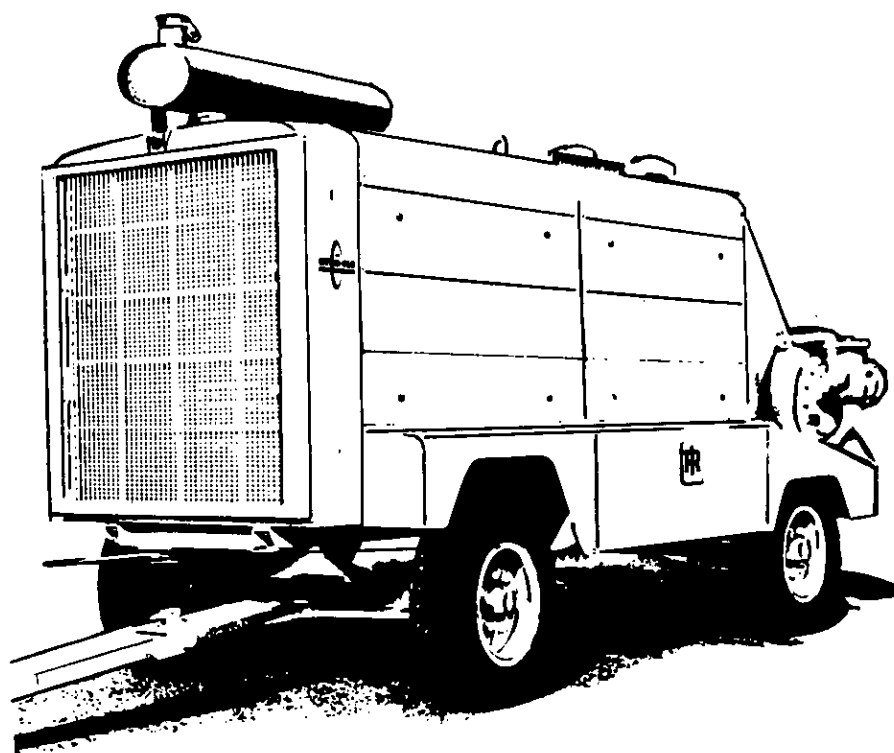




GYRO-FLO DRC 600

DIESEL ENGINE PORTABLE
AIR COMPRESSOR



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INSTRUCTIONS & PARTS LIST

TP12015

Revised (10-12)

INSTRUCTIONS and PARTS LIST



**MODEL DRC 600
DIESEL ENGINE DRIVEN
PORTABLE AIR COMPRESSOR**



Ingersoll-Rand.

FOREWORD

In preparing this publication, every effort has been made to provide sufficient information to permit an operator to perform his duties so as to receive maximum performance and trouble free service from the compressor. All classes of equipment, regardless of how well built, require a certain amount of attention. The purpose of this publication is to acquaint an operator with the functions, operation and servicing of the various components, which were built with the very best of materials and workmanship, to obtain maximum life from the compressor.

Before starting the compressor, the instructions should be carefully read to obtain a thorough knowledge of the duties to be performed. Take pride in the compressor, keep it clean, and in good mechanical condition. For major servicing, not covered in this publication, consult your nearest Ingersoll-Rand Company Branch Office, or the distributor from whom the compressor was purchased. Correspondence with a branch office, or distributor, must always specify the serial number of the compressor as well as the model. See page 6 for location of unit serial number.

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July/68.

TABULATED DATA

Engine Model - Cummins Diesel.....	NH220 - BI
Normal Operating Pressure - p.s.i.....	100 (7.03 kg/sq cm)
Actual Delivery - c.f.m.	600 (17.0 cu metre)
Full Load Speed - r.p.m.	1800
Approximate No Load Speed rpm.....	800
Oil Capacity Compressor System - Imperial Gals.....	25 (113 litres)
Oil Capacity Engine Crankcase - gallons.....	6 (27.2 litres)
Type of Air Filter - Air-Maze.....	J700AA
Air Filter Oil Capacity - Air-Maze - pints.....	1½ (.85 litres)
Electric Starting System - volts.....	24
Water Capacity Engine Cooling System - Imperial Gals.....	11 (50.00 litres)
Capacity Fuel Tank - Imperial Gals.....	75 (341 litres)
Weight Dry - pounds.....	8584 (3900 kg)
Weight with Fuel, Oil, Water - pounds.....	9324 (4236 kg)
Length, including drawbar - feet/inches.....	19' - 0" (580 cms)
Width - feet/inches.....	5' - 10" (178 cms)
Height - feet/inches.....	8' - 3" (252 cms)

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PART I

DESCRIPTION

GENERAL DESCRIPTION

The Gyro-Flo Portable Compressor consists of a two-stage rotary air compressor directly connected to and driven by a heavy duty industrial type engine. This unit assembly is mounted on a sturdy, channel section, welded steel frame.

The running gear is a four-wheel spring mounting, having pneumatic tyred wheels. "Less running gear" units are furnished on wooden shipping skids.

Operating accessories include: oil cooler, fuel supply tank, combination air receiver, oil separator and the necessary regulating devices, instruments, air cleaners, oil filters, etc.

COMPRESSOR

The compressor is two-stage, and is of the sliding vane rotary type. The first stage rotor chamber is supported by a yoke which is bolted directly to the flywheel housing of the engine with pilot fit to ensure correct alignment. The second stage rotor chamber mounts directly in line with, and at the rear of the first stage chamber with a centre

bearing housing between the two. A rear bearing housing and oil pump casing with cover closes the rear end of the second stage rotor chamber. The centre bearing housing also has supporting arms which rest on the main frame and serve as an additional support to the compressor.

A front bearing, with rotary oil seal, is contained in the yoke. Special end plate inserts are located at each end of each rotor chamber to separate the chambers from the adjacent bearing assemblies and act as end guides for the vanes.

The first and second stage cylinder bores (or rotor chambers) are each offset horizontally from the shaft centre line and in opposite directions. This causes each cylinder bore to be eccentric to its rotor.

The two rotor chambers have the same cylinder bore diameter, but the first or low pressure stage chamber, and its rotor, is considerably longer than the second or high pressure stage.

The first and second stage rotors are each slotted to receive sliding vanes which

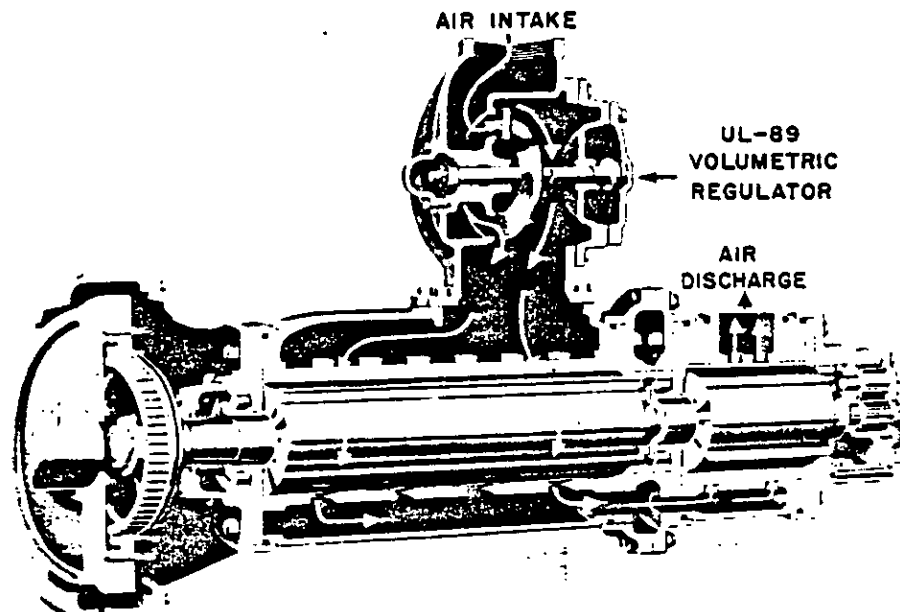


Fig. 1—Cross-sectional view of GYRO-FLO two-stage compressor showing air flow through the volumetric regulator and each of the two stages.

are sealed by the copious amount of lubricating oil fed to the bearings and bores. They are held against the bore wall by centrifugal force when operating.

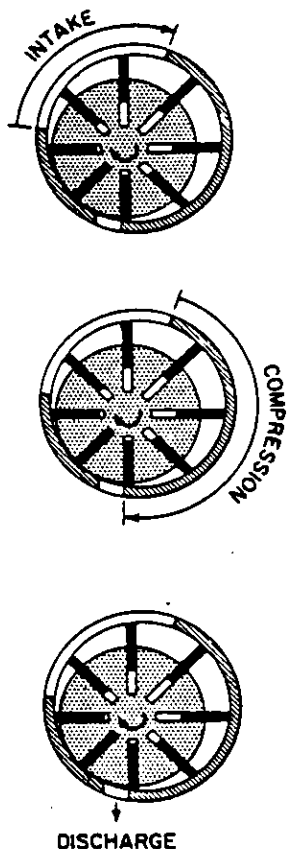
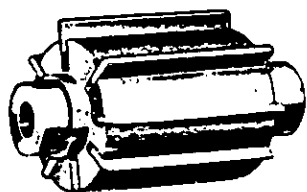


Fig. 2—Diagram showing compression cycle of the GYRO-FLO.

AIR FLOW (Fig. 2)

Free air is taken into the first stage chamber through large ports at an area where the vanes are well out of the rotor slots, thus filling the spaces or volumes between the vanes.

As rotation proceeds, the vanes are moved radially inward in their slots by the bore wall. This causes the volume between the vanes to decrease and compresses the air trapped in this space. As this space volume approaches zero, a second series of ports is uncovered allowing the compressed air to pass on through cast passages to the intake of the second stage rotor chamber. Here the process is repeated, raising the air pressure from the interstage pressure to final discharge pressure.

OIL FLOW

Relatively cool lubricating oil is admitted under pressure to the precision roller bearings and also is injected in metered amounts, directly to the rotor chambers.

The oil passes through the bearings at each end of each rotor, enters the close clearances at the vane ends, and thence to the rotor chambers.

All of the oil thus introduced mixes with and passes on with the air being compressed. This removes the heat of compression to a large degree and results in an unusually low final air discharge temperature.

The second stage discharge air passes through a connection into a combination air receiver oil separator where the oil is removed from the air and collects in the storage reservoir formed by the lower portion of the receiver and primary separator shell. From there, the oil is forced through piping to an oil cooler assembly. This cooler is located at the radiator end of the portable in such a manner that the engine radiator fan serves to cool both the engine jacket water and the compressor lubricating and cooling oil.

OIL PUMP

The oil pump is located at the rear end of the second stage rotor chamber. The pump is of the positive gear type, with the driven gear of the pump mounted directly on, and driven by a splined rotor shaft extension.

The oil pump receives its supply from the oil cooler through piping and an oil filter. It discharges the oil through internal passages directly to the rotor bearings and chambers.

An adjustable spring-loaded by-pass

DESCRIPTION

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valve, in the receiver separator, prevents any possibility of damage due to over pressure.

When the compressor is operating at low capacity, some of the oil may by-pass the cooler through a thermostatically controlled by-pass valve. This arrangement helps to maintain a higher average compressor oil temperature thereby reducing the possibility of water vapour condensation in the oil system. This valve located in the oil piping, by-passes varying amounts of oil, depending on the temperature, until the oil being circulated reaches a temperature of 185°F. (85°C.). At this point, the valve closes the by-pass completely and all of the oil is circulated through the cooler.

GENERAL-AIR END

The first stage rotor chamber intake is equipped with a UL-89 Volumetric Regulator (Fig.17). The incoming air passes through an efficient oil bath (stack type) air cleaner before entering the regulator and the compressor.

The first stage rotor shaft extends forward to carry an internal-external gear toothed coupling, the outer ring of which is bolted directly to the engine flywheel. This coupling assembly is lubricated and sealed against the entrance of dirt or moisture and provides a certain amount of necessary flexibility.

The second stage rotor is driven through a full floating splined shaft connection from the first stage rotor. In addition, the second stage rotor splined grooves serve to drive the oil pump.

Each rotor rides in its own set of caged roller bearings, while the oil pump shaft operates in self-oiled sleeve bushings.

Regulation is 100% from full capacity to zero capacity, and is accomplished by a combination of engine (and compressor) speed reduction together with proportional compressor volumetric regulation.

INSTRUMENT PANEL

The instruments are located on one panel. Instruments include discharge air pressure gauge, interstage pressure gauge, engine water temperature indicator, engine oil pressure gauge, hour counter, ammeter and starting switch.

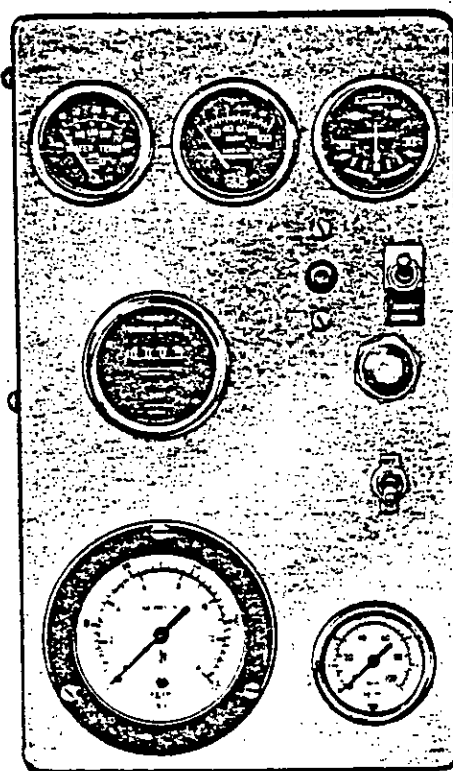


Fig. 3—Instrument Panel.

ELECTRIC STARTING

Electric starting is standard and includes starting motor, generator, voltage regulator and battery with necessary wiring and terminals.

AIR RECEIVER - OIL SEPARATOR

The combination air receiver-oil separator (hereinafter called the receiver-separator) is comprised of a special B. S. S. 487 welded steel receiver shell, designed for 150 lbs. working pressure.

Located entirely within the shell is a secondary separator nest and support tube. Removing the secondary separator nest and the support tube provides a very large opening through which perfect cleaning and inspection can be performed. An internal strainer at the receiver-separator tank (bottom) outlet connection provides a means of trapping any solids which might be carried by the oil flow towards the oil cooler. This

strainer fitting is removable for cleaning. The delivery end of the receiver-separator is arranged to provide connections for the outlet service valve, a hand relief valve, also the required safety valve and atmospheric relief valve. It is continuously drained of any oil accumulation by a connection at the bottom of the chamber to the inlet of the high pressure cylinder.

FUEL TANKS

On the DRC-600 the fuel tanks are mounted under the steel apron between the fenders on both sides of the compressor. These tanks are cross connected and may be filled from either side of the unit. Their combined capacity is approximately 75 Imperial gallons (341 litres).

The entrance to the outlet tube connection is raised above the tank floor to provide a water and sediment settling space or trap. The low side drain valve or plug should be opened or removed occasionally to draw off

any collection of water and sediment.

SPRING MOUNTINGS

The complete unit is carried on a sturdy four-wheel mounting, which has automotive type steering.

The mounting has semi-elliptic springs. Pneumatic tyred disc type wheels equipped with Roller Bearings are standard.

A special length drawbar and steering arm are furnished to enable satisfactory towing by trucks having a high hitch location.

LESS RUNNING GEAR

"Less running gear" units are furnished on temporary wooden shipping skids. If customer mounts a "less running gear" unit on other equipment, it is his responsibility to see that the frame is not stressed or warped because of the mounting arrangement. The use of special rubber mounts may be desirable or necessary.

OPERATION

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BEFORE STARTING

1. Set the portable compressor on level ground and in as clean a location as possible.
2. Check the oil level in both the compressor receiver-separator reservoir and engine crankcase. Add make up oil if required. (See special instructions under Maintenance).
3. Check compressor air cleaner for proper oil level in the bottom pan.
4. Check restriction indicator on engine air cleaner.
5. Check engine radiator to see that it is correctly filled with clean, soft water. Use permanent type anti-freeze solution if operating in below freezing temperatures. The use of a commercial rust inhibitor is recommended to prevent internal corrosion of the cooling system.
6. See that the fuel tank is filled with a good quality engine fuel. Use a good quality high speed diesel engine fuel which meets the specifications given in the engine instruction book.
7. With no air pressure in receiver-separator, leave service valve open.

STARTING

The diesel engine starts directly on fuel oil, except for air temperature below 32° F. provisions are made for sure starting by "Glow Plug" Starter System.

1. The unit is equipped with a manual control lever as shown in Fig. 4 . Latch the lever in the fixed starting position.
2. Switch on protection circuit toggle switch, depress safety control switch and hold down with one hand, while operating starter button with other hand. Hold over-ride switch until engine oil pressure reaches normal and release. As soon as the engine starts, close all service and relief valves on the receiver-

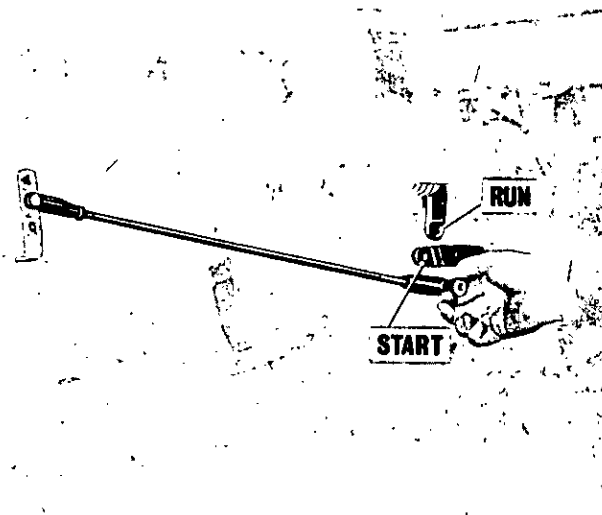


Fig. 4—Latching Governor Lever in starting position.

separator to build up full air pressure. (See Fig. 5). This causes compressor unloading and results in the minimum load on the engine while it is warming up. It also applies full pressure to the lubricating oil in the storage reservoir. This causes the oil to flow to the oil cooler or through the by-pass valve direct to the oil pump inlet to establish full lubricating pressure in the compressor immediately.

3. When fully warmed up, shift the manual speed control knob to the hole in the regulator arm (Fig. 4). This allows the UL-88 Speed and Pressure Regulator to take over. Connect air load to the compressor and open the service valve, allowing air demand to regulate output as required.

STOPPING

Close the air service and relief valves, causing compressor to unload and engine to operate at minimum reduced speed. Continue to operate at this reduced speed until the engine has cooled down sufficiently to prevent the radiator from boiling over, then shut down.

Lift toggle switch to stop the engine. The atmospheric relief valve will automatically relieve all pressure in the receiver tank. Note that valve functions properly.

MINIMUM PRESSURE SERVICE VALVE

This is an automatic valve which maintains a minimum pressure of about 45 psi (3.16 Kg. /sq. cm.) in the receiver-separator so as to ensure oil circulation. The valve is also equipped with a hand wheel for discharge shut-off.

This valve cannot be used as a check valve in any operation where a check valve is required to prevent backflow of line pressure such as in parallel operation, etc. (Refer to Part III).

AUTOMATIC BLOWDOWN VALVE

This is an automatic valve to release air from the system when engine is stopped.

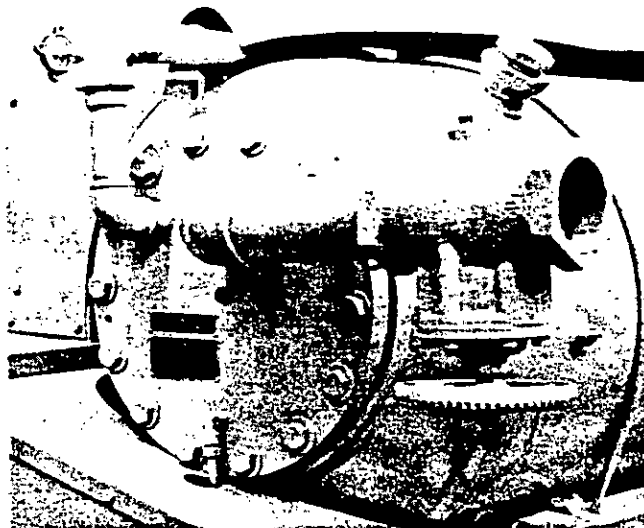


Fig. 5 —View showing Minimum Pressure Valve and Service Valve arrangement.

COOLING SYSTEMS

ENGINE RADIATOR AND COMPRESSOR OIL COOLER

Keep all core sections of both the radiator and oil cooler clean by using a cleaning solution. Higher efficiency and lower temperatures will result when the external grease and grime and the internal oxidation of the lubricating oil is removed thoroughly. Use only clean, soft water for filling the radiator. Where the water is known to be "hard" or alkaline, treat it with a softening compound to prevent formation of scale and rust both in the engine jacket spaces and in the radiator itself.

Freezing of water in the cooling system may result in serious damage. If the unit is to stand idle in freezing temperatures, the only safe plan is to drain the system, unless an anti-freeze solution is used.

Before adding any anti-freeze solution, tighten up all joints in the cooling system and make sure there are no leaks.

Ethylene-glycol solutions are recommended since they are not lost by evaporation and only water need be added to maintain a full system. If any of the solution is lost by leakage, foaming, etc., it must be replaced by new anti-freeze solution.

The entire cooling system must be thoroughly cleaned and flushed before using an ethylene-glycol solution. All hose connections and joints must be kept tight, as any leakage of air into the system may cause acid formation and corrosion.

FUEL SYSTEM AND FUEL STORAGE

Two cylindrical fuel tanks are mounted on, and located under, the steel apron between the fenders on both sides of the unit. Pilferage is prevented by the lockable housing side covers.

The outlet connection of the tank is so arranged that fuel is taken from a point somewhat above the floor of the tank thus providing

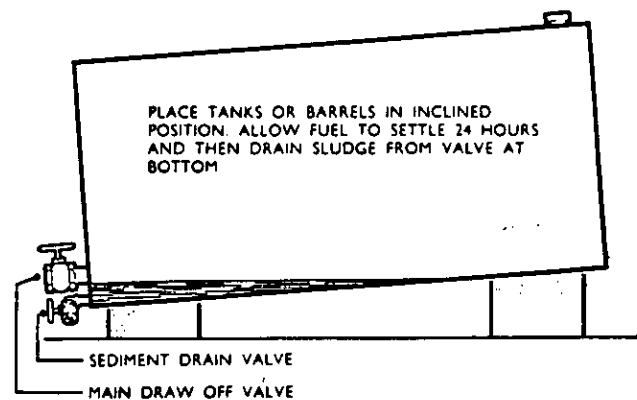


Fig. 6—Fuel Oil Storage Tank

a settling space where water and sediment can collect without being drawn into the fuel system. Bottom drain openings are provided for removal of the collected water and sediment. Drain the settlings after each filling of the tank.

Clean fuel is vitally important and every precaution should be taken to ensure the fuel being clean when it is poured or pumped into the supply tank.

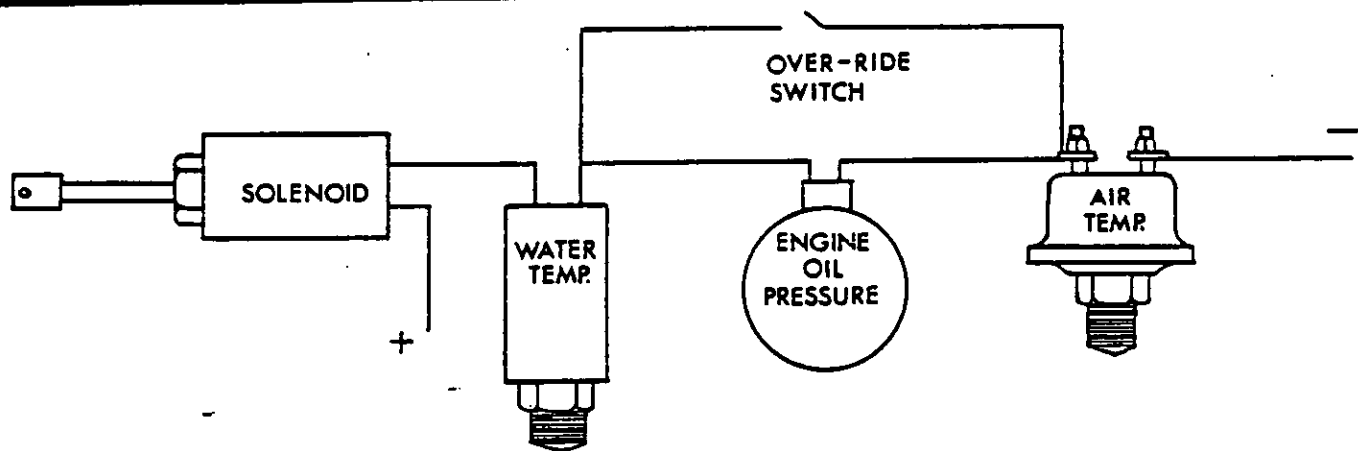
Fuel oils from steel drums and commercial containers often pick up scale, water and sediment. To properly store fuel oil, use black iron (not galvanized) storage tanks or drums, tightly sealed against water, dust and dirt. A satisfactory way of installing tanks is shown in the accompanying illustration (Fig. 6).

Draw settlings from the well at the bottom of the storage tank at frequent intervals and always before drawing fuel for use.

When transferring fuel from the storage tank to the portable supply tanks by other methods than pump and hose, use a funnel which is kept for this purpose only. Wipe the funnel clean each time before using. Do not allow the engine fuel supply tanks to become empty because the engine fuel pump may lose its prime and be damaged.

