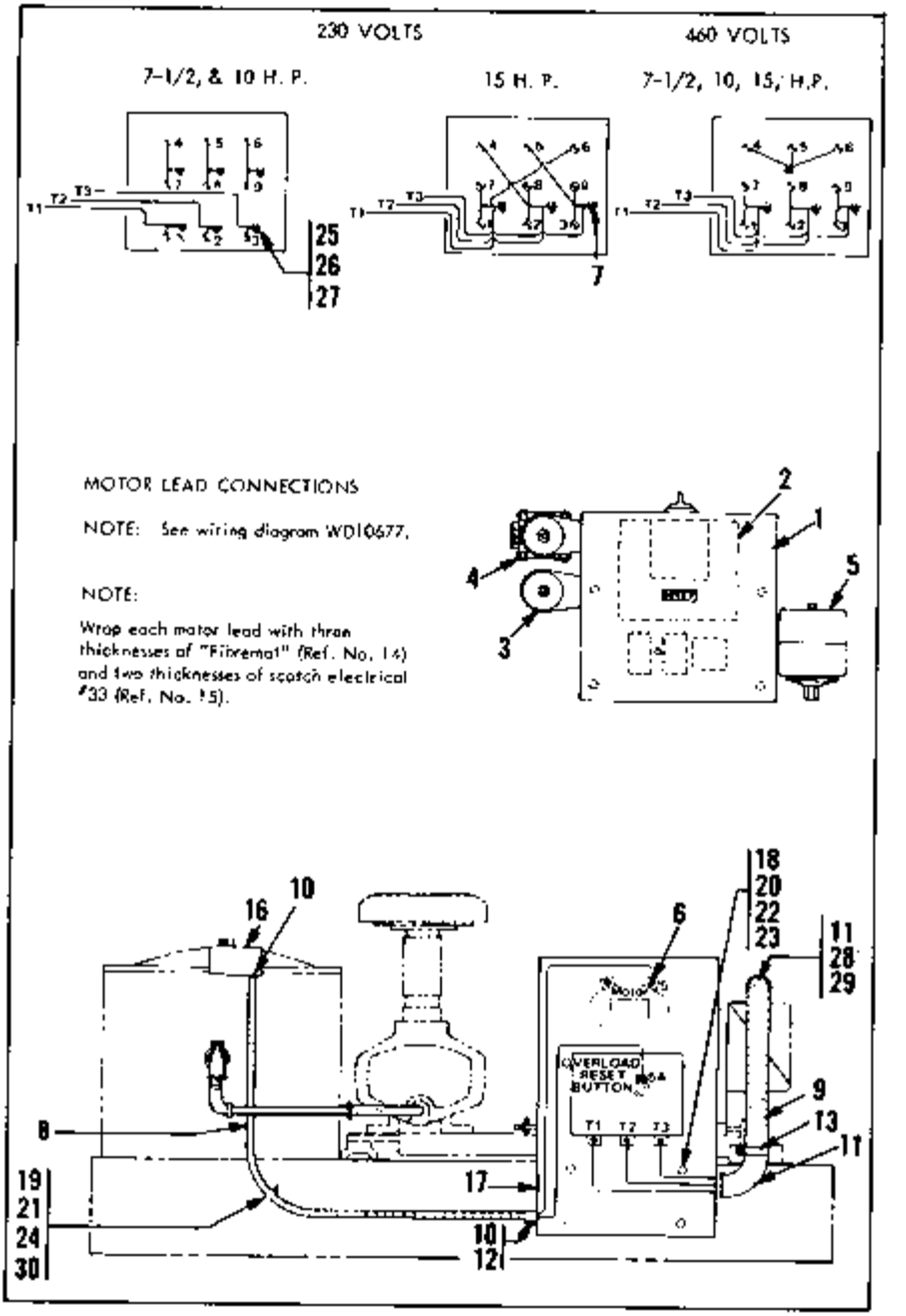


FIGURE 16. MISCELLANEOUS ELECTRICAL PARTS (230V-460V)

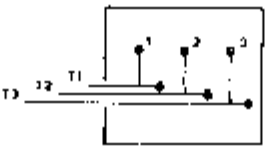
PARTS LIST FOR FIGURE 16. MISCELLANEOUS ELECTRICAL PARTS (230V–460V)

Ref. No.	Description	Qty	MODELS					
			TA007B2, TA007T2 230 Volts	TA007B4, TA007T4 460 Volts	TA010B2, TA010T2 230 Volts	TA010B4, TA010T4 460 Volts	TA015B2, TA015T2 230 Volts	TA015B4, TA015T4 460 Volts
—	MISC. ELEC. PARTS	1	707068-23	707068-18	707068-14	707068-19	707068-15	707068-20
1	. CONTROL CENTER	1	543110	543090	543111	543091	543112	543092
2	. . STARTER*	1	526398-135	526398-168	526398-136	526398-119	526398-137	526398-120
--	. . STARTER**	1	600742-428	600742-428	600742-429	600742-428	600742-429	600742-429
—	. . . OVERLOAD HTR.*	2	600714-738	600714-738	600714-740	600714-736	600714-746	600714-747
—	. . . OVERLOAD HTR.**	2	600707-42	600707-36	600707-44	600707-39	600707-4	600707-3
—	. . . SELECTOR SW.*	1	600701-307	600701-307	600701-307	600701-307	600701-307	600701-307
—	. . . SELECTOR SW.**	1	600701-360	600701-360	600701-360	600701-360	600701-360	600701-360
—	. . . CONT. RELAY*	2	600744-156	600744-155	600744-156	600744-155	600744-156	600744-155
—	. . . . RELAY COIL*	1	600714-779	600714-780	600714-779	600714-780	600714-779	600714-780
—	. . . CONT. RELAY**	2	600744-176	600744-177	600744-176	600744-177	600744-176	600744-177
—	. . . . RELAY COIL**	1	600714-812	600714-813	600714-812	600714-811	600714-812	600714-813
—	. . . TERMINAL BLOCK	1	600714-126	600714-126	600714-126	600734-126	600714-126	600734-126
—	. . . ENCLOSURE	1	3660684	3660865	3660666	3660266	3660666	3660267
3	. . . SOLENOID VALVE	1	600734-136	600734-136	600734-136	600734-136	600734-136	600734-136
4	. . . SOLENOID VALVE	1	600734-135	600734-135	600734-135	600734-135	600734-135	600734-135
5	. . . PRESSURE SWITCH	1	543142	543142	543142	543142	543142	543142
6	. TERMINAL WIRE	1	600608-7	600608-7	600608-7	600608-7	600608-7	600608-7
7	. TERMINAL WIRE	3	600608-9	600608-9	600608-12	600608-12	600608-14	600608-14
8	. CONDUIT	--	600702-2	600702-2	600702-2	600702-2	600702-2	600702-2
9	. CONDUIT	—	600702-4	600702-4	600702-4	600702-4	600702-5	600702-5
10	. CONNECTOR	2	600703-2	600703-2	600703-2	600703-2	600703-2	600703-2
11	. ELBOW	2	600703-15	600703-15	600703-15	600703-15	600703-16	600703-16
12	. SLEEVE	2	600714-717	600714-717	600714-717	600714-717	600714-717	600714-717
13	. SLEEVE	2	600714-719	600714-719	600714-719	600714-719	600714-720	600714-720
14	. TAPE	—	600714-724	600714-724	600714-724	600714-724	600714-724	600714-724
15	. TAPE	—	600714-725	600714-725	600714-725	600714-725	600714-725	600714-725
16	. HIGH TEMP. SWITCH	1	600715-200	600715-200	600715-200	600715-200	600715-200	600715-200
17	. KNOCKOUT PLUG	1	600093-1	600093-1	600093-1	600093-1	600093-1	600093-1
18	. CAPSCREW	4	900020-23	900020-23	900020-23	900020-23	900020-23	900020-23
19	. HEX NUT	1	900160-2	900160-2	900160-2	900160-2	900160-2	900160-2
20	. HEX NUT	4	900160-4	900160-4	900160-4	900160-4	900160-4	900160-4
21	. LOCKWASHER	1	900302-1	900302-1	900302-1	900302-1	900302-1	900302-1
22	. LOCKWASHER	4	900302-3	900302-3	900302-3	900302-3	900302-3	900302-3
23	. PLAINWASHER	4	900322-9	900322-9	900322-9	900322-9	900322-9	900322-9
24	. SCREW	1	900333-503	900333-503	900333-503	900333-503	900333-503	900333-503
25	. HEX NUT	3	900389-14	900389-14	900389-14	900389-14	900389-14	900389-14
26	. LOCKWASHER	3	900609-4	900609-4	900609-4	900609-4	900609-4	900609-4
27	. MACHINE SCREW	3	900802-92	900802-92	900802-92	900802-92	900802-92	900802-92
28	REDUCING BUSHING	1	Not Used	Not Used	901160-13	901160-13	Not Used	Not Used
29	. LOCK NUT	1	Not Used	Not Used	901402-3	901402-3	Not Used	Not Used
30	. CONDUIT CLAMP	1	905299-28	905299-28	905299-28	905299-28	905299-26	905299-26

