COOPER Tools

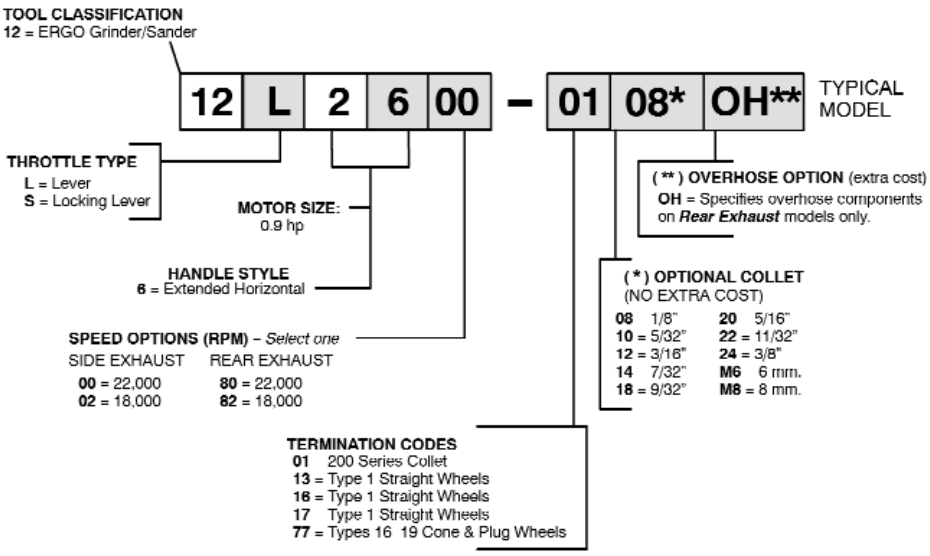
Parts Manual • Ersatzteil–Liste

PL30-1226 September 7, 2001

DOTCO®

45-8189

12L26.. Series
.9 hp ERGO Extended Grinders

