



OPERATING, MAINTENANCE & PARTS MANUAL

**MODEL
P-375WD**

PART NO. 35374917 (Code A)

MAY 1994

COMPRESSOR SERIAL NUMBER RANGE

(Apply Serial No. Label Here)

WARNING

TAMPERING WITH NOISE CONTROL SYSTEM
PROHIBITED

Federal law prohibits the following acts or the causing thereof:

(1) The removal or rendering inoperative by any persons, other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new compressor for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; or (2) the use of the compressor after such device or element of design has been removed or rendered inoperative by any person.

Among those acts included in the prohibition against tampering are the acts listed below.

(1) Removal or rendering inoperative any of the following:

- a. the engine exhaust system or parts thereof
- b. the air intake system or parts thereof
- c. enclosure or parts thereof

(2) Removal of any of the following:

- a. fan shroud
- b. vibration mounts
- c. sound absorption material

(3) Operation of the compressor with any of the enclosure doors open.

DANGER

A BATTERY CONTAINS SULFURIC ACID AND CAN GIVE OFF GASES WHICH ARE CORROSIVE AND POTENTIALLY EXPLOSIVE. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. IN CASE OF CONTACT, FLUSH AREA IMMEDIATELY WITH WATER.

EXERCISE EXTREME CAUTION WHEN USING BOOSTER BATTERY. TO JUMP BATTERY, CONNECT ENDS OF ONE BOOSTER CABLE TO THE POSITIVE (+) TERMINAL OF EACH BATTERY. CONNECT ONE END OF OTHER CABLE TO THE NEGATIVE (-) TERMINAL OF THE BOOSTER BATTERY AND OTHER END TO A GROUND CONNECTION AWAY FROM DEAD BATTERY (TO AVOID A SPARK OCCURRING NEAR ANY EXPLOSIVE GASES THAT MAY BE PRESENT). AFTER STARTING UNIT, ALWAYS DISCONNECT CABLES IN REVERSE ORDER.

THE AIR DISCHARGED FROM THIS UNIT IS NOT SUITABLE FOR HUMAN CONSUMPTION.

NEVER OPERATE UNIT WITHOUT FIRST OBSERVING ALL CAUTIONS AND WARNINGS AND CAREFULLY READING THE OPERATOR'S AND MAINTENANCE MANUAL FURNISHED WITH THIS MACHINE.

NEVER OPERATE THE ENGINE POWERING YOUR MACHINE INSIDE A BUILDING WITHOUT ADEQUATE VENTILATION. AVOID BREATHING EXHAUST FUMES WHEN WORKING ON OR NEAR THE MACHINE.

EVEN AFTER PRESSURE IS RELIEVED FROM THE RECEIVER-SEPARATOR SYSTEM, ANY AIR SUPPLY LINE FROM THE COMPRESSOR TO A TOOL OR MACHINE COULD REMAIN UNDER PRESSURE AND CAUSE VERY SERIOUS PERSONAL INJURY OR DEATH. AFTER THE COMPRESSOR STOPS, CAREFULLY OPEN A VALVE AT ANY TOOL OR MACHINE TO EXHAUST THE PRESSURE IN ANY LINE PRIOR TO REMOVAL OR SERVICING.

NO SMOKING, SPARKS, OR OPEN FLAME NEAR FUEL.

WARNING

NEVER INSPECT OR SERVICE UNIT WITHOUT FIRST DISCONNECTING BATTERY CABLE(S) TO PREVENT ACCIDENTAL STARTING.

DO NOT LOOSEN OR REMOVE OIL FILLER PLUG OR PERFORM ANY MAINTENANCE FUNCTIONS WITHOUT FIRST MAKING SURE ALL AIR PRESSURE HAS BEEN RELIEVED FROM UNIT.

UNRESTRICTED AIR FLOW FROM A HOSE WILL RESULT IN A WHIPPING MOTION OF THE HOSE WHICH CAN CAUSE SEVERE INJURY OR DEATH. A SAFETY DEVICE MUST BE ATTACHED TO THE HOSE AT THE SOURCE OF SUPPLY TO REDUCE PRESSURE IN CASE OF HOSE FAILURE OR OTHER SUDDEN PRESSURE RELEASE. REFERENCE: OSHA REGULATION 29 CFR SECTION 1926.302(b).

USE EXTREME CARE WHEN REMOVING A PRESSURE CAP FROM A LIQUID COOLING SYSTEM FOR THE ENGINE. THE SUDDEN RELEASE OF PRESSURE FROM A HEATED COOLING SYSTEM CAN RESULT IN A LOSS OF COOLANT AND POSSIBLE SEVERE PERSONAL INJURY.

THIS MACHINE PRODUCES LOUD NOISE WITH DOORS OPEN. EXTENDED EXPOSURE TO LOUD NOISE CAN CAUSE HEARING LOSS. WEAR HEARING PROTECTION WHEN DOORS OR VALVE(S) ARE OPEN.

HIGH PRESSURE AIR CAN CAUSE SEVERE INJURY OR DEATH FROM HOT OIL AND FLYING PARTS. ALWAYS RELIEVE PRESSURE BEFORE REMOVING CAPS, PLUGS, COVERS OR OTHER PARTS FROM PRESSURIZED AIR SYSTEM.

TOWING THIS UNIT IN EXCESS OF 50 MPH (80 KM/HR) MAY RESULT IN VERY SERIOUS PERSONAL INJURY OR DEATH. DO NOT STORE OR TRANSPORT MATERIAL OR EQUIPMENT IN OR ON THE UNIT.

NEVER RUN UNIT WITH GUARDS, COVERS OR SCREENS REMOVED. KEEP HANDS, HAIR, NECKTIE, LOOSE CLOTHING AND TEST LEADS WELL AWAY FROM MOVING PARTS, AS SERIOUS INJURY COULD RESULT.

DO NOT USE PETROLEUM PRODUCTS (SOLVENTS OR FUELS) UNDER HIGH PRESSURE AS THIS CAN PENETRATE THE SKIN AND RESULT IN

SERIOUS ILLNESS. WEAR EYE PROTECTION WHILE CLEANING UNIT WITH COMPRESSED AIR TO PREVENT DEBRIS FROM INJURING EYE(S). DO NOT ALLOW THE BLOW GUN TIP TO COME INTO CONTACT WITH ROTATING OR MOVING PARTS. PERSONAL INJURY OR EQUIPMENT DAMAGE MAY RESULT.

CAUTION

USE EXTREME CARE TO AVOID CONTACTING HOT SURFACES (ENGINE EXHAUST MANIFOLD AND PIPING, AIR RECEIVER AND AIR DISCHARGE PIPING, ETC.)

DO NOT CONNECT THE AIR DISCHARGE ON THIS UNIT ONTO A COMMON HEADER WITH ANY OTHER UNIT OF ANY DESCRIPTION, OR ANY OTHER SOURCE OF COMPRESSED AIR, WITHOUT FIRST MAKING SURE A CHECK-VALVE IS USED BETWEEN THE HEADER AND THE UNIT. IF THIS UNIT IS CONNECTED IN PARALLEL WITH ANOTHER UNIT OF HIGHER DISCHARGE PRESSURE AND CAPACITY, A SAFETY HAZARD COULD OCCUR IN A BACK-FLOW CONDITION.

ETHER IS AN EXTREMELY VOLATILE, HIGHLY FLAMMABLE GAS. USE SPARINGLY! IF TOO MUCH IS INJECTED, THE UNCONTROLLED EXPLOSION MAY RESULT IN COSTLY DAMAGE TO THE ENGINE.

NEVER ALLOW THE UNIT TO SIT STOPPED WITH PRESSURE IN THE RECEIVER-SEPARATOR SYSTEM. AS A PRECAUTION, OPEN THE SERVICE VALVE.

ANY UNAUTHORIZED MODIFICATION OR FAILURE TO MAINTAIN THIS EQUIPMENT MAY MAKE IT UNSAFE AND OUT OF FACTORY WARRANTY.

WHEN LIFTING OR LOWERING DRAWBAR ALWAYS USE HANDLE STRAP AND STAND TO ONE SIDE. ENSURE PIN IS FULLY ENGAGED IN DROP LEG BEFORE ALLOWING UNIT TO REST ON CASTER WHEEL.

CHAINS MUST BE CROSSED UNDER DRAWBAR AND ATTACHED TO TOWING VEHICLE TO PREVENT DRAWBAR FROM DROPPING TO GROUND IN EVENT OF COUPLING FAILURE.

0 LOOK FOR THESE SIGNS WHICH POINT OUT POTENTIAL HAZARDS TO THE SAFETY OF YOU AND OTHERS. READ AND UNDERSTAND THOROUGHLY. HEED WARNINGS AND FOLLOW INSTRUCTIONS. IF YOU DO NOT UNDERSTAND, INFORM YOUR SUPERVISOR.



(Red background)

Indicates the presence of a hazard which WILL cause severe injury, death or property damage, if ignored.



(Orange background)

Indicates the presence of a hazard which CAN cause severe injury, death or property damage, if ignored.



(Yellow background)

Indicates the presence of a hazard which WILL or CAN cause injury or property damage, if ignored.



(Blue background)

Indicates important set-up, operating or maintenance information.

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FOREWORD

1 During the preparation of this manual every effort was made to ensure the adequacy and accuracy of the contents. Only in this manner can the owner be provided with a tool that will aid him in obtaining maximum performance and trouble-free service from the compressor. Since all classes of equipment require a certain amount of attention, the purpose of this manual is to acquaint an operator with the functions, operation and lubrication of the compressor. This manual also provides the owner with the maintenance requirements applicable to the various components designed or selected for incorporation into this unit. Special attention has been given in an effort to make sure that only components built with the very best materials and the finest workmanship have been used, thus reducing the maintenance requirement to a bare minimum.

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 complete protection and minimum down-time to facilitate the maintenance effort that is required, it is suggested that a complete set of recommended spares be kept on hand during and after the first few months of operation. For recommended spares, replacement parts or information regarding the condition or operation of your unit or for major servicing not covered in this manual, consult your nearest sales office, autonomous company or au-

thorized distributor. Be sure to specify the model and serial number of the compressor during any correspondence with a company representative.

In addition to preventive maintenance, the compressor airend may require overhauling to maintain maximum output and performance of the unit. Your Ingersoll-Rand Company Construction Equipment Group Sales Offices and authorized distributors as well as Ingersoll-Rand International autonomous companies and authorized distributors now have a compressor airend exchange program, therefore we do not recommend overhaul of the airend by the customer. However, we do recognize the fact that circumstances may warrant field overhaul of the airend. Prior to any disassembly or reassembly of the airend we strongly suggest the owner contact the Customer Service Department, Ingersoll-Rand Company, Mocksville, North Carolina, 27028 for their advice and suggestions.

NOTE

For the purpose of encouraging proper maintenance, Ingersoll-Rand Company is providing a Maintenance Log Book (Form PCD 685) with each compressor shipped from the factory. This Log Book contains a performance schedule for all required noise emission control maintenance. Space is provided in this log book so that the owner of this compressor can note what maintenance was done, by whom, where and when.

SECTION 2 – GENERAL DATA

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MODEL:

P-()-W-D						375
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Rated Delivery:

-cfm						375
-(litres/sec)						(177)

Rated Pressure:

-psi						100
-(kPa)						700

Safety Valve Setting:

-psi						150
-(kPa)						1050

ENGINE – DEUTZ Model F6L912 (DIESEL)

Full Load Speed – rpm	2500
No Load Speed – rpm	1200
Electrical System–volt	12
Crankcase Lube Cap., quarts	14.8
(litres)	(14)

WEIGHT – Pounds/Kilograms

Net Weight (less fuel)	4335 /1960
Gross Weight (all fluids)	4630 /2100

FLUID CAPACITIES

Compressor Lubricant	11 U.S. gallons (41.6 litres)
Fuel Tank (Use clean DIESEL fuel)	42 U.S. gallons (159 litres)
Engine Crankcase Lubricant	4.7 U.S. gallons (17.7 litres)

UNITS MEASUREMENTS/WEIGHTS

Overall Length	179 inches (4547 mm)
Overall Height	70 inches (1778 mm)
Overall Width	64 inches (1626 mm)

RUNNING GEAR

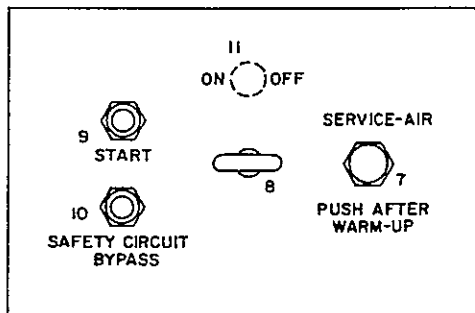
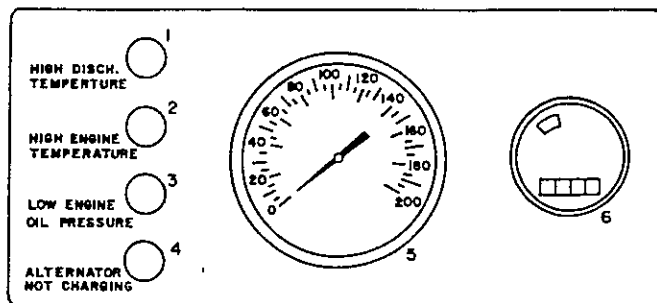
Tire Size	8.75 x 16.5, Load Range E
Inflation Pressure (Cold)	75 psi (520 kPa)
Towing Speed (Maximum)	50 mph (80 km/hr)

CAUTION: Any departure from the specifications may make this equipment unsafe.

EXPENDABLE SERVICE PARTS

Part Number

Compressor Oil Filter Element	35328509
Compressor Oil Separator Element	36723666
Air Cleaner Element	35326230
Engine Air Cleaner Element	35318252



36510188

OPERATING CONTROLS AND INSTRUMENTS - Standard

1. **High Discharge Temperature Lamp**- Glows when compressor discharge air temperature exceeds 220°F (104°C)±.
2. **High Engine Temperature Lamp** - Glows when engine coolant temperature exceeds 210°F (99°C)± or the engine fan belt breaks on an air-cooled engine.
3. **Low Engine Oil Pressure Lamp** - Glows when engine oil pressure drops below 12 psi (0.8 kgf per cm²)±.
4. **Alternator Not Charging Lamp** - Indicates alternator or belt failure.
5. **Compressor Discharge Pressure Gauge**- Indicates pressure in receiver tank, normally from 0 psi (kgf per cm²) to the rated pressure of the machine.
6. **Hourmeter**- Records running time for maintenance purposes.
7. **Service Air Button**- A two-way valve that provides full air pressure at the discharge.
8. **Stop Handle**- Push in before starting; pull to stop engine.
9. **Start Button**- Switch that activates the engine starter.
10. **Safety Circuit Bypass Button** -Switch that bypasses the sensors in the safety shutdown system during start-up. Can also be used for testing lamps on instrument panel and, with gauge option, fuel level reading.
11. **Light Switch (Optional)** - Illuminates gauges on options.

SECTION 3 - OPERATING INSTRUCTIONS

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BEFORE MOVING/MOVING PORTABLES (with running gear)

WARNING

Failure to follow these instructions could result in severe hand or foot injuries.

- * When lifting or lowering draw-bar, always use handle strap and stand to one side.
- * Ensure pin is FULLY ENGAGED in drop leg before allowing unit to rest on caster wheel. THIS IS CRITICAL.

WARNING

Failure to follow these instructions could result in very serious personal injury, death or property damage.

- * Ensure that the tires, wheels and running gear are in good condition and secure.
- * Ensure that the tires are inflated to 32 psi (2.25 kgf per cm²).
- * Do not tow this unit in excess of 50 mph (80 km/hr).
- * Use a tow vehicle whose towing capacity is greater than the gross weight of this unit.

UTILITY PACKAGE (no running gear)

- * The unit must be located (on vehicle bed, etc.) to allow access for normal servicing and maintenance.

- * The air going into the inlet grille must be relatively free of oil, dirt, soot, etc. and no more than 10°F (5°C) over the ambient temperature.

- * The inlet and outlet grilles must not be restricted. The cross-sectional area of any ductwork must be larger by a minimum of 10 percent.

- * The addition of any power-absorbing components (hydraulic pumps, paint mixers, etc.) must be approved by Ingersoll-Rand to maintain the warranty.

- * High loading/continuous operation requires engine oil changes at 1/2 normal interval.

SETTING-UPALL UNITS

- * Place the unit in a position as level as possible. The design of these units permits a 15 degree lengthwise and 15 degree sidewise limit on out-of-level operation. When the unit is to be operated out-of-level it is important: (1) to keep the engine crankcase oil level near the high level mark (with the unit level), and (2) to have the compressor oil level gauge show no more than half full (with the unit level). Do not overfill either the engine crankcase or the compressor lubricating oil system.
- * Chock the wheels, if so equipped, or otherwise restrain the unit from moving.

CAUTION

Do not connect the air discharge on this unit into a common header with any other unit of any description, or any other source of compressed air, without first making sure a check-valve is used between the header and the unit. If this unit is connected in parallel with another unit of higher discharge pressure and capacity, a safety hazard could occur in a back-flow condition.

WARNING

3 Unrestricted air flow from a hose will result in a whipping motion of the hose which can cause severe injury or death. A safety device must be attached to the hose at the source of supply to reduce pressure in case of hose failure or other sudden pressure release. Reference: OSHA regulation 29 CFR Section 1926.302(b).

BEFORE STARTING

ALL UNITS

- * Open service valve(s) to ensure pressure is relieved in receiver-separator system. Close valve(s) in order to build up full air pressure and ensure proper oil circulation.
- * Check battery for proper connections and condition.

WARNING

Exercise extreme caution when using a booster battery to start. To jump-start, connect the ends of one booster cable to the positive (+) terminals of each battery. Then connect one end of the other cable to the negative (-) terminal of the booster battery and the other end to the engine block (NOT TO THE NEGATIVE (-) TERMINAL OF THE WEAK BATTERY). After starting:

- a. Reduce engine speed to idle.
- b. Disconnect negative (-) cable from engine block; then from booster battery.
- c. Disconnect positive (+) cable from both batteries.

- * Check the compressor lubricating oil level. The proper oil level is mid-way on the sight gauge. Add oil if the level falls to the bottom of the sight gauge when the unit is not running. Do not overfill. If necessary, refer to Section 5 - Lubrication for recommended lubricant.

- * Check the engine lubricating oil level. Add oil if low on dipstick. Refer to the engine Operator's Manual for recommended lubricant.

UNITS WITH LIQUID-COOLED ENGINE

WARNING

Use extreme care when removing a pressure cap from a liquid cooling system for the engine. The sudden release of pressure from a heated cooling system can result in a loss of coolant and possible severe personal injury.

- * Check the engine coolant level in the radiator. The coolant must cover the loop below the filler neck, or if visible, the tubes in the top tank (approximately 1 inch high on a clean measuring rod stuck down filler neck). If needed, add coolant.

NOTICE

If the appropriate mixture of antifreeze is not used (during freezing temperatures), failure to drain the engine may cause costly damage. If water only is used, a corrosion inhibitor should be included.

ALL UNITS

DANGER

No smoking, sparks, or open flame near fuel.

- * Check the fuel level. This can be done visually or, if equipped with a fuel gauge and toggle switch, by depressing the SAFETY CIRCUIT BYPASS button with the IGNITION switch "ON". Use clean fuel for maximum service from the engine.

NOTICE

To minimize condensation (water) in the fuel tank, fill the tank at the end of each day.

WARNING

This machine produces loud noise with doors open. Extended exposure to loud noise can cause hearing loss. Wear hearing protection when doors or valve(s) are open.

- * Close the side doors to maintain a cooling air path and to avoid recirculation of hot air. This will maximize the life of the engine and compressor and protect the hearing of surrounding personnel.

STARTING

ALL UNITS

- * The SERVICE-AIR button (2-way or run-start valve) should be extended.
- * Pull the choke knob, if so equipped, all the way out. In hot weather or on restarts, less choke may be adequate.
- * Flip the toggle switch to "ON" or push the Stop Handle in.

NOTICE - COLD WEATHER

- * Normally the service valve should be closed but in extremely cold weather, opening this valve partially will allow the engine to crank faster and start

at a reduced load. Once the engine is running, close the valve slowly to ensure lubrication of the compressor.

CAUTION

Ether is an extremely volatile, highly flammable gas. Use sparingly! If too much is injected, the uncontrolled explosion may result in costly damage to the engine.

- * If equipped with the optional cold starting aid (ether), operate the valve once or twice ONLY while the engine is cranking. Refer to the engine operator's manual for detailed instructions.

UNITS WITH DIAGNOSTIC LAMPS

NOTE

A lamp (bulb) test feature is incorporated within the circuit to the SAFETY BYPASS button. When the BYPASS button is depressed, the high air discharge temperature, the high engine temperature and the engine low oil pressure panel lamps will glow. The lamps may also be tested at any time during operation by depressing the BYPASS button.

ALL UNITS

- * Press the START button and the SAFETY CIRCUIT BYPASS button at the same time.

NOTE

Do not operate the starter motor for more than 10 seconds without allowing at least one minute cooling time between start attempts.

- * Release the START button when the engine starts and sustains running.

If the engine does not start after a couple of attempts, refer to Section 7 - Trouble Shooting.

NOTICE

If no oil pressure is indicated within five seconds after the engine starts, shut it down and correct the problem before continuing.

- * Release the BYPASS switch when the air discharge pressure reaches approximately 40 psi (2.81 kgf per cm²).

UNITS WITH CHOKE (GASOLINE)

- * As required (depending upon the ambient temperature) push the choke in to a point where the engine runs smoothly.

3

- * Gradually pushing the choke in, allow the engine to warm up for 3 to 5 minutes.

UNITS WITH DIAGNOSTIC LAMPS

NOTE

None of the panel lights should be glowing. If they are, shut unit down and refer to Section 7 - Trouble Shooting.

ALL UNITS

- * Allow the engine to warm up for 3 to 5 minutes.

NOTICE

In ambient temperatures below 32°F (0°C) the regulator system can become inoperative due to frozen condensate. This will result in "popping" the safety valve. Should this happen, open the service valve prior to pushing the SERVICE-AIR button. The engine speed and discharge pressure should rise. Slowly close the service valve while watching the pressure gauge to ensure that it does not exceed 130 psi (9.1 kgf per cm²). If the discharge pressure reaches 130 psi, stop closing the service valve until the regulation system can thaw (unfreeze). Proceed to slowly close the service valve completely.

- * Push the SERVICE-AIR button. The discharge pressure should rise to approximately 120 psi (8.6 kgf per cm²). If there is no air being consumed the compressor will unload (the inlet valve will close automatically).

- * The compressor is now ready to furnish air when the service valve is opened.

NOTE

If the engine stops unexpectedly, refer to Section 7 - Trouble Shooting.

STOPPING

- * Close all service valves.
- * Allow the unit to run at idle for 3 to 5 minutes to reduce the engine temperatures.
- * Depending upon controls, flip the toggle switch to "OFF" or pull the Stop Handle out until the engine stops.

NOTICE

Once the engine stops, the automatic blowdown valve will begin to relieve all pressure from the receiver-separator system.

CAUTION

Never allow the unit to sit stopped with pressure in the receiver-separator system. As a precaution, open the service valve.

DANGER

Even after pressure is relieved from the receiver-separator system, any air supply line from the compressor to a tool or machine could remain under pressure and cause very serious personal injury or death. After the compressor stops, carefully open a valve at any tool or machine to exhaust the pressure in any line prior to removal or servicing.

AUTOMATIC SAFETY SHUTDOWN

This unit is protected with sensors (switches) for high discharge air temperature and low engine oil pressure. The high engine temperature sensor is a belt-break switch on an air-cooled engine (Deutz) and a high coolant temperature switch in other engines. Should any of three shutdown situations occur, the unit will stop. Do not wire around or bypass a shutdown sensor (switch).

UNITS WITH DIAGNOSTIC LAMPS

In a shutdown situation, the function of the panel lamps is to indicate what specific failure caused the unit to shut down. These lamps will remain illuminated until the "problem" sensor returns to a "normal" condition and/or the toggle switch is turned "off".

ALL UNITS

Before restarting the unit, check these three areas for excessive heat and fluid level. Other possible causes are listed on the Trouble Shooting chart in Section 7.

SECTION 4 - PREVENTIVE MAINTENANCE

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GENERAL

In addition to periodic inspections, many of the components in these units require periodic servicing to provide maximum output and performance. Servicing may consist of pre-operation and post-operation procedures to be performed by the operating or maintenance personnel. The primary function of preventive maintenance is to prevent failure, and consequently, the need for repair. Preventive maintenance is the easiest and the least expensive type of maintenance. Maintaining your unit and keeping it clean at all times will facilitate servicing.

Refer to the engine Operator's Manual furnished with the unit for the specific requirements on preventive maintenance for the engine.

SCHEDULED MAINTENANCE

The schedule on page 4-11 is based on normal operation of the unit. This page can be reproduced and used as a checklist by the service personnel. In the event unusual environmental operating conditions exist, the schedule should be adjusted accordingly.

COMPRESSOR OIL LEVEL

The optimum operating level is midway of the sight tube on the side of the receiver tank. DO NOT OVERFILL. A totally filled sight tube in which the level is not visible indicates an over-full condition and requires that oil be drained. Add oil only when the level is near the bottom. Then add enough oil to bring the level midway of the sight tube.

AIR CLEANER

Maximum compressor and engine protection against the ravages of dust is possible only if the air cleaners are maintained properly. Never guess about the condition of the air cleaner element. Remove and inspect the elements every month or more often when operating in very dusty conditions. Squeeze the rubber valve (precleaner dirt dump) periodically to ensure that they are not clogged.

If your unit is equipped with the optional air cleaner service indicator (mounted on the air cleaner outlet), it should be checked daily. If the window shows red with the unit operating at full speed, and remains red after the unit is shut down, it is an indication that proper servicing of the filter element is necessary.

After servicing, the restriction indicator should be reset by pressing down on the indicator's flexible top.

To service the air cleaners on all units proceed as follows:

1. Loosen thumb screw on band and remove end cap. Loosen inner wing nut and remove filter element.
2. Inspect air cleaner housing for any condition that might cause a leak and correct as necessary.
3. Wipe inside of air cleaner housing with a clean, damp cloth to remove any dirt accumulation. This will permit better seal for gasket on filter element.
4. Inspect element by placing a bright light inside and rotating slowly. If any holes or tears are found in the paper, discard this element. If no ruptures are found, the element can be cleaned by one of the following procedures.
5. If a new air filter element is to be used check it closely for shipping damage. Install element.
6. Install and tighten inner wing nut. Replace end cap and tighten band securing end cap to housing.
7. Inspect to ensure that the end cap seals tightly 360 degrees around the air cleaner body.

In the event that the filter element must be reused immediately, maintenance of the element should be performed as follows: Direct compressed air through the element in the direction opposite to the normal air flow through the element.

Move the nozzle up and down while rotating the element. Be sure to keep the nozzle at least one inch (25.4 mm) from the pleated paper.

NOTICE

To prevent damage to the element, never exceed a maximum air pressure of 100 psi (7.03 kgf per cm²).

Compressed air cleaning is recommended whenever the element must be reused immediately. A washed element must be thoroughly dried before reusing.

In the event the element is contaminated with dry dirt, oil or greasy dirt deposits, maintenance of the element should be performed as follows:

1. If only a mild cleaning is required, mix a sufficient amount of warm water and household detergent to allow the element to be fully submerged. Place the element in the cleaning solution and allow it to soak for five minutes. Agitate the element thoroughly in the cleaning solution after the soaking period. Remove the element from the cleaning solution, drain, then flush using a gentle stream of clean water.
2. If stronger cleaning is required, wash the element in a thoroughly mixed cleaning solution consisting of four tablespoons of household detergent and one-half a teaspoon of trisodium phosphate to each gallon of lukewarm water. After soaking the element in the cleaning solution for not less than five minutes, agitate the element in the solution to make sure it is thoroughly cleaned.

3. Discard the dirty solution and rewash the element in a newly mixed bath of cleaning solution. After the element has been thoroughly cleaned, flush the element with clear water, using a gentle stream, being careful not to point the stream directly at the element.
4. Inspect the washed element for any damage by placing a bright light inside the element and rotating the element slowly. Keep in mind that the slightest rupture requires replacement of the element.
5. Allow the element to air-dry or use a stream of warm flowing air not exceeding a maximum temperature of 160°F (71°C). Do not use compressed air or the heat of a light bulb to dry the element.

NOTICE

It is highly recommended that new replacement elements be installed in the unit immediately in order that the unit be returned to service in the shortest possible time. In this manner the elements just removed for cleaning can be washed and stored as future replacement elements.

In addition, the air cleaner assembly (housing) should be inspected every three (3) months or 500 hours for any leakage paths. Note: Make sure that the inlet is free from obstructions. Make sure the air cleaner mounting bolts and clamps are tight and that the air cleaner is mounted securely. Check the air cleaner housing for dents or damage to the cleaner which could lead to a leak. Inspect the air transfer tubing from the air cleaner to the compressor and the engine for holes. Make sure that all clamps and flange joints are tight.

GAUGES

The instruments or gauges are essential for safety, maximum productivity and long service life of the machine. Inspect the gauges and test any diagnostic lamps prior to start-up. During operation observe the gauges and any lamps for proper functioning. Refer to page 2-2, Operating Controls, for the normal readings. To test the diagnostic lamps, refer to Section 3 - Starting, page 3-3.

FUEL TANK

The fuel tank on this unit should be filled daily or every eight hours if necessary. In order to prevent condensation from forming in the fuel tank, it should be filled immediately after the unit has been operated, for example, at the end of each working day. Using clean fuel in the fuel tank is vitally important and every precaution should be taken to ensure that only clean fuel is either poured or pumped into the tank.

When filling the fuel tank on this unit, by methods other than a pump and hose, use a **nonmetallic** funnel which is kept for this purpose only. Make sure the funnel is wiped clean before using.

Every six months the drain plug should be removed from the tank so that any sediment or accumulated condensate may be drained. When replacing the drain plug, make sure it is tightened securely.

BATTERY

A low maintenance type battery was installed at the factory and only requires keeping the battery posts to cable connections clean, tight and lightly coated with a grease.

TIRES (If so equipped)

The proper inflation pressure for the tires is listed in Section 2 - Specifications. Tires that have cuts or cracks or little tread should be repaired or replaced.

SAFETY SHUTDOWN SYSTEM

The operation of the safety shutdown system should be checked every month, or whenever it appears not to be operating properly. The three switches involved in this protective shutdown system are the discharge air temperature switch, the engine high temperature switch and the engine oil pressure switch. The operation of these switches is extremely important in order to protect the engine and the compressor air end from overheating. The engine oil pressure switch prevents the engine from being damaged due to oil starvation. The remaining two switches help protect the engine and compressor from high temperature. Once a month remove a wire from the engine oil pressure switch to check the shutdown system for proper operation.

NOTICE

Never operate the unit with a defective safety shutdown switch or by shorting over (bypassing) a switch.

Once a year, the temperature actuated switches should be tested by removing from the unit. Test the switch's operation by connecting an ohmmeter between the wire terminals. The ohmmeter should show continuity (zero ohms.) When the switch is placed in the heated oil bath and its contact open, the ohmmeter should indicate infinite ohms. Tap the switch lightly during the checking operation. The high discharge air temperature

switch will require approximately 248°F (120°C) to actuate. The engine coolant temperature switch will require approximately 220°F (104°C) to actuate. Replace any defective switch before continuing to operate the unit.

The engine oil pressure switch may be tested by removing it and connecting it to a source of controlled pressure while monitoring an ohmmeter connected to the switch terminals. As pressure is applied slowly from the controlled source, the switch should close at 12 psi (.84 kgf per cm²) and show continuity through the contacts. As the pressure is slowly decreased to 8 psi (0.56 kgf per cm²) the contacts should open and the ohmmeter should show lack of continuity (infinite ohms) through the contacts. Replace a defective switch before continuing to operate the unit.

A belt break switch should show a lack of continuity on an ohmmeter if belt tension is relieved. With the belt properly installed, the belt break switch should show continuity.

COMPRESSOR OIL COOLER

The compressor lubricating and cooling oil is cooled by means of the fin and tube-type oil cooler, located behind the fan. The lubricating and cooling oil, flowing internally through the core section, is cooled by the air stream from the cooling fan flowing past the core section. When grease, oil and dirt accumulate on the exterior surfaces of the oil cooler, its efficiency is impaired.

