INGERSOLL-RAND
AIR COMPRESSORS

Ingersoll-Rand Company
800-B Beaty Street
P. O. Box 1803
Davidson, NC 28036

Important information! Read and follow these instructions. Retain for reference.

Owner's Manual
Installation, Operation and Maintenance Instructions for Model 2340

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SAFETY

DEFINITIONS

⚠ **DANGER: WILL cause DEATH, SEVERE INJURY or substantial property damage.**

⚠ **WARNING: CAN cause DEATH, SEVERE INJURY or substantial property damage.**

⚠ **CAUTION: WILL or CAN cause MINOR INJURY or property damage.**

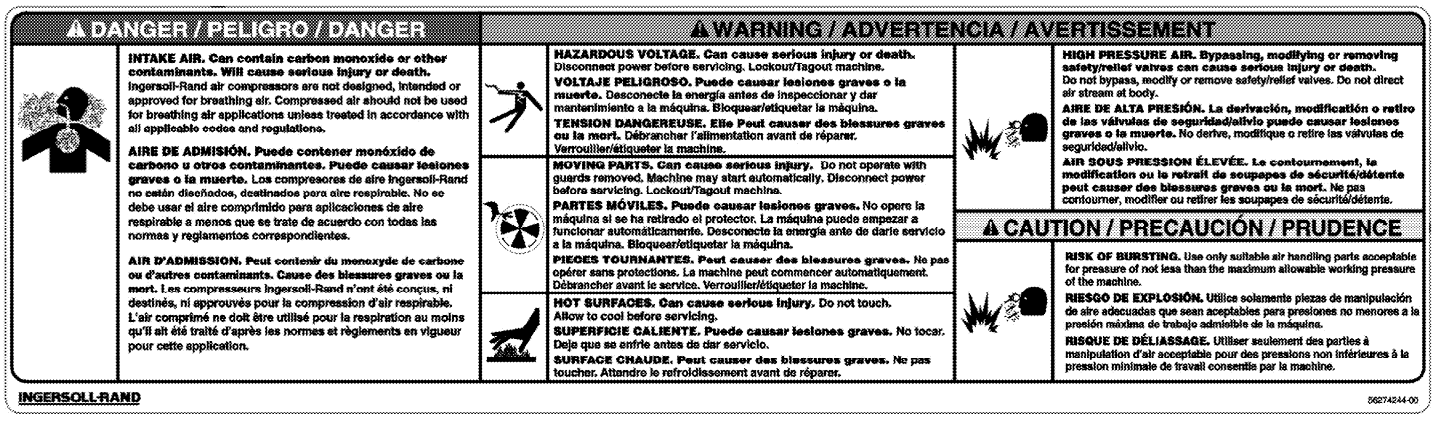
BREATHING AIR PRECAUTION

Ingersoll-Rand air compressors are not designed, intended or approved for breathing air. Compressed air should not be used for breathing air applications unless treated in accordance with all applicable codes and regulations.

GENERAL SAFETY PRECAUTIONS

- Do not directly inhale compressed air.
- Follow precautions on container labels before spraying materials such as paint, insecticide and weed killer.
- Wear a respirator and safety glasses when spraying.
- Do not over-pressurize the receiver tank or similar vessels beyond design limits.
- Do not use a receiver tank or similar vessels that fail to meet the design requirements of the compressor. Contact your dealer for assistance.
- Do not drill into, weld or otherwise alter the receiver tank or similar vessels.
- Do not remove, adjust, bypass, change, modify or make substitutions for safety/relief valves, pressure switches or other pressure control related devices.
- Do not use air tools or attachments without first determining the maximum pressure recommended for that equipment.
- Do not point air nozzles or sprayers toward anyone.
- Do not touch the compressor pump, motor or engine or discharge tubing during or shortly after operation. These parts become hot.
- Wear eye protection when operating or servicing compressor.
- Do not operate where flammable or explosive liquids or vapors such as gasoline, natural gas and solvents are present.
- Do not operate with guards or shields removed, damaged or broken.
- Do not remove, paint over or deface decals. Replace any missing decals.

