

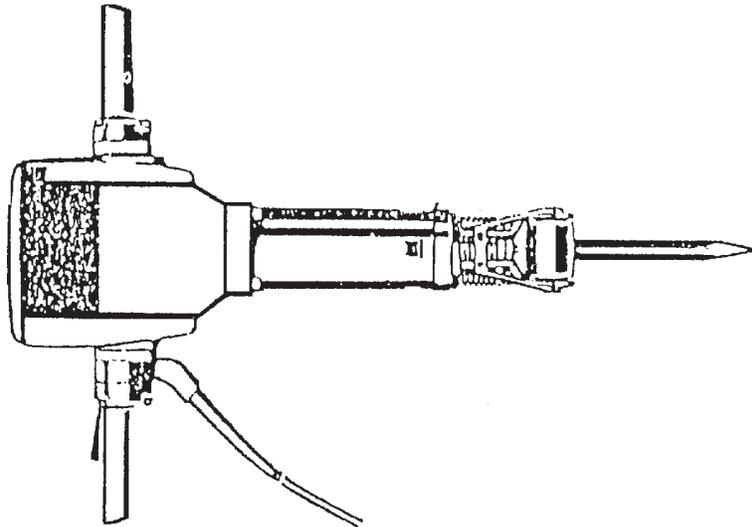
CHICAGO
Electric[®]Power Tools
INDUSTRIAL

BREAKER HAMMER

WITH PORTABLE CASE

Model 46935

ASSEMBLY and OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our Web site at <http://www.harborfreight.com>

Copyright © 2002 by Harbor Freight Tools[®]. All rights reserved. No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.

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

REV 04/03

Specifications

Power Source	115 Volts, 1800 Watts, 17 Running Amps, 3 Prong Grounded Plug
Hammer Blow Rate	1030 Blows Per Minute
Tool Mount	1-1/8" Hex Receiver
Net Weight	77 Lbs.

* Includes One Pointed Chisel and Flat Chisel

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, or extension cords.
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. **Do not force tool.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
6. **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. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
7. **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. Wear steel tipped shoes when working with the Breaker Hammer.
8. **Use eye, face and ear protection.** Always wear ANSI approved impact safety goggles. 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. Always wear ear protection. Hearing protection is required for any other persons in the work area.
9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.

10. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords 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.
11. **Disconnect power.** Unplug tool when not in use.
12. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
13. **Avoid unintentional starting.** Be sure the Switch Knob #87 is not depressed when not in use and before plugging in. Do not carry any tool with the switch depressed, whether it is plugged in or not.
14. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
15. **Take caution as some woods contain preservatives such as copper chromium arsenate (CCA) which can be toxic.** When cutting these materials extra care should be taken to avoid inhalation and minimize skin contact.
16. **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 any switch does not turn On and Off properly.
17. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
18. **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.
19. **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.
20. **People with pacemakers should consult their physician(s) before using this product.** Electromagnetic fields in close proximity to a heart pacemaker could cause interference to or failure of the pacemaker.
21. **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 and cement or other masonry products
 - Arsenic and chromium from chemically treated lumberYour 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.*)

22. **Maintenance.** For your safety, maintenance should be performed by a qualified technician.
23. **Use proper size and type extension cord.** If an extension cord is required, 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. See the chart below for appropriate extension cord size. Longer extension cords require larger size wire. If you are using the tool outdoors, use an extension cord rated for outdoor use (signified by “WA” on the jacket).

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120 VOLT)					
NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	25 Feet	50 Feet	75 Feet	100 Feet	150 Feet
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	16	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-
* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.					

Note: Performance of this tool (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, make sure the parts listed on page 7 are included. If parts are missing or broken, call Harbor Freight at the number on the cover of this manual as soon as possible.

Maintenance

Warning!! Make sure the Breaker Hammer is unplugged before doing any maintenance.

1. Wipe the tool with a lint free cloth after each use. Remove all dust and grit from the tool.
2. Add a drop or two of a lightweight oil to the Switch assembly area to lubricate the **Switch Knob (#87)**.
3. Examine the tool before each use. Make sure the Chisel Bit is sharp and not dull or cracked. Replace worn or broken bits with approved replacement bits from Harbor Freight Tools.
4. Store in temperatures no lower than 50-60° F.

Operation

Installing a Chisel.

Chisels come with or without collars. *Figure 1* shows installation of a chisel without a collar (the two included chisels are without a collar). *Figure 2* shows installation of a chisel with a collar.

Without a Collar:

1. Pull the retaining ring to the side just far enough to allow the bit to be inserted, as shown in *Figure 1*.
2. Insert the bit. Slide the chisel in as far as it will go.
3. Pull the retaining ring down approximately 120° until it contacts the housing. Physically check that the chisel is secure before operating.

