



!WARNING

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.



!WARNING

- MAXIMUM RPM OF 25,000
- 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

Rec. Air Pressure. 90 PSI	Sound Power Level 87.1Db
Air Consumption. 4 CFM	Sound Pressure Level 74.1Db
RPM 25,000	Overall Length 6-1/2"
Air Inlet Thread. 1/4" NPTF	Weight 1 Lb.
Rec. Hose ID 3/8"	

RL301

Straight Line Die Grinder

!WARNING

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.

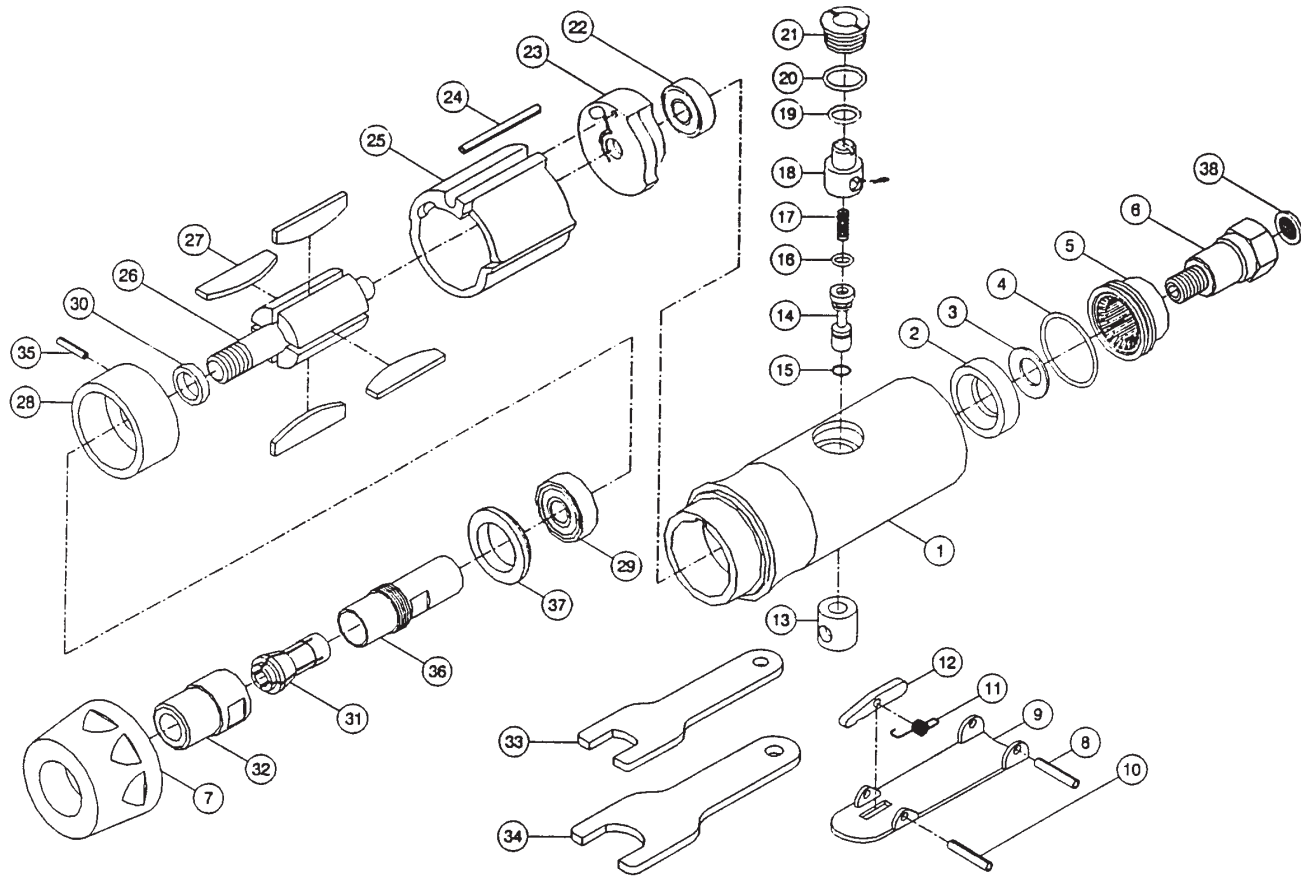
- Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code of Portable Air Tools (ANSI B186.1) and any other applicable safety codes and regulations.
- For safety, top performance and maximum durability of parts, operate this tool at 90 psig 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 damaged labels.

