Ingersoll-Rand

OPERATING, MAINTENANCE, PARTS MANUAL

COMPRESSOR MODELS

P185WIR
XP185WIR

This manual contains important safety information.
Do not destroy this manual.
This manual must be available to the personnel who operate and maintain this machine.

Doosan purchased Bobcat Company from Ingersoll-Rand Company in 2007. Any reference to Ingersoll-Rand Company or use of trademarks, service marks, logos, or other proprietary identifying marks belonging to Ingersoll-Rand Company in this manual is historical or nominative in nature, and is not meant to suggest a current affiliation between Ingersoll-Rand Company and Doosan Company or the products of either.

Portable Power
P.O. Box 868
501 Sanford Ave
Mocksville, N.C. 27028
www.portablepower.irco.com

Manual 54437173 (08/02) **Revised (09-12)**

QUALITY POLICY

We will supply products and services that consistently meet the requirements of our customers and each other.

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

Foreword

Machine models represented in this manual may be used in various locations worldwide. Machines sold and shipped into European common market countries requires that the machine display the EC Mark and conform to various directives. In such cases, the design specification of this machine has been certified as complying with EC directives. Any modification to any part is absolutely prohibited and would result in the CE certification and marking being rendered invalid. A declaration of that conformity follows:

Declaration of Conformity

WITH EC DIRECTIVE

98/37/EC

Ingersoll-Rand Company
P.O. Box 868
501 Sanford Avenue
Mocksville, North Carolina 27028

We

Represented In EC By:

Ingersoll-Rand Company Limited
Swan Lane, Hindley Green
Wigan WN2 4EZ
United Kingdom

Declare that, under our sole responsibility for manufacture and supply, the product(s)

HP1300WCU	VHP825WCU	XHP900WCAT	VHP750WCAT	XHP1070CAT
XP1400WCU	HP935WCU	XHP650WCAT	VHP850WCAT	NXP1300WCU
P1600WCU	XP1050WCU	XHP750WCAT	HP900WCAT	
XP900WCU	HP825WCU	XHP825WCAT	XP1000WCAT	

To which this declaration relates, is (are) in conformity with the provisions of the above directives using the following principal standards

EN1012-1, EN29001, EN202, EN60204-1
PN8NTC2, EN 50081, EN50082

Issued at Mocksville on 1-1-95

Ric Lunsford
Manager of Quality Control

Issued at Hindley Green on 1-1-95

H. Seddon, Q.A. Manager

Nothing contained in this document is intended to extend any promise, warranty or representation, expressed or implied, regarding the Ingersoll-Rand products described herein. Any such warranties or other terms and conditions of sale of products shall be in accordance with the standard terms and conditions of sale for such products, which are available upon request.
This manual contains instructions and technical data to cover all routine operation and scheduled maintenance tasks by operation and maintenance staff. Major overhauls are outside the scope of this manual and should be referred to an authorized Ingersoll-Rand service department.

All components, accessories, pipes and connectors added to the compressed air system should be:

- of good quality, procured from a reputable manufacturer and, wherever possible, be of a type approved by Ingersoll-Rand.
- clearly rated for a pressure at least equal to the machine maximum allowable working pressure.
- compatible with the compressor lubricant/coolant.
- accompanied with instructions for safe installation, operation and maintenance.

Details of approved equipment are available from Ingersoll-Rand Service departments.
The use of repair parts other than those included within the Ingersoll-Rand approved parts list may create hazardous conditions over which Ingersoll-Rand has no control. Therefore, Ingersoll-Rand cannot be held responsible for equipment in which non-approved repair parts are installed.

Ingersoll-Rand reserves the right to make changes and improvements to products without notice and without incurring any obligation to make such changes or add such improvements to products sold previously.

The intended uses of this machine are outlined below and examples of unapproved usage are also given. However, Ingersoll-Rand cannot anticipate every application or work situation that may arise. **If in doubt, consult supervision.**

This machine has been designed and supplied for above ground operation to be used for compression of normal ambient air containing no additional gases, vapors or particles within the ambient temperature range specified in the general data section of this manual.

This machine should not be used:

A. For direct or indirect human consumption of the compressed air.

B. Outside the ambient temperature range specified in the general data section of this manual.

C. When an actual or foreseeable risk of hazardous levels of flammable gases or vapors exists.

D. With other than Ingersoll-Rand approved components.

E. With guards, or controls or switches missing or disabled.

F. For storage or transportation of materials inside or on the enclosure.

This company accepts no responsibility for errors in translation of this manual from the original English version.

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IMPORTANT NOTICE

This machine may have been shipped from the factory with the drawbar positioned upright.

To Convert From Shipping Position to Towing Position

The following tools are required:

Ratchet
13mm socket to fit ratchet
Torque wrench set to 68 foot pounds
(9.4 kg-meters)
16mm socket to fit torque wrench
5 inch extension for torque wrench

Hardware Included:

(4) 12mm bolts with pre-applied thread lock
(2) 8mm Taptite Bolts
(2) Washers
(2) Safety Chains

1. Remove hardware box from compressor toolbox.
2. Open box and remove the bag containing hardware, safety chains and assembly instructions.
3. Using the jack, raise the front of the unit so that the legs are approximately 1" above the ground.
4. Remove the temporary retaining bolts from both sides of the frame at the drawbar connection (See Figure 1).
5. Carefully lower drawbar to the Level Position.
6. Install the four bolts (with pre-applied thread lock) to the four points inside the enclosure and torque to 68 ft. lbs. (9.4 kg-m) (See Figure 2).
7. Install safety chains by sliding the second link of one chain into the slot in drawbar plate. Fasten chain to plate using taptite and washer. Repeat for the other chain (See Sketch).

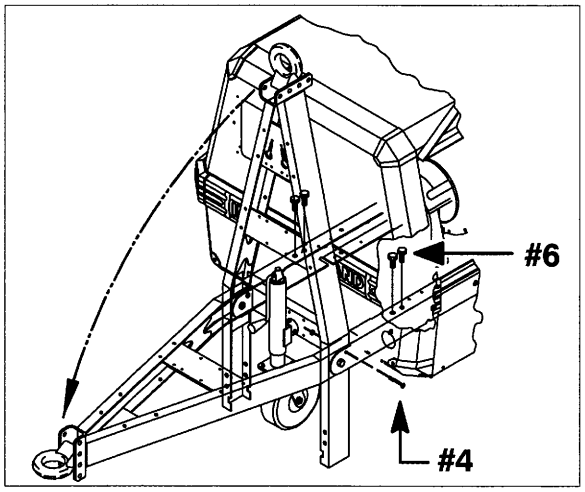


Figure 1
Drawbar Position

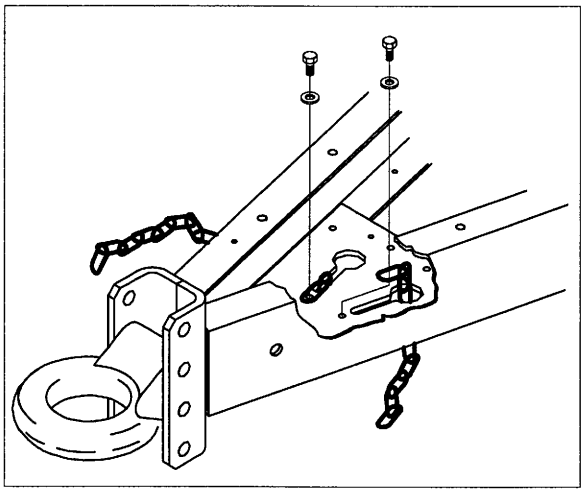


Figure 2
Safety Chain Attachment

SECTION 1- SAFETY

SAFETY PRECAUTIONS

General Information

Ensure that the operator reads and understands the decals and consults the manuals before maintenance or operation.

Ensure that the Operation and Maintenance manual, and the manual holder if equipped, are not removed permanently from the machine.

Ensure that maintenance personnel are adequately trained, competent and have read the manuals.

Make sure that all protective covers are in place and that the canopy/doors are closed during operation.

The specification of this machine is such that the machine is not suitable for use in flammable gas risk areas. If such an application is required then all local regulations, codes of practice and site rules must be observed. To ensure that the machine can operate in a safe and reliable manner, additional equipment such as gas detection, exhaust spark arrestors, and intake (shut-off) valves may be required, dependent on local regulations or the degree of risk involved.

Air discharged from this machine may contain carbon monoxide or other contaminants which will cause serious injury or death. Do not breathe this air.

Compressed air can be dangerous if incorrectly handled. Before doing any work on the unit, ensure that all pressure is vented from the system and that the machine cannot be started accidentally.

Ensure that the machine is operating at the rated pressure and that the rated pressure is known to all relevant personnel.

All air pressure equipment installed in or connected to the machine must have safe working pressure ratings of at least the machine safety valve rating.

If more than one compressor is connected to one common downstream plant, effective check valves and isolation valves must be fitted and controlled by work procedures, so that one machine cannot accidentally be pressurized or over pressurized by another.

Compressed air must not be used for a feed to any form of breathing apparatus or mask.

The discharged air contains a very small percentage of compressor lubricating oil and care should be taken to ensure that downstream equipment is compatible.

If the discharged air is to be ultimately released into a confined space, adequate ventilation must be provided.

When using compressed air, always use appropriate personal protective equipment.

All pressure containing parts, especially flexible hoses and their couplings, must be regularly inspected, be free from defects and be replaced according to the Manual instructions.

Avoid bodily contact with compressed air.

The safety valve located in the separator tank must be checked periodically for correct operation.

Never operate unit without first observing all safety warnings and carefully reading the operation and maintenance manual shipped from the factory with this machine.

Never operate the engine of this machine inside a building without adequate ventilation. Avoid breathing exhaust fumes when working on or near the machine. Do not alter or modify this machine.

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.

Never operate unit without first observing all safety warnings and carefully reading the operation and maintenance manual shipped from the factory with this machine.

This machine may include such materials as oil, diesel fuel, antifreeze, brake fluid, oil/air filters and batteries which may require proper disposal when performing maintenance and service tasks. Contact local authorities for proper disposal of these materials.

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.

High Pressure Air can cause serious injury or death. Relieve pressure before removing filler plugs/caps, fittings or covers.

Air pressure can remain trapped in air supply line which can result in serious injury or death. Always carefully vent air supply line at tool or vent valve before performing any service.

This machine produces loud noise with the doors open or service valve vented. Extended exposure to loud noise can cause hearing loss. Always wear hearing protection when doors are open or service valve is vented.

Never inspect or service unit without first disconnecting battery cable(s) to prevent accidental starting.

Do not remove the pressure cap from a HOT radiator. Allow radiator to cool down before removing pressure cap.

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).

Disconnected air hoses whip and can cause serious injury or death. Always attach a safety flow restrictor to each hose at the source of supply or branch line in accordance with OSHA Regulation 29CFR Section 1926.302(b).

Hot pressurized fluid can cause serious burns. Do not open radiator while hot.

Rotating fan blade can cause serious injury. Do not operate without guard in place.

Use care to avoid contacting hot surfaces (engine exhaust manifold and piping, air receiver and air discharge piping, etc.).

Ether is an extremely volatile, highly flammable gas. USE SPARINGLY! Do NOT use ETHER if unit has GLOW Plug starting aid. Engine damage will result.

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

Never operate unit with guards, covers or screens removed. Keep hands, hair, clothing, tools, blow gun tips, etc. well away from moving parts.

Make sure wheels, tires and tow bar connectors are in safe operating condition and tow bar is properly connected before towing.

Whenever the machine is stopped, air will flow back into the compressor system from devices or systems downstream of the machine unless the service valve is closed. Install a check valve at the machine service valve to prevent reverse flow in the event of an unexpected shutdown when the service valve is open.

Hazardous Substance Precaution

The following substances are used in the manufacture of this machine and may be hazardous to health if used incorrectly.

Precaution: Avoid ingestion, skin contact and breathing fumes for the following substances: Antifreeze, Compressor Oil, Engine Lubricating Oil, Preservative Grease, Rust Preventative, Diesel Fuel and Battery Electrolyte.

The following substances may be produced during the operation of this machine and may be hazardous to health:

Avoid build-up of Engine Exhaust Fumes in confined spaces.

Avoid breathing Exhaust Fumes.

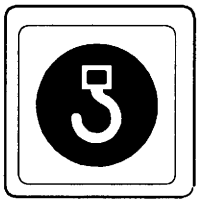
Avoid breathing Brake Lining Dust during maintenance.

SAFETY LABELS

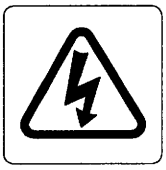
Look for these signs on machines shipped to international markets outside North America, which point out potential hazards to the safety of you and others. Read and understand thoroughly. Heed warnings and follow instructions. If you do not understand, inform you supervisor.

Corrosion risk

Hot Surface



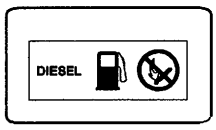
Lifting point



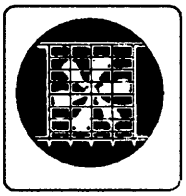
WARNING: Electrical shock risk.

Parking Brake

No open flame



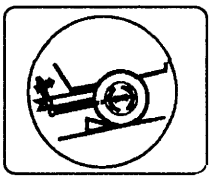
Diesel Fuel.
No open flame.



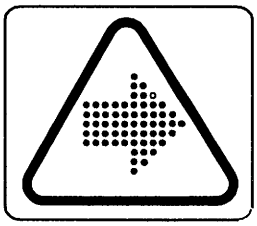
Do not operate the machine without guard being fitted.

Lifting point

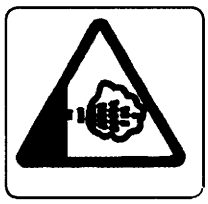
WARNING - Flammable liquid.



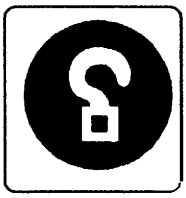
When parking use prop stand, handbrake and wheel chocks.



Air/gas flow or Air discharge.



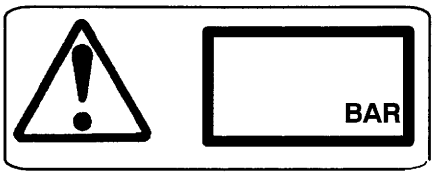
WARNING - Hot and harmful exhaust gas.



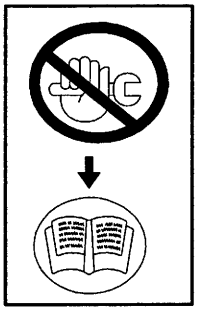
Tie down point

Do not breathe the compressed air from this machine.

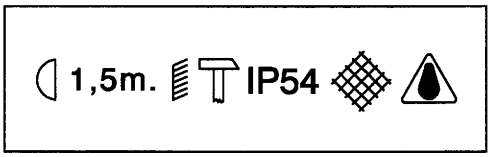
Read the Operation and Maintenance manual before operation or maintenance of this machine is undertaken.



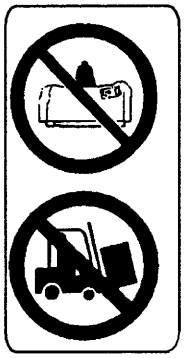
WARNING - Maintain correct tire pressure. (Refer to the *GENERAL INFORMATION* section of this manual).



WARNING: Consult the operation and maintenance manual before performing any maintenance.

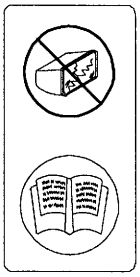


Rough Service Designation
Wet Location Operation

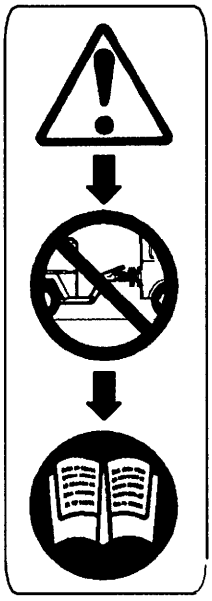


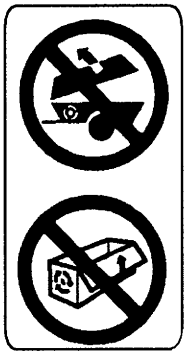
Do not stack

Do not use fork lift truck from this side

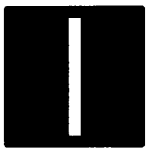


Replace any cracked protective shield.



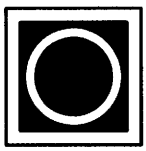


Do not operate with the doors or enclosure open.



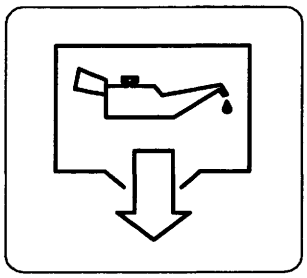
On (power).

Off (power).

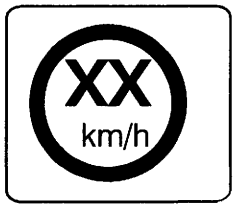


Emergency stop.

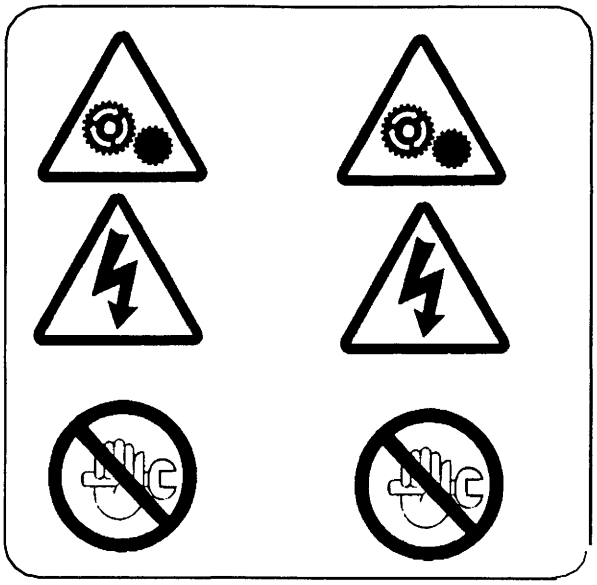
WARNING - Before connecting the tow bar or when preparing to tow, consult the operation and maintenance manual.



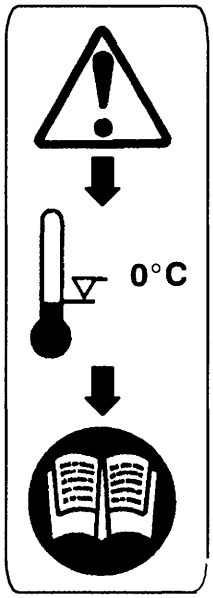
Oil Drain



Do not exceed the speed limit.



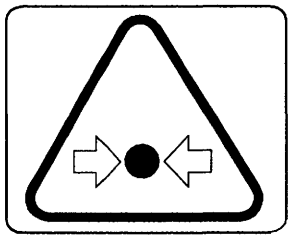
WARNING - Do not undertake any maintenance on this machine until the electrical supply is disconnected and the air pressure is totally relieved.



WARNING - For operating temperature below 0°C, consult the operation and maintenance manual.

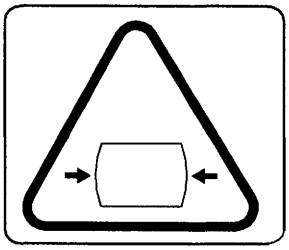
Read the Operation and Maintenance manual before operation or maintenance of this machine is undertaken

Do not remove the Operating and Maintenance manual and manual holder from this machine.



Pressurized vessel.

Use fork lift truck from this side only.



Pressurized component or system.

Look for these signs on machines shipped to markets in North America, 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 you supervisor.

DANGER

(Red Background)

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

WARNING

(Orange Background)

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

CAUTION

(Yellow Background)

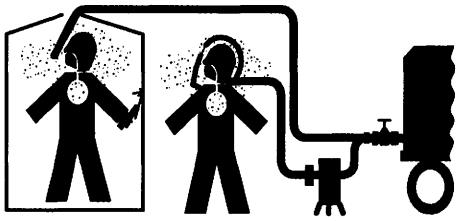
Indicates the presence of a hazard which WILL or can cause injury or property damage, if ignored.

NOTICE

(Blue Background)

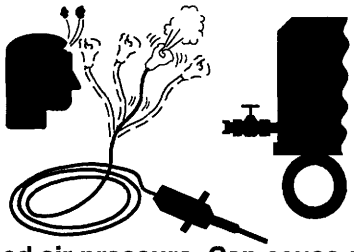
Indicates important set-up, operating or maintenance information.

DANGER



Air discharged from this machine can contain carbon monoxide or other contaminants which will cause serious injury or death. Do not breathe this air.

WARNING



Trapped air pressure. Can cause serious injury or death.

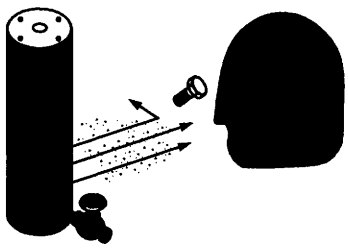
Close service valve and operate tool to vent trapped air before performing any service.

WARNING

Hot pressurized fluid.
Can cause serious burns.

Do not open radiator while hot.

WARNING



High pressure air. Can cause serious injury or death.

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

WARNING

Improper operation of this equipment. CAN cause serious injury or death.

Read Operator's Manual supplied with this machine before operation or servicing.

WARNING

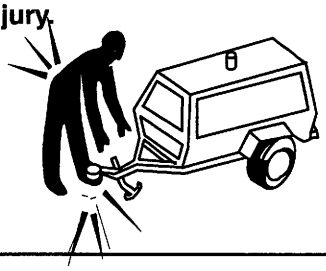
Modification or alteration of this machine. CAN cause serious injury or death.

Do NOT alter or modify this machine without the express written consent of the manufacturer.

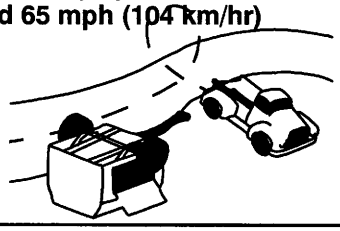
WARNING

Collapsing jack stand. Will cause serious injury.

Insert locking pin completely.

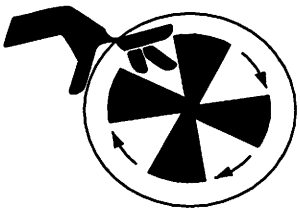


Excessive towing speed. Can cause serious injury or death. Do NOT exceed 65 mph (104 km/hr)



For Highway Towable Units

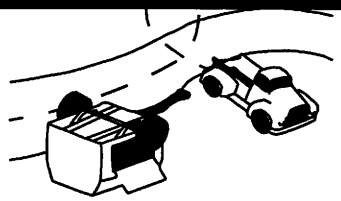
WARNING



Rotating Fan Blade. CAN cause serious injury.

Do NOT operate with guard removed.

WARNING



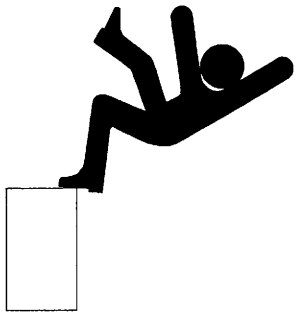
Excessive Towing Speed. CAN cause serious injury or death.

Do NOT Tow on Highway.

Do NOT exceed 20 mph (32 km/h)

For Non-Highway Towable Machines

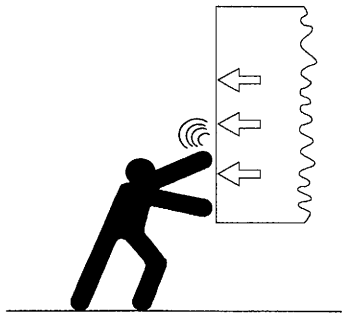
WARNING



Falling off machine. CAN cause serious injury or death.

Access Lifting Bail from inside machine.

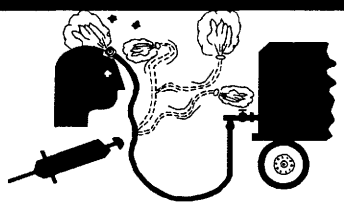
WARNING



Door under pressure CAN cause serious injury.

Use both hands to open door when machine is running.

WARNING



Disconnected Air Hoses Whip. CAN cause serious injury or death.

When using air tools attach safety device (OSHA Valve) at source of air supply for each tool.

WARNING

Combustible Gas. CAN cause serious burns, blindness or death.

Keep sparks and open flames away from batteries.

FREE SAFETY DECALS!

To promote communication of Safety Warnings on products manufactured by the Portable Compressor Division in Mocksville, N.C., Safety Decals are available **free** of charge. Safety decals are identified by the decal heading: **DANGER, WARNING or CAUTION.**

Decal part numbers are on the bottom of each decal and are also listed in the compressor's parts manual. Submit orders for Safety Decals to the Mocksville Parts Service Department. The no charge order should contain only Safety Decals. Help promote product safety! Assure that decals are present on the machines. Replace decals that are not readable.

SECTION 2 - Warranty

Ingersoll-Rand, through its distributor, warrants that each item of equipment manufactured by it and delivered hereunder to the initial user will be free of defects in material and workmanship for a period of three (3) months from initial operation or six (6) months from the date of shipment to the initial user, whichever occurs first.

With respect to the following types of equipment, the warranty period enumerated below will apply in lieu of the foregoing warranty period.

A. **Aftercoolers** - The earlier of nine (9) months from date of shipment to or six (6) months from start up by initial user.

B. **Portable Compressors, Portable Generator Sets (GENSET), Portable Light Towers and Air Dyers** - The earlier of twelve (12) months from shipment to or the accumulation of 2,000 hours of service by the initial user.

C. **Portable Compressor Air Ends -** The earlier of twenty-four (24) months from shipment to or the accumulation of 4,000 hours of service by the initial user. For Air Ends, the warranty against defects will include replacement of the complete Air End, provided the original Air End is returned assembled and unopened.

C.1 **Portable Compressor Airend Limited Optional Warranty** - The earlier of sixty (60) months from shipment to or the accumulation of 10,000 hours of service. The optional warranty is limited to defects in rotors, housings, bearings and gears and provided all the following conditions are met:

The original airend is returned assembled and unopened.

Continued use of genuine Ingersoll-Rand parts, fluids, oils and filters.

Maintenance is performed at prescribed intervals.

D. **Genset Generators -** The earlier of twenty-four (24) months from shipment to or the accumulation of 4,000 hours of service by the initial user.

E. **Portable Light Tower Generators -** The earlier of twelve (12) months from shipment to or the accumulation of 2,000 hours of service by the initial user. Light Source model only, the earlier of twenty-four (24) months from shipment to or the accumulation of 4,000 hours of service.

F. **Ingersoll-Rand Engines** - The earlier of twenty-four (24) months from shipment to or the accumulation of 4,000 hours of service.

G. **Ingersoll-Rand Platinum Drive Train Warranty (Optional)** - Platinum drive train pertains to the Ingersoll-Rand Engine and Airend combination. The earlier of sixty (60) months from shipment to, or the accumulation of 10,000 hours of service. The starter, alternator, fuel injection system and all electrical components are excluded from the extended warranty. The airend seal and drive coupling are included in the warranty (airend drive belts are not included). The optional warranty is automatically available when meeting the following conditions:

The original airend is returned assembled and unopened.

Continued use of genuine Ingersoll-Rand parts, fluids, oil and filters.

Maintenance is performed at prescribed intervals.

It is the obligation of the user to provide verification that these conditions have been satisfied when submitting warranty claims.

H. **Spare Parts** – Six (6) months from date of shipment.

Ingersoll-Rand will provide a new part or repaired part, at its election, in place of any part which is found upon its inspection to be defective in material and workmanship during the period prescribed above. Such part will be repaired or replaced without charge to the initial user during normal working hours at the place of business of an Ingersoll-Rand distributor authorized to sell the type of equipment involved or other establishment authorized by Ingersoll-Rand. User must present proof of purchase at the time of exercising warranty.

The above warrantees do not apply to failures occurring as a result of abuse; misuse, negligent repairs, corrosion, erosion and normal wear and tear, alterations or modifications made to the product without express written consent of Ingersoll-Rand; or failure to follow the recommended operating practices and maintenance procedures as provided in the product's operating and maintenance publications.

Accessories or equipment furnished by Ingersoll-Rand, but manufactured by others, including, but not limited to, engines, tires, batteries, engine electrical equipment, hydraulic transmissions, carriers, shall carry whatever warranty the manufacturers have conveyed to Ingersoll-Rand and which can be passed on to the initial user.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, (EXCEPT THAT OF TITLE),AND THERE ARE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT

EMISSION RELATED SYSTEM DEFECT WARRANTY

Ingersoll-Rand Company warrants to the initial owner and subsequent owner of a certified non-road diesel engine (powering non-road machines and equipment), that the engine is:

1. Designed, built, and equipped so as to conform, at the time of sale, with all applicable regulations adopted by the United States Environmental Protection Agency (EPA) and the California Air Resource Board.

2. Free from defects in materials and workmanship in specific emission related parts for a period of five (5) years or 3,000 hours of operation whichever occurs first, after date of delivery to the initial owner.

If an emission related part fails during the warranty period, it will be repaired or replaced. Any such part repaired or replaced under warranty is warranted for the remainder of the warranty period.

During the term of this warranty, Ingersoll-Rand Company will provide repair or replacement of any warranted part at no charge to the non-road engine owner.

In an emergency, repairs may be performed at any service establishment, or by the owner, using any replacement part.

Ingersoll-Rand Company will reimburse the owner for their expenses, including diagnostic charges for such emergency repair. These expenses shall not exceed Ingersoll-Rand Company suggested retail price for all warranted parts replaced, and labor charges based on Ingersoll-Rand Company recommended time allowance for the warranty repair and the geographically appropriate hourly labor rate.

A part not being available within 30 days constitutes an emergency.

As a condition of reimbursement, replaced parts and receipted invoices must be presented at a place of business of Ingersoll-Rand Company or other establishment authorized by Ingersoll-Rand Company.

This warranty covers the following emission related parts and components.

- Charge Air Cooling System (If Equipped)
- Fuel Injection System
- Intake Manifold
- Exhaust Manifold
- Turbocharger System
- Miscellaneous hoses, clamps, connectors and sealing devices used in the above systems.

If failure of one of these components results in failure of another part, both will be covered by this warranty. Any Replacement part may be used for maintenance or repairs. The owner should ensure that such parts are equivalent in design and durability to genuine INGERSOLL-RAND parts.
Use of non-genuine INGERSOLL-RAND parts does not invalidate the warranty.
However, Ingersoll-Rand Company is not liable for parts which are not genuine INGERSOLL-RAND parts.

LIMITATIONS AND RESPONSIBILITIES

These warranties are subject to the following:

INGERSOLL-RAND COMPANY RESPONSIBILITIES

During the emission warranty period, if a defect in material or workmanship of a warranted part or component is found, Ingersoll-Rand Company will provide:

- New, Remanufactured, or repaired parts and/or components required to correct the defect.

Note: *Items replaced under this warranty become the property of Ingersoll-Rand Company*

- Labor, during normal working hours, required to make the warranty repair. This includes diagnosis and labor to remove and install the engine, if necessary.

OWNER RESPONSIBILITIES

During the emission warranty period, the owner is responsible for:

- The performance of all required maintenance. A warranty claim will not be denied because the scheduled maintenance was not performed. However, if the lack of required maintenance was the reason for the repair, then the claim will be denied.

- Premium of overtime labor costs.

- Costs to investigate complaints which are not caused by a defect in Ingersoll-Rand Company material or workmanship.

- Providing timely notice of a warrantable failure and promptly making the product available for repair.

LIMITATIONS

Ingersoll-Rand Company is not responsible for resultant damages to an emission related part or component resulting from:

- Any application or installation Ingersoll-Rand Company deems improper as explained in the Instruction Manual.
- Attachments, accessory items, or parts not authorized for use by Ingersoll-Rand Company
- Improper off-road engine maintenance, repair, or abuse.
- Owner's unreasonable delay in making the product available after being notified of a potential product problem.

This warranty is in addition to Ingersoll-Rand Company standard warranty, applicable to the off-road engine product involved.

Remedies under this warranty are limited to the provision of material and services as specified herein. Ingersoll-Rand Company is not responsible for incidental or consequential damages such as downtime or loss-use of engine powered equipment.

CALIFORNIA EMiSSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board (CARB) and Ingersoll-Rand Company are please to explain the emission control system warranty on your 1996 and later certified heavy duty off-road engine. In California, new heavy-duty off-road engines must be designed, built and equipped to meet the state's stringent anti-smog standards. Ingersoll-Rand Company must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect, or improper maintenance of your engine.

Your emission control system may include parts such as the fuel injection system, air induction system. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, an authorized INGERSOLL-RAND Dealer will repair the heavy-duty off-road engine at no cost to the owner including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

The 1996 and later heavy-duty off-road engines are warranted for a period of five (5) years, or 3000 hours of operation which ever occurs first. If any emission-related part on your engine is defective, the part will be repaired or replaced by an authorized INGERSOLL-RAND Dealer.

OWNER'S WARRANTY RESPONSIBILITIES:

- As the heavy-duty off-road engine owner, you are responsible for the performance of the required maintenance listed in owner's manual (Instruction Manual). Ingersoll-Rand Company recommends that you retain all receipts and records covering the maintenance on your engine, but Ingersoll-Rand Company cannot deny warranty solely for the lack of receipts and records or for your failure to ensure the performance of all scheduled maintenance.
- As the heavy-duty off-road engine owner, you should however be aware that Ingersoll-Rand Company may deny you warranty coverage if your heavy-duty off-road engine, or part has failed due to abuse, neglect, improper maintenance, or unapproved modifications.
- Your engine is designed to operate on commercial diesel fuel only. Use of any other fuel may result in our engine no longer operation in compliance with California's emission requirements.
- You are responsible for initiating the warranty process. The CARB suggests that you present your heavy-duty off-road engine to an authorized INGERSOLL-RAND Dealer as soon as a problem exists. The warranty repairs should be completed by the dealer as expeditiously as possible.

If you have any questions regarding your warranty rights and responsibilities, you should contact Ingersoll-Rand Company, at P.O. Box 868, Mocksville, NC 27028 or the State of California Air Resources Board, Mobile source Operation Division, P.O. Box 8001, at El Monte, CA 91731-2990.

MAINTENANCE RECOMMENDATION:

Some Ingersoll-Rand Company non-road engines are certified by the United States Environmental Protection Agency and California Air Resource Board to comply with smoke and gaseous emission standards prescribed by Federal laws at the time of manufacture.

The engine is certified if it has a special certification label. An INGERSOLL-RAND Dealer can also inform you if the engine is certified.
Efficiency of emission control and engine performance depends on adherence to proper operation and maintenance recommendations and use of recommended fuels and lubrication oils. It is recommended that major adjustments and repair be made by your authorized INGERSOLL-RAND Dealer.

Various chemical fuel additives, which claim to reduce visible smoke, are available commercially. Although additives have been used by individuals to solve some isolated smoke problems in the field, they are not recommended for general use.
Federal smoke regulations require that engines be certified without smoke depressants.

The corrective steps taken immediately on discovery of worn parts, which may affect emission levels, will help assure proper operation of emission control systems. The use of genuine INGERSOLL-RAND parts is recommended. Suppliers of non-INGERSOLL-RAND parts must assure the owner that the use of such parts will not adversely affect emission levels.

Regular maintenance intervals, along with special emphasis on the following items, are necessary to keep exhaust emissions within acceptable limits for the useful life of the engine. Refer to the Maintenance Section of this manual. If the engine is operating under severe conditions, adjust the maintenance schedule accordingly. See your authorized INGERSOLL-RAND Dealer to help analyze your specific application, operating environment and maintenance schedule adjustments.

The following is an explanation of maintenance for emission-related components.
See the Maintenance Schedule for the specific interval for the following items.

FUEL INJECTION PUMPS OR NOZZLES – Fuel injection pumps or nozzles are subject to tip wear as a result to fuel contamination. This damage can cause an increase in fuel consumption, the engine to emit black smoke, misfire or run rough. Inspect, test and replace if necessary. Fuel injection pumps can be tested by an authorized INGERSOLL-RAND Dealer.

TURBOCHARGER – Check for any unusual sound or vibration in the turbocharger. Inspect inlet and exhaust piping and connections. Check bearing condition and perform maintenance as described in the Maintenance Schedule.

Slow engine response and low power may indicate a need for adjustment or repair. Your INGERSOLL-RAND Dealer is equipped with the necessary tools, personnel, and procedures to perform this service.

Owner is encouraged to keep adequate maintenance records, but the absence of such, in and of itself, will not invalidate the warranty.

The machine or equipment owner may perform routine maintenance, repairs and other non-warranty work or have it done at any repair facility. Such non-warranty work need not e performed at a designated warranty station in order for the warranty to remain in force.

CUSTOMER ASSISTANCE – EMISSION CONTROL SYSTEM WARRANTY:

Ingersoll-Rand Company aims to ensure that the Emission Control Systems Warranty is properly administered. In the event that you do not receive the warranty service to which you believe you are entitled under the Emission Control Systems Warranty, call or write:

Ingersoll-Rand Company
P.O. Box 868
Mocksville, NC 27028

Tel.: 336-751-3561

Authorized Dealers are recommended for major maintenance and repair work as they are staffed with trained personnel, proper tools and are aware of the latest maintenance methods and procedures. Owners and others who desire to perform their own work should purchase a Service Manual and obtain current service information from their INGERSOLL-RAND Dealer.

GENERAL WARRANTY INFORMATION

GENERAL WARRANTY			Extended Coverage
Portable Compressor	Package	1 year/2000 hours	
	Airend	2 years/4000 hours	5 years/10,000 hours Limited warranty, major components (refer to operator's manual).

Portable Genset	Package	1 year/2000 hours	
	Generator	2 years/4000 hours	

Light Tower	Package	1 year/2000 hours	
	Generator	1 year/2000 hours	2 years/4000 hours, for Lightsource introduced 8/16/99.

ENGINES			
Caterpillar	**Months**	**Hours**	**Extended Coverage**
	12	No Limit	Available at dealer
Cummins	24	2000	Major components 3 yrs/10,000 hours - available at dealer
John Deere	24	2000	Available at dealer
Deutz	24	2000	Available at dealer
Kubota	24	2000	Major components 36 months/3000 hours - parts only
Ingersoll-Rand	24	4000	5 years/10,000 hours when using genuine Ingersoll-Rand fluids and parts. Refer to operator's manual.

PARTS			
	Months	**Hours**	**Coverage**
Ingersoll-Rand	6	No Limit	Parts Only

AIREND EXCHANGE			
	Months	**Hours**	**Extended Coverage**
Airend	12	2000 hours	2 years/4000 hours - available from IR.

Note: Actual warranty times may change. Consult the manufacturer's warranty policy as shipped with each new product.

Extended Limited Airend Warranty

Ingersoll-Rand Portable Compressor Division is pleased to announce the availability of extended limited airend warranty. Announcement of the extended warranty coincides with the introduction of PRO•TEC™ Compressor Fluid. PRO•TEC™ Compressor Fluid is an amber colored fluid specially formulated for Portable Compressors and is being provided as the factory filled fluid for all machines except [1] XHP650/900/1070 models.

All machines have the standard airend warranty - *The earlier of 24 months from shipment to, or the accumulation of 4000 hours of service.*

The warranty against defects will include replacement of the complete airend, provided the original airend is returned assembled and unopened.

The optional limited warranty is the earlier of 60 months from shipment to, or the accumulation of 10,000 hours of service. The optional warranty is limited to defects in major components (rotors, housings, gears, bearings), and is automatically available when the following three conditions are met:

1. The original airend is returned assembled and unopened.
2. Submissions of proof that Ingersoll-Rand fluid, filters and separators have been used. Refer to the Operation and Parts manual for the correct fluids, filters and separator elements required.
3. Submission of proof that maintenance intervals have been followed.

WARRANTY	TIME	*BARE AIREND	** AIREND COMPONENTS
STANDARD	**2 yrs/4000 hrs**	**100% parts and labor**	**100% parts and labor**
OPTIONAL	**5 yrs/10,000 hrs**	**100% parts and labor**	**0%**

* Bare Airend - pertains to major airend parts (rotors, housings, gears and bearings).

** Airend Components - pertains to auxiliary attachments to the bare airend (drive coupling, seals, pumps, valves, tubes, hoses, fittings and filter housing).

PRO•TEC™ and XHP505 Compressor Fluids are available from the Mocksville Product Support department by calling 1-800-633-5206.

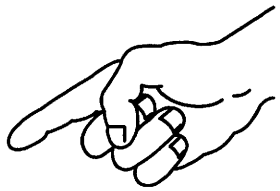
[1] XHP650/900/1070 will continue to use XHP505 and will have the extended warranty when above conditions are met.

WARRANTY REGISTRATION

Complete Machine Registration

Machines shipped to locations within the United States do not require a warranty registration unless the machine status changes (i.e. change of ownership).

Machines shipped outside the United States require notification be made to initiate the machine warranty.



Fill out the Warranty Registration Form in this section, keep a copy for your records and mail form to:

Ingersoll-Rand Company
Portable Compressor Division
P.O. Box 868
Mocksville, North Carolina 27028

Attn: Warranty Department

Note: Completion of this form validates the warranty.

Engine Registration:

John Deere requires a separate engine registration be completed and mailed direct to John Deere.
Separate engine registration material is included with this literature package for John Deere powered machines.
All other engine manufacturers do not require a separate engine registration.
You MUST present proof of in-service date at time of requesting engine warranty service.

Selling Distributor	Servicing Distributor	WARRANTY REGISTRATION
Name _____	Name _____	Owner/User Name _____
Address _____	Address _____	Address _____
City _____	City _____	City _____
County _____	County _____	County _____
State _____	State _____	State _____
Zip Code _____	Zip Code _____	Zip Code _____
Telephone _____	Telephone _____	Telephone _____

Complete the Applicable Blocks

Owner/User Type of Business (check one only)

☐ Construction-Heavy (highway, excavation, etc.)	☐ Asphalt Contractor	☐ Coal Mining	☐ Other Mining
☐ Construction-Light (carpentry, plumbing, pools, mason, etc.)	☐ Government (municipal, state, county, etc.)	☐ Quarry	☐ Shallow Oil & Gas
☐ Rental (rental center, rental fleet, etc.)	☐ Building Contractor	☐ Waterwell	☐ Utility Company (gas, electric, water, etc.)
☐ Industrial (plant use)	☐ Other specify _____	☐ Exploration	☐ Utility Contractor

Model	Unit S/N	Engine S/N	Date Delivered

Unit-Hours	Airend S/N	Truck S/N	Truck Engine S/N

SERVICING DISTRIBUTOR/USER ACKNOWLEDGEMENT

1. The Purchaser has been instructed and/or has read the manual and understands proper preventative maintenance, general operation and safety precautions.
2. The warranty and limitation of liability has been reviewed and understood by the owner/user.
3. In the event that this unit is to be used within a nuclear facility, the owner/user shall notify Ingersoll-Rand of such use so that Ingersoll-Rand may arrange for appropriate nuclear liability protection from the owner-licensee of the facility.
4. Ingersoll-Rand reserves the right to make design changes or modifications of Ingersoll-Rand products at anytime without incurring any obligation to make similar changes or modifications on previously sold units.

- *fold* -

Ingersoll-Rand Company
Portable Compressor Division
P.O. Box 868
Mocksville, North Carolina 27028

Attention: Warranty Department

SECTION 3 - NOISE EMISSION

This section pertains only to machines distributed within the United States.

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 these:

4. 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

5. Removal of any of the following:
   a. fan shroud
   b. vibration mounts
   c. sound absorption material

6. Operation of the compressor with any of the enclosure doors open.

Compressor Noise Emission Control Information

A. The removal or rendering inoperative, other than for the purpose of maintenance, repair, or replacement of any noise control device or element of design incorporated into this compressor in compliance with the noise control act;

B. The use of this compressor after such device or element of design has been removed or rendered inoperative.

Note: the above information applies only to units that are built in compliance with the U.S. Environmental Protection Agency.

Ingersoll-Rand Company reserves the right to make changes or add improvements without notice and without incurring any obligation to make such changes or add such improvements to products sold previously.

The Purchaser is urged to include the above provisions in any agreement for any resale of this compressor.

NOISE EMISSION CONTROL MAINTENANCE LOG

COMPRESSOR MODEL _____
SERIAL NO. _____
USER UNIT NO. _____

UNIT IDENTIFICATION	**DEALER OR DISTRIBUTOR FROM WHOM PURCHASED:**
Engine Make & Model: _____	
Serial No.: _____	_____
Purchaser or Owner: _____	_____
Address: _____	Date Purchased: _____

The Noise Control Act of 1972 (86 Stat. 1234) prohibits tampering with the noise control system of any compressor manufactured and sold under the above regulations, specifically 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 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.

NOISE EMISSION WARRANTY

The manufacturer warrants to the ultimate purchaser and each subsequent purchaser that this air compressor was designed, built and equipped to conform at the time of sale to the first retail purchaser, with all applicable U.S. EPA Noise Control Regulations.

This warranty is not limited to any particular part, component, or system of the air compressor. Defects in the design, assembly or in any part, component, or system of the compressor which, at the time of sale to the first retail purchaser, caused noise emissions to exceed Federal Standards are covered by this warranty for the life of the air compressor.

INTRODUCTION

The unit for which this Maintenance Log is provided conforms to U.S. E.P.A. Regulations for Noise Emissions, applicable to Portable Air Compressors.

The purpose of this book is to provide (1) the Maintenance Performance Schedule for all required noise emission controls and (2) space so that the purchaser or owner can record what maintenance was done, by whom, where and when. The Maintenance Schedule and detailed instructions on the maintenance items are given on following page.

MAINTENANCE SCHEDULE

ITEM	AREA	PERIOD
A.	Compressed Air Leaks	As Detected
B.	Safety and Control Systems	As Detected
C.	Acoustic Materials	Daily
D.	Fasteners	100 hours
E.	Enclosure Panels	100 hours
F.	Air Intake & Engine Exhaust	100 hours
G.	Cooling Systems	250 hours
H.	Isolation Mounts	250 hours
I.	Engine Operation	See Operator's Manual
J.	Fuels & Lubricants	See Operator's Manual

A. Compressed Air Leaks

Correct all compressed air leaks during the first shutdown period after discovery. If severe enough to cause serious noise problems and efficiency loss, shut down immediately and correct the leak(s).

B. Safety and Control Systems

Repair or replace all safety and control systems or circuits as malfunction occurs. No compressor should be operated with either system bypassed, disabled, or nonfunctional.

C. Acoustic Materials

In daily inspections, observe these materials. Maintain all acoustic material as nearly as possible in its original condition. Repair or replace all sections that have: 1) sustained damage, 2) have partially separated from panels to which they were attached, 3) are missing, or have otherwise deteriorated due to severe operating or storage conditions.

D. Fasteners

All fasteners such as hinges, nuts, bolts, clamps, screws, rivets, and latches should be inspected for looseness after each 100 hours of operation. They should be retightened, repaired, or if missing, replaced immediately to prevent subsequent damage and noise emission increase.

E. Enclosure Panels

Enclosure panels should also be inspected at 100 hour operational intervals. All panels that are warped, punctured, torn, or otherwise deformed, such that their noise containment function is reduced, should be repaired or replaced before the next operation interval. Doors, access panels, and hatch closures especially, should be checked and adjusted at this time to insure continuous seating between gasket or acoustic material and the mating frame.

F. Air Intake and Engine Exhaust

Engine and compressor air intake and engine exhaust systems should be inspected after each 100 hours of operation for loose, damaged, or deteriorated components. Repairs or replacements should be made before the next period of use.

G. Cooling Systems

All components of the cooling system for engine water and compressor oil should be inspected every 250 hours of use. Any discrepancies found should be corrected before placing the unit back in operation. Unrestricted airflow over the radiator and oil cooler must be maintained at all times during operation.

H. Isolation Mounts

Engine/airend isolation mounts should be inspected after each 250 hours of operation. Those mounts with cracks or splits in the molded rubber, or with bent or broken bolts due to operation or storage in severe environments, all should be replaced with equivalent parts.

I. Engine Operation

Inspect and maintain engine condition and operation as recommended in the manuals supplied by the engine manufacturer.

J. Fuels and Lubricants

Use only the types and grades of fuels and lubricants recommended in the Ingersoll-Rand Company and Engine Manufacturer's Operator and Maintenance Manuals.

MAINTENANCE RECORD FOR NOISE EMISSION CONTROL AND EXTENDED WARRANTY					
ITEM NO.	DESCRIPTION OF WORK	HOURMETER READING	MAINT/ INSPECT DATE	LOCATION CITY/ STATE	WORK DONE BY (NAME)

SECTION 4 - GENERAL DATA

UNIT MODEL	XP185	P185WIR
Air Delivery - cfm (litres/sec)	185 (87)	185 (87)
Engine Speed - RPM (Full Load)	2500	2500
- RPM (No Load)	1700	1700

COMPRESSOR

Rated Operating Pressure - psi (kPa)	125 (861)	100 (689)
Safety Valve Setting - psi (kPa)	150 (1034)	150 (1034)
Net Weight (less fuel) pounds	2265	2265

ENGINE (Diesel)

Manufacturer	Ingersoll-Rand
Model	4IRJ7N
Electrical System	12 VDC

FLUID CAPACITIES

Compressor Lubricant	12 quarts (11.4 litres)
Engine Lube	9 quarts (8.5 litres)
Fuel Tank	27 U.S. gal. (103 litres)

UNITS MEASUREMENTS/WEIGHTS

Overall Length	11.5 feet (3.5 meters)
Overall Height	4.8 feet (1.46 meters)
Overall Width	5.7 feet (1.74 meters)
Track Width	4.9 feet (1.49 meters)

RUNNING GEAR

Tire Size	P215/75RX15
Inflation Pressure (Cold)	35 psi
Towing Speed (Maximum)	65 mph (105 km/hr)

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

EXPENDABLE SERVICE PARTS

Compressor Oil Filter Element	36897353
Compressor Oil Separator Element	36845303
Air Cleaner Element (compressor)	35393685
Air Cleaner Element (engine)	35393685
Engine Oil Filter Element	54381314
Engine Fuel Filter Element	54381306
Fuel Water Separator Element	54468178

SECTION 5 - OPERATION

BEFORE TOWING

WARNING

Failure to follow these instructions CAN cause severe injury or death.

- Assure tow vehicle has towing capacity for weight of this unit as stated on general data decal.
- Position the tow vehicle to align its hitch with the pintle eye or coupler of the compressor.
- Engage the parking brake and chock the tires of the tow vehicle.
- Stand to the side and ensure pin is FULLY inserted (secure) in tube of jack. Crank jack to seat pintle eye or coupler onto hitch. Latch and lock hitch. Cross safety chain(s) under drawbar. Attach to vehicle.
- Crank jack to raise pad off the ground. Pull pin from tube of jack. Fold jack handle down and forward. Swing up jack tube and FULLY insert pin in tube.
  - Remove tire chocks.
  - Test brakes, if so equipped.
  - Test lights (running, stop, and turn signals).

WARNING

Always raise (or remove) jack for maximum ground clearance before towing.

SETTING - UP (ALL UNITS)

- Place the unit in an open, well-ventilated area. Position as level as possible. The design of these units permits a 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 mid-scale (with the unit run ning at full load). Do not overfill either the engine crankcase or the compressor lubricating oil system.

TOWING

WARNING

Failure to follow these instructions CAN cause severe injury or death.

- Ensure that tires, wheels and running gear are in good condition and secure.
- Ensure that tires are inflated to 35 psi.
- 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.

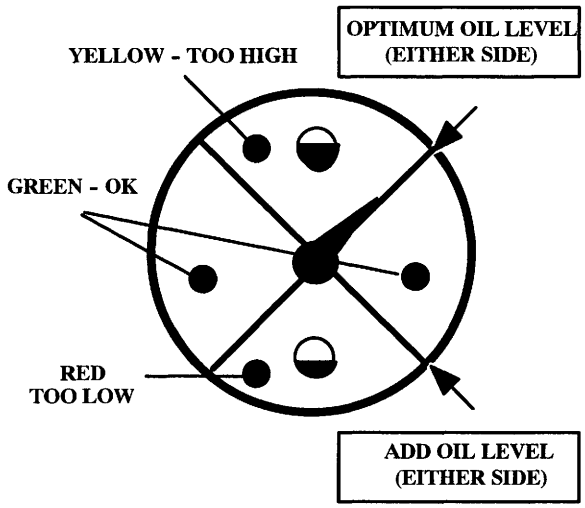
DISCONNECT

- Engage tow vehicle parking brake.
- Chock tires of compressor.
- Set the vehicle parking brake. Chock wheels of unit.
- Standing to the side, remove pin from tube of jack.
- Disconnect safety chains. Crank jack to raise eye or coupler from hitch. Tow vehicle can be moved.

COMPRESSOR OIL LEVEL

The oil level should be checked before the unit is started. Always check the oil level while the unit is level, the engine off, and there is zero pressure in the separator tank. The optimum oil level is with the pointer at the top of the green section on the level gage. Add oil if the pointer reaches the bottom of the green section.

Note: The oil level gage will not read properly while the engine is running.



WARNING

Always raise (or remove) jack for maximum ground clearance before towing.

UTILITY PACKAGE SET-UP
(no running gear)

This unit must be located on vehicle bed to allow access for normal servicing and maintenance.

The air going into the inlet grille must be relatively free of oil, dirt, soot and other debris. It must be no more than 10 degrees F. (5 degrees C) over the ambient temperature.

WATER COOLED ENGINE

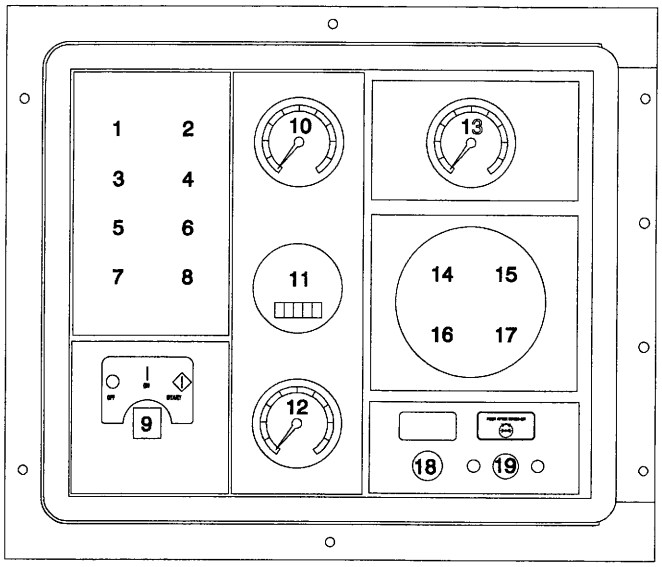
CAUTION

Do not remove pressure cap from a HOT radiator. Allow radiator to cool down before removing pressure cap. 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.

WARNING

NO SMOKING, SPARKS or OPEN FLAME near fuel.

CONTROL PANEL



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DIAGNOSTICS/AUTO SHUTDOWN

1. **High Compressor Temperature -**

   248°F (120°C) or more.

2. **Low Engine Oil Pressure** - 12 psi or less

3. **High Engine Temperature -**

   Coolant above 234°F.

4. **Alternator Not Charging** - needs attention.

5. **Low Fuel Level -**

   Must add fuel to operate.

6. **Air Filters Restricted -**

   Needs Servicing.

7. **Low Coolant Level -**

   Must add coolant.

8. **Needs Servicing -**

CONTROLS

9. **Power Switch -**

Rotate "ON" to activate systems prior to Starting.
Rotate "Off" to stop engine.

Operating Controls/Instruments (Standard)

10. **Compressor Discharge Pressure Gauge -**

    Indicates pressure in receiver tank, psi (kPa).

11. **Hourmeter -**

    Records running time for maintenance.

OPTIONAL GAGES/ CONTROLS

12. **Fuel Level Gauge -**

    Indicates amount of fuel in tank.

13. **Engine Speed Gauge -**

    Indicates engine speed.

14. **Discharge Air Temp. Gauge -**

    Indicates in °F and °C. Normal operating range: 185°F/85° to 248°F/120°C.

15. **Engine Oil Pressure Gauge -**

    Indicates engine oil pressure (psi (kPa).

16. **Engine Water Temp. Gauge -**

    Indicates coolant temperature, with normal operating range from 180°F (82°C) to 230°F.

17. **Voltmeter -**

    Indicates battery condition.

18. **Ether Inject Button - (Optional)**

    Ingersoll-Rand engine has Glow Plug Starting Aid. Do NOT use ETHER.

19. **Service Air Button - (Optional)**

    After warm up, PUSH. Provides full air pressure at the service outlet.

BEFORE STARTING

CAUTION

Whenever the machine is stopped, air will flow back into the compressor system from devices or systems downstream of the machine unless the service valve is closed. Install a check valve at the machine service valve to prevent reverse flow in the event of an unexpected shutdown when the service valve is open.

WARNING

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:

- 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.
- Check the engine oil level. Maintain per marks on dipstick.
- Check the fuel level. Add only CLEAN DIESEL fuel for maximum service from the engine.
- Check the compressor lubricating oil level. The proper oil level is indicated when the gauge pointed in the green section. Add oil only if the pointer in in the red section.

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.
- Be sure no one is IN or ON the compressor unit.

CAUTION

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 the negative (-) cable from the engine block first, then from the booster battery.
c. Disconnect positive (+) cable from both batteries.

STARTING

1. Turn the POWER switch to "ON".

2. Turn power switch to "START" position to crank engine.

Note: Do not operate the starter motor for more than 10 seconds without allowing at least 30 seconds cooling time between start attempts.

Cold Weather Starting:

Leave switch "ON" ten seconds before starting.

Open manual blowdown valve and service valve, if nothing is connected until engine is running.

CAUTION

Engine is equipped with glow plugs for cold starting aid.

Do not use Ether/starting fluid. Engine damage can occur.

3. Release POWER SWITCH when the engine starts and sustains running.

4. Allow engine to warm up 5 to 10 minutes

5. If so equipped, press Service Air Button. Open air service valve(s).

UNITS WITH OPTIONAL DIAGNOSTICS LAMPS

NOTICE

None of the panel lamps should be glowing when machine is operating. If they are, shut unit down and refer to Trouble Shooting Section.

STOPPING

1. Close air service valve.
2. Allow the unit to run at idle for 3 to 5 minutes to reduce the engine temperatures.
3. Turn Power Switch to "OFF" position.
4. When the engine stops, automatic blowdown valve should relieve system air pressure. If automatic blowdown valve malfunction is suspected, open manual blowdown valve.
5. Never allow unit to sit under pressure when engine is not running.

WARNING

Since the service valve is closed, air downstream of the valve may be trapped. A vent hole in the service valve will slowly bleed air from the hose. Do not disconnect hoses until all pressure has been vented.

NOTICE

Do NOT wire around or bypass a shutdown sensor or switch.

All units in this family of machines are protected by sensors or switches at the following locations:

(1) Low engine oil pressure, in the engine.

(2) High engine coolant temperature, in the engine.

High Discharge AIR Temperature

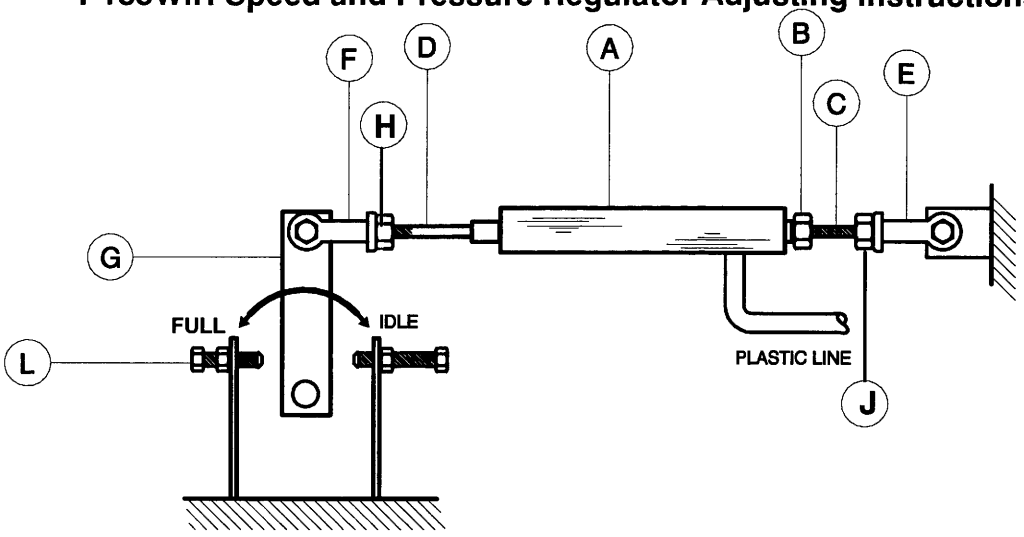
(3) At the airend outlet.

(4) In separator tank.

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 Power Switch is turned "OFF".

P185WIR Speed and Pressure Regulator Adjusting Instructions



The engine idle and full speed settings are set and sealed at the factory, and should not be adjusted. Serious injury may result if the full speed is increased. Removal of the seals without authorization could affect the warranty. If speed settings are lost due to engine fuel pump service or other repairs, the speed settings can be reset as follows:

Before Starting

1. At the Pressure Regulator (on service pipe near receiver tank), remove the cover to expose the adjusting screw. Loosen the jam nut and turn screw counterclockwise until tension is no longer felt at the screw. Then, turn screw clockwise one full turn.

2. Close service valve(s).

3. Inspect throttle arm (G) on engine governor to see the arm is resetting against FULL stop (L) on governor. Loosen jam nut on air actuating cylinder (A) and then turn cylinder rod (D) until throttle arm (G) is forced against stop (L).

After Starting Unit

4. If equipped, push the SERVICE AIR button on the control panel, making certain the button does not pop back out. The unit should speed up and then unload (and drop back to IDLE). With the unit unloaded, turn the adjusting screw on the pressure regulator clockwise until the discharge pressure gauge indicates 125-130 psi. Tighten the pressure regulator jam nut. Replace cover.

5. Open the service valve and adjust the discharge pressure to 100 psi (700 kPa). Now turn adjusting rod (D) until the proper engine FULL speed setting (*) is reached.

6. Close the service valve and adjust IDLE speed (*). Adjust speed using adjusting rod (C). Tighten jam nuts (B) & (J).

7. To obtain maximum cfm at any pressure between 80 psi (550 kPa) and maximum pressure rating (*), make adjustment at the pressure regulator to obtain desired discharge pressure at FULL engine speed. Lock adjusting screw and replace cover.

* See General Data Specifications.

SECTION 6 - MAINTENANCE

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.

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.

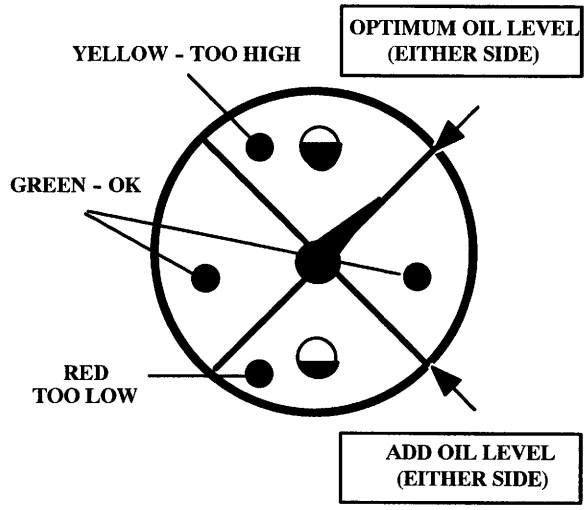
SCHEDULED MAINTENANCE

The maintenance schedule 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 oil level should be checked before the unit is started. Always check the oil level while the unit is level, the engine off, and there is zero pressure in the separator tank. The optimum oil level is with the pointer at the top of the green section on the level gage. Add oil if the pointer reaches the bottom of the green section.

Note: The oil level gage will not read properly while the engine is running.



The oil level should be checked before the unit is started. The optimum operating level is midway of the sight gage on the side of the receiver tank. If the oil level is not in the "OK" range, make appropriate corrections (Add or Drain).

AIR CLEANER

If this unit is equipped with the Optional Diagnostic Panel, it has an AIR FILTERS RESTRICTED lamp on the instrument panel, covering both the engine and the compressor.

This should be checked daily during operation. If the lamp glows (red) with the unit operating at full speed, servicing of the cleaner element is necessary.

Also weekly squeeze the rubber valve (precleaner dirt dump) on each air cleaner housing to ensure that they are not clogged.

The air filters restricted sensor will automatically reset after the main power switch is turned to "OFF."

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

1. Release cover latches, and remove cover.
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, especially in the area where the element seals against the housing.
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.
5. If a new air filter element is to be used check it closely for shipping damage.
6. Install cleaned or new elements in the reverse order to the above.
7. Install cover and fasten latches.

In the event that the filter element must be reused immediately, compressed air cleaning (as follows) is recommended since the element must be thoroughly dry. 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.

NOTE: To prevent damage to the element, never exceed a maximum air pressure of 100 psi (700 kPa).

In the event the element is contaminated with dry dirt, oil or greasy dirt deposits, and a new element is not available, cleaning can be accomplished by washing, using the air cleaner element manufacturer's recommendations.

NOTE: It is recommended that replacement elements be installed in the unit. The elements just removed for cleaning can be washed and stored as future replacement elements.

In addition, the air cleaner system (housing and piping) should be inspected every month for any leakage paths or inlet obstructions. Make sure the air cleaner mounting bolts and clamps are tight. Check the air cleaner housing for dents or damage which could lead to a leak. Inspect the air transfer tubing from the air cleaner to the compressor and the engine for leaks.

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 Operating Controls, for the normal readings.

FUEL TANK

CLEAN fuel in the fuel tanks is vitally important and every precaution should be taken to ensure that only clean fuel is poured or pumped into the tank.

When filling the fuel tank on this unit, by methods other than a pump and hose, use a CLEAN non-metallic funnel.

BATTERY

Keep the battery posts-to-cable connections clean, tight and lightly coated with a grease. Also the electrolyte level in each cell should cover the top of the plates. If necessary, top-up with clean distilled water.

TIRES

A weekly inspection is recommended. Tires that have cuts or cracks or little tread should be repaired or replaced. Monthly check the wheel lug nuts for tightness.

COMPRESSOR OIL COOLER

The compressor lubricating and cooling oil is cooled by means of the fin and tube-type oil cooler, located below the radiator. 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, non-caustic 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.

HOSES

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, and fuel 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 necessary.

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.

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. It is important they be periodically inspected for wear and deterioration. It is also important the operator does not use the hoses as convenient hand hold or steps. Such use can cause early cover wear and hose failure.

Piping systems operating at less than 150 psi (1050 kPa) may use a special nylon tubing. The associated fittings are also of a special "push-in" design. If so, features are as follows:

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 oil filter must be replaced every 500 hours of operation or six (6) months, whichever comes first.

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.

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 oil has improper characteristics and should be immediately changed.

3. Inspect the oil filter head to be sure the gasket was removed with the oil filter element. Clean the gasket seal area on the oil filter head.

NOTICE

Installing a new oil filter element when the old gasket remains on the filter head, will cause an oil leak and can cause property damage.

4. Lubricate the new filter gasket with the same oil being used in the machine.

5. Install new filter by turning element clockwise until gasket makes initial contact. Tighten an additional 1/2 to 3/4 turn.

6. 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 (6) months, whichever comes first.

RUNNING GEAR

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 (corrosion, etc.) or excessive wear. 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.

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

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.

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.

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.

6. Nut should be free to move with only restraint being the cotter pin.

RECEIVER-SEPARATOR SYSTEMS

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 plug from 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 2000 hours. To replace the element proceed as follows:

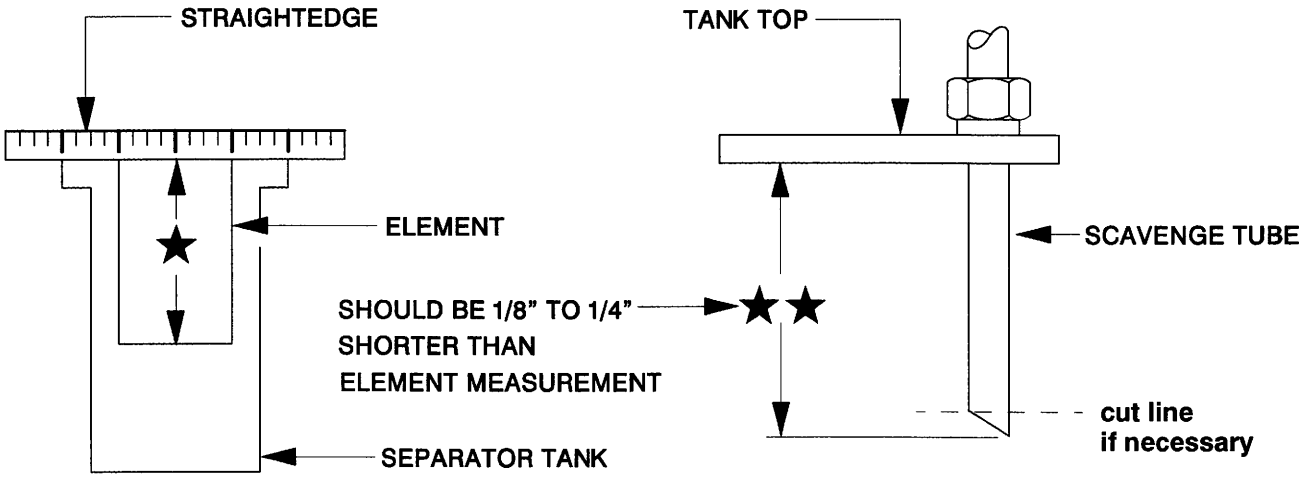
- Ensure the tank pressure is zero.
- Disconnect the hose from the scavenge tube.
- Remove scavenge tube from tank cover.
- Disconnect service line from cover.
- Remove cover mounting screws.
- Remove cover and element.
- Remove any gasket material left on cover or tank.
- Install new element.

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.
- Replace scavenge tube in cover (cover is still off of tank).
- Measure from bottom of cover to end of scavenge tube. Measurement should be from 1/8" to 1/4" less than the element measurement. If not, cut to size.
- Remove scavenge tube.
- Reposition cover (use care not to damage gaskets).
- Replace cover mounting screws: tighten in a crisscross pattern.
- Reconnect service line. Replace scavenge tube. Reconnect hose.
- Close service valve. Start unit and look for leaks.

When replacing the element, the scavenge lines, orifice, filter, and check valve should be thoroughly cleaned and the oil changed.



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 air-end near the oil filter element. An orifice check valve is located on the scavenge tube.

Once a year or every 1000 hours of operation, whichever comes first, replace the separator element and clean the scavenge orifice/check valve.

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/orifice is operational.
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.

Field Repair of Texture Paint

1. The sheet metal should be washed and clean of foreign material and then thoroughly dried.
2. Clean and remove all grease and wax from the area to be painted using Duponts 3900S Cleaner prior to sanding.
3. Use 320 grit sanding paper to repair any scratches or defects necessary.
4. Scuff sand the entire area to be painted with a red scotch brite pad.
5. Wipe the area clean using Duponts 3900S.
6. Blow and tack the area to be painted.
7. Apply a smooth coat of Duponts 1854S Tuffcoat Primer to all bare metal areas and allow to dry.
8. Apply 2 medium - wet coats of Duponts 222S Adhesion Promoter over the entire area to be painted, with a 5 minute flash in between coats.
9. To apply the texture coat, use Duponts 1854S Tuffcoat Primer. The proper technique to do this is to spray the Tuffcoat Primer using a pressure pot and use about 2-5 pounds of air pressure. This will allow the primer to splatter causing the textured look. Note: you must be careful not to put too much primer on at one time, this will effect the amount of texture that you are trying to achieve. Allow the texture coat to flash for 20 minutes or until dry to touch.
10. Apply any of Duponts Topcoat Finishes such as Imron™ or Centari™ according to the label instructions.

Note: To re-top coat the textured surfaces when sheet metal repairs are not necessary, follow steps 1, 2, 4, 5, 6, 8 and 10.

MAINTENANCE SCHEDULE

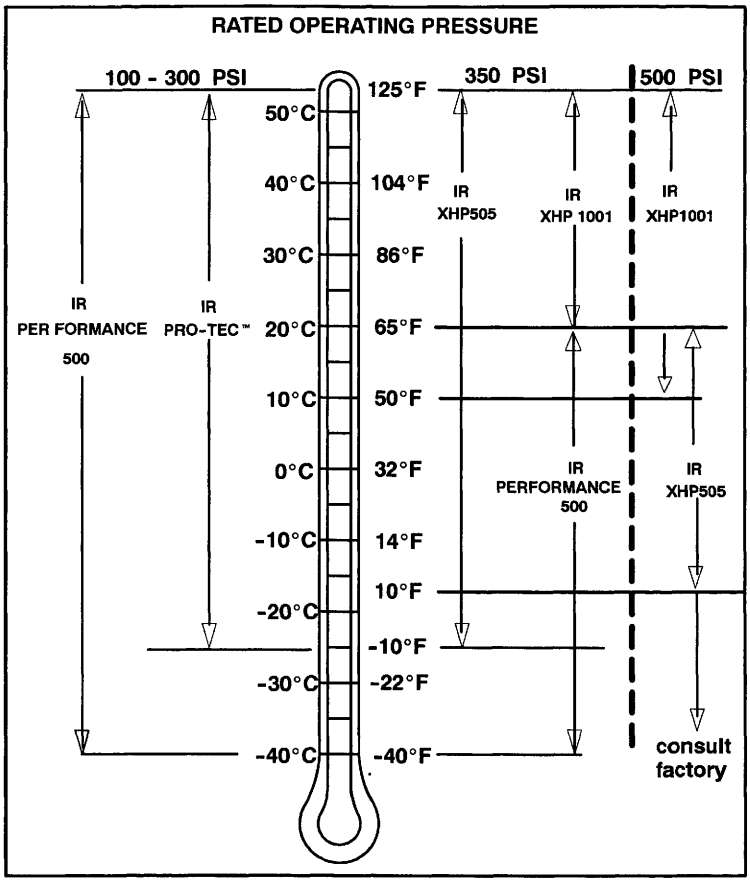
		Daily	Weekly	Monthly	3 MOS . 250 hrs.	6 MOS. 500 hrs	12 MOS. 1000 hrs
Compressor Oil Level		C					
Engine Oil Level		C					
*Radiator Coolant Level		C					
Gauges/Lamps		C					
*Air Cleaner Service Indicators		C					
Fuel Tank (fill at end of day)		C				DRAIN	
*Fuel/Water Separator Drain		C					
Oil Leaks		C					
Fuel Leaks		C					
Drain Water From Fuel Filters		DRAIN					
Coolant Leaks		C					
Radiator Filler Cap		C					
Air Cleaner Precleaner Dumps			C				
Fan/Alternator Belts			C				
Battery Connections/Electrolyte			C				
Tire Pressure and Surface			C				
*Wheel Lug Nuts				C			
Hoses (oil, air, intake, etc.)				C			
Automatic Shutdown System	Test			C			
Air Cleaner System	Visual			C			
Compressor Oil Cooler	Exterior			C	CLEAN		
*Engine Rad/Oil Cooler	Exterior			C	CLEAN		
Fasteners, Guards					C		
Air Cleaner Elements						WI	
*Fuel/Water Separator Element						R	
Compressor Oil Filter Element						R	
Compressor Oil						R	
Engine Oil Change						R	
Engine Oil Filter						R	
Water Pump Grease							R @1500hrs
*Wheels (bearings, seals, etc)						C	
*Engine Coolant	Test					C	R
Fuel Filter Element						R	
Injection Nozzle Check *						C	
Shutdown Switch Settings	Test						C
Scavenger Orifice & Related Parts							CLEAN
Oil Separator Element							R
Feed Pump Strainer Cleaning							CLEAN
Coolant Replacement							R
Valve Clearance Check *							C @1500hrs
Lights (running, brake, & turn)		CBT					
Pintle Eye Bolts		CBT					

*Disregard if not appropriate for this particular machine. **R**=replace, **C**=check (adjust if necessary), **WI**=OR when indicated, **CBT** = check before towing. Refer to specific sections of the operator's manual for more information.

SECTION 7 - COMPRESSOR LUBRICATION

Portable Compressor Fluid Chart

Refer to these charts for correct compressor fluid required. Note that the selection of fluid is dependent on the design operating pressure of the machine and the ambient temperature expected to be encountered before the next oil change.



Design Operating Pressure	Ambient Temperature	Specification
100 psi to 300 psi	-10°F to 125°F (-23°C to 52°C)	IR Pro-Tec™ Mil -PRF 2104G SAE 10W
100 psi to 300 psi	-40°F to 125°F (-40°C to 52°C)	IR Performance 500 Mil-L-46167
350 psi	(-23°C to 52°C) -10°F to 125°F	IR XHP 505
	65°F to 125°F (18°C to 52°C)	IR XHP1001
	-40°F to 65°F (-40°C to 18°C)	IR Performance 500 Mil-L-46167
500 psi	50°F to 125°F (10°C to 52°C)	IR XHP1001
	10°F to 65°F (-12°C to 18°C)	IR XHP 505
	below 10°F (-12°C)	Consult Factory

Recommended Ingersoll-Rand Fluids - Use of these fluids with original I-R filters can extend airend warranty. Refer to operator's manual warranty section for details or contact your I-R representative.

Compressor Fluid	1 Gal. (3.8 Litre)	5 Gal. (19.0 Litre)	55 Gal. (208.2 Litre)
IR Pro-Tec™	36899698	36899706	36899714
IR XHP 505		54418835	54418843
IR Performance 500	35382928	35382936	35382944
IR XHP1001		35612738	35300516
Engine Fluid - IR PROTEC	54480918	36875938	36866903

Section 8 - Trouble Shooting

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" depicted as a bold heading.

B. Follow down that column to find the potential cause or causes. The causes are listed in order to suggest an order to follow in trouble shooting.

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 over- heats" 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.

Note: For trouble shooting electrical problems, refer to the Wiring Diagram Schematic.

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 CHART

Bold Headings depict the COMPLAINT - Subheadings depict the CAUSE

Note: Subheadings suggest order to follow in cause of troubleshooting.

Short Air Cleaner Life:

- Dirty Operating Conditions
- Inadequate Element Cleaning
- Defective Service Indicator
- Incorrect Stopping Procedure
- Wrong Air Filter Element

Excessive Oil In Air:

- High Oil Level
- Out of Level > 15 degrees
- Clogged Scavenge Orifice
- Scavenge Tube Blocked
- Defective Scavenge Check Valve
- Sep. Tank Blown Down Too Quickly
- Defective Minimum Pressure Valve
- Defective Separator Element

Will Not Unload:

- Leaks in Regulator Piping
- Incorrect Pressure Regulator Adjustment
- Malfunctioning Pressure Regulator
- Malfunctioning Inlet Unloader/Butterfly Valve
- Ice in Regulation Lines/Orifice

Oil In Air Cleaner:

- Incorrect Stopping Procedure

Safety Valve Relieves:

- Leaks In Regulator Piping
- Incorrect Pressure Regulator Adjustment
- Malfunctioning Pressure Regulator
- Malfunctioning Inlet Unloader/Butterfly Valve
- Defective Separator Element
- Ice in Regulation Lines/Orifice
- Defective Safety Valve

Excessive Compressor Oil Temperature:

- Ambient Temperature Too High
- Out of Level > 15 degrees
- Low Oil Level
- Dirty Cooler
- Dirty Operating Conditions
- Loose or Broken Belts
- Operating Pressure Too High
- Malfunctioning Thermostat
- Defective Minimum Pressure Valve
- Blocked or Restricted Oil Lines
- Airend Malfunctioning

Engine RPM Low:

- Clogged Fuel Filter
- Operating Pressure Too High
- Incorrect Pressure Regulator Adjustment
- Dirty Air Filter
- Malfunctioning Speed Control Cylinder
- Defective Separator Element
- Ice In Regulation Lines/Orifice
- Engine Malfunctioning
- Airend Malfunctioning

Excessive Vibration:

- Low Engine RPM
- Rubber Mounts Damaged
- Out of Balance Fan
- Engine Malfunctioning
- Airend Malfunctioning

Low CFM:

- Low Engine RPM
- Dirty Air Filter
- Incorrect Linkage Adjustment
- Incorrect Pressure Regulator Adjustment
- Malfunctioning Inlet Unloader/Butterfly Valve
- Malfunctioning Speed Control Cylinder
- Defective Minimum Pressure Valve
- Defective Separator Element

Unit Shutdown:

Out of Fuel
Compressor Oil Temp. Too High
Engine Oil Pressure Too Low
Broken Engine Fan Belt
Loose Wire Connection
Defective Switches
Defective Shutdown Solenoid
Malfunctioning Relay
Blown Fuse
Engine Malfunctioning
Airend Malfunctioning

Unit Fails To Shutdown:

Defective Switches
Defective Shutdown Solenoid
Malfunctioning Relay
Defective Start Switch

Alternator Lamp Stays On:

Loose or Broken Belts
Loose Wire Connection
Defective Battery
Malfunctioning Alternator
Malfunctioning Circuit Board

Alternator Lamp Stays Off:

Loose Wire Connection
Malfunctioning Circuit Board

Won't Start/Run:

Low Battery Voltage
Blown Fuse
Malfunctioning Start Switch
Clogged Fuel Filters
Out of Fuel
Compressor Oil Temp. Too High
Engine Water Temp. Too High
Engine Oil Pressure Too Low
Loose Wire Connection
Defective Switches
Malfunctioning Relay
Engine Malfunctioning
Airend Malfunctioning

Engine Temperature Lamps Stays On:

Broken Engine Fan Belt
Malfunctioning Circuit Board
Defective Engine Belt Break Switch
Ambient Temperature Too High
Dirty Operating Conditions
Dirty Cooler
Out of Level >15 degrees
Operating Pressure Too High

Engine Oil Pressure Lamp Stays On:

Low Oil Level
Out of Level >15 degrees
Wrong Lube Oil
Engine Malfunctioning

Engine Temperature Lamps Stays Off:

Bulb Burned Out
Loose Wire Connection
Malfunctioning Circuit Board
Defective Engine Belt Break Switch

Engine Oil Pressure Lamp Stays Off:

Bulb Burned Out
Malfunctioning Circuit Board
Defective Engine Oil Pressure Switch
Engine Malfunctioning

SECTION 9- ENGINE

1. *ENGINE EXTERNAL VIEWS.* .....
2. *GENERAL INFORMATION.* .....
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    2. *ENGINE IDENTIFICATION* .....
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    3. *COOLANT* .....
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7. *ENGINE MAINTENANCE SCHEDULE* .....
8. *SIMPLE ENGINE TROUBLESHOOTING* .....

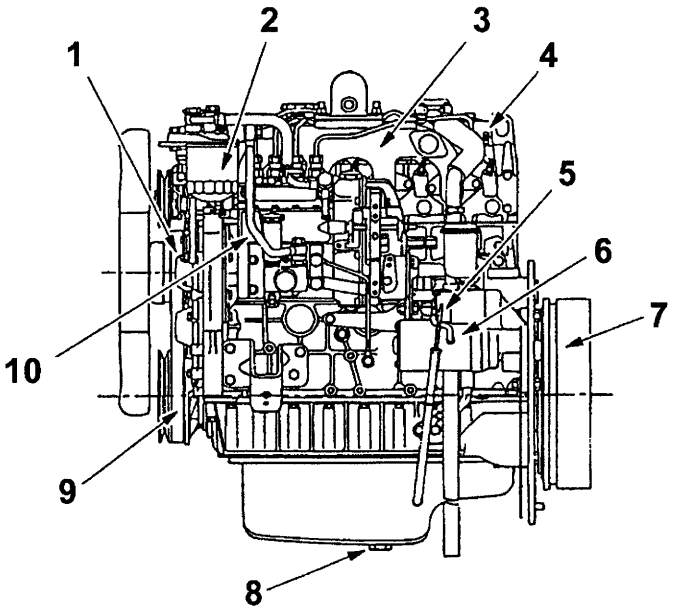
CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

1. ENGINE EXTERNAL VIEWS

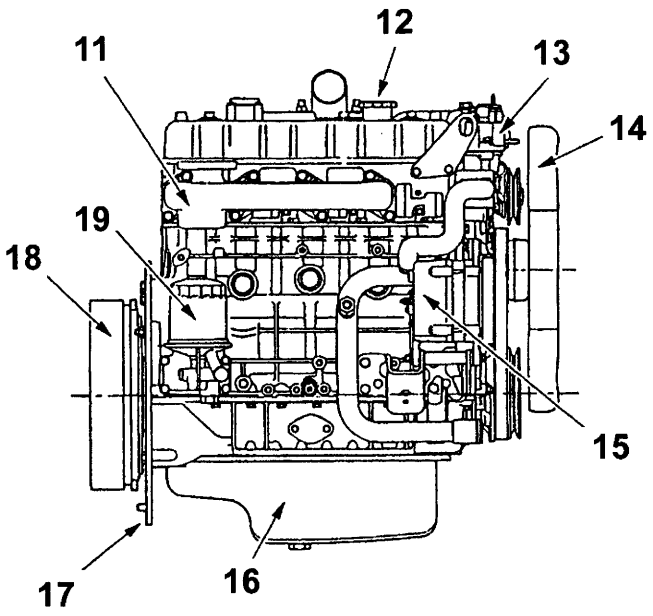
1. EXTERNAL VIEW (LH)



Note: Engine details may vary depending on the specifications

1. Water pump
2. Fuel filter
3. Inlet manifold
4. Nozzle holder
5. Dipstick
6. Starter
7. Flywheel
8. Drain plug
9. Crank pulley
10. Injection pump

2. EXTERNAL VIEW (RH)



Note: Engine details may vary depending on the specifications

11. Exhaust manifold

12. Oil filler cap

13. Thermostat housing

14. Cooling fan

15. Alternator

16. Oil pan

17. Rear plate

18. Flywheel

19. Oil filter

2. GENERAL INFORMATION

1. STANDARD ENGINE DATA AND SPECIFICATIONS

(1) Model 4IRJ7N (IN-LINE INJECTION PUMP TYPE)

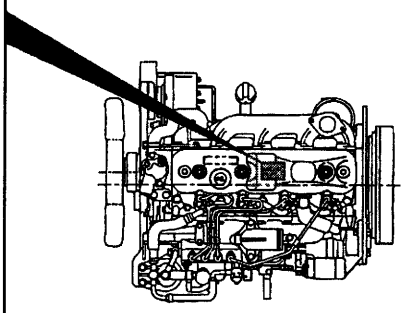
Ingersoll-Rand engine model name		**4IRJ7N**
Engine type		Water-Cooled, four cycle, in-line overhead valve type
Combustion type		Direct Injection
No. of cylinders - bore x stroke mm (in)		4-95.4 x 107 (3.76 x 4.21)
Engine displacement L (cid)		3.059 (186.7)
Compression ratio		18.6 to 1
Firing order		1-3-4-2
Max. rated power: SAE NET (hp)/min^{-1}		65/2500
Exhaust emission control system		Engine modification
Injection pump		In-line, Mechanical
Governor		Variable speed, Mechanical type
Injection nozzles		Multi-hole type
Specified fuel		Diesel fuel (ASTM D975 No. 2-D)
Starter (V-kW)		12 - 2.2
Alternator (V-A)		12 - 50
Specified engine oil (API grade)		CD
Lub. oil volume (Oil pan) L(qts)		9.6 - 7.6 (10.1 - 8.0)
Coolant volume (Engine only) lit(qts)		4.5 (4.8)
Engine dry weight kg(lb)		244 (538)
Engine dimensions	Overall length mm (in)	809 (31.8)
	Overall width mm (in)	606 (23.9)
	Overall height mm (in)	709 (27.9)
Valve clearance (cold) mm (in)		0.4 (0.0157)
Nozzle injection pressure MPa (psi)		18.1 (2.625)
Injection timing B.T.D.C. (Static)		12°
Maker and type of turbocharger		NA

EMISSION CONTROL LABEL: ENGINE LABEL (FOR EPA) - TYPE A

Emission control label is attached on the center, upper side of cylinder head cover. But the same emission control label is attached at a visible point on the equipment when the label that is attached to the engine is not visible due to the structure of the equipment.

The following is the sample of a label required for engine emission control information, along with location.

IMPORTANT ENGINE INFORMATION	
ENGINE FAMILY :XXXXXXX.XXXX	* ENGINE SPECIFICATION ADVERTISED MAX.POWER.
ENGINE CODE :XXXX	SAE NET (FAN DISENGAGED) XXkW/XXXX min^{-1} XXHP/XXXX RPM
MODEL :XXXX	FUEL RATE XX mm^3/st
ENGINE DISPLACEMENT :XXXXcm^3 (:XXX IN^3):	VALVE LASH (COLD) IN X.X mm. EXH X.X mm
EXHAUST EMISSION CONTROL SYSTEM :EM	INITIAL INJECTION TIMING XX° BTDC
DATE OF ENGINE MANUFACTURE :XX / XX	CURB IDLE: XXXmin^{-1}/RPM
THIS ENGINE IS CERTIFIED TO OPERATE ON DIESEL FUEL	(*MODEL SPECIFICATION SEE SERVICE MANUAL)
THIS ENGINE CONFORMS TO U.S. EPA	P.NO. X—XXXXX—XXX—X
REGULATIONS APPLICABLE TO 1999 MODEL YEAR LARGE NONROAD COMPRESSION-IGNITION ENGINES.	



2. ENGINE IDENTIFICATION

(1) Position of Display

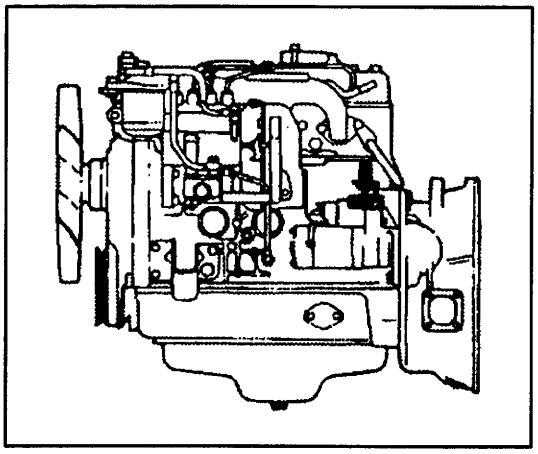


Fig. 3

The engine serial number is stamped on the rear left of cylinder body, near the upper starter. Engine model is described on an ID label on the left side of the cylinder head cover

3. ENGINE AFTER SERVICE

(1) Ingersoll-Rand Engine After Service

Please feel free to contact your Ingersoll-Rand dealer for periodical inspection and maintenance.

(2) Ingersoll-Rand Genuine Parts

The Ingersoll-Rand genuine parts are identical with those of used in the engine production, and accordingly, they are warranted by Ingersoll-Rand.

The Ingersoll-Rand genuine parts are supplied by Ingersoll-Rand distributors. Please designate "Ingersoll-Rand Genuine Parts" when you need engine parts.

3. FUEL, LUBRICANTS, AND COOLANT

1. FUEL

(1) Fuel Selection

The following specific advantages are required for the diesel fuel.

1) Must be free from minute dust particles.

2) Must have adequate viscosity.

3) Must have high cetane value.

4) Must have high fluidity at low temperature.

5) Must have low sulfur content.

6) Must have little residual carbon.

Diesel fuels

APPLICABLE STANDARD	RECOMMENDATION
JIS (JAPANESE INDUSTRIAL STANDARD)	NO.2
DIN (DEUTSCHE INDUSTRIE NORMEN)	DIN 51601
SAE (SOCIETY OF AUTOMOTIVE ENGINEERS) Based on SAE-J-313C	NO.2-D
BS (BRITISH STANDARD) Based on BS/2869-1970	Class A-1

If fuel other than the specified one is used, engine function will be affected.

(2) Fuel Requirements

NOTICE:
The fuel injection pump, injector or other parts of the fuel system and engine can be damaged if you use any fuel or fuel additive other than those specifically recommended by Ingersoll-Rand.

Such damage is not Ingersoll-Rand's responsibility and is not covered by the warranty To help avoid fuel system or engine damage, please heed the following:

- *Some service stations mix used engine oil with diesel fuel. Some manufacturers of large diesel engines allow this; however, for your diesel engine, do not use diesel fuel which has been contaminated with engine oil. Besides causing engine damage, such fuel can also affect emission control. Before using any diesel fuel, check with the service station operator to see if the fuel has been mixed with engine oil.*
- *Do not use any fuel additive (other than as recommended under "Biocide" in this section). At the time this manual was printed, no other fuel additive was recommended.*
(See your authorized dealer to find out if this has changed.)

Your engine is designed to use either Number 1-D or Number 2-D diesel fuel. However, for better fuel economy, use Number 2-D diesel fuel whenever possible. At temperatures less than—7°C, (20°F), Number 2-D fuel may pose operating problems (see "Cold Weather Operation" which follows). At colder temperatures, use Number 1-D fuel (if available) or use a "winterized" Number 2-D (a blend of Number 1-D and Number 2-D). This blended fuel is usually called Number 2-D also, but can be used in colder temperatures than Number 2-D fuel which has not been "winterized." Check with the service station operator to be sure you get the properly blended fuel.Note that diesel fuel may foam during a fill-up. This can cause the automatic pump nozzle to shut off even though your tank is not full.

NOTICE:
Do not use home heating oil or gasoline in your diesel engine; either may cause engine damage.

(3) Handling of the Fuel

Fuel containing dust particles or water will cause engine failure. Therefore;

1) Take care to prevent dust particles or water from contaminating the fuel when filling the fuel tank.

When fueling is done from an oil drum directly, allow the fuel to set long enough for contaminates to settle.

2) Always fully fill the fuel tank. Drain the fuel tank frequently.

(4) Water in Fuel

During refueling, it is possible for water (and other contaminants) to be pumped into your fuel tank along with the diesel fuel. This can happen if a service station does not regularly inspect and clean its fuel tanks, or if a service station receives contaminated fuel from its supplier(s). To protect your engine from contaminated fuel, there is a fuel filter system on the engine which allows you to drain excess water.

CAUTION:
The water/diesel fuel mixture is flammable, and could be hot. To help avoid personal injury and/or property damage, do not touch the fuel coming from the drain valve, and do not expose the fuel to open flames or sparks. Be sure you do not overfill the container. Heat (such as from the engine) can cause the fuel to expand. If the container is too full, fuel could be forced out of the container. This could lead to a fire and the risk of personal injury and/or vehicle or equipment damage.

(5) Biocides

In warm or humid weather, fungus and/or bacteria may form in diesel fuel if there is water in the fuel.

NOTICE:
Fungus or bacteria can cause fuel system damage by plugging the fuel lines, fuel filters or injector. They can also cause fuel system corrosion.

If fungus or bacteria has caused fuel system problems, you should have your authorized dealer correct these problems. Then, use a diesel fuel biocide to sterilize the fuel system (follow the biocide manufacturer's instructions). Biocides are available from your dealer, service stations, parts stores and other automotive places. See your authorized dealer for advice on using biocides in your area and for recommendations on which biocides you should use.

(6) Smoke Suppressants

Because of extensive testing of treated fuel versus untreated fuel, the use of a smoke suppressant additive is not recommended because of the greater possibility of stuck rings and valve failure, resulting from excessive ash deposits.

2. LUBRICANT

The quality of engine oil may affect engine performance, startability and engine life.

Use of unsuitable engine oil will result in piston ring, piston and cylinder seizure and accelerate the sliding surface wear causing increased oil consumption, lowered output and, finally engine failure. To avoid this, use the specified engine oil.

(1) Engine Oil Selection

API, CC or CD grade

(2) Oil Viscosity

Engine oil viscosity affects engine startability, performance, oil consumption, speed of wearing and occurence of seizure, etc. Using lubricants whose viscosity selected according to the atmospheric temperature is important.

NOTICE:
1) Using a mixture of different brand or quality oils will adversely affect the original oil quality; therefore, never mix different brand or different type oils.

2) Don't use API, CA, CB grade and reconstituted engine oil.

3) Engine damage due to improper maintenance, or using oil of the improper quality and/or viscosity, is not covered by the warranty.

Must use Ingersoll-Rand Pro-Tec™ for optional Platinum Extended Engine Warranty.

Recommended Ingersoll-Rand fluids use of these fluids with original I-R filters can extend engine warranty. Refer to operator's manual warranty section for details or contact your I-R representative.

Recommended Fluid	1 Gal.	5 Gal.	45 Gal.
Pro-tec Engine Fluid (15W-40)	54480918	36875938	36866903

4. ENGINE OPERATION

Engine Exhaust Gas Caution (Carbon Monoxide)

CAUTION:
Do not breath exhaust gas because it contains carbon monoxide, which by itself has no color or odor. Carbon monoxide is a dangerous gas. It can cause unconsciousness and can be lethal.

Do not run the engine in confined areas. Keep the exhaust tailpipe area clear of snow and other material to help reduce the buildup of exhaust gases.

1. CHECK BEFORE OPERATION

CAUTION:
For Safety's sake, conduct the inspection before start-up with the engine stopped.

(1) Engine Oil Level

Insert-type dipstick

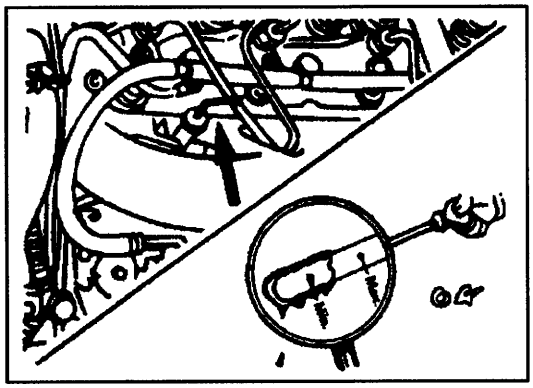


Fig. 6

1) Check with machine in level position.

2) Remove the dipstick from the crankcase, wipe it with a cloth. Insert fully and remove again.

Check the oil level by the level marks on the dipstick. The oil level must be between the "Max" level mark and the "Mm" level mark as illustrated.

