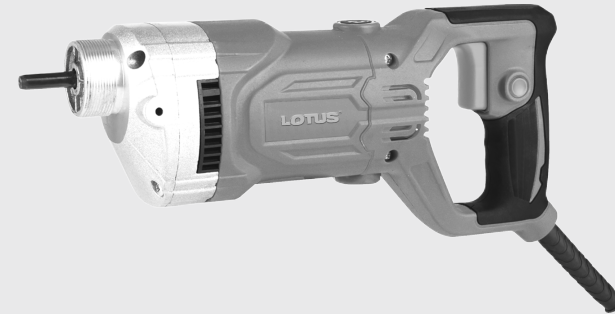


LOTUS[®]
Performance, Delivered.[™]



Concrete Vibrator & Hose

LTCV1400X

Made in China/Fabriqué en Chine
Lotus Tool Group (Philippines)
www.lotustools.ph



GENERAL POWER TOOL SAFETY WARNINGS

⚠ WARNING! Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference. The term “power tool” in the warnings refers to your main~~o~~perated (corded) power tool or battery-operated (cordless) power tool

WORK AREA SAFETY

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

ELECTRICAL SAFETY

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapted plugs with earthed (grounded) power tools. Modified plugs and un-matching outlets will increase the risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep it away from heat, oil, sharp edges or moving parts.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

PERSONAL SAFETY

- 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 or alcohol. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection.
- Protective equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- 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.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly, say no to loose clothing or jewellery. Keep your hair, clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

SERVICE

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- When servicing a power tool, use only identical replacement parts. Follow instructions in the maintenance section of this operator's manual.
- Use of any unauthorized parts or failure to follow maintenance instructions may create a risk of shock or injury.

POWER TOOL USE AND CARE

- 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.
- 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.
- Disconnect the plug from the power source 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.
- Store idle power tools out of the reach of children and 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 untrained users.
- Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
- Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power too

RESIDUAL RISKS

Even if you are operating this product in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise:

- Health defects resulting from vibration emission if the product is being used over long periods of time or not adequately managed and properly maintained.
- Injuries and damage to property due to broken cutting attachments or the sudden impact of hidden objects during use.
- Danger of injury and property damage caused by other objects or due to natural reactions or calamities.

CONCRETE VIBRATOR SAFETY WARNINGS



- Wear ear protectors. Exposure to noise can cause hearing loss.
- Wear safety goggles or other eye protection. Wear a dust mask or respirator for applications that generate dust.
- Wear gloves when operating. Accessible metal parts on the tool and bits may get extremely hot during operation. Small bits of broken material may damage bare hands.
- Hold power tools by insulated gripping surfaces when performing an operation where the tool may contact hidden wiring or its own cord. Keep a firm grip on the tool at all times. Do not attempt to operate this tool without holding it with both hands.
- Do not operate this tool for a long period of time. Vibration caused by tool action may be harmful to your hands and arms. Use gloves to provide extra cushion and limit exposure by taking frequent rest periods.
- Never place the tool down until the motor has come to stop.
- Do not force the vibrator. Tools do a better and safer job when used in the manner for which they are designed.
- Do not put the vibrator head on the hard ground of others hard surfaces when the vibrator is operating. Do not touch the running vibrator head. Do not let the vibrator run unattended.
- Do not install the vibrator shaft to the motor when the motor is in operation.
- Do not work close to flammable liquids or in areas exposed to flammable.
- When finishing the job or when taking a break, the operator should unplug, disconnect it from the electrical system and have it placed in such a way that it should not fall or tip.
- Never allow any person to operate the vibrator unless they are familiar with its operation. When the vibrator is not in use, store it in a dry, out of the reach of children. Inspect the vibrator for good working condition prior to storage and before re-use.
- If the machine needs repair beyond routine maintenance, contact an authorized service representative.

