COOPER Tools

Parts Manual • Ersatzteil–Liste

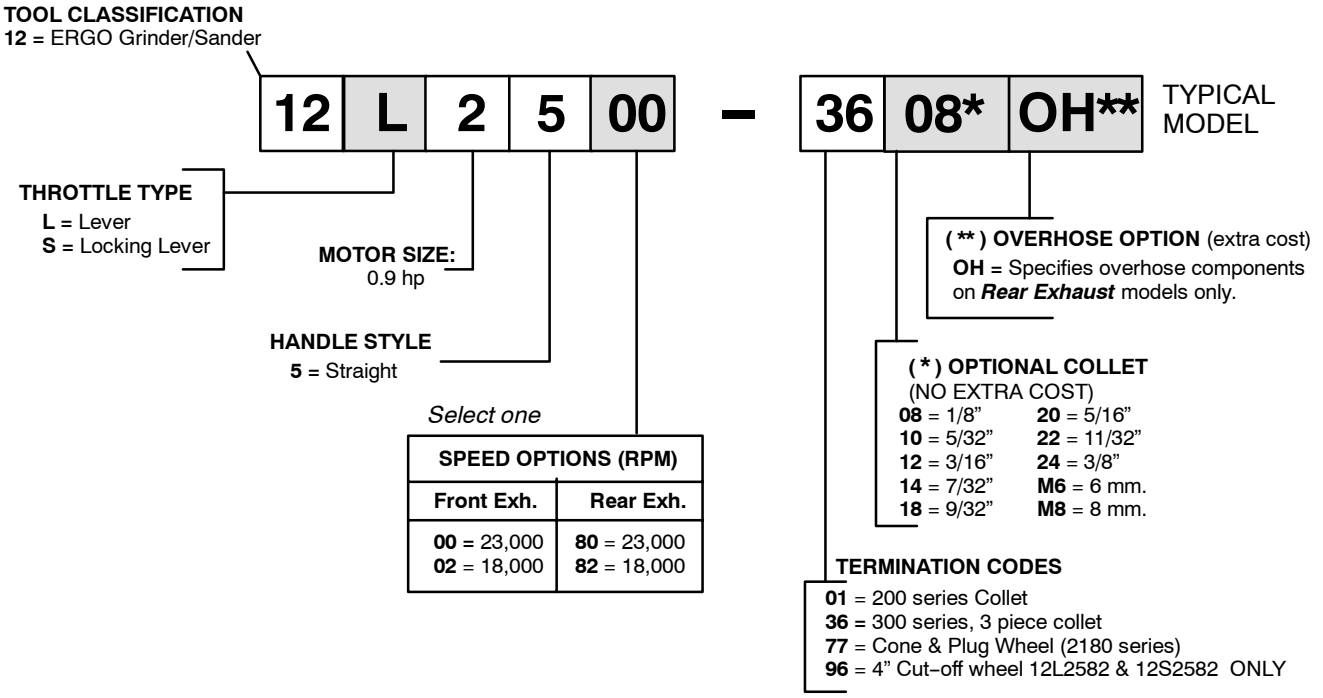
PL30–1225 4/01

DOTCO®

45–8165

12L25.. & 12S25.. series

0.9 hp ERGO Straight Grinders

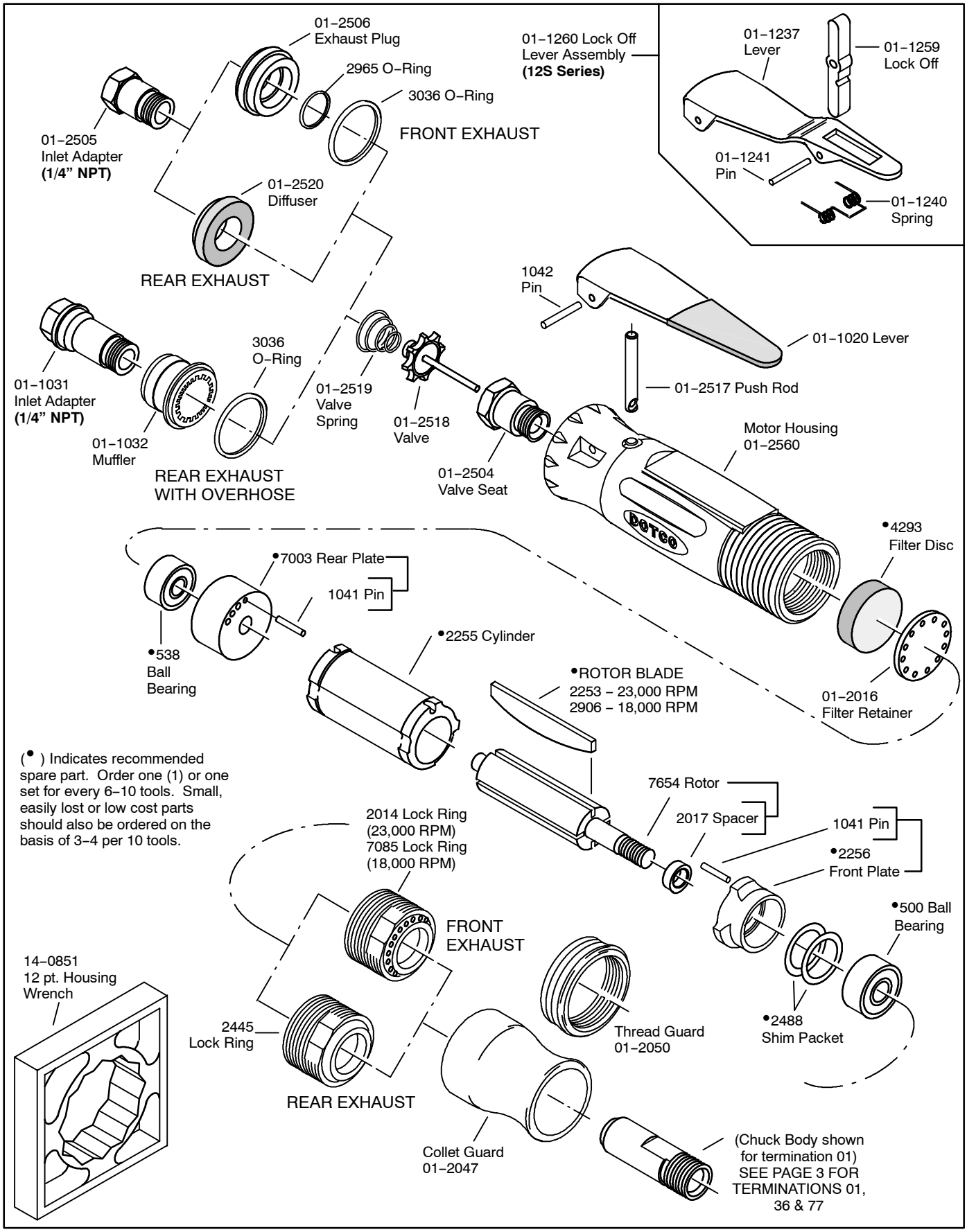


CooperTools
P.O. BOX 1410
LEXINGTON, SOUTH CAROLINA 29071–1410