Take care not to add too much engine oil.

- Drain oil to the max. oil level if oil level is above the max. level mark.
- Add oil to the max. oil level if oil level is below the mm. level mark.

Engine oil replenishment

Oil is poured through the oil filler at the front of the cylinder head cover.

A certain period of time is required before the engine oil completely flows down from the oil filler to the crankcase. Check the oil level ten or twenty minutes after oil replenishment.

NOTICE:
If the engine oil is splashed on the fan drive belt, it causes belt slippage or slackness; therefore, take care to avoid it.

CAUTION:
In adding oil, take care not to spill it. If you spill oil on engine or equipment, wipe it properly, or this could lead to a fire and the risk of personal injury and/or equipment damage.

(2) Fan Belt Check

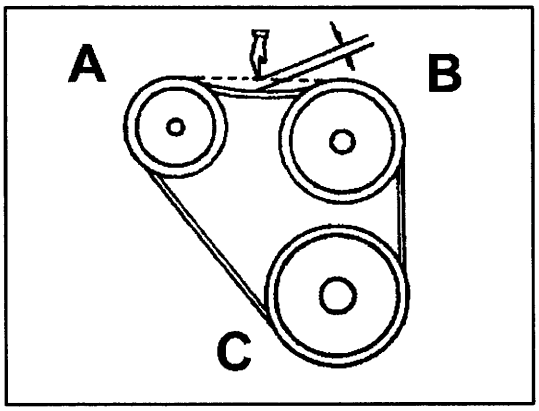


Fig. 8

A Alternator pulley

B Fan pulley

C Crank pulley

Check the fan belt for tension and abnormalities.

1) When the belt is depressed **about 8 to 12 mm (0.31 to 0.47 in)** with the thumb [about 98 N (10 kgf/22 lb) pressure] at midway between the fan pulley and alternator pulley, the belt tension is correct.

When the belt tension is too high, it will result in alternator failure. Contrarily, loose belt will cause belt slipage which may result in damaged belt and abnormal noise.

2) Check the belts. Replace them if any damage is found.

NOTICE:
Replace all belts as a set even when one is not usable. Single belt of similar size must not be used as a substitute for a matched belt set. Otherwise, premature belt wear would result because of uneven belt length.

(3) Coolant Level Check

1) Remove the radiator filler cap, and check the coolant level.

CAUTION:
When removing the radiator filler cap while the engine is still hot, cover the cap with clothing, then turn it slowly to gradually release the internal steam pressure.

2) Use clean drinking water as coolant. When an anti-freeze solution is required, keep to the specified mixing ratio.

(4) Radiator Cap Condition

After adding coolant, install the radiator cap. Make sure the cap is securely installed.

(5) Battery Cable Connection

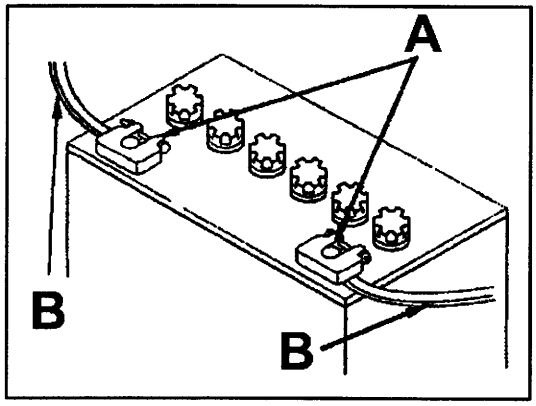


Fig. 9

A Connections

B Battery cable

Check the battery cable connections for looseness or corrosion. The loosened cable connection will result in hard engine starting or insufficient battery charge.

The battery cables must be tightened securely.

Never reverse "+" and "—" terminals when reconnecting cables after disconnection.

Even a short period of reverse connection will damage the electrical parts.

(6) Battery Electrolyte Level

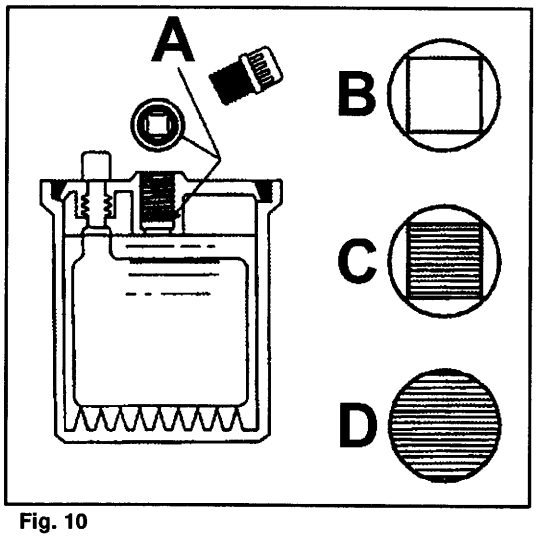


Fig. 10

A Regular position

B Shortage

C Proper

D Excess

The amount of electrolyte in the batteries will be reduced after repeated discharge and recharge.

Check the electrolyte for the level in the batteries, replenish with a commercially available electrolyte such as distilled water, if necessary.

The battery electrolyte level checking procedure will vary with battery type. Follow the equipment manufacturer's instructions.

NOTICE:
Do not replenish with dilute sulfuric acid in the daily service.

2. CHECK AND OPERATION AFTER THE ENGINE START-UP

(1) Warm-up Operation

Allow engine to warm about ten minutes after the engine has started.

(2) Check after the Engine Start-up

Check the following items in the engine warm-up operation.

Engine oil pressure (Gauge Optional)

Although the engine oil pressure gauge readings vary depending on ambient temperature or type of oil, the gauge registers around 392 to 490 kPa (4 to 5kgf/cm^2/57 to 71 psi) during warm-up.

In the oil pressure warning lamp type, make sure that the lamp is off.

Charge Condition (Ammeter Optional)

Gauge should read in normal range shortly after starting.

Engine noise and exhaust smoke colour

Pay attention to engine noise and, if any abnormal noise is heard, check the engine to detect the cause.

Check the fuel combustion condition by exhaust smoke colour. The exhaust smoke colour after engine warming-up and at no-load operation:

Colourless or light blue	Normal (Perfect combustion)
Black colour	Abnormal (Imperfect combustion)
White colour	Abnormal (Imperfect combustion)

NOTICE:
Engine noise after start-up might be noisy than that of warmed-up engine and, the exhaust smoke colour also being more blackish than the normal condition. However. it will be normalized after warming-up engine.

Leakage in the systems

Check the following items:

- Lube oil leakage

Check both sides and bottom of the engine assembly for lube oil leaks, paying particular attention to the lube oil pressure gauge pipe joint, lube oil filter and lube oil pipe joints.

- Fuel leakage

Check the fuel injection pump, fuel lines and fuel filter for leakage.

- Coolant leakage

Check the radiator and water pump hose connections also the water drain cocks on the radiator and cylinder body for leakage.

- Exhaust smoke or gas leakage

Checking coolant level

The coolant level could drop because air is expelled about 5 minutes after the engine started.

Stop the engine, remove radiator cap, and add coolant.

CAUTION:
Hot steam will rush out and you could get burnt, if the radiator cap is removed when the engine is hot. Cover the radiator cap with a thick cloth and loosen the cap slowly to reduce the pressure, then remove the cap.

3. CARE IN THE ENGINE OPERATION

In the engine operation, always pay attention to the following items if the engine indicates any sign of abnormalities.

(1) Engine Oil Pressure

Engine oil pressure is normal when the oil pressure gauge shows 294 to 392 kPa (3 to 4 kgf/cm^2/43 to 57 psi) in the engine warmed-up condition.

In the continuous engine operation, engine oil pressure is slightly lower than the pressure at start-up time. When the engine oil pressure gauge shows the following abnormal conditions, stop the engine immediately and check the engine oil amount in the oil sump and look for oil leakage:

- The engine oil pressure gauge shows below 196 kPa (2 kgf/cm^2/28 psi) though the engine speed is raised.
- The oil pressure gauge indicator oscillates greatly in the engine low speed range.

When no lack of engine oil or no oil leakage is found, contact your equipment supplier to determine the cause of the abnormal reading.

(2) Coolant Temperature

The engine performance will be adversely affected if engine coolant temperature is too hot or too cold.

The normal coolant temperature is 75 to 85°C (167 to 185°F).

Overheating

The engine cooling system may overheat if the engine coolant level is too low, if there is a sudden loss of engine coolant (such as hose splitting), or if other problems occur.

Overcooling

The engine operation at low coolant temperature will not only increase the oil and fuel consumption but also will lead to premature parts wear which may result in engine failure.

(3) Engine Hourmeter (Engine Operation Hour Indicating)

This meter indicates the engine operation hours. Make sure that the meter is always working during engine operation. Periodical engine maintenance is scheduled on the operation hours indicated on the hourmeter.

(4) Liquid and Exhaust Smoke Leakage

Be careful with lubricant, fuel, coolant and exhaust smoke leakage.

(5) Abnormal Engine Noise

Pay attention to the noise from the engine or other related parts, checking if the noise is normal.

(6) State of the Exhaust Smoke

Be careful with exhaust smoke colour, check if it is whitish or blackish.

4. OPERATION AND CARE FOR NEW ENGINE

Your Ingersoll-Rand engine is carefully tested and adjusted in the factory, however, further, thorough run-in (i.e. break-in) operation is necessary.

If the new engine is harshly operated, lubricating oil film will be reduced leading to abnormal wear or seizure. Particularly, avoid a harsh engine operation within the initial 100 operation hours observing the following notice.

(1) Do the warming-up operation continuously until the engine is warmed-up. In this operation, do not race the engine.

(2) Also do not operate the engine with rapid acceleration, rapid machine starting and continuous high speed operation

5. ENGINE CARE FOR OVER-COOLING

Engine over-cooling causes premature wear and increased fuel consumption. Maintain the coolant temperature 75 to 85°C(167 to 185°F).

6. STARTING THE ENGINE AFTER BEING LEFT UNUSED FOR A LONG PERIOD OF TIME

When the vehicle or equipment is left unused for "more than three months" without running the engine (warming up), conduct a thorough inspection of the vehicle before starting the engine. After starting the engine, be sure to warm it up for more than ten minutes.

5. PERIODICAL INSPECTION AND MAINTENANCE

1. LUBRICATING SYSTEM

Servicing of the engine oil or the oil filter element will affect on the engine performance as well as the engine life. Change the engine oil and the oil filter element periodically with the specified ones.

(1) Engine Oil and Oil Filter Element Change

Engine oil change and oil filter element change must be made according to the following change schedule.

Change interval

Engine Oil	Initial 50 and thereafter every 500 operating hours
Oil Filter Element	Initial 50 and therefore every 500 operating hours

Engine oil draining

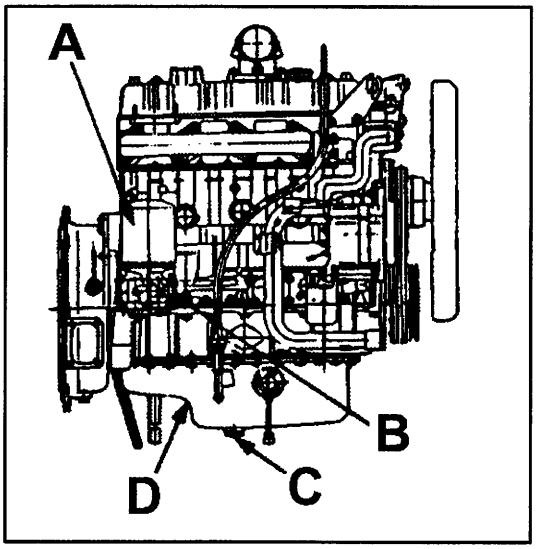


Fig. 14

A Oil filter

B Drain plug

C Drain plug

D Oil pan

CAUTION:
To help avoid the damage of being burned, do not drain oil while the engine is still hot.

1) Wipe the oil filler cap taking care to remove foreign particles. Remove the filler cap.

Remove the following drain plugs to drain the engine oil completely.

a. Drain plug at the oil pan.

b. Drain plug at the main oil filter.

It is advisable that draining be done while the engine is warm. to minimize the draining time.

Oil filter element removal

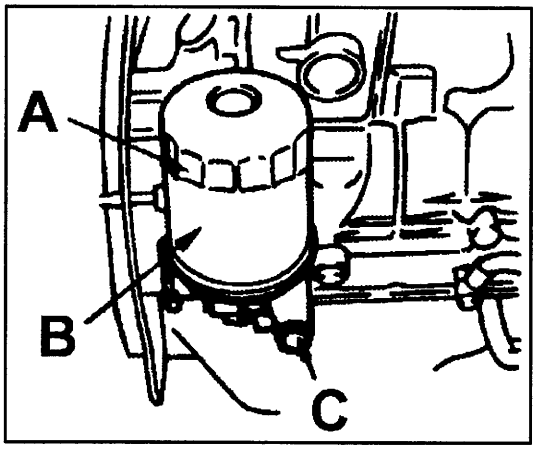


Fig. 15

A Set the filter wrench

B Cartridge

C Drain plug

1) Warm the engine to or near normal operating temperature.

2) Loosen the oil drain bolt (see arrow) one full turn to allow the oil to drain out of the filter and down to the crankcase. (The time it takes to drain the oil from the oil pan is sufficient to thoroughly drain the filter.

3) Once drained, remove the drain bolt entirely and replace the O-ring on the bolt (which is supplied with each Genuine IR oil filter).

4) Install the oil drain bolt. Tighten to 14 - 22 lb. ft. (20-30 Nm).

Oil filter element installation

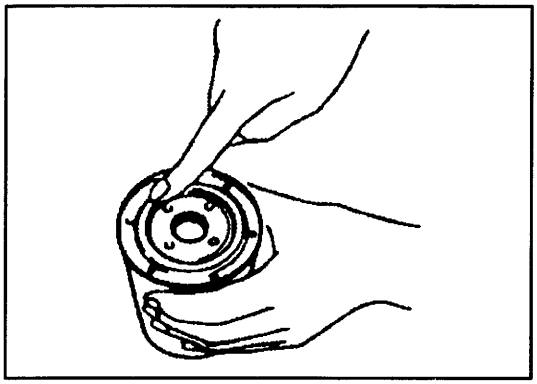


Fig. 16

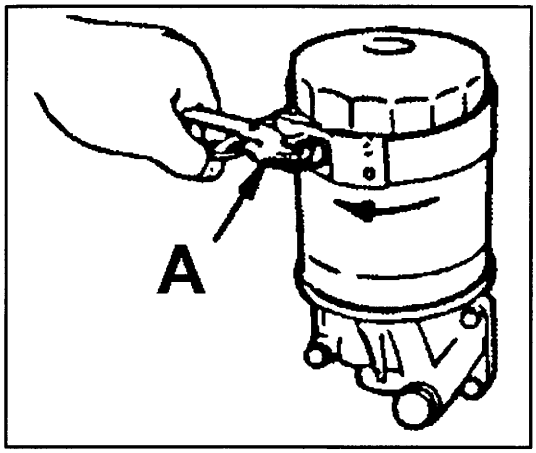


Fig. 17

A Filter wrench

1) Apply engine oil to the O-ring.

2) Rotate new cartridge until its sealed face comes in contact with the O-ring.

3) Use a filter wrench, tighten the cartridge 1 1/4 turns.

Engine oil refilling

1) Reinstall the drain plugs.

2) Fill with new engine oil at the oil filler port.

Wait about fifteen minutes until the oil gets down to the oil pan.

Then cheek the oil level.

(2) Check after Oil and Filter Changes

Oil leakage check

Idle the engine to raise the oil pressure, then check for oil leakage.

Oil level recheck

Stop the engine. Use the dipstick to recheck the oil level.

Replenish with engine oil, if necessary, to the specified level.

NOTICE:
When the engine is started, the oil level will drop slightly from the initial level as the oil fills the entire oil circuit.

(3) Engine Oil Additives

Engine oils contain a variety of additives. Your engine should not need any extra additives if you use the recommended oil quality and change intervals.

(4) Used Oil Disposal

Do not dispose of used engine oil (or any other oil) in a careless manner such as pouring it on the ground, into sewers, or into streams or bodies of water, Instead, recycle it by taking it to a used oil collection facility which may be found in your community. If you have a problem disposing of your used oil, it is suggested that you contact your dealer or service station.

(5) Used Engine Oil

CAUTION:
Used engine oil contains harmful contaminants that have caused skin cancer in laboratory animals. Avoid prolonged skin contact. Clean skin and nails thoroughly using soap and water - not mineral oil, fuels, or solvents. Launder or discard clothing, shoes, or rags containing used engine oil.

Discard used engine oil and other oil properly.

2. COOLING SYSTEM

(1) Fan Belt Tension Adjustment

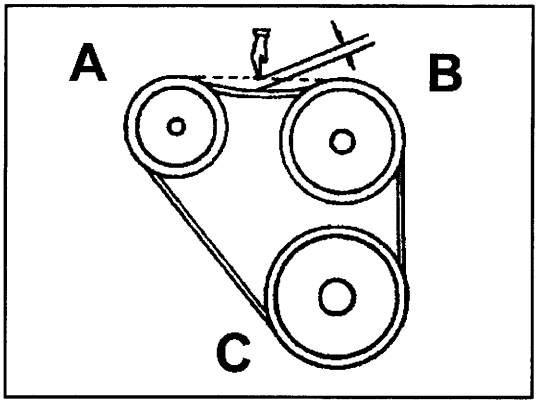


Fig. 18

A Alternator pulley

B Fan pulley

C Crank pulley

Adjust fan belt tension when belt slackness is greater than the specified amount and when the belts are replaced.

CAUTION:
To help avoid injury, check and adjust fan belt tension with engine stopped.

Belt tension

Belt tension is normal when it is depressed 8 to 12 mm (0.31 to 0.47 in) with the thumb at the midway between the fan pulley and alternator pulley. [about 98 N (10 kgf/22 lb) depressing force.]

Fan belt slackness : **About 8 - 12 mm (0.31 - 0.47 in)**

Adjusting procedure

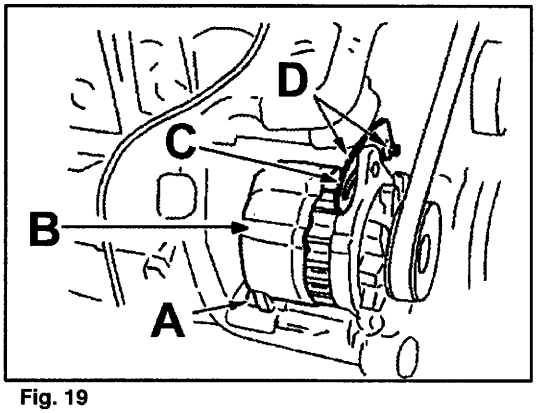


Fig. 19

A loosen

B Alternator

C Adjust plate

D loosen

Belt tension adjustment is made by pivoting the alternator at the alternator mounting bolt.

1) Loosen the alternator adjusting plate bolt and the alternator mounting bolt.

2) Pivot the alternator at the mounting bolt toward the engine left or right hand side as required.

3) Tighten the mounting bolt and the adjusting bolt.

NOTICE:
Belt tension may vary slightly after the alternator is fixed. Therefore, recheck the belt tension after tightening the bolts.

4) After the adjustment, operate the engine about five minutes at a low idle speed and recheck the belt tension. Particularly, pay attention to this matter when installing new belts. Belt tension may vary due to the initial belt conforming.

(2) Fan Belt Change

Use of fan belt with poor quality will result in premature belt wear or belt elongation leading to engine damage such as overheat. Therefore use of the Ingersoll-Rand genuine fan belts are recommended.

(3) Coolant Change

The coolant must be changed at intervals of **six months.** If the coolant is being fouled greatly, it will lead to engineoverheat or coolant blow-off from the radiator.

Coolant draining

1) Remove the radiator cap.

Open the drain cock on the radiator to drain the coolant in the radiator.

CAUTION:
When removing the radiator filler cap while the engine is still hot, cover the cap with a rag, then turn it slowly to release the internal steam pressure. This will prevent a person from scalding with hot steam spouted out from the filler port.

2) Drain away the coolant from the engine by loosening the water drain plug under the injection pump on the left side of cylinder body.

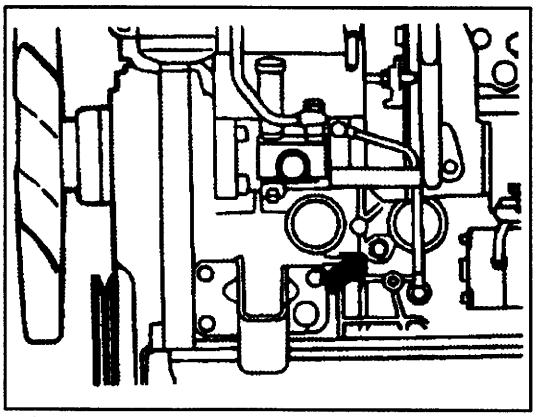


Fig. 20

Filling with coolant

1) Close or tighten the coolant drain plug.

2) Use clean drinking water as a coolant. Fill up the radiator with the coolant until the level comes up to the filler port neck.
Fill gradually to prevent air entry.

Coolant volume (Engine only)

Refer to "Main Data Specifications"

3) Operate the engine about five minutes at a low idle speed, then the air contained in the coolant circuit is bled. The coolant level will drop.

Stop the engine to replenish with the coolant.

(4) Cleaning outside of Radiator

Mud or dried grass caught between radiator fins will block the air flow, resulting in lower cooling efficiency.

Clean the radiator fins with steam or compressed water.

(5) Cooling System Circuit Cleaning

When the cooling system circuit is fouled with water scales or sludge particles, cooling efficiency will be lowered.

Periodically clean the circuit interior with a cleaner.

Refer to the **"Engine Maintenance Schedule"**.

3. FUEL SYSTEM

The fuel injection pump and fuel injection nozzles are precisely manufactured, and therefore, using the fuel which contains water or dust particles will result in either injection pump plunger seizure or injection nozzle seizure, and the fouled fuel filter element with sludge or dust particles lead to decreased engine output.

In addition, clogged filter element can cause low output or automatic air bleeding failure.

Perform inspection and maintenance periodically as follows:

(1) Removal of Water from the Fuel

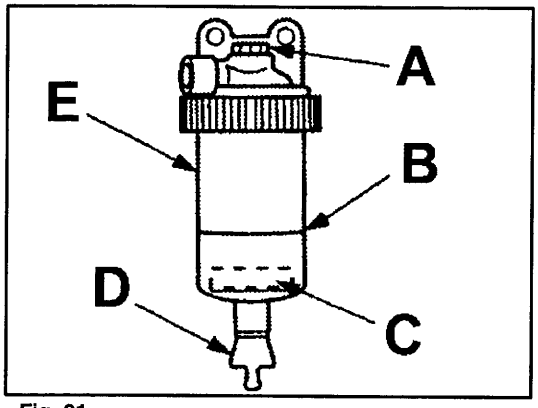


Fig. 21

A Plug

B Warning level line

C Float

D Drain plug

E Water sedimentor

The fuel system with the water sedimentor.

The water sedimentor is provided to separate the water contained in the fuel.

The sedimentor housing contains a float which moves up and down in accordance with level change of the sedimented water. Be sure to drain the sedimented water when the float has come up to the warning level line marked on the transparent sedimentor housing.

Draining procedure:

Loosen the drain plug and drain the sedimented water. Be sure to tighten the drain plug on completion of draining.

A packing of the "plug" which is provided at the upper portion of the water sedimentor is not reusable. When the "plug" is loosened, be sure to replace the packing with a new one.

The fuel system without the water sedimentor

Drain the sedimented water in the fuel filter body every 250 operating hours

1) Loosen the cartridge

2) Drain the fuel in the cartridge with the mixed water.

3) Installation the cartridge. (Refer to fuel filter element change)

NOTICE:
1. The cartridge and cup contains fuel. Take care not to spill it during disassembly

2. Perform the "fuel system air bleeding" after the water in the fuel is drained.

(2) Fuel System Air Bleeding

The entry of air into the fuel system will cause hard engine starting or engine malfunction. When servicing the fuel system, be sure to perform air bleeding procedure.

Air bleeding procedure:

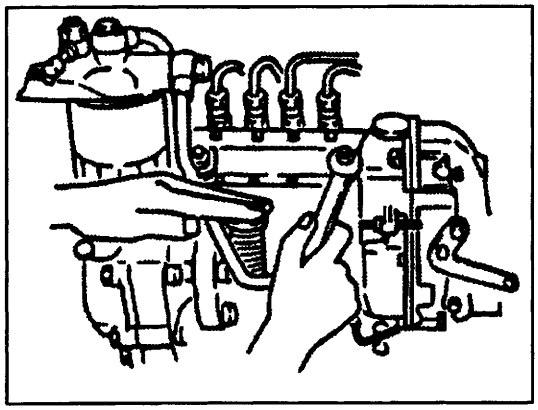


Fig. 22

1) Loosen the bleeding screws on the fuel injection pump.

2) Turn the feed pump knob counter clockwise until the pump knob is forced up by spring.

3) Depressing the pump knob will cause air mixed fuel to drain from the loosened bleeding screws.

4) Repeat the pumping action until no bubbles are visible in the flowing fuel.

No more bubble in the fuel indicates that air bleeding is completed.

Tighten the bleeding screws and the feed pump knob.

5) Start the engine and check the fuel system for fuel leaks.

(3) Fuel Filter Element Change Change interval

Every 500 operating hours

Change Procedure

NOTICE:
1 Be careful not to spill out the fuel remaining in the fuel filter when the filter is removed.

2. After draining the water from the fuel, conduct fuel air bleeding.

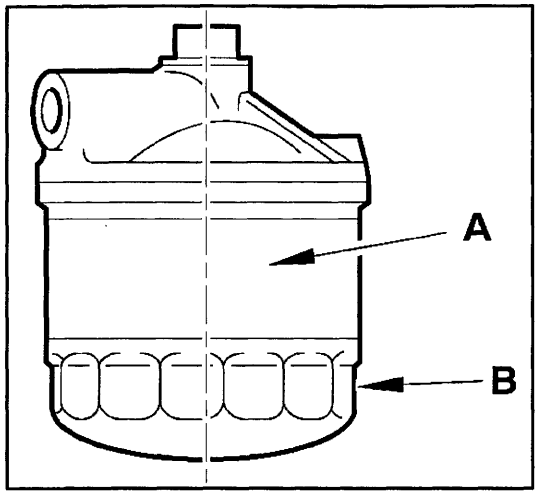


Fig. 23

A Cartridge.

B Set a filter wrench here.

1) Loosen the fuel filter turning it counterclockwise with a filter wrench. Discard the used fuel filter.

2) Clean the fitting face on the upper cover, so that new fuel filter can be seated properly.

3) Lightly oil the O-ring. To reinstall, turn the filter assembly clockwise carefully to prevent the fuel from spilling until the O-ring is fitted against the sealing face of the filter cover. Turn 2/3 turn further with the filter wrench.

Air bleeding

Do air bleeding on completion of fuel filter element change referring the description Fuel System Air Bleeding.

Feed Pump Strainer Cleaning

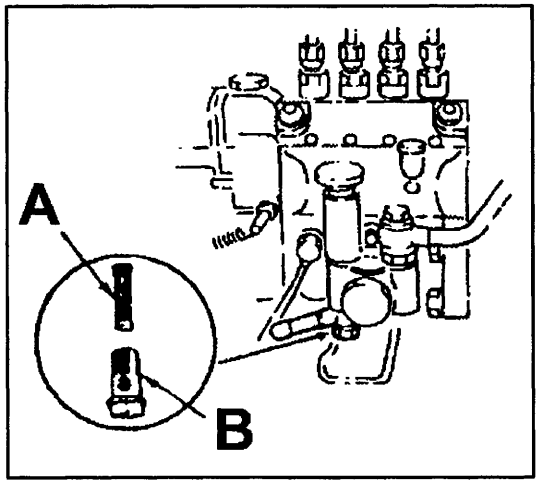


Fig. 24

A Strainer

B Joint bolt

Clean the feed pump strainer every 1000 operating hours. The strainer is incorporated in the feed pump inlet side joint bolt. Clean the strainer with compressed air and rinse it in fuel oil.

4) Fuel Injection Pump Control Seals

As the fuel injection pump is precisely adjusted, most of the controls are sealed, do not break them. When adjustment is necessary, contact you Ingersoll-Rand dealer.

NOTICE:
The manufacturer does not warrant the engine with the broken governor seals.

4. AIR INTAKE SYSTEM

(1) Air Cleaner

Engine performance and life vary with the air intake conditions. A dirty air cleaner element reduces the amount of intake air, causing reduced engine output.

A damaged element leads to abrasion of cylinders and valves, resulting in increased oil consumption, reduced output and shortened engine life.

NOTICE:
1. Shorten the cleaning or change interval when the equipment is used in dusty areas.

2. Change the element, if element damage is found during air cleaner cleaning.

5. ENGINE ELECTRICAL

The engines uses a 12 volt negative ground electrical system.

(1) Battery Servicing

Gravity of the batteries

The battery charge condition is judged by the electrolyte gravity measurement.

Periodically measure the electrolyte gravity of the batteries.

For the internal check follow the equipment manufacturer's standard.

The relationship between the electrolyte specific gravity and the battery conditions are as follows:

Electrolyte Specific Gravity	Battery Conditions
Over 1.300	Over 100% (Over charged)
1.290 - 1.270	100%
1.260 -1.240	75%
Below 1.230	Below 50% (Insufficiently charged)

NOTICE:
The battery electrolyte is dilute sulfuric acid. So. be careful not to stain your body and clothes with it. If stained, rinse portion in clean water.

Gravity conversion

The specified electrolyte temperature for the gravity measurement is 20°C (68°F).

Measure the electrolyte temperature and do the conversion in accordance with the following formula when the temperature does not fall to the specified temperature.

S_{20} = St + 0.0007 (t -20)

S_{20} ; gravity at 20°C

St ; gravity measured

t ; electrolyte temperature when measured
Battery terminal connections

Battery terminal connections

Periodically, check the battery terminals for loose connection and corrosion.

For the check interval, follow the machine manufacturer's standard. Loose connection will cause hard engine starting or deficient battery charging.

If the terminals are excessively corroded, disconnect the battery cables and polish them with a wire brush or sandpaper.

Never reverse the "+" and "—" terminals when reconnecting the cables. Even a short period of reverse connection could damage the electrical parts.

Cleaning of Battery

When the battery is fouled clean it with clean water or tepid water and wipe them with a dry cloth to remove the water. Apply a light coat of vaseline or a grease to the battery post.

(2) Alternator Servicing

1) The polarity of the alternator is negative grounding type. When an inverted circuit connection take place, the circuit will be in short circuit instantaneously resulting in alternator failure.

2) Do not put water directly on the alternator. Entry of water into the alternator leads an electrolyte corrosion causing a alternator failure. Pay attention particularly when cleaning the engine.

3) When the battery is charged with a external electric source, be sure to disconnect the battery cables.

(3) Wiring Connections

Check all of the electric wiring connections for looseness and damage.

6. ENGINE ASSEMBLY AND OTHERS

To continue trouble free engine operation over a long period of time, the servicing items need a skilled maintenance technican, therefore, consult your machine supply source on the following items when necessary.

(1) Fuel Injection Nozzle

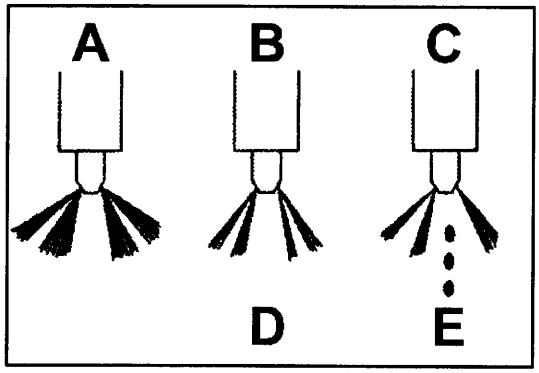


Fig. 28

A Good

B No good

C No good

D Thin Clogging

E Dripping

Use an injection nozzle tester to check the static injection starting pressure and the fuel spray conditions.

Injection nozzle pressure test interval:

Every 500 operating hours.

When the injection starting pressure is too high or too low or the fuel spray pattern is improper, an abnormal fuel combustion take place in the engine causing lowered output and blackish exhaust smoke. Further, it causes a piston seizure or piston damage etc. In such cases, the injection nozzle test or the nozzle replacement is required.

Injection starting pressure 18.1 MPa (2630 psi)

NOTICE:
While using a nozzle tester, it may happen that high pressure blow off the light oil and injure the worker. Keep off the nozzle end.

(2) Valve Clearance Adjustment

The valve clearance must be adjusted every 1500 operating hours, or whenever the valve rocker is abnormally noisy.

Valve clearance : 0.40 mm (0.0157 in) (When the engine is cold.)

Adjustment Procedure

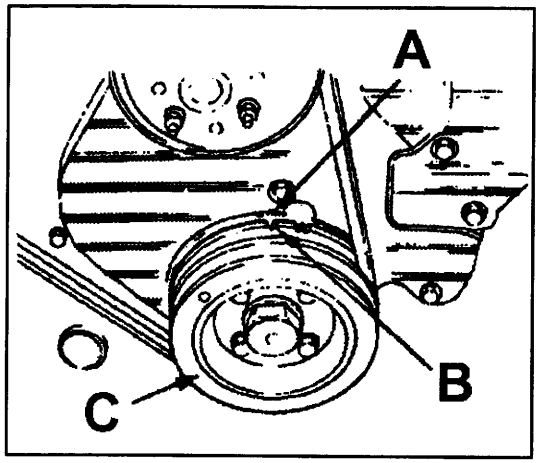


Fig. 29

A Pointer

B T D C Mark

C Pulley

1) In order to bring No.1 or No. 4 cylinder to the top dead center in the compression stroke, align the TDC mark on the crank pulley with the pointer on the timing gear case.

2) Do the adjustment on the circle marked valves in the below table where No. 1 cylinder is in the top dead center in the compression stroke.

After the above steps, do the adjustment on the double circle marked valves where No. 4 cylinder is on the top dead center in the compression stroke.

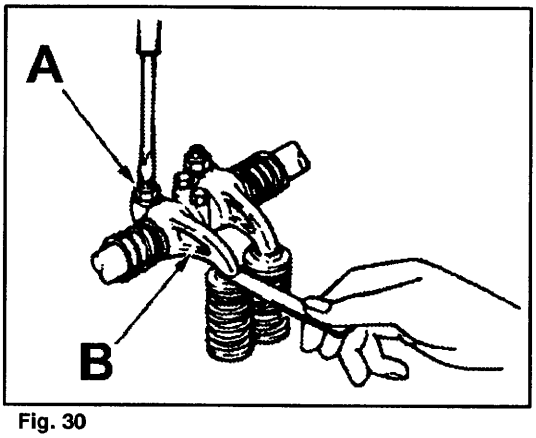


Fig. 30

A Adjust screw

B Rocker Arm

I ; Inlet
E ; Exhaust

Cylinder No.	1		2		3		4	
Valve arrangement	I	E	I	E	I	E	I	E
When No.1 cylinder is at TDC in the compression stroke	X	X	X			X		
When No.4 cylinder is at TDC in the compression stroke				X	X		X	X

Fig. 31

3) After the adjustment started from either piston top dead center, turn the crankshaft 360° to align the TDC mark and the pointer to do the adjustment again on the remaining valve.

(3) Injection Timing Check and Adjust

Improper injection timing causes serious engine failure such as blackish exhaust smoke, poor engine output and engine breakage etc.

In normal servicing, this check and adjustment is unnecessary, however, it might be necessary in conjunction with a related works.

Check procedure

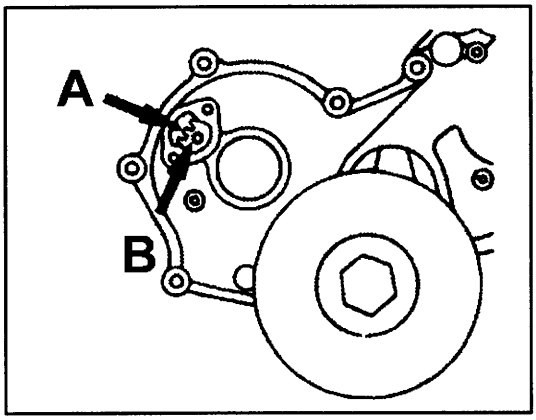


Fig. 32

A Pointer A

B Mark "0" B

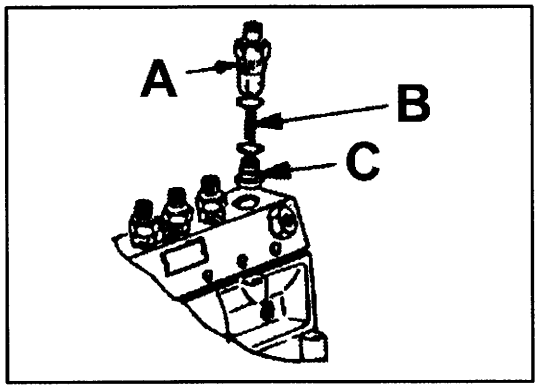


Fig. 33

A Delivery holder

B Spring

C Delivery valve

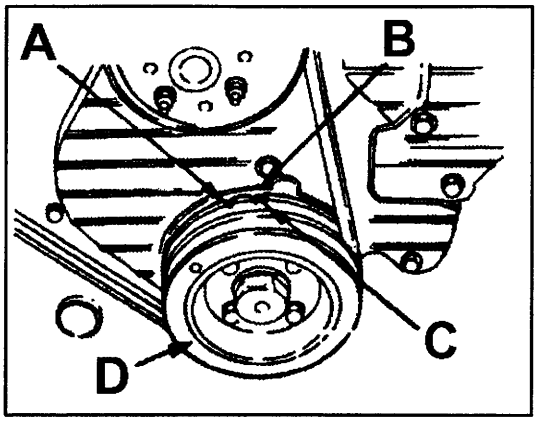


Fig. 34

A TDC mark

B Ponter

C Timing mark (17°, 20°)

D Crank pulley

1) Rotate the crankshaft clockwise to align the camshaft gear timing mark "0" (B) with the timing gear case pointer (A). If A and B are in alignment, the No. 1 cylinder will now be at the point where the fuel injection starts nearly. Next, inspect the crankangle position of the injection starting.

2) Remove No. 1 injection pipe from the engine.

3) Remove the injection pump No. 1 delivery valve holder, delivery valve and spring and reinstall the delivery valve holder on the original place.

Delivery valve holder tightening torque : 39 - 44 Nm (28.9-32.5 lb.ft)

4) Slowly turn the crankshaft pulley clockwise and at the same time, continue to feed the fuel with pumping the feed pump. When the fuel stop to flow out from No. 1 delivery valve holder, stop the pumping instantaneously.

5) Observe and make sure that which mark (injection starting angle line) on the crankshaft pulley is aligning with the pointer. The timing line shows the injection starting crank angle of the engine.

The injection starting crank angle differs depending on the engine model. Refer to the main data and specifications on the injection timing angle for the respective model engine. If the timing is incorrect, do the following adjustment.

Adjustment procedures

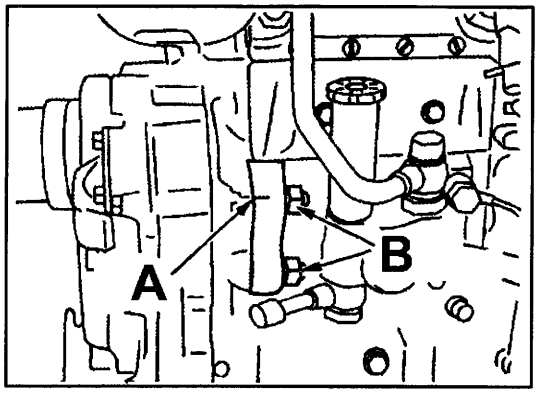


Fig. 35

A Timing mark

B Loosen (both side)

1) Align the pointer and the specified timing mark on the crankshaft pulley.

(Refer to the injection timing angle shown in the main data and specifications.)

2) Loosen the four injection pump fixing nuts.

3) To advance the timing.
Pivot the injection pump at the pump drive shaft toward out.

To retard the timing.
Pivot the injection pump at the pump drive shaft toward in (toward the cylinder block).

The 1 mm (0.039 in) misalignment between the two setting mark lines corresponds to about 2° in crank angle.

4) Do a fine injection pump position adjustment, while continuing the pumping operation to feed the fuel, and stop to pivot the injection pump when the fuel stop to flow out from No. 1 delivery valve holder.

5) Tighten the four injection pump fixing nuts.

6) Once remove No. 1 delivery valve holder, and reinstall thedelivery valve, spring and the valve holder.

Delivery valve holder tightening torque 39~44 Nm (28.9~32.5ft.lb)

7) Install No. 1 injection pipe.

NOTICE:
Take care to prevent entry of dust or foreign particles into the pump interior when timing adjustment is made.

(4) Cylinder Compression Pressure Measurement

The cylinder compression pressure measurement must be done **every 1200** operation hours, or whenever the engine output is reduced.

Compression pressure 3.04 MPa (441 psi)

Test condition:
Cranking speed 200 rpm
Coolant temperature 75°C (167°F)

Repair the engine and/or replace some parts of engine if compression pressure is lower than 2.15 MPa (313 psi)

(5) Starter and Alternator Servicing

Do the starter and the alternator servicing every 1500 operating hours on the following items.

- Starter commutator cleaning.
- Alternator slip ring cleaning.
- Carbon brushes and the brush contact check.

(6) Radiator Pressurization Valve Check

A pressurization valve is incorporated in the radiator cap assembly. Check the valve actuating pressure with a radiator compression tester. For the pressurization valve actuating pressure and the check interval, follow the equipment manufacturer's standards.

(7) Water Pump Grease Replacement

Grease packed in the water pump must be replaced every 1500 operating hours, (BESCO GREASE L-2).

6. ENGINE CARE IN COLD SEASON

1. FUEL

(1) Fuel Selection

In the cold zone, the fuel might be frozen resulting in hard engine starting; therefore, select a suitable fuel for such engine operation.

Use ASTM 975 No. 2-D fuel if you expect temperature above-7°C (20°F).

Use Number 1-D if you expect temperatures below -7°C (20°F). If Number 1-D is not available, a "winterized" blend of 1-D and 2-D is available in some areas during the winter months.

Check with the service station operator to be sure you get the properly blended fuel.

2. COOLANT

Where the atmospheric temperature falls below freezing point, the cooling system should be drained after engine operation, but to eliminate the need for repeated draining and refilling, the use of anti-freeze solution is highly recommended.

A 50/50 Ethylene glycol base antifreeze/water mix.

Concentrations over 65% adversely affect freeze protection, heat transfer rates, and silicate stability which may cause water pump leakage.

Never exceed a 60/40 antifreeze/water mix. (which provides protection to about -50°C (-58°F).

CAUTION:
Under some conditions the ethylene glycol in the engine coolant is combustible. To help avoid being burned when adding engine coolant, do not spill it on the exhaust system or engine parts that may be hot. If there is any question, have this service performed by a qualified technician.

NOTICE:
1. Methyl alcohol base antifreeze is not recommended because of its effect on the non-metallic components of the cooling system and because of its low boiling point.

2. High silicate antifreeze is not recommended because of causing serious silica gelation problems.

3. Usage and mixing ratio etc. should be followed to the antifreeze manufacture's recommendations.

3. ENGINE OIL

Engine oil viscosity largely affects engine startability, so the use of lubricant with selected viscosity according to the atmospheric temperature is important.

At low atmospheric temperature, engine oil viscosity will increase to cause hard engine starting.

4. BATTERY

1) Always pay attention to charging the batteries completely in cold season.

As the discharge current from the battery is large in cold engine starting, it takes a comparatively long while to recharge the batteries than the recharge after the normal engine starting.

Particularly, as the gravity of the insufficiently charged battery's electrolyte is low, it will easily be frozen.Pay attention to keep the batteries warm in the cold season.

2) To replenish the battery with distilled water, do it immediately before the engine operation.

If the work is done after the engine has already been in an operation, the distilled water replenished will not be mixed with the original electrolyte, allowing the danger of freezing the not mixed distilled water staying in the battery cell upper part.

NOTICE:
Do not use starting "aids" in the air in take system. Such aids can cause immediate engine damage.

7. ENGINE MAINTENANCE SCHEDULE

(2) Applicable Engine Model 4IRJ7N

When performing the following items, the daily inspection items should also be carried Out.

No	Description of check and maintenance		Daily	(operation hours)							Remark
				50	250	500	750	1000	1250	1500	
1.	Oil level and oil fouling		O								
2.	Oil leakage check		O								
3.	Oil pressure gauge registration		O								
4.	Oil pressure warning lamp		O								
5.	Engine oil change			(O)		O		O		O	
6.	Oil filter element replacement			(O)		O		O		O	
7.	Water pump grease change									O	
8.	Fuel leakage check		O								
9.	Draining water in fuel filter	w/water sedimentor	O								
		w/o water sedimentor			O	O	O	O	O	O	
10.	Fuel filter element replacement					O		O		O	
11.	Feed Pump Strainer Cleaning							O			See "EXPLANATION OF MAINTENANCE SCHEDULE"
12.	Injection nozzle check (*)					O†		O†		O†	
13.	Coolant level and fouling check		O								
14.	Coolant leakage check		O								
15.	Radiator filler cap fitting condition		O								
16.	Fan belt tension check (Replace if necessary.)		O								
17.	Coolant temperature registration		O								
18.	Coolant replacement										
19.	Radiator external face cleaning					O		O		O	
20.	Cooling system circuit cleaning									O	
21.	Radiator filler cap function check (*)										
22.	Electrolyte level check		O								
23.	Battery cleaning		O								

† This is a recommended maintenance. The failure to perform this maintenance item will not nullify the emission warranty or Limit recall liability prior to the completion engine useful life. However, ills recommended that maintenance service is performed at the indicated intervals.

No	Description of check and maintenance		Daily	(operation hours)							Remark
				50	250	500	750	1000	1250	1500	
24.	Battery charge condition	Ammeter registration	O								See "EXPLANATION OF MAINTENANCE SCHEDULE"
		Charge warning lamp	O								
25.	Electrolyte gravity check										
26.	Starter and alternator check and cleaning (*)									O	
27.	Wiring and connection check										
28.	Preheating condition check		O								
29.	Air cleaner element replace										
30.	Engine starting conditions and noise conditions		O								
31.	Exhaust smoke condition		O								
32.	Cylinder compression pressure (*)									O	
33.	Valve clearance check (*)									O	

Note:

1. The service intervals after 1500 operation hours should also be made every 250 operation hours in accordance with this check and maintenance schedule.

2. When the servicing on the asterisked (*) items are necessary, consult the equipment supplier.

EXPLANATION OF MAINTENANCE SCHEDULE

The following is a brief explanation of the services listed in the preceding Engine Maintenance schedule.

1.	**Oil level and oil fouling**	Check that the oil level is between the max. level mark and the mm. level mark. Drain oil to the max. level mark if oil level is above the max. level mark. Add oil to the max. level mark if oil is below the mm. level mark.
2.	**Oil leakage check**	Replace any damaged or malfunctioning parts which could cause leakage.
3.	**Oil pressure gauge registration**	Engine oil pressure is normal at about 294 to 490 kPa (3 to 5 kgf/cm^2/43 to 71psi) in warmed-up condition. Check and repair the lubrication oil system, if it is abnormal.
4.	**Oil pressure warning lamp**	Warning lamp is off while engine running. If it stays on, check and repair the lubrication system.
5.	**Engine oil change**	Refer to the previous maintenance schedule.
6.	**Oil filter element replacement**	Refer to the previous maintenance schedule.
7.	**Water pump grease change**	Refer to the previous maintenance schedule.
8.	**Fuel leakage check**	Inspect the fuel lines for damage which could cause leakage. Replace any damaged or malfunctioning parts.
9.	**Draining water in fuel filter**	Drain water in fuel filter if water reaches the fuel element. In the fuel system without water sedimentor, drain the sedimented water in fuel filter every specified operating hours.
10.	**Fuel filter element replacement**	Refer to the previous maintenance schedule.
11.	**Feed pump strainer cleaning**	Refer to the previous maintenance schedule.
12.	**Injection nozzle check**	Check and adjust injection opening pressure and spray condition. (This is a recommended maintenance)
13.	**Coolant level and fouling check**	Check coolant level and add coolant if necessary.
14.	**Coolant leakage check**	Repair part for coolant leakage.
15.	**Radiator filler cap fitting condition**	The radiator cap must be installed tightly.
16.	**Fan belt tension check**	Check and adjust fan belt deflection. Look for cracks, fraying and wear.
17.	**Coolant temperature registration**	Coolant temperature is normal at about 75 to 85°C (167 to 185°F). Check and repair the cooling system if coolant temperature is abnormal.
18.	**Coolant replacement**	Change coolant at intervals of 6 months or 12 months respectively if coolant is plain water, or long life coolant (LLC).
19.	**Radiator external face cleaning**	According to the equipment manufacturer's specification.
20.	**Cooling system circuit cleaning**	Refer to the previous maintenance schedule.

21.	**Radiator filling cap function check**	Check radiator pressure cap periodically for proper operation according to the equipment manufacturer's specifications.
22.	**Electrolyte level check**	Replenish with distilled water if necessary.
23.	**Battery cleaning**	Clean the terminals.
24.	**Battery charge condition**	Ammeter registration goes to plus (+) side while engine running. In the lamp type, the lamp is completely being off while engine running. Check charging circuit if the lamp is not off.
25.	**Electrolyte gravity check**	Check according to the equipment manufacturer's specifications.
26.	**Starter and alternator check and cleaning**	Check wear condition of brush and commutator.
27.	**Wiring and connection check**	Check according to the equipment specifications.
28.	**Preheating condition check**	Check preheating condition of the system.
29.	**Air cleaner element replacement**	Change element according to the manufacturer's specifications.
30.	**Engine starting condition and noise condition**	Check engine stability and noise.
31.	**Exhaust smoke condition**	Check exhaust smoke color.
32.	**Cylinder compression pressure**	Refer to the previous maintenance schedule.
33.	**Valve clearance check**	Incorrect valve clearance will result in increased engine noise and lower engine output. Thereby adversely affecting engine performance.

8. SIMPLE ENGINE TROUBLESHOOTING

This item contents a simple troubleshooting. When a failure takes place on your Ingersoll-Rand engine, diagnose the cause referring this troubleshooting. Should the cause of failure cannot be detected or you are unable to manage the failure consult to your machine supply source or nearest Ingersoll-Rand engine service outlet.

Engine does not start	Starter does not turn.	Battery discharged	
		Imperfect cable connections.	
		Starter or starter switch failure.	
		Safety relay failure.	
	Starter turns but engine does not ignite.	No fuel injection.	No fuel in the fuel tank.
			Clogged fuel filter element.
			Air in the fuel system.
			Control rack is stuck at no fuel position.
			Feed pump malfunction.
		Fuel is injected but engine does not ignite.	Incorrect preheating operation.
			Glow plug malfunction.
			Incorrect injection timing.
			Low cylinder compression pressure.
			Wrong engine oil viscosity.
	Engine ignite but stalls immediately.	Air in the fuel system.	
		Incorrect low idle speed adjustment.	
		Feed pump is restricted.	

Unstable engine running	Unstable low idling	Incorrect control lever adjustment	
		Crack in injection pipe.	
		Injection nozzle failure.	
		Engine stop button restricted at stop position.	
		Uneven compression pressure between cylinders.	
	Too high low idling speed.	Incorrect control lever adjustment.	
		Governor interior malfunction.	
	Engine hunting in medium speed range.	Governor spring deteriorated.	
	Malfunction in engine at high speed range.	Insufficient fuel supply.	Air in the fuel system
			Clogged fuel filter element
			Fuel leaked from overflow valve.
		Uneven fuel injection amount between plungers.	
		Deteriorated governor spring.	
		Incorrect valve clearance adjustment.	
		Deteriorated valve spring.	
	Engine speed does not be lowered.	Engine control restriction or seizure.	
Engine overheat.	Cooling system defect	Insufficient coolant amount.	
		Fan belt slippage.	
		Thermostat malfunction.	
		Radiator filler cap malfunction.	
		Cooling system interior fouled.	
		Radiator clogging.	
	Improper servicing	Engine over-loaded.	
		Air cleaner element clogged.	
		Insufficient ventilator.	
		Restricted coolant flow (high concentration of antifreeze, etc.)	
Low oil pressure	Lack of oil	Oil leakage	
		Excessive oil consumption	
	Improper oil	Wrong selection of kind and viscocity.	
	High coolant temperature.	Over heat.	
	Clogged filter and strainer.		
	Worn bearings and oil pump.		
	Faulty relief valve.		

Lack engine output	Incorrect injection pump adjustment	Incorrect injection timing	Too far advanced.
			Too far retarded.
		Injection nozzle malfunction	Incorrect injection pressure adjustment.
			Incorrect spray condition.
		Insufficient fuel supply to the injection pump	Lack of fuel in tank.
			Air mixing in injection pump.
			Fuel filter clogged.
			Overflow valve malfunction.
		Governor malfunction	Incorrect engine control adjustment.
			Deteriorated governor spring.
	Poor cylinder compression pressure	Cylinder compression pressure leakage	Incorrect valve clearance adjustment.
			Nozzle holder misalignment.
			Cylinder bore wear.
		Insufficient air intake volume.	Air cleaner clogging.
			Such as inferior ventilation.
Excessive oil consumption	Improper oil	Wrong selection of kind and viscosity.	
		Too much oil quantity.	
	Oil coming up.	Wrong selection of cylinder liner and piston ring.	
	Oil coming down.	Faulty valve stem seal.	
	Oil leakage	Damaged packing.	
		Improper tightening.	
		Improper installation of filter and piping.	
Excessive fuel consumption	Fuel leakage	Damaged packing.	
		Improper installation or tightening.	
	Too much injection amount.	Injection pump misadjustment.	
	Excessive mechanical loads		

Improper exhaust	Excessive black smoke	Clogged air cleaner.
		Nozzle damage.
		Nozzle misadjustment.
		Injection timing failure.
		Injection amount misadjustment.
		Improper fuel.
	Excessive white smoke	Oil coming up or down..
		Water mixing in fuel.
		Low compression pressure.
		Injection timing failure.
		Low coolant temperature.
Battery overdischarge	Low electrolyte level	Crack in battery body.
		Natural consumption.
	Charging failure	Loose or damaged belt.
		Faulty alternator.
		Damaged wiring or contact failure.
		Low speed driving.
	Excessive electrical loads	Insufficient battery capacity.

SECTION 10 - PARTS ORDERING

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.

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.

Special order parts may not be included in this manual. Contact the Mocksville Parts Department with the unit serial number for assistance with these special parts.

DESCRIPTION

The illustrated parts breakdown illustrates and lists the various assemblies, subassemblies and detailed parts which make up this particular machine. This covers the standard models and the more popular options that are available.

A series of illustrations show each part distinctly and in location relative to the other parts in the assembly. The part number, the description of the part and the quantity of parts required are shown on each illustration or on adjacent page. The quantities specified are the number of parts used per one assembly and are not necessarily the total number of parts used in the machine. 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. The noun name is generally 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 essential.

In referring to the rear, the front or to either side of the unit, always consider the **drawbar end** of the unit as the **front.** Standing at the rear of the unit facing the drawbar (front) 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.

MARKINGS AND DECALS

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

Part numbers for original individual decals and their mounting locations are shown within Parts List Section. 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 Parts List Section.

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.

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.

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.

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 without a Warranty MRR (Material Return Request) Number, no warranty claim will be considered.

PARTS LIST

CONTENTS

Frame & Running Gear

Running Gear Complete

15" Tire & Wheel Assembly

Jack Assembly

Engine Complete

- Gasket Set
- Cylinder Head Cover
- Cylinder Head
- Cylinder Block
- Oil Pan
- Camshaft & Valves
- Crankshaft & Pistons
- Timing Gear
- Engine Mounts
- Intake Manifold
- Exhaust Manifold
- Ventilation System
- Water Pump
- Thermostat Housing
- Water Piping
- Fan Mount
- Fuel Pump
- Injection Pump
- Fuel Filter
- Oil Filter
- Oil Pump
- Oil Piping
- Electrical Components

Cooling Complete

Airend Complete

Airend Assembly

Oil Temperature Bypass Valve

Seperator Tank & Air Service Complete

PARTS LIST

CONTENTS

Fuel Tank Complete

Air Intake Complete

Air Cleaner Assembly

Battery Assembly

Air and Oil Piping

Wiring Diagram

Inst/Control Panel

Enclosure Complete

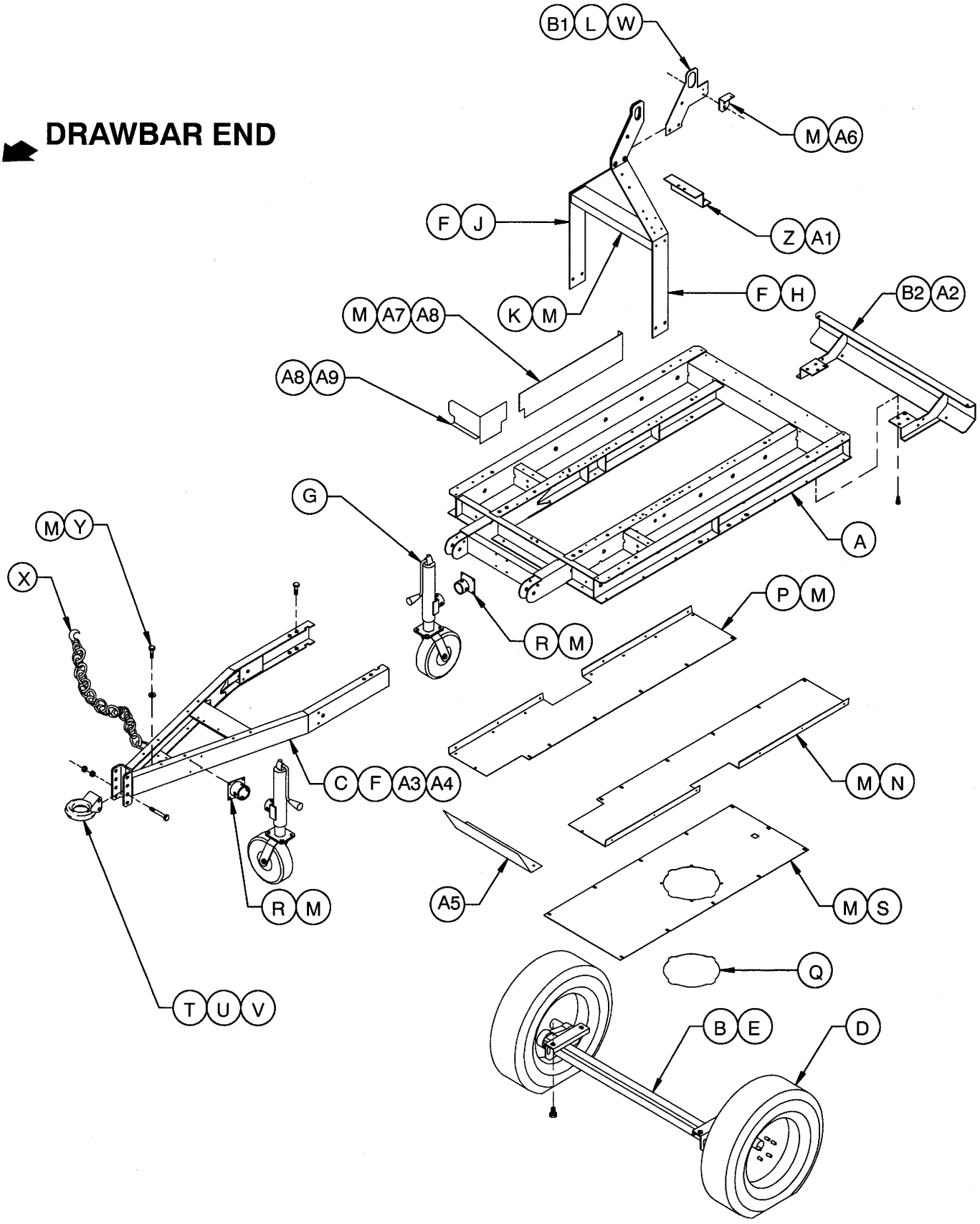
Foam Insulation Complete

Decal Location

Filter, Fuel Water

Service Parts

DRAWBAR END

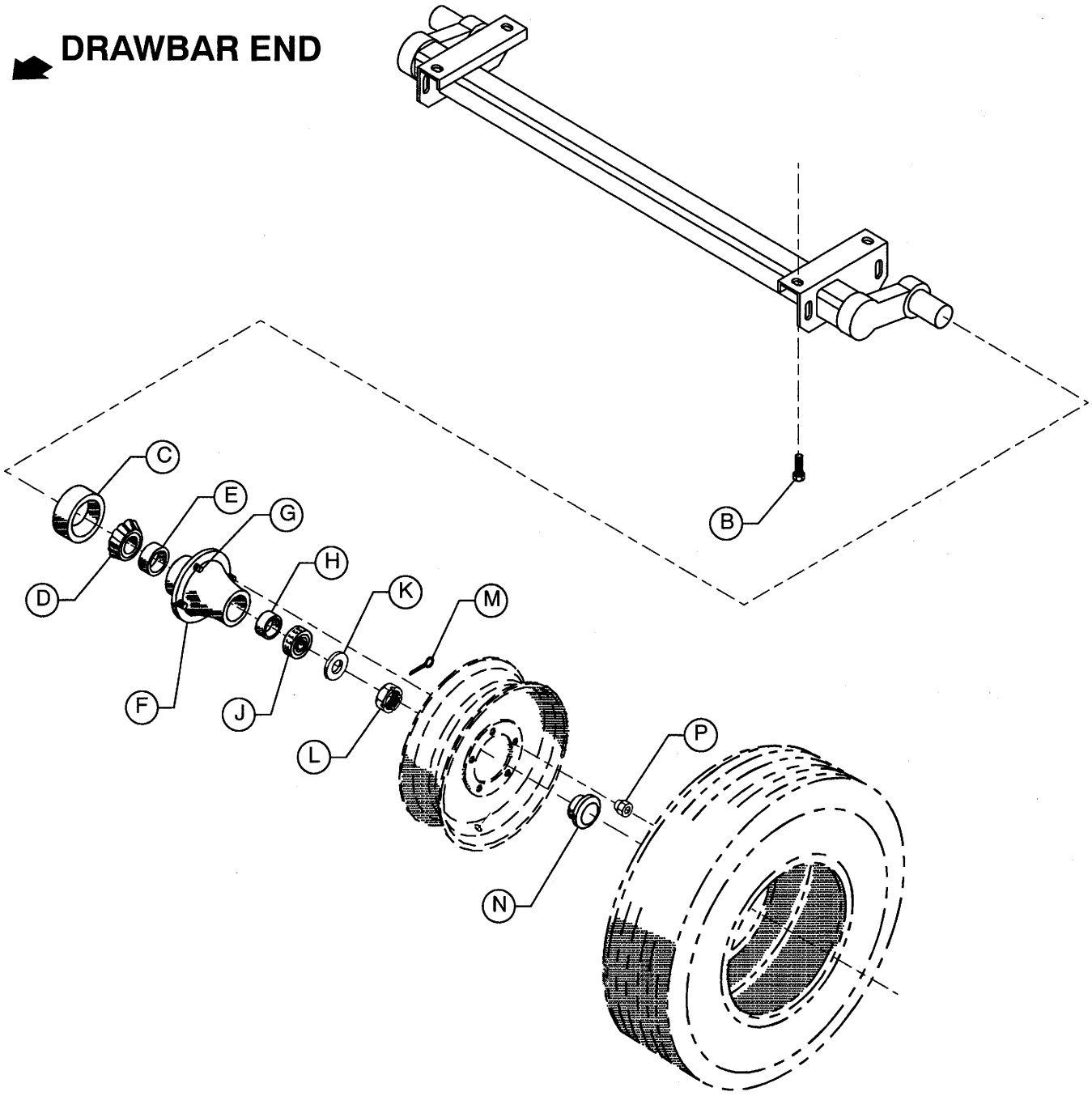


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/27/00 bc	DESCRIPTION: FRAME & RUNNING GEAR	
MODEL NO.: P-105WIR - P-185WIR	MANUAL NO.: 54437173-02	DATE/REV: 4/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	54436803	1	FRAME
B	36880458	1	RUNNING GEAR
C	36886364	1	DRAWBAR
D	35068345	2	13" TIRE & WHEEL ASSY (P105 - P130)
	35046275	2	15" TIRE & WHEEL ASSY (P160 - P185)
E	36879302	4	SCREW, HEX FLANGE HD M16 X 50
F	36789492	12	SCREW, HEX FLANGE HD M12 X 25
G	36888709	1	JACK ASSY
H	36880862	1	BAIL, STSD LIFT
J	36880854	1	BAIL, CRBSD LIFT
K	36880870	1	CROSSMEMBER, LIFT BAIL
L	36882165	1	PLATE, BAIL EYE
M	35279025	36	SCREW, TAPPING M08-1.25 X 20
N	36882686	1	PAN, STSD BELLY
	54529292	1	PAN, STSD BELLY (GALVANNEAL)
P	36882678	1	PAN, CRBSD BELLY
	54529284	1	PAN, CRBSD BELLY (GALVANNEAL)
Q	36880623	1	COVER, FLEXIBLE ACCESS
R	36796068	2	TUBE, JACK MOUNTING
S	36880441	1	PAN, CENTER BELLY
	54529086	1	PAN, CENTER BELLY (GALVANNEAL)
T	35605187	1	PINTLE EYE
U	35376094	2	SCREW, HEX M16-2.0 X 120
V	96701750	4	NUT, HEX M16
W	36879203	3	NUT, HEX FLANGE M12
X	35610377	2	CHAIN ASSY
Y	95934907	2	WASHER, FLAT 3/8
Z	54465653	1	BRACKET, RELAY
A1	35300771	2	SCREW, TAPPING M06 -1.0 X 20
A2	36921930	1	BUMPER
A3	35290113	2	SCREW, HEX M16-2.0 X 75
A4	96704630	2	NUT, NYLOCK M16
A5	36881423	1	BAFFLE, INLET
	54529094	1	BAFFLE, INLET (GALVANNEAL)
A6	36883510	1	ANGLE, ROOF TIE
A7	36884708	1	GUARD, TOOL BOX
A8	36787652	11	SCREW, TAPPING M06-1.0 X 12
A9	36884716	1	GUARD, BATTERY
B1	36877793	3	SCREW, HEX FLANGE HD M12 X 40
B2	35148030	4	SCREW, TAPPING 1/2-13 X 1

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/27/00 bd	DESCRIPTION FRAME & RUNNING GEAR	
MODEL NO. P-105WIR - P-185WIR	MANUAL NO. 54437173-03	DATE/REV: 8/00 C

DRAWBAR END



RUNNING GEAR COMPLETE
PART NO. 36880458

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 4/19/96 bd	DESCRIPTION RUNNING GEAR COMPLETE	
MODEL NO. P-100WD/JD P-185WD/JD/IR	MANUAL NO. 54437173-04	DATE/REV: 4/97 A

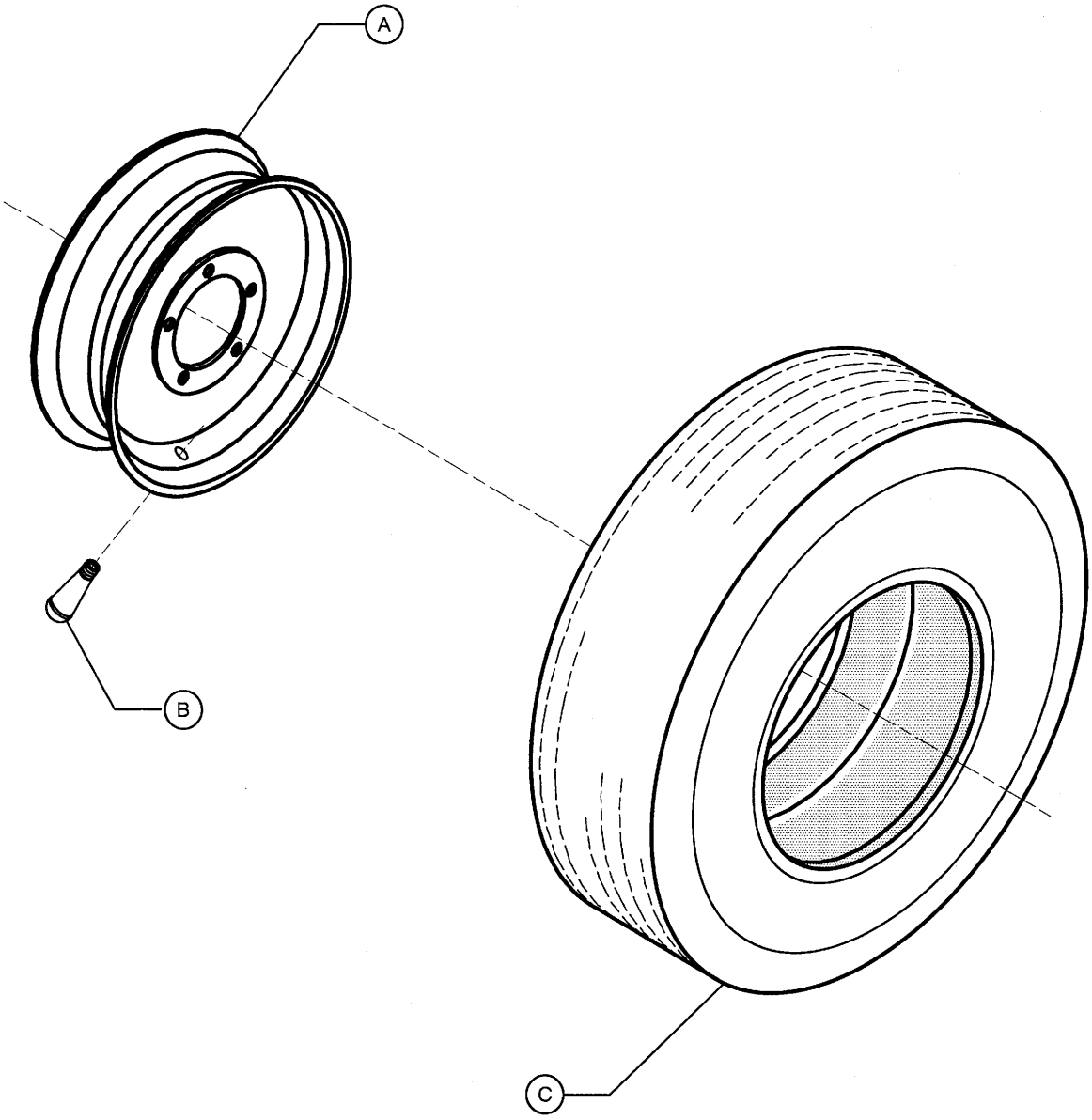
ITEM		C.P.N.	QTY	DESCRIPTION
A		35085398	*	KIT, HUB
B		36879302	4	SCREW, HEX M16-200 X 150
C	*	35315142	2	GREASE SEAL
D	*	35361864	2	BEARING CONE
E	*	35361872	2	BEARING CUP
F	*	35361880	2	HUB
G	*	35361898	10	WHEEL STUD
H	*	35315183	2	BEARING CUP
J	*	35315191	2	BEARING CONE
K		35315209	2	SPINDLE WASHER
L		35315217	2	SPINDLE NUT
M		35315225	2	COTTER PIN
N	*	35315233	2	GREASE CAP
P	*	35315274	10	WHEEL NUT

* ITEMS INCLUDED IN KIT

36880458 RUNNING GEAR - INCLUDES AXLE AND HUBS
(TORSION ARMS AND AXLE NOT AVAILABLE SEPARATELY)

RUNNING GEAR COMPLETE
PART NO. 36880458

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 4/19/96 bd	DESCRIPTION RUNNING GEAR COMPLETE	
MODEL NO. P-100WD/JD P-185WD/JD/IR	MANUAL NO. 54437173-05	DATE/REV: 4/97 A



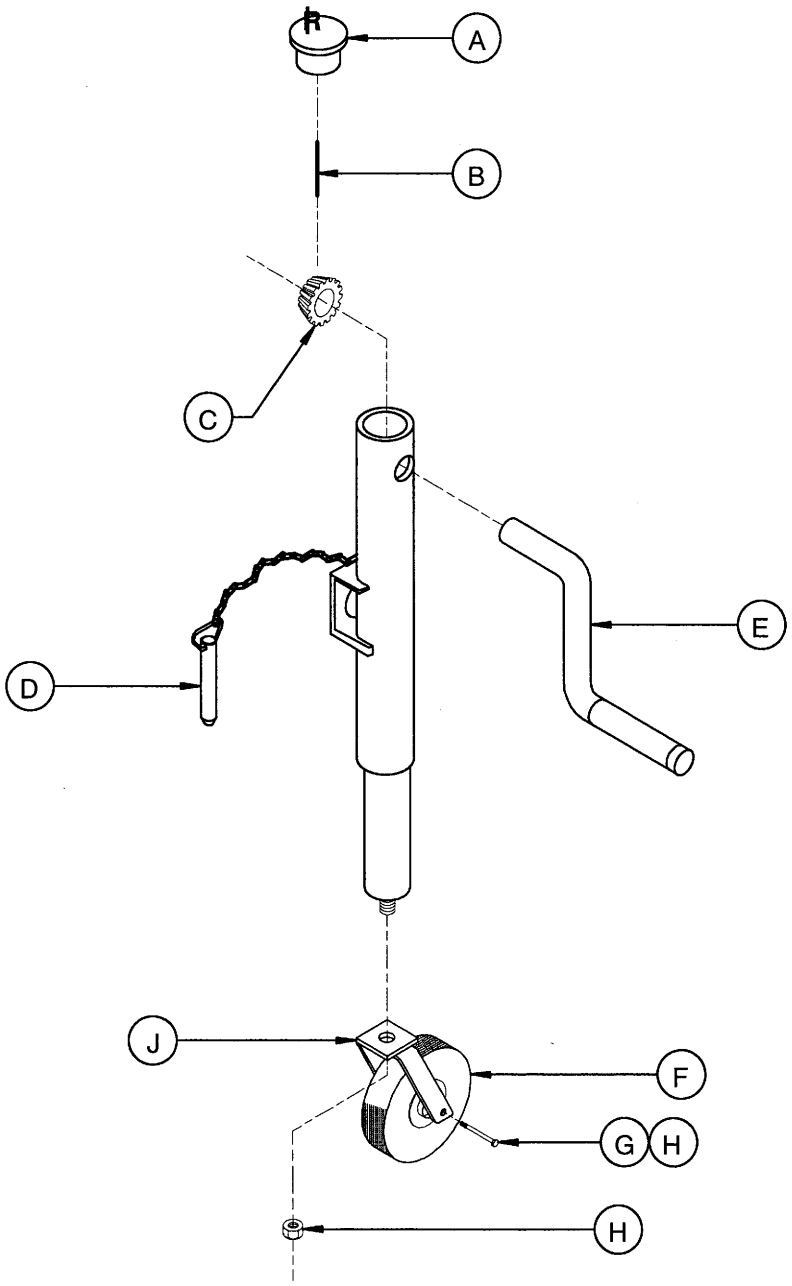
15" TIRE AND WHEEL ASSEMBLY 35046275

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 7/29/93 bd	DESCRIPTION 15" TIRE AND WHEEL ASSY.	
MODEL NO. P-160WD/JD/IR P-185WD/JD/IR	MANUAL NO. 54437173-06	DATE/REV: 3/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	35277706	1	WHEEL
B	35282565	1	VALVE STEM
C	35291988	1	TIRE

15" TIRE AND WHEEL ASSEMBLY 35046275

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 7/29/93 bd	DESCRIPTION 15" TIRE AND WHEEL ASSY.	
MODEL NO. P-160WD/JD/IR P-185WD/JD/IR	MANUAL NO. 54437173-07	DATE/REV: 3/00 C



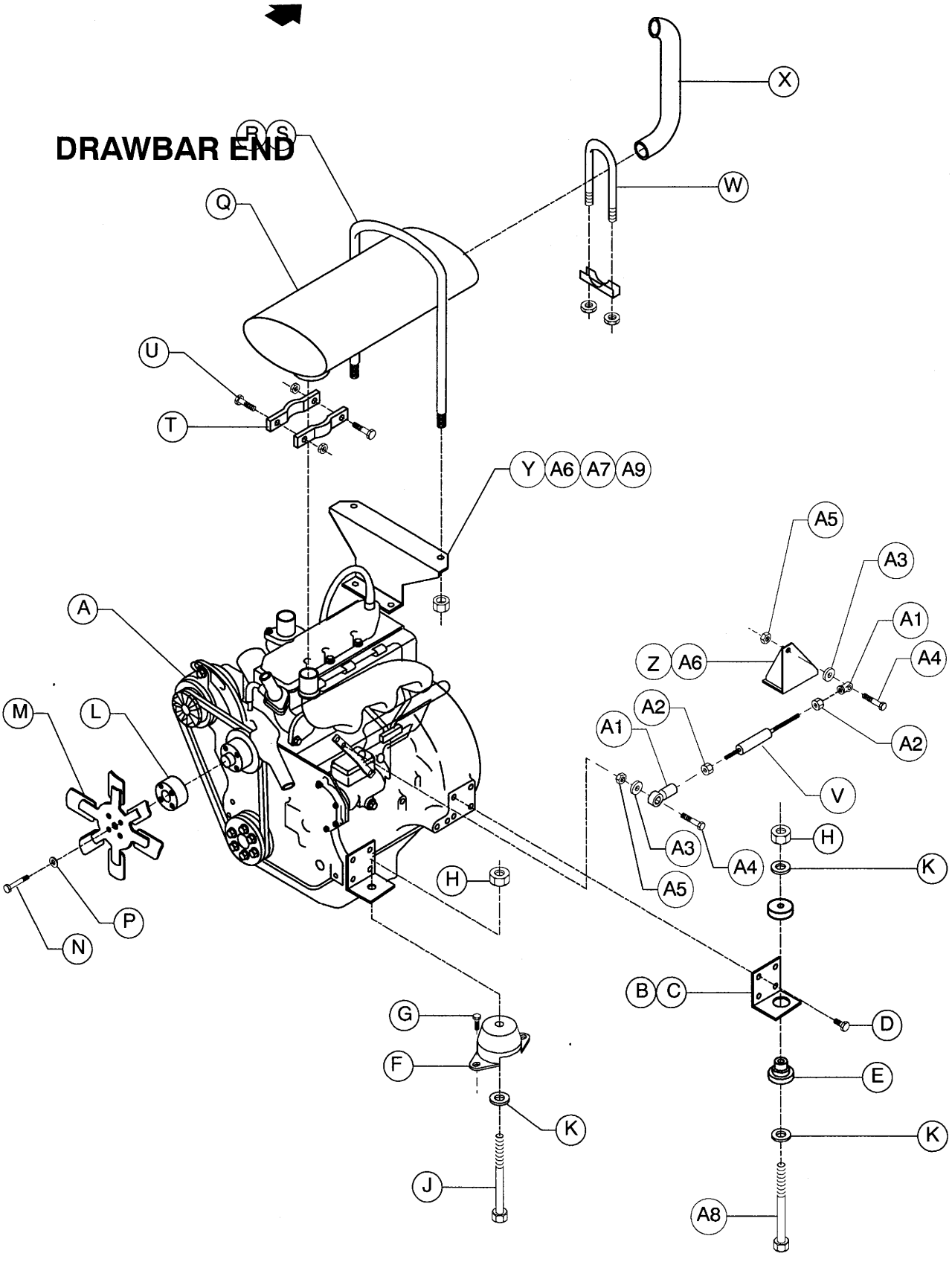
JACK ASSEMBLY 36888709

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/12/97 bd	DESCRIPTION JACK ASSEMBLY	
MODEL NO. P-100WD/JD/IR P-185WD/JD/IR	MANUAL NO. 54437173-08	DATE/REV: 3/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	35392521	1	CAP
B	35392539	1	PIN, ROLL
C	35392547	1	GEAR, DRIVE
D	35392554	1	PLUNGER PIN KIT
E	35392562	1	HANDLE ASSENBLY
F	35392588	1	CASTER WHEEL
G	35392596	1	BOLT, CASTER WHEEL 1/2-13 X 3.18
H	95923348	2	NUT, HEX NYLOCK 1/2-13
J	35392570	1	YOKE, CASTER WHEEL

JACK ASSEMBLY 36888709

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/12/97 bd	DESCRIPTION: JACK ASSEMBLY	
MODEL NO.: P-100WD/JD/IR P-185WD/JD/IR	MANUAL NO.: 54437173-09	DATE/REV: 3/00 D

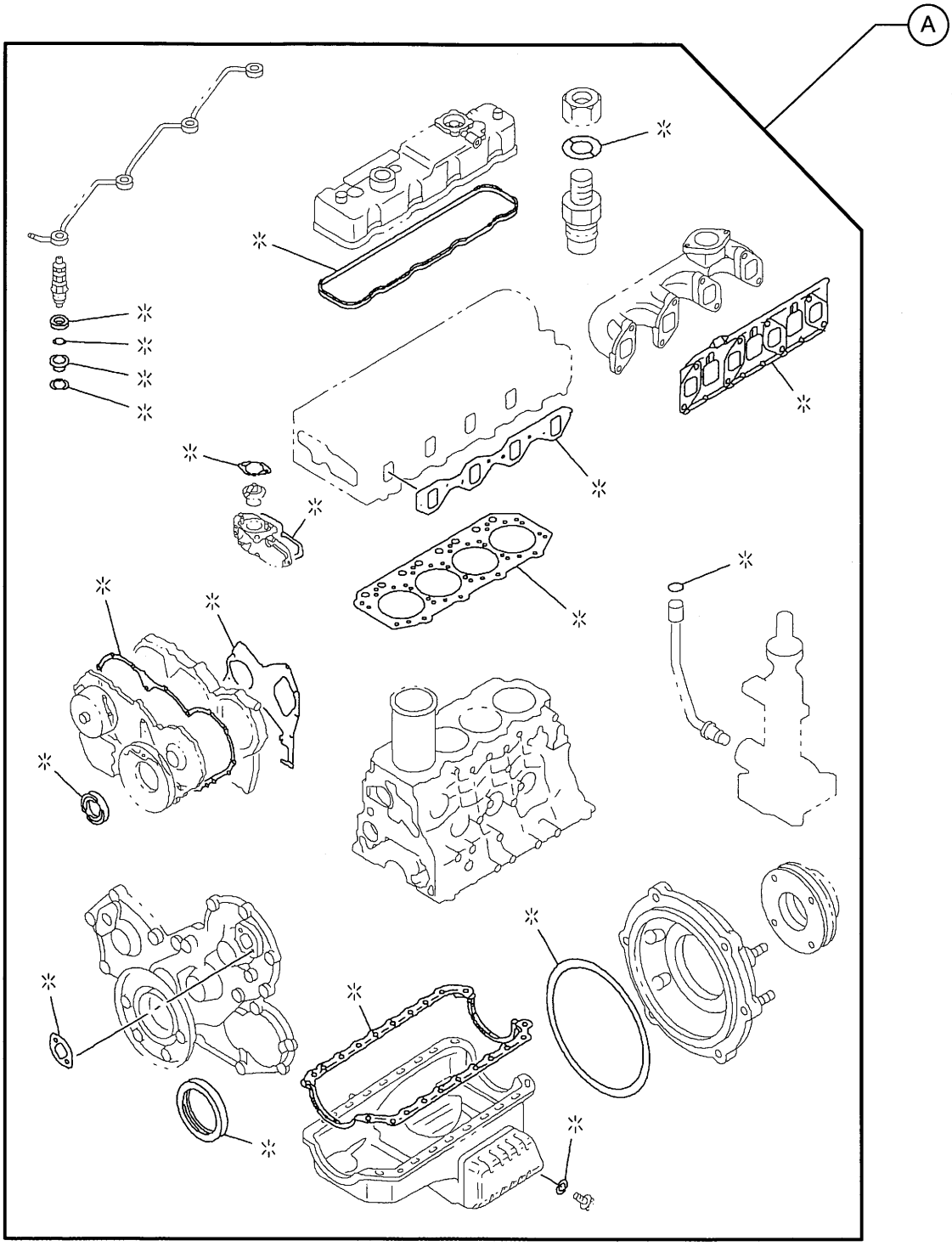


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/25/99 bd	DESCRIPTION ENGINE COMPLETE	
MODEL NO. P-185WIR	MANUAL NO. 54437173-10	DATE/REV: 4/00 D

ITEM	C.P.N.	QTY	DESCRIPTION	
A	54394143	1	ENGINE (P185)	
	54412796	1	ENGINE (XP185)	
B	54438544	1	BRACKET, REAR CURB SIDE ENGINE	
C	54438536	1	BRACKET, REAR STREET SIDE ENGINE	
D	36888055	8	SCREW, HEX FLANGE HD M12-1.75 X 30	
E	54439062	2	ISLOATOR	
F	54429303	2	ISOLATOR	
G	35279025	4	SCREW, TAPPING M08-1.25 X 20	
H	35304047	4	NUT, HEX NYLOCK M12-1.75	
J	96739958	2	SCREW, HEX M12-1.75 X 70	
K	54429295	6	WASHER, SNUBBER	
L	88081641	1	SPACER, FAN	
M	88081252	1	FAN	
N	88080031	4	SCREW, HEX M06-1.0 X 80	
P	88082425	4	WASHER, FLAT ID=6	
Q	36881563	1	MUFFLER	
R	35851377	1	U-BOLT 3/8-16	
S	95923322	2	NUT, HEX LOCK 3/8-16	
T	36796845	2	CLAMP, MUFFLER	
U	95935227	2	SCREW, HEX 5/16-18 X 1 1/4	
V	54466859	1	CYLINDER, AIR	
W	35209048	1	CLAMP, SADDLE 2 1/2	
X	36775690	1	PIPE, EXHAUST TAIL	
Y	54389622	1	BRACKET, MUFFLER	
Z	54389606	1	BRACKET, SPEED CONTROL	
A1	35328467	2	BEARING, ROD END 5/16-24	
A2	95935086	2	NUT, 5/16-24	
A3	95935029	2	WASHER, FLAT	
A4	36771178	2	SCREW, HEX M06-1.0 X 30	**{PRIOR TO S/N 310178}**
	96701461	2	SCREW, HEX M06-1.0 X 30	**{BEGIN WITH S/N 310178}**
A5	36898104	2	NUT, HEX FLANGE M06-1.0	**{PRIOR TO S/N 310178}**
	36769032	2	NUT, HEX FLANGE M06-1.0	**{BEGIN WITH S/N 310178}**
A6	96702279	4	SCREW, HEX M10-1.50 X 20	**{PRIOR TO S/N 310178}**
	35375815	4	NUT, HEX M10-1.5	**{BEGIN WITH S/N 310178}**
A7	95935037	2	WASHER, FLAT	
A8	36740782	2	SCREW, HEX M12-1.75 X 80	**{BEGIN WITH S/N 310990}**
A9	95937413	4	WASHER, LOCK	**{BEGIN WITH S/N 309383}**

ENGINE OIL FILTER ELEMENT 54381314
ENGINE FUEL FILTER ELEMENT 54381306
FUEL / WATER SEPARATOR FILTER 54468178

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/26/99 bd	DESCRIPTION: ENGINE COMPLETE	
MODEL NO.: P-185WIR	MANUAL NO.: 54437173-11	DATE/REV: 1/02 E

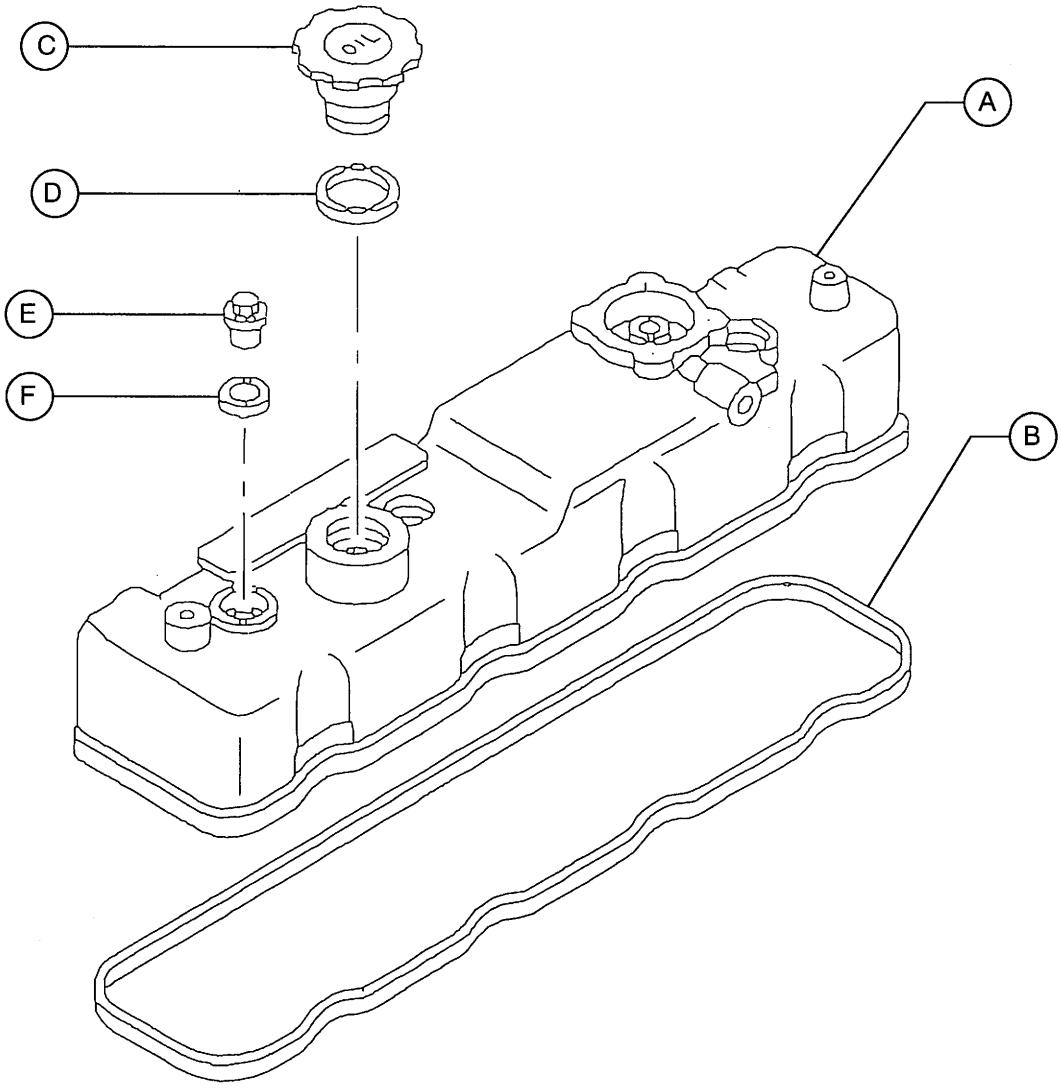


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 12/17/99 bd	DESCRIPTION GASKET SET	
MODEL NO. P-185WIR	MANUAL NO. 54437173-12	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	54385968		SET, GASKET (P185)
	49849599		SET, GASKET (XP185)

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 12/17/99 bd	DESCRIPTION GASKET SET	
MODEL NO. P-185WIR	MANUAL NO. 54437173-13	DATE/REV: 1/02 C

FRONT OF ENGINE



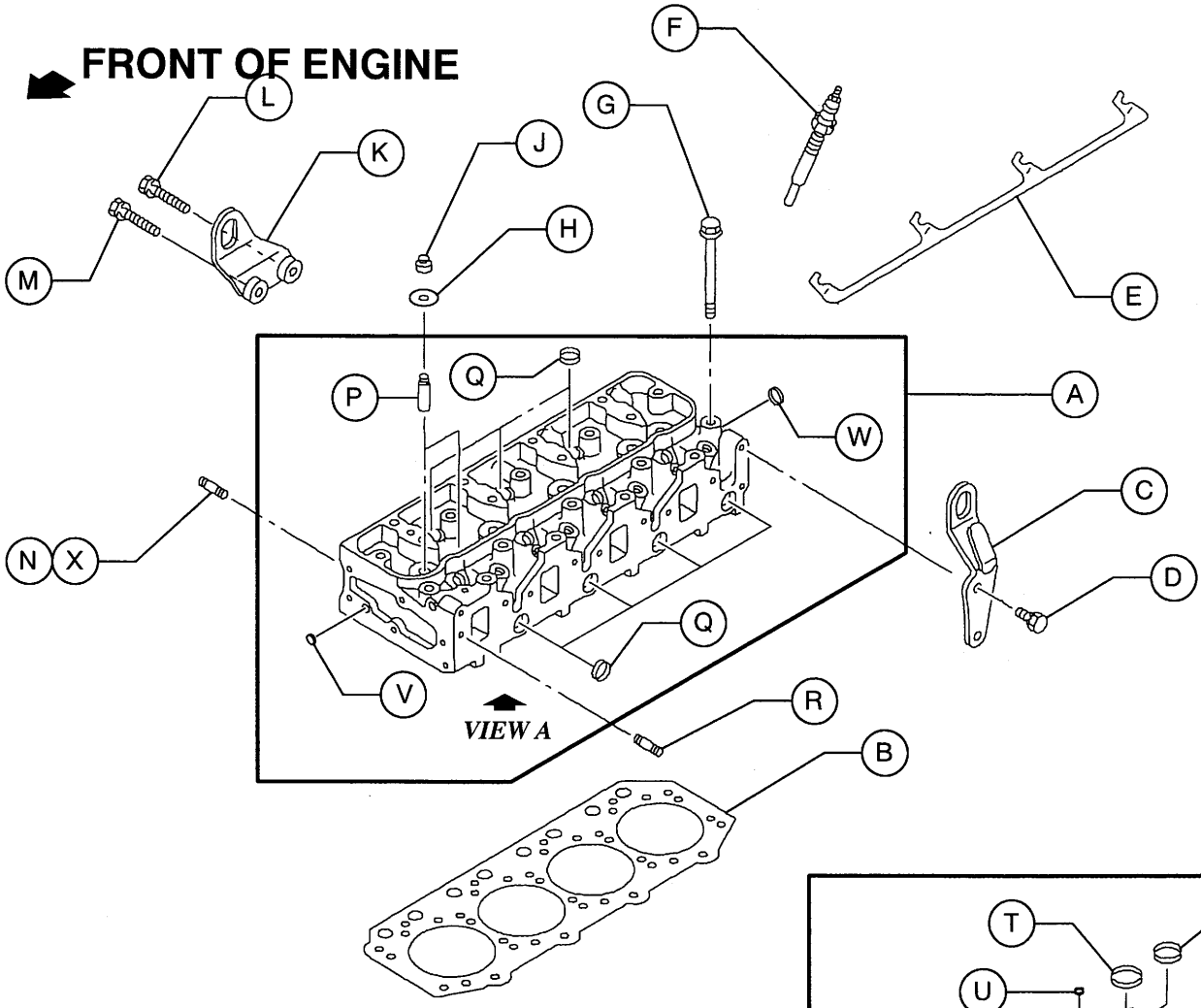
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 12/20/99 bd	DESCRIPTION CYL HEAD COVER	
MODEL NO. P-185WIR	MANUAL NO. 54437173-14	DATE/REV: 3/00 B

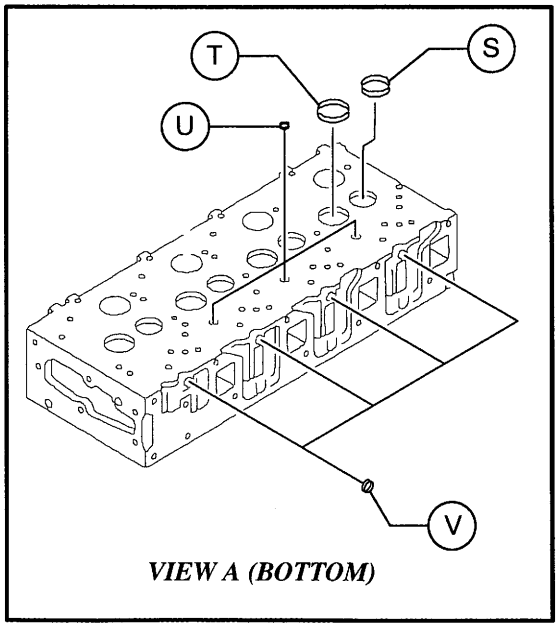
ITEM	C.P.N.	QTY	DESCRIPTION
A	88081740	1	COVER, CYLINDER HEAD
B	** 54386057	1	GASKET, HEAD TO COVER
C	54385984	1	CAP, OIL FILLER
D	* 88080767	1	GASKET, OIL FILLER
E	88080999	3	NUT, CAP HEAD COVER
F	** 88081047	3	GASKET, HEAD COVER

* included with item C, OIL FILLER CAP

** included in GASKET SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 12/20/99 bd	DESCRIPTION: CYL HEAD COVER	
MODEL NO.: P-185WIR	MANUAL NO.: 54437173-15	DATE/REV: 3/00 B





