



# 1/2" REVERSIBLE AIR DRILL PNEUMATIC TOOL INSTRUCTION MANUAL



THIS MANUAL CONTAINS IMPORTANT INFORMATION REGARDING SAFETY, OPERATION, MAINTENANCE AND STORAGE OF THIS PRODUCT. BEFORE USE, READ CAREFULLY AND UNDERSTAND ALL CAUTIONS, WARNINGS, INSTRUCTIONS AND PRODUCT LABELS. FAILURE TO DO SO COULD RESULT IN SERIOUS PERSONAL INJURY AND/OR PROPERTY DAMAGE.



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## **CONGRATULATIONS!**

Thanks for choosing this product. Our aim is to provide you with quality products at an affordable price, and we want you to be totally satisfied with your product and our Customer Service. Properly cared for, this tool will give you many years of satisfaction.

## **INTENDED USE**

This tool is intended for consumer use only



## **GENERAL SAFETY RULES**

**READ AND UNDERSTAND ALL INSTRUCTIONS.** Failure to follow all instructions listed may result in serious personal injury.

## SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

## **RECOGNISE SAFETY SYMBOLS, WORDS AND LABELS**

The safety instructions provided in this manual are not intended to cover all possible conditions and practices that may occur when operating, maintaining and cleaning tools.

Always use common sense and pay particular attention to all the **DANGER**, **WARNING**, **CAUTION** and **NOTE** statements of this manual.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**AWARNING** 

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

Caution

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTE

NOTE provides additional information that is useful for proper use and maintenance of this tool. If a

NOTE is indicated make sure it is fully understood.



#### **IMPORTANT SAFEGUARDS**

## **ADANGER**

**WARNING:** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California 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 dust masks that are specially designed to filter out microscopic particles.

## **SERVICE**



**Caution** 

**Tool service must be performed only by qualified repair personnel.** Service or maintenance by unqualified personnel could result in a risk of injury.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.

## **SPECIFIC SAFETY RULES AND/OR SYMBOLS**



Caution

Maximum operating pressure is 90 PSI. Never use higher air pressure to increase the output of the Air Drill. Overloading will drastically shorten the life of all internal parts.

Disconnect Air Drill from power air supply before servicing or changing accessories.



### **IMPORTANT SAFETY RULES FOR AIR TOOLS**



## BEFORE OPERATING YOUR AIR TOOL, READ THE FOLLOWING INFORMATION:

Always inspect, maintain and operate in accordance with ANSI safety code for portable air tools (ANSI B186.1) and other local safety codes and regulations.

Do not operate this tool over 90 PSI air pressure at the tool.

Always wear safety goggles when operating this tool.

Always disconnect this tool from the air supply before installing, adjusting or removing any accessory in this tool, or before performing maintenance.

Always use a dust mask in dusty conditions.

User and bystanders must wear suitable hearing protection when this tool is in use.

Do not carry any air tool by the hose. Keep air hose away from heat and sharp objects.

Continuous use of vibrating air tools by susceptible users may cause damage to hands.

Always wear gloves and protective clothing to help prevent injury from flying particles.

Always lubricate and maintain tool in safe operating conditions.

## **FUNCTIONAL DESCRIPTION**

## **CONTROLS AND COMPONENTS:**

- 1. Dead handle
- 2. Nozzle
- 3. Chuck Key
- 4. Quick-change Coupling
- 5. Chuck
- 6. Housing
- 7. Direction toggle
- 8. Trigger
- 9. Air Inlet





#### **ASSEMBLY**

## **AWARNING**

Always disconnect this tool from the air supply before installing, adjusting or removing any accessory in this tool, or before performing maintenance.

Failure to do so could result in injury.

Check the speed rating on all accessories. Accessories must never be run at a higher speed than they were designed to handle.

- 1. Remove protective cap from the air inlet. Mount male plug by hand into air inlet.
- 2. Insert chuck key into one of the holes on the chuck. Rotate counter-clockwise to open the chuck jaws.
- 3. Insert your desired bit into the chuck, and centre it inside the jaws. Tighten the chuck by hand while keeping alignment of the bit.
  - **Note:** Insert only the shank of the twist drill bit; it's flute should remain free from the chuck jaws.
- 4. Insert chuck key again and rotate clockwise till it fully tightens the chuck
- 5. Place 2-3 drops of lubricant into the male plug before each operation.
- 6. Blow air out in the line to remove excess material or moisture. Connect the tool to an air source by connecting the air hose to the air inlet. Set air pressure to 90psi

## **OPERATION**

Make sure that the reversible air drill is properly lubricated. See "Lubrication" in the maintenance section.

**Important**: Connecting a quick-change coupling directly onto the tool is not recommended as the vibration when operating the tool may cause the connection to fail. Instead, add a leader hose and install any quick-change couplings further the line.

- 1. Place the bit against the surface of the work item and gently squeeze the trigger. Speed is dependent on the pressure the trigger receives. Gradually increase, if necessary.
- 2. Release the trigger to stop the air tool.



