



Tool & Hoist Products

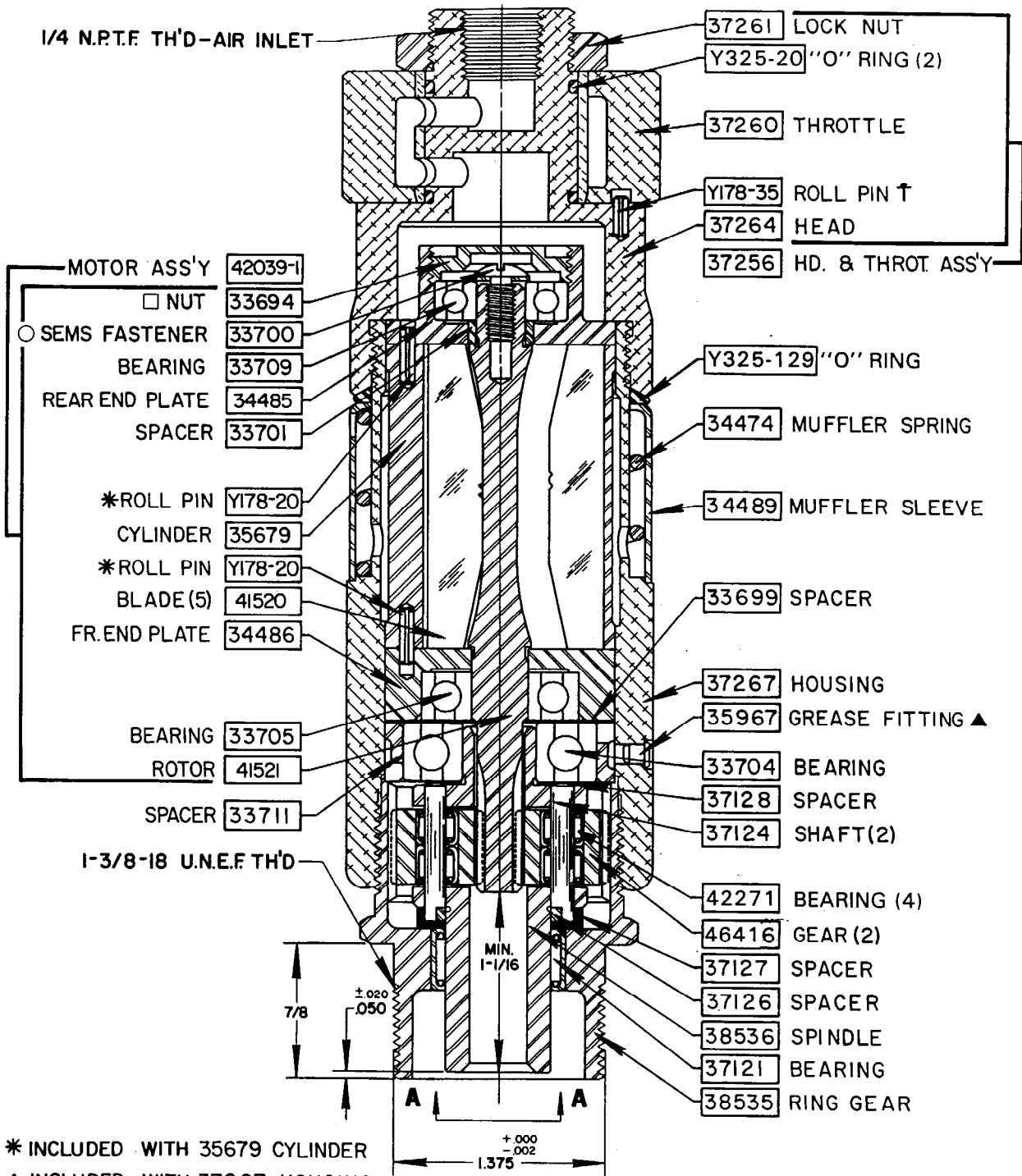
# SALES AND ENGINEERING DATA

2200 SERIES POWER UNIT  
MODEL 7899-A

2500 R.P.M. REVERSE ROTATION

FORM: 1433-2

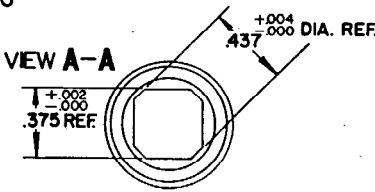
DATE: 8-9-93



- MOTOR ASS'Y 42039-1
- NUT 33694
- SEMS FASTENER 33700
- BEARING 33709
- REAR END PLATE 34485
- SPACER 33701
- \*ROLL PIN Y178-20
- CYLINDER 35679
- \*ROLL PIN Y178-20
- BLADE (5) 41520
- FR.END PLATE 34486
- BEARING 33705
- ROTOR 41521
- SPACER 33711

- 37261 LOCK NUT
- Y325-20 "O" RING (2)
- 37260 THROTTLE
- Y178-35 ROLL PIN †
- 37264 HEAD
- 37256 HD. & THROT. ASS'Y
- Y325-129 "O" RING
- 34474 MUFFLER SPRING
- 34489 MUFFLER SLEEVE
- 33699 SPACER
- 37267 HOUSING
- 35967 GREASE FITTING ▲
- 33704 BEARING
- 37128 SPACER
- 37124 SHAFT (2)
- 42271 BEARING (4)
- 46416 GEAR (2)
- 37127 SPACER
- 37126 SPACER
- 38536 SPINDLE
- 37121 BEARING
- 38535 RING GEAR

- \* INCLUDED WITH 35679 CYLINDER
- ▲ INCLUDED WITH 37267 HOUSING
- † INCLUDED WITH 37264 HEAD
- TORQUE TO 9 - 12 FT LBS
- TORQUE TO 28 IN. LBS



For parts and service information, contact your local ARO distributor, or the Customer Service Dept. of the Ingersoll-Rand Distribution Center, White House, TN at PH: (615) 672-0321, FAX: (615) 672-0601.

ARO Tool & Hoist Products

Ingersoll-Rand Company  
1725 U.S. No. 1 North • P.O. Box 8000 • Southern Pines, NC 28388-8000  
©1993 THE ARO CORPORATION • PRINTED IN U.S.A.

# INGERSOLL-RAND®

## PROFESSIONAL TOOLS

## 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 – 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

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