PROTECTIVE DEVICES

The engine is protected against high water temperature and low oil pressure by



Protective Shut-Down System

Start switch on instrument panel energises the engine protective system at starting and disconnects when stopped to prevent battery drain. When operating, high air or water temperature or low engine oil pressure will cause solenoid to shut off engine fuel supply. Over-ride switch on instrument panel must be held in closed position when starting.

Fig. 7—Protective Shut-Down Devices

a thermal switch and a pressure switch either of which operates to shut off the engine fuel supply; causing immediate shutdown. Similarly the compressor is protected against over-heating by a thermal switch located in the compressor discharge connection and wired in with the above engine protective devices so that immediate shut-down will occur should the discharge air temperature rise above 220°-230°F. (104°-110°C.).

GENERAL

Should the engine be shut down during operation by any of the protective devices check immediately to determine where the trouble lies and correct it before attempting further operation.

Read the engine instruction book to become familiar with the operation of the starting equipment and the various protective devices which are furnished to prevent damage to the engine due to lack of proper care and attention.

SAFETY VALVES

A safety valve is connected to the receiver separator to protect the compressor against any serious over pressure. It should be operated by hand monthly to make sure it is in proper operating condition. Should this safety-valve "blow" at any time due to ex-

cessive discharge pressure, check the regulating devices for improper settings.

COMPRESSOR AIR CLEANER

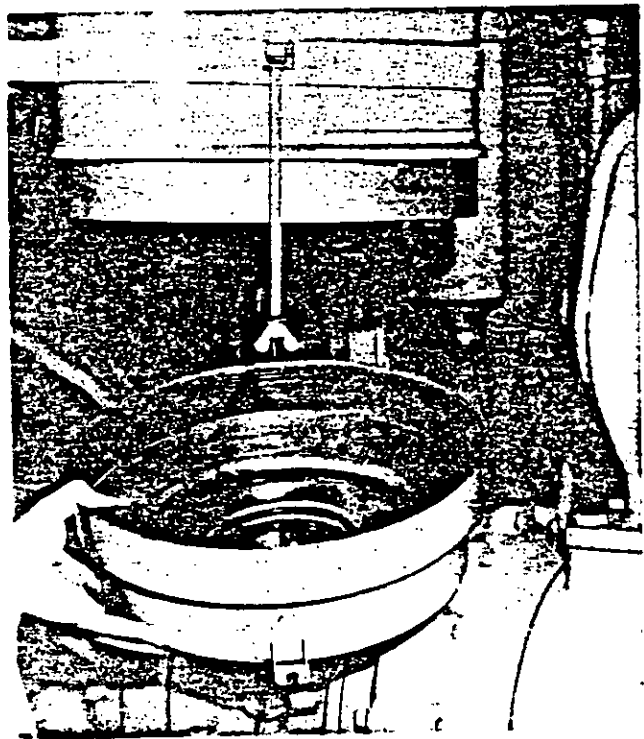


Fig. 8—Dropping Air Cleaner Bottom Pan

AIR CLEANERS

Both the engine and the compressor intake are protected against entrance of dust and foreign objects by efficient air cleaners which take air from above the roof.

The cleaner should be serviced as often as required in accordance with operating conditions: daily, if in a very dusty location.

NOTE: Air cleaners on units for export are drained of oil when shipped and must be refilled before operation of unit.

Normal servicing requires only emptying and cleaning the bottom oil pan as shown in Fig. 8) and refilling with engine oil to the bead line "C". The oil pan can be dropped as shown after loosening the wing nuts. Use the same oil as used in the engine or a heavier grade in hot weather. The precleaner located on the roof, should be checked occasionally to see that it is not clogged with dirt or foreign material.

If the screen element of the stack type air cleaner becomes clogged, remove the complete cleaner, and wash in a tub of hot water and soap powder, or detergent. Then rinse thoroughly, drain and dry, re-oiling before reassembly to the unit.

ENGINE AIR CLEANER

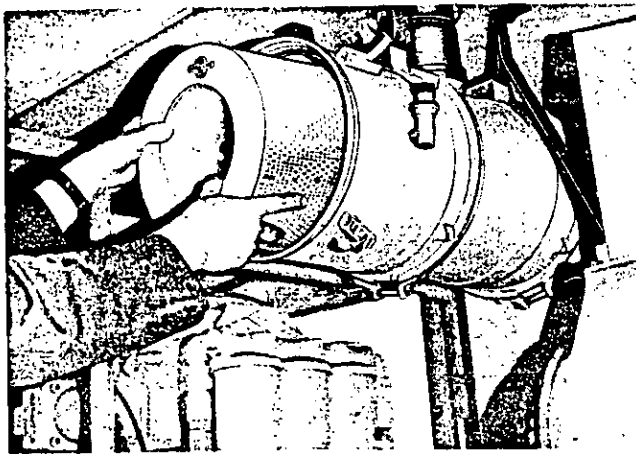


Fig. 9—Removing Engine Filter Element.

The engine air cleaner is a two-stage dry type cleaner and is fitted with a restriction indicator to signal when cleaner service is required. Dirt trapped by the air cleaner

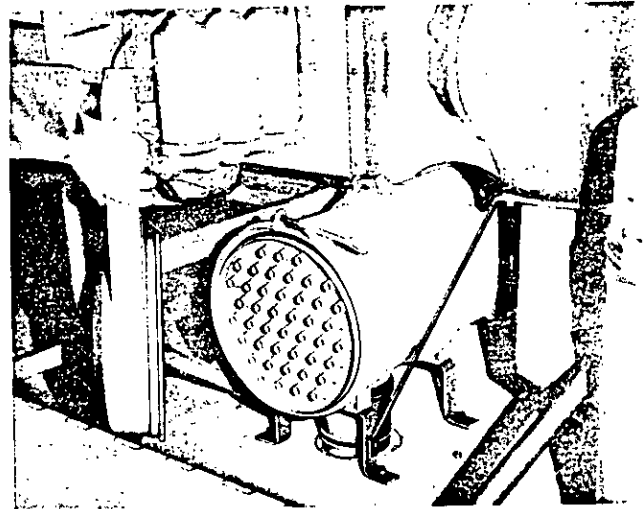


Fig. 10—Removing Engine Filter Dust Cap.

gradually reduces the volume of air flowing and increases the pressure drop across the air cleaner to the engine. As the pressure drop increases the green blind of the indicator gradually descends exposing the red signal until, when the pressure drop reaches the limit and the red signal is fully exposed, the blind is automatically locked down.

When the red signal is fully exposed the air cleaner should be serviced in accordance with paragraph 4 page 17 or the element replaced. After servicing the indicator is reset by pressing the button at the base, this releases the green blind which will again cover the red signal.

RECEIVER SEPARATOR

A secondary oil separator is mounted within a removable inner shell which is placed inside the primary receiver-separator shell. The inside of the primary receiver-separator shell may be cleaned by withdrawing the inner shell, allowing access to the inside of the receiver-separator.

The secondary oil separator element consists of a series of chambers each packed with an oil diverting medium through which the compressed air passes on its way to the final discharge connection. (Most of the oil is thrown out of the air mechanically before the air enters the secondary oil separator.

The secondary separator element (as shown in Fig. 11) is removable as a unit for replacement when required. This is indi-

cated by more oil consumption by the compressor than usual. In normal operation servicing of the secondary separator element should not be required for two or three years.

OIL SEPARATOR ELEMENT

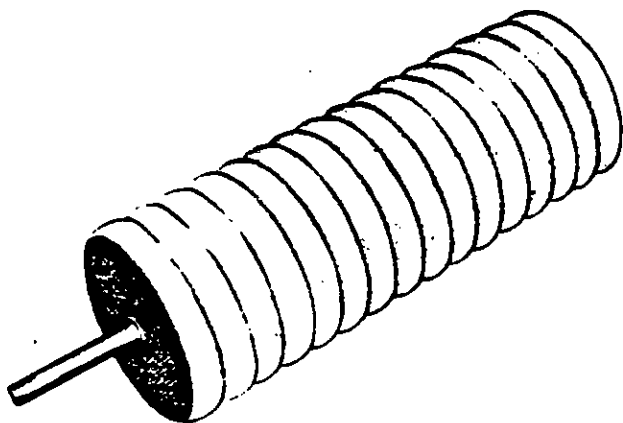


Fig. 11—Secondary Oil Separator factory packed and replaceable.

The diverting medium is a very special material, purchased to a strict specification and installed in the screen element to a definite density. Servicing, therefore, is by replacement with a complete factory packed screen assembly as shown.

CHASSIS (GENERAL)

The spring mountings are equipped with grease fittings at wear points for use with a normal grease gun. The wheels should be removed and the bearings cleaned and repacked once a year. The free ends of the springs may be lubricated occasionally with heavy oil or light grease.

In greasing bearing equipped wheels, do not overgrease. Keep the outside of the dust seal clean and free from grease. Keep the disc wheel hub bolts tight.

Maintain correct air pressure in the pneumatic tyres to obtain maximum tyre life.

Model	Size and Type	Air Pressure	
		Front	Rear
DRC-600	7.50 x 16-10 Ply	65 psi	48 psi

MAXIMUM ALLOWABLE TOWING SPEED

Four-wheel pneumatic tyres: 20 m. p. h.
(32.19 k. p. h.).

ROTOR VANES

It is recommended that vane tips be inspected at 2,000 hours or after one year. Vanes should be replaced after 4,000 hours' service or every two years as a matter of routine preventive maintenance. When vanes are replaced, make sure that driving or trailing tips of rotor slots are not razor sharp. They should be slightly rounded. This can be easily done by hand, using a fine grained stone to produce a radius of about 1/64" (.397 mm.).

To make an inspection of the high and low pressure vanes with a minimum removal of parts the following procedure is recommended.

1. To inspect low pressure vanes remove L. P. cylinder top cover and then "inch" engine over with the starter and inspect vanes through the exposed air intake in cylinder.
2. To inspect high pressure vanes remove cap screws that fasten the high pressure outer bearing housing to the cylinder. The housing with oil pump, bearing and outer race, and end plate can now be slipped off and vanes can be slipped out of rotor slots.

ROTARY COMPRESSORS ON PUMP-UP JOBS

The secondary oil separator on the rotary portable air compressor is designed to function correctly at normal operating pressures.

The high air velocities generated at zero pressure or low pressure will carry considerable quantities of oil from the separator over into the discharge line, therefore, it is essential to hold a minimum pressure of 45 psi (3.16 kg./sq. cm.) in the air receiver and oil separator system until such time as the discharge line pressure has increased to that amount. This is accomplished by a minimum pressure valve which automatically maintains a minimum pressure of 45 psi (3.16 kg./sq. cm.) in the air receiver and oil separator system.

Attempting to operate at discharge pressures below 45 psi (3.16 kg./sq. cm.) will not increase the actual delivery.

OUT-OF-LEVEL OPERATION

Normally, portable air compressors are not operated while being towed, hence the problem of out-of-level operation over the rough terrains encountered on some highway and general construction jobs, in mines and quarries, etc., has not been too important a consideration. The speed with which today's large pipelines are being laid and the rough terrain traversed by these pipelines has required out-of-level operation on extremely steep slopes.

The standard Diesel engine powered Gyro-Flo portable is suitable for extreme out-of-level operation.

	Standard Engine Standard Oil Pan	
	Lengthwise	Sidewise
Diesel Engines* DRC-600	24°	30°

*The engine, and not the compressor, is the limiting factor in all cases. When the unit is to be operated out of level, it is more important to keep engine crankcase oil level near the high mark than when operating on level ground. The above out-of-level degrees are given on the assumption that the engine crankcase is filled to the high level mark (with the unit level) and the compressor oil gauge shows nearly full. Do not over-fill either the compressor lubricating system or the engine crankcase.

These figures are based on oil at full level in both engine and compressor when the unit is standing on level ground. Do not over-fill.

Another factor that must be kept in mind is that the static tipping angle of the unit is approximately 35° (70° slope sideways).

COMPRESSOR COUPLING

The complete coupling assembly is sealed to prevent the entrance of dirt and to retain the permanent lubrication installed on the original assembly.

If the engine and compressor are separated during a major overhaul, the coupling gear teeth should be repacked with grease before re-assembling.

Use an automotive type front wheel bearing grease available at any service station. Use only enough to fill the gear teeth as an excess of grease in the chamber will expand with heat and resulting end thrust may cause compressor failure.

**SPECIAL WARNING FOR
PARALLEL OPERATION**

Do not connect a Gyro-Flo Portable Air Compressor into a common header with any other units of any description, or any other source of compressed air, without placing a check valve between the header and each Gyro-Flo Compressor.

Backflow of line pressure and possible contamination of the receiver-separator and lubricating system with oil, water or scale must be prevented.

LUBRICATION (COMPRESSOR)

Compressor lubrication and cooling are both accomplished by the compressor lubricating oil. The compressor is cooled by oil injection directly into the rotor chambers. The compressor lubricating system consists of an oil pump, a storage reservoir, oil cooler, and the necessary piping together with an oil filter.

The oil cooler is a radiator-like heat transfer core section placed immediately in front of engine radiator core and having approximately the same frontal area. It is so arranged internally that the oil passes through the cooling air stream on its way through the core. Oil is piped from the storage space in the primary oil separator to the inlet opening of the cooler core. On leaving the cooler, it flows through the piping and the oil filter to the oil pump intake.

COMPRESSOR OIL FILTER

The oil filter, Fig. 12 and "C", Fig. 14) is located in a high loop of the oil piping so that the filter shell may be removed for servicing without having to drain any other part of the system. Only the oil in the filter shell itself is drained when the shell is removed for cleaning.

The filter consists of multiple layers of fine mesh screen elements which may be cleaned by brushing with a safety solvent to

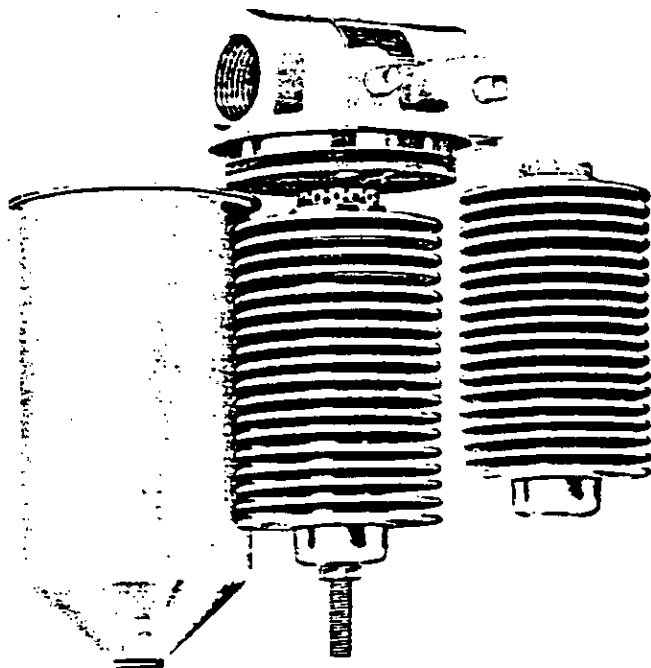


Fig. 12—Compressor Lubricating Oil Filter, showing a dirty filtering element removed and replaced with one which has been cleaned.

remove any sludge and dirt. The filter should be serviced every 100 hours of operation.

It is advisable to have an extra filter element assembly on hand for quick replacement of the dirty element. The dirty filter element can then be cleaned when convenient or allowed to soak in safety solvent preparatory to cleaning, without causing loss of operating time.

While filter shell is removed, inspect for lacquer deposit. If a lacquer deposit is noted, change compressor oil completely to avoid vane sticking in the compressor.

OIL STORAGE RESERVOIR IN RECEIVER SEPARATOR

The oil storage reservoir is in the lower portion of the primary separator shell, where most of the oil collects as it is thrown out of the compressed air before it enters the secondary oil separator. The level of the oil in this storage reservoir is indicated by an oil level dial gauge, visible from the rear of the unit. This should indicate at least between "half and full" when the unit is shut down and on fairly level ground. The storage reservoir (shell) is equipped with a special filler plug and a small drain valve "D", Fig. 14.

COMPRESSOR OIL FILTER (AIR MAZE)

Remove shell and disc assembly. The disc slides off the centre stud as a unit and can be dis-assembled by knocking off the bottom cap with a rod passed through the centre tube. Clean the assembly as a whole first by pouring solvent into centre tube and brushing and scraping off heavy sludge. Then disassemble discs and soak in fresh solvent, cleaning each disc separately. Reassemble exactly as found on removal. Use acetone, varnish remover, or lacquer thinner as solvent. If a lacquer deposit is noted, change compressor oil completely to avoid vane sticking in the compressor.

Fig. 13—Compressor Oil Filter Instructions.

The small drain valve "D" is used in testing for condensate which may accumulate under the oil in the bottom of the reservoir during certain climatic conditions, especially if operating at less than 40% load capacity. For complete draining of the reservoir and piping, use the large drain plug "A" in the pipe fitting under the reservoir, and remove drain plug or open small drain valve "D" at low end of separator. Also remove the union "B" under the oil cooler.

Do not attempt to remove the filler plug without first releasing all pressure from the receiver-separator by opening hand relief valve.

SPECIAL PRECAUTIONS FOR MOISTURE DRAINAGE.

In installation where the discharge piping may slope upwards from the service outlet of the air receiver-oil separator system, provisions should be made to install a drain leg at the service outlet, to collect any drain-back of condensate from the discharge line.

COMPRESSOR LUBRICATING OIL. THESE INSTRUCTIONS ARE VERY IMPORTANT.

1. Use a quality turbine type oil containing

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only rust and oxidation inhibitors that has a viscosity at 100°F. (37.8C.) of 150-220 sec. Saybolt and having a pour point low enough so it will flow at the

lowest starting temperature encountered.

2. Do not mix oils of different brands or specifications.

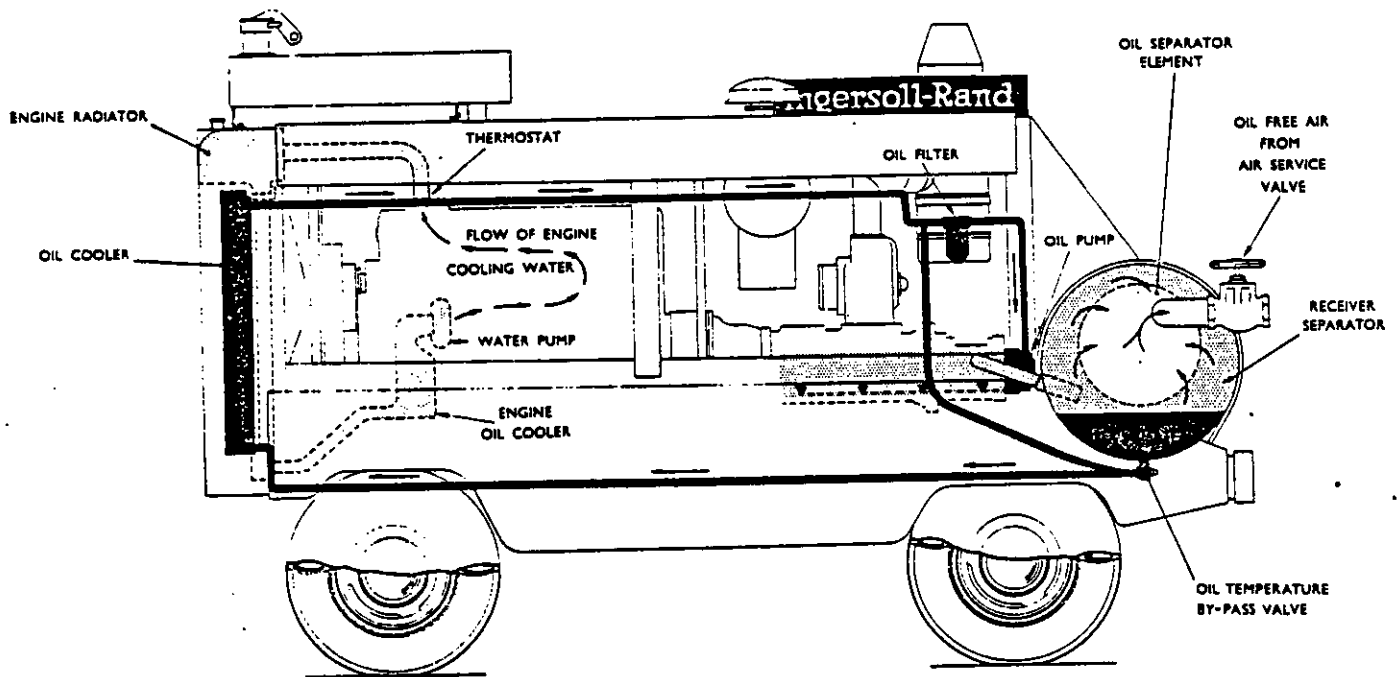
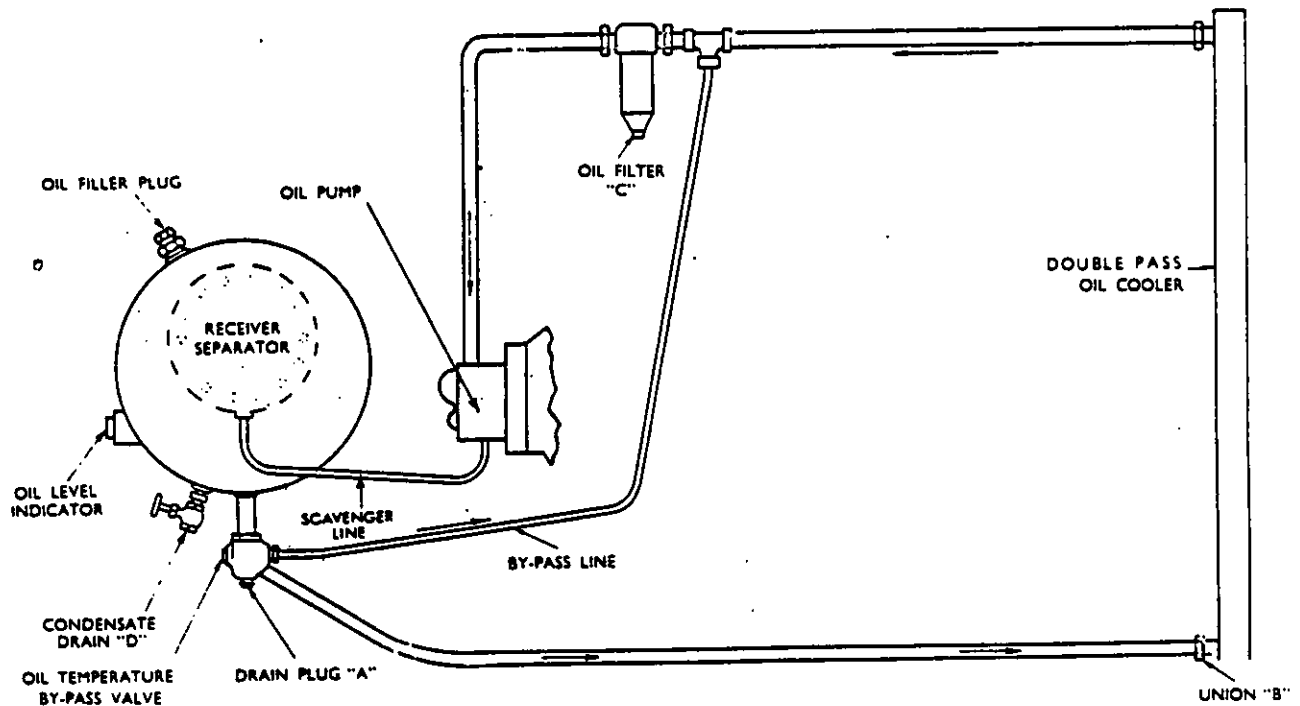


Fig. 14—Diagrams showing the Cooling Systems of the Oil-cooled Compressor and Water-cooled Engine.



3. Inspect and clean oil filter every 100 hours.
4. Change compressor oil every 500 hours of operation.
5. The oils specified above provide adequate lubrication at all ambient temperatures and load conditions. They give maximum efficiency; the easiest cold starting and make seasonal changes unnecessary. The absence of detergents minimizes water pick-up and emulsification under low load conditions. Thus, swelling of vanes and consequent loss of slot clearance is prevented.
6. Some oil mixtures are incompatible, resulting in the formation of varnishes, shellacs or lacquers which may be insoluble. Such deposits can cause serious troubles, including clogging of oil filter sticking vanes and possible vane breakage. Therefore, do not mix different brands of oils.

UNITS FOR DOMESTIC USE

Do not add oil to the compressor lubricating system of new units. Your unit was shipped with an initial supply sufficient to operate for 500 hours or until oil level gauge indicates about half full when standing approximately level and shut down.

UNITS FOR EXPORT USE

The compressor lubricating system of units for export is completely drained at time of shipment and system must be refilled with new oil to preceding specifications before operation.

The receiver-separator, oil cooler and oil filter should be drained completely and refilled with new oil as supplied by your preferred oil supplier to meet specifications preceding when unit has operated for 500 hours or until oil level gauge indicates about half full when standing level and shut down.

7. A complete replacement of the old compressor oil with clean new oil every 500 hours is desirable and is good insurance. This practice tends to prevent accumulation of dirt or sludge or oxidized oil products in the system.
8. Frequent inspection and cleaning of the oil filter has several advantages. It

makes the job of cleaning it easier and provides a check on the condition of the oil and therefore of the whole compressor. Neglect of this operation results in the by-passing of unfiltered oil in reduced quantities, overheating of compressor and probable automatic shut-down.

