



10585081
Edition 2
December 2005

Air Motor

KP5-701

Operation and Maintenance Information



Save These Instructions


IR Ingersoll-Rand®


 **WARNING**


General Product Safety Information

- Important Safety Information enclosed.
- Read and understand this manual before operating this product.
- It is your responsibility to make this safety information available to others that will operate this product.

Safety Information - Explanation of Safety Signal

 **DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.

NOTICE Indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

 **WARNING**

Failure to observe the following warnings could result in injury.

- Always operate, inspect and maintain this motor in accordance with American National Standards Institute Safety Code for Portable Air Tools (ANSI B186.1).
- For safety, top performance and maximum durability of parts, operate this motor at 90 psig (6.2 bar/620 kPa) air pressure at the inlet with 1/2" (13 mm) air supply hose.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this motor or before performing any maintenance on this motor.
- Do not use damaged, frayed or deteriorated air hoses and fittings.
- Wear eye protection when operating or performing maintenance on this tool.
- Wear hearing protection when operating this tool.
- Keep hands, loose clothing and long hair away from rotating end of motor.
- Do not overreach when operating this tool. Keep body stance balanced and firm.
- Anticipate and be alert for sudden changes in motion during start up and operation of any motor.
- Motor shaft may continue to rotate briefly after throttle is released.
- Do not lubricate motor with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not remove any labels. Replace any damaged label.
- Use accessories recommended by **Ingersoll-Rand**.
- This motor is not designed for working in explosive atmospheres.
- This motor is not insulated against electric shock.

Safety Symbol Identification



Wear Respiratory Protection



Wear Eye Protection



Wear Hearing Protection



Read Manuals Before Operating Product

(Dwg. MHP2598)

Routine Lubrication Requirements

Lack of or an excessive amount of lubrication will affect the performance and life of this motor. Use only recommended lubricants at below time intervals:

After each two hours of operation, if an air line lubricator is not used, inject 1/2 to 1 cc of **Ingersoll-Rand** No. 10 Oil into the Air Inlet.

Always use an air line lubricator with this motor. We recommend the following Filter-Lubricator-Regulator Unit:

For USA – No. C28-04-FKG0-28

Air Supply Requirements

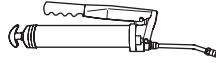
For maximum operating efficiency, the following air supply specifications should be maintained to this air motor:

- AIR PRESSURE – 90 p.s.i.g. (6.2 bar) maximum at inlet.
- LUBRICATED AIR SUPPLY
- HOSE SIZE – 3/8" (10mm) inside diameter air supply hose.

Recommended Lubricants



Ingersoll-Rand No. 10
Ingersoll-Rand No. 50



Ingersoll-Rand No. 68

Inspection Maintenance and Installation

Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this motor, or before performing any maintenance on this motor.

It is important that the motor be serviced and inspected at regular intervals for maintaining safe, trouble-free operation of the motor.

Maintenance and repair shall be performed by authorized, trained, competent personnel. Motors, hose and fittings shall be replaced if unsuitable for safe operation and responsibility should be assigned to be sure that all motors shall be kept in legible condition. Maintenance and repair records should be maintained on all motors. Scheduled maintenance by competent authorized personnel should detect any mistreatment or abuse of the motor and worn parts. Corrective action should be taken before returning the motor to service.

Be sure the motor is receiving adequate lubrication, as failure to lubricate can create hazardous operating conditions resulting from excessive wear.

Do not use damaged, frayed or deteriorated air hoses and fittings.

Be sure all hoses and fittings are the correct size and are tightly secured.

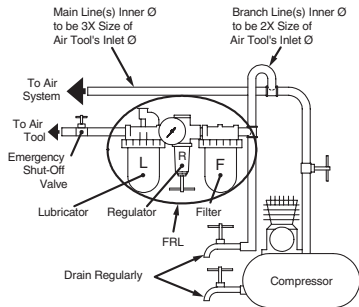
When replacement parts are necessary, consult drawing containing the part for identifications.

Do not mark any nonmetallic surface of this tool with identification codes. Such action could affect motor performance.