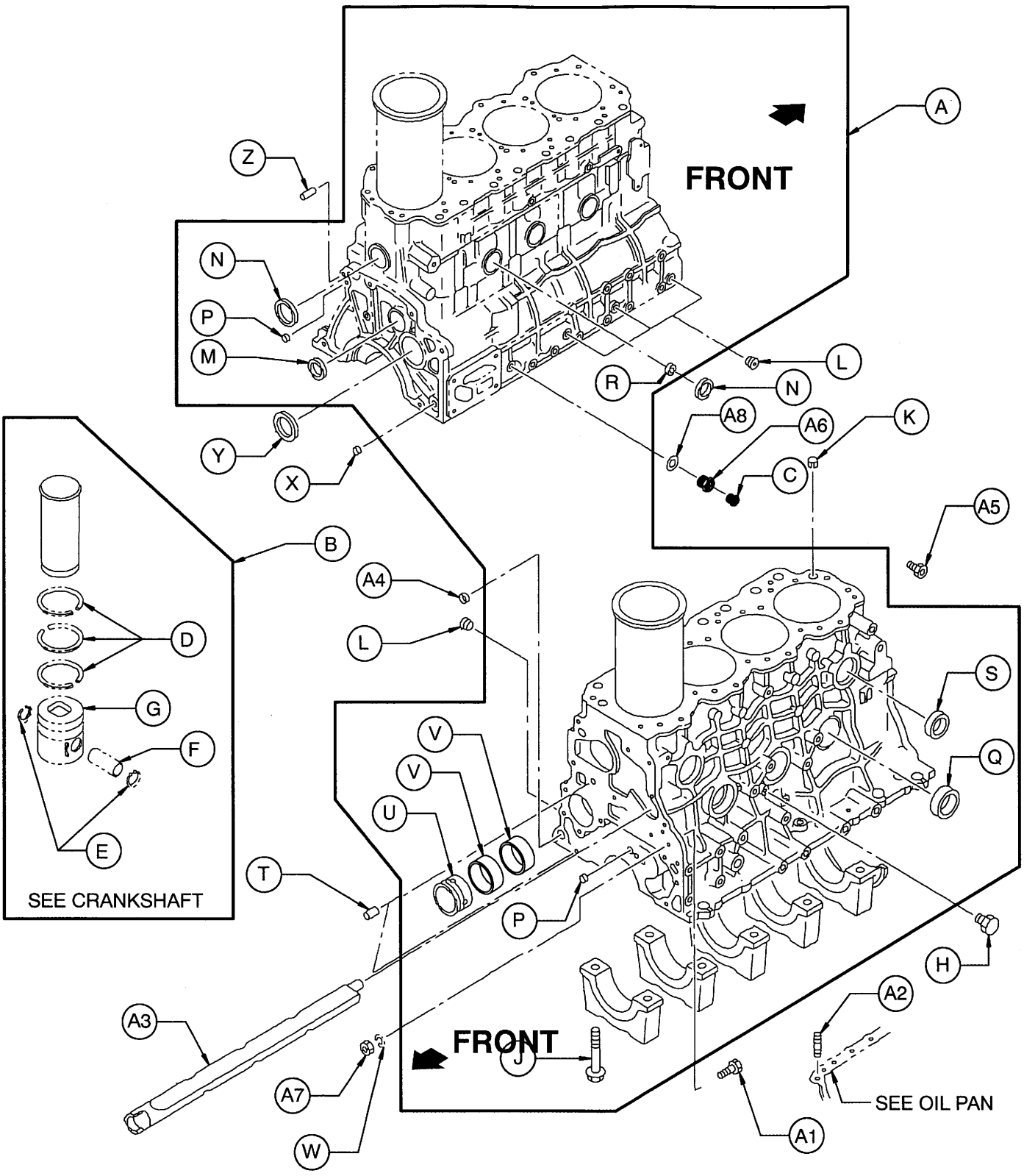
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 12/20/99 bd	DESCRIPTION CYLINDER HEAD	
MODEL NO. P-185WIR	MANUAL NO. 54437173-16	DATE/REV: 1/02 C

ITEM	C.P.N.	QTY	DESCRIPTION	
A	88081781	1	CYLINDER HEAD ASSEMBLY (P185)	
	49849607	1	CYLINDER HEAD ASSEMBLY (XP185)	
B	** 88081674	1	GASKET, CYLINDER HEAD T=1.6	REF. 1 HOLE
	** 88081682	1	GASKET, CYLINDER HEAD T=1.65	REF. 2 HOLES
	** 54386032	1	GASKET, CYLINDER HEAD T=1.7	REF. 3 HOLES
C	88081039	1	HANGER, REAR ENGINE	
D	88080080	2	BOLT, FLANGE M8-1.25 X 20	
E	88080965	1	CONNECTOR, GLOW PLUG	
F	54385893	4	PLUG, GLOW	
G	88081476	18	BOLT, CYLINDER HEAD TO BLOCK	
H	** 88080627	8	SEAT, SPRING OD 34	
J	88081815	8	SEAT, OIL VALVE STEM	
K	88081427	1	HANGER, FRONT ENGINE	
L	88080098	1	BOLT, M8-1.25 X 25	
M	88080122	1	BOLT, M10-1.75 X 30	
N	88081153	4	STUD, M8-1.25 X 116 (P185)	
	49840614	1	STUD, M8-1.25 X 75 (XP185)	
P	* 88080601	8	GUIDE, VALVE	
Q	* 88081906	7	CUP, SEALING CYLINDER HEAD	
R	88082276	2	STUD, M8-1.25 X 25	
S	* 88080817	4	SEAT, VALVE EXHAUST (P185)	
	* 49849623	4	SEAT, VALVE EXHAUST (XP185)	
T	* 88080809	4	SEAT, VALVE INTAKE (P185)	
	* 49849615	4	SEAT, VALVE INTAKE (XP185)	
U	* 88080544	3	CUP, SEALING OD 16	
V	* 88080486	5	CUP, SEALING OD 12.3	
W	* 88080353	1	CUP, SEALING OD 45	
X	49840622	4	STUD, M8-1.25 X 120 (XP185)	

* included in item A, CYLINDER HEAD ASSEMBLY

** included in GASKET SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 12/20/99 bd	DESCRIPTION CYLINDER HEAD	
MODEL NO. P-185WIR	MANUAL NO. 54437173-17	DATE/REV: 4/02 E

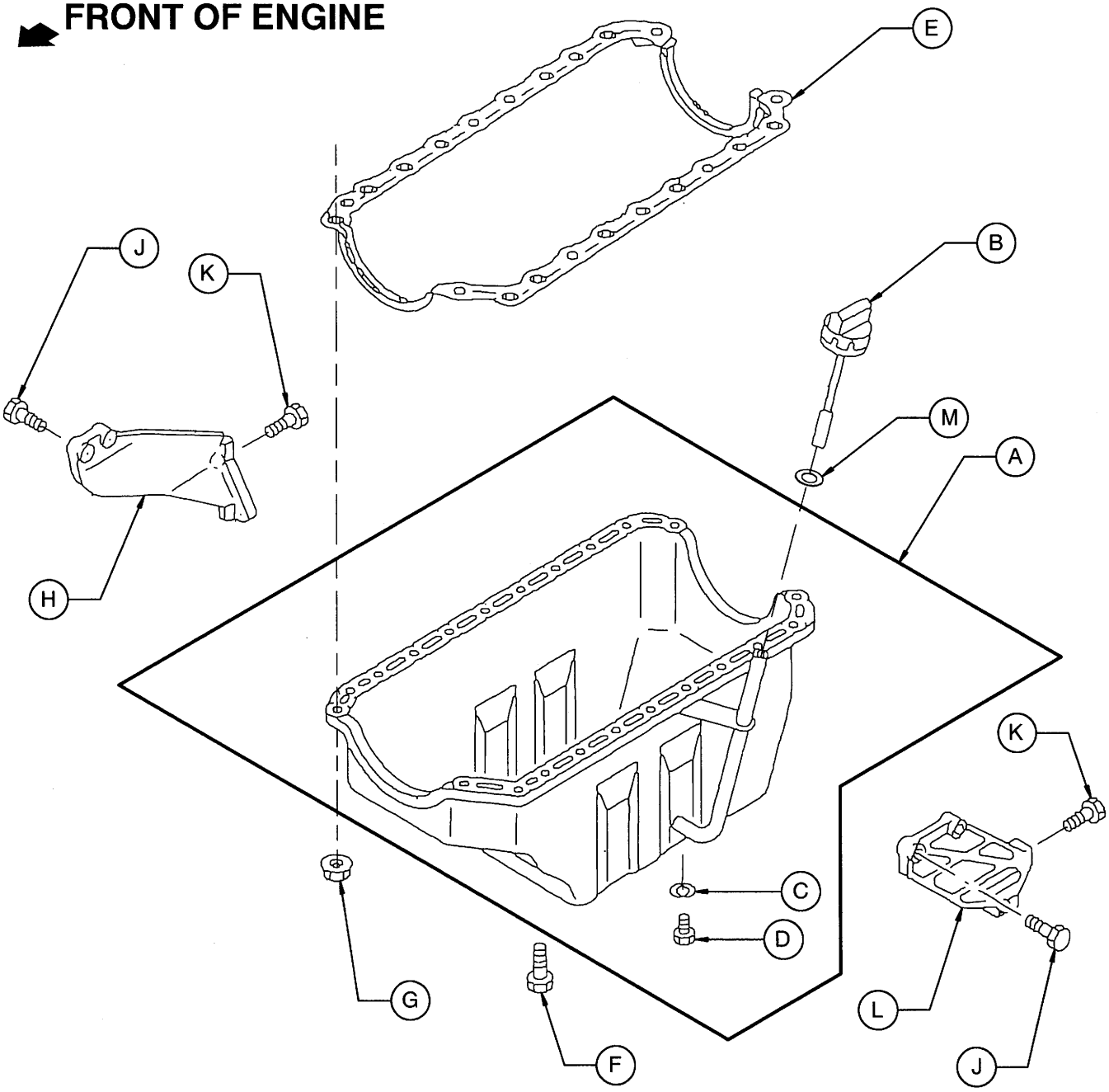


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 12/21/99 bc	DESCRIPTION CYLINDER BLOCK	
MODEL NO. P-185WIR	MANUAL NO. 54437173-18	DATE/REV: 8/00 B

ITEM		C.P.N.	QTY	DESCRIPTION
A		88081765	1	CYLINDER BLOCK ASSEMBLY
B		88080676	4	SET, GRADE 1 CYLINDER LINER (P185)
		88080684	4	SET, GRADE 2 CYLINDER LINER (P185)
		88080692	4	SET, GRADE 3 CYLINDER LINER (P185)
		88080700	4	SET, GRADE 4 CYLINDER LINER (P185)
		49849631	4	SET, GRADE 1 CYLINDER LINER (XP185)
		49849649	4	SET, GRADE 2 CYLINDER LINER (XP185)
		49840002	4	SET, GRADE 3 CYLINDER LINER (XP185)
		49840010	4	SET, GRADE 4 CYLINDER LINER (XP185)
C		36878379	1	SWITCH, OIL PRESSURE
D	*	88081856	4	SET, PISTON RING
E	*	88081518	8	RING, SNAP
F	*	88081492	4	PIN, PISTON
G	*	88081963	4	PISTON, STANDARD A (P185)
	*	88081971	4	PISTON, STANDARD C (P185)
	*	49840036	4	PISTON, STANDARD A (XP185)
	*	49840044	4	PISTON, STANDARD C (XP185)
H		88082664	1	PLUG, WATER DRAIN 1/4 NPT
J		88081344	10	BOLT, M14-2.0 X 89
K		88081443	2	DOWEL, CYLINDER BLOCK TO HEAD
L		88080379	3	PLUG, PT 1/8 NPT
M		88080577	1	CUP, REAR SEALING OD 38
N		88080585	4	CUP, SEALING OD 36
P		88080486	2	CUP, SEALING OD 12.3
Q		88080353	3	CUP, SEALING OD 45
R		88080551	3	CUP, SEALING OD 18
S		88080569	2	CUP, SEALING OD 32
T		88082326	2	PIN, STRAIGHT 10 X 20
U		88081294	1	BEARING, FRONT CAMSHAFT
V		49849292	2	BEARING, CENTER CAMSHAFT
W		88082441	1	WASHER, ID 10.2
X		88080544	2	CUP, SEALING OD 16
Y		88081070	1	CUP, SEALING OD 56
Z		88082342	1	PIN, STRAIGHT 10 X 32
A1		88082615	1	BOLT, REAMER
A2		88080858	8	STUD, OIL PAN
A3		88081484	1	DUCT, WATER BLOCK
A4		88080536	1	CUP, SEALING OD 15.6
A5		88080791	1	NIPPLE, OIL FEED
A6		49849300	1	ADAPTER, OIL PRESSURE SWITCH (P185)
		49849573	1	ADAPTER, OIL PRESSURE SWITCH (XP185)
A7		88082409	1	NUT, REAMER BOLT M10
A8		88082565	1	GASKET, BLOCK SIDE PLUG

* included in item A, CYLINDER LINER SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 12/21/99 bd	DESCRIPTION CYLINDER BLOCK	
MODEL NO. P-160WIR - XP-185WIR	MANUAL NO. 54437173-19	DATE/REV: 1/02 D

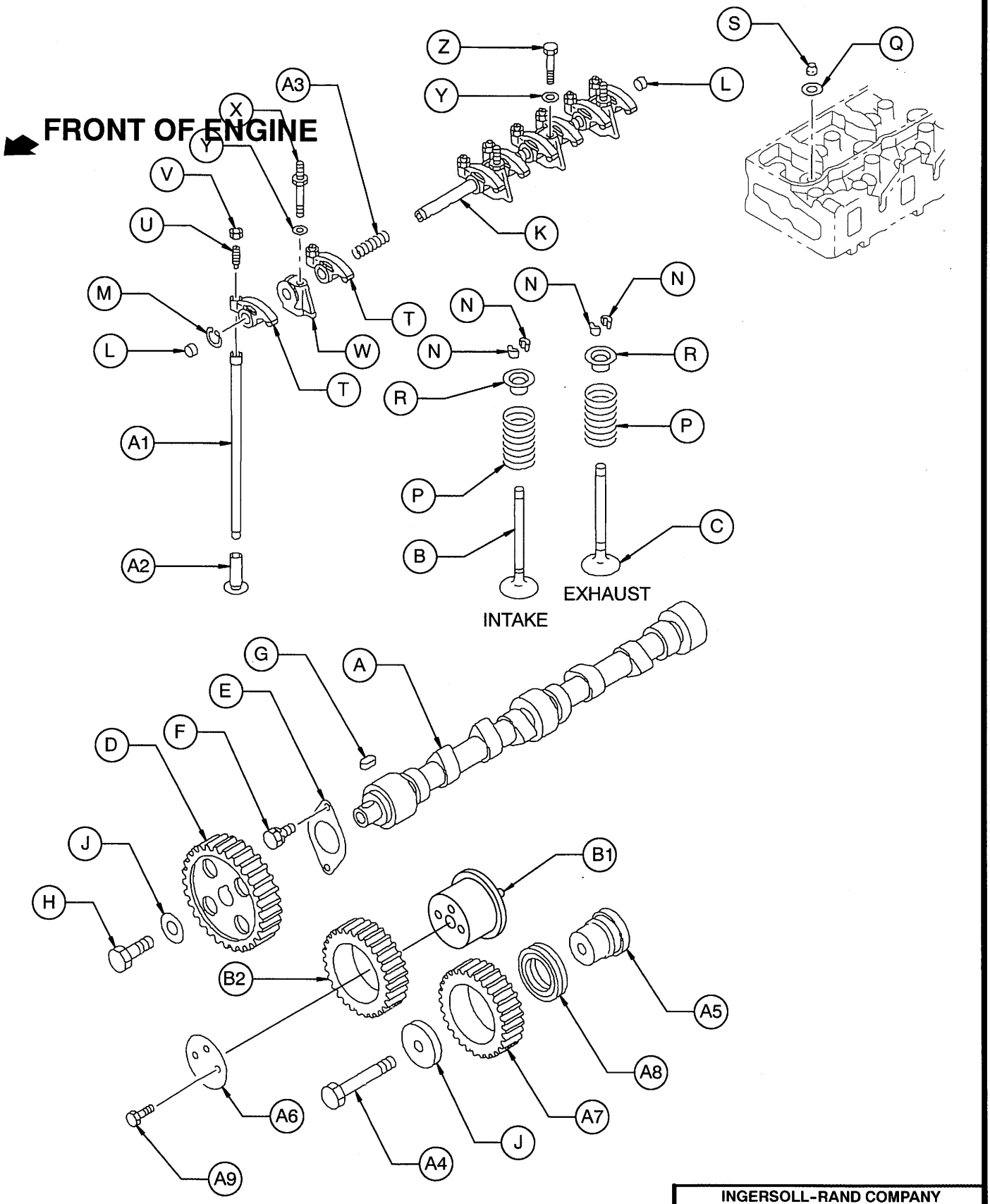


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/04/00 bd	DESCRIPTION OIL PAN	
MODEL NO. P-185WIR	MANUAL NO. 54437173-20	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	88082136	1	OIL PAN ASSEMBLY (P185)
	49840028	1	OIL PAN ASSEMBLY (XP185)
B	88081575	1	GAUGE, OIL LEVEL
C	* 88080395	1	GASKET, DRAIN PLUG
D	88082656	1	PLUG, OIL DRAIN
E	* 88081732	1	GASKET, OIL PAN TO CYL BLOCK
F	88080841	14	BOLT, OIL PAN
G	88080312	12	NUT, OIL PAN
H	88082029	1	STIFFNER, OIL PAN
J	88080148	2	BOLT, STIFFNER OIL PAN M10-1.5 X 40 FLG HEAD
K	88080155	2	BOLT, STIFFNER OIL PAN M12-1.75 X 30 FLG HEAD
L	88082011	1	STIFFNER, OIL PAN
M	49849326	1	GASKET, OIL LEVEL GAUGE

* included in GASKET SET

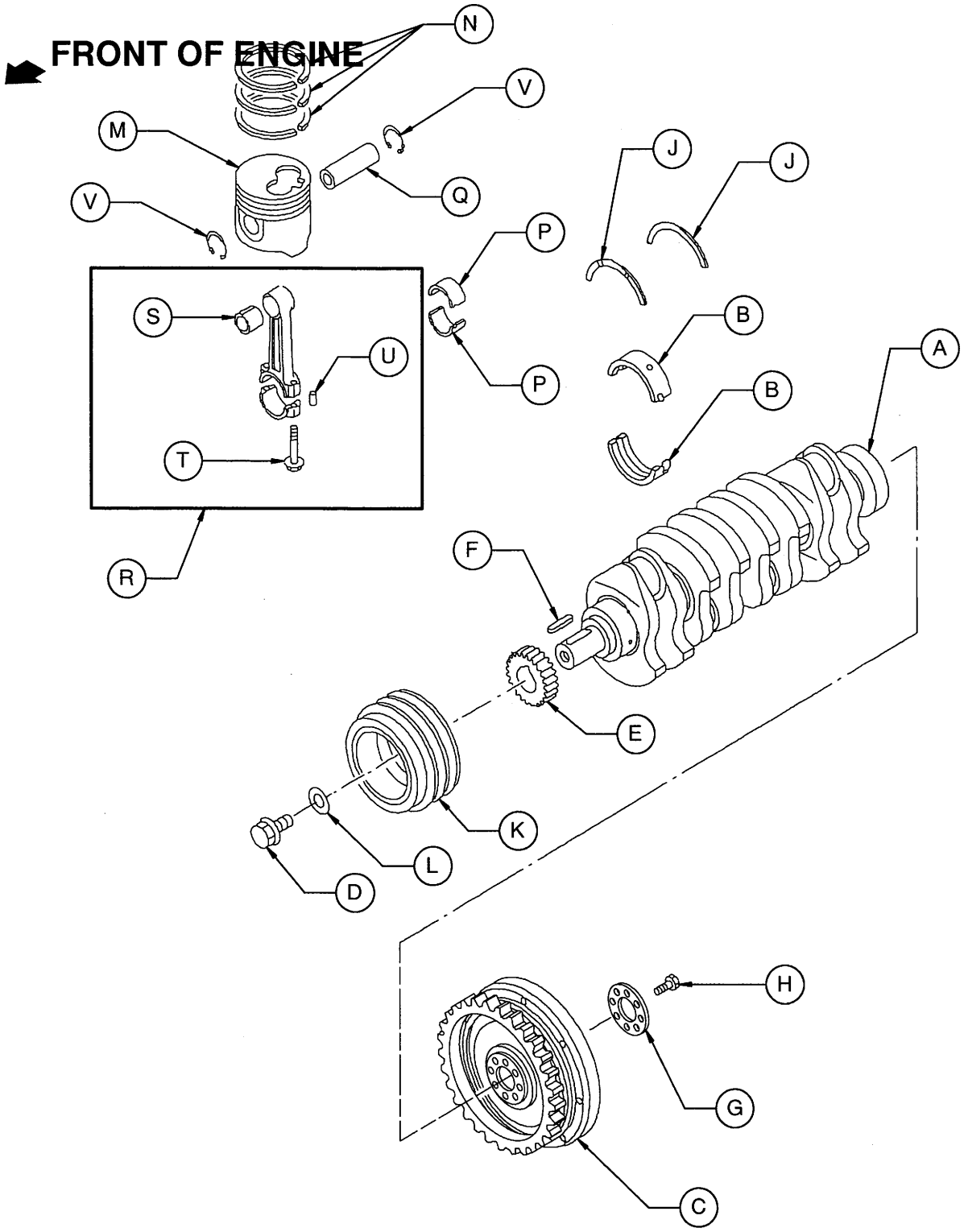
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/04/00 bd	DESCRIPTION OIL PAN	
MODEL NO. P-185WIR	MANUAL NO. 54437173-21	DATE/REV: 4/02 E



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/04/00 bd	DESCRIPTION: CAMSHAFT & VALVES	
MODEL NO.: P-185WIR	MANUAL NO.: 54437173-22	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	88080783	1	CAMSHAFT
B	88080825	4	VALVE, INTAKE
C	88081658	4	VALVE, EXHAUST
D	88081138	1	GEAR, CAMSHAFT
E	88080742	1	PLATE, THRUST
F	88080197	2	BOLT, M8-1.25 X 16 w/LK WASHER
G	88082300	1	KEY, CAMSHAFT
H	88080429	1	BOLT, CAM PULLEY M12-1.75 X 47
J	88080619	2	WASHER
K	88080940	1	SHAFT, ROCKER ARM
L	88082680	2	PLUG, ROCKER SHAFT END
M	88082516	2	RING, ROCKER ARM SNAP
N	88080635	16	COLLAR, SPLIT
P	88081096	8	SPRING, OUTER VALVE
Q	88080627	8	SEAT, SPRING OD 34
R	88080833	8	SEAT, SPRING OD 32.8
S	88081815	8	SEAT, OIL VALVE STEM
T	88080924	8	ARM, ROCKER
U	88080908	8	BOLT, M8-1.25 X 30
V	88082391	8	NUT, LOCK ADJUST SCREW M8
W	88080932	4	BRACKET, ROCKER SHAFT
X	88081377	3	BOLT, BRACKET
Y	88082482	4	WASHER, ROCKER ARM FIX
Z	88081351	1	BOLT, M10-1.5 X 60
A1	88081716	8	ROD, PUSH
A2	88081419	8	TAPPET, VALVE
A3	88081369	3	SPRING, ROCKER SHAFT
A4	88080718	1	BOLT, SHAFT IDLE
A5	88080726	1	SHAFT, IDLE GEAR
A6	88080874	1	COLLAR, IDLE GEAR THRUST
A7	88081849	1	GEAR, IDLE
A8	88080734	1	BEARING, IDLER SHAFT
A9	88080437	2	BOLT, M8-1.25 X 55
B1	49849334	1	SAHFT, IDLER GEAR
B2	49849342	1	GEAR, IDLE

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/04/00 bd	DESCRIPTION CAMSHAFT & VALVES	
MODEL NO. P-185WIR	MANUAL NO. 54437173-23	DATE/REV: 3/00 B

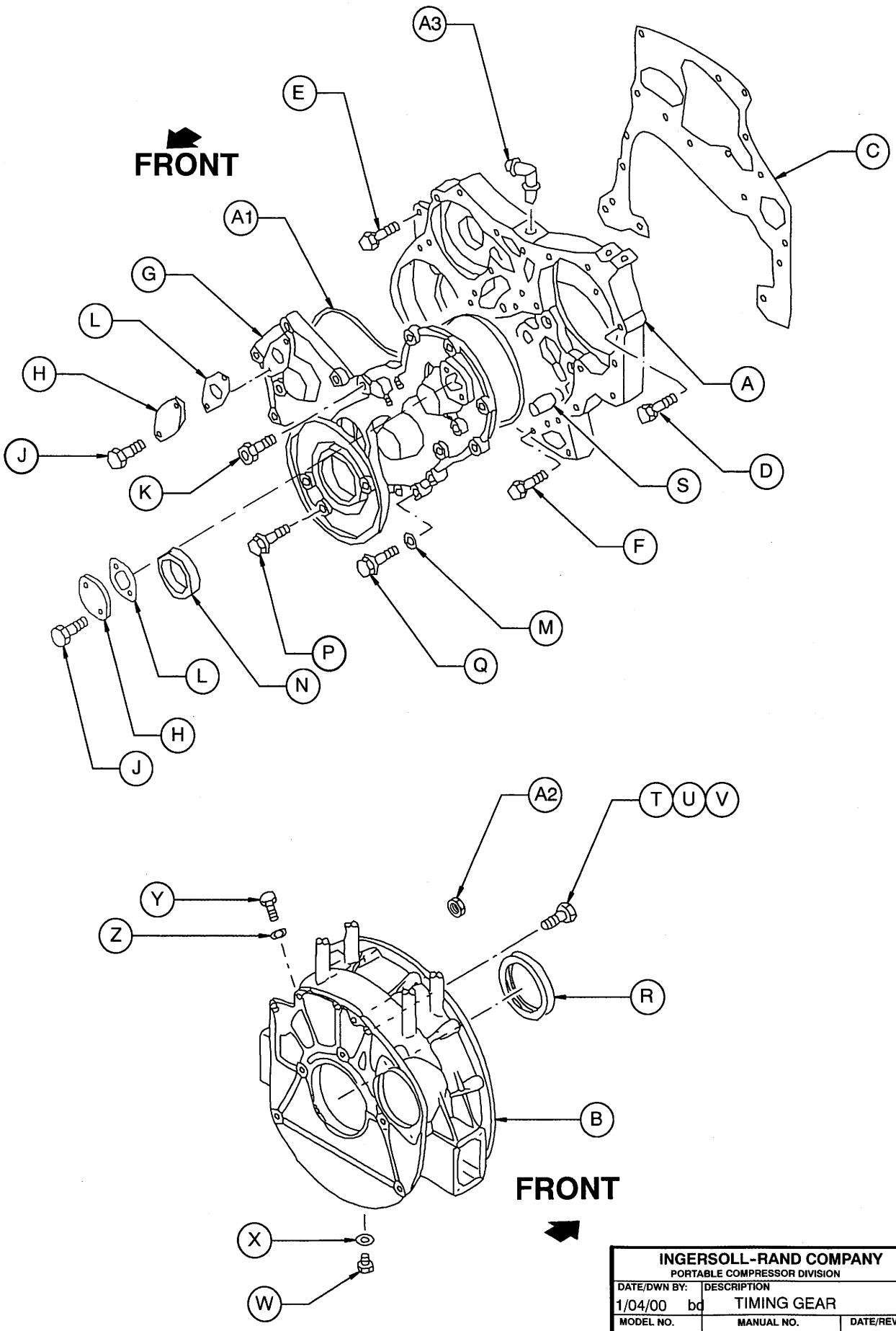


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/04/00 bd	DESCRIPTION CRANKSHAFT & PISTONS	
MODEL NO. P-185WIR	MANUAL NO. 54437173-24	DATE/REV: 3/00 B

ITEM		C.P.N.	QTY	DESCRIPTION
A		88081567	1	CRANKSHAFT
B		88081617	5	BEARING, CRANKSHAFT MAIN BLUE
		88081625	5	BEARING, CRANKSHAFT MAIN BLACK
		88081633	5	BEARING, CRANKSHAFT MAIN GREEN
C		88082003	1	FLYWHEEL
D		88080452	1	BOLT, M16-2.0 X 43
E		88081120	1	GEAR, CRANKSHAFT
F		88082318	1	KEY, CRANKSHAFT FEATHER
G		88080882	1	WASHER, FLYWHEEL
H		88081310	8	BOLT, M13 X 40.5
J		88081450	2	WASHER, CRANKSHAFT THRUST
K		88082169	1	PULLEY, CRANKSHAFT DAMPER
L		88080478	1	WASHER, CRANKSHAFT PULLEY
M	*	88081963	4	PISTON, STANDARD A (P185)
	*	88081971	4	PISTON, STANDARD C (P185)
	*	49840036	4	PISTON, STANDARD A (XP185)
	*	49840044	4	PISTON, STANDARD C (XP185)
N	*	88081856	4	SET, PISTON RING
P		88081112	4	BEARING, CONNECTING ROD
Q		88081492	4	PIN, PISTON
R		88081609	4	CONNECTING ROD ASSEMBLY
S	*	88081500	4	BUSHING, CONNECTING ROD
T		88081591	8	BOLT, M11-1.75 X 44.5
U		88082334	8	PIN, CONNECTING ROD BIG END
V	*	88081518	8	RING, PISTON PIN SNAP

* included in CYLINDER LINER SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/04/00 bd	DESCRIPTION CRANKSHAFT & PISTONS	
MODEL NO. P-185WIR	MANUAL NO. 54437173-25	DATE/REV: 1/02 C



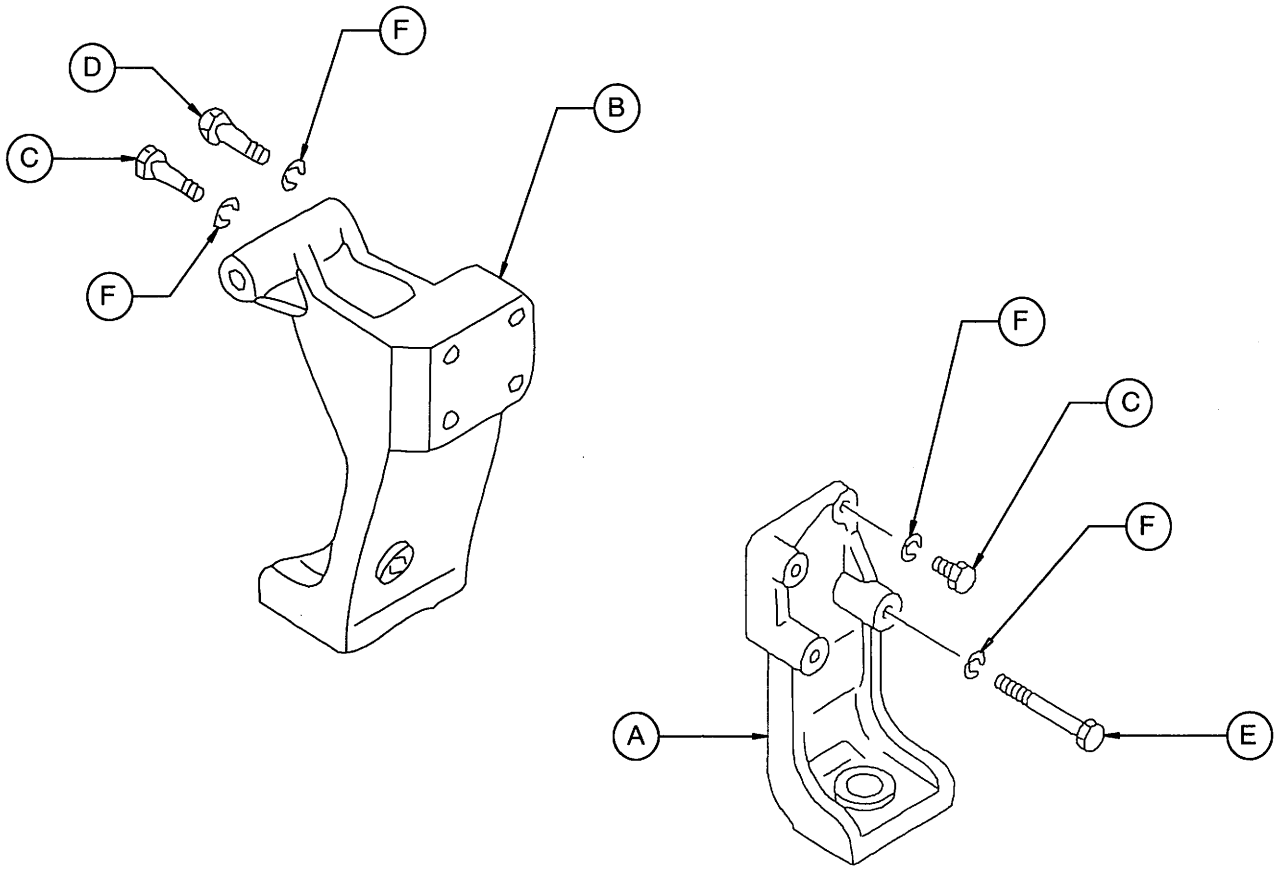
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/04/00 bd	DESCRIPTION: TIMING GEAR	
MODEL NO.: P-185WIR	MANUAL NO.: 54437173-26	DATE/REV: 1/02 C

ITEM		C.P.N.	QTY	DESCRIPTION
A		88081948	1	COVER, TIMING GEAR (P185)
		49840051	1	COVER, TIMING GEAR (XP185)
B		88081724	1	HOUSING, FLYWHEEL
C	*	88081799	1	GASKET, GEAR CASE TO CYL BLOCK
D		88080213	3	BOLT, M8-1.25 X 20 w/LK WASHER
E		88080205	3	BOLT, M8-1.25 X 18 w/LK WASHER
F		88080254	2	BOLT, M8-1.25 X 45 w/LK WASHER
G		88082177	1	COVER, GEAR CASE
H		88080593	2	COVER, TIMING CHECK HOLE
J		88080023	4	BOLT, M6-1.0 X 12 FLANGE
K		88082730	1	BOLT, M12-1.75 X 55 HEX SOCKET
L	*	88081807	2	GASKET, COVER
M		88082474	1	WASHER, PL COVER
N	*	88080510	1	SEAL, CRANKSHAFT FRONT OIL
P		88080064	8	BOLT, M8-1.25 X 30 FLANGE
Q		88080072	7	BOLT, M8-1.25 X 60 FLANGE
R	*	88081708	1	SEAL, CRANKSHAFT REAR OIL
S		88082326	2	PIN STRAIGHT 10 X 20
T		88080270	2	BOLT, M12-1.75 X 30 w/LK WASHER
U		88080262	3	BOLT, M10-1.75 X 30 w/LK WASHER
V		88080445	3	BOLT, M12-1.75 X 25
W		88082748	1	PLUG, M16-2.0 X 12
X		88082573	1	GASKET, PLUG
Y		88080387	1	PLUG, SENSOR HOLE
Z		88082581	1	GASKET, HOUSING PLUG
A1	*	88080866	1	GASKET, COVER
A2		88080320	2	NUT, HOUSING
A3		22099691	1	ELBOW, WATER PIPE (XP185)

* included in GASKET SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/05/00 bd	DESCRIPTION TIMING GEAR	
MODEL NO. P-185WIR	MANUAL NO. 54437173-27	DATE/REV: 1/02 D

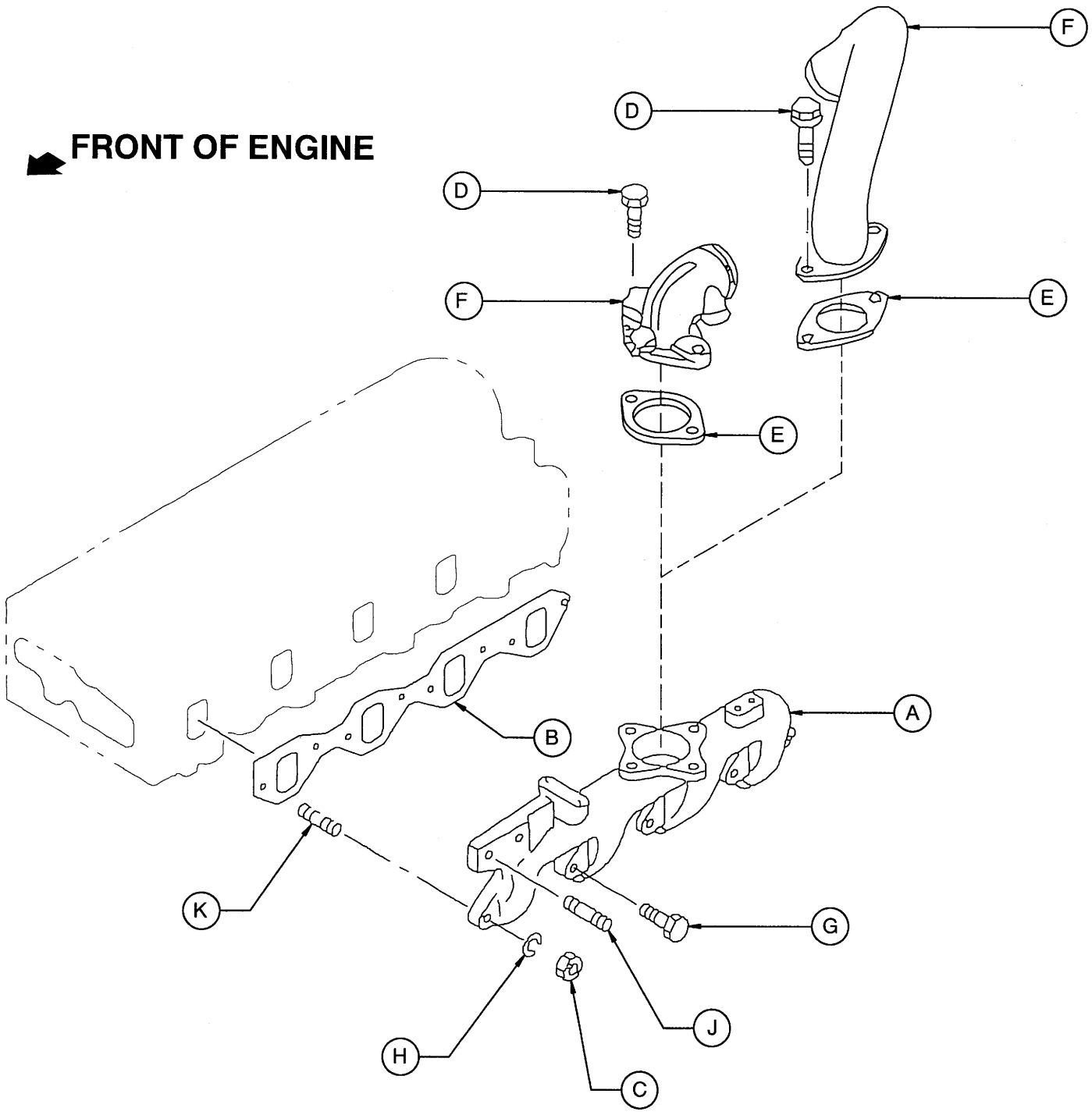
FRONT OF ENGINE



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/05/00 bd	DESCRIPTION ENGINE MOUNTS	
MODEL NO. P-185WIR	MANUAL NO. 54437173-28	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	88082060	1	MOUNT, LH ENGINE
B	88082078	1	MOUNT, RH ENGINE
C	88082201	4	BOLT, M10-1.75 X 60
D	88082193	2	BOLT, M10-1.75 X 45
E	49849359	2	BOLT, M10-1.75 X 80
F	88082441	8	WASHER, ID 10.2

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/05/00 bd	DESCRIPTION ENGINE MOUNTS	
MODEL NO. P-185WIR	MANUAL NO. 54437173-29	DATE/REV: 3/00 B



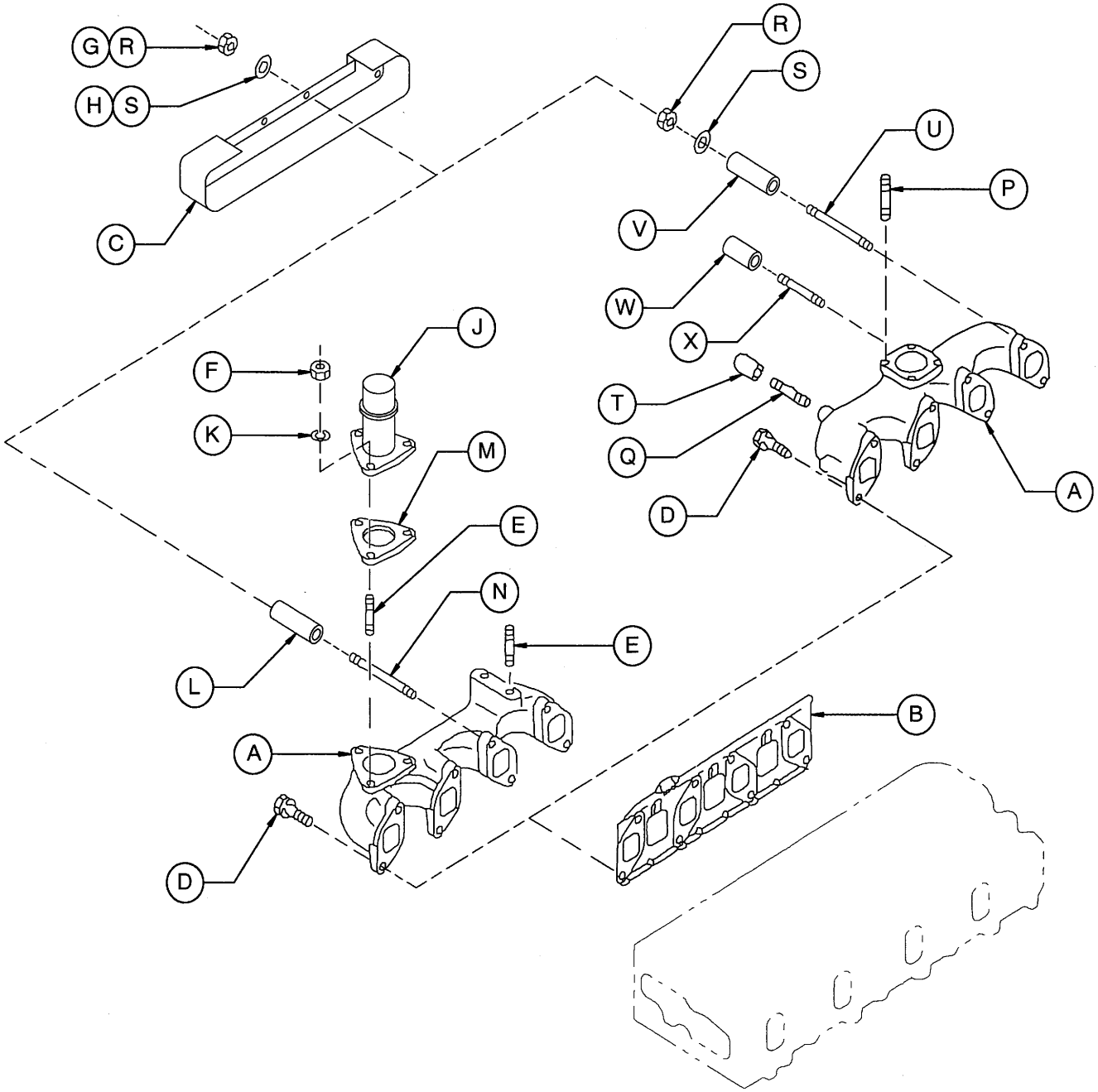
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/05/00 bd	DESCRIPTION INTAKE MANIFOLD	
MODEL NO. P-185WIR	MANUAL NO. 54437173-30	DATE/REV: 1/02 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	88081542	1	MANIFOLD, INTAKE
B	* 88081690	1	GASKET, INTAKE MANIFOLD TO HEAD
C	88080312	2	NUT, M8
D	88080114	2	BOLT, M10-1.75 X 25
E	* 88081559	1	GASKET, INTAKE PIPE
F	88080916	1	PIPE, INTAKE (P185)
	49840150	1	PIPE, INTAKE (XP185)
G	88080056	6	BOLT, M8-1.25 X 25
H	88082433	2	WASHER, ID 8
J	88082623	2	STUD, FUEL FILTER
K	88082276	2	STUD, M8-1.25 X 41

* included in GASKET SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/05/00 bd	DESCRIPTION INTAKE MANIFOLD	
MODEL NO. P-185WIR	MANUAL NO. 54437173-31	DATE/REV: 1/02 C

FRONT

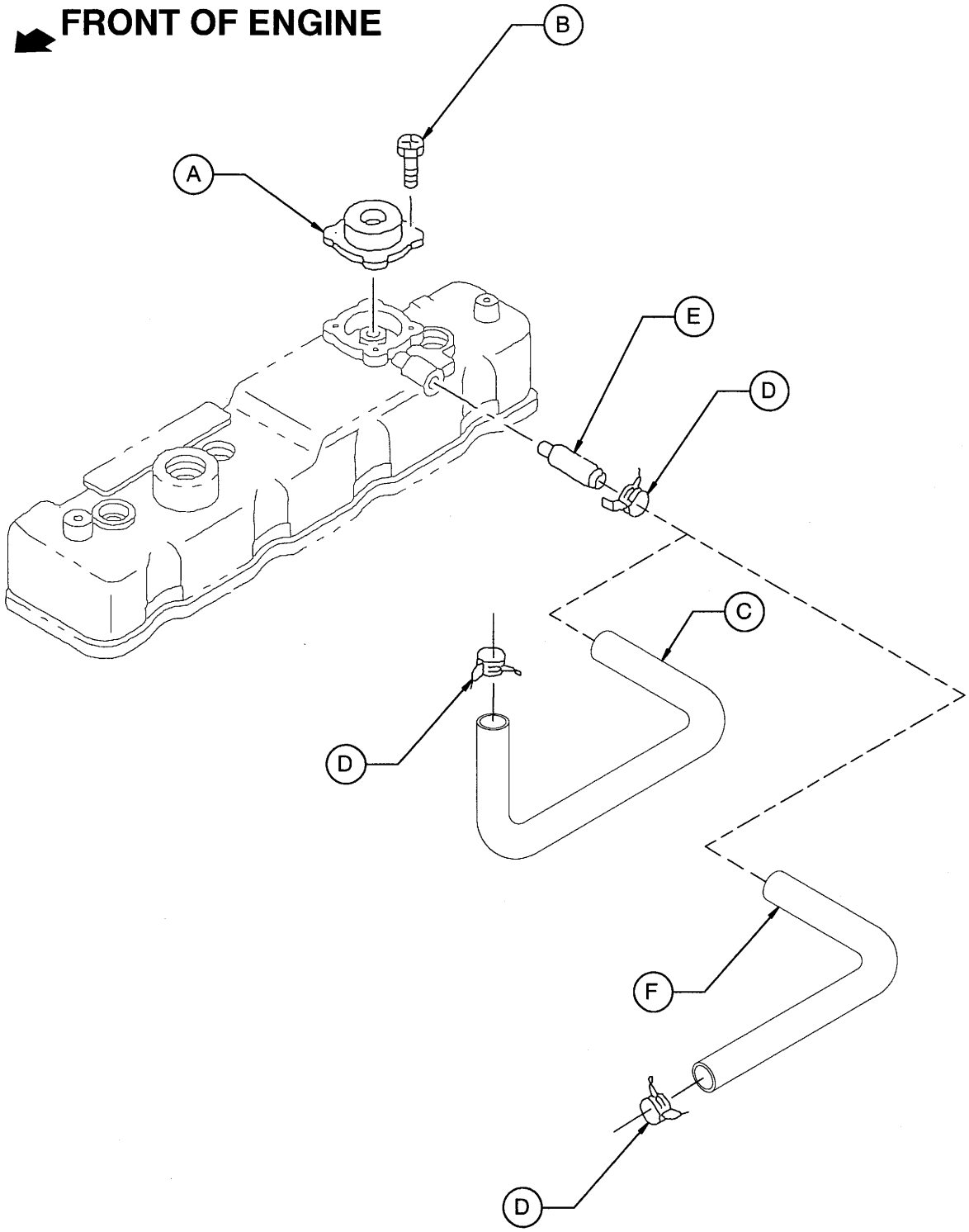


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/06/00 bd	DESCRIPTION EXHAUST MANIFOLD	
MODEL NO. P-185WIR	MANUAL NO. 54437173-32	DATE/REV: 1/02 C

ITEM		C.P.N.	QTY	DESCRIPTION
A		88081187	1	MANIFOLD, EXHAUST (P185)
		49840069	1	MANIFOLD, EXHAUST (XP185)
B	*	88081773	1	GASKET, EXHAUST MANIFOLD
C		88082102	1	SHIELD, HEAT
D		88080239	4	BOLT, M8-1.25 X 30 w/LK WASHER
E		88082292	5	STUD, M10-2.0 X 43 (P185)
F		88082417	3	NUT, EXHAUST MANIFOLD M10 (P185)
G		88082367	4	NUT, M8 (P185)
H		88082433	4	WASHER, ID 8 (P185)
J		88082037	1	PIPE, EXHAUST (P185)
K		88082441	3	WASHER, ID 10 (P185)
L		88082151	4	TUBE, EXHAUST (P185)
M		88081195	1	GASKET, EXHAUST PIPE (P185)
N		88081153	4	STUD, M8-1.25 X 105 (P185)
P		49840234	4	STUD, TURBO (XP185)
Q		49840655	1	STUD, BRACKET EXHAUST MANIFOLD (XP185)
R		49843337	4	NUT, M8 (XP185)
S		22099899	8	WASHER, ID 8 (XP185)
T		49840648	1	SPACER, BRACKET (XP185)
U		49840622	4	STUD, M8-1.25 X 105 (XP185)
V		88082151	2	TUBE, EXHAUST L=70 (XP185)
W		22082051	1	TUBE, EXHAUST L=28 (XP185)
X		49840614	1	STUD, M8-1.25 X 75 (XP185)

* included in GASKET SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/06/00 bd	DESCRIPTION EXHAUST MANIFOLD	
MODEL NO. P-185WIR	MANUAL NO. 54437173-33	DATE/REV: 1/02 D

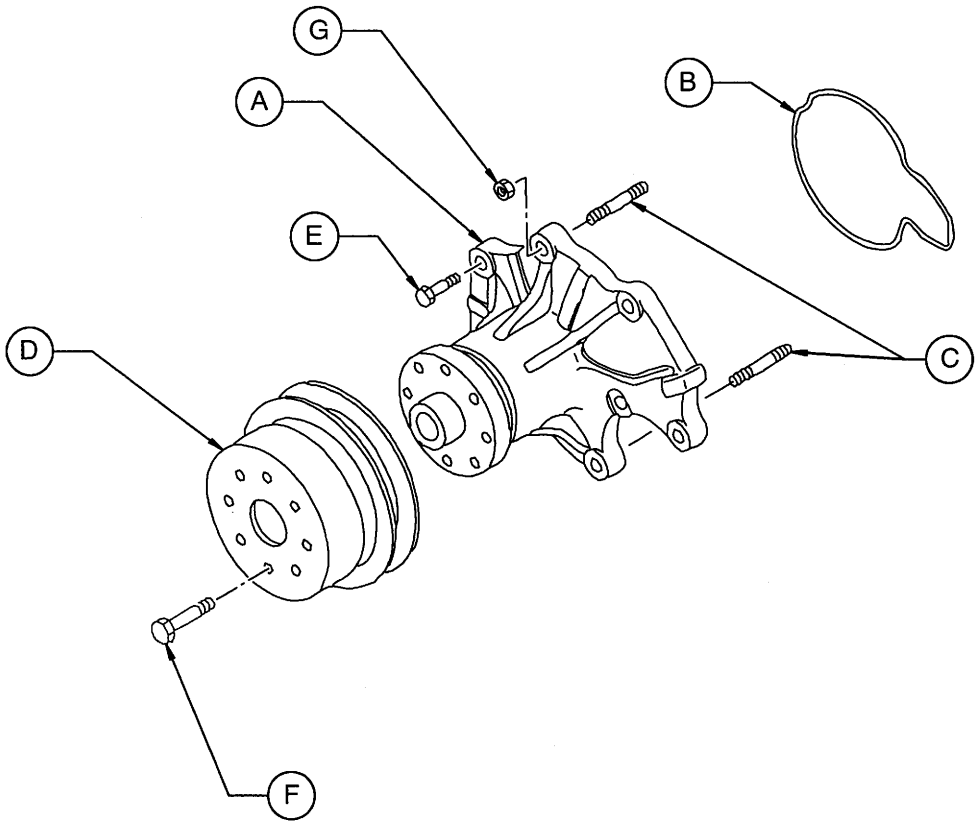


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY:	DESCRIPTION	
1/06/00 bd	VENTILATION SYSTEM	
MODEL NO.	MANUAL NO.	DATE/REV:
P-185WIR	54437173-34	1/02 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	54385760	1	VALVE, CRANKCASE
B	88082250	4	BOLT, M4-0.7 X 8
C	88081088	1	HOSE, RUBBER BREATHER (P185)
D	88080759	2	CLIP, VENT HOSE
E	88081088	1	PIPE, BREATHER
F	88081872	1	HOSE, PVC (XP185)

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/06/00 bd	DESCRIPTION VENTILATION SYSTEM	
MODEL NO. P-185WIR	MANUAL NO. 54437173-35	DATE/REV: 1/02 C

FRONT OF ENGINE



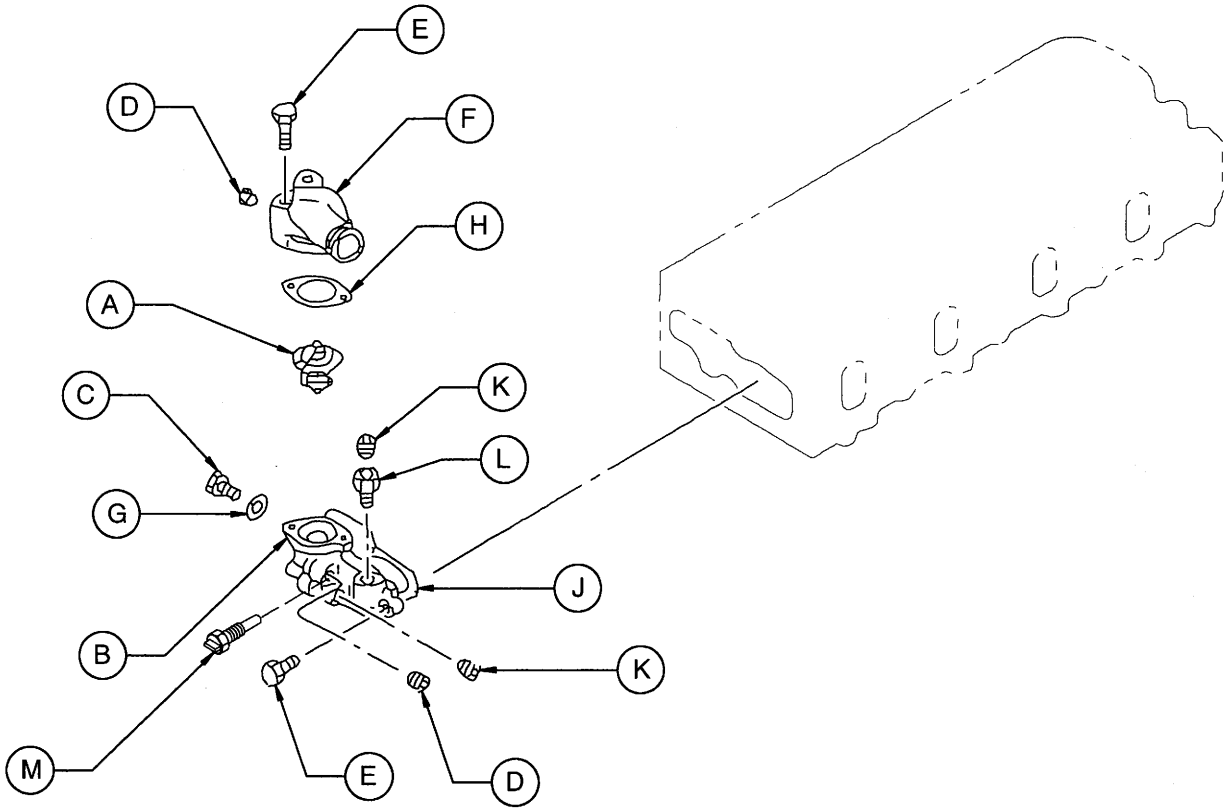
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/06/00 bd	DESCRIPTION WATER PUMP	
MODEL NO. P-185WIR	MANUAL NO. 54437173-36	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	88081823	1	WATER PUMP ASSEMBLY w/ GASKET
B	* 54385885	1	GASKET, PUMP TO CYLINDER BLOCK
C	88082268	2	STUD, WATER PUMP
D	88081302	1	PULLEY, WATER PUMP
E	88080338	5	BOLT, M8-1.25 X 55 FLANGE
F	88082243	2	SCREW, PULLEY
G	88081054	2	NUT, M8

* included in GASKET SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/06/00 bd	DESCRIPTION WATER PUMP	
MODEL NO. P-185WIR	MANUAL NO. 54437173-37	DATE/REV: 3/00 B

FRONT OF ENGINE

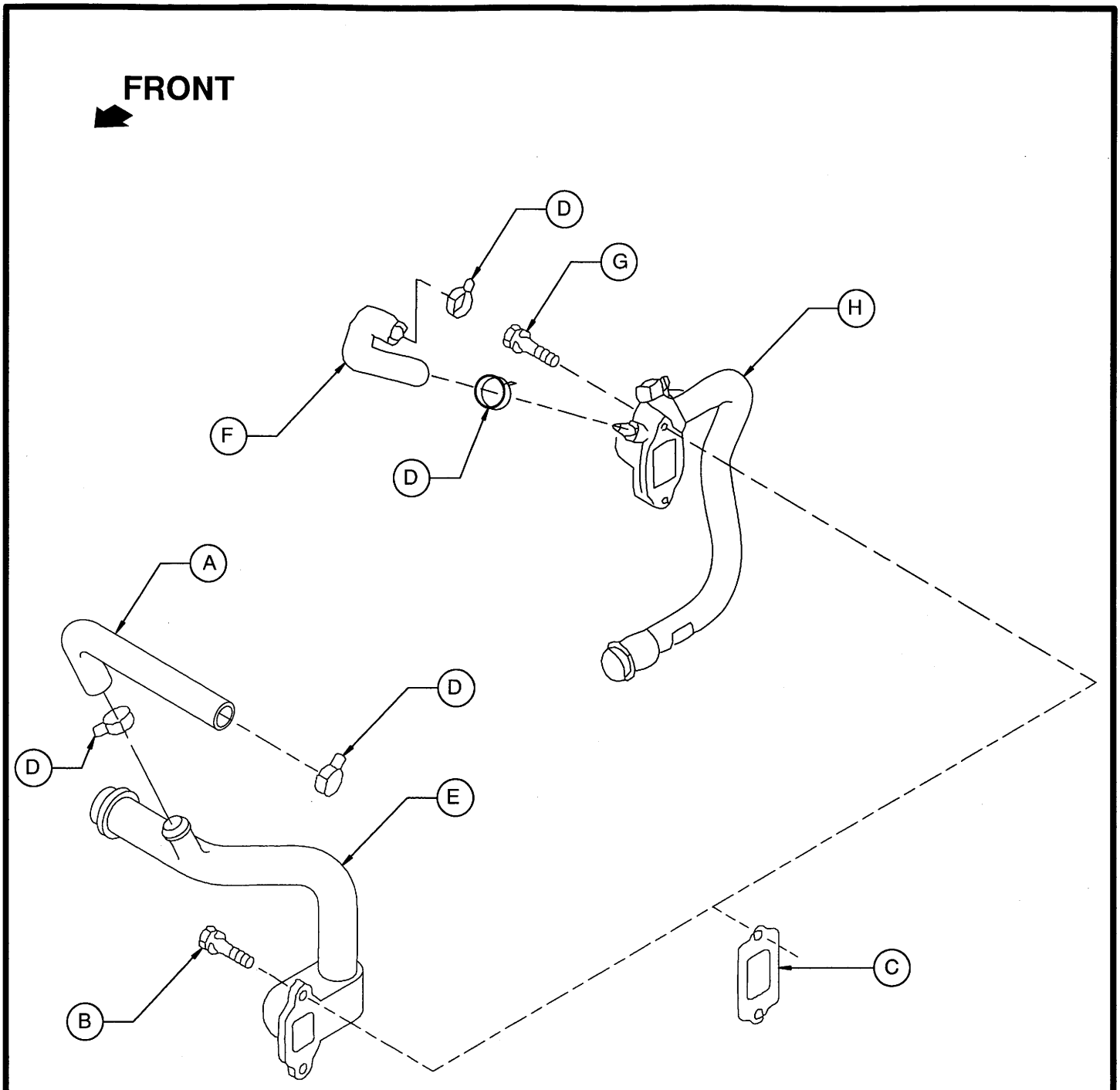


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/06/00 bd	DESCRIPTION THERMOSTAT HOUSING	
MODEL NO. P-185WIR	MANUAL NO. 54437173-38	DATE/REV: 3/00 B

ITEM		C.P.N.	QTY	DESCRIPTION
A		54385836	1	THERMOSTAT
B		88082110	1	HOUSING, THERMOSTAT (P185)
		49840077	1	HOUSING, THERMOSTAT (XP185)
C		88082649	1	PLUG, M16-2.0 X 8 (P185)
D		88080494	3	PLUG, 3/8 NPT (P185)
E		88080106	7	BOLT, M8-1.25 X 30 FLANGE
F		88081898	1	OUTLET, WATER DISCHARGE
G		88082540	1	GASKET, PLUG (P185)
H	*	54385851	1	GASKET, OUTLET PIPE TO HOUSING
J	*	88081922	1	GASKET, THERMOSTAT HOUSING
K		88080494	2	PLUG, THERMOSTAT
L		49849367	1	ADAPTER, THERMOSTAT
M		54385828	1	TIMER, QOS

* included in GASKET SET

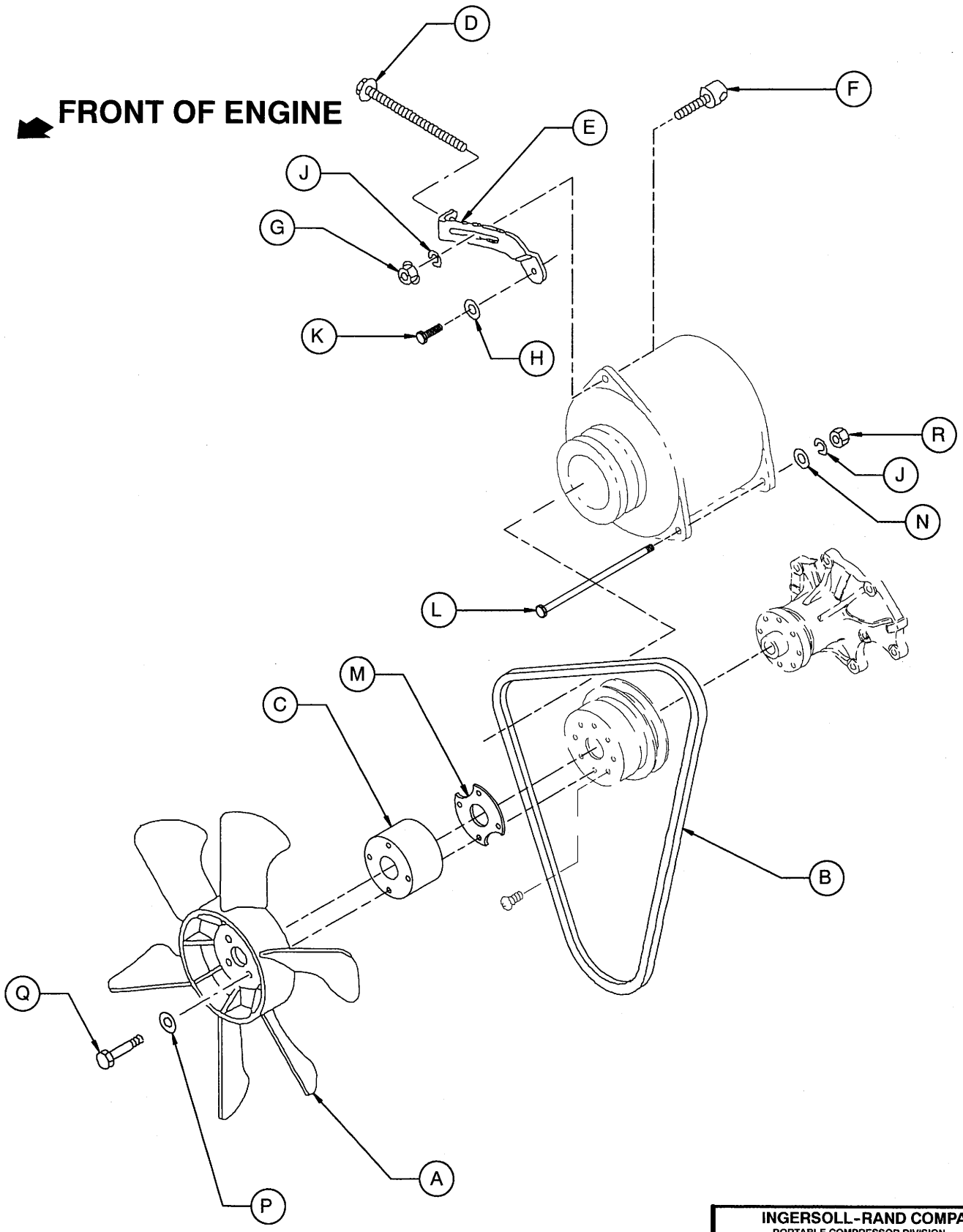
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/06/00 bd	DESCRIPTION THERMOSTAT HOUSING	
MODEL NO. P-185WIR	MANUAL NO. 54437173-39	DATE/REV: 1/02 D



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/06/00 bd	DESCRIPTION WATER PIPING	
MODEL NO. P-185WIR	MANUAL NO. 54437173-40	DATE/REV: 1/02 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	88080015	1	HOSE, WATER BY-PASS (P185)
B	88080049	2	BOLT, M8-1.25 X 20 FLANGE (P185)
C	88081179	1	GASKET, WATER PIPE
D	88080775	2	CLIP, ID 20.8
E	88082128	1	PIPE, WATER INLET (P185)
F	49840085	1	HOSE, WATER BY-PASS (XP185)
G	49806813	2	BOLT, M8-1.25 X 20 FLANGE (XP185)
H	49840101	1	PIPE, WATER INLET (XP185)

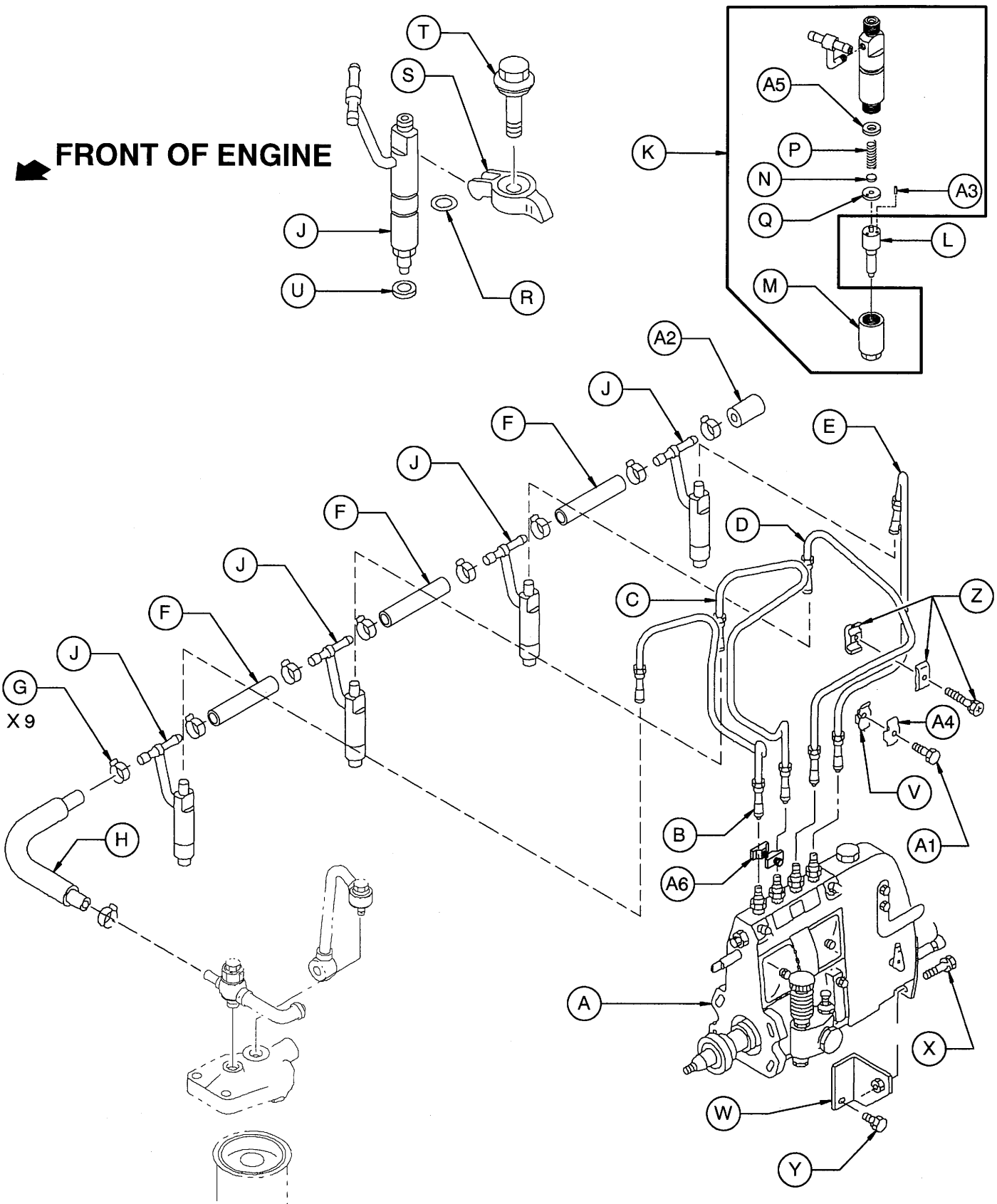
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/07/00 bd	DESCRIPTION WATER PIPING	
MODEL NO. P-185WIR	MANUAL NO. 54437173-41	DATE/REV: 1/02 C



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/07/00 bd	DESCRIPTION FAN MOUNT	
MODEL NO. P-185WIR	MANUAL NO. 54437173-42	DATE/REV: 6/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	88081252	1	FAN, COOLING (P185)
	54486451	1	FAN, COOLING (XP185)
B	54381322	1	BELT, COOLING FAN
C	88081641	1	SPACER, FAN
D	88081203	1	BOLT, GENERATOR ADJUSTMENT PLATE
E	88082045	1	PLATE, ADJUSTMENT
F	88081757	1	SLIDE
G	88082367	1	NUT, ADJUSTMENT PLATE
H	88082508	1	WASHER, PLATE
J	88082433	2	WASHER, ID 8
K	88080049	1	BOLT, M8-1.25 X 20 FLANGE
L	88081989	1	BOLT, M8-1.25 X 124
M	49849375	1	SPACER, REAR FAN
N	88082466	2	WASHER, GENERATOR PLATE
P	88082490	4	WASHER, PLAIN
Q	88080031	4	BOLT, M6-1.0 X 80 FLANGE
R	88082359	1	NUT, HEX M08-1.25

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/07/00 bd	DESCRIPTION FAN MOUNT	
MODEL NO. P-185WIR	MANUAL NO. 54437173-43	DATE/REV: 1/02 D

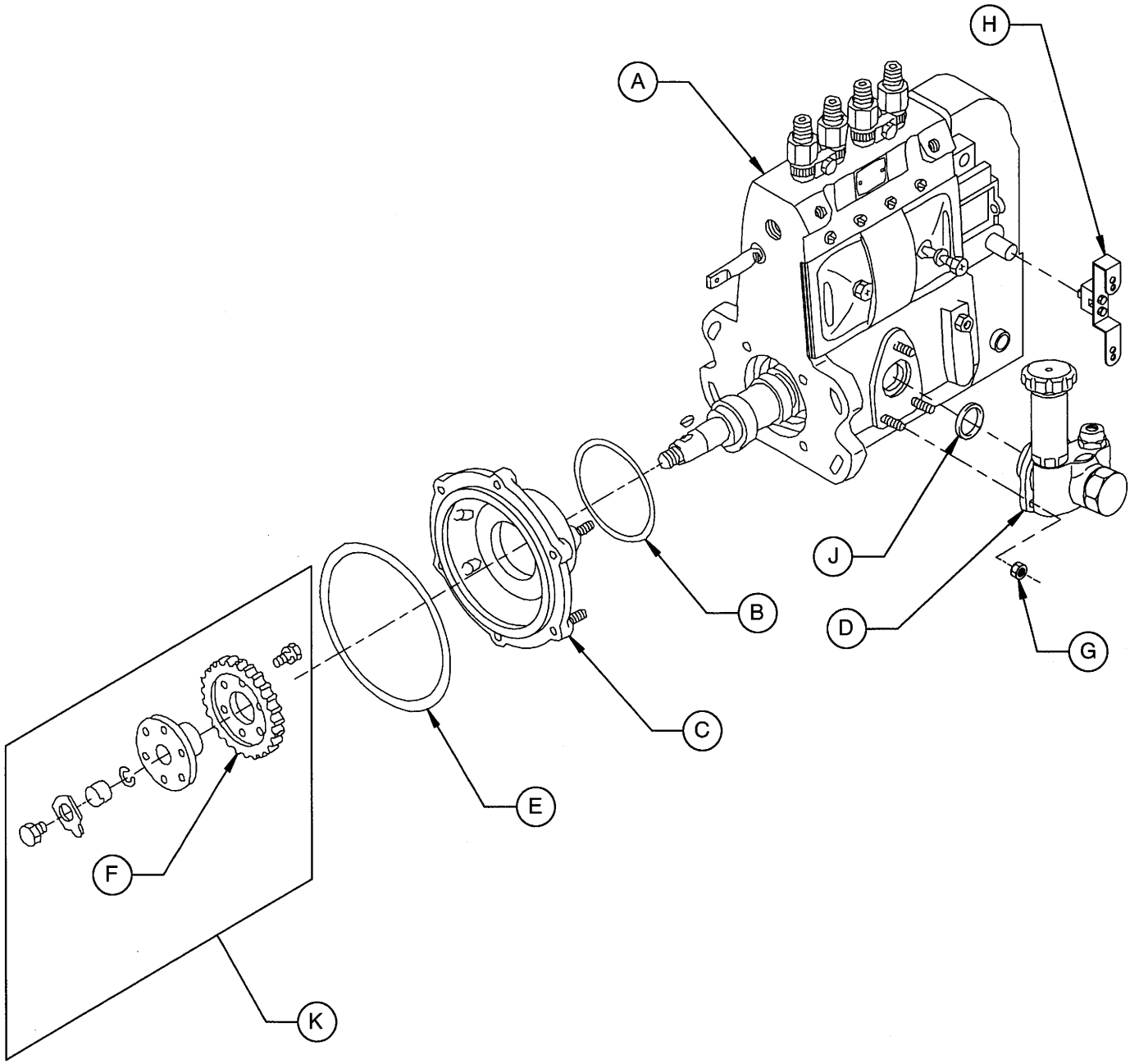


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/07/00 bd	DESCRIPTION: FUEL PUMP	
MODEL NO.: P-185WIR	MANUAL NO.: 54437173-44	DATE/REV: 3/00 A

ITEM		C.P.N.	QTY	DESCRIPTION
A		88081997	1	INJECTION PUMP ASSEMBLY (P185)
		49849565	1	INJECTION PUMP ASSEMBLY (CALIF. RE-RATE)
		49840275	1	INJECTION PUMP ASSEMBLY (XP185)
B		54385745	1	PIPE, NO. 1 INJECTOR (P185)
		49840283	1	PIPE, NO. 1 INJECTOR (XP185)
C		54385844	1	PIPE, NO. 2 INJECTOR (P185)
		49840291	1	PIPE, NO. 2 INJECTOR (XP185)
D		54385919	1	PIPE, NO. 3 INJECTOR (P185)
		49840309	1	PIPE, NO. 3 INJECTOR (XP185)
E		54385976	1	PIPE, NO. 4 INJECTOR (P185)
		49840317	1	PIPE, NO. 4 INJECTOR (XP185)
F		88080957	3	HOSE, FUEL
G		88081062	9	CLIP
H		54386008	1	HOSE, FUEL
J		54385927	4	INJECTOR NOZZLE ASSEMBLY (P185)
		49840325	4	INJECTOR NOZZLE ASSEMBLY (XP185)
K		88081435	4	NOZZLE HOLDER ASSEMBLY
L		88081955	4	NOZZLE, INJECTOR (P185)
		49840333	4	NOZZLE, INJECTOR (XP185)
M		88081021	4	NUT
N		88081104	4	SEAT, NOZZLE SPRING
P		88081005	4	SPRING
Q		88081013	4	SPACER
R	*	54385935	4	GASKET
S		88081385	4	CLAMP
T		88081393	4	BOLT
U	*	54385950	4	GASKET, INJECTOR NOZZLE (P185)
	*	49840341	4	GASKET, INJECTOR NOZZLE (XP185)
V		88081336	1	CLIP, INJECTOR PIPE
W		88088194	1	BRACKET, PUMP (P185)
		49840358	1	BRACKET, PUMP (XP185)
X		88080304	1	BOLT, M10-2.0 X 25 w/ WASHER
Y		88080080	1	BOLT, M8-1.25 X 20 FLANGE
Z		88082722	3	CLIP, INJECTOR PIPE
A1		88080288	1	BOLT, M8-1.25 X 18 w/ WASHER
A2		88081534	1	CAP, FUEL END NOZZLE
A3		49849383	8	PIN, NOZZLE
A4		49849391	1	CLIP, INJECTOR PIPE TOP
A5		49849409	A/R	SHIM, .500 NOZZLE SPRING
		49849417	A/R	SHIM, .510 NOZZLE SPRING
		49849425	A/R	SHIM, .520 NOZZLE SPRING
		49849433	A/R	SHIM, .530 NOZZLE SPRING
		49849441	A/R	SHIM, .540 NOZZLE SPRING
		49849458	A/R	SHIM, .550 NOZZLE SPRING
		49849466	A/R	SHIM, .560 NOZZLE SPRING
		49849474	A/R	SHIM, .570 NOZZLE SPRING
A6		54519129	2	CLIP, NOZZLE LOCK

* included in GASKET SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/07/00 bd	DESCRIPTION: FUEL PUMP	
MODEL NO.: P-185WIR	MANUAL NO.: 54437173-45	DATE/REV: 1/02 C

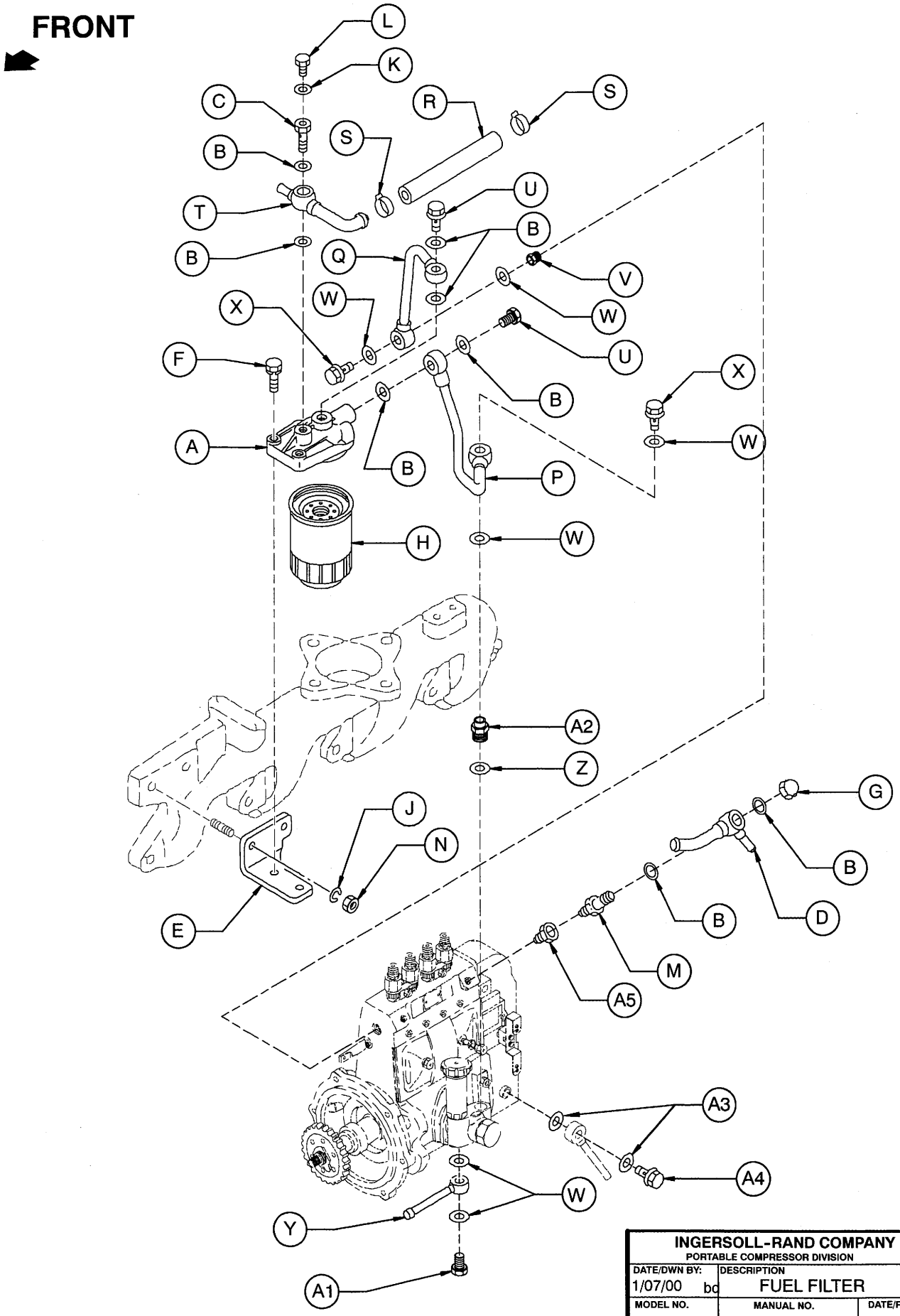


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 3/15/00 bd	DESCRIPTION INJECTION PUMP ASM.	
MODEL NO. P-185WIR	MANUAL NO. 54437173-46	DATE/REV: 1/02 B

ITEM		C.P.N.	QTY	DESCRIPTION
A		88081997	1	INJECTION PUMP ASSEMBLY (P185)
		49849565	1	INJECTION PUMP ASSEMBLY (CALIF. RE-RATE)
		49840275	1	INJECTION PUMP ASSEMBLY (XP185)
B		54519061	1	GASKET, INJECTION PUMP COVER
C		54519095	1	COVER, INJECTION PUMP FRONT
D		54385786	1	PUMP ASM., INJECTION FEED (P185; XP185)
		22100309	1	PUMP ASM., INJECTION FEED (CALIF. RE-RATE)
E	*	54519103	1	GASKET, FRONT INJECTION PUMP COVER
F		54519111	1	GEAR, COUPLING
G		54519087	1	NUT, FEED PUMP
H		54519079	1	LEVER, SPEED CONTROL
J		54519053	1	GASKET, FEED PUMP
K		22100226	1	COUPLING ASM., INJECTION PUMP (P185)
		22100234	1	COUPLING ASM., INJECTION PUMP (CALIF. RE-RATE)
		22083943	1	COUPLING ASM., TURBO INJECTION PUMP (XP185)

* included in GASKET SET

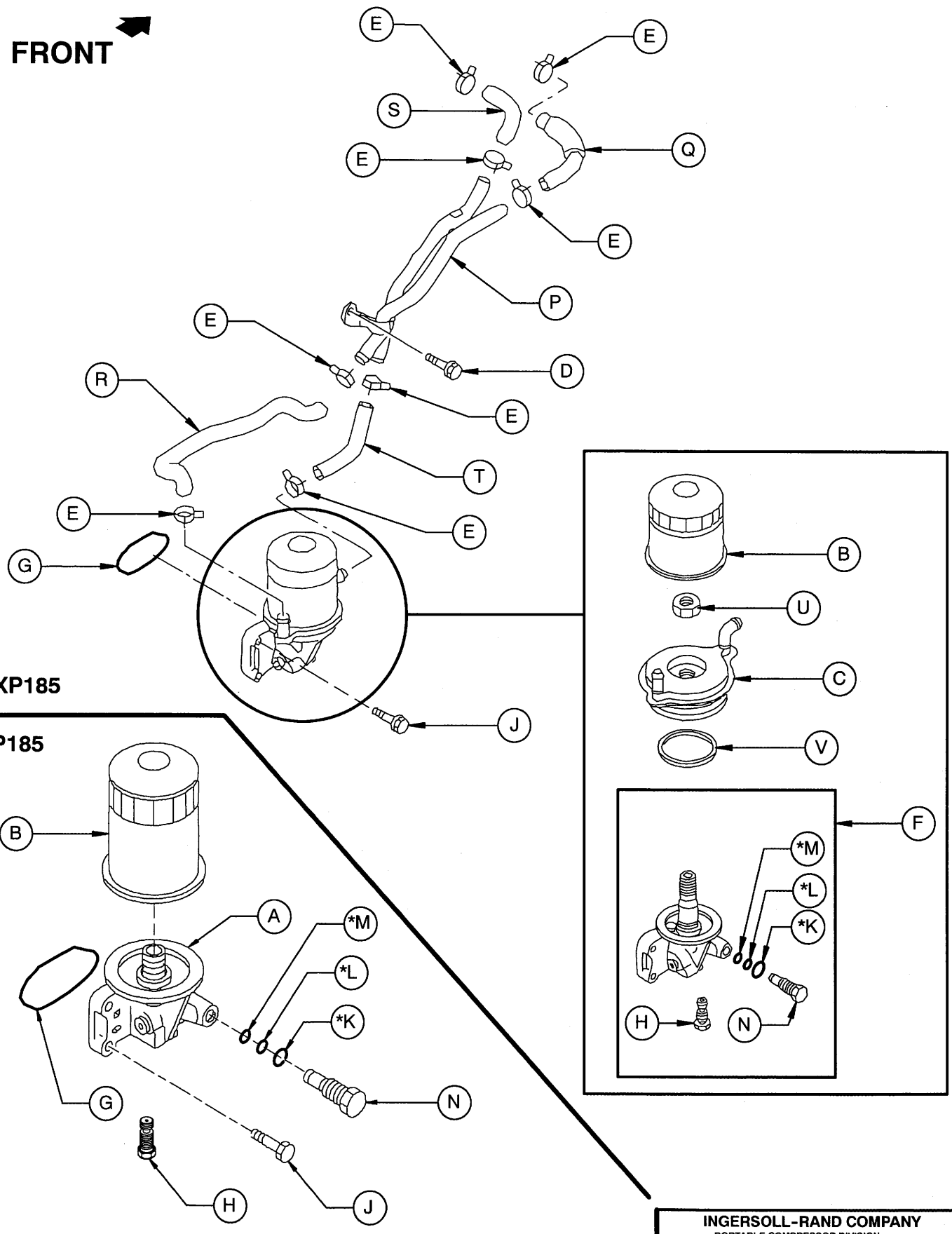
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 3/15/00 bd	DESCRIPTION: INJECTION PUMP ASM.	
MODEL NO.: P-185WIR	MANUAL NO.: 54437173-47	DATE/REV: 1/02 B



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/07/00 bc	DESCRIPTION FUEL FILTER	
MODEL NO. P-185WIR	MANUAL NO. 54437173-48	DATE/REV: 3/00 A

ITEM	C.P.N.	QTY	DESCRIPTION
A	88080643	1	COVER, FUEL FILTER
B	88082607	8	GASKET
C	88082714	1	VALVE, OVERFLOW
D	88081328	1	OVERFLOW PIPE ASSEMBLY
E	88081211	1	BRACKET, FUEL FILTER
F	88080130	2	BOLT, M10-1.5 X 35 FLANGE
G	88080346	1	NUT, FUEL CAP
H	54381306	1	FUEL FILTER ELEMENT KIT
J	88082441	2	WASHER, ID 10.2
K	88082557	1	GASKET, FUEL FILTER PLUG
L	88082532	1	PLUG, OVERFLOW VALVE
M	88080403	1	VALVE, OVERFLOW
N	88082375	2	NUT, BRACKET
P	88081260	1	PIPE, FUEL FEED
Q	88081278	1	PIPE, FUEL
R	88080007	1	HOSE, FUEL FILTER TO INJECTION PUMP
S	49840366	2	CLIP, HOSE
T	49849482	1	PIPE, FUEL RETURN
U	88082672	2	BOLT, EYE M14-2.0 X 29
V	54488259	1	ADAPTER, PUMP HOUSING EYE BOLT
W	54488267	6	GASKET, INJECTION PUMP EYE BOLT
X	54488283	2	BOLT, FUEL INLET INJECTION PUMP ASSEMBLY
Y	88080650	1	FEED PUMP FUEL PIPE ASSEMBLY
Z	54488325	1	GASKET
A1	54488291	1	BOLT, FEED PUMP FUEL INLET EYE
A2	54488309	1	ADAPTER, FUEL FEED PUMP EYE BOLT
A3	54518980	2	GASKET, INJ PUMP OIL FEED BOLT
A4	54519004	1	BOLT, INJ PUMP OIL FEED EYE
A5	54519020	1	ADAPTER, FUEL PIPE

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/07/00 bd	DESCRIPTION FUEL FILTER	
MODEL NO. P-185WIR	MANUAL NO. 54437173-49	DATE/REV: 3/00 A



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/10/00 bd	DESCRIPTION OIL FILTER	
MODEL NO. P-185WIR	MANUAL NO. 54437173-50	DATE/REV: 1/02 C

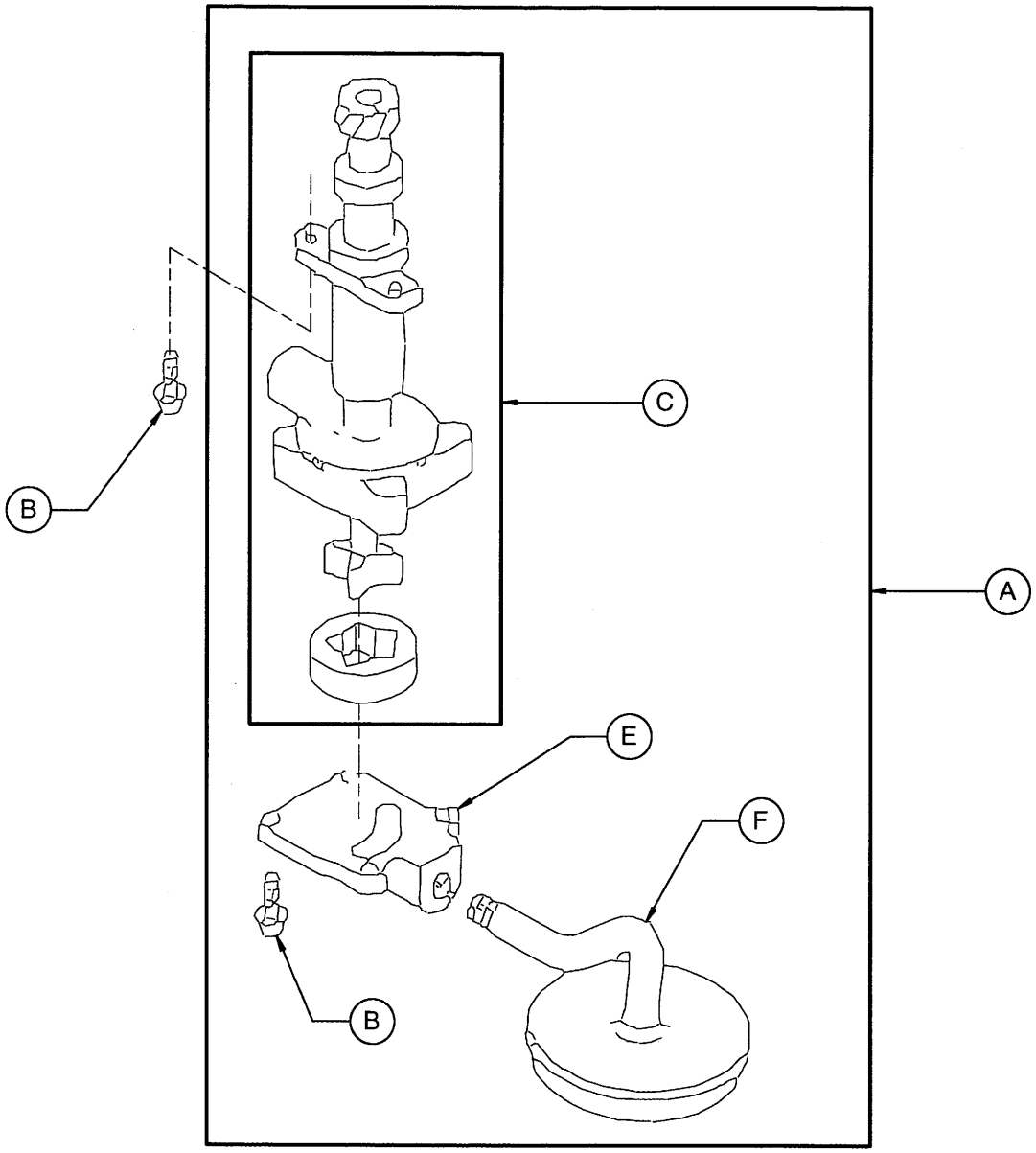
ITEM	C.P.N.	QTY	DESCRIPTION
A	88081146	1	BODY, OIL FILTER (P185)
B	54381314	1	ELEMENT, OIL FILTER
C	49840374	1	COOLER ASSEMBLY
D	49840382	1	BOLT, M8-1.25 X 14 LOCK WASHER
E	88080775	8	CLIP, OIL COOLER HOSE
F	49840408	1	HEAD, OIL FILTER
G	** 88081666	1	GASKET, OIL FILTER HEAD
H	49849508	1	VALVE, OIL RELIEF
J	88080106	4	BOLT, M8-1.25 X 30 FLANGE
K	* 49849516	1	GASKET, ID 13.6
L	* 49849524	1	GASKET, ID 8.8
M	* 49849532	1	GASKET, ID 8.6
N	88080973	1	PLUG, SCREW
P	49840416	1	PIPE, FILTER COOLER TO WATER PUMP
Q	49840424	1	HOSE, UPPER OIL COOLER INLET
R	49840432	1	HOSE, LOWER OIL COOLER INLET
S	49840440	1	HOSE, UPPER OIL COOLER RETURN
T	49840457	1	HOSE, LOWER OIL COOLER RETURN
U	54519038	1	NUT, OIL COOLER FILTER
V	54519046	1	GASKET, OIL COOLER FILTER

* included with item B, OIL FILTER ELEMENT

** included in GASKET SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/10/00 bd	DESCRIPTION: OIL FILTER	
MODEL NO.: P-185WIR	MANUAL NO.: 54437173-51	DATE/REV: 1/02 D

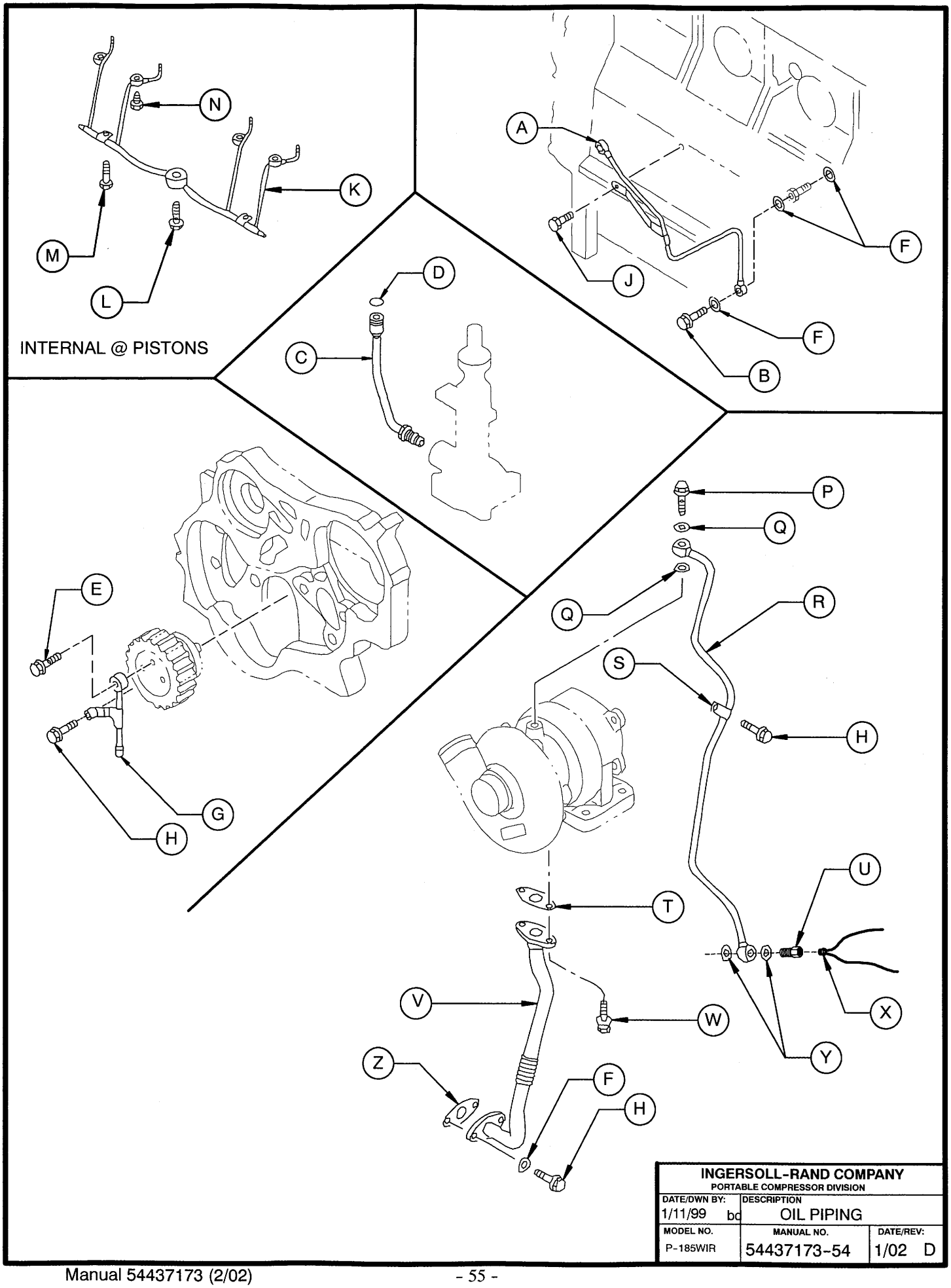
FRONT OF ENGINE



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY:	DESCRIPTION	
1/10/00 bd	OIL PUMP	
MODEL NO.	MANUAL NO.	DATE/REV:
P-185WIR	54437173-52	3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	88081161	1	OIL PUMP ASSEMBLY
B	88082219	4	BOLT, M8-1.25 X 25 w/ LK WASHER
C	88081583	1	OIL PUMP GEAR SET
D	88080296	2	BOLT, M8-1.25 X 25 w/ LK & PLAIN WASHER
E	88082698	1	COVER, OIL PUMP
F	88082706	1	STRAINER

