

## WARNING CORDLESS CONCRETE VIBRATOR SAFETY

Any piece of equipment can be dangerous if not operated properly. **YOU** are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface, or render inoperable any of the safety devices or warnings on this equipment. If any safety devices or warnings have been removed, defeated, defaced, or rendered inoperable, **DO NOT USE THIS EQUIPMENT!!!**

**⚠ WARNING:** Lithium-ion Batteries and/or products that contain Lithium-ion Batteries can expose you to chemicals including cobalt lithium nickel oxide, and nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)

**⚠ WARNING:** Operating, servicing and maintaining this equipment can expose you to chemicals including Chromium (Hexavalent Compounds) & (Chromium 6, Chromium VI) from concrete which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize your exposure, avoid breathing dust. For more information go to [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)

**NEVER** submerge the motor in the concrete or other liquids it will create an electrical hazard and damage the motor. The Equipment Protection Plan does not cover damage caused by submersion.

### GENERAL POWER TOOL SAFETY WARNINGS

**WARNING Read all safety warnings and all instructions.** Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **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.
3. **Keep children & bystanders away while operating power tool.** Distractions can cause you to lose control.

### ELECTRICAL SAFETY

4. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools.** Unmodified plugs & matching outlets will reduce risk of electric shock.
5. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.
6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
7. **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of an GFCI reduces the risk of electric shock.

### PERSONAL SAFETY

8. **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.
9. **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, & hearing protection used in appropriate conditions will reduce personal injury.
10. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
11. **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.
12. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
13. **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.
14. **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.

15. **Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.**
16. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
17. **Store idle power tools out of the reach of children & 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 the untrained.
18. **Use of the power tool for operations different from those intended may result in hazardous situations.**
19. **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
20. **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
21. **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
22. **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
23. **Keep handles dry, clean and free from oil and grease.**

### **CORDLESS CONCRETE VIBRATOR SAFETY WARNINGS**

1. Always keep your hands and face away from vibrating head when operating.
2. Switch off the tool immediately if you notice abnormal noise or something faulty during operation.
3. Inspect the tool carefully for breakage, cracks or deformation if you accidentally drop it or strike it against something.
4. Do not carry the tool with finger on switch.
5. Do not set the tool down & switch it on. The vibrating head may whip around out of control and cause an accident.
6. Be careful not to allow water, wet concrete or the like to get into the tool. Do not let the tool fall into wet concrete.
7. Insert the vibrating head carefully between iron/steel frames or reinforcing rods not to come in contact with them.
8. Do not crush or twist the flexible hose.
9. Do not overly bend the flexible hose.
10. Use a wet cloth or the like to carefully wipe off any wet concrete left on the tool after use. Extra care should be given to thorough cleaning of the vents, switch area, cover openings, etc.
11. Do not use the tool in the rain. Do not clean the tool in water.

### **WARNING**

**DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.**

### **Symbols**

The followings show the symbols used for tool.

V	·	volts
— —	·	direct current
n <sub>0</sub>	·	no load speed
... /min r /min	·	vibration per minute

### **FOR BATTERY CARTRIDGE**

1. **Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.**
2. **Do not disassemble battery cartridge.**
3. **If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.**

4. If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.
5. Do not short the battery cartridge:
  - (1) Do not touch the terminals with any conductive material.
  - (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
  - (3) Do not expose battery cartridge to water or rain. A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
6. Do not store the tool or battery in locations where the temperature may reach or exceed 122 ° F.
7. Do not incinerate the battery cartridge, even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
8. Be careful not to drop or strike battery.
9. Do not use a damaged battery.

**Tips for maintaining maximum battery life**

1. Charge the battery cartridge before completely discharged.  
Always stop tool operation and charge the battery cartridge when you notice less tool power.
2. Never recharge a fully charged battery cartridge.  
Overcharging shortens the battery service life.
3. Charge the battery cartridge with room temperature at 50 ° F - 104 ° F.  
Let a hot battery cartridge cool down before charging it

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. If there is any doubt as to the operation or safety of the equipment, **DO NOT USE!!! CALL A TOOL SHED IMMEDIATELY!!!**

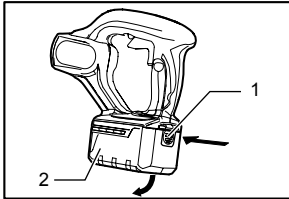
**FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH**

## FUNCTIONAL DESCRIPTION

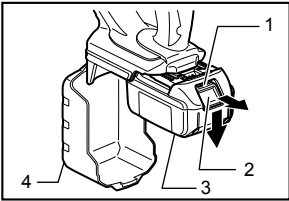
### ⚠CAUTION:

- Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

### Installing or removing battery cartridge



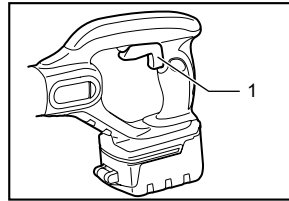
1. Recessed part in the battery cartridge cover
2. Battery cartridge cover



1. Red part
2. Button
3. Battery cartridge
4. Cover

- Always switch off the tool before insertion or removal of the battery cartridge.
- To remove the battery cartridge, first open the battery cartridge cover. To open the cover, press its recessed part and pivot it with the recessed part depressed. And then withdraw it from the tool while sliding the button on the front of the cartridge.
- To insert the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Always insert it all the way until it locks in place with a little click. If you can see the red part on the upper side of the button, it is not locked completely. Insert it fully until the red part cannot be seen. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.
- Do not use force when inserting the battery cartridge. If the cartridge does not slide in easily, it is not being inserted correctly.

### Switch action



1. Switch lever

### ⚠CAUTION:

- Before inserting the battery cartridge into the tool, always check to see that the switch lever actuates properly and returns to the "OFF" position when released.

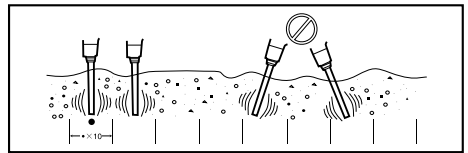
To start the tool, simply pull the switch lever. Release the switch lever to stop.

Switch lever can be pulled from either top or back side of the tool.

## OPERATION

Hold the tool straight when inserting/operating. Use the tool within the effective vibrations range at equidistant intervals. The effective air bubble removal range is about ten times diameter of the vibrating head, or around 250 mm (9-27/32").

Do not use this tool to move concrete within a form. The mortar will just move away and the coarse aggregate will remain, causing segregation.



### Effective leveling and removal of air bubbles

Removal of the air bubbles is complete after you have worked the tool throughout each effective range, the concrete stops shrinking, and the mortar has risen evenly to the surface, giving off a light appearance. Gently remove the operating tool not to leave holes.

### NOTE:

- Vibrating too long in a single place causes concrete segregation.
- When the coarse aggregates segregates when placing concrete, shovel out the coarse aggregate and put it where there is plenty of mortar. Then use the tool on it. Don't leave coarse aggregate in the segregated condition.