

# OPERATOR'S MANUAL

INCLUDING: OPERATION, INSTALLATION & MAINTENANCE

"000" SERIES "QRT" POWER UNIT

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Form: 3675-2

MODEL 7771  
2300 R.P.M.  
8.0:1 REDUCTION

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

## 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 or device attached to tool and also before removing or installing bit, socket, etc.

**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.

## 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 160 HOURS OF TOOL OPERATION** — Lubricate gearing. Pack bearings, coat shafts and lubricate gears with NLGI #1 "EP" grease (33153). Gearing should contain approximately 1/16 oz. of grease.

## 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.

## 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
Gears and Bearings	33153	5 lb. "EP" — NLGI #1 Grease
"O" Rings & Lip Seals	36460	4 oz. Stringy Lubricant



# DISASSEMBLY/ASSEMBLY INSTRUCTIONS

- Never apply excessive pressure by a holding device which may cause distortion of a part.
- Apply pressure evenly to parts which have a press fit.
- Apply even pressure to the bearing race that will be press fitted to the mating part.
- Use correct tools and fixtures when servicing this tool.
- Don't damage "O" rings when servicing tool.
- Use only genuine ARO replacement parts for this tool. When ordering, specify part number, description, tool model number and serial number.

## GEARING DISASSEMBLY

- Clamp housing (4) in a smooth face vise.
- Remove adapter (36), using a wrench on flats – LEFT-HAND THREADS.
- Remove ring gear (35) and components from housing, using a wrench on flats.
- Grasp ring gear in one hand and tap drive end of spindle with a soft face hammer; spindle and components will loosen from ring gear.
- Remove spacer (34).
- Alternately tap ends of shafts (31) to loosen and remove bearing (30).
- Remove shafts (31), releasing gears (33).

## GEARING ASSEMBLY

- Lubricate gears (33) with ARO 33153 grease and assemble to spindle, securing with shafts (31). Align notch in end of shafts with step on spindle. NOTE: Gearing should contain approximately 1/16 oz. (1.8 g) of grease.
- Lubricate bearing (30) with ARO 33153 grease and assemble to spindle, pressing on inner race of bearing.
- Assemble spacer (34) to spindle.
- Assemble spindle and components to ring gear.
- Assemble ring gear to housing.
- Assemble adapter (36) to tool – LEFT-HAND THREADS – and tighten securely.

## MOTOR DISASSEMBLY

- Remove gearing from tool.
- Tap front edge of housing to remove motor assembly.
- Tap drive end of rotor (21) with a soft face hammer; motor will come apart. NOTE: Bearings are light press fit in end plates.
- Remove end plate (19) and bearing (18) from rotor.

## MOTOR ASSEMBLY

- Lubricate bearings with ARO 33153 grease before assembly.
- Assemble bearing (18) to end plate (19), pressing on outer race of bearing.
- Assemble end plate (19) to rotor, pressing on inner race of bearing.
- Coat five rotor blades (20) with ARO 29665 spindle oil and assemble to rotor slots – straight side out.
- Coat i.d. of cylinder (23) with ARO 29665 spindle oil and assemble over rotor, aligning roll pin (22) with hole in end plate. NOTE: Assemble cylinder with air inlet slots facing end plate (19).
- Assemble bearing (26) to end plate (25), pressing on outer race of bearing.
- Assemble end plate (25) to rotor, pressing on inner race of bearing. Be sure rotor turns without binding.
- Assemble locating pin (29) to end plate (25) and assemble motor assembly to housing, aligning locating pin (29) with slot in housing.
- Assemble spacers (27 and 28) to tool.
- Assemble gearing to tool.

## HOUSING DISASSEMBLY

- Remove roll pin (17), releasing trigger (16).
- Remove screw (15), releasing shroud (14).
- Grasp end of valve (7) and pull to remove valve assembly with bushing (11).
- Remove retaining ring (1) and screens (2) to remove muffler (3).

## HOUSING ASSEMBLY

- NOTE: When a part containing "O" rings has been removed from the tool, it is recommended that the "O" rings be replaced upon assembly. Lubricate all "O" rings with 36460 grease when assembling.
- Assemble "O" rings (9, 10 and 12) to bushings (11).
- Assemble "O" rings (6) to valves (7).
- Lubricate plungers (13) and valves (7) with ARO 29665 spindle oil.
- Assemble plungers (13) and valves (7) to bushings (11).
- Assemble bushings and shroud (14) to tool, securing with screw (15). NOTE: Flats of bushings must be aligned with flats of shroud (14).
- Assemble trigger (16) to tool, securing with roll pin (17).
- Assemble muffler (3) and two screens (2) to tool, securing with retaining ring (1).

### PART NUMBER FOR ORDERING

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1	Retaining Ring	Y147-68	21	Rotor	33026-1
2	Screen (2 req'd)	42911	22	Roll Pin (included with item 23)	34152
3	Muffler	45474	23	Cylinder (includes items 22 and 24)	34083
4	Housing Assembly (includes item 5)	45798	24	Roll Pin (included with item 23)	Y178-1
5	Grease Fitting (included with item 4)	35967	25	Front End Plate	33024
6	"O" Ring (2 req'd)	Y325-7	26	Ball Bearing	32851
7	Valve Assembly (2 req'd)	47880		MOTOR ASSEMBLY (includes items 18 thru 26)	34082-1
9	"O" Ring (2 req'd)	Y325-11	27	Spacer	34737
10	"O" Ring (2 req'd)	Y325-12	28	Spacer	33018
11	Bushing (2 req'd)	45465	29	Locating Pin	32814
12	"O" Ring (2 req'd)	Y325-13	30	Ball Bearing	32850
13	Plunger (2 req'd)	47879	31	Shaft (2 req'd)	33021
14	Shroud	45468	32	Spindle	36526
15	Screw	Y222-156-C	33	Gear (2 req'd)	33048
16	Trigger	45469	34	Spacer	36525
17	Roll Pin	Y178-25	35	Ring Gear	36527
18	Ball Bearing	38232		GEARING ASSEMBLY (includes items 30 thru 35)	36524
19	Rear End Plate	33035	36	Adapter	47989-1
20	Blade (5 req'd)	32860			



