



3/8" AIR RATCHET WRENCH

Model 47214



ASSEMBLY and OPERATING INSTRUCTIONS



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For technical questions and replacement parts, please call 1-800-444-3353

Specifications

| | |
|--------------------------|----------------------|
| Drive Size | 3/8" |
| Air Consumption | SCFM @ 90 PSI = 6 |
| Torque (Foot Pounds) | CW - 48, CCW - 50 |
| Air Inlet | 1/4" - 18 NPT Female |
| Recommended Air Pressure | 90 PSI |
| Drive Hardness | 38 - 55 HRC |
| RPM's | 130 @ 90 PSI |

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, extension cords, or air hoses.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended .
6. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
7. **Use eye, face and ear protection.** Always wear ANSI approved impact safety goggles and ear protection. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.

8. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines or air hoses.
9. **Maintain tools with care.** Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords and air hoses periodically and, if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.
10. **Disconnect air supply.** Disconnect air hose when not in use.
11. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
12. **Avoid unintentional starting.** Be sure the **Throttle Lever (#9)** is not depressed when not in use and before attaching to the air hose. Do not carry the Ratchet Wrench with the **Throttle Lever (#9)** depressed..
13. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
14. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if **Throttle Lever (#9)** does not engage and disengage properly.
15. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
16. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
17. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
18. **Use proper size and type extension cord.** If an extension cord is required for the air compressor, it must be of the proper size and type to supply the correct current to the tool without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the tool. Check your compressor's manual for the appropriate size cord.
19. **Maintenance.** For your safety, maintenance should be performed regularly by a qualified technician.
20. **Compressed air only.** Never use combustible gases as a power source.

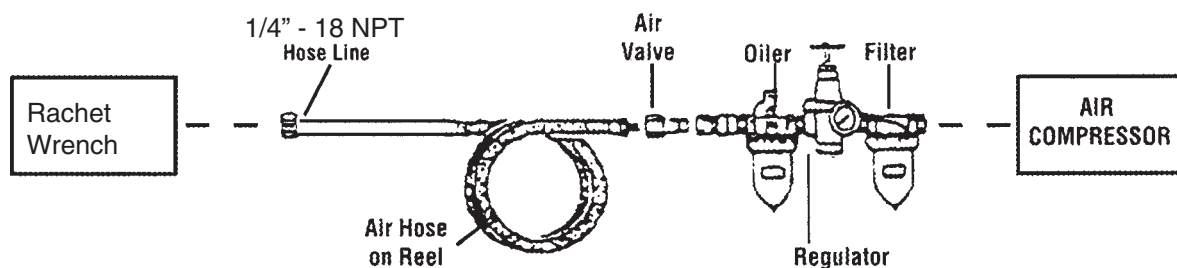
Note: Performance of the compressor (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Unpacking

When unpacking, check to make sure the parts listed on page 6 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

Operation



Recommended Air Line Components

For best service you should incorporate an oiler, regulator, and inline filter, as shown in the diagram above. Hoses, couplers, oilers, regulators, and filters are all available at Harbor Freight Tools.

1. Thread a 1/4" male air fitting (not included) into the **Connection Head (#41)**.
2. Attach air hose to the **Connection Head (#41)**.

Note: If you are not using an automatic oiler system, before operation, add a few drops of Pneumatic Tool Oil to the airline connection. Add a few drops more after each hour of continual use.

3. Set the air pressure on your compressor to 90 PSI. Do not exceed the recommended air pressure of 90 PSI.
4. Check the air connection for leaks.

Operation (continued)

Note: Turn off your air compressor and disconnect the air hose when you are changing sockets. After you attach the socket, attach the air hose and turn the air compressor on.

5. Select the appropriate size 3/8" socket for your needs.
6. Attach the socket (not included) to the **Anvil (#32)**.
7. Gently squeeze the **Throttle Lever (#9)** and determine which direction the drive turns. Clockwise direction will tighten, and counterclockwise will loosen.
8. If the drive isn't turning in the direction you want it to, switch the **Reverse Button (#40)** to change directions.

Tightening (Reverse Button (#40) must be set so the drive travels in the clockwise direction.)

9. Tighten the nut as tight as you can by hand.
 10. Place the socket (not included) over the nut you wish to tighten.
 11. Grip the Ratchet Wrench firmly and gently squeeze the **Throttle Lever (#9)**.
- Note:** If the Ratchet Wrench cannot tighten the hardware to your satisfaction, do not raise the air pressure on the compressor over 90 PSI.
12. When the nut is tightened, release the **Throttle Lever (#9)**. Turn off the air compressor and disconnect the hose.
 13. If available, check the recommended torque specification for the nut. Use a torque wrench to tighten the nut to the proper setting after using the Ratchet Wrench.

Loosening (Reverse Button (#40) must be set so the drive travels in the counterclockwise direction.)

14. Place the socket (not included) over the nut you wish to loosen.
 15. Grip the Ratchet Wrench firmly and gently squeeze the **Throttle Lever (#9)**.
- Note:** If the Ratchet Wrench cannot loosen the nut, do not raise the air pressure on the compressor over 90 PSI. Do not attempt to loosen the nut with the Ratchet Wrench. Use appropriate methods and tools to loosen the nut.
16. When the nut is loosened, release the **Throttle Lever (#9)**. Turn off the air compressor and disconnect the hose.
 17. If needed, remove the nut from the socket.

Maintenance

1. Make sure your Ratchet Wrench is disconnected from the air hose before attempting any maintenance.
2. If you are not using an automatic oiler system, put a few drops of pneumatic tool oil through the air line before and after each use. During use, add a few drops every hour.
3. Apply a few drops of oil to the **Throttle Lever (#9)** **Spring Pin (#7)** before each use.
4. Wipe the Ratchet Wrench down with a lint free cloth after each use.
5. Make sure the **Anvil (#32)** is clear of dirt or debris. If possible, spray it with compressed air before each use.

Parts List

| Part No. | Description | Part No. | Description |
|----------|------------------|----------|------------------|
| 1 | Housing | 22 | Idler Gear Plate |
| 2 | Valve Plug | 23 | Idler Gear Pin |
| 3 | O-ring | 24 | Clamp Nut |
| 4 | Spring | 25 | Spacer |
| 5 | Roll Pin | 26 | Rachet Housing |
| 6 | O-ring | 27 | Pin |
| 7 | Spring Pin | 28 | Needle Bearing |
| 8 | Throttle Valve | 29 | Crank Shaft |
| 9 | Throttle Lever | 30 | Drive Bushing |
| 10 | End Plate Cap | 31 | Rachet Yoke |
| 11 | Rear Bearing | 32 | Anvil |
| 12 | Rear Plate | 33 | Spring |
| 13 | Rotor Blade | 34 | Washer |
| 14 | Rotor | 35 | Thrust Washer |
| 15 | Cylinder Pin | 36 | Retainer Ring |
| 16 | Cylinder | 37 | Rachet Pawl |
| 17 | Front Plate | 38 | Lock Pin |
| 18 | Front Bearing | 39 | Spring |
| 19 | Washer | 40 | Reverse Button |
| 20 | Thread Ring Gear | 41 | Connection Head |
| 21 | Idler Gear | 42 | Steel Ball |

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

Assembly Drawing

