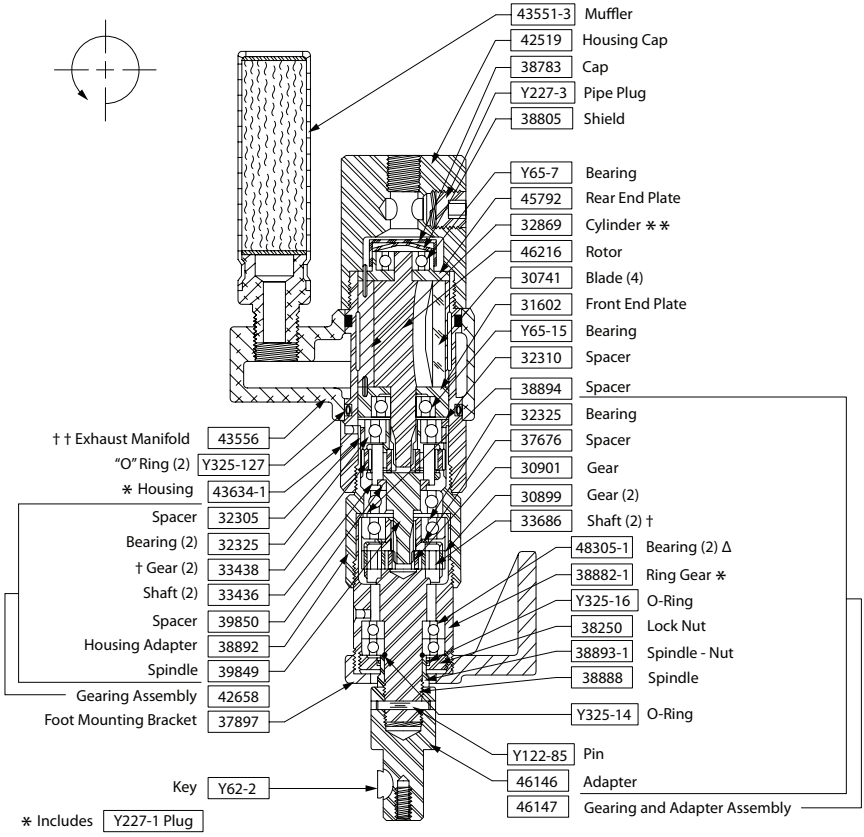
Sales and Engineering Data

"O" Series Power Motor Model 8004 (800 rpm) - Reverse Rotation

Note: Looking at tool from rear end (Air Inlet End), Spindle rotates counterclockwise.



∗ Includes Y227-1 Plug

∗∗ Includes Roll Pins Y178-23 (Short) and Y178-27 (Long)

† Includes Set Screw Y23-102 (Not Shown)

†† Includes Needle Bearing (15 per Shaft)

Air and Lube Requirements

AIR PRESSURE OF 90 p.s.i.g. (6 bar) at the air inlet of the tool is required for maximum motor efficiency. If necessary, an air regulator should be installed to maintain this pressure when tool is in operation.

FILTERED AND OILED AIR will allow the tool to operate more efficiently and yield a longer life to operating parts and mechanisms. A line filter capable of filtering particles larger than 50 microns should be used with a line oiler.

FILTER-REGULATOR-LUBRICATOR (F-R-L) assembly model C28221-800 is recommended for use with this air tool. The capacity or this F-R-L is adequate to provide clean (40 micron) oiled and regulated air for the tool.

FLUSH TOOL with a solution of three parts cleaning solvent and one part light oil after each 40 hours of operation. After flushing, apply a small amount of spindle oil in air inlet and run free for one minute to insure proper lubrication.

GEARING should be grease lubricated a minimum of once a month.

⚠ CAUTION

An excessive amount of lubricant in a tool will affect the speed and power. Gearing should contain approximately 1/8 oz. (3.5 g) of grease.

RECOMMENDED HOSE SIZE - 5/16" (8 mm) nominal inside diameter.

