

CENTRAL PNEUMATIC®
Professional

1/4" MINI RATCHET WRENCH

Model 93821

SET UP AND OPERATING INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally.

Due to continuing improvements, actual product may differ slightly from the product described herein.

Distributed exclusively by Harbor Freight Tools®.

3491 Mission Oaks Blvd., Camarillo, CA 93011

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**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

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

Rev 07k

PRODUCT SPECIFICATIONS

Drive Size	1/4" Square Drive
Max. Working Pressure	90 PSI
Minimum Air Consumption Required	14.5 SCFM @ 90 PSI
Free Speed RPM	300 Max. RPM
Torque	20 ft./lb.
Air Inlet Size	1/4" - 18 NPT
Required Air Hose I.D.	3/8"
Exhaust Type	Rear Exhaust
Overall Length	5" L
Unit Weight	.85 lb.

UNPACKING

When unpacking, check to make sure the product is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

SAVE THIS MANUAL

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

GENERAL SAFETY RULES

 **WARNING!**

READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions listed in the following pages may result in electric shock, fire, and/or serious injury.

SAVE THESE INSTRUCTIONS

WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate pneumatic tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Pneumatic tools create sparks which may ignite flammables.
3. **Keep bystanders, children, and visitors away while operating a pneumatic tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

PERSONAL SAFETY

1. **Stay alert. Watch what you are doing, and use common sense when operating a pneumatic tool. Do not use a pneumatic tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating pneumatic tools may result in serious personal injury.
2. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
3. **Avoid accidental starting. Be sure the Throttle Lever (11) is off before connecting to the air supply.** Carrying pneumatic tools with your finger on the Throttle Lever, or connecting pneumatic tools to the air supply with the Throttle Lever on, invites accidents.
4. **Remove adjusting keys or wrenches before turning on the tool.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
6. **Use safety equipment. Always wear ANSI approved safety impact eye goggles, hearing protection, and heavy duty work gloves.**

TOOL USE AND CARE


1. **Use clamps or other practical ways to secure and support the workpiece to a stable platform.** Holding the work by hand is unstable and may lead to loss of control. Only work on a workpiece that is properly secured.



2. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
3. **Do not use the power tool if the Throttle Lever does not turn it on or off.** Any tool that cannot be controlled with the Throttle Lever is dangerous and must be replaced.
4. **Disconnect the air hose from the tool before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
5. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
6. **Maintain tools with care.** Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.
7. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool’s operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
8. **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.

SERVICE

1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
2. **When servicing a tool, use only identical replacement parts. Follow instructions in the “*Inspection, Maintenance, And Cleaning*” section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.

SPECIFIC SAFETY RULES

1. **Maintain labels and nameplates on the Ratchet Wrench.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2.  **CAUTION!** To avoid injury, grip the Ratchet Wrench *firmly* with both hands.

3. **Use clean, dry, regulated, compressed air at 90 PSI.** Do not exceed the recommended 90 PSI. Never use oxygen, carbon dioxide, combustible gases, or any other bottled gas as a power source for this tool.
4. **When connecting to the air supply:** Prior to each use, if an automatic oiler is *not* used, add two drops of air tool oil (not included) into the Air Inlet (10) fitting of the Ratchet Wrench.
5. **Always disconnect the Ratchet Wrench from its compressed air supply source, and squeeze the Throttle Lever (11) to release all compressed air in the tool before performing any maintenance or services.**
6. **Industrial applications must follow OSHA requirements.**
7.  **WARNING!** The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). (*California Health & Safety code 25249.5, et seq.*)
8.  **WARNING!** The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

ASSEMBLY AND OPERATING INSTRUCTIONS

NOTE:

For additional references to the parts listed in the following pages, refer to the **Assembly Diagram on page 9.**

