

Original instructions

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**For your personal safety,
READ and UNDERSTAND before using.
SAVE THESE INSTRUCTIONS
FOR FUTURE REFERENCE.**

CE CB 

Electric Concrete Vibrator

Version:20150408

FUNCTIONAL DESCRIPTION

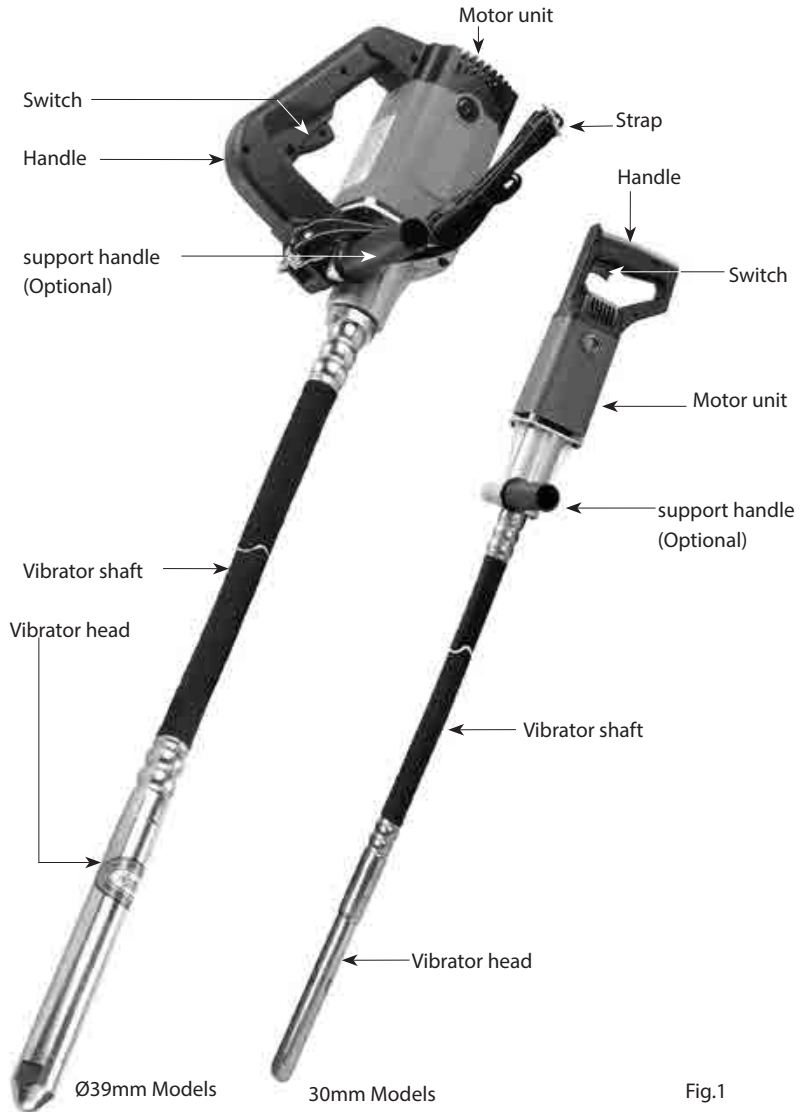


Fig.1

| | Ø39mm Model | Ø30mm Model |
|------------------------------|---|--|
| Voltage | See machine nameplate | |
| Power output | 1200W/8.4A (220-240V), 760W /13.9A (110-120V) | 330W/3A (220-240V), 330W/5.5A (110-120V) |
| No load min ⁻¹ | 16,000 | 20,000 |
| Vibration rate | 11,000 b/min | 14,000 b/min |
| Net weight (motor head only) | 4.2kg (9.26 Lbs) | 2.5kg (5.51 Lbs) |

GENERAL SAFETY INSTRUCTIONS



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.

Save all warnings and instructions for future reference. The term “power tool” in the warnings refers to your mainsoperated (corded) power tool or battery-operated (cordless) power tool.

1) WORK AREA SAFETY

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

2) ELECTRICAL SAFETY

- a. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.**
Unmodified plugs and matching outlets will reduce risk of electric shock.
- b. **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.
- c. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.

- e. **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.
- f. **If operating a power tool in a damp location is unavoidable, use an earth leakage circuit breaker.** Use of an earth leakage circuit breaker reduces the risk of electric shock.