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/10/00 bd	DESCRIPTION OIL PUMP	
MODEL NO. P-185WIR	MANUAL NO. 54437173-53	DATE/REV: 3/00 B



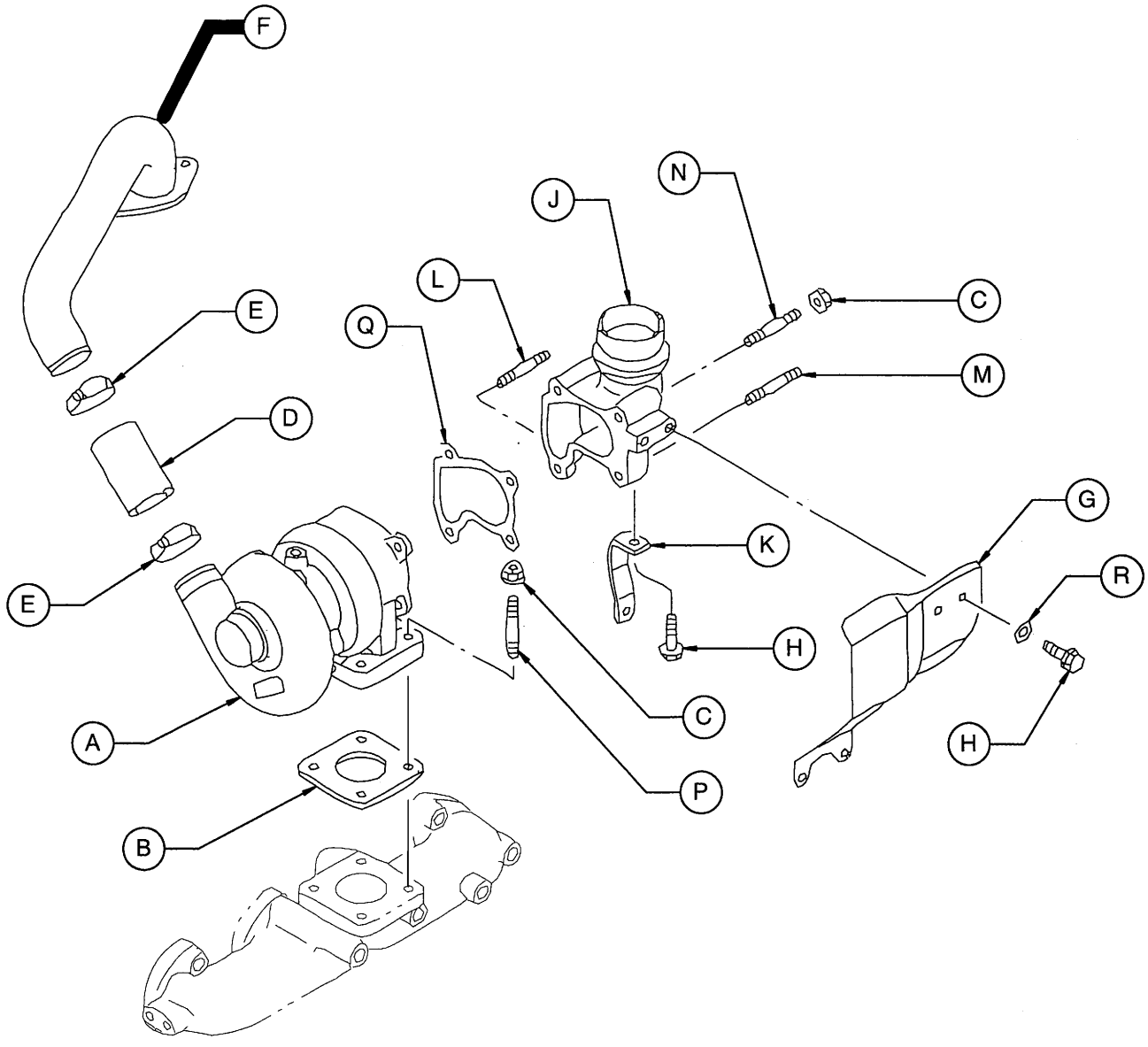
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/11/99 bd	DESCRIPTION OIL PIPING	
MODEL NO. P-185WIR	MANUAL NO. 54437173-54	DATE/REV: 1/02 D

ITEM		C.P.N.	QTY	DESCRIPTION
A		88080981	1	PIPE, OIL
B		88080528	1	BOLT, M8-1.25 X 20 FLANGE
C		88081401	1	PIPE, OIL
D	*	88080502	1	GASKET, OIL PIPE
E		88081468	1	NIPPLE, INJECTION PUMP
F	*	88082599	5	GASKET, OIL PIPE CAP NUT
G		88081864	1	PIPE, OIL
H		88080221	3	BOLT, M8-1.25 X 22 w/ LOCK WASHER
J		88080171	1	BOLT, M6-1.0 X 12 w/ LOCK WASHER
K		49840531	1	PIPE, OIL JET
L		49840572	1	VALVE, OIL RELIEF
M		49840671	2	BOLT, M8-1.25 X 10 FLANGE
N		49840663	4	BOLT, M6-1.0 X 20 FLANGE
P		49840580	1	BOLT, JOINT
Q		49840507	2	GASKET, UPPER INLET OIL PIPE
R		49840549	1	PIPE, TURBO OIL FEED
S		49840523	1	CLIP, OIL PIPE
T		49840564	1	GASKET, OIL PIPE ENGINE
U		49849573	1	ADAPTER, OIL PRESSURE SWITCH
V		49840598	1	PIPE, OIL EXHAUST TURBO
W		49840465	2	BOLT, M6-1.0 X 18 LOCKWASHER
X		36878379	1	SWITCH, OIL PRESSURE
Y		88082565	2	GASKET, LOWER INLET PIPE
Z		49840556	1	GASKET, OIL PIPE TURBO

* included in GASKET SET

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/11/99 bc	DESCRIPTION: OIL PIPING	
MODEL NO. P-185WIR	MANUAL NO. 54437173-055	DATE/REV: 1/02 D

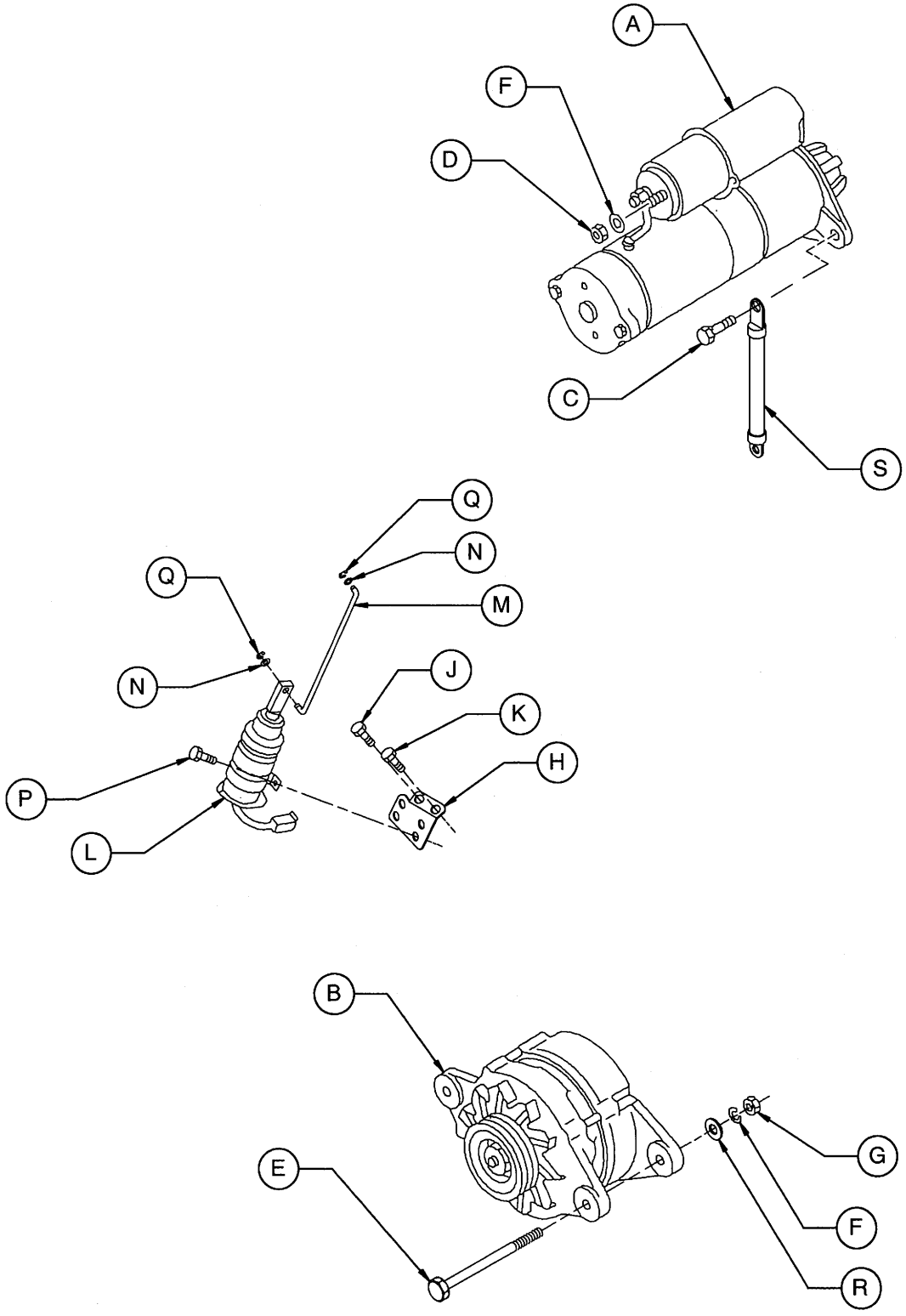
FRONT



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/22/00 bd	DESCRIPTION TURBOCHARGER	
MODEL NO. P185WIR	MANUAL NO. 5447173-056	DATE/REV: 3/00 A

ITEM	C.P.N.	QTY	DESCRIPTION
A	49840119	1	TURBOCHARGER
B	49840127	1	GASKET, TURBO TO EXHAUST DUCT
C	49840135	4	NUT, TURBOCHARGER
D	49840143	1	HOSE, TURBO INTAKE PIPE
E	49840259	2	CLIP, HOSE
F	49840150	1	DUCT, TURBO INTAKE
G	49840168	1	SHIELD, TURBO HEAT
H	49840176	4	BOLT
J	49840184	1	ADAPTER, TURBO TO EXHAUST PIPE
K	49840192	1	BRACKET, ADAPTER TO EXHAUST MANIFOLD
L	49840200	1	STUD, TURBO TO ADAPTER
M	49840218	1	STUD, TURBO TO ADAPTER
N	49840226	2	STUD, TURBO TO ADAPTER
P	49840234	4	STUD, TURBO
Q	49840242	1	GASKET, TURBO
R	88082474	1	WASHER, PLAIN HEAT SHIELD

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/22/00 bd	DESCRIPTION TURBOCHARGER	
MODEL NO. P-185WIR	MANUAL NO. 5447173-057	DATE/REV: 1/02 A

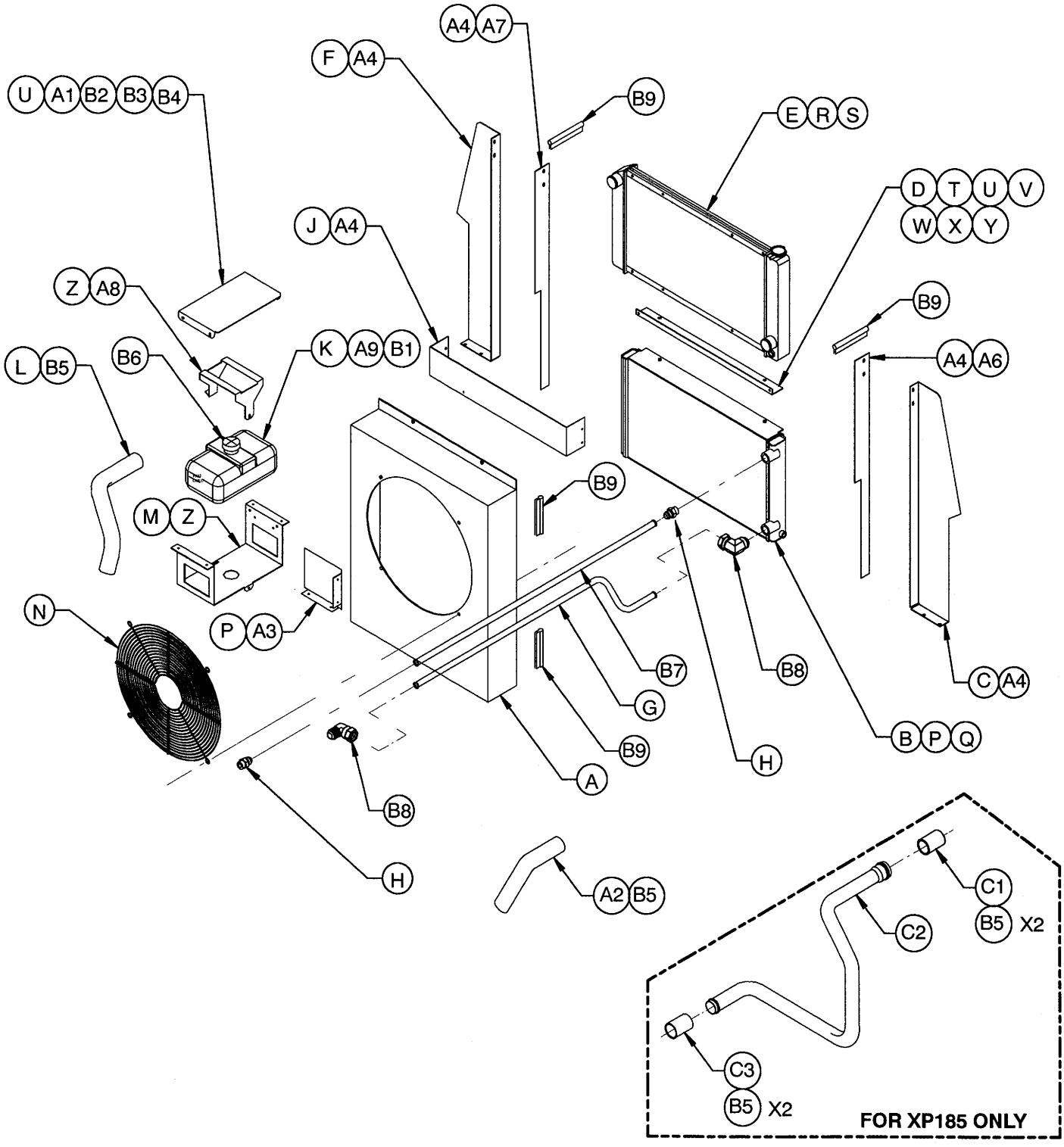


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/11/99 bd	DESCRIPTION ELECTRICAL COMPONENTS	
MODEL NO. P-185WIR	MANUAL NO. 54437173-058	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	54386016	1	STARTER MOTOR, 12V - 2.2KW
B	54385794	1	ALTERNATOR, 12V - 50A
C	88080163	2	BOLT, M12-2.0 X 35 FLANGE
D	88082383	1	NUT, M8
E	88081989	1	BOLT, M8-1.25 X 124
F	88082433	2	WASHER, ID 8
G	88082367	1	NUT, M8
H	88082094	1	BRACKET, SOLENOID VALVE
J	88080122	1	BOLT, M10-1.5 X 30 FLANGE
K	88080130	1	BOLT, M10-1.5 X 35 FLANGE
L	54385992	1	SOLENOID, SHUTDOWN
M	88082086	1	ROD, LINK
N	88082458	3	WASHER, PLAIN
P	88080189	4	BOLT, M6-1.0 X 16 w/ LOCK WASHER
Q	88082524	2	RING, SNAP
R	88082466	1	WASHER, PLAIN GENERATOR
S	49849540	1	CABLE, GROUND

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 1/11/99 bd	DESCRIPTION ELECTRICAL COMPONENTS	
MODEL NO. P-185WIR	MANUAL NO. 54437173-059	DATE/REV: 10/00 C

DRAWBAR



PRIOR TO SERIAL NUMBER 326650

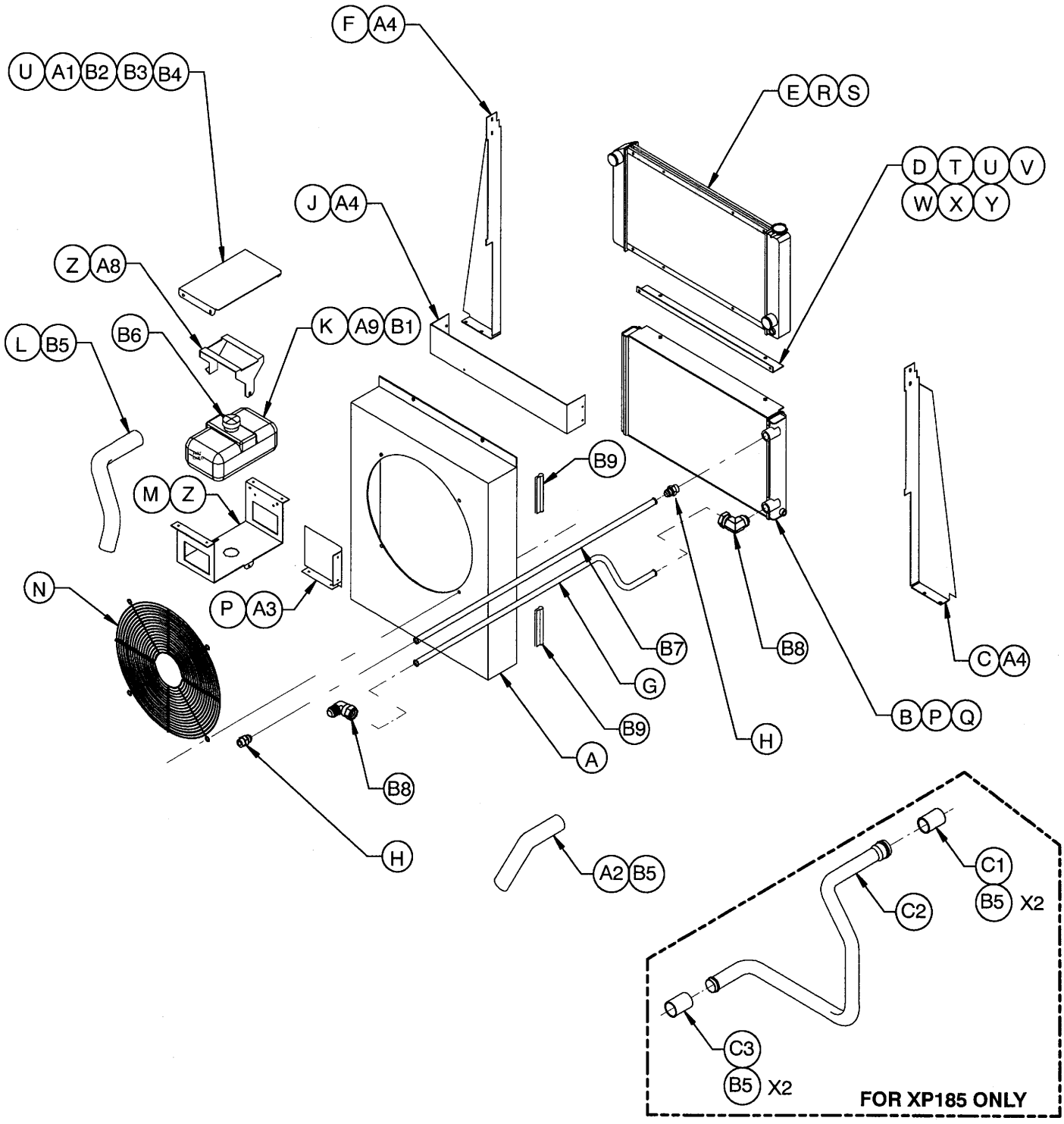
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION: COOLING COMPLETE	
MODEL NO. P185WIR	MANUAL NO. 54437173-060	DATE/REV: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	54389580	1	SHROUD, FAN
B	36882934	1	COOLER, OIL
C	36889533	1	BAFFLE, COOLER STREET SIDE
	54529391	1	BAFFLE, COOLER STREET SIDE (GALVANNEAL)
D	36881480	1	BRACKET, RAD/OIL COOLER
	54529250	1	BRACKET, RAD/OIL COOLER (GALVANNEAL)
E	36880516	1	RADIATOR
F	36889541	1	BAFFLE, COOLER CURB SIDE
	54529409	1	BAFFLE, COOLER CURB SIDE (GALVANNEAL)
G	35132877	1	HOSE
H	95955993	2	CONNECTOR, 1 1/16-12
J	36881472	1	BAFFLE, COOLER TOP
	54529243	1	BAFFLE, COOLER TOP (GALVANNEAL)
K	36782043	1	RESERVIOR, OVERFLOW
L	54389846	1	HOSE, RADIATOR TOP
M	36883866	1	SUPPORT, WATER BOTTLE
N	36884096	1	GUARD, FAN
P	35279025	8	SCREW, TAPPING M08-125 X 20
Q	95928230	1	PLUG, HEX CTRSK
R	36769560	1	CAP, RADIATOR
S	36782167	1	VALVE, DRAIN
T	36785327	2	SCREW, HEX M06-100 X 55
U	95935029	6	WASHER, FLAT 1/4
V	36769032	2	NUT, HEX LOCK M06
W	96702055	2	SCREW, HEX M08-125 X 20
X	95934998	2	WASHER, FLAT 3/8
Y	36881886	2	NUT, HEX FLANGE M08
Z	36797652	5	SCREW, TAPPING M06-100 X 12
A1	35278720	1	PIN, QUICK RELEASE
A2	54389853	1	HOSE, RADIATOR LOWER
A3	36920858	1	GUARD, OIL COOLER
A4	92368687	14	SCREW, TAPPING M06-100 X 14
A5	36877587	4	RIVET, 3/16
A6	36883221	1	BAFFLE, RADIATOR STREET SIDE
	54529300	1	BAFFLE, RADIATOR STREET SIDE (GALVANNEAL)
A7	36883239	1	BAFFLE, RADIATOR CURB SIDE
	54529318	1	BAFFLE, RADIATOR CURB SIDE (GALVANNEAL)
A8	36883874	1	STRAP, WATER BOTTLE HOLDDOWN
A9	35360775	10"	HOSE, 5/16
B1	35296342	2	CLAMP, HOSE
B2	36884500	1	DOOR, RADIATOR ACCESS
	54529342	1	DOOR, RADIATOR ACCESS (GALVANNEAL)
B3	95934873	2	SCREW, SOC HD SHLD 1/4-20 X 1
B4	95923298	2	NUT, HEX LOCK 1/4-20
B5	35221662	2	CLAMP, HOSE
B6	35382837	4	CAP, OVERFLOW RSVR.
B7	36923555	1	TUBE, OIL
B8	35291384	2	ELBOW, 90 1 5/16-12 X -16JIC
B9	54445176	6	STRIP, SEAL
C1	95235131	2	CLAMP, HOSE
C2	54563333	1	TUBE, BOTTOM RADIATOR
C3	35291321	3"	HOSE, RADIATOR 1.5" ID

PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION COOLING COMPLETE	
MODEL NO. P135WIR	MANUAL NO. 54437173-061	DATE/REV: 8/00 B

DRAWBAR



BEGIN WITH SERIAL NUMBER 326650

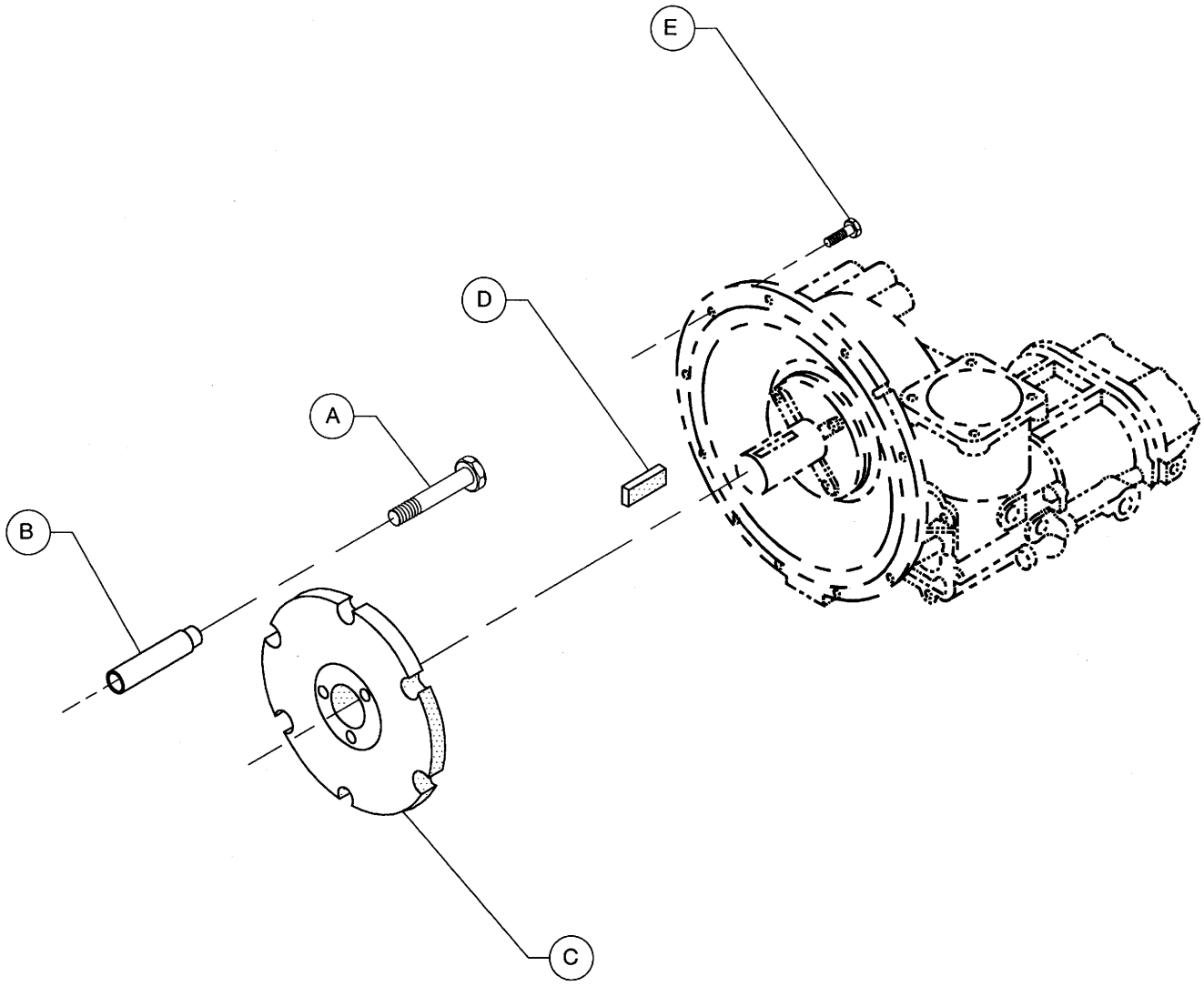
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION COOLING COMPLETE	
MODEL NO. P185WIR	MANUAL NO. 54437173-060	DATE/REV: 1/02 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	54389580	1	SHROUD, FAN
B	36882934	1	COOLER, OIL
C	54712807	1	BAFFLE, COOLER STREET SIDE
	54729611	1	BAFFLE, COOLER STREET SIDE (GALVANNEAL)
D	36881480	1	BRACKET, RAD/OIL COOLER
	54529250	1	BRACKET, RAD/OIL COOLER (GALVANNEAL)
E	36880516	1	RADIATOR
F	54712815	1	BAFFLE, COOLER CURB SIDE
	54729629	1	BAFFLE, COOLER CURB SIDE (GALVANNEAL)
G	35132877	1	HOSE
H	95955993	2	CONNECTOR, 1 1/16-12
J	36881472	1	BAFFLE, COOLER TOP
	54529243	1	BAFFLE, COOLER TOP (GALVANNEAL)
K	36782043	1	RESERVIOR, OVERFLOW
L	54389846	1	HOSE, RADIATOR TOP
M	36883866	1	SUPPORT, WATER BOTTLE
N	36884096	1	GUARD, FAN
P	35279025	8	SCREW, TAPPING M08-125 X 20
Q	95928230	1	PLUG, HEX CTRSK
R	36769560	1	CAP, RADIATOR
S	36782167	1	VALVE, DRAIN
T	36785327	2	SCREW, HEX M06-100 X 55
U	95935029	6	WASHER, FLAT 1/4
V	36769032	2	NUT, HEX LOCK M06
W	96702055	2	SCREW, HEX M08-125 X 20
X	95934998	2	WASHER, FLAT 3/8
Y	36881886	2	NUT, HEX FLANGE M08
Z	36797652	5	SCREW, TAPPING M06-100 X 12
A1	35278720	1	PIN, QUICK RELEASE
A2	54389853	1	HOSE, RADIATOR LOWER
A3	36920858	1	GUARD, OIL COOLER
A4	92368687	14	SCREW, TAPPING M06-100 X 14
A5	36877587	4	RIVET, 3/16
A6	54563333	1	TUBE, BOTTOM RADIATOR
A7	35291321	3"	HOSE, RADIATOR 1.5" ID
A8	36883874	1	STRAP, WATER BOTTLE HOLDDOWN
A9	35360775	10"	HOSE, 5/16
B1	35296342	2	CLAMP, HOSE
B2	36884500	1	DOOR, RADIATOR ACCESS
	54529342	1	DOOR, RADIATOR ACCESS (GALVANNEAL)
B3	95934873	2	SCREW, SOC HD SHLD 1/4-20 X 1
B4	95923298	2	NUT, HEX LOCK 1/4-20
B5	35221662	2	CLAMP, HOSE
B6	35382837	4	CAP, OVERFLOW RSVR.
B7	36923555	1	TUBE, OIL
B8	35291384	2	ELBOW, 90 1 5/16-12 X -16JIC
B9	54445176	4	STRIP, SEAL
C1	95235131	2	CLAMP, HOSE

BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION COOLING COMPLETE	
MODEL NO. P135WIR	MANUAL NO. 54437173-061	DATE/REV: 1/02 C

DRAWBAR END



PRIOR TO SERIAL NUMBER 326650

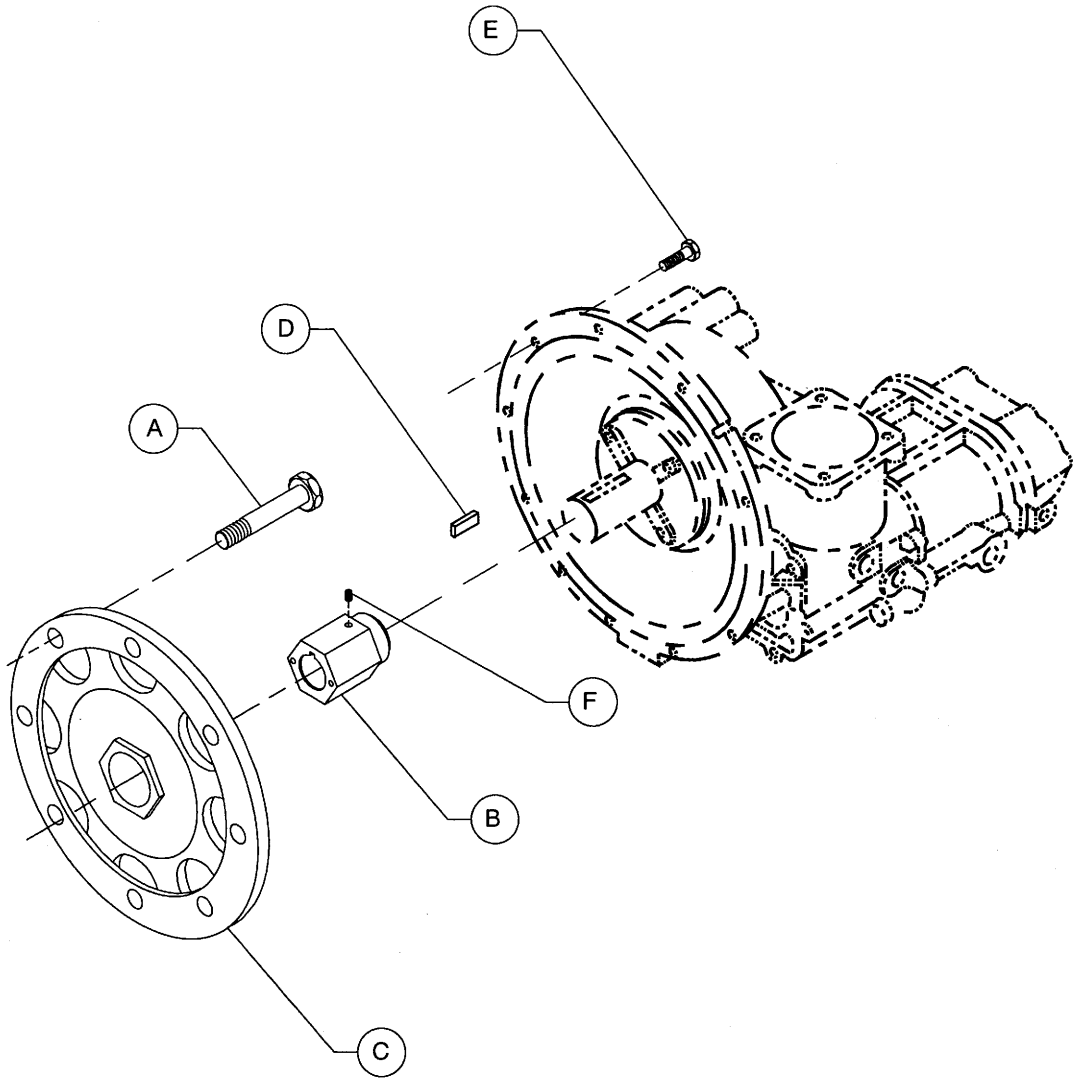
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 6/18/96 bd	DESCRIPTION AIREND COMPLETE	
MODEL NO. P-185WJD/IR	MANUAL NO. 54437173-060	DATE/REV: 3/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	95055307	8	SCREW, CAP SOC HD 3/8-16 X 2
B	35329887	8	DRIVER, COUPLING 3/8
C	36865012	1	COUPLING, DRIVE
D	36769289	1	KEY
E	36880995	9	SCREW, HEX FLANGE HD M10-1.5 X 30

PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 6/18/96 bd	DESCRIPTION AIREND COMPLETE	
MODEL NO. P-185WJD/IR	MANUAL NO. 54437173-063	DATE/REV: 3/00 C

DRAWBAR END



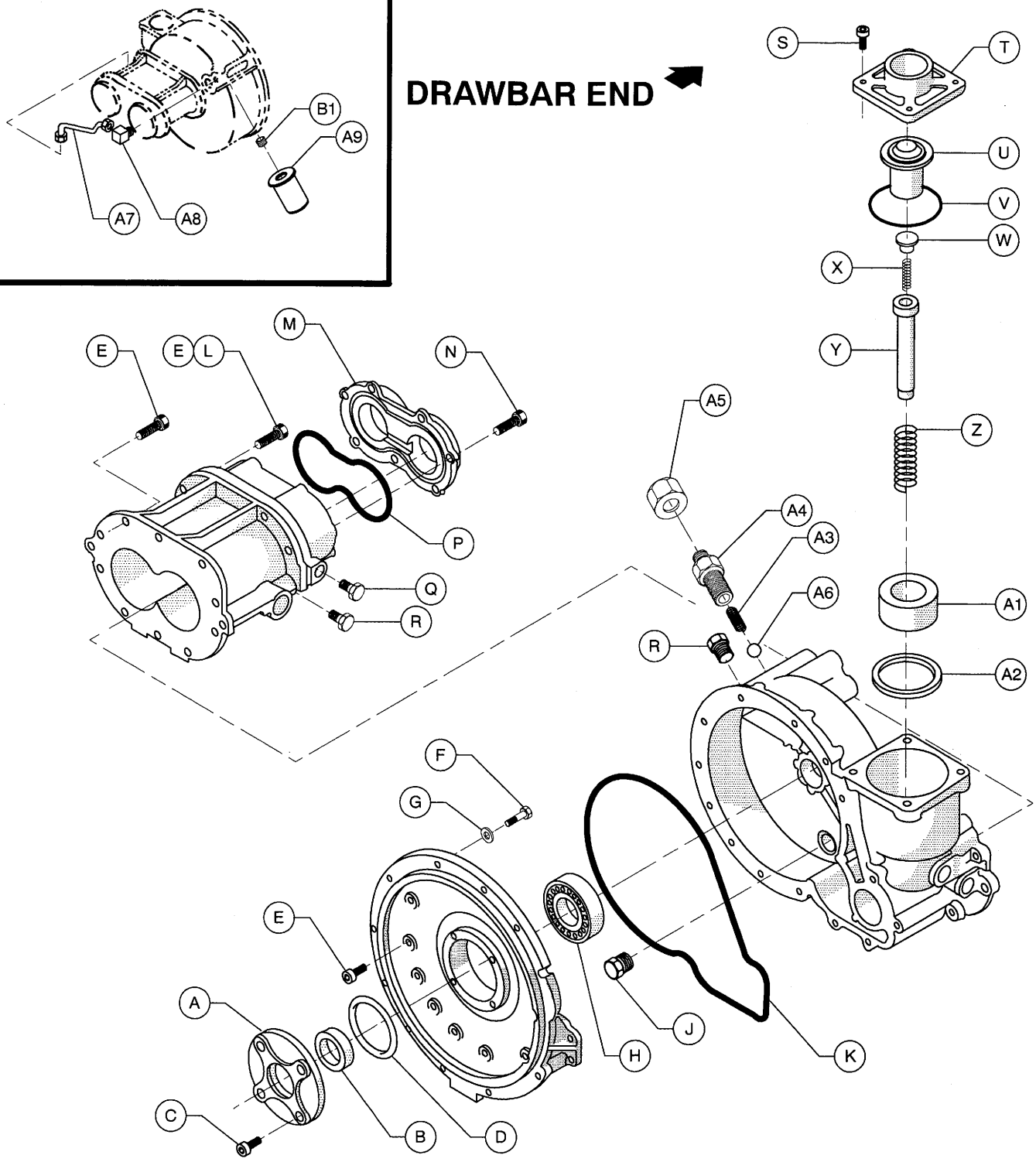
BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 6/18/96 bd	DESCRIPTION AIREND COMPLETE	
MODEL NO. P-185WJD/IR	MANUAL NO. 54437173-060	DATE/REV: 2/02 D

ITEM	C.P.N.	QTY	DESCRIPTION
A	36881704	8	SCREW, HEX FLANGE HD 3/8-16 X 1 1/4
B	54755095	1	BEARING, HEX
C	54755087	1	COUPLING, DRIVE
D	36769289	1	KEY
E	36880995	9	SCREW, HEX FLANGE HD M10-1.5 X 30
F	95376943	1	SCREW, SOCKET SET 3/8-16 X 1/4

BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 6/18/96 bd	DESCRIPTION AIREND COMPLETE	
MODEL NO. P-185WJD/IR	MANUAL NO. 54437173-063	DATE/REV: 2/02 D



*** NEW P-100 AIREND ASSEMBLY 36007839**

*** NEW P-130 AIREND ASSEMBLY 36007870**

*** NEW P-160 AIREND ASSEMBLY 36007854**

*** NEW P-175 AIREND ASSEMBLY 36007854**

*** NEW P-185 AIREND ASSEMBLY 36007854**

*** NEW P-185 CALIF. RE-RATE AIREND ASSEMBLY 36007870**

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 6/18/96 bd	DESCRIPTION: AIREND ASSEMBLY	
MODEL NO.: P100WJD/IR - P185WJD/IR	MANUAL NO.: 54437173-064	DATE/REV: 10/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	36506772	1	SEAL COVER
B	35375369	1	SEAL
C	35611961	4	SCREW
D	95022331	1	O-RING
E	119M2AB221	32	SCREW
F	36791689	2	SCREW
G	95094306	2	WASHER
H	35286004	1	BEARING
J	39101449	1	PLUG
K	95641734	1	O-RING
L	35612134	1	SCREW
M	36506442	1	BEARING COVER
N	35611953	7	SCREW
P	95023115	1	O-RING
Q	35289057	1	PLUG
R	35287556	2	PLUG
S	35287655	4	SCREW
T	36508471	1	INLET COVER
U	36511623	1	UNLOADER VALVE
V	95023107	1	O-RING
W	35379817	1	SPRING CAP
X	35376342	1	SPRING
Y	35611557	1	STEM
Z	35376334	1	SPRING
A1	35611615	1	PISTON
A2	35376359	1	SEAL
A3	35376326	1	SPRING
A4	35612175	1	CONNECTOR
A5	95257333	1	CAP
A6	35376318	1	BALL
A7	36764553	1	TUBE ASSY
A8	35286491	2	ELBOW
A9	36897353	1	FILTER ELEMENT
B1	35372986	1	NIPPLE

*** NEW P-100 AIREND ASSEMBLY 36007839**

*** NEW P-130 AIREND ASSEMBLY 36007870**

*** NEW P-160 AIREND ASSEMBLY 36007854**

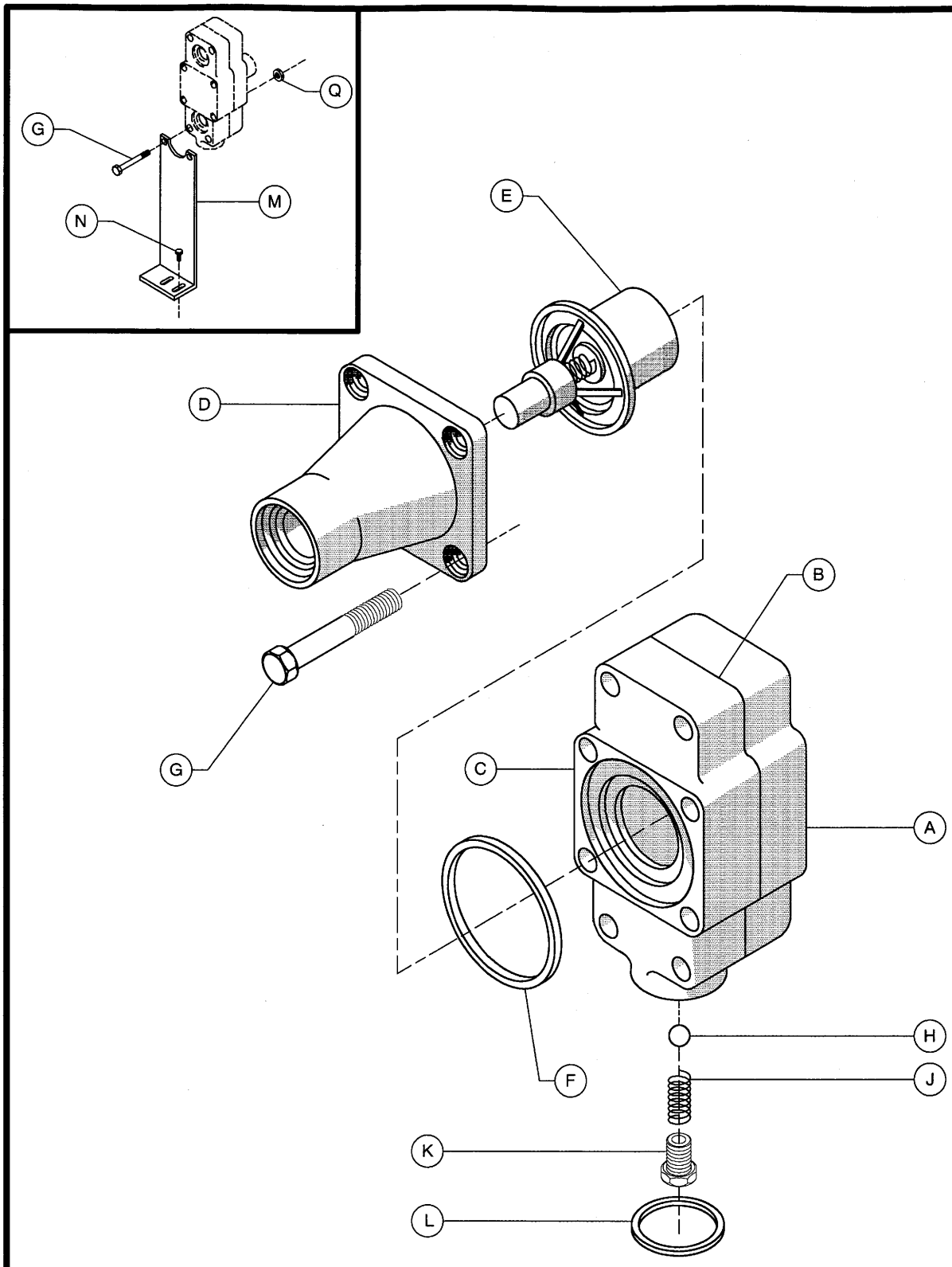
*** NEW P-175 AIREND ASSEMBLY 36007854**

*** NEW P-185 AIREND ASSEMBLY 36007854**

*** NEW P-185 CALIF. RE-RATE AIREND ASSEMBLY 36007870**

*** EXCHANGE AIREND OPTION:** INGERSOLL-RAND OFFERS FACTORY REMANUFACTURED AIRENDS THAT ARE BUILT TO THE LATEST DESIGNS. MEANING IT WILL REFLECT ALL THE ENGINEERING UPGRADES AND PERFORMANCE ENHANCEMENTS MADE TO THAT SIZE UNIT. ALL EXCHANGE AIRENDS COME WITH A ONE YEAR WARRANTY. THESE BENEFITS MAKE A FACTORY REBUILT AIREND THE ONLY COST EFFECTIVE OPTION. CALL YOUR LOCAL IR DEALER FOR MORE DETAILS. PLEASE PROVIDE YOUR AIREND SERIAL NUMBER.

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 6/18/96 bd	DESCRIPTION: AIREND ASSEMBLY	
MODEL NO.: P100WJD/IR - P185WJD/IR	MANUAL NO.: 54437173-065	DATE/REV: 4/02 F



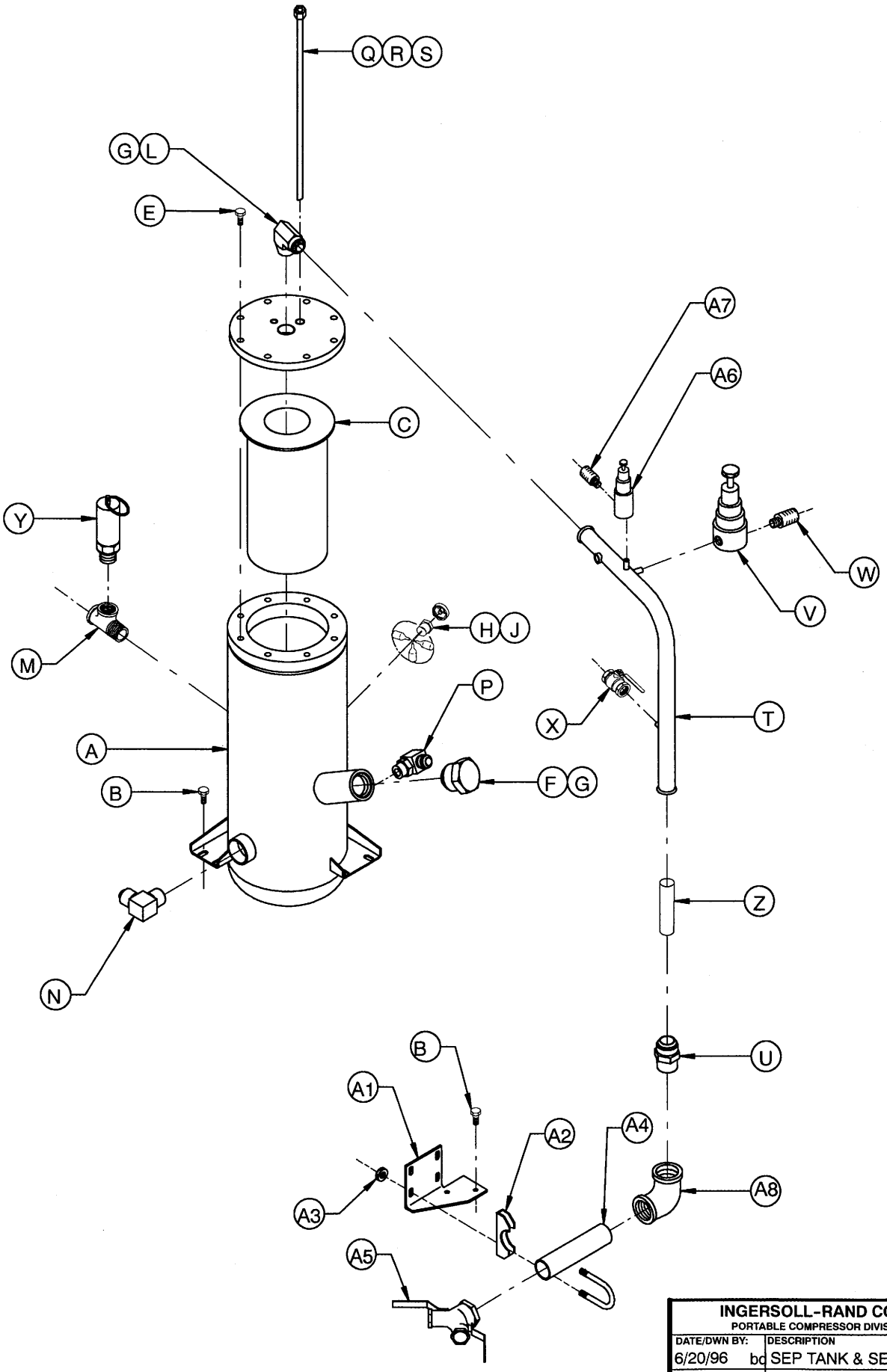
OIL TEMPERATURE BYPASS VALVE
ASSEMBLY 36884179

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 9/3/96 bd	DESCRIPTION OIL TEMP BYPASS VALVE	
MODEL NO. P-100WD/JD/IR - P-185WD/JD/IR	MANUAL NO. 54437173-066	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36776714	1	BODY
B	35584242	1	GASKET
C	36788289	1	BODY
D	36765832	1	COVER
E	36782019	1	ELEMENT
F	95022307	1	O-RING
G	36786382	6	SCREW
H	35288448	1	BALL
J	35379940	1	SPRING
K	36788164	1	PLUG
L	36788172	1	SEAL
M	36880755	1	BRACKET
N	35279025	2	SCREW, TAPPING M08-1.25 X 20
P	36884187	2	SCREW, HEX M08-125 X 80
Q	36881886	2	NUT, HEX FLANGE M08

OIL TEMPERATURE BYPASS VALVE
ASSEMBLY 36884179

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 9/3/96 bd	DESCRIPTION OIL TEMP BYPASS VALVE	
MODEL NO. P-100WD/JD/IR - P-185WD/JD/IR	MANUAL NO. 54437173-067	DATE/REV: 3/00 B



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY:	DESCRIPTION	
6/20/96 bd	SEP TANK & SERVICE AIR	
MODEL NO.	MANUAL NO.	DATE/REV:
P-100WD/JD/IR - P-185WD/JD/IR	54437173-068	7/00 D

ITEM		C.P.N.	QTY	DESCRIPTION	
A		54465851	1	TANK, SEPARATOR	
B		35279025	4	SCREW, TAPPING M08-1.25 X 20	
C		36845303	1	ELEMENT, SEPARATOR	
D		~	~	~	
E		36877793	8	SCREW, HEX FLANGE HD M12	
F		35579630	1	PLUG 1 5/8	
G		35279942	1	O-RING	
H		36891083	1	GAUGE ASSEMBLY, OIL LEVEL	
J	***	36891489	1	POINTER ASSEMBLY	
K		~	~	~	
L		35279777	1	ELBOW, 90□ 1 5/8-12	
M		95944708	1	TEE, STREET NPT 1/2	
N		95431292	1	ELBOW, 90□ 1 7/8-12	
P		35294727	1	ELBOW, 45□	
Q		35329309	1	FITTING, TUBE LENZ	
R		36781227	1	TUBE, SCAVENGE	
S		36840437	1	VALVE, CHECK	
T		36880672	1	TUBE, SERVICE	
U		95219770	1	ADAPTER 1 1/4	
V	*	35322379	1	VALVE, BLOWDOWN	
W		36766772	1	ORIFICE, MUFFLER	
X		35324839	1	VALVE, BALL	
Y		35325166	1	VALVE, SAFETY	**{PRIOR TO S/N 297429}**
		35325166	1	VALVE, SAFETY (P100 - P185)	**{BEGIN WITH S/N 297429}**
		36920254	1	VALVE, SAFETY (XP185)	**{BEGIN WITH S/N 297429}**
Z		35607993	1	NOZZLE, .286 SONIC ORIFICE (P100)	**{PRIOR TO S/N 305271}**
		36921690	1	NOZZLE, .286 SONIC ORIFICE (P100)	**{BEGIN WITH S/N 305271}**
		35608009	1	NOZZLE, .319 SONIC ORIFICE (P130)	**{PRIOR TO S/N 305271}**
		36923910	1	NOZZLE, .319 SONIC ORIFICE (P130)	**{BEGIN WITH S/N 305271}**
		35608017	1	NOZZLE, .361 SONIC ORIFICE (P160)	
		35608025	1	NOZZLE, .378 SONIC ORIFICE (P175)	
		36865129	1	NOZZLE, .394 SONIC ORIFICE (P185)	**{PRIOR TO S/N 305271}**
		36921377	1	NOZZLE, .395 SONIC ORIFICE (P185)	**{BEGIN WITH S/N 305271}**
A1		36889996	1	BRACKET, SERVICE PIPE	
A2		36785277	1	CLAMP, SADDLE 1 5/8	
A3		95923314	1	NUT, HEX LOCK 5/16-18	
A4		95916268	1	NIPPLE	
A5		36881076	1	VALVE, WYE	
A6	**	36854149	1	VALVE, PRESSURE REGULATOR	
A7		36766756	1	ORIFICE, MUFFLER	
A8		95953378	1	ELBOW, 1 1/4 NPT	

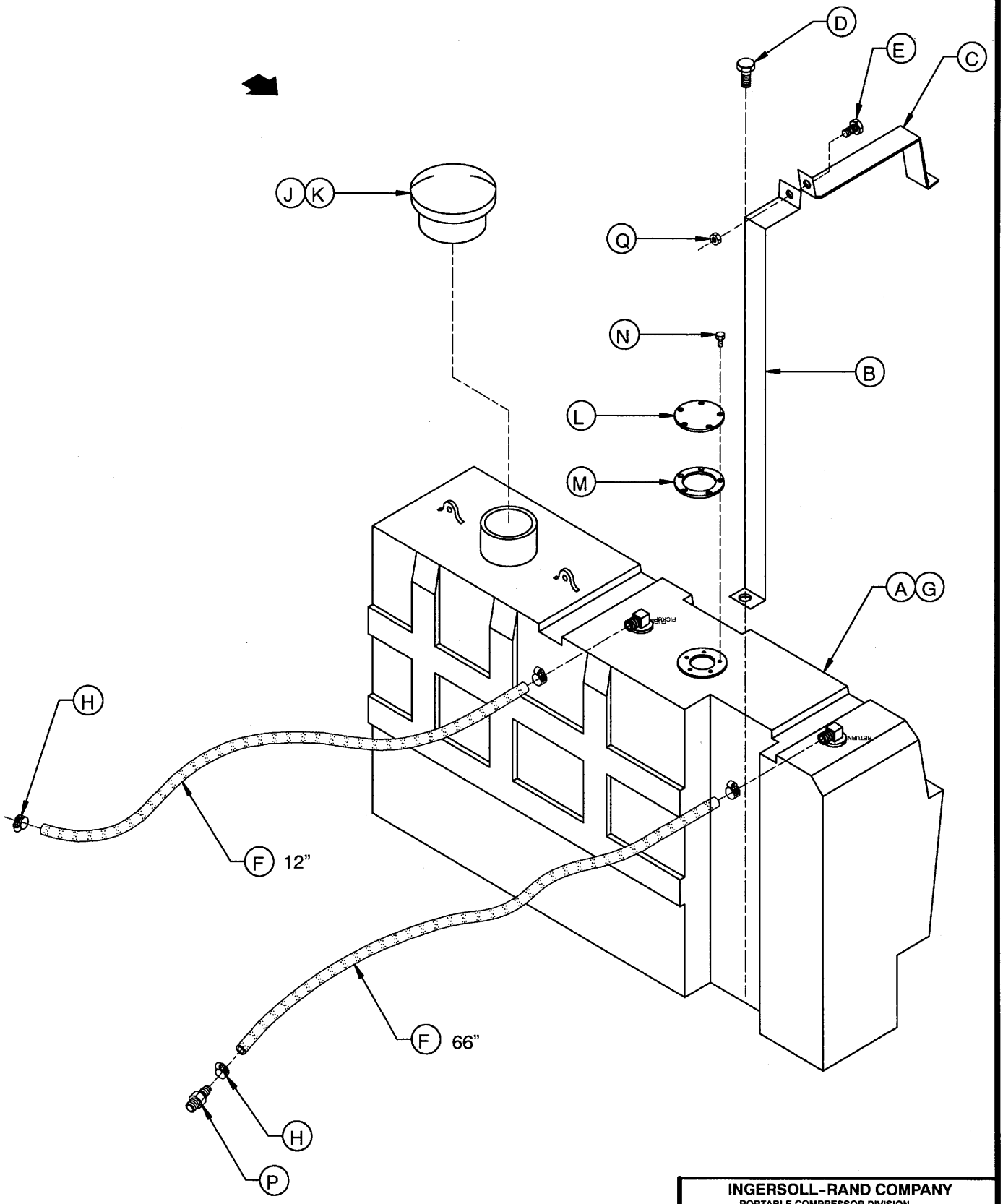
* 35379064 DIAPHRAM REPAIR KIT

** 35387919 DIAPHRAM REPAIR KIT

*** INCLUDED WITH GAUGE ASSEMBLY (36891083)

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY:	DESCRIPTION	
6/20/96 bd	SEP TANK & SERVICE AIR	
MODEL NO.	MANUAL NO.	DATE/REV:
P-100WD/JD/IR - P-185WD/JD/IR	54437173-069	7/00 F

DRAWBAR END



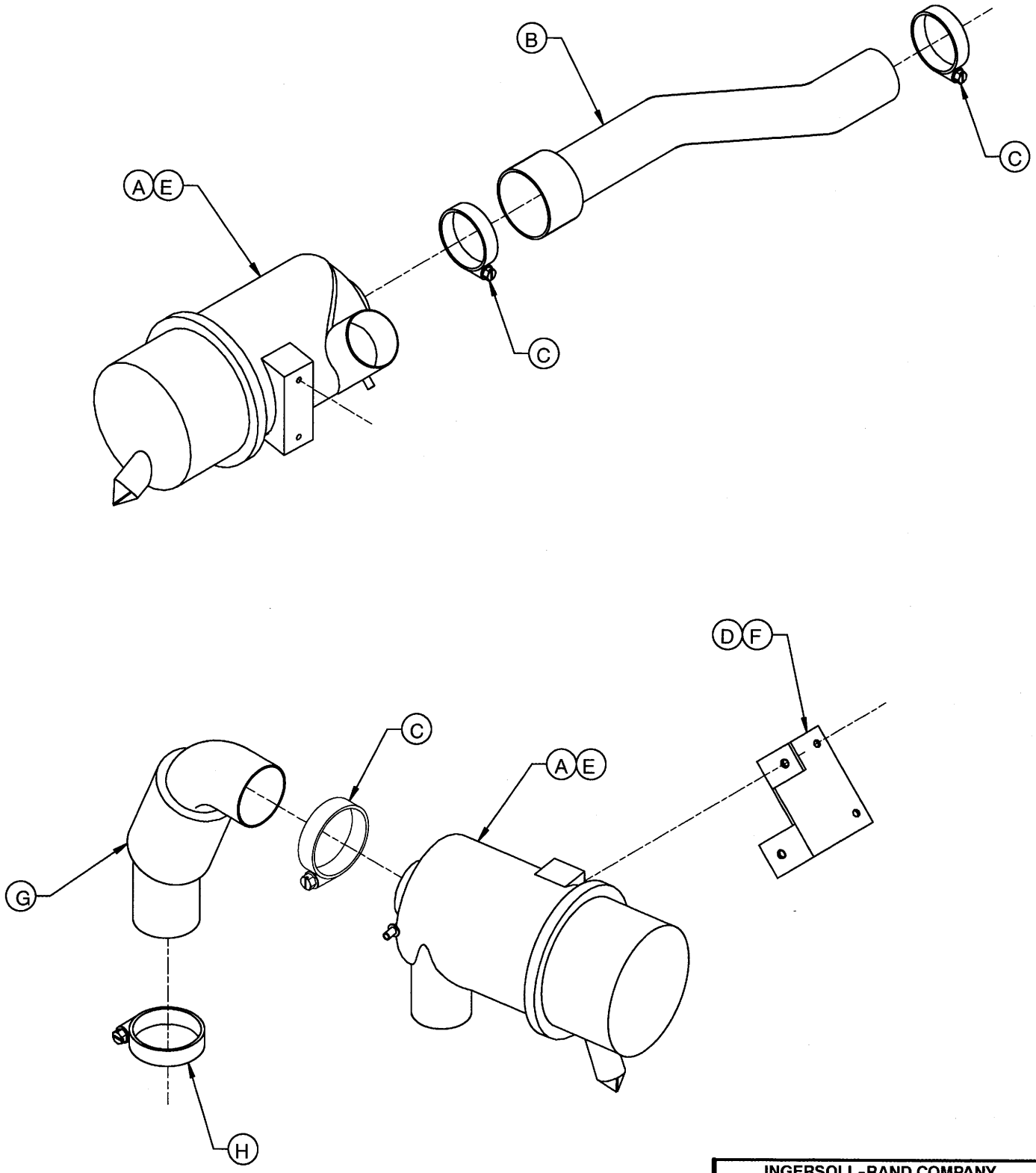
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION FUEL TANK COMPLETE	
MODEL NO. P-100WIR - P-185WIR	MANUAL NO. 54437173-070	DATE/REV: 8/00 D

ITEM	C.P.N.	QTY	DESCRIPTION
A	36881100	1	TANK, FUEL
B	36884252	1	STRAP, HOLD DOWN
C	36884245	1	STRAP, HOLD DOWN
D	35279025	1	SCREW, TAPPING M08-125 x 20
E	35271170	1	SCREW, TAPPING M08-125 x 40
F	35363498	*	HOSE, 5/16 FUEL
G **	35384577	2	BUSHING
H	35296342	4	CLAMP, WORM GEAR
J	36859049	1	CAP, FUEL
K	36385111	1	GASKET, FUEL CAP
L	36792828	1	COVER, FUEL SENDER
M	35361849	1	GASKET, FUEL SENDER
N	95946532	5	SCREW, HEX 10-32 X 1/2
P	36895977	1	REDUCER
Q	35278530	1	NUT, HEX NYLOCK M08

* SEE ILLUSTRATION FOR LENGTH

** INCLUDED WITH TANK

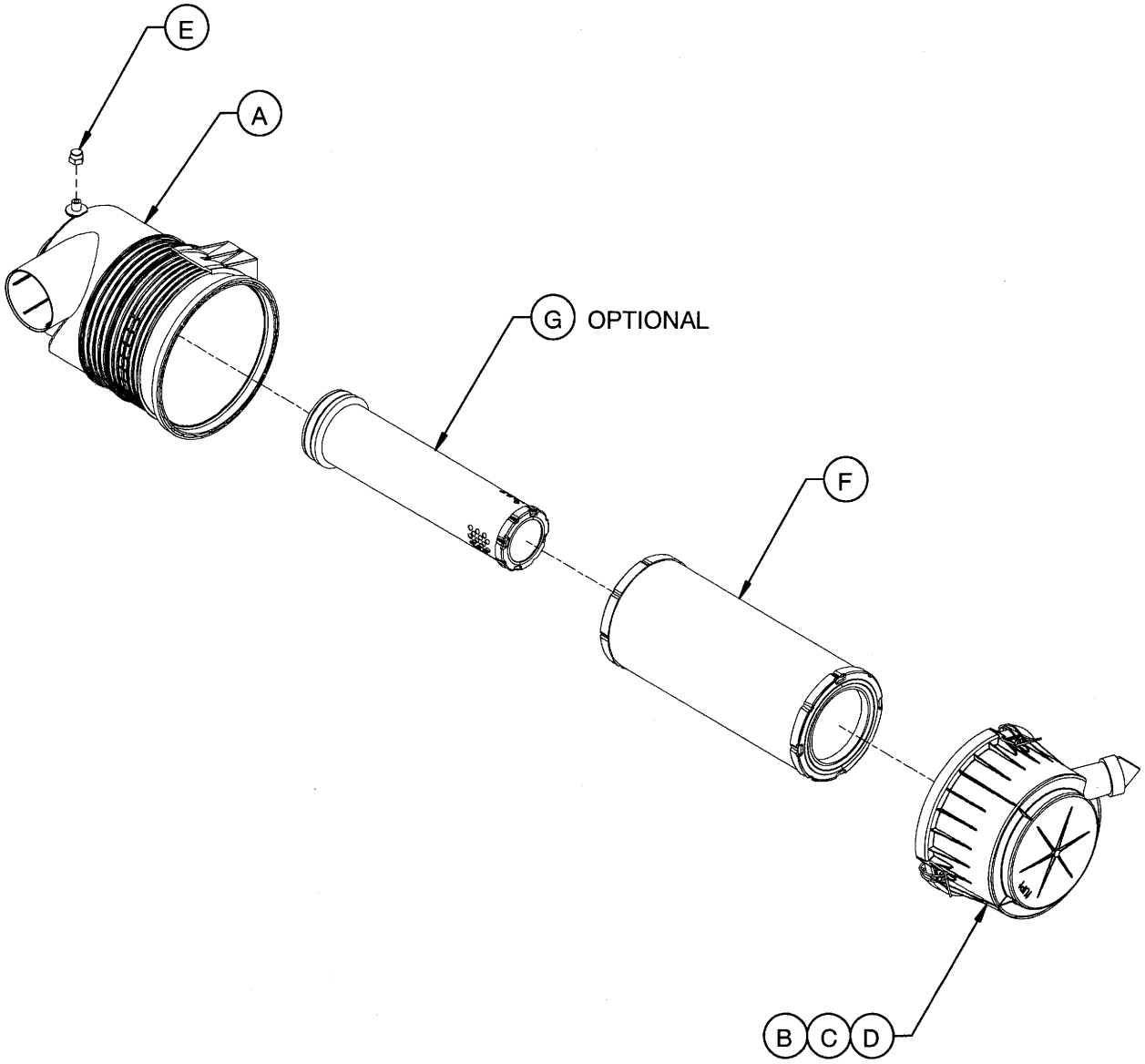
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY:	DESCRIPTION	
10/27/99 bd	FUEL TANK COMPLETE	
MODEL NO.	MANUAL NO.	DATE/REV:
P-100WIR - P-185WIR	54437173-071	3/00 B



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION: AIR INTAKE COMPLETE	
MODEL NO.: P-100WIR - P-185WIR	MANUAL NO.: 54437173-072	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36897999	2	CLEANER, AIR
B	54389861	1	HOSE, AIR END
C	35374073	3	CLAMP, TEE 3.62 DIA
D	36897981	1	BRACKET, AIR CLEANER
E	96702048	4	SCREW, HEX HD M08-1.25 X 16
F	35279025	2	SCREW, TAPPING M08-1.25 X 20
G	36880920	1	HOSE, AIR INLET
H	35314996	1	CLAMP, TEE 3.12 DIA

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION AIR INTAKE COMPLETE	
MODEL NO. P-100WIR - P-185WIR	MANUAL NO. 54437173-073	DATE/REV: 8/00 C



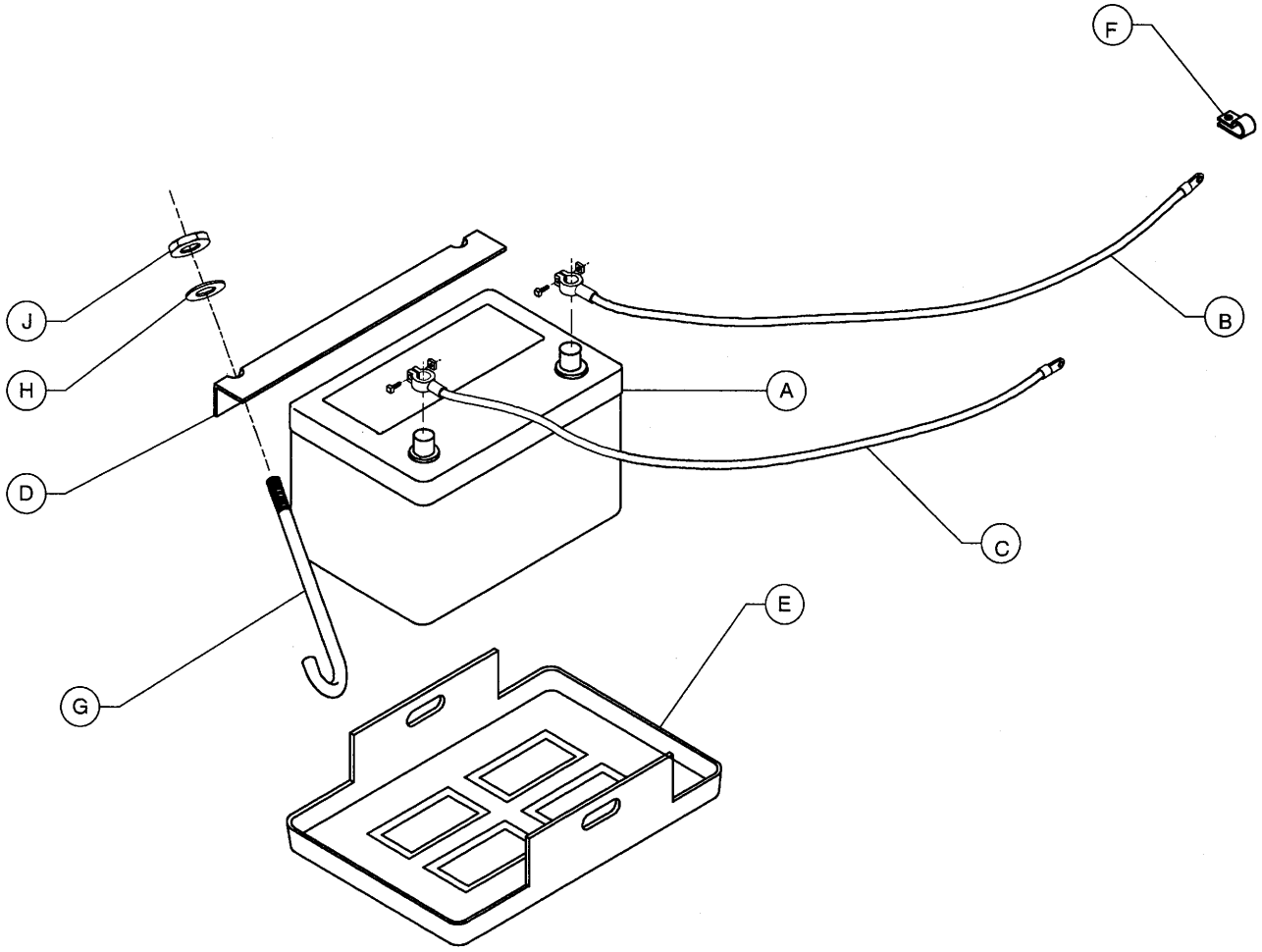
AIR CLEANER ASSEMBLY 36897999

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 4/21/98 bd	DESCRIPTION AIR CLEANER ASSEMBLY	
MODEL NO. P-130 W IR/JD/D P-185 W IR/JD/D	MANUAL NO. 54437173-074	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	35393701	1	BODY, AIR CLEANER
B	35393693	1	COVER, AIR CLEANER
C	35393669	3	CLIP, RETAINING
D	35393677	1	VALVE, DUST EJECTOR
E	35393719	1	PLUG, CAP
F	35393685	1	ELEMENT, PRIMARY
G	35393651	1	SAFETY ELEMENT (OPTION)

AIR CLEANER ASSEMBLY 36897999

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 4/21/98 bd	DESCRIPTION AIR CLEANER ASSEMBLY	
MODEL NO. P-130 W IR/JD/D P-185 W IR/JD/D	MANUAL NO. 54437173-075	DATE/REV: 3/00 B

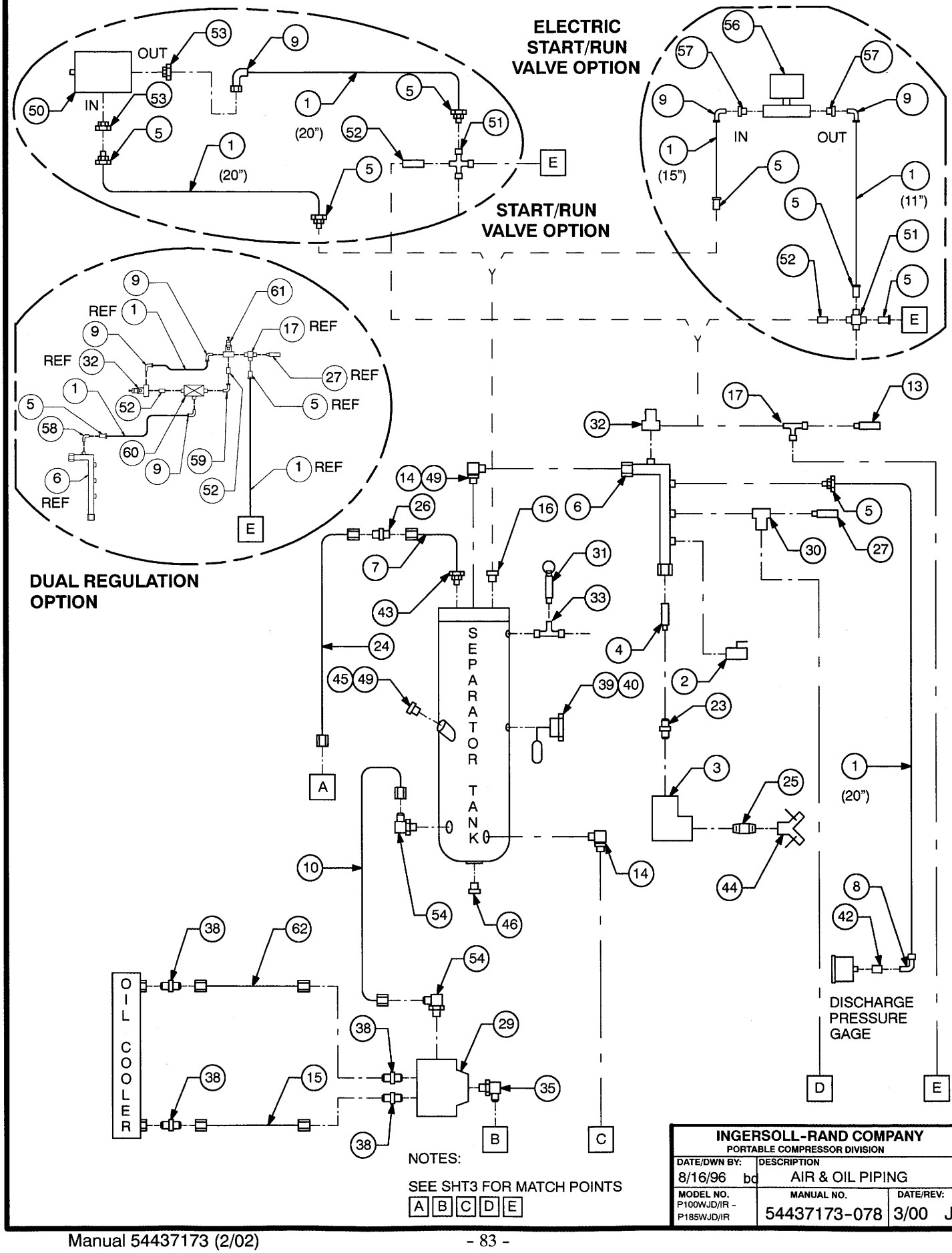


INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bd	DESCRIPTION BATTERY & MOUNTING	
MODEL NO. P-100WIR P-185WIR	MANUAL NO. 54437173-076	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION	
A	36844264	1	BATTERY	
B	36793747	1	CABLE, POSITIVE BATTERY	**{PRIOR TO S/N 309111}**
	36793743	1	CABLE, POSITIVE BATTERY	**{BEGIN WITH S/N 309111}**
C	35582402	1	CABLE, NEGATIVE BATTERY	
D	36853257	1	ANGLE	
E	36878064	1	TRAY, BATTERY	
F	35225093	2	CLAMP, 1/2" SUPPORT	
G	36853240	2	J-BOLT	
H	36853265	2	WASHER, PLASTIC	
J	35144492	2	NUT, LOCK 1/4-20	

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bd	DESCRIPTION BATTERY & MOUNTING	
MODEL NO. P-100WIR P-185WIR	MANUAL NO. 54437173-077	DATE/REV: 4/00 C

BEGINNING WITH SN 296411



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 8/16/96 bd	DESCRIPTION: AIR & OIL PIPING	
MODEL NO.: P100WJD/IR - P185WJD/IR	MANUAL NO.: 54437173-078	DATE/REV: 3/00 J

ITEM	C.P.N.	DESCRIPTION	
1	35356484	TUBING	
2	35324839	BALL VALVE	
3	95953378	ELBOW, 90° 1 1/4NPT	
4	35607993	NOZZLE, SONIC (P100)	**{PRIOR TO S/N 305271}**
	36921690	NOZZLE, SONIC (P100)	**{BEGIN W/ S/N 305271}**
	35608009	NOZZLE, SONIC (P130)	**{PRIOR TO S/N 305271}**
	36923910	NOZZLE, SONIC (P130)	**{BEGIN W/ S/N 305271}**
	35608017	NOZZLE, SONIC (P160)	
	35608025	NOZZLE, SONIC (P175)	
	36865129	NOZZLE, SONIC (P185)	**{PRIOR TO S/N 305271}**
	36921377	NOZZLE, SONIC (P185)	**{BEGIN W/ S/N 305271}**
5	35369347	CONNECTOR	
6	36880672	SERVICE TUBE	
7	36781227	SCAVENGE TUBE	
8	35370386	ELBOW, 90° 1/4NPT X 3/8	
9	35369354	ELBOW, 90° 1/4NPT X 3/8	
10	35287721	HOSE ASSEMBLY	
11			
12	95431292	ELBOW, 90° 1 7/8-12	**{PRIOR TO S/N 296411}**
	35374867	ELBOW, 90° 1 7/8-12	**{BEGIN W/ S/N 296411}**
13	36766756	MUFFLER, .140 ORIFICE	
14	35279777	ELBOW, 90° 1 5/8-12	
15	36880763	COOLER TUBE	
16	95928230	PLUG	
17	35114545	TEE, STREET 1/4NPT	
18			
19			
20			
21			
22			
23	95219770	ADAPTER, 1 1/4NPT	
24	35315407	HOSE ASSEMBLY	
25	95916268	NIPPLE	
26	36840437	ORIFICE/CHECK VALVE	
27	36766772	MUFFLER, .062 ORIFICE	
28			
29	36884179	VALVE, BYPASS	
★ 30	35322379	VALVE, BLOWDOWN	
31	35325166	VALVE, SAFETY	
	35375971	VALVE, SAFETY (XP185)	**{PRIOR TO S/N 297429}**
	36920254	VALVE, SAFETY (XP185)	**{BEGIN W/ S/N 297429}**
★★ 32	36854149	VALVE, PRESS REG	
33	95944708	STREET TEE	
34			
35	35294750	ELBOW, 90° 1 1/16-12	
36			
37			
38	35295880	STRAIGHT CONNECTOR	
39	36860468	FITTING	**{PRIOR TO S/N 296411}**
	36891083	INDICATOR, OIL LEVEL	**{BEGIN W/ S/N 296411}**
40	35324649	GASKET	**{PRIOR TO S/N 296411}**
	36891489	ASSEMBLY, POINTER	**{BEGIN W/ S/N 296411}**
41	92121532	SIGHT GLASS	**{PRIOR TO S/N 296411}**
42	95930319	COUPLING	
43	35329309	LENZ FITTING	
44	36881076	WYE VALVE	
45	35579630	PLUG	
46	95664934	PLUG	
47			
48			
49	35279942	O-RING	
50	36783439	VALVE, 2-WAY START/RUN	
51	95954293	CROSS, 1/4NPT	
52	95667341	NIPPLE,1/4NPT X .88	
53	35302314	ADAPTER	
54	35294727	ELBOW, 45°	
55			
56	36843142	VALVE, SOLENOID 12V	
57	95940748	BUSHING, REDUCING 3/8 - 1/4	
58	95954095	ELBOW, 90° .25 NPT	
59	95944666	ELBOW, 90° STREET .25 NPT	
60	36864684	VALVE, 3-WAY .25 NPT	
61	35359090	VALVE, PRESS REG 150 PSI	
62	36880763	ASSEMBLY, TUBE (P100 - P175)	
	36920353	ASSEMBLY, TUBE (P - XP185)	

★

35379064 DIAPHRAM REPAIR KIT

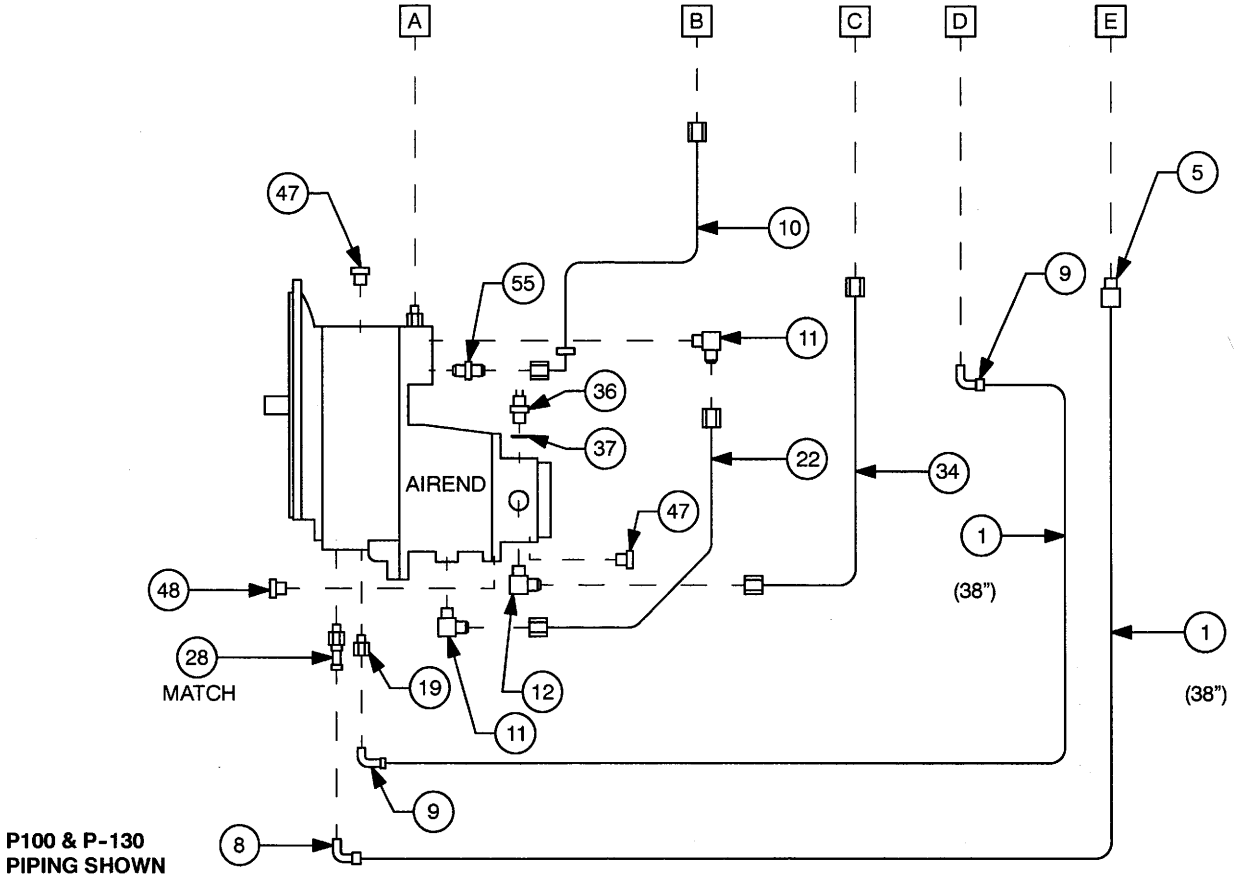
★★ 35387919 DIAPHRAM REPAIR KIT

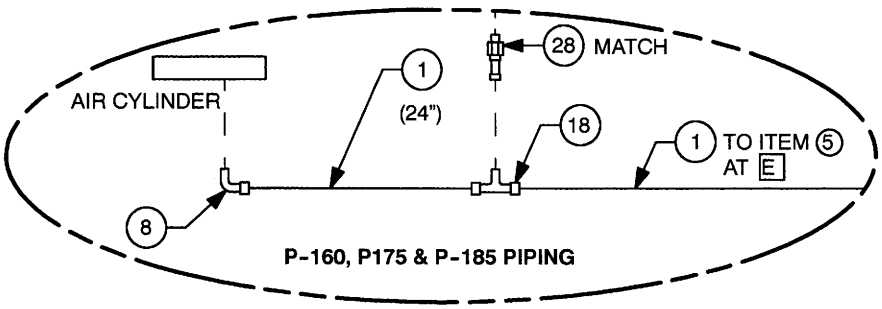
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 8/16/96 bc	DESCRIPTION: AIR & OIL PIPING	
MODEL NO.: P100WJD/IR - P185WJD/IR	MANUAL NO.: 54437173-079	DATE/REV: 3/00 L

NOTES:

SEE SHT1 FOR MATCH POINTS

A B C D E

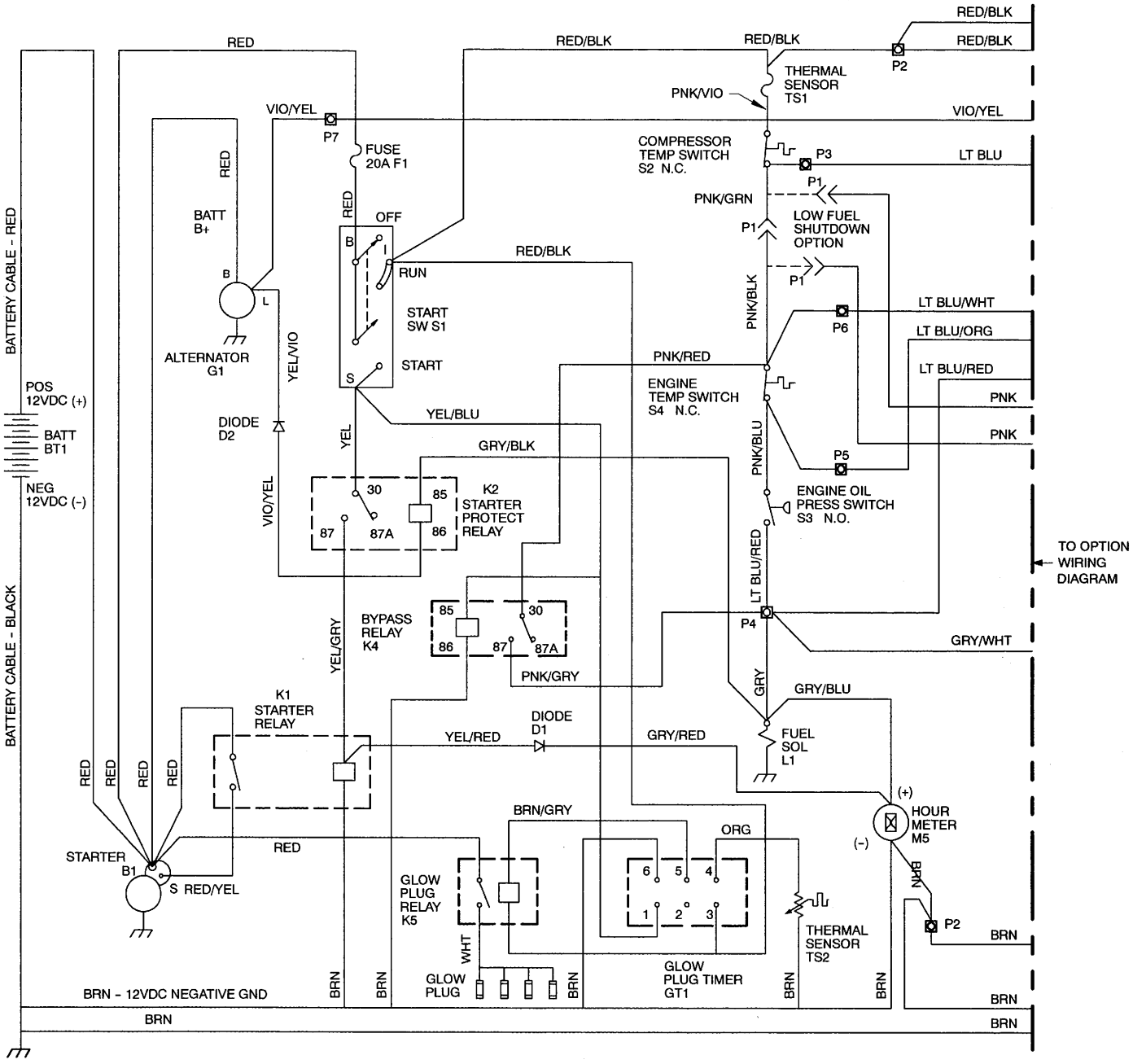




INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 12/20/99 bd	DESCRIPTION: AIR & OIL PIPING	
MODEL NO.: P100WJD/IR - P185WJD/IR	MANUAL NO.: 54437173-080	DATE/REV: 3/00 B

ITEM				ITEM		
1	35356484	TUBING		30		
2				31		
3						
4				32		
				33		
				34	36886752	DISCHARGE HOSE
				35		
				36	35596436	SHUTDOWN SWITCH
5	35369347	CONNECTOR		37	39404165	O-RING
6				38		
7				39		
8	35370386	ELBOW, 90° 1/8NPT X 3/8		40		
9	35369354	ELBOW, 90° 1/4NPT X 3/8		41		
10	35287721	HOSE ASSEMBLY		42		
11	35286491	ELBOW, 90° 7/8-14		43		
12	95431292	ELBOW, 90° 1 7/8-12	**{PRIOR TO S/N 296411}**	44		
	35374867	ELBOW, 90° 1 7/8-12	**{BEGIN W/ S/N 296411}**	45		
13				46		
14				47	35287556	PLUG, HEX 5/8-18
15				48	35289057	PLUG, HEX 7/16-20
16				49		
17				50		
18	35369396	TEE, 1/8NPT		51		
19	35302314	ADAPTER		52		
20				53		
21				54		
22	36764553	TUBE ASSEMBLY		55	36885093	ELBOW, 90° LONG
23				56		
24				57		
25				58		
26				59		
27				60		
28	36840403	VALVE, CHECK .093		61		
	36886992	VALVE, CHECK.078 (P160 - P175)		62		
29						

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 8/16/96 bd	DESCRIPTION: AIR & OIL PIPING	
MODEL NO.: P100WJD/IR - P185WJD/IR	MANUAL NO.: 54437173-081	DATE/REV: 3/00 F



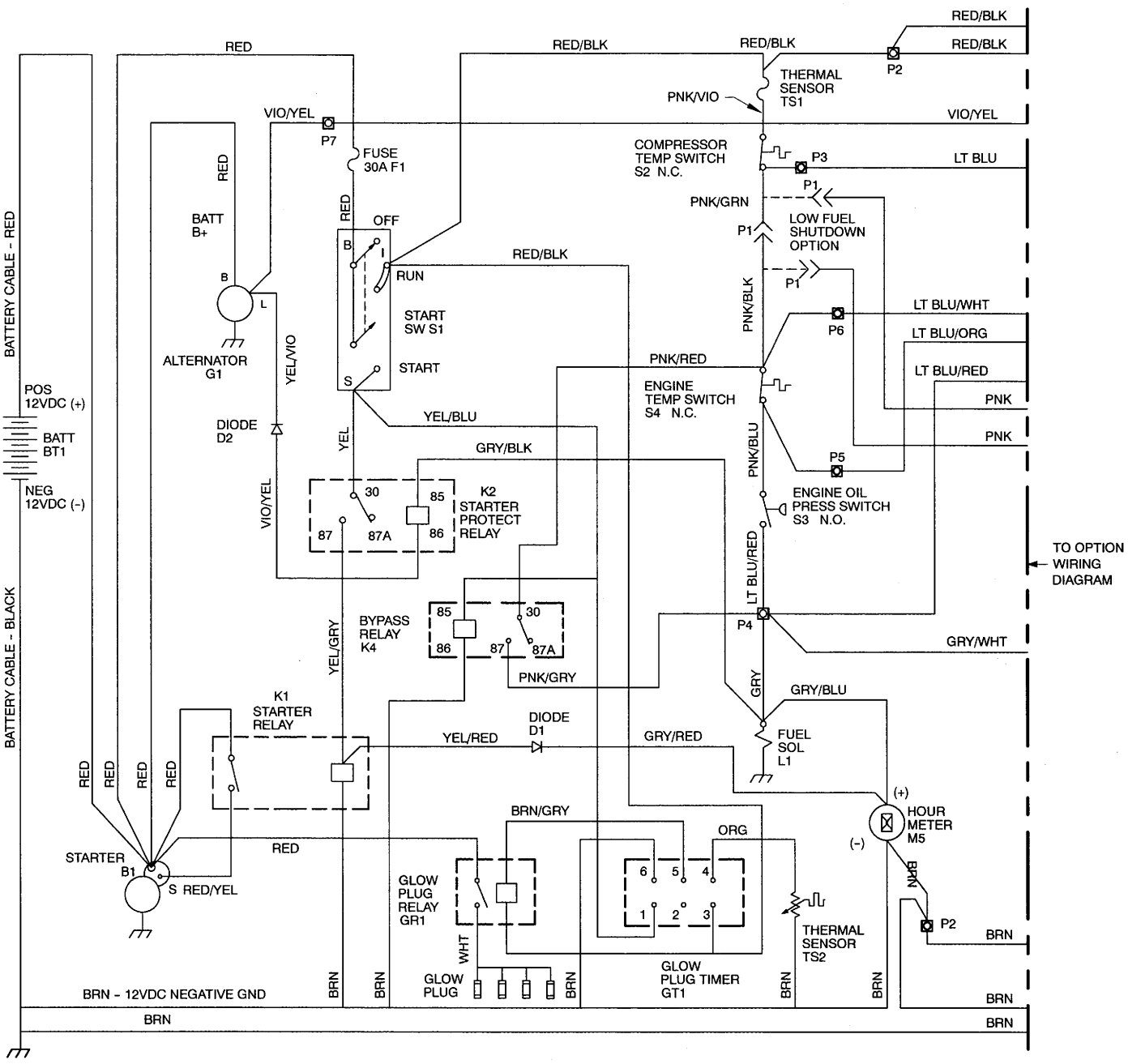
PRIOR TO S/N 316305

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bd	DESCRIPTION STD WIRING DIAGRAM	
MODEL NO. P-100WIR - P-185WIR	MANUAL NO. 54437173-082	DATE/REV: 3/00 B

ITEM	C.P.N.	DESCRIPTION
B1	54386016	STARTER
BT1	36844264	BATTERY, 12 V
D1	35376169	DIODE
D2	35376169	DIODE
F1	36792083	FUSE, 20A
G1	54385794	ALTERNATOR
GT1	54385828	TIMER, GLOW PLUG
K1	36856250	RELAY, STARTER
K2	36878361	RELAY, SHUT-DOAWN
K4	36878361	RELAY, BYPASS
K5	36856250	RELAY, GLOW PLUG
L1	54385992	SOLENOID, FUEL
M5	36879880	HOURMETER
S1	36884211	SWITCH, START
S2	35596436	SWITCH, COMPRESSOR TEMPERATUR
S3	36878379	SWITCH, ENGINE OIL
S4	36880706	SWITCH, ENGINE TEMPERATURE
TS1	36865756	SENSOR, THERMAL
TS2	54385901	SENSOR, THERMAL
W1	54418959	HARNESS, ENGINE

PRIOR TO S/N 316305

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bc	DESCRIPTION STD WIRING DIAGRAM	
MODEL NO. P-100WIR - P-185WIR	MANUAL NO. 54437173-083	DATE/REV: 3/00 B



BETWEEN S/N 316305 & 326649

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bd	DESCRIPTION STD WIRING DIAGRAM	
MODEL NO. P-100WIR - P-185WIR	MANUAL NO. 54437173-082	DATE/REV: 10/00 C

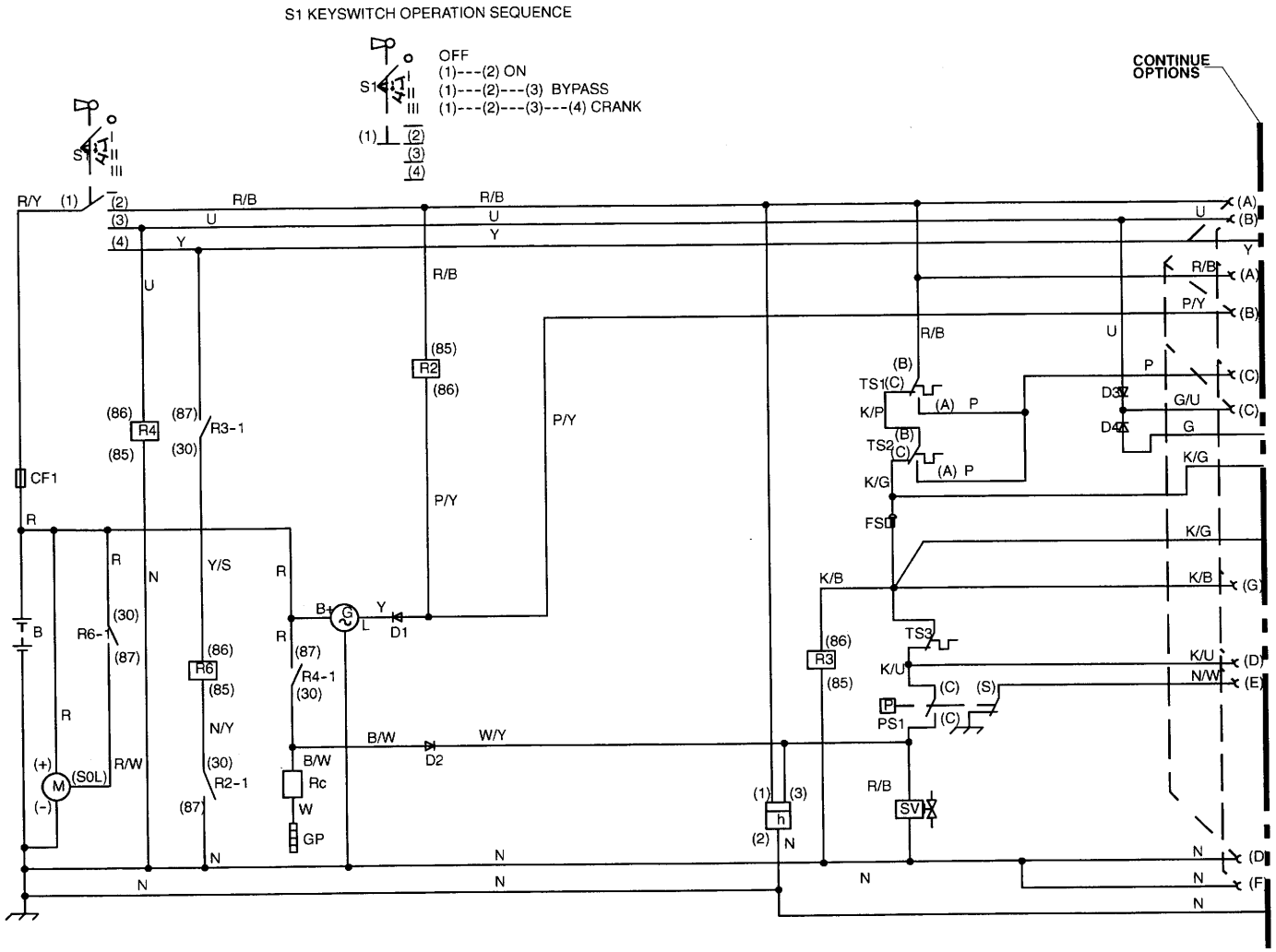
ITEM	C.P.N.	DESCRIPTION
B1	54386016	STARTER
BT1	36844264	BATTERY, 12 V
D1	35376169	DIODE
D2	35376169	DIODE
F1	36786259	FUSE, 30A
G1	54385794	ALTERNATOR
GR1	36856250	RELAY, GLOW PLUG
GT1	54385828	TIMER, GLOW PLUG
K1	36856250	RELAY, STARTER
K2	54368048	RELAY, SHUT-DOAWN
K4	54368048	RELAY, BYPASS
L1	54385992	SOLENOID, FUEL
M5	36879880	HOURMETER
S1	36884211	SWITCH, START
S2	35596436	SWITCH, COMPRESSOR TEMPERATUR
S3	36878379	SWITCH, ENGINE OIL
S4	36880706	SWITCH, ENGINE TEMPERATURE
TS1	36865756	SENSOR, THERMAL
TS2	54385901	SENSOR, THERMAL
W1	54418959	HARNESS, ENGINE

BETWEEN S/N 316305 & 326649

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bc	DESCRIPTION STD WIRING DIAGRAM	
MODEL NO. P-100WIR - P-185WIR	MANUAL NO. 54437173-083	DATE/REV: 10/00 C

ITEM	B	U	N	G	S	LG	O	K	P	R	W	Y
COLOR	BLK	BLU	BRN	GRN	GRY	LT GRN	ORG	PNK	PUR	RED	WHT	YEL

DASHED LINES INDICATE COMMON CONNECTIONS/CONNECTORS



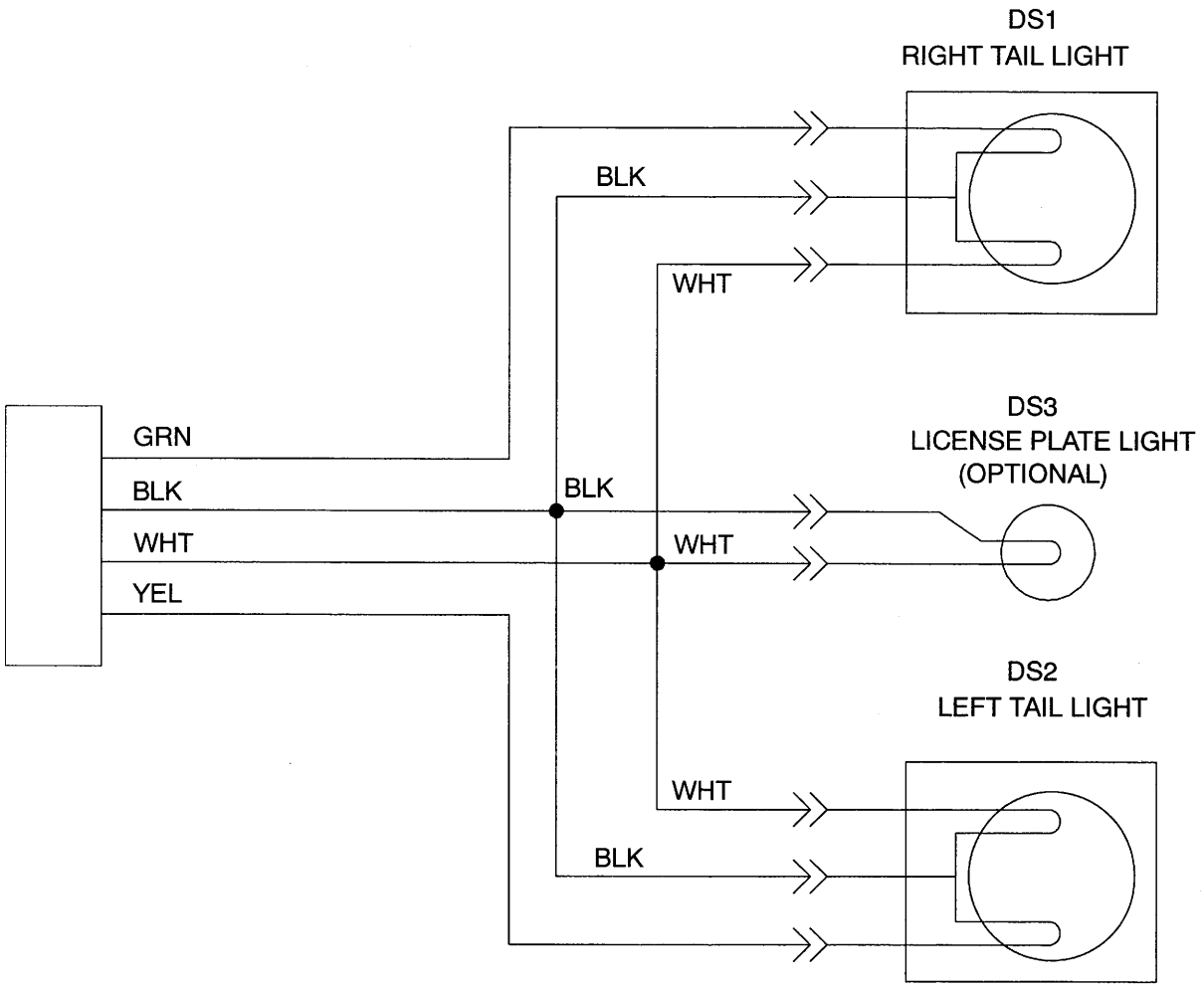
BEGIN WITH S/N 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bd	DESCRIPTION STD WIRING DIAGRAM	
MODEL NO. P-100WIR - P-185WIR	MANUAL NO. 54437173-082	DATE/REV: 6/02 E

ITEM	C.P.N.	QTY.	DESCRIPTION
B	36844264	1	BATTERY
CF1	36792083	1	FUSE, 20A
D1	35676169	1	DIODE
D2	35676169	1	DIODE
D3	35676169	1	DIODE
D4	35676169	1	DIODE
G	54747571	1	ALTERNATOR
GP	54385893	4	PLUG, GLOW
H	54766704	1	HOURMETER
M	54747563	1	STARTER
PS1	54747935	1	SWITCH, ENGINE OIL PRESSURE
Rc	49841836	1	RESISTOR, CONTROL (GLOW PLUGS)
R2	54368048	1	RELAY, START PROTECT
R3	54368048	1	RELAY, START INHIBIT
R4	54368048	1	RELAY, GLOW PLUG
R6	54368048	1	RELAY, CRANK
S1	92086719	1	SWITCH, KEY
SV1	54385992	1	SOLENOID, FUEL
TS1	54764964	1	SWITCH, A/E HIGH AIR TEMP
TS2	54764956	1	SWITCH, DISCRG HIGH AIR TEMP
TS3	36880706	1	SWITCH, HIGH ENGINE TEMP
W1	22060297	1	HARNESS, ENGINE CONTROL
	22054167		KEY, REMOVABLE
	54774104		KEY, NON-REMOVABLE

BEGIN WITH S/N 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bd	DESCRIPTION STD WIRING DIAGRAM	
MODEL NO. P-100WIR - P-185WIR	MANUAL NO. 54437173-083	DATE/REV: 12/01 D



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/10/95 bd	DESCRIPTION STD WIRING DIAGRAM	
MODEL NO. P-100WJD/IR - P-185WJD/IR	MANUAL NO. 54437173-084	DATE/REV: 3/00 C

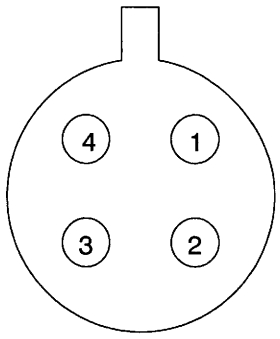
ITEM	C.P.N.	DESCRIPTION
DS1	36788081	LAMP ASSEMBLY
DS2	36788081	LAMP ASSEMBLY
DS3	36895860	LIGHT, LICENSE
DS4	35367044	LAMP, RED CLEARANCE
DS5	35367051	LAMP, YELLOW CLEARANCE
DS6	35367044	LAMP, RED CLEARANCE
DS7	35367051	LAMP, YELLOW CLEARANCE
W2	36893196	HARNESS, 2-LIGHT SYSTEM

AVAILABLE FROM I-R:

PLUG	SOCKET
35288760	35288752

NOTE:

STANDARD MACHINE IS SUPPLIED WITHOUT PLUG ON LIGHT HARNESS.