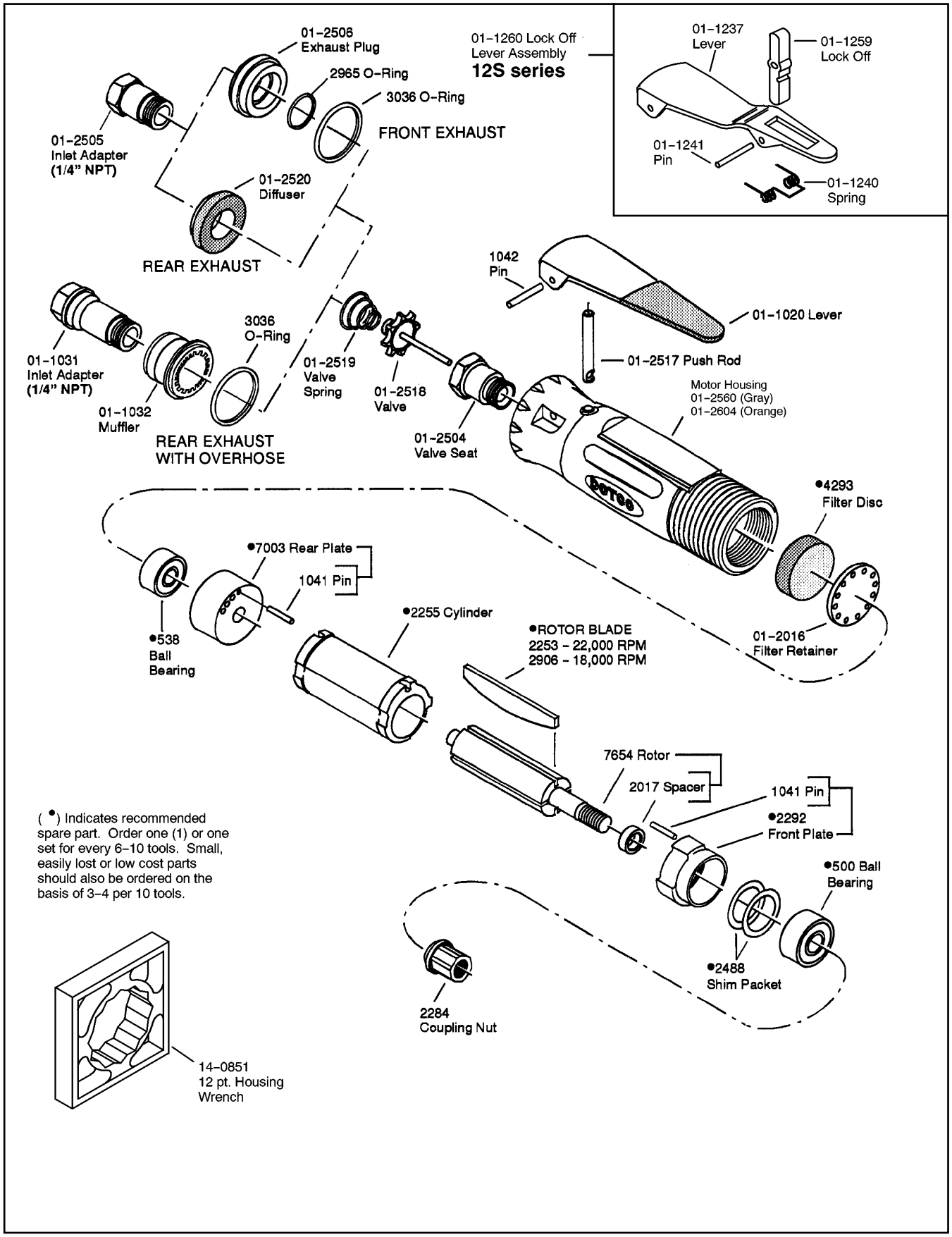


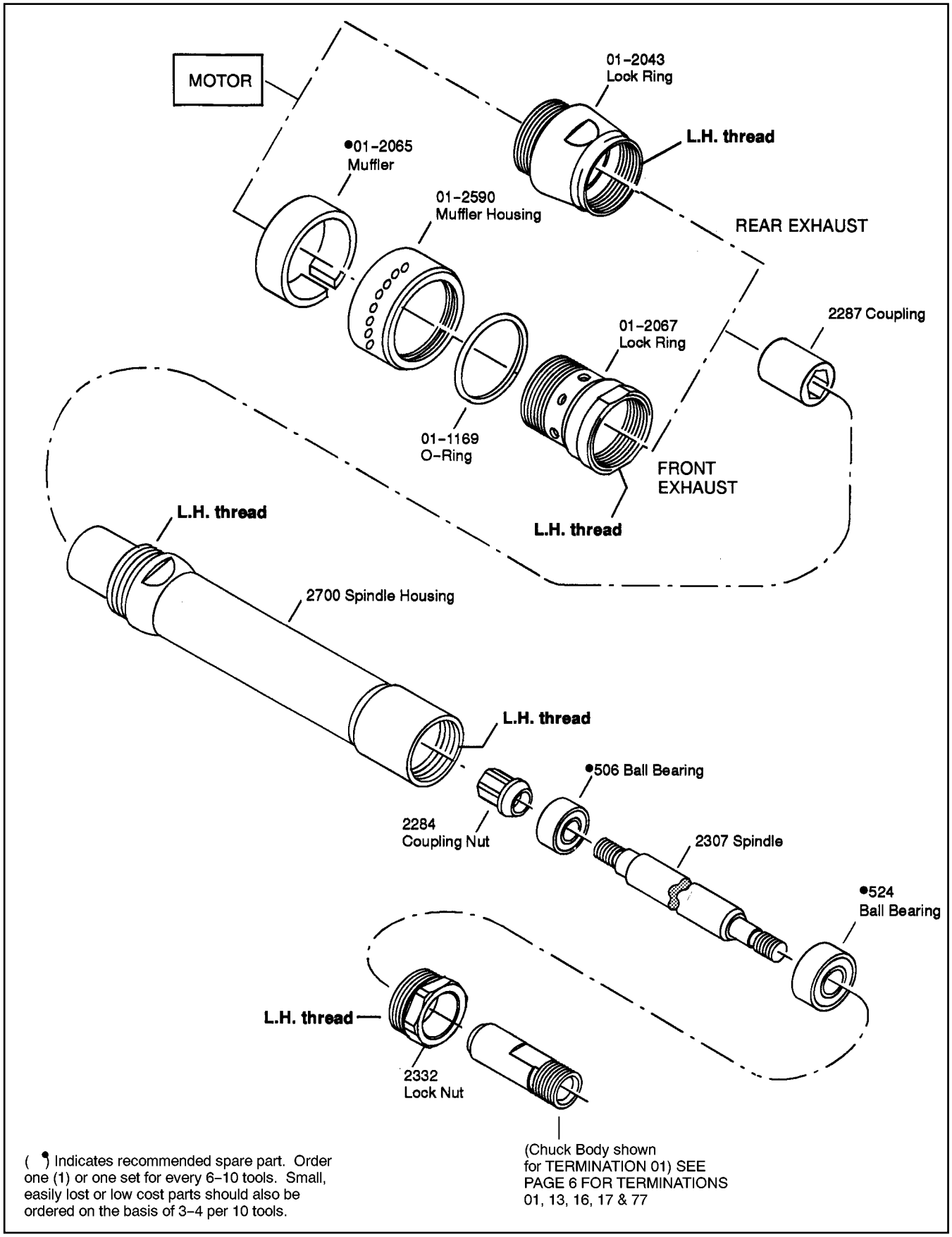
IMPORTANT: Read and comply with safety and operating instructions contained in this manual.

