



**Part No. 49999-283**

Edition 2

February 2009

CCN: 45633781

## **2200 Series, Pistol Grip Drill**

**Model 7671-A (1100 RPM)**

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# **Operator's Manual**



**Save These Instructions**

 **Ingersoll Rand**

## Air Supply Requirements

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

- Air pressure - 90 psig (6 bar)
- Air filtration - 50 micron
- Lubricated air supply
- Hose size - 5/16 (8 mm) i.d.

A 128221-800 air line Filter/Regulator/Lubricator (F.R.L) is recommended to maintain the above air supply specifications.

## Routine Lubrication Requirements

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

**Every 8 hours of tool operation,** Fill lubricator reservoir of recommended F.R.L. with Spindle Oil (29665). If an In-line or Air-line lubricator is not used, apply several drops of spindle oil (29665) in air inlet.

**Every 40 hours of tool operation,** Flush tool with a solution of three (3) parts cleaning solvent and one (1) part light oil. After flushing, apply a small amount of spindle oil in air inlet and run free for one minute to insure proper lubrication. Fill built-in oiler reservoir with spindle oil if an in line or air line lubricator is not used.

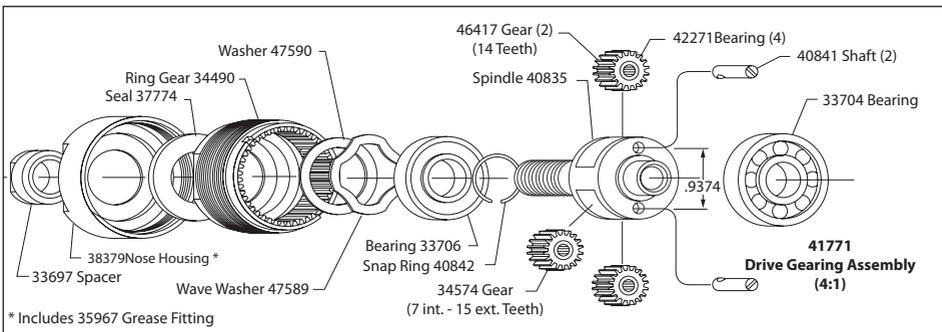
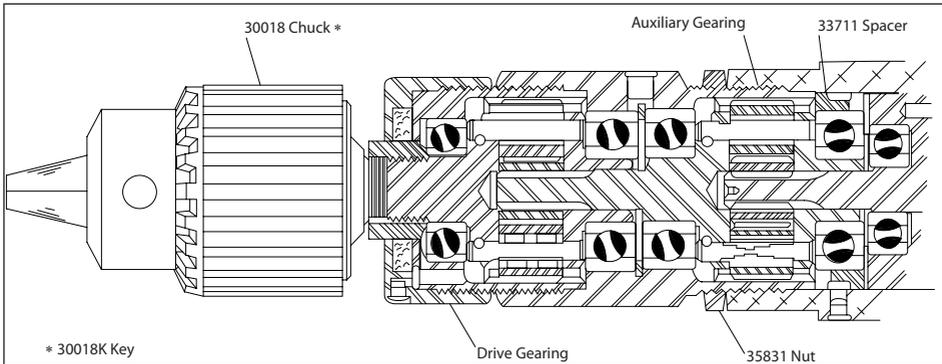
**Every 160 hours of tool operation,** Lubricate gearing. Pack bearings, coat shafts and lubricate gears with NLGI # 1 "EP" Grease (33153). Gearing should contain approximately 114 oz. (7 g) of grease per set of planetary gearing.

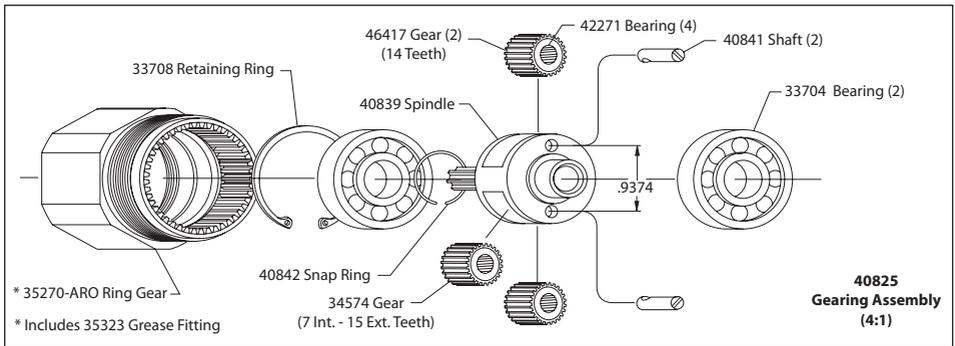
## Recommended Lubricants

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:

Where Used	Ingersoll Rand Part #	Description
Air Motor	29665	1 qt. Spindle Oil
O-Rings & Lip Seals	36460	4 oz. Stringy Lubricant
Gears and Bearings	33153	5 lb. "EP" - NLGI # 1 Grease

## Disassembly and Assembly of Tools Gearing Section





### Disassembly

Secure tool in a suitable holding device. Place wrench on spacer (33697), place Chuck key in Chuck and strike Key a sharp blow to loosen Chuck. Remove Chuck and Spacer (33697). Using a Wrench on flats of Ring Gear and a Strap Wrench on Motor Housing, unthread and remove Gearing Sections. Separate the Gearing Sections using Wrenches on flats of Ring Gears.

Remove Nose Housing (38379), Seal (37774) and Spacer (33697). Grasp Ring Gear in one hand and tap threaded end of spindle with a soft face Hammer; spindle and components will loosen from ring gear.

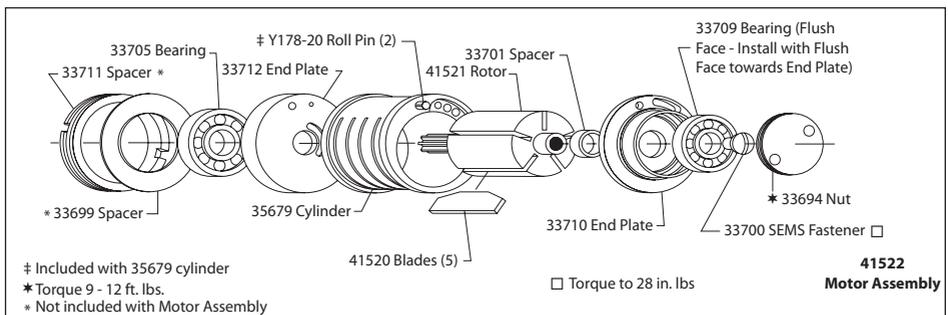
**NOTE:** Further disassembly should be done only if it should be necessary to replace a part, as Brinelling of the bearing races may occur, making replacement necessary.

To disassemble completely, remove Bearing (33706). Turn snap ring on spindle so the open portion of the ring will allow the removal of shaft. Remove shaft, releasing gear. Repeat for removal of opposite shaft and gear.

### Assembly

Assemble snap ring to spindle. Rotate snap ring, allowing installation of shafts. After both gears and shafts have been assembled to spindle, rotate Snap Ring, Locking Shafts in place. Assemble Bearings to spindle and assemble Washer (47590), Wave Washer (47589) and spindle to Ring Gear. Assemble Seal, Nose Housing and Spacer to gearing.

### Motor Section



### Disassembly

Remove Motor Assembly from Housing. Using a spanner type Wrench, Remove Nut (33694) and SEMS Fastener (33700). Grasp cylinder in one hand and tap splined end of rotor with a soft face Hammer; Motor will come apart.