#### **SPECIFICATIONS**

Chuck	1/2"		
Free Speed	700RPM		
Spindle Thread	3/8"-24UNF		
Air Cons	4CFM (113L/min) @90PSI		
Air Inlet	1/4"		
Weight	1.38kg		

## **MAINTENANCE**

## **AIR SUPPLY**

Always use clean dry air as excessive moisture will lower the available torque and rust the interior moving parts. Make sure all hoses and fittings are of the recommended size and be sure the units are not used with less than or more than the recommended pressure at the tool! (90 PSI)

#### **LUBRICATION**

Proper lubrication of this air tool is critical to the operation and life of the unit. Units can be severely damaged or have excessive wear placed on working parts if not lubricated. We recommend the use of Marvel Mystery Oil which is available at most auto parts locations. The tool should be lubricated each time it is used. During daily prolonged use, lube heavily 3 or 4 times during the day.

#### **MAINTENANCE**

Daily – before putting the tool in operation, disconnect air hose and pour about one tablespoonful of Marvel Mystery Oil into tool air inlet. Blow out airline to clear it of accumulated dirt and moisture. Connect tool and operate tool to allow oil to be carried to the interior of the tool.

## **ACCESSORIES**

Use only accessories that are recommended by the manufacturer for your model.

Accessories that may be suitable for one tool may become hazardous when used on another tool.

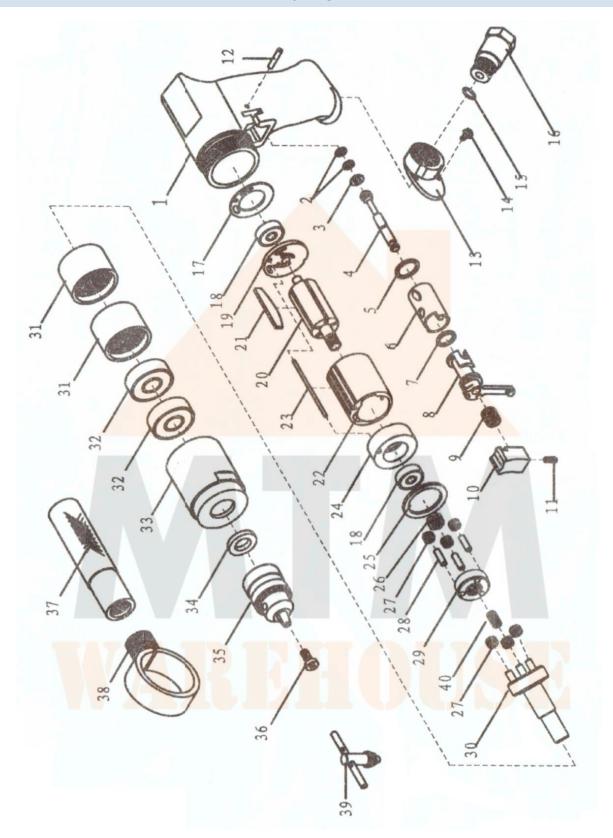
### **TROUBLESHOOTING**

Most minor problems can be resolved quickly and easily using the troubleshooting table below.

PROBLEM	POSSIBLE CAUSE	SOLUTION		
Unit will not work	Plugged air inlets Interior rusted	Remove fitting and clean Disassemble, clean, lube and reassemble		
Unit lacks power	Low air supply Lack of lubrication	Check hoses, tanks, etc. Lube properly and retry		
Internal parts	Dirty or gummed Components worn	Disassemble, clean, lube Disassemble, determine parts requiring replacement and repair		



# PARTS DIAGRAM





# **PARTS LIST**

Ref.	Part #	Description	Q'ty	Ref.	Part #	Description	Q'ty
1	WFD-1050-01	Housing	1	21	WFG-1310-12	Blade	5
2	JB/T6659-2007 4*1	O-Ring	2	22	WFD-1050-12	Cylinder	1
3	JB/T6659-1993 4*2	O-Ring	1	23	WFD-1050-13	Pin	1
4	WFD-1050-02	Pin	1	24	WFD-1050-14	Front Cylinder Head	1
5	JB/T6659-2007 13*2.5	O-Ring	1	25	WFD-1050-15	V Gasket	1
6	WFD-1050-03	Reversal Regulator Sleeve	1	26	WFD-1057-01	Planet Gear	1
7	O Ring 11*1.5	O-Ring	1	27	WFD-1057-02	Planet Gear	6
8	WFD-1050-04	Direction Lever	1	28	WFD-1057-03	Pin	3
9	WFD-1050-05	Spring	1	29	WFD-1057-04	Planet Cage incl	1
10	WFD-1050- <mark>06</mark>	Trigger	1	30	WFD-1057-05	Drive Shaft Component	1
11	GB/T <mark>77-2000</mark> M4*8	Screw	1	31	WFD-1050-18	Gear Ring	2
12	GB/T879.1-2000 2.5*22	Straight Pin	1	32	GB/T276-1994 6201-2Z	Bearing	2
13	WFD-1050-07	Muffle Cover	1	33	WFD-1057-06	Locking Ring	1
14	GB/T845-1985 ST2. 9*8	Screw	2	34	WFD-1050-20	Washer	1
15	O RING 10.8*1.6	O-Ring	1	35	BQ04A-01-B02	1/2" Spanner Drill Collet	1
16	WFD-1050-08	Air Inlet Connector	1	36	Screw M5*22 LH	Screw	1
17	WFD-1050-09	Sealing Gasket	1	37	WFD-1057-07	Handle	1
18	GB/T276-1994 625-2Z	Bearing	2	38	WFD-1057-08	Handle Ring	1
19	WFD-1050-10	Back Cylinder Head	1	39	BQ05-01-02	1/2" Chuck Key	1
20	WFD-1050-11	Rotor	1	40	WFD-1057-09	High Planet Gear	1