



PARTS LIST AND INSTRUCTION MANUAL

MODEL 7658 RIGHT-ANGLE DRILL

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 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 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.

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

DISASSEMBLY AND REASSEMBLY OF TOOLS

Before starting to disassemble or reassemble this tool (any part or completely) be sure to read Maintenance Section.

To minimize the possibility of parts damage and for convenience, the steps for disassembly or reassembly listed on the following pages are recommended.

The basic sections and instructions for removing them from tool are as follows:

With tool disconnected from air service—

RIGHT-ANGLE SECTION

Remove Cap Screw (Y99-54) and pull angle assembly from gearing.

GEARING should be grease lubricated approximately every 160 hours of operation. Inject 2 or 3 strokes of grease (33153), or equivalent, thru grease fitting in housing. Gearing assembly should contain approximately 1/8 oz. (3.5 g) grease.

RIGHT-ANGLE ASSEMBLY should be grease lubricated approximately every 160 hours. Inject 2 to 3 strokes of grease (33153), or equivalent, thru fitting (or pipe plug) in right-angle housing. Right-Angle assembly should contain approximately 1/8 oz. (3.5 g) grease.

CAUTION: An excessive amount of lubricant in a tool will affect the speed and power.

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.

MAINTENANCE

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" 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.

GEARING SECTION

While holding motor housing with a strap wrench or in a suitable holding device, unscrew gearing using a wrench on flats of Ring Gear. NOTE: On models having both auxiliary and drive gearings separate gearing by using a wrench on flats of each gearing assembly.

MOTOR SECTION

Place head of tool in a suitable holding device and unscrew motor housing by the use of a strap wrench.

HEAD SECTION

Follow disassembly procedures as outlined in the preceding sections.

RIGHT-ANGLE SECTION

DISASSEMBLY

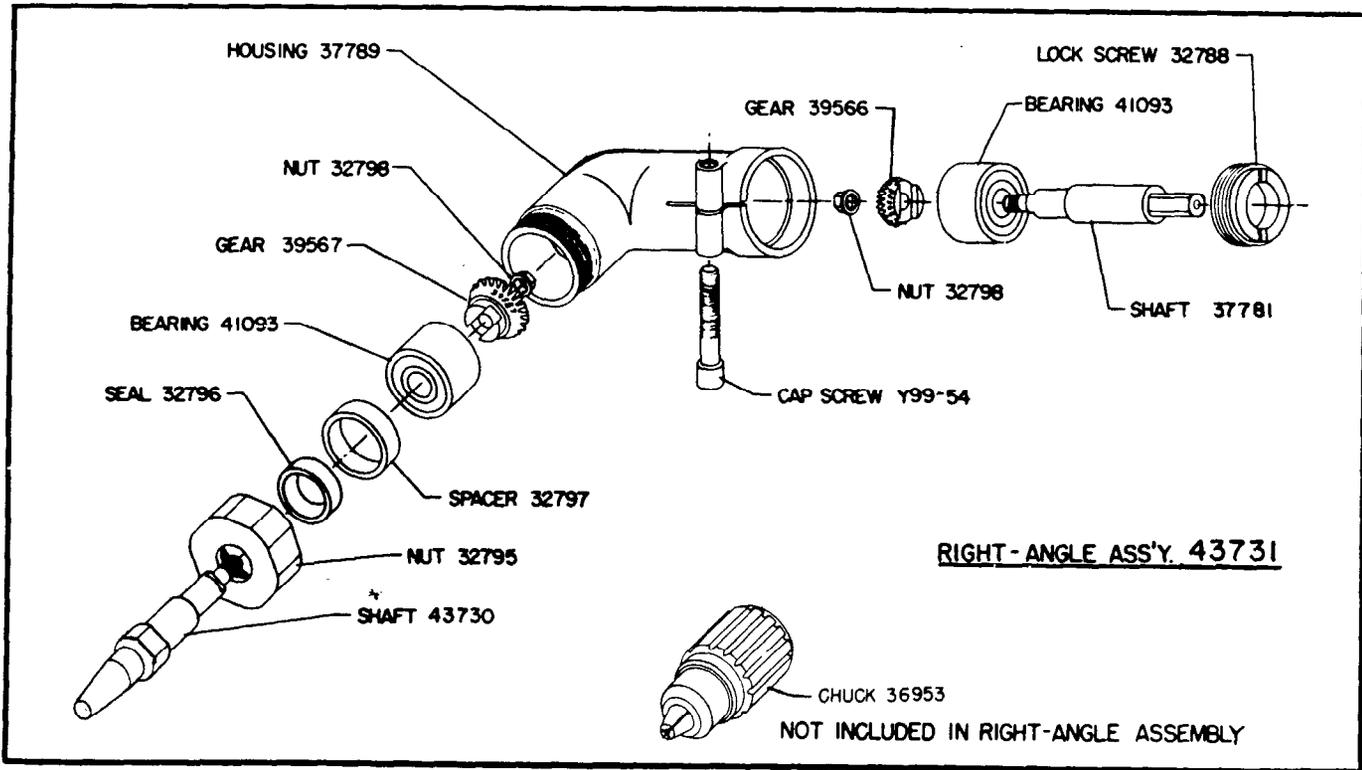
- a. Remove Lock Screw (32788) and remove Drive Shaft (37781) with Bearing and Gear attached.
- b. To remove Bearing (41093), remove Nut (32798) and Gear.
- c. Loosen Nut (32795) completely and remove Drive Shaft (43730) with attached parts. To remove from shaft, remove Nut (32798).