If any varnish or lacquer deposits are found in the filter, this indicates that the oil is deteriorating and it should be changed immediately.

LUBRICATION (ENGINE)

Lubrication of the engine is fully covered in the engine instruction book.

Note: Engines of units for export are completely drained of oil before shipping and must be refilled before operation.

LUBRICATING POINTS

ONCE A DAY

or every 8 hours of operation

1. Open small drain valve under the receiver-separator to draw off any condensate or water which may collect under the lubricating oil. Close as soon as oil appears. Do this each morning before starting the day's run.
2. Maintain an oil level between one-half and full on the oil level indicator gauge. Check this each morning before starting.
3. Compressor Air Cleaner. Remove bottom pan, clean out sludge and dirt, refill to bead line and replace, every eight hours if compressor is operating in an extremely dusty location.
4. Engine Air Cleaner. Loosen ring clamp, remove Dust Bowl and empty out dust. Inspect the lower body. If an accumulation of dirt is found in the tubes, they should be cleaned by pushing a round bottle brush through from the bottom. Inspect the Rubber Seal and renew if necessary. Re-assemble when clean and and tighten ring clamp.

Check restriction indicator and if red signal is visible proceed as follows:

With engine stopped, wipe off cover and element end of air cleaner.

Unclip and remove end cover.

Unscrew central Wing Bolt and lift out the element, taking care that loose dirt does not fall back into the chamber.

Considerable dust can be removed by slapping the side or bottom rim of the element with the palm of the hand. Do not bang the rim against any hard surface. This may damage the rim and affect the seal when re-assembled. Depending on the type of contamination the element can then be cleaned by one of the following methods:

(1) Using dry air not exceeding 100 psi loosen embedded dirt particles by directing the air in a hosing motion, from the clean side, i.e., against the normal direction of flow, along the complete length of each pleat in turn. Blow off the loosened dirt by hosing with air the dirty side of the element.

Repeat this procedure until the element is clean.

(2) Using clean water at a pressure not exceeding 40 psi proceed as for air but thoroughly dry element before using.

(3) Some oily, sooty deposits can be removed by washing the element in a

solution of warm water and a good household non-foaming detergent. Then rinse in clean water and thoroughly dry.

Inspect after cleaning for damage.

A ruptured paper will render the complete element ineffective. Inspect Rubber Seals on Element and in chamber, renewing if damaged. Before replacing the element, wipe out any loose dirt which may be in the chamber. Slide element into position and secure with wing nut so that unit cannot be rotated. Ensure that the rubber-metal washer is in place under the wing bolt and that it is in good condition.

Inspect Cover Gasket for damage, renew if necessary. Replace and secure the cover.

ONCE A WEEK

or every 50 hours of operation

3 and 4. Air Cleaners. If unit is operating in a reasonably clean atmosphere its cleaning need only be performed once each week instead of every day.

5. The Regulator Arm and Linkage should receive a few drops of oil every 50 hours. Use engine crankcase oil in oil can.

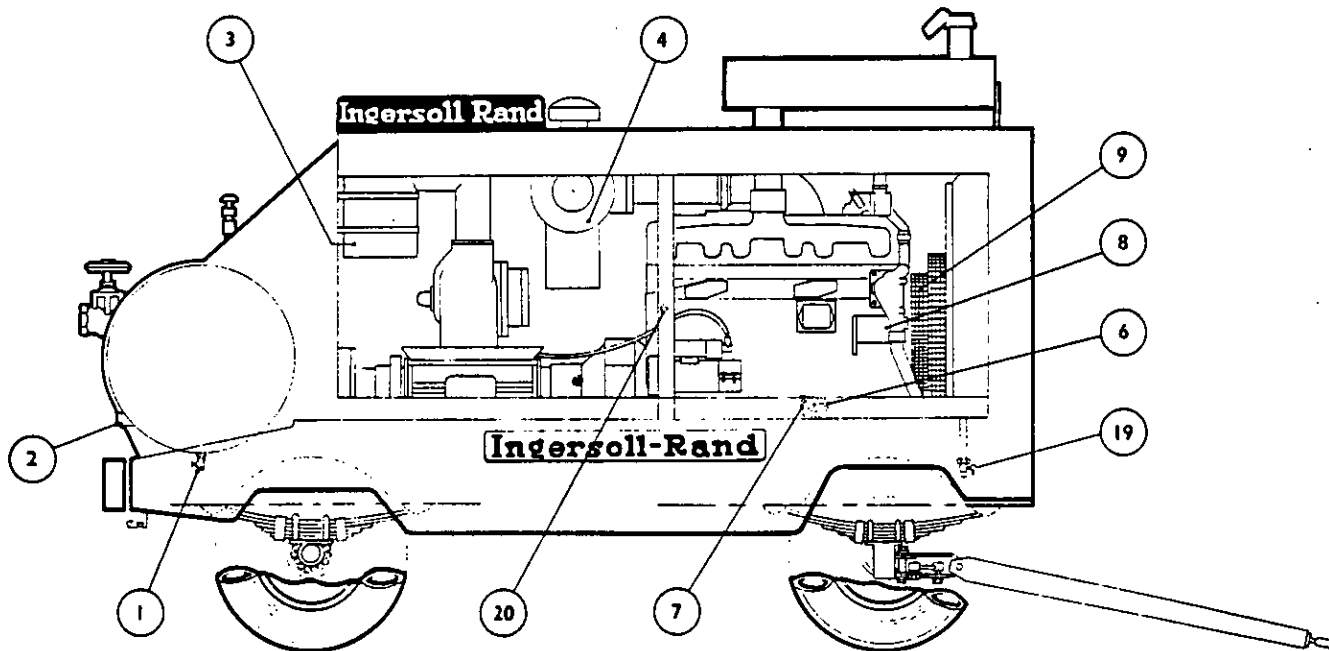


Fig.15—Lubrication Chart—Right-hand Side of Unit. (Composite view only—to illustrate lube points.)

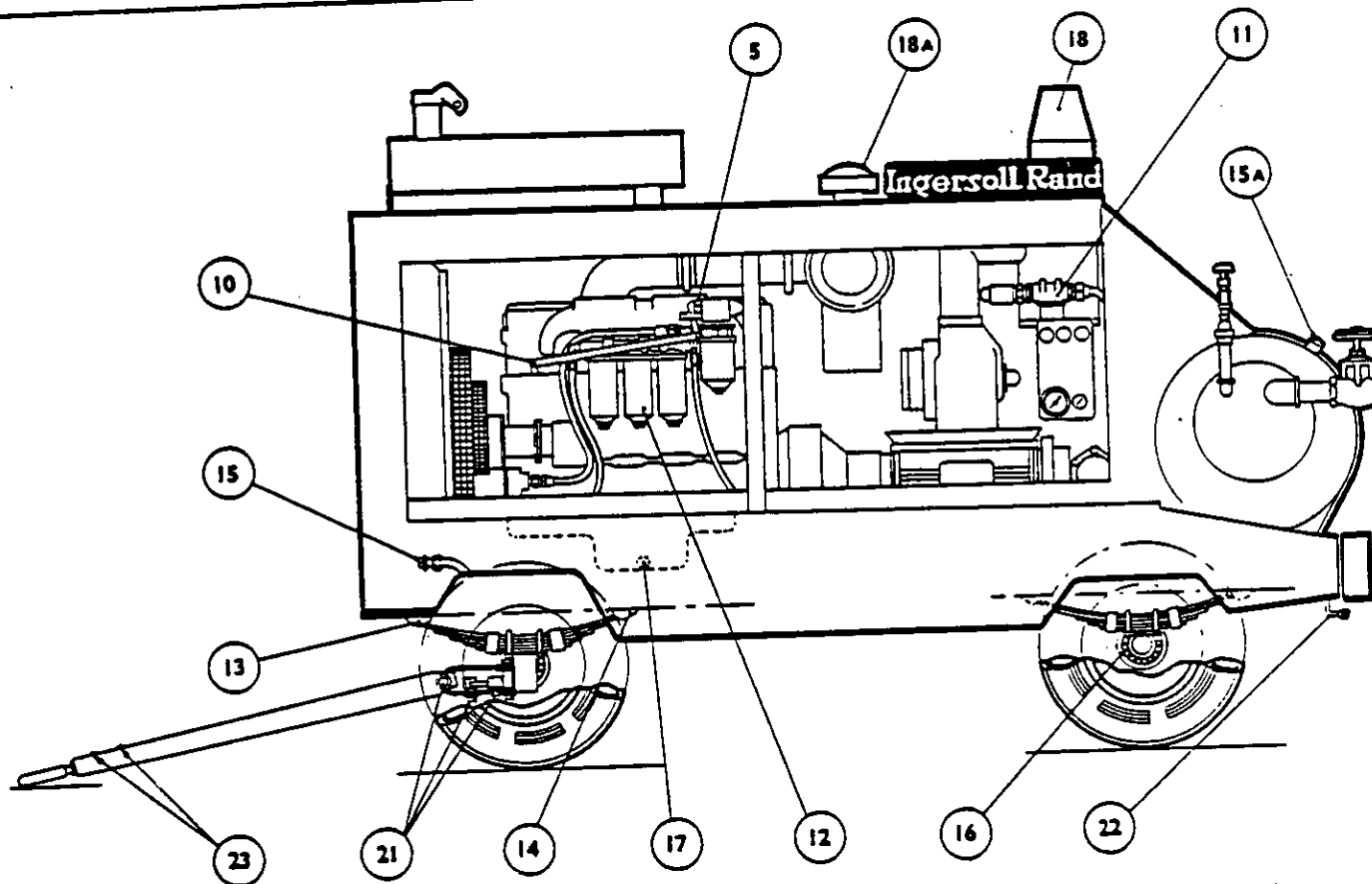


Fig16—Lubrication Chart—Left-Hand Side of Unit. (Composite view only—to illustrate lube points.)

6. Engine Crankcase Oil Filler Hole. See Engine Instruction Book.
7. Engine Oil Level Gauge. Check the oil level and refill if necessary. See Engine Instruction Book.
8. Generator. See Engine Instruction Book.
9. Fan and Water Pump Bearing. See Engine Instruction Book.
10. Governor to Regulator Linkage. Use crankcase oil in oil can.

TWICE A MONTH

or every 100 hours of operation

11. Compressor Lubricating Oil Filter. Remove shell, and service as per instructions on pages 14 & 15.
12. Engine Oil Filters. Clean and renew element. See Engine Instruction Book.

EVERY THREE MONTHS

or every 500 hours of operation

13. Running Gear Spring Bolts. Use grease gun.

14. Running Gear Spring Slip End. Apply grease with brush.

- 15, 1, 15a. Compressor Lubricating Oil. Change oil completely every 500 hours of operation, or more often if lacquer formation is found. To drain system remove union 15 and open valve 1. Never remove filler plug 15a when oil separator is under pressure. Do not remove union 15 or open valve 1 except when it is necessary to completely change the oil.

TWICE A YEAR

or every 1250 hours of operation

16. Wheel bearings. Remove wheels, replace any worn parts and repack not over half-full with wheel bearing grease.

IDENTIFICATION OF OTHER SERVICE PARTS

17. Engine Crankcase Drain Plugs.
18. 18a. Compressor and Engine Air Inlet Pre-cleaners. Keep screen free of

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leaves, etc., at all times. To remove dust, wash screen in fuel or solvent as required.

19. Radiator Drain Cock. Drain water in freezing weather if not protected with anti-freeze.
 20. Engine Cylinder Block Drain Cock. Drain water in freezing weather if not protected by anti-freeze.
 21. Use a grease-gun to lubricate track rod end, king pins and drawbar pintel.
 22. Use oil can on hand parking brake linkage.
 23. Towing eye grease nipples.
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REGULATION

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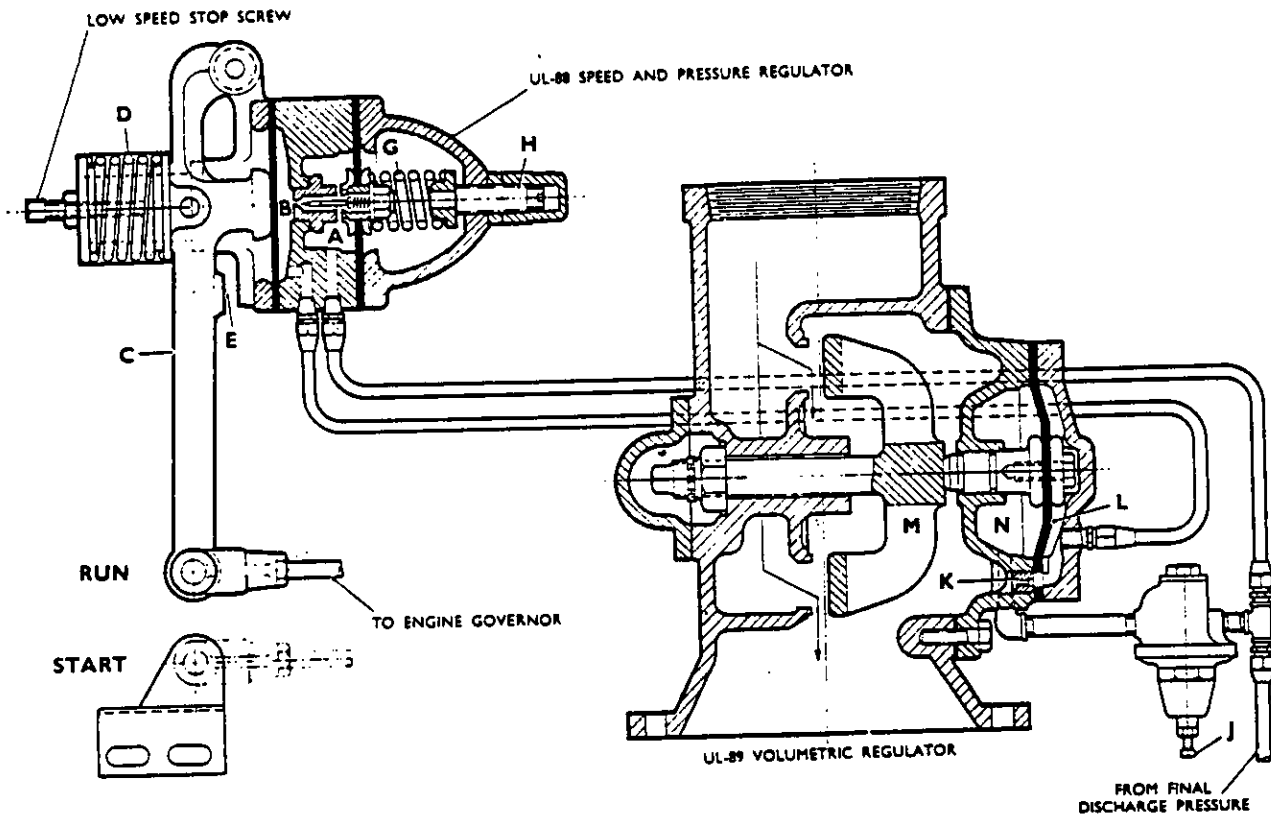


Fig. 17 —UL-88 Speed and Pressure Regulator, UL-89 Volumetric Regulator and Pressure Reducing Valve.

REGULATION

100% regulation is provided for by a proportional speed reduction from full capacity down to approximately 60% capacity, and a combination of further speed reduction with volumetric regulation of the compressor for capacities from 60% down to zero capacity.

The total effect is accomplished by the

UL-88 "Air Glide" Speed and Pressure Regulator in conjunction with the UL-89 Volumetric Regulator and a pressure reducing valve (see Fig. 17).

UL-88 "AIR GLIDE" SPEED AND PRESSURE REGULATOR (FIG. 18).

The UL-88 Speed and Pressure Regulator is an air pressure operated device consisting of a spring loaded diaphragm on

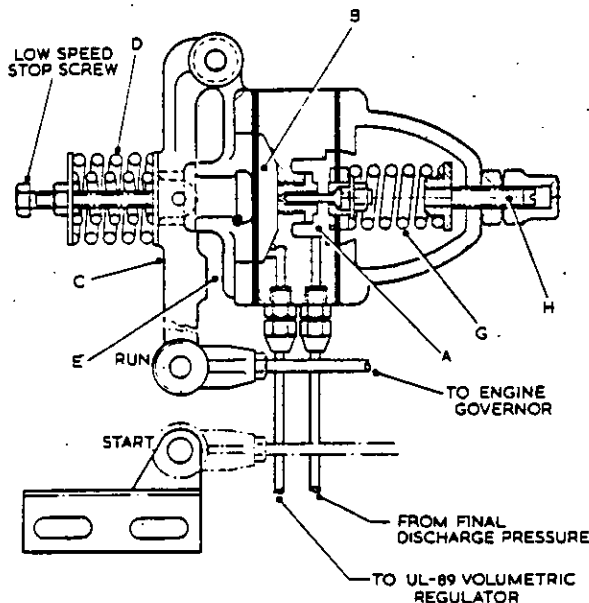


Fig. 18 — UL-88 Speed and Pressure Regulator with Fixed Starting Position Bracket as used on Diesel Engine Driven Compressor.

the opposite side of the same body. The central body forms two chambers "A" and "B", with a needle valve orifice located to pass air from one chamber to the other.

Chamber "A" is directly connected through tubing to the delivery end of the secondary oil separator and thus is subject to final discharge pressure at all times. Chamber "B" is connected through tubing to the operating diaphragm chamber "L" (Fig. 17) of the UL-89 Volumetric Regulator, where a small orifice "K" is provided to bleed off a portion of the regulating air to give range control to the system.

The spring loaded diaphragm of chamber "A" controls the positioning of the orifice needle, thus controlling the amount of pressure passing from chamber "A" to chamber "B". A spring-loaded lever "C" (Fig. 18) is so arranged against the chamber "B" diaphragm that movement of this diaphragm is multiplied, and conveyed by linkage, to the engine governing system.

The pressure in chamber "B" will always be less than in chamber "A" because of the throttling effect of the needle valve orifice and the fact that, when less than full capacity is being used and the discharge pressure is above the set pressure, chamber "B" pressure is then constantly bleeding off through

the small vent "K" in the UL-89 Volumetric Regulator. Thus, when final discharge pressure (and chamber "A" pressure) is sufficient to cause the diaphragm to raise the needle valve off its seat, chamber "B" pressure will slowly raise and gradually overcome tension of spring "D" and move lever "C" to cause speed reduction of the engine and compressor.

Since spring "D" is designed to be stronger than the engine governor spring, lever "C" will be held against the stop "E" as long as there is insufficient pressure in chamber "B" to overcome the difference in balance between spring "D" and the engine governor spring. Therefore, the engine will operate at full rated speed as long as the pressure in chamber "A" is insufficient to raise the needle valve.

The tension of spring "G" on the needle valve diaphragm is so adjusted by screw "H" that no lever movement occurs until final discharge pressure has reached 100 psi (7.03 kg./sq. cm.) (or whatever set pressure between 90 psi (6.33 kg./sq. cm.) and 110 psi (7.73 kg./sq. cm.) is desired in accordance with the tools being operated). Do not attempt to adjust below 90 psi (6.33 kg./sq. cm.) or above 110 psi (7.73 kg./sq. cm.).

If the air demand is less than the full capacity of the compressor, causing the final discharge pressure and chamber "A" pressure to rise above 100 psi (7.03 kg./sq. cm.), then movement of the needle valve will permit sufficient air to pass to chamber "B" to overcome the bleed loss. This will build up enough pressure to move lever "C" in an infinitely variable manner from the full speed position to a reduced speed just sufficient to meet the reduced air demand. This speed and capacity change, from 100% down to 60% capacity, occurs within an approximate pressure increase of six pounds (from 100 psi (7.03 kg./sq. cm.) to 106 psi (7.45 kg./sq. cm.)), during which the speed will drop from full speed (1,800 RPM) down to approximately 1,100 RPM.

On further reduction of air demand, the final discharge pressure will rise above 106 psi, lifting the chamber "A" needle valve still more and further increasing the pressure in chamber "B" whereupon two controlling functions occur simultaneously.

REGULATION

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1. Since movement of lever "C" continues with further increase of pressure in chamber "B", there will be additional speed reduction, which, carried to its full limit, will reduce the speed proportionately from 1,100 RPM approximately down to 800 RPM. The low speed limit is adjusted by the low speed stop screw on the engine governor. It limits the movement of the governor spring lever or the regulator lever in this direction.
2. At the same time, the increase in chamber "B" pressure, which is also effective on the operating diaphragm (Fig. 17) of the UL-89 Volumetric Regulator, is now sufficient to start closing the intake regulator valve "M". Here again the closing of the valve is in an infinitely variable manner and the resulting capacity of the unit is progressively reduced.

The combined effect of functions (1) and (2) is such that the capacity of the unit is reduced from 60% capacity to zero capacity while the final discharge pressure is rising from 106 psi to 110 psi.

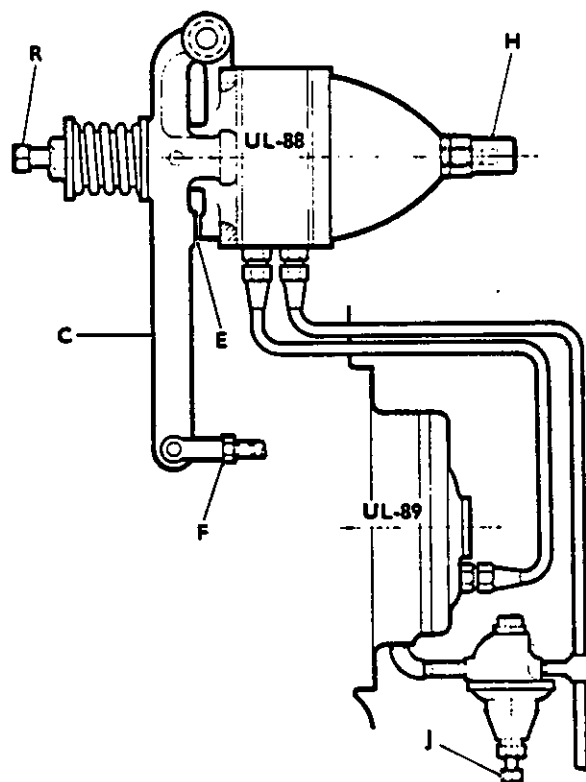
Complete regulation therefore has occurred within a pressure range of approximately 10 psi (.703 kg./sq. cm.) and in an infinitely variable or stepless manner. (See Speed and Volumetric Regulation Diagrams, Figs. (20 and 21).

UL-89 VOLUMETRIC REGULATOR (Fig.17)

The UL-89 Volumetric Regulator consists of an intake housing equipped with a port and a diaphragm operated valve "M". The diaphragm chamber "L" receives its operating pressure from the UL-88 Speed and Pressure Regulator as explained before.

ADJUSTING INSTRUCTIONS UL-88 AIR-GLIDE REGULATOR

NORMALLY REGULATION REQUIRES NO SERVICING, BUT IF PROPER ADJUSTMENT IS LOST PROCEED AS FOLLOWS:-



FIRST-With discharge pressure held at 100 lbs., adjust screw "H" so that lever "C" remains against stop "E".

SECOND-Adjust length of link rod at "F" to hold engine at 1,800 RPM at 100 psi (7.03 kg./sq. cm.) pressure and lock adjustment "F".

THIRD-Readjust screw "H" so that lever "C" is just starting to leave stop "E". Lock adjustment "H".

FOURTH-Raise discharge pressure slowly and when engine RPM has dropped to approximately 1,100 RPM, turn adjusting screw "J" "in" and note the highest interstage pressure obtainable, then unscrew adjustment "J" until interstage pressure starts to fall. Lock adjustment "J".

FIFTH-Close service valves completely and adjust "LOW SPEED" Stop Screw to hold 800 RPM minimum speed (Low Speed Stop Screw on UL-88 at R.) (See instruction book for possible variation of setting "H" for other operating pressure ranges to suit certain tools or work.)

Fig. 19 - UL-88 Air Glide Regulator Instruction Plate.

Balancing control of the diaphragm is obtained by holding a fixed pressure in chamber "N". This is accomplished by use of an air pressure reducing valve "J" connected to the final discharge pressure at the oil separator. This pressure reducing valve is adjusted to maintain a pressure in chamber "N" sufficient to prevent movement of the regulator diaphragm (and the valve) until the pressure in chamber "B" and "L" has increased to a predetermined value. By this means, it is evident that compressor volumetric regulation can be started at any desired point on the capacity reduction curve, such as 60%. From there on it will become progressively more effective as the air demand decreases and the pressure in chamber "L" increases above the balancing point.

ADJUSTMENTS FOR SPEED AND PRESSURE

MAXIMUM RATED SPEED (Fig. 21)

With final pressure held at 100 psi (7.03 kg./sq. cm.) and governor link rod attached to UL-88 lever arm, adjust screw "H" so that lever "C" remains firmly against stop "E". Then adjust the length of link rod "F" to maintain full rated speed of 1,800 RPM.

MINIMUM LOW SPEED

Close service valve causing final pressure to increase and complete unloading to occur (zero delivery). Then adjust low speed stop screw on the UL-88 Regulator to hold engine at 800 RPM.