For additional product information visit our website at http://www.coopertools.com

CooperTools
P.O. BOX 1410
LEXINGTON, SC 29071-1410

DOTCO
12L26 Series ERGO Extended Grinders

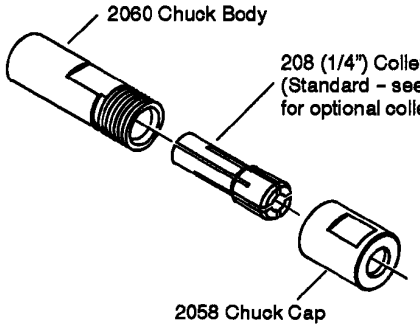




(•) Indicates recommended spare part. Order one (1) or one set for every 6–10 tools. Small, easily lost or low cost parts should also be ordered on the basis of 3–4 per 10 tools.

DOTCO
12L26 Series ERGO Extended Grinders

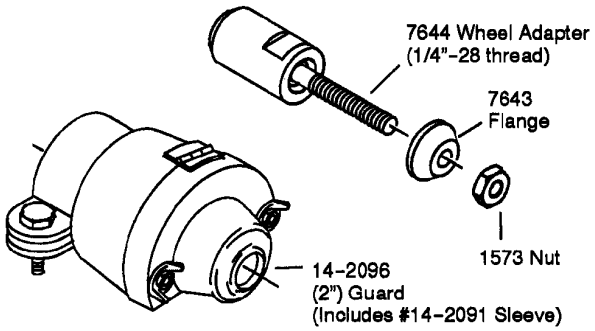
TERMINATION 01
200 Series Collet Spindle