PRODUCT SPECIFICATIONS

Rated voltage/Frequency	: 220V~60Hz
Rated input power	: 1200W
Rated no load speed	: 4000rpm
Machine Net Weight	: 2.4Kg
Vibration frequency	: 50 Hz
Max. amplitude of vibration	: 0.9 mm
Vibrator hose length	: 1.5 m
Vibrator hose diameter	: 35 mm

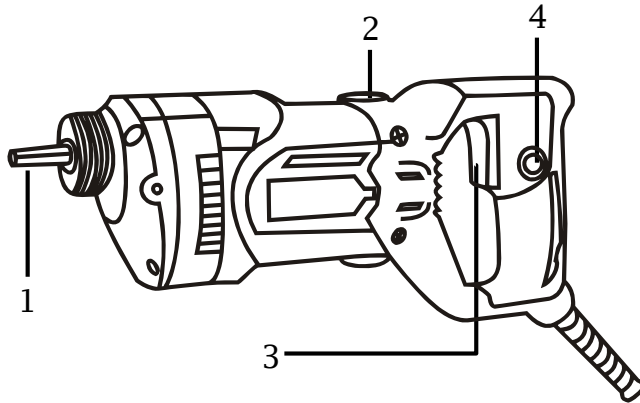
INTENDED USE

Concrete vibrator is a machine used for construction - based purposes to generate vibrations . These consolidate freshly poured concrete so that trapped air and excess water are released and the concrete settles firmly in place in the formwork. This comes with a vibration hose or rod attached to one end, the vibrator head is immersed in the wet concrete.

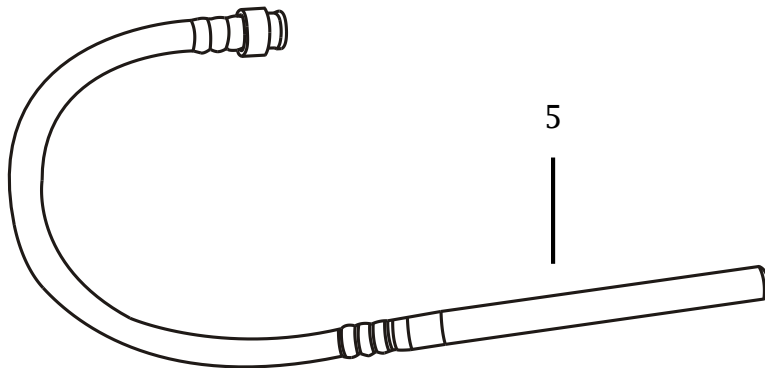
- Using vibration to assist concrete during its settling period has proven a worthwhile method that aids in long-term durability. This reduces improper consolidation of concrete and possible defects and thereby improves the concrete strength.
- The amount of time that the vibrator must remain in the concrete will depend on the vibrator's frequency (50Hz) and amplitude (0.9mm) and the concrete's workability

⚠ **WARNING!** The product must be fully assembled before operation! Do not use a product that is only partly assembled or assembled with damaged parts! Do not connect the product to power supply before it is completely assembled!

PRODUCT OVERVIEW



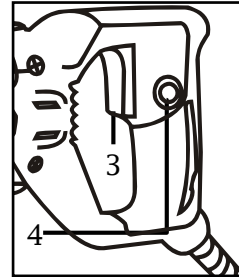
1. Spindle
2. Carbon Brush Compartment
3. ON/OFF Switch
4. Switch Lock ON Button
5. Vibration Hose



PRODUCT FUNCTIONS AND ASSEMBLY

ON/OFF TRIGGER SWITCH AND LOCK BUTTON

To start the tool, simply press the trigger switch (3). Release the trigger switch to stop. For continuous operation, press the switch trigger and then push in the lock button (4). To stop the tool from the locked position, pull the switch trigger fully, then release it.

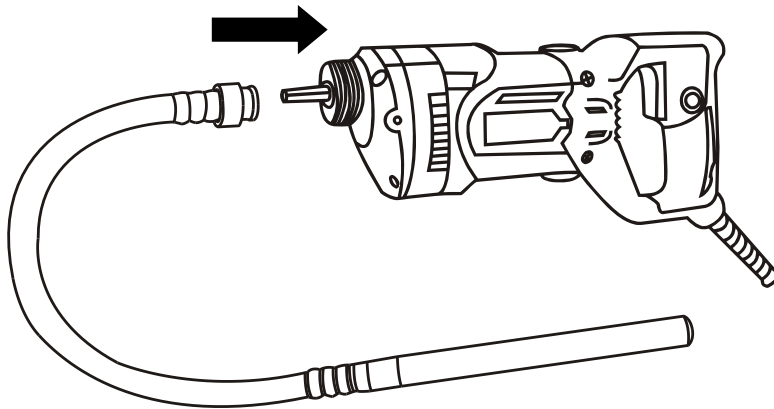


NEEDLE INSTALLATION

A heavy duty vibrating hose (flexible shaft or rod) which is 1.5m long and 35 mm diameter is available with the product.

Connect the flexible shaft to the motor:

- Check that the ON/OFF trigger switch is switched OFF and don't connect the plug yet before installing the attachment.
- Do not lubricate the spindle. Put the vibrating hose on the spindle and screw to the threads. No tools are required.



GENERAL OPERATION

⚠ WARNING! Most of these tools are very heavy, which makes them difficult to operate. Never use it close to other people or anyone else is in the work site. While operating you should be protected by required protective wearing. Refer the specific safety warnings before operating the vibrator.

- Put the plug into a socket. The operation is quite simple, trigger the switch to operate it, but handling it is not that simple and need a lot of experience.
- Place the motor and shaft in direct domain and put the flexible shaft (needle) into the concrete.
- Ensure that the vibrator's diameter corresponds with the consistency of the concrete.
- Stick the vibrating head into the concrete and allow the vibrator to vibrate for 3 to 4 seconds in one place in the concrete, before moving it to the next spot.
- Repeat this procedure every 50 cm until you have compacted the concrete completely (depending on the concrete's consistency).
- When work is done put the switch in the OFF position and pull the supply-cable's plug out of the socket.

The distance between two vibration places and the vibration time in one place, depends on the thickness of the concrete layer and the composition of the concrete.

For Floors, Stick the vibrator slowly into the concrete 3 to 4 seconds. Pull the vibrator slowly out of the concrete and repeat the procedure each 50cm.

For Walls and columns, Pour concrete to approx. 100 cm. Lower the vibrator into the formwork. Pull the poker-vibrator slowly out of the concrete and move it to the next spot. Now ready for the following pour of approx. 100 cms of concrete.

CLEANING AND STORAGE

⚠ WARNING! Always switch the product off, disconnect the product from the power supply and let the product cool down before performing inspection, maintenance and cleaning work! Only perform repairs and maintenance work according to these instructions! All further works must be performed by a qualified specialist!

- Keep the product clean. Remove debris from it after each use and before storage. Do not use chemical, alkaline, abrasive or other aggressive detergents or disinfectants to clean this product as they might be harmful to its surfaces. Regular and proper cleaning will help ensure safe use and prolong the life of the product. Clean the product with a dry cloth. Use a brush for areas that are hard to reach.
- Always store the product in a place that is inaccessible to children. We recommend using the original package for storage or covering the product with a suitable cloth or enclosure to protect it against dust.

MAINTENANCE AND REPAIR

- Before and after each use, check the product and accessories (or attachments) for wear and damage.
This product does not contain any parts that can be repaired by the consumer. Contact an authorised service centre or a similarly qualified person to have it checked and repaired.
- Inspect carbon brushes every 100 hours of usage (can vary according to different factors). With a screwdriver remove the side cap (carbon brush compartment) of the housing for inspection and replace it if necessary.
- A periodic lubrication of the converters bearings is not necessary. Clean the ventilation vents in the front and back part of the converter periodically to avoid overheating.
- Regularly inspect all mounting screws and ensure that they are properly tightened; if any of the screws loosen, tighten them immediately. Failure to do so could result in personal injury.