3) PERSONAL SAFETY

- a. **a) 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.
- b. **b) Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. **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 energising power tools that have the switch on invites accidents.
- d. **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.
- e. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f. **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.
- g. **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.

4) POWER TOOL USE AND CARE

- a. **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.
- b. **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.
- c. **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.
- d. **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.
- e. **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 tools.
- f. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. **Use the power tool, accessories and tool bits etc., in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

5) 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.

Symbols used in this manual

V.....volts
A.....amperes
Hz.....hertz
W.....watt
~.....alternating current
 n_0no load speed
min⁻¹.....revolutions or reciprocation
per minute



.....warning of general danger



.....class II tool



.....with electrical earth



.....read these instructions



.....always wear eye protection



.....always wear a dust mask.



.....always wear hearing protection



.....wear safety-approved hard hat



do not dispose of electric tools,
accessories and packaging together
with household waste material

SPECIFIC SAFETY RULES

DO NOT let comfort or familiarity with the product (gained from repeated use) replace strict adherence to concrete vibrator safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

1. Always keep 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, deformation or cracks if you accidentally drop it or strike it against something.
4. Do not set the tool down and switch it on. The vibrating head may whip around out of control and cause an accident.
5. Be careful to not allow water, wet concrete or the like to get into the motor. Do not let the motor head fall into wet concrete.
6. Be extra careful when inserting the vibrating head between iron/steel frames or reinforcing rods to not come in contact with them.
7. Do not crush or twist the flexible hose.
8. Do not bend the flexible hose at too severe an angle when operating.
9. Use a wet cloth or similar method 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.
10. Since this tool produces vibration, it is necessary to periodically check for loose screws.

UNPACKING

Carefully remove the tool and all loose items from the shipping container.

Retain all packing materials until after you have inspected and satisfactorily operated the machine.

CARTON CONTENTS

1. Concrete Vibrator Motor Head Unit.
2. Support Strap.
3. Vibrator pipe (packaged separately).
4. Support Handle (optional)

ASSEMBLY -Mounting the flexible hose

1. Ensure that the machine is unplugged.
2. Carefully align and insert the tang in the flexible hose into the driving socket in the motor head.
3. Tighten the flexible hose.

NOTE: THE PIPE IS LEFT HAND THREAD.

ASSEMBLY -Mounting the support strap (VRN1400 models only)

For more comfortable operation and better mobility, a support strap is provided. Note that there are 2 eyelets on the motor head just ahead of the side handle.

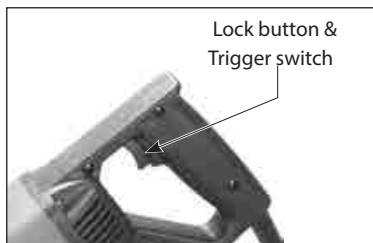
1. Clip each end of the support strap to the eyelets, thus forming a loop.
2. Adjust the strap to achieve a comfortable length.

ASSEMBLY – Mounting the support handle (optional)

For an even more comfortable operation, a support handle is provided.

The support handle is fitted where the Vibrator Shaft is connected to the Gear Case (motor unit).

1. Loosen the support handle.
2. **VR600 models:** mount the clamp to the nose of the gearcase.
VRN1400 models: push the mounting bolt through from one side of the front of the gearcase and then on the other side, thread on the tension collar and the handle. See Fig.1.
3. Lock the support handle into place. See Fig.1.



DO NOT OPERATE THIS TOOL UNTIL YOU READ AND UNDERSTAND THE ENTIRE INSTRUCTION MANUAL.

CAUTION: Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

STARTING AND STOPPING TOOL

Make sure that the power circuit voltage is the same as that shown on the specification plate of the machine and that switch is "OFF" before connecting the tool to the power circuit.

Squeeze trigger switch to turn tool on. Release the trigger to shut tool off.

To lock the switch in the on position, press the lock button while the switch is fully on. To release the lock, press the switch and release it again.

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 the diameter of the vibrating head.

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.

CAUTION: Never bend the vibrator shaft at a severe angle. This will cause overheating of the rubber and premature failure of the shaft. Only allow a gentle bend.

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 to avoid leaving holes.

NOTE: Vibrating too long in a single place causes concrete segregation.

When the coarse aggregate 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 separated.

When pouring concrete on a slope, always work from the bottom at the beginning. This way the weight of the freshly poured concrete and vibration will lead to effective removal of air bubbles. Conversely, if the working is done first from above, the mortar will separate and eventually slide to the bottom.

