

# SALES AND ENGINEERING DATA

"O" SERIES POWER MOTOR

MODEL 8219-9

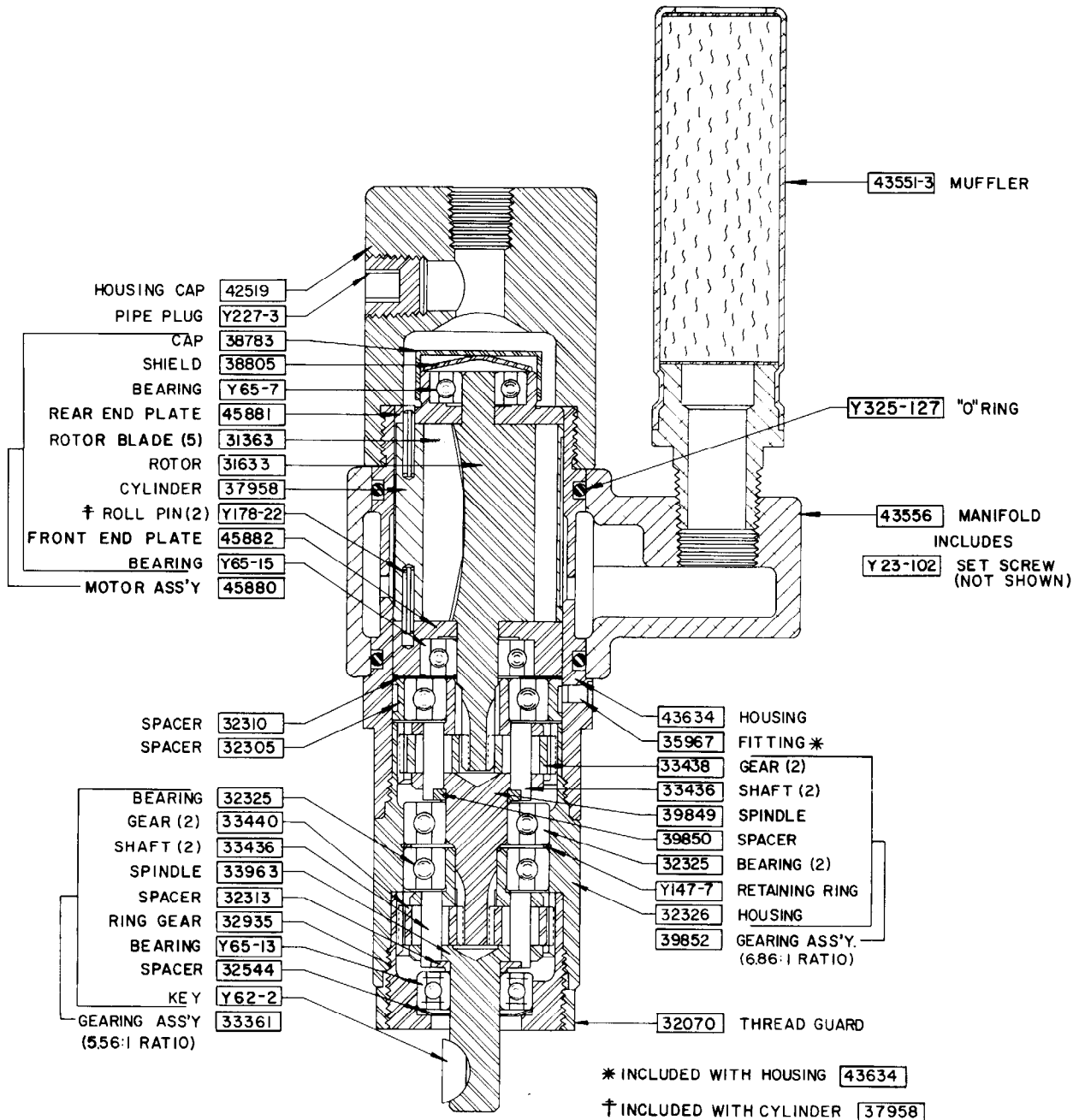
500 R.P.M.

3/8" KEYPED SPINDLE

38.1:1 TOTAL RED.

FORM 1546-2

7-2-81



**THE ARO CORPORATION**  
BRYAN, OHIO, U. S. A.



## AIR AND LUBE REQUIREMENTS

AIR PRESSURE of 90 p.s.i.g. (6 bar, g) 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 128231-300 is recommended for use with this Air Tool. The capacity of the individual Filter-Lubricator is adequate to provide clean (40 micron) oiled and regulated air for the tool.

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

RECOMMENDED LUBRICANTS: Spindle Oil (29665), 1 qt. (.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; Grease 40036-1, 1 lb. (.45 kg) can for adjustable clutches.

## 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.

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.

IF LINE OILER is not used and tool does not have a built-in oiler, apply a small amount of Spindle Oil in air inlet of tool and run free for one minute to insure proper lubrication; after each 8 hours of operation.

GEARING should be grease lubricated approximately every 160 hours of operation.

CAUTION: An excessive amount of lubricant in a tool will affect the speed and power. Each set of planetary gearing should contain approximately 1/8 oz. (3.5 g) of grease.

Double sealed or shielded bearings should never be placed in solvent unless a good method of re-lubricating 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 TOOL

### DISASSEMBLY

GEARING — Remove accessory and key (Y62-2) from spindle and remove Thread Guard (32070). Using wrenches on flats of Ring Gears, unthread and remove Gearing Ass'y. (33361). Remove Spindle and components from Ring Gear. Remove Bearing (Y65-13), Spacer (32313) and Shafts (33436) releasing Gears (33440). To remove Bearing (32325), insert Shafts into Spindle and alternately tap ends of Shafts loosening bearings from Spindle. Disassembly of Gearing Ass'y. (39852) is similar to that of Gearing Ass'y. (33361).

MOTOR — Remove Gearing from tool and remove Motor Ass'y. 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). Loosen Set Screw (Y23-102) completely and slip Manifold off housing.

### REASSEMBLY

MOTOR — Assemble Bearings into End Plates and assemble End Plate (45881) to Rotor. 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 (45882) 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 Spacers (32310) and (32305) and Gearing to tool.

GEARING — Pack Bearings and lubricate Gears liberally with grease (33153), or equivalent. Assemble Spacer (32313) and Gears (33440) to Spindle, securing Gears with Shafts (33436). Align notch in ends of Shafts with Spacer (32313). Assemble Bearings to Spindle and assemble Washer into Ring Gear with large dia. towards bearing. Reassembly of Gearing (39852) will be similar to that of Gearing (33361).