Tool & Hoist Products

OPERATOR'S MANUAL

INCLUDING: OPERATION, INSTALLATION & MAINTENANCE

2200 SERIES PISTOL GRIP DRILL
1100 R.P.M.

Released:
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Form: 1221–2

Model 7671–A

IMPORTANT: READ THIS MANUAL CAREFULLY BEFORE INSTALLING, OPERATING OR SERVICING THIS EQUIPMENT.

OPERATING AND SAFETY PRECAUTIONS

Pneumatic tools should always be installed and used in accordance with A.N.S.I. B186.1 "Safety Code For Portable Air Tools."

CAUTION:

- Keep hands and clothing away from rotating end of tool.
- Wear suitable eye protection while operating tool.
- Use tool only for purposes for which it was intended.
- SHUT OFF and DISCONNECT AIR SUPPLY from tool BEFORE performing maintenance, service or disassembly of tool.

WARNING: Repeated prolonged operator exposure to vibrations which may be generated in the use of certain hand–held tools may produce Raynaud's phenomenon, commonly referred to as Whitefinger disease. The phenomenon produces numbness and burning sensations in the hand and may cause circulation and nerve damage as well as tissue necrosis. Repetitive users of hand–held tools who experience vibrations should closely monitor duration of use and their physical condition.

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.

An ARO® model 128231–800 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 1/4 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:

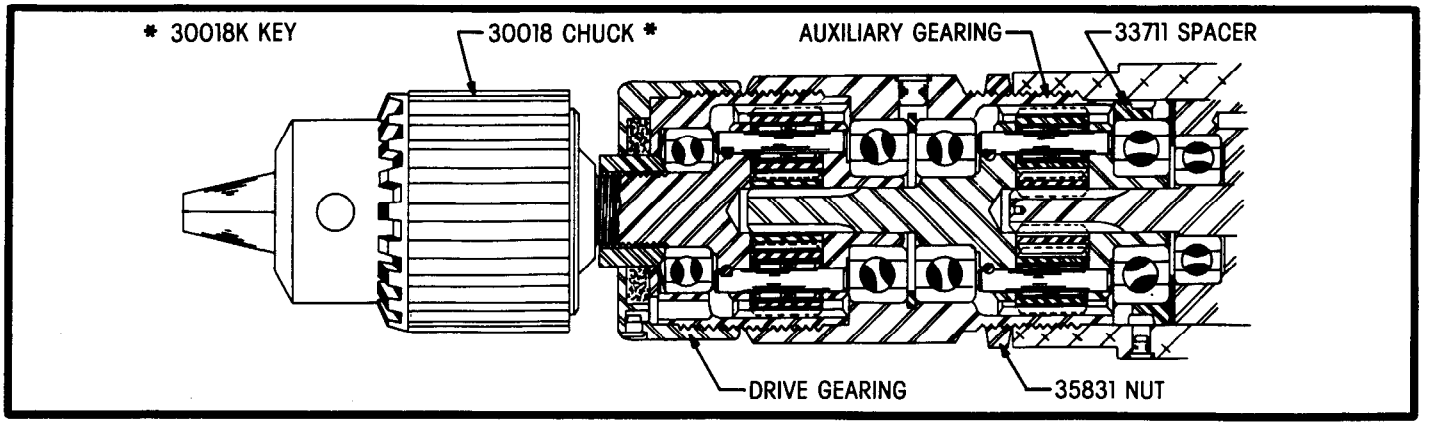
Where Used	ARO Part #	Description
Air Motor	29665	1 qt. Spindle Oil
"O" Rings & Lip Seals	36460	4 oz. Stringy Lubricant
Gears and Bearings	33153	5 lb. "EP" – NLGI #1 Grease

For parts and service information, contact your local ARO distributor, or the Customer Service Dept. of the Ingersoll–Rand Distribution Center, White House, TN at PH: (615) 672–0321, FAX: (615) 672–0601.