Each month it is recommended that the oil cooler be cleaned by directing compressed air which contains a nonflammable safety solvent through the core of the oil cooler. This should remove the accumulation of grease, oil and dirt from the exterior surfaces of the oil cooler core so that the entire cooling area can transmit the heat of the lubricating and cooling oil to the air stream.

In the event foreign deposits, such as sludge and lacquer, accumulate in the oil cooler to the extent that its cooling efficiency is impaired, a resulting high discharge air temperature is likely to occur, causing shut down of the unit. To correct this situation it will be necessary to clean it using a cleaning compound in accordance with the manufacturer's recommendations. Use only a dependable cleaning compound. This is of prime importance because different cleaners vary in concentration and chemical composition. After completing the cleaning procedure, the oil cooler must be flushed before returning to service.

RADIATOR

ALL LIQUID-COOLED ENGINES

WARNING

Use extreme care when removing a pressure cap from a liquid cooling system for the engine. The sudden release of pressure from a heated cooling system can result in a loss of coolant and possible severe personal injury.

The engine cooling system is filled at the factory with a 50/50 mixture of water and ethylene glycol. This permanent type antifreeze contains rust inhibitors and provides protection to -35°F (-37°C). The use of such a mixture is recommended for both summer and winter operation. When using water alone be sure to add a reputable brand of rust inhibitor to prevent internal corrosion.

It is recommended to test the freezing protection of the coolant every six months or prior to freezing temperatures. Replenish with a fresh mixture every twelve months. A drain for the system is located in the bottom of the radiator tank or in the lower radiator pipe. An alternate method would be to disconnect a bottom radiator hose.

Each month, inspect the radiator exterior for obstructions (dirt, bugs, etc.). If present, blow water or compressed air containing a nonflammable solvent between the fins in a direction opposite the normal air flow. Should the radiator be clogged internally, standard automotive practices should be followed.

AIR COOLED ENGINES

All components of the engine cooling system should be checked periodically to keep the engine operating at peak efficiency. Consult the engine Operator's Manual for instructions and schedule.

HOSES

ALL UNITS

Each month it is recommended that all of the intake lines to and from the air cleaners, the engine cooling system hoses and all of the flexible hoses used for air, oil, brake and fuel (if so equipped) be inspected.

To ensure freedom from air leaks all rubber hose joints and the screw-type hose clamps must be absolutely tight. Regular inspection of these connections for wear or deterioration is a definite "must" if regular servicing of the air cleaners is not to prove futile. Premature wear of both the engine and compressor is assured whenever dust-laden air is permitted to enter the engine's combustion chamber or the compressor intake practically unfiltered.

The flexible hoses used in the fuel, oil and air lines on these units are primarily used for their ability to accommodate relative movement between components. Secondly, they reduce vibration problems found with fixed piping and they permit much more flexibility in routing. Because these hose lines are flexible it is extremely important they be periodically inspected for wear and deterioration. Clamps are used to prevent hose cover abrasion through vibration. This abrasion may occur when two hose lines cross, or when a hose line rubs against a fixed point; therefore, it is necessary that all clamps be replaced if missing or that new clamps be added if required to prevent further wear. It is also important the operator does not use the hoses as convenient hand holds or steps. Such use can cause early cover wear and hose failure.

NOTICE

Special nylon tubing is used in the control (regulation) system. The associated fittings are also of a special design ("push-in").

Pulling on the tubing will cause the inner sleeve to withdraw and compress, thus tightening the connection. The tubing can be withdrawn only while holding the sleeve against the fitting. The tubing can be removed and replaced numerous times without losing its sealing ability.

To install the nylon tubing, make a mark (with tape or grease pencil) approximately 7/8 inch from the end of the tubing.

Insert the tubing into the sleeve and "push-in" past the first resistance to the bottom. The mark should be approximately 1/16 inch from the sleeve, for the 3/8 inch O.D. tubing; 1/8 inch for the 0.25 inch O.D. tubing. This will ensure that the tubing is fully engaged in the sealing mechanism.

COMPRESSOR OIL FILTER

The compressor lubrication and cooling oil system is equipped with a spin-on, throwaway type oil filter with an internal bypass valve. With a clean, new filter element all of the oil flows through the full element area, from the outside/inside. As each element becomes contaminated with dirt, a pressure differential is created in the filter housing between the oil inlet and outlet ports. As dirt builds up on the outside filter surface, this pressure differential increases. As this differential approaches 15 psi (1.05 kgf per cm²), the bypass valve starts to open, thus permitting a small quantity of oil to bypass the filter. As the contaminants continue to build up on the surface of the filter, the pressure differential increases, thus permitting more oil to bypass until finally the valve is wide open. This does not provide any filtration but does allow a maximum flow of compressor lubricating and cooling oil to preclude any possible damage from loss of oil. The design of the filter prevents any washing-off of any dirt during oil bypassing.

NOTICE

The oil filter must be replaced every 500 hours of operation. On new or overhauled units replace the element after the first 50 and 150 hours of operation; thereafter, service the oil filter every 500 hours.

To service the oil filters it will first be necessary to shut the unit down. Wipe off any external dirt and oil from the exterior of the filter to minimize any contamination from entering the lubrication system. Proceed as follows:

WARNING

High pressure air can cause severe injury or death from hot oil and flying parts. Always relieve pressure before removing caps, plugs, covers or other parts from pressurized air system.

1. Open the service air valve(s) to ensure that system is relieved of all pressure. Close the valve(s).
2. Turn the spin-on filter element counterclockwise to remove it from the filter housing. Inspect the filter element and then discard.

NOTICE

If there is any indication of formation of varnishes, shellacs or lacquers on the oil filter element, it is a warning the compressor lubricating and cooling oil has improper characteristics and should be immediately changed. Refer to Section 5 - Lubrication.

3. Inspect filter gasket contact area for cleanliness and damage. Clean or repair as necessary.
4. Install new filter by turning element clockwise until gasket makes initial contact. Tighten an additional 1/2 to 3/4 turn.
5. Start unit and allow to build up to rated pressure. Check for leaks before placing unit back into service.

FASTENERS

Visually check entire unit in regard to bolts, nuts and screws being properly secured. Spot check several capscrews and nuts for proper torque. If any are found loose a more thorough inspection must be made. Take corrective action.

COMPRESSOR OIL

The lubricating and cooling oil must be replaced every 500 hours of operation or six months, whichever comes first. Refer to Section 5 - Lubrication for detailed instructions and specifications.

RUNNING GEAR

ALL UNITS ON WHEELS

Every month or 500 miles, tighten the wheel lug nuts to 85 - 95 lbs.-ft. Every six months the wheel bearings, grease seals and axle spindles should be inspected for damage and wear (i.e. from corrosion, scratches, metal particles). Replace any damaged or worn parts. Repack wheel bearings. Use a wheel bearing grease conforming to specification MIL-G-10924 and suitable for all ambient temperatures.

Grease can be replaced in a wheel bearing using a special fixture or by hand as follows. Place a spoonful of grease in the palm of one hand and take the bearing in the other hand. Push a segment of the wider end of the bearing down into the outer edge of the grease pile closest to the thumb. Keep lifting and pushing the bearing down into the edge of the grease pile until grease oozes out both from the top and from between the rollers. Then rotate the bearing to repeat this operation on the next segment. Keep doing this until you have the entire bearing completely filled with grease.

Before installing bearing, place a light coat of grease on the bearing cups which are pressed in the hub.

NOTE

Excessive grease in the hub or grease cap serves no purpose due to the fact that there is no way to force the grease into the bearing. The manufacturer's standard procedure is to thoroughly pack the inner and outer bearing with grease and then to apply only a very small amount of grease into the grease cap.

If bearing adjustment is required or the hub has been removed for any reason, the following procedure must be followed to ensure a correct bearing adjustment of 0.001 to .012 free play.

4

- (1) While rotating hub slowly to seat the bearings, tighten spindle nut to approximately 15 lbs.-ft. Grasp the tire at the top and bottom and rock, in and out. There should be no evidence of looseness (free play) at the bearing.
- (2) Loosen nut to remove preload torque. Do not rotate hub.
- (3) Finger tighten nut until just snug. Loosen nut until the first nut castellation lines up with cotter pin hole in spindle. Insert cotter pin.
- (4) Ensure a definite but minimal amount of free play by rocking the tire.
- (5) Bend over cotter pin legs to secure nut and clear grease cap.
- (6) Nut should be free to move with only restraint being the cotter pin.

RECEIVER-SEPARATOR SYSTEM
ALL UNITS

WARNING

High pressure air can cause severe injury or death from hot oil and flying parts. Always relieve pressure before removing caps, plugs, covers or other parts from pressurized air system.

- * Open service valve at end of machine.
- * Ensure pressure is relieved, with BOTH:
 - Discharge air pressure gauge reads zero (0).
 - No air discharging from service valve.
- * When draining oil, remove and replace (make tight) plug at bottom of separator tank.
- * When adding oil, remove and replace (make tight) plug on side of separator tank.

In the compressor lubricating and cooling system, separation of the oil from the compressed air takes place in the receiver-separator tank. As the compressed air enters the tank, the change in velocity and direction drop out most of the oil from the air. Additional separation takes place in the oil separator element which is located in the top of the tank.

Any oil accumulation in this separator element is continuously drained off by means of a scavenge tube which returns the accumulated oil to the system.

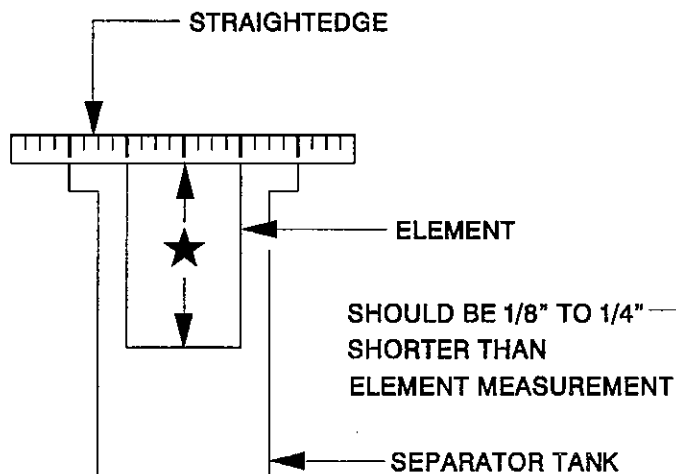
The life of the oil separator element is dependent upon the operating environment (soot, dust, etc.) and should be replaced every twelve months or 1000 hours. To replace the element proceed as follows:

- * Ensure the tank pressure is zero.
- * Disconnect the hose from the scavenge tube.
- * Disconnect large line from fitting in cover.
- * Remove (8) cover attaching screws.
- * Remove cover (some assemblies may require that the scavenge tube be removed first to clear the element).
- * Remove and discard the old element.
- * Remove any gasket material left on cover or tank.
- * Inspect and install new element (with gasket in place) in tank.

NOTICE

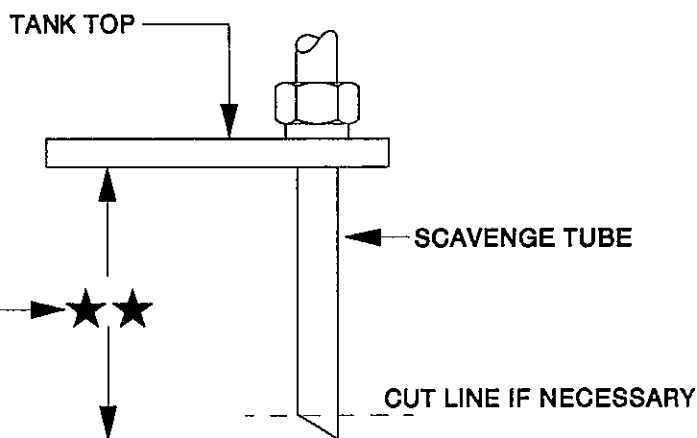
Do not remove staples from the element/gasket connection.

- * Place a straightedge across top of element and measure from bottom of straightedge to bottom of element (see Figure 4.1).



**Figure No. 4.1
Element Measure**

- * Clean scavenge tube and any included orifice or check valve.
- * With scavenge tube installed (cover is still off tank), measure from bottom of cover to end of scavenge tube (see Figure 4.2). This measurement should be 1/8 inch to 1/4 inch less than the element measurement. If not, cut tube to size.
- * Install cover and tube, as removed, using care not to damage gasket.
- * Replace cover mounting screws; tighten in a crisscross pattern to 75 lbs.-ft.
- * Reconnect large line.
- * Reconnect scavenge hose.
- * Normally, the compressor oil and filter would be changed at this time.
- * Close service valve. Start unit and look for leaks.



**Figure No. 4.2
Tube Measurement**

SCAVENGE LINE**WARNING**

High pressure air can cause severe injury or death from hot oil and flying parts. Always relieve pressure before removing caps, plugs, covers or other parts from pressurized air system.

The scavenge line originates at the receiver-separator tank cover and terminates at the compressor airtend through an orifice, as follows:

<u>Unit</u>	<u>Orifice Size</u>
P250	.078 in./2.0 mm
P375/HP300	None
All Others	.063 in./1.6 mm

Once a year or every 1000 hours of operation, whichever comes first, remove this line and any orifice, thoroughly clean, then reassemble.

NOTICE

Excessive oil carry-over may be caused by an oil-logged separator element. Do not replace element without first performing the following maintenance procedure:

1. Check oil level. Maintain as indicated earlier in this section.
2. Thoroughly clean scavenge line, any orifice and check valve.
3. Assure minimum pressure valve (if so equipped) has proper setting.
4. Run unit at rated operating pressure for 30 to 40 minutes to permit element to clear itself.

EXTERIOR FINISH CARE

This unit was painted and heat cured at the factory with a high quality, thermoset polyester powder coating. The following care will ensure the longest possible life from this finish.

1. If necessary to remove dust, pollen, etc. from housing, wash with water and soap or dish washing liquid detergent. Do not scrub with a rough cloth, pad, etc.
2. If grease removal is needed, a fast evaporating alcohol or chlorinated solvent can be used. Note: This may cause some dulling of the paint finish.
3. If the paint has faded or chalked, the use of a commercial grade, non-abrasive car wax may partially restore the color and gloss.

To touch-up or paint over and retain the superior finish requires the following:

1. The area to be painted should be finish sanded with 320 grit paper.
2. Remove all sanding dust with alcohol using clean, lint free rag(s). Change rag when soiled. Remove any lint and other loose contamination with automobile-grade tack rag(s).
3. Before applying paint: Inspect to insure that area is free of all dirt, fibers, lint, grease, moisture or any other form of surface contamination. Coat area with a solvent based, automotive-type, high quality liquid paint that will adhere to powder coatings. DO NOT USE WATER BORNE OR LATEX PRODUCTS.
4. If possible allow 30 days before washing with anything but clean water.

CAUTION

- ANY UNAUTHORIZED MODIFICATION OR FAILURE TO MAINTAIN THIS EQUIPMENT MAY MAKE IT UNSAFE AND OUT OF FACTORY WARRANTY.
- IF PERFORMING MORE THAN VISUAL INSPECTIONS, DISCONNECT BATTERY CABLES AND OPEN MANUAL BLOWDOWN VALVE.
- USE EXTREME CARE TO AVOID CONTACTING HOT SURFACES (ENGINE EXHAUST MANIFOLD AND PIPING, AIR RECEIVER AND AIR DISCHARGE PIPING, ETC.).
- NEVER OPERATE THIS MACHINE WITH ANY GUARDS REMOVED.
- INCH AND METRIC HARDWARE WAS USED IN THE DESIGN AND ASSEMBLY OF THIS UNIT. CONSULT THE PARTS MANUAL FOR CLARIFICATION OF USAGE.

NOTICE: Disregard any maintenance pertaining to components not provided on your machine.

PREVENTIVE MAINTENANCE SCHEDULE

UNIT _____
HOURS _____

DATE _____
SERVICEMAN _____

PREVENTIVE MAINTENANCE SCHEDULE

If operating in extreme environments (very hot, cold, dusty or wet), these time periods should be reduced.

	DAILY	WKLY	MO.	3 MO. 300 HRS	6 MO. 500 HRS	12 MO. 1000 HRS
COMPRESSOR OIL LEVEL	C					
ENGINE OIL LEVEL	C					
*RADIATOR COOLANT LEVEL	C					
GAUGES/LAMPS	C					
*AIR CLEANER SERVICE INDICATORS	C					
FUEL TANK (FILL AT END OF DAY)	C				DRAIN	
*FUEL/WATER SEPARATOR	C					
AIR CLEANER PRECLEANER DUMPS		C				
FAN/ALTERNATOR BELTS		C				
BATTERY CONNECTIONS		C				
TIRE PRESSURE AND SURFACE		C				
*WHEEL LUG NUTS			C			
HOSES (OIL, AIR, INTAKE, ETC.)			C			
SAFETY SHUTDOWN SYSTEM	TEST		C			
AIR CLEANER ASSEMBLY	VISUAL		C			
AIR FILTER ELEMENT			C	R		
COMPRESSOR OIL COOLER	EXTERIOR		C	CLEAN		
*ENGINE RADIATOR	EXTERIOR		C	CLEAN		
FASTENERS				C		
*FUEL/WATER SEPARATOR ELEMENT					R	
COMPRESSOR OIL FILTER ELEMENT					R	
COMPRESSOR OIL					R	
*WHEELS (BEARINGS, SEALS, ETC.)					C	
*ENGINE COOLANT	TEST				C	R
SHUTDOWN SWITCH SETTINGS	TEST					C
SCAVENGER ORIFICE & RELATED PARTS						Clean
OIL SEPARATOR ELEMENT						R
ENGINE (OIL CHANGES, FILTERS, ETC.)	REFER TO ENGINE OPERATOR'S MANUAL					

*DISREGARD IF NOT APPROPRIATE FOR THIS PARTICULAR MACHINE.
C=CHECK (AND ADJUST OR REPLACE IF NECESSARY) R=REPLACE

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SECTION 5 - LUBRICATION

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Compressor Oil Change.....	1
Fluids & Lubricants Table.....	2

GENERAL INFORMATION

Lubrication is an essential part of preventive maintenance, affecting to a great extent the useful life of the unit. Different lubricants are needed and some components in the unit require more frequent lubrication than others. Therefore, it is important that the instructions regarding types of lubricants and the frequency of their application be explicitly followed. Periodic lubrication of the moving parts reduces to a minimum the possibility of mechanical failures.

The lubrication chart on page 5-2 shows those items requiring regular service and the interval in which they should be performed. A regular service program should be developed to include all items and fluids. These intervals are based on average operating conditions. In the event of extremely severe (hot, cold, dusty or wet) operating conditions, more frequent lubrication than specified may be necessary. Details concerning lubrication of the running gear are in Section 4 - Maintenance.

All filters and filter elements for air and compressor lubricant must be obtained through Ingersoll-Rand to assure the proper size and filtration for the compressor.

COMPRESSOR OIL CHANGE

These units are normally furnished with an initial supply of oil sufficient to allow operation of the unit for approximately 500 hours; however, if a unit has been completely drained of all oil, it must be refilled with new oil before it is placed in operation. Refer to specifications in table on page 5-2.

NOTICE

Some oil types are incompatible when mixed and result in the formation of varnishes, shellacs, or lacquers which may be insoluble. Such deposits can cause serious troubles including clogging of the filters. Where possible, do not mix oils of different types and avoid mixing different brands. A type or brand change is best made at the time of a complete oil drain and refill.

If the unit has been operated for 500 hours (or 2500 hours, if using a synthetic lubricant), it should be completely drained of oil. If the unit has been operated under adverse conditions, or after long shutdown periods, an earlier change period may be necessary as oil deteriorates with time as well as by operating conditions.

Complete replacement of the old oil with clean new oil every 500 operating hours (or every six months, whichever comes first), depending upon operating conditions, is not only desirable, but is good insurance against the accumulation of dirt, sludge, or oxidized oil products.

WARNING

High pressure air can cause severe injury or death from hot oil and flying parts. Always relieve pressure before removing caps, plugs, covers or other parts from pressurized air system. Ensure the following conditions are met:

- Discharge air pressure gauge reads zero (0).

- No air discharging from manual blowdown valve.

Completely drain the receiver-separator, piping, and oil cooler. If the oil is drained immediately after the unit has been run for some time, most of the sediment will be in suspension and, therefore, will drain more readily. However, the fluid will be hot and care must be taken to avoid contact with the skin or eyes.

After the unit has been completely drained of all old oil, close the drain valve. Add oil in the specified quantity at the filler plug. Tighten the filler plug and run the machine to circulate the oil. Shut the machine down and after some 5 minutes check the oil level. Top-up as required to put the level in the middle of the sight tube. DO NOT OVERFILL.

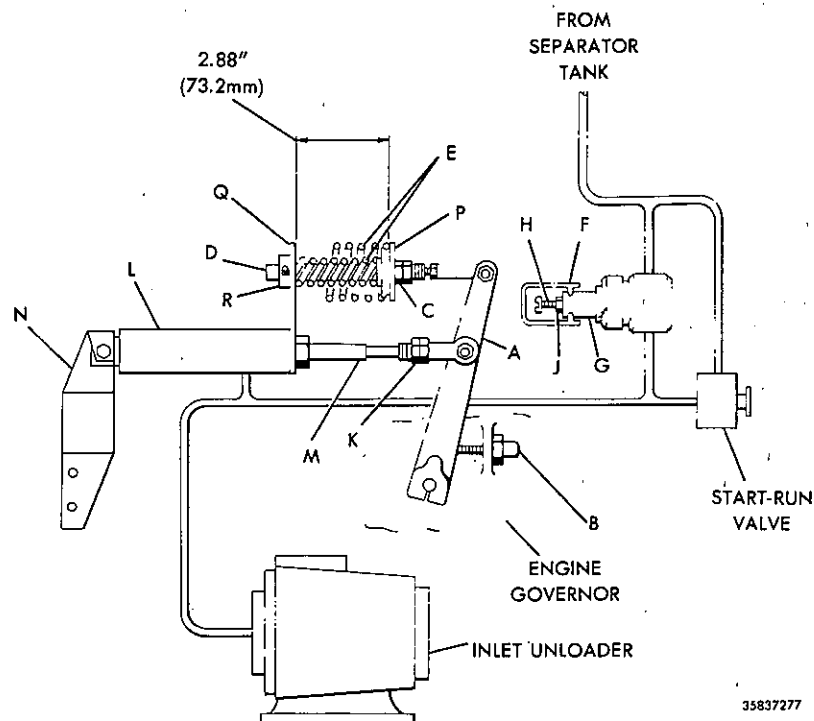
FLUIDS AND LUBRICANTS TABLE

ITEM	FLUID	AMBIENT TEMP.	SPECIFICATION	INTERVAL
Compressor	Lubricant	125°F to -10°F (52°C to -23°C)	• DEXRON® or DEXRON® II ATF • MIL-L-46152 SAE 10W, API CC • MIL-L-2104B SAE 10W • MIL-L-23699B Synthetic • MIL-L-23699B Synthetic • MIL-L-46167 Sub-Zero Arctic	500 hours*
		-10°F to -50°F (-23°C to -46°C)		500 hours*
				500 hours*
Engine	• Oil • Fuel	Refer to Engine Operator's Manual or Manufacturer's Representative		
Running Gear				
• Wheel Bearings	Grease	All	MIL-G-10924	6 months
• Other	Grease	All	Multi-Purpose	6 months

DEXRON® — Reg. T.M. of General Motors Corp.

*Or every six months, whichever comes first.

SECTION 6

SPEED AND PRESSURE REGULATOR
ADJUSTING INSTRUCTIONS

ADJUSTING INSTRUCTIONS

Normally, regulation requires no adjusting, but if proper adjustment is lost, proceed as follows:

Before Starting Unit

1. Inspect throttle arm (A) on engine governor to see that it is resting against full speed stop (B) on governor.
2. Adjust jam nut (C) on throttle spring rod (D) to fully relieve tension on two compression springs (E).
3. Remove cover (F) on regulator valve (G) to expose adjustment screw (H). Loosen jam nut (J) on adjustment screw (H) and

turn screw counterclockwise until no tension is felt on screw. Now turn screw (H) clockwise one full turn.

After Starting Unit

4. Allow unit to warm up, then push "Service Air" button (on start-run valve) on control panel.
5. Open and adjust service valve on outside of unit to obtain the rated operating pressure* on the discharge pressure gauge.

NOTE: If the rated operating pressure* cannot be maintained with engine at full load rpm* (throttle arm (A) against stop (B)), adjust regulator screw(H)

clockwise until throttle arm (A) just comes off stop (B).

6. Maintaining the rated operating pressure*, adjust regulator screw (H) until throttle arm (A) just comes off stop (B).

NOTE: Adjusting regulator screw clockwise will raise full speed pressure.

7. Close service valve (engine will slow to no load rpm*). Loosen jam nut (K) on air cylinder shaft (M). Rotate air cylinder shaft (M) to adjust speed to no load rpm*. If still unable to obtain desired engine rpm, loosen bolts securing air cylinder mounting bracket (N) and rotate bracket as required. Moving air cylinder(L) toward stop (B) increases no load rpm*. Tighten bolts attaching bracket (N) and, if required, finely adjust no load rpm* using air cylinder shaft (M). Then tighten jam nut (K).

8. Adjust jam nut (C) on throttle spring rod (D) until distance between spring mount (P) and rod guide (Q) is 2.88 in. (73.2mm).

9. If necessary, repeat steps 5 and 6.

10. Tighten jam nut (J) and replace cover (F).

11. Limit engine speed to full load rpm* by adjusting the collar (R) on the end of the throttle spring rod (D).

12. To obtain maximum cfm at any pressure between 80 psi (5.62 kgf per cm²) and the rated operating pressure*, change adjustment of screw (H) to obtain desired discharge pressure at engine full load rpm*. Always lock setting with jam nut (J) and replace cover (F).

* Refer to General Data.

SECTION 7 - TROUBLE SHOOTING

Contents	Page
Introduction.....	1
Action Plan.....	1
Chart.....	3

INTRODUCTION

Trouble shooting for a portable air compressor is an organized study of a particular problem or series of problems and a planned method of procedure for investigation and correction. The trouble shooting chart that follows includes some of the problems that an operator may encounter during the operation of a portable compressor.

The chart does not attempt to list all of the troubles that may occur, nor does it attempt to give all of the answers for correction of the problems. The chart does give those problems that are most apt to occur. To use the trouble shooting chart:

- A. Find the "complaint" in the top horizontal line.
- B. Follow down that column to find the potential cause or causes. The numbers (1,2,3 etc.) suggest an order to follow in trouble shooting.
- C. A reference for most causes is indicated in the extreme right column and the footnotes. For example, "M" stands for Maintenance - Section 4 in this manual.

For trouble shooting electrical problems refer to the Wiring Diagram Schematic found in the Section 9 - Parts List.

ACTION PLAN

A. Think Before Acting

Study the problem thoroughly and ask yourself these questions:

- (1) What were the warning signals that preceded the trouble?
- (2) Has a similar trouble occurred before?
- (3) What previous maintenance work has been done?
- (4) If the compressor will still operate, is it safe to continue operating it to make further checks?

B. Do The Simplest Things First

Most troubles are simple and easily corrected. For example, most complaints are "low capacity" which may be caused by too low an engine speed or "compressor overheats" which may be caused by low oil level.

Always check the easiest and most obvious things first; following this simple rule will save time and trouble.

C. Double Check Before Disassembly

The source of most compressor troubles can be traced not to one component alone, but to the relationship of one component with another. Too often, a compressor can be partially disassembled in search of the cause of a certain trouble and all evidence is destroyed during disassembly. Check again to be sure an easy solution to the problem has not been overlooked.

D. Find And Correct Basic Cause

After a mechanical failure has been corrected, be sure to locate and correct the cause of the trouble so the same failure will not be repeated. A complaint of "premature breakdown" may be corrected by repairing any improper wiring connections, but something caused the defective wiring. The cause may be excessive vibration.

TROUBLE SHOOTING I-R PORTABLE COMPRESSOR	CAUSE	COMPLAINT																			
		Short Air Cleaner Life	Excessive Oil In Air	Oil Seal Leak	Oil In Air Cleaner	Excessive Comp. Oil Temperature Down	Engine RPM	Will Not Unload	Safety Valve Relieves	Low CFM	Unit Shutdown	Unit Fails To Shutdown	Excessive Vibration	Won't Start/Run	Alternator Lamp Slays On	Alternator Lamp Slays Off	Engine Temp. Lamp Slays On	Engine Temp. Lamp Slays Off	Engine Oil Press. Lamp Slays Off	Engine Oil Press. Lamp Slays On	*REFER TO: SECTION
Dirty Operating Conditions		1		1		6			3							5					M
Wrong Air Filter Element		6					8		13												P
Defective Service Indicator		3																			P
Inadequate Element Cleaning		2							4												M
High Oil Level			1																		M
Out Of Level ~ 15°			2			2										7			3		O
Clogged Scavenge Orifice			3																		M
Defective Separator Element			8				9		7	12											P
Scavenge Tube Blocked			4																		M
Defective Scavenge Check Valve			5																		M
Defective Minimum Pressure Valve			7			14			11												P
Contaminated Lube Oil				2																	M
Malfunctioning Seal				6																	P
Scored Shaft				7																	P
Malfunctioning Inlet Unloader		5			3			5	6	9											P
Incorrect Stopping Procedure		4			1																O
Dirty Cooler						5										6					M
Low Oil Level						3													2		M
Clogged Oil Filter Elements						7													5		M
Wrong Lube Oil				3		4													4		L
Malfunctioning Thermostat						12															P
Defective Oil Cooler Relief Valve						13															P
Recirculation Of Cooling Air						10										11					RA
Operating Pressure Too High			5			9	2		1	8						9					O/A
Loose Or Broken Belts						8						1		1		8					M/P
Blocked Or Restricted Oil Lines				4		15													6		—
Incorrect Linkage Adjustment						5			5												A
Clogged Fuel Filters						1							5								EM
Incorrect Pressure Regulator Adjustment						3	3	3	6												A
Ruptured Inlet Unloader Diaphragm					2			2	5												P
Defective Discharge Air Temp. Switch										7	1		11								P/M
Defective Engine Belt Break Switch										8	2		12			3	4				P/M
Defective Engine Oil Pressure Switch										9	3		13					3			P/M
Defective Shutdown Solenoid										10	4		14								P/M
Malfunctioning Relay										11	5		15								P/M
Loose Wire Connection										6			10	2	2		2				W/P
Blown Fuse										1			3								P
Low Battery Voltage													2	3							—
Malfunctioning Start Switch													4								P
Defective Safety Bypass Switch											6		16								P
< 9 Volts At Shutdown Solenoid										12			1								—
Malfunctioning Alternator														4							P
Bulb Burnt Out															1		1	1			P
Broken Engine Fan Belt										4			8			1					M
Malfunctioning Circuit Board														5	3	2	3	2			P
Ambient Temp. >125°F (52°C)					1											4					RA
Ice In Regulation Lines/Orifice						10	6	8	14												RA
Sep. Tank Blown Down Too Quickly			6																		O
Dirty Air Filter						6			1												M
Malfunctioning Pressure Regulator						4	4	4	7												P
Malfunctioning Air Cylinder						7			10												P
Leaks In Regulator Piping							1	2	2												—
Compressor Oil Temp. Too High										3			7								TC
Engine Water Temp. Too High										4			8								TC
Engine Oil Pressure Too Low										5			9								TC
Out Of Fuel										2			6								—
Malfunctioning Fan					12							3						9			P
Rubber Mounts Damaged												2									P
Engine Malfunctioning						11				14		5	18					12	7		EM
Drive Coupling Defective												4									P
Airend Malfunctioning					17	12						6	19								P
Defective Safety Valve								9													P

Numbers (1, 2, 3, Etc.) Suggest
Order To Follow In Cause
Trouble Shooting

*M - Maintenance (5)
P - Parts (10)

O - Operating (4)
L - Lubrication (6)

RA - Review Application
A - Adjustments (7)

EM - Engine Manual
W - Wiring Diagram (10)

TC - Trouble Complaint

SECTION 8 - PARTS ORDERING INFORMATION

Contents	Page	Contents	Page
General.....	1	How to Use Parts List.....	2
Description.....	1	How to Order.....	2
Fasteners.....	2	Terms and Conditions.....	3
Markings and Decals.....	2	Airend Exchange Program.....	4

GENERAL

This publication, which contains an illustrated parts breakdown, has been 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 genuine Ingersoll-Rand Company parts for your compressor.