MAINTENANCE CAUTION:

Every 50 hours of operation blow compressed air through the motor while running at no load to clean out accumulated dust. (If operating in especially dusty conditions, perform this operation more often.)

Always be sure that the tool is switched off before attempting to perform inspection or maintenance.

KEEP TOOL CLEAN

IMMEDIATE AFTER USE:

Rinse off all wet concrete from the shaft and vibrator unit before it dries.

WARNING: Double check to ensure that the machine is unplugged before using water!

CAUTION: Take care that no water enters the motor unit during cleaning.

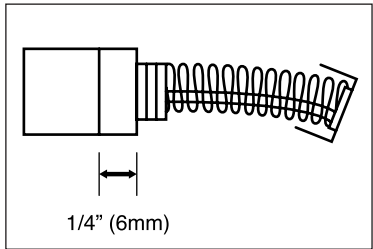
Periodically blow out all air passages with dry compressed air. All plastic parts should be cleaned with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material. Wear safety glasses while using compressed air.

THE VIBRATOR SHAFT

The vibrator shaft is a sealed unit and lubricating grease is included inside. But if the operator finds that the shaft gets hot more and more easily, relubrication will be required. Since disassembling the shaft for lubrication requires special tools, it must be done by a qualified service center only.

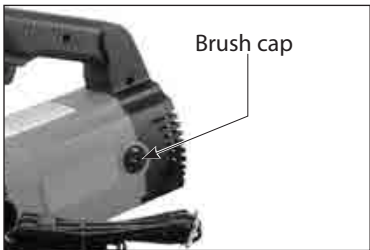
THE CARBON BRUSHES

The carbon brushes are a normal wearing part and must be replaced when they reach their wear limit.



To replace:

Simply remove the brush caps and withdraw the old brushes. Replace with new brushes (always replace as a pair) ensuring that they align properly and slide freely. Then replace the brush caps.