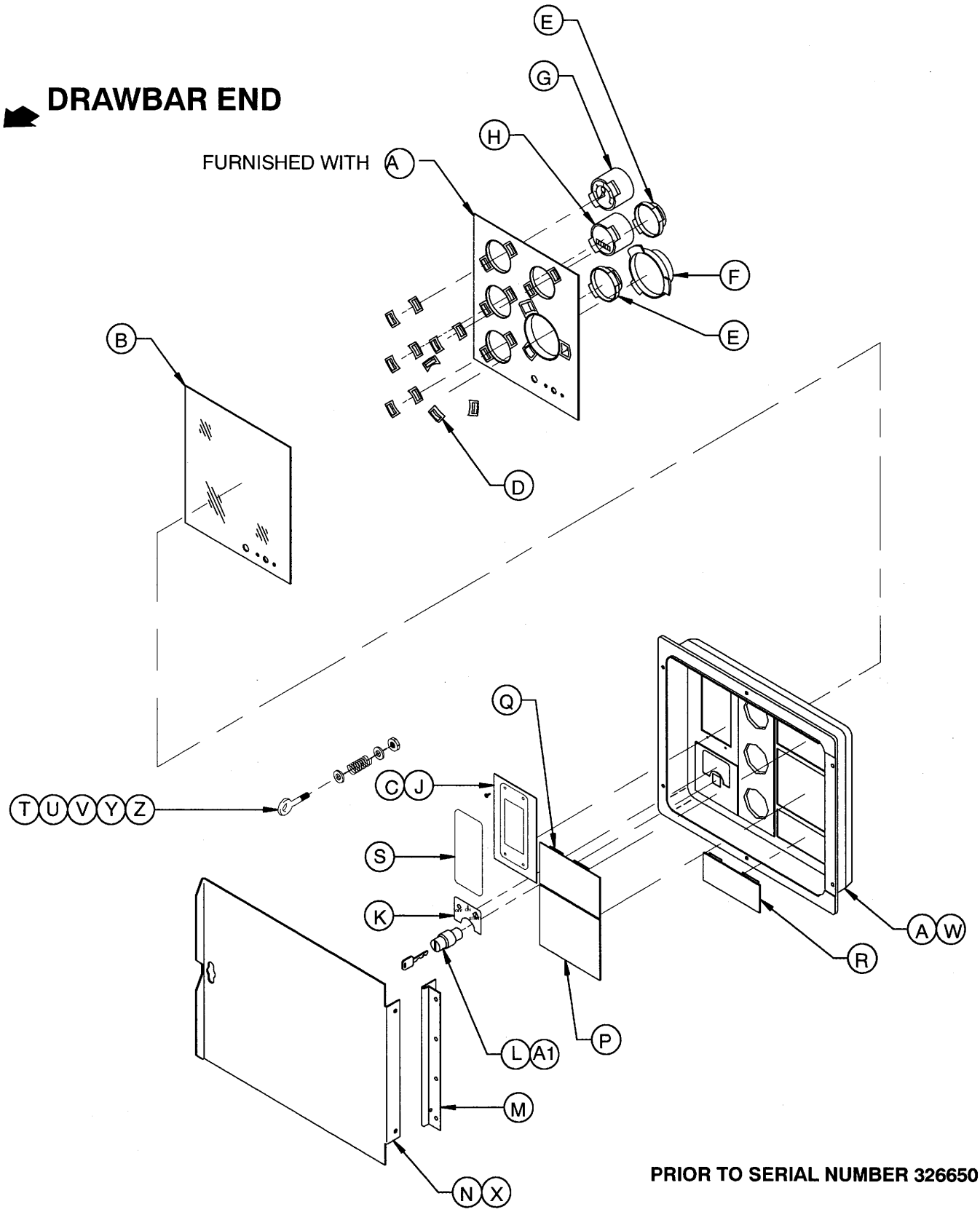


PLUG / SOCKET WIRING CONNECTIONS

1 YELLOW - LEFT TURN AND STOP-LIGHT
2 BLACK - TAIL LIGHTS
3 WHITE - GROUND
4 GREEN- RIGHT TURN AND STOP-LIGHT

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 9/16/96 bd	DESCRIPTION STD WIRING DIAGRAM	
MODEL NO. P-100WJD/IR - P-185WJD/IR	MANUAL NO. 54437173-085	DATE/REV: 3/00 C

DRAWBAR END



PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 7/29/96 bd	DESCRIPTION INST/CONT PNL ASSEMBLY	
MODEL NO. P100WD/JD/IR P185WD/JD/IR	MANUAL NO. 54437173-086	DATE/REV: 3/00 C

ITEM		C.P.N.	QTY	DESCRIPTION	
A		36884492	1	RECESSED FRAME ASSEMBLY	
B	**	35390368	1	PANEL, ACRYLIC	
C		35390400	2	SCREW, FLAT PH #6 X 3/8	
D	**	36880730	11	CLIP, GAUGE RETAINING	
E		35390319	2	CAP, 2" GAUGE	
F		35390301	1	CAP, 3.38" GAUGE	
G		36879898	1	GAUGE, 150 PSI PRESSURE	
H		36879880	1	HOURMETER	
J		35390343	1	COVER, WARNING MODULE	
K		36879971	1	DECAL, SWITCH	
L		36884211	1	SWITCH, IGNITION	
M		36890085	1	HINGE, CONTROL PANEL	
N		36879922	1	DOOR, INSTRUMENT PANEL	
		54523618	1	DOOR, INSTRUMENT PANEL (GALVANNEAL)	
P		35390293	1	COVER, 3.38" BEZEL	
Q		35390285	1	COVER, 2.06" BEZEL	
R		35390327	1	COVER, SWITCH PANEL	
S		36882173	1	LABEL, BLANK WARNING MODULE	
T		35607829	1	EYEBOLT	
U		95935029	1	WASHER, FLAT	
V		36772028	1	WASHER, PLASTIC	
W		36881118	6	RIVET	**{PRIOR TO S/N 296411}**
		36920486	6	RIVET, 3/16 SS	**{BEGIN WITH S/N 296411}**
X		36877587	2	RIVET	
Y		35607837	1	SPRING	
Z		95923298	1	NUT, HEX 1/4-20	
A1		36884229	1	KEY	

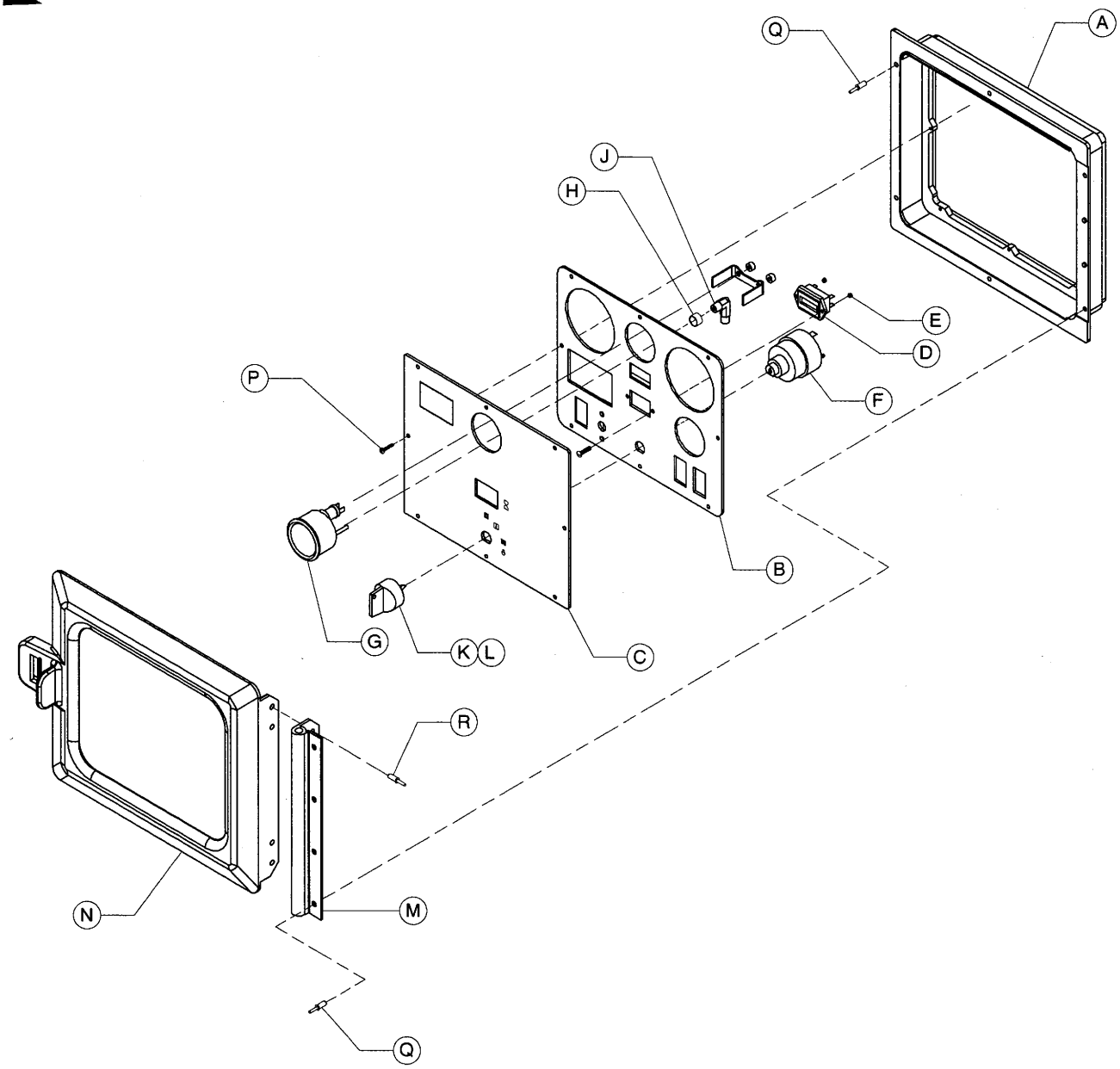
** FURNISHED WITH ITEM "A"

ITEMS "A" THROUGH "L" AND "P" THROUGH "S" ARE INCLUDED WITH PANEL ASSEMBLY 36880557

PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 7/29/96 bd	DESCRIPTION INST/CONT PNL ASSEMBLY	
MODEL NO. P100WD/IR/JD P185WD/IR/JD	MANUAL NO. 54437173-087	DATE/REV: 8/00 E

DRAWBAR END



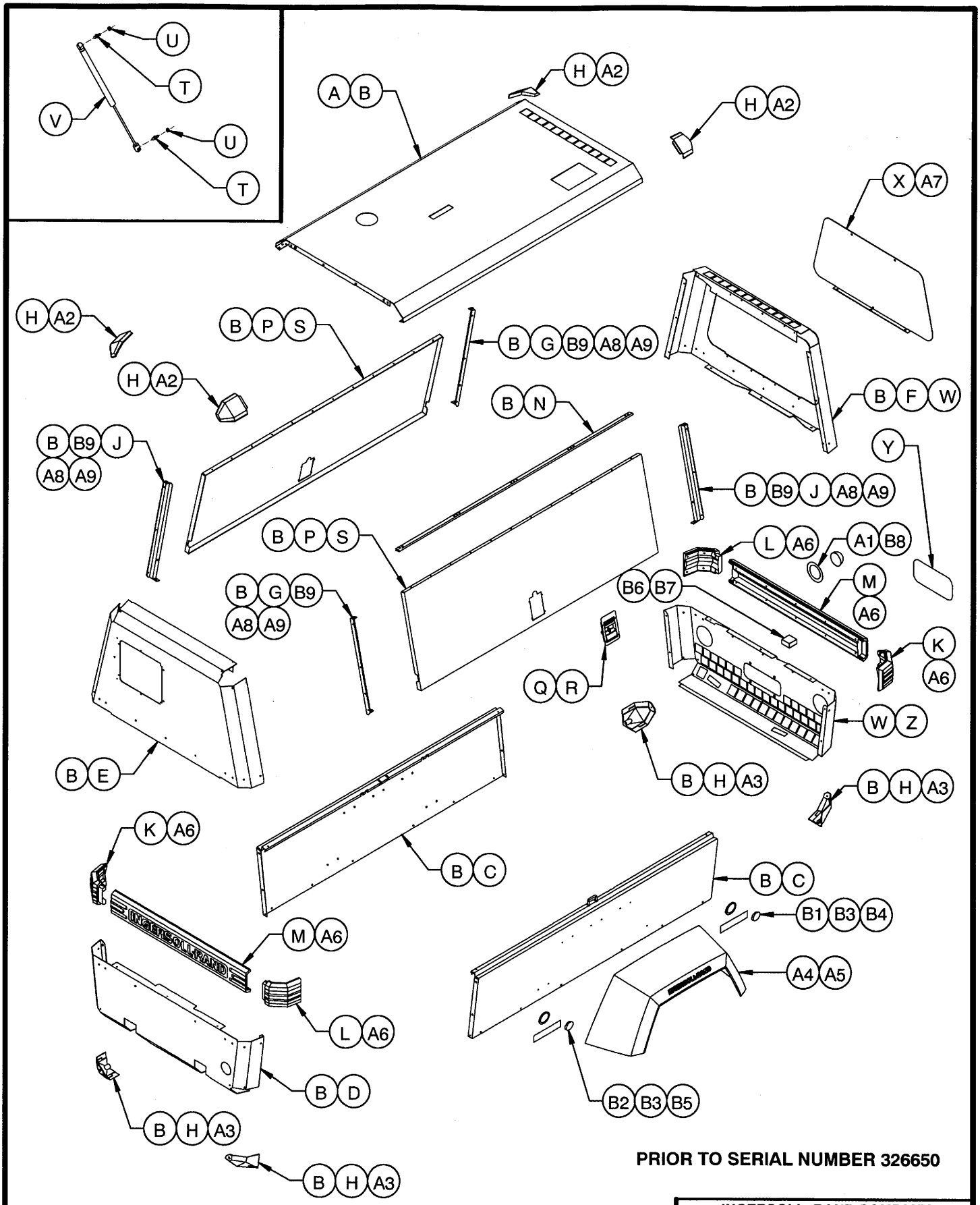
BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 7/29/96 bd	DESCRIPTION INST/CONT PNL ASSEMBLY	
MODEL NO. P100WD/JD/IR P185WD/JD/IR	MANUAL NO. 54437173-086	DATE/REV: 1/02 D

ITEM	C.P.N.	QTY	DESCRIPTION
A	54749601	1	FRAME, WW INSTR PANEL
B	54749619	1	PANEL, INSTRUMENT
C	54766845	1	DECAL, WW INSTR PANEL
D	54766704	1	METER, ELECTRONIC HOUR
E	22054159	2	NUT, PLASTIC 4-40
F	92086719	1	SWITCH, IGNITION
G	35604065	1	GAUGE, 150 PSI PRESSURE (P105 - P185)
	36891216	1	GAUGE, 250 PSI PRESSURE (XP185)
H	95935599	1	COUPLING, STD 1/8 NPT X .75
J	35370386	1	ELBOW, 1/8 NPT X 3/8 TUBE
K	22054167	*	KEY, REMOVABLE IGNITION
L	54774104	*	KEY, NON-REMOVABLE IGNITION
M	36890085	1	HINGE, CONTROL PANEL
N	54482500	1	DOOR, INSTRUMENT PANEL (STD. PAINT)
	54729199	1	DOOR, INSTRUMENT PANEL (SPECIAL PAINT)
P	22070494	8	SCREW, PLASTIC TAPPING
Q	54721212	6	RIVET, 3/16 ALUMINUM
R	54721220	4	RIVET, 3/16 ALUMINUM

BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 7/29/96 bd	DESCRIPTION INST/CONT PNL ASSEMBLY	
MODEL NO. P100WD/IR/JD P185WD/IR/JD	MANUAL NO. 54437173-087	DATE/REV: 1/02 F



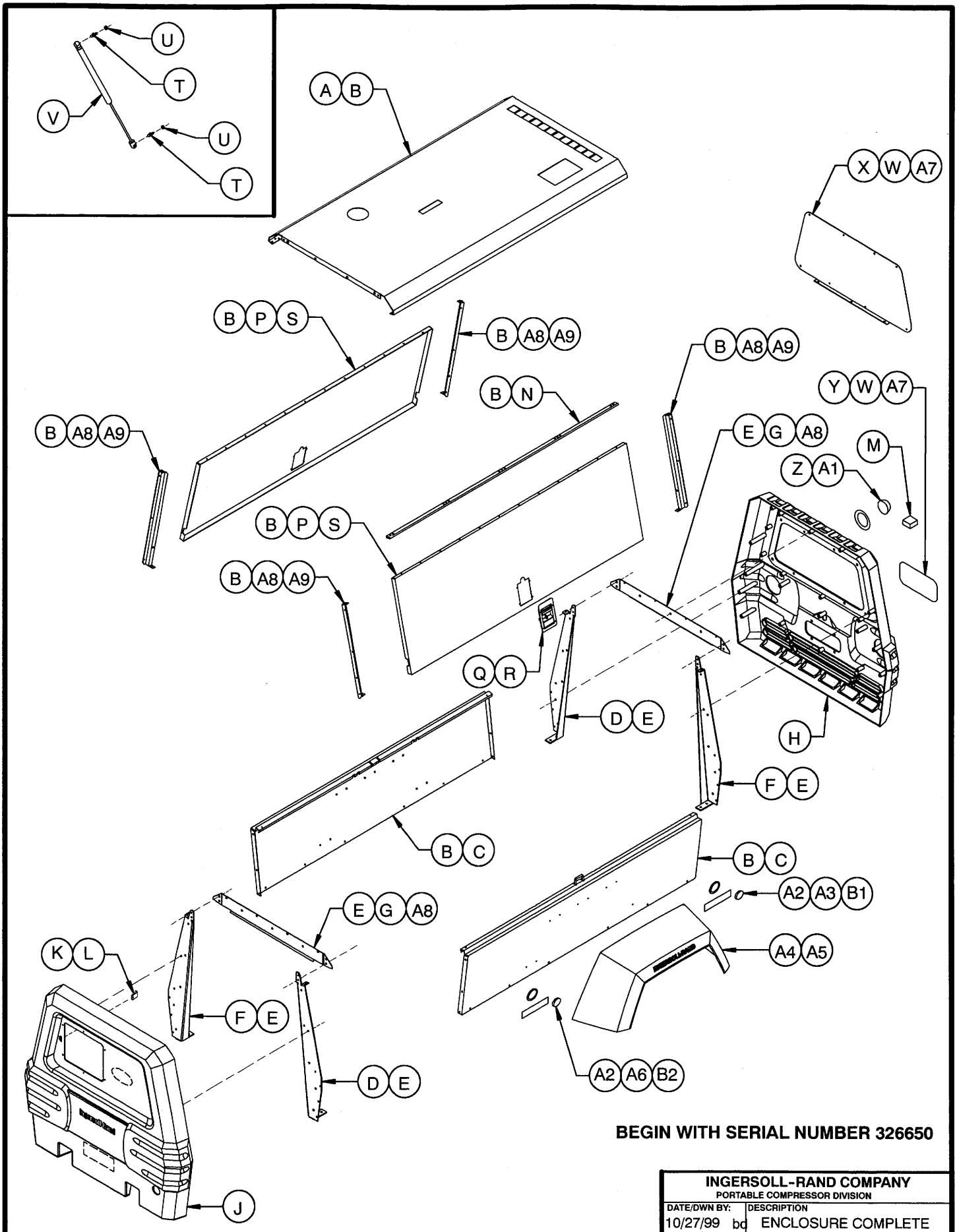
PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION ENCLOSURE COMPLETE	
MODEL NO. P-100WIR P-185WIR	MANUAL NO. 54437173-088	DATE/REV: 8/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	54389598	1	ROOF, PANEL
	54529458	1	ROOF, PANEL (GALVANNEAL)
B	36797652	68	SCREW, TAPPING M06-100 X 12
C	36894194	2	PANEL, SIDE
	54529433	2	PANEL, SIDE (GALVANNEAL)
D	36889517	1	CAP, FRONT BOTTOM END
	54529383	1	CAP, FRONT BOTTOM END (GALVANNEAL)
E	36881779	1	CAP, FRONT TOP END
	54529268	1	CAP, FRONT TOP END (GALVANNEAL)
F	36881795	1	CAP, REAR TOP END
	54529276	1	CAP, REAR TOP END (GALVANNEAL)
G	36889590	2	STIFFENER, CURB SIDE
H	36877587	20	RIVET, 3/16 ALUM
J	36889566	2	STIFFENER, STREET SIDE
K	36880953	2	BUMPER, END FR CURB/R ST
L	36880961	2	BUMPER, END FR ST/R CURB
M	36880979	2	BUMPER, CENTER
N	36883437	2	HINGE, DOOR
P	36889509	2	DOOR
	54529375	2	DOOR (GALVANNEAL)
Q	36793602	2	LATCH, SLAM DOOR
R	36794816	8	RIVET, 3/16 X 1/8
S	36865293	4	BUMPER, RUBBER
T	35337328	8	STUD, BALL M08
U	36881886	8	NUT, HEX FLANGE M08
V	35600287	4	SPRING, GAS
W	36794774	12	GROMMET, SCREW
X	36883445	1	COVER, COOLER ACCESS
	54529326	1	COVER, COOLER ACCESS (GALVANNEAL)
Y	36883452	1	COVER, COOLER ACCESS
	54529334	1	COVER, COOLER ACCESS (GALVANNEAL)
Z	36894202	1	CAP, REAR BOTTOM END
	54529441	1	CAP, REAR BOTTOM EN D (GALVANNEAL)
A1	36787968	2	GROMMET
A2	36881662	4	CAP, TOP CORNER
A3	36881670	4	CAP, BOTTOM CORNER
A4	36877579	2	FENDER
A5	92368687	10	SCREW, TAPPING M06-100 X 14
A6	36884419	22	RIVET, ALUMINUM BULB
A7	36885085	12	SCREW, TAPPING 1/4-10 X 3/4
A8	35279025	4	SCREW, TAPPING M08-1.25 X 20
A9	36889558	4	STOP, DOOR
	54529417	4	STOP, DOOR (GALVANNEAL)
B1	36894608	2	REFLECTOR, RED
B2	36894616	2	REFLECTOR, AMBER
B3	36893634	4	GROMMET, CLEARANCE LIGHT
B4	35367044	2	LIGHT, RED CLEARANCE
B5	35367051	2	LIGHT, YELLOW CLEARANCE
B6	36895860	1	LIGHT, LICENSE
B7	36782837	2	SCREW, HEX SHT MTL #10 X 1
B8	36788081	2	LAMP ASSEMBLY
B9	36920486	20	RIVET, 3/16 SS

PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION ENCLOSURE COMPLETE	
MODEL NO. P-100WIR P-185WIR	MANUAL NO. 54437173-089	DATE/REV: 8/00 C



BEGIN WITH SERIAL NUMBER 326650

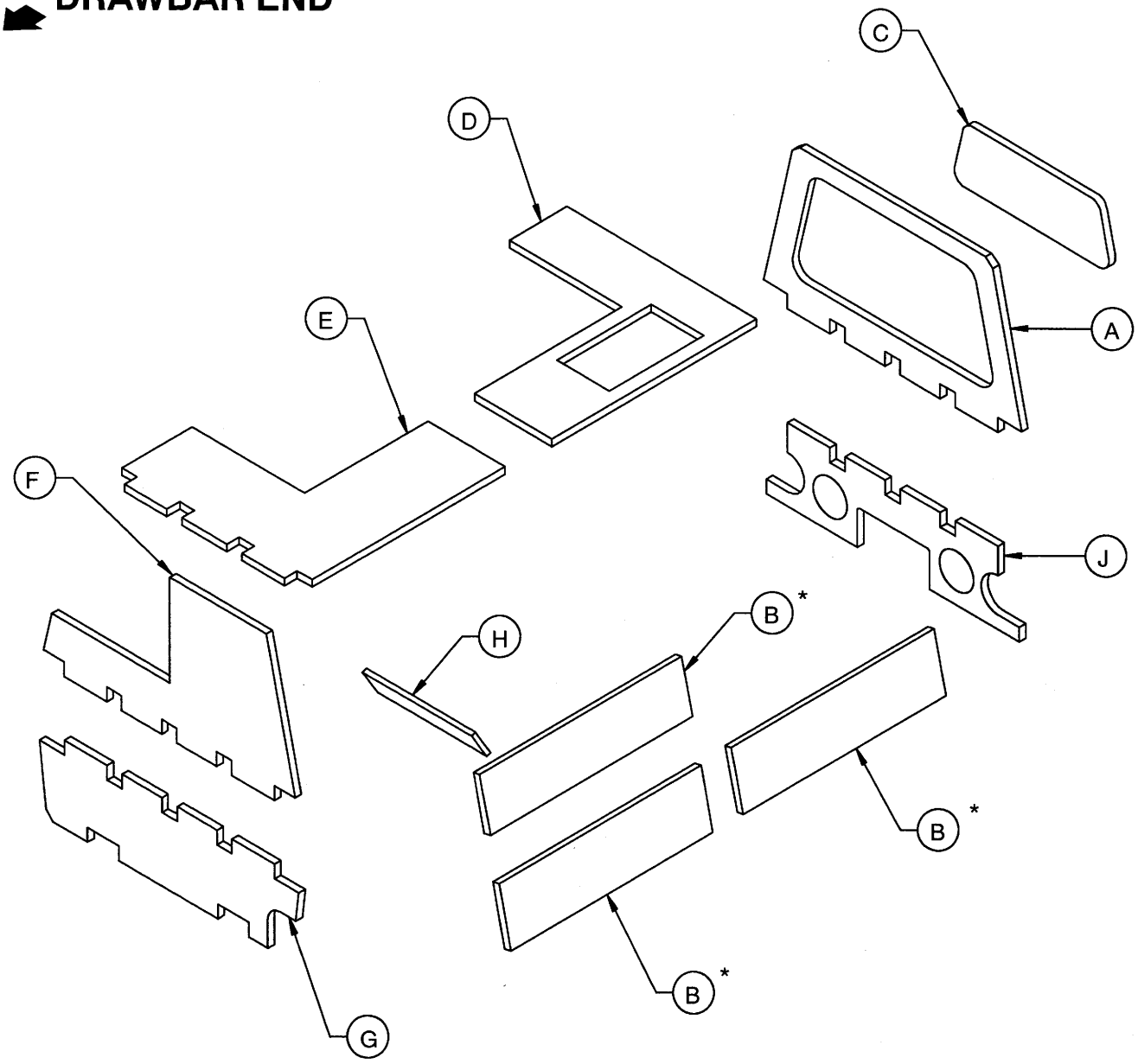
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY:	DESCRIPTION	
10/27/99 bd	ENCLOSURE COMPLETE	
MODEL NO.	MANUAL NO.	DATE/REV:
P-100WIR P-185WIR	54437173-088	12/01 D

ITEM	C.P.N.	QTY	DESCRIPTION
A	54389598	1	ROOF, PANEL
	54529458	1	ROOF, PANEL (GALVANNEAL)
B	36797652	59	SCREW, TAPPING M06-100 X 12
C	36894194	2	PANEL, SIDE
	54529433	2	PANEL, SIDE (GALVANNEAL)
D	54631783	2	STIFFNER, PLASTIC ECAP
E	54721238	22	SCREW, 11/32" HI-LO
F	54631775	2	STIFFNER, PLASTIC ECAP
G	54602719	2	CROSSMEMBER, ECAP
H	54473525	1	ENDCAP, REAR (STD. PAINT)
	54729140	1	ENDCAP, REAR (SPECIAL PAINT)
J	54473517	1	ENDCAP, FRONT (STD. PAINT)
	54729132	1	ENDCAP, FRONT (SPECIAL PAINT)
K	54482518	1	LATCH, PLASTIC ENDCAP (STD. PAINT)
	54729181	1	LATCH, PLASTIC ENDCAP (SPECIAL PAINT)
L	54721212	2	RIVET, 3/16 ALUMINUM
M	54726468	1	LIGHT, LICENSE
N	36883437	2	HINGE, DOOR
P	36889509	2	DOOR
	54529375	2	DOOR (GALVANNEAL)
Q	36793602	2	LATCH, SLAM DOOR
R	36794816	8	RIVET, 3/16 X 1/8
S	36865293	4	BUMPER, RUBBER
T	35337328	8	STUD, BALL M08
U	36881886	8	NUT, HEX FLANGE M08
V	35600287	4	SPRING, GAS
W	54724117	12	GROMMET, SCREW
X	36883445	1	COVER, COOLER ACCESS
	54529326	1	COVER, COOLER ACCESS (GALVANNEAL)
Y	36883452	1	COVER, COOLER ACCESS
	54529334	1	COVER, COOLER ACCESS (GALVANNEAL)
Z	36788081	2	LAMP ASSEMBLY
A1	36787968	2	GROMMET
A2	36893634	4	GROMMET, CLEARANCE LIGHT
A3	35367044	2	LIGHT, RED CLEARANCE
A4	36877579	2	FENDER
A5	92368687	10	SCREW, TAPPING M06-100 X 14
A6	35367051	2	LIGHT, YELLOW CLEARANCE
A7	36885085	12	SCREW, TAPPING 1/4-10 X 3/4
A8	35279025	24	SCREW, TAPPING M08-1.25 X 20
A9	36889558	4	STOP, DOOR
	54529417	4	STOP, DOOR (GALVANNEAL)
B1	36894608	2	REFLECTOR, RED
B2	36894616	2	REFLECTOR, AMBER

BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY:	DESCRIPTION	
10/27/99 bd	ENCLOSURE COMPLETE	
MODEL NO.	MANUAL NO.	DATE/REV:
P-100WIR P-185WIR	54437173-089	12/01 D

DRAWBAR END



* ON BOTH DOORS

PRIOR TO SERIAL NUMBER 326650

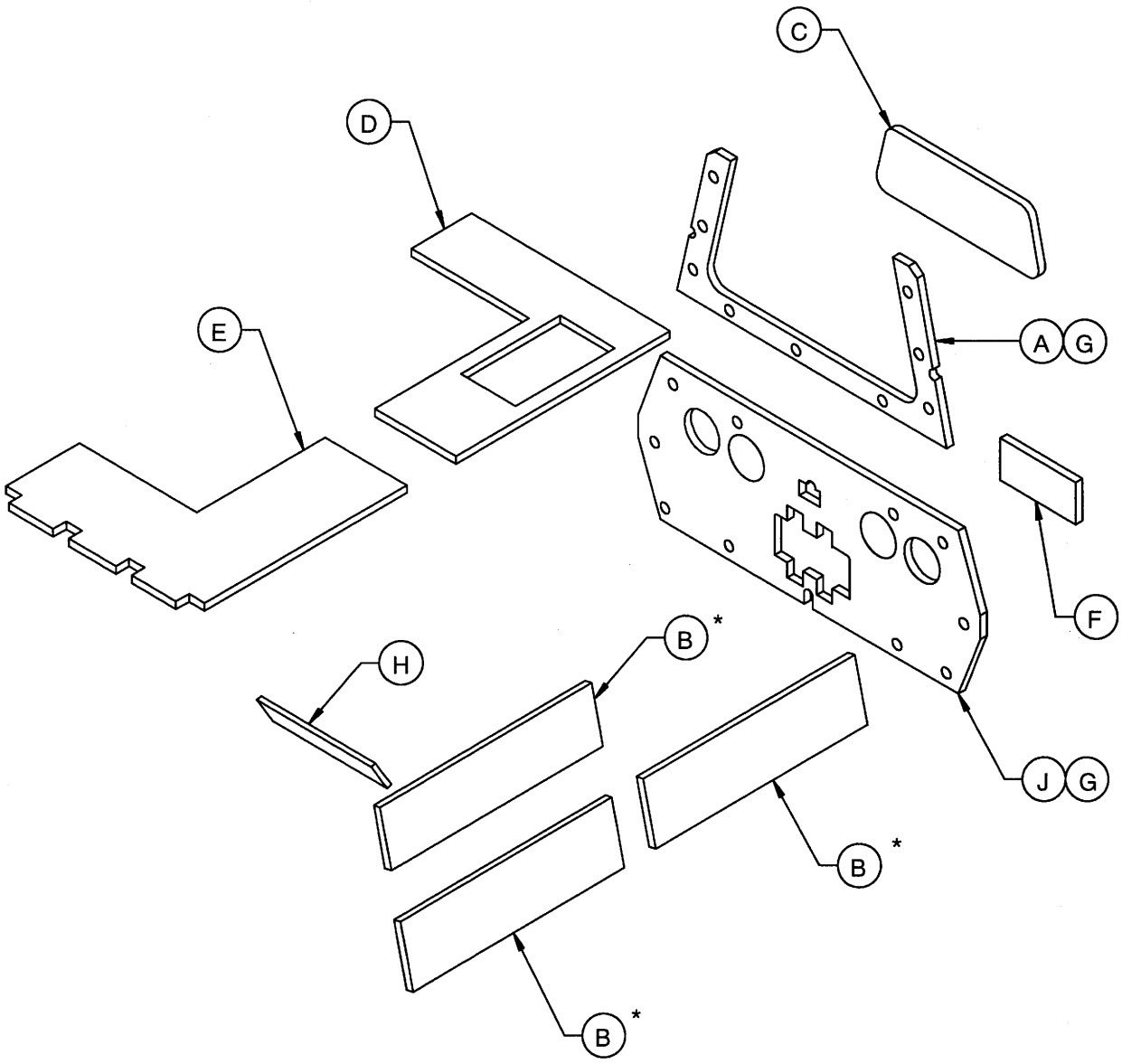
INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION FOAM INSUL COMPLETE	
MODEL NO. P100WIR P185WIR	MANUAL NO. 54437173-090	DATE/REV: 3/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36883700	1	PANEL, REAR END ACST
B	36883742	6	PANEL, SIDE DOOR ACST
C	54389879	1	PANEL, ACCESS DOOR ACST
D	54389887	1	PANEL, REAR ROOF ACST
E	36883767	1	PANEL, FRONT ROOF ACST
F	36883726	1	PANEL, TOP FRONT END ACST
G	36883734	1	PANEL, BOTTOM FRONT END ACST
H	36886166	1	PANEL, INLET BAFFLE ACST
J	36886125	1	PANEL, BOTTOM REAR END ACST

PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION FOAM INSUL COMPLETE	
MODEL NO. P100WIR P185WIR	MANUAL NO. 54437173-091	DATE/REV: 3/00 B

DRAWBAR END



* ON BOTH DOORS

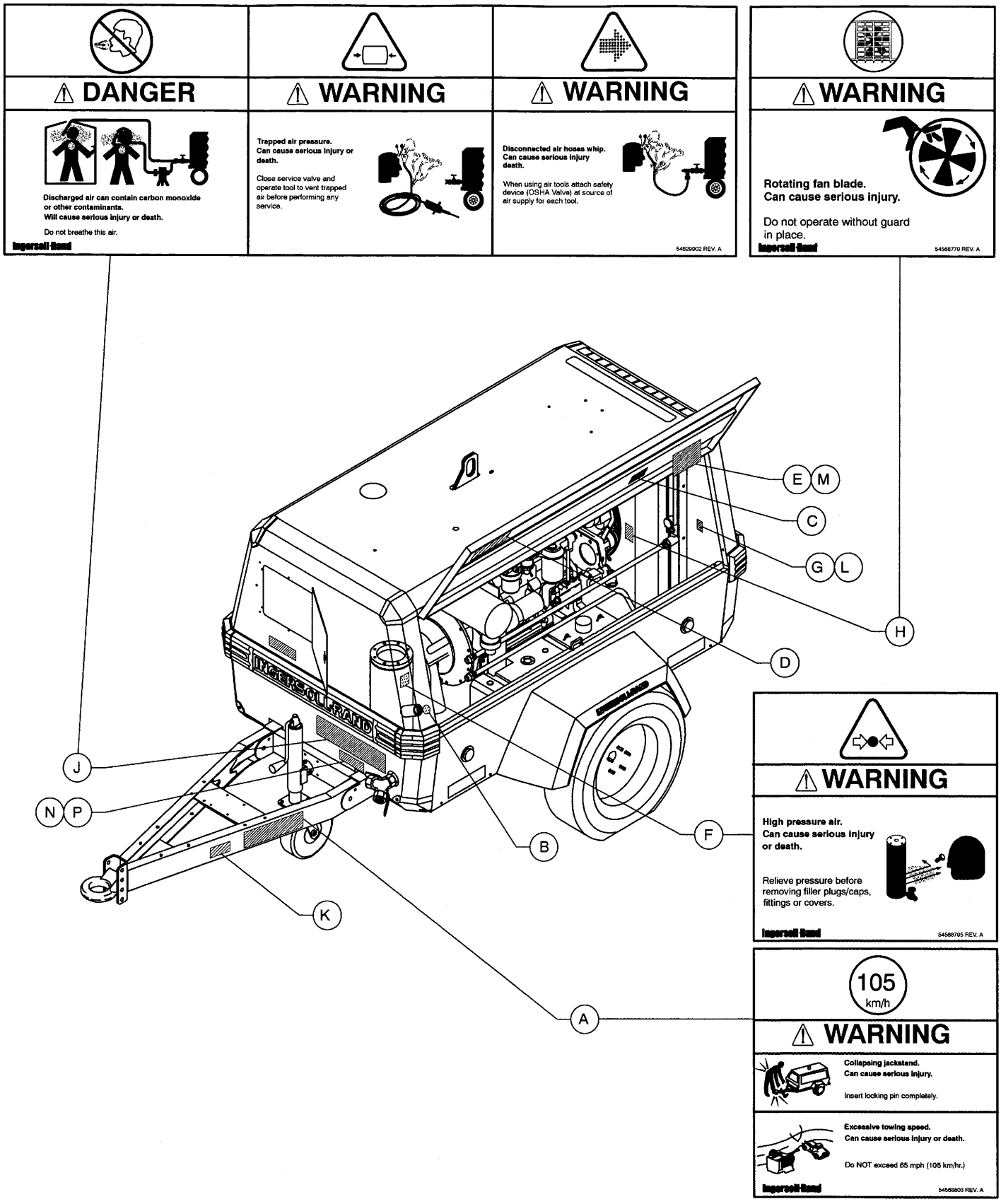
BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION FOAM INSUL COMPLETE	
MODEL NO. P100WIR P185WIR	MANUAL NO. 54437173-090	DATE/REV: 12/01 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	54698089	1	PANEL, REAR END ACST
B	36883742	6	PANEL, SIDE DOOR ACST
C	54389879	1	PANEL, ACCESS DOOR ACST
D	54389887	1	PANEL, REAR ROOF ACST
E	36883767	1	PANEL, FRONT ROOF ACST
F	54698105	1	PANEL, ACCESS DOOR ACST
G	54724125	15	CLIP, XMAS TREE
H	36886166	1	PANEL, INLET BAFFLE ACST
J	54698097	1	PANEL, BOTTOM REAR END ACST

BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bc	DESCRIPTION FOAM INSUL COMPLETE	
MODEL NO. P100WIR P185WIR	MANUAL NO. 54437173-091	DATE/REV: 12/01 C



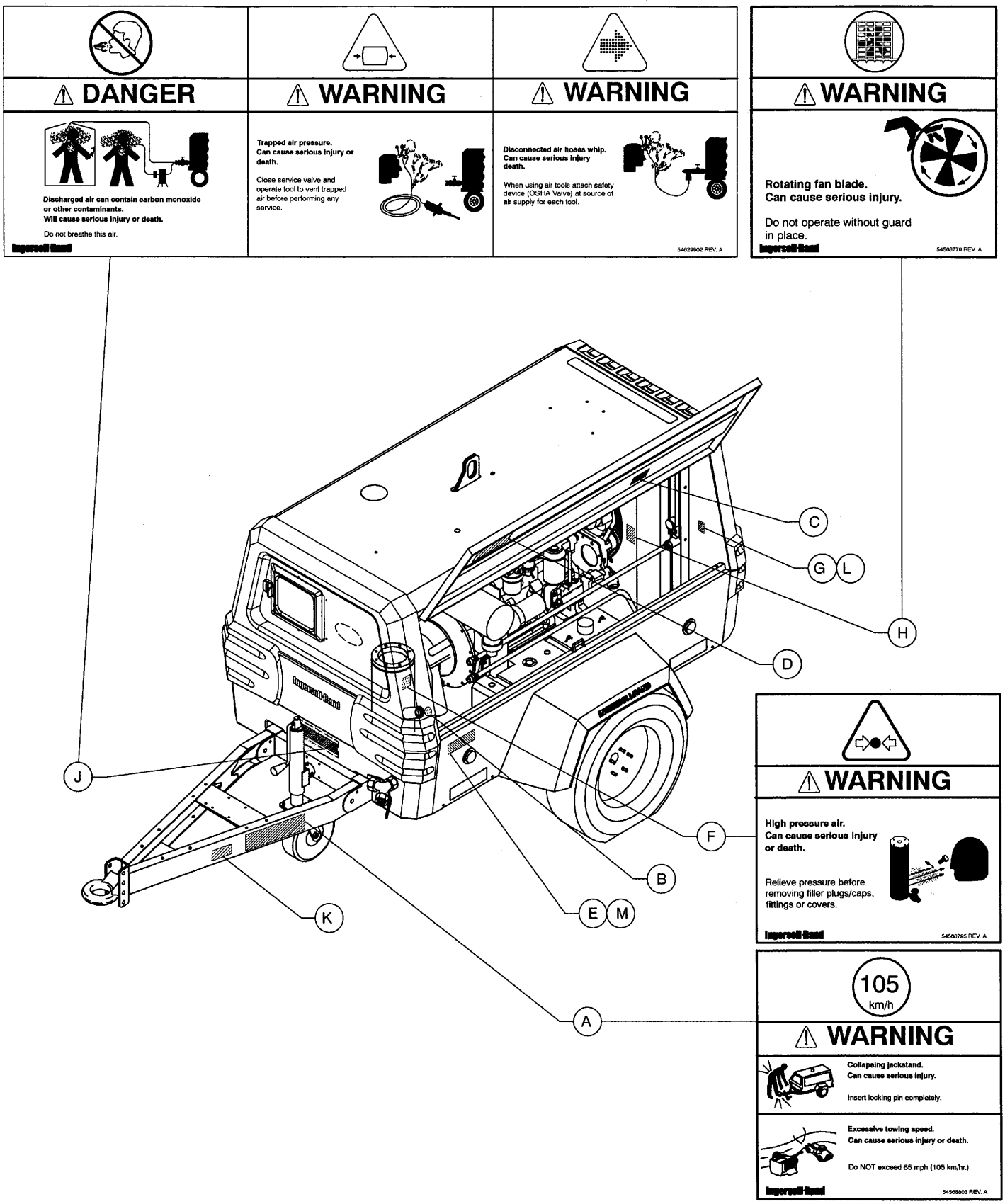
PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bd	DESCRIPTION DECAL LOCATION CHART	
MODEL NO. P-100WIR P-185WIR	MANUAL NO. 54437173-092	DATE/REV: 12/00 C

ITEM	C.P.N.	DESCRIPTION
A	54568803	2-PART DRAWBAR WARNING
B	54604970	OIL FILL
C	54625207	DIESEL FUEL
D	54486410	WIRING DIAGRAM
E	36522290	SAFETY CARD
F	54568795	HIGH PRESSURE WARNING
G	36523306	SERIAL NUMBER PLATE
H	54568779	ROTATING FAN WARNING
J	54629902	3-PART DANGER/WARNING
K	54604921	TOW CHAINS NOTICE
L	36794816	RIVET
M	36847861	CABLE TIE
N	36531176	V.I.N.
P	36533081	V.I.N. OVERLAY

PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bd	DESCRIPTION DECAL LOCATION CHART	
MODEL NO. P-100WIR P-185WIR	MANUAL NO. 54437173-093	DATE/REV: 12/00 C



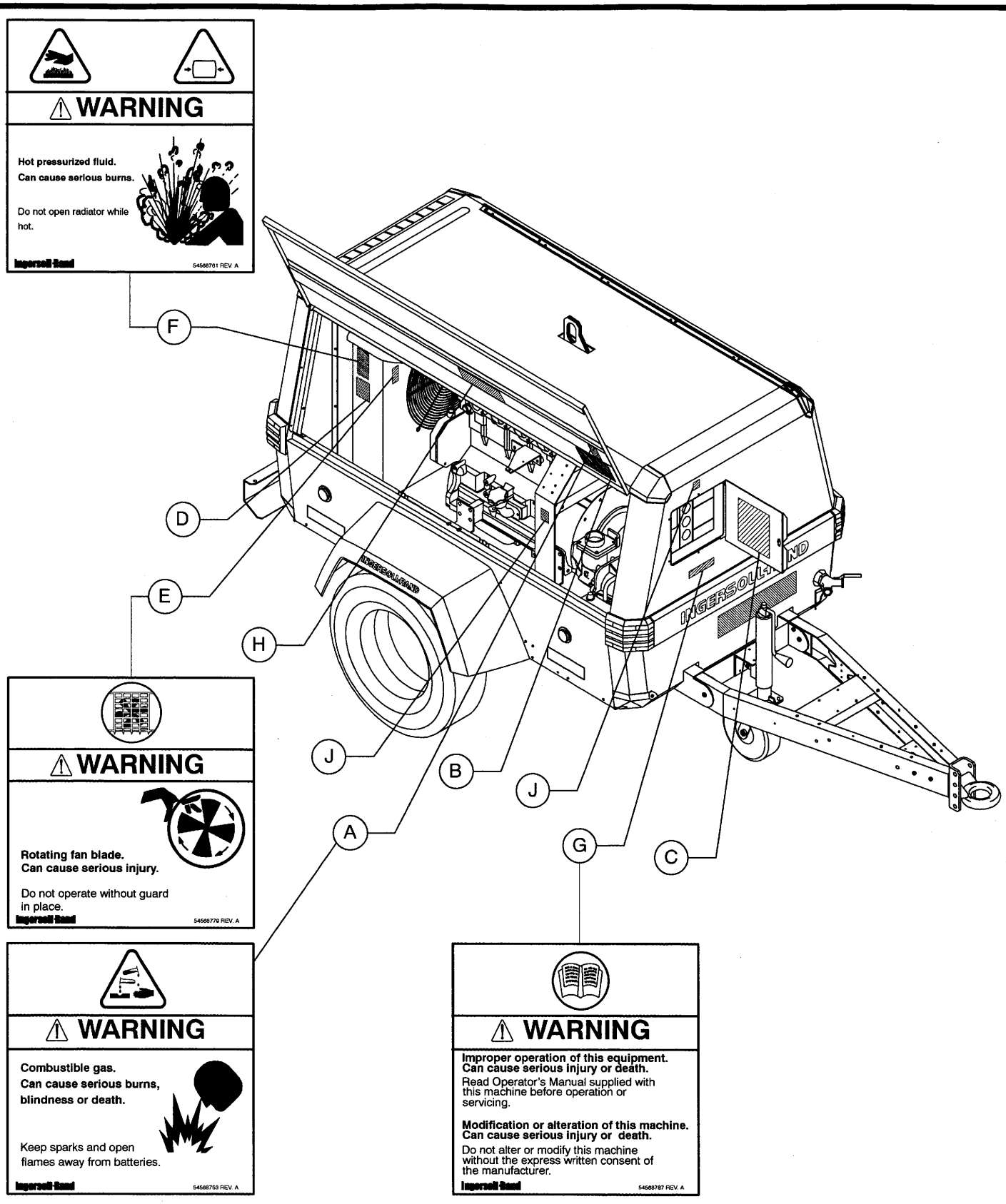
BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bd	DESCRIPTION DECAL LOCATION CHART	
MODEL NO. P-100WIR P-185WIR	MANUAL NO. 54437173-092	DATE/REV: 1/02 D

ITEM	C.P.N.	DESCRIPTION
A	54568803	2-PART DRAWBAR WARNING
B	54604970	OIL FILL
C	54625207	DIESEL FUEL
D	22096036	WIRING DIAGRAM
E	36531176	V.I.N.
F	54568795	HIGH PRESSURE WARNING
G	36523306	SERIAL NUMBER PLATE
H	54568779	ROTATING FAN WARNING
J	54629902	3-PART DANGER/WARNING
K	54604921	TOW CHAINS NOTICE
L	36794816	RIVET
M	36533081	V.I.N. OVERLAY

BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/01/00 bd	DESCRIPTION DECAL LOCATION CHART	
MODEL NO. P-100WIR P-185WIR	MANUAL NO. 54437173-093	DATE/REV: 6/02 E



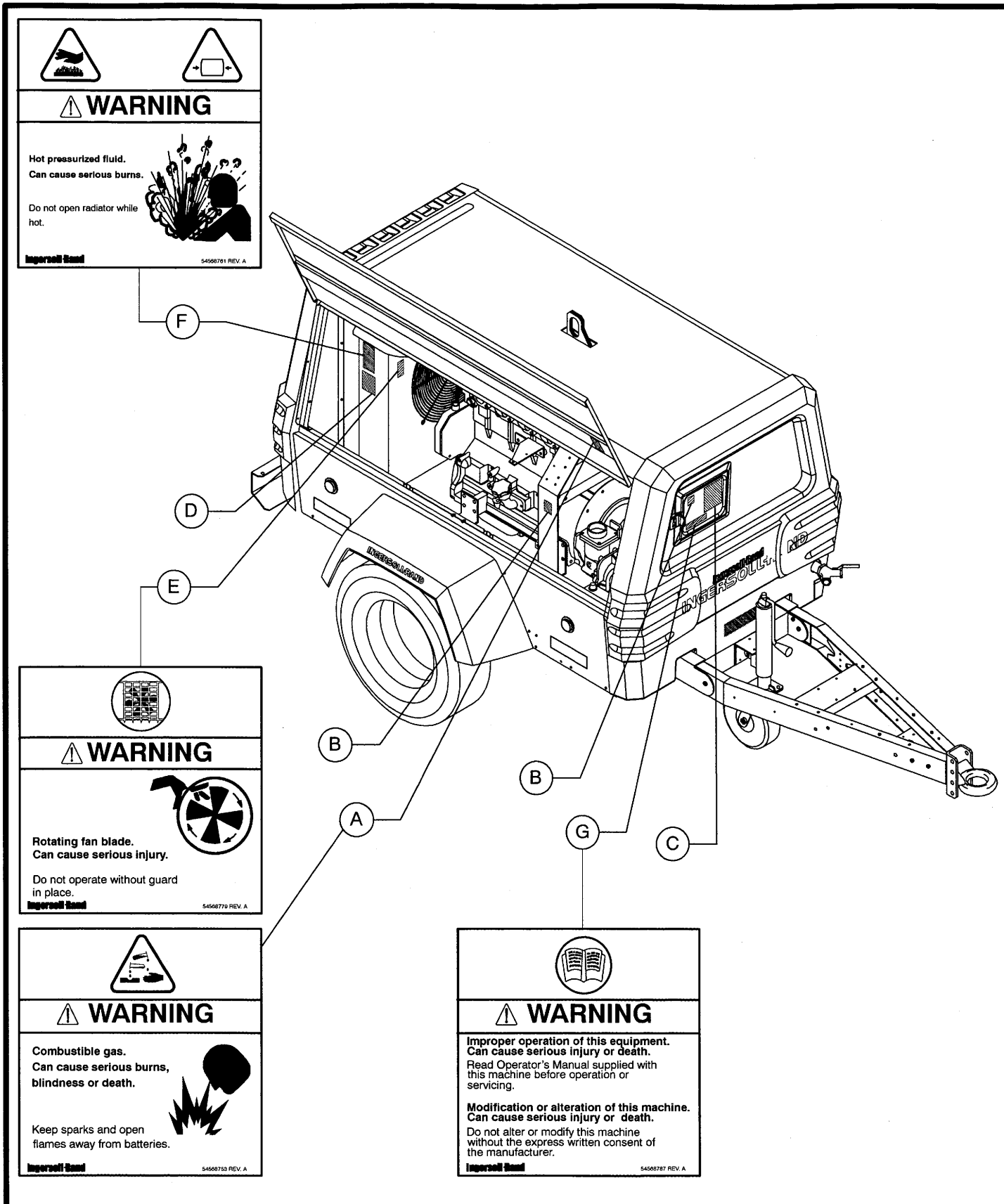
PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION DECAL LOCATION CHART	
MODEL NO. P-110WIR P-185WIR	MANUAL NO. 54437173-094	DATE/REV: 12/00 D

ITEM	C.P.N.	DESCRIPTION
A	54568753	BATTERY GAS WARNING
B	54485149	GENERAL DATA
C	54495536	OPERATING INSTRUCTIONS
D	54604962	RADIATOR FILL
E	54568779	ROTATING FAN WARNING
F	54568761	HOT PRESS FLUID WARNING
G	54568787	IMPROPER OPERATION
H	54495544	PRESSURE REGULATION
J	54454756	NO ETHER

PRIOR TO SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION DECAL LOCATION CHART	
MODEL NO. P-110WIR P-185WIR	MANUAL NO. 54437173-095	DATE/REV: 12/00 E



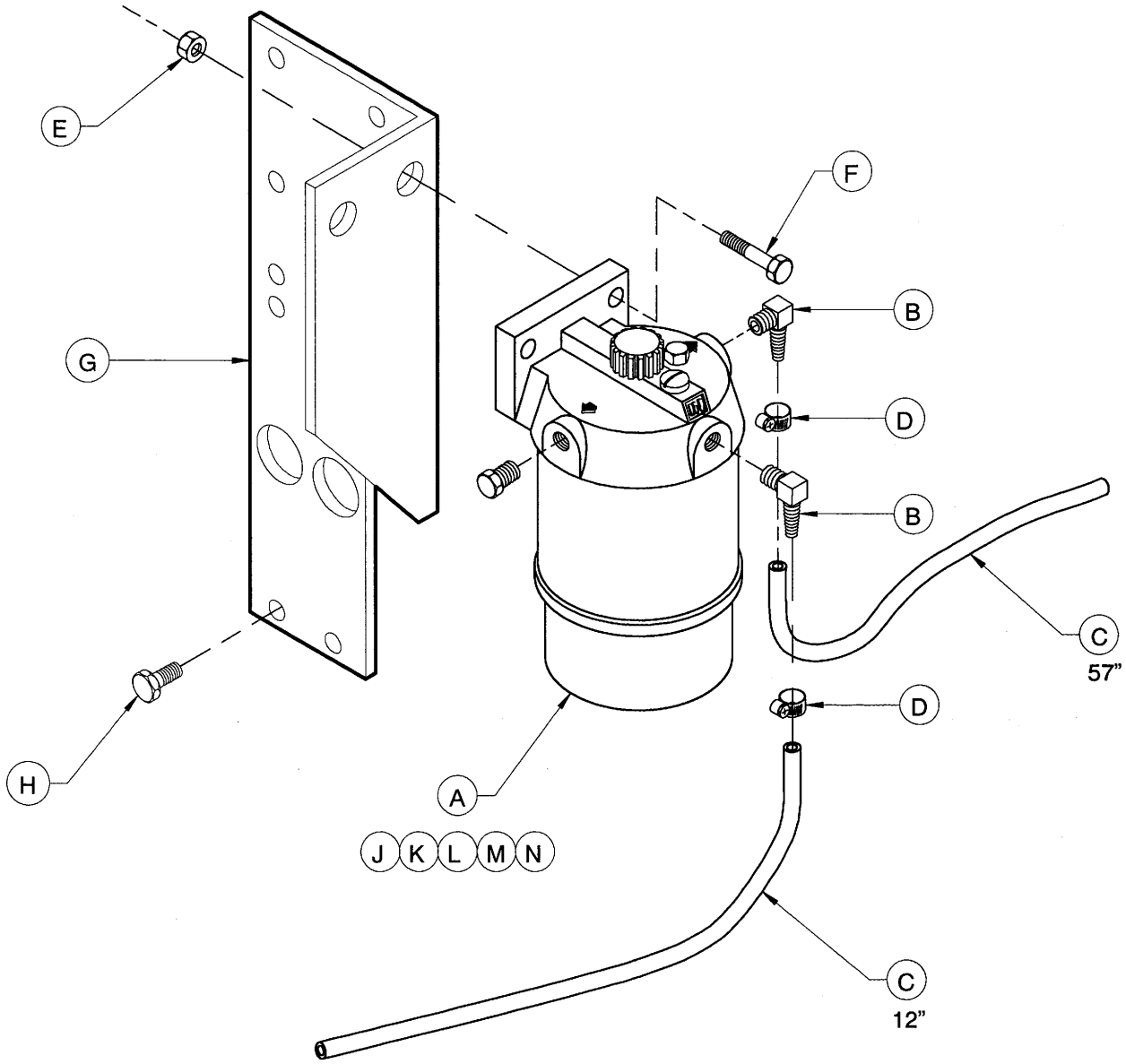
BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bd	DESCRIPTION DECAL LOCATION CHART	
MODEL NO. P-110WIR P-185WIR	MANUAL NO. 54437173-094	DATE/REV: 1/02 E

ITEM	C.P.N.	DESCRIPTION
A	54568753	BATTERY GAS WARNING
B	54454756	NO ETHER
C	54749163	OPERATING INSTRUCTIONS
D	54604962	RADIATOR FILL
E	54568779	ROTATING FAN WARNING
F	54568761	HOT PRESS FLUID WARNING
G	54568787	IMPROPER OPERATION

BEGIN WITH SERIAL NUMBER 326650

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/27/99 bc	DESCRIPTION DECAL LOCATION CHART	
MODEL NO. P-110WIR P-185WIR	MANUAL NO. 54437173-095	DATE/REV: 1/02 F



INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/28/99 bd	DESCRIPTION FILTER, FUEL/WATER	
MODEL NO. P-100WIR P-185WIR	MANUAL NO. 54437173-096	DATE/REV: 3/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	54468160	1	FILTER, FUEL/WATER SEPARATOR
B	35378538	2	ELBOW, BARBED
C	35363498	*	HOSE, 5/16 FUEL
D	35296342	2	CLAMP
E	36881886	2	NUT, HEX FLANGE M08-1.25
F	36889608	2	SCREW, HEX FLANGE M08-1.25 X 25
G	36883890	1	BRACKET, ETHER/FUEL FILTER
H	35279025	2	SCREW, TAPPING M08-1.25 X 20
J	54468178	**	ASSEMBLY, ELEMENT
K	54480504	**	BOWL
L	54480512	**	HEAD
M	35358381	**	COVER, CHECK BALL
N	54480520	**	PLUG, VENT

* AS REQUIRED

** INCLUDED IN FUEL / WATER SEPARATOR FILTER 54468160

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/28/99 bc	DESCRIPTION FILTER, FUEL/WATER	
MODEL NO. P-100WIR - P-185WIR	MANUAL NO. 54437173-097	DATE/REV: 3/00 C

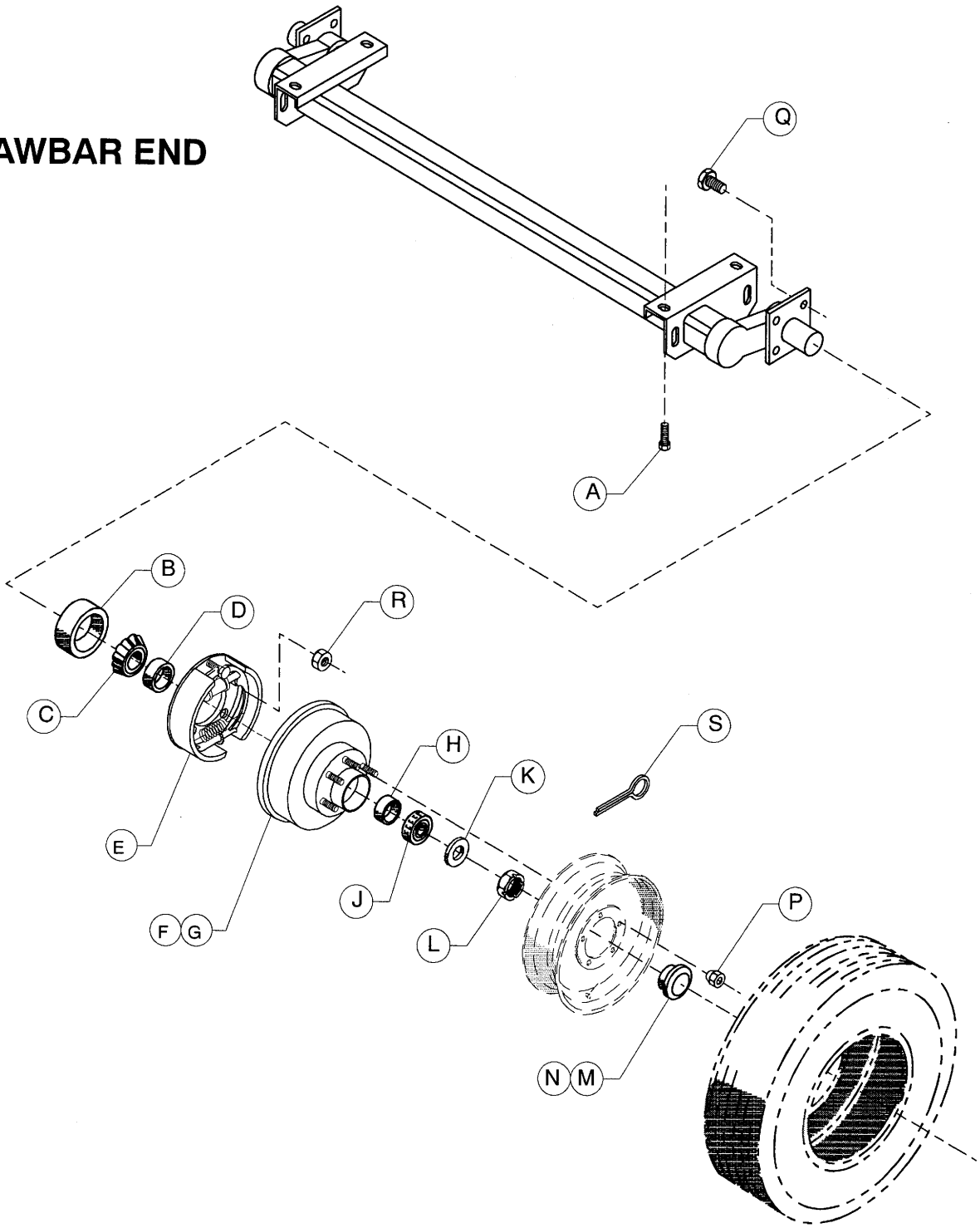
ITEM	C.P.N.	DESCRIPTION
A	54381306	FILTER, FUEL
B	54381314	FILTER, OIL
C	54381322	BELT, FAN
D	54385745	PIPE ASM., #1 INJECTOR
E	54385760	VALVE, CRANKCASE
F	54385786	PUMP, FEED
G	54385794	ALTERNATOR
H	54385844	PIPE ASM., #2 INJECTOR
J	54385851	GASKET, OUTLET PIPE TO HSG
K	54385877	PUMP, WATER
L	54385893	PLUG, GLOW
M	54385919	PIPE ASM., #3 INJECTOR
N	54385927	NOZZLE ASM., INJECTOR
P	54385935	GASKET, NOZZLE HOLDER
Q	54385950	GASKET, INJECTOR NOZZLE
R	54385976	PIPE ASM., #4 INJECTOR
S	54385984	CAP, OIL FILLER
T	54385992	SOLENOID, ENGINE STOP
U	54386008	HOSE, FUEL
V	54386016	STARTER

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 10/28/99 bd	DESCRIPTION SERVICE PARTS	
MODEL NO. P-185WIR	MANUAL NO. 54437173-098	DATE/REV: 3/00 C

OPTIONS LIST

Axle, Electric Brake
Axle, E Z Lube
Axle, Hydraulic Brake
Brakes, Electric
Shoe, Electric Brake
Shoe, Hydraulic Brake
Brakes, Electric w/ 4-Lights
Brakes, Electric w/ Park
Brakes, Adj Height Drawbar Hydraulic
Brakes, Extended Drawbar Hydraulic
Brakes, Hydraulic
Brakes, Hydraulic w/ Park
Cold Start, Auto JD
Cold Start, Auto Deutz
Cold Start, Manual
Diagnostic Module
Drains, Deutz Central
Drains, 3 Cyl. JD Central
Drains, 4 Cyl. JD Central
Drains, IR Engines Central
Drawbar, Adjustable Height
Drawbar, Extended
Drawbar, Extended/Adjustable Ht.
Filter, Fuel/Water
Gauge, 4 in 1
Gauge, Fuel Level
Gauge, Tachometer
Hose Reel Assembly
Hose Reel, Single
Hose Reel, Double
Oiler, 1 Qt. Hose Reel
Oiler, 2 Qt. Hose Reel
Indicator, Electric Air Filter
Leg, Rear Drop
Lights, 4
Lights, Revolving Amber
Regulation, Dual Pressure
Panel, Inst wo/ Start-Run Valve
Valve, Minimum Pressure
Valve, Start Run
Schematic, Deutz & JD Option Wiring
Schematic, IR Engine Option Wiring
Schematic, Cold Start Wiring
Control, Speed (P100 - P130 WD)
Generator Option
Schematic, 4 Light Wiring
Schematic, Generator Wiring
Schematic, Block Heater Wiring
Heater, Block

DRAWBAR END



ELECTRIC BRAKE OPTIONS FOR

P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

54437173-02 54529599-02 54531520-02	35391705-02 35391713-02 35391721-02 35391739-02 35392984-02	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/24/96 bd DESCRIPTION: ELEC BRAKE AXLE MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV.: 8/00 B

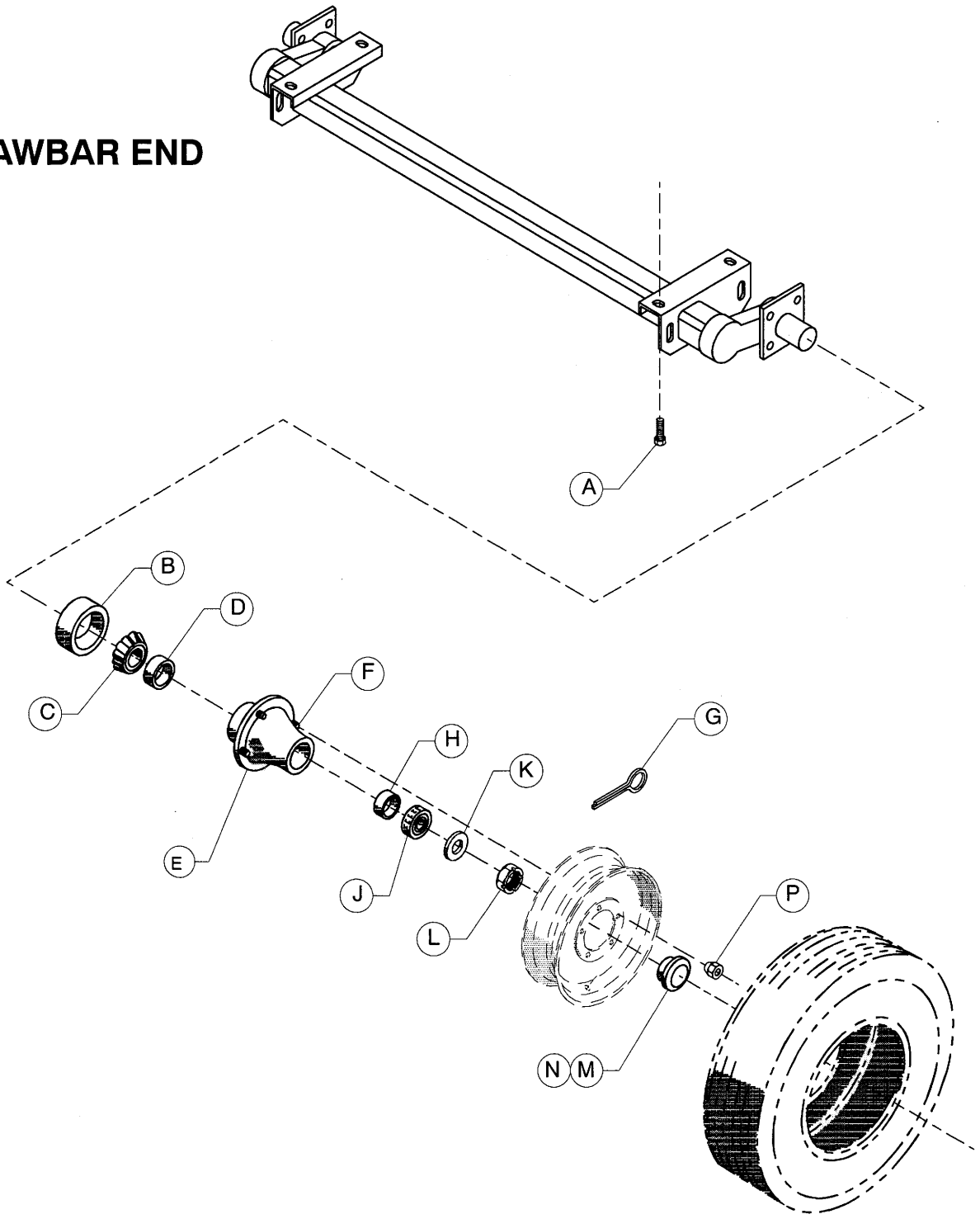
ITEM	C.P.N.	QTY	DESCRIPTION
A	36879302	4	SCREW, HEX FLANGED HD M16 X 50
B	35391101	2	SEAL, E Z LUBE GREASE
C	35361864	2	CONE, INNER BEARING
D	35361872	2	CUP, INNER BEARING
E	35391168	1	LH BRAKE ASSEMBLY
	35391176	1	RH BRAKE ASSEMBLY
F	35391119	2	HUB & DRUM with STUDS
G	35361898	10	STUD
H	35315183	2	CUP, OUTTER BEARING
J	35315191	2	CONE, OUTTER BEARING
K	35315209	2	WASHER, SPINDLE
L	35315217	2	NUT, SPINDLE
M	35391127	2	CAP, E Z LUBE GREASE
N	35391135	2	PLUG, E Z LUBE RUBBER
P	35315274	10	NUT, WHEEL
Q	35391648	8	SCREW, BRAKE MOUNTING
R	35391630	8	NUT, BRAKE MOUNTING HEX
S	35315225	2	PIN, COTTER

ELECTRIC BRAKE OPTIONS FOR

P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

54437173-03 54529599-03 54531520-03	35391705-03 35391713-03 35391721-03 35391739-03 35392984-03	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/24/96 bc DESCRIPTION: ELEC BRAKE AXLE MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV.: 8/00 B

DRAWBAR END



E Z LUBE AXLE OPTIONS FOR

P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

54437173-04 54529599-04 54531520-04	35391705-04 35391713-04 35391721-04 35391739-04 35392984-04	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
10/24/96 bd	E Z LUBE AXLE	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 B

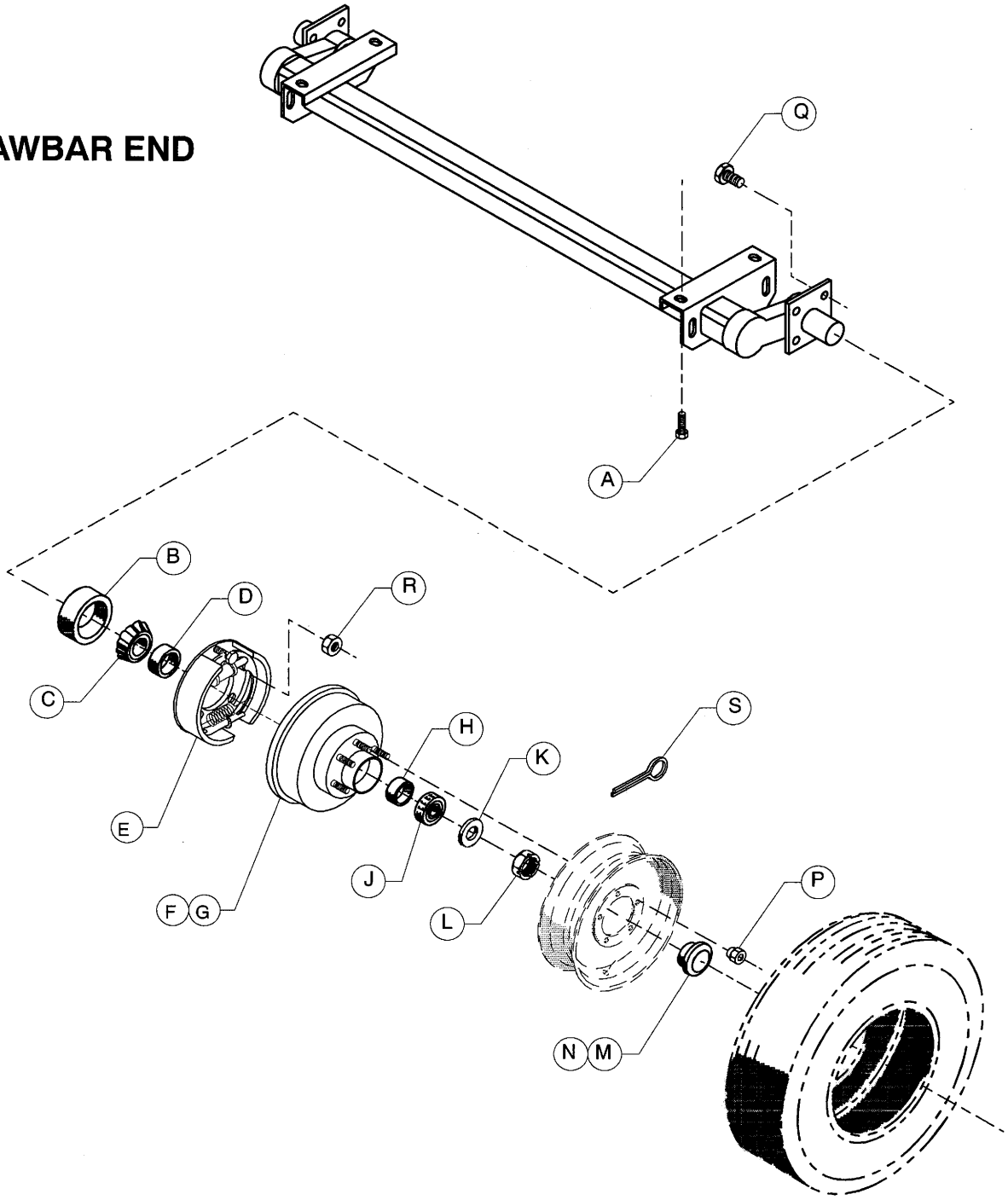
ITEM	C.P.N.	QTY	DESCRIPTION
A	36879302	4	SCREW, HEX FLANGED HD M16 X 50
B	35391101	2	SEAL, E Z LUBE GREASE
C	35361864	2	CONE, INNER BEARING
D	35361872	2	CUP, INNER BEARING
E	36848158	2	HUB with STUDS and BEARING CUPS
F	35361898	10	STUD
G	35315225	2	PIN, COTTER
H	35315183	2	CUP, OUTTER BEARING
J	35315191	2	CONE, OUTTER BEARING
K	35315209	2	WASHER, SPINDLE
L	35315217	2	NUT, SPINDLE
M	35391127	2	CAP, E Z LUBE GREASE
N	35391135	2	PLUG, E Z LUBE RUBBER
P	35315274	10	NUT, WHEEL

E Z LUBE AXLE OPTIONS FOR

P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

54437173-05 54529599-05 54531520-05	35391705-05 35391713-05 35391721-05 35391739-05 35392984-05	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/24/96 bd DESCRIPTION: E Z LUBE AXLE MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 8/00 B

DRAWBAR END



HYDRAULIC BRAKE OPTIONS FOR

P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

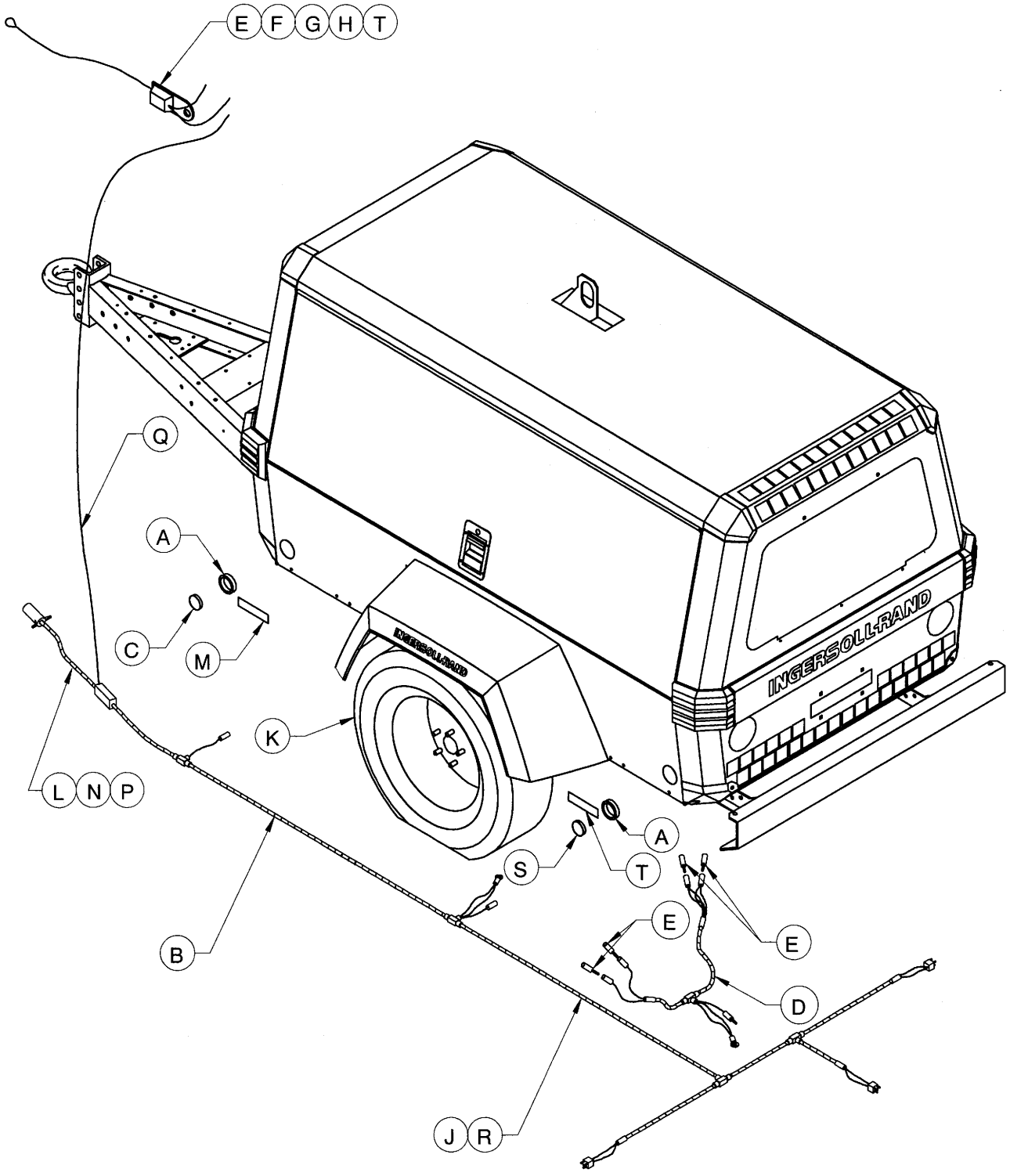
54437173-06 54529599-06 54531520-06	35391705-06 35391713-06 35391721-06 35391739-06 35392984-06	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/24/96 bd DESCRIPTION: HYDRAULIC BRAKE AXLE MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36879302	4	SCREW, HEX FLANGED HD M16 X 50
B	35391101	2	SEAL, E Z LUBE GREASE
C	35361864	2	CONE, INNER BEARING
D	35361872	2	CUP, INNER BEARING
E	35391143	1	LH HYDRAULIC BRAKE ASSEMBLY
	35391150	1	RH HYDRAULIC BRAKE ASSEMBLY
F	35391119	2	HUB & DRUM with STUDS
G	35361898	10	STUD
H	35315183	2	CUP, OUTTER BEARING
J	35315191	2	CONE, OUTTER BEARING
K	35315209	2	WASHER, SPINDLE
L	35315217	2	NUT, SPINDLE
M	35391127	2	CAP, E Z LUBE GREASE
N	35391135	2	PLUG, E Z LUBE RUBBER
P	35315274	10	NUT, WHEEL
Q	35391648	8	SCREW, BRAKE MOUNTING
R	35391630	8	NUT, BRAKE MOUNTING HEX
S	35315225	2	PIN, COTTER

HYDRAULIC BRAKE OPTIONS FOR

P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

54437173-07 54529599-07 54531520-07	35391705-07 35391713-07 35391721-07 35391739-07 35392984-07	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/24/96 bd — DESCRIPTION: HYDRAULIC BRAKE AXLE MODEL NO.: PLATINUM — MANUAL NO.: OPTION — DATE/REV: 8/00 B



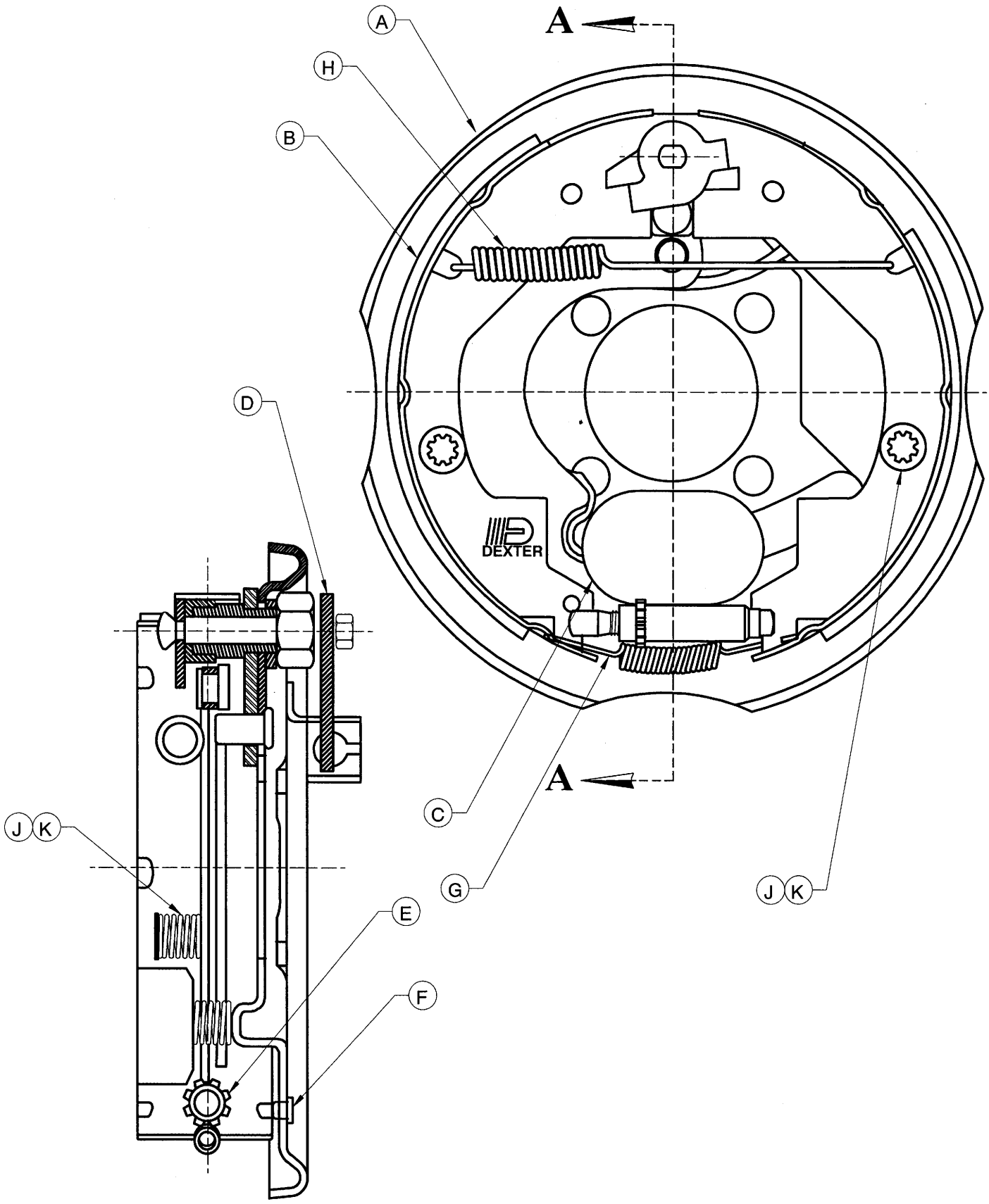
35393958-06 35393966-06	54437173-08 54529599-08 54531520-08 54529581-06 54525973-06	35391705-08 35391713-08 35391721-08 35391739-08 35392984-08	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/28/96 bd DESCRIPTION: ELEC BRK w/ 2-LIGHT ASSY MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	36893634	4	GROMMET, CLEARANCE LIGHT
B	36893345	1	HARNESS, TAIL LIGHT
C	35367051	2	LIGHT, YELLOW CLEARANCE
D	36895282	1	HARNESS, ELECTRIC BRAKE
E	35375427	8	TERMINAL, SNAP
F	35315944	1	SWITCH, BREAKAWAY
G	37140365	1	TERMINAL, SPLICE
H	35346337	1	TERMINAL, LUG
J	35253038	4	CLAMP, 3/8
K	36881324	1	GEAR, ELEC BRAKE w/ RUNNING
L	92368687	6	SCREW, TAPPING M06-100 X 14
M	36894616	2	REFLECTOR, AMBER
N	36789261	1	HARNESS, 6 CONDUCTOR CABLE (STD LENGTH DRAWBAR)
	36787216	1	HARNESS, 6 CONDUCTOR CABLE (EXT LENGTH DRAWBAR)
P	35225093	3	CLAMP, 1/2
Q	35120005	40"	WIRE, 14 GA BLACK
R	35279025	3	SCREW, TAPPING M08-125 X 20
S	35367044	2	LIGHT, RED CLEARANCE
T	36894608	2	REFLECTOR, RED

35393958-07 35393966-07	54437173-09 54529599-09 54531520-09 54529581-07 54525973-07	35391705-09 35391713-09 35391721-09 35391739-09 35392984-09

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
10/28/96 bd	ELEC BRK w/ 2-LIGHT ASSY	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 C



SECTION A - A

35390277-14	35391705-10
35393396-14	35391713-10
54437173-10	35391721-10
54529599-10	35391739-10
54531520-10	35392984-10