Safety Decal (Located on Receiver Tank)



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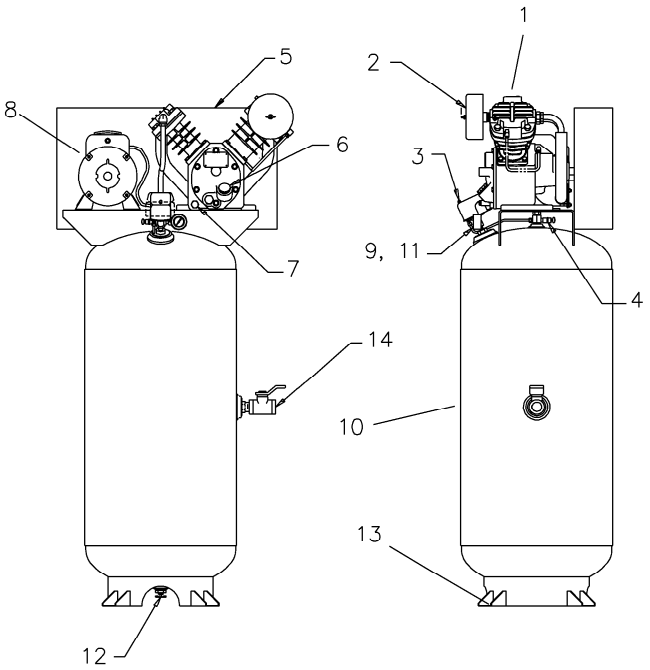
GENERAL INFORMATION



1. Bare compressor pump
2. Air inlet filter assembly
3. Pressure switch
4. Discharge safety/relief valve
5. Beltguard
6. Lubricant fill
7. Lubricant drain
8. Electric motor
9. Pressure gauge
10. Air receiver tank
11. Air receiver tank safety/relief valve
12. Manual drain valve
13. Mounting holes
14. Service valve (air outlet)

NOTE: Component locations and appearance may vary. Designs and specifications are subject to change without notice or obligation.

Your air compressor unit is suitable for operating paint spray guns, air tools, caulking guns, grease guns, sandblasters, etc. Depending on your application, the following accessories may be required:

- An air pressure regulator to adjust the air pressure entering the tool or accessory.
- An air line filter for removal of moisture and oil vapor in compressed air when a paint spray gun is used.
- An in-line lubricator to prolong the life of air tools.
- Separate air transformers which combine the functions of air regulation and/or moisture and dirt removal.

Contact your nearest authorized dealer for more information on air tools and accessories for your application.

RECEIPT & INSPECTION

Ensure adequate lifting equipment is available for unloading and moving your unit to the installation site.

NOTE: Lifting equipment must be properly rated for the weight of the unit.

Lift the unit by the shipping skid only. Use straps to prevent tipping.

⚠ **CAUTION! Do not work on or walk under the compressor while it is suspended.**

Before signing the delivery receipt, inspect for damage and missing parts. If damage or missing parts are apparent, make the appropriate notation on the delivery receipt, then sign the receipt. Immediately contact the carrier for an inspection. All material must be held in the receiving location for the carrier's inspection. Delivery receipts that have been signed without a notation of damage or missing parts are considered to be delivered "clear." Subsequent claims are then considered to be concealed damage claims. Settle damage claims directly with the transportation company.

If you discover damage after receiving the compressor (concealed damage), the carrier must be notified within 15 days of receipt and an inspection must be requested by telephone with confirmation in writing. On concealed damage claims, the burden of establishing that the compressor was damaged in transit reverts back to the claimant.

Read the compressor nameplate to verify it is the model ordered, and read the motor nameplate to verify it is compatible with your electrical conditions. Make sure electrical enclosures and components are appropriate.

