

## 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 air pressure when the 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 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.

Recommended hose size – 3/8" (10 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

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 press fit to the mating part; if this is not practiced, Brinelling of the bearing races will 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 ASSEMBLY OF TOOLS

### DISASSEMBLY

**DRIVE GEARING** – Remove gearing assembly from tool. Remove collet nut (32970), collet (32968-9), lock ring (38241) and lock nut (38240). Tap threaded end of spindle with a soft face hammer; spindle and components will loosen from ring gear. Remove bearing (33704), spacer (37128) and shafts (38242) to remove gears or splined driver from spindle.

**AUXILIARY GEARING** – Remove drive gearing and remove auxiliary gearing assembly from tool. Tap splined end of spindle with a soft face hammer; spindle and components will loosen from ring gear. Remove bearings. Rotate open portion of snap ring, allowing the removal of one shaft and gear. Repeat for removal of opposite shaft and gear.

**MOTOR** – The motor assembly may be removed from housing after the removal of gearing or head. Remove nut (33694) and sems fastener (33700). Grasp cylinder in one hand and tap splined end of rotor with a soft face hammer; motor will come apart. To remove manifold from housing, remove head and "O" ring (Y325-129) and slip manifold off housing.

### ASSEMBLY

**MOTOR** – Assemble bearings into end plates. NOTE: Bearing (33709) must be assembled to end plate with the identification markings on bearing face to the outside. Assemble end plate (33710) with spacer (33701) to rotor. Assemble cylinder (35679)

over rotor and to end plate, aligning roll pin with hole in end plate. Assemble blades to rotor and assemble end plate (33705), with bearing, to rotor and cylinder, aligning roll pin with hole in end plate. Assemble sems fastener (33700) and nut (33694) to motor. NOTE: Torque fastener to 28 in. lbs and nut to 9 – 12 ft lbs. Insure motor does not bind (if rotor binds, lightly tap splined end with a soft face hammer to loosen) and assemble to housing with spacers (33699 and 33711).

**AUXILIARY GEARING** – Assemble snap ring to spindle and align open portion of ring with one shaft hole. Assemble gear to spindle and secure with shaft, aligning notch in shaft with snap ring. Rotate snap ring, securing shaft and align open portion with other shaft hole. Assemble other gear and shaft. Rotate snap ring, securing both shafts. Assemble bearings to spindle and assemble to ring gear. Gearing should contain approximately 1/4 oz. grease.

**DRIVE GEARING** – Assemble gears or splined driver to spindle and secure with shafts (38242), aligning notch in shaft with step of spindle. Assemble spacer (37128) and bearing (33704) to spindle and assemble to ring gear. NOTE: Bearings must be assembled with scribed lines on outside diameter of bearing aligned, where applicable (bearing identification markings facing out). Assemble lock nut, lock ring with seal, collet and collet nut. Gearing should contain approximately 1/4 oz. grease.