NOTE

Ingersoll-Rand Company can bear no responsibility for injury or damages resulting directly from the use of non-approved repair parts.

Ingersoll-Rand Company service facilities and parts are available worldwide. There are Ingersoll-Rand Company Construction Equipment Group Sales Offices and authorized distributors located in the principal cities of the United States. In Canada our customers are serviced by the Canadian Ingersoll-Rand Company, Limited. There are also Ingersoll-Rand International autonomous companies and authorized distributors located in the principal cities throughout the free world.

All parts orders pertaining to your engine should be referred to your particular engine manufacturer's authorized distributor or dealer.

DESCRIPTION

The illustrated parts breakdown illustrates and lists the various assemblies, subassemblies and detailed parts which make up this particular air compressor. This includes the standard unit along with some of the options that are available. A series of illustrations show each part clearly and in its correct location relative to the other parts in the illustration. The part number, the description of the part, the quantity of parts required, and the part number of the next higher assembly in which a particular part is used are shown on each illustration. The quantities specified are the number of parts used per one assembly and are not necessarily the total number of parts used in the overall unit. Where no quantity is specified the quantity is assumed to be one.

Each description of a part is based upon the "noun first" method, i.e., the identifying noun or item name is always the first part of the description. In the event the item is an assembly or sub-assembly, the abbreviation "assy" or "subassy" follows the noun name. If the previous conditions do not exist, the noun name is followed by a single descriptive modifier. The descriptive modifier may be followed by words or abbreviations such as upper, lower, inner, outer, front, rear, RH, LH, etc. when they are required to modify the part noun.

In referring to the rear, the front or to either side of the unit, always consider the flywheel end of the engine as the rear of the unit. Standing at the rear of the unit facing the flywheel end of the engine, will determine the right and left sides.

FASTENERS

Both SAE/inch and ISO/metric hardware have been used in the design and assembly of these units. In the disassembly and reassembly of parts, extreme care must be taken to avoid damaging threads by the use of wrong fasteners. In order to clarify the proper usage and for exact replacement parts, all standard fasteners have been identified by part number, size and description. This will enable a customer to obtain fasteners locally rather than ordering from the factory. These parts are identified in tables that will be found at the rear of the parts illustrations. Any fastener that has not been identified by both part number and size is a specially engineered part that must be ordered by part number to obtain the exact replacement part. Refer to Section 10 - Common Fasteners.

MARKINGS AND DECALS

NOTE

3 Do not paint over safety warnings or instructional decals. If safety warning decals become illegible, immediately order replacements from the factory.

Part numbers for sets of original-type exterior markings (IR logotype etc.) and warnings/instructional decals are listed on the index page of Section 9 - Parts List. Part numbers for original individual decals and their mounting locations are shown within Section 9 - Parts List. These are available as long as a particular model is in production.

Afterwards, service sets of exterior decals and current production safety warning decals are available. Contact the Product Support Group at Mocksville for your particular needs and availability.

HOW TO USE PARTS LIST

- a. Turn to Section 9 - Parts List.
- b. Locate the area or system of the compressor in which the desired part is used and find illustration page number.
- c. Locate the desired part on the illustration by visual identification and make note of part number and description.

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 sales office, autonomous company or authorized distributor, with complete information, you will enable them to fill your order correctly and to 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 general data decal attached to the unit.
- b. Always specify the serial number of the unit. **THIS IS IMPORTANT.** The serial number of the unit will be found stamped on a plate attached to the unit. (The serial number on the unit is also permanently stamped in the metal of the frame side rail.)

- c. Always specify the number of the parts list publication.
- d. Always specify the quantity of parts required.
- e. Always specify the part number, as well as the description of the part, or parts, exactly as it is given on the parts list illustration.

In the event parts are being returned to your nearest sales office, autonomous company or authorized distributor, for inspection or repair, it is important to include the serial number of the unit from which the parts were removed.

TERMS AND CONDITIONS ON PARTS ORDERS

Acceptance: Acceptance of an offer is expressly limited to the exact terms contained herein. If purchaser's order form is used for acceptance of an offer, it is expressly understood and agreed that the terms and conditions of such order form shall not apply unless expressly agreed to by Ingersoll-Rand Company ("Company") in writing. No additional or contrary terms will be binding upon the Company unless expressly agreed to in writing.

Taxes: Any tax or other governmental charge now or hereafter levied upon the production, sale, use or shipment of material and equipment ordered or sold is not included in the Company's price and will be charged to and paid for by the Purchaser.

Delivery: Shipping dates are approximate. The Company will use best efforts to ship by the dates specified; however, the Company shall not be liable for any delay or failure in the estimated delivery or shipment of material and equipment or for any damages suffered by reason thereof.

Shipping dates shall be extended for delays due to acts of God, acts of Purchaser, acts of Government, fires, floods, strikes, riot, war, embargo, transportation shortages, delay or default on the part of the Company's vendors, or any other cause beyond the Company's reasonable control.

Should Purchaser request special shipping instruction, such as exclusive use of shipping facilities, including air freight when common carrier has been quoted and before change order to purchase order can be received by the Company, the additional charges will be honored by the Purchaser.

Warranty: The Company warrants that parts manufactured by it will be as specified and will be free from defects in materials and workmanship. The Company's liability under this warranty shall be limited to the repair or replacement of any part which was defective at the time of shipment provided Purchaser notifies the Company of any such defect promptly upon discovery, but in no event later than three (3) months from the date of shipment of such part by the Company. The only exception to the previous statement is the extended warranty as it applies to the special airend exchange program.

Repairs and replacements shall be made by the Company F.O.B. point of shipment. The Company shall not be responsible for costs of transportation, removal or installation.

Warranties applicable to material and equipment supplied by the Company but wholly manufactured by others shall be limited to the warranties extended to the Company by the manufacturer which are able to be conveyed to the Purchaser.

THE COMPANY MAKES NO OTHER WARRANTY OR REPRESENTATION OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED.

Limitation of Liability: The remedies of the Purchaser set forth herein are exclusive, and the total liability of the Company with respect to this order whether based on contract, warranty, negligence, indemnity, strict liability or otherwise, shall not exceed the purchase price of the part upon which such liability is based.

The Company shall in no event be liable to the Purchaser, any successors in interest or any beneficiary of this order for any consequential, incidental, indirect, special or punitive damages arising out of this order or any breach thereof, or any defect in, or failure of, or malfunction of the parts hereunder, whether based upon loss of use, lost profits or revenue, interest, lost goodwill, work stoppage, impairment of other goods, loss by reason of shutdown or non-operation, increased expenses of operation or claims of customers of Purchaser for service interruption whether or not such loss or damage is based on contract, warranty, negligence, indemnity, strict liability or otherwise.

AIREND EXCHANGE PROGRAM

Your Ingersoll-Rand Company Construction Equipment Group Sales Offices and authorized distributors as well as Ingersoll-Rand International autonomous companies and authorized distributors now have an airend exchange program to benefit portable compressor users.

On the airend exchange program the exchange price is determined by the age and condition of the airend and may be classified by one of the following categories.

Category "A": The airend must not be over two years old and must have reusable rotor housing(s) and rotor(s).

Category "B": The airend must be between two and five years old and returned with two or more reusable major castings.

Category "C": The airend must be over five years old.

Your nearest sales office, autonomous company or authorized distributor must first contact the Parts Service Department at the factory at which your portable air compressor was manufactured for an airend exchange number. The airend must be tagged with this preassigned number and returned to the factory prepaid. The airend must be intact, with no excluded parts, otherwise the exchange agreement may be cancelled. The warranty on an exchange or factory rebuilt airend is 365 days.

NOTE

Airends being returned to the factory in connection with a warranty claim must be processed through the Customer Service Department. If returned as an exchange airend, no warranty claim will be considered.

SECTION 9

PARTS LIST

PARTS LIST

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PARTS LIST

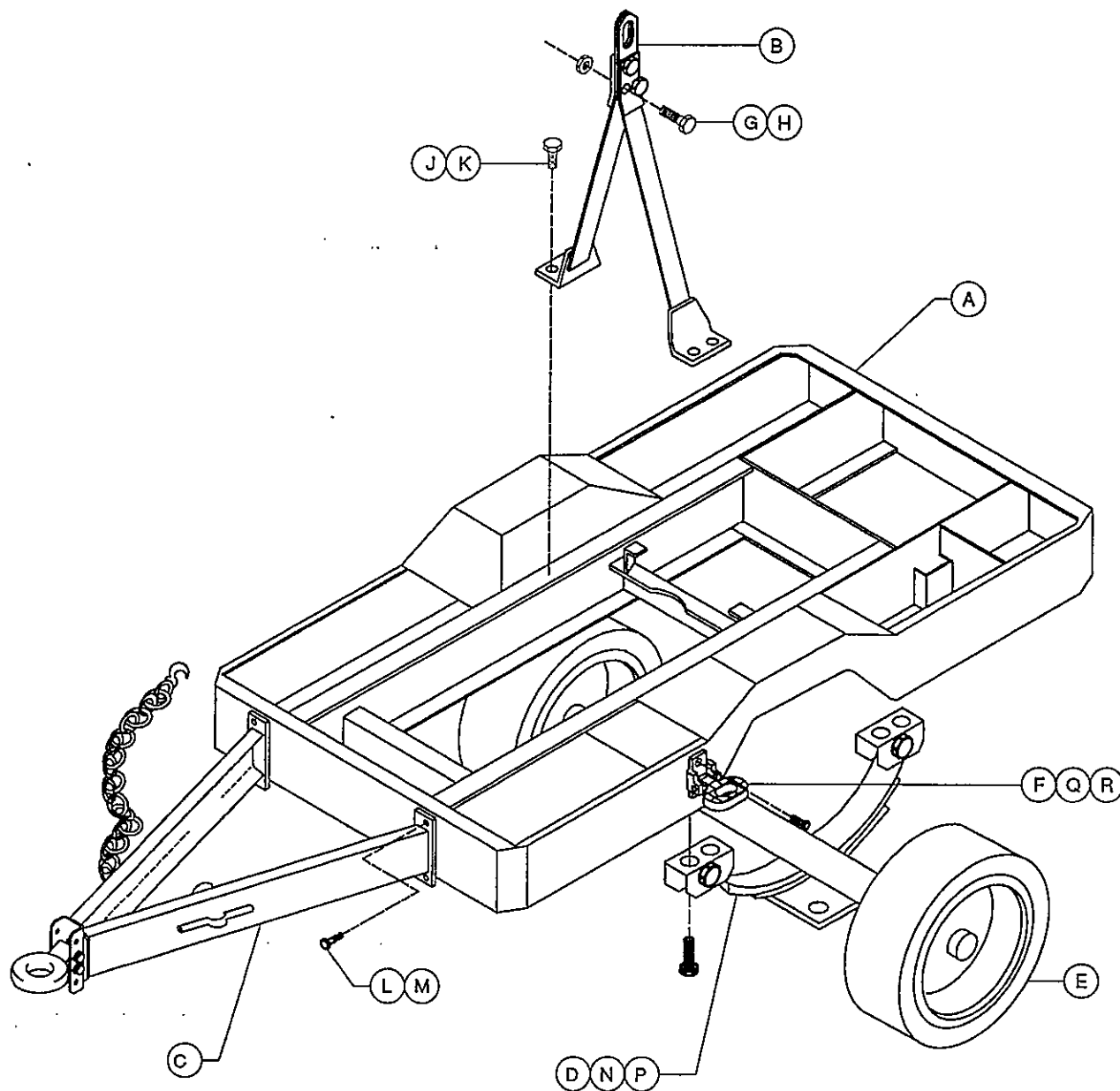
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ITEM	C.P.N.	QTY	DESCRIPTION
A	36725943	1	FRAME
B	36725844	2	LIFTING BAIL
C	36843803	1	DRAWBAR
D	36723948	1	RUNNING GEAR
E	35284074	2	TIRE & WHEEL ASSY
F	35369313	1	STEP
G	35252741	3	SCREW
H	35252618	3	NUT
J	95935193	4	SCREW
K	95922928	4	NUT
L	95934386	4	SCREW
M	35294404	4	NUT
N	36763688	8	SCREW
P	36770386	8	NUT
Q	35144336	2	SCREW
R	35252600	2	NUT

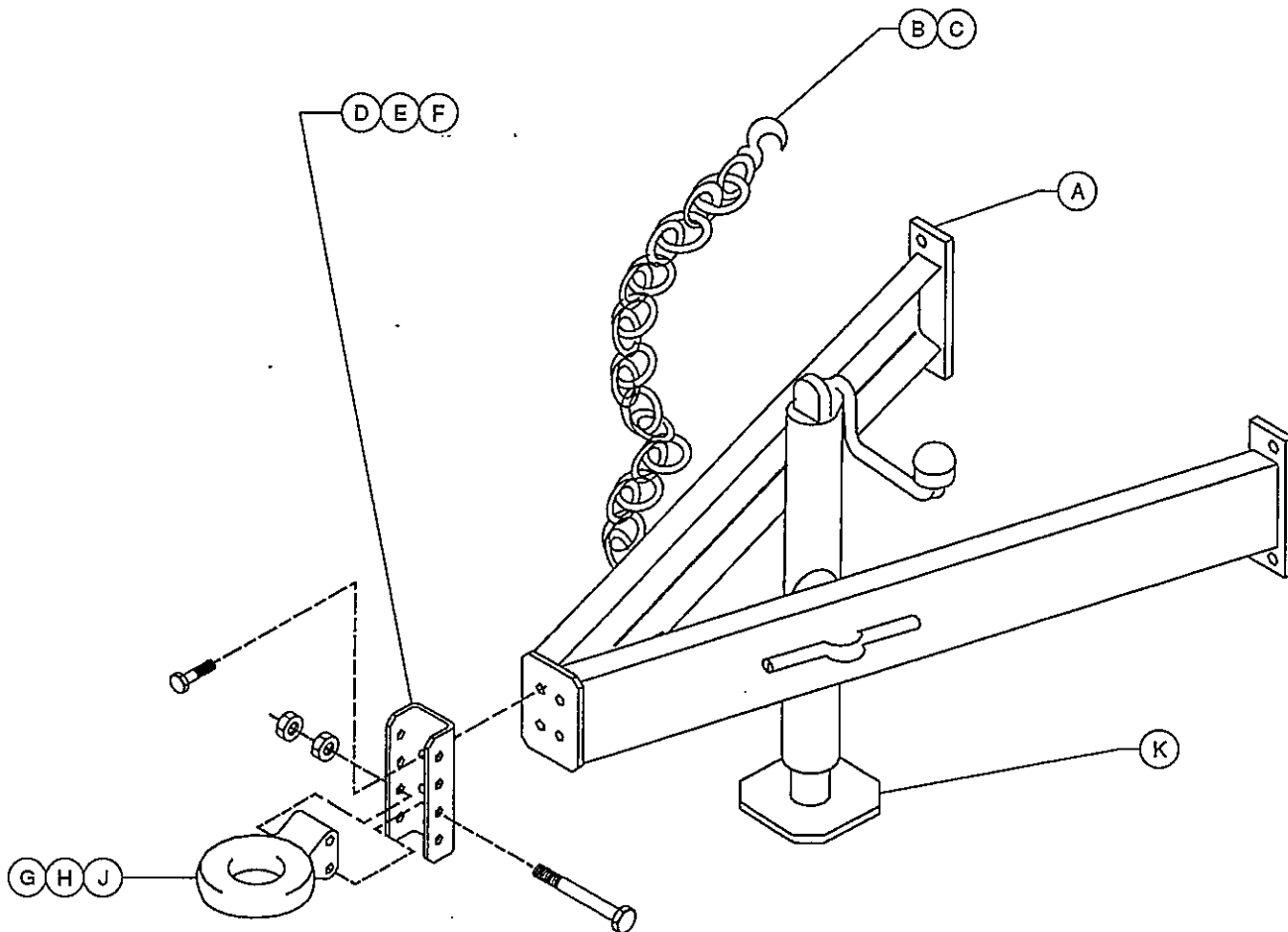
INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
FRAME AND RUNNING GEAR			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
7/28/93 B	BMR	15	1995 JF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD VHP-300AWD	35846815	2 of 2	27478

PARTS LIST 9-2



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
FRAME AND RUNNING GEAR			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APPD BY:
7/28/93 B	B	MAR 1 1995	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD VHP-300AWD	35846815	1 of 2	27478

PARTS LIST 9-4



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
DRAWBAR COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APPD BY:
7/28/93	D C	MAR 15 1995	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD VHP-300AWD	36508364	1 of 2	26760

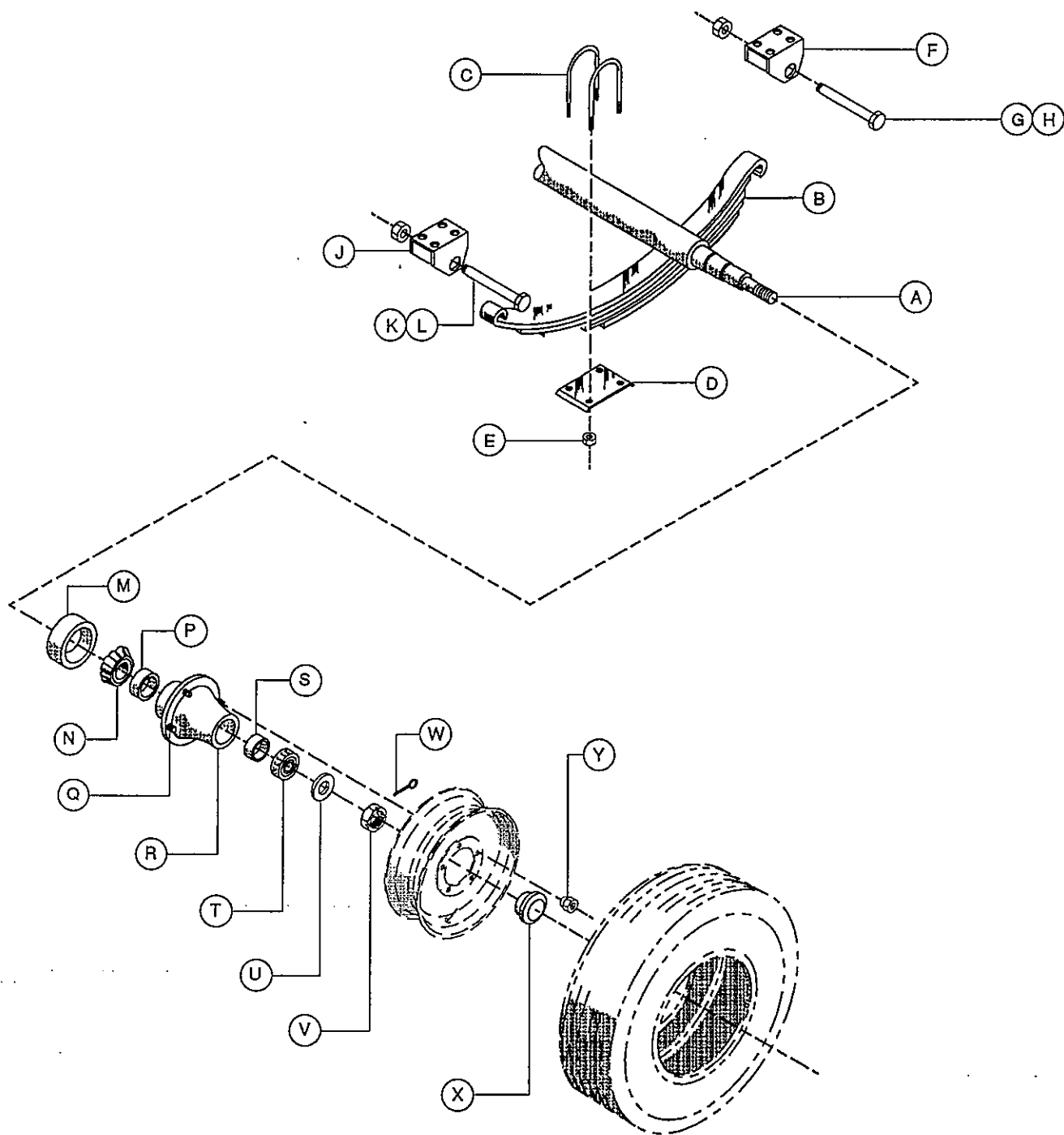
PARTS LIST 9-5

ITEM	C.P.N.	QTY	DESCRIPTION
A	36843803	1	DRAWBAR
B	35610377	2	CHAIN ASSY
C	35372432	2	COUPLING LINK
D	36757284	1	MOUNING PLATE
E	95934501	4	SCREW
F	35374453	4	NUT
G	35605187	1	PINTLE EYE
H	35376094	2	SCREW
J	96700885	4	NUT
K	36752228	1	JACK ASSY

INGERSOLL-RAND COMPANY
 PORTABLE COMPRESSOR DIVISION

DESCRIPTION -- DRAWBAR COMPLETE			
DATE/DWN BY:	REV.	DATE/CHKD BY:	DATE/APVD BY:
7/28/93 H	CMR	5	1995 DF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-376AWD VMP-300AWD	36508364	2 of 2	26760

PARTS LIST 9-6



RUNNING GEAR COMPLETE
PART NO. 36723948
DEXTER 8-LUG

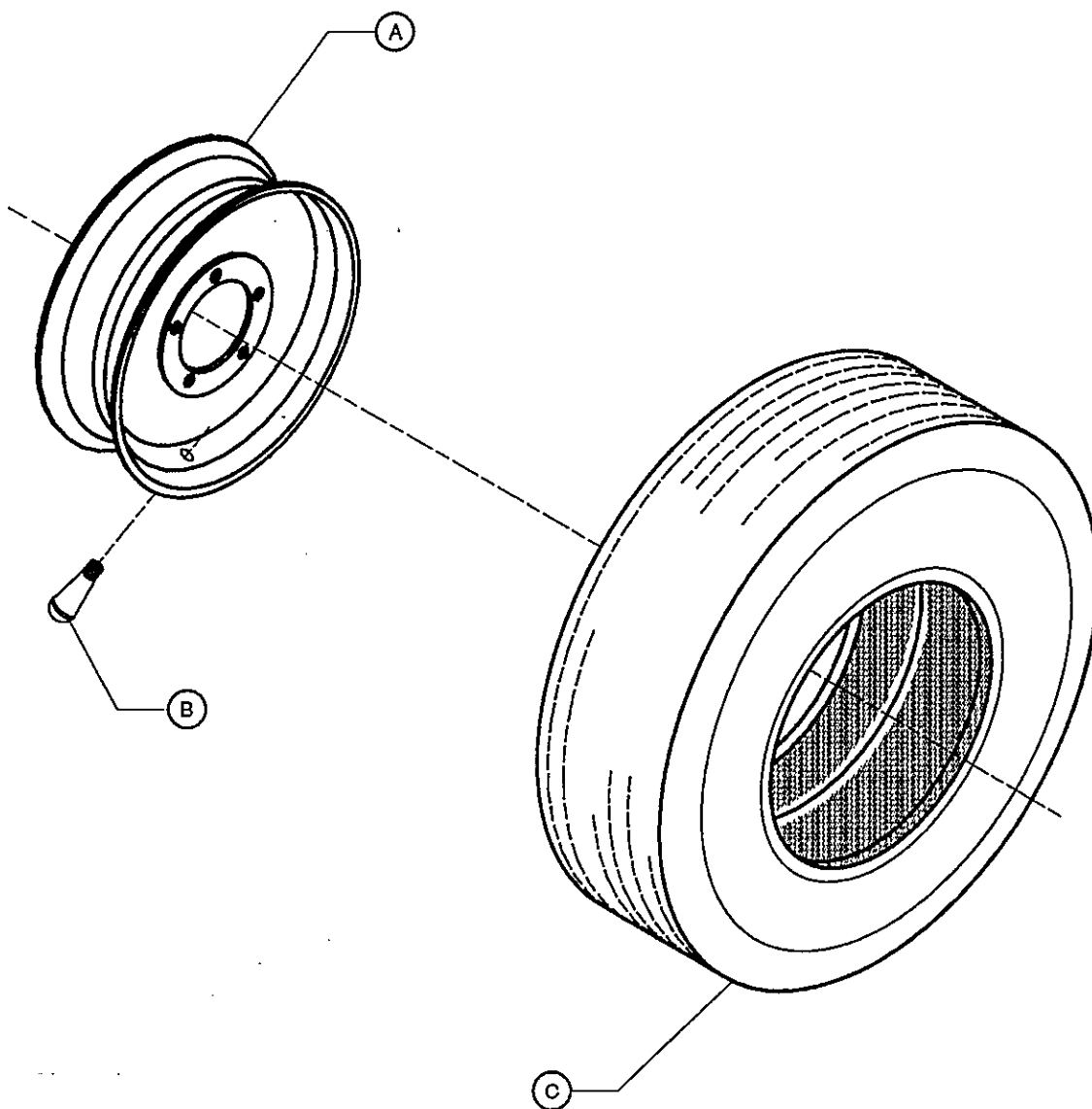
INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
RUNNING GEAR COMPLETE (DEXTER)			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
7/28/93 B	A	5	1005 OF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP-300AWD	35844125	1 of 2	24053

PARTS LIST 9-7

ITEM	C.P.N.	QTY	DESCRIPTION
A	35316850	1	AXLE BEAM
B	35315126	2	SPRING
C	35316959	4	U-BOLT
D	35316967	2	TIE PLATE
E	35315258	8	NUT
F	35326966	2	REAR HANGER
G	35315365	2	KEEPER BOLT
H	35315373	2	NUT
J	35326958	2	FRONT HANGER
K	35315340	2	BOLT
L	35315357	2	NUT
M	35316868	2	GREASE SEAL
N	35316884	2	ROLLER BEARING
P	35316876	2	INNER CUP
Q	35361898	16	WHEEL STUD
R	36770709	2	HUB
S	35316900	2	OUTTER CUP
T	35316918	2	ROLLER BEARING
U	35315209	2	SPINDLE WASHER
V	35315217	2	SPINDLE NUT
W	35315225	2	COTTER PIN
X	35316926	2	DUST CAP
Y	35315274	16	LUG NUT

RUNNING GEAR COMPLETE
PART NO. 36723948
DEXTER 8-LUG

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
RUNNING GEAR COMPLETE (DEXTER)			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
7/28/93 H	BMA	15	1005 JH
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP-300AWD	35844125	2 of 2	24053



TIRE AND WHEEL ASSEMBLY 35284074

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
TIRE AND WHEEL ASSY.			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APPD BY:
7/28/93 H	B	MAR 15 1995	F
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
	36521680	1 of 2	26922

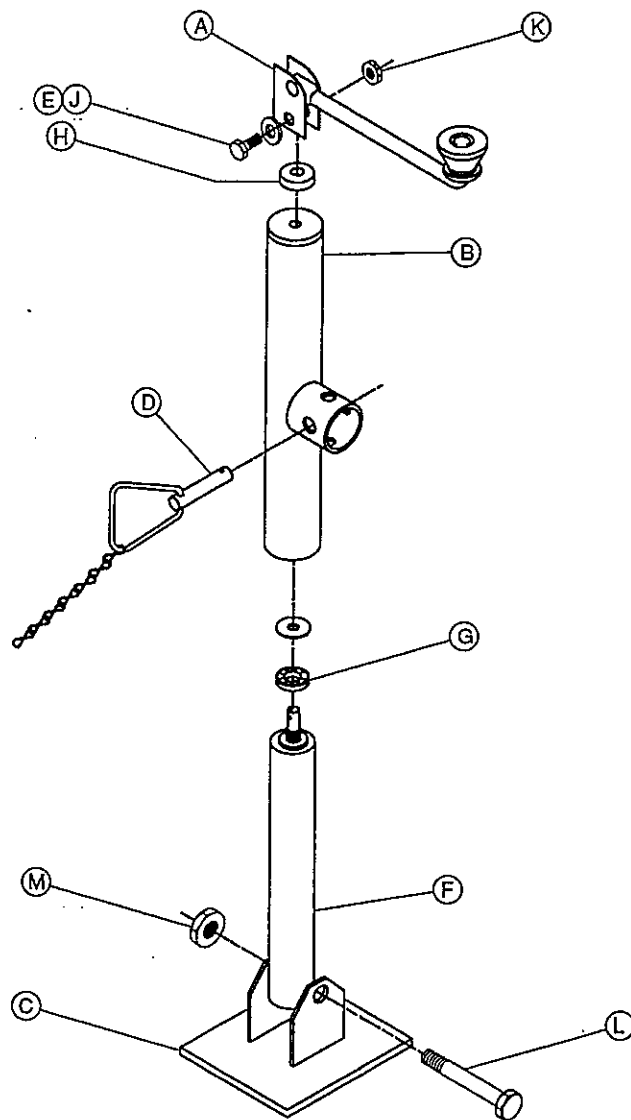
PARTS LIST 9-9

ITEM	C.P.N.	QTY	DESCRIPTION
A	35145234	1	WHEEL
B	35148204	1	VALVE STEM
C	35148071	1	TIRE

TIRE AND WHEEL ASSEMBLY 35284074

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION TIRE AND WHEEL ASSY.			
DATE/DWN BY: 7/28/93 H	REV: B	DATE/CHKD BY: 5/1995	DATE/APVD BY: [Signature]
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
	36521680	2 of 2	26922

PARTS LIST 9-10



JACK ASSEMBLY 36752228

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION JACK ASSEMBLY			
DATE/DWN BY: 7/29/93	REV: B	DATE/CHKD BY: 11/15/93	DATE/APVD BY: 100501
MODEL NO. VHP300AWD	ILLUSTRATION NO. 36521664	SHEET NO. 1 of 2	E/C 27141

PARTS LIST 9-11

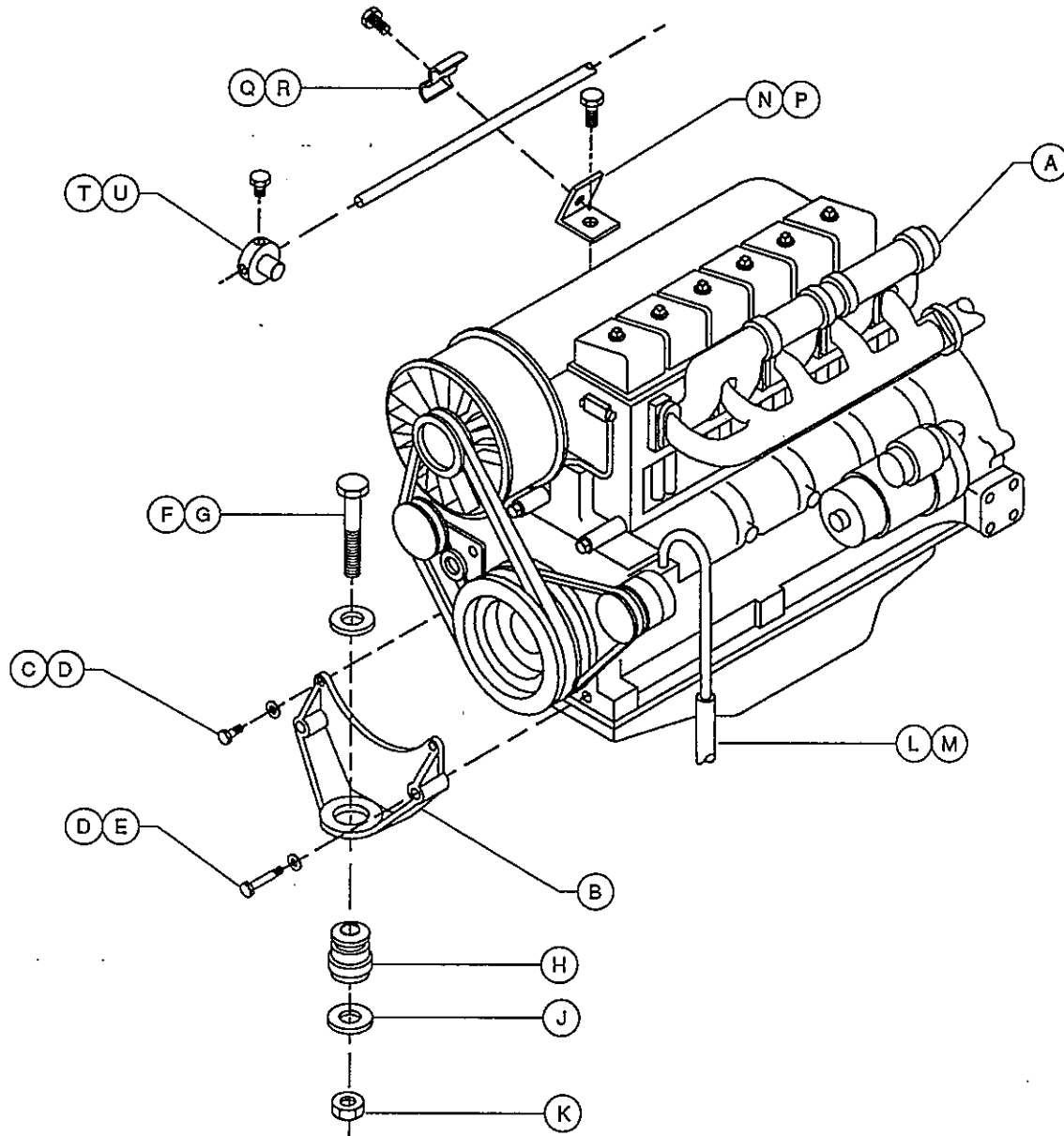
ITEM	C.P.N.	QTY	DESCRIPTION
A	36856383	1	CRANK ASSEMBLY
B	36856409	1	OUTER TUBE ASSEMBLY
C	36856359	1	BASE
D	35609544	1	PIN AND CHAIN ASSEMBLY
E	36856375	1	FLAT WASHER
F	36856391	1	INNER TUBE ASSEMBLY
G	36856367	1	BEARING
H	95935003	1	WASHER
J	95934857	1	SCREW
K	95923298	1	NUT
L	95844213	1	SCREW
M	35324409	1	NUT