INSTALLATION

SELECTING A LOCATION

General. Select a well-lighted indoor area with plenty of space for proper cooling air flow and accessibility. Locate the compressor at least 12 inches (30 cm) from walls, and make sure the main power supply is clearly identified and accessible.

Temperature. Ideal operating temperatures are between 32°F and 100°F (0°C and 37.8°C). If temperatures consistently drop below 32°F (0°C), install the compressor inside a heated building. If this is not possible, you must protect safety/relief valves and drain valves from freezing. If temperatures are consistently below 40°F (4.4°C), consider installing a crankcase heater kit, especially if the compressor has difficulty starting.

⚠ **CAUTION! Never operate in temperatures below -15°F (-26.1°C) or above 125°F (51.0°C).**

Humid Areas. In frequently humid areas, moisture may form in the bare pump and produce sludge in the lubricant, causing running parts to wear out prematurely. Excessive moisture is especially likely to occur if the compressor is located in an unheated area that is subject to large temperature changes.

Two signs of excessive humidity are external condensation on the compressor when it cools down and a "milky" appearance in petroleum lubricant.

You may be able to prevent moisture from forming in the pump by increasing ventilation, operating for longer intervals or installing a crankcase heater kit.

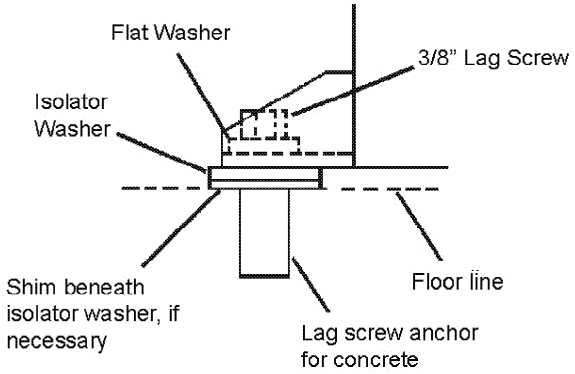
Noise Considerations. Consult local officials for information regarding acceptable noise levels in your area. To reduce excessive noise, use vibration isolator pads or intake silencers, relocate the compressor or construct total enclosures or baffle walls. Contact your dealer for assistance.

MOUNTING

⚠ **WARNING! Remove the unit from the skid before mounting.**

The unit must be permanently mounted. Bolt the unit to a firm, level foundation (such as a concrete floor). Do not bolt uneven feet tightly to the foundation, as this will cause excessive stress on the receiver tank. Use metal shims under the "short" feet if necessary.

Typical Permanent Mounting (Customer-Supplied Hardware)



INSTALLING THE AIR INLET FILTER

⚠ **CAUTION! Do not operate without air inlet filter.**

If the air around the compressor is relatively free of dirt, install the air inlet filter at the inlet connection at the bare pump. If remote air inlet piping or heavy duty filtration is required, contact your dealer for information.

INSTALLING DISCHARGE PIPING

If it is necessary to install air discharge and condensate discharge piping, adhere to the following general guidelines. Contact your dealer for information.

⚠ **WARNING: If an aftercooler, check valve, block valve, or any other restriction is added to the compressor discharge, install a properly-sized ASME approved safety/relief valve between the compressor discharge and the restriction.**

⚠ **CAUTION: If you will be using Ingersoll-Rand Synthetic Lubricant, all downstream piping material and system components must be compatible. Refer to the following material compatibility list. If there are incompatible materials present in your system, or if there are materials not included in the list, contact your dealer.**

Suitable

Viton®, Teflon®, Epoxy (Glass Filled), Oil Resistant Alkyd, Fluorosilicone, Fluorocarbon, Polysulfide, 2-Component Urethane, Nylon, Delrin®, Celcon®, High Nitrile Rubber (Buna N. NBR more than 36% Acrylonitrile), Polyurethane, Polyethylene, Epichlorohydrin, Polyacrylate, Melamine, Polypropylene, Baked Phenolics, Epoxy, Modified Alkyds
(® indicates trademark of DuPont Corporation)

