

MODEL 3840M/VSM-6171 THREAD BEVELING MACHINE MOTOR

WARNING

IMPORTANT SAFETY INFORMATION ENCLOSED - SAVE THESE INSTRUCTIONS

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**

**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.

Using the Motor (Continued)

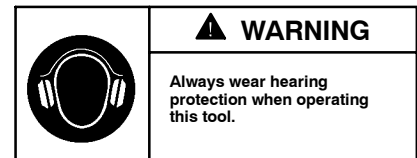
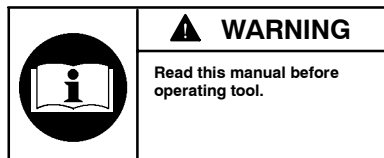
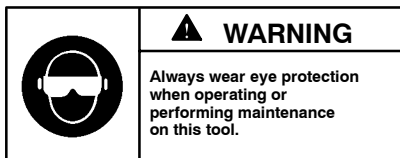
- Keep hands, loose clothing, long hair and jewelry away from motor.
- Motor and/or accessories may briefly continue their motion after throttle is released.
- Ensure work pieces are secure. Use clamps or vises to hold work piece whenever possible.
- Do not use motor when tired, or under the influence 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.

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.

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

WARNING SYMBOL IDENTIFICATION



PLACING MOTOR IN SERVICE

Lubrication



Ingersoll-Rand No. 50



Ingersoll-Rand No. 28

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

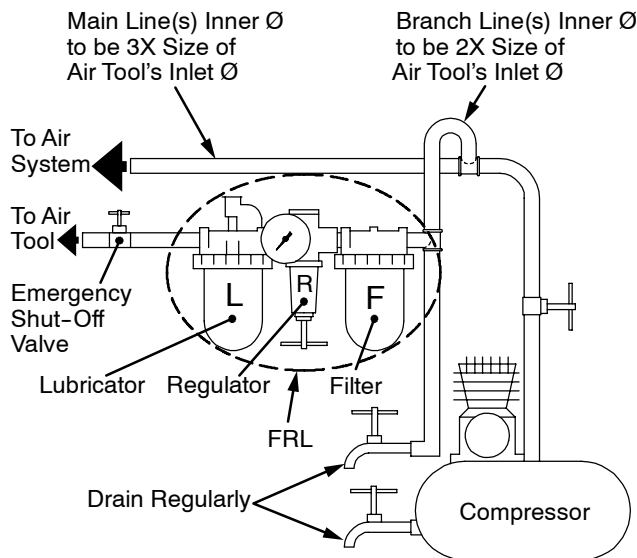
For USA - No. C22-04-G00

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 (55). 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.

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)

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.

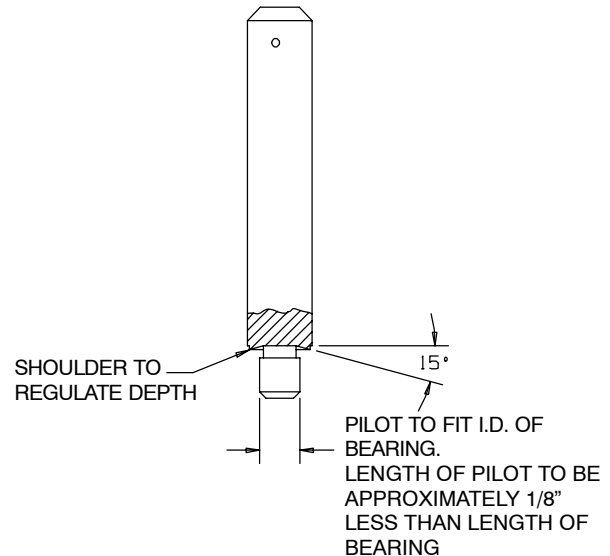
When replacement parts are necessary, consult Maintenance Section for part identification.

Maintenance Instructions

When removing a Spindle Planet Gear Shaft (61) from the Spindle (59), 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.