**GEARING** – Remove gearing assembly from tool. Grasp ring gear in one hand and tap drive end of spindle with a soft face hammer; spindle and components will loosen from ring gear. Remove spacers from drive end of spindle and remove shafts, releasing gears. To remove spacer and bearing from rear end of spindle, insert shafts into spindle and alternately tap ends of shafts, loosening bearing.

**MOTOR** – The motor assembly may be removed from either end of housing by first removing head or gearing. After removing motor from housing, remove nut (33694) and sems fastener (33700). Grasp cylinder in one hand and tap drive end of rotor with a soft face hammer; motor will come apart.

**HEAD ASSEMBLY** – Remove lock nut (37261), throttle will loosen from head.

### ASSEMBLY

Pack bearings and lubricate gears with ARO 33153 grease upon

assembly. Gearing assembly should contain approximately 1/4 oz. (7 g) of grease.

**HEAD ASSEMBLY** – Assemble "O" rings (Y325-20) to head. Assemble throttle (37260) to head, aligning slot in throttle with pin in head. Secure with lock nut (37261).

**MOTOR** – Assemble bearings into end plates. Assemble rear end plate (34485), with spacer (33701), to rotor and secure with sems fastener. NOTE: Torque fastener to 28 in. lbs. Assemble nut (33694) to end plate. NOTE: Torque nut to 9 – 12 ft lbs. Assemble cylinder to rear end plate and assemble blades to rotor. Assemble front end plate to cylinder and rotor. Make sure motor does not bind and assemble, with spacer (33699), to housing.

**GEARING** – Assemble spacer (37128) and bearing (33704) to rear end of spindle. Assemble gears (46416) to spindle and secure with shafts (37124). Assemble spacers (37126 and 37127) to spindle. Assemble spindle, with components, to ring gear.