Not Recommended

Neoprene, Natural Rubber, SBR Rubber, Acrylic Paint, Lacquer, Varnish, Polystyrene, PVC, ABS, Polycarbonate, Cellulose Acetate, Low Nitrile Rubber (Buna N. NBR less than 36% Acrylonitrile), EPDM, Ethylene Vinyl Acetate, Latex, EPR, Acrylics, Phenoxy, Polysulfones, Styrene Acrylonitrile (San), Butyl

⚠ **NOTE: All compressed air systems generate condensate which accumulates in any drain point (e.g. tanks, filters, drip legs, aftercoolers, dryers). This condensate contains lubricating oil and/or substances which may be regulated and must be disposed of in accordance with local, state, and federal laws and regulations.**

General Requirements. The piping, fittings, receiver tank, etc. must be certified safe for at least the maximum working pressure of the unit. Use hard-welded or threaded steel or copper pipes and cast iron fittings that are certified safe for the unit's discharge pressure and temperature. DO NOT USE PVC PLASTIC. Use pipe thread sealant on all threads, and make up joints tightly to prevent air leaks.

Condensate Discharge Piping. If installing a condensate discharge line, the piping must be at least one size larger than the connection, as short and direct as possible, secured tightly and routed to a suitable drain point. Condensate must be disposed of in accordance with local, state, and federal laws and regulations.

ELECTRICAL WIRING

⚠ **WARNING! Electrical installation and service should be performed by a qualified electrician who is familiar with all applicable local, state and federal laws and regulations.**

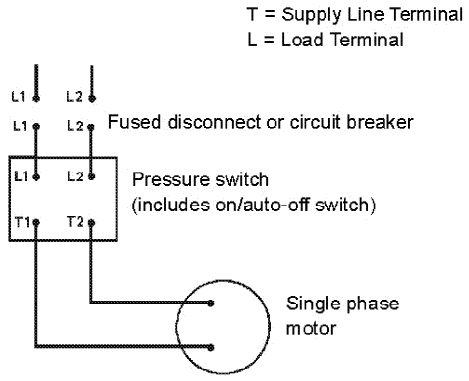
NOTE: This product should be connected to a grounded, metallic, permanent wiring system, or an equipment-grounding terminal or lead on the product.

General. The motor rating, as shown on the motor nameplate, and the power supply must have compatible voltage, phase and hertz characteristics.

Wire Size The electrical wiring between the power supply and electric motor varies according to motor horsepower. Power leads must be adequately sized to protect against excessive voltage drop during start-up. Information for selecting the proper wire size and securing connections should be provided with the motor. If not, refer to the National Electric Code (NEC) or applicable local, state and federal laws and regulations. If other electrical equipment is connected to the same circuit, the total electrical load must be considered in selecting the proper wire size. DO NOT USE UNDERSIZE WIRE.

Fuses Refer to the National Electric Code to determine the proper fuse or circuit breaker rating required. When selecting fuses, remember the momentary starting current of an electric motor is greater than its full load current. Time-delay or "slow-blow" fuses are recommended.

Single-Phase Wiring



COMPRESSOR LUBRICATION

⚠ **CAUTION! Do not operate without lubricant or with inadequate lubricant. Ingersoll-Rand is not responsible for compressor failure caused by inadequate lubrication.**

Synthetic Lubricant. We recommend Ingersoll-Rand synthetic lubricant from start-up. See the WARRANTY section for extended warranty information.

Alternate Lubricants. You may use a petroleum-based lubricant that is premium quality, does not contain detergents, contains only anti-rust, anti-oxidation, and anti-foam agents as additives, has a flashpoint of 440°F (227°C) or higher, and has an auto-ignition point of 650°F (343°C) or higher. Remember using a lubricant other than Ingersoll-Rand synthetic lubricant from start-up limits warranty to one year.