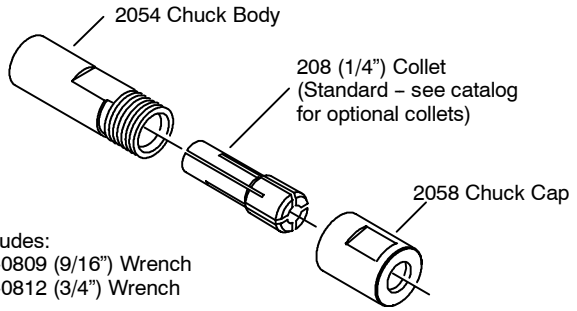
DOTCO®

Models 12–25 Series ERGO Grinders

Motor & Motor Housing Assemblies

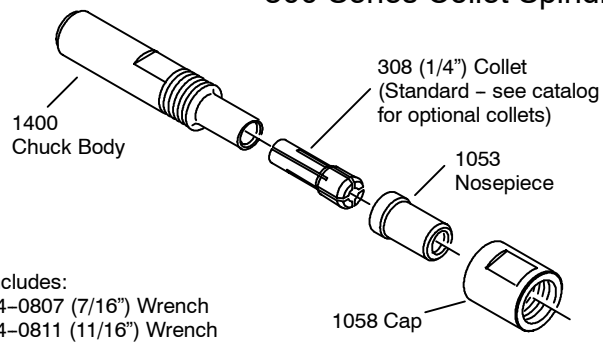


TERMINATION 01
200 Series Collet Spindle



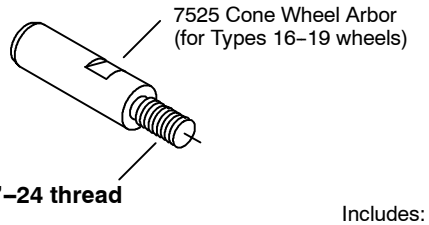
Includes:
14–0809 (9/16") Wrench
14–0812 (3/4") Wrench

TERMINATION 36
300 Series Collet Spindle



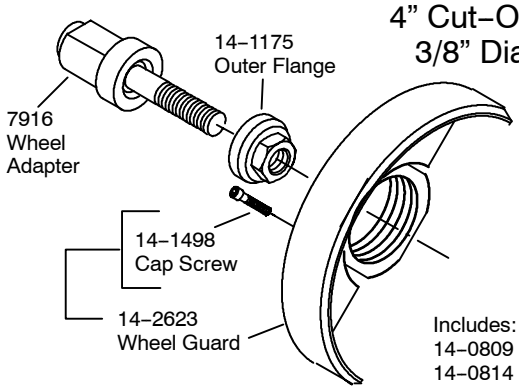
Includes:
14–0807 (7/16") Wrench
14–0811 (11/16") Wrench

TERMINATION 77
Cone & Plug Wheel
Types 16—19



Includes:
14–0808 (1/2") Wrench

TERMINATION 96
4" Cut–Off Wheel
3/8" Dia. Hole



Includes:
14–0809 (9/16") Wrench
14–0814 (7/8") Wrench

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 six to ten tools.

Part Number	Description	Qty. per Tool	Recommended Spare Parts	
			Per Tool	Per 10 Tools
01–2065	Muffler	1	1	3
2253	Rotor Blade (23,000)	4	4	20
2255	Cylinder	1	0	2
2256	Front Plate	1	0	2
2488	Shim Packet	1	1	3
2906	Rotor Blade (18,000)	4	4	20
4293	Filter Disc	1	1	2

INSTALLATION

For best tool 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 is in operation. An air line filter and lubricator, such as Cooper Power Tool's #F02–M Filter (1/4" NPT) and #L02–EP Lubricator (1/4" NPT) should be used (**refer to Cooper's "F–R–L" brochure**). Hose should be blown out before attaching to the tool.

LUBRICATION

The motor must be lubricated and free of moisture. Use a high grade SAE spindle oil, such as Cooper's Lubricating Oil #45–0918 *(one quart)*. Two or three drops per minute should be sufficient.

LOSS OF POWER

A loss of power may not be related to the tool. First, check the air line pressure. It should be ***90 psi at the tool while operating***.

SERVICE INSTRUCTIONS

Do not squeeze tool or parts in a vise except as specified. Care must be used in their 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.

DISASSEMBLY INSTRUCTIONS

Place the special 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 from the tool. To remove the motor, grasp the end of the rotor (or chuck body) 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 Collet Chuck Body 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).

ASSEMBLY INSTRUCTIONS

MOTOR

Make sure all parts are clean. Press Pins *(part #1041)* — if necessary — into the motor end plates. To correct for bearing tolerances, it is necessary to use shims to maintain correct clearances between the ends of the rotor and the bearing plates. Shim Packet *(part #2488)* contains a 0.001" shim and two 0.002" shims. Insert a 0.002" Shim in the Front Bearing Plate's pocket and install *#500* Ball Bearing into the Front Plate. Also, install *#538* Ball Bearing into the Rear Bearing Plate, *#7003*. Slip Spacer, *part #2017*, onto the threaded end of the 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 Chuck Body or Adapter on end of rotor by holding rotor body in soft vise jaws.

Now, hold the rotor in the left hand and the front end plate in the right hand. Apply an 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 0.002" maximum. *If the rotor rubs the bearing plate, reduce the spacing between the bearing and bearing plate by removing the 0.002" shim entirely, or by substituting the 0.001" shim for the 0.002" shim. However, if there was more than 0.002" spacing between the end of the rotor and the bearing plate, then add 0.001" shim between the bearing and bearing plate.*

Replace Cylinder, *part #2255*. *NOTE: 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 Collet Chuck Body, if so equipped. If tool has a Chuck Body, place the Nosepiece over the Chuck Body and support this assembly on the face of the Nosepiece. 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 motor into housing and screw in the Lock Ring until tight. *Check the assembly by spinning the chuck body; 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.*