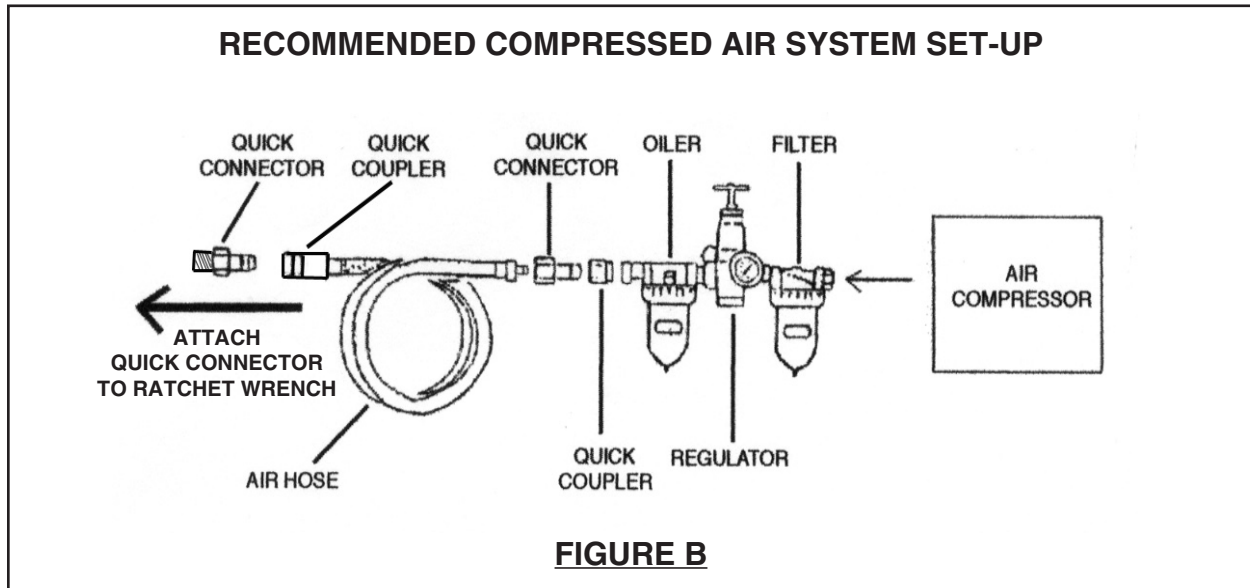
To Attach A Quick Connector:

1. Prior to use, the Ratchet Wrench requires the attachment of a *Quick Connector* (not included) into its Air Inlet (10). To do so, wrap approximately 3" of pipe thread sealer tape (not included) around the male threads of a Quick Connector. Then, firmly tighten the Quick Connector into the Air Inlet. **(See Figure A.)**



Recommended Compressed Air System Set-Up:

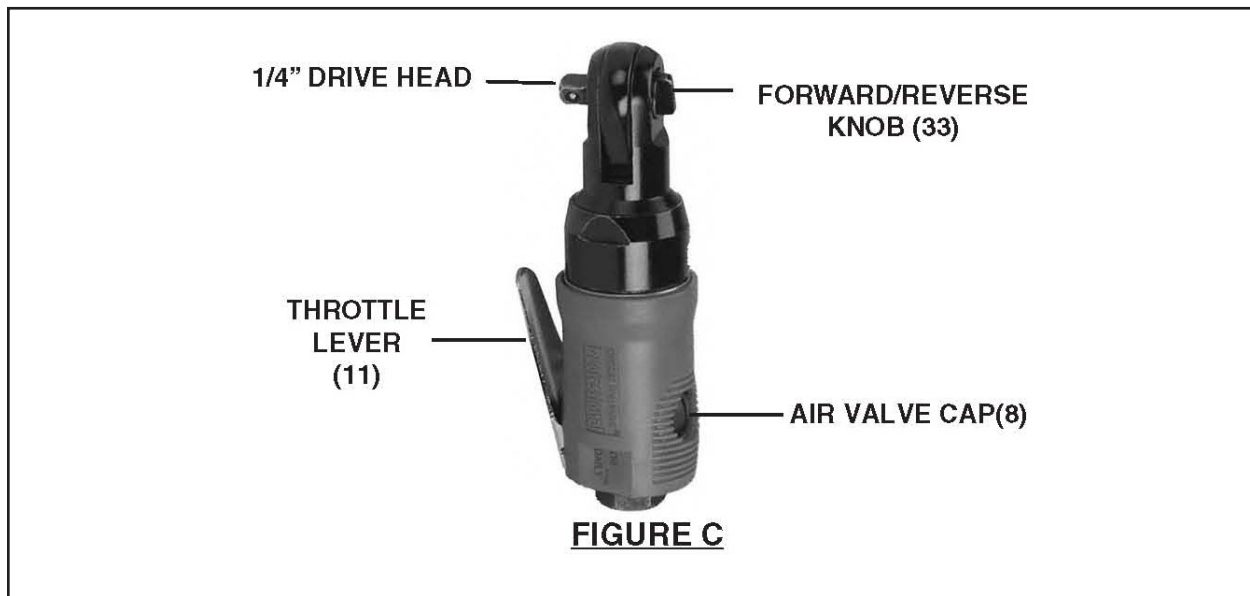
1. For best service, you should incorporate an oiler, regulator, and inline filter when using an air compressor (not included) to operate the Ratchet Wrench.
(See Figure B.)




To Operate The Ratchet Wrench:

1. The Ratchet Wrench is designed to work with all 1/4" drive sockets (not included). Before installing a socket, make sure your hand is away from the Throttle Lever (11). When installing a socket onto the Drive Head of the Ratchet Wrench, always make sure the socket is firmly secured in the Drive Head.
(See Figure C, [next page](#).)
2. After installing a socket onto the Drive Head of the Ratchet Wrench, set the Forward/Reverse Knob (33) to the direction in which you wish the Ratchet to turn (**Forward = clockwise rotation / Reverse = counterclockwise rotation**).
(See Figure C.)
3. Connect the air supply hose to the Ratchet Wrench. Turn on the air compressor, and set its regulator to the recommended 90 PSI for the Ratchet Wrench.
4. Insert the socket onto the bolt or nut that is to be loosened/tightened.
5. Make sure to hold the Ratchet Wrench firmly with both hands, as torque will cause the tool to twist. Then gently squeeze the Throttle Lever (11) to tighten or loosen the bolt/nut. Apply additional pressure on the Throttle Lever (11) as needed. (See Figure C.)


6. If necessary, use a torque wrench (not included) to verify the desired torque of a bolt/nut. If a bolt/nut requires a higher torque level than that produced by the Ratchet Wrench at **90 PSI**, an alternate means (other than the Ratchet Wrench) of achieving the desired torque should be used.
7. When finished, release the Throttle Lever (11) to stop the Ratchet Wrench. **(See Figure C.)**
8. Turn off the air compressor. Disconnect the Ratchet Wrench from its air supply hose, and remove the socket from the tool.
9. Make sure to store the Ratchet Wrench in a dry, clean, location out of reach of children and other unauthorized users.



INSPECTION, MAINTENANCE, AND CLEANING

1.  **WARNING!** Always make sure the Throttle Lever (11) is in its “**OFF**” position, and disconnect the Ratchet Wrench from its compressed air supply before performing any inspection, adjustments, maintenance, or cleaning.
2. **Before each use**, inspect the general condition of the Ratchet Wrench. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged air hoses, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**

3. **Daily:** With a soft brush, cloth, or vacuum, remove all dust and debris from the Ratchet Wrench. Then, use a premium quality, lightweight machine oil to lubricate all external moving parts.

4.  **CAUTION!** All maintenance, service, or repairs not listed in this manual are only to be attempted by a qualified service technician.

PLEASE READ THE FOLLOWING CAREFULLY

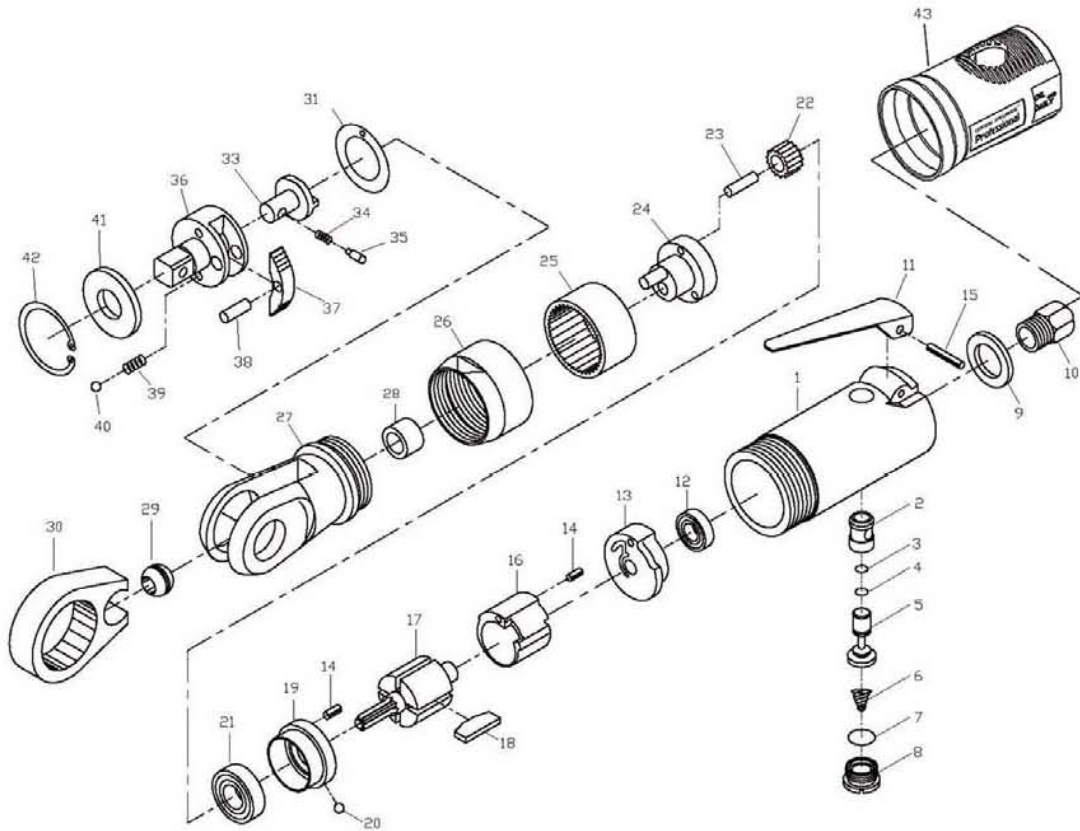
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PARTS LIST

Part #	Description
1	Motor Housing
2	Valve Bushing
3	O Ring
4	O Ring
5	Throttle Valve
6	Spring
7	O Ring
8	Air Valve Cap
9	Exhaust Sleeve
10	Air Inlet
11	Throttle Lever
12	Bearing
13	Rear End Plate
14	Pin
15	Pin
16	Cylinder
17	Rotor
18	Rotor Blade
19	Front End Plate
20	Roll Pin
21	Bearing

Part #	Description
22	Planet Gear
23	Planet Pin
24	Gear Cage
25	Internal Gear
26	Clamp Nut
27	Ratchet Housing
28	Needle Bearing
29	Drive Bushing
30	Ratchet Yoke
31	Washer
33	Forward/Reverse Knob
34	Reverse Spring
35	Reverse Pin
36	¼" Ratchet Anvil
37	Ratchet Pawl
38	Pin
39	Spring
40	Ball
41	Thrust Washer
42	Retaining Ring
43	Grip

ASSEMBLY DIAGRAM



NOTE:

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

LIMITED 1 YEAR WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of one year from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

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

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