See the petroleum lubricant viscosity table below. The table is intended as a general guide only. Heavy duty operating conditions require heavier viscosities. Refer specific operating conditions to your dealer for recommendations.

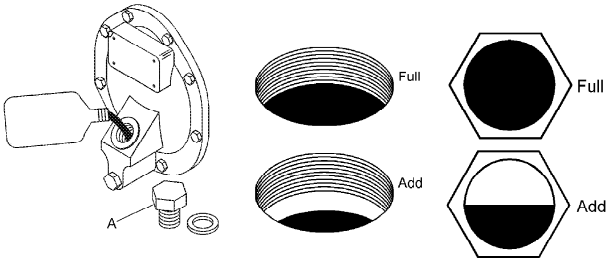
Temperature Around Unit		Viscosity @ 100°F (37.8°C)		Viscosity Grade	
F	°C	SUS	Centistokes	ISO	SAE
40 & below	4.4 & below	150	32	32	10
40 - 80	4.4 - 26.7	500	110	100	30
80 - 125	26.7 - 51.0	750	165	150	40

If you use a petroleum-based compressor lubricant at start-up and decide to convert to Ingersoll-Rand synthetic lubricant later on, the compressor valves must be decarbonized and the crankcase must be flushed before conversion.

Filling Procedures.

1. Unscrew and remove the oil fill plug (A).
2. Slowly fill the crankcase with lubricant until the lubricant reaches the bottom thread of the oil fill opening and the center of the sight glass. Crankcase capacity is 28 oz. (827 ml.)
3. Replace the oil fill plug HAND TIGHT ONLY.

Filling Procedures



INITIAL START-UP

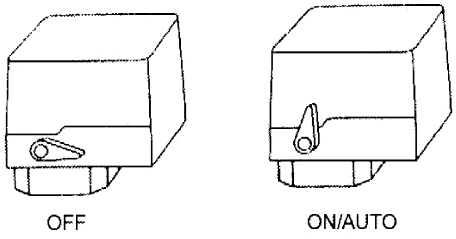
Follow this procedure before putting the unit into service for the first time:

1. Set the pressure switch lever (A) to "OFF".
2. Open the service valve (B) fully to prevent air pressure from building in the tank.
3. Move the pressure switch lever to "ON/AUTO". The unit will start.
4. Run the unit for 30 minutes. Ensure the service valve is fully open and there is no tank pressure build up.

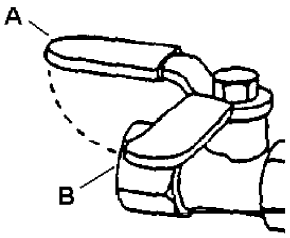
⚠ **CAUTION: Unusual noise or vibration indicates a problem. Do not continue to operate until you identify and correct the source of the problem. IF EMERGENCY CONDITIONS ARE ENCOUNTERED, SHUT OFF THE MAIN POWER IMMEDIATELY.**

5. After 30 minutes, close the service valve fully. The air receiver will fill to cut-out pressure and the motor will stop. The unit is now ready for use.

Pressure Switch Lever



Service Valve



OPERATION

GENERAL

Your air compressor was designed for 100% continuous duty operation with the use of Ingersoll-Rand Synthetic Lubricant and 60% continuous duty operation with the use of petroleum lubricant. In other words, synthetic lubricant allows the compressor to pump continuously without cycling, and petroleum lubricant limits the compressor to a maximum of 36 minutes of pumping time per hour. The compressor should not cycle more than 10 times per hour.

NORMAL START-UP

1. Set the pressure switch lever to "OFF".
2. Close the service valve.
3. Attach hose and accessory.
4. Move the pressure switch lever to "ON/AUTO". The unit will start.
5. Allow tank pressure to build. The motor will stop when tank pressure reaches cut-out pressure.
6. Open the service valve. The unit is now ready for use.
   NOTE: When the receiver tank pressure drops below the factory pre-set minimum, the pressure switch resets and restarts the unit.