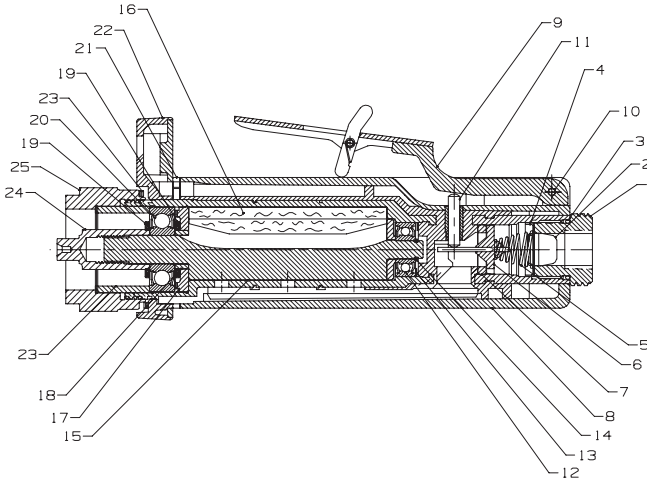
Disassembly should be done on a clean work bench with a clean cloth spread to prevent the loss of small parts. After disassembly is completed, all parts should be thoroughly washed in a clean solvent, blown dry with air and inspected for wear levels, abuse and contamination. Double sealed or shielded bearings should never be placed in solvent unless a good method of re-lubricating the bearing is available. Open bearings may be washed but should not be allowed to spin while being blown dry.

Upon reassembling, lubricate parts where required using recommended lubricants. When assembling O-rings or parts adjacent O-rings, care must be exercised to prevent damage to the rubber sealing surfaces.

Always use clean, dry air. Dust, corrosive fumes and/or excessive moisture can damage the motor of an air tool. An air line filter can greatly increase the life of an air motor. The filter removes rust, scale, moisture and other debris from the air lines. Low air pressure (less than 90 p.s.i.g.) reduces the speed of the air tool. High air pressure (more than 90 p.s.i.g.) raises performance beyond the rated capacity of the tool and could cause injury. Shown below is a typical piping arrangement:



Aurand Motor Assembly Drawing



Aurand Motor Assembly Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
1	Inlet Assembly	LG2-A465	*14	Retaining Ring	LG1-118
2	Inlet Screen	R1602-61	15	Rotor	LG3-53-4
*3	Inlet Seal	R18LF-21	*16	Vane Packet (4 per pack)	DG31-42-4
4	Seat	LG3-592	17	Front End Plate	LG2-11
5	Spring	7L-51	18	Spacer	LG2-65
6	Throttle Valve	LG3-302	*19	Seal Cup Assembly (qty. 2)	61H-A32
*7	Throttle Valve Seat	LG3-303	*20	Bearing	LG2-24
8	Motor Housing	LG3-40	21	Flow Ring	LG2-103-0
9	Throttle Lever	LG2-A400	22	High Profile Flange	LG2-23
10	Throttle Lever Pin	61H-120	23	Clamp Sleeve	LE2-176
11	Plunger	LG2-191	24	Driver	10583930
12	Rear Rotor Bearing	R120-127	25	Nut	10583961
*13	Spacer (qty. 2)	400-25-191			

* Recommended spares. Stock one (pair or set) for every four motors in service.

Parts and Maintenance

NOTICE

The use of other than genuine Ingersoll-Rand replacement parts may result in safety hazards, decreased motor performance, and increased maintenance, and may invalidate all warranties.

Ingersoll-Rand is not responsible for customer modification of motors for applications on which Ingersoll-Rand was not consulted.

Repairs should be made only by authorized trained personnel. Consult your nearest Ingersoll-Rand Authorized Service center.

When the life of the tool has expired, it is recommended that the tool be disassembled, degreased and parts be separated by material so that they can be recycled.

Manuals can be downloaded from www.irtools.com

Refer all communications to the nearest **Ingersoll-Rand** Office or Distributor.

Notes

Notes

www.irttools.com

© 2005 Ingersoll-Rand Company