Includes:
14–0809 (9/16") Wrench
14–0812 (3/4") Wrench

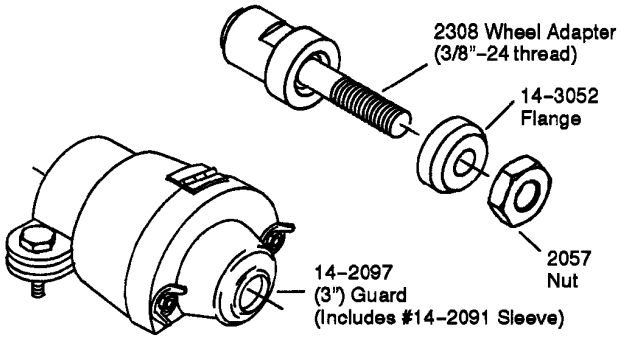
TERMINATION 13
Type 1 Straight Wheel
(2" x 1/2" x 1/4" hole)

Includes:
14–0810 (5/8") Wrench
14–0807 (7/16") Wrench



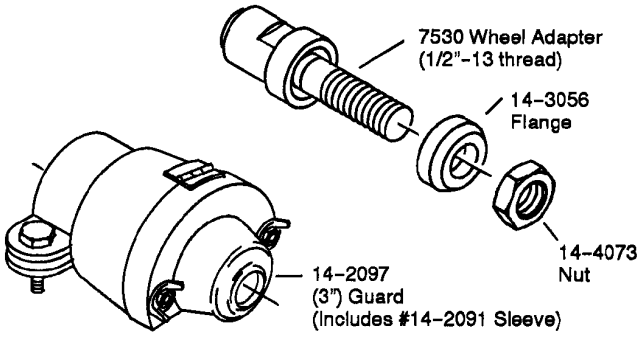
TERMINATION 16
Type 1 Straight Wheels
(3" x 1/2" x 3/8" hole)

Includes:
14–0809 (9/16") Wrench
14–0810 (5/8") Wrench

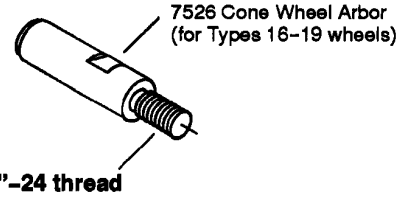


TERMINATION 17
Type 1 Straight Wheels
(3" x 1/2" x 1/2" hole)

Includes:
14–0814 (7/8") Wrench
14–0810 (5/8") Wrench



TERMINATION 77
Cone & Plug Wheel
Types 16—19



Includes:
14–0808 (1/2") Wrench

Service Instructions

DISASSEMBLY INSTRUCTIONS

Place the 12-Point socket wrench, part #14-0851, horizontally in a vise and insert the tool's housing vertically into the wrench. Loosen and unscrew the Lock Ring (or extension) from the tool. To remove motor, grasp the end of the rotor (or coupling nut) and pull the motor out. To disassemble the motor, remove the Rear Bearing Plate, part #7003, and bearing by pressing on the rear of the rotor with an arbor press. Unthread the Coupling Nut by holding the rotor in soft vise jaws. The Front Bearing Plate and Bearing can now be pressed off. be careful not to lose the rotor's spacer.

Extension Spindle

To disassemble the Extension Assembly, remove Lock Ring, **NOTE:** left hand threads, and pull Spindle Assembly from Spindle Housing, part #2700. To remove Bearing, part #506, from Spindle, unscrew Coupling Nut, Part #2284, and press Spindle, part #2307, from bearing. Hold spindle in vise and unthread Chuck Body,(or Spindle Adapter). Press Spindle out of Bearing, part #524.

ASSEMBLY INSTRUCTIONS

Make sure all parts are clean. Press Pins, part #1041, if necessary, into the motor plates. To Correct for Bearing tolerances, it is necessary to use shims to maintain correct clearances between the ends of the rotor and bearing plates.Shim Packet, part #2488, contains a .001" shim and two .002" shims. Insert a .002" shim in the Front Bearing Plate's pocket and install part #500 Ball Bearing into Front Plate. Also, install part #538, Ball Bearing, into the Rear Bearing Plate, part #7003. Slip Spacer, part #2017, onto the threaded end of Rotor. Support the rotor on the rear end and assemble the front plate assembly onto the rotor by pressing on the bearing's inner race. Assemble Coupling Nut, part #2284, onto rotor by holding rotor in soft vise jaws.