When you are finished:

1. Set the pressure switch lever to "OFF".
2. Close the service valve fully.
3. Remove the air tool or accessory.
4. Slowly open the service valve to bleed air pressure down to 20 psig.
5. Slowly open the manual drain valve at the bottom of the tank to drain all condensate (water).
6. Close the drain valve and the service valve for the next use.

MAINTENANCE

⚠ **WARNING! Disconnect, lock and tag main power supply and release air pressure from system before performing maintenance.**

NOTE: All compressed air systems contain maintenance parts (e.g. lubricating oil, filters, separators) which are periodically replaced. These used parts may be, or may contain, substances that are regulated and must be disposed of in accordance with local, state, and federal laws and regulations.

NOTE: Take note of the positions and locations of parts during disassembly to make reassembly easier. The assembly sequences and parts illustrated may differ for your particular unit.

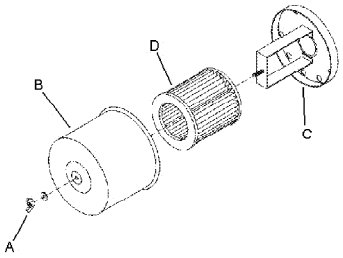
NOTE: Any service operations not included in this section should be performed by an authorized service representative.

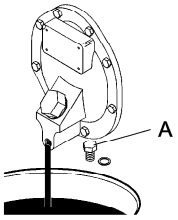
Daily or Before Each Operation	● Check lubricant level. Fill as needed. ● Drain receiver tank condensate. Open manual drain valve and collect and dispose of condensate accordingly. ● Check for unusual noise and vibration. ● Ensure beltguards and covers are securely in place. ● Ensure area around compressor is free from rags, tools, debris, and flammable or explosive materials.
Weekly	● Inspect air filter element(s). Clean if necessary.
Monthly	● Inspect for air leaks. Squirt soapy water around joints during compressor operation and watch for bubbles. ● Check tightness of screws and bolts. Tighten as needed. ● Clean exterior.
3/500 *	● Change petroleum lubricant while crankcase is warm.
12/2000 *	● Change synthetic lubricant while crankcase is warm. ● Replace filter element.

* indicates months/operating hours, whichever occurs first.

FILTER INSPECTION & CLEANING

1. Unscrew and remove the wing nut (A) securing the filter housing (B) to its base (C).
2. Remove the filter housing and withdraw the old filter element (D). Clean the element with a jet of air or vacuum.
3. Replace the filter element and housing, securing it in place with the wing nut previously removed.





OIL CHANGE

1. Remove the oil drain plug (A) and allow the lubricant to drain into a suitable container.
2. Replace the oil drain plug.
3. Follow the filling procedures in OPERATION section.

TROUBLESHOOTING

This section provides a list of the more frequently encountered malfunctions, their causes and corrective actions. Some corrective actions can be performed by the operator or maintenance personnel, and others may require the assistance of a qualified electrician or your dealer.

PROBLEM	CHECK POINT
Abnormal piston, ring or cylinder wear	4, 8, 9, 18, 23, 29
Air delivery drops off	1, 6, 15, 17, 18, 24
Broken intercooler or aftercooler tubes	30
Compressor does not come up to speed	2, 6, 12, 15, 20
Compressor is slow to come up to speed	27, 28
Compressor runs excessively hot	3, 14, 15
Excessive noise during operation	2, 6, 15, 20, 22, 27
Excessive starting and stopping	5, 11, 16, 27, 31
Knocks or rattles	2, 15, 16, 18, 19, 20
Lights flicker or dim when running	12, 13
Moisture in crankcase or "milky" appearance in petroleum lubricant or rusting in cylinders	9, 10
Motor overload trips or draws excessive current	5, 6, 12, 13, 14, 15, 18, 19, 20, 28
Oil in discharge air (oil pumping)	4, 7, 9, 17, 18, 21, 29
Oil leaking from shaft seal	21
Safety/relief valve "pops"	1, 5, 24, 25
High interstage pressure	25
Low interstage pressure	26
Motor will not start	12

