# **CENTRAL PNEUMATIC®**

# AIR HYDRAULIC RIVETER

**Model 93458** 

## SET UP AND OPERATING INSTRUCTIONS



Distributed exclusively by Harbor Freight Tools<sup>®</sup>.

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.

Cover revised 07i

### PRODUCT SPECIFICATIONS

Rivet Capacity	3/32", 1/8", 5/32", & 3/16" sized pins
Operating Air Pressure	90 PSI
Air Consumption	4.5 CFM @ 90 PSI
Air Inlet Size	1/4"-18 NPT
Nosepiece Sizes	3/32", 1/8", 5/32", 3/16"

### **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.

### UNPACKING

When unpacking, 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.

#### SAFETY WARNINGS AND PRECAUTIONS



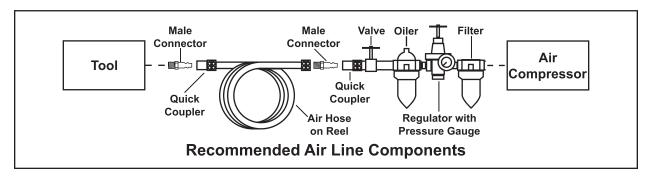
**Use eye and hearing protection.** Wear ANSI approved safety impact goggles, hearing protection, and heavy-duty work gloves when using this Riveter. Other people in the work area must also wear appropriate ANSI approved safety equipment.

- 2. **Keep work area clean.** Cluttered areas invite accidents.
- 3. Stay within air pressure capacity. Do not operate the Riveter above 90 PSI.
- 4. **Observe work area conditions.** Keep work area well lit. Do not use pneumatic tools in the presence of flammable gases or liquids.
- 5. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, extension cords, or air hoses.
- 6. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Lock up tools and keep out of reach of children.
- 7. **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.
- 8. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically nonconductive clothes and nonskid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
- 9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running tools or air hoses.
- 10. **Disconnect air hose and release any built-up air pressure.** Do not service the Riveter or disassemble with the air hose attached. Verify that there is no residual air pressure even after disconnecting hose. Disconnect the Riveter when not in use.
- 11. **Remove adjusting wrenches.** Check that adjusting wrenches are removed from the tool and work surface before attaching to an air source.
- 12. **Avoid unintentional starting.** Be sure the Trigger (40) is in the **OFF** position when not in use and before plugging in. Do not carry any tool with your finger on the Trigger, whether it is attached to an air source or not. Do not point the tool towards yourself or anyone.
- 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, 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 the Trigger does not operate properly.
- 15. **Replacement parts and accessories.** This product is to be repaired and serviced only by a qualified technician. When this product is serviced, only identical replacement parts should be used. 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.
- 16. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
- 17. **Maintenance.** The maintenance outlined in the "Maintenance" section should be performed regularly. For your safety, this product should be serviced or repaired regularly only by a qualified technician.
- 18. **Compressed air only.** Do not use combustible gas as a power source.

- 19. **Fire the Rivets into an appropriate work surface only.** This Riveter is designed for use on metal objects only, and is not suitable for soft surfaces.
- 20. **Do not fire the Rivets too close to the edge of a workpiece.** They may split the workpiece and cause it to fly free, causing personal injury.
- 21. **Transport the Riveter safely.** Disconnect the air supply when moving the tool in the workplace. Carry the tool by the handle and avoid contact with the Trigger (40).
- 22. Avoid working alone. If an accident happens, an assistant can bring help.
- 23. Attach the Safety Cap (23) to the Riveter before use. Turn the slot in the Safety Cap upward to avoid spilling used Rivet Pins.
- 24. **AWARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contain 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, cement, and other masonry products,
  - \* Arsenic and chromium from chemically treated lumber. (California Health & Safety Code § 25249.5, et seq.)
- 25. **AWARNING!** 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.