Note: If the Chisel Bit doesn't slide in easily, apply some grease on the loading end of the Chisel Bit.

With a Collar:

1. Pull the retaining ring open about 30-40° to the second engaging position as shown in *Figure 2*.
2. Insert the collared chisel.
3. Return the retaining ring to close to its original position to lock the chisel in place. Physically check that the chisel is secure before operating.

Before each use, check the Chisel for cracks or other damage: Never use a damaged Chisel.

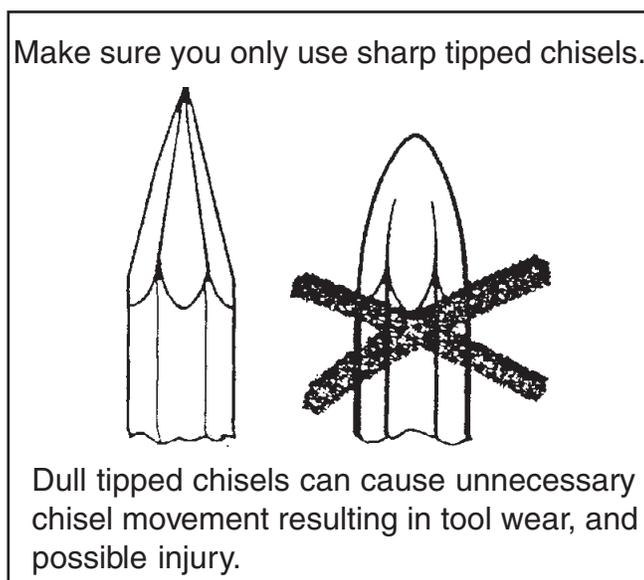


Figure 1

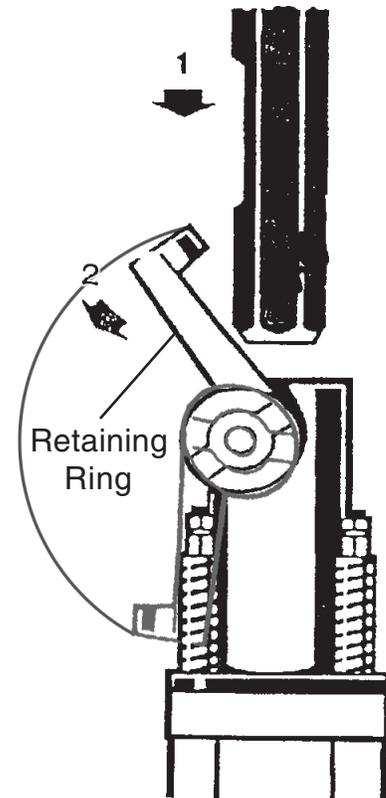
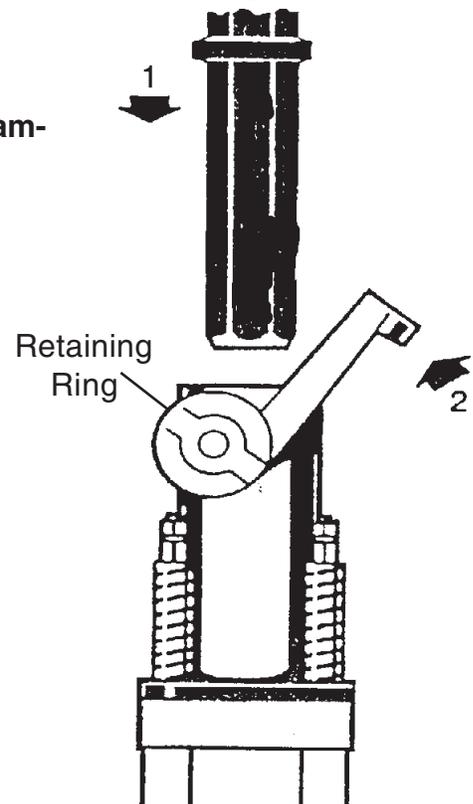


Figure 2



Operation (continued)

Warning!! Always wear ANSI approved impact safety goggles. 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. Always wear ear protection. Ear protection is required for any other persons in the work area.

Warning!! Be aware of flying concrete chips. Keep all spectators clear of the work area.

Warning!! Do not operate this tool if you have back, neck, wrist, or other conditions or injuries that will be aggravated by the severe jerking forces that this tool exerts upon its operator.

Warning!! If the Breaker Hammer ever gets out of your control, immediately release the **Switch Knob (#87)**.

Note: Use the weight of the Breaker Hammer to help you break up concrete. Use the tool in the vertical position whenever possible. This tool was intended to break up larger pieces of concrete.

