



Form P7177
CCN 03540861
Edition 3
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Thread Beveling Machine Motor

Model 3840M/VSM-6171

Installation and Maintenance Information



Save These Instructions

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 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.

Placing Motor in Service

- Always install, operate, inspect and maintain this product in accordance with all applicable standards and regulations (local, state, country, federal, etc.).
- Always use clean, dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet. Higher pressure may result in hazardous situations including excessive speed, rupture, or incorrect output torque or force.
- Be sure all hoses and fittings are the correct size and are tightly secured. See Dwg. TPD905-2 for a typical piping arrangement.
- Ensure an accessible emergency shut off valve has been installed in the air supply line, and make others aware of its location.
- Do not use damaged, frayed or deteriorated air hoses and fittings.
- Keep clear of whipping air hoses. Shut off the compressed air before approaching a whipping 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 lubricate with flammable or volatile liquids such as kerosene, diesel or jet fuel. Use only recommended lubricants.
- Keep work area clean, uncluttered, ventilated and illuminated.
- Do not remove any labels. Replace any damaged label.

Using the Motor

- Always wear eye protection when operating or performing maintenance on this motor.
- Always wear hearing protection when operating this motor.
- Always use Personal Protective Equipment appropriate to the product used and material worked. This may include dust mask or other breathing apparatus, safety glasses, ear plugs, gloves, apron, safety shoes, hard hat and other equipment.
- Keep others a safe distance from your work area, or ensure they use appropriate Personal Protective Equipment.
- This motor is not insulated against electric shock.
- This motor is not designed for working in explosive atmospheres.
- Keep hands, loose clothing, long hair and jewelry away from motor.
- Motor and/or accessories may briefly continue their motion after throttle is released.
- Ensure work pieces are secure. Use clamps or vises to hold work piece whenever possible.
- Do not use motor when tired, or under the influence of medication, drugs, or alcohol.
- Never use a damaged or malfunctioning motor or accessory.
- Do not modify the motor, safety devices, or accessories.
- Do not use this motor for purposes other than those recommended.
- Use accessories recommended by **Ingersoll-Rand**.

Safety Symbol Identification

			
Wear Respiratory Protection	Wear Eye Protection	Wear Hearing Protection	Read Manuals Before Operating Product

(Dwg. MHP2598)

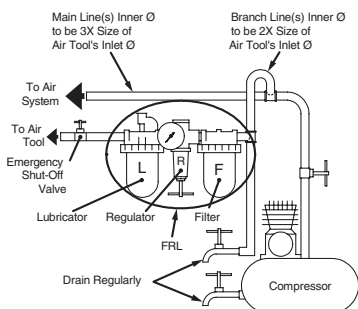
Lubrication



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

Installation

Always use clean dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool. An air line filter can greatly increase the life of an air tool. The filter removes the dust and moisture. Be sure all hoses and fittings are the correct size and tightly secured. See Drawing TPD905-2 for a typical piping arrangement.



(Dwg. TPD905-2)

Maintenance Instructions

When removing a Spindle Planet Gear Shaft (50) from the Spindle (48), always press it out so that it is ejected at the short hub end of these parts. Likewise, when installing a Shaft, start it into the narrow flange at the short hub end. This is important, as the shaft holes are slightly tapered, so the Shaft fits much tighter in the front, or wide, flange of the Spindle.

Spindle Planet Gear Bearings (52) must be installed with care to avoid distorting or fracturing the thin shell surrounding the needles. Use a bearing inserting tool, as shown in Drawing TPD786, when installing a needle bearing. Press only on the stamped end of the bearing. Press one bearing from each end of the hole when two bearings are used in one gear. Never use one bearing as an anchor for installing the second bearing.

For USA - No. C22-04-G00

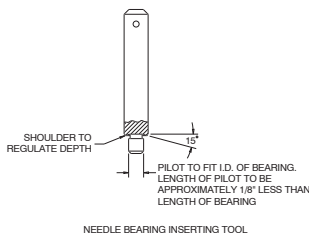
For International - No. C26-C4-A29

After each forty hours of operation, or as experience indicates, inject 1.5 cc of **Ingersoll-Rand No. 28** Grease into the Grease Fitting (44). Do not grease excessively. Too much grease in the Gear Case will cause heating. Grease leakage from the spindle end is also an indication that an excessive amount of grease has accumulated within the Gear Case.