JACK ASSEMBLY 36752228

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION — JACK ASSEMBLY			
DATE/DWN BY: 7/29/93 H	REV: B	DATE CHG BY: 13 1995	DATE/APVD BY: [Signature]
MODEL NO. VHP300AWD	ILLUSTRATION NO. 36521664	SHEET NO. 2 of 2	E/C 27141

PARTS LIST 9-12

← DRAWBAR END



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
ENGINE COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
7/3/91 H	B	1/3/95	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36508448	1 of 2	27478

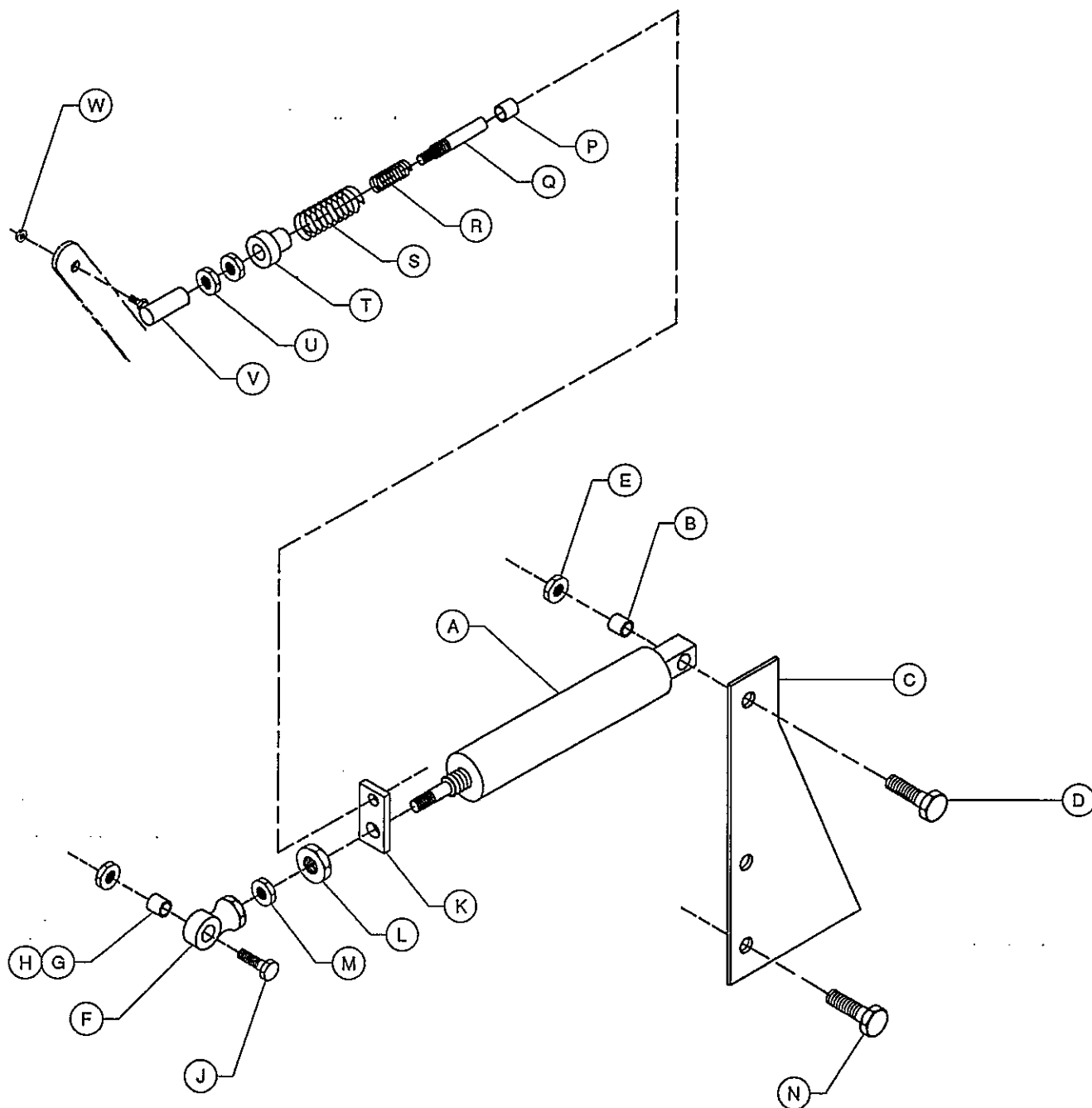
PARTS LIST 9-13

ITEM	C.P.N.	QTY	DESCRIPTION
A	36786077	1	ENGINE
B	36704856	1	BRACKET
C	35290451	2	SCREW
D	96701420	4	WASHER
E	35290469	2	SCREW
F	95935201	1	SCREW
G	35273937	1	WASHER
H	35272491	1	MOUNT
J	95935011	1	WASHER
K	95922928	1	NUT
L	35282094	10"	HOSE
M	95220851	1	CLAMP
N	35590132	1	BRACKET
P	35M2AB359M3	1	SCREW
Q	X1503T1	1	CLAMP
R	35300771	1	SCREW
S	35305424	1	SWIVEL
T	95664298	1	SCREW

35292366 ENG FUEL FILTER ELEMENT
 35330687 ENG OIL FILTER ELEMENT

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION ENGINE COMPLETE			
DATE/DWN BY: 7/3/91 H	REV: B	DATE/CHKD BY: 13 1995	DATE/APVD BY: DF
MODEL NO. P375AWD	ILLUSTRATION NO. 36508448	SHEET NO. 2 of 2	E/C 27478

PARTS LIST 9-14



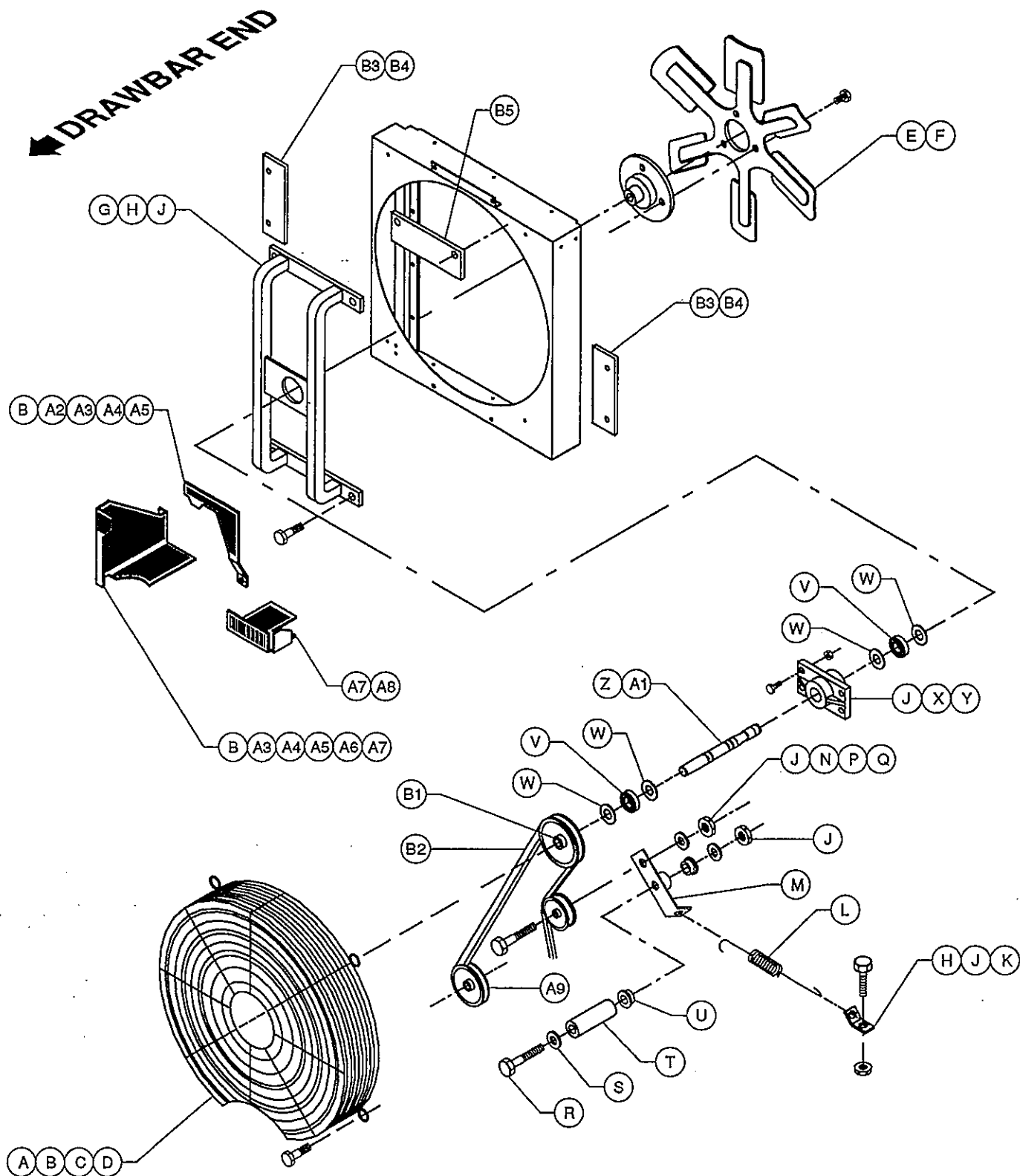
INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
SPEED CONTROL			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/ARVD BY:
12/16/93 H	A	12/16/93 H	12/16/93 H
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36522266	1 of 2	26265

PARTS LIST 9-15

ITEM	C.P.N.	QTY	DESCRIPTION
A	35594225	1	CYLINDER
B	35288885	1	BUSHING
C	36770204	1	BRACKET
D	36761476	1	SCREW
E	95923314	1	NUT
F	35300532	1	ROD END
G	35322452	1	BUSHING
H	35145242	1	SCREW
J	35144492	1	NUT
K	35322445	1	GUIDE
L	95923108	1	NUT
M	95926028	1	NUT
N	96702048	1	SCREW
P	35324664	1	COLLAR
Q	35322429	1	ROD
R	35329721	1	SPRING
S	35322411	1	SPRING
T	35322437	1	MOUNT
U	95923082	2	NUT
V	35322635	1	BALL JOINT
W	95935078	1	NUT

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION		SPEED CONTROL	
DATE/DWN BY:	REV	DATE/CHKD BY:	DATE/APVD BY:
12/16/93 H	A	12/16/93 H	12/16/93 H
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36522266	2 of 2	26265

PARTS LIST 9-16



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION FAN DRIVE COMPLETE			
DATE/DWN BY: 1/30/91 B	REV: B	DATE/CHKD BY: MAR 15 1995	DATE/APVD BY: [Signature]
MODEL NO. P375AWD	ILLUSTRATION NO. 35846856	SHEET NO. 1 of 2	E/C 27455

PARTS LIST 9-17

ITEM	C.P.N.	QTY	DESCRIPTION
A	36742849	1	WIRE GUARD
B	35144336	6	SCREW
C	35252600	3	NUT
D	35279025	4	SCREW
E	36725927	1	FAN
F	35593763	1	BUSHING
G	36790988	1	SUPPORT
H	35252493	5	SCREW
J	35145077	11	NUT
K	35327683	1	BRACKET
L	36503027	1	SPRING
M	35841295	1	LEVER
N	35591882	1	IDLER PULLEY
P	95935128	1	SCRW
Q	95935037	1	WASHER
R	95935136	1	SCREW
S	35327675	2	WASHER
T	35327808	1	SPACER
U	35592310	2	BEARING
V	35288240	2	BEARING
W	35288232	4	RETAINING RING
X	35813914	1	BEARING HOUSING
Y	36145259	4	SCREW
Z	35842228	1	SHAFT
A1	35327576	1	TRANSTORQUE COUPLING
A2	36790962	1	CENTER GUARD
A3	95934931	3	WASHER
A4	95934998	3	WASHER
A5	95923314	3	NUT
A6	36790954	1	RH FAN GUARD
A7	92368687	6	SCREW
A8	36790970	1	LH FAN GUARD
A9	35592070	1	DRIVE SHEAVE
B1	35592088	1	DRIVEN SHEAVE
B2	35327998	1	V BELT
B3	36861938	2	SIDE GUARD
B4	36843282	4	RIVETS
B5	36861946	1	BACK GUARD

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

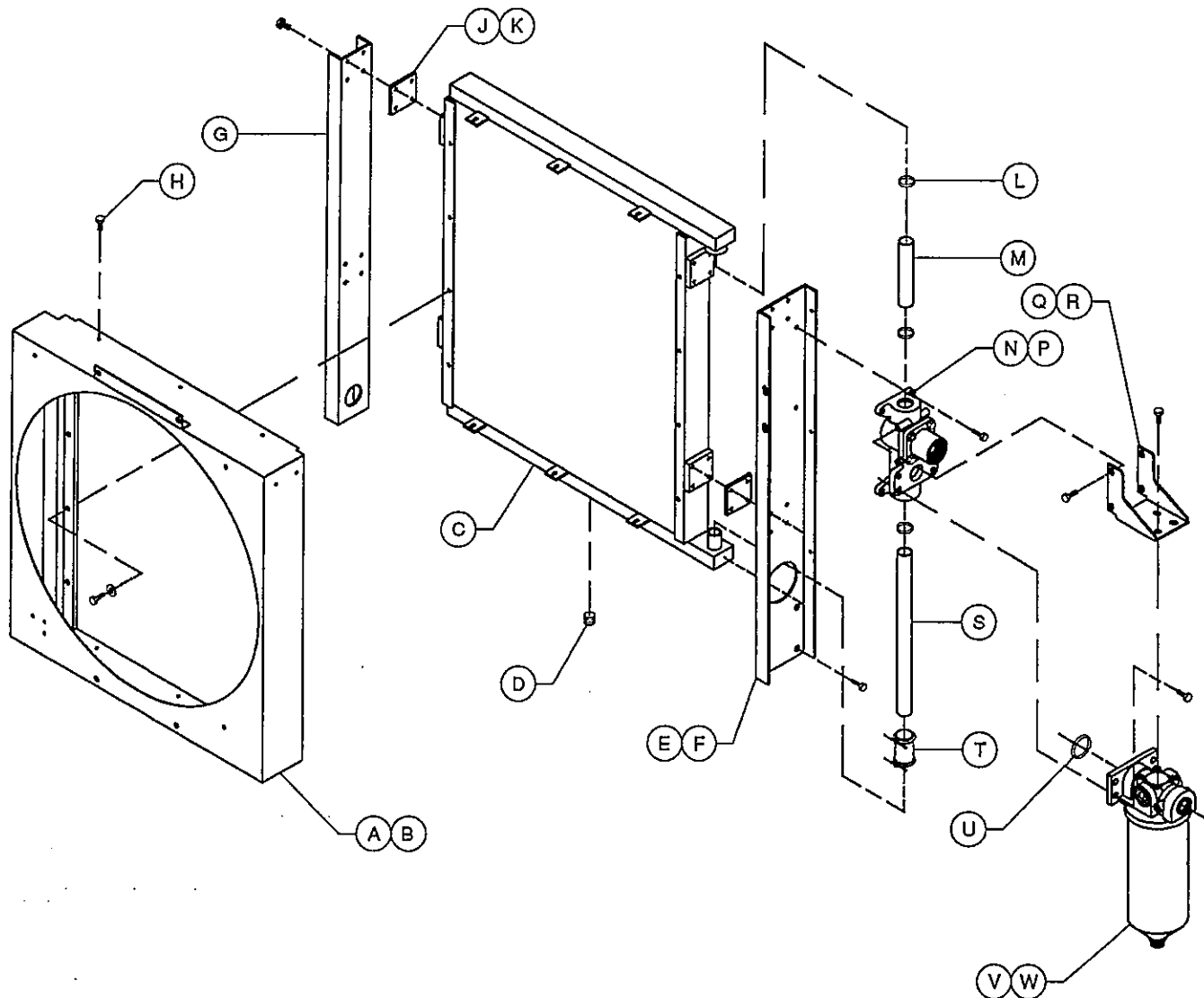
DESCRIPTION FAN DRIVE COMPLETE

DATE/DWN BY: 1/30/91 H DATE/CHKD BY: BAK 10 1990 DATE/APVD BY: OF

MODEL NO. P375AWD ILLUSTRATION NO. 35846856 SHEET NO. 2 of 2 E/C 27455

PARTS LIST 9-18

← DRAWBAR END



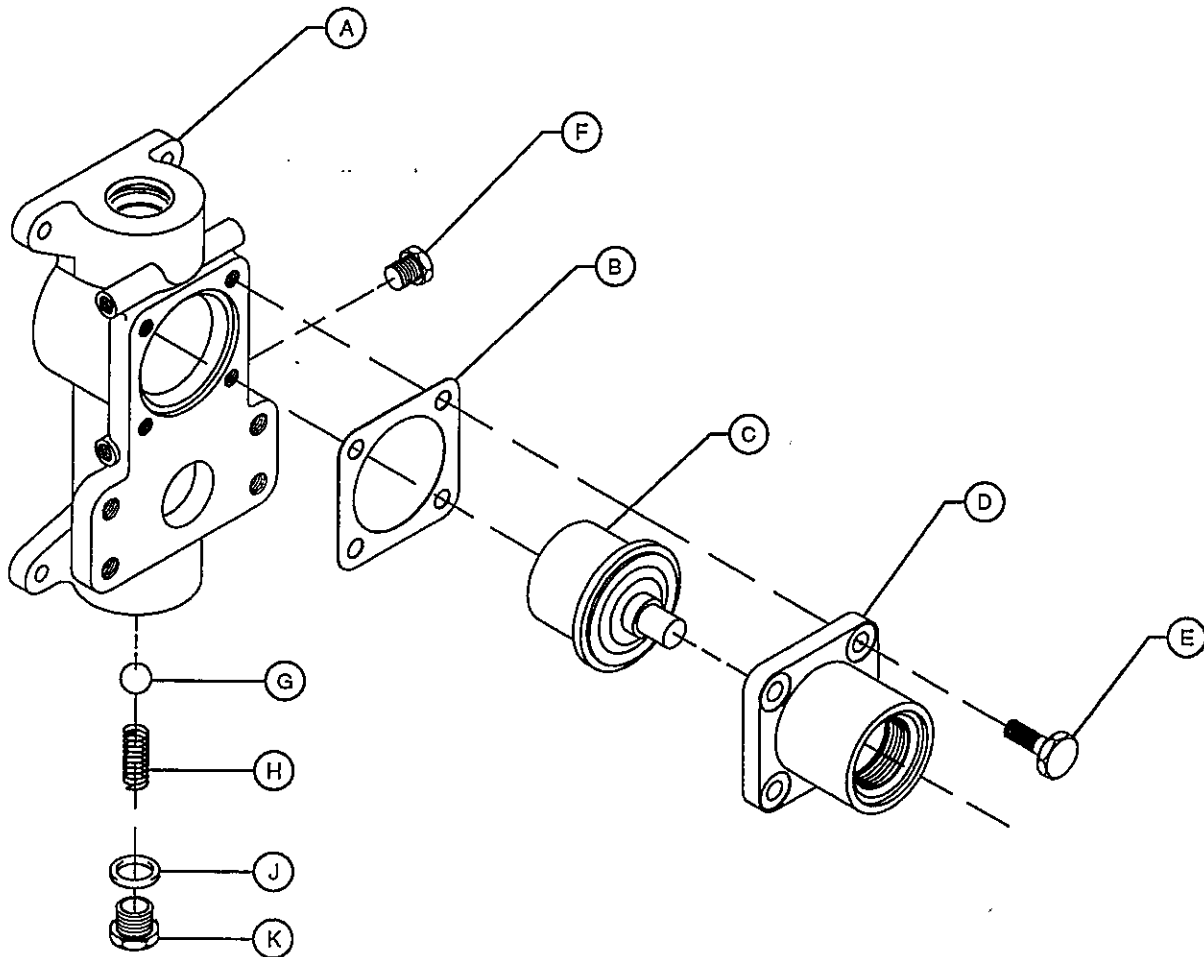
INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
OIL COOLER COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
1/24/91 B	B	5/1995	DF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	35846864	1 of 2	27478

PARTS LIST 9-19

ITEM	C.P.N.	QTY	DESCRIPTION
A	36725042	1	FAN SHROUD
B	96702055	8	SCREW
C	36705416	1	OIL COOLER
D	35287556	1	PLUG
E	36725521	1	LH OIL COOLER CHANNEL
F	35148030	8	SCREW
G	36725562	1	RH OIL COOLER CHANNEL
H	92368687	6	SCREW
J	35286319	4	SHIM
K	35279025	16	SCREW
L	95022208	3	O-RING
M	35579457	1	INLET TUBE
N	35810852	1	BY-PASS VALVE
P	35334879	4	SCREW
Q	35810688	1	SUPPORT
R	35376953	8	SCREW
S	35579440	1	OUTLET TUBE
T	35579705	1	COUPLING
U	95022257	1	O-RING
V	36705861	1	OIL FILTER ASSY
W	36763688	4	SCREW

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION OIL COOLER COMPLETE			
DATE/DWN BY:	REV.	DATE/CHKD BY	DATE/APVD BY
1/24/91 H	B	1/25/91	DF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	35846864	2 of 2	27478

PARTS LIST 9-20



OIL BY-PASS VALVE ASSEMBLY COMPLETE 35810852

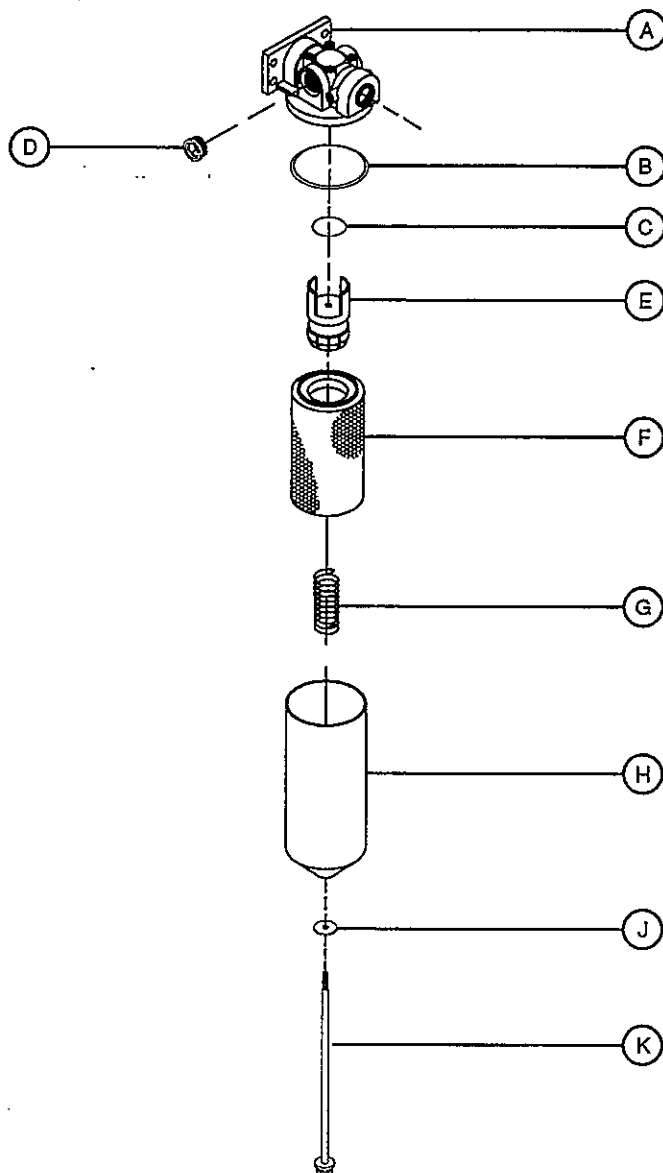
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION OIL BY-PASS VALVE ASSEMBLY			
DATE/DWN BY: 7/29/93 H	REV: A	DATE CHKD BY: J. J. J.	DATE APP'D BY: J. J. J.
MODEL NO. P-375AWD VHP300AWD	ILLUSTRATION NO. 35817402	SHEET NO. 1 of 2	E/C 25822

PARTS LIST 9-21

ITEM	C.P.N.	QTY	DESCRIPTION
A	36705226	1	VALVE BODY
B	35292309	1	GASKET
C	35288117	1	THERMOSTAT
D	35579416	1	COVER
E	35374842	4	SCREW
F	35287556	1	PLUG
G	35278563	1	BALL
H	35576891	1	SPRING
J	35278595	1	O-RING
K	35278555	1	PLUG

OIL BY-PASS VALVE ASSEMBLY COMPLETE 35810852

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION OIL BY-PASS VALVE ASSEMBLY			
DATE/DWN BY: 7/29/93 H	REV. 1	DATE/CHKD BY: MAY 5 1995	DATE/APVD BY: OK
MODEL NO. P-376AWD VHP300AWD	ILLUSTRATION NO. 35817402	SHEET NO. 2 of 2	E/C 25822



OIL FILTER ASSEMBLY COMPLETE 36705861

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
OIL FILTER ASSEMBLY			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
7/29/93 H	AMAR	5	1995 JF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD VHP300AWD	35817410	1 of 2	23914

PARTS LIST 9-23

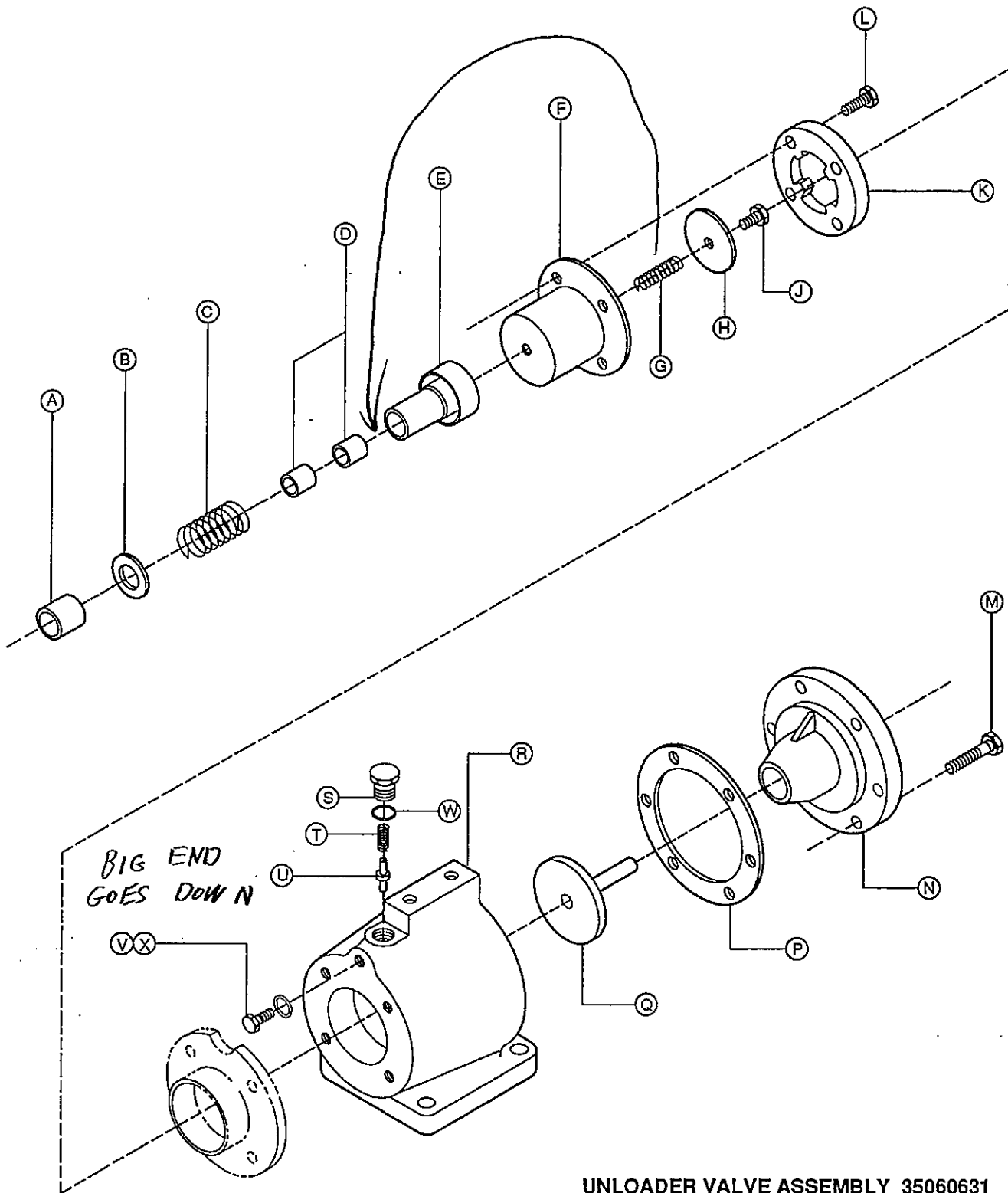
ITEM	C.P.N.	QTY	DESCRIPTION
A	35290501	1	HEAD ASSY
B	35280767	1	O-RING
C	35251511	1	O-RING
D	35277151	2	SIGHT GLASS
E	35301944	1	VALVE ASSY
F	35328509	1	FILTER ELEMENT
G	35278498	1	SPRING
H	35290303	1	HOUSING
J	35251545	1	GASKET WASHER
K	35290311	1	SCREW

OIL FILER ASSEMBLY COMPLETE 36705861

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION - OIL FILTER ASSEMBLY			
DATE/DWN BY:	REV	DATE/CHKD BY	DATE/APVD BY
7/29/93 B	A	8/19/93	DF
MODEL NO. P-375AWD VHP300AWD	ILLUSTRATION NO. 35817410	SHEET NO. 2 of 2	E/C 23914

BOOK 35374917 (3/95)

PARTS LIST 9-24



UNLOADER VALVE ASSEMBLY 35060631

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
UNLOADER ASSEMBLY			
DATE/DOWN BY:	REV.	DATE/CHKD BY	DATE/APVD BY
9/30/92 H	C MAR	10 995	DF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375WCU	36517514	1 of 2	26254