### **ASSEMBLY INSTRUCTIONS**



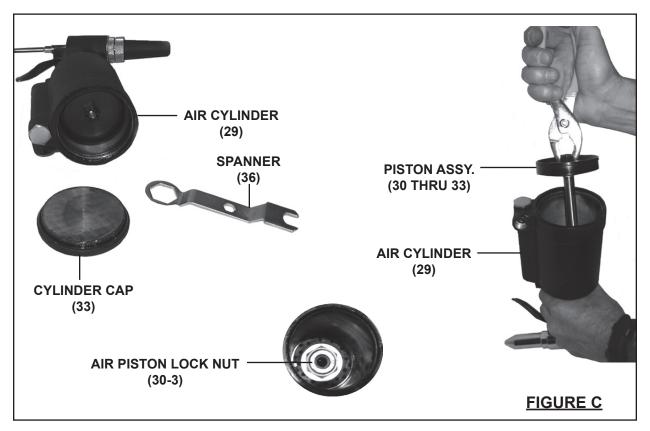
1. For best service, you should incorporate an oiler, regulator, and inline filter, as shown in the diagram above. Hoses, couplers, oilers, regulators, and filters are all available at Harbor Freight Tools.

**Note:** If an automatic oiler is not used, put 3-5 drops of pneumatic Tool Oil (not included) in the tool's quick connector before each use.

2. Prior to use, the Riveter requires the attachment of the Quick Connector (53) to its Air Cylinder (29). To do so, make sure the screen Air Filter is properly seated in the Air Cylinder. Wrap approximately 3" of pipe thread sealer tape (not included) around the male threads of the Quick Connector. Then, firmly tighten the Quick Connector into the Air Cylinder.

#### To Prime The Riveter:

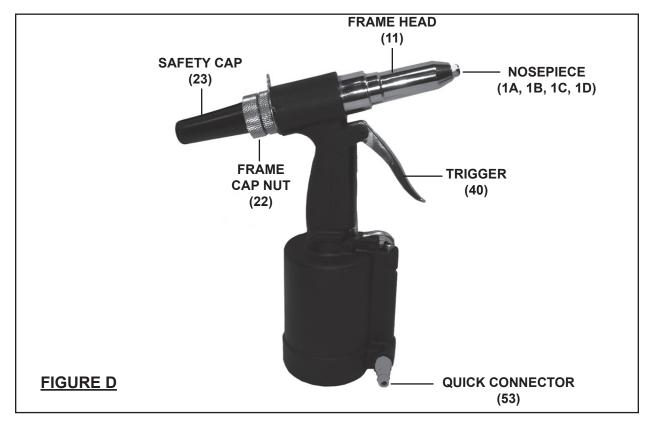
**AWARNING!** Make sure the Riveter is disconnected from its air supply hose prior to performing any maintenance, service, or changing accessories.



- 1. Use the Spanner (36) to unscrew and remove the Cylinder Cap (33) from the bottom of the Riveter. (See Figure C.)
- 2. Use a pair of pliers (not included) to remove the Piston Assembly (30 thru 33) from the Air Cylinder (29). (See Figure C.)
- 3. Hold the Air Cylinder (29) upside down, and pour in hydraulic oil (not included). The fill level should only reach the top of the Frame (15). (See Figure C.)
- 4. Insert the Piston Assembly (30 thru 33) back into the Air Cylinder (29). (See Figure C.)
- 5. Use the Spanner (36) to firmly screw the Cylinder Cap (33) back onto the Air Cylinder (29). (See Figure C.)

#### Nosepieces:

1. The Riveter comes with *four* Nosepieces. The Nosepiece part numbers and sizes are as follows: (1A = 3/16"), (1B = 5/32"), (1C = 1/8"), (1D = 3/32").



2. Use the Spanner (36) to remove the old nosepiece and install the new one. Tighten the new nosepiece in place before use. (See Figure D.)