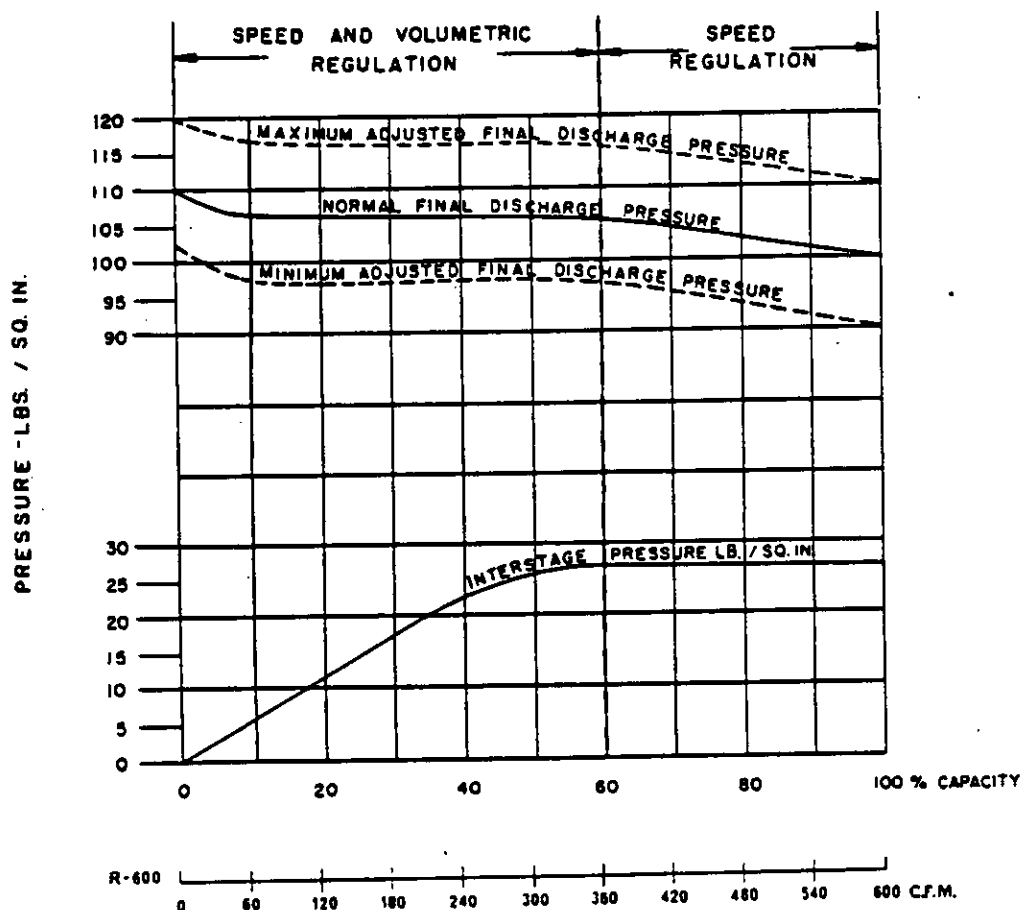


Fig. 20—Capacity-Pressure Chart.

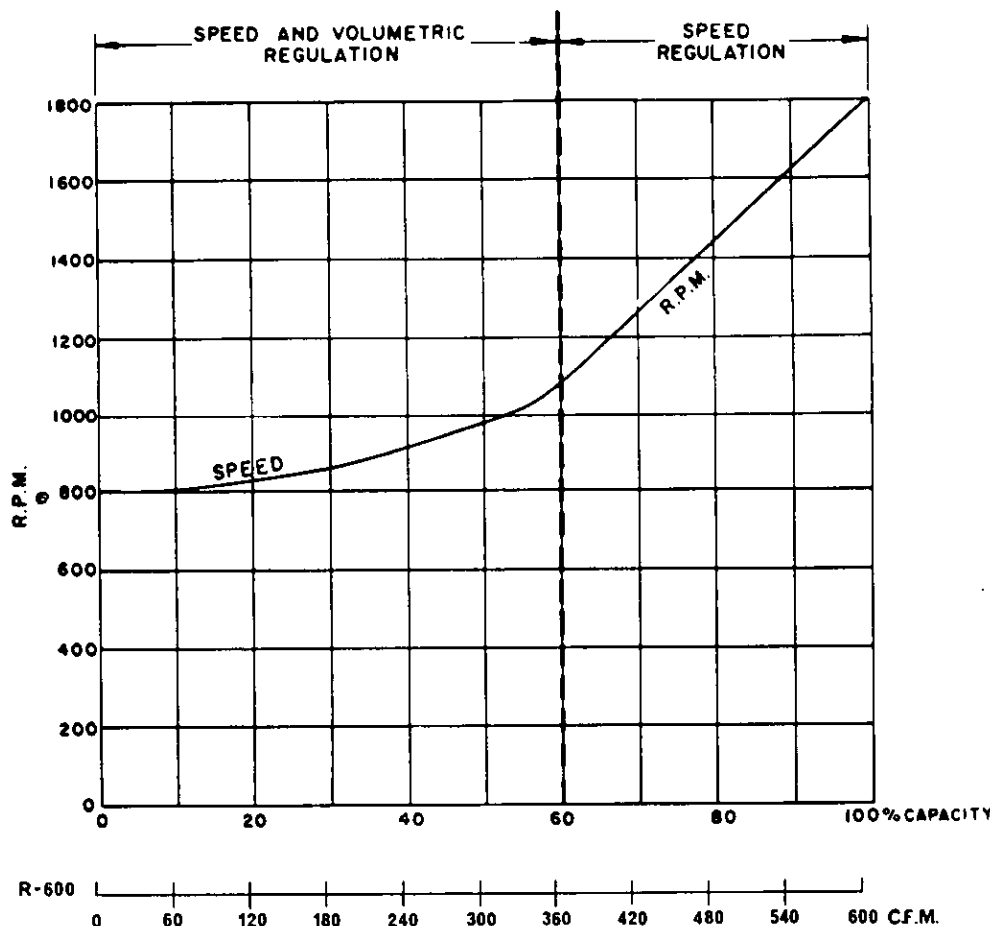


Fig. 21—Capacity-Speed Chart.

START OF SPEED REGULATION

Hold final pressure at 100 psi and re-adjust screw "H" so that lever "C" is just leaving stop "E". (Speed starts to fall off if pressure is raised above 100 psi.)

CHANGING PRESSURE RANGE

By simple readjustment of screw "H" (Fig. 19), the start of regulation can be raised or lowered from the normal 100 psi setting. This enables the operator to select an average operating pressure suitable for the tools being operated, or to compensate for pipe line loss to a certain extent where long lines must be used. Do not attempt to adjust for more than plus or minus 10% from the normal 100 lb. setting.

CHANGING PRESSURE RANGE

By simple readjustment of screw "H" Fig. 19, the start of regulation can be raised or lowered from the normal 100 psi setting. This enables the operator to select an average operating pressure suitable for the tools being operated, or to compensate for pipe line loss to a certain extent where long lines must be used. Do not attempt to adjust for more than plus or minus 10 per cent from the normal 100 lb. setting.

UL-89 REGULATOR VALVE TRAVEL ADJUSTMENT

Should it be necessary to dismantle the regulator for any reason, when reassembling the maximum travel of valve "M" Fig.18 should be held to the following dimensions:-

Desired travel 5/16"

Tolerance + 1/32" - 0".

The Model DR -600 Gyro-Flo Compressor is manufactured with the finest quality material. Years of research and experience have been combined with quality workmanship and careful inspection to provide many years of dependable trouble-free operation.

The section, which contains an illustrated parts breakdown, has been carefully prepared as an aid in locating those parts which may be required in the maintenance of the unit. All of the compressor parts, listed in the parts breakdown, are manufactured with the same precision as the original equipment. For the greatest protection, always insist on Ingersoll-Rand Company parts for your compressor.

Ingersoll-Rand Company service facilities and genuine parts are available worldwide. There are Ingersoll-Rand Company Branch Offices, and authorized distributors, conveniently located in the principal cities of the United States and throughout the free world. Each branch office, or authorized distributor, is thoroughly equipped with a full and adequate supply of genuine Ingersoll-Rand Company parts. For faster and better service, your parts requirements should be ordered from your nearest Ingersoll-Rand Company Branch Office or authorized distributor. A list of branch offices will be found in the rear of this publication. Each branch office is ably equipped to provide technical assistance with prompt, intelligent, and courteous service, either through correspondence or personal contact.

All parts orders pertaining to the diesel engine should be referred to your nearest Engine Company, authorized distributor. Correspondence concerning the diesel engine should always include the engine serial and model number as well as the type number of the components being ordered.

One complete set of instruction books and parts lists covering both the compressor and engine is shipped with each compressor. Additional copies of the compressor literature may be obtained from your nearest Ingersoll-Rand Company Branch Office or authorized distributor. For additional copies of the engine literature, consult your nearest Engine Company, authorized distributor.

INTRODUCTION

The illustrated parts breakdown illustrates, lists and describes the various assemblies, sub-assemblies and detail parts which make up the Model DR.-600 Air Compressor. Each group of parts is accompanied by an illustration which shows each individual part as clearly as possible and in its correct location relative to the other parts in the illustration. Reference numbers only are used on each illustration. These numbers correspond to those in the illustration number column in the list of parts which follows each illustration.

Each illustration is followed immediately by a listing of the component parts. These component parts are listed in numerical order according to the number shown in the illustration.

A special feature of this parts listing is a system of identifying those parts which are included with an assembly or with other parts. The included part, or parts, is denoted by being indented from the previous item. When a part is ordered that has an indented item, or items, following the parts, the indented items are always included with that part. Indented items may also be ordered individually.

There are a number of items in the parts listing that are located on the rear or front of the unit, or that are identified as being either right hand or left hand parts. These

parts are modified with the necessary descriptive information to properly identify them. In referring to the rear, the front or to either side of the unit, always consider the receiver-separator as the rear of the unit. Standing at the rear of the unit facing the receiver-separator, will determine the right and left sides.

The right hand columns show both the part number, and the quantity of each item. The quantity given is the total quantity required per assembly or per group of parts.

HOW TO ORDER

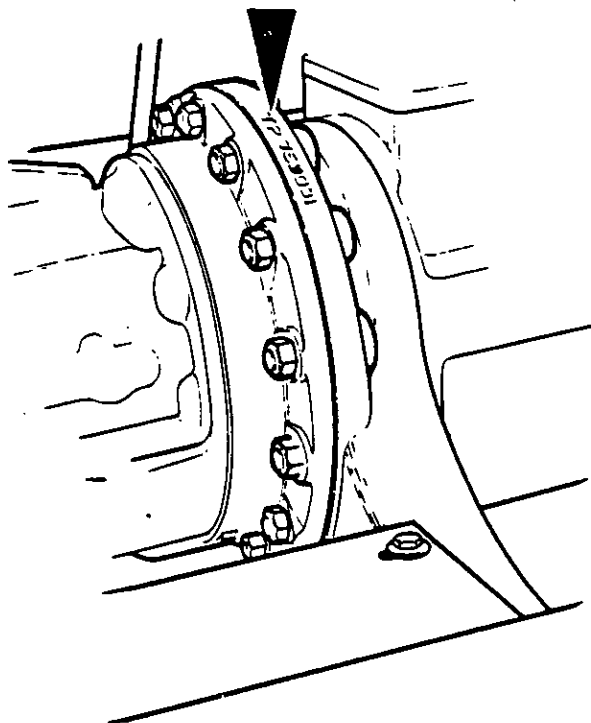
The satisfactory ordering of parts by a purchaser is greatly dependent upon the proper use of all available information. By supplying your nearest Ingersoll-Rand Company Branch Office, or authorized distributor, with complete information, you will enable them to fill your order correctly and avoid any unnecessary delays. In order that all avoidable errors may be eliminated, the following instructions are offered as a guide to the purchaser when ordering replacement parts.

- a. Always specify the model number of the unit as shown on the model plate attached to the housing.
- b. Always specify the serial number of the unit. This is very important. The serial number of the unit will be found stamped on a brass instruction plate attached to the housing. The serial number of the that will also be found stamped in the metal on the top edge of the L. P. Inner Bearing Housing.
- c. Always specify the form number of this publication.
- d. Always specify the description of the part, or parts, as well as the part number exactly as it is given in the parts listing. Do not order a part, or parts, using the illustration number.
- e. Never use such terms as "Assembly", "Complete", or "Sets" unless these terms appear specifically in the parts listing.
- f. Always specify the quantity of parts required.

In the event parts are being returned to your nearest Ingersoll-Rand Company Branch Office, or authorized distributor, for inspection or repair, it is extremely important to include the serial number of the unit from which the parts were removed. This is necessary if the branch or distributor is to take care of your order promptly.

Engine parts must be ordered from your nearest Engine Company, authorized distributor.

Location of Serial Number.



PARTS LIST

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SPARE PARTS

Special selections of spare parts have been prepared as insurance against prolonged shut-down periods. These selected parts, called spare parts boxes, are shown itemized in the rear of this section. The contents of each spare parts box are carefully selected so as to provide maximum protection for the unit with a minimum number of parts. Three sizes of spare parts boxes, ranging from small to extra large, are available. The small spare parts box is suitable for minimum domestic use while the large is suitable for average domestic use or for minimum export use. The extra large spare parts box is suitable to maintain up to five units, domestically; or up to two units in foreign countries, or in remote locations, where transportation facilities may be slow.

Page 25 will give you the correct part numbers and the contents of each box in the event they were not obtained at the time the compressor was purchased.

Spare Parts
(Not Illustrated)

Part No.	Name of Part
R600P150	Air End Complete (Includes: Low Pressure Cylinder Assembly, Part Number R600P185; High Pressure Cylinder Assembly, Part Number TR600P175 and Lubricating Oil Pump Assembly, Part Number TR600P225
T2R600P750	Complete Set of Gaskets and "O" Rings.

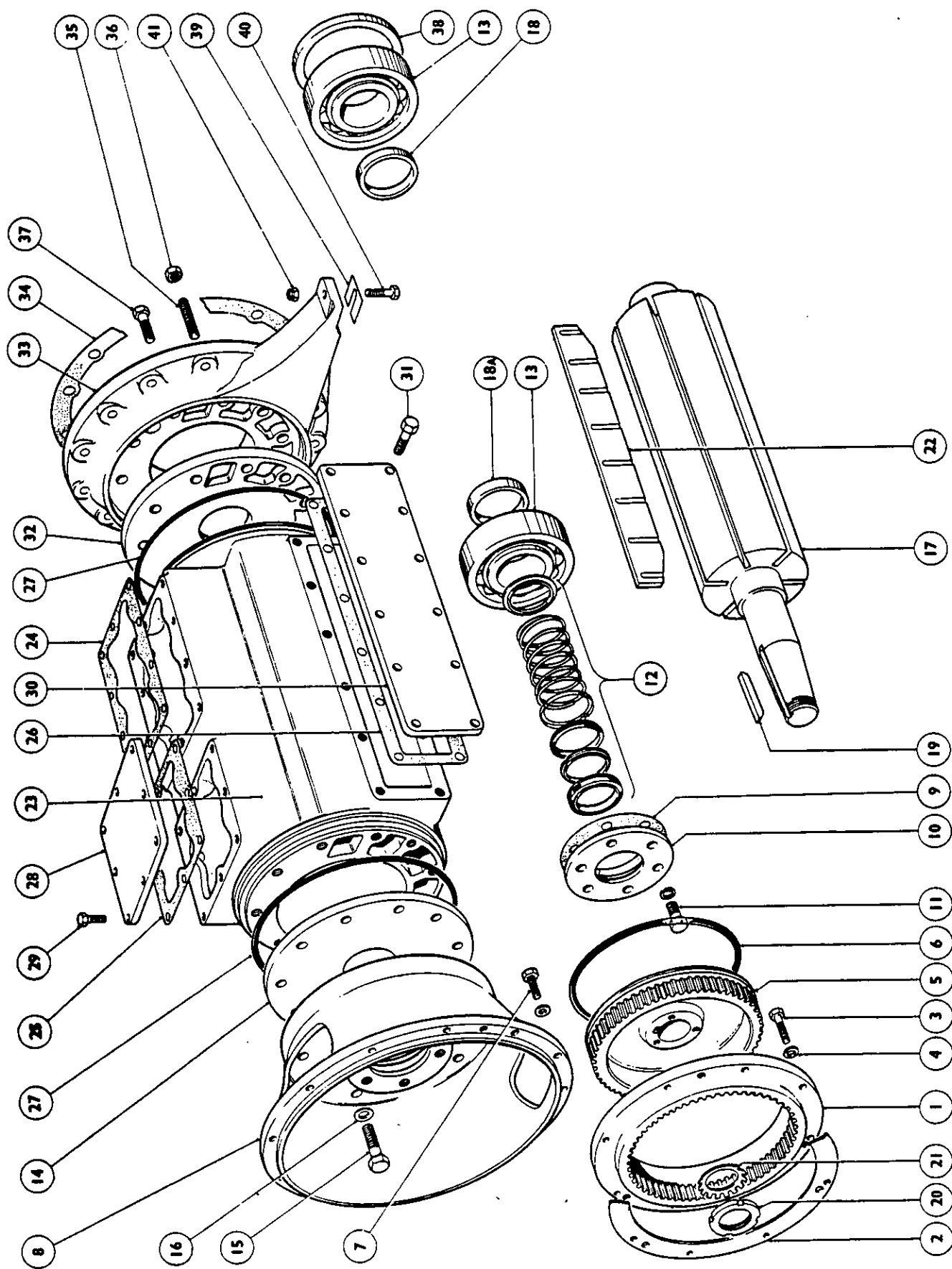
L. P. OUTER BEARING HOUSING & CYLINDER

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ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
1	Compressor Coupling Drive Gear.....	2H11192	1
2	Compressor Coupling Drive Gear Gasket	2W30236	1
3	Drive Gear and Flywheel Set Screw.....	3/8"-16x1 1/4"	8
4	Set Screw Lockwasher	3/8"	8
5	Compressor Coupling Driven Gear.....	002H11193	1
6	Compressor Coupling Driven Gear "O" Ring.....	00X1514T449C	1
7	Compressor to Engine Set Screw.....	003/8" - 16x1"	12
*	L. P. CYLINDER COMPLETE.....	00R600P185	1
8	L. P. Outer Bearing Housing - Front	00T2H11205	1
9	Rotary Shaft Cover Gasket.....	002W30333	1
10	Rotary Shaft Seal Cover.....	002W30280	1
9	Rotary Shaft Seal Cover Gasket.....	002W30333	1
11	Rotary Shaft Seal Cover Screw.....	00 1/2"-13 x 1 1/4"	6
12	Rotary Shaft Seal.....	002W21790	1
*	L. P. Front Bearing Retaining Washer.....	002W30354	1
13	Roller Bearing.....	002W41015	2
14	L. P. Cylinder Outer Plate-Engine End.....	002R26580	1
15	Bearing Housing to L. P. Cylinder Set Screw	005/8"-11x2 1/4"	10
16	L. P. Outer Bearing Housing Washer	00X1016T47	10
17	L. P. ROTOR.....	00T2H11535TP	1
18	L. P. Rotor Bearing Spacer (Bronze).....	002W32595	1
18A	L. P. Rotor Bearing Spacer (Steel).....	002W48933	1
19	Compressor Coupling Drive Gear Key.....	00X1495T4	1
20	Compressor Coupling Lock Nut.....	002W26552	1
21	Compressor Coupling Lock Washer	002W26554	1
22	L. P. Rotor Vane (Set consists of 8).....	00R600P110	1
23	L. P. CYLINDER.....	00T2F9126	1
24	UL89 Regulator Body Gasket.....	2H11261	1
25	L. P. Cylinder Top Cover Gasket.....	002W40747	1
26	L. P. Cylinder Side Cover Gasket.....	002R16490	1
27	Bearing Housing to Cylinder "O" Ring.....	00X1514T453C	2
28	L. P. Cylinder Top Cover	002W40746	1
25	L. P. Cylinder Top Cover Gasket.....	002W40747	1
29	L. P. Cylinder Top Cover Set Screw.....	005/8"-11x1 1/4"	8
30	L. P. Cylinder Side Cover	002R16489	1
26	L. P. Cylinder Side Cover Gasket.....	002R16490	1
31	L. P. Cylinder Side Cover Set Screw.....	00 1/2"-13x1 1/4"	12
32	L. P. Cylinder Inner Plate.....	002R16415	1
33	L. P. Inner Bearing Housing.....	002H11541	1
34	L. P. Inner Bearing Housing Gasket.....	002H11217	1
35	L. P. Inner Bearing Housing Stud.....	00T2V4586-4	14
36	L. P. Inner Bearing Housing Stud Nut.....	005/8" - 11	14
37	Housing to L. P. Cylinder Set Screw.....	005/8"-11x2 1/4"	10
38	Inner Bearing Spacer - Outer Ring	002W30345	1
39	L. P. Inner Bearing Housing Shim-Set.....	00X1406T18	1
40	Compressor to Frame Set Screw.....		2
41	Compressor to Frame Set Screw Lock Nut.....		2

*Not Illustrated.

Always give the serial number of your compressor.

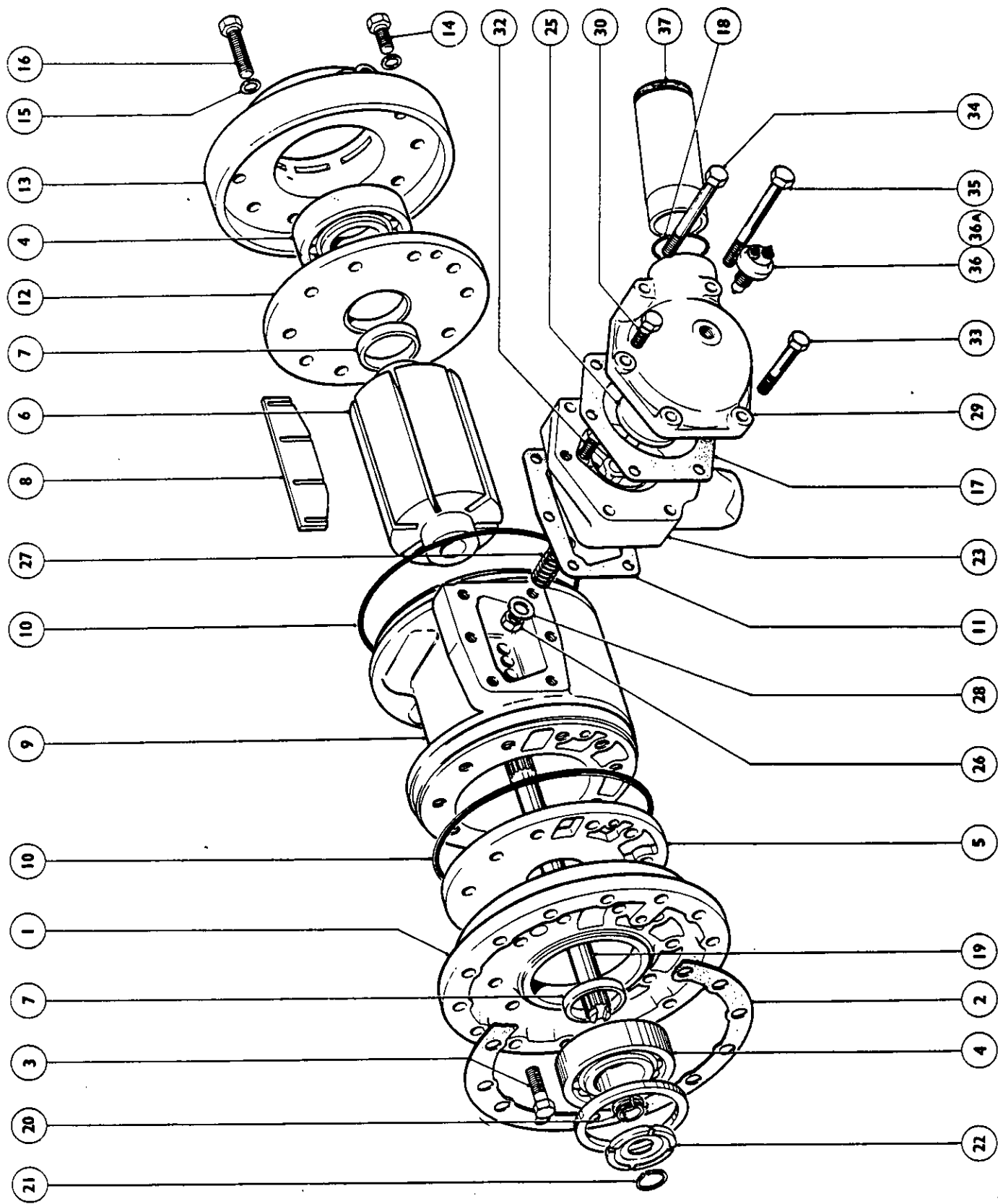


H.P. CYLINDER & DISCHARGE CHECK VALVE July/68.

ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
*	H. P. CYLINDER COMPLETE.....	00TR600P175	1
1	H. P. Inner Bearing Housing.....	002H11542	1
2	Inner Bearing Housing Gasket.....	002H11217	1
3	Bearing Housing to H. P. Cylinder Set Screw.....	005/8"-11 x 2 $\frac{1}{4}$ "	10
4	Roller Bearing	002W41015	2
5	H. P. Cylinder Inner Plate	002R16415	1
6	H. P. Rotor.....	002H11534	1
7	H. P. Rotor Bearing Spacer.....	002W32595	2
8	H. P. Rotor Vanes (Set consists of 8).....	00R600P115	1
9	H. P. Cylinder.....	00T2F7017	1
10	Bearing Housing to H. P. Cylinder "O" Ring.....	00X1514T453-C	2
11	Check Valve Gasket.....	2W26605	1
12	H. P. Cylinder Outer Plate.....	002R16416	1
13	H. P. Outer Bearing Housing	002R16427	1
14	Housing to H. P. Cylinder Set Screw.....	005/8"-11 x 2 $\frac{1}{4}$ "	8
15	Bearing Housing Steel Washer.....	00X1016T47	10
16	Bearing Housing to H. P. Cylinder Set Screw.....	005/8"-11 x 3 $\frac{1}{2}$ "	2
17	H. P. Discharge Elbow Cover Gasket.....	2W30386	1
18	H. P. Discharge Pipe "O" Ring	00X1514T336-C	1
*	Oil Pump Body to Bearing Housing "O" Ring	00X1514T259-C	1
19	H. P. Rotor Drive Shaft.....	002H11536	1
20	H. P. Inner Bearing Spacer Support	002W57549	1
21	Inner Bearing Spacer Snap Ring - Centre.....	002W30393	1
22	H. P. Inner Bearing Spacer - Inner Ring.....	002W57550	1
*	H. P. Outer Bearing Snap Ring - Rear.....	002W30356	1
*	CHECK VALVE COMPLETE.....	T2H11273TP	1
23	H. P. Discharge Check Valve Body.....	T2H11273	1
11	Check Valve Gasket.....	2W26605	1
17	H. P. Discharge Elbow Cover Gasket	2W30386	1
25	H. P. Discharge Check Valve.....	2W37859	1
26	H. P. Discharge Check Valve Lock Nut.....	$\frac{1}{2}$ " - 13	1
27	H. P. Discharge Check Valve Spring.....	PP760	1
28	H. P. Discharge Check Valve Spring Washer	2W37123	1
29	H. P. Check Valve Elbow	2F6588	1
17	H. P. Discharge Elbow Cover Gasket.....	2W30386	1
18	H. P. Discharge Pipe "O" Ring	X1514T336-C	1
30	H. P. Discharge Elbow Cover Set Screw.....	$\frac{1}{2}$ " - 13 x 2"	2
32	Check Valve Body to H. P. Cylinder Set Screw (Allen Head).....	$\frac{1}{2}$ " - 13 x 1 $\frac{1}{4}$ "	2
33	H. P. Discharge Elbow to H. P. Cylinder Set Screw....	$\frac{1}{2}$ " - 13 x 3 $\frac{3}{4}$ "	2
34	H. P. Discharge Elbow to H. P. Cylinder Set Screw....	$\frac{1}{2}$ " - 13 x 5 $\frac{1}{2}$ "	1
35	H. P. Discharge Elbow to H. P. Cylinder Set Screw....	2W32671	1
36	H. P. Check Valve Temperature Switch	2R17460	1
37	H. P. Discharge Pipe	T2W30404	1
18	H. P. Discharge Pipe "O" Ring	X1514T336-C	1

*Not Illustrated

Always give the serial number of your compressor.



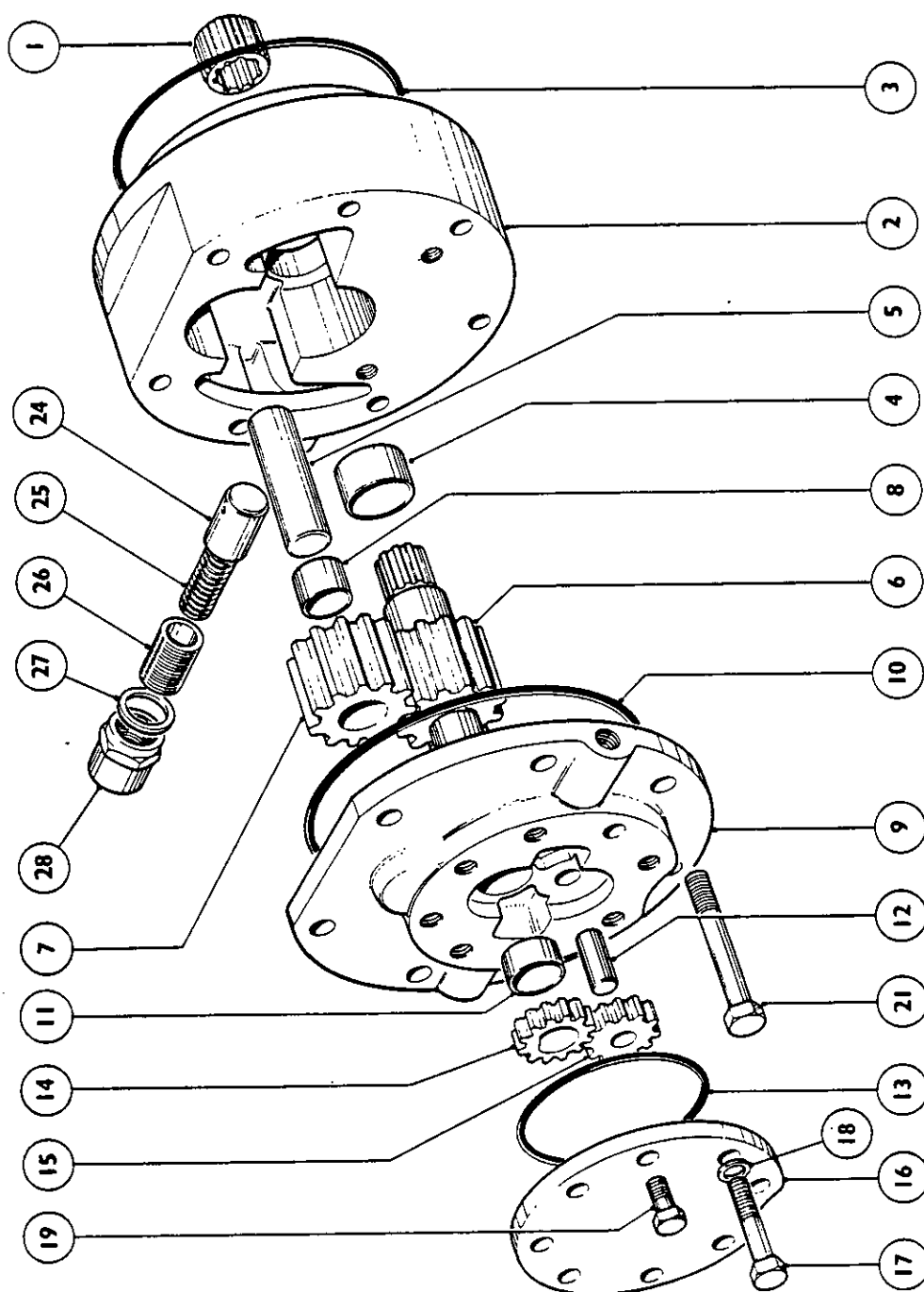
LUBRICATING OIL PUMP

July/68

ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
*	LUBRICATING AND SCAVENGING OIL PUMP COMP..	00 TR600P225	1
1	Lubricating Oil Pump Drive Coupling	00 2H11265	1
2	Lubricating Oil Pump Body	00 T2H11219P1	1
3	Oil Pump Body to Housing "O" Ring	00 X1514T259-C	1
4	Lubricating Oil Pump Gear Bushing-Inner	00 2W30365	1
5	Lubricating Oil Pump Driven Gear Shaft	00 2W30363	1
6	Lubricating Oil Pump Drive Gear	00 2H11268	1
7	Lubricating Oil Pump Driven Gear	00 2W30352	1
8	Oil Pump Driven Gear Bushing	00 2W26166	1
9	Scavenging Oil Pump Body	00 T2H11220	1
10	Scavenging to Lubricating Oil Pump "O" Ring	00 X1514T260-C	1
11	Oil Pump Drive Gear Bushing - Outer	00 2W30371	1
12	Scavenging Oil Pump Driven Shaft	00 2W30364	1
13	Scavenging Oil Pump Cover "O" Ring	00 X1514T239-C	1
14	Scavenging Oil Pump Drive Gear	00 2W24686	1
15	Scavenging Oil Pump Driven Gear	00 2W20175	1
16	Scavenging Oil Pump Cover	00 2W30301	1
13	Scavenging Oil Pump Cover "O" Ring	00 X1514T239-C	1
17	Scavenging Oil Pump Cover Set Screw	00 3/8" - 16 x 2 1/4"	2
18	Scavenging Oil Pump Cover Steel Washer	00 X1016T90	2
19	Scavenging Oil Pump Cover Set Screw	00 3/8" - 16 x 1"	6
21	Oil Pump to H. P. Cylinder Set Screw	00 1/2" - 13 x 3 3/4"	7
*	Lubricating Oil Pump By-Pass Valve Complete	2W32599T	1
24	Lubricating Oil Pump By-Pass Valve - Bare	2W32599	1
25	Lubricating Oil Pump By-Pass Valve Spring	PP761	1
26	By-Pass Valve Spring Adjuster	2W32601	1
27	By-Pass Valve Gasket	X1014T52	1
28	By-Pass Valve Spring Adjuster Lock Nut	2W32602	1

*Not Illustrated

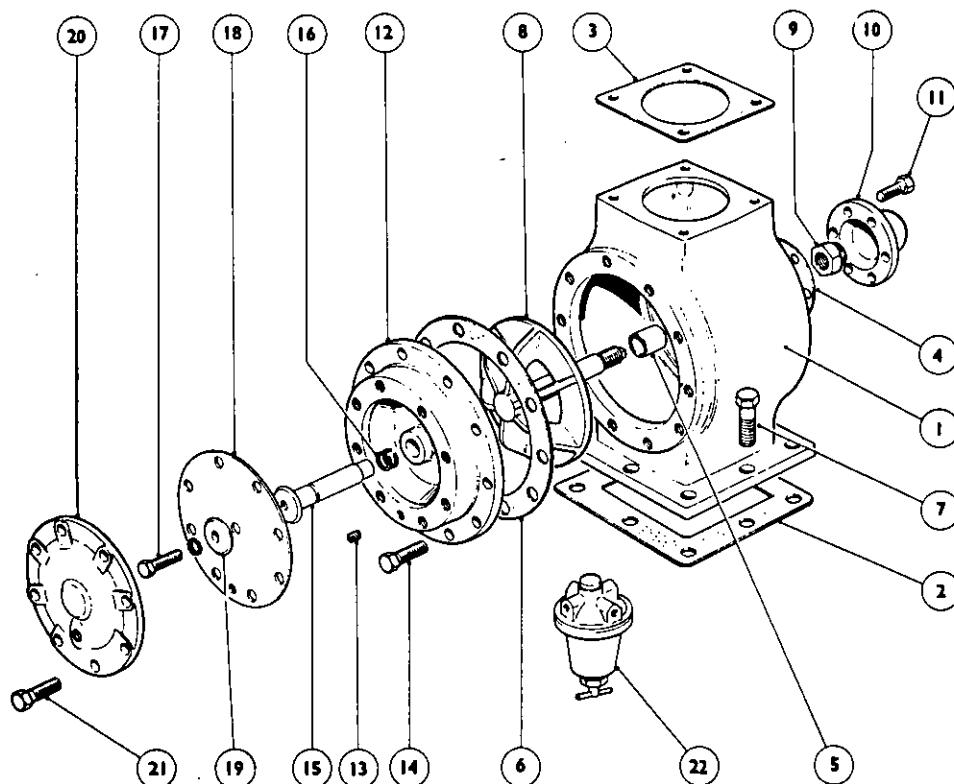
Always give the serial number of your compressor.



Lubricating Oil Pump

UL89 VOLUMETRIC REGULATOR

July/68.



ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
*	UL89 VOLUMETRIC REGULATOR COMPLETE.....	TUL89R600B	1
1	UL89 Volumetric Regulator Body.....	T2F8652	1
2	UL89 Volumetric Body Gasket.....	2H11261	1
3	Compressor Air Inlet Elbow Gasket.....	2G6462	1
4	UL89 Volumetric Regulator Valve Nut Cover Gasket.	2W30340	1
5	UL89 Volumetric Regulator Valve Bushing	2W35026	2
6	UL89 Volumetric Regulator Diaphragm Body Gasket	2W32670	1
7	UL89 Volumetric Regulator Body Set Screw	5/8" - 11 x 1 1/2"	10
8	UL89 Volumetric Regulator Valve	2H11252	1
9	UL89 Volumetric Regulator Valve Lock Nut.....	1"-8	1
10	UL89 Volumetric Regulator Valve Nut Cover.....	2W30327	1
4	UL89 Volumetric Regulator Valve Nut Cover Gasket.	2W30340	1
11	Valve Nut Cover Set Screw	3/8" - 16 x 1"	6
12	UL89 Volumetric Regulator Diaphragm Body	T2H11583	1
6	UL89 Volumetric Regulator Diaphragm Body Gasket.	2W32670	1
13	Diaphragm Body Orifice Plug	X1080T38	1
14	Diaphragm Body Set Screw	1/2"-13 x 1 1/4"	10
15	UL89 Volumetric Regulator Diaphragm Piston.....	2W32648	1
16	UL89 Volumetric Regulator Diaphragm Piston Ring .	X1440T9A	2
17	UL89 Retaining Plate Set Screw & L. W.....	1/2"-13 x 1"	1
18	UL89 Volumetric Regulator Diaphragm	2W32669	1
19	UL89 Regulator Retaining Plate	2W32613	1
20	UL89 Volumetric Regulator Diaphragm Cover	T2R18029	1
21	Diaphragm Cover Set Screw	1/2" - 13 x 1 1/2"	8
22	UL89 Volumetric Regulator Reducing and Relief Valve ..	T2W41121	1

* Not Illustrated.

Always give the serial number of your compressor.

UL88 REGULATOR

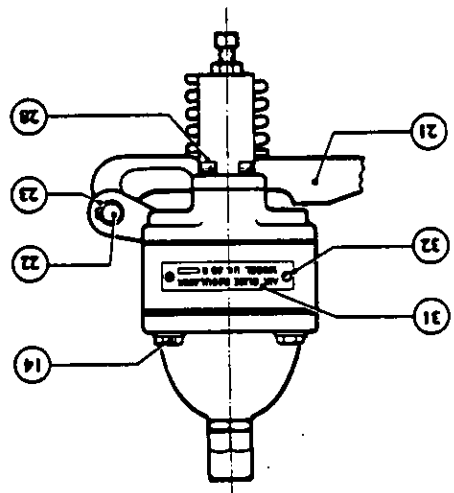
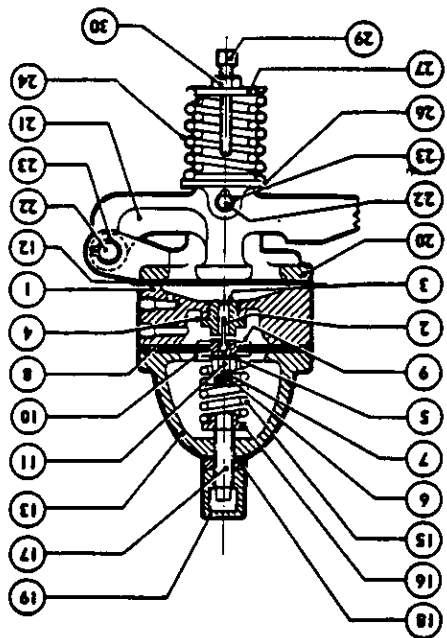
July/68.

ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
*	UL88 SPEED AND PRESSURE REGULATOR COMPLETE.	T2UL88R210B	1
1	UL88 Regulator Body	T2U183-2A	1
*	UL88 Regulator Repair Kit	UL88-R85	1
2	UL88 Regulator Metering Pin	UL88-5B	1
3	UL88 Regulator Metering Pin Seat	UL88-6B	1
4	UL88 Regulator Metering Pin Seat Gasket	UF1-31	1
5	UL88 Regulator Metering Pin Spring	PP607	1
6	UL88 Regulator Socket Head Set Screw	5/16"-24 x 3/8"	1
7	UL88 Regulator Set Screw Gasket	X1108T20	1
8	UL88 Regulator Top Cover Diaphragm	UL83-33A	1
9	UL88 Regulator Top Cover Diaphragm Bolt	UL88-7A	1
10	Top Cover Diaphragm Washer	1W1619P1	1
11	Top Cover Diaphragm Bolt Nut	UL88-9	1
12	UL88 Regulator Bottom Cover Diaphragm	UL88-3	1
13	UL88 Regulator Top Cover	UL83-40	1
14	UL88 Regulator Top Cover Set Screw	7/16"-14 x 2 3/4"	4
15	UL88 Regulator Pilot Valve Spring	PP412	1
16	UL88 Regulator Pilot Valve Spring Seat	UF1-38	1
17	UL88 Regulator Pilot Valve Adjusting Screw	UL83-39	1
18	Pilot Valve Adjusting Screw Lock Nut	XX15L	1
19	UL88 Regulator Pilot Valve Adjusting Screw Nut	UL83-42	1
20	UL88 Regulator Bottom Cover	UL88-65A	1
21	UL88 Regulator Lever	UL88-66C	1
*	UL88 Regulator Lever Bushing	UL88-69	1
22	UL88 Regulator Shaft	UL83-67	1
23	UL88 Regulator Retaining Ring	X1318T9	4
24	UL88 Regulator Range Spring - Outside	PP604	1
25	UL88 Regulator Range Spring - Inside	T2V4677	1
26	UL88 Regulator Range Spring Seat	UL88-73A	1
27	UL88 Regulator Range Spring Support	UL88-70B	1
28	UL88 Support Socket Head Set Screw	1/4"-20 x 3/4"	4
29	UL88 Regulator Minimum Speed Screw	5/16"-18 x 2 3/4"	1
30	Minimum Speed Screw Lock Nut	5/16" - 18	1
31	UL88 Regulator Name Plate	7A16X172	1
32	UL88 Regulator Name Plate Drive Screw	No. 2 x 1/4"	2

*Not Illustrated.

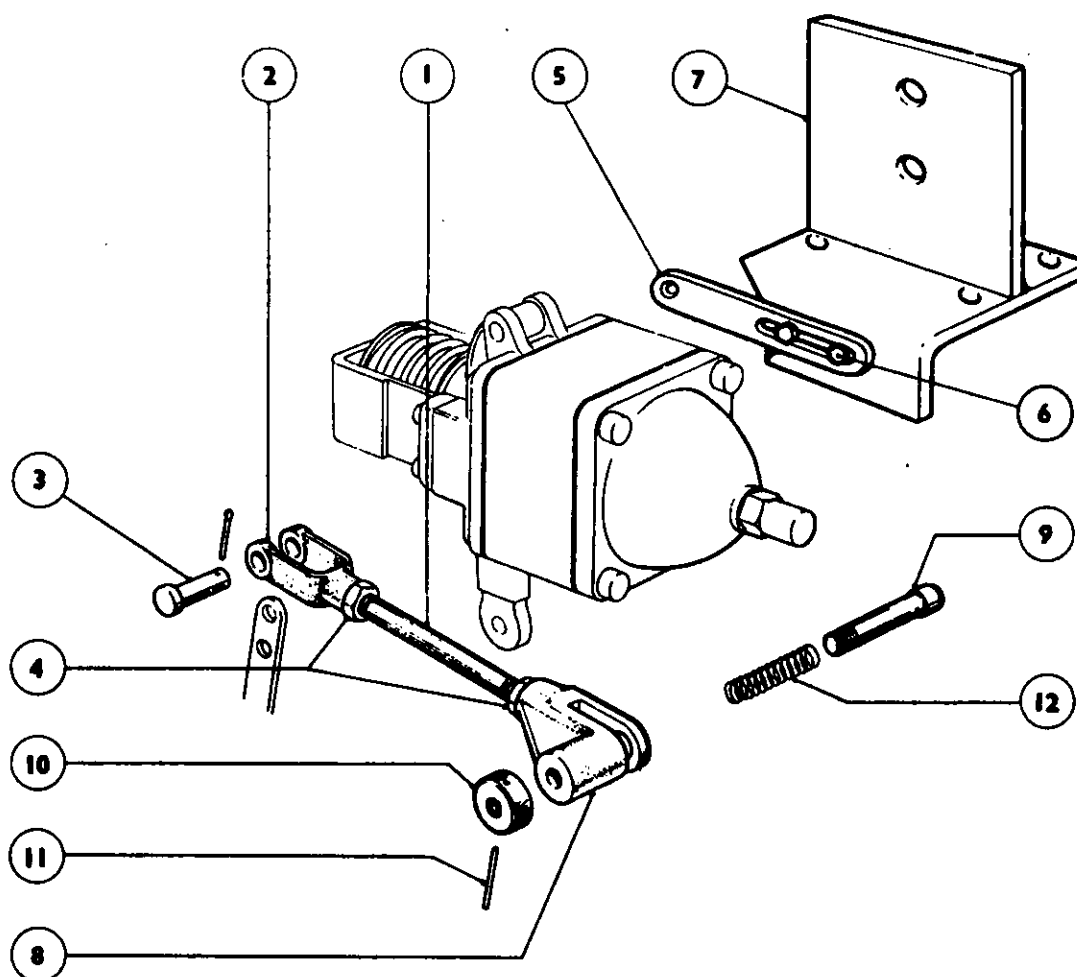
Always give the serial number of your compressor.

UL-88 Regulator



UL88 REGULATOR LINKAGE

July/68.



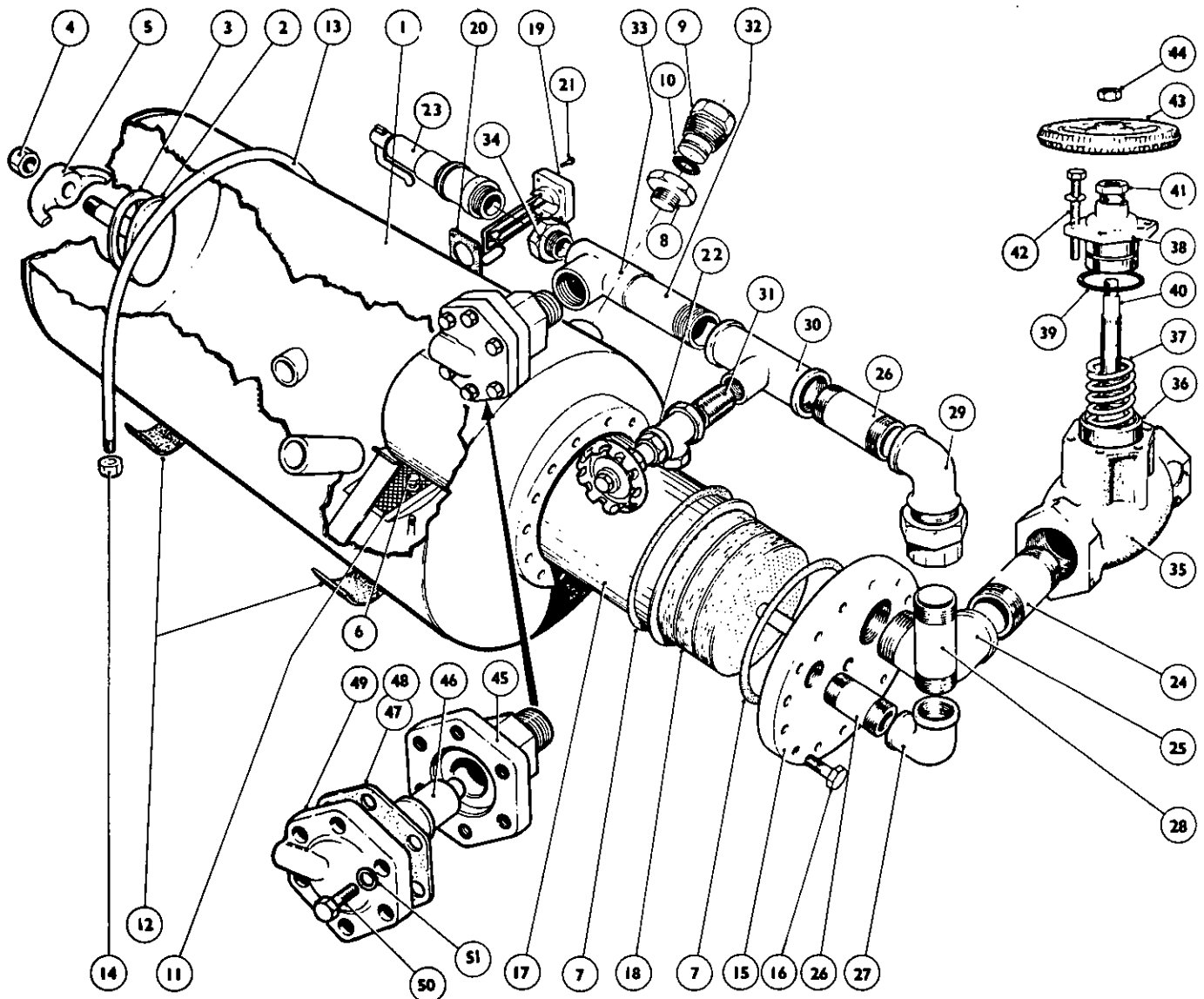
ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
1	UL88 Regulator Governor Lever Link Rod	T2V5089	1
2	UL88 Regulator Rod End Clevis	T97012ES	1
3	UL88 Regulator Rod End Clevis Pin	T73931	1
4	UL88 Regulator Rod End Lock Nut	5/16" - 24	2
5	UL88 Regulator Manual Speed Control Bracket....	T2V4989	1
6	UL88 Control Bracket Set Screw and Washer...	5/16" - 18 x $\frac{3}{4}$ "	2
7	UL88 Regulator Bracket.....	T2R2463	1
*	UL88 Regulator Manual Speed Latch Assembly....	T2W35049	1
8	UL88 Regulator Manual Speed Latch	T2V4544-1	1
9	UL88 Regulator Manual Speed Latch Pin.....	2W35046	1
10	UL88 Regulator Latch Plunger Pull Knob	2W43729	1
11	UL88 Regulator Latch Plunger Pull Knob Pin ..	.094" x $\frac{1}{2}$ "	1
12	UL88 Speed Latch Plunger Spring.....	PP232	1

* Not illustrated.