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

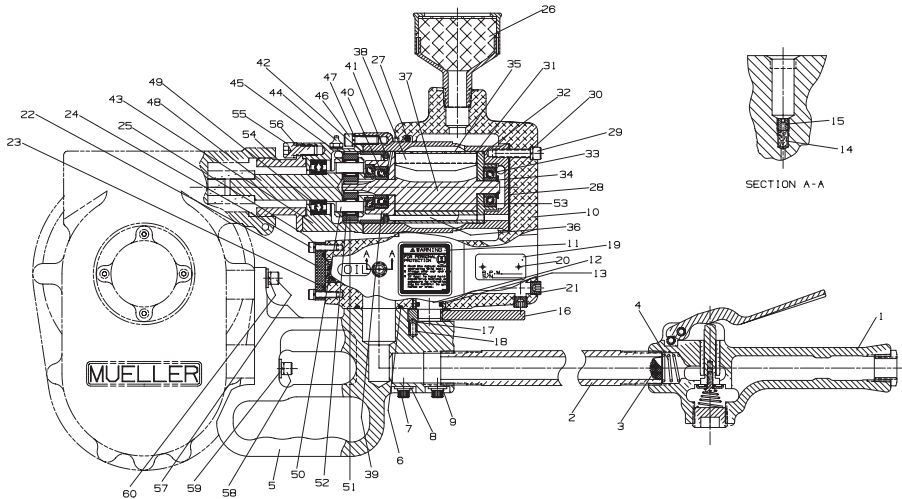
Tools, hose and fittings shall be replaced if unsuitable for safe operation and responsibility should be assigned to ensure that all tools requiring guards or other safety devices are kept in operating condition. Maintenance and repair records should be maintained on all tools. Frequency of repair and the nature of the repairs can reveal improper application or use. 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 for use.

When replacement parts are necessary, consult Maintenance Section for part identification.



Periodically check the Regulator Mounting Screws (29), Gear Case Mounting Screws (46) and Adapter Mounting Screws (55) for tightness.

3840M/VSM-6171 Thread Beveling Assembly Drawing



3840M/VSM-6171 Thread Beveling Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
1	Throttle Handle	VSM-6228	31	Motor Housing	R3800-40
2	Throttle Connector	VSM-780	32	Rear End Plate	R3800-12
3	Air Strainer	434-61	33	Rear Rotor Bearing	R1-24
4	Strainer Retaining Spring	241SR-5	34	Rear Rotor Bearing Retainer	404-118
5	Connector Handle	VSM-1430	35	Cylinder	R3840-3
6	Handle Seal	HRA20A-117	36	Cylinder Dowel	R38KT-198
7	Connector Handle Mounting Screw (4)	VSM-6246	37	Rotor	R3800M-53
8	Mounting Screw Flat Washer (4)	16922	38	Vane Packet (set of 5 Vanes)	R38-42-5
9	Mounting Screw Lock Washer (4)	T05-58	39	Front End Plate	R3800-11
10	Regulator Housing	VSM-6178	40	Front Rotor Bearing	R1-24A
11	Warning Label	WARNING-22-99	41	Motor Retaining Ring	34U-216
12	Directional Valve	VSM-6218	42	Motor Retainer	R3800-118
13	Directional Valve Seal	5L-167	43	Gear Case Assembly	ET3802M-A37
14	Oiler Felt	R1-75	44	Grease Fitting	R1-188
15	Oiler Adjustment Screw	R1-71A	45	Grease Fitting Washer	R3-92A
16	Directional Lever	VSM-6244	46	Gear Case Mounting Screw (3)	R0H-354
17	Lever Detent	4U-663B	47	Mounting Screw Lock Washer (3)	8U-58
18	Lever Detent Spring	4U-664	48	Spindle	VSM-6181
19	Nameplate	4RA-301	49	Spindle Front Bearing	4UA9-593
20	Nameplate Screw (2)	BN403-302	50	Spindle Planet Gear Shaft (2)	8U-191
21	Regulator Housing Plug (7)	R2-227	51	Spindle Planet Gear Assembly (2)	4E-10A
22	Oil Chamber Cover	VSM-6176	52	Planet Gear Bearing (1 for each Gear)	8U-654
23	Oil Chamber Cover Seal	VSM-6182	53	Spindle Rear Bearing	4E-510
24	Chamber Cover Mounting Screw (6)	4U-58	54	Flange Adapter	VSM-6180
25	Mounting Screw Lock Washer (6)	AL-638	55	Adapter Mounting Screw (3)	34U-150
26	Muffler	M0V010AA-674	56	Mounting Screw Lock Washer (3)	34U-58
27	Exhaust Seal	R3800-210	57	Gear Box Long Mounting Screw (2)	5080-638
28	Regulator Gasket	VSM-6183	58	Gear Box Short Mounting Screw (2)	R2-548
29	Regulator Mounting Screw (4)	VSM-6248	59	Mounting Screw Flat Washer (4)	16922
30	Mounting Screw Lock Washer (4)	8U-58	60	Mounting Screw Lock Washer (4)	8U-58

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.

www.irttools.com

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