# **OPERATING INSTRUCTIONS**

- 1. Secure the Safety Cap (23) firmly to the Riveter by tightening the Frame Cap Nut (22). While securing turn the slot in the Safety Cap upward to avoid spilling used rivet pins. (See Figure D.)
- 2. Depending on the size of rivet's pin used, attach the corresponding Nosepiece size (3/16", 5/32", 1/8", or 3/32") with the Spanner (36). (See Figure D.)
- 3. **IMPORTANT:** When drilling rivet holes in a workpiece, use the same diameter drill bit as the outer diameter of rivet you will be using.
- 4. Attach an air hose to the Quick Connector (53) of the Riveter. (See Figure D.)
- 5. Turn on the air compressor, and set its regulator at 90 PSI. **Do not exceed 90 PSI.**

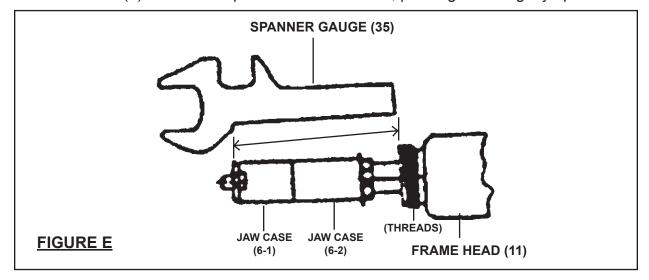
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- 6. Insert the small end of a rivet fully through the Nosepiece (1A, 1B, 1C, or 1D). **CAUTION!** Keep clear of the trigger when inserting rivets.
- 7. Insert the rivet through the predrilled hole in the workpiece.
- 8. Hold the Riveter firmly with both hands, and squeeze the Trigger (40) to activate the Riveter. Repeat as necessary. Then, release pressure on the Trigger.
- 9. When finished using the Riveter, turn off the air compressor. Squeeze the Trigger again to release any compressed air in the Riveter. Disconnect the air hose from the tool. Then, store the Riveter in a clean, dry, safe location out of reach of children.

## **INSPECTION, MAINTENANCE, AND CLEANING**

- **▲**WARNING! Wear ANSI-approved safety impact goggles when performing any inspection, maintenance, or cleaning procedures.
- **▲WARNING!** Prior to performing any inspection, maintenance, or cleaning of the Riveter, make sure to disconnect the air hose from the tool. Then, squeeze the Trigger (40) again to release any compressed air in the Riveter.
- **<u>AWARNING!</u>** All maintenance, service, and repairs not mentioned in this manual must only be performed by a qualified service technician.
- 1. **To clean the exterior of the Riveter,** wipe with a clean, damp cloth using a mild detergent or mild solvent. Do not immerse the tool in liquids.
- 2. To clean and change the Jaws:
  - a. Unscrew and remove the Frame Head (11), using the Spanner (36).
  - b. Use the Spanner (36) to unscrew and remove the Jaw Cases (6-1, 6-2). Use care as there is a Spring (10) behind the Jaw Case (6-2) which may fly out.
  - c. Remove the Jaws (7) from between the Jaw Cases (6-1, 6-2).
  - d. If you are going to clean the Jaws (7), use a steel brush and mild solvent. Then, apply a light coat of machine oil to the Jaws. If you are going to replace the Jaws, the entire assembly (6-1, 6-2, 7, 8, 9, & 10) must be replaced at the same time,

- due to the possibility of additional parts being damaged when the Jaws were damaged.
- e. Insert the Jaws (7) back into the Jaw Cases (6-1, 6-2).
- f. When reassembling the Jaw Cases (6-1, 6-2), make sure the wedge on the Jaw Pusher's (8) head lines up in between the Jaws, pushing them slightly apart.



- g. Check the distance from the head of the Jaw Cases (6-1, 6-2) to the mounting threads of the Frame Head (11) using the gauge on the Spanner (35). With the gauge at a slight incline, the back of the gauge should rest on the beginning of the Frame Head threads, while the front of the gauge should rest on the front edge of the Jaw Case (6-1). If it does not, tighten/loosen the Jaw Cases until the distance is corrected. (See Figure E.)
- h. Before reassembly, secure the Lock Nut (12) against the Jaw Case assembly using the Spanner Gauge (35).
- 3. Store the Riveter in a clean, dry, safe location out of reach of children.