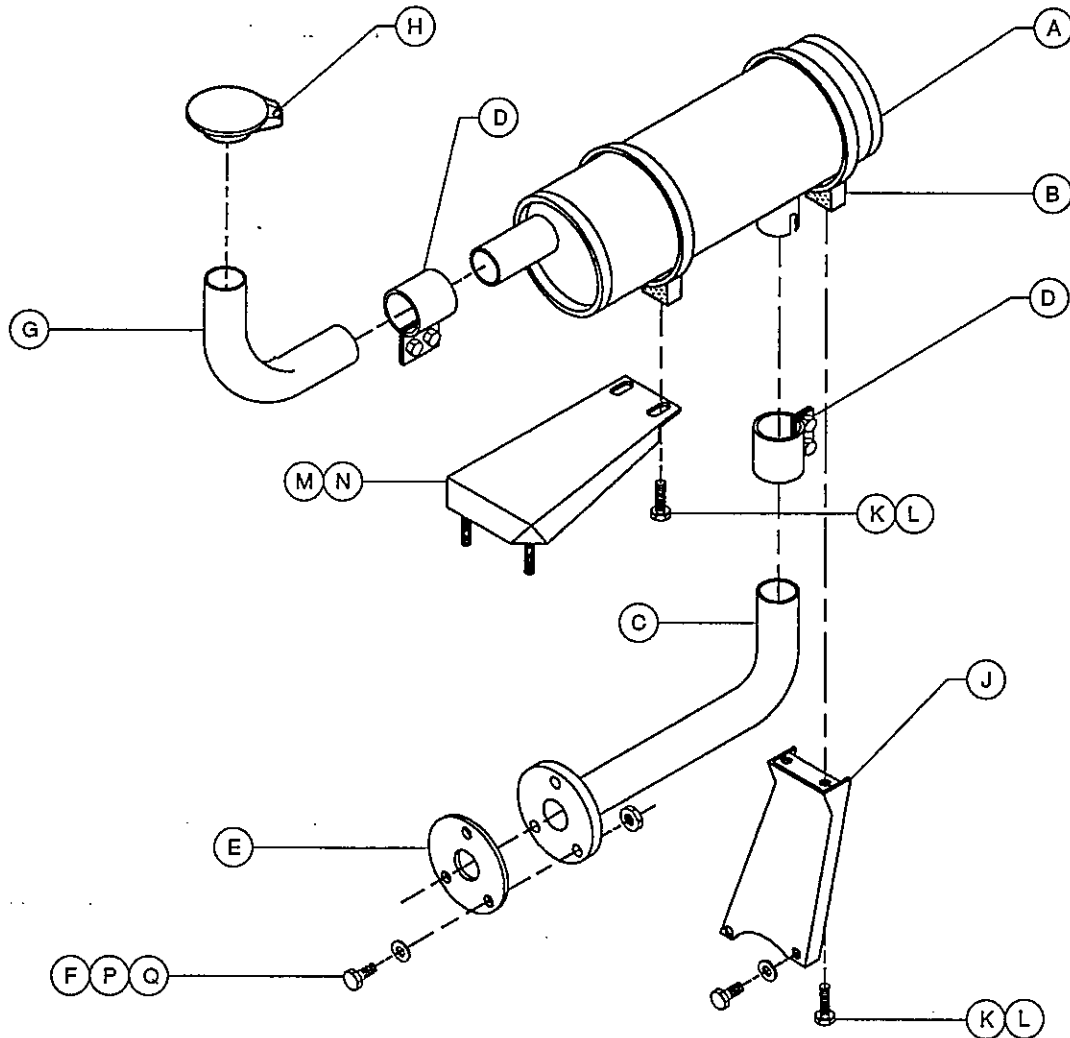
ITEM	C.P.N.	QTY	DESCRIPTION
A *	35318013	1	HOUSING BUSHING
B *	35317205	1	WASHER
C *	35322767	1	PISTON SPRING
D *	35318005	2	PISTON BUSHING
E	35588193	1	PISTON UNLOADER
F *	35317197	1	DIAPHRAGM
G *	35321603	1	SPRING
H *	35317239	1	PISTON WASHER
J *	35321595	1	CAP SCREW
K	35836949	1	PISTON COVER
L	35271162	4	SCREW
M	35374842	6	SCREW
N	35833227	1	PISTON HOUSING
P *	35588300	1	PISTON GASKET
Q	35591122	1	VALVE PLATE
R	36718427	1	UNLOADER BODY
S *	35278555	1	PLUG
T *	35318914	1	PIN SPRING
U *	35317213	1	UNLOADER PIN
V	35289057	1	PLUG
W	35278589	1	O-RING
X	35279959	1	O-RING

* ITEMS INCLUDED IN REPAIR KIT 35088798

UNLOADER VALVE ASSEMBLY 35060631

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION UNLOADER ASSEMBLY			
DATE/DWN BY: 9/30/92 H	REV. DATE/CHD BY: C/R	DATE/CHD BY: 5/93	DATE/APVD BY: JF
MODEL NO. P-375WCU	ILLUSTRATION NO. 36517514	SHEET NO. 2 of 2	E/C 26254

← DRAWBAR END



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
EXHAUST SYSTEM COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
4/9/91 H	B	1/1/95	5/1/95
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36508430	1 of 2	26760

PARTS LIST 9-27

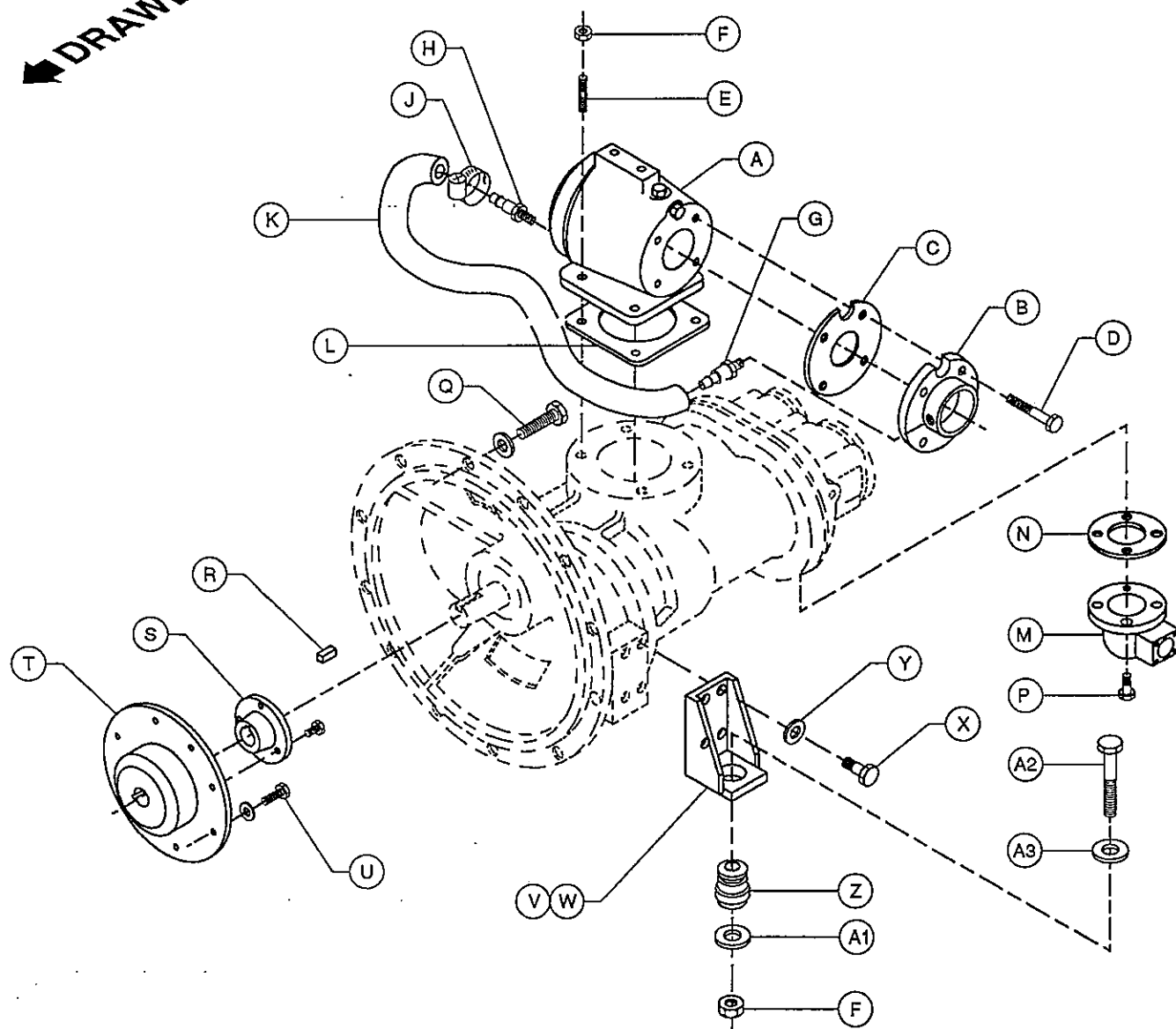
ITEM	C.P.N.	QTY	DESCRIPTION
A	35594480	1	MUFFLER
B	35579853	2	MOUNTING BAND
C	35824515	1	PIPE AND FLANGE
D	35365811	2	CLAMP
E	35293760	1	GASKET
F	35A2D225Z1	3	SCREW
G	35594522	1	TAIL PIPE
H	35846484	1	RAIN CAP
J	36725984	1	REAR BRACKET
K	35144344	4	SCREW
L	35145077	4	NUT
M	36713865	1	FRONT BRACKET
N	96702055	2	SCREW
P	35326016	3	RETAINING WASHER
Q	35326420	3	NUT

INGERSOLL-RAND COMPANY
 PORTABLE COMPRESSOR DIVISION

DESCRIPTION			
EXHAUST SYSTEM COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
4/9/91 H	0	04/15/95	DE
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36508430	2 of 2	27746

PARTS LIST 9-28

← DRAWBAR END



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
AIR END COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
7/29/93 B	D	15	100
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP-300AWD	35846831	1 of 2	27672

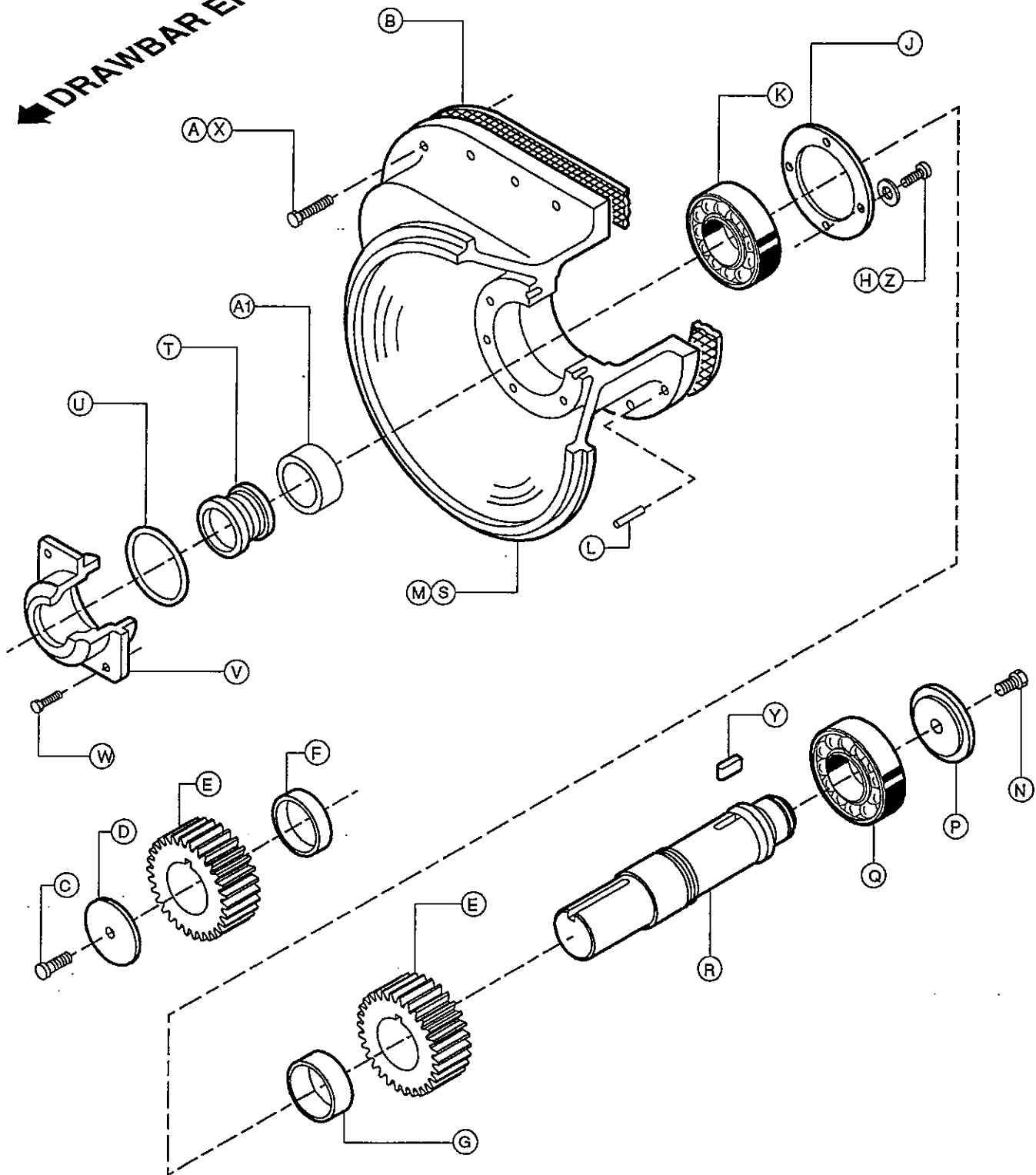
PARTS LIST 9-29

ITEM	C.P.N.	QTY	DESCRIPTION
A	35060631	1	UNLOADER ASSY
B	35843168	1	FLANGE
C	35588318	1	GASKET
D	96702048	4	SREW
E	35323450	4	STUD
F	96700885	6	NUT
G	35316587	1	FITTING
H	35323542	1	FITTING
J	35377621	2	CLAMP
K	35382292	14"	HOSE
L	35589589	1	GASKET
M	35842160	1	ELBOW
N	35575570	1	GASKET
P	35375385	4	SCREW
Q	35271154	12	SCREW
R	35221421	1	KEY
S	35589621	1	BUSHING
T	35834779	1	DRIVE COUPLING
U	35611995	8	SCREW
V	36723708	1	LH BRACKET
W	35840537	1	RH BRACKET
X	96701495	8	SCREW
Y	96701412	8	WASHER
Z	35318229	2	MOUNT
A1	96701438	2	WASHER
A2	96701503	2	SCREW
A3	35327212	2	WASHER

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION AIR END COMPLETE			
DATE/DWN BY:	REV:	DATE CHKD BY:	DATE REVD BY:
7/29/93 H	D	10/15/93	10/15/93
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP-300AWD	35846831	2 of 2	27672

PARTS LIST 9-30

← DRAWBAR END



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
AIR END ASSEMBLY			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APP'D BY:
7/30/93 H	C	MMR	1993
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	36514313	1 of 6	27447

PARTS LIST 9-31

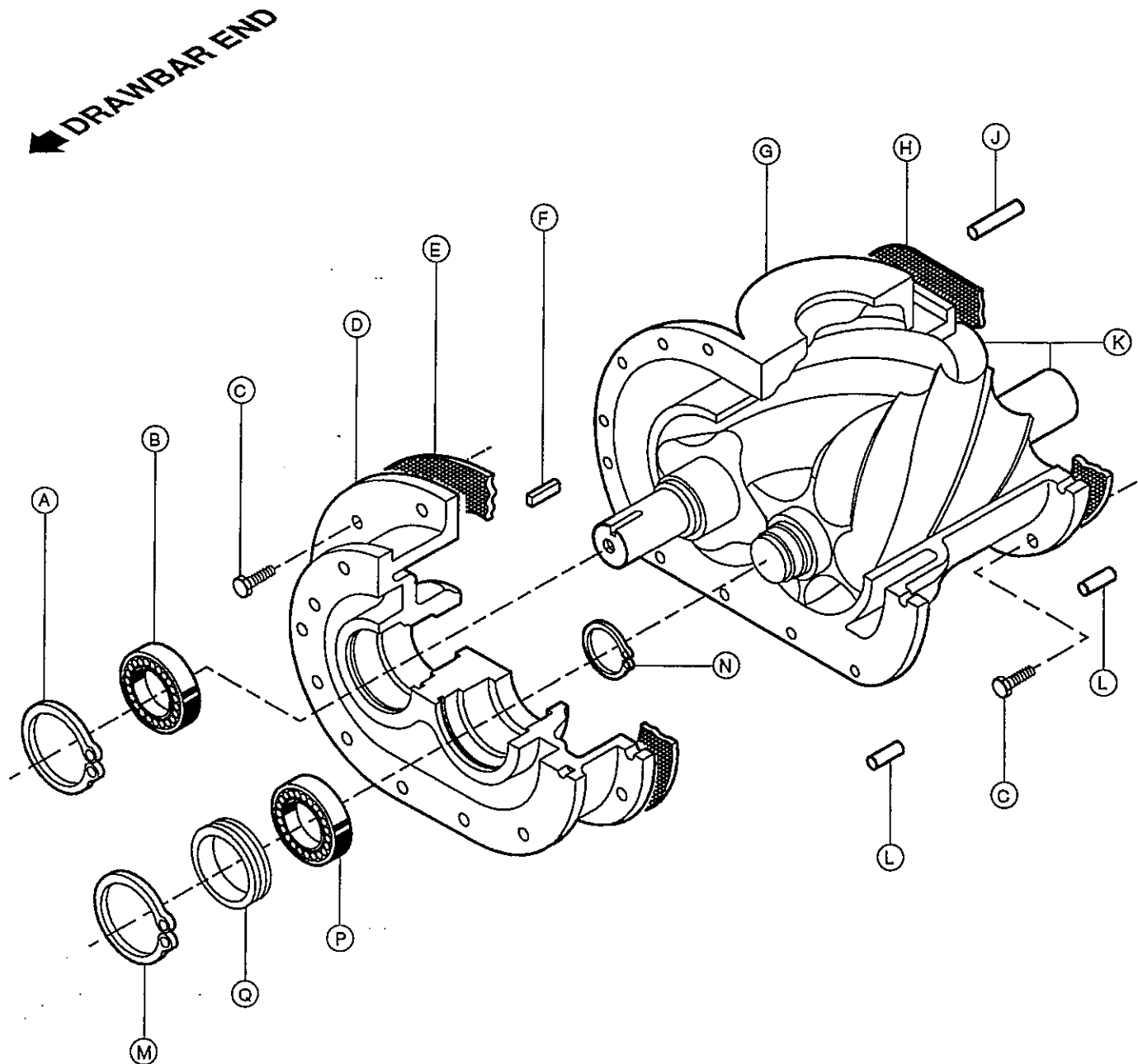
ITEM	C.P.N.	QTY	DESCRIPTION
A	35272541	8	SCREW
B	39437637	1	GASKET
C	35108372	1	SCREW
D	35255827	1	CLAMP PLATE
E	35327063	1	GEAR SET (P375; VHP300)
	35303429	1	GEAR SET (HP375; XP400; P425)
F	35262716	1	SPACER
G	35327626	1	SPACER BEARING
H	35327550	4	SCREW
J	35326602	1	RETAINING PLATE
K	35327543	1	BEARING
L	17A13A287	2	DOWEL PIN
M	36723641	1	GEAR CASE
N	35336304	1	SCREW
P	36764785	1	GUIDE CAP
Q	35313568	1	BEARING
R	36764827	1	GEAR SHAFT
S	36798346	2	GUARD
T	35593490	1	OIL SEAL
U	20A11C2M234	1	O-RING
V	35328475	1	OIL SEAL COVER
W	35374842	4	SCREW
X	34M2AB411	4	SCREW
Y	35M2AB527	1	KEY
Z	X1026T45	4	WASHER
A1	35364460	1	SEAL SPACER

178.5 mm AIREND ASSEMBLY 35085067 (P375AWD; VHP300AWD)

178.5 mm AIREND ASSEMBLY 35097096 (HP375AWD; XP400AWD; P425AWD)

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
AIR END ASSEMBLY			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
7/30/93 H	C	MAR 15 1995	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	36514313	2 of 6	27447

PARTS LIST 9-32

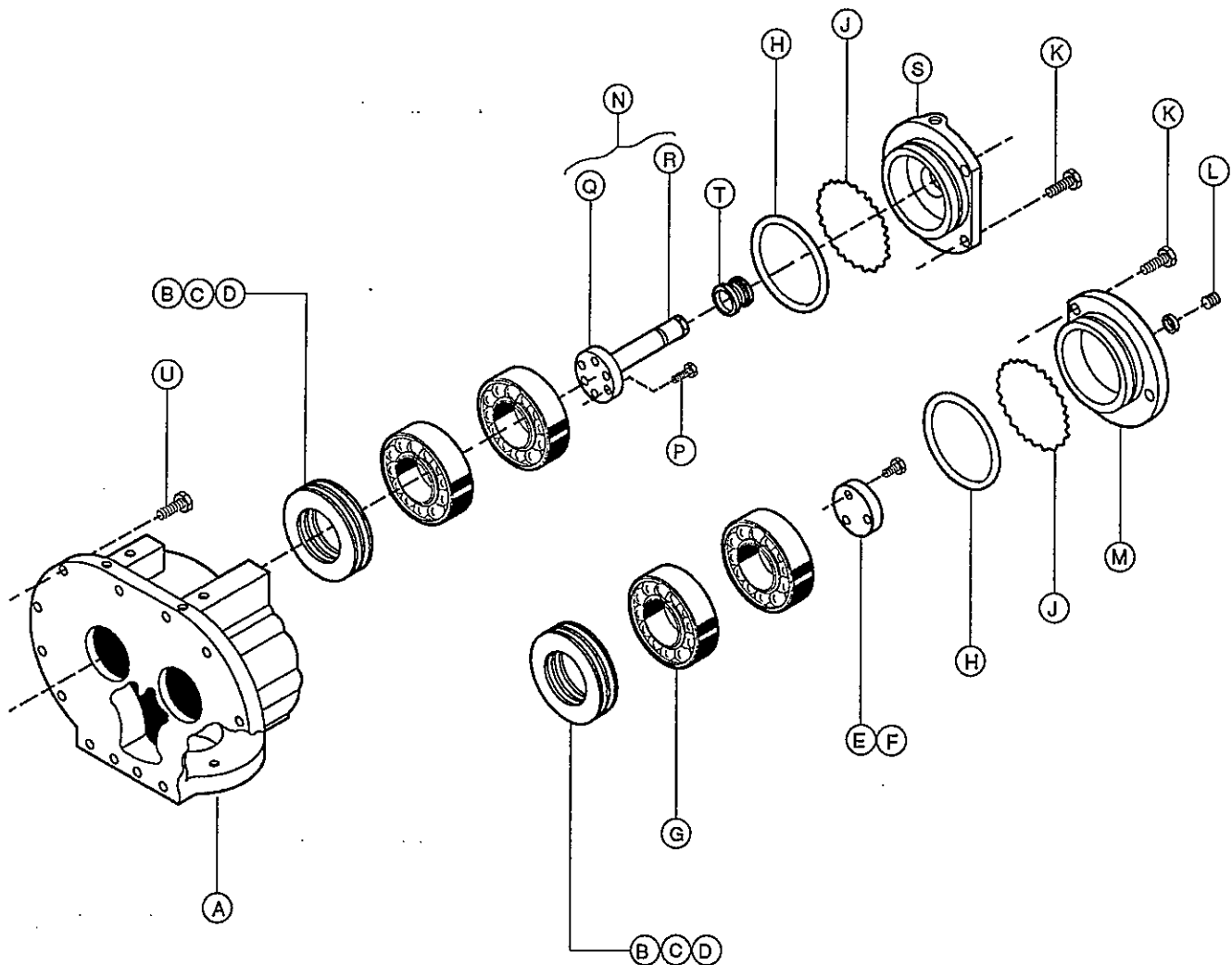


INGERSOLL-RAND COMPANY				
PORTABLE COMPRESSOR DIVISION				
DESCRIPTION				
AIR END ASSEMBLY				
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:	
7/30/93 H	B	1/5	1995	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C	
VHP300AWD	36514313	3 of 6	27447	

PARTS LIST 9-33

ITEM	C.P.N.	QTY	DESCRIPTION
A	161A13S475	1	SNAP RING
B	35313535	1	ROLLER BEARING
C	35272541	13	SCREW
D	39703921	1	FRT BEARING HOUSING
E	35518497	1	GASKET
F	12A9C135	1	KEY
G	39748942	1	ROTOR HOUSING
H	39437629	1	GASKET
J	95239927	2	DOWEL PIN
K	36008241	1	ROTOR SET
L	35332915	2	DOWEL PIN
M	95223178	1	SNAP RING
N	164A13S215	1	SNAP RING
P	35609361	1	ROLLER BEARING
Q	35270131	1	BEARING SPACER

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
AIR END ASSEMBLY			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
7/30/93 H	BMA	15	1995 JF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	36514313	4 of 6	27447



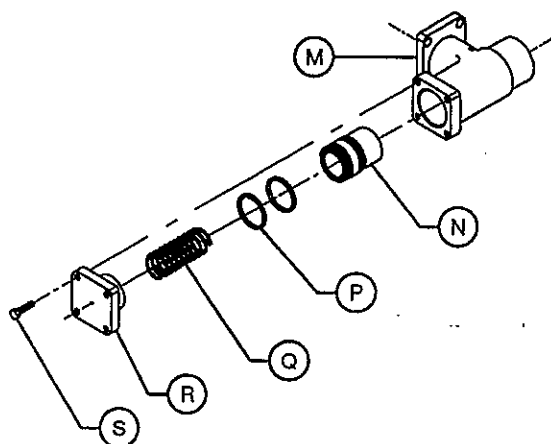
BOOK 35374917 (3/95)

PARTS LIST 9-35

ITEM	C.P.N.	QTY	DESCRIPTION
A	36769404	1	REAR BEARING HOUSING
B	35313600	4	SHIM, .002
C	35313618	4	SHIM, .003
D	35364769	2	SHIM, .010
E	35262690	1	CLAMP PLATE
F	35104108	3	SCREW
G	39437595	4	ROLLER BEARING
H	20A112CM249	2	O-RING
J	35354448	2	SHIM SET
K	34M2AB462	6	SCREW
L	35287556	1	PLUG
M	35600832	1	REAR BEARING COVER
N	35604032	1	FAN DRIVE SHAFT ASSY
P	119A2A177N	8	SCREW
Q	35858935	1	SHAFT
R	35327576	1	TRANSTORQUE BUSHING
S	35854512	1	REAR BEARING COVER
T	35606979	1	SHAFT SEAL
U	35272541	12	SCREW

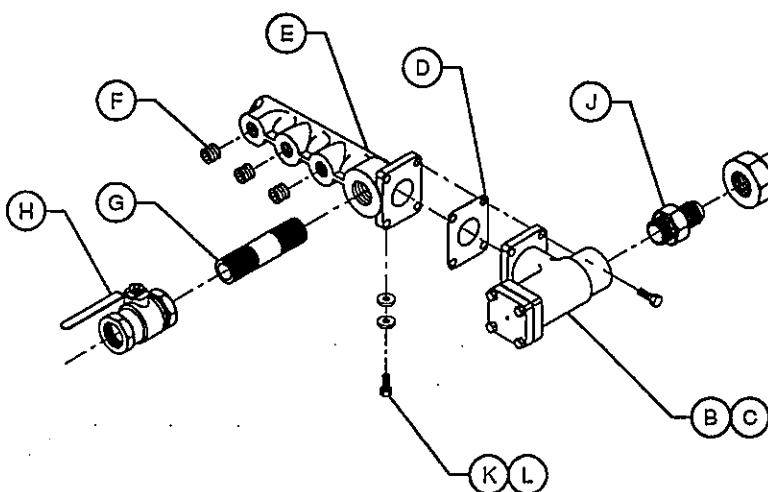
INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
AIR END ASSEMBLY			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
7/30/93 H	B/15	15	10/05
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	36514313	6 of 6	27447

PARTS LIST 9-36



MINIMUM PRESSURE VALVE ASSEMBLY 35608363

← DRAWBAR END



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
SERVICE AIR COMPLETE			
DATE/DWN BY:	REV.	DATE/CHKD BY:	DATE/APVD BY:
8/2/93 B	B	15	1995
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	36514354	1 of 2	27478

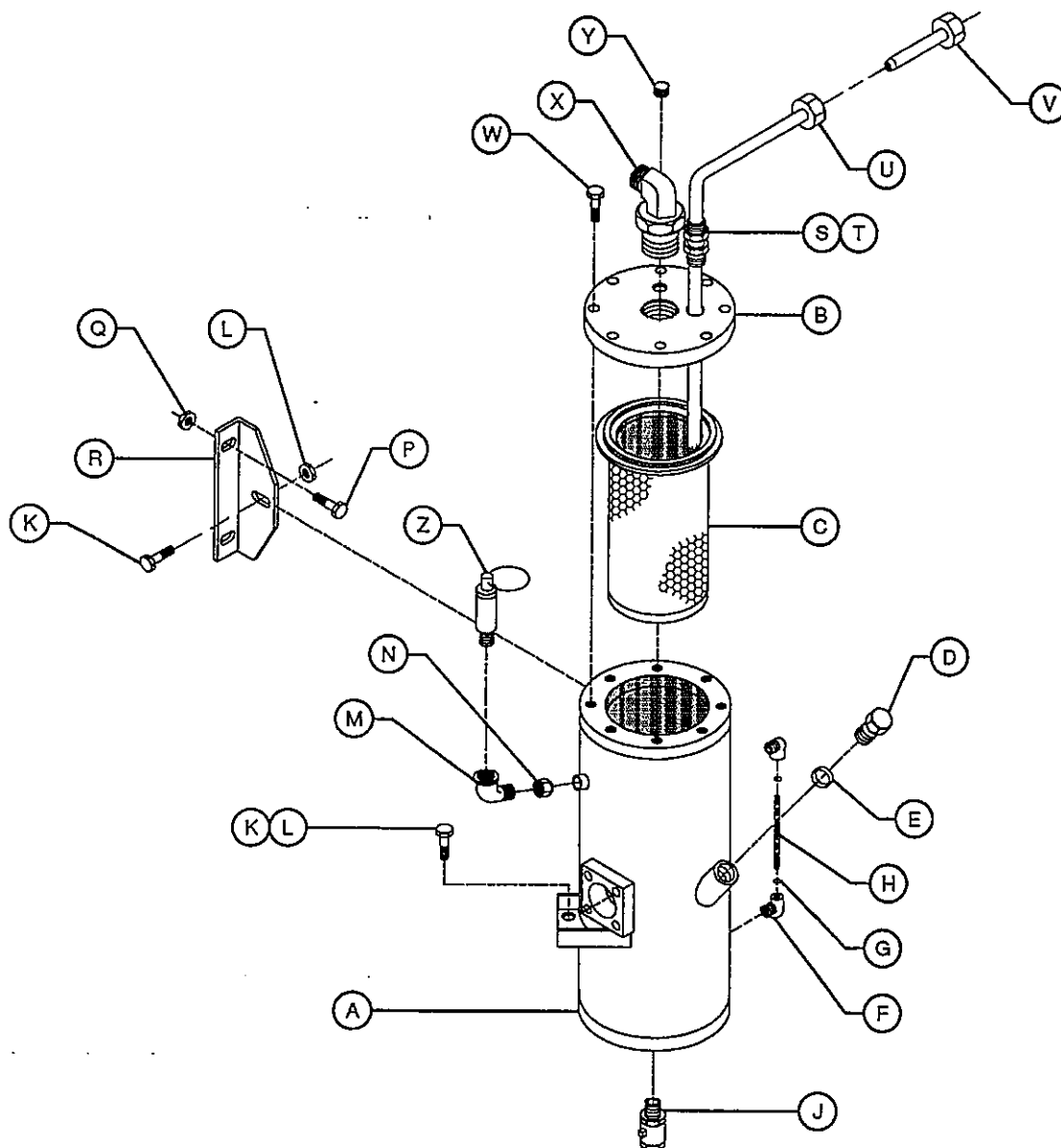
PARTS LIST 9-37

ITEM	C.P.N.	QTY	DESCRIPTION
A	35843002	1	SERVICE PIPE
B	35608363	1	MINIMUM PRESS VALVE
C	35374842	4	SCREW
D	35294628	1	GASKET
E	36710036	1	MANIFOLD
F	34A7S6Z1	3	PLUG
G	19A7J148Z1	1	NIPPLE
H	35612126	1	BALL VALVE
J	95371225	1	CONNECTOR
K	35376953	3	SCREW
L	95935037	3	WASHER
M	35811843	1	VALVE BODY
N	35579762	1	PISTON
P	95022257	2	O-RING
Q	35318161	1	SPRING
R	35365139	1	VALVE COVER
S	35271162	4	SCREW