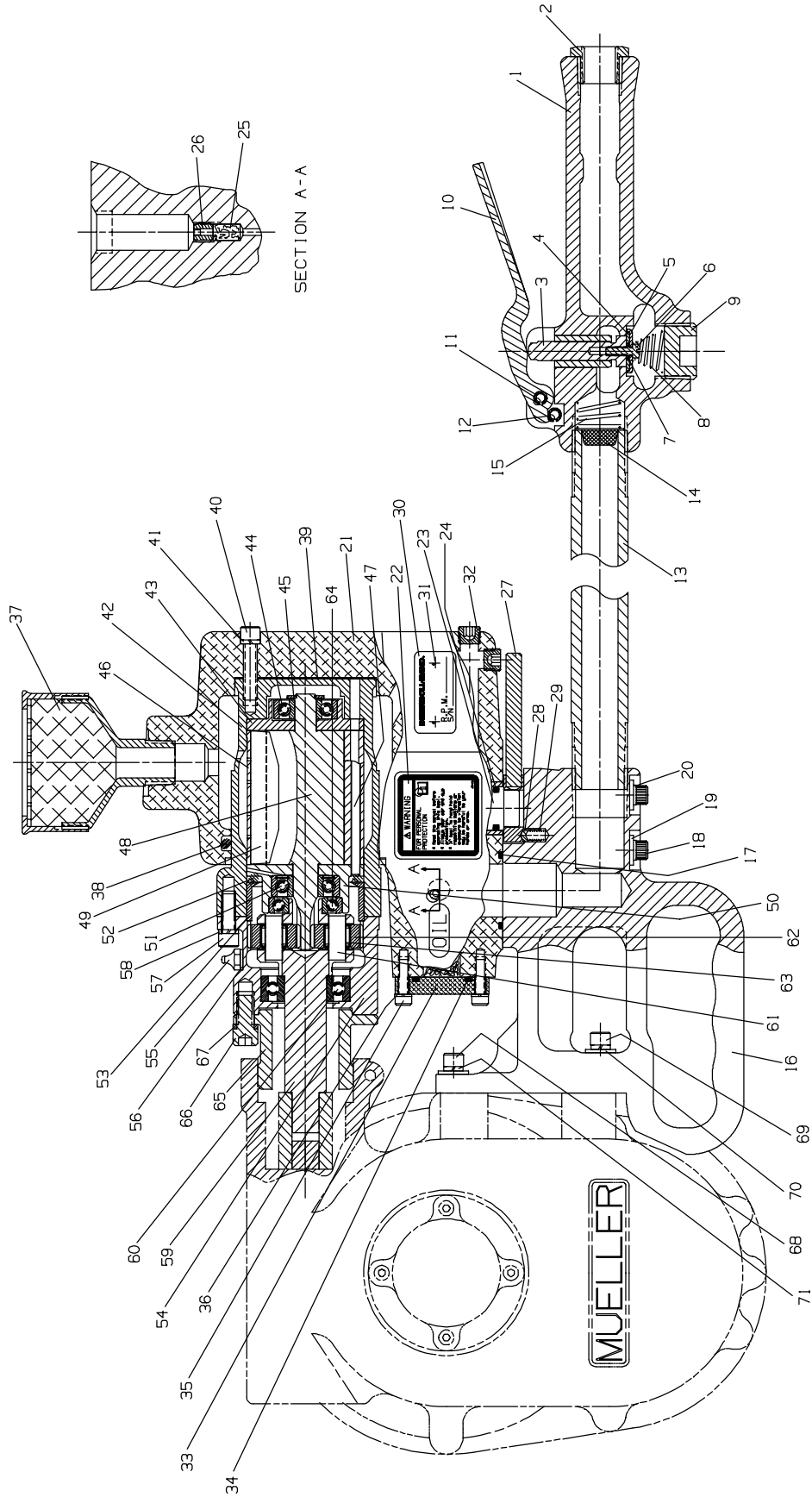
Spindle Planet Gear Bearings (63) must be installed with care to avoid distorting or fracturing the thin shell surrounding the needles. Use a bearing inserting tool, as shown in Drawing TPD786, when installing a needle bearing. **Press only on the stamped end of the bearing.** Press one bearing from 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.