RECOMMENDED LUBRICANTS: Spindle Oil 29665, 1 qt. (0.9 liter) container for oiler and air inlet; Grease 33153, 5 lb. (2.3 kg) can for gears and bearings, "O" ring Lubricant 36460, 4 oz. (113 g) tube for lubrication and installation of "O" rings.

Maintenance

DISCONNECT AIR SUPPLY from tool or shut off air supply line to tool and exhaust (drain) air line to tool of compressed air BEFORE performing service or maintenance to tool.

AIR TOOLS are made of precision parts and should be handled with reasonable care when servicing. Excessive pressure exerted by a holding device may cause distortion of a part. Apply pressure evenly when disassembling (or assembling) parts which have a press fit. When removing or installing bearings, apply pressure to the bearing race that will be the press fit to the mating part; if this is not practiced, Brinelling of the bearing races may occur making replacement necessary. It is important that the correct tools and fixtures are used when servicing this air tool.

DISASSEMBLY should be done on a clean work bench with a clean cloth spread to prevent the loss of small parts. After disassembly is completed, all parts should be thoroughly washed in a clean solvent, blown dry with air and inspected for wear levels, abuse and contamination. Double sealed or shielded bearings should never be placed in solvent unless a good method of relubricating the bearing is available. Open bearings may be washed but should not be allowed to spin while being blown dry. When REPLACEMENT PARTS are necessary, consult drawing containing the part for identification.

BEFORE REASSEMBLING, lubricate parts where required. Use 33153 grease, or equivalent, in bearings. Use 36460 lubricant for "O" ring assembly. When assembling "O" rings, care must be exercised to prevent damage to the rubber sealing surfaces. A small amount of grease will usually hold steel balls and other small parts in place while assembling.

WHEN ORDERING PARTS, be sure to list PART NUMBER, PART NAME, MODEL NUMBER AND SERIAL NUMBER OF TOOL. USE ONLY GENUINE ARO® REPLACEMENT PARTS.

Disassembly and Reassembly of Tools

Disassembly

GEARING - Remove pin (Y122-85) and adapter (46146) from spindle and remove mounting bracket (37897). Using wrenches on flats of ring gears, unthread and remove drive gearing assembly. Remove spindle and components from ring gear. Remove spindle nut (38893-1) and lock nut (38250) to remove bearings (48305-1). Remove bearing (32325), spacer (37676), and shafts (33686) releasing gears (30899) and gear (30901). Disassembly of gearing assembly (42658) is similar to that of drive gearing assembly.

MOTOR - Remove gearing from tool and remove motor assembly from housing. Grasp cylinder in one hand and tap splined end of rotor with a non-metallic hammer; motor will come apart. Remove cap (38783) and shield (38805).

To remove manifold (43556), unthread and remove head (42519) from housing (43634-1). Loosen set screw (Y23-102) completely and slip manifold of housing.

Assembly

MOTOR - Assemble bearings to end plates and assemble end plate (45792) to rotor (46216). Lubricate I.D. of cylinder with spindle oil and assemble cylinder over rotor aligning air inlet holes of cylinder with air inlet of end plate and roll pin with hole in end plate. Assemble blades to rotor and assemble end plate (31602) to rotor aligning hole in end plate with roll pin in cylinder. Insure rotor does not bind (if rotor binds tap splined end lightly to loosen) and assemble shield (38805) and cap (38783). Assemble motor to housing and assemble spacer (32310) and gearing to tool.

GEARING - Pack bearings and lubricate gears liberally with grease (33153), or equivalent. Assemble bearings (48305-1) to ring gear and secure with lock nut (38250). Assemble spindle nut (38893-1) to spindle. Assemble gear (30901) and gears (30899) to spindle, securing with shafts (33686). Assemble spacer and bearing to spindle and assemble spindle to ring gear. Reassembly of gearing (42658) will be similar to that of drive gearing.

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