CHECK POINT	POSSIBLE CAUSE	POSSIBLE SOLUTION
1	Clogged or dirty inlet and/or discharge line filter.	Clean or replace.
2	Loose beltwheel or motor pulley, excessive end play in motor shaft or loose drive belts.	Check beltwheel, motor pulley, crankshaft, drive belt tension and alignment. Repair or replace as required.
3	Inadequate ventilation around beltwheel.	Relocate compressor for better air flow.
4	Lubricant viscosity too low.	Drain existing lubricant and refill with proper lubricant.
5	Air leaks in air discharge piping.	Check tubing and connections. Tighten joints or replace as required.
6	Lubricant viscosity too high.	Drain existing lubricant and refill with proper lubricant.
7	Lubricant level too high.	Drain excess lubricant.
8	Lubricant level too low.	Add lubricant to crankcase to proper level.
9	Detergent type lubricant being used.	Drain existing lubricant and refill with proper lubricant.
10	Extremely light duty cycles.	Run compressor for longer duty cycles.
	Compressor located in damp or humid location.	Relocate compressor or install crankcase heater kit.
11	Pressure switch differential too narrow.	Install pressure switch with differential adjustment feature if differential adjustment is desired.
12	Improper line voltage.	Check line voltage and upgrade lines as required. Contact electrician.
	Wiring or electric service panel too small.	Intall properly sized wire or service box. Contact electrician.
	Poor contact on motor terminals or starter connections.	Ensure good contact on motor terminals or starter connections.
	Improper starter overload heaters.	Install proper starter overload heaters. Contact electrician.
13	Poor power regulation (unbalanced line).	Contact power company.
14	Drive belts too tight or misaligned.	Adjust belts to proper tension and alignment.
15	Compressor valves leaky, broken, carbonized or loose.	Inspect valves. Clean or replace as required. Install Valve/Gasket Step Saver Kit.
16	Carbon build-up on top of piston(s).	Clean piston(s). Repair or replace as required.
17	Piston rings damaged or worn (broken, rough or scratched). Excessive end gap or side clearance.	Install Ring/Gasket Step Saver Kit.
	Piston rings not seated, are stuck in grooves or end gaps not staggered.	Adjust piston rings.
18	Cylinder(s) or piston(s) scratched, worn or scored.	Repair or replace as required.
19	Connecting rod, piston pin or crankpin bearings worn or scored. Loose bearing spacer on crankshaft.	Inspect all. Repair or replace as required. Install Bearing/Connecting Rod Step Saver Kit.
20	Defective ball bearings on crankshaft or motor shaft.	Inspect bearings and replace if required. Install Bearing/Connecting Rod Step Saver Kit.
21	Crankshaft seal worn or crankshaft scored.	Replace seal. Install shaft sleeve if required. Install Bearing/Connecting Rod Step Saver Kit.
22	Leaking check valve or check valve seat blown out.	Replace check valve.
23	Extremely dusty atmosphere.	Install remote air inlet piping and route to source of cleaner air. Install more effective filtration.
24	Defective safety/relief valve.	Replace.
25	High pressure inlet valve leaking.	Inspect, clean or repair as required.
26	Low pressure discharge valve leaking.	Inspect, clean or repair as required.
27	Automatic start and stop mode is not suitable for air demand.	Constant speed operation required. Contact dealer for recommendations.
28	Ambient temperature too low.	Install crankcase heater kit. Convert to synthetic lubricant. Relocate compressor to warmer environment.
29	Worn cylinder finish.	Deglaze cylinder with 180 grit flex-hone.
30	Beltwheel out of balance, tubes not braced or secured, wrong pulley speed.	Check vibration level, change pulley or beltwheel if required, tighten tube clamps.
31	Excessive condensate in receiver tank.	Drain receiver tank with manual drain valve or install automatic drain valve.

