

• Operating Instructions • Warning Information  
• Parts Breakdown

## SPECIFICATIONS

### MT1880

Max. Free Speed . . . . .	25,000 RPM
Air Inlet. . . . .	1/4" NPT
Air Hose Size . . . . .	3/8" ID
Recommended Air Pressure . . . . .	90 PSIG
Length. . . . .	6.125"
Weight . . . . .	1.25 LBS.
Air Consumption . . . . .	4 CFM
Collet Size . . . . .	1/4"



## MT1880

### 1/4" Straight Die Grinder



## !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

## !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.

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**! 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 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.



- 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.



- 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.

**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.

## MT1880 1/4" Straight Die Grinder

### FEATURES

- Rubber grip for greater comfort and control
- Safety throttle lever to prevent accidental start ups
- Built-in power regulator
- Positive action 1/4" industrial grade collet chuck
- Rear exhaust directs air away from work
- Rotating inlet bushing for ease of use

### 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 and unclean air will shorten tool life because of faster wear and may create a hazardous condition.

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 hook-up procedure can be viewed in Figure 1.

The air inlet (Figure 2), used for connecting air supply, has standard 1/4" NPT American Thread.

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.

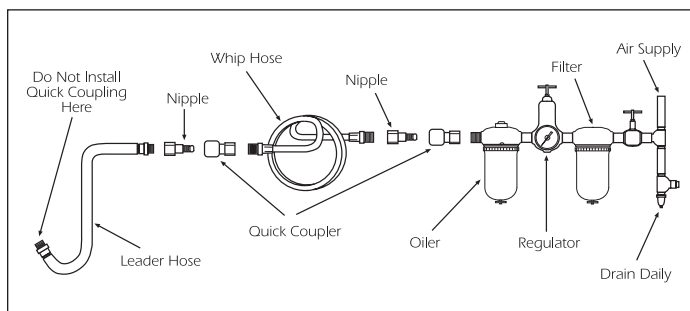


FIG. 1

### TROUBLESHOOTING

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 conditions may reduce air supply. If outside conditions are in order, disconnect tool from hose and take tool to your nearest Matco authorized service center.

### LUBRICATION & MAINTENANCE

Lubricate the tool daily with a good grade of 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 Figure 2, or into the hose at the nearest connection to the air supply, then run the tool. A rust inhibitive oil is acceptable for air tools.



FIG. 2

### WARRANTY

Matco warrants its air tools for a period of 1 year to the consumer. We will repair any MT Series 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 either of the Matco Authorized Warranty Centers listed below, 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, the tool will be repaired free of charge and returned to you freight prepaid.