* These Parts Particular to Control Centers Manufactured by Cutler Hammer

** These Parts Particular to Control Centers Manufactured by General Electric Co.

208 & 575 VOLTS
7-1/2, 10, & 15 H. P.

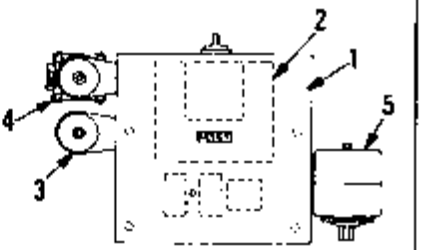


MOTOR LEAD CONNECTIONS

NOTE: See wiring diagram WD10677.

NOTE:

Wrap each motor lead with three thicknesses of "Fibremat" (Ref. No. 14) and two thicknesses of scotch electrical #33 (Ref. No. 15).



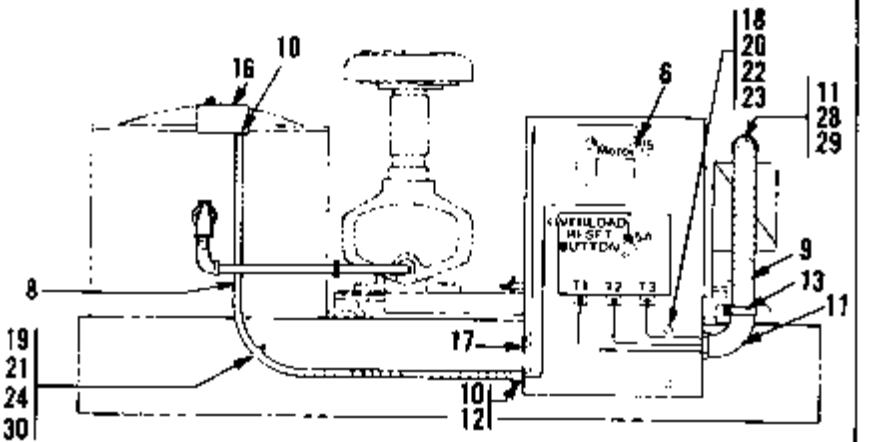


FIGURE 17. MISCELLANEOUS ELECTRICAL PARTS (208V-575V)

PARTS LIST FOR FIGURE 17. MISCELLANEOUS ELECTRICAL PARTS (208-575V)

Ref. No.	Description	Qty	MODELS					
			TA007B1, TA007T1 208 Volts	TA007B5, TA007T5 575 Volts	TA010B1, TA010T1 208 Volts	TA010B5, TA010T5 575 Volts	TA015B1, TA015T1 208 Volts	TA015B5, TA015T5 575 Volts
—	MISC. ELEC. PARTS	1	707069-24	707069-29	707069-25	707069-30	707069-26	707069-31
1	. CONTROL CENTER	1	543231-1	543231-6	543231-2	543231-7	543231-7	543231-8
2	. . STARTER*	1	526399-135	526399-168	526399-136	526399-119	526399-137	526399-120
—	. . STARTER**	1	600742-428	600742-428	600742-429	600742-428	600742-429	600742-429
—	. . . OVERLOAD HTR.*	2	600714-785	600714-788	600714-789	600714-738	600714-791	600714-801
—	. . . OVERLOAD HTR.**	2	600707-43	600707-33	600707-3	600707-37	600707-5	600707-43
—	. . . SELECTOR SW.*	1	600701-307	600701-301	600701-307	600701-307	600701-307	600701-307
—	. . . SELECTOR SW.**	1	600701-360	600701-360	600701-360	600701-360	600701-360	600701-360
—	. . . CONTROL RELAY*	2	600744-165	600744-163	600744-165	600744-163	600744-165	600744-163
—	. . . . RELAY COIL*	1	600714-784	600714-781	600714-784	600714-781	600714-784	600714-781
—	. . . CONT. RELAY**	2	600744-175	600744-178	600744-175	600744-176	600744-175	600744-178
—	. . . . RELAY COIL**	1	600714-809	600714-816	600714-839	600714-816	600714-809	600714-816
—	. . . TERMINAL BLOCK	1	600714-126	600714-126	600714-126	600714-126	600714-126	600714-126
—	. . . ENCLOSURE	1	3660664	3660665	3660665	3660666	3660666	3660667
3	. . . SOLENOID VALVE	1	600734-136	600734-136	600734-136	600734-136	600734-136	600734-136
4	. . . SOLENOID VALVE	1	600734-135	600734-135	600734-135	600734-135	600734-135	600734-135
5	. . . PRESSURE SWITCH	1	543142	543142	543142	543142	543142	543142
6	. TERMINAL	1	600608-7	600608-7	600608-7	600608-7	600608-7	600608-7
7	. TERMINAL	3	600608-9	600608-9	600608-12	600608-12	600608-14	600608-14
8	. CONDUIT	—	600702-2	600702-2	600702-2	600702-2	600702-2	600702-2
9	. CONDUIT	—	600702-4	600702-4	600702-4	600702-4	600702-5	600702-5
10	. CONNECTOR	2	600703-2	600703-2	600703-2	600703-2	600703-2	600703-2
11	. ELBOW	2	600703-15	600703-15	600703-15	600703-15	600703-16	600703-16
12	. SLEEVE	2	600714-717	600714-717	600714-717	600714-717	600714-717	600714-717
13	. SLEEVE	2	600714-719	600714-719	600714-719	600714-719	600714-720	600714-720
14	. TAPE	—	600714-724	600714-724	600714-724	600714-724	600714-724	600714-724
15	. TAPE		600714-725	600714-725	600714-725	600714-725	600714-725	600714-725
16	. HIGH TEMP. SWITCH	1	600715-200	600715-200	600715-200	600715-200	600715-200	600715-200
17	. KNOCKOUT PLUG	1	600093-1	600093-1	600093-1	600093-1	600093-1	600093-1
18	. CAPSCREW	4	900020-23	900020-23	900020-23	900020-23	900020-23	900020-23
19	. HEX NUT	1	900160-2	900160-2	900160-2	900160-2	900160-2	900160-2
20	. HEX NUT	4	900160-4	900160-4	900160-4	900160-4	900160-4	900160-4
21	. LOCKWASHER	1	900302-1	900302-1	900302-1	900302-1	900302-1	900302-1
22	. LOCKWASHER	4	900302-3	900302-3	900302-3	900302-3	900302-3	900302-3
23	. PLAINWASHER	4	900322-9	900322-9	900322-9	900322-9	900322-9	900322-9
24	. SCREW	2	900333-503	900333-503	900333-503	900333-503	900333-503	900333-503
25	. HEX NUT	3	900399-14	900399-14	900399-14	900399-14	900399-14	900399-14
26	LOCKWASHER	3	900609-4	900609-4	900609-4	900609-4	900609-4	900609-4
27	. MACHINE SCREW	3	900802-92	900802-92	900802-92	900802-92	900802-92	900802-92
28	. REDUCING BUSHING	1	Not Used	Not Used	901160-10	901160-10	Not Used	Not Used
29	. LOCK NUT	1	Not Used	Not Used	901402-3	901402-3	Not Used	Not Used
30	. CONDUIT CLAMP	1	905299-26	905299-26	905299-26	905299-26	905299-26	905299-26

* These parts particular to Control Centers Manufactured by Cutler Hammer

** These parts particular to Control Centers Manufactured by General Electric Co.

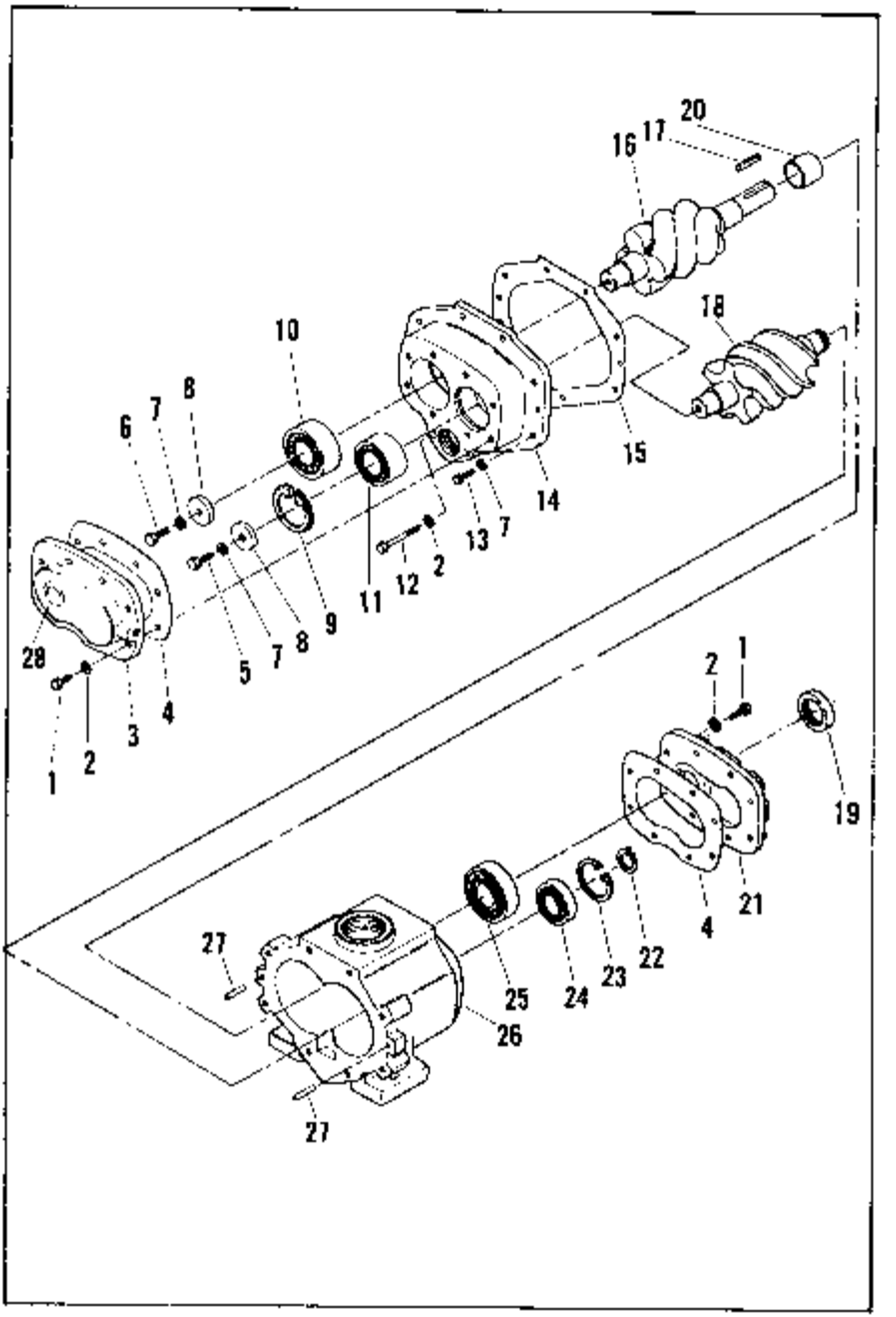


FIGURE 18. COMPRESSOR ASSEMBLY

PARTS LIST FOR FIGURE 18. COMPRESSOR ASSEMBLY

Ref. No.	Description	Qty	MODELS TA007B, TA010B, TA015B, TA007T, TA010B, TA015T
—	COMPRESSOR ASSEMBLY	1	543077-8
1	. CAPSCREW	16	900020-12
2	. LOCKWASHER	16	900302-2
3	. DISCHARGE BEARING CAP	1	1660196
4	. GASKET-BEARING CAP	2	1660197 * †
5	. LOCK SCREW	1	1660020
6	. CAPSCREW	1	900042-13
7	. LOCKWASHER	10	900302-3
8	. THRUST RETAINER, MALE	2	1660016
9	. RETAINING RING	1	902868-206
10	. BALL BEARING	1	543101-1 * †
11	. BALL BEARING	1	543101-2 * †
12	. CAPSCREW	2	900020-73
13	. CAPSCREW	6	900020-402
14	. DISCHARGE BEARING HOUSING	1	1660190
15	. GASKET	1	1660205 * †
16	. MALE ROTOR	1	No Number †
17	. SQUARE KEY	1	900947-81
18	. FEMALE ROTOR	1	No Number †
19	. OIL SEAL	1	1660392 * †
20	. SLEEVE	1	1660021 * †
21	. SEAL RETAINER CAP	1	1660199
22	. SNAP-RING-SHAFT	1	902095-66
23	. SNAP-RING-HOUSING	1	906512-162
24	. ROLLER BEARING	1	543102-2 * †
25	. ROLLER BEARING	1	543102-1 * †
26	. STATOR	1	1660189
27	. DOWEL PIN	2	904584-34
28	. ROTATION DECAL	1	1660328
—	BEARING KIT (Includes parts marked*)	AR	701601-666
—	COMPRESSOR OVERHAUL KIT (Includes parts marked *)	AR	701601-668

NOTE

Male and female rotors are supplied only as a part of kit 701601-668.