INGERSOLL-RAND COMPANY
 PORTABLE COMPRESSOR DIVISION

DESCRIPTION - SERVICE AIR COMPLETE			
DATE/DWN BY:	REV.	DATE/CHKD BY:	DATE/APVD BY:
8/2/93 H	AMAR	15	1995 OF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	36514354	2 of 2	27478

PARTS LIST 9-38



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION				
DESCRIPTION				
SEPARATOR TANK COMPLETE				
DATE/DWN BY:	REV.	DATE/CHKD BY:	DATE/APVD BY:	
7/10/89 H	DMR	15	1995	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C	
P375AWD	36510956	1 of 2	27495	

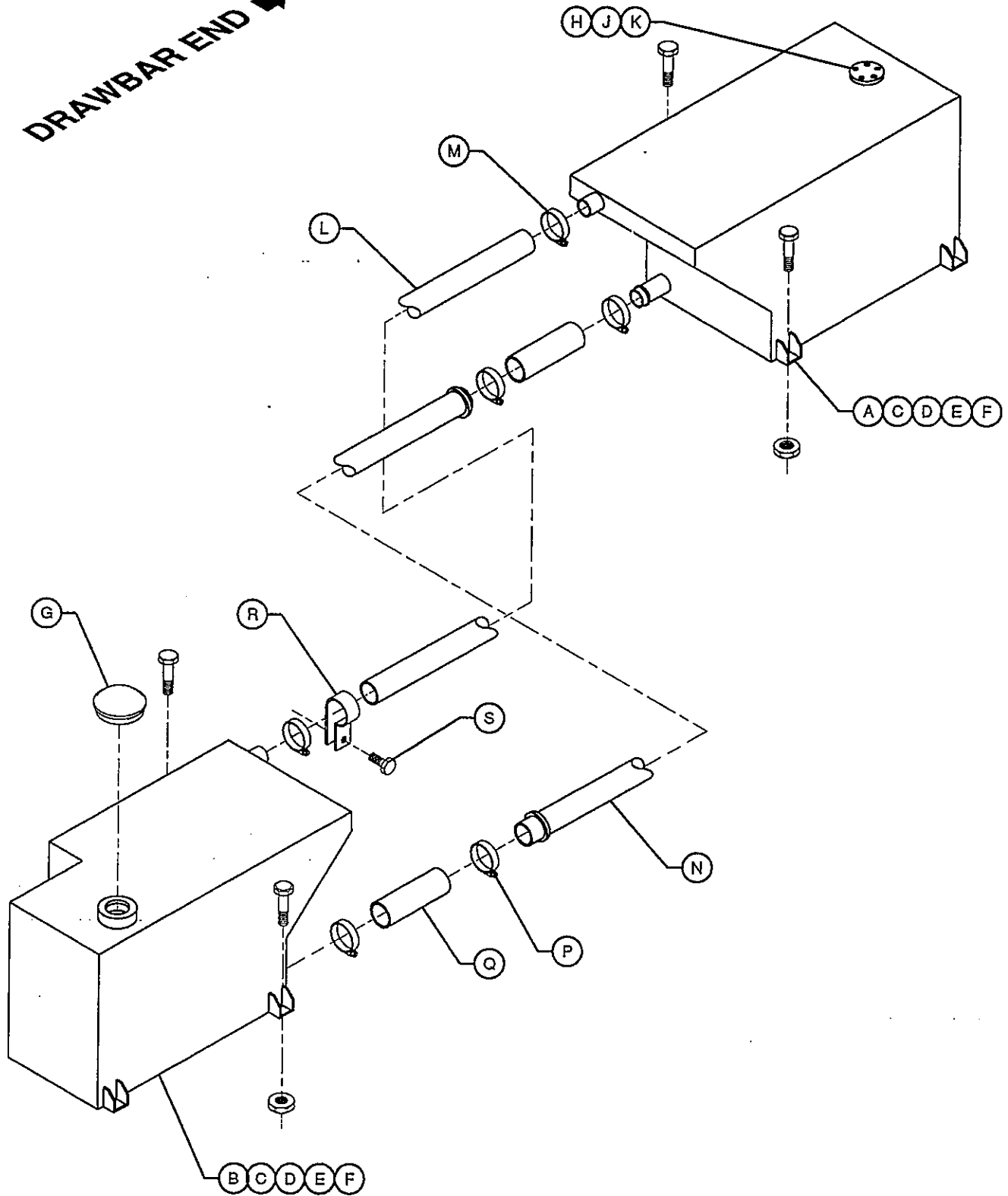
PARTS LIST 9-39

ITEM	C.P.N.	QTY	DESCRIPTION
A	36862605	1	SEPARTOR TANK
B	36770683	1	COVER
C	36723666	1	FILTER ELEMENT
D	35579630	1	PLUG
E	35279942	1	O-RING
F	36860468	1	FITTING
G	35324649	2	GASKET
H	92121532	1	GLASS TUBE
J	36795680	1	BALL VALVE
K	35252758	2	SCREW
L	35252618	3	NUT
M	95928164	1	ELBOW
N	23A7S12Z1	1	BUSHING
P	35144344	2	SCREW
Q	35145077	2	NUT
R	35579366	1	SUPPORT
S	35329309	1	FITTING
T	23A7S8Z1	1	BUSHING
U	36794147	1	SCAVENGE TUBE
V	36840411	1	FILTER/ORFICE
W	95930723	8	SCREW
X	95431292	1	ELBOW
Y	34A7S4Z1	1	PLUG
Z	35325232	1	SAFETY VALVE

INGERSOLL-RAND COMPANY				
PORTABLE COMPRESSOR DIVISION				
DESCRIPTION				
SEPARATOR TANK COMPLETE				
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:	
7/10/89 B	DMR	5	1305 06	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C	
P975AWD	36510956	2 of 2	27495	

PARTS LIST 9-40

DRAWBAR END →



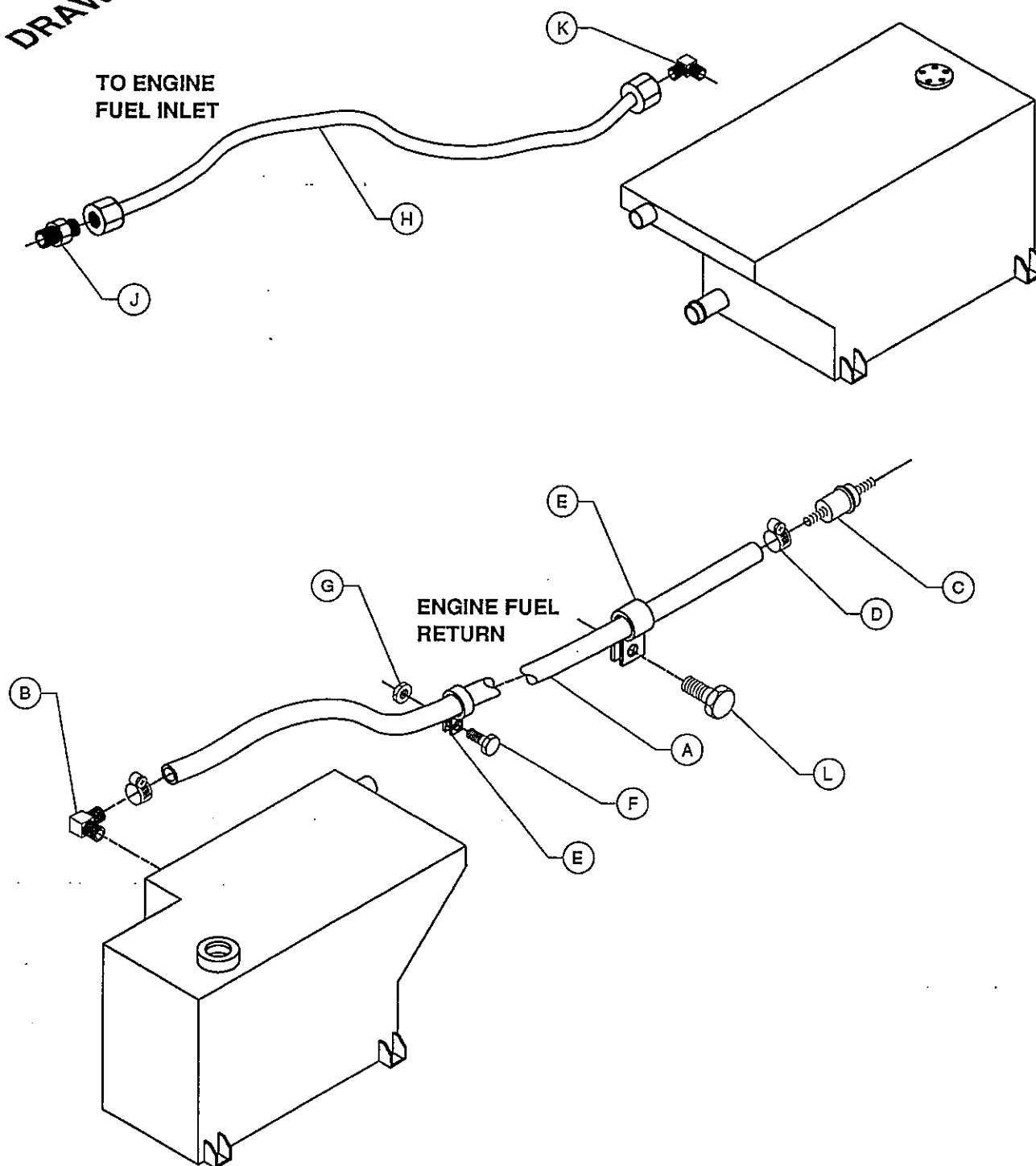
INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
FUEL TANKS COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
8/2/93 H	A	NRP	5/1995
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	35846948	1 of 2	25130

PARTS LIST 9-41

ITEM	C.P.N.	QTY	DESCRIPTION
A	36724896	1	FRONT TANK
B	36724904	1	REAR TANK
C	35144336	4	SCREW
D	W90555T1	4	NUT
E	35144344	4	SCREW
F	35145077	4	NUT
G	35135102	1	CAP
H	35111855	1	COVER
J	35361849	1	GASKET
K	35252279	5	SCREW
L	35286327	22"	HOSE
M	95220844	2	CLAMP
N	35326198	1	TUBE
P	95235131	4	CLAMP
Q	35292408	2 at 3"	HOSE
R	35314095	1	CLAMP
S	92368687	1	SCREW

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION - FUEL TANKS COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
8/2/93 B	A	15	1995
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	35846948	2 of 2	25130

DRAWBAR END →



INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

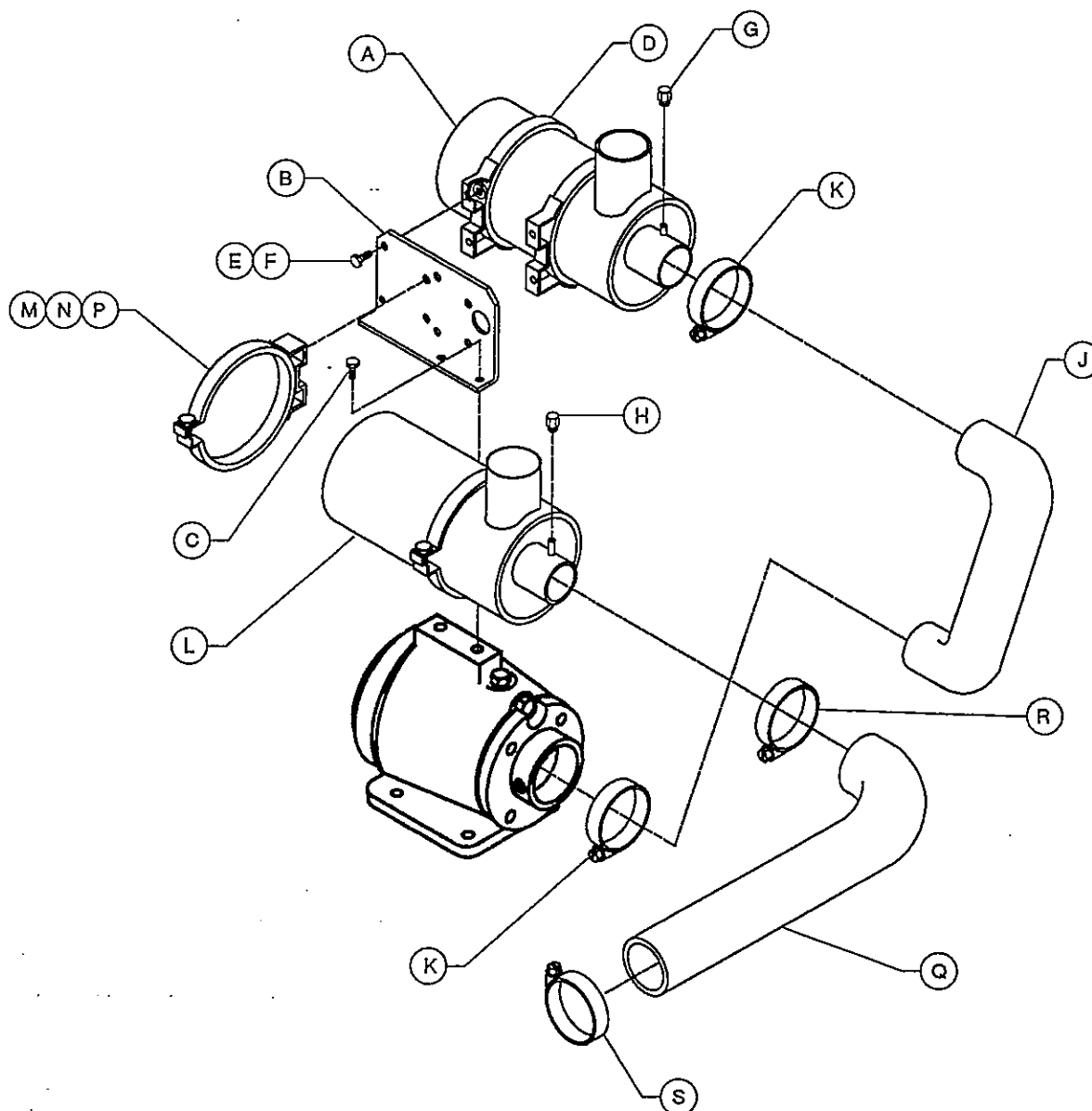
DESCRIPTION			
ENGINE PIPING COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
8/2/93 B	B	15	1005
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	35846930	1 of 2	27432

PARTS LIST 9-43

ITEM	C.P.N.	QTY	DESCRIPTION
A	35285600	58"	HOSE
B	35363654	1	BARBED FITTING
C	35321215	1	CHECK VALVE
D	35296342	2	CLAMP
E	W88676	2	CLAMP
F	35321108	1	SCREW
G	35252600	1	NUT
H	35282946	1	HOSE
J	35284082	1	CONNECTOR
K	35279926	1	ELBOW
L	92368687	1	SCREW

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION: ENGINE PIPING COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
8/2/93	H	BM	15 1995
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	35846930	2 of 2	27432

PARTS LIST 9-44



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
AIR INTAKE COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
6/19/89 H	B	15	1990
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	35846898	1 of 2	27576

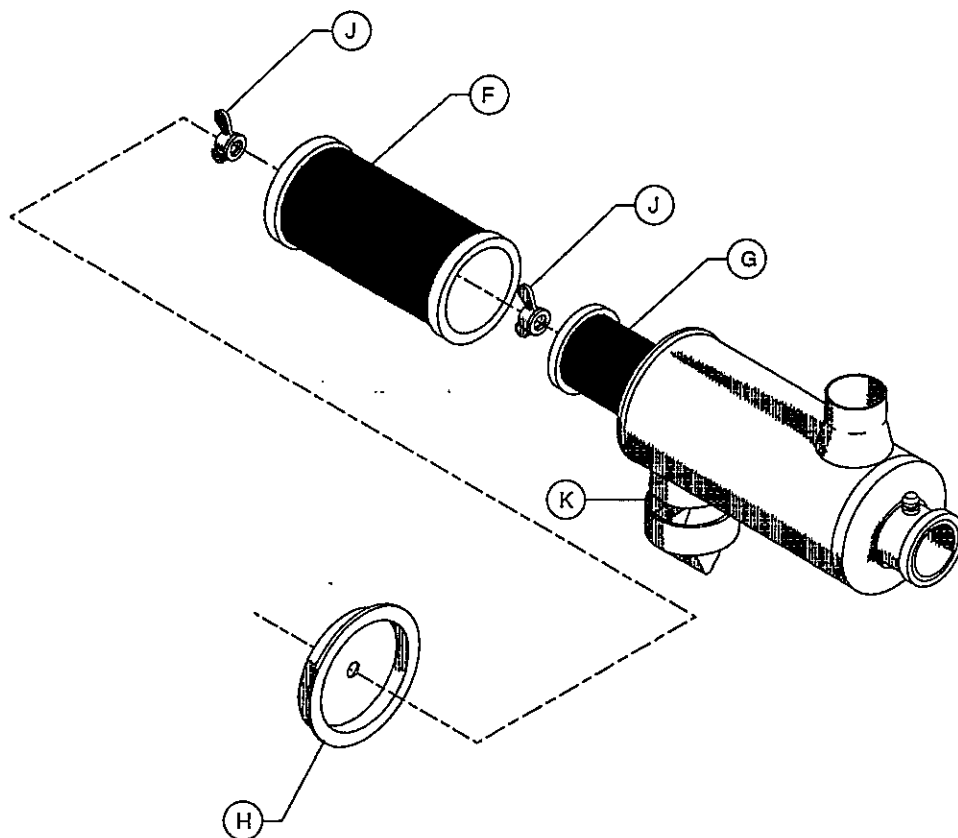
PARTS LIST 9-45

ITEM	C.P.N.	QTY	DESCRIPTION
A	36863900	1	A/E AIR CLEANER ASSY
B	35591551	1	AIR CLEANER BRACKET
C	96701495	2	SCREW
D	35294974	2	9" BAND
E	35252493	4	SCREW
F	35145077	4	NUT
G	35314939	1	INDICATOR RESTRICTOR (A/E AIR CLEANER)
H	35300615	1	INDICATOR RESTRICTOR (ENG AIR CLEANER)
J	35591536	1	180 ELBOW
K	35279553	2	CLAMP
L	36863843	1	ENG AIR CLEANER ASSY
M	35587468	2	8" BAND
N	35244336	4	SCREW
P	35252600	4	NUT
Q	35591544	1	ENG AIR CONNECTOR
R	W32875	1	CLAMP
S	35295781	1	CLAMP

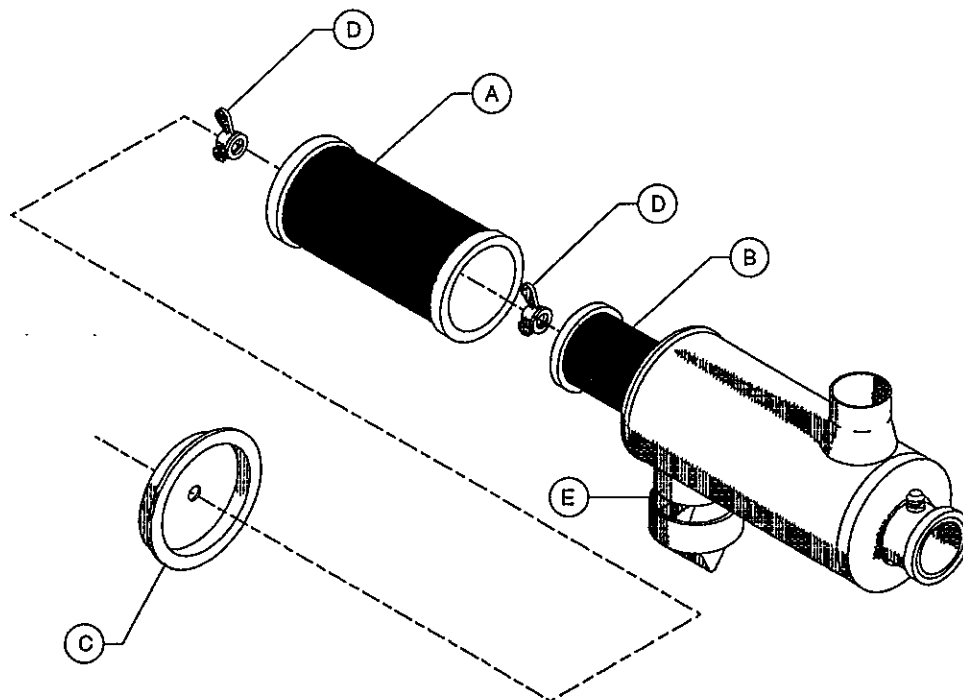
INGERSOLL-RAND COMPANY
 PORTABLE COMPRESSOR DIVISION

DESCRIPTION - AIR INTAKE COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
6/19/89 H	B	5	100%
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	P/E/C
P376AWD	35846898	2 of 2	27576

PARTS LIST 9-46



A/E AIR CLEANER ASSEMBLY 36863900



ENGINE AIR CLEANER ASSEMBLY 36863843

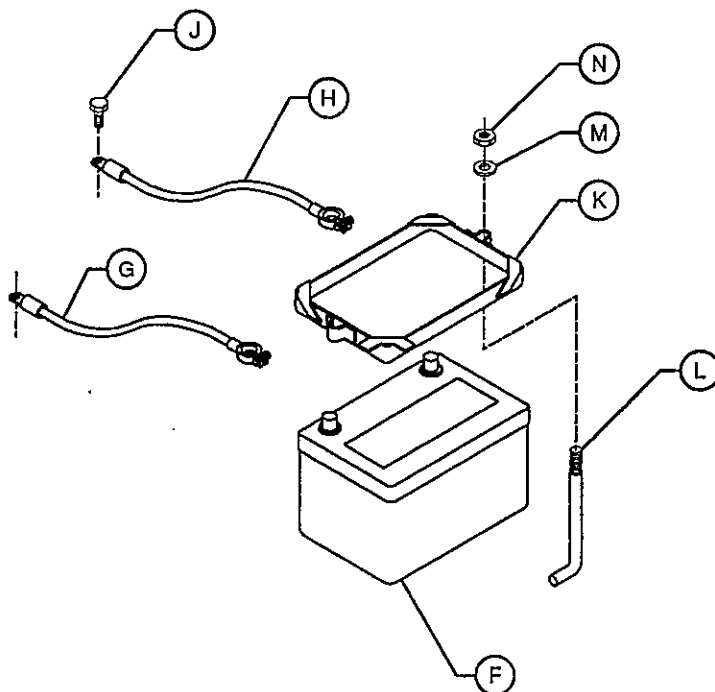
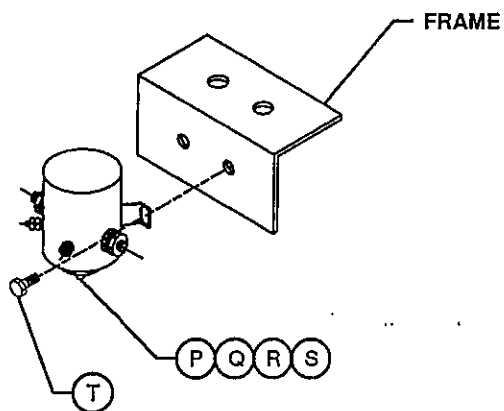
INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
AIR CLEANER ASSEMBLY			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
6/21/89 B	BMA	15	1995 OF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36510923	1 of 2	27576

PARTS LIST 9-47

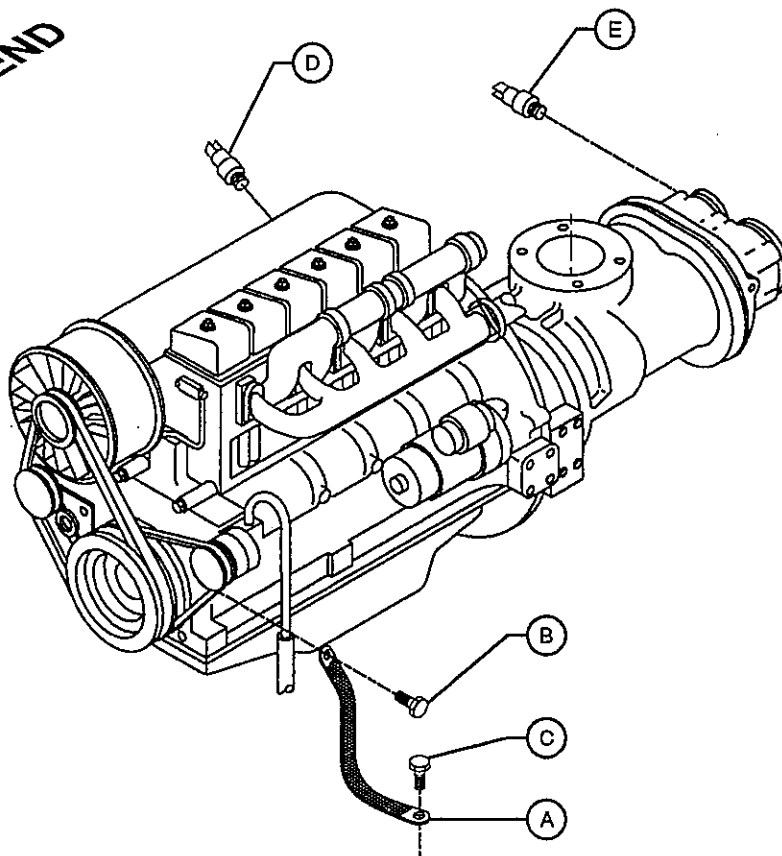
ITEM	C.P.N.	QTY	DESCRIPTION
A	35318252	1	ELEMENT
B	35328442	1	SAFETY ELEMENT
C	35326057	1	COVER
D	35291475	2	NUT
E	35318245	1	VALVE
F	35326230	1	ELEMENT
G	35377696	1	SAFETY ELEMENT
H	35326222	1	COVER
J	35326214	1	VALVE
K	35291475	2	NUT

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION — AIR CLEANER ASSEMBLY			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
6/21/89 H	B KAR	5/19/95	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36510923	2 of 2	27576

PARTS LIST 9-48



← DRAWBAR END



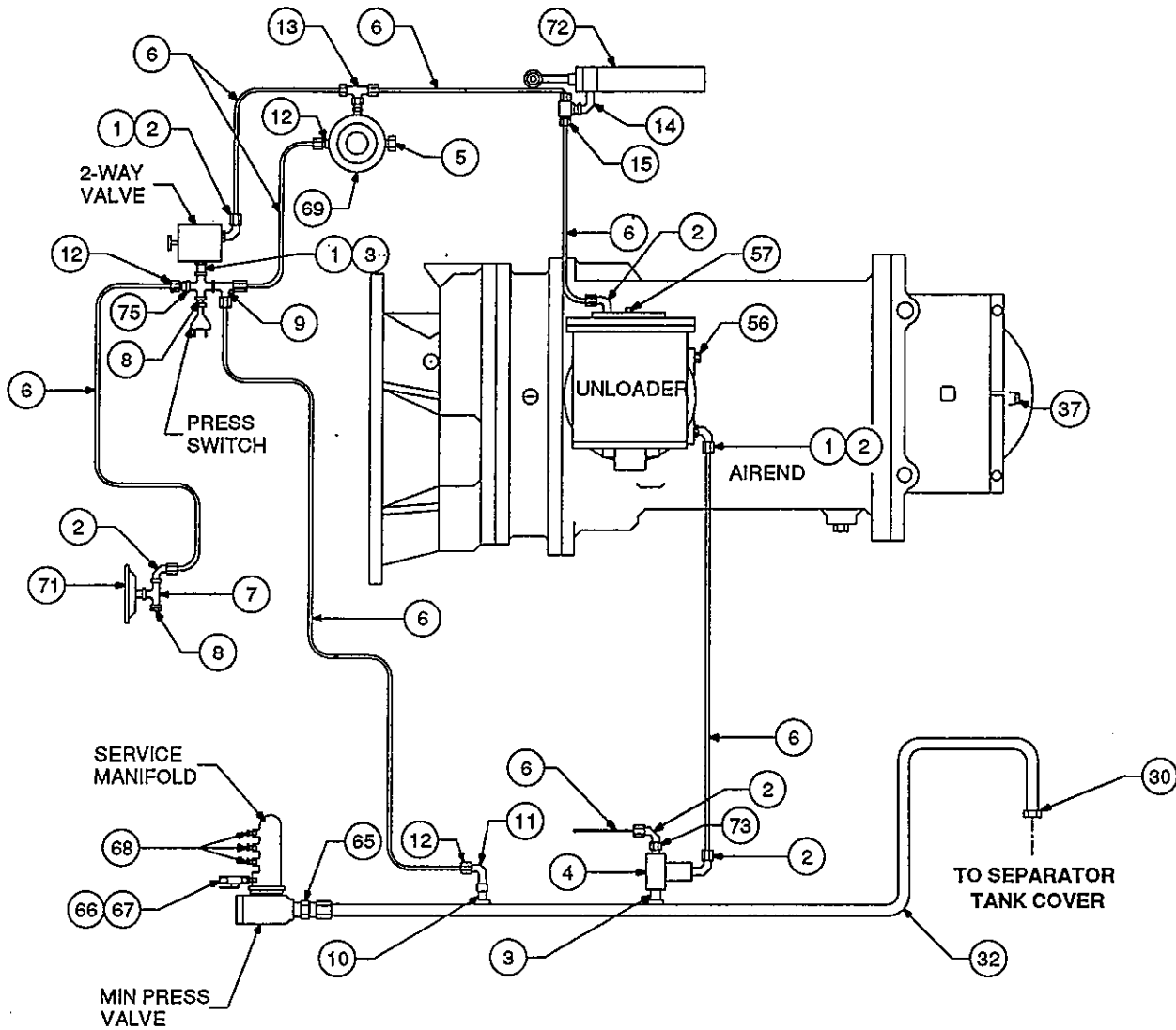
INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION		ELECTRICAL COMPLETE	
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
8/3/93 B	A	1/5/95	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	35846963	1 of 2	27478

PARTS LIST 9-49

ITEM	C.P.N.	QTY	DESCRIPTION
A	35578194	1	GROUND STRAP
B	35376953	1	SCREW
C	35130293	1	SCREW
D	36757581	1	OIL PRESS SWITCH
E	35596436	1	DISCHG TEMP SWITCH
F	36793545	1	BATTERY
G	35582410	1	POSITIVE BATTERY CABLE
H	35506419	1	NEGATIVE BATTERY CABLE
J	36763704	1	SCREW
K	36793404	1	HOLD-DOWN FRAME
L	35336759	2	ROD
M	95935037	2	WASHER
N	95923322	2	NUT
P	35364611	1	MAG SWITCH
Q	95076550	1	NUT
R	95929782	1	NUT
S	26A5S111800Z1	1	WASHER
T	92368687	2	NUT

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION - ELECTRICAL COMPLETE			
DATE/DWN BY: 8/3/93	REV: H	DATE/CHKD BY: A	DATE/APVD BY: [Signature]
MODEL NO. VHP300AWD	ILLUSTRATION NO. 35846963	SHEET NO. 2 of 2	E/C 27478

PARTS LIST 9-50



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION				
DESCRIPTION				
AIR & OIL-PIPING				
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:	
12/17/93 H	C	MAR	5 1995	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C	
P375AWD	36522274	1 of 4	27829	