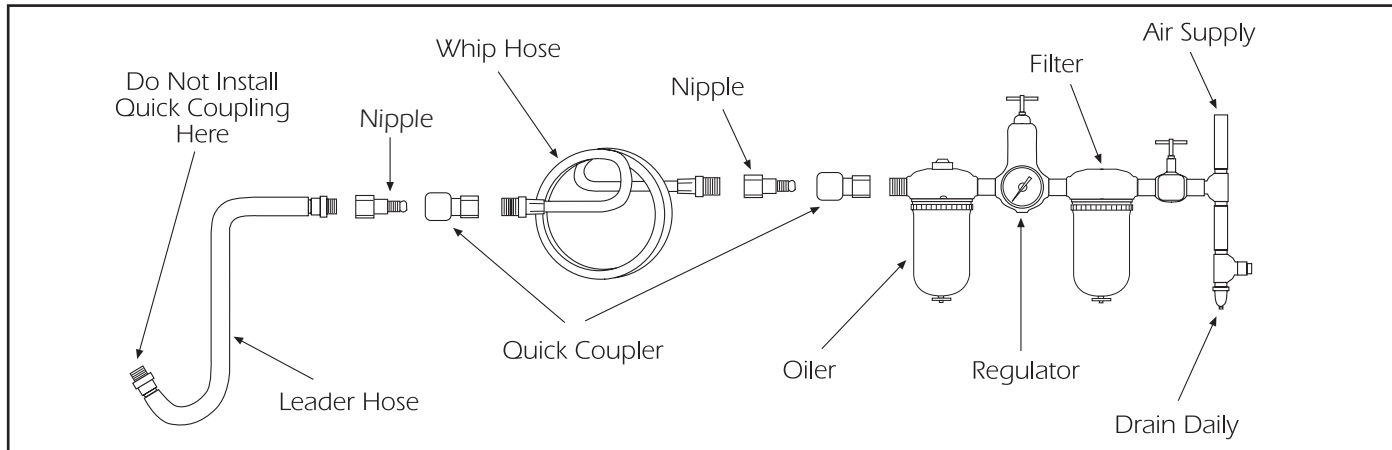
RL301

Straight Line Die Grinder



Index #	Part #	Description	Qty.	Index #	Part #	Description	Qty.
1	RS96101-RL301	Motor Housing	1	20	RS96120	O-Ring	1
2	RS96102	Silencer	1	21	RS96121	Valve Screw	1
3	RS96103	Washer	1	22	RS96122	Ball Bearing	1
4	RS96104	O-Ring	1	23	RS96123	Rear End Plate	1
5	RS96105	Deflector	1	24	RS96124	Cylinder Pin	4
6	RS96106	Air Inlet	1	25	RS96125	Cylinder	1
7	RS96107	Housing Lock Ring	1	26	RS96126	Rotor	2
8	RS96108	Lever Pin	1	27	RS96127	Rotor Blade	1
9	RS96109	Throttle Lever	1	28	RS96128	Front End Plate	1
10	RS96110	Spring Pin	1	29	RS30524	Ball Bearing	1
11	RS96111	Spring	1	30	RS96130	Rotor Spacer	1
12	RS96112	Stop Rod	1	31	RS96131	Collet	1
13	RS96113	Valve Bushing	1	32	RS96132	Collet Nut	1
14	RS96114	Valve Stem	1	33	RS96133	Spanner Wrench (11mm)	1
15	RS96115	O-Ring	1	34	RS96134	Spanner Wrench (17mm)	1
16	RS96116	O-Ring	1	35	RS96135	Pin	1
17	RS96117	Spring	1	36	RS96136	Spindle	1
18	RS96118	Regulator	1	37	RS96137	Rubber Gasket	1
19	RS96119	O-Ring	1	38	RS96138	Filter	1

Operating Instructions • Warning Information • Parts Breakdown



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 could 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 conditions by making sure there is sufficient 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.

MATCO TOOLS™ 1 YEAR LIMITED WARRANTY FOR AIR TOOLS

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.