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

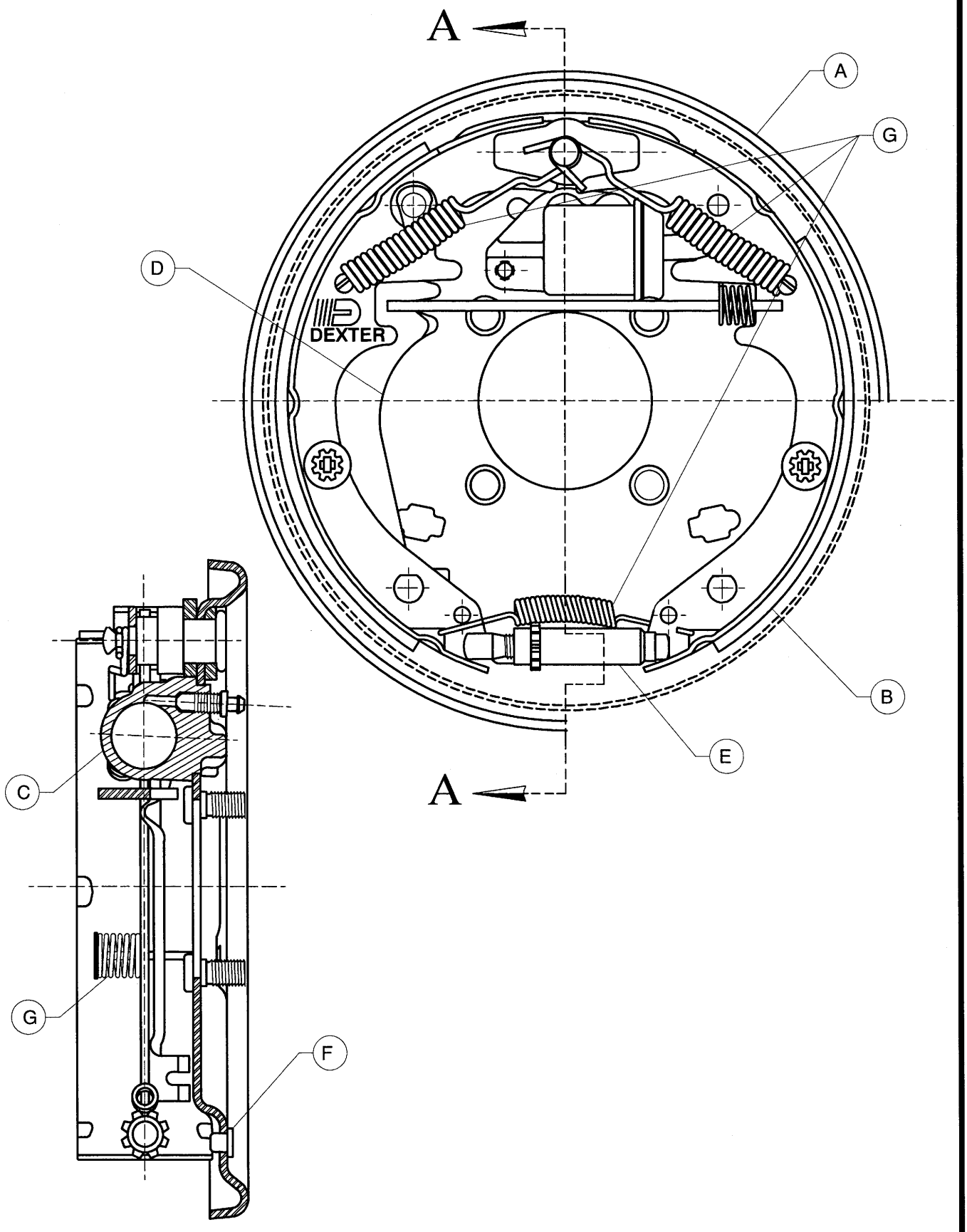
DATE/DWN BY:	DESCRIPTION	
10/28/96 bd	ELEC BRK SHOE	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	35391184	1	LH BACKING PLATE ASSEMBLY
	35391192	1	RH BACKING PLATE ASSEMBLY
B	35391333	1	BRAKE SHOE KIT
C	35391309	2	MAGNET KIT
D	35391267	2	PARKING BRAKE LEVER
E	35391366	2	ADJUSTING SCREW ASSEMBLY
F	35391416	2	ADJUSTING SLOT PLUG
G	35391374	2	SPRING, ADJUSTER
H	35391358	2	SPRING, RETRACTOR
J	35391382	4	SPRING, SHOE HOLD DOWN
K	35391390	4	PIN, SHOE HOLD DOWN
L	35391226	1	LH ACTUATING LEVER KIT
	35391234	1	RH ACTUATING LEVER KIT

35390277-15	35391705-11
35393396-15	35391713-11
54437173-11	35391721-11
54529599-11	35391739-11
54531520-11	35392984-11

PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
10/28/96 bd	ELEC BRAKE SHOE	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 C



SECTION A-A

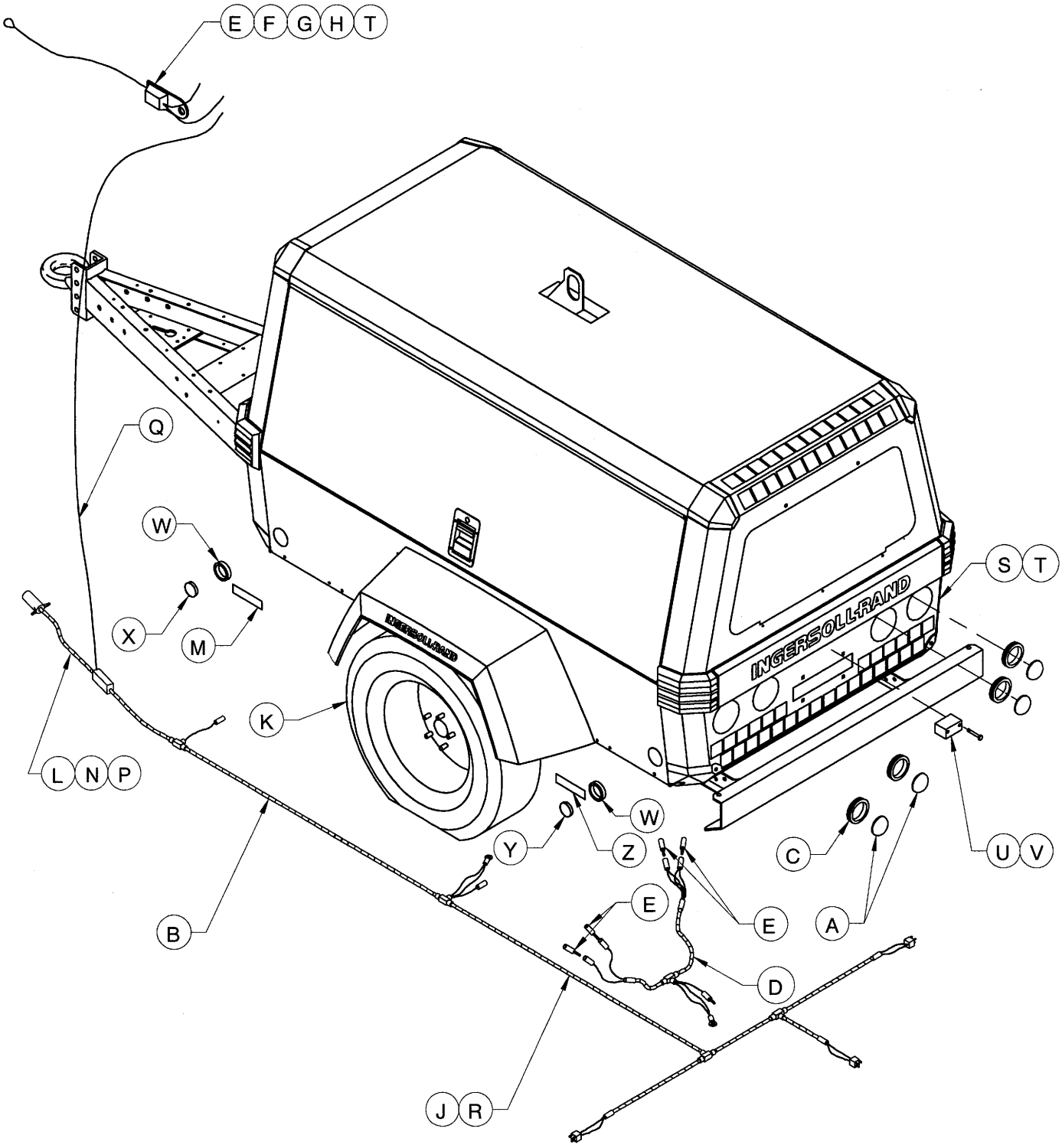
35390277-16	35391705-12
35393396-16	35391713-12
54437173-12	35391721-12
54529599-12	35391739-12
54531520-12	35392984-12

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
10/28/96 bd	HYDRAULIC BRAKE SHOE	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	35391432	2	BACKING PLATE ASSEMBLY
B	35391556	2	BRAKE SHOE KIT
C	35391440	1	CYLINDER, LH BRAKE
	35391457	1	CYLINDER, RH BRAKE
D	35391580	1	LH PARKING LEVER & PIN
	35391598	1	RH PARKING LEVER & PIN
E	35391499	2	ADJUSTING SCREW ASSEMBLY
F	35391481	4	ADJUSTING SLOT PLUG
G	35391507	2	BRAKE SPRING KIT

35390277-17	35391705-13	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION
35393396-17	35391713-13	DATE/DWN BY: 10/28/96 bd / DESCRIPTION: HYDRAULIC BRAKE SHOE
54437173-13	35391721-13	
54529599-13	35391739-13	MODEL NO. / MANUAL NO.: OPTION / DATE/REV.: 8/00 C
54531520-13	35392984-13	



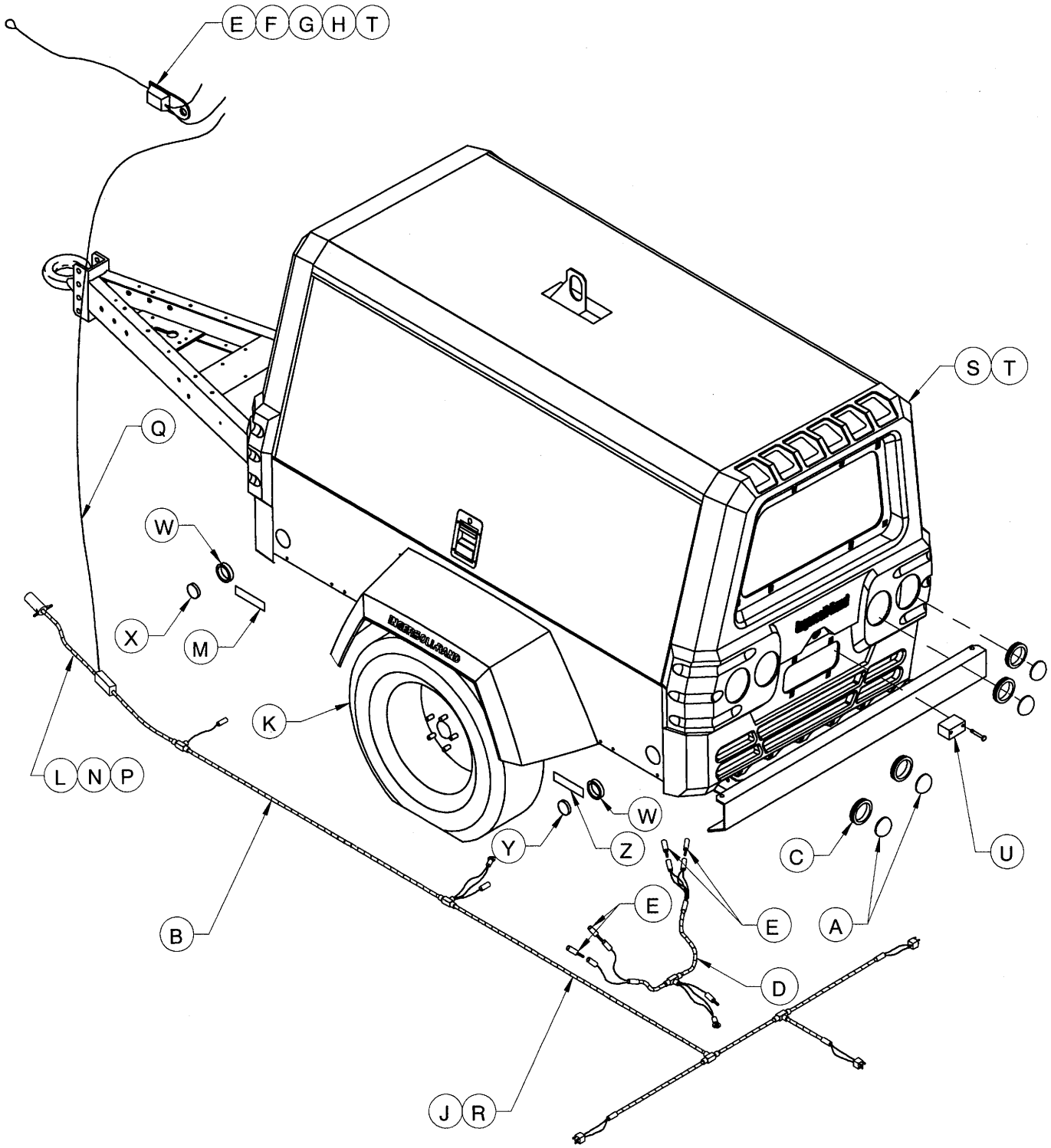
PRIOR TO SERIAL NUMBER 326650

35393958-12 35393966-12	54437173-14 54529599-14 54531520-14 54529581-12 54525973-12	35391705-14 35391713-14 35391721-14 35391739-14 35392984-14	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/28/96 bd DESCRIPTION: ELEC BRK w/ 4-LIGHT ASSY MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	36788081	4	TAIL LIGHT
B	36893345	1	HARNESS, TAIL LIGHT
C	36787968	4	GROMMET
D	36895282	1	HARNESS, ELECTRIC BRAKE
E	35375427	8	TERMINAL, SNAP
F	35315944	1	SWITCH, BREAKAWAY
G	37140365	1	TERMINAL, SPLICE
H	35346337	1	TERMINAL, LUG
J	35253038	4	CLAMP, 3/8
K	36881324	1	GEAR, ELEC BRAKE w/ RUNNING
L	92368687	6	SCREW, TAPPING M06-100 X 14
M	36894616	2	REFLECTOR, AMBER
N	36789261	1	HARNESS, 6 CONDUCTOR CABLE (STD LENGTH DRAWBAR)
	36787216	1	HARNESS, 6 CONDUCTOR CABLE (EXT LENGTH DRAWBAR)
P	35225093	3	CLAMP, 1/2
Q	35120005	40"	WIRE, 14 GA BLACK
R	35279025	3	SCREW, TAPPING M08-125 X 20
S	36889491	1	CAP, BOTTOM REAR END
	54529367	1	CAP, BOTTOM REAR END (GALVANNEAL)
T	36797652	8	SCREW, TAPPING M06-100 X 12
U	36881910	1	LIGHT, LICENSE
V	36782837	2	SCREW, HEX SH MET #10 X 1
W	36893634	4	GROMMET, CLEARANCE LIGHT
X	35367051	2	LIGHT, YELLOW CLEARANCE
Y	35367044	2	LIGHT, RED CLEARANCE
Z	36894608	2	REFLECTOR, RED

PRIOR TO SERIAL NUMBER 326650

35393958-13 35393966-13	54437173-15 54529599-15 54531520-15 54529581-13 54525973-13	35391705-15 35391713-15 35391721-15 35391739-15 35392984-15	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/28/96 bd DESCRIPTION: ELEC BRK w/ 4-LIGHT ASSY MODEL NO. MANUAL NO.: OPTION DATE/REV: 8/00 C



BEGIN WITH SERIAL NUMBER 326650

35393958-12	54437173-14	35391705-14
35393966-12	54529599-14	35391713-14
	54531520-14	35391721-14
	54529581-12	35391739-14
	54525973-12	35392984-14

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
10/28/96 bd	ELEC BRK w/ 4-LIGHT ASSY	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	1/02 D

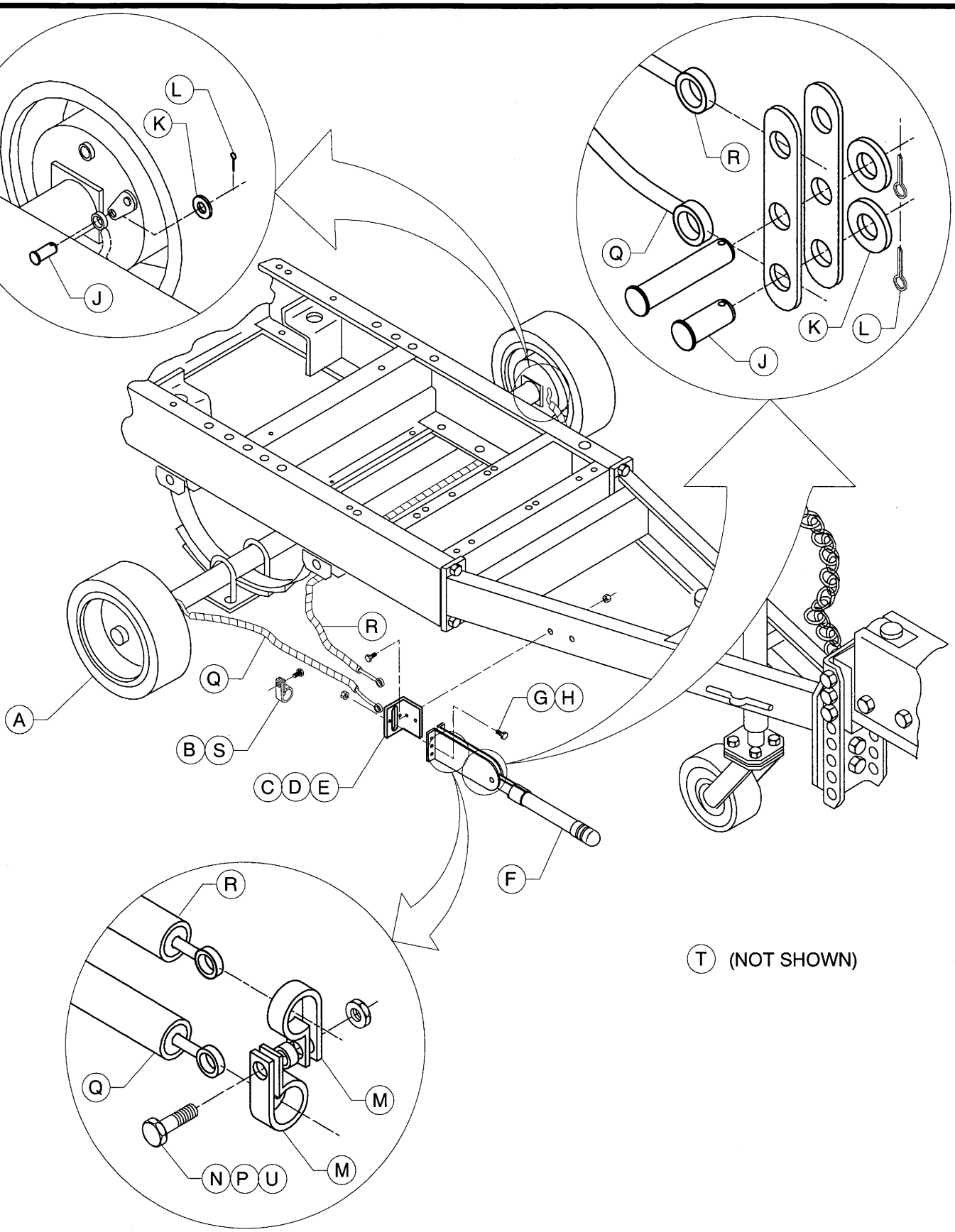
ITEM	C.P.N.	QTY	DESCRIPTION
A	36788081	4	TAIL LIGHT
B	36893345	1	HARNESS, TAIL LIGHT
C	36787968	4	GROMMET
D	36895282	1	HARNESS, ELECTRIC BRAKE
E	35375427	8	TERMINAL, SNAP
F	35315944	1	SWITCH, BREAKAWAY
G	37140365	1	TERMINAL, SPLICE
H	35346337	1	TERMINAL, LUG
J	35253038	4	CLAMP, 3/8
K	36881324	1	GEAR, ELEC BRAKE w/ RUNNING
L	92368687	6	SCREW, TAPPING M06-100 X 14
M	36894616	2	REFLECTOR, AMBER
N	36789261	1	HARNESS, 6 CONDUCTOR CABLE (STD LENGTH DRAWBAR)
	36787216	1	HARNESS, 6 CONDUCTOR CABLE (EXT LENGTH DRAWBAR)
P	35225093	3	CLAMP, 1/2
Q	35120005	40"	WIRE, 14 GA BLACK
R	35279025	3	SCREW, TAPPING M08-125 X 20
S	54515606	1	CAP, REAR END (STD. PAINT)
	54729157	1	CAP, REAR END (SPECIAL PAINT)
T	36797652	8	SCREW, TAPPING M06-100 X 12
U	54726468	1	LIGHT, LICENSE
V	~	~	~
W	36893634	4	GROMMET, CLEARANCE LIGHT
X	35367051	2	LIGHT, YELLOW CLEARANCE
Y	35367044	2	LIGHT, RED CLEARANCE
Z	36894608	2	REFLECTOR, RED

BEGIN WITH SERIAL NUMBER 326650

35393958-13	54437173-15	35391705-15
35393966-13	54529599-15	35391713-15
	54531520-15	35391721-15
	54529581-13	35391739-15
	54525973-13	35392984-15

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
10/28/96 bd	ELEC BRK w/ 4-LIGHT ASSY	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	1/02 D



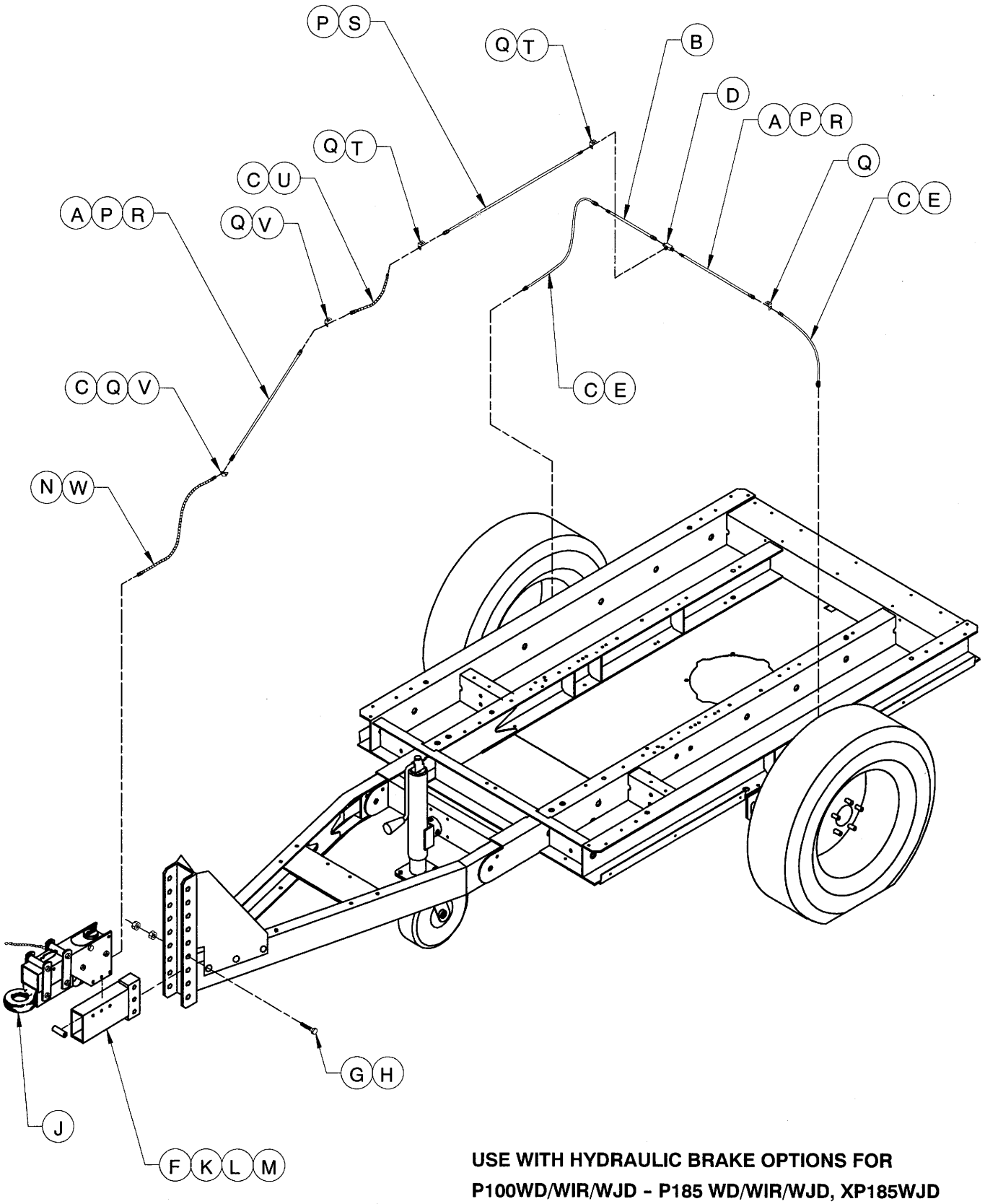
35393958-14 35393966-14	54437173-16 54529599-16 54531520-16 54529581-14 54525973-14	35391705-16 35391713-16 35391721-16 35391739-16 35392984-16	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/28/96 bd DESCRIPTION: ELECTRIC BRAKE w/ PARK MODEL NO. MANUAL NO.: OPTION DATE/REV: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36881324	1	RUNNING GEAR W/ BRAKES
B	35134477	1	CLAMP, RUBBER COATED
C	35116433	1	BRACKET, BRAKE LEVER
D	36769297	2	SCREW, HEX M10-150 X 35
E	96701529	2	NUT, HEX M10
F	35370055	1	LEVER, PARKING BRAKE
G	35374834	2	SCREW, HEX M08-125 X 25
H	96700869	2	NUT, HEX M08
J	36846780	4	PIN, CLEVIS .31 X .75
K	95934998	4	WASHER, FLAT 3/8
L	95928867	4	PIN, COTTER .09
M	35126325	2	CLAMP, CABLE
N	95929006	1	SCREW, HEX 5/16-18 X 1
P	35126358	1	SPACER
Q	35589746	1	ASSEMBLY, BRAKE CABLE 78
R	36503134	1	ASSEMBLY, BRAKE CABLE 108
S	35300771	1	SCREW, TAPPING M06-100 X 20
T	35253038	4	CLAMP, RUBBER COATED
U	35252600	1	NUT, LOCKING 5/16-18

USE WITH ELECTRIC BRAKE OPTIONS FOR

P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

54437173-17 54529599-17 54531520-17	35391705-17 35391713-17 35391721-17 35391739-17 35392984-17	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/28/96 bd DESCRIPTION: ELECTRIC BRAKE w/ PARK MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV.: 8/00 B



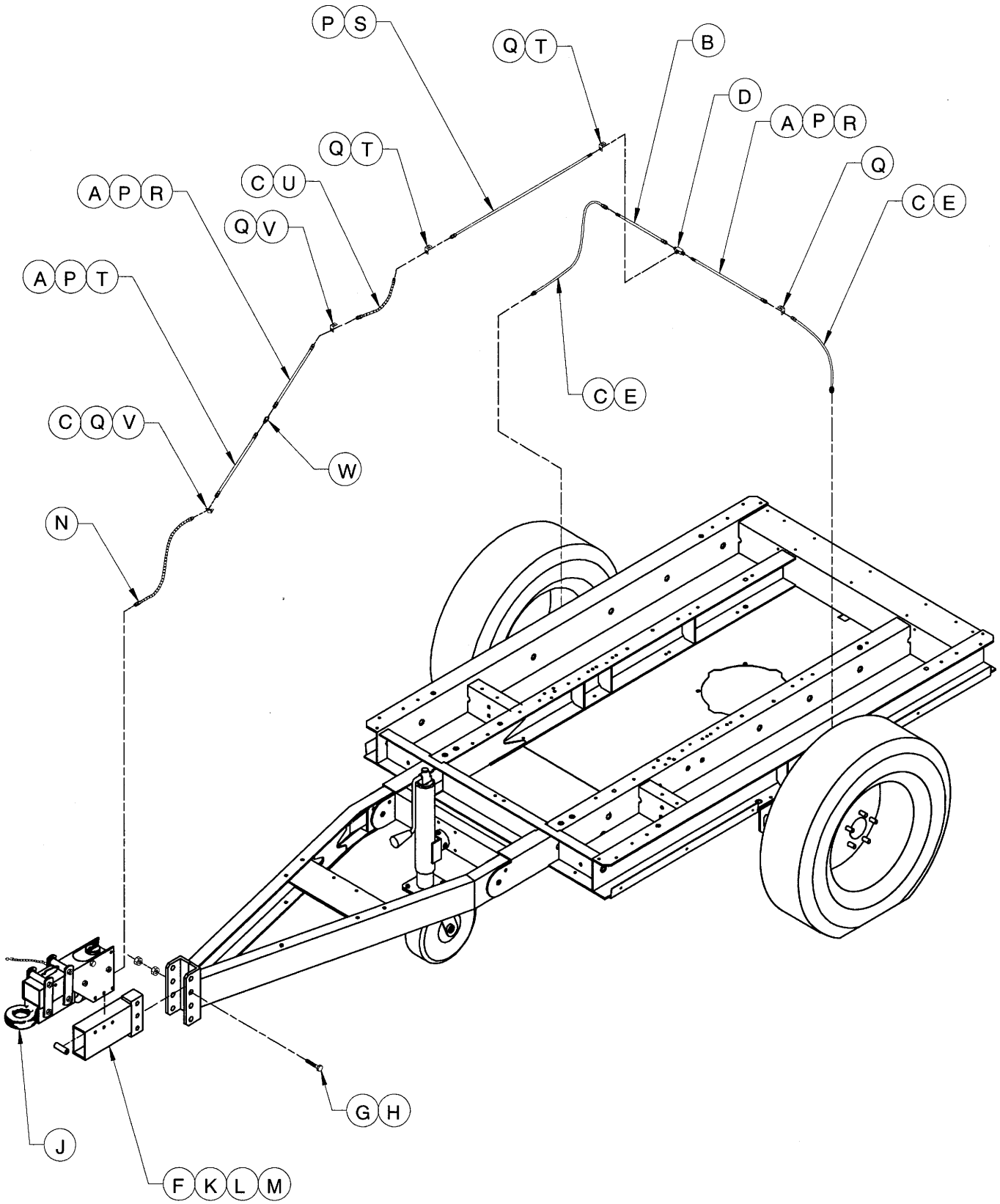
USE WITH HYDRAULIC BRAKE OPTIONS FOR
P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

54437173-18 54529599-18 54531520-18	35391705-18 35391713-18 35391721-18 35391739-18 35392984-18	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
10/29/96 bd	ADJ HT HYDRAULIC BRAKE	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	35356401	2	HOSE, BRAKE 3/16 X 40
B	36881290	1	HOSE, BRAKE 3/8 X 12
C	35356302	5	CLIP, HOSE
D	35356328	1	TEE, 3/16 INVERTED
E	35356369	2	TUBE, BRAKE 3/16 X 10
F	36758647	1	SUPPORT, HYDRAULIC ACTUATOR
G	35376094	3	SCREW, M16-200
H	96700885	6	NUT, HEX M16
J	35316611	1	ACTUATOR, HYDRAULIC BRAKE
K	35333673	3	SPACER, HYDRAULIC DRAWBAR
L	95935169	3	SCREW, 1/2-13 X 4
M	95923348	3	NUT, NYLOC 1/2-13
N	35605310	1	TUBING, 3/16 X 18.88
P	37001252	4	CLAMP, SUPPORT
Q	35356310	5	BRACKET, HOSE MOUNTING
R	35300771	2	SCREW, TAPPING M06-100 X 20
S	36881274	1	HOSE, BRAKE 3/16 X 50
T	92368687	2	SCREW, TAPPING M06-100 X 14
U	36881399	1	HOSE, BRAKE 3/8 X 24
V	35279025	2	SCREW, TAPPING M08-125 X 20
W	35315746	1	ADAPTER

35393958-17 35393966-17	54437173-19 54529599-19 54531520-19 54529581-17 54525973-17	35391705-19 35391713-19 35391721-19 35391739-19 35392984-19	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/29/96 bd DESCRIPTION: ADJ HT HYDRAULIC BRAKE MODEL NO. MANUAL NO.: OPTION DATE/REV: 8/00 B

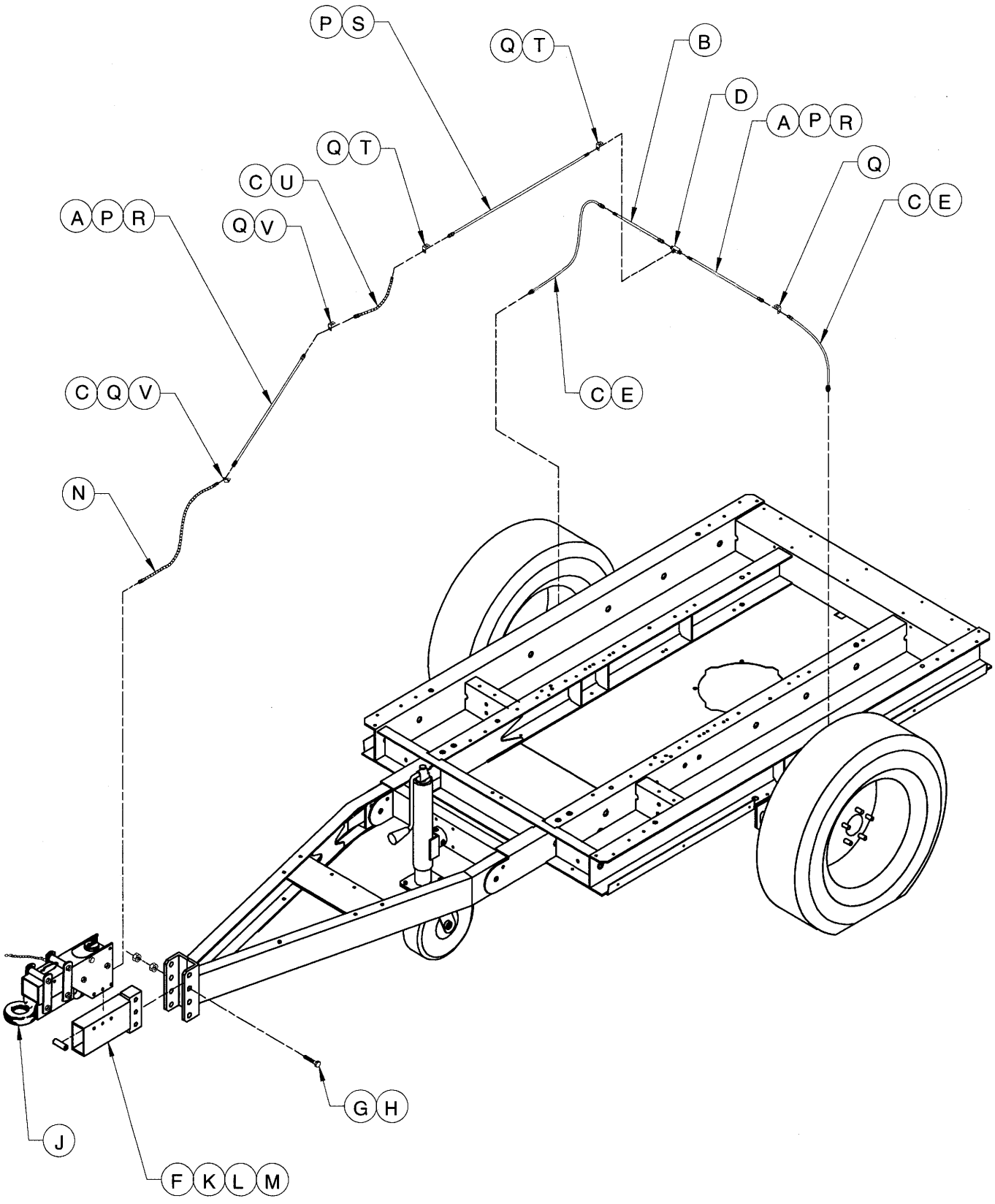


35393958-18 35393966-18	54437173-20 54529599-20 54531520-20 54529581-18 54525973-18	35391705-20 35391713-20 35391721-20 35391739-20 35392984-20	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
10/29/96 bd	EXT DBAR HYD BRAKE	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	35356401	3	HOSE, BRAKE 3/16 X 40
B	36881290	1	HOSE, BRAKE 3/8 X 12
C	35356302	4	CLIP, HOSE
D	35356328	1	TEE, 3/16 INVERTED
E	35356369	2	TUBE, BRAKE 3/16 X 13
F	36758647	1	SUPPORT, HYDRAULIC ACTUATOR
G	35376094	3	SCREW, M16-200
H	96700885	6	NUT, HEX M16
J	35316611	1	ACTUATOR, HYDRAULIC BRAKE
K	35333673	3	SPACER, HYDRAULIC DRAWBAR
L	95935169	3	SCREW, 1/2-13 X 4
M	95923348	3	NUT, NYLOC 1/2-13
N	35356377	1	TUBING, 3/16 X 18.88
P	37001252	4	CLAMP, SUPPORT
Q	35356310	5	BRACKET, HOSE MOUNTING
R	35300771	2	SCREW, TAPPING M06-100 X 20
S	36881274	1	HOSE, BRAKE 3/16 X 50
T	92368687	2	SCREW, TAPPING M06-100 X 14
U	36881399	1	HOSE, BRAKE 3/8 X 24
V	35279025	2	SCREW, TAPPING M08-125 X 20
W	35356336	1	UNION, 3/16

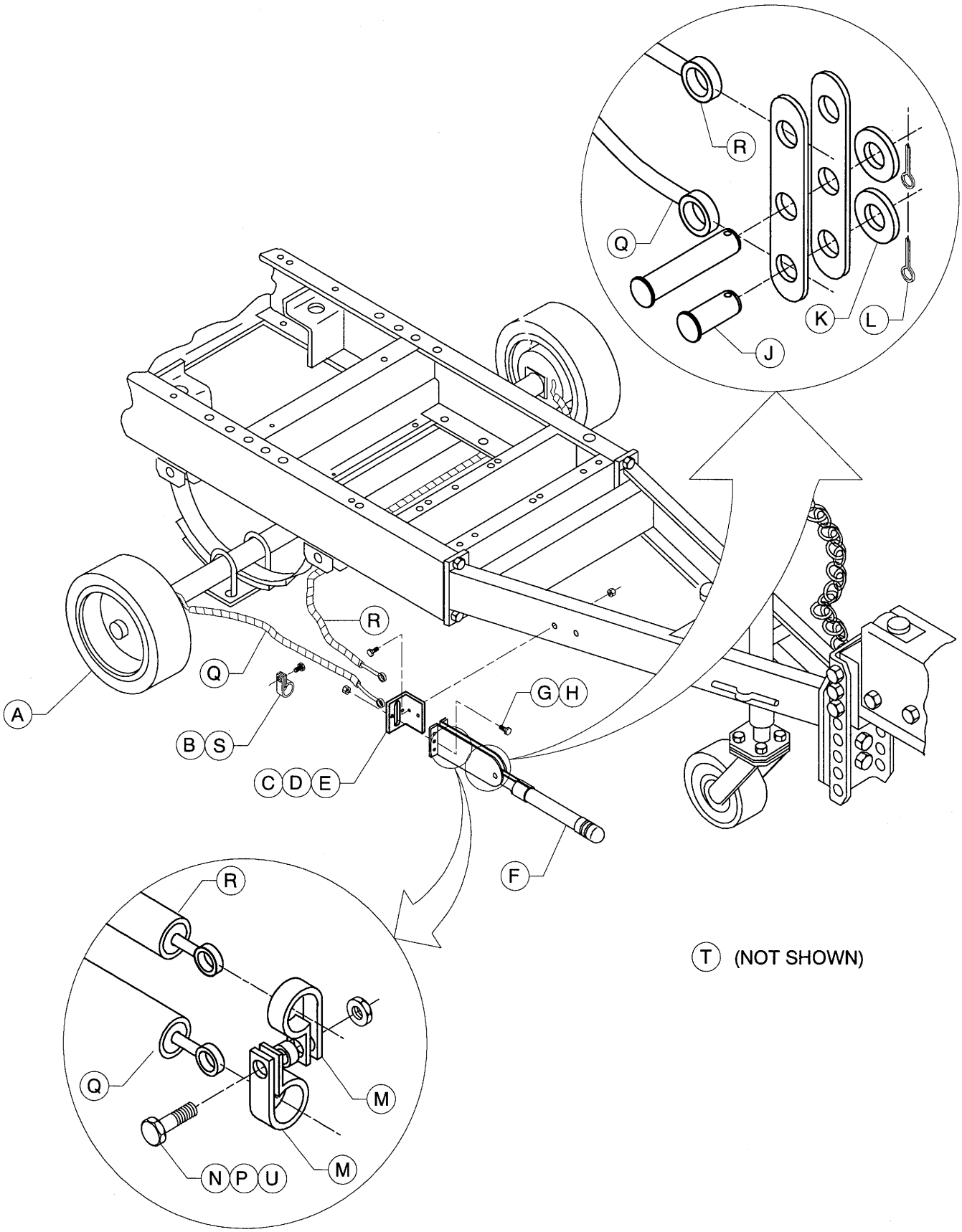
35393958-19 35393966-19	54437173-21 54529599-21 54531520-21 54529581-19 54525973-19	35391705-21 35391713-21 35391721-21 35391739-21 35392984-21	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/29/96 bd DESCRIPTION: EXT DBAR HYD BRAKE MODEL NO. MANUAL NO.: OPTION DATE/REV: 8/00 B



35393958-20 35393966-20	54437173-22 54529599-22 54531520-22 54529581-20 54525973-20	35391705-22 35391713-22 35391721-22 35391739-22 35392984-22	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/29/96 bd DESCRIPTION: HYDRAULIC BRAKE MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	35356401	2	HOSE, BRAKE 3/16 X 40
B	36881290	1	HOSE, BRAKE 3/8 X 12
C	35356302	5	CLIP, HOSE
D	35356328	1	TEE, 3/16 INVERTED
E	35356369	2	TUBE, BRAKE 3/16 X 13
F	36758647	1	SUPPORT, HYDRAULIC ACTUATOR
G	35376094	3	SCREW, M16-200
H	96700885	6	NUT, HEX M16
J	35316611	1	ACTUATOR, HYDRAULIC BRAKE
K	35333673	3	SPACER, HYDRAULIC DRAWBAR
L	95935169	3	SCREW, 1/2-13 X 4
M	95923348	3	NUT, NYLOC 1/2-13
N	35356377	1	TUBING, 3/16 X 18.88
P	37001252	4	CLAMP, SUPPORT
Q	35356310	5	BRACKET, HOSE MOUNTING
R	35300771	2	SCREW, TAPPING M06-100 X 20
S	36881274	1	HOSE, BRAKE 3/16 X 50
T	92368687	2	SCREW, TAPPING M06-100 X 14
U	36881399	1	HOSE, BRAKE 3/8 X 24
V	35279025	2	SCREW, TAPPING M08-125 X 20

35393958-21 35393966-21	54437173-23 54529599-23 54531520-23 54529581-21 54525973-21	35391705-23 35391713-23 35391721-23 35391739-23 35392984-23	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/29/96 bd DESCRIPTION: HYDRAULIC BRAKE MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B



35393958-22 35393966-22	54437173-24 54529599-24 54531520-24 54529581-22 54525973-22	35391705-24 35391713-24 35391721-24 35391739-24 35392984-24	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/31/96 bd DESCRIPTION: HYD BRAKE w/ PARK MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

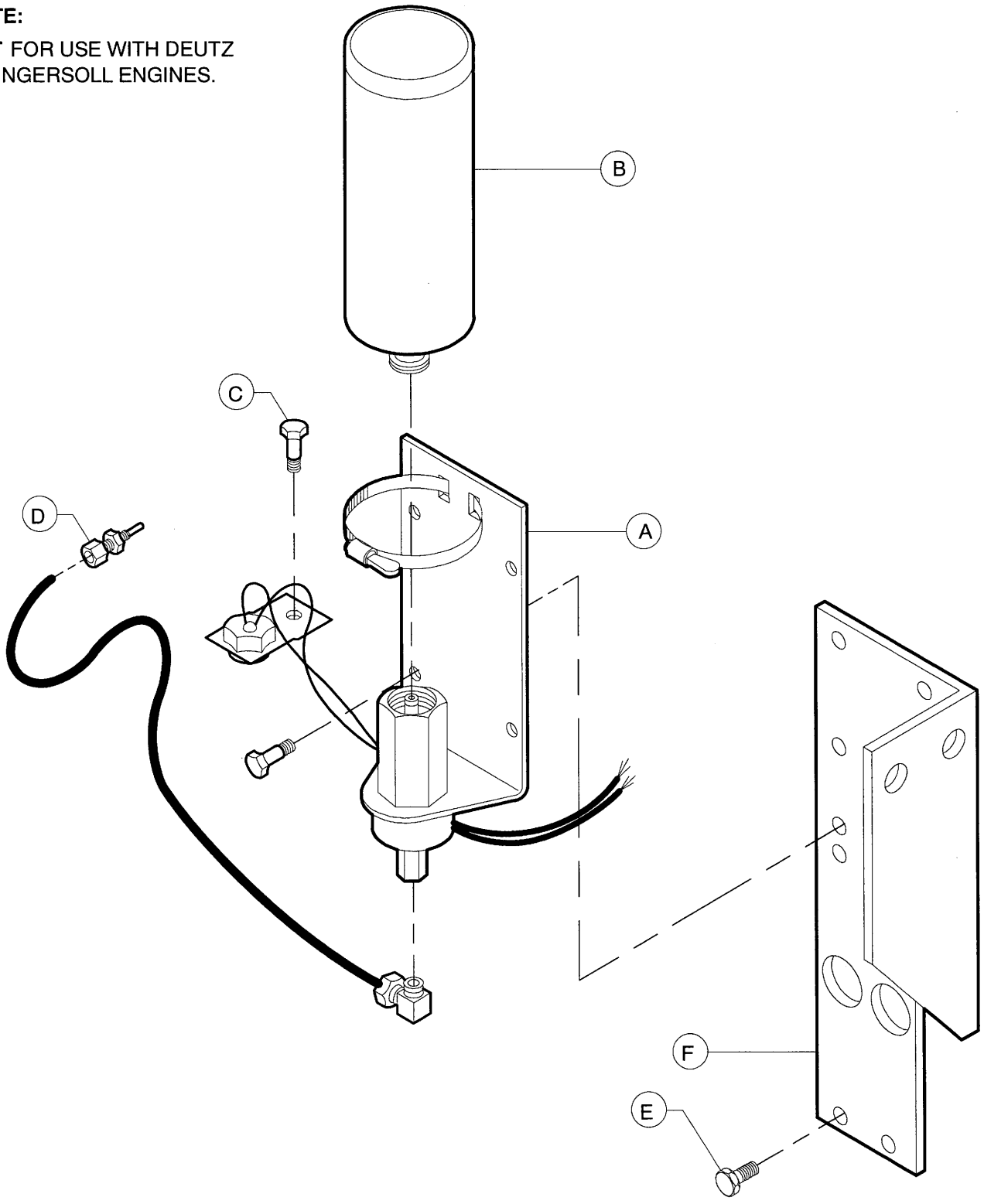
ITEM	C.P.N.	QTY	DESCRIPTION
A	36881209	1	RUNNING GEAR W/ BRAKES
B	35134477	1	CLAMP, RUBBER COATED
C	36882009	1	BRAKE LEVER BRACKET
D	36769297	2	SCREW, HEX M10-150 X 35
E	96701529	2	NUT, HEX M10
F	35370055	1	LEVER, PARKING BRAKE
G	35374834	2	SCREW, HEX M08-125 X 25
H	96700869	2	NUT, HEX M08
J	36846780	2	PIN, CLEVIS .31 X .75
K	95934998	2	WASHER, FLAT 3/8
L	95928867	2	PIN, COTTER .09
M	35126325	2	CLAMP, CABLE
N	95943668	1	SCREW, HEX 5/16-18 X 1 3/4
P	35126358	1	SPACER
Q	35517176	1	ASSEMBLY, BRAKE CABLE 78"
R	35594076	1	ASSEMBLY, BRAKE CABLE 117"
S	35300771	1	SCREW, TAPPING M06-100 X 20
T	35253038	3	CLAMP, RUBBER COATED
U	35252600	1	NUT, LOCKING 5/16-18

35393958-23 35393966-23	54437173-25 54529599-25 54531520-25 54529581-23 54525973-23	35391705-25 35391713-25 35391721-25 35391739-25 35392984-25	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
10/31/96 bd	HYD BRAKE w/ PARK	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 B

NOTE:

NOT FOR USE WITH DEUTZ
OR INGERSOLL ENGINES.



USE WITH ETHER START OPTIONS FOR
P100WJD - P250WJD, XP185WJD

35393958-24 35393966-24	54437173-26 54529599-26 54531520-26 54529581-24 54525973-24	35391705-26 35391713-26 35391721-26 35391739-26 35392984-26	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 2/14/97 bd DESCRIPTION: AUTO COLD START (JD) MODEL NO.: P100 - P250 J DEERE MANUAL NO.: OPTION DATE/REV: 8/00 D

ITEM		C.P.N.	QTY	DESCRIPTION
A	*	35377266	1	KIT, COLD START
B		36796910	1	CYLINDER, ETHER
C		35252725	1	SCREW, LOCK 3/8-16 X 1/2
D		36889384	1	BUSHING
E		35279025	2	SCREW, TAPPING M08-125 X 20
F		36883890	1	BRACKET, ETHER FUEL

* SEE WIRING SCHEMATIC FOR COLD START KIT

NOTE:

NOT FOR USE WITH DEUTZ
OR INGERSOLL ENGINES.

USE WITH ETHER START OPTIONS FOR

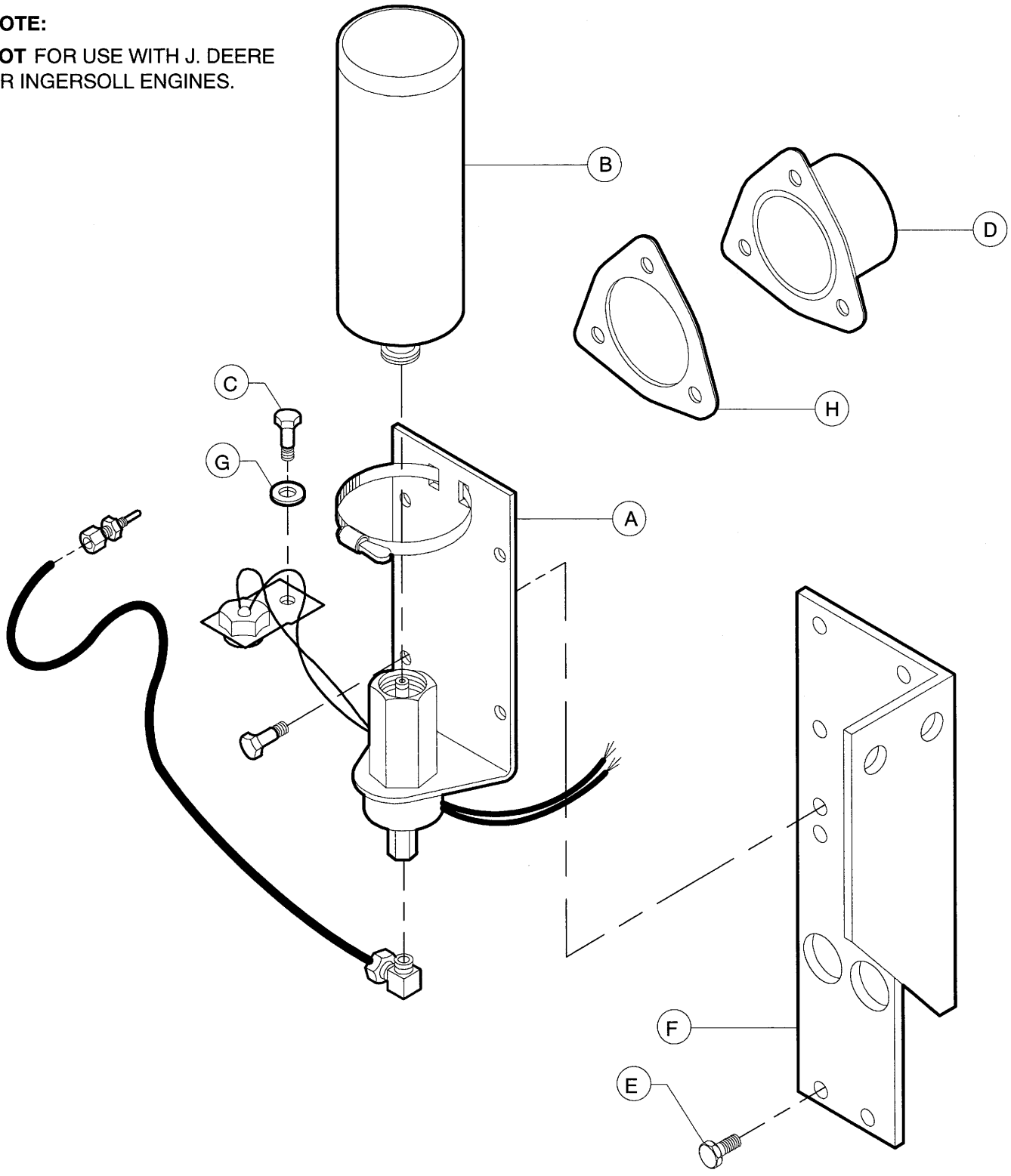
P100WJD - P250WJD, XP185WJD

35393958-25 35393966-25	54437173-27 54529599-27 54531520-27 54529581-25 54525973-25	35391705-27 35391713-27 35391721-27 35391739-27 35392984-27

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 2/14/97 bd	DESCRIPTION: AUTO COLD START (JD)	
MODEL NO.: P100 - P250 J DEERE	MANUAL NO.: OPTION	DATE/REV: 8/00 D

NOTE:

NOT FOR USE WITH J. DEERE OR INGERSOLL ENGINES.



USE WITH ETHER START OPTIONS FOR

P100WD - P185WD

54437173-28 54529599-28 54531520-28	35391705-28 35391713-28 35391721-28 35391739-28 35392984-28	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION	
		DATE/DWN BY: 2/17/97 bd	DESCRIPTION AUTO COLD START (DEUTZ)
		MODEL NO. P100 - P185 DEUTZ	MANUAL NO. OPTION
			DATE/REV: 8/00 D

ITEM	C.P.N.	QTY	DESCRIPTION
A	36853448	1	KIT, COLD START
B	36796910	1	CYLINDER, ETHER
C	96702048	1	SCREW, HEX M08-125 X 16
D	36880946	1	ADAPTER, ENG AIR INTAKE
E	35279025	2	SCREW, TAPPING M08-125 X 20
F	36883890	1	BRACKET, ETHER FUEL
G	96701396	1	WASHER, FLAT M08
H	36792240	1	GASKET, AIR INTAKE ADAPTER

NOTE:

NOT FOR USE WITH J. DEERE
OR INGERSOLL ENGINES.

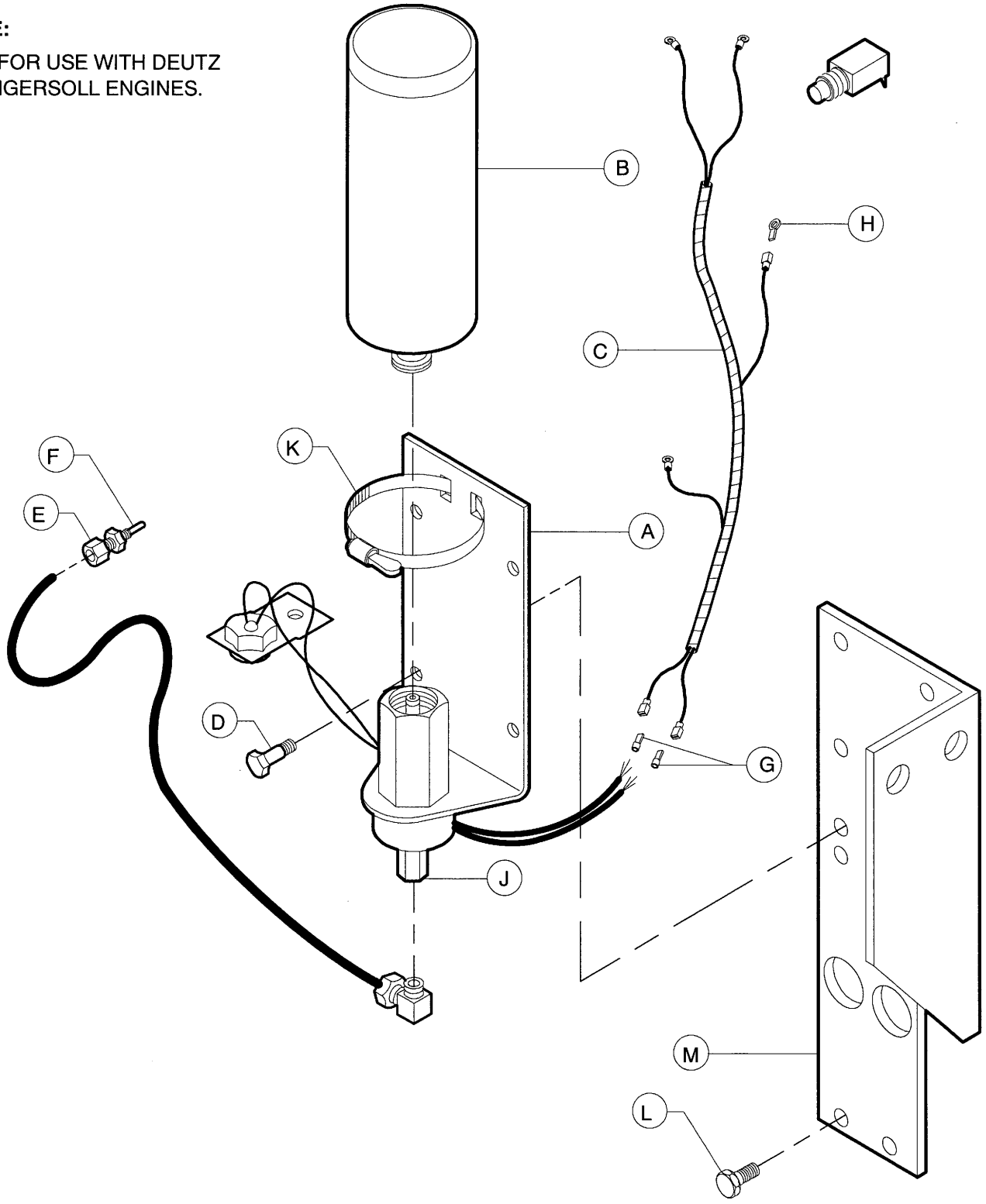
USE WITH ETHER START OPTIONS FOR

P100WD - P185WD

54437173-29 54529599-29 54531520-29	35391705-29 35391713-29 35391721-29 35391739-29 35392984-29	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 2/17/97 bd DESCRIPTION: AUTO COLD START (DEUTZ) MODEL NO.: P100 - P185 DEUTZ MANUAL NO.: OPTION DATE/REV.: 8/00 D

NOTE:

NOT FOR USE WITH DEUTZ OR INGERSOLL ENGINES.



USE WITH ETHER START OPTIONS FOR

P100WD/WJD - P250 WD/WJD, XP185WJD

35393958-26 35393966-26	54437173-30 54529599-30 54531520-30 54529581-26 54525973-26	35391705-30 35391713-30 35391721-30 35391739-30 35392984-30	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 11/4/96 bc DESCRIPTION: MAN COLD START OPT MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 C

ITEM		C.P.N.	QTY	DESCRIPTION
A		35367739	1	KIT, COLD START
B		35112911	1	CYLINDER, ETHER
C		36842821	1	HARNESS, COLD START
D		92368687	2	SCREW, HEX M06-100 X 14
E		36889384	1	BUSHING
F		35315027	1	ATOMIZER
G		35306141	2	TERMINAL, CONNECTOR
H		35287572	1	SPLICE, INSULATED
J	*	35367747	1	VALVE
K	*	35103506	1	CLAMP
L		35279025	2	SCREW, TAPPING M08-125 X 20
M		36883890	1	BRACKET, ETHER FUEL

* INCLUDED IN COLD START KIT

NOTE:

NOT FOR USE WITH DEUTZ
OR INGERSOLL ENGINES.

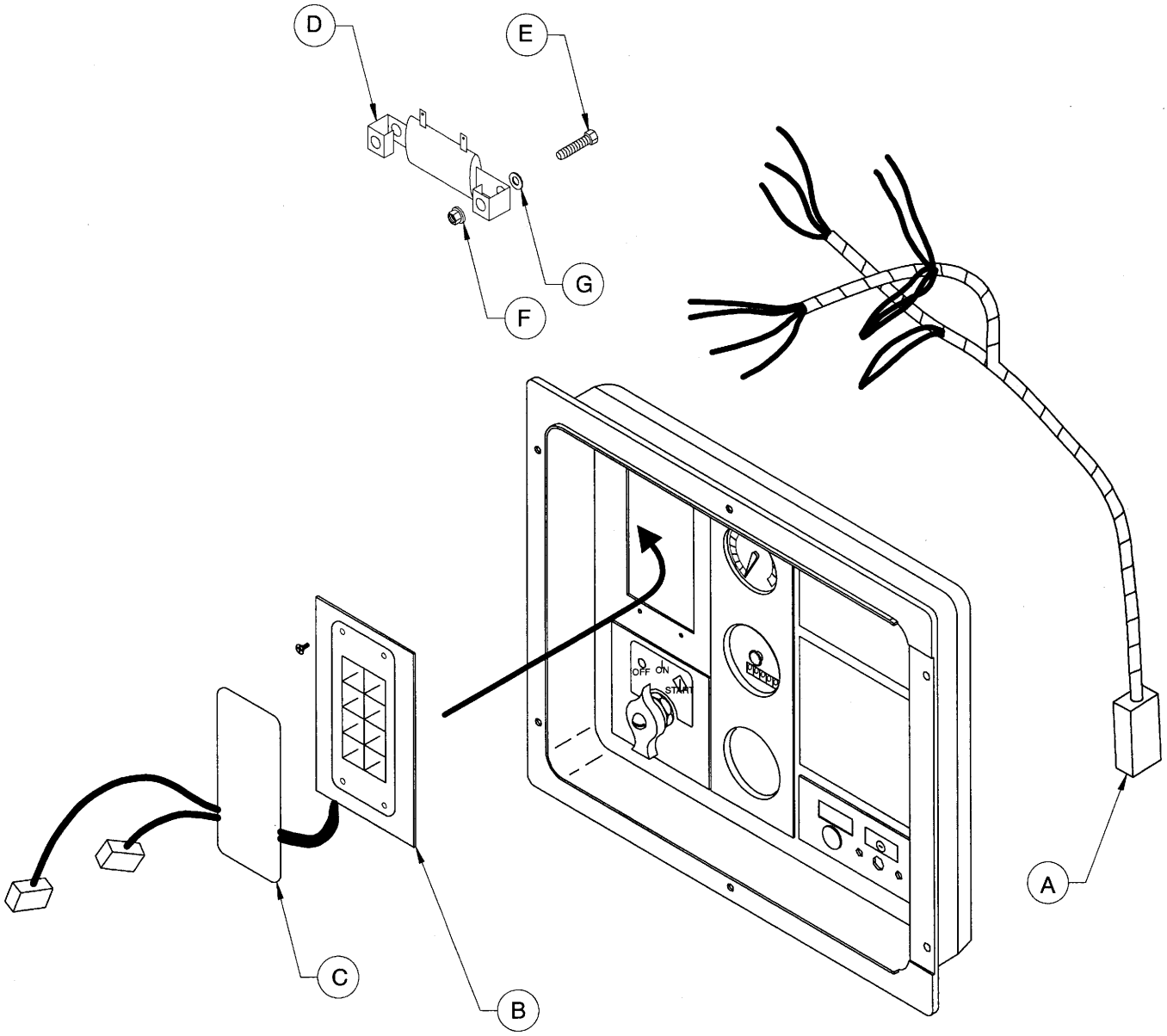
USE WITH ETHER START OPTIONS FOR

P100WD/WJD - P250 WD/WJD, XP185WJD

35393958-27	54437173-31	35391705-31
35393966-27	54529599-31	35391713-31
	54531520-31	35391721-31
	54529581-27	35391739-31
	54525973-27	35392984-31

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
11/4/96 bd	MAN COLD START OPT	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 C



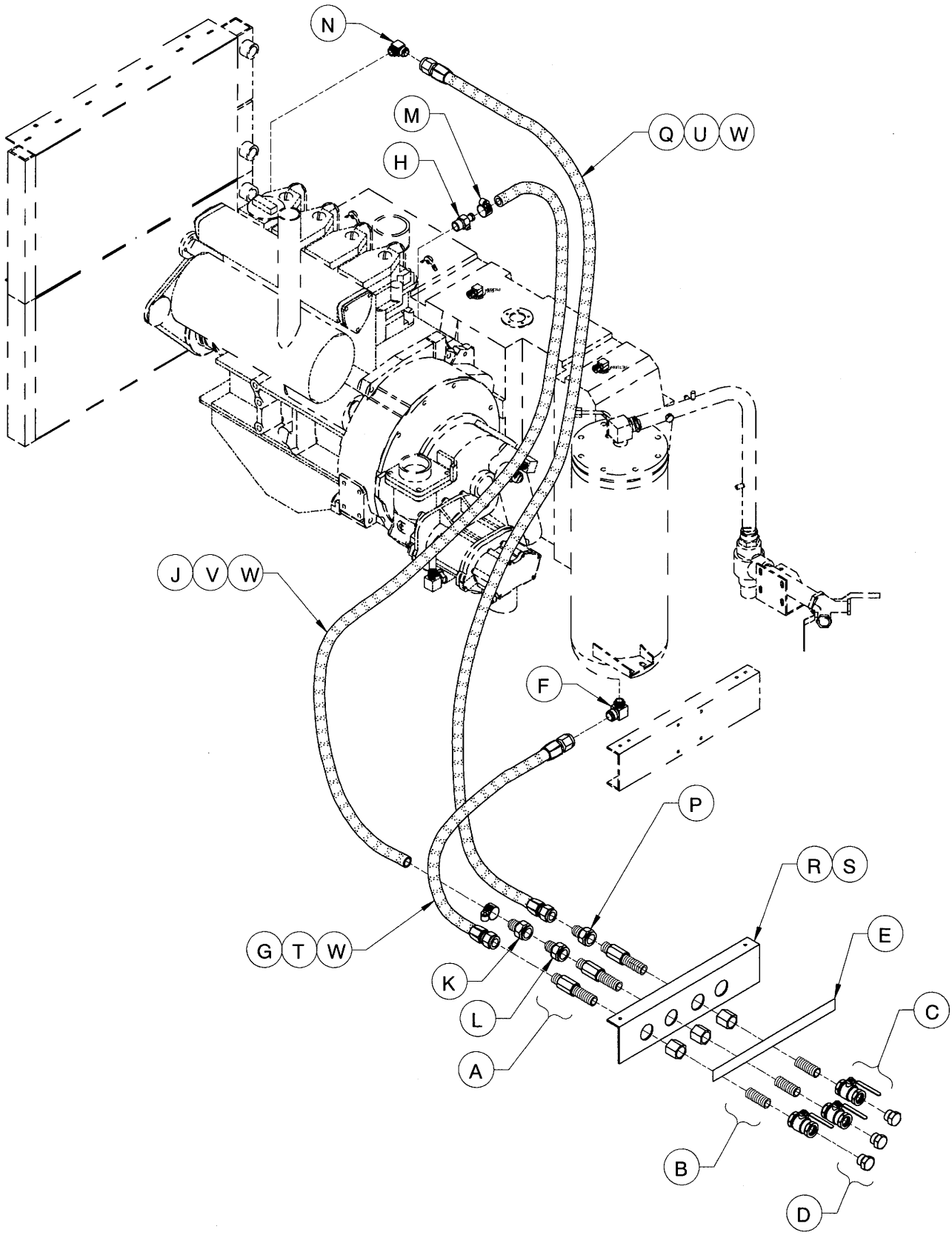
PRIOR TO SERIAL NUMBER 326650

35393958-28 35393966-28	54437173-32 54529599-32 54531520-32 54529581-28 54525973-28	35391705-32 35391713-32 35391721-32 35391739-32 35392984-32	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 2/17/97 bd DESCRIPTION: DIGN DISPLAY MODULE MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36885739	1	HARNESS, OPTION
	54484324	1	HARNESS, OPTION (FOR IR ENGINES ONLY)
B	36882033	1	MODULE, DIAGNOSTIC
C	36879674	1	DECAL, DIAGNOSTIC
D	54488416	1	RESISTOR (FOR IR ENGINES ONLY)
E	36842102	2	SCREW, HEX 10-32 X 1 (FOR IR ENGINES ONLY)
F	95928800	2	NUT, HEX LOCK 10-32 (FOR IR ENGINES ONLY)
G	95954251	2	WASHER, FLAT (FOR IR ENGINES ONLY)

PRIOR TO SERIAL NUMBER 326650

35393958-29 35393966-29	54437173-33 54529599-33 54531520-33 54529581-29 54525973-29	35391705-33 35391713-33 35391721-33 35391739-33 35392984-33	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 2/17/97 bd DESCRIPTION: DIGN DISPLAY MODULE MODEL NO. MANUAL NO.: OPTION DATE/REV: 8/00 B



USE WITH CENTRAL DRAIN OPTIONS FOR P100WD - P185 WD

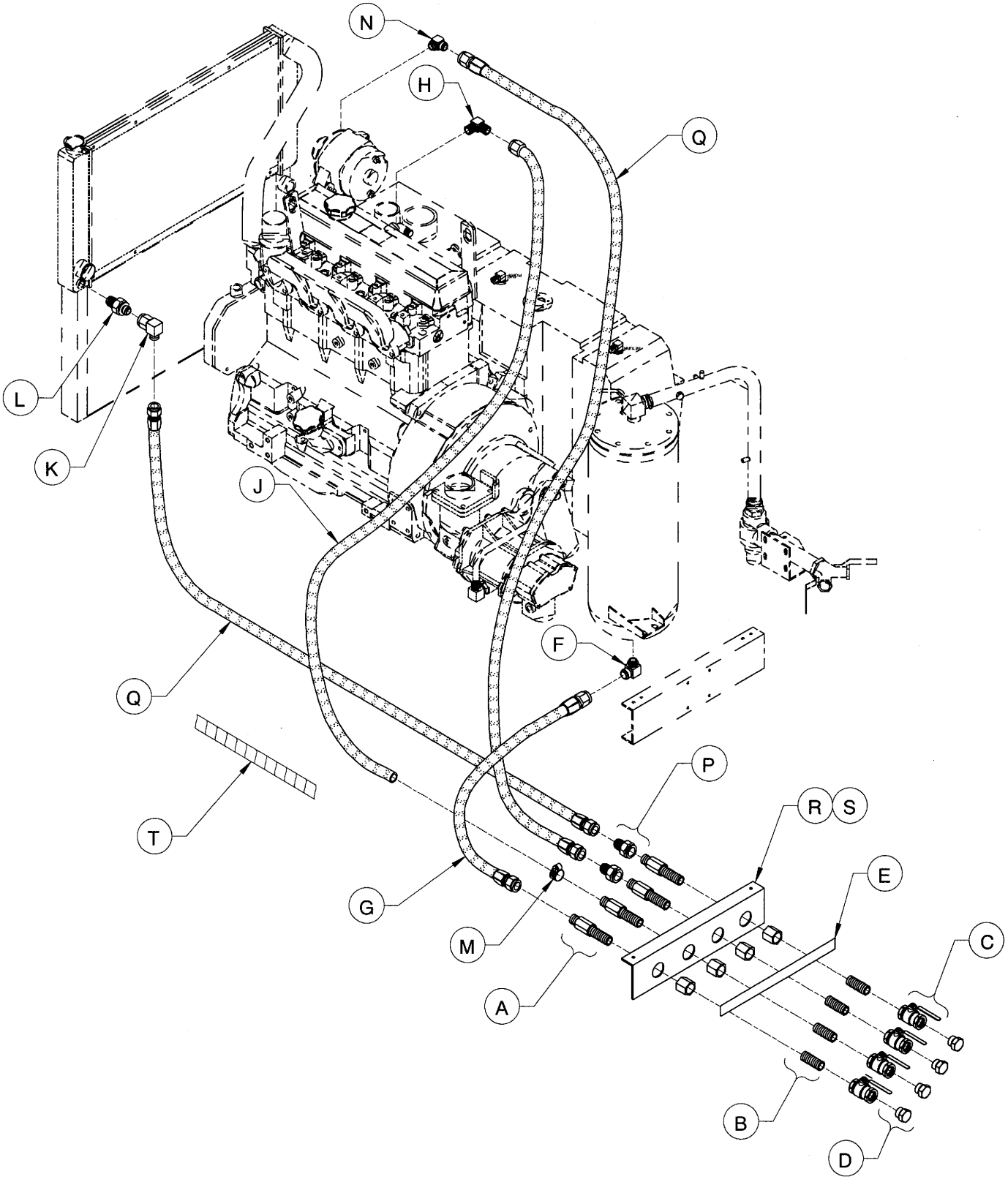
54437173-34 54529599-34 54531520-34	35391705-34 35391713-34 35391721-34 35391739-34 35392984-34	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
03/03/97 bd	CENTRAL DRAIN	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	35287747	3	BULKHEAD, FITTING
B	95928040	3	NIPPLE, CLOSE 3/4
C	36777399	3	VALVE, BALL 3/4 T-HANDLE
D	95947149	3	PLUG, HEX CTR SINK
E	36524791	1	DECAL, FLUID DRAIN
F	35294750	1	ELBOW, SAE 1.06-12 JIC
G	35287721	1	HOSE
H	36774487	1	VALVE, DRAIN (ENGINE OIL)
J	35326578	57"	HOSE, HEATER 5/8"
K	95082970	1	CONNECTOR, 1/2 NPT X 5/8 NPT
L	95279378	1	CONNECTOR, 1/2 NPT
M	95220844	2	CLAMP, HOSE 9/16
N	35296250	1	ELBOW, 90□ 1/4 NPT X 8 JIC
P	35365774	1	REDUCER, TUBE
Q	35305481	1	HOSE
R	36884120	1	SUPPORT, CENTRAL DRAIN
S	36763662	4	SCREW, HEX M12-1.75 X 40
T	35291285	1	CLAMP, .84 RBR CTD
U	35141019	1	CLAMP, .62 RBR CTD
V	35225093	1	CLAMP, .50 RBR CTD
W	36797652	3	SCREW, TAPPING M06-1.00 X 12

USE WITH CENTRAL DRAIN OPTIONS FOR P100WD - P185 WD

54437173-35 54529599-35 54531520-35	35391705-35 35391713-35 35391721-35 35391739-35 35392984-35	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 03/03/97 bd DESCRIPTION: CENTRAL DRAIN MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 8/00 B



USE WITH CENTRAL DRAIN OPTIONS FOR P100WJD - P175 WJD (3 CYL.)

54437173-36 54529599-36 54531520-36	35391705-36 35391713-36 35391721-36 35391739-36 35392984-36	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

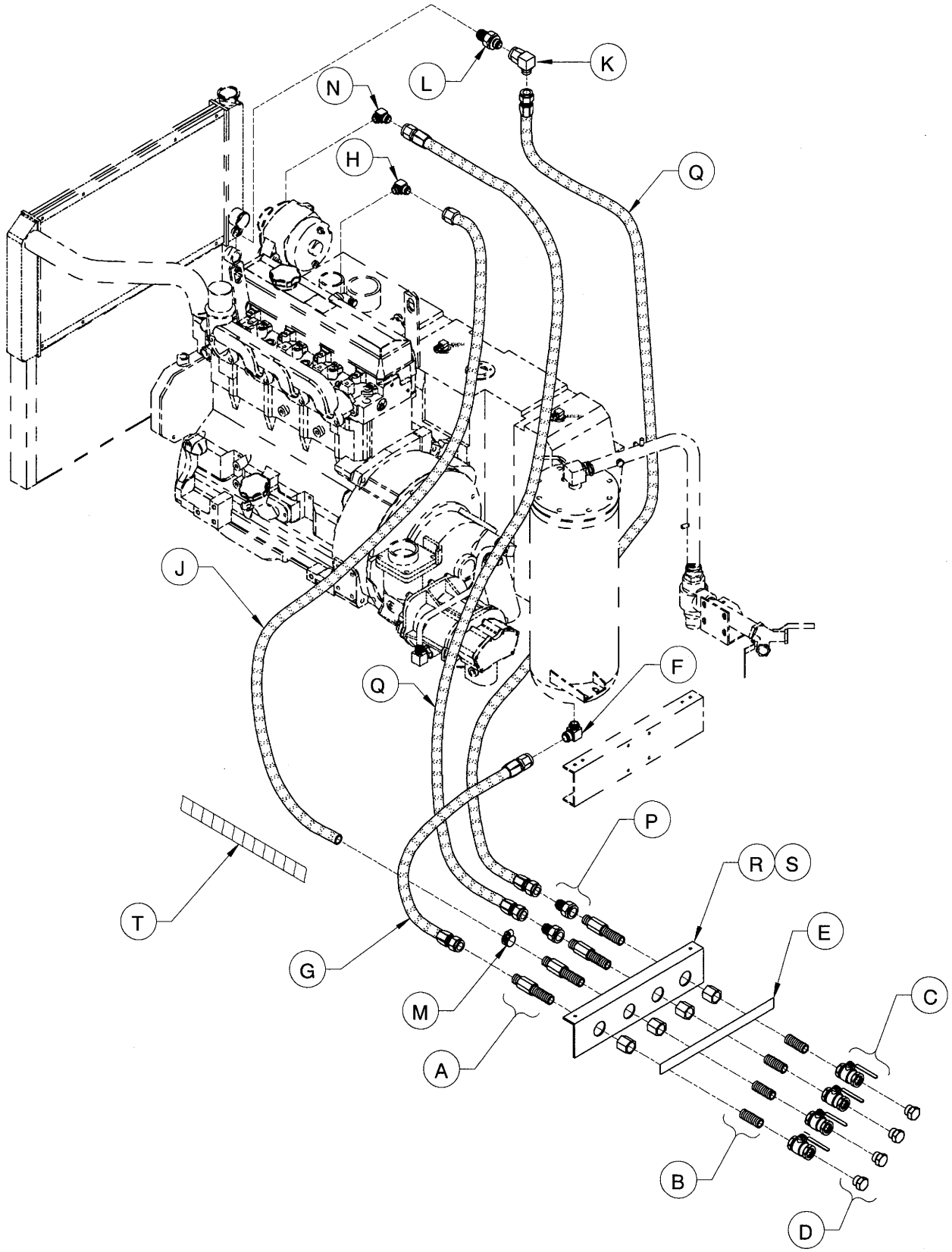
DATE/DWN BY:	DESCRIPTION	
03/12/97 bd	CENTRAL DRAIN	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 C

ITEM		C.P.N.	QTY	DESCRIPTION
A		35287747	4	BULKHEAD, FITTING
B		95928040	4	NIPPLE, CLOSE 3/4
C		36777399	4	VALVE, BALL 3/4 T-HANDLE
D		95947149	4	PLUG, HEX CTR SINK
E		36524791	1	DECAL, FLUID DRAIN
F		35294750	1	ELBOW, SAE 1.06-12 JIC
G		35330844	1	HOSE
H		36883395	1	ELBOW, 90° M18-1.5 SAE
J		36921641	1	HOSE
K		35287911	1	ELBOW, 90° SWIVEL NUT -8
L		35283134	1	CONNECTOR, 1/4 NPT X -8 JIC
M		95220844	1	CLAMP, HOSE 9/16
N		35296250	1	ELBOW, 90° 1/4 NPT X 8 JIC
P		35365774	2	REDUCER, TUBE
Q		35305481	2	HOSE
R		36884120	1	SUPPORT, CENTRAL DRAIN
S		96702444	4	SCREW, HEX M12-1.75 X 40
T	*	35291236	36"	COIL, PLASTIC

* CUT TO LENGTH TO PROTECT HOSES

USE WITH CENTRAL DRAIN OPTIONS FOR P100WJD - P175 WJD (3 CYL.)

54437173-37 54529599-37 54531520-37	35391705-37 35391713-37 35391721-37 35391739-37 35392984-37	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 03/12/97 bd | DESCRIPTION: CENTRAL DRAIN MODEL NO.: PLATINUM | MANUAL NO.: OPTION | DATE/REV: 8/00 C



USE WITH CENTRAL DRAIN OPTIONS FOR P185 WJD (4 CYL.)

54437173-38 54529599-38 54531520-38	35391705-38 35391713-38 35391721-38 35391739-38 35392984-38	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

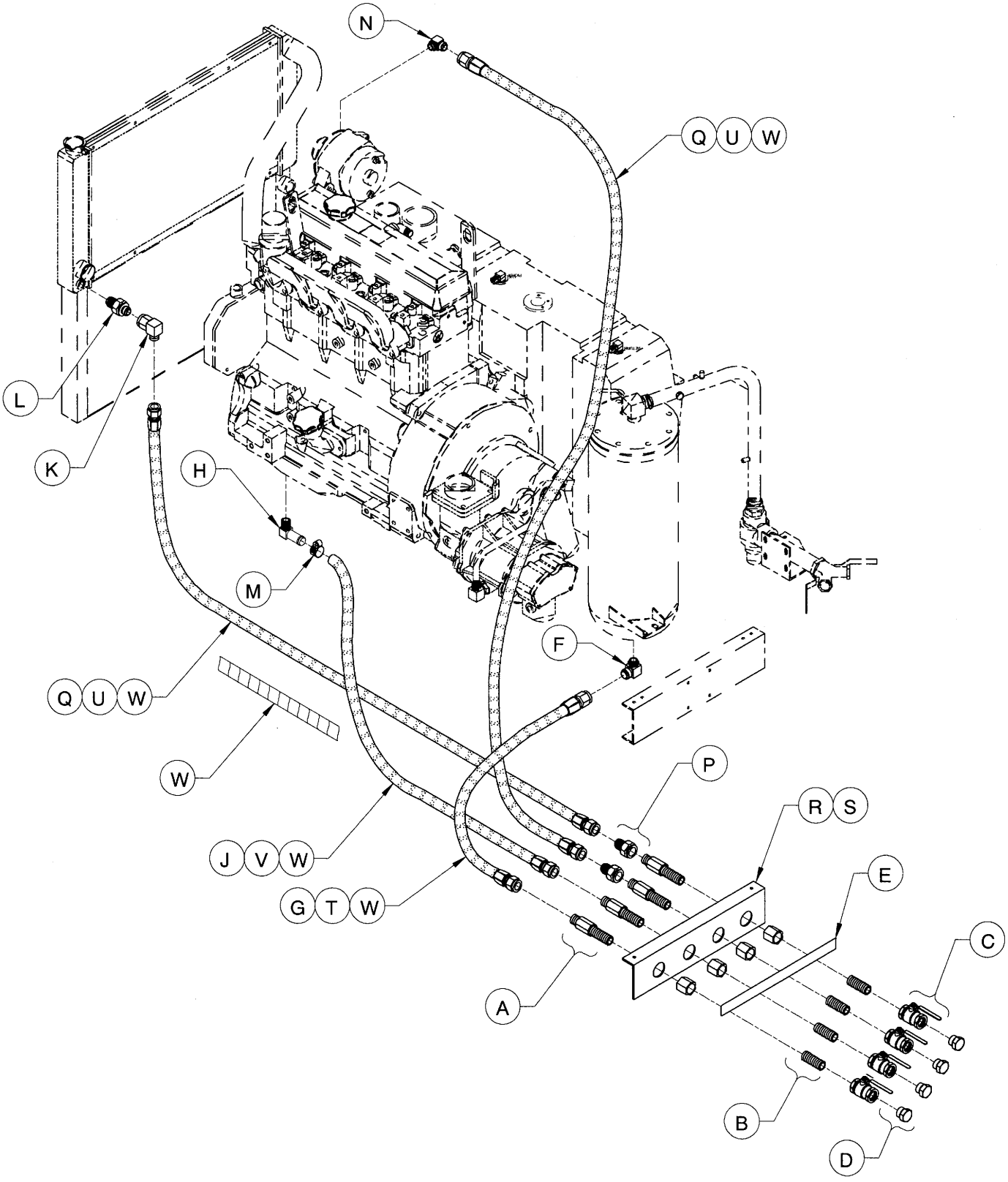
DATE/DWN BY:	DESCRIPTION	
03/12/97 bd	CENTRAL DRAIN	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 C

ITEM		C.P.N.	QTY	DESCRIPTION
A		35287747	4	BULKHEAD, FITTING
B		95928040	4	NIPPLE, CLOSE 3/4
C		36777399	4	VALVE, BALL 3/4 T-HANDLE
D		95947149	4	PLUG, HEX CTR SINK
E		36524791	1	DECAL, FLUID DRAIN
F		35294750	1	ELBOW, SAE 1.06-12 JIC
G		35330844	1	HOSE
H		36883395	1	ELBOW, 90° M18-1.5 SAE
J		36921641	1	HOSE
K		35287911	1	ELBOW, 90° SWIVEL NUT -8
L		35283134	1	CONNECTOR, 1/4 NPT X -8 JIC
M		95220844	1	CLAMP, HOSE 9/16
N		35296250	1	ELBOW, 90° 1/4 NPT X 8 JIC
P		35365774	2	REDUCER, TUBE
Q		35305481	2	HOSE
R		36884120	1	SUPPORT, CENTRAL DRAIN
S		96702444	4	SCREW, HEX M12-1.75 X 40
T	*	35291236	36"	COIL, PLASTIC

* CUT TO LENGTH TO PROTECT HOSES

USE WITH CENTRAL DRAIN OPTIONS FOR P185 WJD (4 CYL.)