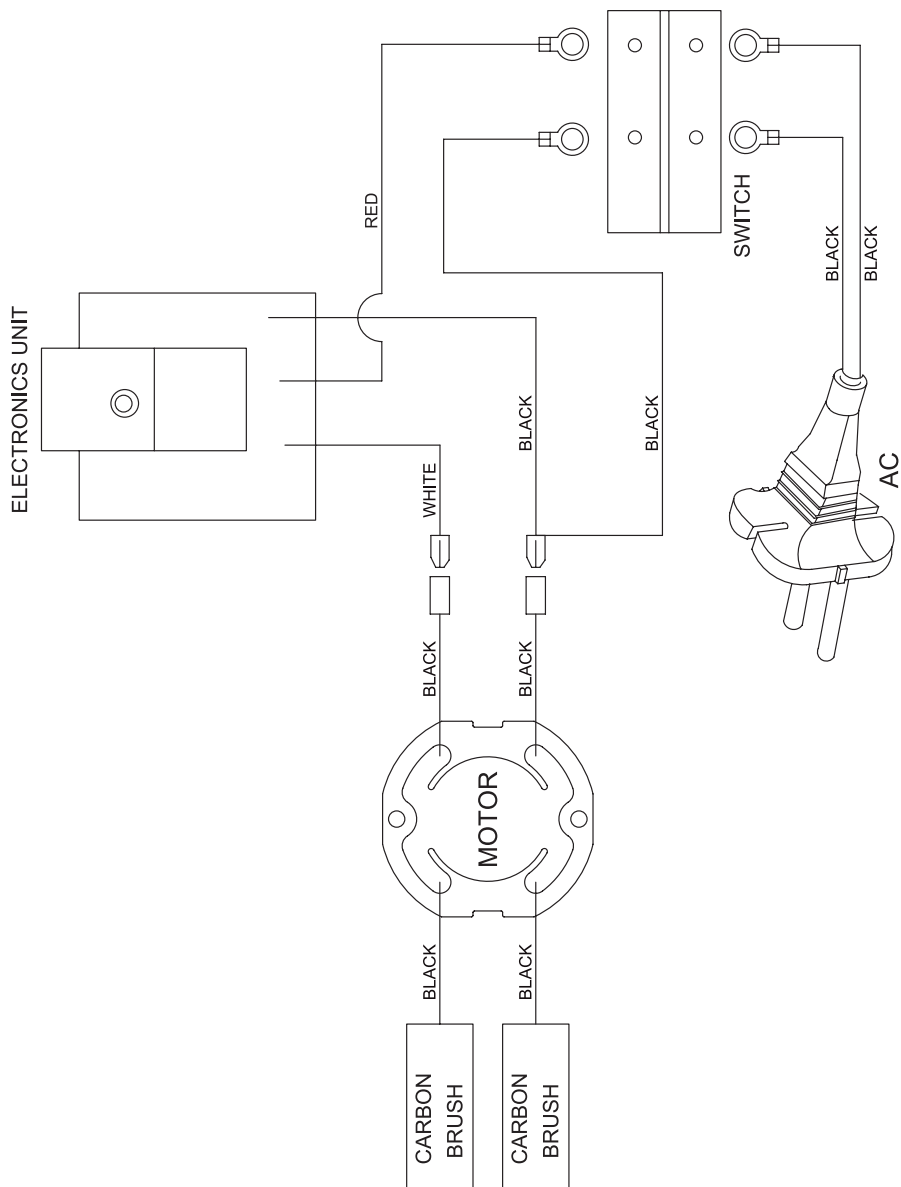
STANDARD ACCESSORIES

Support Strap (**VRN1400 only**)

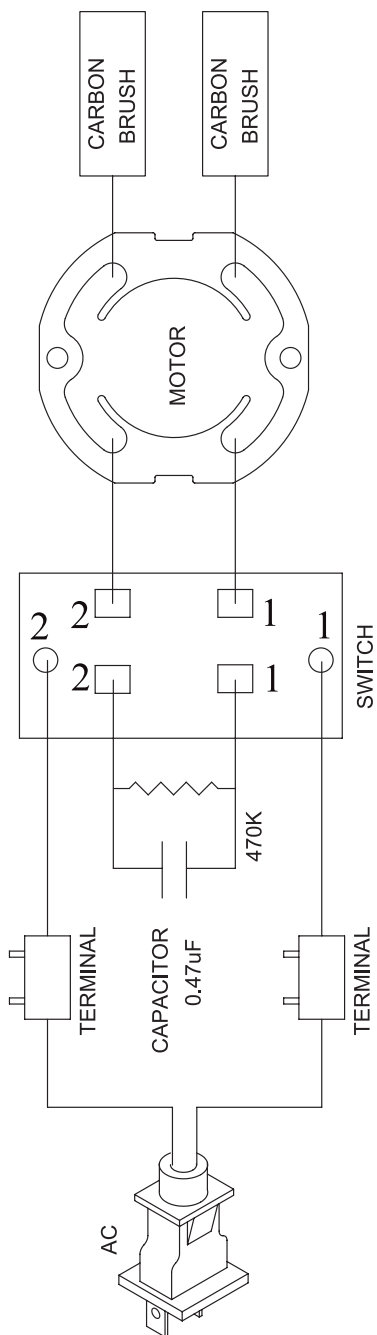
If the replacement of the power supply cord is necessary, this has to be done by the manufacturer or their agent in order to avoid a safety hazard.

WARNING: All repairs must be entrusted to an authorized service center. Incorrectly performed repairs could lead to injury or death.