WARRANTY & LIMITATION OF LIABILITY

WARRANTY

Ingersoll-Rand Company warrants that the Equipment manufactured by it and delivered hereunder shall be free of defects in material and workmanship for a period of twelve (12) months from the date of placing the Equipment in operation or eighteen (18) months from the date of shipment, whichever shall occur first. The foregoing warranty period shall apply to all Equipment, except for the following: (A) Compressors that are operated solely on Ingersoll-Rand Synthetic Lubricant will have their bare compressor warranted for the earlier of twenty-four (24) months from the date of initial operation or thirty (30) months from the date of shipment. (B) Replacement parts will be warranted for six (6) months from the date of shipment. Should any failure to conform to this Warranty be reported in writing to the Company within said period, the Company shall, at its option, correct such nonconformity by suitable repair to such Equipment, or furnish a replacement part F.O.B. point of shipment, provided the purchaser has installed, maintained and operated such equipment in accordance with good industry practices and has complied with specific recommendations of the Company. Accessories or equipment furnished by the Company, but manufactured by others, shall carry whatever warranty the manufacturer conveyed to Ingersoll-Rand Company and which can be passed on to the Purchaser. The Company shall not be liable for any repairs, replacements, or adjustments to the Equipment or any costs of labor performed by the Purchaser without the Company's prior written approval.

The Company makes no performance warranty unless specifically stated within its proposal and the effects of corrosion, erosion and normal wear and tear are specifically excluded from the Company's Warranty. In the event performance warranties are expressly included, the Company's obligation shall be to correct in the manner and for the period of time provided above.

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

Correction by the Company of nonconformities, whether patent or latent, in the manner and for the period of time provided above, shall constitute fulfillment of all liabilities of the Company and its Distributors for such nonconformities with respect to or arising out of such Equipment.

LIMITATION OF LIABILITY

THE REMEDIES OF THE PURCHASER SET FORTH HEREIN ARE EXCLUSIVE, AND THE TOTAL LIABILITY OF THE COMPANY, ITS DISTRIBUTORS AND SUPPLIERS WITH RESPECT TO CONTRACT OR THE EQUIPMENT AND SERVICES FURNISHED, IN CONNECTION WITH THE PERFORMANCE OR BREACH THEREOF, OR FROM THE MANUFACTURE, SALE, DELIVERY, INSTALLATION, REPAIR OR TECHNICAL DIRECTION COVERED BY OR FURNISHED UNDER CONTRACT, WHETHER BASED ON CONTRACT, WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHERWISE SHALL NOT EXCEED THE PURCHASE PRICE OF THE UNIT OF EQUIPMENT UPON WHICH SUCH LIABILITY IS BASED.

THE COMPANY, ITS DISTRIBUTORS AND ITS SUPPLIERS SHALL IN NO EVENT BE LIABLE TO THE PURCHASER, ANY SUCCESSORS IN INTEREST OR ANY BENEFICIARY OR ASSIGNEE OF THE CONTRACT FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL OR PUNITIVE DAMAGES ARISING OUT OF TIIIS CONTRACT OR ANY BREACII TIIEREOF, OR ANY DEFECT IN, OR FAILURE OF, OR MALFUNCTION OF THE EQUIPMENT, WHETHER OR NOT BASED UPON LOSS OF USE, LOSS PROFITS OR REVENUE, INTEREST, LOST GOODWILL, WORK STOPPAGE, IMPAIRMENT OF OTHER GOODS, LOSS BY REASON OF SHUTDOWN OR NON-OPERATION, INCREASED EXPENSES OF OPERATION, COST OF PURCHASE OF REPLACEMENT POWER, OR CLAIMS OF PURCHASER OR CUSTOMERS OF PURCHASER FOR SERVICE INTERRUPTION WHETHER OR NOT SUCH LOSS OR DAMAGE IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHERWISE.