Operating Instructions • Warning Information • Parts Breakdown





AWARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

AWARNING

- MAXIMUM RPM OF 54,000
- MAX AIR PRESSURE: 90 PSIG, 6.2 BAR
- RPM OF THE ACCESSORY MUST EXCEED TOOL RPM



ALWAYS READ INSTRUCTIONS BEFORE USING POWER TOOLS



ALWAYS WEAR SAFETY GOGGLES



WEAR HEARING PROTECTION



AVOID PROLONGED EXPOSURE TO VIBRATION

SPECIFICATIONS

Free Speed (RPM)54,000	Air Pressure (PSI) 90
Collet Size (In.)	Air Consumption (CFM)85
Air Inlet (NPT)	Length (In.) 5 3/8"
Collet Size (In.)	Shipping Wt. (Lbs.)55

RL320K
PENCIL DIE
GRINDER KIT

RL320K 1 Rev. 12/31/03

AWARNING

FAILURE TO OBSERVE THESE WARNINGS COULD RESULT IN INJURY.



THIS INSTRUCTION MANUAL CONTAINS IMPORTANT SAFETY INFORMATION.

READ THIS INSTRUCTION MANUAL CAREFULLY AND UNDERSTAND ALL INFORMATION BEFORE OPERATING THIS TOOL.

- Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code of Portable Air Tools (ANSI B186.1) and any other applicable safety codes and regulations.
- For safety, top performance and maximum durability of parts, operate this tool at 90 psig, 6.2 bar max air pressure with 3/8" diameter air supply hose.



 Always wear impact-resistant eye and face protection when operating or performing maintenance on this tool. Always wear hearing protection when using this tool.



- High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or OSHA regulation.
- Keep the tool in efficient operating condition.
- Operators and maintenance personnel must be physically able to handle the bulk, weight and power of this tool.



Air under pressure can cause severe injury.
Never direct air at yourself or others. Always
turn off the air supply, drain hose of air
pressure and detach tool from air supply before
installing, removing or adjusting any accessory
on this tool, or before performing any
maintenance on this tool. Failure to do so could
result in injury. Whip hoses can cause serious
injury. Always check for damaged, frayed or
loose hoses and fittings, and replace
immediately. Do not use quick detach
couplings at tool. See instructions for correct
set-up.

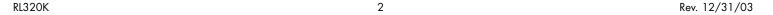


 Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions over extended periods of time may be harmful to your hands and arms. Discontinue use of tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.

- Place the tool on the work before starting the tool.
- Slipping, tripping and/or falling while operating air tools can be a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface.
- Keep body working stance balanced and firm. Do not overreach when operating the tool.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.
- Do not carry tool by the hose. Protect the hose from sharp objects and heat.
- Tool shaft may continue to rotate briefly after throttle is released. Avoid direct contact with accessories during and after use. Gloves will reduce the risk of cuts or burns.

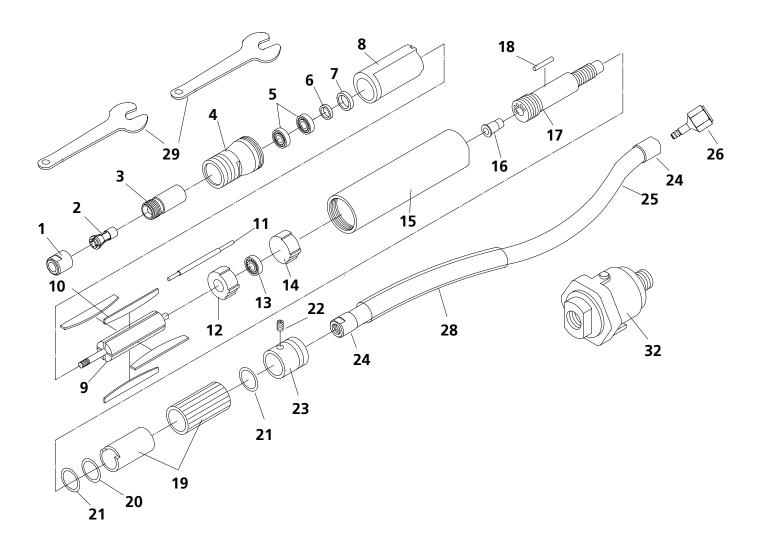


- Keep away from rotating end of tool. Do not wear jewelry or loose clothing. Secure long hair. Scalping can occur if hair is not kept away from tool and accessories. Choking can occur if neckwear is not kept away from tool and accessories.
- Correct grinding wheel mounting is necessary
 to prevent injury from broken wheels. Do not
 use chipped or cracked grinding wheels.
 Grinding wheels should be a free fit on the
 spindle to prevent stress at the hole. Use only
 wheel collars that come with the grinder for
 mounting the grinding wheel. Flat washers or
 other adapters may over stress the wheel.
 Always use heavy paper blotter discs between
 the wheel collars and the grinding wheel.
 Tighten the wheel on the spindle to prevent spin
 off when the air grinder is turned off.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not force tool beyond its rated capacity.
- Do not remove any labels. Replace any damaged labels.



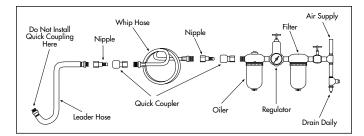
RL320K

Pencil Die Grinder Kit



Ref. #	Item #	DESCRIPTION	QTY	Ref#	Item#	DESCRIPTION	QTY	
1	RS24501	Clamping Nut	1	17	RS24517	Hose Plug	1	
2	RS24502	Collet, 1/8"	1	18	RS24518	Pin	1	
3	RS24503	Spindle	1	19	RSPDG19	Sliding Knob Assembly	1	
4	RS24504	Collet Foundation	1	20	RS24520	O-Ring	1	
5	RSPDG05	Ball Bearing	2	21	RS24521	O-Ring	2	
6	RS24506	Spacer	1	22	RS24522	Screw	1	
7	RS24507	Lateral Disc	1	23	RSPDG23	Rear End Holder	1	
8	RS24508	Cylinder	1	*24		Hose Nut	2	
9	RS24509	Rotor	1	25	RS24525	Hose, Black (Includes #24)	1	
10	RS24510	Rotor Blade	4	26	RS24526	Air Inlet	1	
11	RS24511	Pin	1	28	RSPDG28	Silencer	1	
12	RS24512	Bearing Plate	1	29	RSPDG29	9mm Wrench	2	
13	RS24513	Ball Bearing	1	32	RS24532	Filter	1	
14	RS24514	Intake Plate	1	* Available only with #25				
15	RS24515	Sleeve, Black	1	Also Available: RL320SK - 10 Piece Set of Stones				
16	RS24516	Intake Steel Tube	1	(Air nipple included in kit – not available separately.)				

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Air Supply...

Tools of this class operate on a wide range of air pressures. It is recommended that air pressure of these tools measures 90 PSI at the tool while running free. Higher pressure (over 90 psig; 6.2 bar) raises performance beyond the rated capacity of the tool, which will shorten tool life because of faster wear and could cause injury.

Always use clean, dry air. Dust, corrosive fumes and/or water in the air line will cause damage to the tool. Drain the air tank daily. Clean the air inlet filter screen on at least a weekly schedule. The recommended hookup procedure can be viewed in the above figure.

The air inlet used for connecting air supply has standard 1/4" NPT. Line pressure should be increased to compensate for unusually long air hoses (over 25 feet). Minimum hose diameter should be 3/8" I.D. and fittings should have the same inside dimensions and be tightly secured.

Operation...

When using the grinder, be careful not to exert excessive force. Too much force may be hazardous, if it causes the cutting tool spindle to bend or break.

The burning of the work piece or excessive speed reduction indicates too much force being applied. Changing to a free cutting tool may be better for the desired rate of speed and stock removal

Avoid hazardous condition by making sure there is sufficient gripping force on the spindle of the cutting tool by placing the spindle 7/16" or more inside the collet.

Lubrication...

Lubricate the air motor daily with quality air tool oil. If no air line oiler is used, run a teaspoon of oil through the tool. The oil can be squirted into the tool air inlet or into the hose at the nearest connection to the air supply, then run the tool. The amount of oil to be used is 1 ounce. Overfilling will cause a reduction in the power of the tool.

Other factors outside the tool may cause loss of power or erratic action. Reduced compressor output, excessive drain on the air line, moisture or restrictions in air pipes or the use of hose connections of improper size or poor condition may reduce air supply. Grit or gum deposits in the tool may cut power and may be corrected by cleaning the air strainer and flushing out the tool with gum solvent oil or an equal mixture of SAE #10 oil and kerosene. If outside conditions are in order, and the tool continues erratic action or low power, disconnect tool from hose and contact your nearest authorized service center.

Warranty...

Matco warrants its air tools for a period of 1 year to the consumer. We will repair any air tool covered under this warranty which proves to be defective in material or

workmanship during the warranty period. In order to have your tool repaired, return the tool to any Matco authorized Warranty Center, freight prepaid. Please include a copy of your proof of purchase and a brief description of the problem. The tool will be inspected and if any part or parts are found to be defective in material or workmanship, they will be repaired free of charge and the repaired tool will be returned to you freight prepaid.

This warranty gives you specific rights. You may also have other rights which vary from state to state.

The foregoing obligation is Matco's sole liability under this or any implied warranty and under no circumstances shall Matco be liable for any incidental or consequential damages.

Note: Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.