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

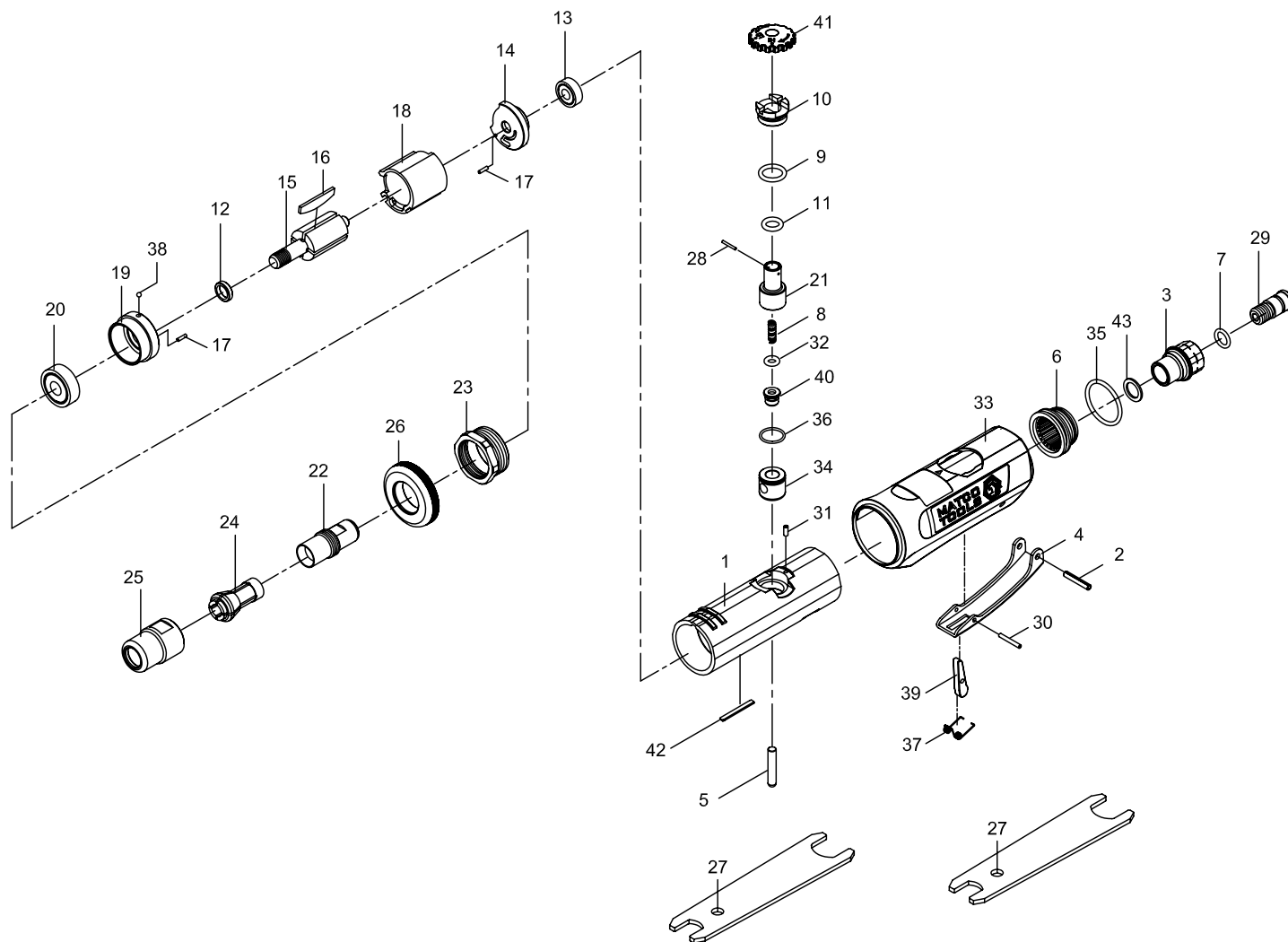
The foregoing obligation is Matco's sole liability under this or any implied warranty and under no circumstances shall Matco be liable for any incidental or consequential damages.

**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.

MATCO AIR COMMAND  
Tool Repair SV  
1330 Commerce Dr.  
Stow, OH 44224  
(800) 433-7098

DISCOUNT TOOL REPAIR  
3433 Losee Rd. #1  
North Las Vegas, NV 89030  
(702) 657-6570

# MT1880 1/4" Straight Die Grinder



ITEM	PART NO.	DESCRIPTION	QTY.
1 **	RS188001N	Motor Housing	1
2	RS78741	Lever Pin	1
3 **	RS188003N	Air Inlet (includes #7, 29, 43)	1
4	RS188004	Throttle Lever	1
5	RS188005	Valve Shaft	1
6	RS188006	Deflector	1
7		O-Ring (included in #3)	1
8	RS188008	Spring	1
9	RS188009	O-Ring	1
10	RS188010	Valve Screw	1
11	RS188011	O-Ring	1
12	RS188012	Rotor Spacer	1
13	RS30516	Ball Bearing	1
14	RS188014	Rear End Plate	1
15	RS188015	Rotor	1
16	RS188016	Vane	4
17	RS43018	Spring Pin	2
18	RS188018	Cylinder	1
19	RS188019	Front End Plate (incl. #38)	1
20	RS30524	Ball Bearing	1
21	RS188021	Controller	1
22	RS188022	Spindle	1

\* Available through special order dept. only.

ITEM	PART NO.	DESCRIPTION	QTY.
23	RS188023	Front Coupling	1
24	RS188024A	1/4" Collet	1
	RS188024B	1/8" Collet (optional)*	
25	RS188025	Collet Nut	1
26	RS188026	Front Cap	1
27	RS44028	Spanner	2
28	RS188028	Spring Pin	1
29		21mm Fixed Shaft (included in #3)	1
30	RS188030	Spring Pin	1
31	RS188031	Spring Pin	1
32	RS78707	O-Ring	1
33	RS188033	Grip	1
34	RS188034	Bushing	1
35	RS188035	O-Ring	1
36	RS188036	O-Ring	1
37	RS188037	Spring	1
38		Steel Ball (included in #19)	1
39	RS188039	Safety Bar	1
40	RS188040	Throttle Valve	1
41	RS188041	Knob	1
42	RS188042	Lever Plate	1
43		Washer (included in #3)	1

\*\* New improved parts as of serial number #DWF010001. For tools with earlier serial numbers, order RS188001 Motor Housing and RS188003R Air Inlet.