CENTRAL PNEUMATIC®

AIR HYDRAULIC RIVETER

Model 167

ASSEMBLY AND OPERATING INSTRUCTIONS

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
Visit our Web site at: http://www.harborfreight.com

**TO PREVENT SERIOUS INJURY,
READ AND UNDERSTAND ALL WARNINGS
AND INSTRUCTIONS BEFORE USE.**

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

PRODUCT SPECIFICATIONS

Rivet Capacity	$^{3}/_{32}$", $^{1}/_{8}$", $^{5}/_{32}$", & $^{3}/_{16}$" sized pins
Operating Air Pressure	90 PSI
Air Consumption	4 CFM @ 90 PSI
Air Inlet Size	$^{1}/_{4}$"-18 NPT
Nosepiece Sizes	$^{3}/_{32}$", $^{1}/_{8}$", $^{5}/_{32}$", $^{3}/_{16}$"
Overall Dimensions	11" H x 9" L x $3^{1}/_{8}$" W
Net Weight	$3^{7}/_{8}$ Pounds

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, check to make sure that all the parts and accessories **listed on page 11** are included, and 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.

SAFETY WARNINGS AND PRECAUTIONS

1.  **WARNING! Use eye and hearing protection.** Always 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.** Never 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. Always 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.** Never service the Riveter or disassemble with the air hose attached. Always release any built-up air 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.** Never 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.** Always 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. **Always attach the Safety Cap (23) to the Riveter prior to using the tool.** Make sure the *slot* in the Safety Cap faces upward to avoid spilling used Rivet Pins.

24. ⚠ **WARNING!** 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. ⚠ **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.

ASSEMBLY INSTRUCTIONS

1. For best service, you should incorporate an oiler, regulator, and inline filter, as shown in the diagram below. 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. **(See Figure A.)**

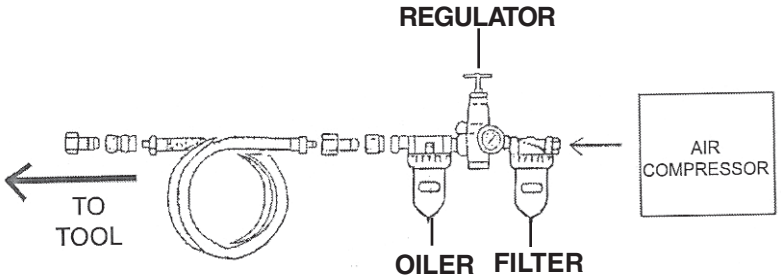


FIGURE A

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 seal tape (not included) around the male threads of the Quick Connector. Then, firmly tighten the Quick Connector into the Air Cylinder. **(See Figure B.)**

FIGURE B

To Prime The Riveter:

1. ⚠ **WARNING!** Make sure the Riveter is disconnected from its air supply hose prior to performing any maintenance, service, or changing accessories.
2. To prime the Riveter, use the Spanner (36) to unscrew and remove the Cylinder Cap (33) from the bottom of the Riveter. **(See Figure C, next page.)**
3. Use a pair of pliers (not included) to remove the Piston Assembly (30 thru 33) from the Air Cylinder (29). **(See Figure C.)**
4. 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.)**