Now, hold the rotor in the left hand and the front end plate in the right hand. Apply and outward, (pulling) pressure and observe the spacing between the end of the rotor and the bearing plate. This should be from flush, not rubbing, to .002" maximum. If the rotor rubs the bearing plate, reduce the spacing between the bearing and bearing plate by removing the .002" shim entirely, or by substituting the .001" shim for the .002" shim. However if there was more than .002" spacing between the end of the rotor and the Bearing plate, then add the.001" shim between the bearing and the bearing plate.

Replace the Cylinder, part #2255. **NOTICE:** Be sure that the cylinder is not on backwards. The air inlet in the cylinder must line up with the air inlet in the rear plate, when the plate's pin is engaged in the mating slot in the cylinder.

Insert the rotor blades into the rotor. Support this assembly on the face of the Coupling Nut. Then, press on the Rear Bearing Plate, part #7003, with bearing assembled, pressing on inner race only. Press just enough to bring the bearing plate against the cylinder. There should be a slight drag between the bearing plate and the cylinder when these are moved with the fingers. Position the cylinder until the motor turns finger free. Insert the motor into housing and screw in the Lock Ring until tight. Check the assembly by spinning the coupling nut; it must be free. If it is not free, remove motor from housing and recheck snugness and alignment of cylinder between end plates. IMPORTANT: Lock Ring must be tight, do not loosen this lock ring for the purpose of "freeing up" the motor.

Extension Spindle:

Press front bearing, part #524, against shoulder of the spindle , pressing only on the bearing's inner race. Thread Chuck, or Coupling Nut< onto spindle until it is snug against bearing. Press Bearing, part #506, onto rear of spindle and tighten Coupling Nut, part #2284, against bearing's inner race by holding chuck body, or spindle adapter. Position Spindle / Bearing Assembly in Spindle Housing, part #2700, making sure that outer race of bearing is up against inside shoulder of the Spindle Housing. Screw Lock Ring, part #2332, against outer race of front bearing and tighten. Spindle must turn freely.

Assembling the Extension Spindle and Motor:

To assemble the extension spindle and motor together, place the special 12 point socket wrench, part #14-0851, horizontally in a vise and insert the tool's housing vertically into the wrench. Place Coupling, part #2287, over Coupling Nut, part #2284. Mount spindle assembly onto motor assembly and thread into Cap, part #01-2043, or Cap, part # 01-2087, **NOTE:** Left hand threads, making sure that Coupling Nut, part #2284, on spindle assembly engages Coupling, part #2287. Cap, part #01-2043, must be held stationary while spindle assembly is tightened. Spindle must rotate freely.

Pre-operation Inspection:

Before this tool is connected to the air line, be sure that spindle turns freely. Tools should not be operated if there is any rubbing or binding in the assembly. Add a few drops of oil to tool before using.

RECOMMENDED SPARE PARTS LIST

These parts are suggested as a recommended inventory of spare parts. Where parts are small, low cost, or easily lost, then we recommend stocking 3 to 4 for every 10 tools. Other, larger, lower wear, or more expensive parts should be maintained as one, (or one set) for every 6 to 10 tools.

Part #	Description	Qty. Per Tool	Recommended Spare Parts	
			Per Tool	Per 10 Tools
01-2065	Muffler	1	1	3
2253	Rotor Blade	4	4	20
2255	Cylinder	1	0	2
2256	Front Plate	1	0	2
2488	Shim Packet	1	1	3
2905	Rotor Blade (18,000)	4	4	20
4293	Filter Disc	1	1	2

Part #	Description	Qty. Per Tool	Recommended Spare Parts	
			Per Tool	Per 10 Tools
500	Ball Bearing	1	1	2
506	Ball Bearing	1	1	2
524	Ball Bearing	1	1	2
538	Ball Bearing	1	1	2
7003	Front Plate	1	0	2
Var.	Collet (TERM. 01)	1	1	2

Safety First!