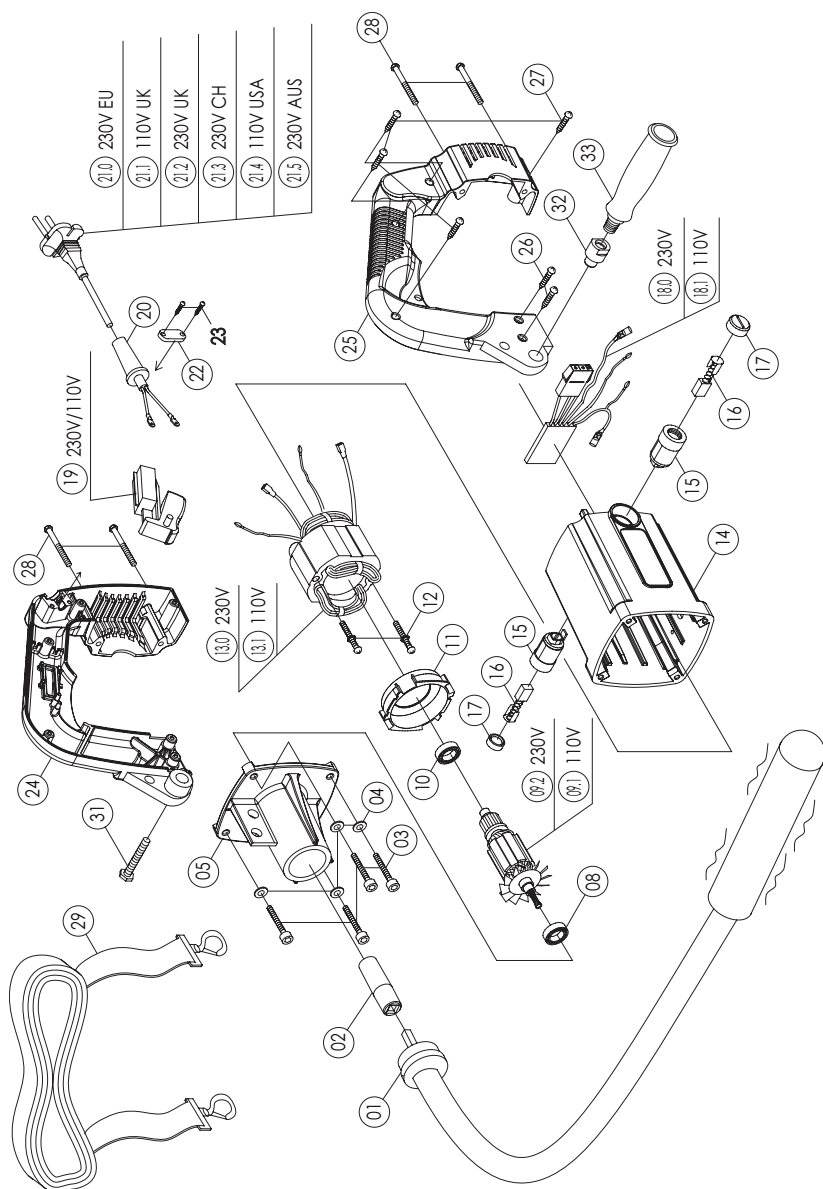
Ø38mm Model WIRING



Ø28mm Model WIRING



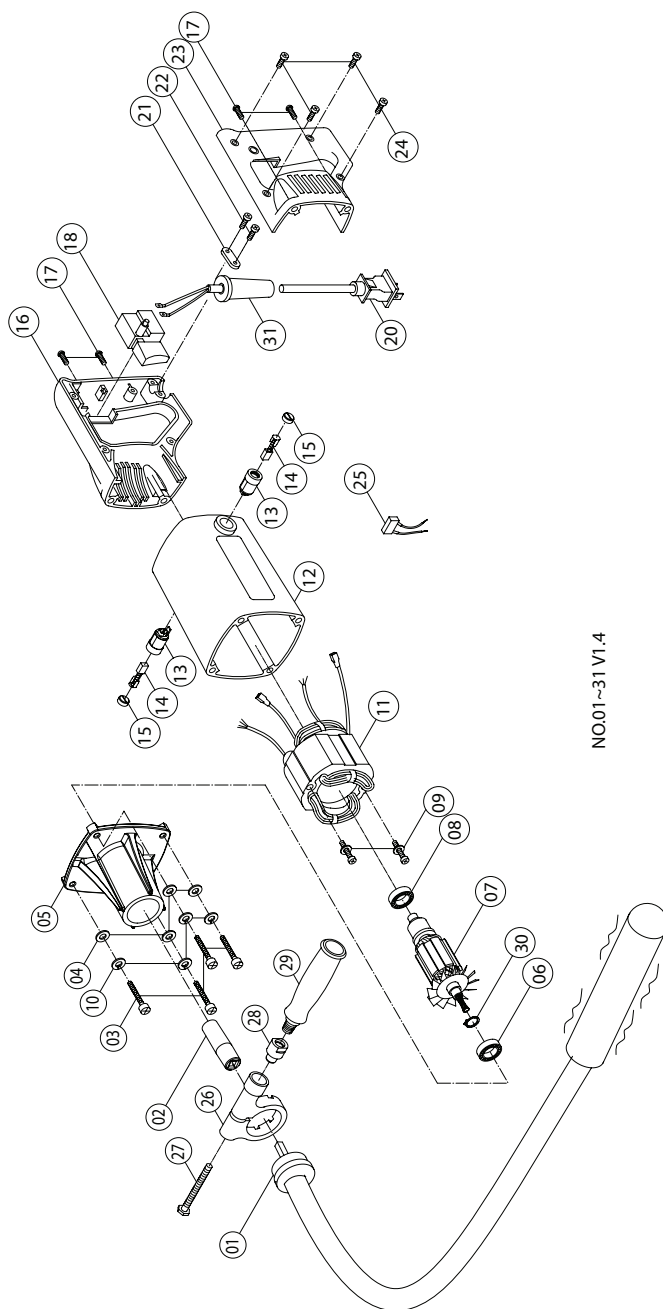
Ø38mm Model EXPLODED VIEW



Ø38mm Model PARTS LIST

| Item No. | Parts Name | | Q'TY |
|----------|-------------------------|----------|------|
| 1 | VIBRATOR SHAFT | | 1 |
| 2 | COUPLING | | 1 |
| 3 | CAP SCREW | M5 x 25 | 4 |
| 4 | FLAT WASHER | M5 | 4 |
| 5 | GEAR CASE | | 1 |
| 6 | N/A | | - |
| 7 | N/A | | - |
| 8 | BEARING | 6202-2RS | 1 |
| 9 | ARMATURE | M10 x1.5 | 1 |
| 10 | BEARING | 6200 zz | 1 |
| 11 | FAN SHROUD | | 1 |
| 12 | STATOR SCREW | M5 x 60 | 2 |
| 13 | STATOR | | 1 |
| 14 | MOTOR HOUSING | | 1 |
| 15 | BRUSH HOLDER | 7 x17 | 2 |
| 16 | CARBON BRUSH | 7 x17 | 2 |
| 17 | BRUSH CAP | 7 x 17 | 2 |
| 18 | ELECTRONICS UNIT | | 1 |
| 19 | SWITCH | | 1 |
| 20 | CORD ARMOR | | 1 |
| 21 | POWER SUPPLY CORD | | 1 |
| 22 | CORD CLIP | | 1 |
| 23 | SCREW | M4x14 | 2 |
| 24 | HANDLE HALF-RIGHT | | 1 |
| 25 | HANDLE HALF-LEFT | | 1 |
| 26 | SCREW | M4 x 20 | 2 |
| 27 | SCREW | M4x16 | 4 |
| 28 | SCREW | M5 x 45 | 4 |
| 29 | SUPPORT STRAP | | 1 |