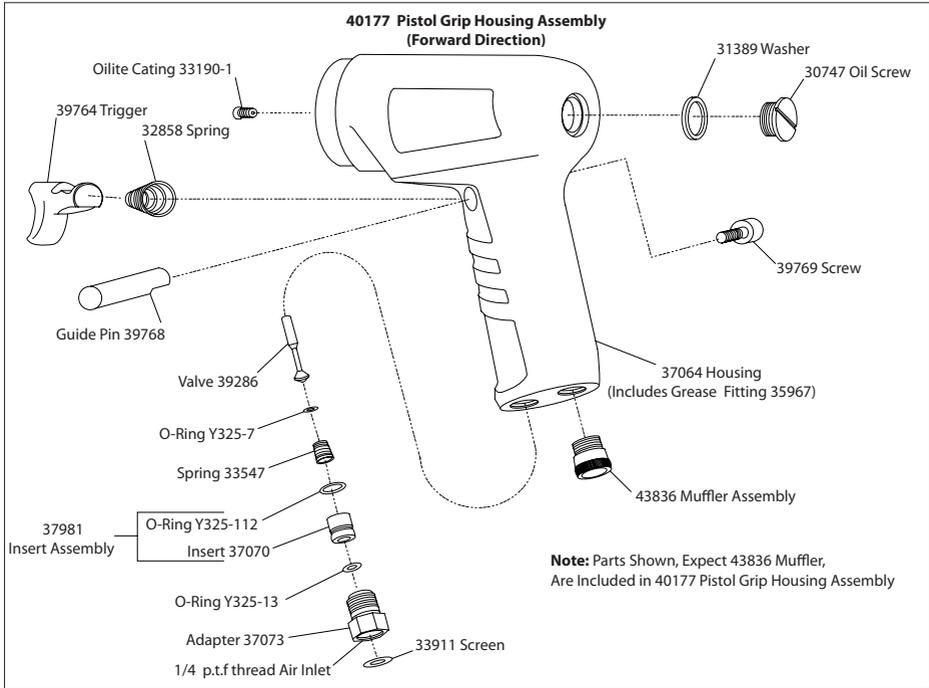
### Assembly

Pack Bearings with 33153 Grease, or equivalent, and coat i.d. of Cylinder with 29665 spindle oil upon assembly. Assemble Bearings into end plates.

**NOTE:** Assemble Bearing (33709) into end plate with identification markings on the bearing facing out. Assemble End Plate (33710), with Spacer (33701), to Rotor and secure with SEMS Fastener (33700).

**NOTE:** Torque fastener to 28 in. lbs. Assemble cylinder over Rotor, aligning air inlet holes in cylinder with air inlet slot of End Plate and Roll Pin with hole in End Plate. Assemble Blades to rotor. Assemble End Plate (33712) to Rotor and cylinder, aligning hole in End Plate with Roll pin in cylinder. Assemble Nut (33694) to End Plate and Torque to 9-12 ft. lbs. Be sure rotor does not bind (If rotor binds, lightly tap splined end of rotor with a soft face hammer to loosen) and assemble to tool.

## Disassembly And Assembly Pistol Grip - Forward Direction

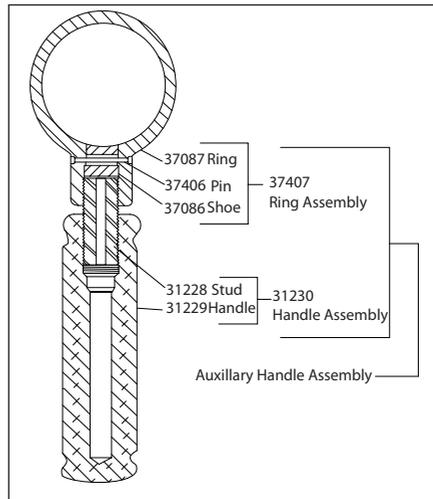


### Disassembly

- Remove adapter (37073), O-ring (Y325-13), insert assembly (37981) and spring (33547).
- Depress trigger (39764) to Release Valve (39286) and O-ring (Y325-7).
- To remove Trigger (39764), remove Locking Screw (39769) and Guide pin (39768), releasing Trigger and Spring (32858).
- To remove Oilite Casting (33190-1) insert Screwdriver into Motor end of housing and unscrew.

### Assembly

- Assemble Spring (32858) and Trigger (39764) into housing and secure with Guide Pin (39768) and Locking Screw (39769).
- Assemble Valve (39286) with O-Ring (Y325-7), Spring (33547) and Insert assembly (37981) into Housing, securing with O-Ring (Y325-13) and Adapter (37073).
- Assemble Oilite Casting (33190-1) into place in Oil cavity, fill cavity with Oil and Seal with Washer (31389) and Screw (30747).



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## **Parts and Maintenance**

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.

Tool repair and maintenance should only be carried out by an authorized Service Center.

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

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## **Related Documentation**

For additional information refer to:

Air Drill Product Safety Information Manual 04580353.

Manuals can be downloaded from [www.irttools.com](http://www.irttools.com).

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**Notes:**

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