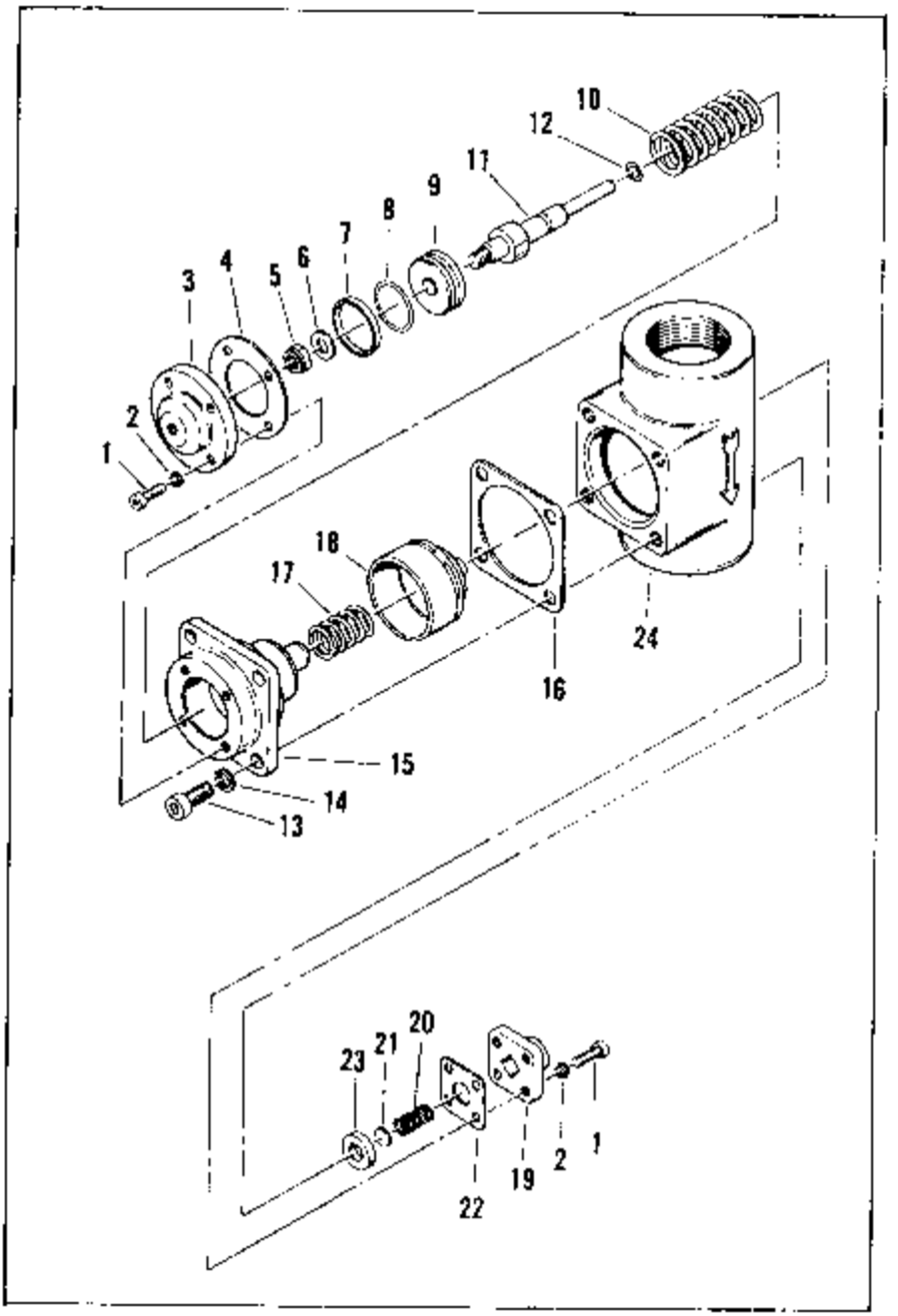


FIGURE 19. INLET VALVE

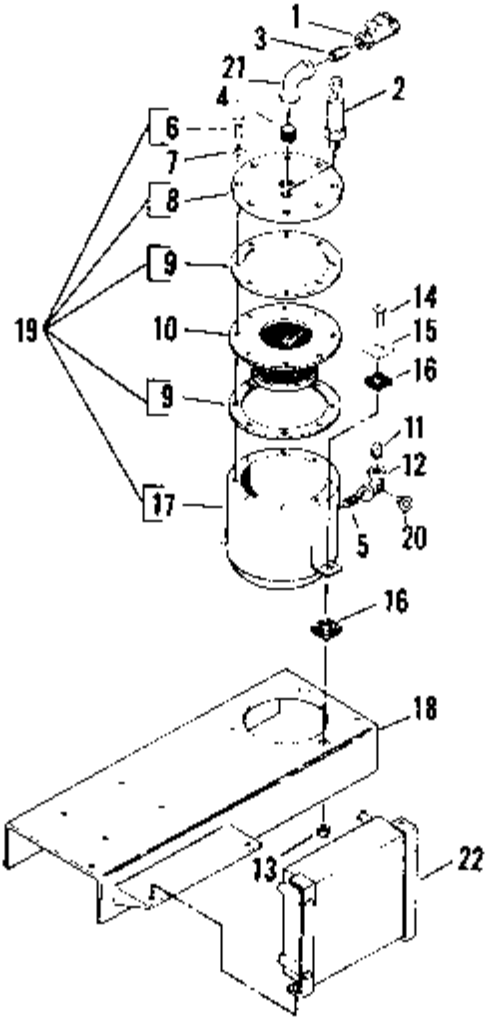


FIGURE 20. COOLER, BASE AND SUMP

PARTS LIST FOR FIGURE 20. COOLER, BASE AND SUMP

Ref. No.	Description	Qty	MODELS TA007B TA007T	TA010B TA010T	TA015B TA015T
—	BASE AND SUMP ASSEMBLY	1	543081-22	543081-23	543081-24
1	. CHECK VALVE △	1	543203	543203	543204
—	. . HANGER ASSEMBLY ◇	1	543245	543245	543246
1	. CHECK VALVE △	1	543208	543208	543209
—	. . HANGER ASSEMBLY ◇	1	543238	543238	543239
2	. SAFETY VALVE	1	543099	543099	543099
3	. NIPPLE	1	901176-60	901176-78	901176-79
4	. NIPPLE	1	901176-60	901176-60	901176-61
5	. NIPPLE	1	901176-51	901176-51	901176-51
6	. CAPSCREW	12	910406-137*	910406-137*	910406-149
7	. LOCK WASHER	12	900302-114*	900302-114*	900317-114
8	. SUMP HEAD	1	1660572	1660573	1660574
**9	. GASKET	2	1660221	1660222	1660223
**10	. OIL SEPARATOR	1	543117-1	543117-2	543117-3
11	. PLUG	1	901204-6	901204-6	901204-6
12	. ELBOW	1	902150-6	902150-6	902150-6
13	. NUT	3	900490-75	900490-75	900490-75
14	. CAPSCREW	3	900020-73	900020-73	900020-73
15	. SQUARE WASHER	3	1660476	1660476	1660476
16	. MOUNTING PAD	6	1660475	1660475	1660475
17	. SUMP ASSEMBLY	1	3661000	3661001	3661002
18	. BASE ASSEMBLY	1	3661159	3661160	3661161
19	. SUMP & HEAD ASSEMBLY	1	543211-6	543211-7	543211-8
20	. SIGHT WINDOW	1	914483-16	914483-16	914483-16
21	. ELBOW	1	901023-6	901023-6	901023-7
22	OIL COOLER ASSEMBLY	1	543097-6	543097-7	543097-8
**23	OIL SEPARATOR KIT (Consists of 9 & 10 above)	1	701601-409	701601-410	701601-411

△ ALTERNATE, INTERCHANEABLE WITH OTHER COMPLETE CHECK VALVE ASSEMBLY LISTED FOR THESE MODELS.

◇ HANGER ASSEMBLY IS NOT INTERCHANGEABLE WITH OTHER HANGERS LISTED. USE HANGER LISTED UNDER CHECK VALVE IN USE.

* QUANTITY IS 8.