5. Insert the Piston Assembly (30 thru 33) back into the Air Cylinder (29). **(See Figure C.)**

6. Use the Spanner (36) to firmly screw the Cylinder Cap (33) back onto the Air Cylinder (29). **(See Figure C.)**

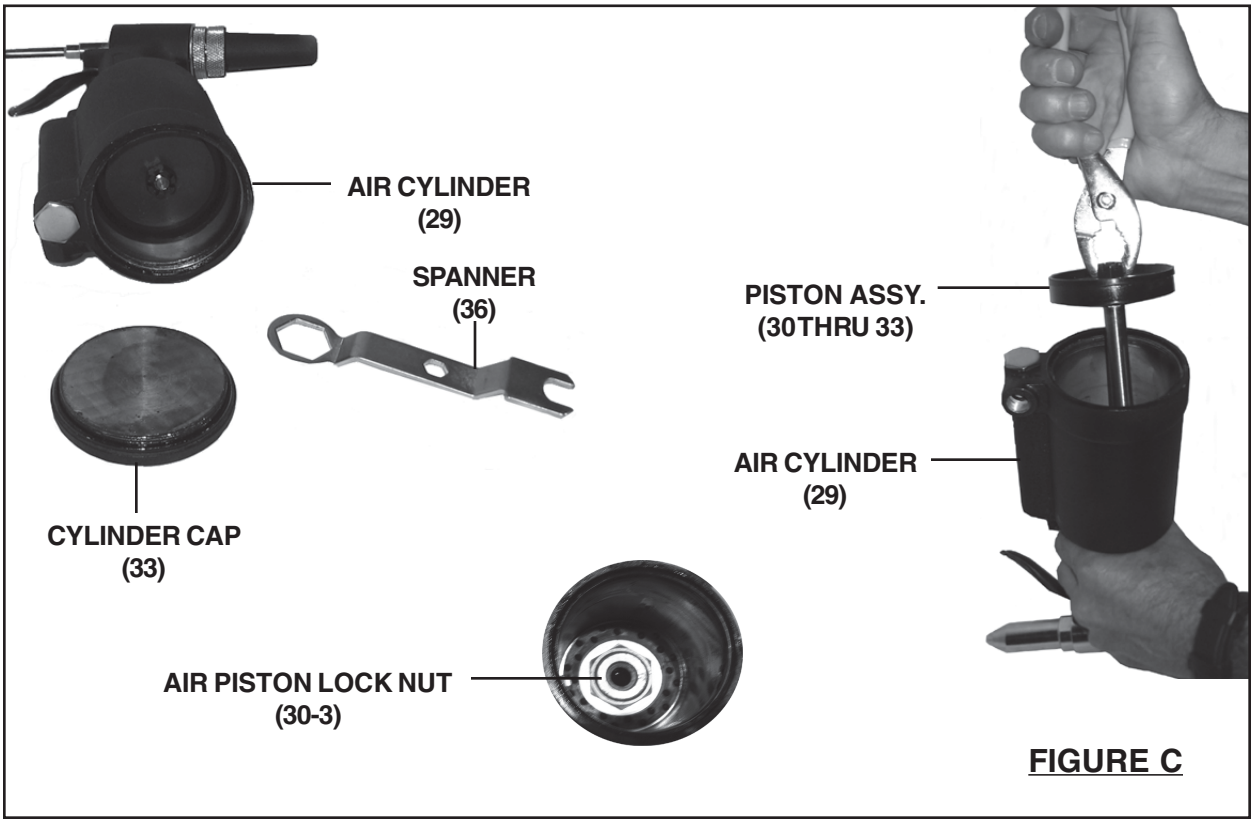


FIGURE C

OPERATING INSTRUCTIONS

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”). **(See Figure D.)**
2. Use the Spanner (36) when changing Nosepieces. **(See Figure D.)**

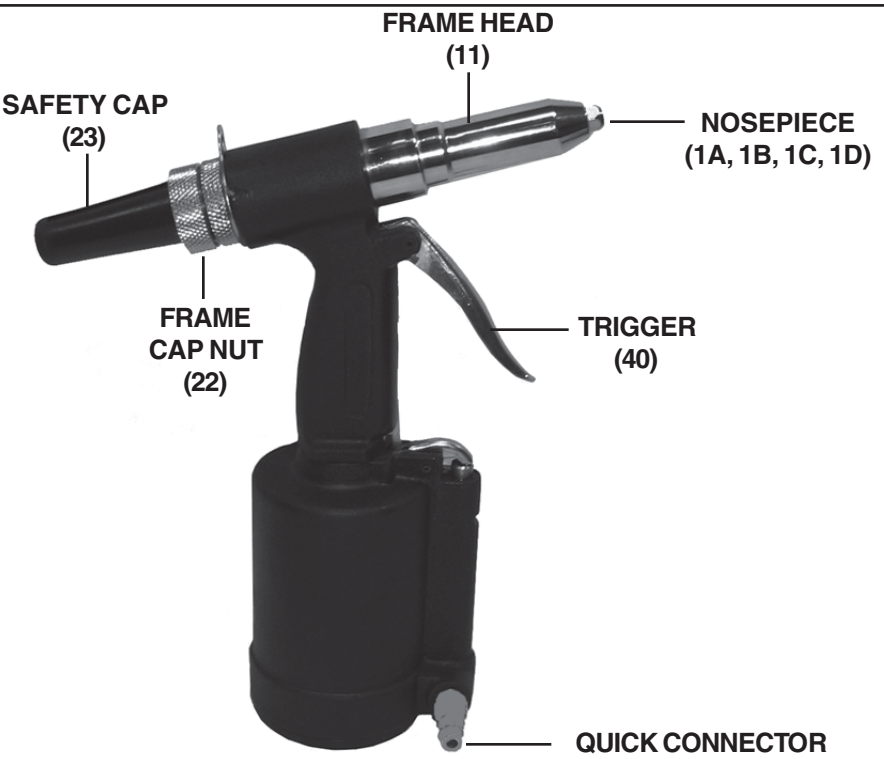


FIGURE D

To Operate The Riveter:

1. Make sure the Safety Cap (23) is firmly secured to the Riveter by tightening the Frame Cap Nut (22). Also, make sure the slot in the Safety Cap is turned upward to avoid spilling used rivet pins. **(See Figure D.)**
2. Depending on the size of rivet’s pin (not included) 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, make sure to 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.**

6. Insert the small end of a rivet fully through the Nosepiece (1A, 1B, 1C, or 1D). **CAUTION! Make sure to NEVER to touch the Trigger (40) when you are inserting rivets. (See Figure D.)**

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. **(See Figure D.)**

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. **(See Figure D.)**

INSPECTION, MAINTENANCE, AND CLEANING

1. ⚠ **WARNING! Always wear ANSI approved safety impact goggles when performing any inspection, maintenance, or cleaning procedures.**

2. ⚠ **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.

3. **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.

4. **To clean and change the Jaws:**

   A. Unscrew and remove the Frame Head (11), using the Spanner (36). **(See Assy. Diagram.)**

   B. Use the Spanner (36) to unscrew and remove the Jaw Case (6). Use care as there is a Spring (10) behind the Jaw Case (6) which may fly out. **(See Assy. Diagram.)**

   C. Remove the Jaws (7) from inside the Jaw Case (6). **(See Assy. Diagram.)**

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, 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. **(See Assy. Diagram.)**

E. Insert the Jaws (7) back into the Jaw Case (6). **(See Assy. Diagram.)**

F. When reassembling the Jaw Case (6), make sure the wedge on the Jaw Pusher's (8) head lines up in between the Jaws, pushing them slightly apart. **(See Assy. Diagram.)**

G. Check the distance from the head of the Jaw Case (6) 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). If it does not, tighten/loosen the Jaw Case until the distance is corrected. **(See Figure E.)**

5. **When storing,** always store the Riveter in a clean, dry, safe location out of reach of children.

6. ⚠ **WARNING!** All maintenance, service, and repairs not mentioned in this manual must only be performed by a qualified service technician.