# TROUBLESHOOTING

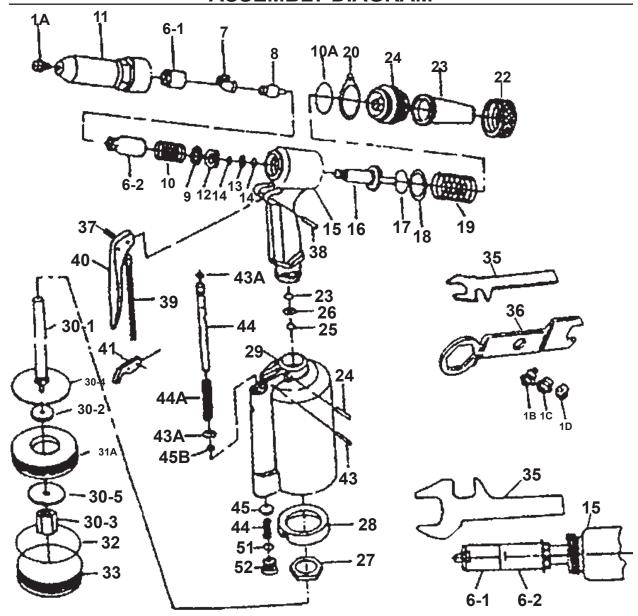
Problem	Possible Cause	Likely Solution
Jaws slipping.	Worn or damaged Jaws.	Replace Jaws.
Jaws will not open.	Loose Nosepiece.	Tighten Nosepiece.
	2. Dirty Jaws.	2. Clean Jaws.
Stroke is too short.	Rivet pin not properly inserted into Riveter.	Fully insert pin.
	2. Low oil.	2. Prime Riveter.
	3. Rivet wrong size.	3. Use proper rivet length.
Weak pulling action.	Low air pressure.	Check regulator.
	Broken/inadequate air compressor.	Have compressor serviced by a qualified technician/upgrade to compressor of sufficient capability.
	3. Low oil.	3. Prime Riveter.
Leaking air.	Poor hose connections.	Reconnect using pipe thread seal tape.
	2. Damaged O-Ring.	2. Replace O-Ring.
	Dirty Air Valve or airline inlet.	Clean and lubricate with pneumatic tool oil.

# PARTS LIST

Part	Description
1A	Nosepiece (3/16")
1B	Nosepiece (5/32")
1C	Nosepiece (1/8")
1D	Nosepiece (3/32")
6-1	Jaw Case Front (3/32", 1/8", 5/32")
6-2	Jaw Case End
7	Jaw
8	Jaw Pusher
9	Case Washer Ring
10	Jaw Pusher Spring
10A	Frame Cap O-Ring (27 x 2)
11	Frame Head
12	Case Lock Nut
13	Back Up Ring
14	Back Up O-Ring (p12)
15	Frame
16	Oil Piston
17	Oil Piston O-Ring (p22A)
18	Back Up Ring
19	Return Spring
20	Hanging Clip
21	Frame Cap
22	Frame Cap Nut
23	Safety Cap
24	Setting Screw Pin
25	Back Up O-Ring (12)
26	Back Up Ring
27	Frame Lock Nut
28	Rubber Cushion

Part	Description
29	Air Cylinder
30-1	Air Piston Stem
30-2	Air Piston Insert
30-3	Air Piston Lock Nut
30-4	Large Iron Plate
30-5	Small Iron Plate
31A	Air Piston Ring
32	Cylinder O-Ring (67.94 x 2.62)
33	Cylinder Cap
35	Spanner Gauge
36	Spanner
37	Trigger Pin
38	Connector
39	Trigger Rod
40	Trigger
41	Connector
42	Trigger Lever
43	Lever Pin
43A	Valve Pusher O-Ring (p7)
44	Valve Pusher
44A	Valve Spring
45	Valve
45A	Valve Collar
45B	Collar O-Ring (p5)
46	Valve Spring
51	Valve Cap O-Ring (p11)
52	Valve Cap
53	Quick Connector

### **ASSEMBLY DIAGRAM**



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

#### 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.

#### 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.

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