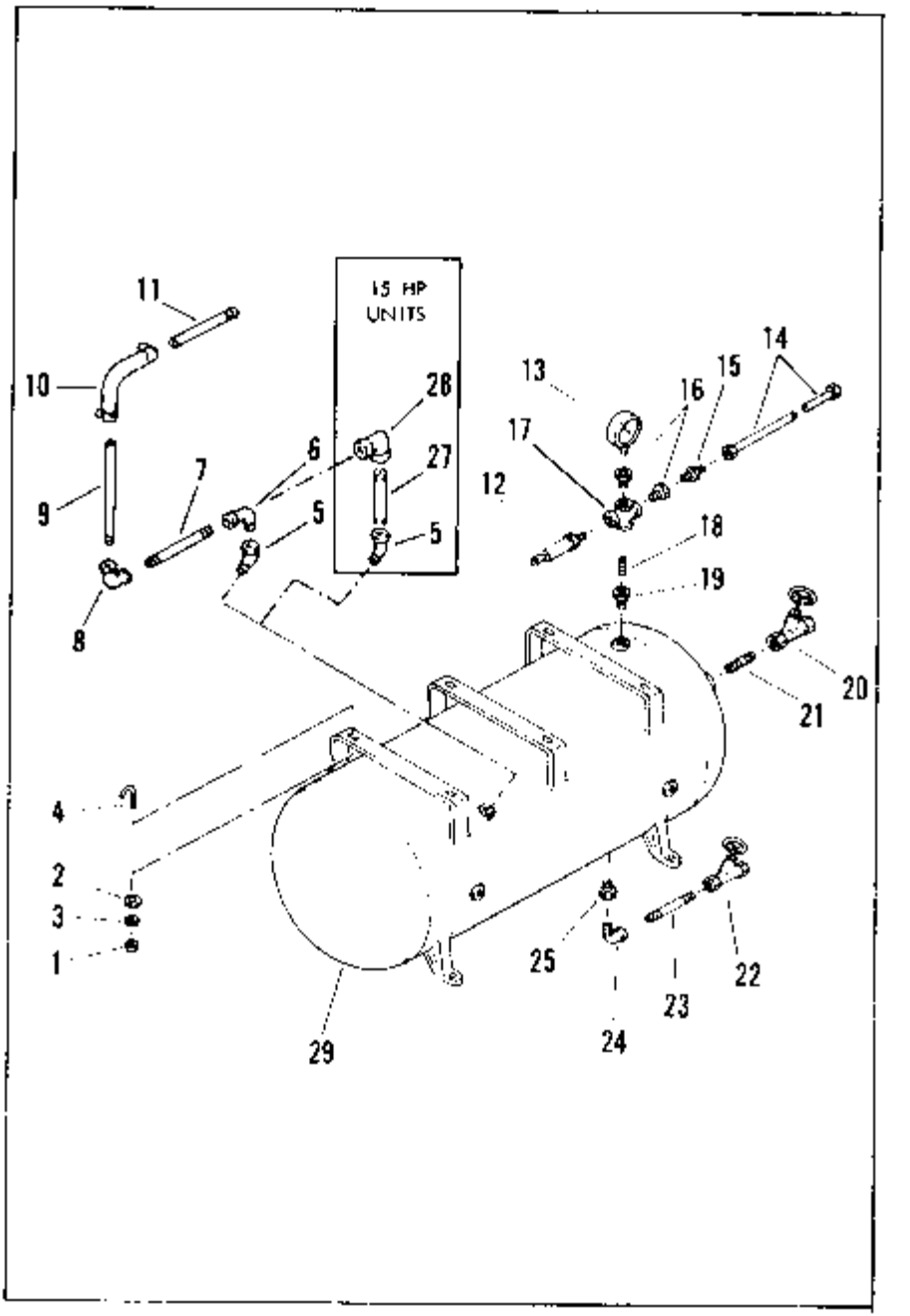


FIGURE 21. RECEIVER AND PARTS

PARTS LIST FOR FIGURE 21. RECEIVER AND PARTS

Ref. No.	Description	Qty.	MODEL TA081T		MODEL TA101T		MODEL TA151T	
			80 Gallon	120 Gallon	80 Gallon	120 Gallon	120 Gallon	200 Gallon
—	RECEIVER & PARTS	1	707066-5	707067-9	707066-5	707067-9	707067-5	707068-5
1	. NUT	6	900160-4	900160-4	900160-4	900160-4	900160-4	900160-4
2	. FLAT WASHER	6	900317-4	900317-4	900317-4	900317-4	900317-4	900317-4
3	. LOCK WASHER	6	900302-3	900302-3	900302-3	900302-3	900302-3	900302-3
4	. "U" BOLT	6	1660188	1660188	1660188	1660188	1660188	1660188
5	. STREET L, 45°	1	901046-26	901046-26	901046-26	901046-26	901046-27	901046-27
6	. STREET ELBOW	1	901046-6	901046-6	901046-6	901046-6	Not Used	Not Used
7	. NIPPLE	1	901176-132	901176-132	901176-132	901176-132	901176-133	901176-133
8	. ELBOW	1	901023-6	901023-6	901023-6	901023-6	901023-7	901023-7
9	. HALF NIPPLE	1	910096-463	910096-348	910096-474	910096-348	910096-511	910096-367
10	. COUPLING, 90°	1	910058-4	910058-4	910058-4	910058-4	910058-5	910058-5
11	. HALF NIPPLE	1	910096-168	910096-204	910096-186	910096-204	910096-241	910096-241
12	. SAFETY VALVE	1	543099	543099	543099	543099	543099	543099
13	. PRESSURE GAGE	1	543096	543096	543096	543096	543096	543096
14	TUBING (16")	1	910082	910082	910082	910082	910082	910082
15	. ADAPTER	1	906079-44	906079-44	906079-44	906079-44	906079-44	906079-44
16	. REDUC. BUSHING	2	Not Used	Not Used	Not Used	Not Used	Not Used	901160-5
17	. CROSS	1	901109-2	901109-2	901109-2	901109-2	901109-2	901109-2
18	. CLOSE NIPPLE	1	901176-2	901176-2	901176-2	901176-2	901176-2	901176-2
19	. REDUC. BUSHING	2	Not Used	Not Used	Not Used	Not Used	901160-5	Not Used
20	. SERVICE VALVE	1	543045	543045	543045	543045	543046	543046
21	CLOSE NIPPLE	1	901176-51	901176-51	901176-51	901176-51	901176-2015	901176-2015
22	. DRAIN VALVE	1	543043	543043	543043	543043	543043	543043
23	. NIPPLE	1	902466-93	902466-93	902466-93	902466-93	902466-93	902466-93
24	. STREET ELBOW	1	901046-3	901046-3	901046-3	901046-3	901046-3	901046-3
25	. REDUC. BUSHING	1	901160-4	901160-4	901160-4	901160-4	901160-4	901160-4
26	. RECEIVER	1	543083	543084	543083	543084	543085	543086
27	. NIPPLE	1	Not Used	Not Used	Not Used	Not Used	901176-61	901176-61
28	. ELBOW	1	Not Used	Not Used	Not Used	Not Used	901023-7	901023-7