Needle Bearing Inserting Tool



(Dwg. TPD786)

Periodically check the Regulator Mounting Screws (40), Gear Case Mounting Screws (57) and Adapter Mounting Screws (66) for tightness.



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(Dwg. TPA1512)

Maintenance Section (Continued)

Item	Part Description	Part Number	Item	Part Description	Part Number
	Throttle Handle Assembly	VSM-6228	36	Mounting Screw Lock Washer (6) . .	AL-638
1	Throttle Handle	150SR-160	37	Muffler	M0V010AA-674
2	Inlet Bushing	13SR-9	38	Exhaust Seal	R3800-210
3	Throttle Valve	150SR-302	39	Regulator Gasket	VSM-6183
4	Throttle Valve Face	MT4-159	40	Regulator Mounting Screw (4)	VSM-6248
5	Throttle Valve Face Cap	R4-157	41	Mounting Screw Lock Washer (4) . .	8U-58
6	Retaining Screw	4U-359	42	Motor Housing	R3800-40
7	Retaining Screw Lock Washer	H54U-352	43	Rear End Plate	R3800-12
8	Throttle Valve Spring	150SR-262	44	Rear Rotor Bearing	R1-24
9	Throttle Valve Cap	DLC-165	45	Rear Rotor Bearing Retainer	404-118
10	Throttle Lever	33SR-163	46	Cylinder	R3840-3
11	Throttle Lever Pin	5040T-962	47	Cylinder Dowel	R38KT-198
12	Throttle Lever Stop Pin	5040T-962	48	Rotor	R3800M-53
13	Throttle Connector	VSM-780	49	Vane Packet (set of 5 Vanes)	R38-42-5
14	Air Strainer	434-61	50	Front End Plate	R3800-11
15	Strainer Retaining Spring	241SR-5	51	Front Rotor Bearing	R1-24A
16	Connector Handle	VSM-1430	52	Motor Retaining Ring	34U-216
17	Handle Seal	HRA20A-117	53	Motor Retainer	R3800-118
18	Connector Handle Mounting Screw (4)	VSM-6246	54	Gear Case Assembly	ET3802M-A37
19	Mounting Screw Flat Washer (4)	16922	55	Grease Fitting	R1-188
20	Mounting Screw Lock Washer (4)	T05-58	56	Grease Fitting Washer	R3-92A
21	Regulator Housing	VSM-6178	57	Gear Case Mounting Screw (3)	R0H-354
22	Warning Label	WARNING-22-99	58	Mounting Screw Lock Washer (3) . .	8U-58
23	Directional Valve	VSM-6218	59	Spindle	VSM-6181
24	Directional Valve Seal	5L-167	60	Spindle Front Bearing	4UA9-593
25	Oiler Felt	R1-75	61	Spindle Planet Gear Shaft (2)	8U-191
26	Oiler Adjustment Screw	R1-71A	62	Spindle Planet Gear Assembly (2) . .	4E-10A
27	Directional Lever	VSM-6244	63	Planet Gear Bearing (1 for each Gear)	8U-654
28	Lever Detent	4U-663B	64	Spindle Rear Bearing	4E-510
29	Lever Detent Spring	4U-664	65	Flange Adapter	VSM-6180
30	Nameplate	4RA-301	66	Adapter Mounting Screw (3)	34U-150
31	Nameplate Screw (2)	BN403-302	67	Mounting Screw Lock Washer (3) . .	34U-58
32	Regulator Housing Plug (7)	R2-227	68	Gear Box Long Mounting Screw (2)	5080-638
33	Oil Chamber Cover	VSM-6176	69	Gear Box Short Mounting Screw (2)	R2-548
34	Oil Chamber Cover Seal	VSM-6182	70	Mounting Screw Flat Washer (4) . . .	16922
35	Chamber Cover Mounting Screw (6)	4U-58	71	Mounting Screw Lock Washer (4) . .	8U-58

NOTICE

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.

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

SERVICE NOTES

SERVICE NOTES

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