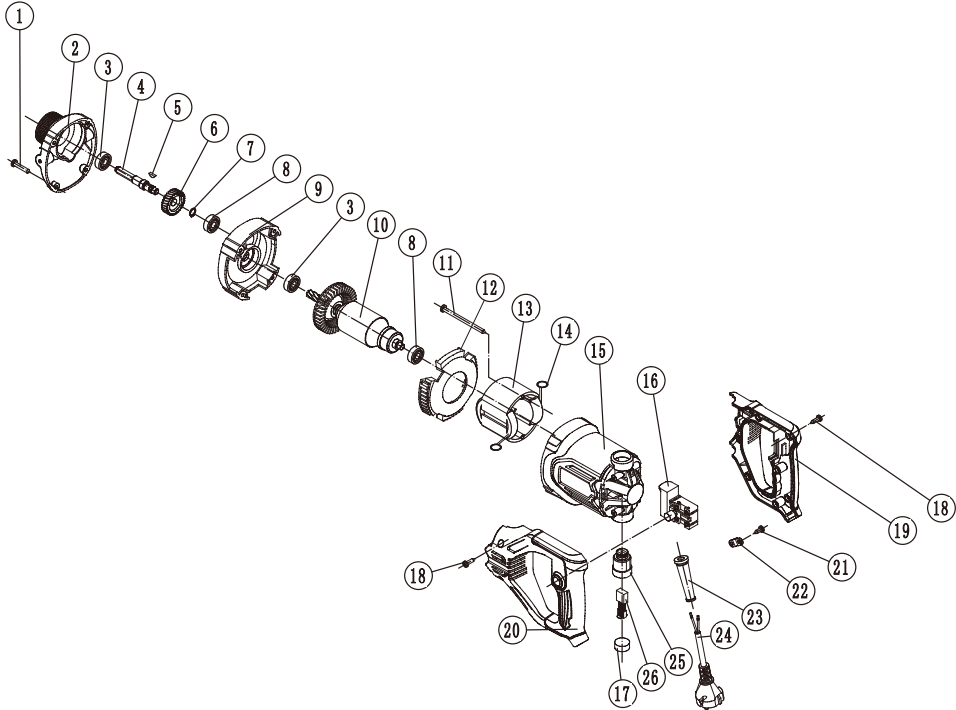
TROUBLESHOOTING

Suspected malfunctions are often due to causes that the users can fix themselves, therefore check the product using this section. In most cases the problem can be solved quickly.

Problem	Possible Cause	Solution
1. Product does not start	1.1 No power supply 1.2 Product damaged 1.3 Short circuit in motor winding. 1.4 Wear out of carbon brush.	1.1 Check the plug 1.2 Check it by a technician 1.3 Replace stator or rotor by technician. 1.4 Replace carbon brush by technician.
2. Excessive sparkling during running	2.1 Ring fire caused by short circuit in rotor or stator winding. 2.2 Under pressure in carbon brush spring.	2.1 Check or replace rotor/stator by technician. 2.2 Replace carbon brush by technician.
4. Excessive noise during no load running	4.1 Motor bearing damage.	4.1 Replace bearing by a technician.
5. Machine overheating	5.1 Overload running. 5.2 Motor bearing damage.	5.1 Conduct the operation correctly. 5.2 Check or replace it by technician.

⚠ WARNING! Only perform the steps described within these instructions! All further inspection, maintenance and repair work must be performed by an authorised service centre or a similarly qualified specialist if you cannot solve the problem yourself!

EXPLODED VIEW AND PART LIST



EXPLODED No.	DESCRIPTION	QTY/ Unit	EXPLODED No.	DESCRIPTION	QTY/ Unit
1	Self tapping screw 5*40	4	14	Tension spring	2
2	Gear case	1	15	Main case	1
3	Bearing 6200	1	16	Switch	1
4	Output sha	1	17	Brush holder	2
5	Woodruff key	1	18	Self-tapping screw 4*14	2
6	Main gear	1	19	Right handle	1 set
7	Axis Lock 9	1	20	Le handle	
8	Bearing 608	1	21	Self-tapping screw 4*12	1
9	Middle cover of gear case	1	22	Tension disc	1
10	Rotor	1	23	Cable shield	1
11	Self-tapping screw 5*65	2	24	Cable	1
12	Windshield ring	1	25	Carbon brush	2
13	Stator	1	26	Brush holder cover	2