IMPORTANT - READ BEFORE USE

This Breaker Hammer may have decreased performance for a brief period at the beginning of each use. This warmup period lasts approximately 3-5 minutes. This happens because the grease inside the tool may be somewhat thick, preventing the tool from operating at full efficiency while the motor is cold. This is perfectly normal and does not indicate a problem. To help reduce this effect, we recommend storing this equipment in temperatures no lower than 50-60° F.

Chipping a Straight Line

1. Use chalk or another suitable writing material and mark your work surface to delineate the area you intend to hammer.
2. Plug in the Breaker Hammer.
3. Grasp the handles firmly with both hands. When you are sure that no people or animals are in the vicinity, and it's safe to begin, depress the **Switch Knob (#87)**.
4. The Breaker Hammer will begin to break the top layer of concrete. If you push down, it will begin to break the next layer as well.
5. Keep moving the Breaker Hammer along the line you want to section, breaking concrete as you go. If the Breaker Hammer jumps off of the line or section, release the **Switch Knob (#87)** and reposition the Breaker Hammer.
6. When you are finished, release the **Switch Knob (#87)** and unplug the Breaker Hammer.

Breaking up Concrete.

1. Place the bit on the center of a piece of concrete.
2. Grasp the handles firmly with both hands. When you are sure that no people or animals are in the vicinity, and it's safe to begin, depress the **Switch Knob (#87)**.
3. As you break the concrete into big chunks, release the **Switch Knob (#87)** and move to other large pieces until all of the larger pieces are broken. Do not try to break up smaller pieces with this tool as it is too powerful and aggressive to control on small pieces.
4. When you are finished, release the **Switch Knob (#87)** and unplug the Breaker Hammer.

Parts List

Part No.	Description	Qty	Part No.	Description	Qty	Part No.	Description	Qty
1	Screw	4	32**	Spring	1	63**	Rubber Seal	1
2	Cover	1	33	Fixing Sheath	1	64	Bearing	1
3	Crankshaft Box	1	34	Hammer Cylinder	1	65	Fixing Sheath	1
4	Connecting Rod	1	35**	O-ring	2			
5**	Fixing Ring	1	36	Clamp Base	1	67	Crankshaft	1
6	Piston	1	37**	Spring	3	68*	Bearing	2
7	Spring Hammer	1	38	Washer	3	69**	Seal Washer	1
8**	O-ring	1	39	Nut	3	70**	Seal Cover	1
9	Cylinder Box	1	40**	Rubber Washer	2	71	Right-down Cover	1
10	Screw	4	41	Pin	1	72	Screw	4
11*	Bearing	1	42	Clamp Frame	1	73	Screw	4
12	Pin	1	43	Roll Pin	2	74	Right Balancing	1
13	Felt Washer	1	44	Shell	1	75	Nut	2
14	Bearing	1	45	Wire Protector	1	76	Switch Box	1
15	Axle	2	46	Stator	1	77	Switch	1
16	Bearing Ass'y.	1	47	Stator Compressor	2	78	Switch Sheath	1
17	Gear	1	48	Screw	2	79	Screw	2
18*	Bearing	1	49	Rotor	1	80	Switch Box Cover	1
19	Adjust Washer	1	50	Wire Fixing Board	2	81	Capacitor	1
20	Snap Ring	2	51	Carbon Brush	2	82	Terminal	1
21	Gear	1	52	Screw	2	83	Cable Clip	1
22**	Seal Spacer	1	53	Carbon Brush Holder	2	84	Screw	2
23	Gear Box	1	54	Screw	2	85	Cable	1
24	Shock Absorber	2	55	Wind Lead Ring	1	86	Switch Knob Base	1
25	Screw	9	56	Vane	1	87	Switch Knob	1
26	Spline Ass'y.	2	57	Tail Cover	1	88	Roll Pin	1
27	Spline Axle	1	58	Screw	9	89	Right Handle	1
28	Nut	2	59*	Bearing	1	90	Screw	4
29	Left Balancing	1	60	Nut	1	91	Nut	2
30	Fixing Sheath Washer	1	61	Rear Cover	1	92	Left Handle	1
31	Fixing Sheath	1	62	Washer	2	93	Screw	4
						94*	Bearing Kit	
						95**	Seal Kit	

Parts with one or two asterisks are not available individually. You must purchase the parts kits.

#94* - Bearing Kit includes part numbers 11*, 18*, 59*, 68*.

#95** - Seal Kit includes part numbers 5**, 8**, 22**, 32**, 35**, 37**, 40**, 63**, 69**, 70**

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.

Assembly Drawing

