

## ATD-2114

1/4" MINI AIR RATCHET WRENCH

#### **A WARNING**

- ALWAYS WEAR APPROVED EAR AND EYE PROTECTION.
- ALWAYS OPERATE AT MAX. AIR PRESSURE OF 90 PSIG, 6.2 BAR.
- REPETITIVE MOTION/EXTENDED EXPOSURE TO VIBRATION MAY HARM HANDS/ARMS.

#### **A** WARNING



ALWAYS READ INSTRUCTIONS BEFORE USING POWER TOOLS

THIS INSTRUCTION MANUAL CONTAINS IMPORTANT SAFETY INFORMATION

READ CAREFULLY AND UNDERSTAND ALL INFORMATION BEFORE OPERATING THIS TOOL!

SAVE THIS MANUAL FOR FUTURE REFERENCE.

## **A** 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

Free Speed	260 RPM
Maximum Torque	
Air Inlet	
Hose Size	3/8" I.D.
Rec. Air Pressure	90 psig (6.2 bar)
Avg. Air Consumption	4.12 cfm
Sound Level	97 dBA
Length	
Shipping Weight	2.3 Lbs.

### **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.
   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.

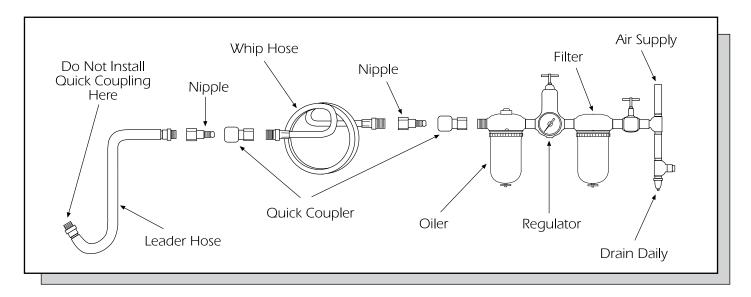


- Keep body working stance balanced and firm. Do not overreach when operating the tool.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.
- Do not carry tool by the hose. Protect the hose from sharp objects and heat.
- Tool shaft may continue to rotate 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.



- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Don't force tool beyond its rated capacity.
- Do not remove any labels. Replace any damaged labels.
- Use accessories recommended by ATD Tools.

#### Operating Instructions • Warning Information • Parts Breakdown



#### Air Supply...

Toolsofthisclassoperateonawiderangeofairpressures. It is recommended that air pressure of these tools measures 90PSIatthetoolwhilerunningfree.Higherpressure(over 90 psig; 6.2 bar) raises performance beyond the rated capacityofthetoolwhichwillshortenthetool'slife beauseoffasterwearandcouldcauseinjury.

Alwaysuseclean, dryair. Dust, corrosive fumes and/orwater in the airline will caused a mage to the tool. Drain the air tankdaily. Clean the air in let filters creen on at least a weekly schedule. The reommende dhook upprodure can be viewed in the above figure.

Theairinletusedforcomectngairsupply,hasstandard 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.

#### Operating Instructions...

This ratchet wrench is rated at 1/4" USS bolt size. Rating must be down graded for spring U bolts, tie bolts, long cap screws, double depth nuts, badly rusted conditions and spring fasteners, as they absorb much of the impact power. When possible, clamp or wedge the bolt to prevent springback.

NOTE: Actual torque on a fastener is directly related to joint hardness, tool speed, condition of socket and the time the tool is allowed to impact.

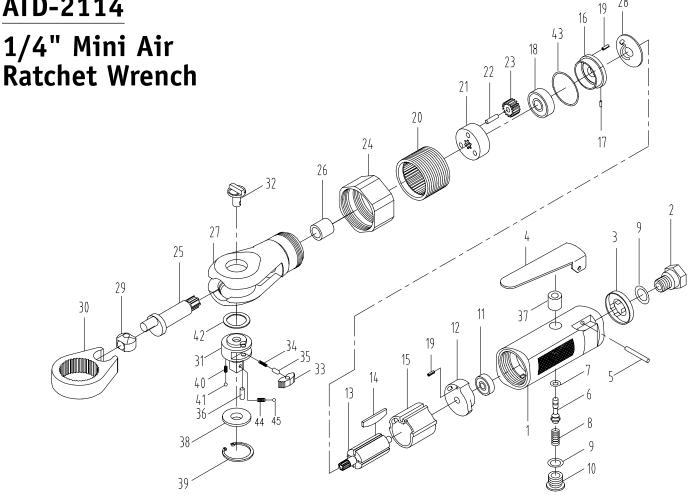
Use the simplest possible tool-to-socket hook up. Every connection absorbs energy and reduces power.

NOTE: Soak rusted nuts in penetrating oil and break rust seal before removing with ratchet wrench. If nut does not start to move in three to five seconds, use a larger size ratchet wrench. Do not use ratchet wrench beyond rated capacity as this will drastically reduce tool life.

#### **Lubrication & Maintenance...**

Lubricate the air motor daily with quality air tool oil. If no air line oiler is used, run 1/2 oz. 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. Overfilling will cause a reduction in the power of the tool.

# ATD-2114



Ref. No.	Part No.	Description	Qty.
1	RS2114HA	Housing (incl. #37)	1
2	RS25102	Air Inlet Bushing	1
3	RS25103	Exhaust Deflector	1
4	RS15104	Throttle Lever	1
5	RS25005A	Trigger Pin	1
6	RS15106	Valve Stem	1
7	RS11409	0-Ring	1
8	RS11308	Valve Spring	1
9	RS15011	0-Ring	2
10	RS15009	Valve Screw	1
11	RS106211	Ball Bearing	1
12	RS15112	Rear End Plate	1
13	RS15114	Rotor	1
14	RS15115	Rotor Blade	4
15	RS15113	Cylinder	1
16	RS15116	Front End Plate	1
17	RS15141	Pin	1
18	RS30524	Ball Bearing	1
19	RS22004	Dowel Pin	2
20	RS15121	Internal Gear	1
21	RS15120	Idle Gear Plate (incl. #22)	1
22		Needle Roller (incl. w/ #21)	3
23	RS15118	Planet Gear	3

Ref. No.	Part No.	Description	Qty.
24	RS25124	Clamp Nut	1
25	RS25125	Crank Shaft	1
26	RS25126	Bushing	1
27	RS25127	Ratchet Housing	1
28	RS15143	Washer	1
29	RS15124	Drive Bushing	1
30	RS15127	Ratchet Yoke	1
31	*	Ratchet Anvil (1/4")	1
32	*	Reverse Switch (1/4")	1
33	*	Ratchet Pawl	1
34	*	Spring	1
35	*	Locking Pin	1
36	*	Pin	1
37		Valve Bushing (incl. w/ #1)	1
38	*	Thrust Washer (1/4")	1
39	*	Retaining Ring	1
40	*	Spring	2
41	*	Steel Ball	2
42	*	Washer	1
43	RS15144	Washer	1
44	*	Spring (1/4")	1
45	*	Steel Ball (1/4")	1
* Available or	ıly in Head Kit, F	RSRHK2114	