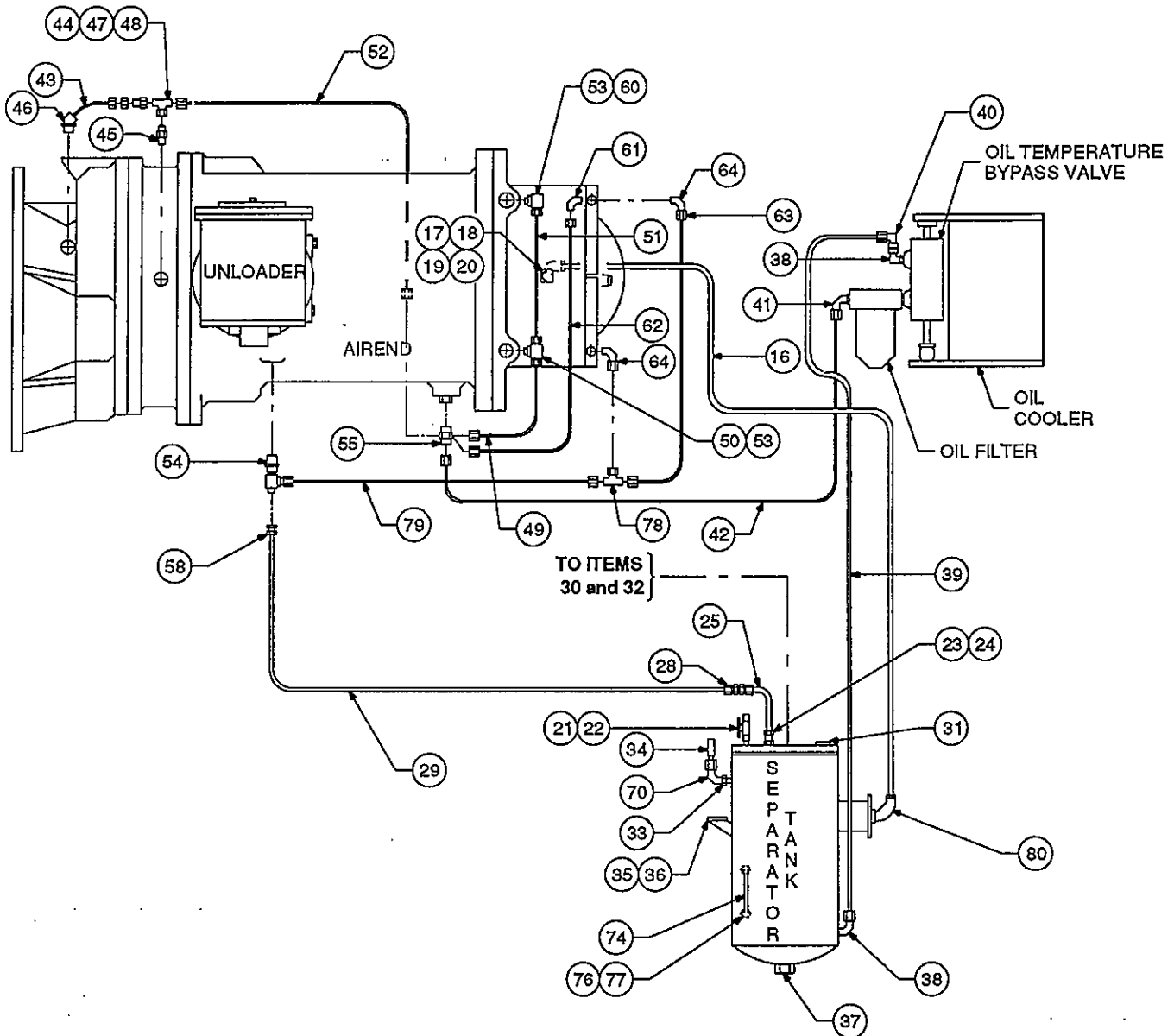
PARTS LIST 9-51

ITEM	C.P.N.	DESCRIPTION	ITEM	C.P.N.	DESCRIPTION
1	35302314	ADAPTER	42		
2	35369354	ELBOW	43		
3	19A7S2Z1	NIPPLE	44		
4	35322379	BLOWDOWN VALVE	45		
5	36766731	ORIFICE	46		
6	35356484	TUBING	47		
7	71A7M2Z1	TEE	48		
8	23A7S1Z1	BUSHING	49		
9	35369503	TEE	50		
10	35332147	INLINE FILTER	51		
11	65A7M2	ELBOW	52		
12	35369347	CONNECTOR	53		
13	35373976	TEE	54		
14	67A7M1	ELBOW	55		
15	35369396	TEE	56	35287556	PULG
16			57	34A7S3Z1	PLUG
17			58		
18			59		
19			60		
20			61		
21			62		
22			63		
23			64		
24			65	145A23S32	ADAPTER
25			66	19A7J148Z1	NIPPLE
28			67	35590181	BALL VALVE
29			68	34A7S6Z1	PIPE PLUG
30	144A23S13	ELBOW	69	35355106	REGULATOR
31			70		
32	35843002	SERVICE PIPE	71	35706761	DISCHARGE PRESS GAGE
33			72	35594225	SPEED CONTROL CYLINDER
34			73	35322346	ORIFICE
35			74		
36			75	73A7M2Z1	CROSS
37	34A7S5Z1	PIPE PLUG	76		
38			77		
39			78		
40			79		
41			80		

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DESCRIPTION			
AIR & OIL PIPING			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 H	CMS	5	1995 OF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36522274	2 of 4	27829

PARTS LIST 9-52



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
AIR & OIL PIPING			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 B	0	15	ICE
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36522274	3 of 4	27829

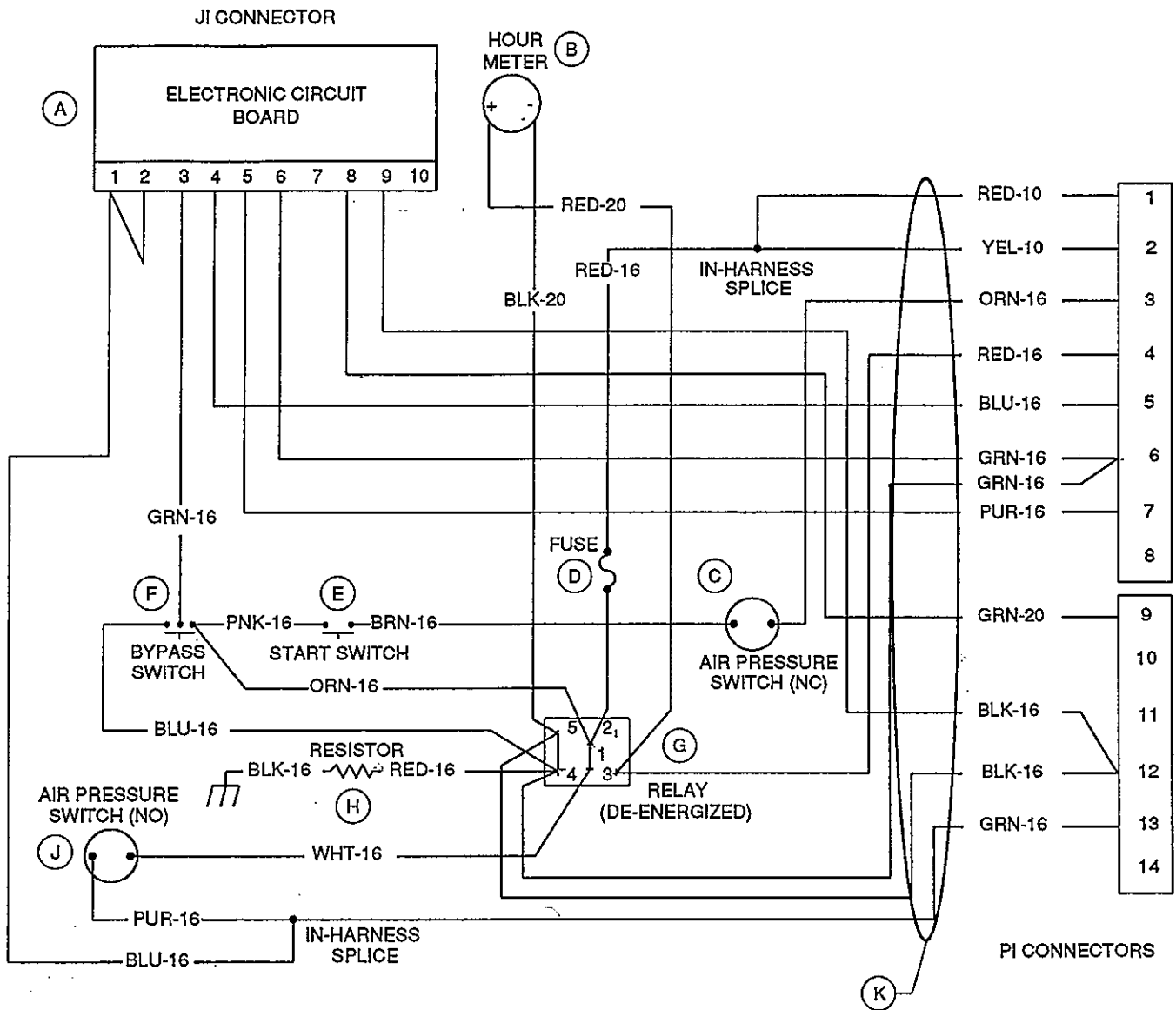
PARTS LIST 9-53

ITEM	C.P.N.	DESCRIPTION	ITEM	C.P.N.	DESCRIPTION
1			42	35132877	HOSE
2			43	36860419	TUBE ASSEMBLY
3			44	35306109	TUBE NUT
4			45	145A23S02	CONNECTOR
5			46	35279884	ELBOW
6			47	35036091	REDUCER
7			48	35283092	TEE
8			49	36846087	TUBE ASSEMBLY
9			50	35279843	TEE
10			51	36795482	TUBE ASSEMBLY
11			52	36860401	TUBE ASSEMBLY
12			53	35287945	REDUCER
13			54	35296177	TEE
14			55	36845154	OIL MANIFOLD
15			56		
16	36862654	DISCHARGE HOSE	57		
17	20A11C2M228	O-RING	58	35299734	REDUCER
18	35292143	HALF FLANGE	59		
19	14A5C110	WASHER	60	35279827	ELBOW
20	35291640	SCREW	61	35279876	ELBOW
21	19A7S22Z1	NIPPLE	62	36860393	TUBE ASSEMBLY
22	35581792	BALL VALVE	63	36860377	TUBE ASSEMBLY
23	23A7S8Z1	BUSHING	64	35279801	ELBOW
24	35329309	LENZ FITTING	65		
25	36794147	SCAVENGE TUBE	66		
28	36840437 411	CHECK VALVE	67		
29	35288034	HOSE ASSEMBLY	68		
30			69		
31	34A7S4Z1	PIPE PLUG	70	67A7M4Z1	ELBOW
32			71		
33	23A7S12Z1	BUSHING	72		
34	35325232	SAVETY VALVE	73		
35	35579630	PLUG	74	92121532	SIGHT GLASS
36	35279942	O-RING	75		
37	34A7S5Z1	PIPE PLUG	76	36860468	FITTING
38	35279777	ELBOW	77	35324649	GASKET
39	W90438	HOSE ASSEMBLY	78	95642484	TEE
40	35279918	ELBOW	79	36860385	TUBE ASSEMBLY
41	35291384	ELBOW	80	95944740	ELBOW

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DESCRIPTION			
AIR & OIL PIPING			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 H	C 180	1 5	1005 01
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36522274	4 of 4	27829

PARTS LIST 9-54



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
INST/CONTROL PNL WIRING DIAGRAM			
DATE/DWN BY:	REV. DATE/CHKD BY:	DATE/APVD BY:	
9/3/93 H	A	15 1995	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	36521771	1 of 2	25295

PARTS LIST 9-55

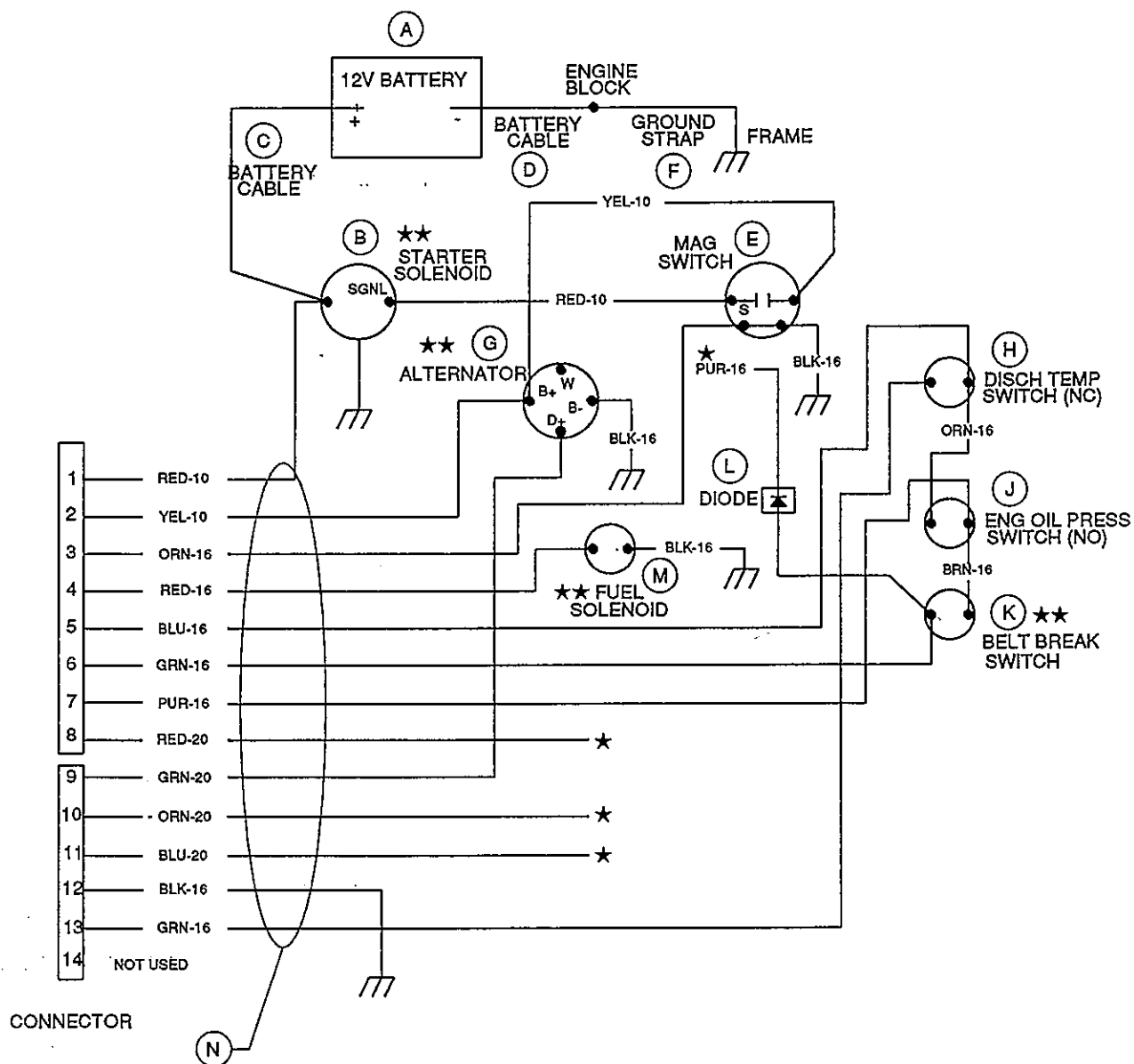
ITEM	C.P.N.	DESCRIPTION
A	36724458	MONITOR PANEL
B	35605229	HOURLMETER
C	36757573	DISCHG PRESS SWITCH
D	36782464	FUSE 15A
E	35255553	START SWITCH
F	35330794	BYPASS SWITCH
G	35583442	RELAY
H	35333616	RESISTOR
J	36757581	PRESSURE SWITCH
K	36765824	INSTRUMENT HARNESS

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DESCRIPTION			
INST/CONTROL PNL WIRING DIAGRAM			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
9/3/93 H	AMR	15	1995
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
VHP300AWD	36521771	2 of 2	25295

PARTS LIST 9-56

★ NO CONNECTION
★★ FURNISHED BY ENGINE MANUFACTURER



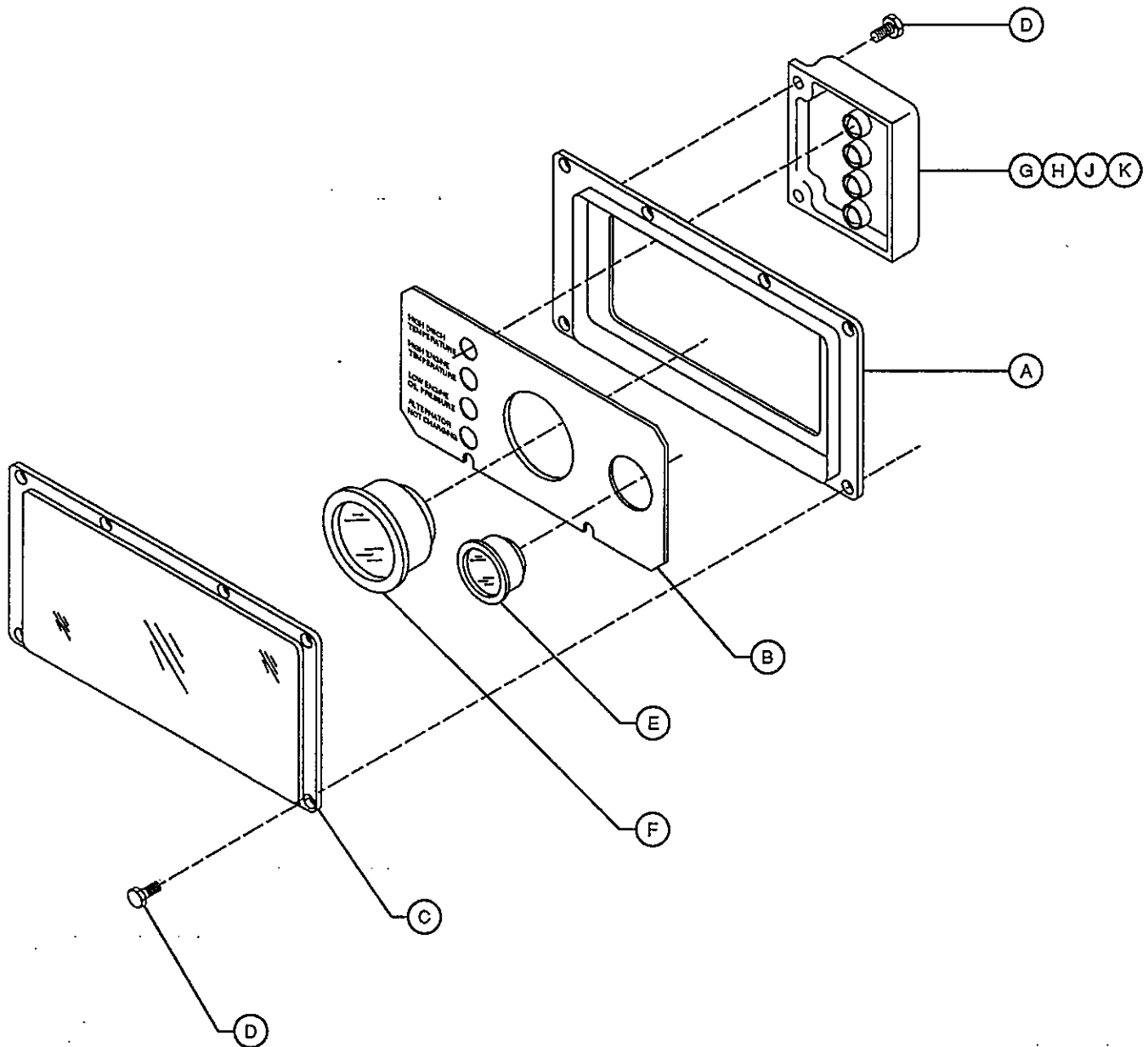
INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
ENGINE WIRING DIAGRAM			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 B	A	1/5/1995	DF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD	36522282	1 of 2	26228

ITEM	C.P.N.	
A	36793545	BATTERY
B	★★	STARTER SOLENOID
C	35582410	POSITIVE BATTERY CABLE
D	35506419	NEGATIVE BATTERY CABLE
E	35364611	MAG SWITCH
F	35578191	GROUND STRAP
G	★★	ALTERNATOR
H	35706761	DISCHG PRESS GAGE
J	36757581	ENG OIL PRESS SWITCH
K	★★	BELT BREAK SWITCH
L	35375609	DIODE
M	★★	FUEL SHUTDOWN SWITCH
N	36766152	ENGINE HARNESS

★★ FURNISHED BY ENGINE MANUFACTURER

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
ENGINE WIRING DIAGRAM			
DATE/DWR BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 H	A M&R	15	100506
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-376AWD	36522282	2 of 2	26228

PARTS LIST 9-58



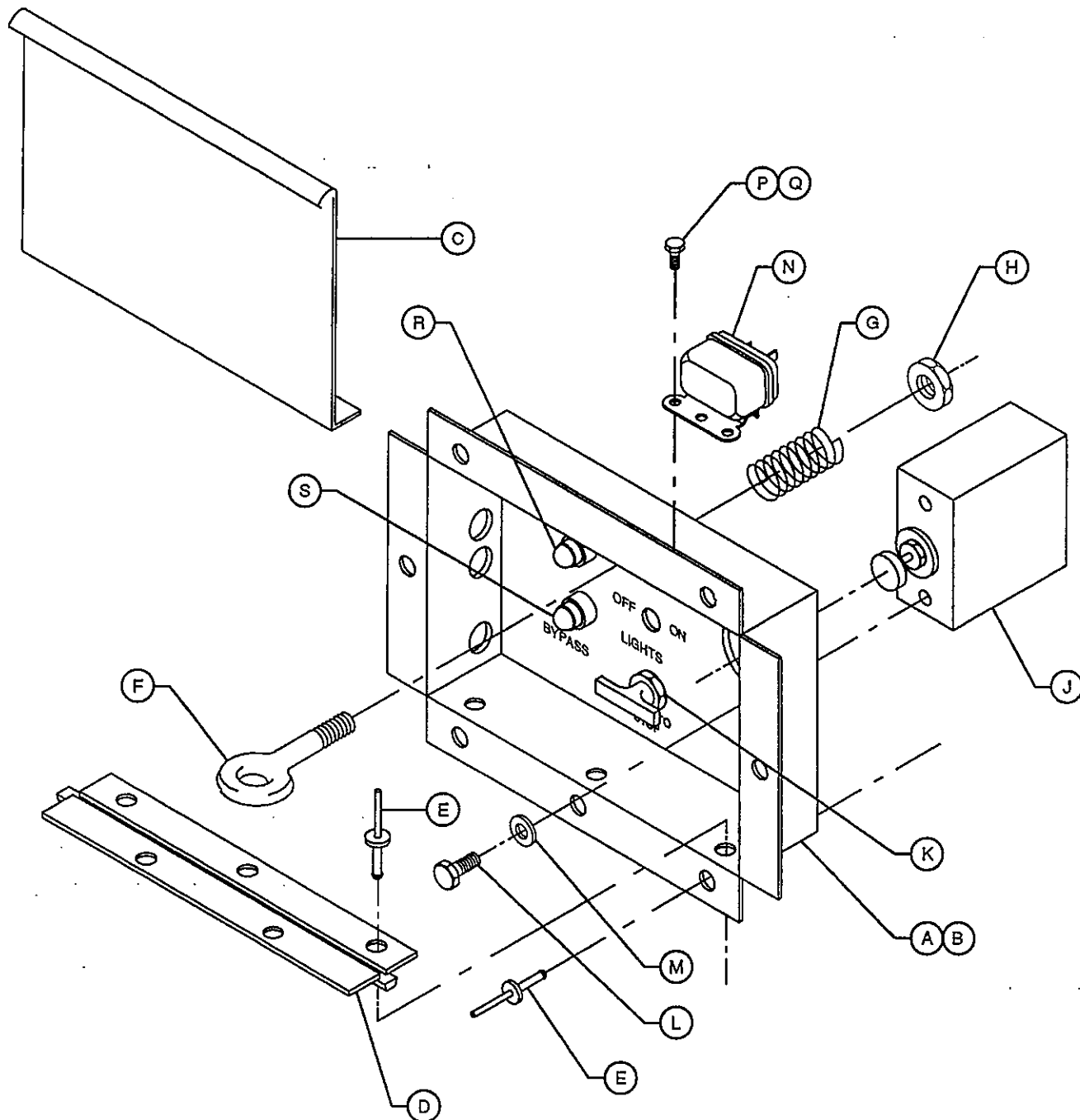
INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
INSTRUMENT PANEL ASSY.			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
4/9/91 B	B	SWAR	F 100506
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD	35843762	1 of 2	24521

PARTS LIST 9-59

ITEM	C.P.N.	QTY	DESCRIPTION
A	36775864	1	INSTURMENT PANEL
B	36775898	1	DECAL
C	36723989	1	WINDOW
D	95095659	10	SCREW
E	35605229	1	HOURLMETER
F	35706761	1	DISCHG PRESS GAGE
G	36724458	1	CIRCUIT BOARD
H	35327907	4	LAMP
J	35327915	4	LAMP BASE
K	35327923	4	LAMP SEAL

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION INSTRUMENT PANEL ASSY.			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
4/9/91 H	B	NAR	5/19/95
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD	35843762	2 of 2	24521

PARTS LIST 9-60



INGERSOLL-RAND COMPANY				
PORTABLE COMPRESSOR DIVISION				
DESCRIPTION				
CONTROL PANEL ASSEMBLY				
DATE/OWN BY:	REV:	DATE/CHKD BY:	DATE/APPD BY:	
8/3/93	H D	11/3/93		
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C	
P-375AWD	36508422	1 of 2	25747	

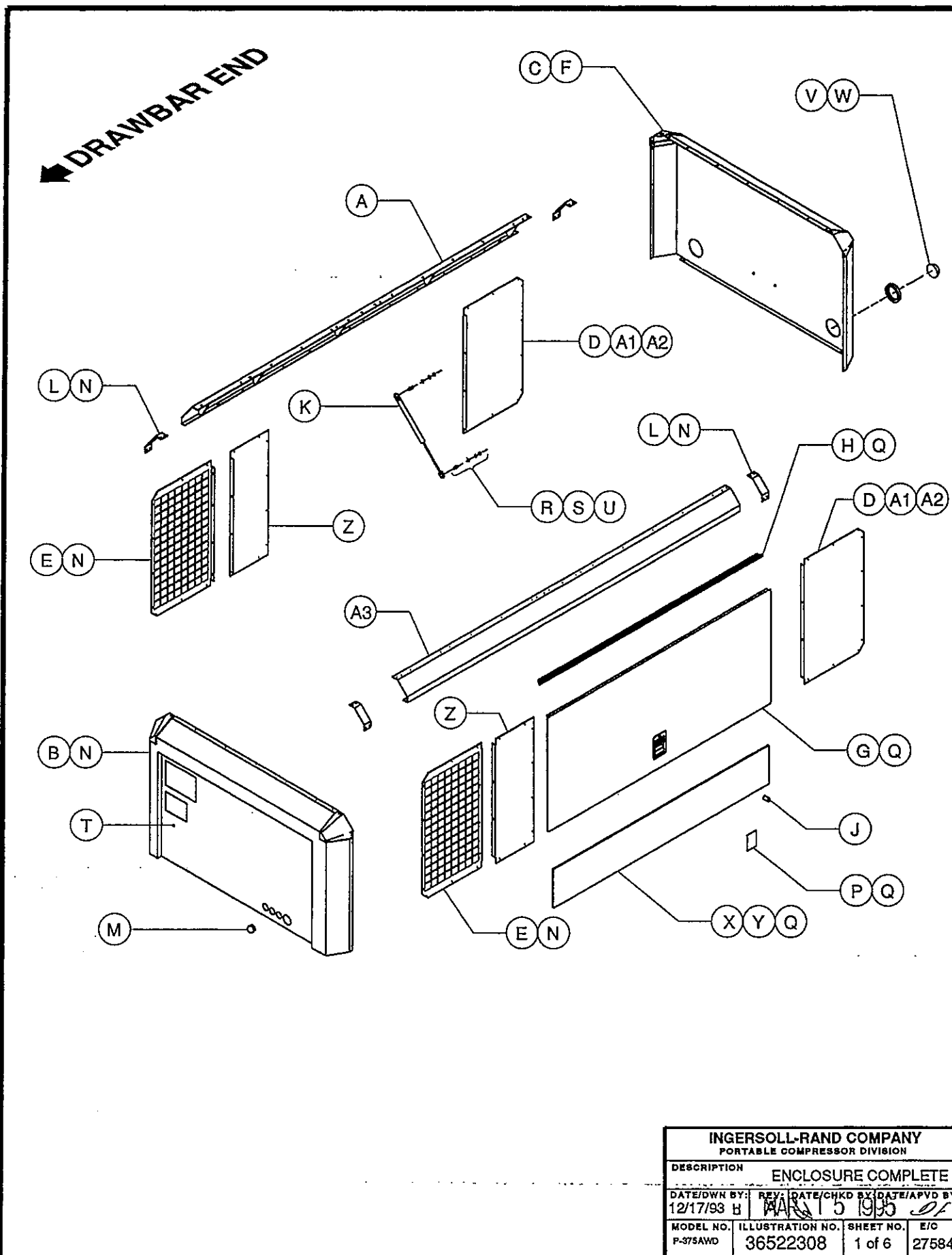
PARTS LIST 9-61

ITEM	C.P.N.	QTY	DESCRIPTION
A	36762078	1	CONTROL PANEL
B	36765493	1	CONTROL PANEL DECAL
C	36748648	1	CONTROL PANEL DOOR
D	35582220	1	HINGE
E	35291437	12	RIVET
F	35607829	1	EYE BOLT
G	35607837	1	SPRING
H	35923298	1	NUT
J	36783439	1	2-WAY VALVE
K	R25640P3	1	SPEED CONTROL CABLE
L	35307818	2	SCREW
M	92304658	2	WASHER
N	35583442	1	RELAY
P	35144328	2	SCREW
Q	35144492	2	NUT
R	35255553	1	START SWITCH
S	35330794	1	BY-PASS SWITCH

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DESCRIPTION			
CONTROL PANEL ASSEMBLY			
DATE/DWN BY:	REV.	DATE/CHKD BY	DATE/APVD BY
8/3/93 H	DMA	15	1995 JF
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD	36508422	2 of 2	25747

PARTS LIST 9-62



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION		ENCLOSURE COMPLETE	
DATE/DWN BY:	REV. DATE/CHKD BY:	DATE/APVD BY:	
12/17/93 B	12/17/93 B	12/17/93 B	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD	36522308	1 of 6	27584

