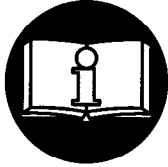


# OPERATION AND MAINTENANCE MANUAL FOR 2200 SERIES POWER MOTOR MODEL 8295

## ⚠ WARNING



**IMPORTANT SAFETY INFORMATION ENCLOSED.  
READ THIS MANUAL BEFORE OPERATING MOTOR.**

**FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.**

- Always operate, inspect and maintain this motor in accordance with American National Standards Institute Safety Code for Portable Air Tools (ANSI B186.1).
- For safety, top performance and maximum durability of parts, operate this motor at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet with 5/16" (8 mm) air supply hose.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this motor or before performing any maintenance on this motor.
- Keep hands, loose clothing and long hair away from rotating end of motor.
- Anticipate and be alert for sudden changes in motion during start up and operation of any motor.
- Motor shaft may continue to rotate briefly after Air line is removed.
- Do not lubricate motor with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not remove any labels. Replace any damaged label.
- Use accessories recommended by ARO.
- This motor is not insulated against electric shock.

## NOTICE

The use of other than genuine ARO replacement parts may result in safety hazards, decreased tool performance and increased maintenance, and may invalidate all warranties.

ARO is not responsible for customer modification of tools for applications on which ARO was not consulted.

Repairs should be made only by authorized, trained personnel. Consult your nearest ARO Authorized Servicenter.


It is the responsibility of the employer to place the information in this manual into the hands of the operator.


Refer all communications to the nearest ARO Office or Distributor.

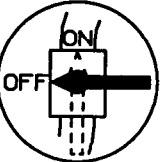
# WARNING LABEL IDENTIFICATION


## ⚠ WARNING

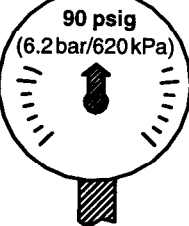
FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

	<b>⚠ WARNING</b>
	Always wear eye protection when operating or performing maintenance on this motor.

	<b>⚠ WARNING</b>
	Always wear hearing protection when operating this motor.

	<b>⚠ WARNING</b>
	Always turn off the air supply and disconnect the supply hose before installing, removing or adjusting any accessory on this motor, or before performing any maintenance on this motor.

	<b>⚠ WARNING</b>
	Do not use damaged, frayed or deteriorated air hoses and fittings.

	<b>⚠ WARNING</b>
	Operate at 90 psig (6.2 bar/620 kPa) Maximum air pressure.

## ROUTINE LUBRICATION REQUIREMENTS

Lack of or an excessive amount of lubrication will affect the performance and life of this motor. Use only recommended lubricants at below time intervals:

**EVERY 8 HOURS OF OPERATION** – Fill lubricator reservoir of recommended F.R.L. with spindle oil (29665). If an in line or air line lubricator is not used, apply several drops of spindle oil (29665) in air inlet.

**EVERY 160 HOURS OF OPERATION** – Flush motor with a solution of three (3) parts cleaning solvent to one (1) part spindle oil (or use kerosene).

**EVERY 160 HOURS OF OPERATION** – Lubricate gearing. Pack bearings, coat shafts and lubricate gears with NLGI #1 "EP" grease (33153).

## AIR SUPPLY REQUIREMENTS

For maximum operating efficiency, the following air supply specifications should be maintained to this motor:

- AIR PRESSURE – 90 p.s.i.g. (6.2 bar)
- AIR FILTRATION – 50 micron
- LUBRICATED AIR SUPPLY
- HOSE SIZE – 5/16" (8 mm) I.D.

An ARO® model C28231–810 air line FILTER/REGULATOR/LUBRICATOR (F.R.L.) is recommended to maintain the above air supply specifications.

## RECOMMENDED LUBRICANTS

After disassembly is complete, all parts, except sealed or shielded bearings, should be washed with solvent. To relubricate parts, or for routine lubrication, use the following recommended lubricants:



Where Used	ARO Part #	Description
Air Motor	29665	1 qt Spindle Oil
"O" Rings & Lip Seals	36460	4 oz. Stringy Lubricant
Gears and Bearings	33153	5 lb. "EP" – NLGI #1 Grease

## INSPECTION, MAINTENANCE AND INSTALLATION

Disconnect air supply from the motor or shut off air supply and exhaust (drain) line of compressed air before performing maintenance or service to the motor.

It is important that the motor be serviced and inspected at regular intervals for maintaining safe, trouble-free operation of the motor.

Be sure the motor is receiving adequate lubrication, as failure to lubricate can create hazardous operating conditions resulting from excessive wear.

Be sure that the air supply lines and connectors are of proper size to provide a sufficient quantity of air to the motor.

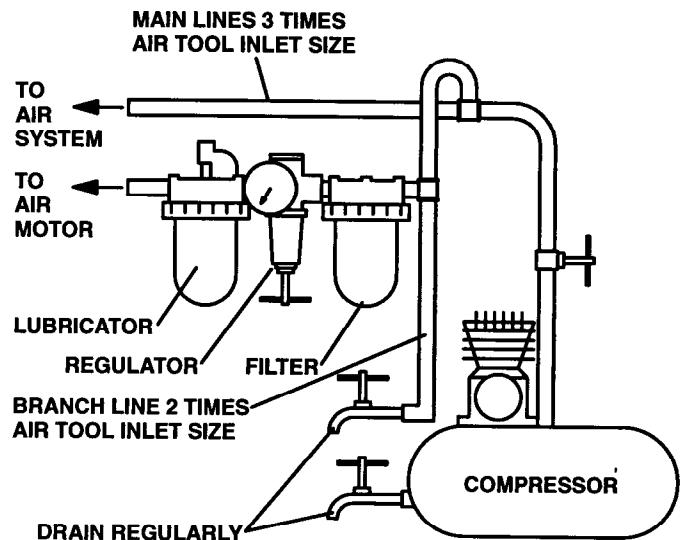
Maintenance and repair shall be performed by authorized, trained, competent personnel. Motors, hose and fittings shall be replaced if unsuitable for safe operation and responsibility should be assigned to be sure that all tools requiring guards or other safety devices shall be kept in legible condition. Maintenance and repair records should be maintained on all motors. Frequency of repair and the nature of the repairs can reveal unsafe application. Scheduled maintenance by competent authorized personnel should detect any mistreatment or abuse of the motor and worn parts. Corrective action should be taken before returning the motor for use.