ALWAYS COMPLY WITH:

1. General industry Safety & Health Regulations, Part 1910, OSHA 2206, available from: Sup't of Documents; Government Printing Office; Washington, DC 20402.
2. Safety Code of Portable Air Tools, ANSI B186.1 available from: American National Standards Institute, Inc.; 1430 Broadway; New York, NY 10018.
3. State and Local regulations.

Portions of the above codes and regulations are listed below for quick reference.

THE FOLLOWING EXCERPTS ARE NOT INTENDED TO BE ALL INCLUSIVE: STUDY AND COMPLY WITH ALL REGULATIONS!

1. TOOL INTENT: Tools shall be used only for purposes intended in their design (refer to product catalog).
2. AIR SUPPLY: Test and operate tools at 90 PSIG maximum unless tool is marked otherwise. Use recommended airline filters-regulators-lubricators.
3. UNUSUAL SOUND or VIBRATION: If tool vibrates or produces an unusual sound, repair immediately for correction.
4. OPERATOR PROTECTIVE EQUIPMENT: Wear goggles or face shield at all times tool is in operation. Other protective clothing shall be worn, if necessary. SEE REGULATIONS.
5. SAFETY MAINTENANCE PROGRAM: Employ a safety program to provide inspection and maintenance of all phases of tool operation and air supply equipment in accordance with *"Safety Code for Portable Air Tools."*

⚠ *CAUTION: Disconnect the air supply hose before servicing the tool.*

INSTALLATION:

For best performance, a working air pressure of ***90 pounds per square inch*** is recommended. Pipings, fittings, and hose should be adequate to maintain ***90 psig*** while the tool in in operation. An air line filter and lubricator, such as CooperTools' #F02-M Filter (1/4" NPT) and #L02-EP Lubricator (1/4" NPT) should be used (refer to product catalog). Hose should be blown out before attaching to tool.

LUBRICATION:

The gears in angle head style tools must be lubricated every 8 hours of operation with high quality gear grease. CooperTools' grease #45-0980 is recommended. A Grease Gun, #45-1982, is furnished with each geared tool. Insert the nozzle into the flush type lube fitting, located on the side or top of the angle head, and pump four or five times. The motor must be lubricated and moisture free. Use a high grade SAE #5 spindle oil, such as CooperTools' Lubricating oil #45-0918 (one quart). Two or three drops per minute should be sufficient lubrication. **NOTE: Turbine motor type tools (10-90 & 10-95) must NOT be oiled.**

LOSS OF POWER:

It is seldom necessary to disassemble this tool for loss of power. A loss of power may not be related to the tool. First, check the air line regulator. Also, check the air line pressure; it should be 90 psig at or near the tool while the tool is running. Check the size of hose and fittings to be certain they are not causing air restrictions. Make certain they are not plugged with dirt, rust, or scale.

SERVICE INSTRUCTIONS:

The parts of this tool are small and require careful handling. We recommend the tool be returned to the factory for repair. However, if the tool is to be repaired in the field, carefully follow instructions. Do not squeeze the tool or parts in a vise except as specified. Care must be used during assembly and disassembly. When pressing bearings onto a shaft, press only on the inner race. When pressing bearings into a bore, press on the outer race only. *NOTE: Ball bearings are the shielded type. They are lubricated for life by the bearing manufacturer and should not be washed out with solvents to clean.*

⚠ WARNING!

CHECK SPEED OF TOOL WITHOUT WHEEL BEFORE IT IS RELEASED FOR USE.

The SPEED TOLERANCE is rated speed minus 10%. The tool must ***NOT*** have a free speed higher than the RPM stamped on the housing. Use an accurate tachometer to check the tool speed, with 90 psig air pressure at the tool with the tool running.