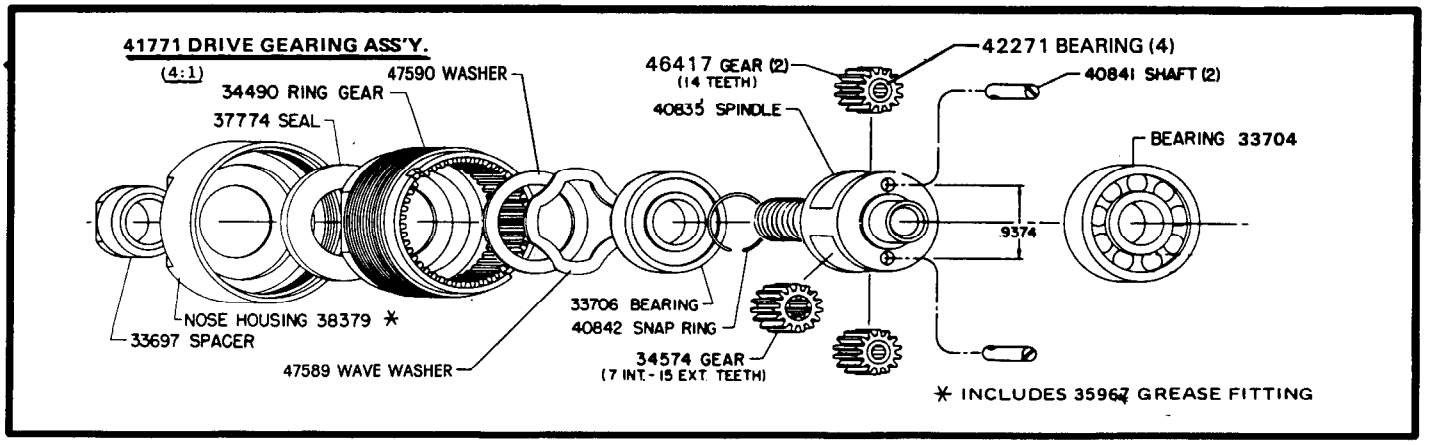
ARO Tool & Hoist Products
Ingersoll–Rand Company
1725 U.S. No. 1 North • P.O. Box 8000 • Southern Pines, NC 28388–8000

INGERSOLL-RAND®
PROFESSIONAL TOOLS

DISASSEMBLY AND ASSEMBLY OF TOOLS



GEARING SECTION



DISASSEMBLY

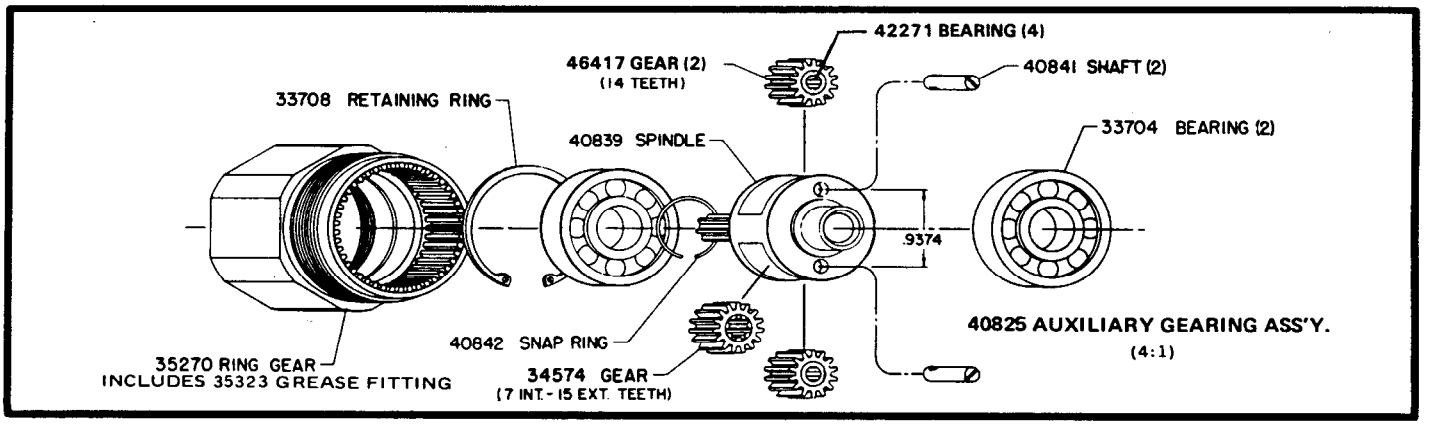
Secure tool in a suitable holding device. Place wrench on spacer (33697), place chuck key in chuck and strike key a sharp blow to loosen chuck. Remove chuck and spacer (33697). Using a wrench on flats of ring gear and a strap wrench on motor housing, unthread and remove gearing sections. Separate the 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