Always give the serial number of your compressor.

OIL SEPARATOR & MINIMUM PRESSURE VALVE

July/68.



ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
1	OIL SEPARATOR TANK.....	T2N1255	1
2	Oil Separator Hand Hole Cover.....	5" x 3½"	1
3	Oil Separator Hand Hole Gasket.....	5" x 3½"	1
4	Oil Separator Hand Hole Cover Nut.....		1
5	Oil Separator Hand Hole Cover Yoke.....		1
6	Oil Filter Screen Nut and Lock Washer.....	3/8" - 16	2
7	Oil Separator Shell to Tank Cover Gasket.....	T2V4776	2
8	Oil Filler Hole Adaptor.....	T2R22211	1

Always give the serial number of your compressor.

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ILLUS. No.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
9	Oil Filler Hole Plug.....	T2W30343	1
10	Oil Filler Plug "O" Ring.....	X1514T222C	1
11	Oil Filter Screen Assembly.....	2H15071	1
12	Oil Separator Tank Support Cushion.....	2½"x4½"x3/16"	4
13	Oil Separator Tank Strap.....	2W30138	2
14	Oil Separator Tank Strap Lock Nut.....	½" - 20	4
15	Oil Separator Cover.....	T2R21957	1
7	Oil Separator to Tank Cover Gasket.....	T2V4776	2
16	Oil Separator Cover Set Screw.....	¾" - 10 x 2¼"	14
17	Oil Separator Inner Shell.....	2R21921	1
7	Oil Separator Shell to Tank Cover Gasket.....	T2V4776	2
18	Screen Assembly with Packing.....	T2H11131T	1
7	Oil Separator Shell to Tank Cover Gasket.....	T2V4776	2
19	Oil Separator Tank Oil Level Gauge.....	2R17410	1
20	Oil Level Gauge Gasket.....	2W31890	1
21	Oil Level Gauge Set Screw.....	5/16"-18x7/8"	4
22	Angle Globe Valve..... B. S. P. T.	¾"	1
23	Safety Valve (Fig. 356)..... B. S. P. T. x PSI.	1¼" x 125	1
24	Pipe Nipple..... B. S. P. T.	3" x 9"	1
25	M. and F. Elbow (90°)..... B. S. P. T.	3"	1
26	Pipe Nipple..... B. S. P. T.	1¼" x 2½"	2
27	M. and F. Elbow (90°)..... B. S. P. T.	1¼"	1
28	Pipe Nipple..... B. S. P. T.	1¼" x 4¾"	1
29	Female Union Elbow (90°)..... B. S. P. T.	1¼"	1
30	Reducing Tee..... B. S. P. T.	1¼" x 1¼" x ¾"	1
31	Close Nipple..... B. S. P. T.	1¼"	1
32	Pipe Nipple..... B. S. P. T.	1¼" x 8"	1
33	Reducing Tee..... B. S. P. T.	1¼" x ½" x 1¼"	1
34	Reducing Bushing..... B. S. P. T.	½" x ¼"	1
*	MINIMUM PRESSURE VALVE COMPLETE.....	TR600P510	1
35	Valve Body.....	T2H15019	1
36	Valve.....	2R21851	1
*	Valve Ring.....	X1312T12	1
37	Valve Spring.....	2W37762	1
38	Valve Body Cover.....	2R21850	1
39	Valve Body Cover "O" Ring.....	X1514T233C	1
40	Valve Stem.....	2R21852	1
41	Valve Stem Retaining Nut.....	2W37764	1
42	Valve Body Cover Set Screw and Lock Washer.....	3/8" - 16 x 3"	6
43	Valve Hand Wheel.....	2R21680	1
44	Valve Hand Wheel Lock Nut.....	½" - 13	1
*	Reducing Bushing..... B. S. P. T.	¾" x 3/8"	1
*	Hexagon Nipple..... B. S. P. T.	3/8"	1
*	Globe Valve (Drain)..... B. S. P. T.	3/8"	1
	ATMOSPHERIC RELIEF VALVE COMPLETE.....	T2R26559	1
45	Valve Body.....	T2R26564	1
46	Valve Piston.....	T2W37695	1
47	Valve Diaphragm (Unwinterized Units).....	T2W37185	1
48	Valve Diaphragm (Winterized Units).....	T2W48943	1
49	Valve Diaphragm Cover.....	T2W37184	1
50	Valve Diaphragm Cover Setscrews U. N. C.	5/16"-18 x 1"	6
51	Lockwasher.....	5/16"	6

*Not Illustrated

Always give the serial number of your compressor.

RADIATOR & OIL COOLER

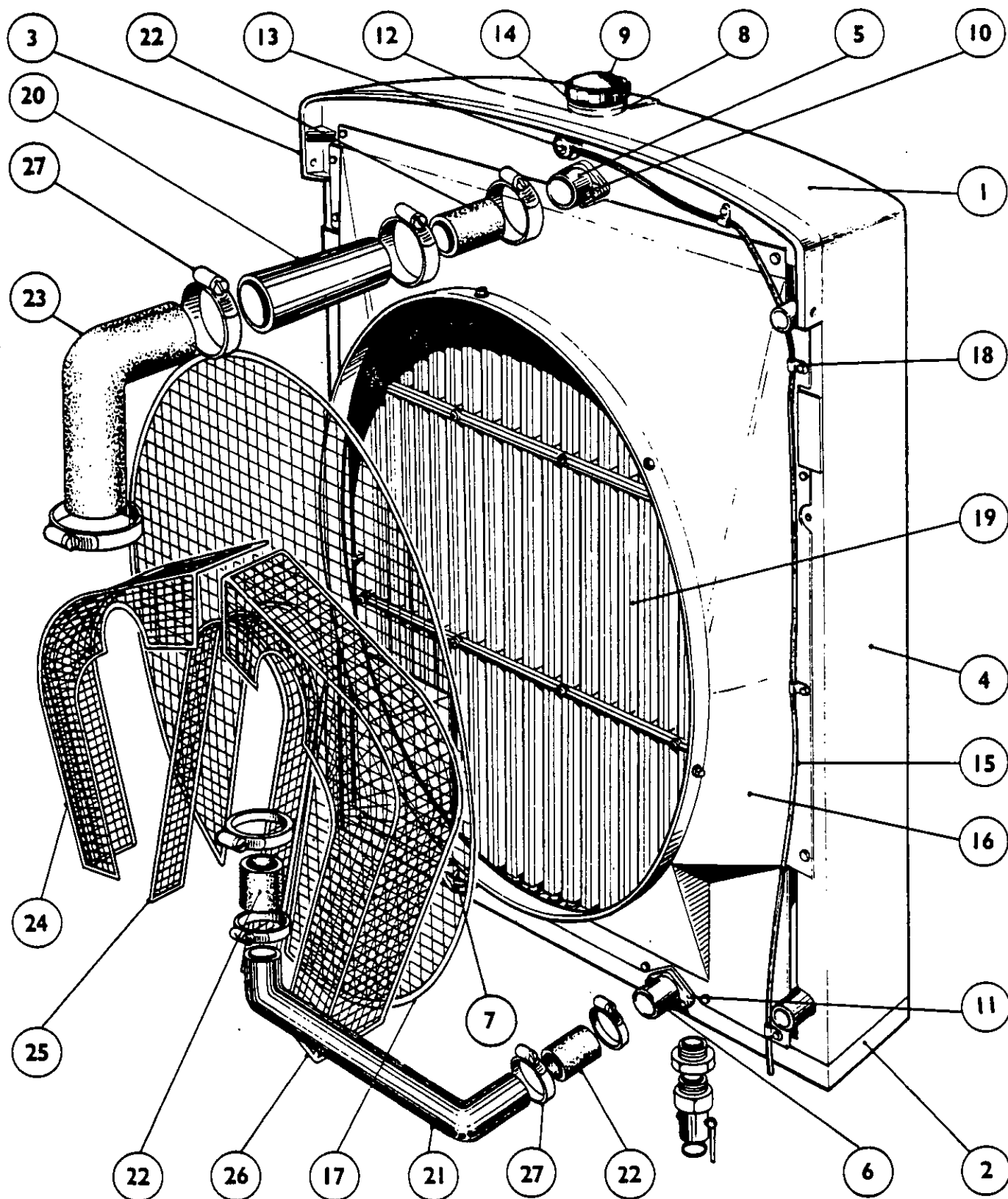
July/68.

ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
*	RADIATOR AND OIL COOLER SYSTEM	T2/20090	1
*	RADIATOR ASSEMBLY COMPLETE	T2/20087	1
1	Radiator Top Tank	T2/12320E	1
2	Radiator Bottom Tank	T2/12321B	1
3	Radiator L. H. Side Standard	T2/12322B	1
4	Radiator R. H. Side Standard	T2/12323B	1
5	Radiator Top Water Pipe	T2/11320	1
6	Radiator Bottom Water Pipe	T2/11320	1
7	Radiator Blank Flange	T2/11318	2
*	Radiator I. R. Badge	T2/12269	1
8	Radiator Filler Adaptor	T2/12333A	1
9	Radiator Filler Cap	T2/8480	1
*	Chain for Filler Cap	T2/8682	1
*	Radiator Grille Complete	T2/12326C	1
*	Radiator Pressure Relief Valve (4 lbs.)	T2/6446	1
*	Joint - Radiator Tube Plate	T2/12328	2
10	Joint - Radiator Top Water Pipe	T2/5962	1
11	Joint - Radiator Bottom Water Pipe and Blank Flange	T2/5962	2
12	Joint - Radiator Filler Adaptor	T2/8683	1
13	Joint - Radiator Relief Valve	T2/6447	2
14	Joint - Washer - Radiator Filler Cap	T2/8684	1
15	Radiator External Overflow Pipe	T2/12984	1
16	Radiator Fancowl	T2/12324C	1
17	Radiator Fanguard	T2/12325	1
18	Radiator Overflow Pipe Clip	T2/5702	4
*	Radiator Internal Overflow Pipe Complete	T2/12257	1
*	Radiator Tube Block Complete	T2/12317	1
*	Radiator Top Tube Plate Complete	T2/12374	1
*	Radiator Bottom Tube Plate Complete	T2/12375	1
19	Withnell Tube	T2/12347	57
*	Radiator Tube Ferrule	T2/5184	114
*	Radiator Front Tube Stay	T2/12371	2
*	Radiator Rear Tube Stay	T2/12370	2
*	Radiator Tube Stay Distance Piece	T2/11080	6
†	OIL COOLER ASSEMBLY COMPLETE (2 Row 2 Pass 0.65 Pitch)	T2/18852	1
†	Oil Cooler Inlet/Outlet Header Tank	T2/18853	1
†	Oil Cooler Return Header Tank	T2/18854	1
†	Joint - Inlet/Outlet Header Tank	T2/12354	1
†	Joint - Return Header Tank	T2/12339	1
†	Joint - Oil Cooler Oil Connection	T2/13542	2
†	Oil Cooler Air Baffle	T2/18855	2
†	Oil Cooler Mounting Bracket	T2/12342A	4
†	Oil Cooler Tube Block Complete	T2/18862	1
†	Oil Cooler Oil Connection Tube Complete	T2/13540	2
†	Oil Cooler Tube Stay Complete	T2/18856	3
20	Upper Radiator Pipe	T2V4848	1
21	Lower Radiator Pipe	T2V4815	1
22	Radiator Hose Connections	2 1/4" ID x 3 1/2" lg	3
23	Radiator Top Elbow Connection	T2V4784	1
24	Fuel Pump Drive Guard	T2T3376	1

* Not Illustrated

Always give the serial number of your compressor.

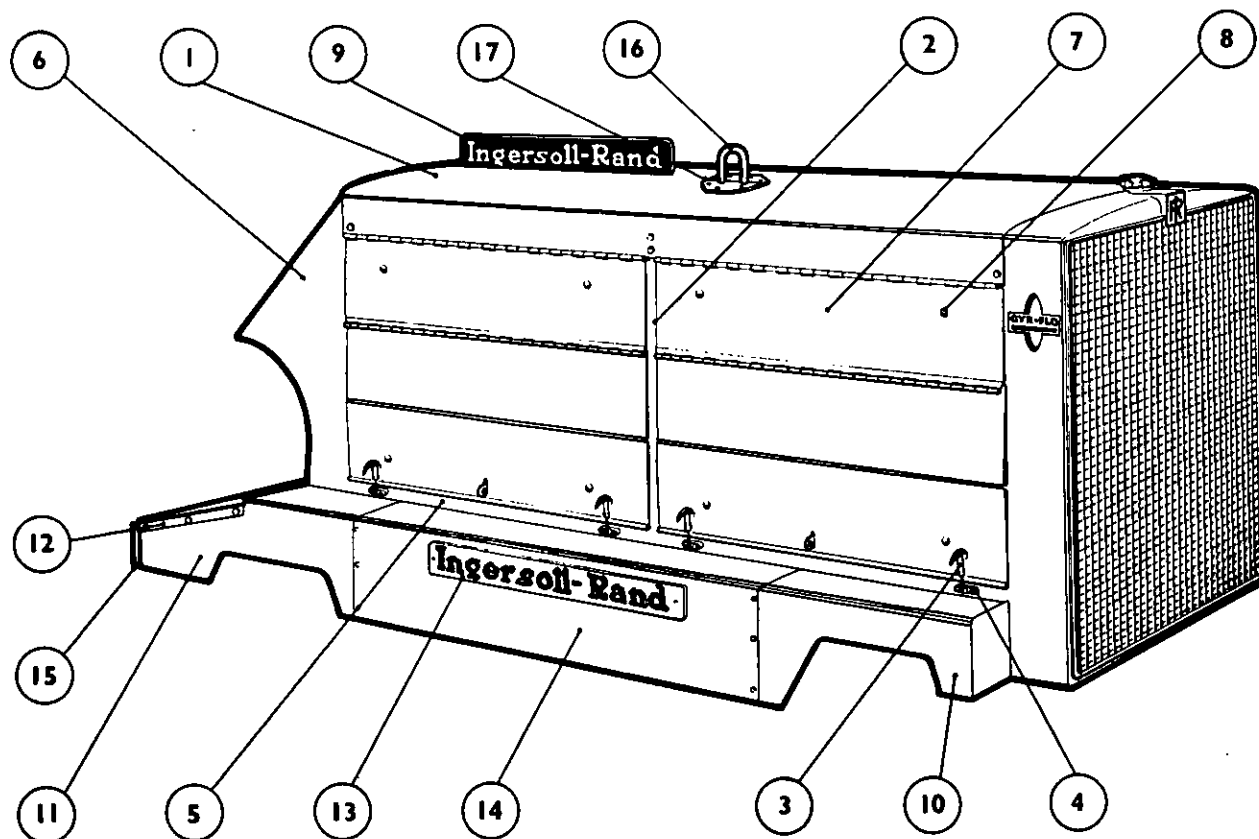
† For Units with 3 Row Oil Coolers Order Oil Cooler Assy Complete T2/18852 Only.



ILLUS	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
25	Fan Belt Guard.....	T2V4902	1
26	Generator Belt Guard	T2T3499	1
27	Radiator Hose Clips.....	No. 3	8
*	Radiator Brace.....	T2W26800	2

HOUSING

July/68.



ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
1	Top Cover.....	T2K2373	1
*	Set Screws, Nuts and Washers (Cover to Support)	$\frac{1}{2}$ " - 13 x 1"	16
*	Top Cover Reinforcing Angle	2R17437	1
*	Set Screws, Nuts and Washers (Cover to Reinforcing Angle)	$\frac{3}{8}$ " - 16 x 1"	4
*	Housing Rear Support Assembly	2H16400	1
*	Set Screws, Nuts and Washers (Support to Frame).....	$\frac{1}{2}$ " - 13 x 1 $\frac{1}{2}$ "	4
*	Top Cover Rear Support	T2H11308	1
*	Set Screws, Nuts and Washers (Support to Rear Support) ..	$\frac{3}{8}$ " - 16 x 7/8"	4
*	Rear End Filler Strip R. H.	T2R17429	1
*	Rear End Filler Strip L. H.	T2R17430	1
*	Set Screws, Nuts and Washers (Strip to Support)	$\frac{3}{8}$ " - 16 x 7/8"	8

*Not Illustrated

Always give the serial number of your compressor.

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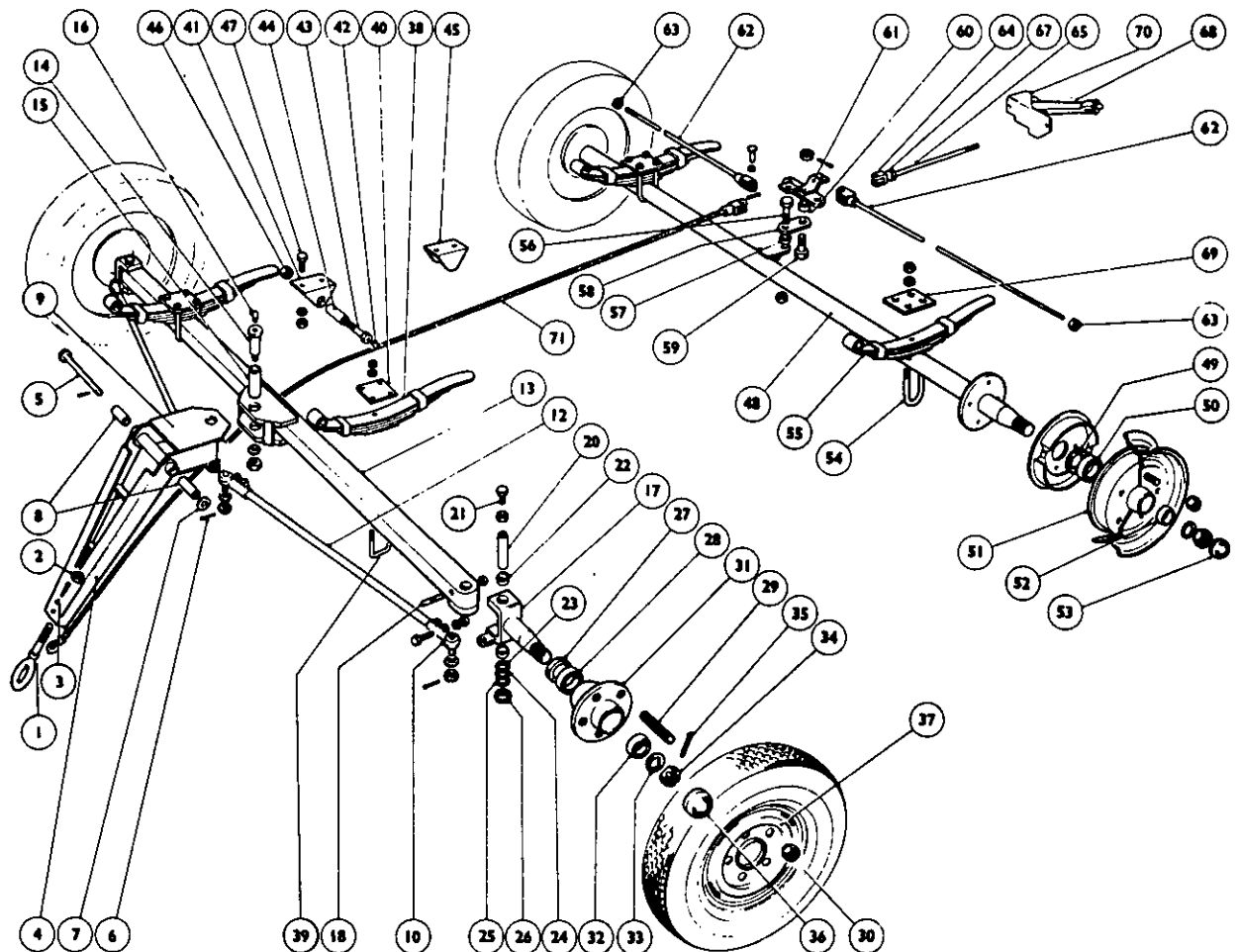
ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
2	Side Cover Centre Support	2W30476	2
*	Set Screws, Nuts and Washers	3/8" - 16 x 1"	4
*	Side Cover Support Arm	2W43948	8
*	Cupped Spring Washers	2W30033	8
*	Nyloc Set Screws	2W44137	2
*	Set Screws	3/8" - 16 x 1"	6
3	Bonnet Fasteners	T27/1157	8
4	Set Screws, Nuts & Lockwashers (Bonnet Fasteners)	3/16" - 24 x 1"	16
5	Housing Side Angle R. H.	T2R22050	1
*	Housing Side Angle L. H.	T2R22051	1
*	Set Screws, Nuts and Washers	3/8" - 16 x 1"	14
6	Rear End Housing Assembly	T2F7051	1
*	Set Screws, Nuts and Washers (Housing to Filler Strip) ...	3/8" - 16 x 3/4"	8
*	Set Screws, Nuts and Washers (Housing to Angle)	3/8" - 16 x 7/8"	4
7	Side Cover Assembly	T2H11337	4
*	Set Screws, Nuts and Washers (Side to Top Cover)	1/4" - 20 x 1/2"	24
8	Rubber Bumpers	2W13762	16
9	Nameplate	22A16X3	1
*	Set Screws, Nuts and Washers (Plate to Cover)	5/16" x 5/8"	5
*	Fender Support Bracket (R. H. Front and L. H. Rear)	2H11351	2
*	Fender Support Bracket (L. H. Front and R. H. Rear)	2H11352	2
*	Set Screws, Nuts and Washers (Bracket to Frame)	1/2" - 13 x 1 1/4"	8
10	Front Fender R. H.	T2R2354	1
*	Front Fender L. H.	T2R2355	1
*	Set Screws, Nuts and Washers (Fender to Frame)	3/8" - 16 x 1 1/2"	8
*	Rear Fender L. H.	T2H11546	1
11	Rear Fender R. H.	T2H11545	1
*	Set Screws, Nuts and Washers (Fender to Frame)	3/8" - 16 x 1"	8
12	Rear Fender Cover R. H.	T2R2359	1
*	Rear Fender Cover L. H.	T2R2357	1
*	Set Screws, Nuts and Washers (Cover to Fender)	3/8" - 16 x 5/8"	10
13	Fuel Tank Cover Nameplate	21A16A5	2
*	Set Screws, Nuts and Washers	1/4" x 1"	6
14	Fuel Tank Cover R. H.	T2H16034 TP	2
*	Set Screws, Nuts and Washers (Cover to Bracket)	3/8" - 16 x 7/8"	20
15	Frame Rear Bumper	T2H11132	1
*	Nuts and Washers (Bumper to Frame)	1/2"	6
16	Lifting Bail	T2R2390	1
*	Set Screws, Nuts and Washers (Bail to Frame)	5/8" - 11 x 1 1/2"	12
17	Lifting Bail Hole Cover	T2V4812	1
*	Set Screws, Nuts and Washers	1/4" - 20 x 1/2"	6
*	Registration Plate Bracket	T2V4877	2
*	Rear Lamp Bracket	T2V4878	1
*	Triangle Support Bracket	T2V4879	1

*Not Illustrated

Always give the serial number of your compressor

RUNNING GEAR

July/68.