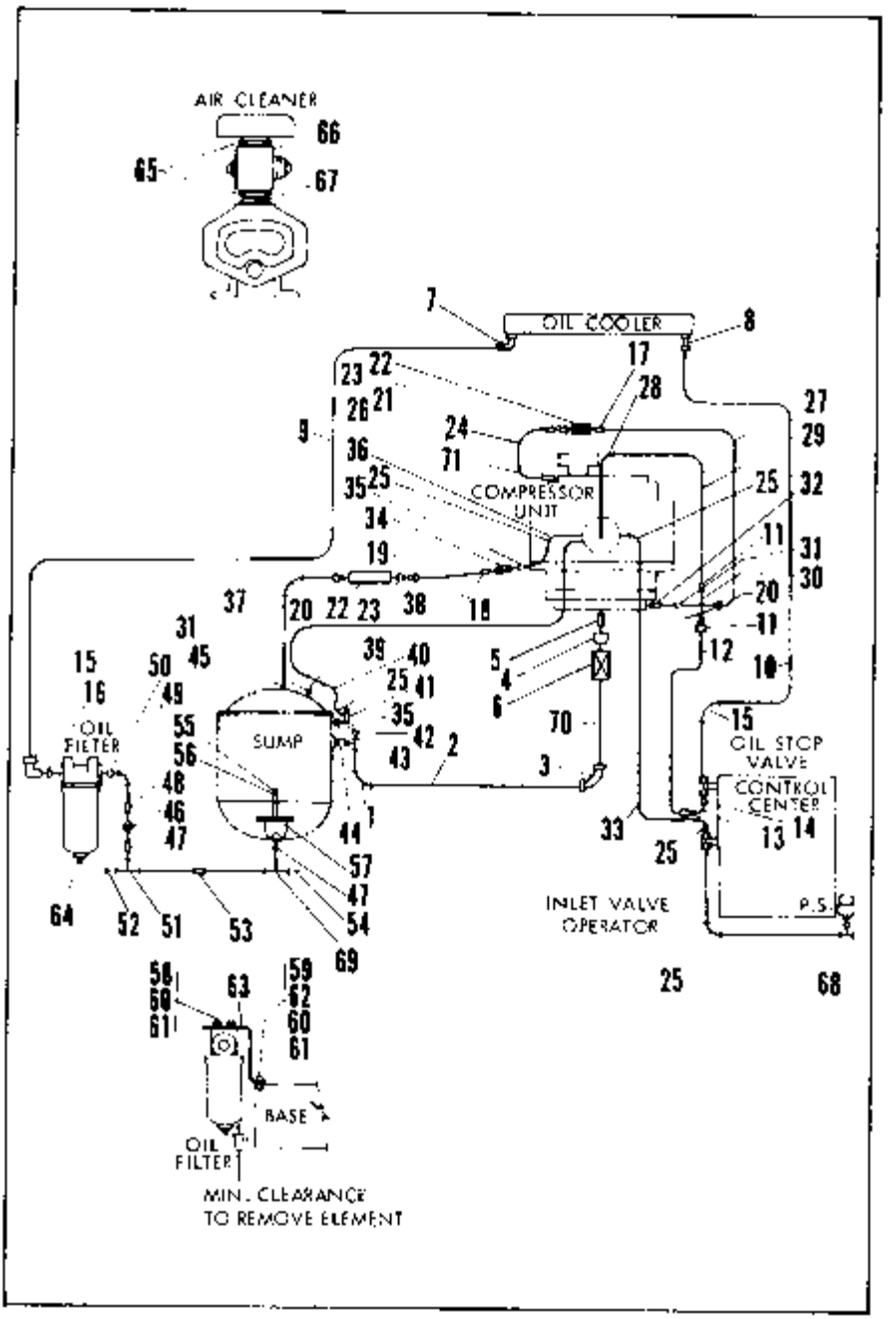


FIGURE 22. CONTROL PARTS AND PIPING

PARTS LIST FOR FIGURE 22. CONTROL PARTS AND PIPING

Ref. No.	Description	Qty	MODELS		
			TA007B TA007T	TA010B TA010T	TA015B TA015T
—	CONTROL PARTS AND AIR PIPING	1	707065-25	707065-26	707065-27
1	. ELBOW, 90°/STRT	1	901046-7	901046-7	901046-7
2	. HALF NIPPLE	1	910096-214	910096-232	910096-250
3	. COUPLING L	1	910058-5	910058-5	910058-5
4	. REDUC. BUSHING	1	901158-17	901158-17	901158-17
5	. NIPPLE	1	901178-60	901178-178	901178-78
6	. CHECK VALVE ^	1	543204	543204	543204
—	. . HANGER ASSY ◊	1	543246	543246	543246
6	. CHECK VALVE ^	1	543209	543209	543209
—	. . HANGER ASSY ^	1	543239	543239	543239
7	. TUBE UNION, L	1	906240-8	906240-8	906240-8
8	. TUBE, UNION	1	906244-8	906244-8	906244-8
9	. TUBE	1	543292-7	543292-8	543292-5
10	. TUBE	1	543292-2	543292-3	543292-6
11	. CONNECTOR	2	906242-64	906242-64	906242-64
12	. TUBE	1	543291-9	543291-10	543291-12
13	. ELBOW, 90°	1	906266-66	906266-66	906266-66
14	. REDUC. BUSHING	1	901158-6	901158-6	901158-6
15	. ELBOW, 90°	2	906266-88	906266-88	906266-88
16	. REDUC. BUSHING	1	901158-12	901158-12	901158-12
17	. CONNECTOR	1	906242-44	906242-44	906242-44
18	. CONNECTOR	2	906079-1	906079-1	906079-1
19	. TUBING, ORIFICE	1	1660396-5	1660396-6	1660396-6
20	. ELBOW, 90°	2	906266-44	906266-44	906266-44
21	. CONNECTOR	1	906242-42	906242-42	906242-42
22	. STRAINER	2	543254	543254	543254
23	. REDUC. COUPLING	2	901147-1	901147-1	901147-1
24	. TUBE ASSEMBLY	1	543290-35	543290-35	543290-35
25	. ELBOW, 90°	5	906371-42	906371-42	906371-42
26	. ORIFICE FITTING	1	543116	543116	543116
27	. TUBE ASSEMBLY	1	543290-34	543290-34	543290-34
28	. ELBOW, 90°	1	906266-64	906266-64	906266-64
29	. INJECTION LINE	1	543291-16	543291-16	543291-16
30	. CROSS	1	901109-2	901109-2	901109-2
31	. REDUC. BUSHING	3	901158-1	901158-1	901158-1

(Continued)

^ ALTERNATE, INTERCHANGEABLE WITH OTHER COMPLETE CHECK VALVE ASSEMBLY LISTED FOR THESE MODELS.

◊ HANGER ASSEMBLY IS NOT INTERCHANGEABLE WITH OTHER HANGERS LISTED. USE HANGER LISTED UNDER CHECK VALVE IN USE.

PARTS LIST FOR FIGURE 22. CONTROL PARTS AND PIPING (Continued)