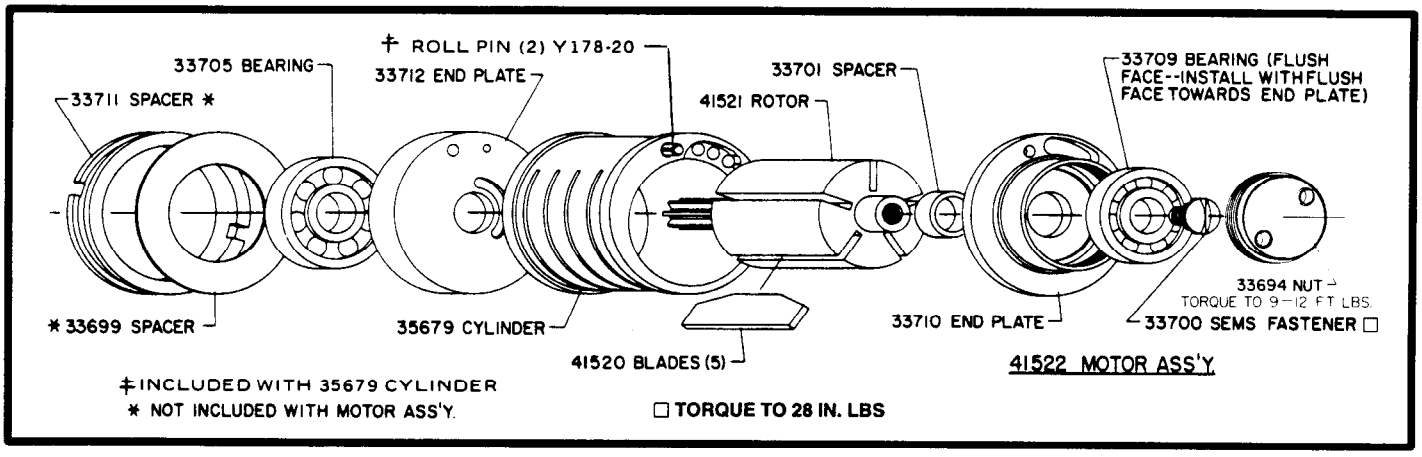
Assemble snap ring to spindle. Rotate snap ring, allowing installation of shafts. After both gears and shafts have been assembled to spindle, rotate snap ring, locking shafts in place. Assemble bearings to spindle and assemble washer (47590), wave washer (47589) and spindle to ring gear. Assemble seal, nose housing and spacer to gearing.



Disassembly and assembly of the auxiliary gearing is similar to that of the drive gearing.

DISASSEMBLY AND ASSEMBLY OF TOOLS

MOTOR SECTION

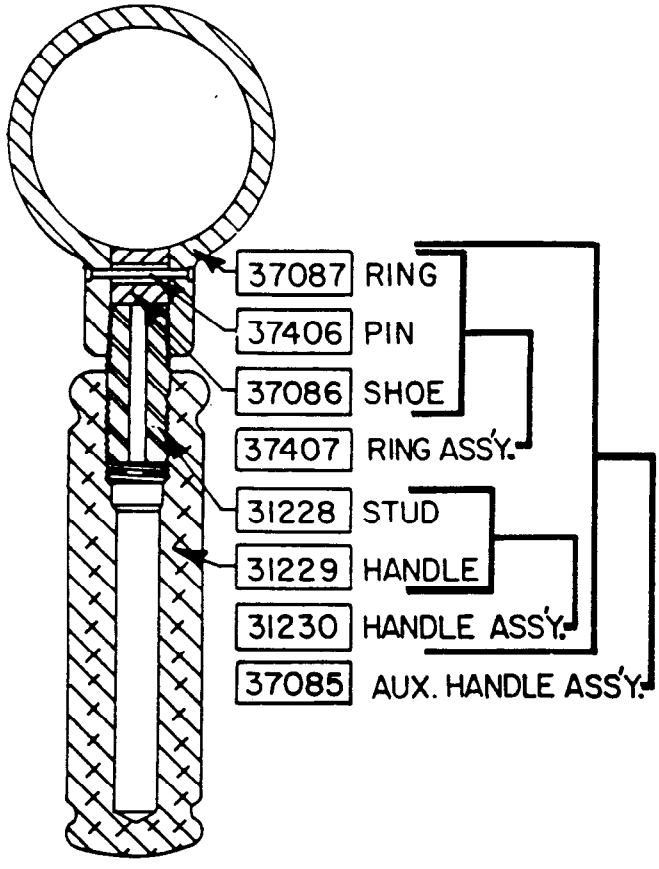


DISASSEMBLY

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 of rotor with a soft face hammer; motor will come apart.

ASSEMBLY

Pack bearings with ARO 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 OF TOOLS

PISTOL GRIP

(FORWARD DIRECTION)

DISASSEMBLY

a. Remove adapter (37073), "O" ring (Y325–13), insert assembly (37981) and spring (33547).
b. Depress trigger (39764) to release valve (39286) and "O" ring (Y325–7).
c. To remove trigger (39764), remove locking screw (39769) and guide pin (39768), releasing trigger and spring (32858).
d. To remove oilite casting (33190–1) insert screwdriver into motor end of housing and unscrew.

ASSEMBLY

a. Assemble spring (32858) and trigger (39764) into housing and secure with guide pin (39768) and locking screw (39769).
b. 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).
c. Assemble oilite casting (33190–1) into place in oil cavity, fill cavity with oil and seal with washer (31389) and screw (30747).