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.

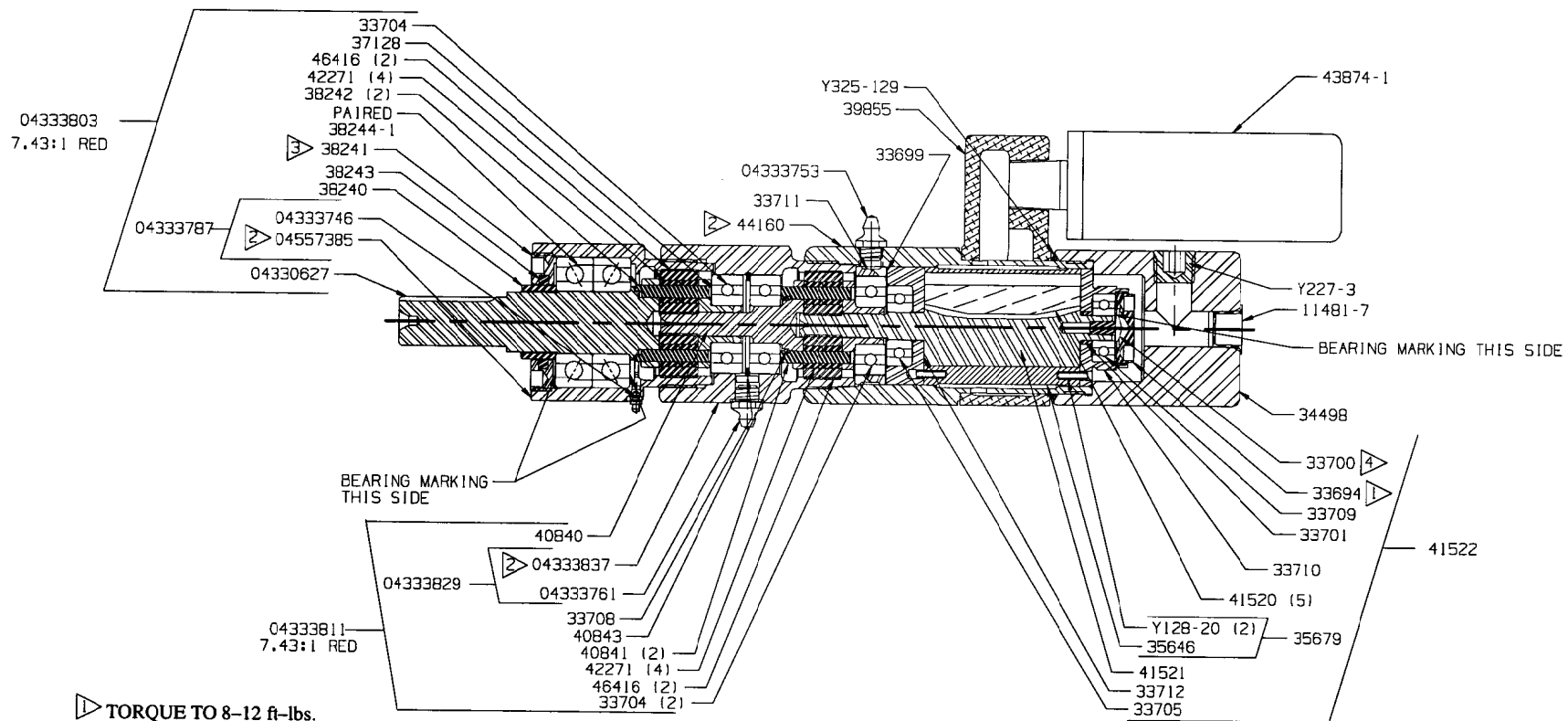
Upon reassembling, lubricate parts where required. Use 33153 grease, or equivalent, in bearings. Use 36460 lubricant for "O" ring assembly. When assembling "O" rings or parts adjacent "O" rings, care must be exercised to prevent damage to the rubber sealing surfaces. A small amount of grease will usually hold steel balls and other small parts in place while assembling.

When replacement parts are necessary, consult drawing containing the part for identification.

Always use clean, dry air. Dust, corrosive fumes and/or excessive moisture can damage the motor. An air line filter can greatly increase the life of an air motor. The filter removes rust, scale, moisture and other debris from the air lines. Low air pressure (less than 90 p.s.i.g.) reduces the speed of the air motor. High air pressure (more than 90 p.s.i.g.) raises performance beyond the rated capacity of the motor and could cause injury. Shown below is a typical piping arrangement.



## 8295 (55.2:1 Gear Reduction) (350 R.P.M.)



- TORQUE TO 8-12 ft-lbs.
- TORQUE TO 110-120 ft-lbs.
- TORQUE TO 55-60 ft-lbs.
- TORQUE TO 28 in-lbs.