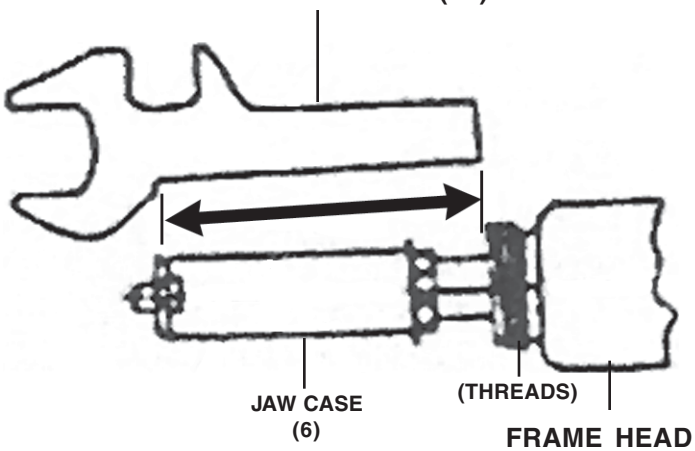


FIGURE E

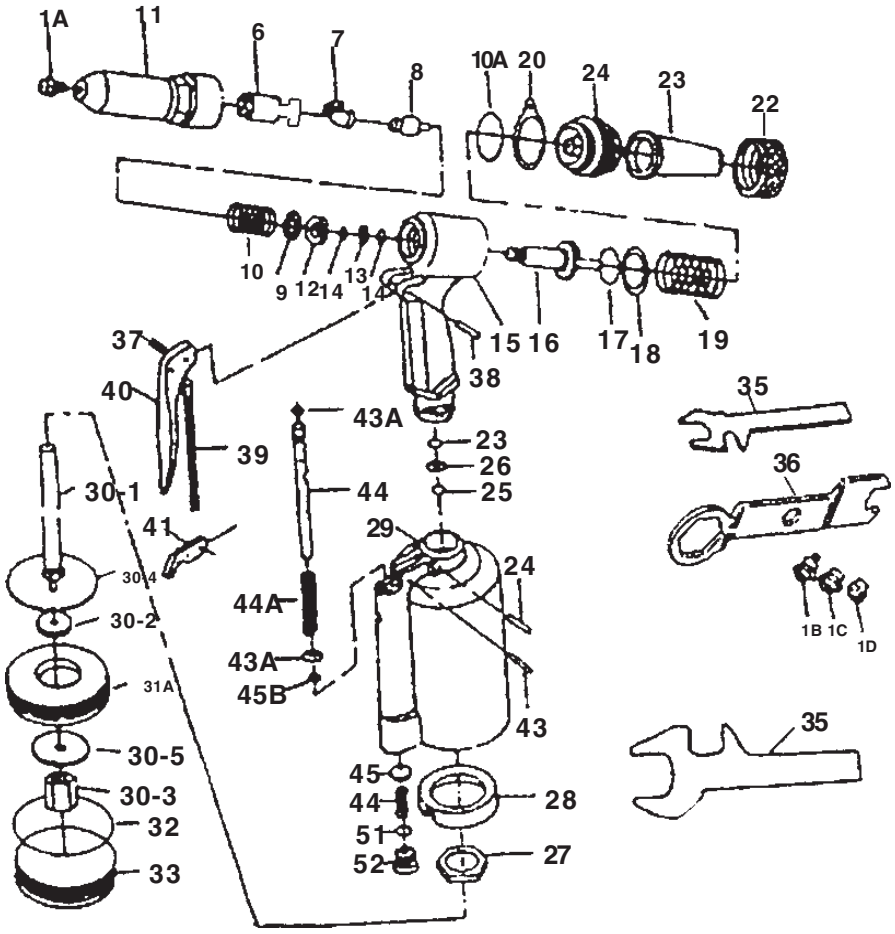
TROUBLESHOOTING

Problem	Possible Cause	Likely Solution
Jaws slipping.	Worn or damaged Jaws.	Replace Jaws.
Jaws will not open.	Loose Nosepiece.	Tighten Nosepiece.
	Dirty Jaws.	Clean Jaws.
Stroke is too short.	Rivet pin not properly inserted into Riveter.	Make sure that Pin is fully inserted.
	Low oil.	Prime Riveter.
	Rivet wrong size.	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.
Leaking air.	Poor hose connections.	Reconnect using pipe thread seal tape.
	Damaged O-Ring.	Replace O-Ring.
	Dirty Air Valve.	Clean and lubricate with pneumatic tool oil.
	Dirty airline inlet.	Clean and lubricate with pneumatic tool oil.

PARTS LIST

Part	Description	Part	Description	Part	Description
1A	Nosepiece ($^{3}/_{16}$")	20	Hanging Clip	36	Spanner
1B	Nosepiece ($^{5}/_{32}$")	21	Frame Cap	37	Trigger Pin
1C	Nosepiece ($^{1}/_{8}$")	22	Frame Cap Nut	38	Connector
1D	Nosepiece ($^{3}/_{32}$")	23	Safety Cap	39	Trigger Rod
6	Jaw Case	24	Setting Screw Pin	40	Trigger
7	Jaw	25	Backup O-Ring (12)	41	Connector
8	Jaw Pusher	26	Backup Ring	42	Trigger Lever
9	Case Washer Ring	27	Frame Lock Nut	43	Lever Pin
10	Jaw Pusher Spring	28	Rubber Cushion	43A	Valve Pusher O-Ring (p7)
10A	Frame Cap O-Ring (27 x 2)	29	Air Cylinder	44	Valve Pusher
11	Frame Head	30-1	Air Piston Stem	44A	Valve Spring
12	Case Lock Nut	30-2	Air Piston Insert	45	Valve
13	Back Up Ring	30-3	Air Piston Lock Nut	45A	Valve Collar
14	Back Up O-Ring (p12)	30-4	Large Iron Plate	45B	Collar O-Ring (p5)
15	Frame	30-5	Small Iron Plate	46	Valve Spring
16	Oil Piston	31A	Air Piston Ring	51	Valve Cap O-Ring (p11)
17	Oil Piston O-Ring (p22A)	32	Cylinder O-Ring (67.94 x 2.62)	52	Valve Cap
18	Back Up Ring	33	Cylinder Cap	53	Quick Connector
19	Return Spring	35	Spanner Gauge		

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.