# OPERATION AND MAINTENANCE MANUAL for KP5-701 MOTOR ASSEMBLY





# IMPORTANT SAFETY INFORMATION ENCLOSED. READ THIS MANUAL BEFORE OPERATING TOOL.

#### 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.
- Keep hands, loose clothing and long hair away from rotating end of motor.

- 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.

#### **NOTICE**

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

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

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

It is the responsibility of the employer to place the information in this manual into the hands of the operator.



## **△ WARNING**



Wear eye protection when operating or performing maintenance on this tool.

## **MARNING**



Wear hearing protection when operating this tool.

## **WARNING**



Turn off air supply and disconnect air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.

### **MARNING**



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

#### **MARNING**



Do not overreach when operating this tool. Keep body stance balanced and firm.

### **MARNING**



Operate at 90 p.s.i.g. (6.2 bar/620 kPa) maximum air pressure.

WARNING = Hazards or unsafe practices which could result in severe personal injury, death or substantial property damage.

CAUTION = Hazards or unsafe practices which could result in minor personal injury or product or property damage.

NOTICE = Important installation, operation or maintenance information.

#### **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

After disassembly is complete, all parts, except sealed or shielded bearings, should be washed with solvent. To relubricate parts, or for routine lubrication, use the following recommended lubricants:





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

Ingersoll-Rand No. 68

INSPECTION, MAINTENANCE AND INSTALLA TION

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 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.

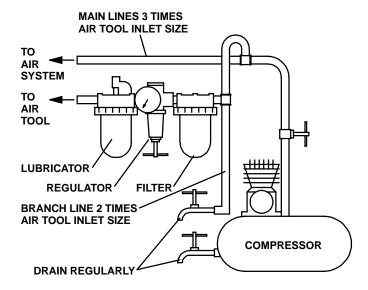
When replacement parts are necessary, consult drawing containing the part for identifications.

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

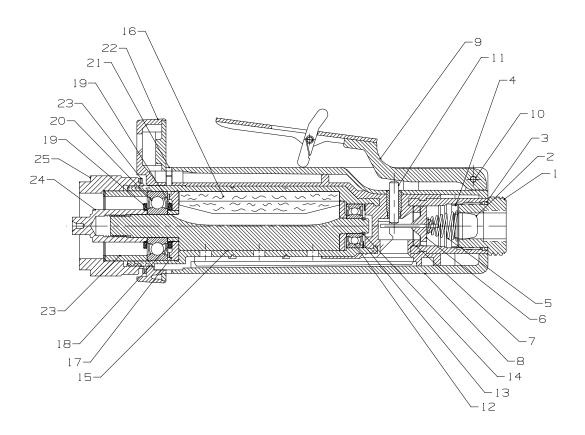
Disassembly should be done on a clean work bench with a clean cloth spread to prevent the loss of small parts. After disassembly is completed, all parts should be thoroughly washed in a clean solvent, blown dry with air and inspected for wear levels, abuse and contamination. Double sealed or shielded 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 PARTS DRAWING



**TPM1064** 

ITEM NO.	DESCRIPTION OF PART	QTY TOTAL	PART NUMBER	ITEM NO.	DESCRIPTION OF PART	QTY TOTAL	PART NUMBER
1	Inlet Assembly	1	LG2-A465	14	Retaining Ring	1	LG1-118
2	Inlet Screen	1	R1602-61	15	Rotor	1	LG3-53-4
3	Inlet Seal	1	R18LF-21	16	Vane Packet (4 per pack)	1 pack	DG31-42-4
4	Seat	1	LG3-592	17	Front End Plate	1	LG2-11
5	Spring	1	7L-51	18	Spacer	1	LG2-65
6	Throttle Valve	1	LG3-302	19	Seal Cup Assy.	2	61H-A32
7	Throttle Valve Seat	1	LG3-303	20	Bearing	1	LG2-24
8	Motor Housing	1	LG3-40	21	Flow Ring	1	LG3-103-3
9	Throttle Lever	1	LG2-A400	22	High Profile Flange	1	LG2-23
10	Throttle Lever Pin	1	61H-120	23	Clamp Sleeve	1	LE2-176
11	Plunger	1	LG2-191	24	Driver	1	10583930
12	Rear Rotor Bearing	1	R120–127	25	Nut	1	10583961
13	Spacer	2	400-25-191				
Recommended spares. Stock one (pair or set) for every four motors in service.							