PARTS LIST 9-63

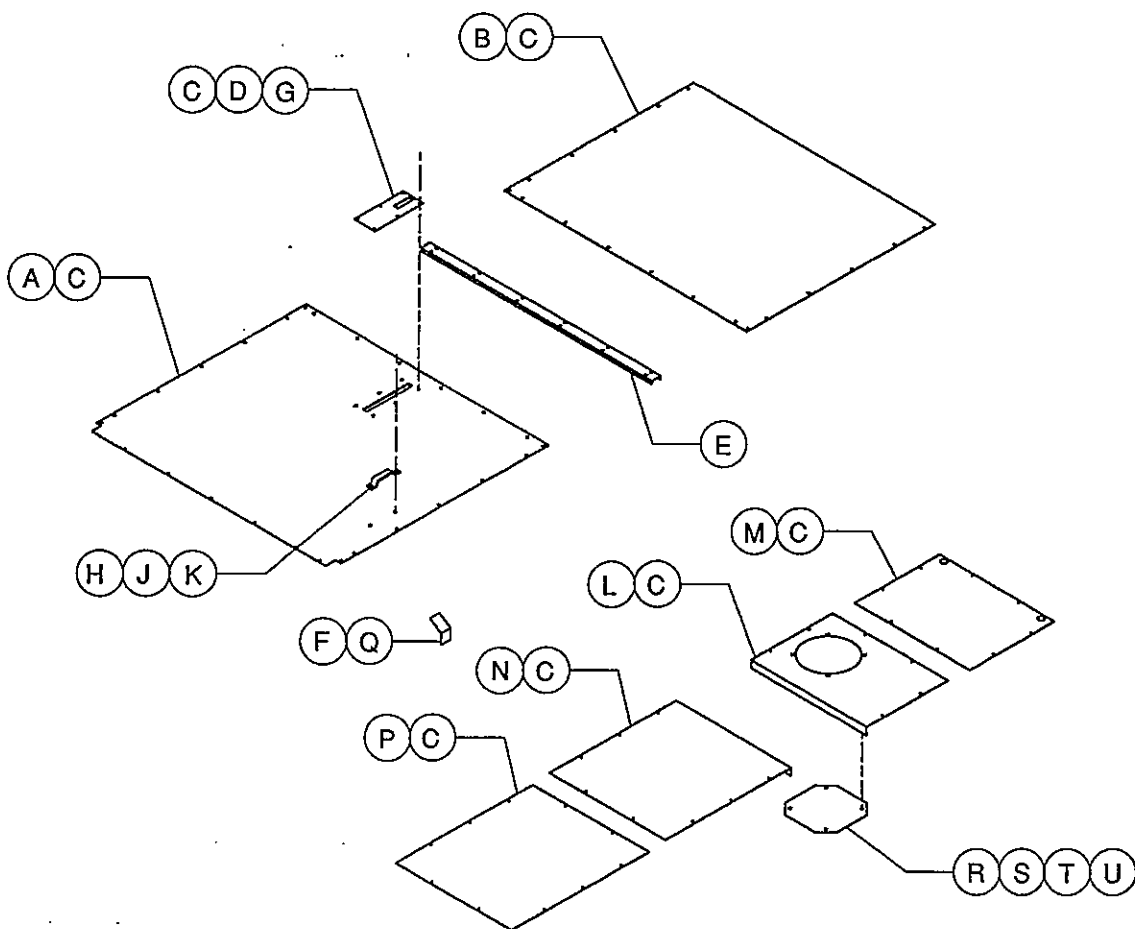
ITEM	C.P.N.	QTY	DESCRIPTION
A	36860534	1	CURB SIDE PIECE
B	36857530	1	FRONT END CAP
C	36857548	1	REAR END CAP
D	36725703	2	REAR SIDE PANEL
E	36730430	2	SIDE GRILLE
F	36794774	2	LICENSE PLATE NUT
G	36725513	2	SIDE DOOR
H	36708378	2	HINGE
J	35374362	2	CYLINDER & KEY
K	35600261	4	GAS SPRING
L	36755742	4	STRIP CONNECTOR
M	35285543	3	HOLE PLUG
N	36797652	53	SCREW
P	35592401	2	CATCH
Q	92368687	81	SCREW
R	35337328	8	BALL STUD
S	12A5D3Z1	8	FLAT WASHER
T	35322312	1	RUBBER BUMPER
U	16M4JC22M3	8	NUT
V	36787349	2	REFLECTOR
W	36787968	2	GROMMET
X	36726339	1	LOW RH SIDE PANEL
Y	36726347	1	LOW LH SIDE PANEL
Z	36725992	1	FRONT SIDE PANEL
A1	35144328	4	SCREW
A2	35144492	4	NUT
A3	36860542	1	STREET SIDE PIECE

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DESCRIPTION - ENCLOSURE COMPLETE			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 H	AKR	15	995
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD	36522308	2 of 6	27584

PARTS LIST 9-64

← DRAWBAR END



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION		ENCLOSURE COMPLETE	
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 H	AMAR	5	005
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD	36522308	3 of 6	27584

PARTS LIST 9-65

ITEM	C.P.N.	QTY	DESCRIPTION
A	36860518	1	FRONT ROOF
B	36860526	1	REAR ROOF
C	36797652	95	SCREW
D	35138781	1	LIFTING BAIL COVER
E	36848208	1	ROOF CHANNEL
F	35592393	2	FUEL LINE COVER
G	35827119	4	SCREW
H	35130707	1	HAND HOLD
J	35144336	2	SCREW
K	35252600	2	NUT
L	35850395	1	REAR BELLY PAN
M	35850379	1	REAR BELLY PAN
N	36840346	1	CENTER BELLY PAN
P	35592419	1	FRONT BELLY PAN
Q	92368687	4	SCREW
R	35279413	1	COVER
S	35256452	4	RECEPTACLE CLIP
T	35256429	4	STUD
U	35256445	4	RETAINER

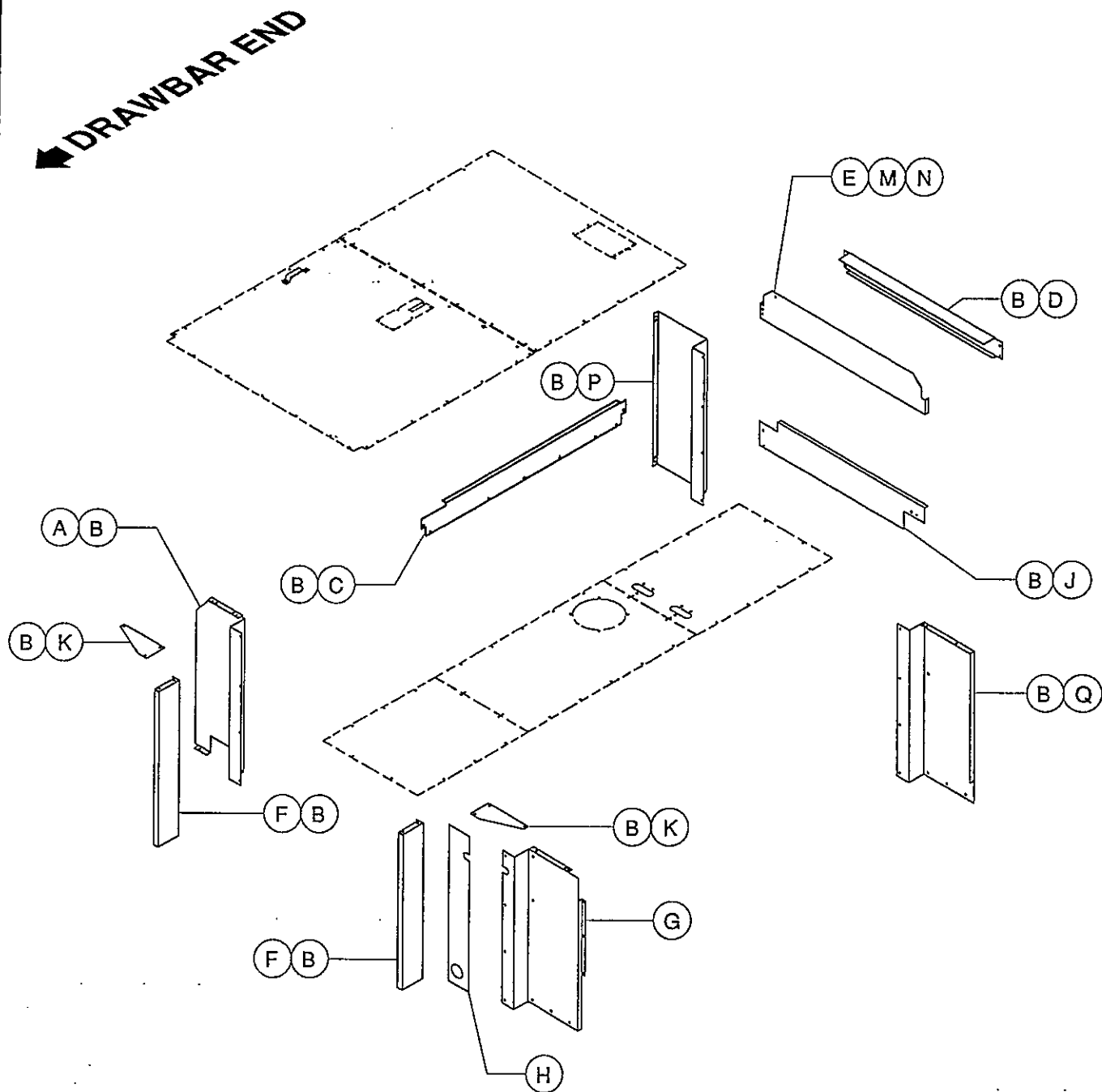
INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DESCRIPTION - ENCLOSURE COMPLETE

DATE/DWN BY: 12/17/93 H REV: A DATE/CHKD BY: 1/3/93 DATE/APVD BY: [Signature]

MODEL NO. P-375AWD ILLUSTRATION NO. 36522308 SHEET NO. 4 of 6 E/C 27584

PARTS LIST 9-66



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION		ENCLOSURE COMPLETE	
DATE/DWN BY:	REV.	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 H	A	5	1995
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD	36522308	5 of 6	27584

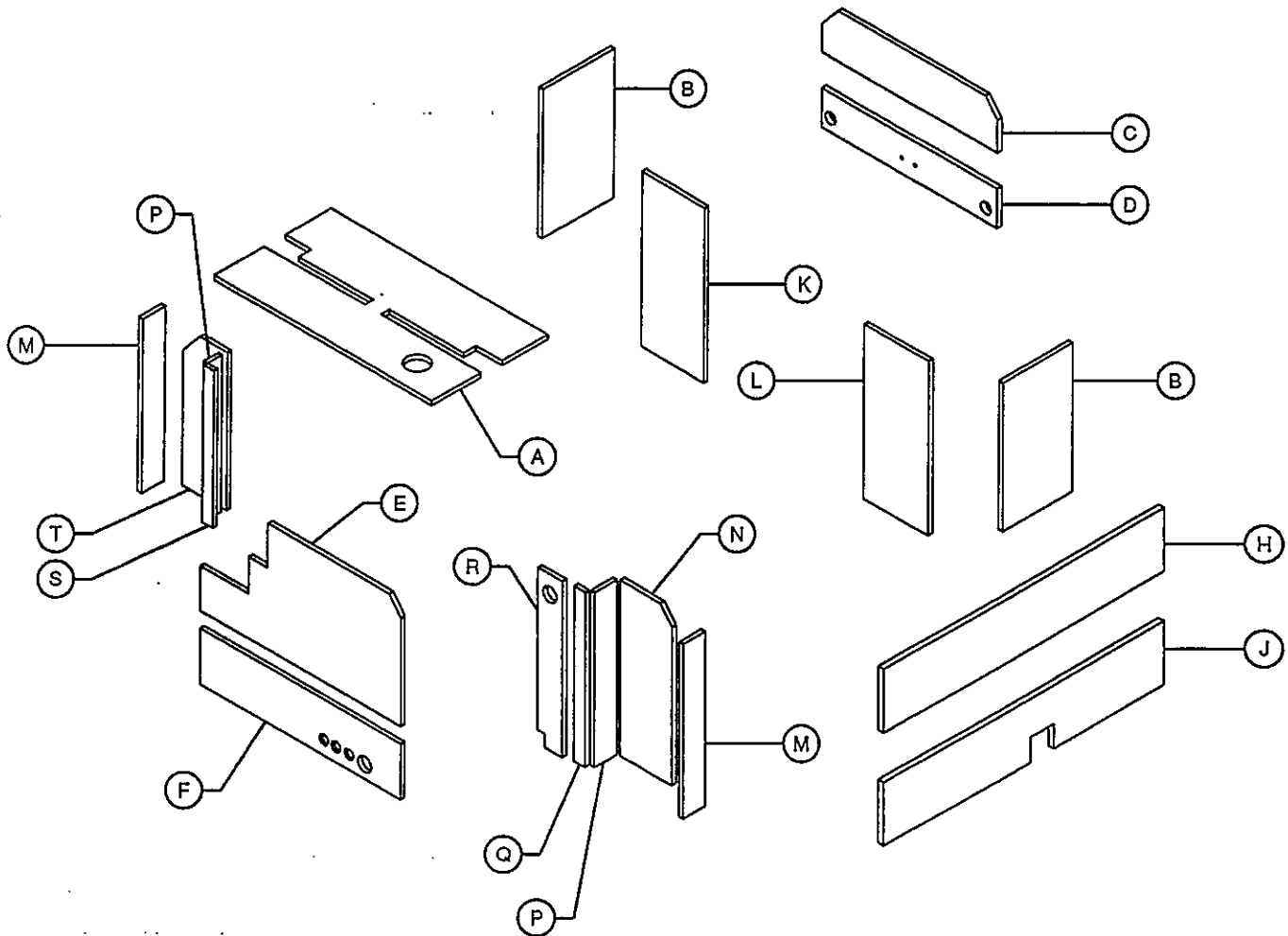
PARTS LIST 9-67

ITEM	C.P.N.	QTY	DESCRIPTION
A	36860575	1	FRONT CURB SIDE BAFF
B	92368687	46	SCREW
C	36860559	1	AIR DEFLECTOR
D	36860567	1	EXHAUST AIR DEFLECTOR
E	36738748	1	REAR TOP BAFF
F	36860609	2	INTAKE BAFF
G	36860583	1	FRONT STREET SIDE BAFF
H	36860591	1	FRONT STREET SIDE BAFF
J	36738730	1	REAR BOTT BAFF
K	36860617	2	BRACKET
L	36757652	8	SCREW
M	35144328	4	SCREW
N	35144492	4	NUT
P	36725646	1	REAR CURBSIDE BAFF
Q	36725596	1	REAR STREETSIDE BAFF

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION		ENCLOSURE COMPLETE	
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 H	A		
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P-375AWD	36522308	6 of 6	27584

PARTS LIST 9-68

← DRAWBAR END



FOR P-375AWD; VHP-300AWD

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION ACOUSTICAL PANEL COMPLETE			
DATE/DWN BY: 8/11/93 B	REV. DATE/CHKD BY: 8/11/93 B	DATE/APVD BY: 8/11/93 JF	
MODEL NO. VHP300AWD	ILLUSTRATION NO. 36521656	SHEET NO. 1 of 2	E/C 27411

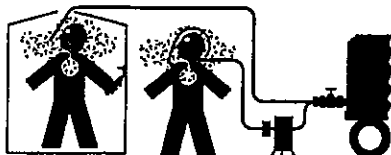
PARTS LIST 9-69

ITEM	C.P.N.	QTY	DESCRIPTION
A	36860765	1	ROOF PANEL
B	35593888	2	REAR SIDE PANEL
C	36860740	1	TOP REAR COVER
D	36860757	1	LOWER REAR COVER
E	36860724	1	TOP FRONT COVER
F	36860732	1	LOWER REAR COVER
G	35593854	1	FRONT CENTER BAFF
H	36860906	2	DOOR HINGE
J	36860898	2	DOOR LATCH
K	35593847	1	RH REAR BAFF
L	35593839	1	LH REAR BAFF
M	35593862	2	INLET BAFF
N	35593821	1	LH FRONT BAFF
P	35597418	2	FRONT BAFF
Q	36790863	1	LH FRONT BAFF
R	35593813	1	RH FRONT BAFF
S	35593797	1	RH FRONT BAFF

FOR P-375AWD; VHP-300AWD

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION ACOUSTICAL PANEL COMPLETE			
DATE/DWN BY: 8/11/93 H	REV. C	DATE/CHKD BY: 10/15/95	DATE/APVD BY: JF
MODEL NO. VHP300AWD	ILLUSTRATION NO. 36521656	SHEET NO. 2 of 2	E/C 27411

⚠ DANGER



Discharged air can contain carbon monoxide or other contaminants.
Will cause severe injury or death.

Do not breathe this air.

Ingersoll-Rand Co., Mooresville, N.C. 27028

⚠ WARNING



Trapped air pressure.
Can cause severe injury or death.

Close service valve and operate tool to vent trapped air before performing any service.

⚠ WARNING



Disconnected air hoses whip.
Can cause severe injury or death.

Attach safety flow restrictor to each hose "at the source of supply or branch line" in accordance with OSHA Regulation 29CFR Section 1926.302(b).

30512325

⚠ WARNING



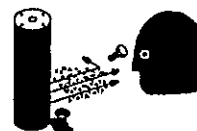
Rotating fan blade.
Can cause severe injury.

Do not operate without guard in place.

Ingersoll-Rand Co., Mooresville, NC 27028

84523054

⚠ WARNING



High pressure air.
Can cause severe injury or death.

Relieve pressure before removing filler plugs/caps, fittings or covers.

Ingersoll-Rand Co., Mooresville, NC 27028

84523057

⚠ WARNING



Combustible gas.
Can cause severe burns, blindness or death.

Keep sparks and open flames away from batteries.

Ingersoll-Rand Co.

30518445

⚠ WARNING

Collapsing Jackstand.
Can cause severe injury.

Insert locking pin completely.



Excessive towing speed.
Can cause severe injury or death.

Do NOT exceed 50 mph (80 km/hr.)



Ingersoll-Rand Co., Mooresville, NC 27028

84523011

**INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION**

DESCRIPTION DECAL LOCATION

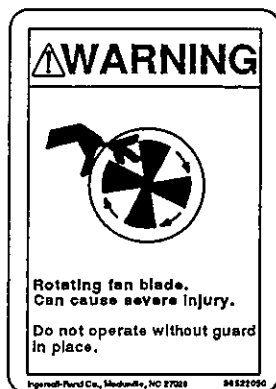
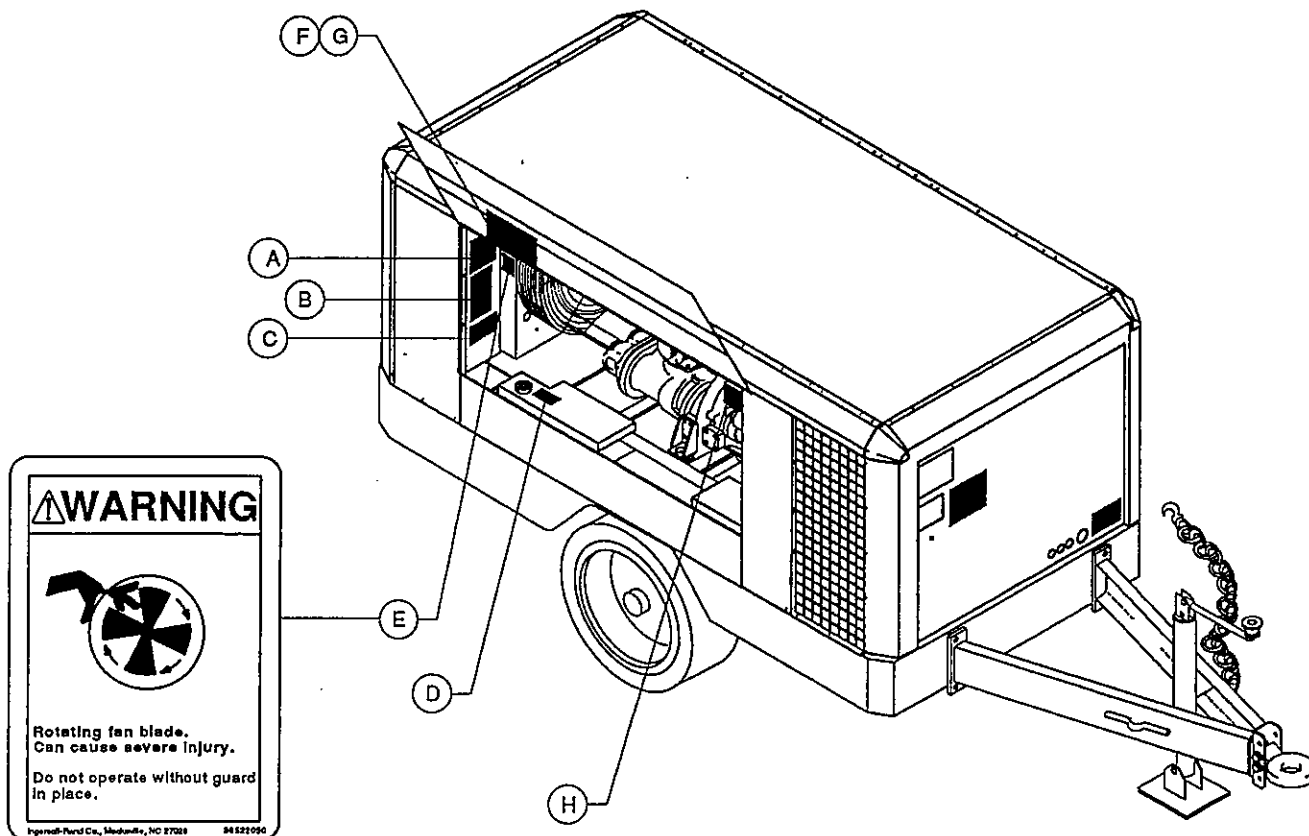
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 H	C	MAR 15 1995	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36522316	1 of 4	27839

PARTS LIST 9-71

ITEM	C.P.N.	DESCRIPTION
A	36522050	ROTATING FAN WARNING
B	36523306	SERIAL NO PLATE
C	36518108	OIL FILL
D	36522027	HIGH PRESSURE WARNING
E	36519445	BATTERY GAS WARNING
F	36502995	CAUTION STEP
G	36520161	2-PART DRAWBAR WARNING
H	36512325	3-PART DANGER/WARNING
J	35839604	OPERATING INSTRUCTIONS
K	36522035	IMPROPER OPERATION
L	36794816	RIVET

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION		DECAL LOCATION	
DATE/DWN BY:	REV.	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 H	0	01/13/95	JK
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
375AWD	36522316	2 of 4	27839

PARTS LIST 9-72



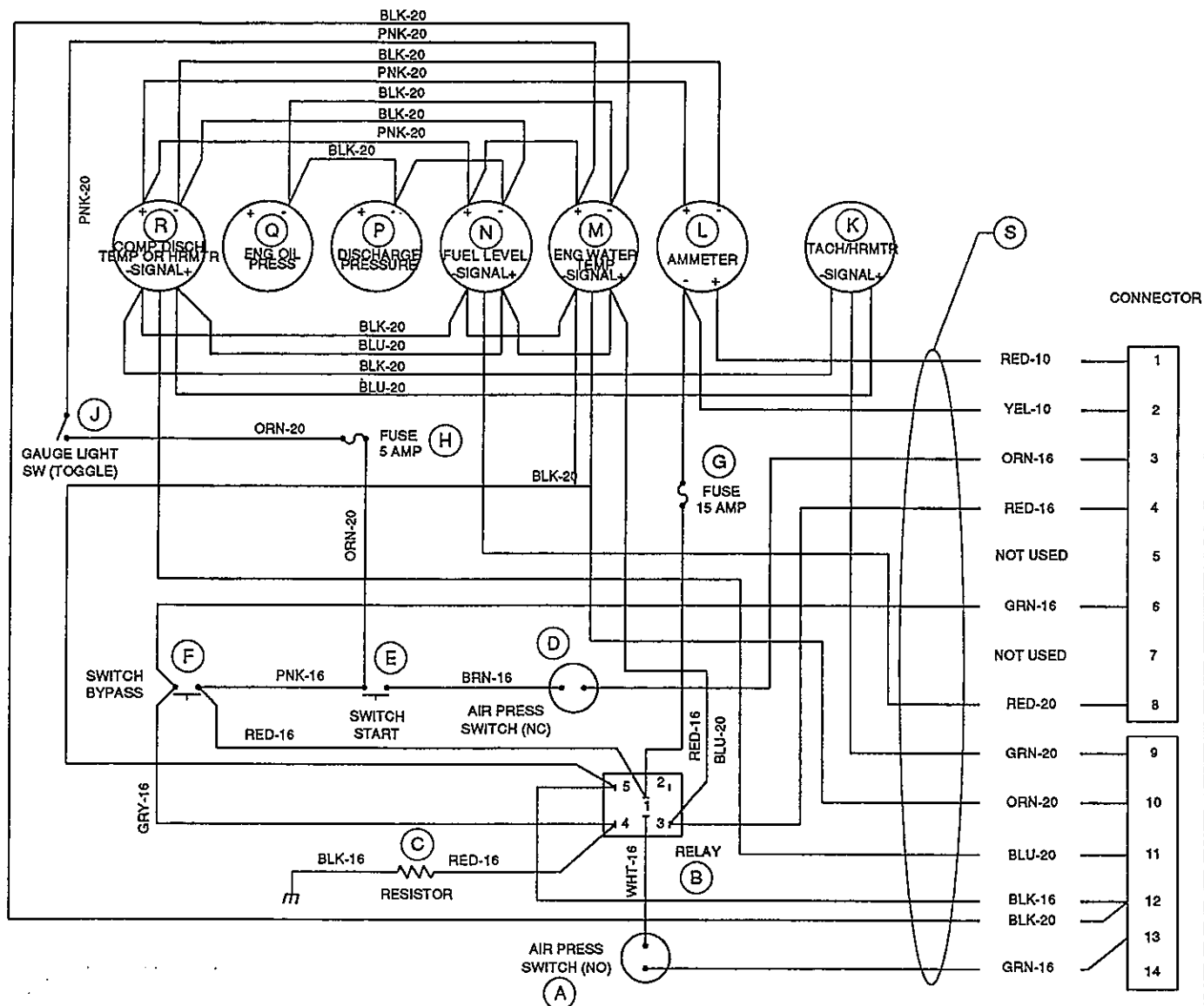
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION				
DESCRIPTION		DECAL LOCATION		
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:	
12/17/93 B	BMS	15	005	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C	
P375AWD	36522316	3 of 4	27636	

PARTS LIST 9-73

ITEM	C.P.N.	DESCRIPTION
A	36523132	GENERAL DATA
B	36515757	WIRING DECAL
C	36508273	ADJUSTING INSTRUCTIONS
D	36516474	DIESEL FUEL
E	36522050	ROTATING FAN WARNING
F	36522290	SAFETY CARD
G	36847861	CABLE TIE
H	35273960	ENGINE PREVENTIVE MAINT

INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION		DECAL LOCATION	
DATE/DWN BY:	REV.	DATE/CHKD BY:	DATE/APVD BY:
12/17/93 B		MAR 5 1995	df
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P975AWD	36522316	4 of 4	27892

PARTS LIST 9-74



INGERSOLL-RAND COMPANY			
PORTABLE COMPRESSOR DIVISION			
DESCRIPTION			
OPTION WIRING DIAGRAM			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:
9/3/93 B	1	15	1995
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD	36521805	1 of 4	24671
VHP-300AWD			

PARTS LIST 9-75

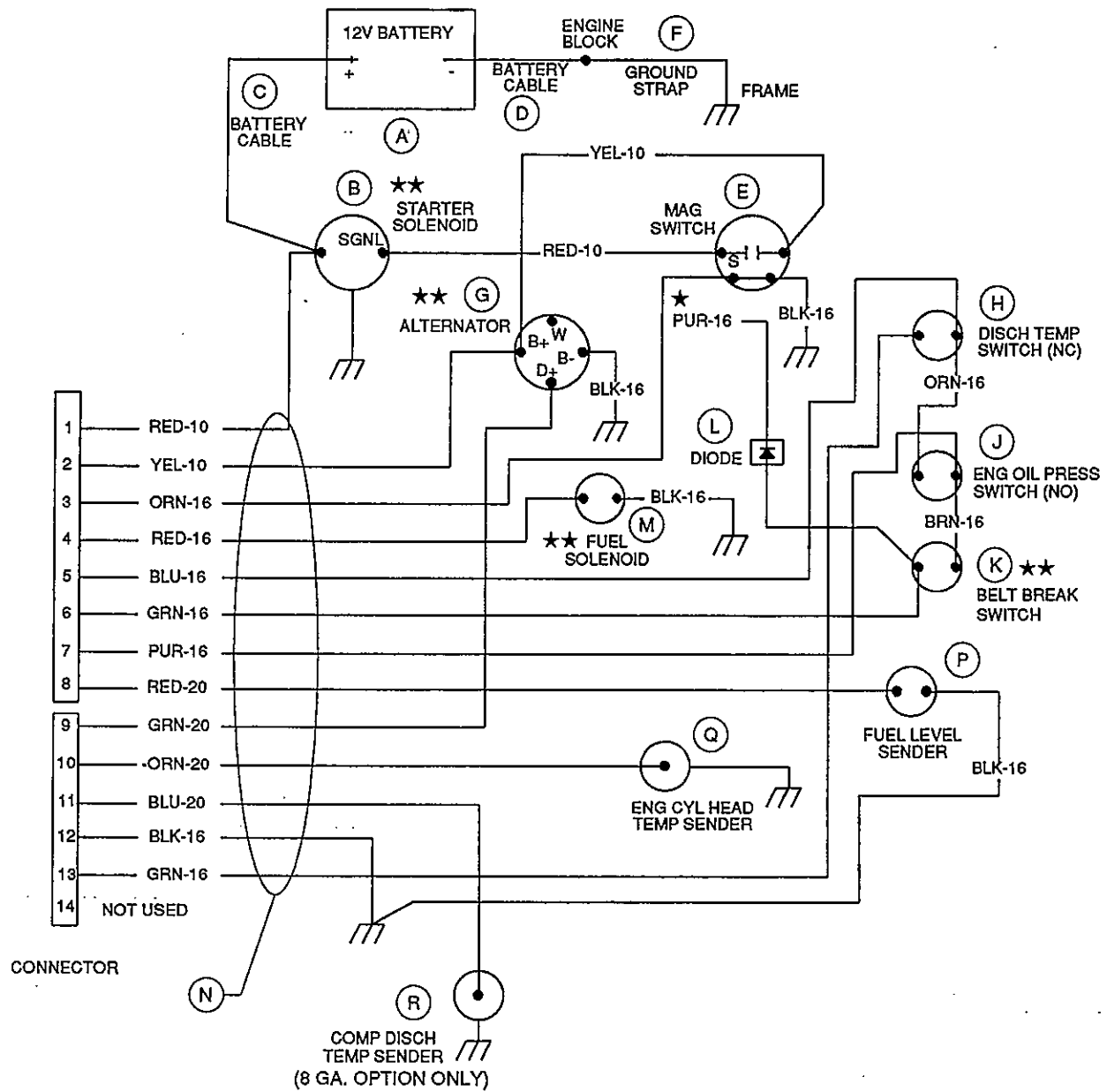
ITEM	C.P.N.	DESCRIPTION
A	36757581	PRESSURE SWITCH
B	35583442	RELAY
C	35333616	RESISTOR
D	36757573	DISCHG PRESS SWITCH
E	35255553	START SWITCH
F	35330794	BYPASS SWITCH
G	36782464	FUSE 15A
H	36782654	FUSE 5A
J	35337435	GAGE LIGHT SWITCH
K	36785392	TACH/HOURMETER (8 GA OPT ONLY)
L	36504107	AMMETER
M	35611672	ENG TEMP GAGE
N	35604099	FUEL LEVEL GAGE
P	35706761	DISCHARGE PRESS GAGE (P375; P425; HP375; XP400)
	35517085	DISCHARGE PRESS GAGE (VHP300)
Q	35604081	ENG OIL PRESS GAGE
R	35604115	COMP DISCHG TEMP GAGE (8 GA OPT ONLY)
	35605229	HOURMETER (6 GA OPT ONLY)
S	36766111	INST PANEL HARNESS

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DESCRIPTION			
OPTION WIRING DIAGRAM			
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APPD BY:
9/3/93 H	B	15	1995
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C
P375AWD VHP-300AWD	36521805	2 of 4	24671

PARTS LIST 9-76

★ NO CONNECTION
★★ FURNISHED BY ENGINE MANUFACTURER



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION			
DESCRIPTION OPTION WIRING DIAGRAM			
DATE/DWN BY: 9/3/93 H		REV: DATE/CHKD BY/DATE/APVD BY AMAR 1 5 1995	
MODEL NO. P375AWD VHP-300AWD	ILLUSTRATION NO. 36521805	SHEET NO. 3 of 4	E/C 24671

PARTS LIST 9-77

ITEM	C.P.N.	DESCRIPTION
A	36793545	BATTERY
B	★★	STARTER SOLENOID
C	35582410	POSITIVE BATTERY CABLE
D	35506419	NEGATIVE BATTERY CABLE
E	35364611	MAG SWITCH
F	35578191	GROUND STRAP
G	★★	ALTERNATOR
H	35517085	DISCHG TEMP SWITCH
J	36757581	ENG OIL PRESS SWITCH
K	★★	BELT BREAK SWITCH
L	35375609	DIODE
M	★★	FUEL SHUTDOWN SWITCH
N	36766152	ENGINE HARNESS
P	35604206	FUEL LEVEL SENDER
Q	35374081	ENGINE TEMPERATURE SENDER
R	35604180	COMPRESSOR TEMPERATURE SENDER

★★ FURNISHED BY ENGINE MANUFACTURER

INGERSOLL-RAND COMPANY				
PORTABLE COMPRESSOR DIVISION				
DESCRIPTION - OPTION WIRING DIAGRAM				
DATE/DWN BY:	REV:	DATE/CHKD BY:	DATE/APVD BY:	
9/3/93	H B	15	1995	
MODEL NO.	ILLUSTRATION NO.	SHEET NO.	E/C	
P375AWD VHP-300AWD	36521805	4 of 4	24671	