Ref. No.	Description	Qty	MODELS TA007B TA007T	MODELS TA010B TA010T	MODELS TA015B TA015T
32	. CLOSE NIPPLE	1	901178-2000	901178-2000	901178-2000
33	. VENT LINE, 1/4 IN.	1	910082 (30")	910082 (33")	910082 (34")
34	. SIGHT GLASS	1	543241	543241	543241
35	. NIPPLE	2	901178-55	901178-55	901178-55
36	. ELBOW, STREET	1	901046-1	901046-1	901046-1
37	. TUBE	1	543290-21	543290-21	543290-22
38	. VENT LINE, 1/4 IN.	1	910082 (12")	910082 (17")	910082 (15")
39	. TEE	2	906563-42	906563-42	906563-42
40	. VENT LINE, 1/4 IN.	1	910082 (12")	910082 (12")	910082 (17")
41	. DIFF. PRESS. IND.	1	543255	543255	543255
42	. REDUC. BUSHING	1	901158-9	901158-9	901158-9
43	. REDUC. TEE	1	905329-15	905329-15	905329-15
44	. NIPPLE	1	901178-196	901178-151	901178-97
45	. CONNECTOR	1	543286-2	543286-2	543286-2
46	. UNION	1	901128-2	901128-2	901128-2
47	. CLOSE NIPPLE	2	901178-12	901178-12	901178-12
48	. NIPPLE	1	901178-174	901178-192	901178-210
49	. ELBOW, 90°/ST	1	901046-3	901046-3	901046-3
50	. REDUC. BUSHING	1	901158-11	901158-11	901158-11
51	. TEE	1	901090-3	901090-3	901090-3
52	. PIPE PLUG	1	901204-3	901204-3	901204-3
53	. NIPPLE	1	901178-282	901178-300	901178-318
54	. PIPE PLUG, MAG.	1	901205-3	901205-3	901205-3
55	. ELAS. STOP NUT	1	900490-11	900490-11	900490-11
56	. PLAIN WASHER	1	900322-7	900322-7	900322-7
57	. SUMP BAFFLE	1	3660553	3660553	3660553
58	. CAPSCREW	2	900020-3	900020-3	900020-3
59	. CAPSCREW	2	900020-23	900020-23	900020-23
60	. LOCKWASHER	4	900302-3	900302-3	900302-3
61	. PLAIN WASHER	4	900322-9	900322-9	900322-9
62	. HEX NUT	2	900160-4	900160-4	900160-4
63	. FILTER SUPPORT	1	1660554	1660554	1660554
64	. OIL FILTER	1	543193	543193	543193
—	. . FILTER	1	1660569	1660569	1660569
65	. REDUC. BUSHING	2	901158-26	901158-26	901158-26
66	. INLET VALVE	1	543191	543191	543191
67	. CLOSE NIPPLE	1	902466-1225	902466-1225	902466-1225
68	. VENT LINE, 1/4 IN.	1	910082 (17")	910082 (17")	910082 (17")
69	. BAFFLE SUPPORT	1	3660304	3660304	3660304
70	. HALF NIPPLE	1	910096-97	910096-115	910096-133
71	. ELBOW, 90°	1	906266-42	906266-42	906266-42

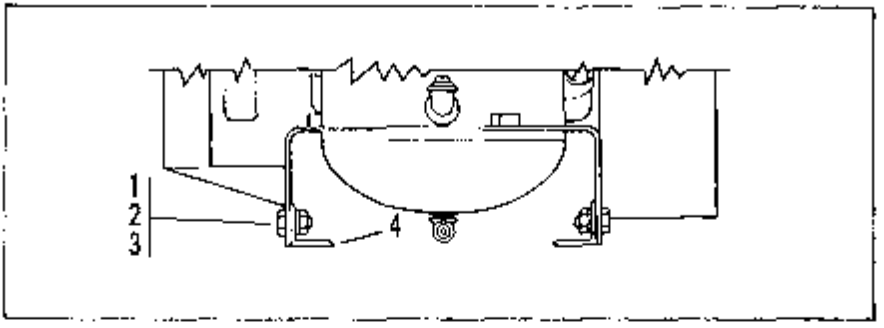


FIGURE 23. BASE MOUNTED PARTS

PARTS LIST FOR FIGURE 23. BASE MOUNTED PARTS

Ref. No.	Description	Qty	ALL BASE MOUNTED UNITS
1	NUT, HEX	6	900160-5
2	LOCK WASHER	6	900302-4
3	CAPSCREW	6	900020-24
4	LEG BRACKET	6	1660329

TWISTAIR COMPRESSOR ACCESSORIES

Several accessory items are available for special applications. These accessories have been selected as being particularly suitable for use on the Twistair compressor and can be easily installed in the field, or be ordered at time of purchase of the compressor.

OIL BATH AIR FILTER KIT

Hooded, recleanable, bottom opening. Male pipe thread.
With relief valve
Part No. 00701600-0279 1½" P.T.—70CFM
Part Number. 00701600-0280 2" P.T.—150CFM
Recommended for use where compressor will operate under extremely dusty conditions.

PRESSURE REGULATORS

Can be used for air and non-corrosive gases, self relieving.
Primary Pressure: 400 PSIG
Secondary Pressure: 0-125 PSIG
Temperature Range: —40° to +200° F.
Part No. 00543106-0001 ¼" F.P.T.
Part No. 00543106-0002 ⅜" F.P.T.
Part No. 00543106-0003 ½" F.P.T.
Regulates air to be required pressure with minimum pressure drop.

AIR LINE FILTER, AUTOMATIC DRAIN

Maximum operating conditions:
250 PSIG at 100° F.
200 PSIG at 160° F.
100 PSIG at 200° F.
Normal rating: 25 Micron
Automatic Bowl Drain
Safety-Green Transparent Bowl.
Part No. 00543107-0004 ¼" F.P.T.
Part No. 00543107-0005 ⅜" F.P.T.
Part No. 00543107-0006 ½" F.P.T.
To assure delivery of continuously dry, clean air for the protection of pneumatic devices. Condensate is collected and automatically drained from the bowl.

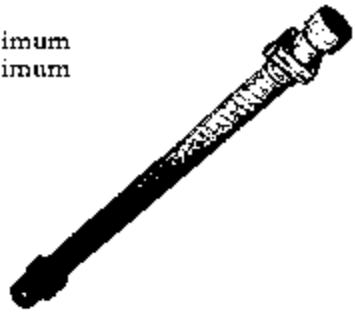
AIR LINE FILTER, MANUAL DRAIN

Maximum operating conditions:
250 PSIG at 100° F.
200 PSIG at 160° F.
100 PSIG at 200° F.
Manual Bowl Drain
Nominal Rating: 25 micron
Safety-Green Transparent Bowl.
Part No. 00543108-0001 ¼" F.P.T.
Part No. 00543108-0002 ⅜" F.P.T.
Part No. 00543108-0003 ½" F.P.T.
Serves same purpose as Automatic Drain Air Line Filter, except condensate must be drained from the filter bowl manually.

PIPELINE LUBRICATOR

Maximum operating condition:
250 PSIG at 100° F.
200 PSIG at 160° F.
100 PSIG at 200° F.
Oil Mist Lubricator
Thumb-screw Rate Adjustment
Safety-Green Transparent Bowl
Part No. 00543109-0001 ¼" F.P.T.
1/3 pint capacity
Part No. 00543109-0002 ⅜" F.P.T.
1/3 pint capacity
Part No. 00543109-0003 ½" F.P.T.
½ pint capacity
To assure delivery of properly lubricated air in such applications where lubricant in the air, in predetermined, measured quantities, is desired.

WATER COOLED AFTERCOOLERS



Shell (water side) rating: 75 PSIG Maximum
Tube (air side) rating: 250 PSIG Maximum
15° F. Approach

Water Ports—½" F.P.T.

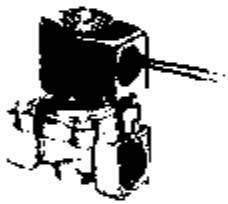
Part No. 00543103-0002 90 CFM
for 7½ H.P. Unit

Part No. 00543103-0002 90 CFM
for 10 H.P. Unit

Part No. 00543103-0002 90 CFM
for 15 H.P. Unit

Aftercoolers will reduce amount of condensate in plant air lines, and are required when a dryer is used in the system.

SOLENOID WATER VALVE



Maximum Operating Pressure Differential:
135 PSIG

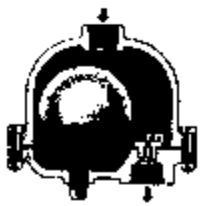
Maximum Temperature: 200° F.

½" Orifice, ½" F.P.T. Ports
115V.

Part No. 527412-1

Automatically shuts off water supply when compressor is shut down.

AUTOMATIC CONDENSATE TRAP KIT



Maximum Pressure. 125 PSIG

¾" F.P.T. Ports

Part No. 00701600-0260

Automatically collects and removes moisture and condensate from the receiver.

OVERSIZE TANKS

7½ and 10 H.P.—00707067-0009 Receiver and Parts 120 Gallon

15 H.P.—00707068-0005 Receiver and Parts 200 Gallon

For use when air demand requires a larger volume receiver to reduce number of compressor starts and stops.