Running Gear

ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
*	Truck Frame.....	T2N984	1
	Running Gear Complete.....	T2C3973	1
1	Towing Eye	T2C4376/1	1
2	Towing Eye Nut.....	T2C4376/2	1
3	Grease Nipples	T2C4376/3	2
4	Draw Bar	T2C4376/4	1
5	Draw Bar Pin	T2C4376/5	1
6	Draw Bar Pin Split Pin.....	T2C4376/6	1
7	Draw Bar Pin Washer	T2C4376/7	1
8	Draw Bar Pin Bush	T2C4376/8	2
9	Pintel.....	T2C4863	1
10	Track Rod End L. H.	T2J7806	1
*	Track Rod End R. H.	T2J7805	1
12	Track Rod L. H.	T2B4966	1
*	Track Rod R. H.	T2B4868	1
13	Front Axle	T2C4376/15	1
14	Pivot Pin, Nut and Washer.....	T2C4376/19	1
15	Pivot Pin Bush	T2C4376/18	1
16	Pivot Pin Greaser	T2C4376/20	1
17	Stub Pivot L. H. 4272.....	T2B4859	1
*	Stub Pivot R. H. 4272.....	T2B4859	1
*	Pivot Pin (Conn. Track Rod on Pintel).....	T2A4867	1

*Not Illustrated

Always give the serial number of new covers

G. 4111

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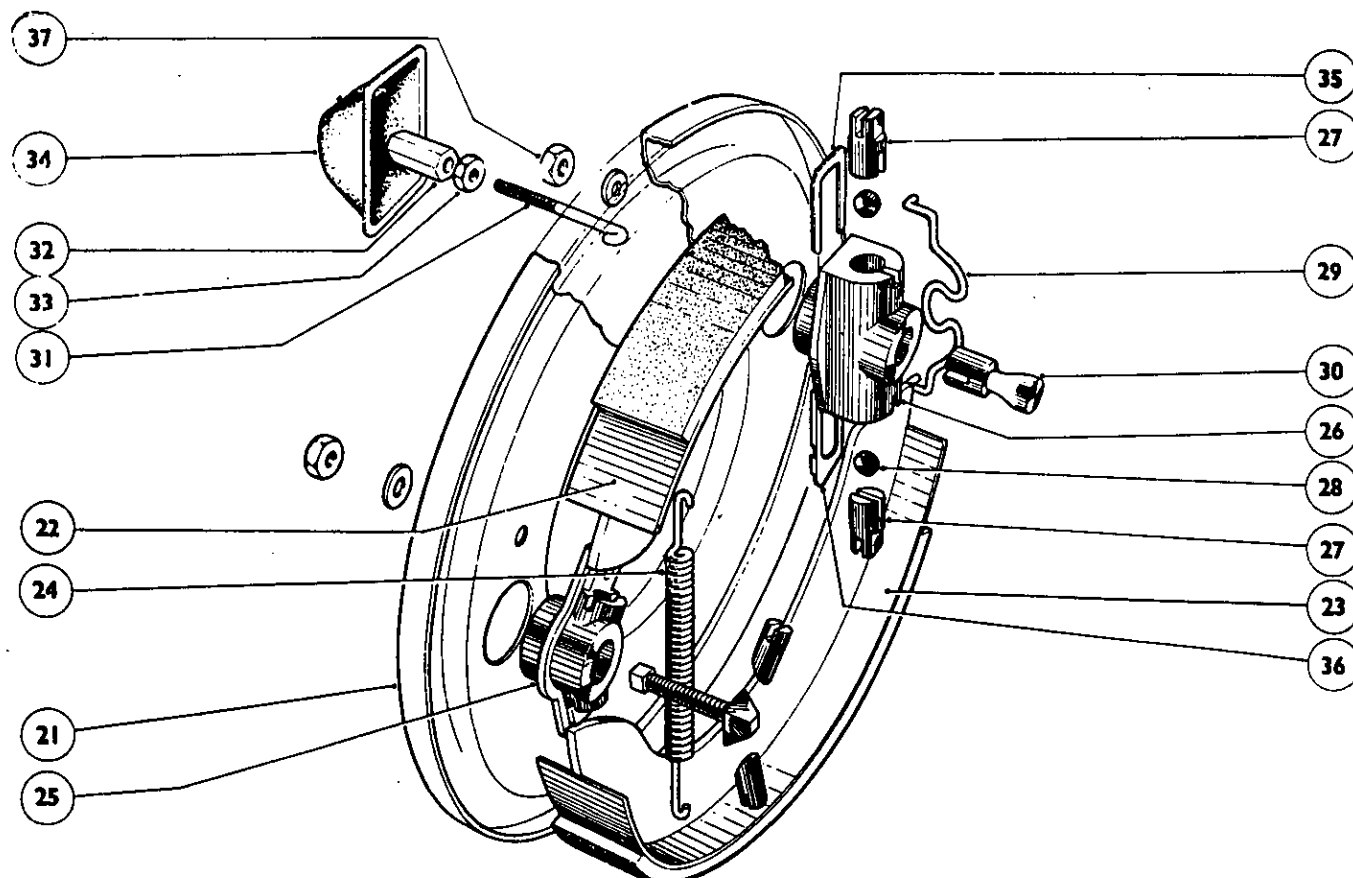
ILLUS. No.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
18	Cotter Pin and Nut	T2C4376/23	2
20	King Pin	T2C4376/30	2
21	King Pin Retaining Screw and Nut	T2C4376/32	2
22	King Pin Bush	T2C4376/33	4
23	King Pin Thrust Washer	T2C4376/34	2
24	King Pin Thrust Washer	T2C4376/35	2
25	King Pin Washer	T2C4376/36	2
26	Thrust Washer Holder	T2C4376/37	2
27	Oil Seal	T2C4376/38	2
28	Inner Bearing	T2C4376/39	2
29	Wheel Stud	T2C4376/40	20
30	Wheel Nut	T2C4376/41	20
31	Hub	T2C4376/43	2
32	Outer Bearing	T2C4376/44	2
33	'D' Washer	T2C4376/45	4
34	Axle End Nut	T2C4376/46	4
35	Axle End Split Pin	T2C4376/42	4
36	Hub Cap	T2C4376/47	2
37	Wheel	T2C4376/48	4
38	Front Spring	T2C4376/49	2
39	Front Spring 'U' Bolt, Nuts and Washers	T2C4376/50	4
40	Front Spring 'U' Bolt Plate	T2C4376/50A	2
41	Fixed End Shackle	T2C4376/51	4
42	Grease Nipple	T2C4376/52	4
43	Shackle Bolt	T2C4376/53	4
44	Shackle Bolt Bush	T2C4376/54	4
45	Moving End Shackle	T2C4376/55	4
46	Shackle Bolt Nut	T2C4376/56	4
47	Bolt, Nut and Washers (Shackle to Frame)	T2C4376/60	16
48	Rear Axle	T2C4382/1	1
49	Oil Seal	T2C4382/3	2
50	Inner Bearing	T2C4382/4	2
51	Hub Drum	T2C4382/5	2
52	Outer Bearing	T2C4382/6	2
53	Hub Cap	T2C4382/9	2
54	Rear Spring 'U' Bolt, Nuts and Washers	T2C4382/11	4
55	Rear Spring	T2C4382/18	2
56	Bolt, Nut, Washer and Split Pin	T2C4382/27	1
57	Spacer	T2C4382/26	1
58	Compensator	T2C4382/28	1
59	Bolt, Nut and Split Pin	T2C4382/29	1
60	Spacer	T2C4382/30	1
61	'T' Lever	T2C4382/36	
62	Brake Cable complete with Yoke	T2C4382/34	2
63	Locknut	T2C4382/35	4
64	Yoke, Pin and Spring	T2C4382/39	2
65	Brake Cable (16.3/8 in. long)	T2C4382/41	1
67	Locknut	T2C4382/40	2
68	Brake Lever	T2C4382/42	1
69	Rear Spring 'U' Bolt Plate	T2C4382/2	2
70	Parking Brake Bracket	T2V4905	1
*	Bracket to Frame Screws, Nut Washers	5/8" x 1 1/2"	2
*	Lever to Bracket Screws & Nuts	3/8" x 1"	2
71	Brake Cable complete with Yoke	T2C4382/71	1

*Not Illustrated

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BRAKE DETAILS

July/68.



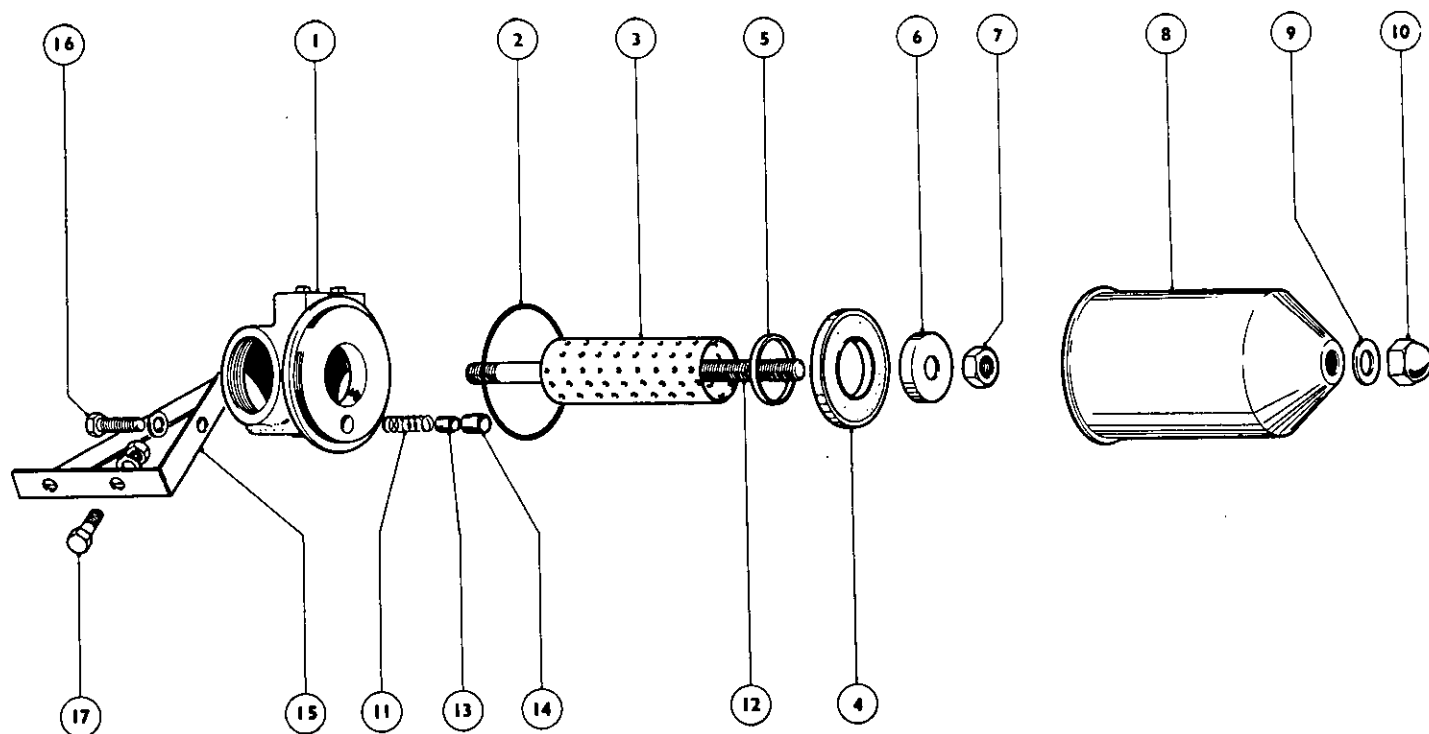
ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
*	BRAKE ASSEMBLY COMPLETE R. H.	T2GBB46296	1
*	BRAKE ASSEMBLY COMPLETE L. H.	T2GBB46297	1
21	Backplate	T2GB46298	1
22	Lined Shoe	T2GB41470	1
23	Lined Shoe	T2GB41471	1
24	Spring (Adj. End)	T2GB2453	1
*	Spring (Exp. End)	T2GB3311	1
25	Adjuster Assembly	T2GB41302	1
*	Adjuster Assembly Service Kit	T2SP1193	
26	Expander Housing	T2GB46307	1
27	Tappet	T2GB46308	2
28	Roller	T2GB38	2
29	Retaining Clip		1
30	Plunger	T2GB46286	1
31	Draw Link	T2GB46480	1
*	Draw Link Pin	T2GB46288	1
32	Barrel Nut	T2GB46484	1
33	Lock Nut	T2GB46483	1
34	Dust Cover	T2GB46568	1
35	Retaining Spring	T2GB48065	1
36	Locking Plate	T2GB46291	1
*	Expander Assembly	T2GB46306	1
37	Steady Post	T2GB40000	2
*	Nut	T2GB50242	2

*Not Illustrated.

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OIL FILTER

July/68.



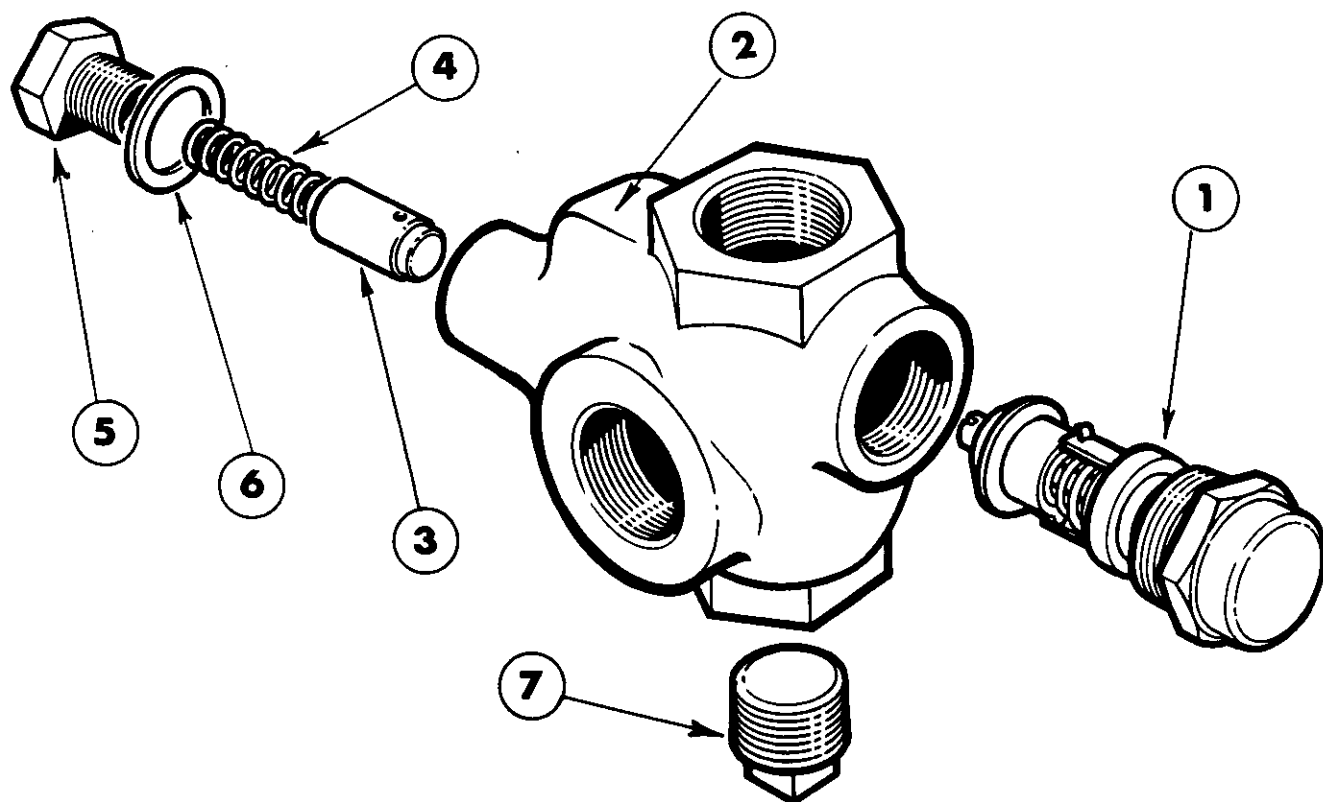
ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
	OIL FILTER COMPLETE.....	T2-03FK30	1
1	Oil Filter Head	T2-C1894	1
2	Oil Filter "O" Ring.....	T2-C4047/4	1
*	Oil Filter Cartridge Assembly. T2-03FK30-231 ...		1
3	Oil Filter Perforated Tube	T2-03FA-218	1
4	Oil Filter Pack (30 Disc)	T2-A18000	1
5	Oil Filter Spacer	T2-03RA-135	29
6	Oil Filter Retaining Cup.....	T2-03RA-211	1
7	Oil Filter Lock Nut.....	3/8" B. S. F.	1
8	Oil Filter Bowl	T2-03FJ-158	1
9	Oil Filter Dowty Seal.....	T2-PP45-A	1
10	Oil Filter Acorn Nut.....	3/8" B. S. F.	1
11	Oil Filter Valve Spring	T2-D3286	1
12	Oil Filter Stem	T2-D2096	1
13	Oil Filter Relief Valve.....	T2-D1490	1
14	Oil Filter Valve Seat	T2-D1491	1
15	Oil Filter Bracket	T2-T3399	1
16	Set Screws and Washers (Filter to Bracket).....	3/8"-16x ³ / ₄ "	2
17	Set Screws, Nuts and Washers (Bracket to Housing)....	3/8"-16 x 1"	2

*Not Illustrated

Always give the serial number of your compressor.

OIL TEMPERATURE BY-PASS VALVE

July/68.



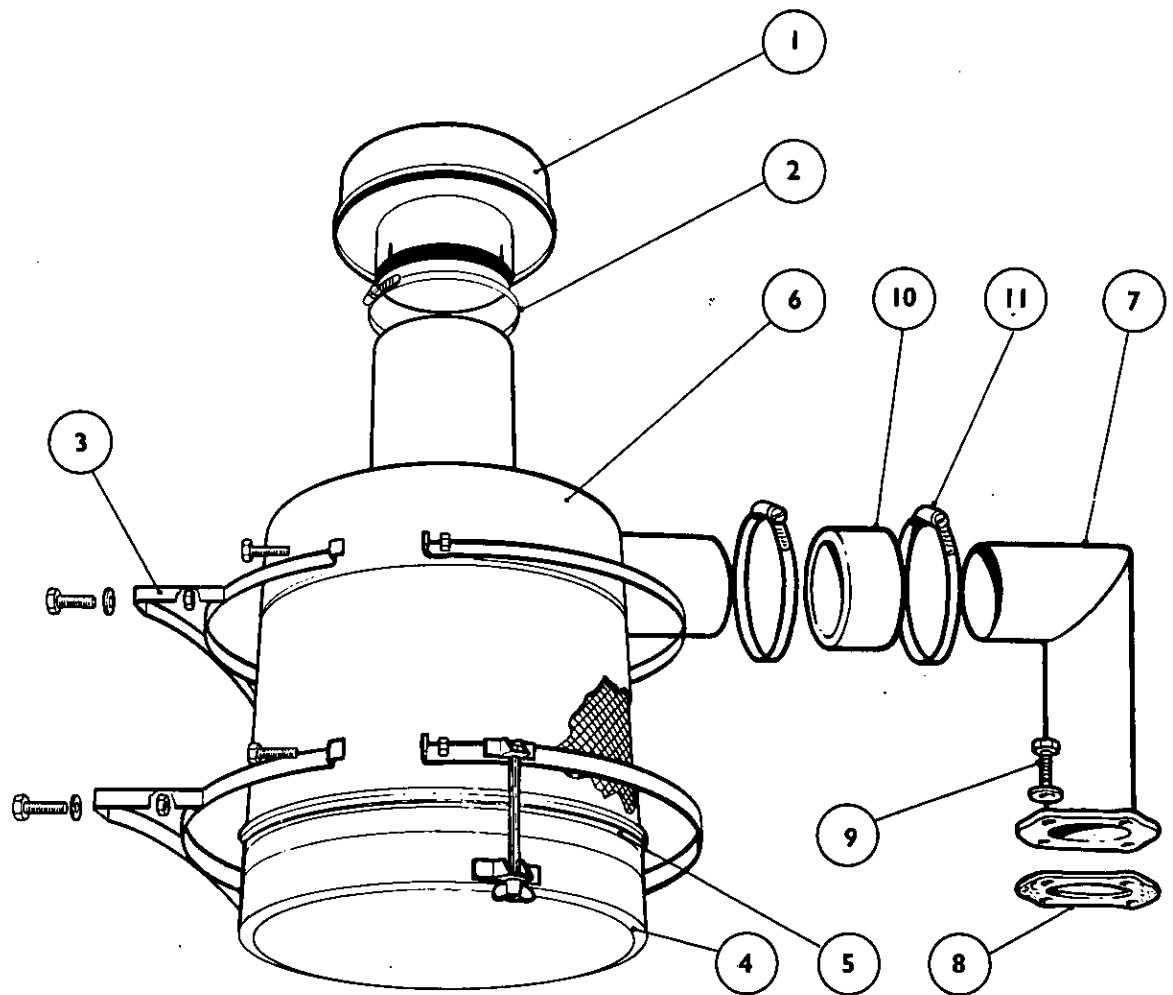
ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
*	OIL TEMPERATURE AND PRESSURE RELIEF VALVE COMPLETE.....	2H25063	1
1	By-Pass Valve Assembly	2H15039	1
2	By-Pass Valve Body.....	2H25059	1
3	By-Pass Valve.....	2W32599	1
4	By-Pass Valve Spring	PP761	1
5	Spring Adaptor Nut.....	2W69424	1
6	Adaptor Nut Gasket.....	X1014T52	1
7	Pipe Plug	½" N. P. T.	1

*Not Illustrated

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COMPRESSOR AIR FILTER

July/68.



ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
	COMPRESSOR AIR FILTER COMPLETE.....	T2-J700AA	1
1	Air Filter Pre-Cleaner.....	T2-C5980	1
2	Air Filter Pre-Cleaner Clip.....	No. 6X	1
3	Air Filter Mounting Bracket (Top).....	T2-C6019	1
*	Air Filter Mounting Bracket (Bottom).....	T2-C6020	1
4	Air Filter Bowl Assembly.....	T2-B6017	1
5	Air Filter Bowl "O" Ring.....	T2-C4047/35	1
6	Air Filter Body Assembly.....	T2-A6051	1
7	Air Filter Inlet Elbow.....	2H14934	1
8	Filter Inlet Elbow Gasket.....	2G6462	1
9	Air Filter Inlet Elbow Set Screw and Lock Washers....	$\frac{1}{2}$ "-13-7/8"	4
10	Air Inlet Hose Connection.....	2W30464	1
11	Air Inlet Hose Clips.....	No. 6X	2

*Not Illustrated

Always give the serial number of your compressor ;

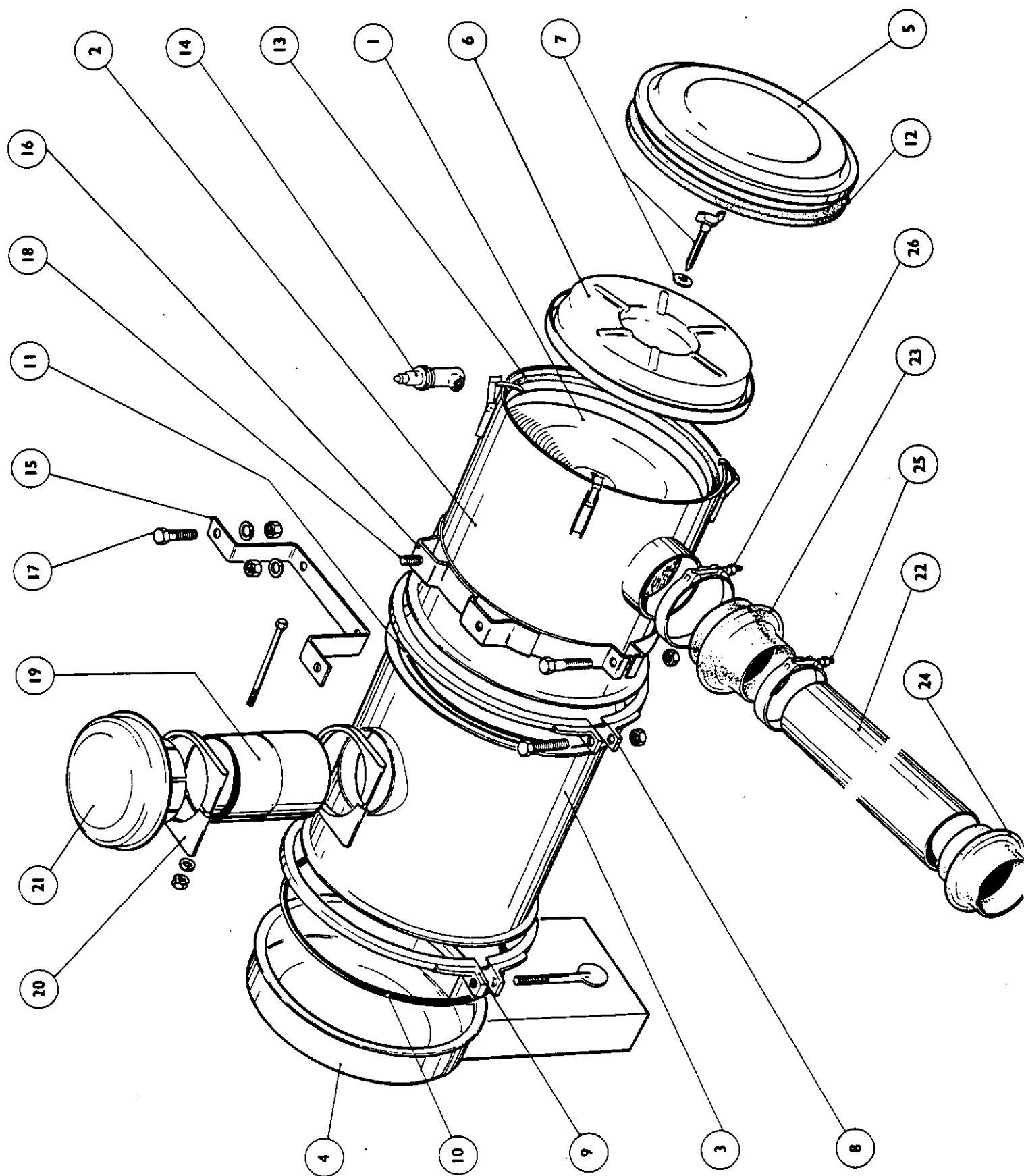
ENGINE AIR FILTER

July / 68.

ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
	ENGINE AIR FILTER COMPLETE	T2-DA117/1	1
1	Engine Air Filter Element.....	T2-DU345S	1
2	Engine Air Filter Body Assembly	T2-DU464S	1
3	Donaclone Assembly	T2-DU476S	1
4	Engine Air Filter Dust Cup Assembly.....	T2-DU512S	1
5	Engine Air Filter Cover Assembly.....	T2-DU353S	1
6	Engine Air Filter Inner Cover Assembly.	T2-DU520S	1
7	Engine Air Filter Inner Cover Bolt and Gasket.. Assembly	T2-DU266S	1
8	Engine Air Filter Clamp Assembly	T2-DU469S	1
9	Engine Air Filter Clamp Assembly	T2-DU481S	1
10	Engine Air Filter Dust Bowl Gasket	T2-DU314S	1
11	Engine Air Filter Body Gasket	T2-DU314S	1
12	Engine Air Filter Cover Gasket	T2-DU315S	1
*	Engine Air Filter Element Lower Gasket.....	T2-DU362S	1
*	Engine Air Filter Upper Body Element Gasket ..	T2-DU313S	1
13	Engine Air Filter Inner Cover Seal	T2-DU467S	1
14	Engine Air Filter Restriction Indicator.....	T2-PD2590/22	1
15	Engine Air Filter Bracket	T2-V4785	2
16	Engine Air Filter Mounting Bands	T2-DU330	2
17	Set Screws, Nuts and Washers (Bracket to Top Cover).....	3/8" - 16 x 3/4"	4
18	Set Screws, Nuts and Washers(Mounting Band to Bracket)	3/8" - 16 x 3/4"	4
19	Engine Air Filter Stack Pipe.....	T2-V4752	1
20	Engine Air Filter Stack Pipe Clips.....	5. 1/8" Dia.	2
21	Engine Air Filter Stack Cap.....	T2-DA102	1
22	Engine Air Inlet Pipe.....	T2-V4783	1
23	Engine Air Inlet Reducing Hose.....	5" x 4"	1
*	Engine Air Filter Steady.....	T2-V4937	1
24	Engine Air Inlet Hump Hose	4"	1
25	Engine Air Inlet Hose Tee Clamp.....	4 1/2"	3
26	Engine Air Inlet Hose Tee Clamp	5 1/2"	1

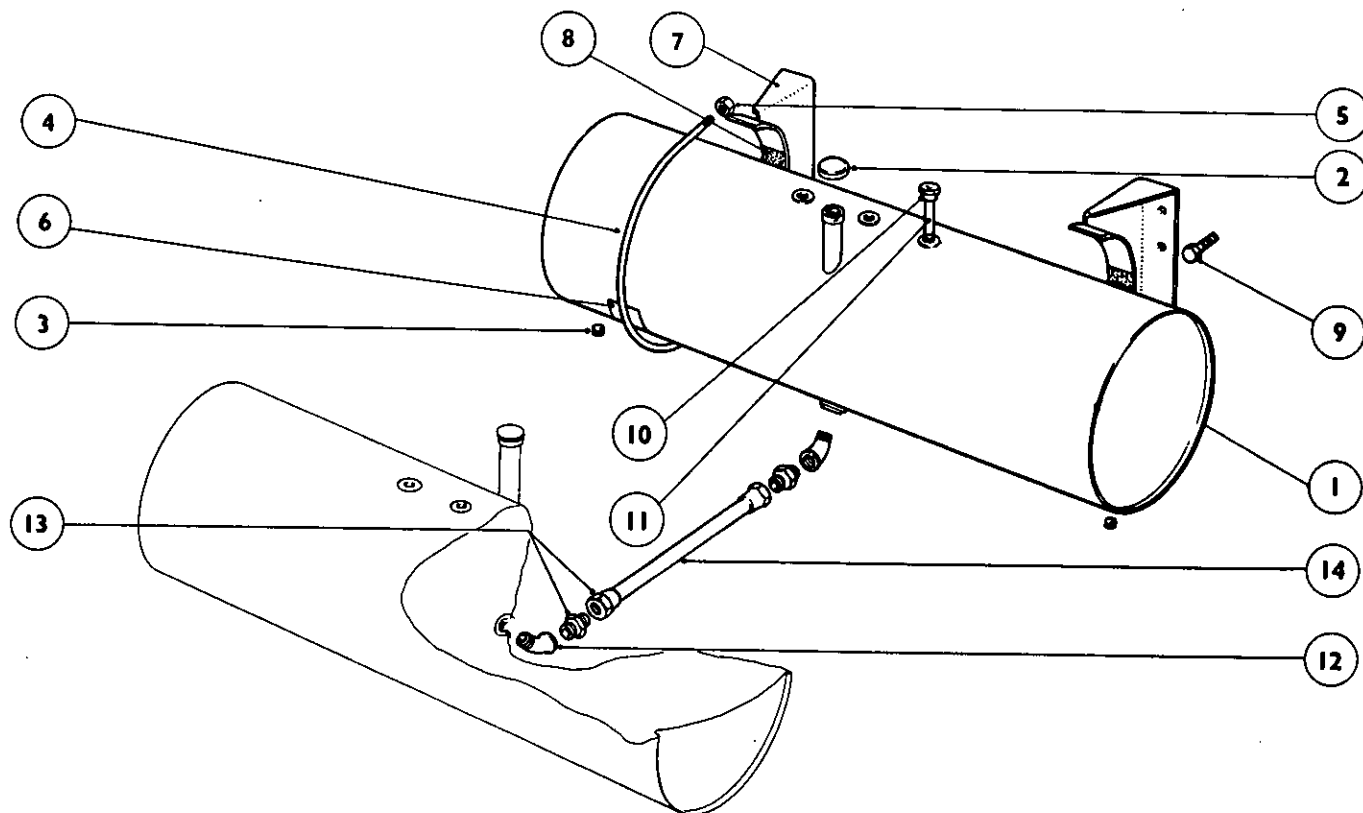
* Not illustrated.

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FUEL TANK AND FITTINGS

July/68.



ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
1	FUEL TANK.	T2-H16031	2
2	Fuel Tank Cap.	EOA9030	2
3	Fuel Tank Pipe Plug. B. S. P. T.	$\frac{1}{4}$ "	4
4	Fuel Tank Strap.	2R16181	4
5	Fuel Tank Strap Nut.	$\frac{1}{2}$ " - 13	4
6	Fuel Tank Cushion.	2W56939	4
7	Fuel Tank Bracket.	2H17871	4
8	Fuel Tank Cushions.	2W56939	8
9	Fuel Tank Bracket Set Screw, Nut and Lock Washer.	$\frac{1}{2}$ " - 13 x 1"	8
10	Fuel Tank Outlet Adaptor.	T2V4686-2	1
11	Fuel Tank Drop Tube.	$\frac{1}{2}$ " x 15"	1
12	Fuel Tank Connecting Elbow. B. S. P. T.	1" x 45°	2
13	Fuel Tank Connecting Union (Fig. 431) B. S. P. T.	1.1/8" Q.D. x 1"	2
14	Fuel Tank Connecting Pipe.	1.1/8" Q.D. x 36"	1
*	Fuel Hose (Fuel Feed) Complete.	No. 10 x 35"	1
*	Fuel Hose (Drain Manifold) Complete.	No. 8 x 64"	1
*	Fuel Hose (Pump Drain) Complete.	No. 6 x 64"	1

*Not Illustrated

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ENGINE & COMPRESSOR ACCESSORIES - NOT ILLUS.

July/68.

ILLUS. NO.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
1	Engine Exhaust Silencer 4" (including Rain Cap).....	T2-D9/7917	1
2	Engine Exhaust Pipe Assembly	T2- T2-T3400	1
3	Engine Exhaust Silencer Bracket (Rear)	T2-V4781	1
4	Engine Exhaust Silencer Bracket (Front)	T2-V4780	1
5	Battery (12-volts)	6XTFZ/29/3R	2
6	Battery Tray	T2-T3347	2
7	Battery Hold Down Frame	T2-V4680	2
8	Battery Tray Studs.....	T2-V4682	4
9	Battery Cover	T2-V4681	2
11	Battery Lead (Positive).....	T2-T3344-5	1
12	Battery Lead (Negative)	T2-T3394-2	1
13	Battery Lead (Battery Link).....	T2-T3394-1	1
14	Wiring Harness Complete.....	T2-K2350	1
15	Discharge Pressure Gauge.....	T2-V5058	1
16	Interstage Pressure Gauge.....	2"/0-100psi	1
17	Complete Set of Gaskets and "O" Rings. T2-R600P750A .		1
18	Engine Hour Counter	ATFC268/11	1
19	Pressure Switch (1/8)	PS4209/10	1

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COMPRESSOR PIPING & FITTINGS

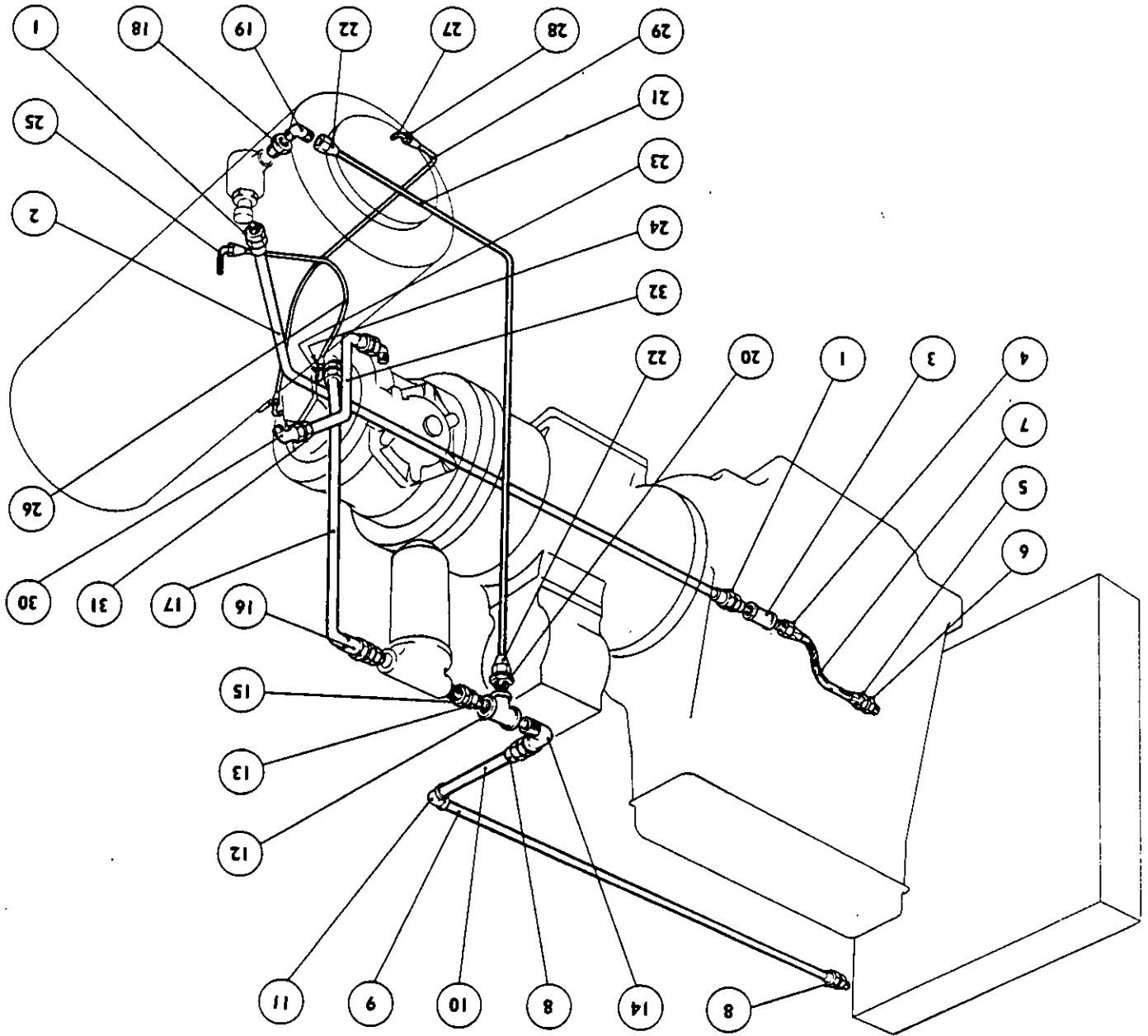
July/68.

ILLUS. No.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
	<u>Oil Separator to Oil Cooler</u>		
1	Solder Joint Union (1.3/8" O/D x 1 1/4")..... B.S.P.T.	431	2
2	Copper Tube (1.3/8" O/D)	8' - 7"	1
3	W.I. Socket	1 1/4"	1
4	Male Hose Fitting	218 - 20	1
5	Female Hose Fitting	202 - 20	1
6	Hose Adaptor	136 - 20	1
7	Flexible Hose (24" long)	501 - 20	1
*	M. & F. Elbow 45°	1 1/4"	1
	<u>Oil Cooler to Oil Filter</u>		
8	Solder Joint Union (1.3/8" O/D x 1 1/4")	431	2
9	Copper Tube (1.3/8" O/D)	87"	1
10	Copper Tube (1.3/8" O/D)	26 1/2"	1
*	W.I. Socket	1 1/4"	1
11	Solder Joint Elbow (1.3/8" O/D)	406	1
12	W.I. Tee	1 1/4" x 1/2"	1
13	Hexagon Nipple	1 1/4"	1
14	M. & F. Elbow 90°	1 1/4"	1
15	Hexagon Reducing Bush	1 1/2" x 1 1/4"	2
	<u>Oil Filter to Pump</u>		
16	Solder Joint Union (1.3/8" O/D x 1 1/4")	432	2
17	Copper Tube (1.3/8" O/D)	30"	1
	<u>By-Pass Valve to Filter Inlet</u>		
18	Hexagon Reducing Bush	3/4" x 1/2"	1
19	Male Elbow Connector (5/8" O/D x 1/2")	608F	1
20	Male Connector (5/8" O/D x 1/2")	605F	1
21	Copper Tube (5/8" O/D)	5' - 10"	1
22	Tube Nuts (5/8" O/D)	601F	2
	<u>Scavenger Pump to Separator</u>		
23	Tube Elbow (1/2" O/D x 3/8")	708F	1
24	Tube Nut 1/2"	700F	2
25	Scavenger Pump Oil Line Screen Assembly	T2-W37758	1
26	Copper Tube (1/2" O/D)	51"	1
	<u>Oil Separator to Scavenger Pump</u>		
27	Tube Elbow (1/2" O/D x 3/8")	708F	2
28	Tube Nut 1/2" O/D	700F	2
29	Copper Tube (1/2" O/D)	24"	1
	<u>Oil Separator to Discharge Check Valve</u>		
30	Street Elbow 90° (3/4" M.P.T.)	500-14AL	2
31	Male Connector Assembly "Sealastic" (7/8" x 3/4")	30"	1

*Not Illustrated

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Compressor Piping and Fittings



COMPRESSOR PIPING & FITTINGS

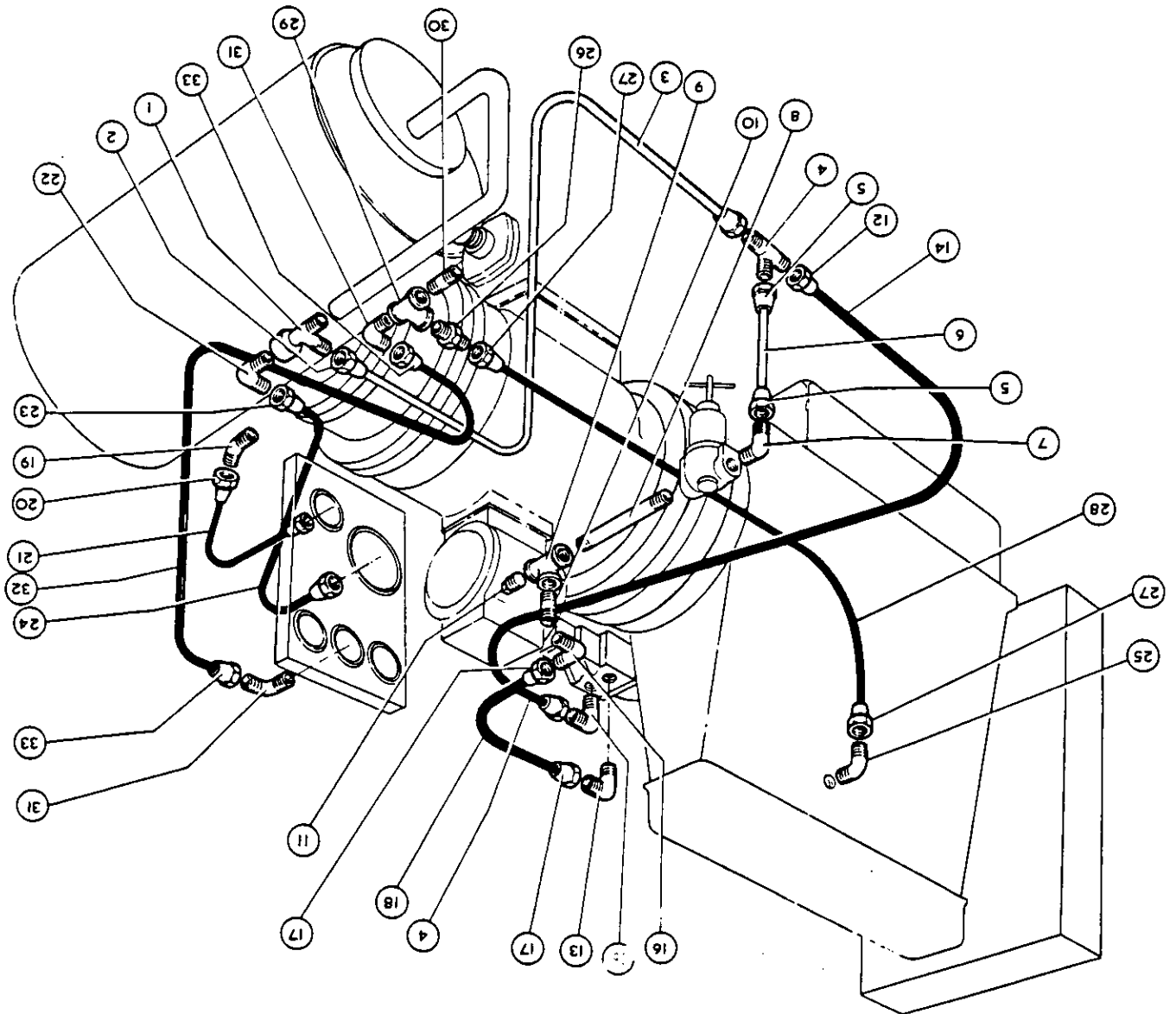
July/68.

ILLUS. No.	NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
	<u>Oil Separator to Reducing Valve</u>		
1	M. & F. Tee Connector ($\frac{1}{4}$ " M. x $1/8$ " F. x $5/16$ " O/D)	612F	1
2	Tube Nuts ($5/16$ " O/D)	601F	2
3	Copper Tube ($5/16$ " O/D)	46"	1
4	Male Tee Connector ($5/16$ " O/D x $5/16$ " O/D x $5/16$ " O/D)	604F	1
5	Tube Nuts ($5/16$ " O/D)	601F	2
6	Bundy Tube ($5/16$ " O/D)	13"	1
7	Male Elbow Connector ($5/16$ " O/D x $\frac{1}{4}$ ") B.S.P.T.	608F	1
	<u>Reducing Valve to Inlet Unloader</u>		
8	Space Nipple B.S.P.T.	$\frac{1}{4}$ " x $4\frac{1}{2}$ "	1
9	Female Tee B.S.P.T.	$\frac{1}{4}$ " x $\frac{1}{4}$ " x $\frac{1}{4}$ "	1
10	Space Nipple B.S.P.T.	$\frac{1}{4}$ " x $1\frac{1}{4}$ "	1
11	Pipe Plug (Steel) B.S.P.T.	$\frac{1}{4}$ "	1
*	Tube Clamp	HD 1300-11	4
	<u>Oil Separator to U. L. 88 Regulator</u>		
12	Tube Nuts ($5/16$ " O/D)	601F	2
13	Male Elbow Connector ($5/16$ " O/D x $\frac{1}{4}$ ") B.S.P.T.	608F	1
14	Nylon Tube ($5/16$ " O/D)	13"	1
	<u>U. L. 88 Regulator to Inlet Unloader</u>		
15	Male Elbow Connector ($5/16$ " O/D x $\frac{1}{4}$ ") B.S.P.T.	608F	1
16	Male Elbow Connector ($5/16$ " O/D x $1/8$ ") .. B.S.P.T.	605F	1
17	Tube Nuts ($5/16$ " O/D)	601F	2
18	Nylon Tube ($5/16$ " O/D)	71"	1
	<u>H. P. Cylinder to Inter-Stage Pressure Gauge</u>		
19	Male Elbow Connector ($3/16$ " O/D x $1/8$ ") .. B.S.P.T.	608F	1
20	Tube Nuts ($3/16$ " O/D)	601F	2
21	Nylon Tube ($3/16$ " O/D)	32"	1
	<u>Piping to H. P. Discharge Gauge</u>		
22	Male Elbow Connector ($3/16$ " O/D x $1/8$ ") .. B.S.P.T.	608F	1
23	Tube Nuts ($3/16$ " O/D)	601F	2
24	Nylon Tube ($3/16$ " O/D)	30"	1
	<u>Piping to Atmospheric Relief Valve & Oil Pressure Gauge.</u>		
25	Male Elbow Connector ($5/16$ " O/D x $\frac{1}{4}$ ") B.S.P.T.	608F	1
26	Male Connector ($5/16$ " O/D x $1/8$ ") N.P.T.	605F	1
27	Tube Nut ($5/16$ " O/D)	601F	2
28	Nylon Tube ($5/16$ " O/D)	88"	1
29	Tee Connection ($1/8$ ") N.P.T.	-	1
30	Close Nipple ($1/8$ ") N.P.T.	-	1
31	Male Elbow Connector ($3/16$ " O/D x $1/8$ ") N.P.T.	608F	2
32	Nylon Tube ($3/16$ " O/D)	33"	1
33	Tube Nut ($3/16$ " O/D)	601F	2

Always give the serial number of your compressor.

* Not Illustrated.

Piping and Fittings



BOX No. TR. 600 P1002

NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
COMPLETE BOX OF SPARES	TR600P1002	1
Diaphragm Piston Ring	X1440T9A	2
UL89 Regulator Diaphragm.....	2W32669	1
UL88 Regulator Top Cover Diaphragm.....	UL83-33A	1
UL88 Regulator Bottom Cover Diaphragm.....	UL88-3	1
Oil Filler Plug "O" Ring	X1514T222C	2
Oil Filter Shell "O" Ring (Top)	T2-C4047/4	2
Oil Filter Seal (Bottom).....	T2-PP45-A	2
Oil Filter Cartridge Assembly.....	T2-03FK30-231	1
Engine Air Filter Element	T2DU345S	1
Engine Air Filter Gasket.....	T2DU315s	2
Engine Air Filter Element Lower Gasket.....	T2DU362S	2
Engine Air Filter Upper Body Element Gasket	T2DU313S	1
Engine Air Filter Inner Cover Seal.....	T2DU467S	1

BOX No. TR. 600 P1003

NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
COMPLETE BOX OF SPARES	TR600P1003	1
Gasket Set	TR600P750	1
Diaphragm Piston Ring	X1440T9A	4
Oil Filler Plug "O" Ring.....	X1514T222C	2
Oil Filter Shell "O" Ring (Top).....	T2-C4047/4	2
Oil Filter Seal (Bottom)	T2-PP45-A	2
Oil Filter Cartridge Assembly	T2-03FK30-231	1
Engine Air Filter Element	T2-DU879	1
Low Pressure Rotor Vanes - Complete Set	R600P110	1
High Pressure Rotor Vanes - Complete Set	R600P115	1
Roller Bearing	2W41015	2
Rotary Shaft Oil Seal	2W21790	1
Interstage Pressure Gauge.....	2"-100 P.S.I.	1
Discharge Pressure Gauge.....	T2-V5058	1
Grab Bag (Misc. Bolts, Nuts, etc.).....	T2-W34865	1
Wood Box with handles		1

BOX No. TR. 600 P1010

NAME OF PART Parts indented after an item are included with the item	PART NUMBER	QTY.
COMPLETE BOX OF SPARES	TR600P1010	
Gasket Set	TR600P750	1
Diaphragm Piston Ring	X1440T9A	4
Compressor Coupling Drive Gear Gasket	2W30236	1
Rotary Shaft Seal	2W21790	1
Roller Bearing	2W41015	2
Cylinder Outer Plate	2R16416	1
L. P. Cylinder	2F9126	1
L. P. Rotor Vanes - Complete	R600P110	1
L. P. Rotor Bearing Spacer	2W32595	2
Cylinder Inner Plate	2R16415	1
H. P. Cylinder	2F7017	1
H. P. Rotor	2H11534	1
H. P. Rotor Vanes - Complete Set	R600P115	1
H. P. Rotor Drive Shaft	2H11536	1
H. P. Outer Bearing Snap Ring	2W30356	1
Oil Pump Drive Gear	2H11268	1
Oil Pump Drive Gear Bushing	2W30365	1
Oil Pump Driven Gear (Bushed)	2W30352	1
Scavenging Oil Pump Drive Gear	2W24686	1
Scavenging Oil Pump Drive Gear Bushing	2W30371	1
Scavenging Oil Pump Driven Gear	2W20175	1
UL89 Regulator Valve Bushing	2W35053	2
UL89 Regulator Diaphragm Piston	2W32648	1
UL88 Regulator Conversion and Repair Kit	UL88-200	1
UL89 Reducing and Relief Valve	T2-W41121	1
UL88 Regulator Range Spring	PP604	1
UL88 Regulator Range Spring	T2-V4677	1
Oil Separator Screen Assembly (Packed)	T2-H11131T	1
Oil Filler Hole Plug "O" Ring	X1514T222C	2
Radiator Tube Ferrule	T2-5184	114
Radiator Hose Connection	2 $\frac{1}{4}$ " I/D x 3 $\frac{1}{2}$ " lg	3
Radiator Top Elbow	T2-V4784	1
Radiator Cap	T2/8480	1
Radiator Tube	T2/12984	4
Oil Cooler Header Joint (Inlet/Outlet)	T2/12354	1
Oil Cooler Header Joint (Return)	T2/12339	1
Air Discharge Pressure Gauge	T2-V5058	1
Interstage Pressure Gauge	2"-100 P. S. I.	1
Oil Filter Cartridge Assembly	T2-03FK30-231	1
Oil Filter Shell "O" Ring (Top)	T2-C4047/4	2
Oil Filter Seal (Bottom)	T2-PP45-A	2
Engine Air Filter Element	T2-DU345S	1
Exhaust Rain Cap	RC4"	1
Grab Bag (Misc. Bolts, Nuts, etc.)	T2-W37140	1
Wood Box with handles		1