54437173-39 54529599-39 54531520-39	35391705-39 35391713-39 35391721-39 35391739-39 35392984-39	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 03/12/97 bd | DESCRIPTION: CENTRAL DRAIN MODEL NO.: PLATINUM | MANUAL NO.: OPTION | DATE/REV: 8/00 C



USE WITH CENTRAL DRAIN OPTIONS FOR P110WIR - P185 WIR

54437173-40 54529599-40 54531520-40	35391705-40 35391713-40 35391721-40 35391739-40 35392984-40	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

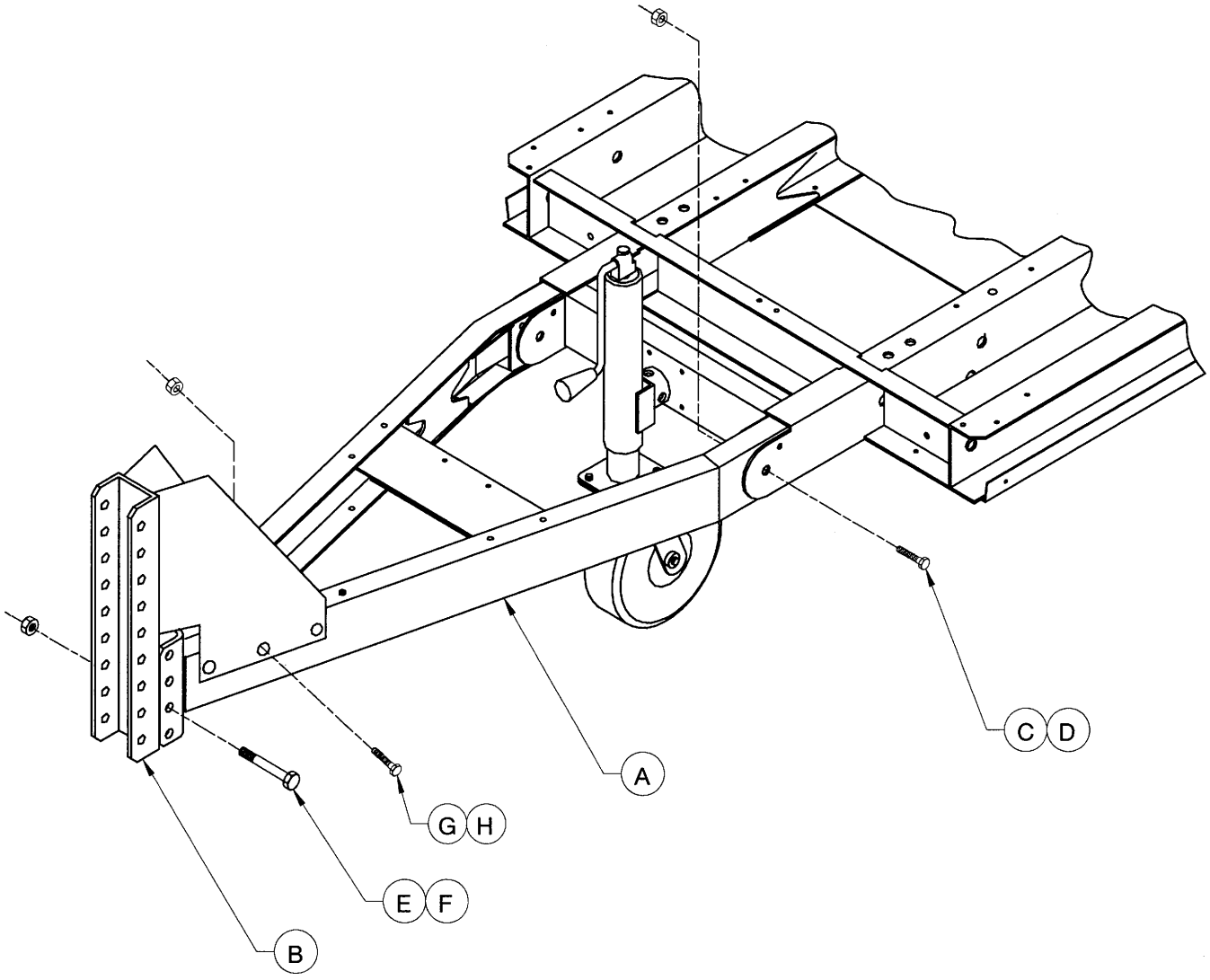
DATE/DWN BY:	DESCRIPTION	
8/10/00 bd	CENTRAL DRAIN	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 A

ITEM		C.P.N.	QTY	DESCRIPTION
A		35287747	4	BULKHEAD, FITTING
B		95928040	4	NIPPLE, CLOSE 3/4
C		36777399	4	VALVE, BALL 3/4 T-HANDLE
D		95947149	4	PLUG, HEX CTR SINK
E		36524791	1	DECAL, FLUID DRAIN
F		35294750	1	ELBOW, SAE 1.06-12 JIC
G		35330844	1	HOSE
H		54534243	1	ELBOW, 90° M20-1.5 SAE
J		36921641	1	HOSE
K		35287911	1	ELBOW, 90° SWIVEL NUT -8
L		35283134	1	CONNECTOR, 1/4 NPT X -8 JIC
M		95220844	1	CLAMP, HOSE 9/16
N		35296250	1	ELBOW, 90° 1/4 NPT X 8 JIC
P		35365774	2	REDUCER, TUBE
Q		35305481	2	HOSE
R		36884120	1	SUPPORT, CENTRAL DRAIN
S		96702444	4	SCREW, HEX M12-1.75 X 40
T	*	35291236	36"	COIL, PLASTIC

* CUT TO LENGTH TO PROTECT HOSES

USE WITH CENTRAL DRAIN OPTIONS FOR P110WIR - P185 WIR

54437173-41 54529599-41 54531520-41	35391705-41 35391713-41 35391721-41 35391739-41 35392984-41	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 8/10/00 bd DESCRIPTION: CENTRAL DRAIN MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 8/00 A

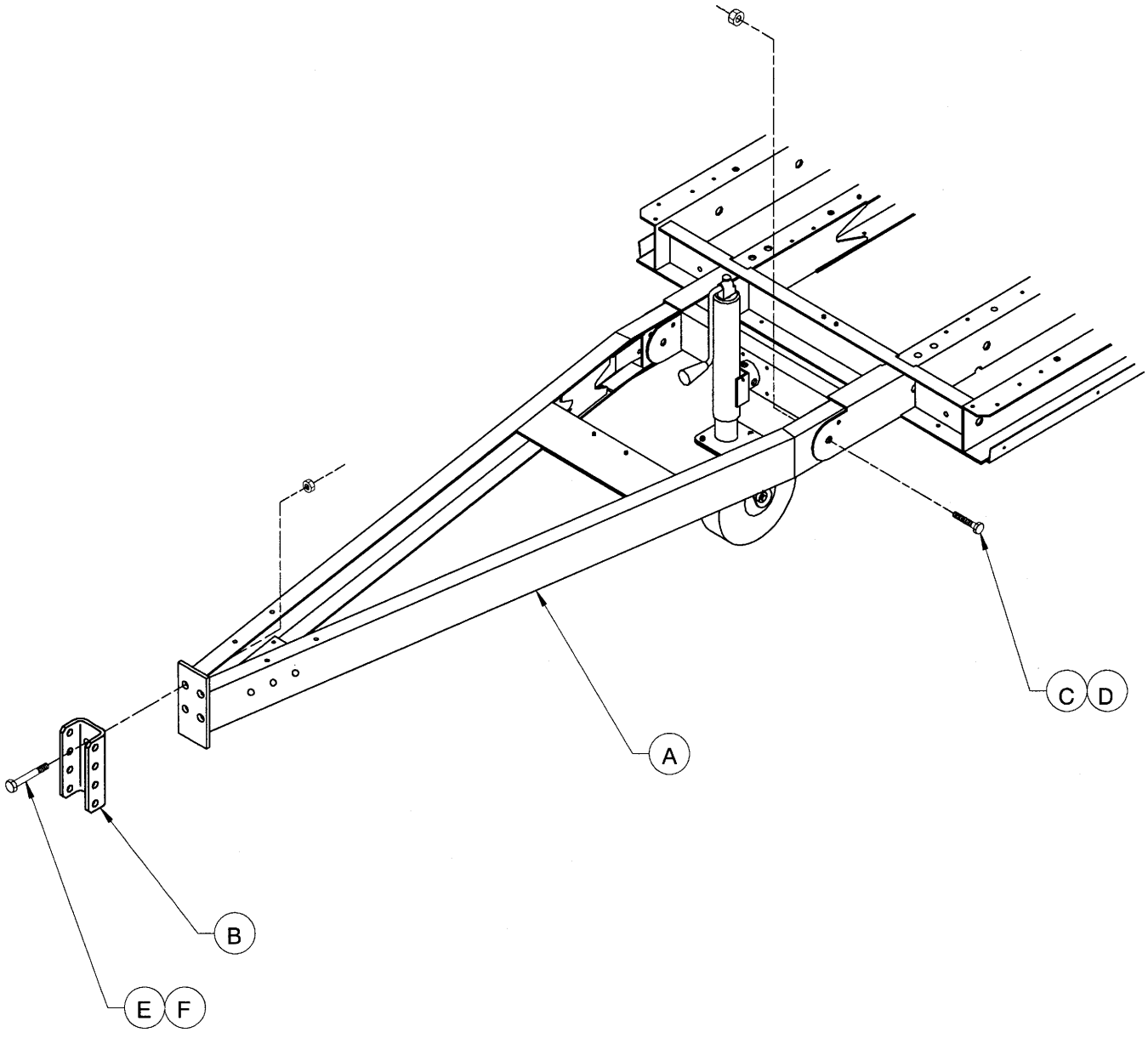


35393958-34 35393966-34	54437173-42 54529599-42 54531520-42 54529581-34 54525973-34	35391705-42 35391713-42 35391721-42 35391739-42 35392984-42	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/13/97 bd DESCRIPTION: ADJ HT DRAWBAR MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36886364	1	DRAWBAR
B	36882660	1	LUNETTE, ADJ HT
C	35290113	2	SCREW, HEX M16-2.00 X 75
D	96704630	2	NUT, NYLOCK M16
E	35376094	2	SCREW, HEX M16-2.00 X 12
F	96700885	2	NUT, HEX M16
G	36879492	6	SCREW, HEX FLANGE M12-1.75 X 25
H	36879203	6	NUT, HEX FLANGE M12

35393958-35 35393966-35	54437173-43 54529599-43 54531520-43 54529581-35 54525973-35	35391705-43 35391713-43 35391721-43 35391739-43 35392984-43	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

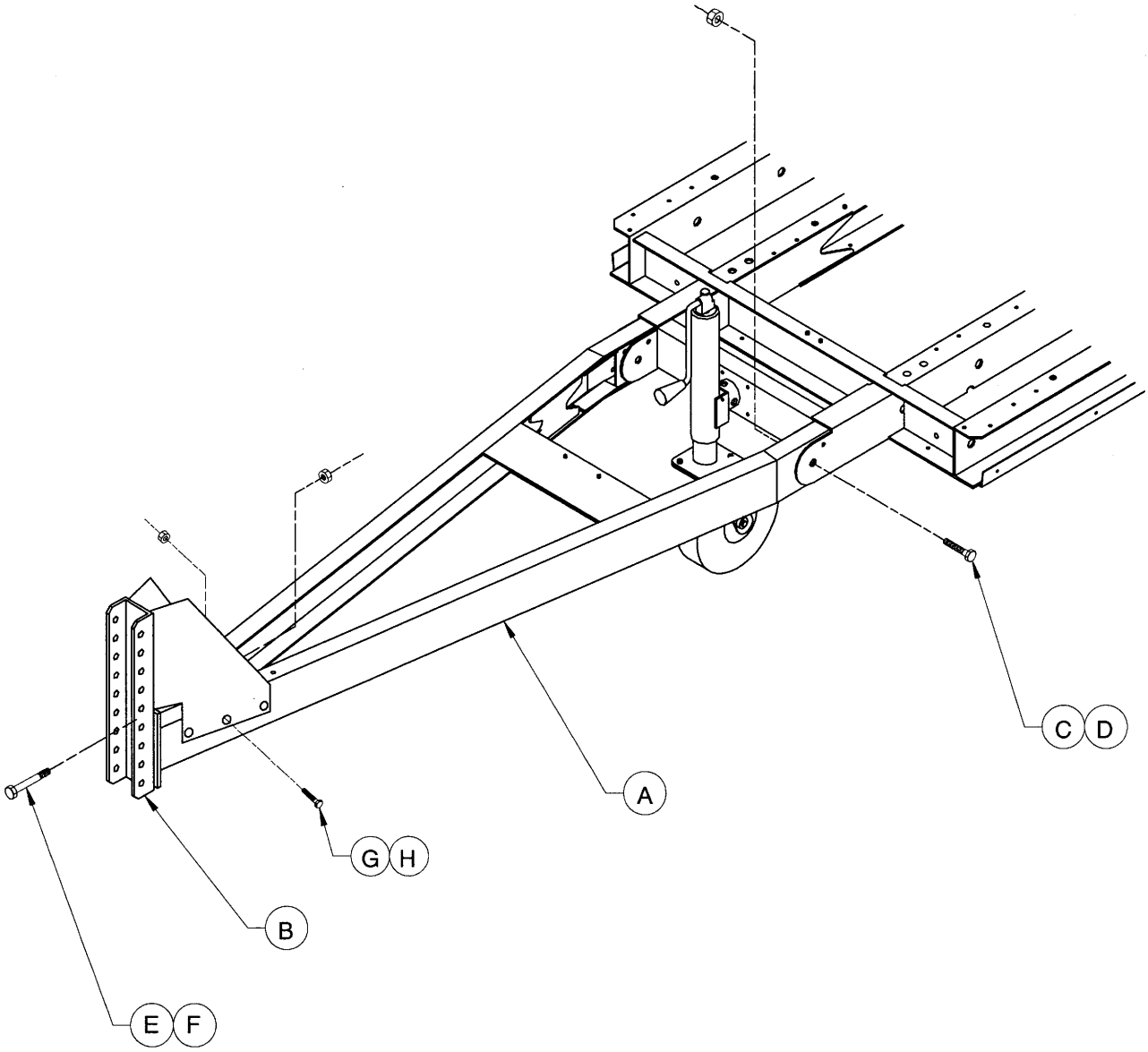
DATE/DWN BY:	DESCRIPTION	
3/13/97 bd	ADJ HT DRAWBAR	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 B



35393958-36 35393966-36	54437173-44 54529599-44 54531520-44 54529581-36 54525973-36	35391705-44 35391713-44 35391721-44 35391739-44 35392984-44	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/13/97 bd DESCRIPTION: EXTENDED DRAWBAR MODEL NO. MANUAL NO.: OPTION DATE/REV: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36887032	1	DRAWBAR, EXTENDED
B	36757284	1	CHANNEL, PINTEL MOUNTING
C	35290113	2	SCREW, HEX M16-2.00 X 75
D	96704630	2	NUT, NYLOCK M16
E	39179072	4	SCREW, HEX M16-2.00 X 50
F	36879211	4	NUT, HEX FLANGE M16

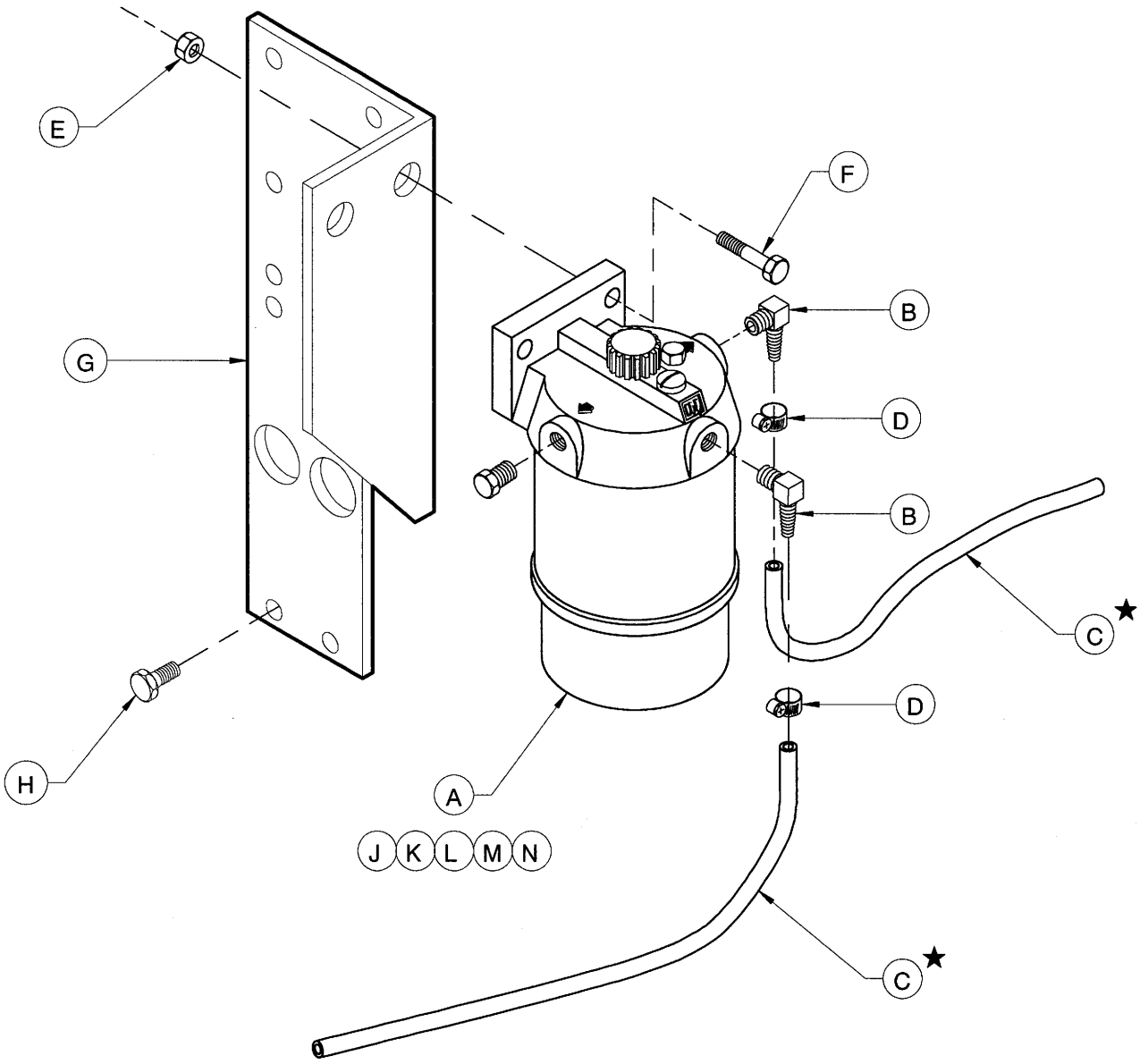
35393958-37 35393966-37	54437173-45 54529599-45 54531520-45 54529581-37 54525973-37	35391705-45 35391713-45 35391721-45 35391739-45 35392984-45	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/13/97 bd DESCRIPTION: EXTENDED DRAWBAR MODEL NO. MANUAL NO. OPTION 8/00 B



35393958-38 35393966-38	54437173-46 54529599-46 54531520-46 54529581-38 54525973-38	35391705-46 35391713-46 35391721-46 35391739-46 35392984-46	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/13/97 bd DESCRIPTION: EXTD/ADJ HT DRAWBAR MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36887032	1	DRAWBAR, EXTENDED
B	36882652	1	LUNETTE, ADJ HT
C	35290113	2	SCREW, HEX M16-2.00 X 75
D	96704630	2	NUT, NYLOCK M16
E	39179072	4	SCREW, HEX M16-2.00 X 50
F	36879211	4	NUT, HEX FLANGE M16
G	36879492	6	SCREW, HEX FLANGE M12-1.75 X 25
H	36879203	6	NUT, HEX FLANGE M12

35393958-39 35393966-39	54437173-47 54529599-47 54531520-47 54529581-39 54525973-39	35391705-47 35391713-47 35391721-47 35391739-47 35392984-47	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/13/97 bd DESCRIPTION: EXTD/ADJ HT DRAWBAR MODEL NO. MANUAL NO.: OPTION DATE/REV: 8/00 B



★ CUT AS REQUIRED

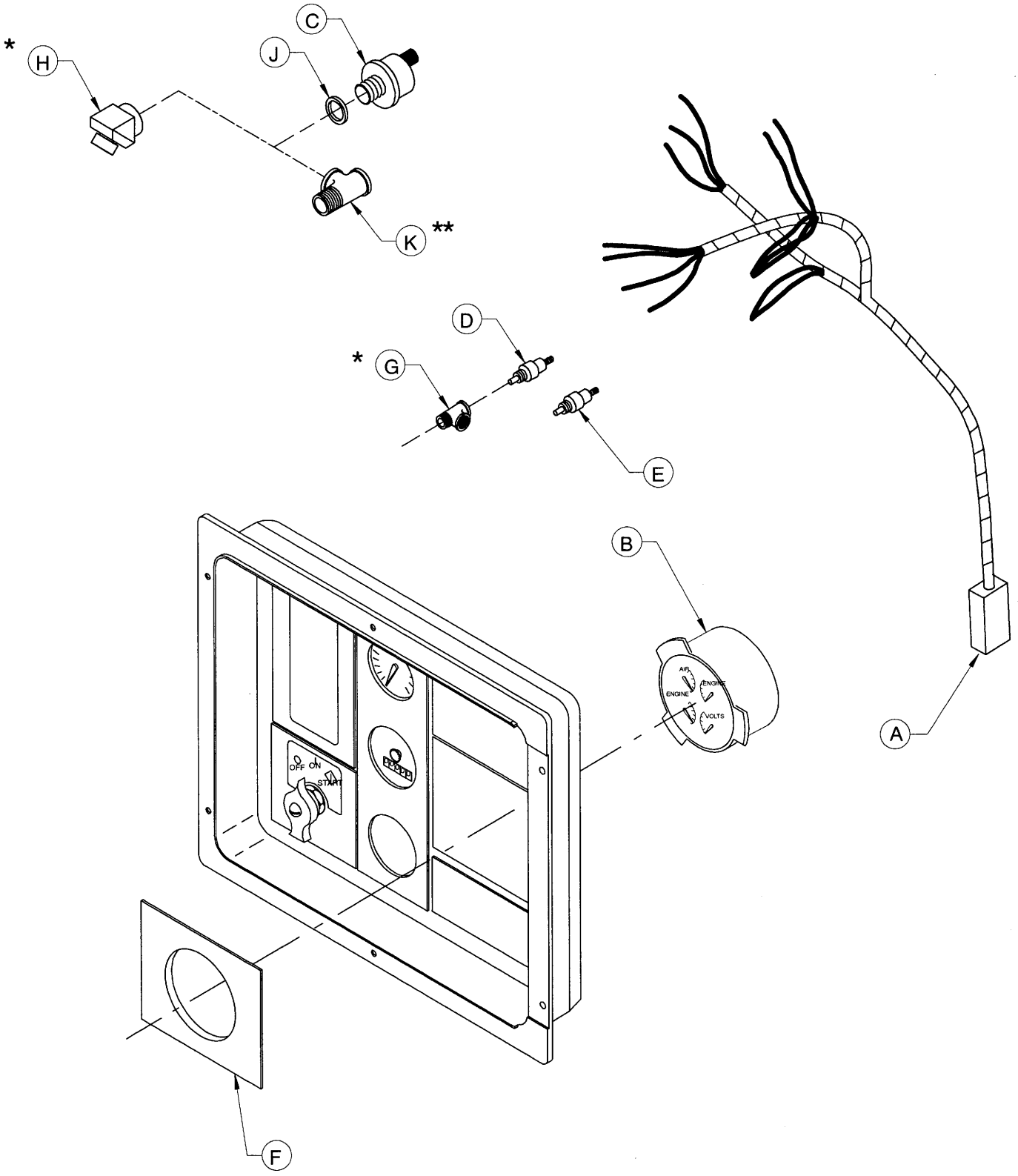
35393958-40 35393966-40	54437173-48 54529599-48 54531520-48 54529581-40 54525973-40	35391705-48 35391713-48 35391721-48 35391739-48 35392984-48	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/14/97 bd DESCRIPTION: FILTER, FUEL/WATER MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	35858786	1	FILTER, FUEL/WATER SEPARATOR
B	35378538	2	ELBOW, BARBED
C	35363498	* 22"	HOSE, 5/16 FUEL
D	35296342	2	CLAMP
E	35252600	2	NUT, LOCK 5/16-18
F	35321108	2	SCREW, LOCK 5/16-18 X 1
G	36883890	1	BRACKET, ETHER/FUEL FILTER
H	35279025	2	SCREW, TAPPING M08-1.25 X 20
J	35358332	**	ASSEMBLY, ELEMENT
K	35358340	**	BOWL
L	35358357	**	HEAD
M	35358365	**	CAP, PRIMER PUMP
N	35358373	**	PULG, DRAIN

* CUT AS REQUIRED

** INCLUDED IN FUEL / WATER SEPARATOR FILTER 35858786

35393958-41 35393966-41	54437173-49 54529599-49 54531520-49 54529581-41 54525973-41	35391705-49 35391713-49 35391721-49 35391739-49 35392984-49	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/14/97 bd DESCRIPTION: FILTER, FUEL/WATER MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B



* USE ON DEUTZ UNITS ONLY

** USE WITH IR ENGINES ONLY

PRIOR TO SERIAL NUMBER 326650

35393958-42	54437173-50	35391705-50
35393966-42	54529599-50	35391713-50
	54531520-50	35391721-50
	54529581-42	35391739-50
	54525973-42	35392984-50

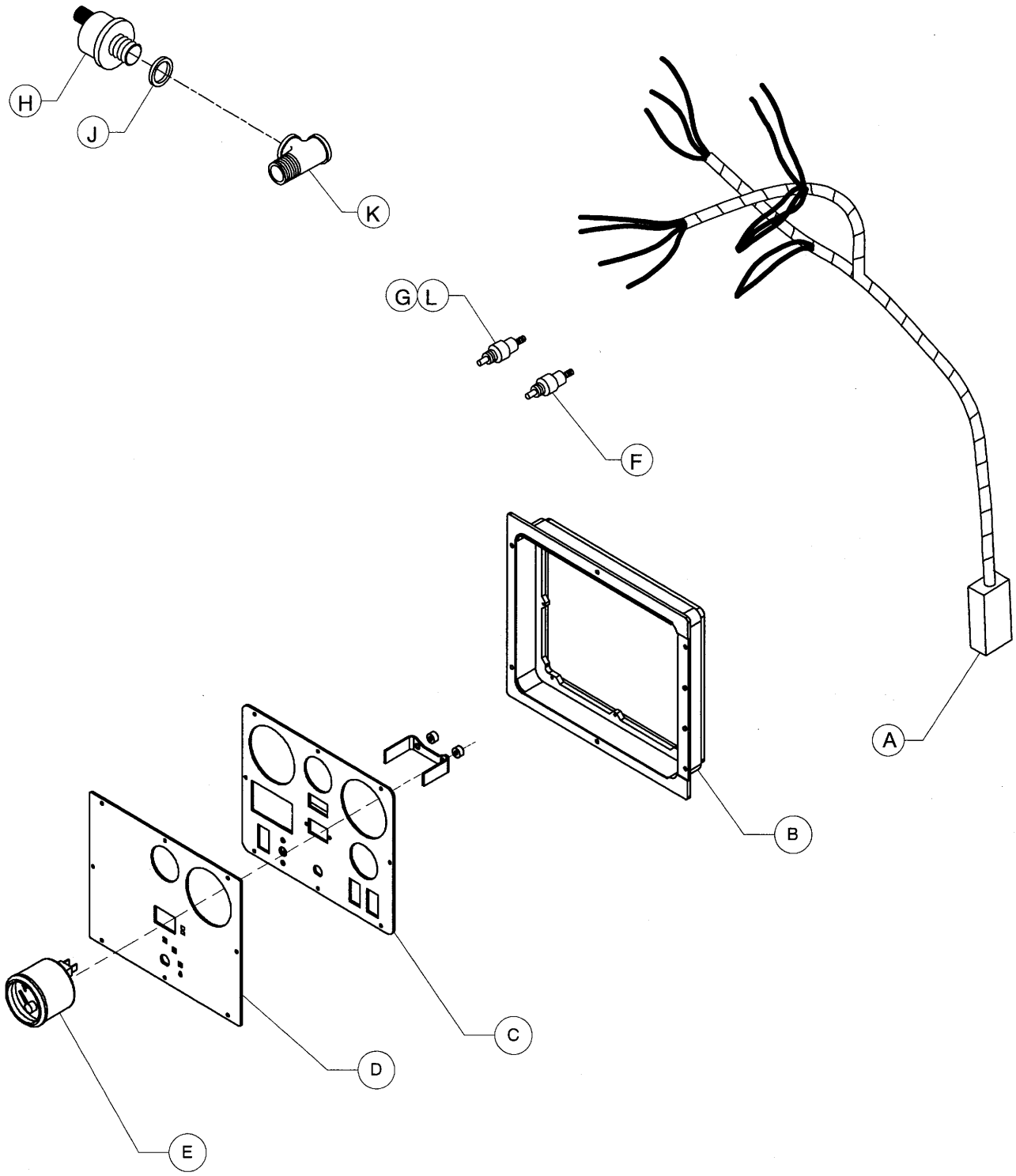
INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
3/17/97 bd	4 in 1 GAGE OPTION	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	54599121	1	HARNESS, OPTION (JD DEUTZ)
	54599113	1	HARNESS, OPTION (IR)
B	36879682	1	GAGE, 4 in 1
C	36870608	1	SENDER, OIL PRESSURE
D	35604180	1	SENDER, WATER TEMPERATURE (3 CYL JD & IR ENGINES)
	35372457	1	SENDER, WATER TEMPERATURE (4 CYL JD)
	35367218	1	SENDER, WATER TEMPERATURE (DEUTZ)
E	54593843	1	SENDER, CPRSR AIR TEMP
F	36879716	1	PANEL, GAGE BEZEL
G	36796571	1	TEE (DEUTZ)
H	95942702	1	ELBOW, ST NPT 1/8 X 45□ (DEUTZ)
J	36879716	1	O-RING
K	35278571	1	TEE (IR)

PRIOR TO SERIAL NUMBER 326650

35393958-43 35393966-43	54437173-51 54529599-51 54531520-51 54529581-43 54529573-43	35391705-51 35391713-51 35391721-51 35391739-51 35392984-51	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/17/97 bd DESCRIPTION: 4 in 1 GAGE OPTION MODEL NO. MANUAL NO.: OPTION DATE/REV: 1/01 C



BEGIN WITH SERIAL NUMBER 326650

35393958-42 35393966-42	54437173-50 54529599-50 54531520-50 54529581-42 54525973-42	35391705-50 35391713-50 35391721-50 35391739-50 35392984-50	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/17/97 bd DESCRIPTION: 4 in 1 GAGE OPTION MODEL NO. MANUAL NO.: OPTION DATE/REV.: 1/02 C

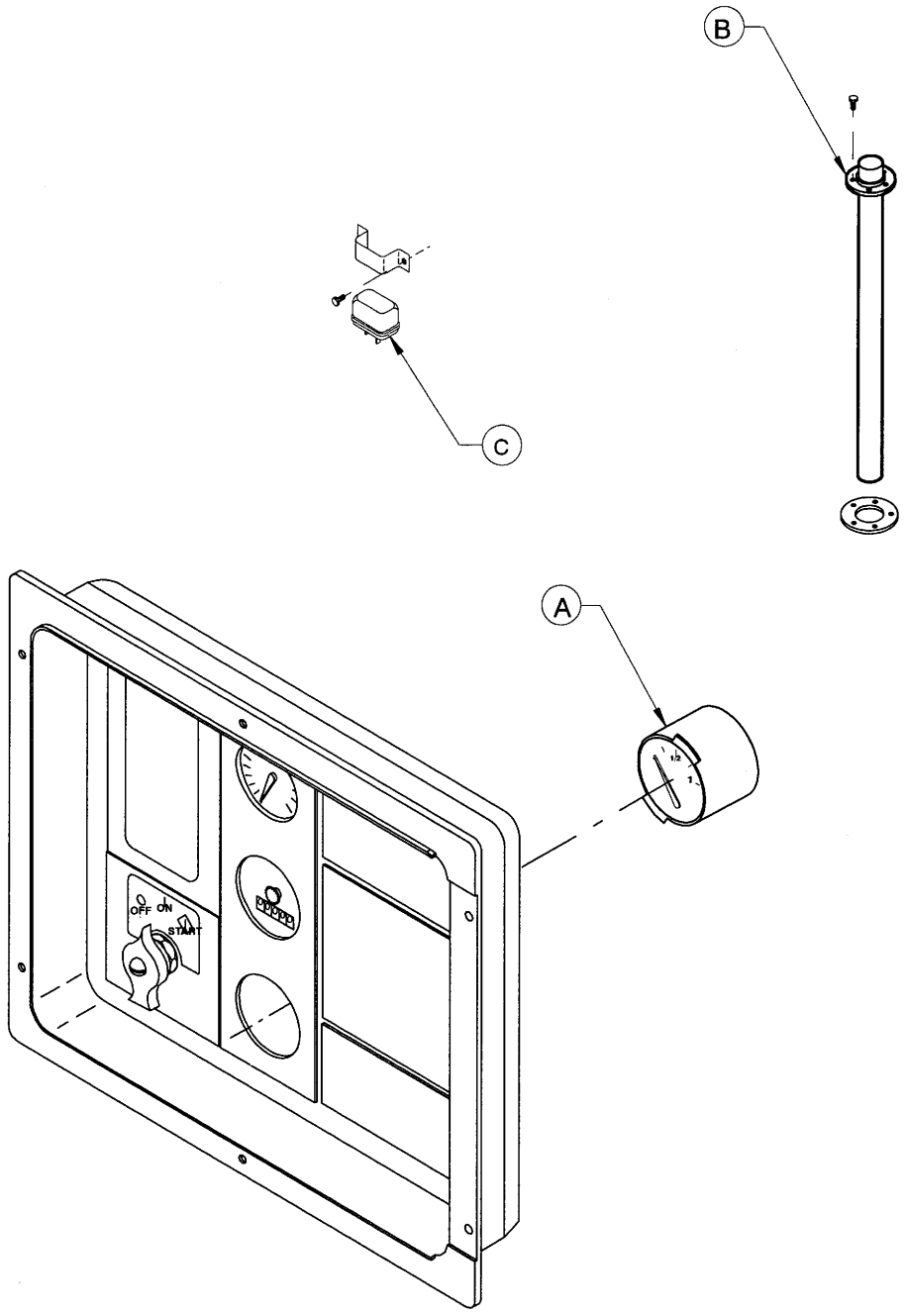
ITEM	C.P.N.	QTY	DESCRIPTION
A	22060339	1	HARNESS, OPTION (JD)
	22060347	1	HARNESS, OPTION (IR)
B	54749601	1	FRAME, WW INSTRUMENT PANEL
C	54749619	1	PANEL, INSTRUMENT
D	54766845	1	DECAL, WW INSTR PANEL
E	22058291	1	GAUGE, 4 IN 1
F	35372457	1	SENDER, CPRSR TEMP
G	35372457	1	SENDER, WATER TEMP. (4 CYL. JD)
	35604180	1	SENDER, WATER TEMP. (3 CYL. JD AND IR)
H	36870608	1	SENDER, OIL PRESSURE
J	35278571	1	O-RING
K	39127287	1	TEE, 1/8 STREET (IR)
L	35327535	1	TAB, MALE SLIP-ON

BEGIN WITH SERIAL NUMBER 326650

35393958-42	54437173-50	35391705-50
35393966-42	54529599-50	35391713-50
	54531520-50	35391721-50
	54529581-42	35391739-50
	54525973-42	35392984-50

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
3/17/97 bd	4 IN 1 GAUGE OPTION	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	1/02 C



PRIOR TO SERIAL NUMBER 326650

35393958-44 35393966-44	54437173-52 54529599-52 54531520-52 54529581-44 54525973-44	35391705-52 35391713-52 35391721-52 35391739-52 35392984-52	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/25/97 bd DESCRIPTION: FUEL LEVEL OPTION MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

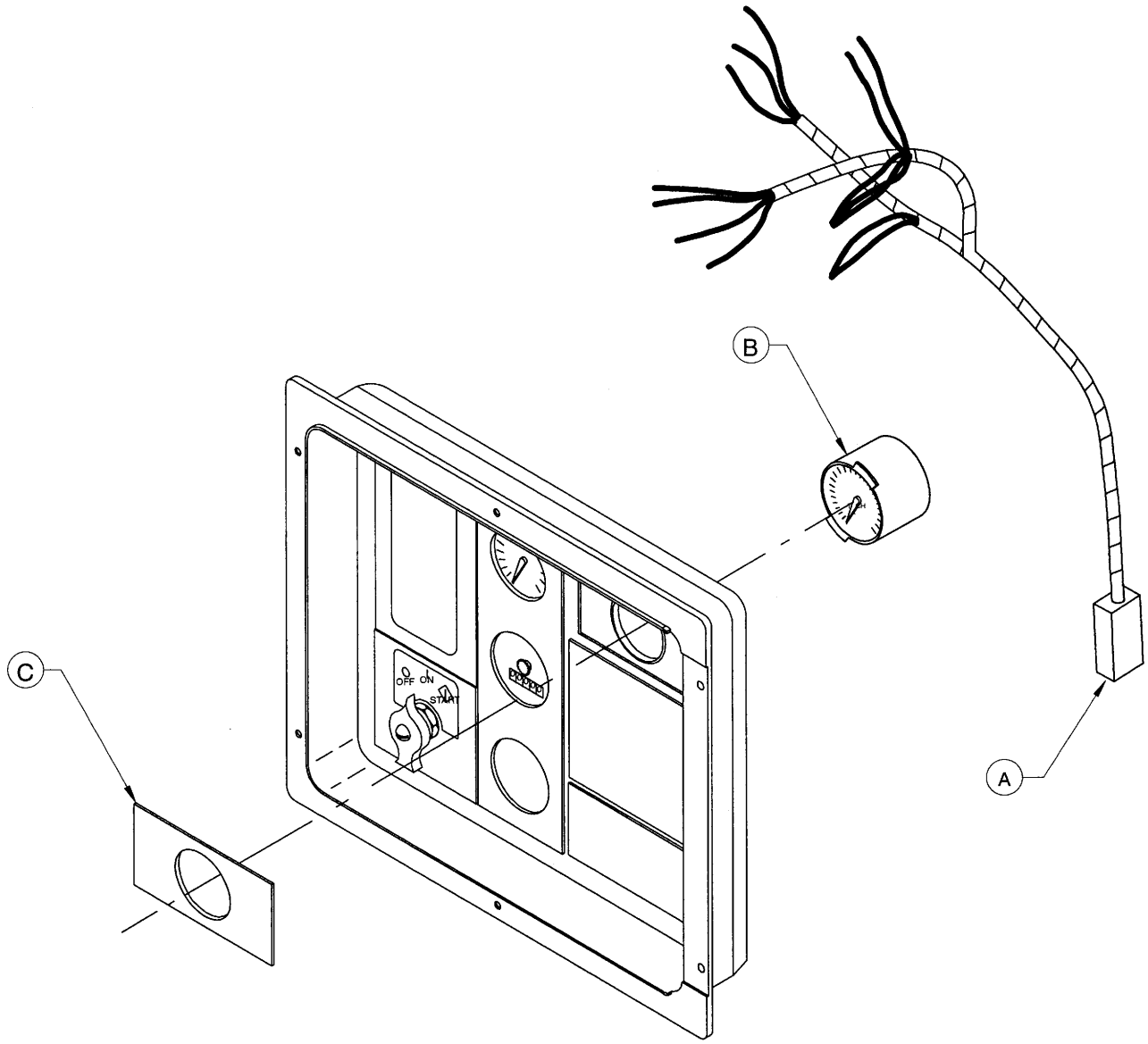
ITEM	C.P.N.	QTY	DESCRIPTION
A	36879690	1	GAGE, FUEL LEVEL
B	36882611	1	SENDER, FUEL LEVEL
C	36856979	1	RELAY, FUEL SHUTDOWN

PRIOR TO SERIAL NUMBER 326650

35393958-45 35393966-45	54437173-53 54529599-53 54531520-53 54529581-45 54525973-45	35391705-53 35391713-53 35391721-53 35391739-53 35392984-53

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
3/25/97 bd	FUEL LEVEL OPTION	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 B



PRIOR TO SERIAL NUMBER 326650

TACHOMETER OPTIONS FOR
P100WD/WJD - P185 WD/WJD, HP185WJD

54437173-54 54529599-54 54531520-54	35391705-54 35391713-54 35391721-54 35391739-54 35392984-54	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
3/25/97 bd	TACHOMETER OPTION	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 B

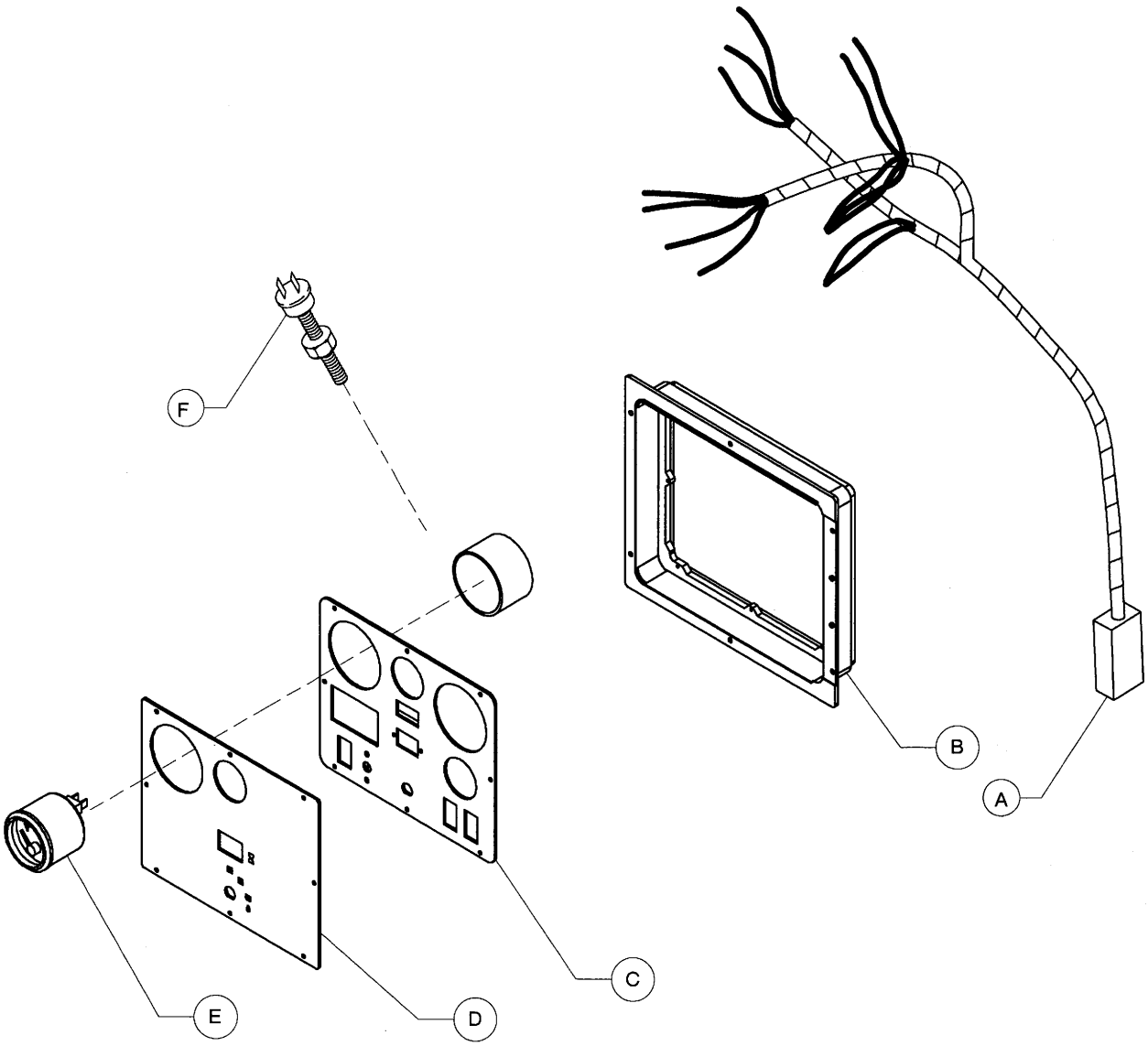
ITEM	C.P.N.	QTY	DESCRIPTION
A	36885739	1	HARNESS, OPTION
B	36879740	1	TACHOMETER
C	36879914	1	PANEL, BEZEL

PRIOR TO SERIAL NUMBER 326650

TACHOMETER OPTIONS FOR
P100WD/WJD - P185 WD/WJD, XP185WJD, P250WJD

35393958-47	54437173-55	35391705-55
35393966-47	54529599-55	35391713-55
	54531520-55	35391721-55
	54529581-47	35391739-55
	54525973-47	35392984-55

INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION		
DATE/DWN BY: 3/25/97 bd	DESCRIPTION: TACHOMETER OPTION	
MODEL NO.	MANUAL NO.: OPTION	DATE/REV: 8/00 B



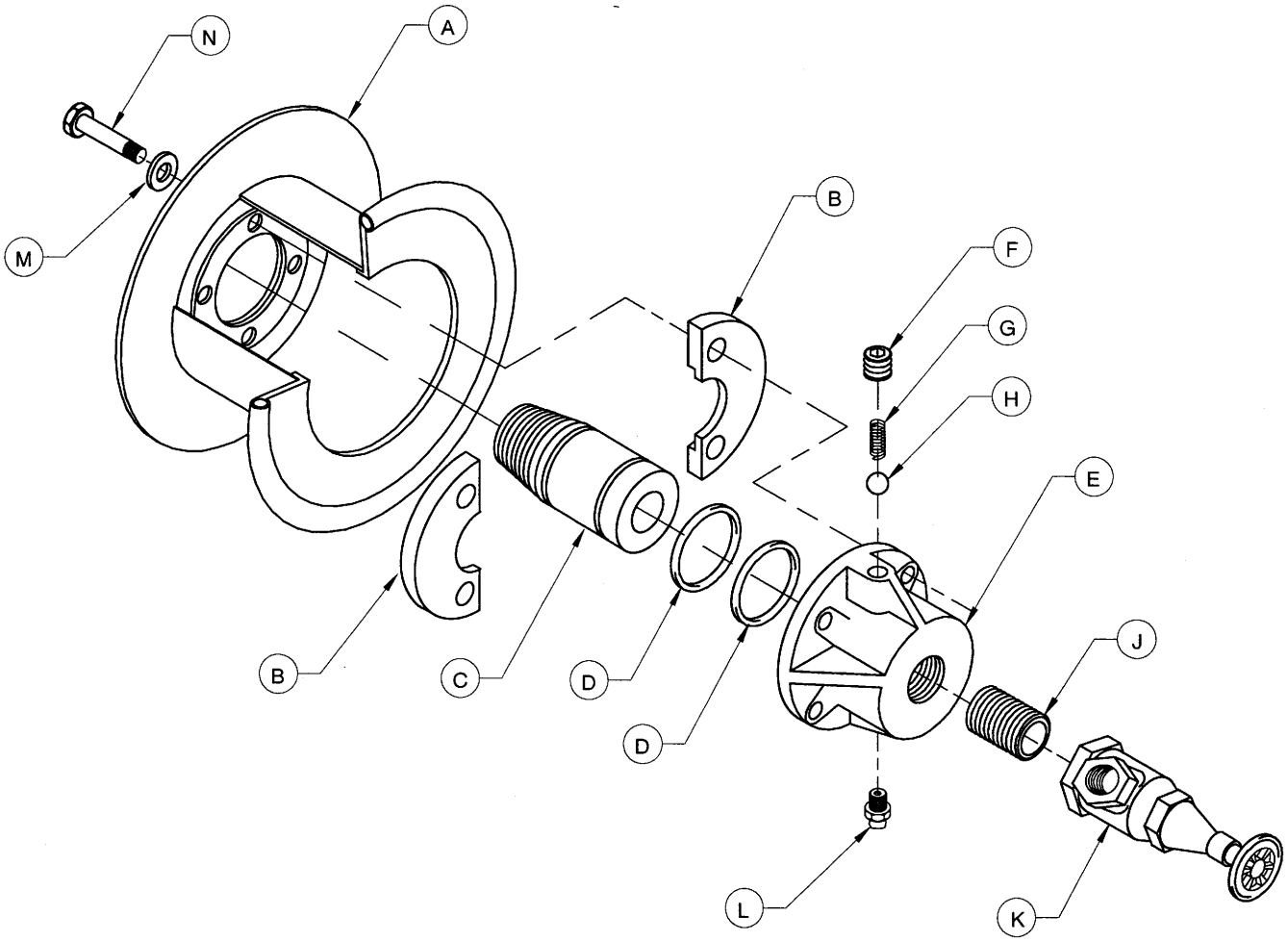
BEGIN WITH SERIAL NUMBER 326650

54437173-54 54529599-54 54531520-54	35391705-54 35391713-54 35391721-54 35391739-54 35392984-54	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/25/97 bd DESCRIPTION: TACHOMETER OPTION MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 1/02 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	22060339	1	HARNESS, OPTION (JD)
	22060347	1	HARNESS, OPTION (IR)
B	54749601	1	FRAME, WW INSTRUMENT PANEL
C	54749619	1	PANEL, INSTRUMENT
D	54766845	1	DECAL, WW INSTR PANEL
E	22055883	1	TACHOMETER (JD)
	22060198	1	TACHOMETER (IR)
F	36772366	1	SENSOR, MAGNETIC PICK-UP (IR)

BEGIN WITH SERIAL NUMBER 326650

35393958-47 35393966-47	54437173-55 54529599-55 54531520-55 54529581-47 54525973-47	35391705-55 35391713-55 35391721-55 35391739-55 35392984-55	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/25/97 bd DESCRIPTION: TACHOMETER OPTION MODEL NO. MANUAL NO.: OPTION DATE/REV: 1/02 C



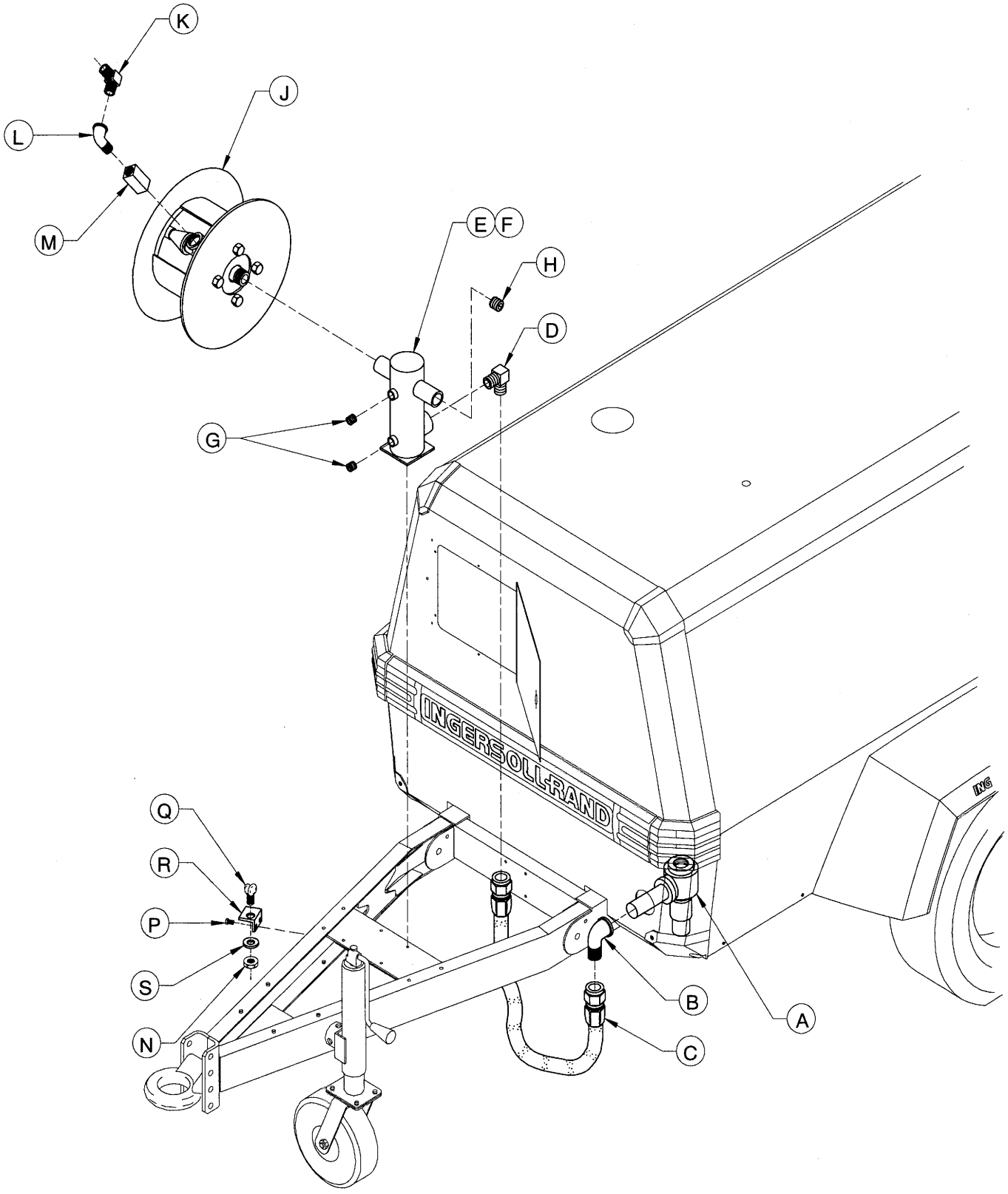
HOSE REEL ASSEMBLY 35097914

	35393958-48 35393966-48	54437173-56 54529599-56 54531520-56 54529581-48 54525973-48	35391705-56 35391713-56 35391721-56 35391739-56 35392984-56	35390095-56 35391093-56 35392877-56 35392885-56 35393172-56	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 4/9/96 bd DESCRIPTION: HOSE REEL ASSEMBLY MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36765212	1	HOSE REEL
B	36765188	2	BEARING COVER
C	36765196	1	BEARING SHAFT
D	95358297	2	O-RING
E	36762706	1	HOSE REEL BEARING
F	95928222	1	PLUG
G	30671242	1	SPRING
H	35221902	1	BALL, RETARD
J	95928040	1	NIPPLE
K	95072971	1	GLOBE VALVE
L	35221894	1	FITTING, LUBE 1/8
M	95937413	4	WASHER, LOCK 3/8
N	95934584	4	SCREW, HEX 3/8-16 X 1[]

HOSE REEL ASSEMBLY 35097914

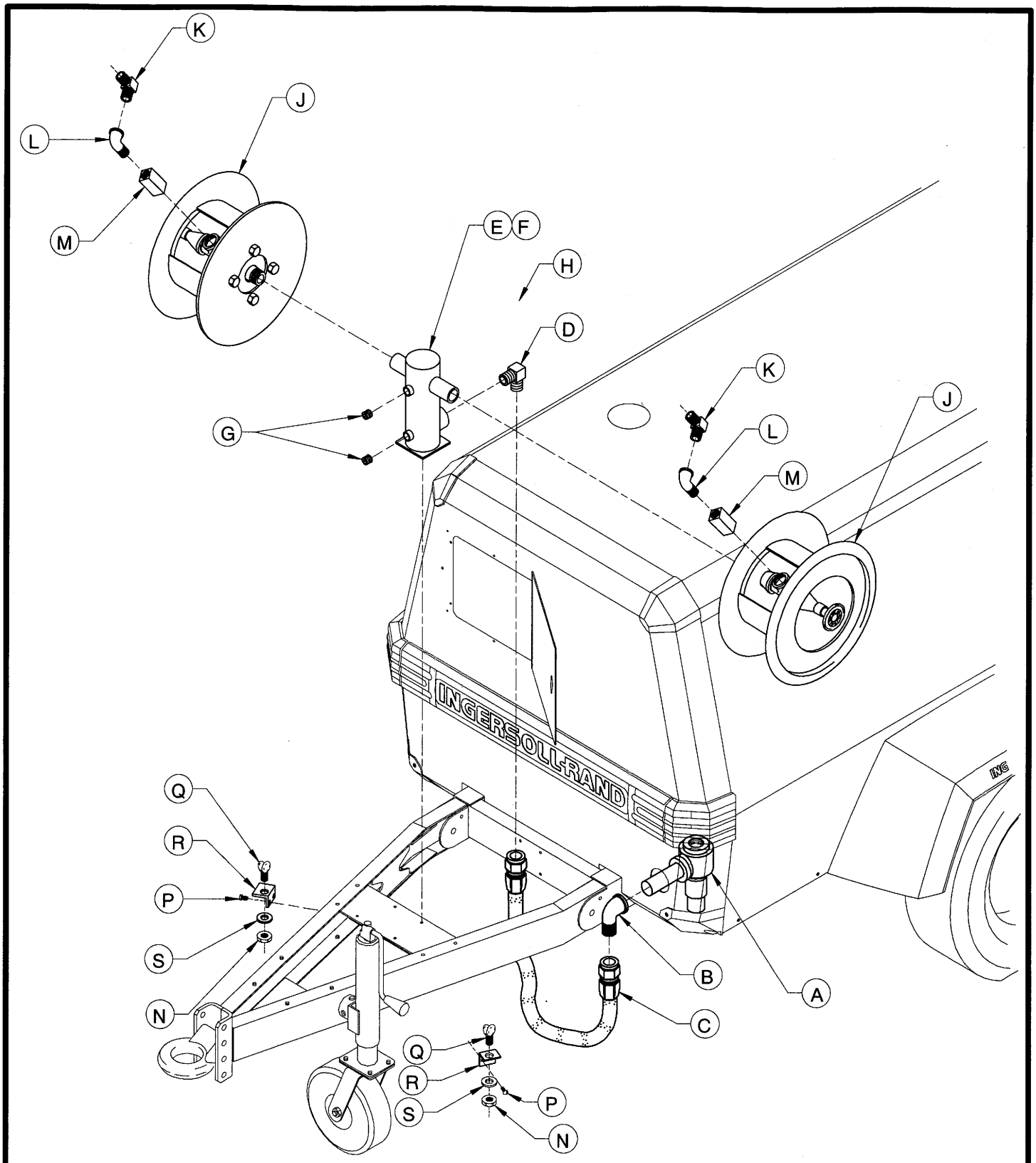
	35393958-49 35393966-49	54437173-57 54529599-57 54531520-57 54529581-49 54525973-49	35391705-57 35391713-57 35391721-57 35391739-57 35392984-57	35390095-57 35391093-57 35392877-57 35392885-57 35393172-57	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 4/9/96 bd DESCRIPTION: HOSE REEL ASSEMBLY MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B



35393958-50	54437173-58	35391705-58	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION
35393966-50	54529599-58	35391713-58	DATE/DWN BY: 3/26/97 bd — DESCRIPTION: SINGLE HOSE REEL
	54531520-58	35391721-58	
	54529581-50	35391739-58	MODEL NO. — MANUAL NO.: OPTION — DATE/REV.: 8/00 B
	54525973-50	35392984-58	

ITEM	C.P.N.	QTY	DESCRIPTION
A	36776219	1	VALVE, MINIMUM PRESSURE CHECK
B	95286530	1	ELBOW, 90□
C	35117480	1	HOSE
D	95219861	1	ELBOW, TUBE JIC
E	36755460	1	MANIFOLD, HOSE REEL
F	35374834	4	SCREW, HEX M08-1.25 X 25
G	95947149	2	PLUG, HEX CTSK 3/4
H	95928248	1	PLUG, HEX CTSK 1□
J	35097914	1	ASSEMBLY, HOSE REEL
K	95928198	1	ELBOW, STREET 3/4 X 45□
L	95928172	1	ELBOW, STREET 3/4 X 90□
M	35364397	1	VALVE, CHECK
N	35153972	2	CAP, HOSE LOCK
P	92368687	1	SCREW, TAPPING M06-100 X 14
Q	35221910	1	LOCK , COUPLING HOSE
R	35296748	1	BRACKET, HOSE REEL LOCK
S	95928321	2	WASHER, FLAT 7/8

35393958-51 35393966-51	54437173-59 54529599-59 54531520-59 54529581-51 54525973-51	35391705-59 35391713-59 35391721-59 35391739-59 35392984-59	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/26/97 bd DESCRIPTION: SINGLE HOSE REEL MODEL NO. MANUAL NO.: OPTION DATE/REV: 8/00 B

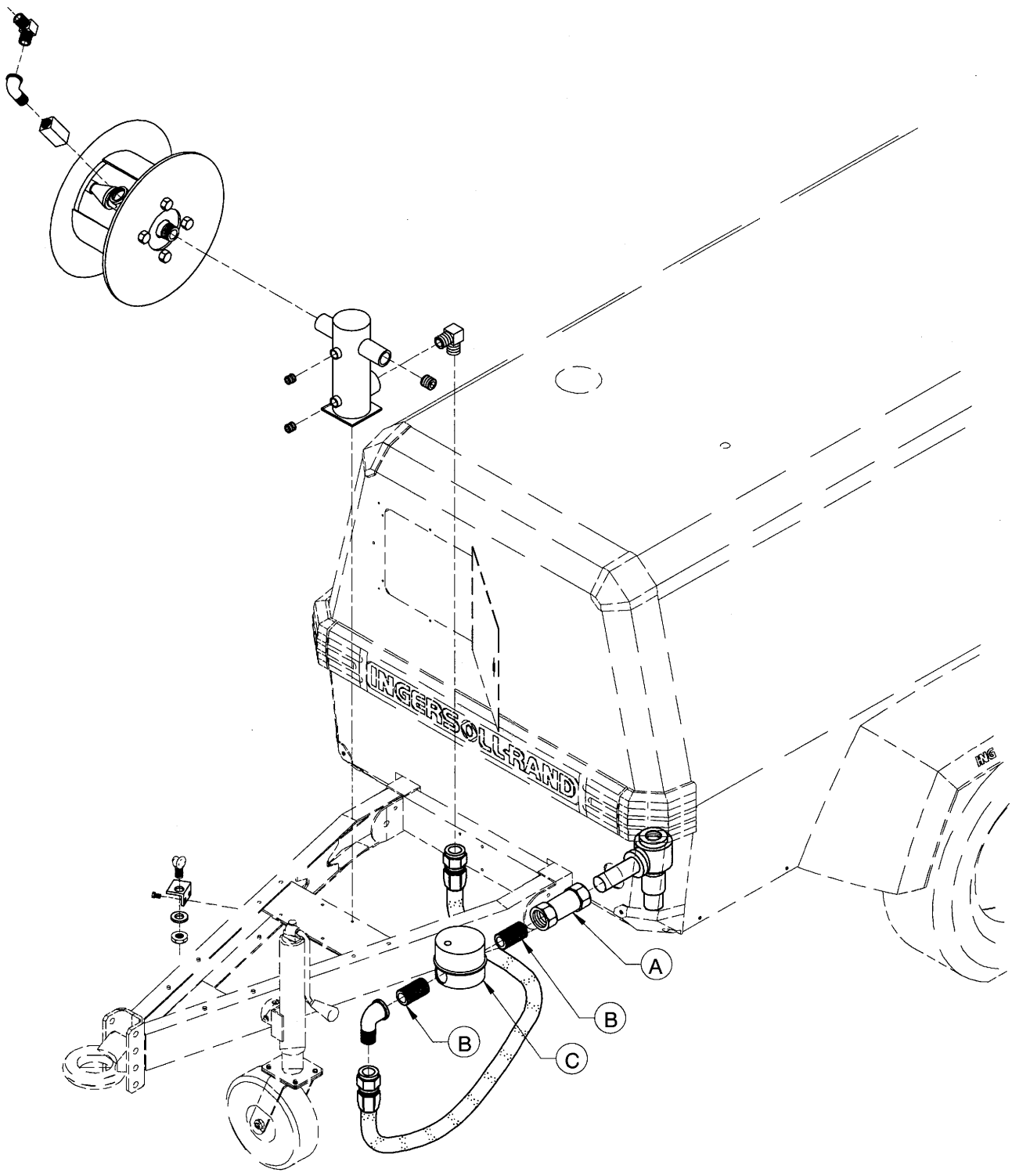


35393958-52 35393966-52	54437173-60 54529599-60 54531520-60 54529581-52 54525973-52	35391705-60 35391713-60 35391721-60 35391739-60 35392984-60	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
3/26/97 bd	DOUBLE HOSE REEL	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36776219	1	VALVE, MINIMUM PRESSURE CHECK
B	95286530	1	ELBOW, 90°
C	35117480	1	HOSE
D	95219861	1	ELBOW, TUBE JIC
E	36755460	1	MANIFOLD, HOSE REEL
F	35374834	4	SCREW, HEX M08-1.25 X 25
G	95947149	2	PLUG, HEX CTSK 3/4
H	95928321	4	WASHER, FLAT 7/8
J	35097914	2	ASSEMBLY, HOSE REEL
K	95928198	2	ELBOW, STREET 3/4 X 45°
L	95928172	2	ELBOW, STREET 3/4 X 90°
M	35364397	2	VALVE, CHECK
N	35153972	4	CAP, HOSE LOCK
P	92368687	2	SCREW, TAPPING M06-100 X 14
Q	35221910	2	LOCK , COUPLING HOSE
R	35296748	2	BRACKET, HOSE REEL LOCK

35393958-53 35393966-53	54437173-61 54529599-61 54531520-61 54529581-53 54525973-53	35391705-61 35391713-61 35391721-61 35391739-61 35392984-61	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/26/97 bd DESCRIPTION: DOUBLE HOSE REEL MODEL NO. MANUAL NO.: OPTION DATE/REV: 8/00 B



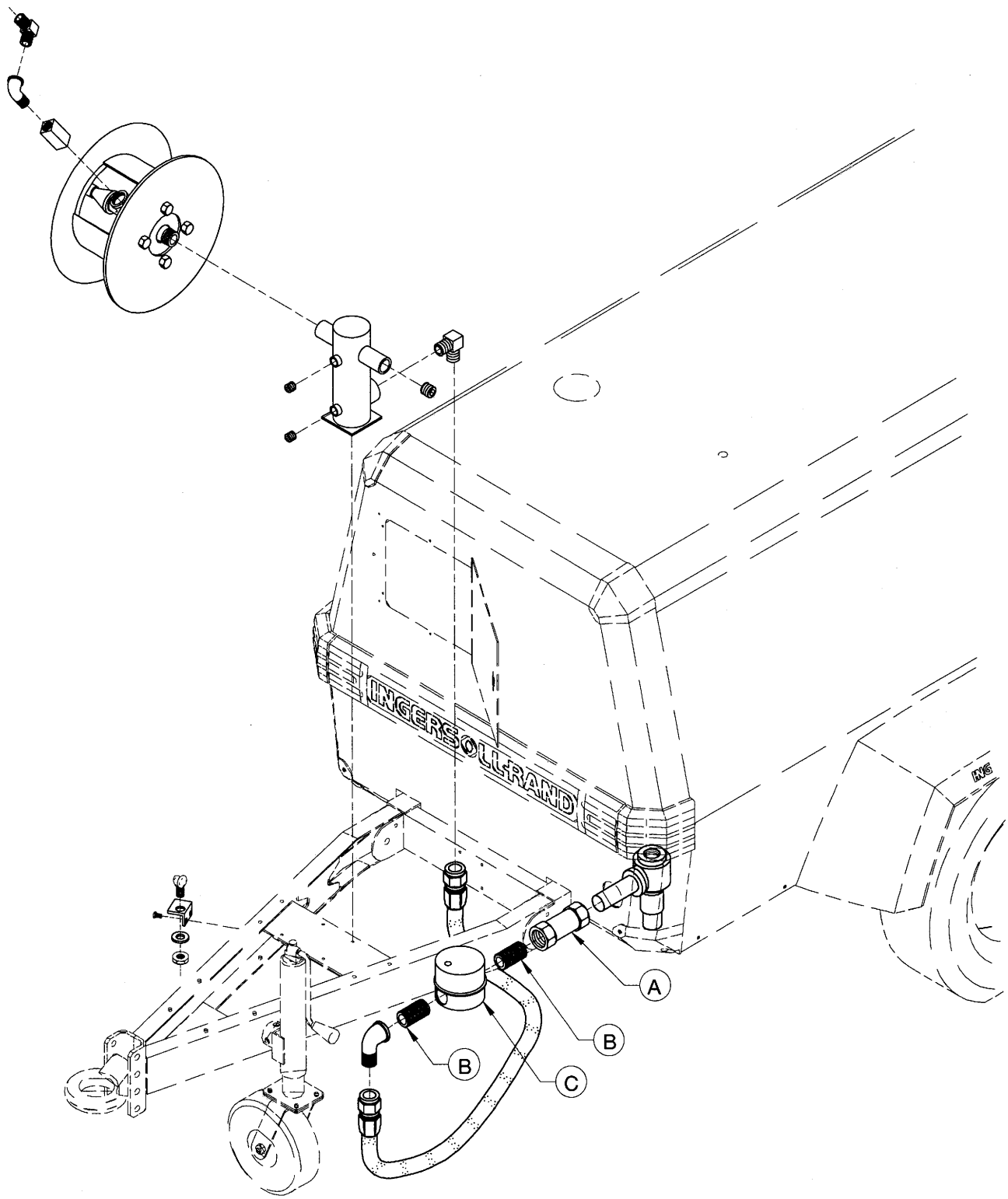
35393958-54 35393966-54	54437173-62 54529599-62 54531520-62 54529581-54 54525973-54	35391705-62 35391713-62 35391721-62 35391739-62 35392984-62	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/27/97 bd DESCRIPTION: 1 QT HOSE REEL OILER MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	95941373	1	UNION, 1 1/4 NPT
B	95953600	2	NIPPLE, 1 1/4 X 2
C	35255025	1	LUBRICATOR, 1 QT.

35393958-55	54437173-63	35391705-63
35393966-55	54529599-63	35391713-63
	54531520-63	35391721-63
	54529581-55	35391739-63
	54525973-55	35392984-63

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
3/27/97 bc	1 QT HOSE REEL OILER	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 B



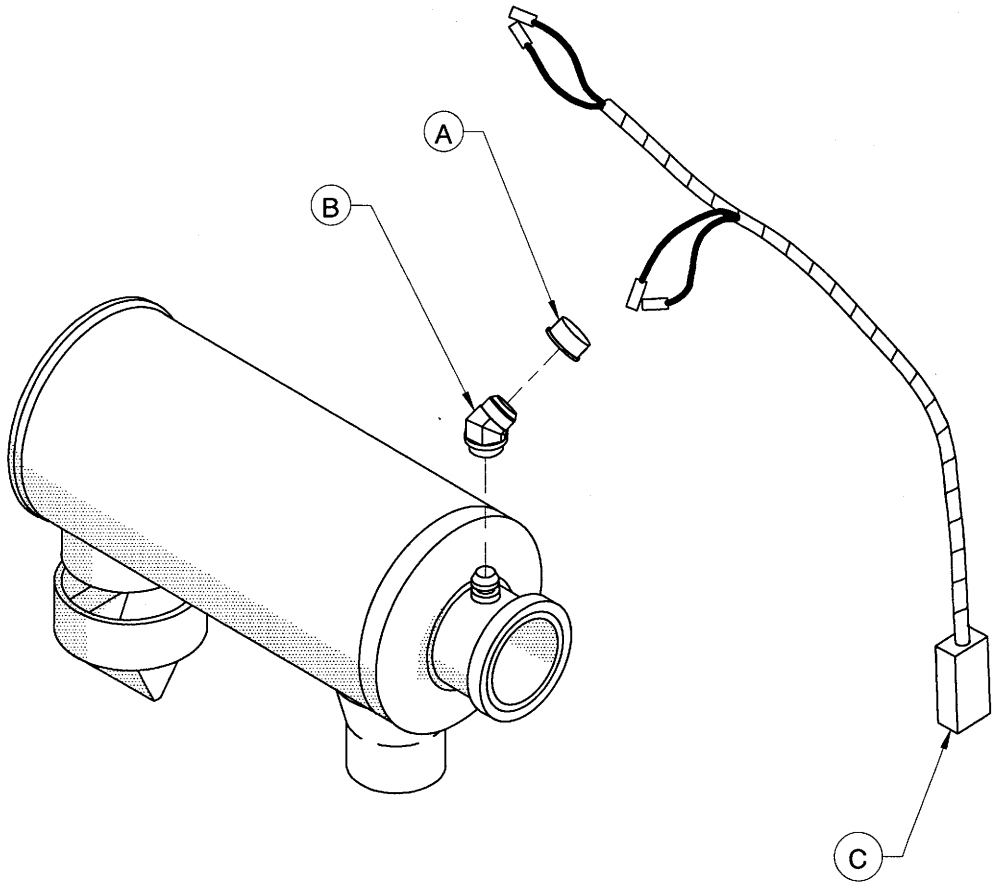
35393958-56 35393966-56	54437173-64 54529599-64 54531520-64 54529581-56 54525973-56	35391705-64 35391713-64 35391721-64 35391739-64 35392984-64	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/27/97 bd DESCRIPTION: 2 QT HOSE REEL OILER MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	95941373	1	UNION, 1 1/4 NPT
B	95953600	2	NIPPLE, 1 1/4 X 2
C	35356252	1	LUBRICATOR, 2 QT.

35393958-57	54437173-65	35391705-65
35393966-57	54529599-65	35391713-65
	54531520-65	35391721-65
	54529581-57	35391739-65
	54525973-57	35392984-65

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
3/27/97 bd	2 QT HOSE REEL OILER	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 B



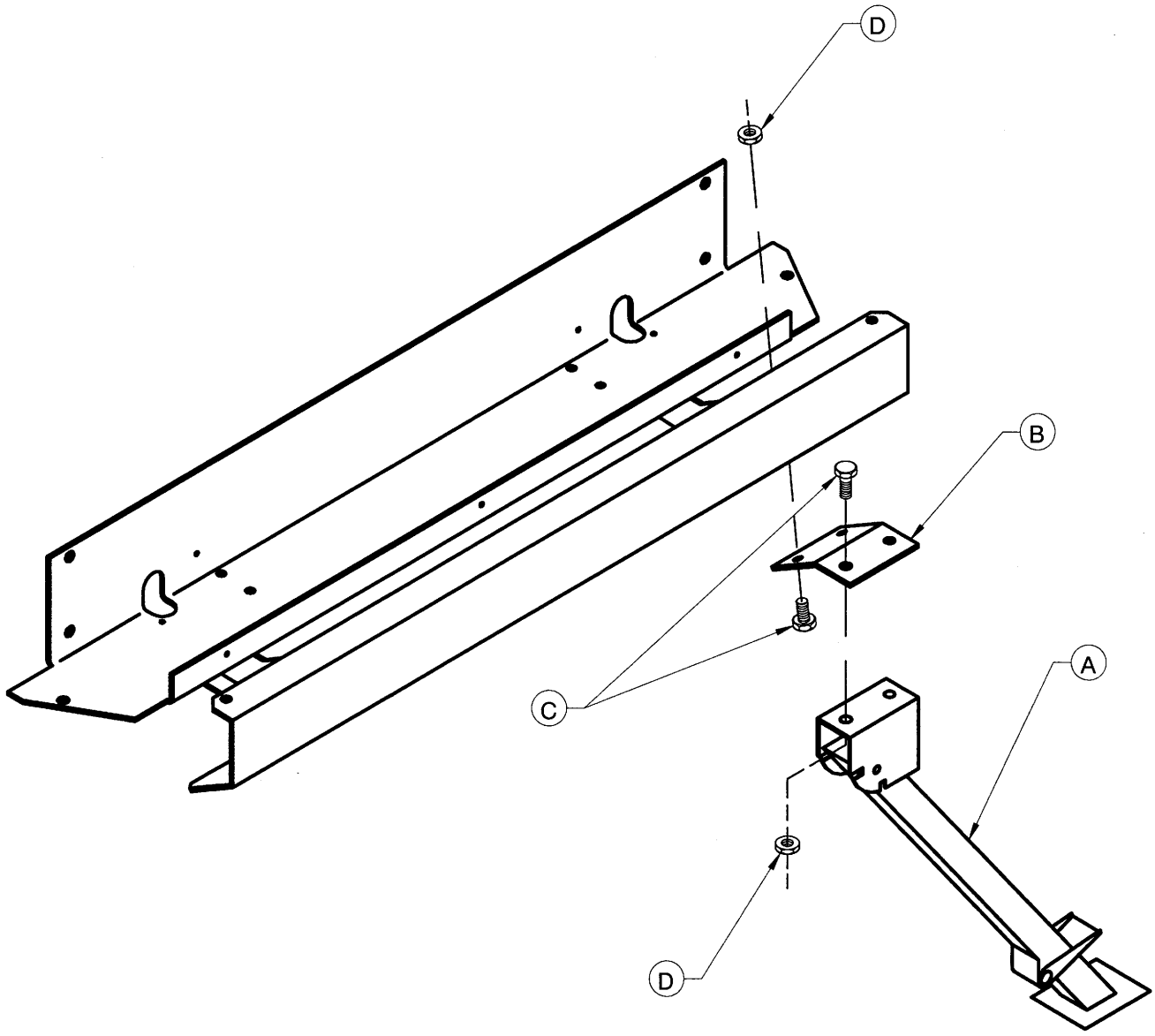
ELECTRIC AIR FILTER MAINTANCE INDICATOR OPTIONS

	35393958-58	35393065-18	35391705-66	35390095-66	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION
	35393966-58	35393628-18	35391713-66	35391093-66	DATE/DWN BY: 3/22/96 bd / DESCRIPTION: ELECT AIR FLTR MAINT IND
	54529581-58	54437173-66	35391721-66	35392877-66	
	54525973-58	54529599-66	35391739-66	35392885-66	MODEL NO. / MANUAL NO.: OPTION / DATE/REV.: 8/00 B
		54531520-66	35392984-66	35393172-66	

ITEM	C.P.N.	QTY	DESCRIPTION
A	36847838	2	SWITCH, FILTER INDICATOR
B	95956199	2	ELBOW, 45□ 1/8NPT
C	36842839	1	HARNESS, AFMI

ELECTRIC AIR FILTER MAINTANCE INDICATOR OPTIONS

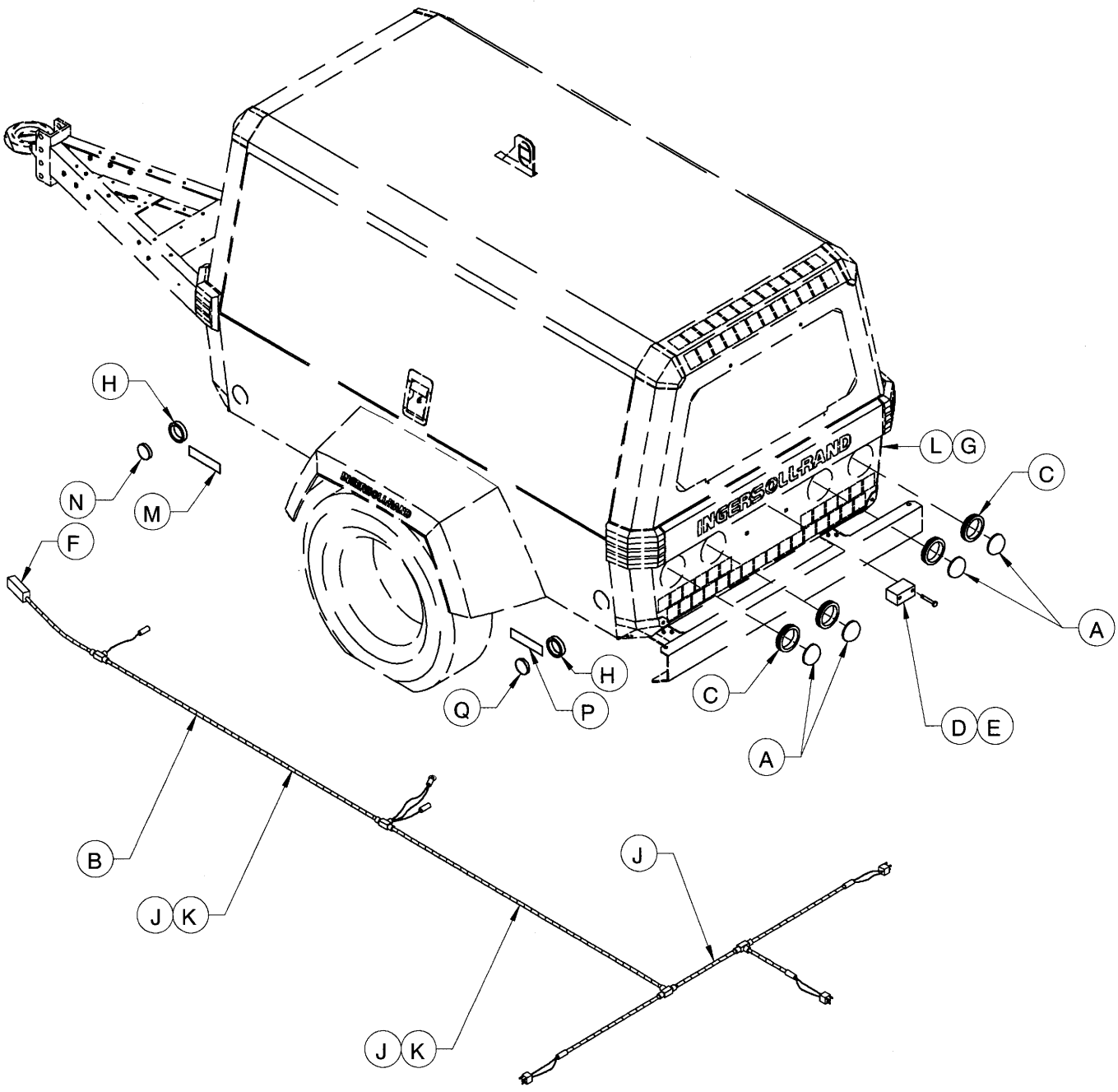
	35393958-59	35393065-19	35391705-67	35390095-67	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION
	35393966-59	35393628-19	35391713-67	35391093-67	DATE/DWN BY: 3/22/96 bd / DESCRIPTION: ELECT AIR FLTR MAINT IND
	54529581-59	54437173-67	35391721-67	35392877-67	
	54525973-59	54529599-67	35391739-67	35392885-67	MODEL NO. / MANUAL NO.: OPTION / DATE/REV.: 8/00 B
		54531520-67	35392984-67	35393172-67	



	35393958-60	35390277-34	35391705-68	35390095-42	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION
	35393966-60	35393396-34	35391713-68	35391093-42	DATE/DWN BY: 5/24/96 bd / DESCRIPTION: REAR DROPLEG
	54529581-60	54437173-68	35391721-68	35392877-42	
	54525973-60	54529599-68	35391739-68	35392885-42	MODEL NO. / MANUAL NO. OPTION / DATE/REV: 8/00 B
		54531520-68	35392984-68	35393172-42	

ITEM	C.P.N.	QTY	DESCRIPTION
A	36726586	1	DROPLEG
B	36778124	1	BRACKET, DROPLEG
C	35252493	4	SCREW, 3/8-16 X 3/4
D	35145077	4	NUT, LOCK WASHER HEAD 3/8-16

35393958-61	35390277-35	35391705-69	35390095-43	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION
35393966-61	35393396-35	35391713-69	35391093-43	DATE/DWN BY: 5/24/96 bd / DESCRIPTION: REAR DROPLEG
54529581-61	54437173-69	35391721-69	35392877-43	MODEL NO. / MANUAL NO.: OPTION / DATE/REV: 8/00 B
54525973-61	54529599-69	35391739-69	35392885-43	
	54531520-69	35392984-69	35393172-43	



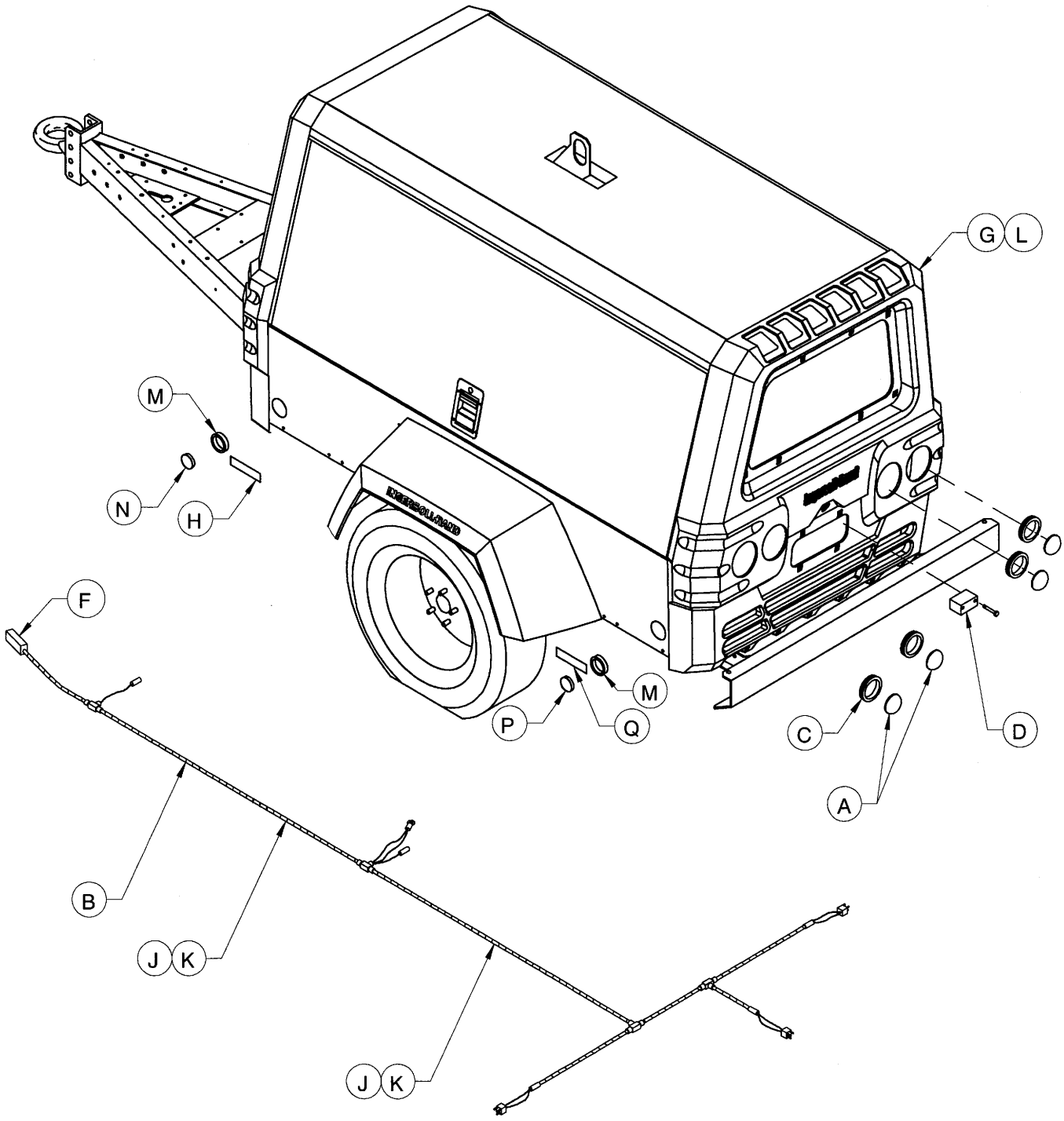
PRIOR TO SERIAL NUMBER 326650

35393958-62 35393966-62	54437173-70 54529599-70 54531520-70 54529581-62 54525973-62	35391705-70 35391713-70 35391721-70 35391739-70 35392984-70	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/31/97 bd DESCRIPTION: 4 LIGHT MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	36788081	4	TAIL LIGHT
B	36893345	1	HARNESS, TAIL LIGHT
C	36787968	4	GROMMET
D	36881910	1	LIGHT, LICENSE PLATE
E	36782837	2	SCREW, SHEET METAL
F	92368687	2	SCREW, TAPPING M06-1.00 X 14
G	36797652	4	SCREW, TAPPING M06-1.00 X 12
H	36894616	2	REFLECTOR, AMBER
J	35253038	5	CLAMP, 3/8
K	35279025	2	SCREW, HEX M08-1.25 X 20
L	36889491	1	CAP, REAR END
	54529367	1	CAP, REAR END (GALVANNEAL)
M	36893634	4	GROMMET, CLEARANCE LIGHT
N	35367051	2	LIGHT, YELLOW CLEARANCE
P	35367044	2	LIGHT, RED CLEARANCE
Q	36894608	2	REFLECTOR, RED

PRIOR TO SERIAL NUMBER 326650

35393958-63 35393966-63	54437173-71 54529599-71 54531520-71 54529581-63 54525973-63	35391705-71 35391713-71 35391721-71 35391739-71 35392984-71	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/31/97 bd DESCRIPTION: 4 LIGHT MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 D



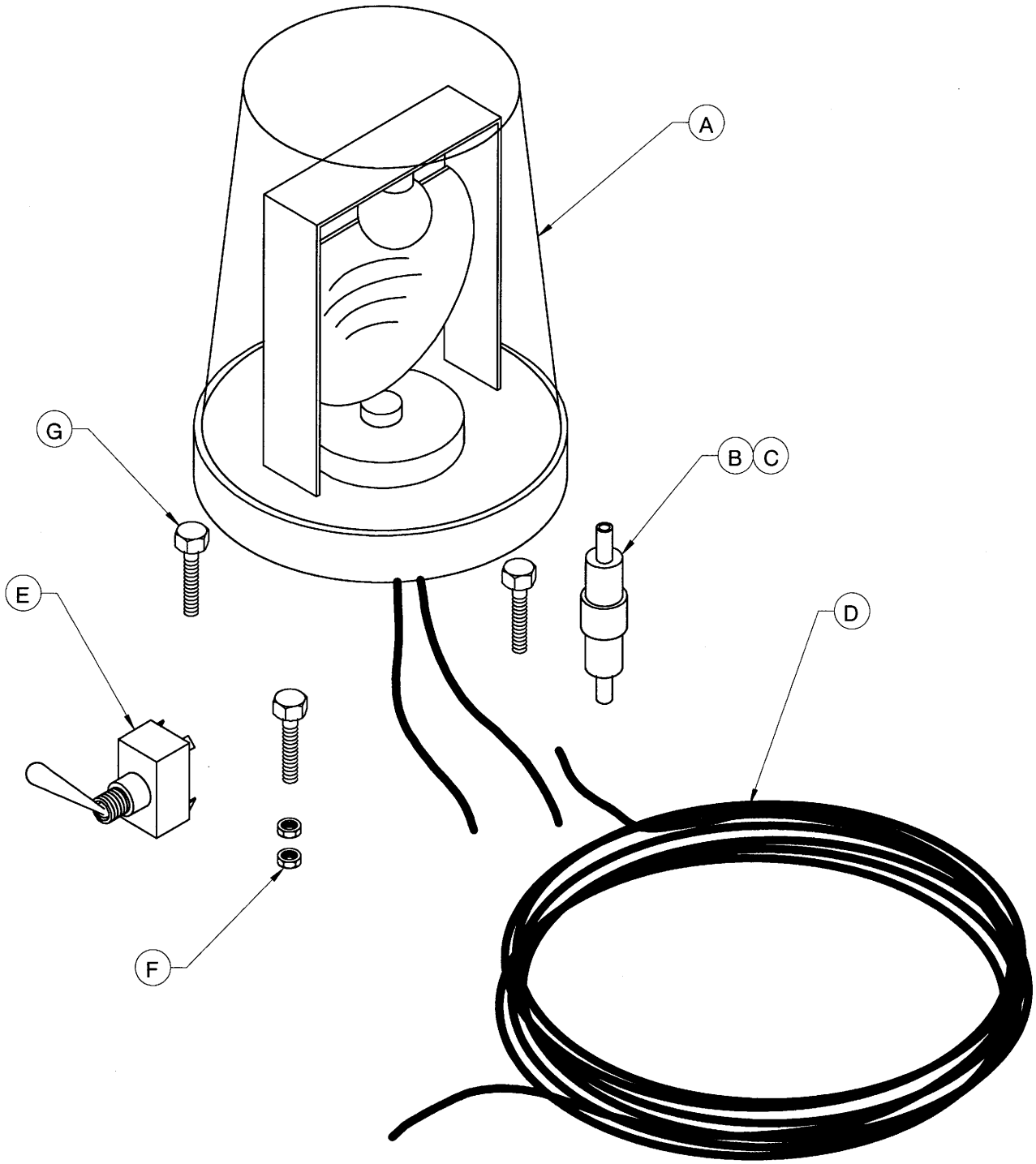
BEGIN WITH SERIAL NUMBER 326650

35393958-62 35393966-62	54437173-70 54529599-70 54531520-70 54529581-62 54525973-62	35391705-70 35391713-70 35391721-70 35391739-70 35392984-70	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/31/97 bd DESCRIPTION: 4-LIGHT ASSY MODEL NO. MANUAL NO.: OPTION DATE/REV.: 1/02 D

ITEM	C.P.N.	QTY	DESCRIPTION
A	36788081	4	TAIL LIGHT
B	36893345	1	HARNESS, TAIL LIGHT
C	36787968	4	GROMMET
D	54726468	1	LIGHT, LICENSE PLATE
E	36782837	2	SCREW, SHEET METAL
F	92368687	2	SCREW, TAPPING M06-1.00 X 14
G	36797652	6	SCREW, TAPPING M06-1.00 X 12
H	36894616	2	REFLECTOR, AMBER
J	35253038	5	CLAMP, 3/8
K	35279025	2	SCREW, HEX M08-1.25 X 20
L	54515606	1	CAP, REAR END (STD. PAINT)
	54729157	1	CAP, REAR END (SPECIAL PAINT)
M	36893634	4	GROMMET, CLEARANCE LIGHT
N	35367051	2	LIGHT, YELLOW CLEARANCE
P	35367044	2	LIGHT, RED CLEARANCE
Q	36894608	2	REFLECTOR, RED

PRIOR TO SERIAL NUMBER 326650

35393958-63 35393966-63	54437173-71 54529599-71 54531520-71 54529581-63 54525973-63	35391705-71 35391713-71 35391721-71 35391739-71 35392984-71	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/31/97 bd DESCRIPTION: 4 LIGHT MODEL NO. MANUAL NO.: OPTION DATE/REV: 1/02 E



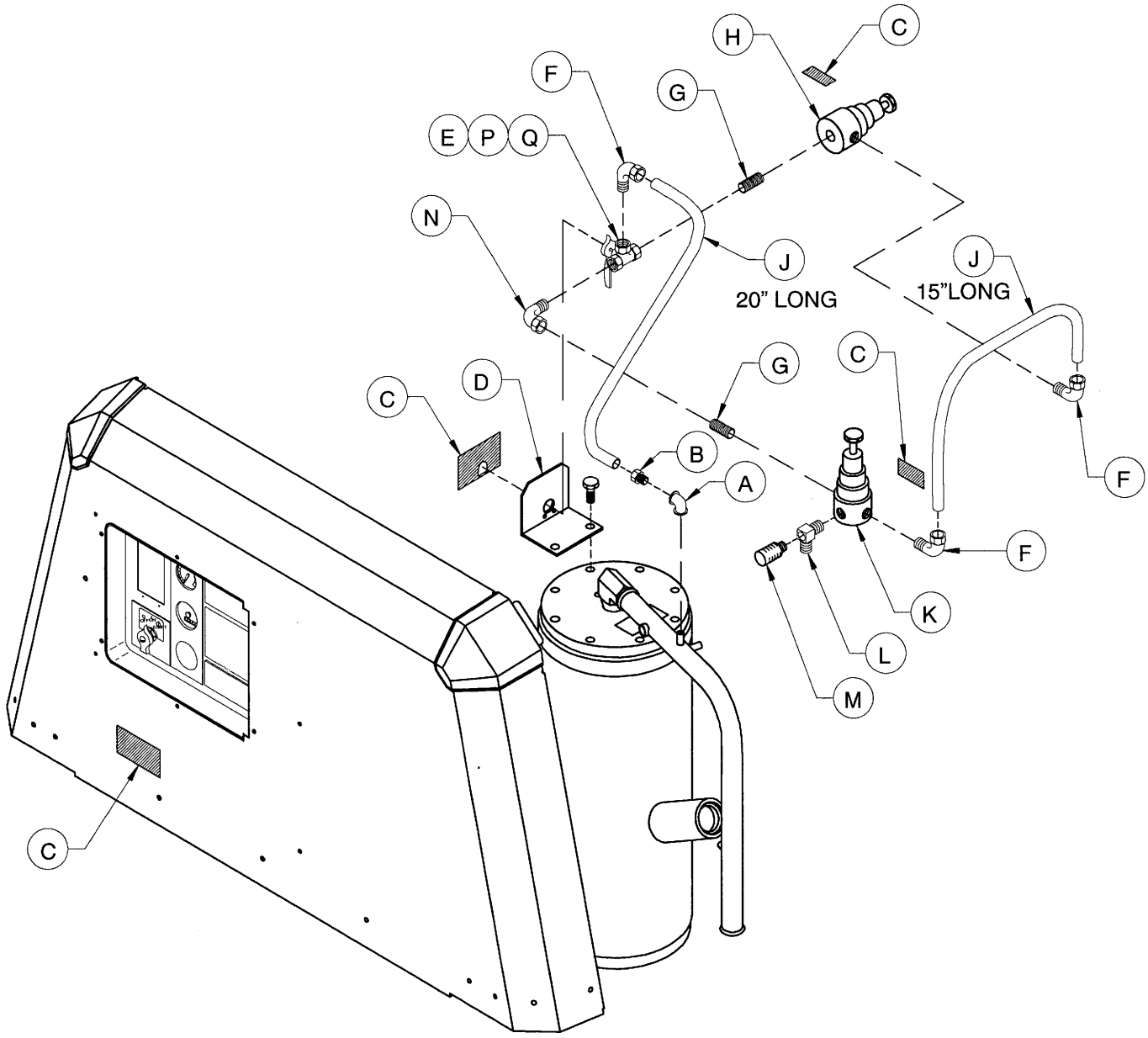
	35393958-64	35380277-38	35391705-72	35390095-68	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION
	35393966-64	35393396-38	35391713-72	35391093-68	
	54529581-64	54437173-72	35391721-72	35392877-68	DATE/DWN BY: 4/8/96 bd — DESCRIPTION: REVOLVING LIGHT OPTION
	54525973-64	54529599-72	35391739-72	35392885-68	MODEL NO. PLATINUM — MANUAL NO. OPTION — DATE/REV: 8/00 C
		54531520-72	35392984-72	35393172-68	

ITEM	C.P.N.	QTY	DESCRIPTION
A	35366111	1	LIGHT, AMBER FLASHING
B	35316645	1	FUSEHOLDER
C	35298041	1	FUSE, 20 AMP
D	35124114	120"	WIRE, 14 GA.
E	35337435	1	SWITCH, TOGGLE
F	35265388	6	NUT, LOCK 10-24
G	95163473	3	SCREW, HEX 10-24 X 1.25

	35393958-65	35380277-39	35391705-73	35390095-69
	35393966-65	35393396-39	35391713-73	35391093-69
	54529581-65	54437173-73	35391721-73	35392877-69
	54525973-65	54529599-73	35391739-73	35392885-69
		54531520-73	35392984-73	35393172-69

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
4/8/96 bc	REVOLVING LIGHT OPTION	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 C



OPTION FOR XP185 JOHN DEERE UNITS ONLY

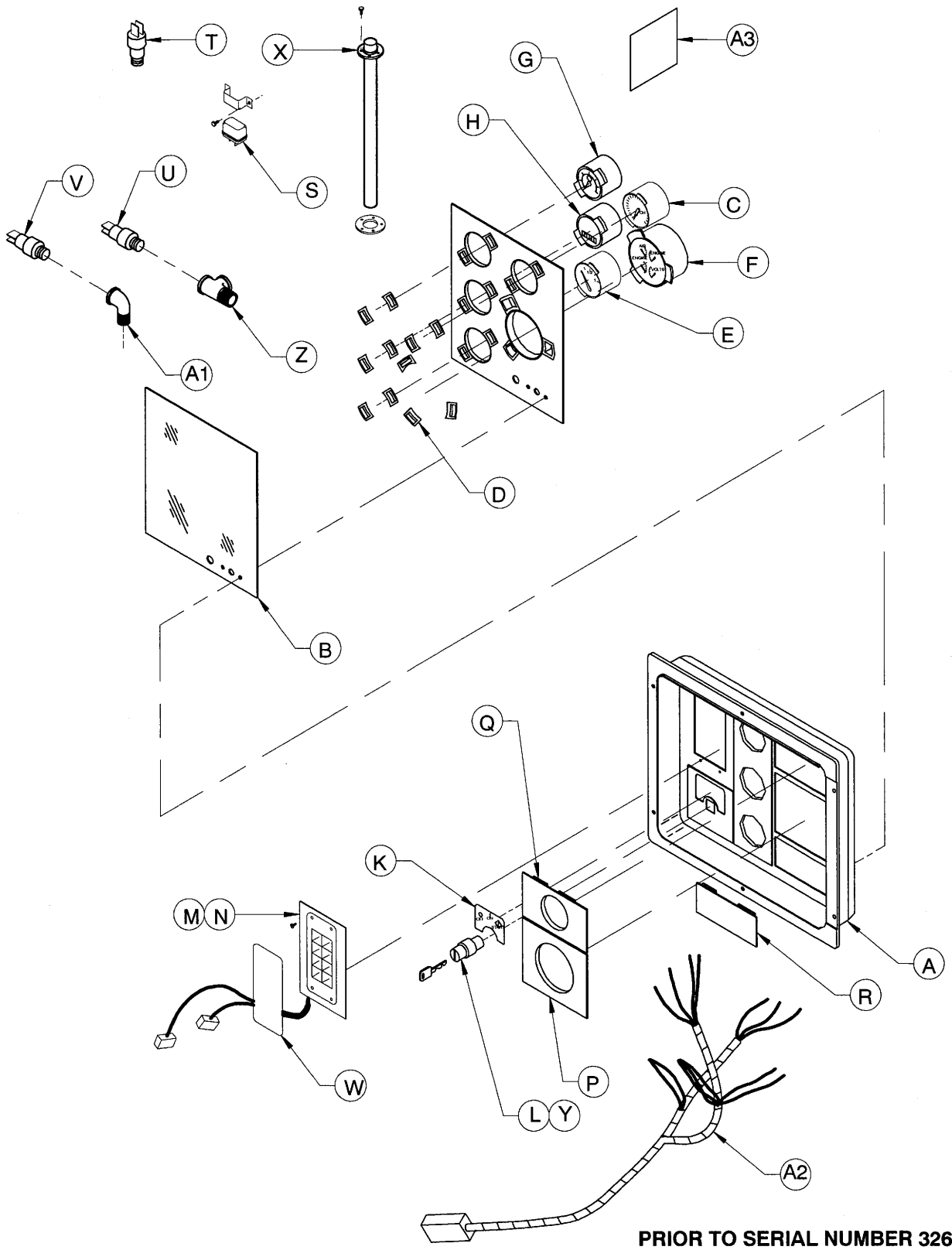
54437173-74 54529599-74 54531520-74	35391705-74 35391713-74 35391721-74 35391739-74 35392984-74	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/18/98 bd DESCRIPTION: DUAL REGULATION OPTION MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	95954095	1	ELBOW, 1/4
B	35369347	1	CONNECTOR, MALE 1/4 NPT X 3/8
C	54773791	1	DECAL, DUAL REGULATION
D	36888881	1	BRACKET, DUAL REGULATION
E	36864684	1	VALVE, 3-WAY
F	35369354	3	ELBOW, MALE 1/4 NPT X 3/8
G	95667341	2	NIPPLE, CLOSED NPT 1/4 X 7/8
H	36854149	1	REGULATOR, PRESSURE
J	35356484	**	TUBING, 3/8 OD
K	35359090	1	REGULATOR, PRESSURE
L	35114545	1	TEE, 1/4 NPT
M	36766756	1	ORIFICE, .140
N	95944666	1	ELBOW, STREET NPT 1/4 X 90
P	36769024	2	SCREW, HEX M06-1.0 X 20
Q	96703806	2	NUT, HEX M06-1.0

** SEE ILLUSTRATION FOR LENGTHS

OPTION FOR XP185 JOHN DEERE UNITS ONLY

54437173-75 54529599-75 54531520-75	35391705-75 35391713-75 35391721-75 35391739-75 35392984-75	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/18/98 bd DESCRIPTION: DUAL REGULATION OPTION MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 1/02 C



PRIOR TO SERIAL NUMBER 326650

FULL INST PNL wo/ START-RUN OPTION FOR
P100WD/WIR/WJD - P185 WD/WIR/WJD, HP185WJD

54437173-76 54529599-76 54531520-76	35391705-76 35391713-76 35391721-76 35391739-76 35392984-76	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
4/1/97 bd	INST/CONT PNL wo/SR VLV	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 C

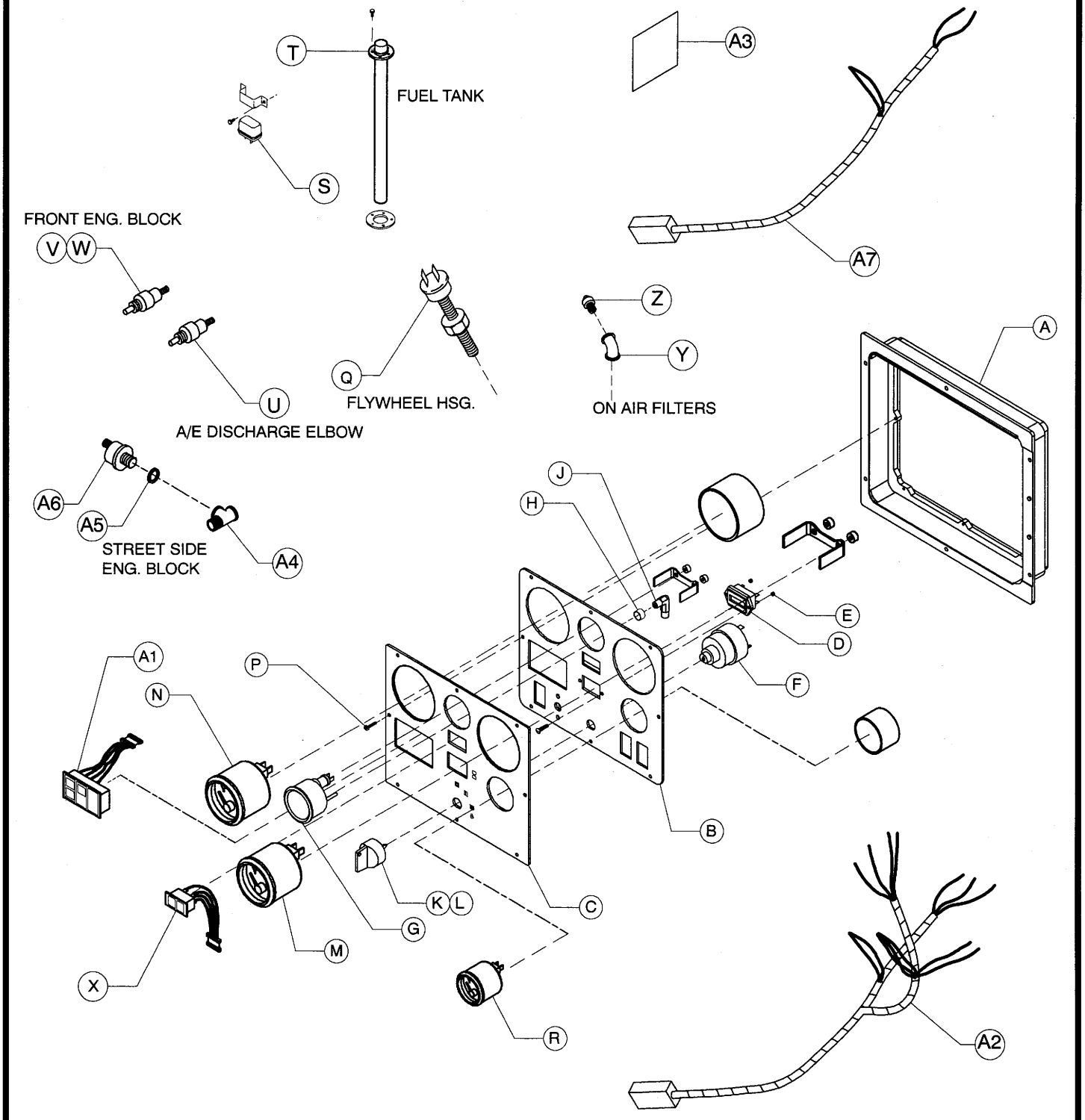
ITEM		C.P.N.	QTY	DESCRIPTION
A		36884492	1	RECESSED FRAME ASSEMBLY
B		35390368	1	PANEL, ACRYLIC
C		36879740	1	TACHOMETER
D		36880730	11	CLIP, GAUGE RETAINING
E		36879690	1	GAUGE, FUEL LEVEL
F		36879682	1	GAUGE, 4 in 1
G		36879898	1	GAUGE, 150 PSI PRESSURE
H		36879880	1	HOURMETER
J		~		~
K		36879971	1	DECAL, SWITCH
L		36884211	1	SWITCH, IGNITION
M		36882033	1	ASSEMBLY, WARNING MODULE
N		35390400	4	SCREW, #6 X 3/8
P		36879716	1	PANEL, 3 3/8 BEZEL
Q		36879914	1	PANEL, 2 1/16 BEZEL
R		35390327	1	PANEL, SWITCH BEZEL
S		36856979	1	RELAY, FUEL SHUTDOWN
T		35372457	1	SENDER, DISCHARGE TEMPERATURE
U		35604180	1	SENDER, ENGINE TEMPERATURE (P160-P185 JD)
		35372457	1	SENDER, ENGINE TEMPERATURE (P100-P130JD)
		35367218	1	SENDER, ENGINE TEMPERATURE (DEUTZ)
V		36780608	1	SENDER, OIL PRESSURE
W		36879674	1	LABEL, WANING MODULE
X		36882611	1	SENDER, FUEL LEVEL
Y		36884229	1	KEY
Z	*	36796571	1	TEE, RUN JIC
A1	*	95942702	1	ELBOW, STREET NPT 1/8 X 45□
A2		36885739	1	HARNESS, ENGINE A/E
A3		36529469	1	DECAL, OPT WIRING