| 30 | N/A | | - |
| 31 | HEX HD. BOLT | M8 x 45 | 1 |
| 32 | HANDLE TENSIONER COLLAR | | 1 |
| 33 | SIDE HANDLE GRIP | | 1 |

Ø28mm Model EXPLODED VIEW



NO.01~31 V1.4

Ø28mm Model PARTS LIST

| Item No. | Parts Name | Q'TY |
|----------|-------------------------|------|
| 1 | VIBRATOR SHAFT | 1 |
| 2 | COUPLING | 1 |
| 3 | SCREW M5x25 | 4 |
| 4 | FLAT WASHER | 4 |
| 5 | GEAR CASE | 1 |
| 6 | BEARING 609-2RS | 1 |
| 7 | ARMATURE | 1 |
| 8 | BEARING 608-2RS | 1 |
| 9 | STATOR SCREW M5x60 | 2 |
| 10 | SPRING WASHER M5 | 6 |
| 11 | STATOR | 1 |
| 12 | MOTOR HOUSING | 1 |
| 13 | BRUSH HOLDER 7x11 | 2 |
| 14 | CARBON BRUSH 7x11 | 2 |
| 15 | BRUSH CAP 7x11 | 2 |
| 16 | HANDLE HALF-RIGHT | 1 |
| 17 | SCREW M5x20 | 4 |
| 18 | SWITCH | 1 |
| 19 | N/A | - |
| 20 | POWER SUPPLY CABLE | 1 |
| 21 | CORD CLIP | 1 |
| 22 | SCREW M4x14 | 2 |
| 23 | HANDLE HALF-LEFT | 1 |
| 24 | SCREW M4x25 | 4 |
| 25 | CAPACITOR | 1 |
| 26 | SIDE HANDLE CLAMP | 1 |
| 27 | HEX HD. BOLT M8x80 | 1 |
| 28 | HANDLE TENSIONER COLLAR | 1 |
| 29 | SIDE HANDLE GRIP | 1 |
| 30 | EXTERNAL CIRCLIP | 1 |
| 31 | CORD ARMOR | 1 |

