

- **Operating Instructions**
- **Warning Information**
- **Parts Breakdown**



!WARNING



**ALWAYS READ
INSTRUCTIONS
BEFORE USING
POWER TOOLS**



**ALWAYS WEAR
SAFETY GOGGLES**



**WEAR HEARING
PROTECTION**



**AVOID
PROLONGED
EXPOSURE TO
VIBRATION**

!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.

SPECIFICATIONS

Max. Free Speed	1600 RPM
Air Inlet	1/4" NPT
Air Hose Size	3/8" ID
Recom. Air Pressure	90 PSI
Air Consumption	4 CFM
Length	8"
Weight	2-3/4 lbs.

RL137
3/8" REVERSIBLE
ANGLE DRILL
W/ KEYED
JACOBS® CHUCK

!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. Do not point or indulge in any horseplay with this 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.



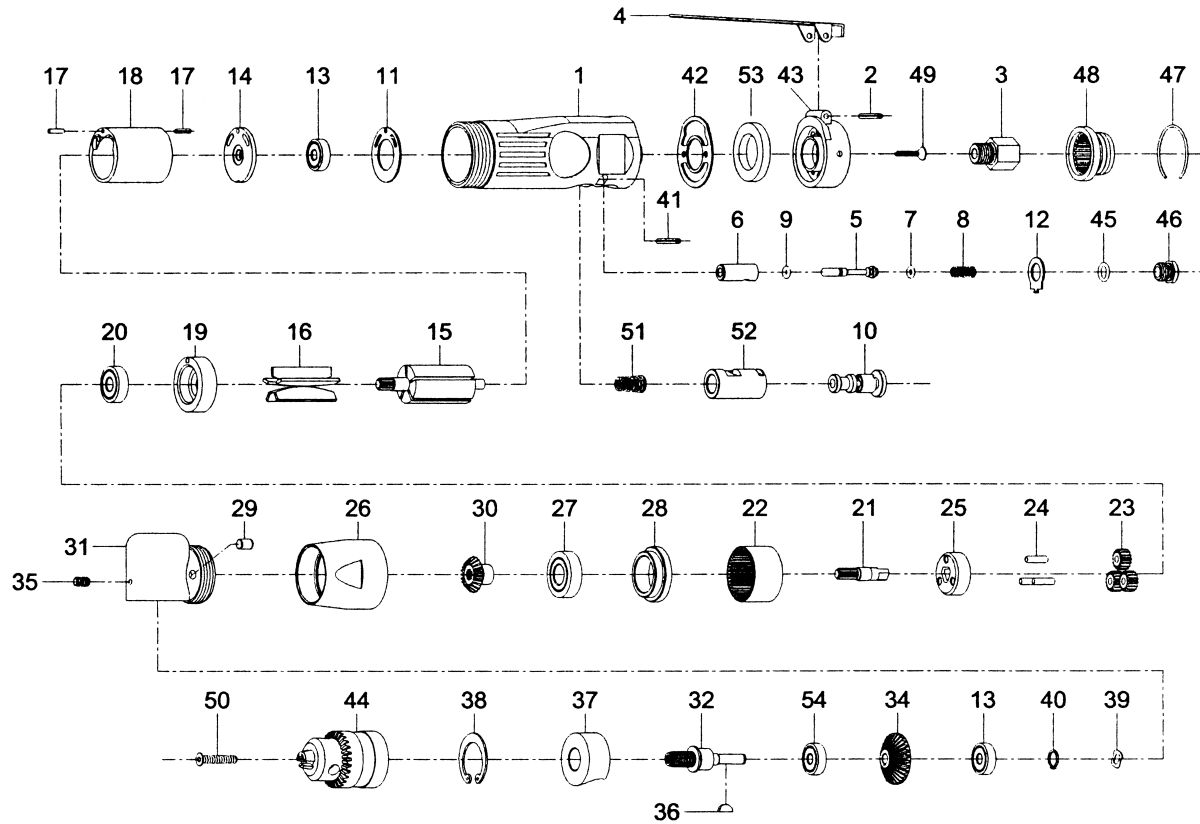
- Keep away from rotating end of tool. Do not wear jewelry or loose clothing. Secure long hair. Scalping can occur if hair is not kept away from tool and accessories. Choking can occur if neckwear is not kept away from tool and accessories.

- Drill bits can bind suddenly and cause rotation of the work piece or tool, causing injury to arms and/or shoulders. Enough torque is generated to cause falls. Always use sharp bits. Use less downward pressure at breakthrough.
- 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.
- Use accessories recommended by Matco Tools.