REASSEMBLY

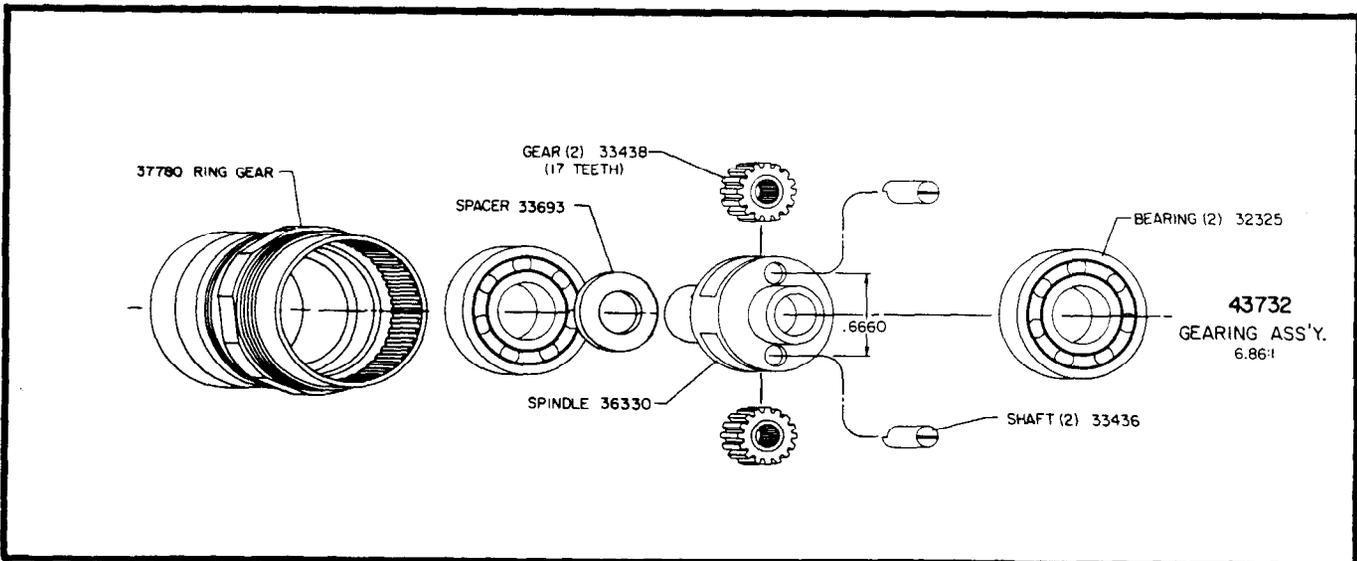
- a. Assemble Nut (32795), Seal (32796), Spacer (32797), Bearing (41093) and Gear to Shaft

- (43730) and secure with hex Nut (32798). Assemble into housing and secure to housing with Nut (32795).
- b. Assemble Bearing (41093) and Gear to Shaft (37781) and secure with Nut (32798). Assemble into housing and secure to housing with Lock Screw (32788).

NOTE: Seal (32796) must be assembled to shaft with lip of seal facing bearing. Bearings (41093) are shielded on one side. Bearings must be assembled to shafts shielded side first. Right-angle assembly should contain 1/8 oz. grease.



GEARING SECTION



DISASSEMBLY

- Grasp Ring Gear in one hand and tap drive end of Spindle with a non-metallic hammer; Spindle with component parts will loosen from ring gear.
- Gearing should not be disassembled further unless it is necessary to replace a part as Brinelling of the bearing races may occur making replacement necessary.
- To further disassemble – remove Bearing and Spacer from splined end of Spindle. Remove Shafts from Spindle releasing Gears. To remove Bearing from oppo-

site end of Spindle, insert Shafts in Spindle and alternately tap end of Shafts loosening bearing.

