

# CHICAGO

## Electric Power Tools

### HANDHELD CONCRETE VIBRATOR

Model 90304

#### ASSEMBLY AND OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011  
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For technical questions and replacement parts, please call 1-800-444-3353

## Specifications

Motor	Single Phase 110V, 60 Hz, 120 Watts, 2.5 Amps (working load)
Vibrations per minute	3440 VPM (220 Lbs. - Force Weight)
Skid Dimensions	7-5/8" x 11" L
Overall Dimensions	8-5/16" W x 11-9/16" L x 8-1/2" H
Hand Grip	4-1/2" L
Weight	16.20 Lbs.
Power Cord	4', 11" Long / 3-Pole Plug

## 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. **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.
6. **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.
7. **Use eye and ear protection.** Always wear ANSI approved impact safety goggles. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.

8. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
9. **Maintain tools with care.** Keep tools 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 handle must be kept clean, dry, and free from oil and grease at all times.
10. **Disconnect power.** Unplug tool when not in use.
11. **Avoid unintentional starting.** Be sure the trigger 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 plugged in or not.
12. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired. The Concrete Vibrator is a physically demanding tool to use. Use the tool for short periods of time to avoid fatigue and possible accidents.
13. **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 the trigger does not turn On and Off properly.
14. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
15. **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.
16. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
17. **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. This tool requires use of an extension cord with up to **10 amps** capability (up to 50 feet), with wire size rated at **18 AWG**. 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).
18. **Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.
19. **Pacemaker safety warning.** People with pacemakers should consult with their physician(s) before using this product; operation of equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

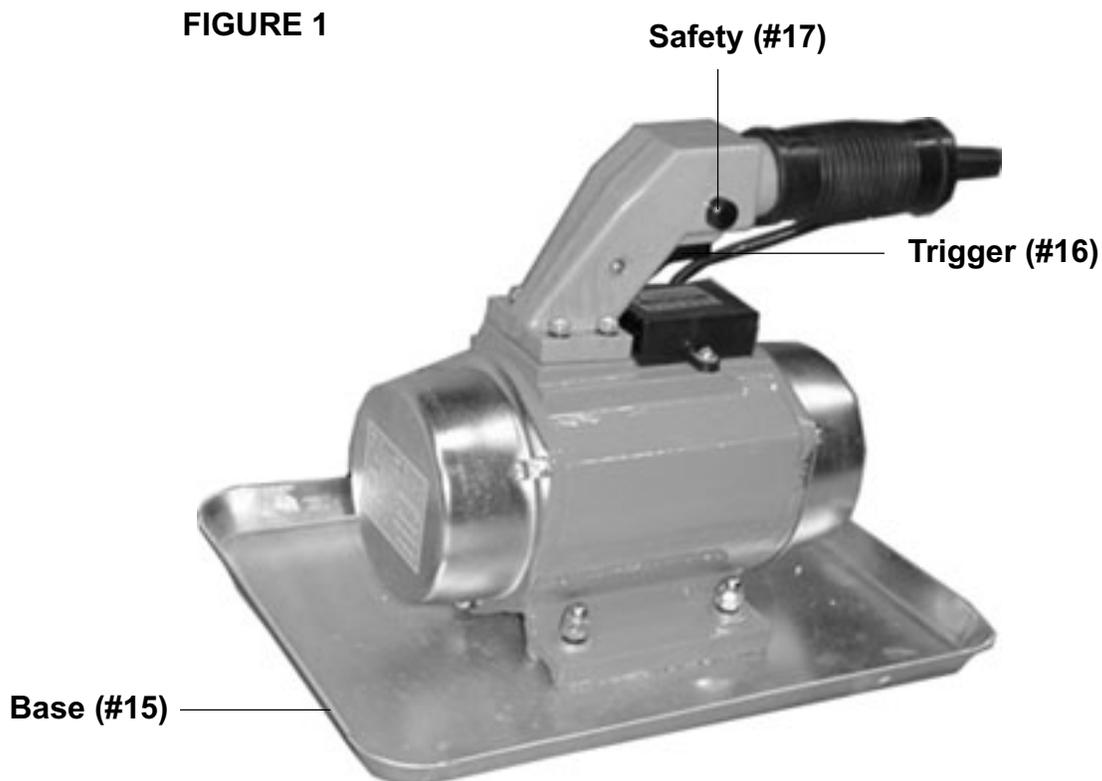
**Note:** Performance of this tool may vary depending on variations in local line voltage or tool battery power. Extension cord usage may also affect tool performance.

**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.

**WARNING:** This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code 25249.5, *et seq.*)

## Unpacking

When unpacking, check to make sure the parts listed on page 6 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.



## Operation

**Note:** Only use the Concrete Vibrator to vibrate and smooth wet concrete. Do not use it on hard surfaces or you will damage the unit.

**Note:** Position the power cord away from the wet concrete and keep it dry at all times. Keep the motor housing dry.

**Warning! Never operate this Concrete Vibrator if the power cord or electrical components are damaged or the seals are compromised. Never plug in the power cord when wet or standing on damp or wet ground. Exercise extreme caution when working with electrical equipment in the presence of water to maintain your personal insulation to avoid shock. Do not allow others in the work area when working with electrical equipment. Use GFCI (Ground Fault Circuit Interrupter) outlets when using this tool.**

1. Once the concrete has been hand smoothed, plug in the Concrete Vibrator.
2. Push in the **Safety (#17)** and then gently squeeze the **Trigger (#16)** to start the unit.
3. Set the **Base (#15)** on the concrete and slowly move it around without applying too much force. Let the unit do the work.
4. When finished, release the **Trigger (#16)** and unplug the unit.
5. Be careful not to smash fingers, hands and feet under the tool's base while the Concrete Vibrator is in operation.

## Maintenance

**Warning!** Unplug the Concrete Vibrator before attempting any maintenance.

1. Clean the unit immediately after each use, before any concrete dries on it. Do not submerge the unit in water or you will short out and damage the motor. Use a wet cloth to remove concrete from the **Base (#15)** and **Shell (#7)**. Do not use any harsh detergents or solvents to clean the Concrete Vibrator.
2. Dry the unit with a lint free cloth.

### 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.

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

## Parts List

Part No.	Description
1	Handle
2	Cord
3	Plug
4	Handle Grip
5	Capacitor
6	Stator
7	Shell
8	End Cover
9	Nut
10	Spring Washer
11	Steel Plate
12	End Lid
13	Bearing
14	Rotor
15	Base
16	Trigger
17	Safety

## Assembly Drawing

