

AIR RATCHET

Model 34900

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.



3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: http://www.harborfreight.com



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.

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SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



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

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

AWARNING

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

ACAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

GENERAL SAFETY RULES



WARNING! Read all instructions

Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury. The term "power tool" in all of the warnings listed below refers to your pneumatic-operated power tool.

SAVE THESE INSTRUCTIONS

Work area safety

- a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Personal safety

- a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b. Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Avoid accidental starting. Ensure the Trigger is in the off-position before plugging in. Carrying power tools with your finger on the Trigger or plugging the power tool in, with the Trigger depressed, invites accidents.
- d. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.

Power tool use and care

a. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.

- b. Do not use the power tool if the Trigger does not turn it on and off. Any power tool that cannot be controlled with the Trigger is dangerous and must be repaired.
- c. Disconnect the Air Ratchet from the air connection before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f. Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

Service

a. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

SPECIFIC SAFETY RULES

- 1. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 2. Avoid unintentional starting. Prepare to begin work before turning on the tool.
- 3. Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- 4. This product is not a toy. Keep it out of reach of children.
- 5. 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 or other masonry products 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. (California Health & Safety Code § 25249.5, et seq.)

- 6. Pay attention to air requirements for this tool. Do not exceed recommended air pressure of 90 PSI for this tool. Use clean, dry, regulated compressed air only. Never use oxygen, carbon dioxide, combustible gasses, or any other bottled gasses as a power source for this tool.
- 7. The warnings, precautions, 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.



SAVE THESE INSTRUCTIONS.

SPECIFICATIONS

Air Consumption	4 CFM @ 90 PSI
Drive Size	1/4" NPT
Recommended Air Pressure	90 PSI
Maximum Torque	15 Ft. Lbs. @ 90 PSI
Air Inlet	1/4" NPT Female
No Load Speed	150 RPM

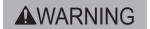
UNPACKING

When unpacking, check to make sure that the item 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.

SET UP INSTRUCTIONS

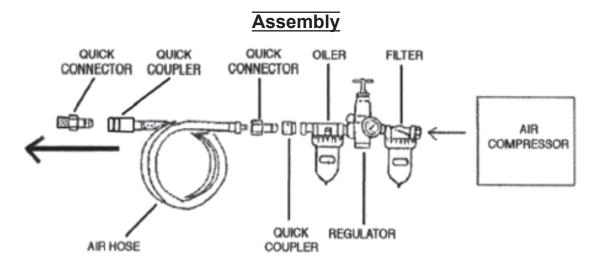


Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

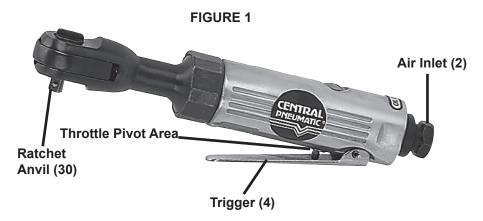


Risk of accidental starting; resulting in serious personal injury. Turn the Power Switch of the compressor to its "OFF" position and unplug the Air Ratchet from the pneumatic outlet before assembling or making any adjustments to the tool.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.



- 1. For best results, a regulator, an oiler, and an in-line filter should be connected to the Air Ratchet, as shown above.
- 2. You will need to prepare the included 1/4" air connector to connect to the air inlet on the Ratchet. First, wrap the 1/4" air connector with pipe thread seal tape before threading it into the Air Inlet (2). Connect the 3/8" ID Air Source Hose to a quick-connect coupler (not included), and then to the Ratchet.
- 3. Note: If you are not using an automatic oiler system, before operation, add a few drops of Pneumatic Tool Oil to the Air Inlet (2). Add a few drops more after each hour of continual use.
- 4. Set the air pressure on your compressor to 90 PSI. Do not exceed the recommended air pressure of 90 PSI.
- 5. Check the air connection for leaks. Disconnect from the air source.



OPERATING INSTRUCTIONS



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

General operating instructions

1. Do not use a "cheater" or other extension to increase torque for this tool. Do not exceed the maximum torque rating on this tool.



- 2. Disconnect the Ratchet from the air source when attaching and removing sockets. There is no safety lock mechanism on this tool; always disconnect from the air source when not in use. (See Figure 2, above)
- 3. Attach a 1/4" drive socket to the Ratchet Anvil (30).
- 4. By following the directions on page 7, attach the Ratchet to the air source hose.
- 5. Gently press the Trigger (4) to activate the Ratchet. Do not force the unit; allow it to do the work for you. To change direction (loosen or tighten), stop the tool and move it away from the workpiece, then turn the Reverse Button (29).
- 6. To adjust the torque, re-adjust the air pressure by changing the setting on the compressor.
- 7. Warning! Do not set the air pressure on the compressor above the recommended air pressure of 90 PSI.
- 8. When you are finished working, turn off the compressor.
- 9. There may still be air in the Ratchet. Squeeze the Trigger (4) and activate the Ratchet to expel any air still inside the tool.
- 10. Disconnect the air source hose. Remove the socket. Clean, then store the tool indoors out of children's reach.

MAINTENANCE AND SERVICING

AWARNING

Risk of serious personal injury from accidental starting or electric shock. Make certain that the Trigger of the tool is not depressed and unplug the tool from the air compressor before performing any inspection, maintenance, or cleaning procedures.

Damaged equipment can fail, causing serious personal injury. Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, maintenance, and lubrication

- 1. BEFORE EACH USE, inspect the general condition of the tool. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, and any other condition that may affect its safe operation.
- 2. AFTER USE, wipe the unit down with a lint free cloth.
- 3. Periodically apply a high grade, light machine oil to the Throttle Pivot area. (See Figure 1)
- 4. Clear the Ratchet Anvil (30), the Air Inlet (2), and the Reverse Button (29) of grease, dirt, or debris.

PLEASE READ THE FOLLOWING CAREFULLY

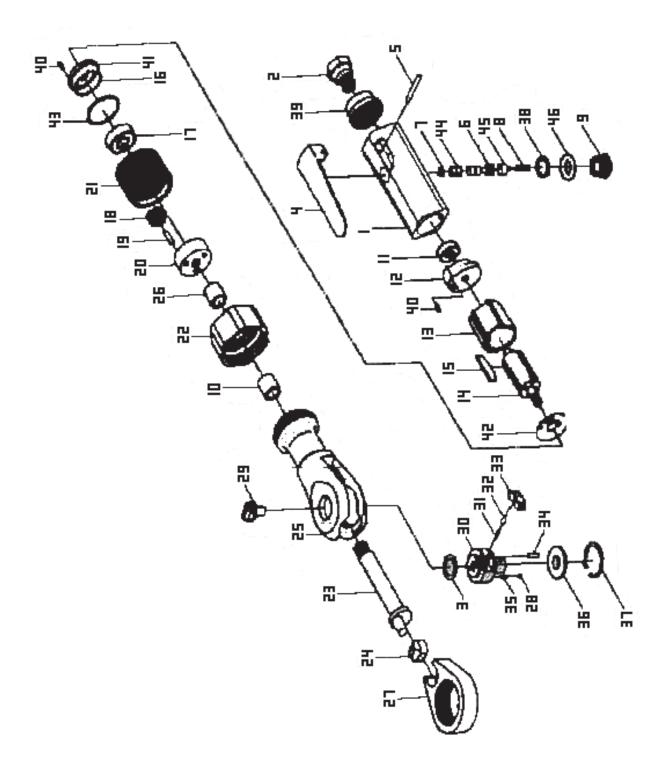
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PARTS LIST

Part	Description	Qty
1	Housing	1
2	Air Inlet	1
3	Washer	1
4	Trigger	1
5	Pin	1
6	Valve Stem	1
7	O-ring	1
8	Spring	1
9	Valve Plug	1
10	Bushing	1
11	Bearing	1
12	End Plate	1
13	Cylinder	1
14	Rotor	1
15	Rotor Blade	4
16	Front Plate	1
17	Bearing	1
18	Gear	3
19	Pin	3
20	Gear Pin	1
21	Thread Gear Plate	1
22	Сар	1
23	Crankshaft	1

Part	Description	Qty
24	Drive Bushing	1
25	Ratchet Housing	1
26	Bushing	1
27	Ratchet Yoke	1
28	Ball Bearing	2
29	Reverse Button	1
30	Ratchet Anvil	1
31	Spring	1
32	Lock Pin	1
33	Ratchet Pawl	1
34	Pin	1
35	Spring	2
36	Washer	1
37	Retaining Ring	1
38	O-ring	1
39	Muffler Cover	1
40	Pin	2
41	Pin	1
42	Washer	1
43	Washer	1
44	Valve Bushing	1
45	Air Regulator	1
46	O-ring	1

ASSEMBLY DIAGRAM



Note: If product has no serial number, record month and year of purchase instead.

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

90 Day 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 90 days 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, criminal activity, improper installation, 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.

3491 Mission Oaks Blvd. • PO Box 6009 • Camarillo, CA 93011 • (800) 444-3353