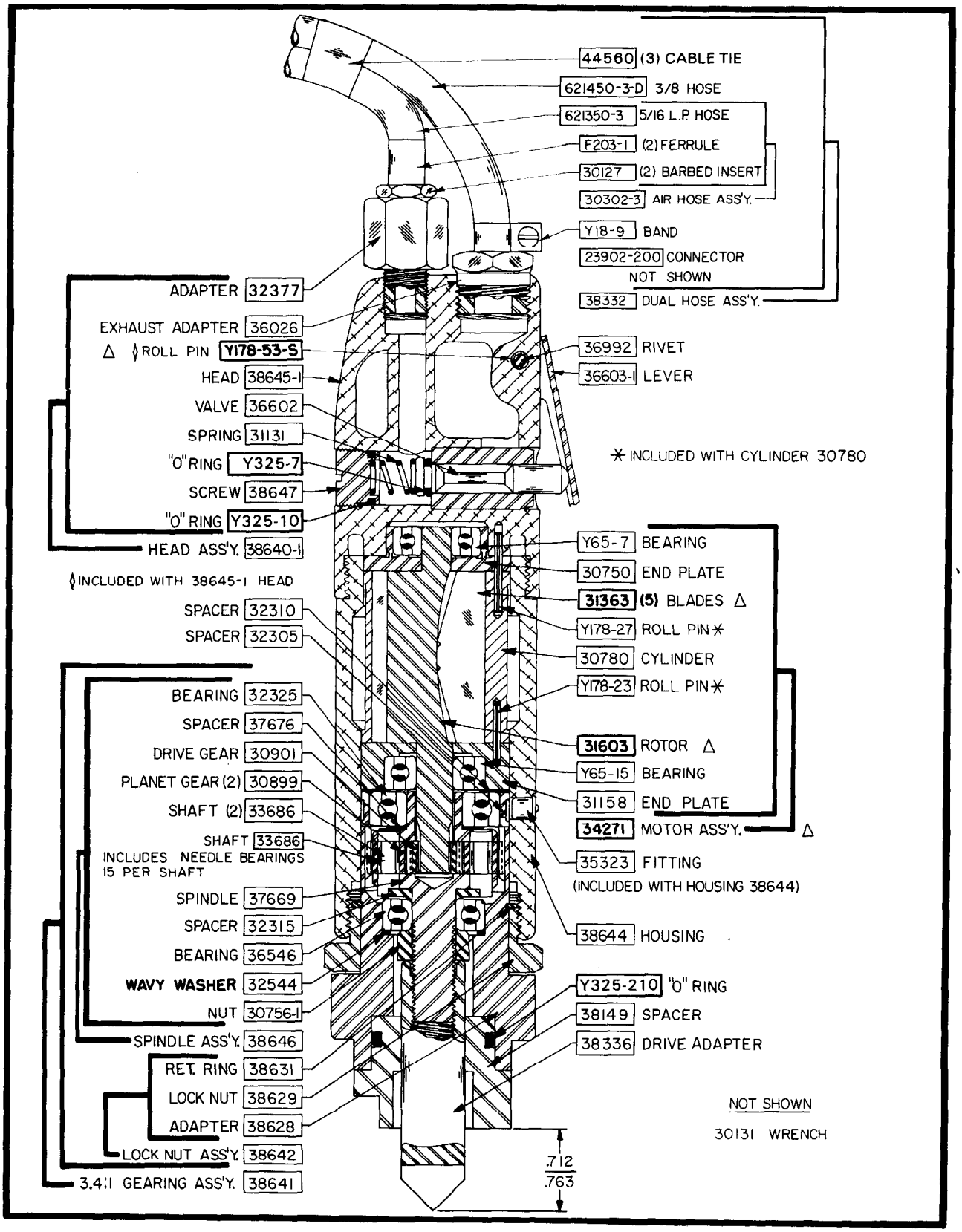
SALES AND ENGINEERING DATA

MODEL 7963

FORM 5611

REV. 4/84



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 combination (F-R-L) Model 128231-800 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 this 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.

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.

MAINTENANCE

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 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 TOOLS

DISASSEMBLY

GEARING — Place flats of Head (38645-1) in a suitable holding device. Hold motor Housing (38644) with a strap wrench and remove Lock Nut Assembly (38642) and Gearing Assembly (38641). Tap end of Adapter lightly with a non-metallic hammer, Spindle (37669) with component parts will loosen from Adapter (38628). Remove Adapter (38336), Nut (30756-1), Bearing (36546) and Spacer (32315). Remove Shafts (33686) to remove gears (30899) and Gear (30901). To remove Bearing (32325) and Spacer (37676), insert Shafts in Spindle and alternately tap ends of Shafts loosening Spacer and Bearing.

MOTOR — After removal of gear assembly, grasp end of Rotor and pull motor assembly from housing. Grasp Cylinder (30780) in one hand and tap splined end of Rotor with a non-metallic hammer; motor will come apart.

HEAD — Remove Screw (38647) and Valve parts are free to be removed from Head.

REASSEMBLY

HEAD — Lubricate "O" Rings, assemble "O" Ring (Y325-7) to Valve (36602) and assemble Valve to Head. Assemble "O" Ring (Y325-10) and Spring (31131) to Screw (38647) and assemble Screw to Head securing Valve.

MOTOR — Assemble Bearings into End Plates and assemble End Plate (30750) to Rotor. Assemble Cylinder (30780) over Rotor to End Plate (30750) aligning Roll Pin (Y178-27) with hole in End Plate. Assemble Blades (31363) to Rotor and assemble End Plate (31158) to Rotor aligning hole in end plate with Roll Pin (Y178-23). Insure that motor does not bind. With motor housing removed from Head, place Head in a suitable holding device with the "motor end" in an upright position. Place Motor Assembly (34271) on Head aligning Roll Pin (Y178-27) with hole in Head and being certain motor is properly seated on Head, slip Motor Housing (38644) over Motor and secure to Head. Assemble Spacers (32310) and (32305) and gear assembly.

GEARING — Assemble Spacer (32315), Bearing (36546), Nut (30756-1) and Adapter (38336) to Spindle. Assemble Gear (30901) and Gears (30899) to Spindle and secure with Shafts (33686). Note that each shaft contains (15) needle bearings. Align notch in Shafts with Spacer (32315). Assemble Spacer (37676) and Bearing (32325). NOTE: Gear assembly should contain approximately 1/8 oz. grease and should be lubricated thru fitting in housing to a minimum of once a month. Assemble Spindle with component parts to Lock Nut Assembly (38642) and assemble to tool.