REASSEMBLY

- Assemble Spacer and Bearing to splined end of Spindle. Assemble Gears to Spindle and secure with Shafts, aligning Shafts to Spacer.
- Assemble Bearing to opposite end of Spindle and assemble to Ring Gear.

MOTOR SECTION

DISASSEMBLY

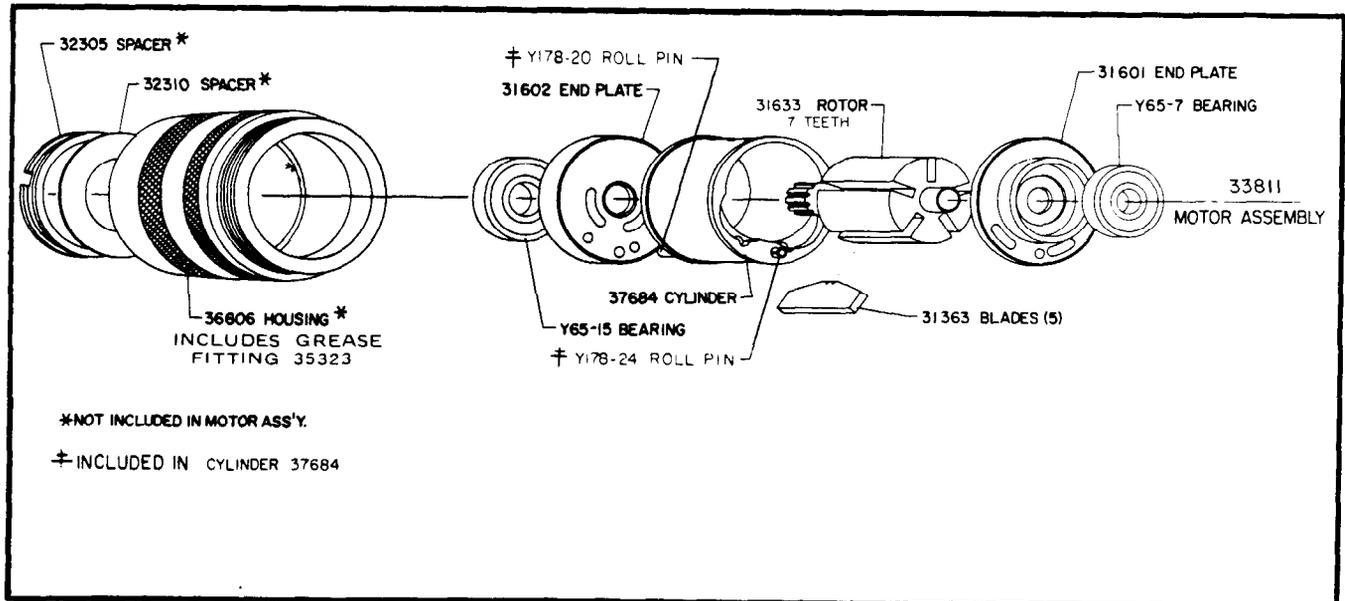
- Remove motor assembly from housing.
- Grasp Cylinder in one hand and tap splined end of Rotor with a non-metallic hammer; motor will come apart.

REASSEMBLY

- Assemble Bearings into End Plates and assemble End Plate (31601) to Rotor.
- Assemble Cylinder over Rotor to End Plate aligning Roll Pin in Cylinder with hole in End Plate.

- Assemble Blades to Rotor and assemble End Plate (31602) to Rotor and Cylinder aligning Roll Pin in Cylinder with hole in End Plate. Insure motor does not bind and assemble to tool.

NOTE: When assembling motor assembly to tool: place Head of tool in a suitable holding device with the "motor end" in an upright position. Place motor assembly on head aligning Roll Pin of motor with hole provided in head (blind hole). Slip Motor Housing over motor and secure to head. Assemble Spacers (32310), (32305) and gearing to tool.



HEAD SECTION

DISASSEMBLY

- Remove Nut (36609) and Valve parts may easily be removed.
- REVERSIBLE TYPE HEAD – drive out Roll Pin (Y178-7) to release Valve (39207) and Spring (30032).

REASSEMBLY

- Assemble "O" Ring (Y125-7) to Valve Stem (36602).
- Assemble Valve Stem, Spring (31131) and Regulator (35642) and secure with Seal (35675) and Nut (36609).