* USED ON DEUTZ UNITS ONLY

PRIOR TO SERIAL NUMBER 326650

FULL INST PNL wo/ START-RUN OPTION FOR P100WD/WIR/WJD - P185 WD/WIR/WJD, HP185WJD

54437173-77 54529599-77 54531520-77	35391705-77 35391713-77 35391721-77 35391739-77 35392984-77	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 4/1/97 bd DESCRIPTION: INST/CONT PNL wo/SR VLV MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 8/00 C



BEGIN WITH SERIAL NUMBER 326650

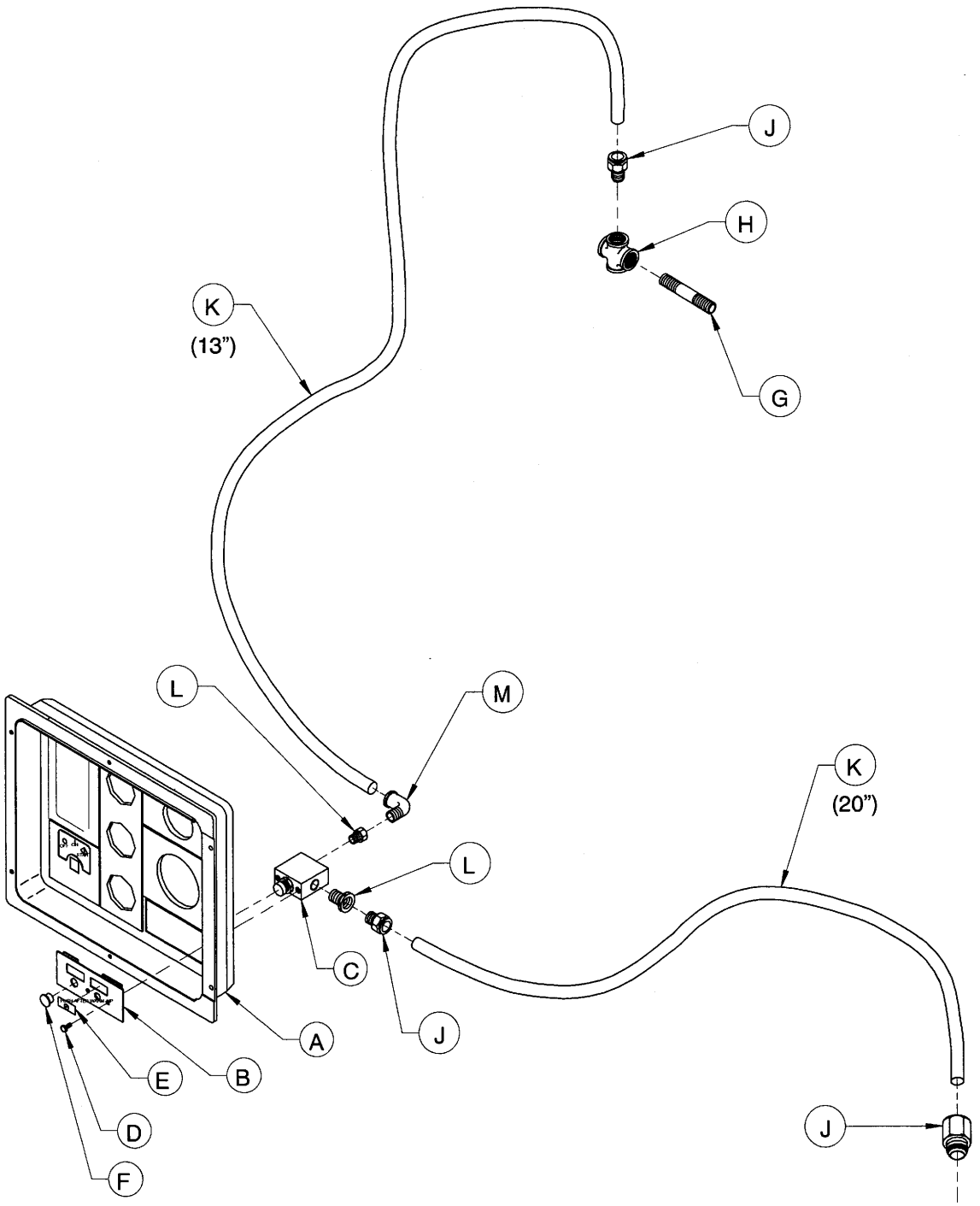
54437173-76 54529599-76 54531520-76	35391705-76 35391713-76 35391721-76 35391739-76 35392984-76	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
4/1/97 bd	FULL INST PNL wo/SR VLV	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	1/02 D

ITEM	C.P.N.	QTY	DESCRIPTION
A	54749601	1	FRAME, WW INSTRUMENT PANEL
B	54749619	1	PANEL, INSTRUMENT
C	54766845	1	DECAL, WW INSTRUMENT PANEL
D	54766704	1	METER, ELECTRONIC HOUR
E	22054159	2	NUT, PLASTIC 4-40
F	92086719	1	SWITCH, IGNITION
G	35604065	1	GAUGE, 150 PSI PRESSURE (P105 - P185)
	36891216	1	GAUGE, 250 PSI PRESSURE (XP185)
H	95935599	1	COUPLING, STD 1/8 NPT X .75
J	35370386	1	ELBOW, 1/8 NPT X 3/8 TUBE
K	22054167	*	KEY, REMOVABLE IGNITION
L	54774104	*	KEY, NON-REMOVABLE IGNITION
M	22058291	1	GAUGE, 4 IN 1
N	22055883	1	TACHOMETER (JD)
	22060198	1	TACHOMETER (IR)
P	22070494	8	SCREW, PLASTIC TAPPING
Q	36773266	1	SENSOR, MAGNETIC PICKUP (IR)
R	54774096	1	GAUGE, FUEL LEVEL
S	54368048	1	RELAY, FUEL SHUTDOWN
T	22058531	1	SENDER, FUEL LEVEL
U	35372457	1	SENDER, DISCHARGE TEMPERATURE
V	35604180	1	SENDER, ENGINE TEMPERATURE (4 CYLINDER JD)
	35372457	1	SENDER, ENGINE TEMPERATURE (3 CYLINDER JD & IR)
W	36780608	1	SENDER, OIL PRESSURE
X	54774112	1	MODULE, 2 LIGHT WARNING
Y	95956199	2	ELBOW, STREET NPT 1/8 X 45□
Z	36847838	2	SWITCH, VACUUM
A1	22055891	1	MODULE, 3 LIGHT WARNING
A2	22060339	1	HARNESS, JD OPTION
	22060347	1	HARNESS, IR OPTION
A3	22103741	1	DECAL, OPT WIRING (JD)
	22096044	1	DECAL, OPT WIRING (IR)
A4	39127287	1	TEE, 1/8 STREET (IR)
A5	35278571	1	O-RING
A6	36870608	1	SENDER, OIL PRESSURE
A7	36842839	1	HARNESS, AIR FILTER RESTRICTION

BEGIN WITH SERIAL NUMBER 326650

54437173-77 54529599-77 54531520-77	35391705-77 35391713-77 35391721-77 35391739-77 35392984-77	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 4/1/97 bd DESCRIPTION: FULL INST PNL wo/SR VLV MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 1/02 D



PRIOR TO S/N 326650

START-RUN VALVE OPTION FOR P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

54437173-78 54529599-78 54531520-78	35391705-78 35391713-78 35391721-78 35391739-78 35392984-78	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
4/1/97 bc	START-RUN VALVE	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 B

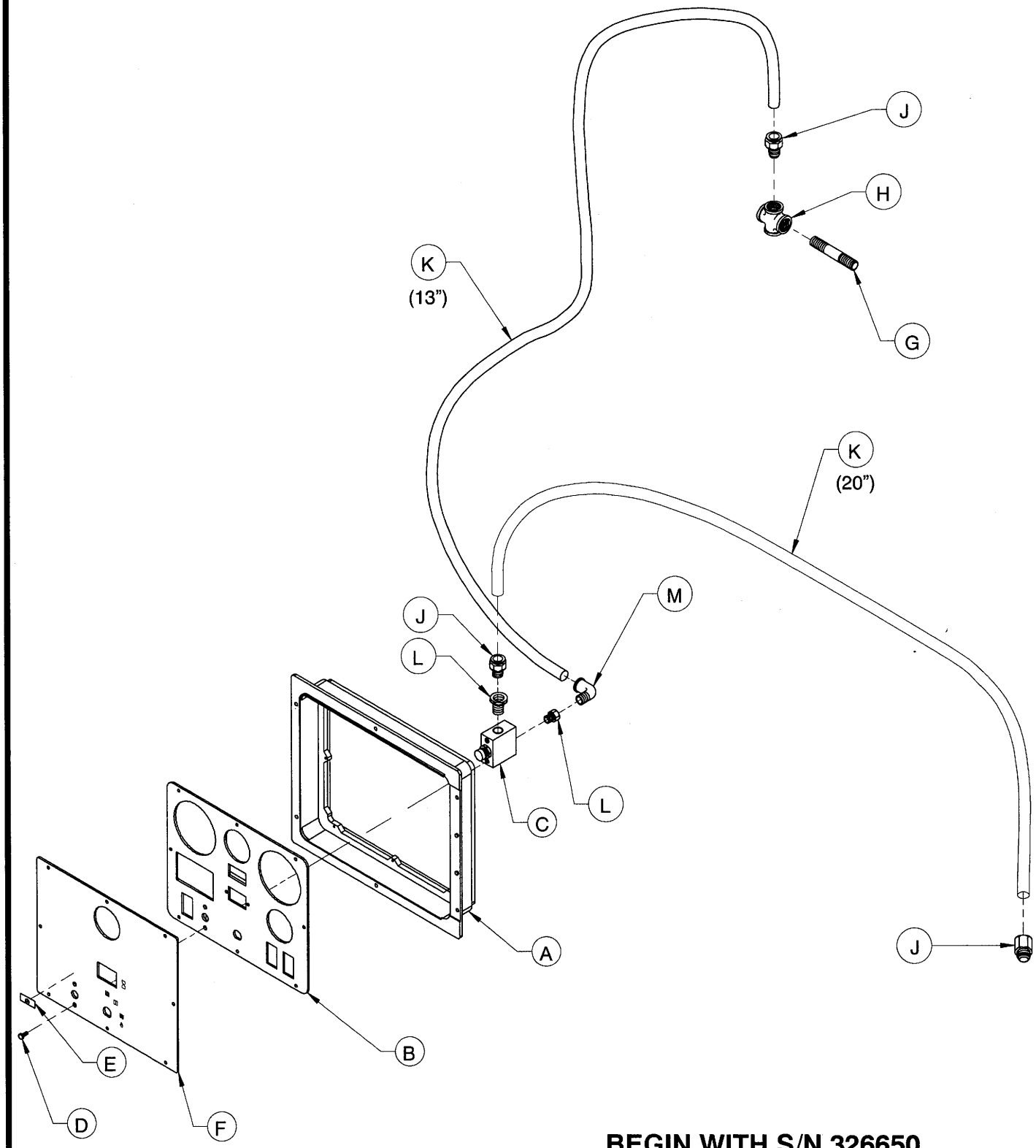
		QTY	DESCRIPTION
A	36884492	1	RECESSED FRAME ASSEMBLY
B	36879708	1	PANEL, SWITCH BEZEL
C	36783439	1	VALVE, 2-WAY START-RUN
D	36882207	2	SCREW, PAN HD M06-100 X 12
E	36879963	1	DECAL, START-RUN
F	35282185	1	PLUG
G	95667341	1	NIPPLE, CLOSE NPT 1/4 X 7/8
H	95954293	1	CROSS, NPT 1/4
J	35369347	3	CONNECTOR, MALE 1/4 NPT X 3/8
K	35356484	*	TUBING, 3/8 OD
L	35302314	2	ADAPTER
M	35369354	1	ELBOW, MALE 1/4 NPT X 3/8

* SEE ILLUSTRATION FOR LENGTH

PRIOR TO SERIAL NUMBER 326650

START-RUN VALVE OPTION FOR
P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

54437173-79 54529599-79 54531520-79	35391705-79 35391713-79 35391721-79 35391739-79 35392984-79	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 4/1/97 bd DESCRIPTION: START-RUN VALVE MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 8/00 B



BEGIN WITH S/N 326650

START-RUN VALVE OPTION FOR P100WIR/WJD - P185WIR/WJD, XP185WIR/WJD

54437173-78 54529599-78 54531520-78	35391705-78 35391713-78 35391721-78 35391739-78 35392984-78	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
4/1/97 bd	START-RUN VALVE	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	1/02 C

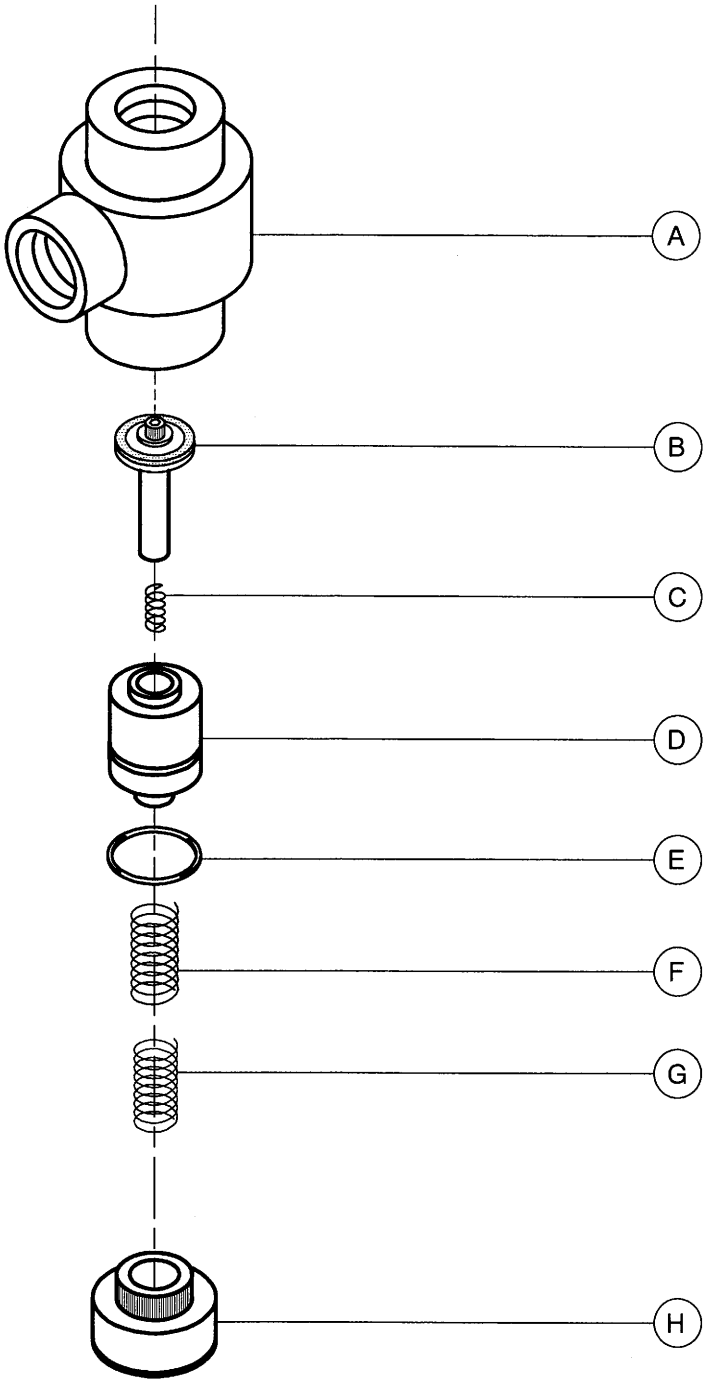
ITEM	C.P.N.	QTY	DESCRIPTION
A	54749601	1	FRAME, WW INSTRUMENT PANEL
B	54749619	1	PANEL, INSTRUMENT
C	36783439	1	VALVE, 2-WAY START-RUN
D	22090898	2	SCREW, PAN HD M06-100 X 12
E	36879963	1	DECAL, START-RUN
F	54766845	1	DECAL, WW INSTRUMNET PANEL
G	95667341	1	NIPPLE, CLOSE NPT 1/4 X 7/8
H	95954293	1	CROSS, NPT 1/4
J	35369347	3	CONNECTOR, MALE 1/4 NPT X 3/8
K	35356484	*	TUBING, 3/8 OD
L	35302314	2	ADAPTER
M	35369354	1	ELBOW, MALE 1/4 NPT X 3/8

* SEE ILLUSTRATION FOR LENGTH

BEGIN WITH SERIAL NUMBER 326650

START-RUN VALVE OPTION FOR
P100WD/WIR/WJD - P185 WD/WIR/WJD, XP185WJD

54437173-79 54529599-79 54531520-79	35391705-79 35391713-79 35391721-79 35391739-79 35392984-79	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 4/1/97 bd DESCRIPTION: START-RUN VALVE MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 1/02 C



35393958-68 35393966-68	54437173-80 54529599-80 54531520-80 54529581-68 54525973-68	35391705-80 35391713-80 35391721-80 35391739-80 35392984-80	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 3/26/97 bd DESCRIPTION: MIN PRESS VALVE MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

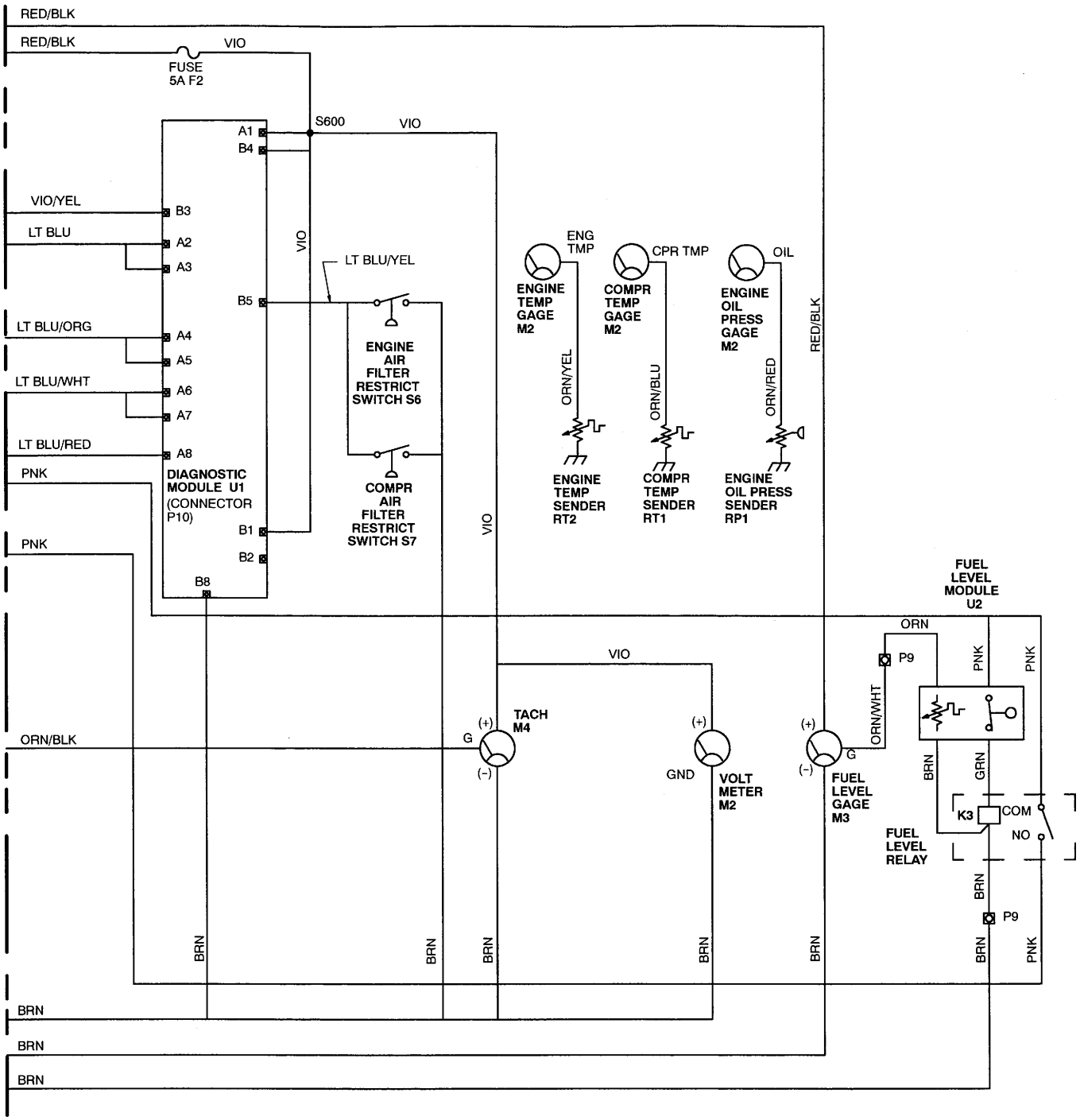
ITEM	C.P.N.	QTY	DESCRIPTION
A	35382621	1	MIN PRESS VALVE BODY
B	35382639	1	CV ASSEMBLY
C	35382662	1	SPRING
D	35382647	1	PISTON
E	35382654	1	O-RING
F	35382670	1	SPRING
G	35389055	1	SPRING
H	35382688	1	CAP
	35598770	1	MIN PRESS VALVE ASSEMBLY

35393958-69 35393966-69	54437173-81 54529599-81 54531520-81 54529581-69 54525973-69	35391705-81 35391713-81 35391721-81 35391739-81 35392984-81

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
3/26/97 bd	MIN PRESS VALVE	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 B

- Options for manuals: 35391705, 35391713, 35391721, 35391739, 35393984, 54437173, 54529599, 54531520, 54701347 (2/02)



TO SHT1 OF STANDARD WIRING DIAG

PRIOR TO SERIAL NUMBER 326650
OPTION WIRING DIAGRAM FOR
P100WD/WJD - P185 WD/WJD, XP185WJD

54437173-82 54529599-82 54531520-82	35391705-82 35391713-82 35391721-82 35391739-82 35392984-82	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 4/4/97 bd DESCRIPTION: OPTION WIRING DIAGRAM MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV.: 8/00 C

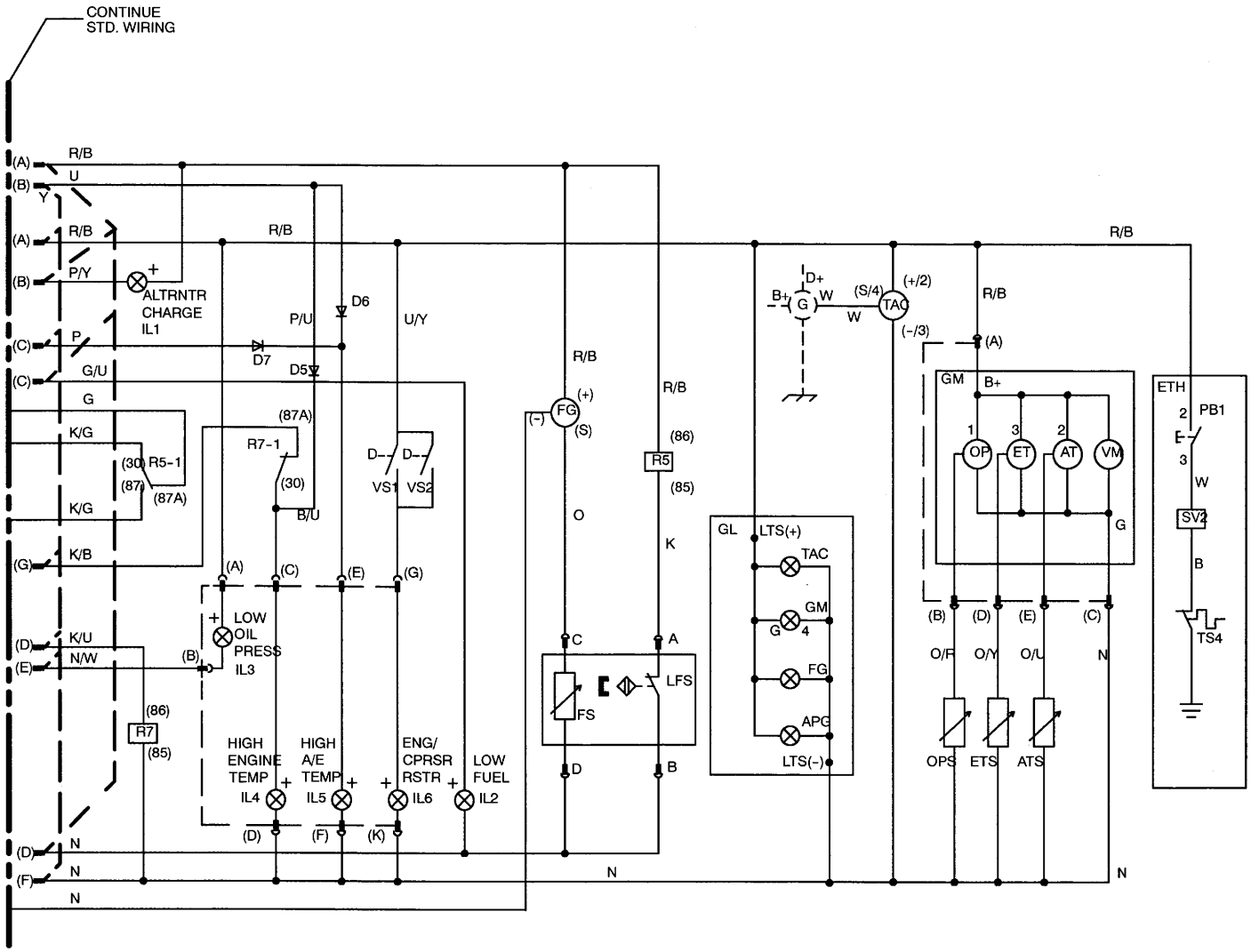
ITEM	C.P.N.	DESCRIPTION
F2	36782654	FUSE, 5A
K3	36856979	RELAY, FUEL SHUTDOWN
M2	36879682	GAGE, 4 IN 1
M3	36879690	GAGE, FUEL LEVEL
M4	36879740	GAGE, TACHOMETER
RP1	36870608	SENDER, ENG OIL PRESS
RT1	35372457	SENDER, CPRSR TEMP
RT2	35372457	SENDER, ENG TEMP
S6	35314939	SWITCH, ENG AIR FILTER RESTRICTION
S7	35314939	SWITCH, CPRSR AIR FILTER RESTRICTION
U1	36882033	MODULE, DIAGNOSTIC
U2	36882611	MODULE, FUEL LEVEL

PRIOR TO SERIAL NUMBER 326650

OPTION WIRING DIAGRAM FOR

P100WD/WJD - P185 WD/WJD, XP185WJD

54437173-83 54529599-83 54531520-83	35391705-83 35391713-83 35391721-83 35391739-83 35392984-83	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 4/4/97 bd DESCRIPTION: OPTION WIRING DIAGRAM MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 8/00 B



BEGIN WITH SERIAL NUMBER 326650

54437173-82 54529599-82 54531520-82	35391705-82 35391713-82 35391721-82 35391739-82 35392984-82	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 4/4/97 bd DESCRIPTION: JD OPTION WIRING DIAG. MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV.: 1/02 D

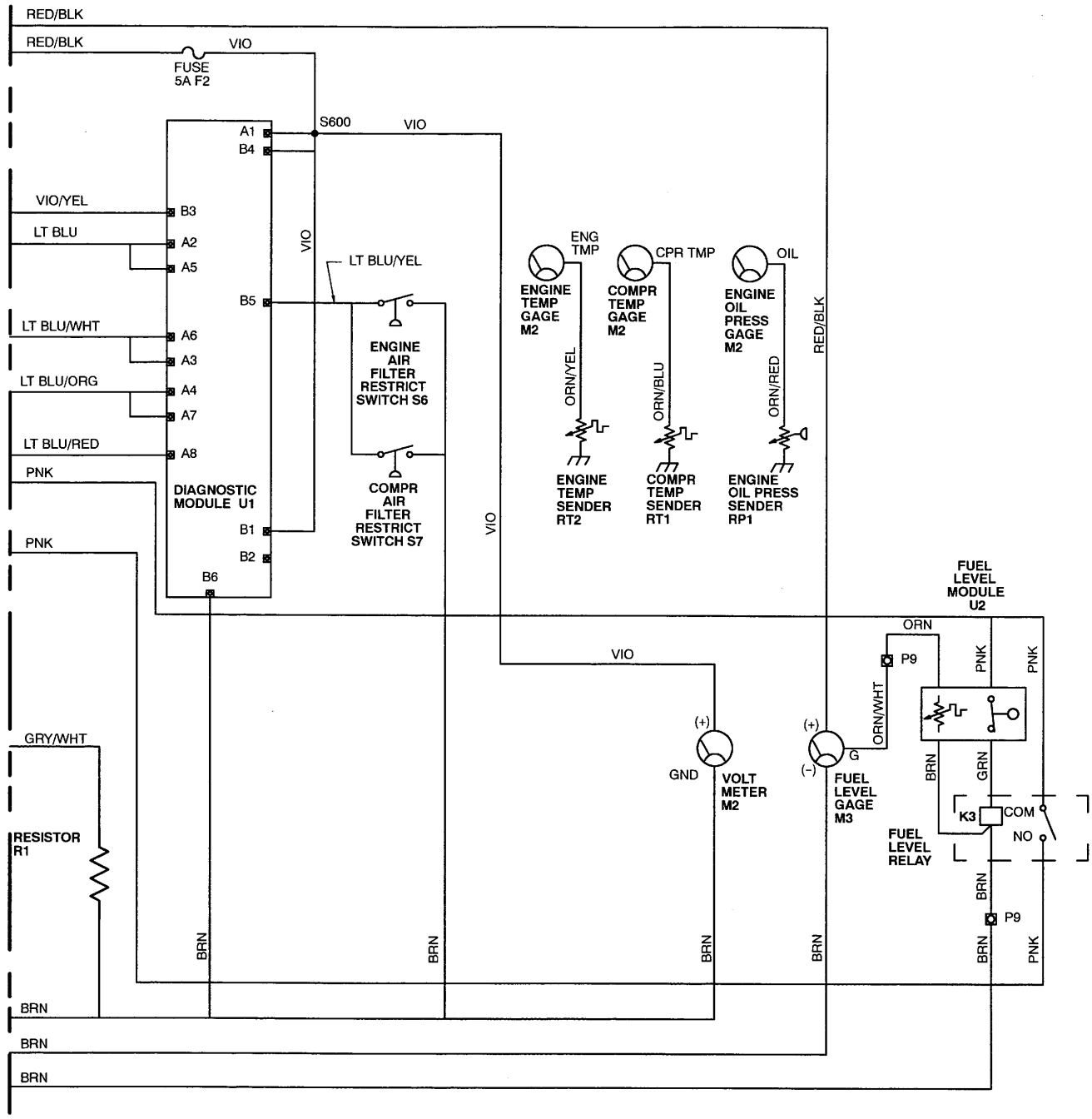
ITEM	C.P.N.	DESCRIPTION
ATS	35372457	AIREND TEMP SENDER
D5	35676169	DIODE
D6	35676169	DIODE
D7	35676169	DIODE
ETH	35367739	MANUAL ETHER START
	35377266	AUTOMATIC ETHER START
ETS	35604180	3 CYL. ENG. TEMP. SENDER
	35372457	4 CYL. ENG. TEMP. SENDER
FG	54774096	GAUGE, FUEL
FS	* 22058531	SENDER, FUEL
GL	36852622	GAUGE LIGHTS
	35333236	BULB, INCANDESCENT
GM	22058291	GAUGE MODULE
IL1	** 54774112	LOW OIL PRESS INDICATOR LAMP
IL2	** 54774112	LOW OIL PRESS INDICATOR LAMP
IL3	*** 22061493	LOW OIL PRESS INDICATOR LAMP
IL4	*** 22061493	HIGH ENG TEMP INDICATOR LAMP
IL5	*** 22061493	HIGH A/E TEMP INDICATOR LAMP
IL6	*** 22061493	HIGH A/E TEMP INDICATOR LAMP
LFS	* 22058531	SWITCH, LOW FUEL
OPS	36870608	OIL PRESSURE SENDER
PB1	****	PUSH BUTTON SWITCH
R5	54368084	RELAY, FUEL SHUTDOWN
R7	54368084	RELAY, HIGH ENG TEMP
SV2	****	SOLENOID, ETHER
TAC	22060198	TACHOMETER
TS4	****	SWITCH, BLOCK TEMP. ETHER
VS1	36847838	SWITCH, AIR FILTER RESTRICTION
VS2	36847838	SWITCH, AIR FILTER RESTRICTION
W2	22060339	HARNESS, OPTION
W3	22074843	HARNESS, GAUGE ILLUMINATION OPTION
W4	36842839	HARNESS, AIR FILTER RESTR OPTION
W5	36842821	HARNESS, MANUAL COLD START OPTION

*** FS & LFS COMBINED IN ONE MODULE**
**** IL1 & IL2 COMBINED IN 2 LAMP MODULE**
***** IL3 THROUGH IL6 COMBINED IN 4 LAMP MODULE**
****** INCLUDED IN OPTION**

BEGIN WITH SERIAL NUMBER 326650

OPTION WIRING DIAGRAM FOR
P105WJD - P185 WJD, XP185WJD

54437173-83 54529599-83 54531520-83	35391705-83 35391713-83 35391721-83 35391739-83 35392984-83	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 4/4/97 bd DESCRIPTION: OPTION WIRING DIAGRAM MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 1/02 C



PRIOR TO S/N 326650

OPTION WIRING DIAGRAM FOR

P110WIR - P260WIR, XP185WIR

54437173-84 54529599-84 54531520-84	35391705-84 35391713-84 35391721-84 35391739-84 35392984-84	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 8/11/00 bd DESCRIPTION: OPTION WIRING DIAGRAM MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV.: 8/00 A

ITEM	C.P.N.	DESCRIPTION
F2	36782654	FUSE, 5A
K3	36856979	RELAY, FUEL SHUTDOWN
M2	36879682	GAGE, 4 IN 1
M3	36879690	GAGE, FUEL LEVEL
R1	54488416	RESISTOR
RP1	36870608	SENDER, ENG OIL PRESS
RT1	35372457	SENDER, CPRSR TEMP
RT2	35372457	SENDER, ENG TEMP
S6	35314939	SWITCH, ENG AIR FILTER RESTRICTION
S7	35314939	SWITCH, CPRSR AIR FILTER RESTRICTION
U1	36882033	MODULE, DIAGNOSTIC
U2	36882611	MODULE, FUEL LEVEL

PRIOR TO S/N 326650

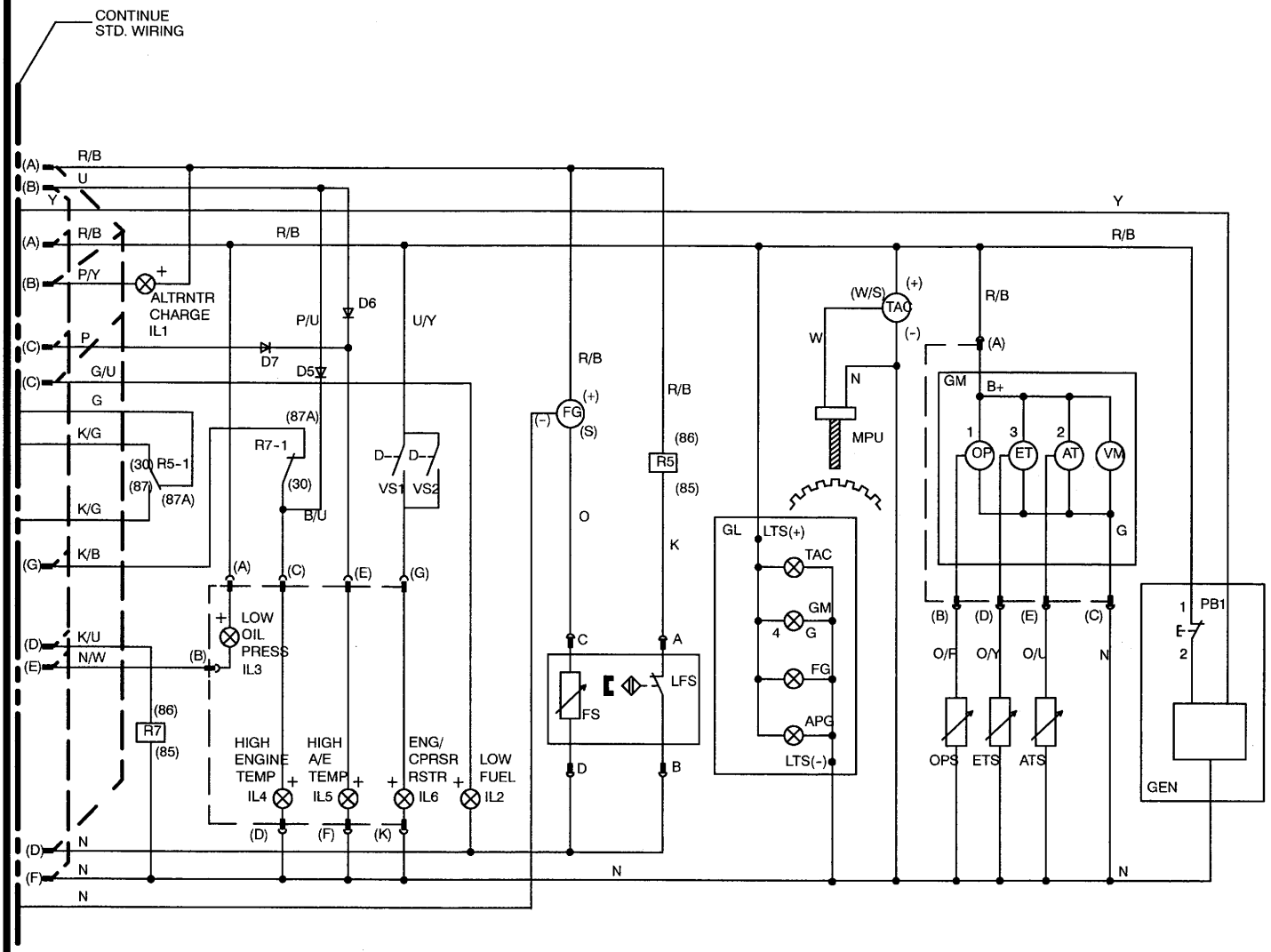
OPTION WIRING DIAGRAM FOR

P110WIR - P260 WIR, XP185WIR

54437173-85 54529599-85 54531520-85	35391705-85 35391713-85 35391721-85 35391739-85 35392984-85	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 8/11/00 bd DESCRIPTION: OPTION WIRING DIAGRAM MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 8/00 A

ITEM	B	U	N	G	S	LG	O	K	P	R	W	Y
COLOR	BLK	BLU	BRN	GRN	GRY	LT GRN	ORG	PNK	PUR	RED	WHT	YEL

DASHED LINES INDICATE COMMON CONNECTIONS/CONNECTORS



BEGIN WITH S/N 326650

OPTION WIRING DIAGRAM FOR

P110WIR - P260WIR, XP185WIR

54437173-84 54529599-84 54531520-84	35391705-84 35391713-84 35391721-84 35391739-84 35392984-84	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 8/11/00 bd DESCRIPTION: IR OPTION WIRING DIAG. MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 12/01 B

ITEM		C.P.N.	DESCRIPTION
ATS		35372457	AIREND TEMP SENDER
D5		35676169	DIODE
D6		35676169	DIODE
D7		35676169	DIODE
ETS		35604180	ENGINE TEMP SENDER
FG		54774096	GAUGE, FUEL
FS	*	22058531	SENDER, FUEL
GEN		54620610	GENERATOR, 6KW
GL		36852622	GAUGE LIGHTS
		35333236	BULB, INCANDESCENT
GM		22058291	GAUGE MODULE
IL1	**	54774112	LOW OIL PRESS INDICATOR LAMP
IL2	**	54774112	LOW OIL PRESS INDICATOR LAMP
IL3	***	22061493	LOW OIL PRESS INDICATOR LAMP
IL4	***	22061493	HIGH ENG TEMP INDICATOR LAMP
IL5	***	22061493	HIGH A/E TEMP INDICATOR LAMP
IL6	***	22061493	HIGH A/E TEMP INDICATOR LAMP
LFS	*	22058531	SWITCH, LOW FUEL
MPU		36772366	MAGNETIC PICKUP
OPS		36870608	OIL PRESSURE SENDER
PB1		22090278	PUSH BUTTON SWITCH
R5		54368084	RELAY, FUEL SHUTDOWN
R7		54368084	RELAY, HIGH ENG TEMP
TAC		22060198	TACHOMETER
VS1		36847838	SWITCH, AIR FILTER RESTRICTION
VS2		36847838	SWITCH, AIR FILTER RESTRICTION
W2		22060347	HARNESS, OPTION
W3		22074843	HARNESS, GAUGE ILLUMINATION OPTION
W4		36842839	HARNESS, AIR FILTER RESTR OPTION
W5		54631355	HARNESS, 6KW GENERATOR OPTION
W6		22098727	HARNESS, ALTERNATOR (6KW GEN.)
W7		22098735	HARNESS, AC OUTLETS (6KW GEN.)
W8		22098743	HARNESS, STATUS PANEL (6KW GEN.)

*** FS & LFS COMBINED IN ONE MODULE**
**** IL1 & IL2 COMBINED IN 2 LAMP MODULE**
***** IL3 THROUGH IL6 COMBINED IN 4 LAMP MODULE**

BEGIN WITH S/N 326650

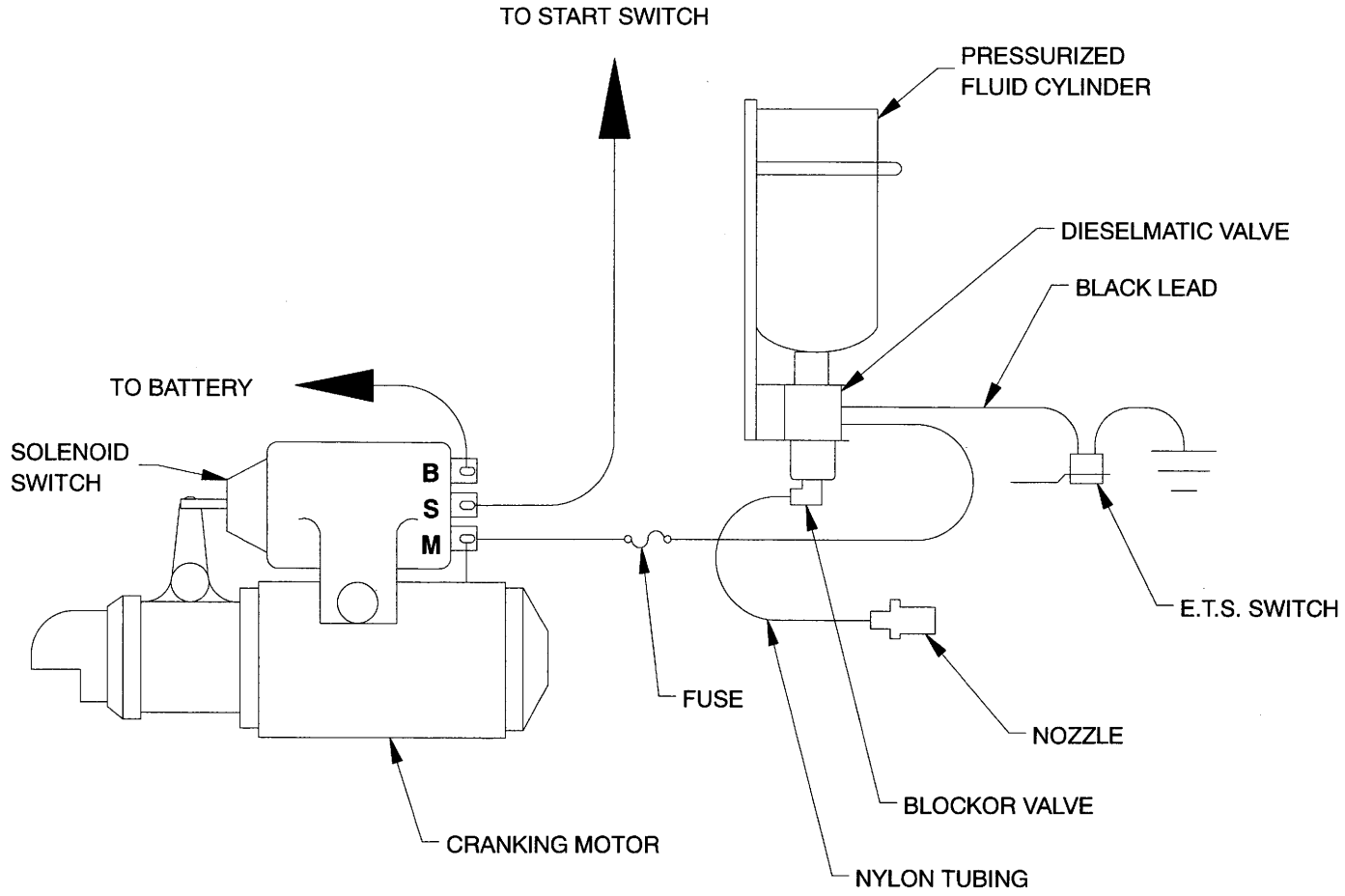
OPTION WIRING DIAGRAM FOR

P110WIR - P260 WIR, XP185WIR

54437173-85 54529599-85 54531520-85	35391705-85 35391713-85 35391721-85 35391739-85 35392984-85	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 8/11/00 bd DESCRIPTION: OPTION WIRING DIAGRAM MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 12/01 B

NOTE:

1. WIRE FUSE INTO CIRCUIT AS CLOSE TO **M (MOTOR)** TERMINAL AS POSSIBLE.
2. **NOT** FOR USE WITH INGERSOLL ENGINES.



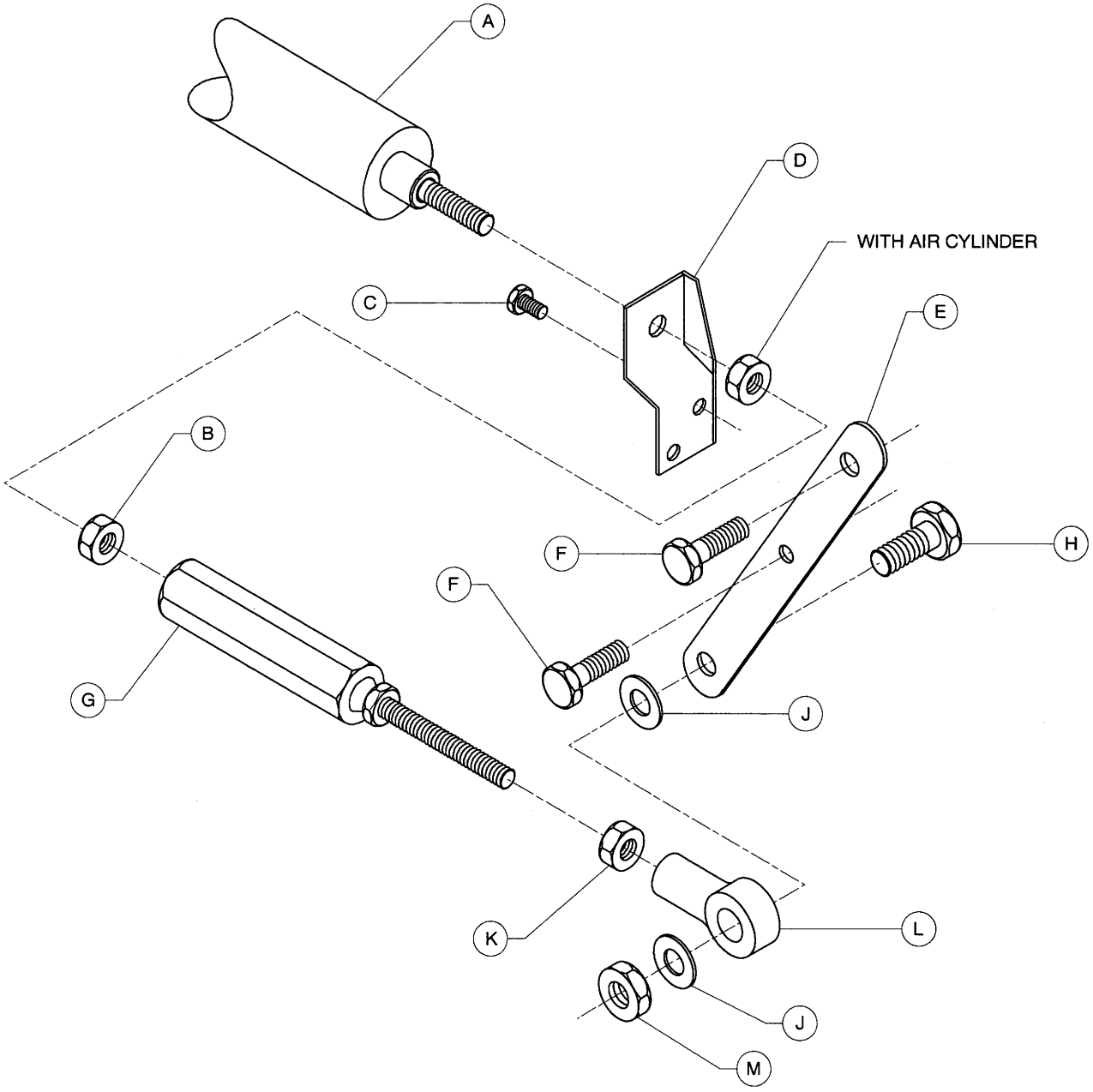
COLD START WIRING FOR KIT 35377266

35393958-90	54529599-86	35380277-42	35391705-86	35390095-76	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION
	54531520-86	35393396-42	35391713-86	35391093-76	DATE/DWN BY: 4/12/96 bd / DESCRIPTION: COLD START WIRING
	35393966-90	35393065-28	35391721-86	35392877-76	
	54529581-90	35393628-28	35391739-86	35392885-76	MODEL NO. / MANUAL NO. OPTION / DATE/REV: 8/00 B
	54525973-90	54437173-86	35392984-86	35393172-76	

C.P.N.	DESCRIPTION
35610500	SPARK ARRESTOR (J DEERE)
36897296	ELBOW, EXHAUST
35612159	SPARK ARRESTOR (DEUTZ)
36843563	ENGINE BLOCK HEATER (3 CYL. J DEERE)
35379221	ENGINE BLOCK HEATER (4 CYL. J DEERE)
36780252	KEY IGNITION SWITCH
36886810	GAGE LIGHT HARNESS
36843043	LIGHT, PANEL
35333236	BULB
36794345	KEY LOCK CYLINDER
35612746	KEY (REPLACEMENT)
36881910	LIGHT, LICENSE PLATE
36782837	SCREW, SHEET METAL
36844975	BATTERY, 1000 CCA
36888758	BATTERY, DRY 1000 CCA
35370469	COUPLER, 2.31" BALL
36509073	COUPLER, 2" BALL
35131499 *	LIP
35131481 *	SPRING
35131457 *	NUT, LOOP HANDLE
35131465 *	BOLT
35321637	ELEMENT, SAFETY
35291475	NUT, AIR CLEANER

* FURNISHED WITH 2" COUPLER

DRAWBAR END



USE WITH VARABLE SPEED CONTROL OPTION FOR

P100WD - P130WD

54437173-88 54529599-88 54531520-88	35391705-88 35391713-88 35391721-88 35391739-88 35392984-88	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

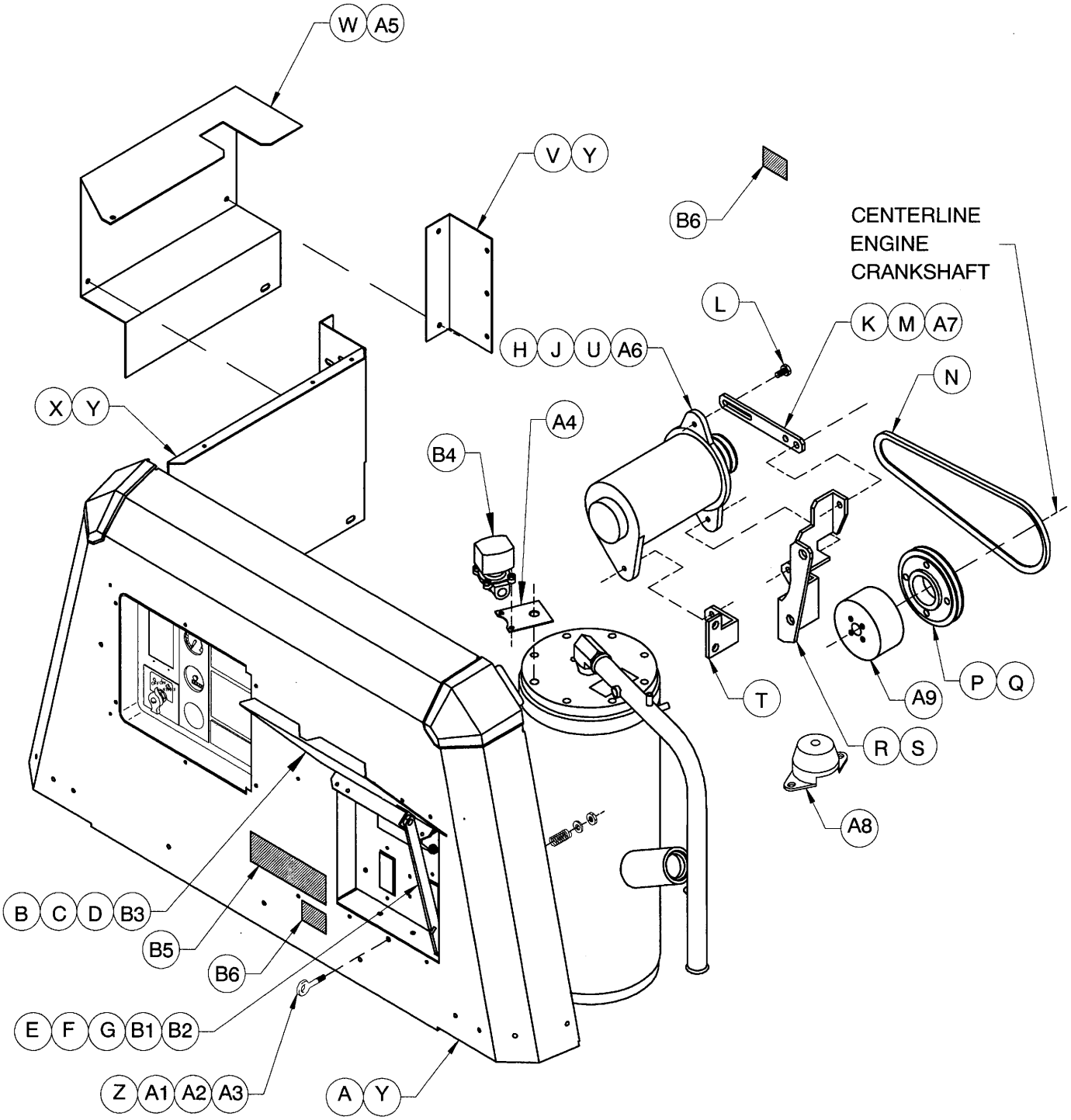
DATE/DWN BY:	DESCRIPTION	
9/6/96 bd	SPEED CONTROL ASSY	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	36772549	1	AIR CYLINDER
B	95926028	1	NUT, HEX JAM 7/16-20
C	92368687	2	SCREW, TAPPING M06-100 X 14
D	36881621	1	BRACKET, SPEED CONTROL
E	36768539	1	GOVERNOR LEVER
F	36769024	2	SCREW, HEX M06-125 X 20
G	36849685	1	BALL JOINT
H	96701461	1	SCREW
J	95935029	2	WASHER, FLAT 1/4
K	95935078	1	NUT, 1/4-28
L	35218106	1	RODEND BEARING
M	36769032	1	NUT, HEX LOCK M06

USE WITH VARABLE SPEED CONTROL OPTION FOR

P100WD - P130WD

54437173-89 54529599-89 54531520-89	35391705-89 35391713-89 35391721-89 35391739-89 35392984-89	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 9/6/96 bd DESCRIPTION: SPEED CONTROL ASSY MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 8/00 C



OPTION FOR JOHN DEERE UNITS ONLY

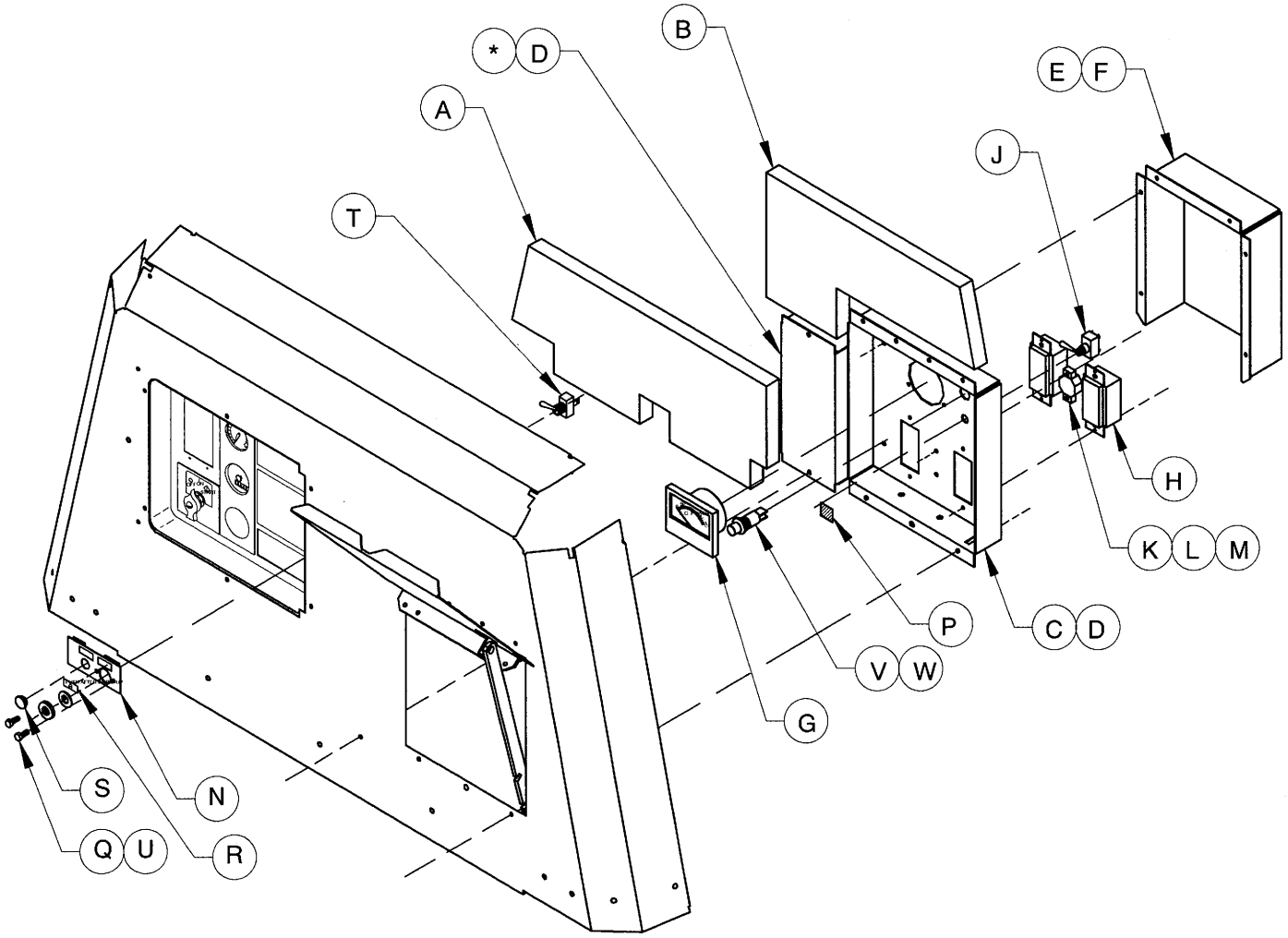
54437173-90 54529599-90 54531520-90	35391705-90 35391713-90 35391721-90 35391739-90 35392984-90	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
10/24/97 bd	4.5 kW GENERATOR OPTION	
MODEL NO.	MANUAL NO.	DATE/REV:
PLATINUM	OPTION	8/00 C

ITEM	C.P.N.	QTY	DESCRIPTION
A	36895373	1	ENDCAP, FRONT TOP
B	36895381	1	DOOR, GENERATOR CONTROL PANEL
C	36890085	1	HINGE, CONTROL PANEL
D	36877587	4	RIVET, 3/16 ALUMINUM
E	36895506	1	ARM, CONTROL PANEL SUPPORT
F	35158617	1	WASHER, SPRING
G	35374842	1	SCREW, HEX M10-1.5 X 25
H	36884427	1	GENERAOR, 4.5 KW
J	35271162	2	SCREW, HEX M08-1.25 X 30
K	35611391	1	STRAP, ADJ ALTERNATOR
L	95929006	1	SCREW, HEX 3/16-18 X 1
M	35271154	1	SCREW, HEX M10-1.5 X 30
N	36892610	1	BELT, V 10mm
P	36895233	1	PULLEY, CRANKSHAFT
Q	95055349	4	SCREW, CAP SHOULDER 3/8-16 X 1
R	36892511	1	BRACKET, GEN FRONT
S	36793040	2	SCREW, FLANG HEAD M16-2.0 X 40
T	36892529	1	BRACKET, GEN REAR
U	95934303	2	WASHER, LOCK
V	36894152	1	BRACKET, GEN GUARD
W	36894145	1	GUARD, GENERATOR
X	36894137	1	GUARD, TOOLBOX / GENERATOR
Y	36797652	12	SCREW, TAPPING M06-1.0 X 12
Z	35607829	1	EYEBOLT, 1/4 X 2.5
A1	95925029	1	WASHER, FLAT
A2	35607837	1	SPRING, COMPRESSION
A3	95923298	1	NUT, HEX LOCK M10-1.5
A4	36892669	1	BRACKET, SOLENOID VALVE
A5	35279025	3	SCREW, TAPPING M08-1.25 X 20
A6	96700869	2	NUT, HEX M08-1.25
A7	36879195	1	NUT, HEX FLANGE M10
A8	36876274	2	ISOLATOR, ENGINE
A9	36895761	1	ADAPTER, CRANKSHAFT PULLEY
B1	95935037	1	WASHER, FLAT
B2	35312024	1	NUT, HEX LOCK M10-1.5
B3	36920486	4	RIVET, 3/16 SS
B4	36843142	1	VALVE, SOLENOID 12V
B5	36532034	1	DECAL, GENERATOR OPERATION
B6	36532026	2	DECAL, HORIZONTAL HAZARDOUS VOLTAGE

OPTION FOR JOHN DEERE UNITS ONLY

54437173-91 54529599-91 54531520-91	35391705-91 35391713-91 35391721-91 35391739-91 35392984-91	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/24/97 bd DESCRIPTION: 4.5 KW GENERATOR OPTION MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV.: 8/00 D



* FURNISHED BY GENERATOR MANUFACTURER

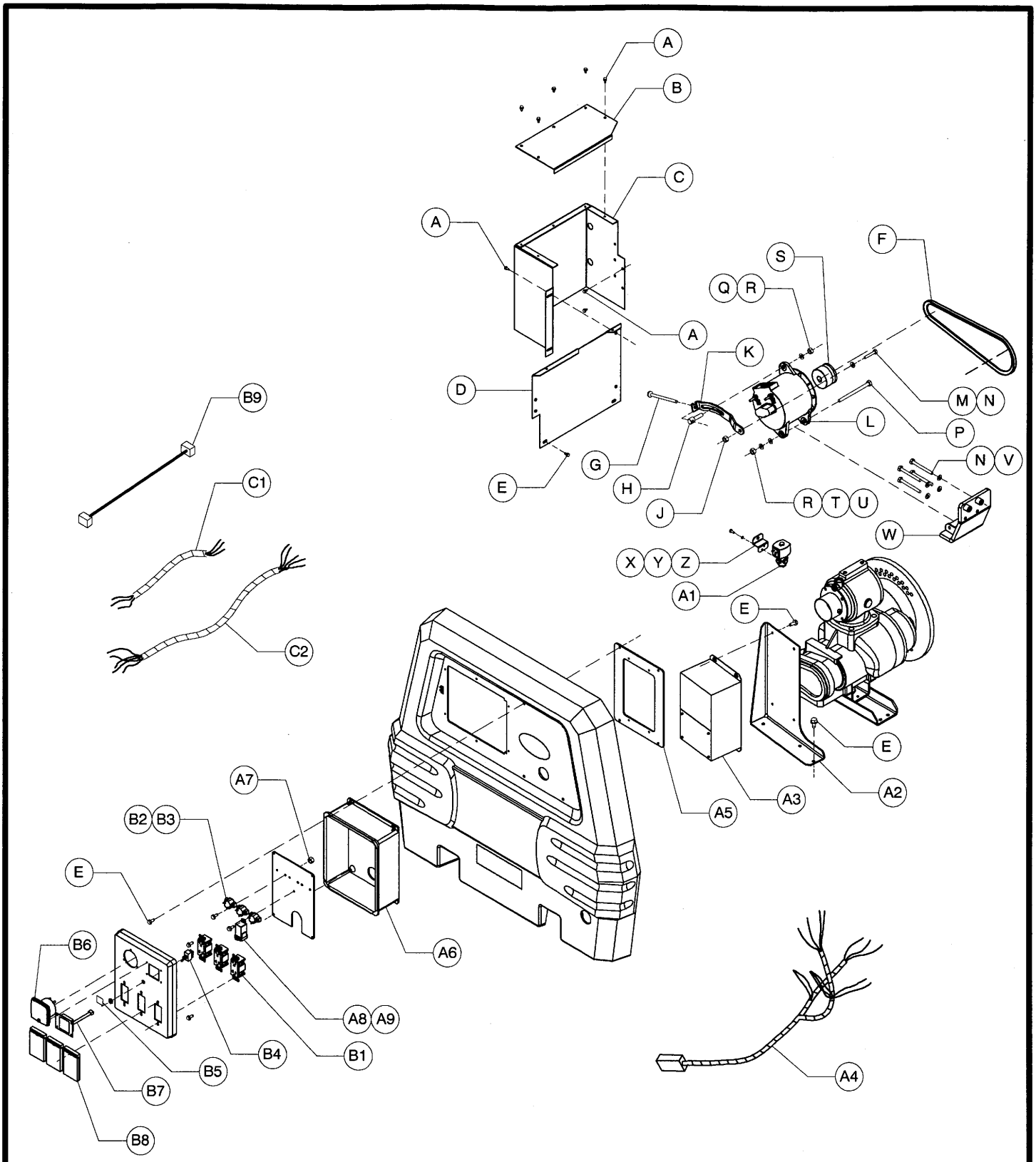
OPTION FOR JOHN DEERE UNITS ONLY

54437173-92 54529599-92 54531520-92	35391705-92 35391713-92 35391721-92 35391739-92 35392984-92	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION	
		DATE/DWN BY: 10/24/97 bd	DESCRIPTION 4.5 KW GENERATOR OPTION
		MODEL NO. PLATINUM	ILLUSTRATION NO. OPTION
			DATE/REV: 8/00 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	36895423	1	PANEL, ACST TOP FRONT LOWER
B	36895431	1	PANEL, ACST TOP FRONT UPPER
C	36895332	1	PANEL, GENERATOR CONTROL
D	36920486	8	RIVET, 3/16 SS
E	36895340	1	COVER, GENERATOR CONTROL BOX
F	36797652	1	SCREW, TAPPING M06-1.0 X 12
G	36884435	1	METER, VOLT
H	36848745	2	RECEPTACLE, DUPLEX 125V 20A
J	36892545	1	SWITCH, 3 POSITION
K	95923124	2	NUT, HEX #10-32
L	36892560	1	BREAKER, CIRCUIT 25AMP
M	95942603	2	SCREW, PAN HEAD #10-32 X 3/4
N	36879708	1	PANEL, SWITCH BEZEL
P	36532984	1	DECAL, GEN-AIR-GEN/AIR
Q	36882207	2	SCREW, PAN HD M06-100 X 12
R	36532992	1	DECAL, START-RUN / WARM-UP
S	35282185	1	PLUG
T	36895449	1	SWITCH, SPDT TOGGLE
U	96700851	2	NUT, HEX M06
V	36883825	1	LAMP, HOLDER RED
W	35333236	1	BULB, INCANDESCENT

OPTION FOR JOHN DEERE UNITS ONLY

54437173-93 54529599-93 54531520-93	35391705-93 35391713-93 35391721-93 35391739-93 35392984-93	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 10/24/97 bd DESCRIPTION: 4.5 KW GENERATOR OPTION MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 8/00 C



OPTION FOR WIR UNITS ONLY

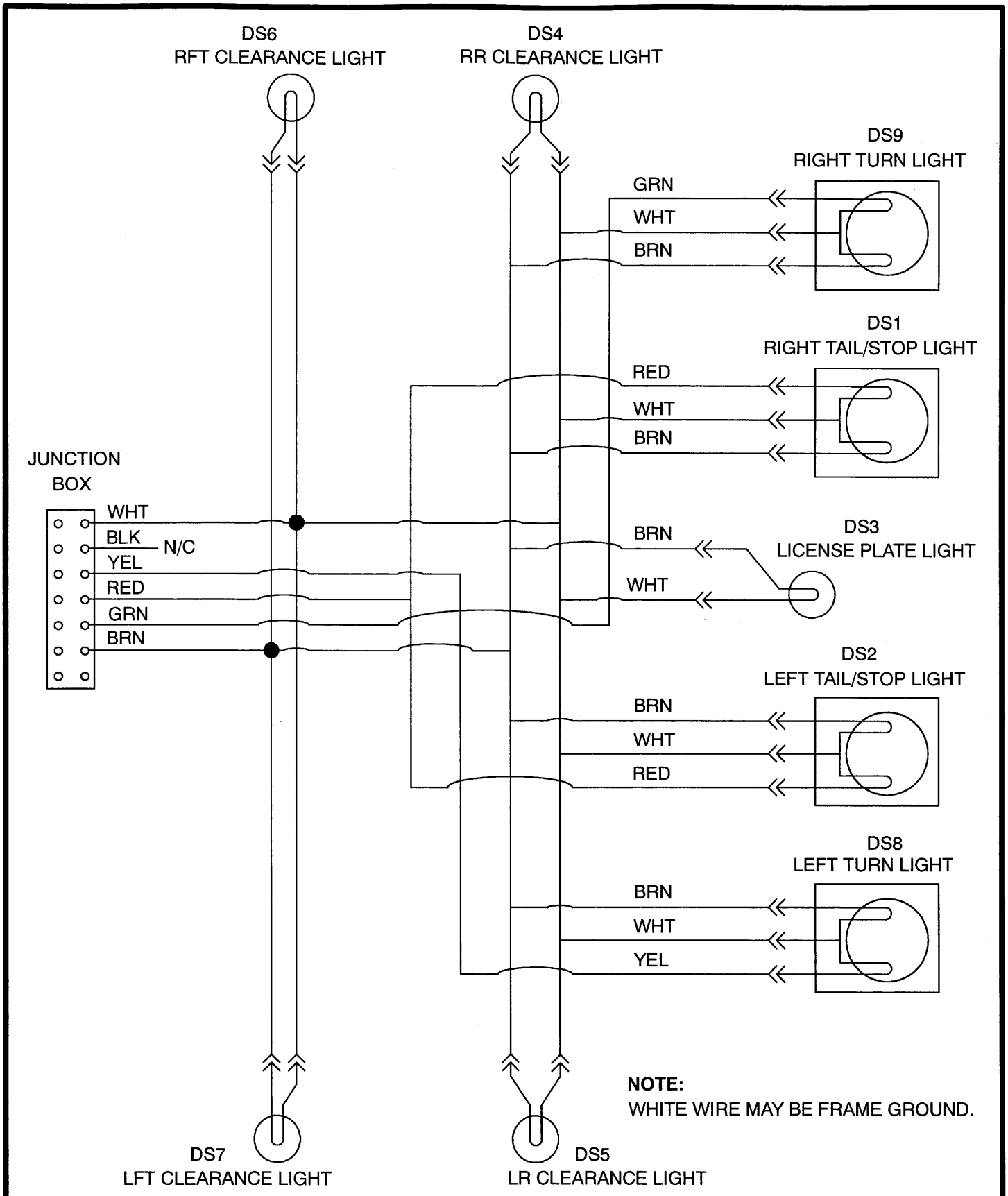
54437173-94 54529599-94 54531520-94	35391705-94 35391713-94 35391721-94 35391739-94 35392984-94	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
1/30/02 bd	6 KW GENERATOR OPTION	
MODEL NO.	ILLUSTRATION NO.	DATE/REV:
PLATINUM	OPTION	1/02 A

ITEM	C.P.N.	QTY	DESCRIPTION
A	36797652	8	SCREW, TAPPING M06-1.0 X 12
B	54596770	1	COVER, GENERATOR
C	54596754	1	GUARD, GENERATOR
D	54596762	1	GUARD, TOOLBOX
E	35279025	12	SCREW, TAPPING M08-1.25 X 20
F	22061923	1	V-BELT, GENERATOR
G	49843253	1	SCREW, HEX M10-1.5 X 135
H	49843238	1	PIECE, SLIDING
J	36789195	1	NUT, HEX FLANGE M10-1.5
K	49843220	1	PLATE, ADJUSTING
L	54629746	1	GENERATOR, 6KW
M	96719265	1	SCREW, HEX M10-1.5 X 50
N	95935037	5	WASHER, FLAT 3/8
P	95955548	1	SCREW, HEX 1/2-13 X 6
Q	96742986	1	NUT, HEX M12-1.25
R	95935003	2	WASHER, FLAT 1/2-13
S	22060610	1	PULLEY, GENERATOR
T	95922902	1	NUT,HEX 1/2-13
U	95081824	1	WASHER, LOCK 1/2-13
V	96742978	4	SCREW, HEX M10-1.25 X 100
W	54596077	1	BRACKET ASM.
X	95287025	2	SCREW, SELF TAPPING #10 X 3/8
Y	95934972	2	WASHER, FLAT #10
Z	22064281	1	BRACKET, SOLENOID
A1	22060685	1	VALVE, 3-WAY 12VDC
A2	54611777	1	BRACKET, GENERATOR
A3	54629696	1	UNIT, POWER CONVERSION
A4	54632355	1	HARNESS, 6KW GENERATOR
A5	22098073	1	PLATE, BACKING
A6	22072300	1	BOX, GENERATOR CONTROL
A7	95923124	6	NUT, HEX #10-32
A8	54368048	1	RELAY
A9	35300771	1	SCREW, TAPPING M06-1.0 X 20
B1	36848745	3	RECEPTACLE, DUPLEX 125V 20A
B2	36884443	3	BREAKER, CIRCUIT 20A
B3	95942603	6	SCREW, PAN HEAD #10-32 X .75
B4	36892545	1	SWITCH, 3 POSITION
B5	36532984	1	DECAL, GEN-AIR-GEN/AIR
B6	36884435	1	METER, VOLT 0-150
B7	22099063	1	PANEL, STATUS
B8	36920932	3	COVER, WEATHERPROOF
B9	22098743	1	HARNESS, STATUS PANEL
C1	22098727	1	HARNESS, ALTERNATOR
C2	22098735	1	HARNESS, AC POWER OUTLETS

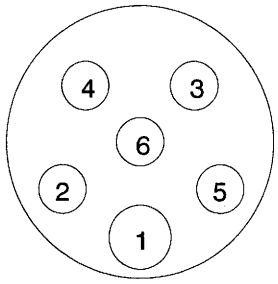
OPTION FOR WIR UNITS ONLY

54437173-95 54529599-95 54531520-95	35391705-95 35391713-95 35391721-95 35391739-95 35392984-95	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 1/30/02 bc DESCRIPTION: 6 KW GENERATOR OPTION MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV: 1/02 A



35393958-88 35393966-88	54437173-96 54529599-96 54531520-96 54529581-88 54525973-88	35391705-96 35391713-96 35391721-96 35391739-96 35392984-96	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 11/18/97 bd DESCRIPTION: 4 LIGHT WIRING DIAGRAM MODEL NO.: PLATINUM MANUAL NO.: OPTION DATE/REV.: 8/00 B

ITEM	C.P.N.	DESCRIPTION
DS1	36788081	LAMP ASSEMBLY
DS2	36788081	LAMP ASSEMBLY
DS3	36895860	LIGHT, LICENSE
DS4	35367044	LAMP, RED CLEARANCE
DS5	35367051	LAMP, YELLOW CLEARANCE
DS6	35367044	LAMP, RED CLEARANCE
DS7	35367051	LAMP, YELLOW CLEARANCE
DS8	36788081	LAMP ASSEMBLY
DS9	36788081	LAMP ASSEMBLY
W3	36893345	HARNESS, 4-LIGHT SYSTEM



PLUG / SOCKET WIRING CONNECTIONS

1 WHITE - GROUND
2 YELLOW - LEFT TURN SIGNAL
3 RED - STOP LIGHT
4 GREEN - RIGHT TURN SIGNAL
5 BROWN - TAIL / CLEARANCE LIGHTS
6 BLUE - ELECTRIC BRAKES

35393958-89 35393966-89	54437173-97 54529599-97 54531520-97 54529581-89 54525973-89	35391705-97 35391713-97 35391721-97 35391739-97 35392984-97	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 11/18/97 bd DESCRIPTION: 4 LIGHT WIRING DIAGRAM MODEL NO. MANUAL NO.: OPTION DATE/REV.: 8/00 B

[1] INSTALLATION OF PMVR 120 REGULATOR:

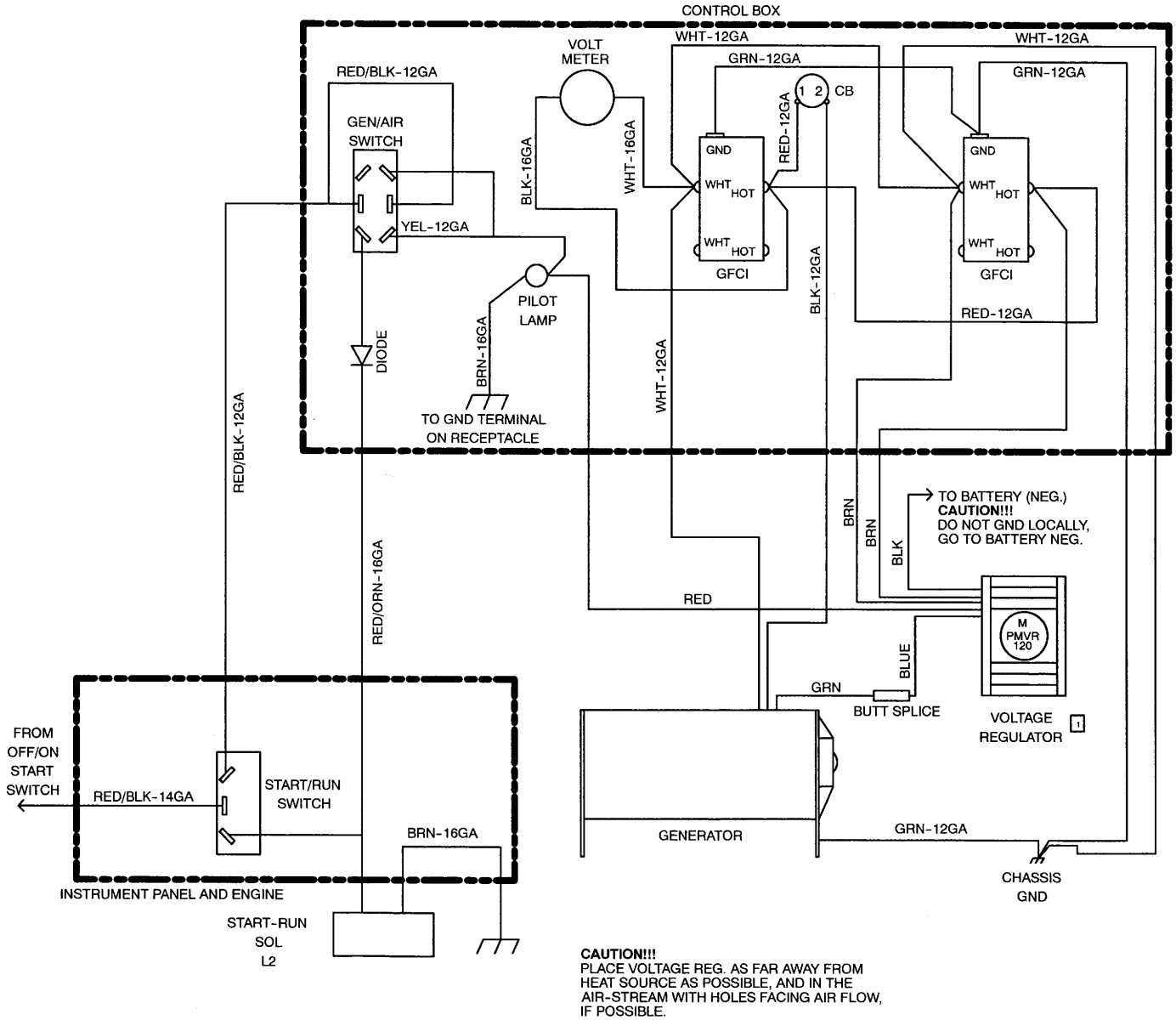
A. CONNECT DOUBLE BRN WIRE LEADS OF VOLTAGE REGULATOR AS FOLLOWS:

ONE LEAD TO SILVER SCREW OF DOUBLE RECEPTACLE IN CONTROL BOX.
OTHER LEAD TO BRASS SCREW.

B. CONNECT RED WIRE TO YELLOW WIRE (HOT +12 V SOURCE), AND TO PILOT LAMP TERMINAL.

C. CONNECT BLUE WIRE TO GREEN WIRE OF ALTERNATOR WITH BUTT SPLICE.

D. CONNECT BLACK WIRE TO BATTERY NEG.

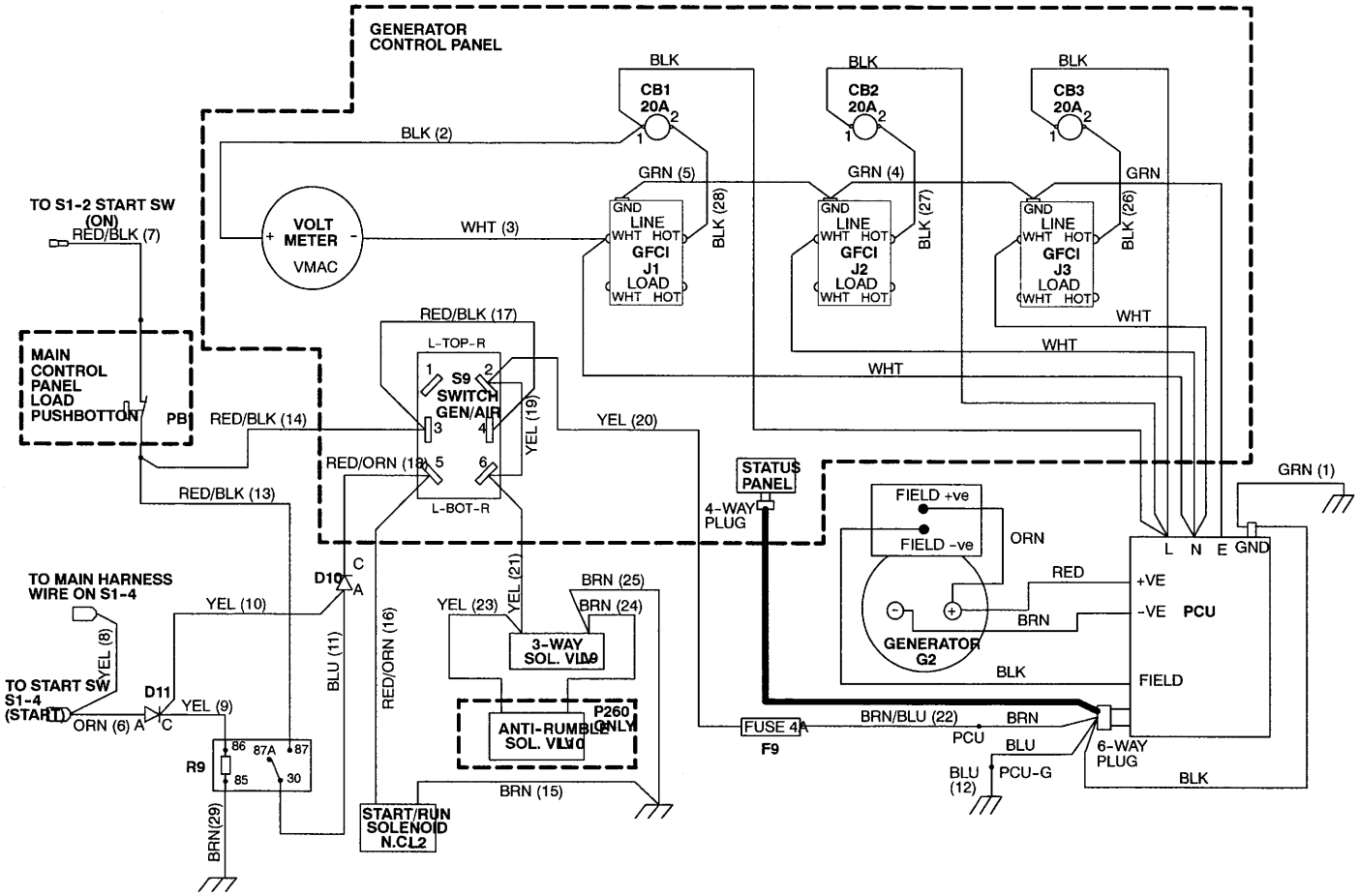


CAUTION!!!
PLACE VOLTAGE REG. AS FAR AWAY FROM HEAT SOURCE AS POSSIBLE, AND IN THE AIR-STREAM WITH HOLES FACING AIR FLOW, IF POSSIBLE.

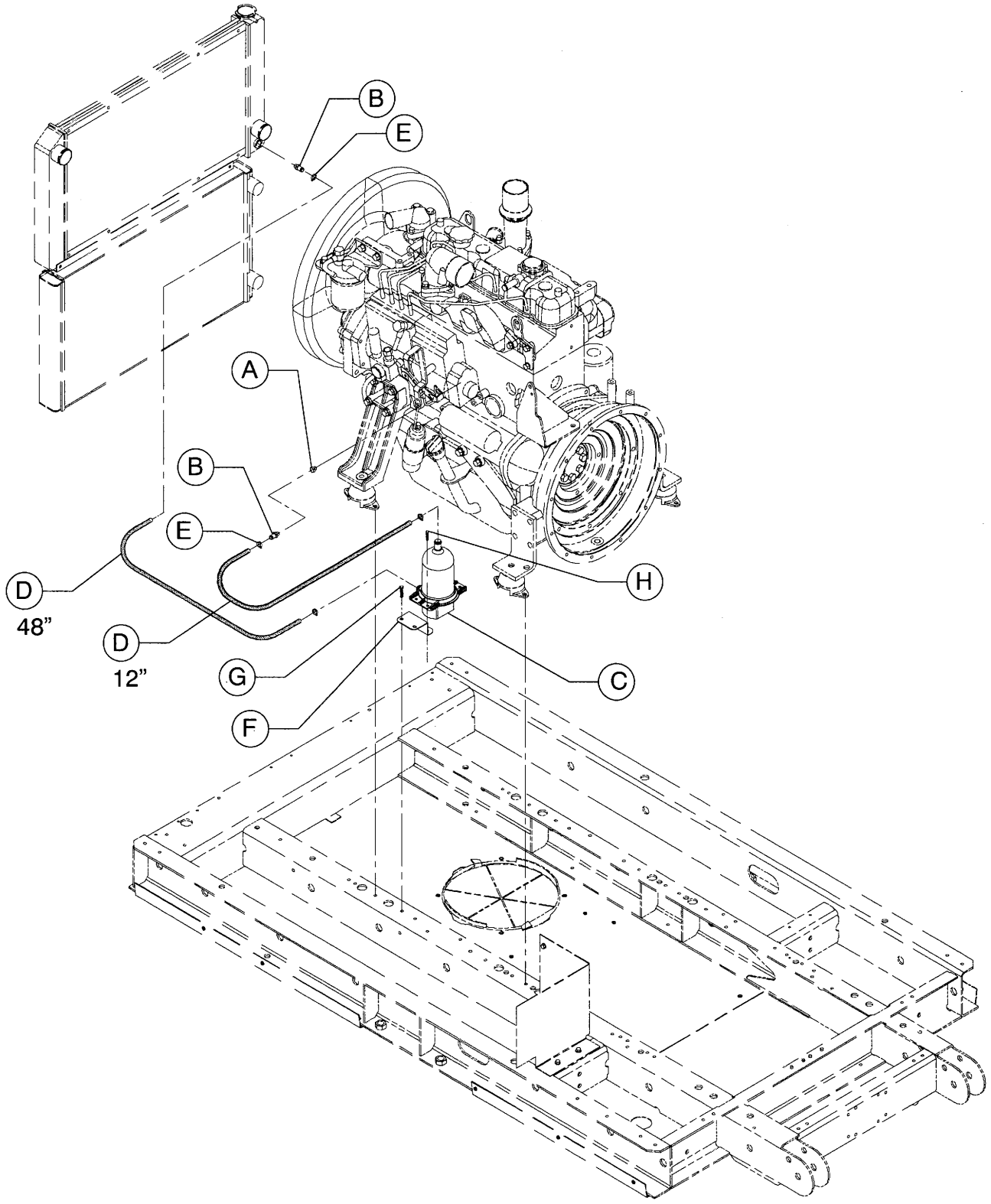
35393958-91	35393065-29	35391705-98
35393966-91	35393628-29	35391713-98
54529581-91	54437173-98	35391721-98
54525973-91	54529599-98	35391739-98
	54531520-98	35392984-98

INGERSOLL-RAND COMPANY
PORTABLE COMPRESSOR DIVISION

DATE/DWN BY:	DESCRIPTION	
8/20/97 bd	4.5 KW GENERATOR WIRING	
MODEL NO.	MANUAL NO.	DATE/REV:
	OPTION	8/00 E



35393958-91	35393065-29	35391705-99	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION
35393966-91	35393628-29	35391713-99	DATE/DWN BY: 1/31/02 bd — DESCRIPTION: 6 KW GENERATOR WIRING
54529581-91	54437173-99	35391721-99	
54525973-91	54529599-99	35391739-99	MODEL NO. — MANUAL NO.: OPTION — DATE/REV.: 1/02 A
	54531520-99	35392984-99	



USE WITH BLOCK HEATER OPTION FOR
P110 - P185 WIR

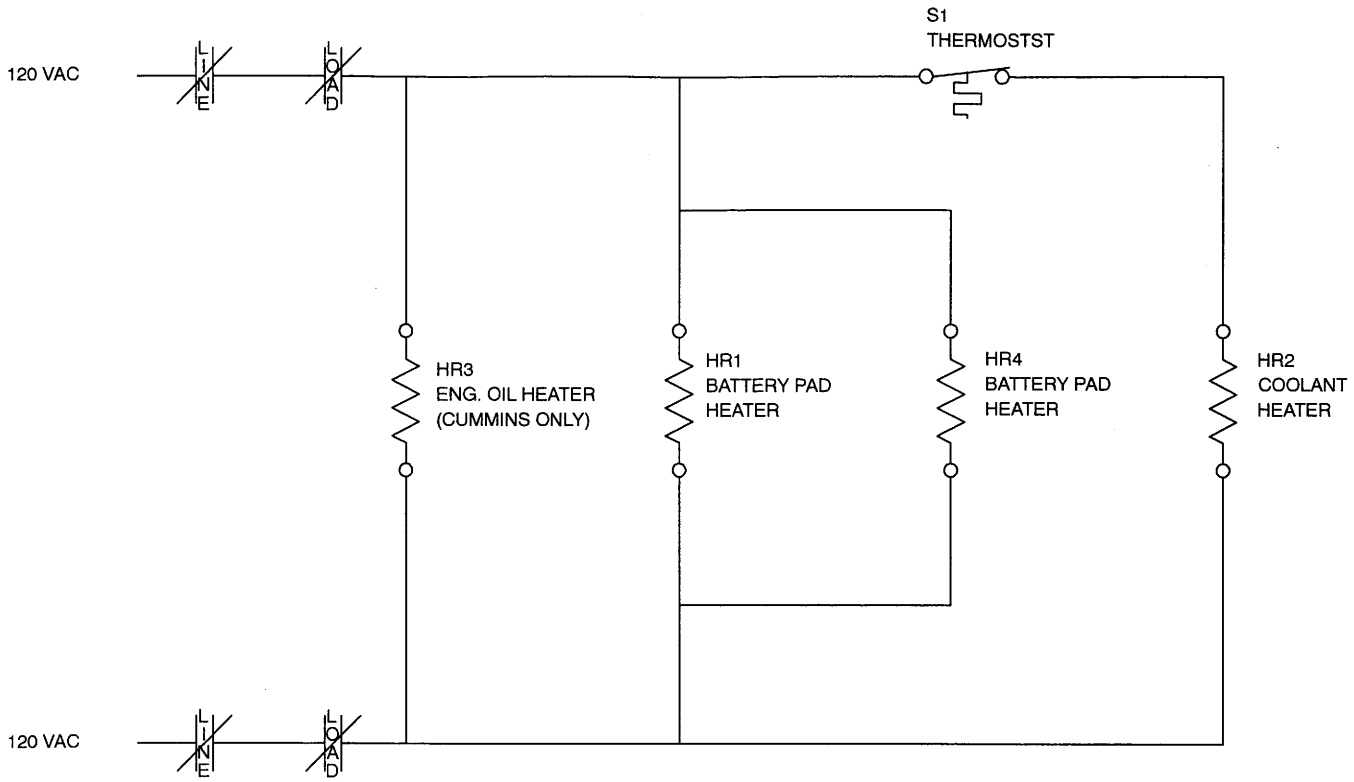
54437173-100 54529599-100 54531520-100	35391705-100 35391713-100 35391721-100 35391739-100 35392984-100	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION DATE/DWN BY: 9/18/00 bd DESCRIPTION: BLOCK HEATER MODEL NO. MANUAL NO.: OPTION DATE/REV.: 1/01 B

ITEM	C.P.N.	QTY	DESCRIPTION
A	54625702	1	ADAPTOR, .25 BSPT
B	54618111	2	ADAPTOR, .25 NPT
C	54541263	1	HEATER, TANK
D	35326578	*	HOSE, HEATER
E	95220844	4	CLAMP, HOSE
F	54593967	1	BRACKET, HEATER
G	35279025	2	SCREW, TAPPING M08-1.25 X 20
H	92368687	2	SCREW, TAPPING M06-1.0 X 12

* SEE DRAWING FOR LENGTHS

USE WITH BLOCK HEATER OPTION FOR
P110 - P185 WIR

54437173-101	35391705-101	INGERSOLL-RAND COMPANY PORTABLE COMPRESSOR DIVISION
54529599-101	35391713-101	DATE/DWN BY: 9/18/00 bd | DESCRIPTION: BLOCK HEATER
54531520-101	35391721-101	
	35391739-101	MODEL NO.: PLUTO | MANUAL NO.: OPTION | DATE/REV: 1/01 B
	35392984-101	



NOTE: REFER TO MODEL FOR LIST OF OPTIONAL HEATERS AVAILABLE

	P100-P160	P100-P160	J DEERE P175-XP185	CUMMINS P250-P375 E25-E50	KUBOTA L5; L6-L8	CUMMINS VHP400-P600
HR1	~	~	36920387	36920387	36920387	36920379
HR2	36843563	35379221	36874659	36898971	36898252	36898971
HR3	~	~	~	~	~	~
HR4	~	~	~	~	~	36920387
S1	~	~	36858751	36858751	~	36858751
W1	~	~	36920361	36920361	36898245	36920361

	CUMMINS HP600-XP825	J DEERE HP600-XP825	CAT XHP600-XHP900	CUMMINS VHP825-XP1050	CAT VHP750-XP1000	CUMMINS HP100-P1600
HR1	36920411	36920411	36920338	36920411	36920411	36920338
HR2	36874642	36874659	36871325	36852614	36871283	36882520
HR3	36874675	~	~	36869691	~	36882512
HR4	36920429	36920429	36920346	36920429	36920429	36920346
S1	36858751	36858751	36858751	36858751	36858751	36858751
W1	36920437	36920403	36871317	36852598	36871275	36920320

35393958-92	35392893-55	35380277-44	35391825-102	35390095-84	**INGERSOLL-RAND COMPANY** PORTABLE COMPRESSOR DIVISION
35393966-92	35392901-55	35393396-44	35391713-102	35391093-84	DATE/DWN BY: 7/6/99 bd | DESCRIPTION: 110 VAC HEATER WIRING
54529581-92	54529599-102	35393065-40	35391721-102	35392877-84	MODEL NO. | MANUAL NO.: OPTION | DATE/REV.: 8/00 B
54525973-92	54531520-102	35393628-40	35391739-102	35392885-84	
		54437173-102	35392984-102	35393172-84	