RL137

3/8" REVERSIBLE ANGLE DRILL

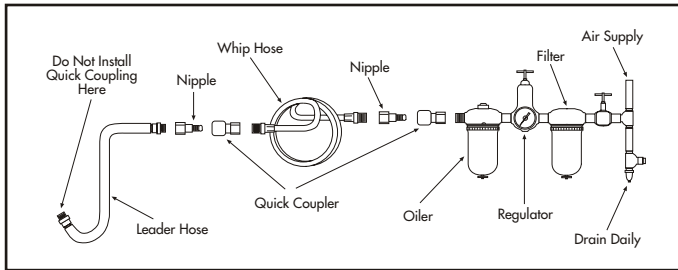
W/ KEYED JACOBS® CHUCK



Ref. #	Item #	DESCRIPTION	QTY.
1	RS78701M	Motor Housing	1
2	RS233A02	Spring Pin	1
3	RS233A03	Air Inlet	1
4	RS78704M	Throttle Lever	1
5	RS78705	Valve Stem	1
6	RS78706	Valve	1
7	RS78707	O-Ring	1
8	RS78708	Spring	1
9	RS78709	O-Ring	1
10	RS78710	Reverse Lever	1
11	RS78711	Motor Gasket	1
12	RS78712	Reverse Retainer	1
13	RS21114	Ball Bearing	2
14	RS78714	End Plate	1
15	RS78715	Rotor	1
16	RS78716	Rotor Blades	5
17	RS78717	Spring Pin	2
18	RS78718	Cylinder	1
19	RS78719	Front End Plate	1
20	RS21417	Ball Bearing	1
21	RS78721	Shaft	1
22	RS78722	Internal Gear	1
23	RS78723	Planet Gear	3
24		Pin (Included with Item 25)	3
25	RS78725A	Cage with Pins	1
26	RS78726	Lock Ring	1
27	RS227B25	Ball Bearing	1

Ref. #	Item #	DESCRIPTION	QTY.
28	RS78728	Spacer	1
29	RS78729	Oil Cap	1
30	RS78730	Pinion	1
31	RS78731	Angle Housing	1
32	RS78732	Spindle (6mm)	1
	RS78755	Spindle (7mm)	1
34	RS78734	Gear	1
35	RS78735	Set Screw	1
36	RS78736	Key	1
37	RS78737	Bearing Cap	1
38	RS78738	Retainer Ring	1
39	RS78739	Wave Washer	1
40	RS78740	Retainer Ring	1
41	RS78741	Spring Pin	1
42	RS78742	Rear Gasket	1
43	RS78743	Rear Cover	1
44	RS87106	3/8" Jacobs® Chuck	1
45	RS78745	O-Ring	1
46	RS78746	Throttle Valve Plug	1
47	RS233A29	Retainer Ring	1
48	RS233A06	Exhaust Deflector	1
49	RS78749	Screw	2
50	RS78750	Screw	1
51	RS78751	Spring	1
52	RS78752	Reverse Bushing	1
53	RS78753	Muffler	1
54	RS108A12	Ball Bearing (for 7mm Spindle)	1
	RS21114	Ball Bearing (for 6mm Spindle)	1

Operating Instructions • Warning Information • Parts Breakdown



Air Supply...

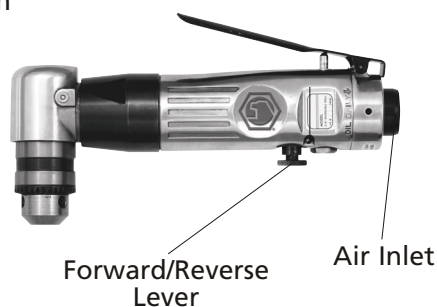
Tools of this class operate on a wide range of air pressures. It is recommended that air pressure of these tools measure 90 PSI at the tool while running free. Higher pressure (over 90 psig; 6.2 bar) raises performance beyond the rated capacity of the tool, which will shorten tool life because of faster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

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.



Operation...

Locate center of new hole by using a center punch. Place drill bit tip in punch mark. Hold drill square with work and start motor. Apply steady, even pressure. Do not force. Too much pressure can cause bit to break or overheat. Too little pressure will keep bit from cutting and cause it to overheat. Reduce pressure just before bit cuts through the work. When bit has penetrated work and is spinning freely, take it from the work while the motor is running, then turn off drill. If the drill jams in the work, release throttle immediately. Disconnect the drill before removing bit and determining cause of trouble. Do not attempt to free the bit by starting and stopping the motor.

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.