PEDESTAL MODIFICATION KIT WASHINGTON, D. C., MASSACHUSETTS AND PENNSYLVANIA

Part No. 00701600-0270 80 Gallon Receiver
Part No. 00701600-0271 120 Gallon Receiver
Part No. 00701600-0272 200 Gallon Receiver

MASSACHUSETTS AND WASHINGTON, D. C. CODE CONVERSION KIT (TANK MOUNTED UNITS ONLY)

Part No. 00707071-0001 7½-10 H.P. with 80 Gal. Receiver
Part No. 00707071-0002 7½-10-15 H.P. with 120 or 200 Gal. Receiver
Note: 1 Pedestal Kit and 1 Conversion Kit Required.

LOW DIFFERENTIAL PRESSURE SWITCH

Range—0 to 150 PSIG
Adj. Diff. 2 to 18 PSIG
5A—240V. NEMA 1 Enclosure
Part No. 00600713-0241 Pressure Switch

VERTICAL AIR RECEIVER—TANK ONLY

Part No. 00518888-0003 75 Gal. Capacity 18" x 72"
Part No. 0A243003 125 Gal. Capacity 24" x 72"

FULLY ENCLOSED BELT GUARD

Part No. 00707073-0006 7½ H.P. Twistair
Part No. 00707073-0007 10 H.P. Twistair
Part No. 00707073-0008 15 H.P. Twistair

BELT TENSION TOOL

Part No. 00543217
Used for Determining, Proper Drive
V-Belt Tension

AUTOMATIC COMBINATION CONDENSATE SEPARATOR AND TRAP

Mounts between aftercooler and receiver to remove condensate from the air before it enters the receiver.
Part No. 00701600-295—1" 7½-10 H.P.
Part No. 00701600-296—1¼" 15 H.P.

THIRD OVERLAY RELAY KITS

For N. E. M. A. Size 1	Starter Without Heater	600714-883x
For N. E. M. A. Size 1	Starter Without Heater	600714-879xx
For N. E. M. A. Size 2	Starter Without Heater	600714-883x
For N. E. M. A. Size 2	Starter Without Heater	600714-880xx
For N. E. M. A. Size 3	Starter Without Heater	600714-883x
For N. E. M. A. Size 3	Starter Without Heater	600714-881xx

Overload Reset Kit for N. E. M. A. Size 3 G. E. Starter only 600714-882xx

x These parts particular to control centers Manufactured by Cutler Hammer
xx These parts Particular to control centers Manufactured by General Electric

TRANSFORMER KITS FOR CONTROL CIRCUITS

Part Number 00701600-0241
7½ and 10 H.P. 440V
7½ H.P. 220V
140VA Primary 230/460V Secondary 115V NEMA #1 Enclosure

Part Number 00701600-0242
10 and 15 H.P. 220V
15 H.P. 440V.
200VA Primary 230/460V Secondary 115V NEMA #1 Enclosure

Part Number 00701600-0265
7½ H.P. 208V
140VA Primary 208V Secondary 115V NEMA #1 Enclosure

Part Number 00701600-0266
10 and 15 H.P. 208V
200VA Primary 208V Secondary 115V NEMA #1 Enclosure

Part Number 00701600-0273
7½ and 10 H.P. 550V
140V Primary 550V Secondary 115V

Part Number 00701600-0274
15 H.P. 550V
200VA Primary 550V Secondary 115V

MAINTENANCE KITS

Bearing Maintenance Kit 7½-10 & 15 H.P. Units
Part No. 00701601-0666

Compressor Unit Overhaul Kit 7½-10 & 15 H.P. Units
Part No. 00701601-0668

NOTE

For list of parts included in above kits, refer to Figure 18, Pages 36 and 37 of this manual.

WARRANTY

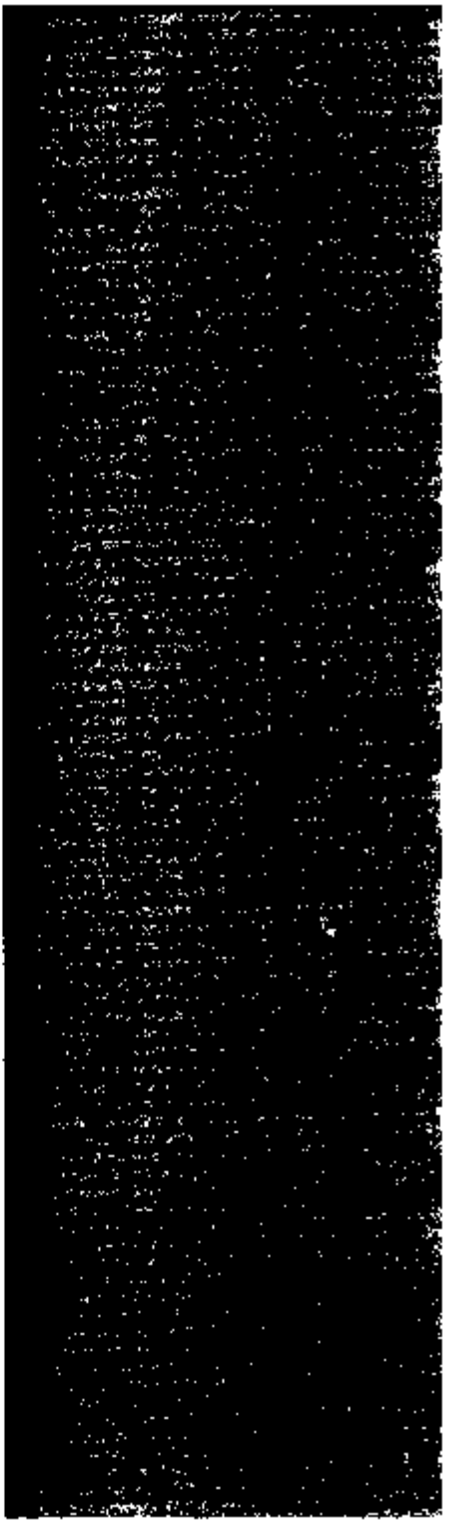
Seller will repair or replace, without charge f.o.b. point of shipment, any parts of its own manufacture proven upon Seller's examination to be defective in material or workmanship when furnished, provided claim is made within twelve months after date of shipment. Deterioration or wear occasioned by misuse, abuse, chemical or abrasive action or excessive heat shall not constitute defects. At the request and at the sole cost of Buyer, Seller will supply labor to replace any such defective part. Equipment and accessories not of the Seller's manufacture are warranted only to the extent that they are warranted by the manufacturers. THERE ARE NO OTHER WARRANTIES, EXPRESS, STATUTORY OR IMPLIED, INCLUDING THAT OF MERCHANTABILITY AND OF FITNESS.

No liability for any special, indirect or consequential damages of any nature is assumed by or shall be imposed on Seller based on its undertakings herein.

No allowance will be granted for any repairs or alterations made by the Buyer without the Seller's written consent. The Seller reserves the right to make, at any time, changes in detail of design, construction arrangement or equipment.

NOTE TO OWNER:

TO VALIDATE THE ABOVE WARRANTY, IT IS NECESSARY THAT YOU FILL IN AND RETURN THE REGISTRATION CARD THAT WAS SUPPLIED WITH THIS MACHINE. WE SUGGEST YOU RETAIN THE GUARANTEE HALF OF THE CARD IN YOUR FILES FOR READY REFERENCE AS TO SHOP NUMBER AND DATE OF PURCHASE OF THE UNIT.



JOY MANUFACTURING COMPANY
AIR POWER DIVISION
MICHIGAN CITY, INDIANA 46360