

High Frequency Brushless Concrete Grinder & Converter

BG125 / P4K



Instruction Manual

P4K



| Model | Concrete Grinder | Power Converter |
|---------------------------|--------------------|--------------------------|
| Voltage | - | 100 V - 240 V ~ 50-60 Hz |
| Power Input | 3~ 2200 W | 1~ 4500 W |
| Power Output | - | 3~ 4000 W |
| No Load/min ⁻¹ | 3550 - 5350 | - |
| Wheel Diameter | 125 mm (5") | - |
| Arbor | 22.23 mm (7/8") | - |
| Spindle | M14 | - |
| Ingress Protection | IP55 | IP55 |
| Dimensions (L x W x H) | 455 x 200 x 175 mm | 290 x 180 x 245 mm |
| Weight | 4.6 kg (10.1 lb) | 3.1 kg (6.9 lb) |

Concrete Grinder:



- 1. Motor
- 2. Load Warning Lamp
- 3. Main Handle
- 4. Trigger Switch
- 5. Lock Button
- 6. Dust Port
- 7. Skirt
- 8. Spindle Lock Button
- 9. Front Handle
- 10. Half-Moon Door
- **11.**Tab
- 12. Knob, Handle Adjustor
- 13. Coupling Cable
- 14. Screen
- 15. Power Button
- 16. Power Supply Cable
- 17. Selection Buttons
- 18. Motor Coupling Socket
- 19. Handle

Power Converter:



GENERAL SAFETY RULES



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 mains-operated (corded) power tool or battery-operated (cordless) power tool.

1. WORK AREA SAFETY

- a. Keep work area clean and well lit. Cluttered and 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.
- d. Never leave the electric power tool unattended. Only leave the machine when the tool in use has come to a complete standstill.

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 a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

3. PERSONAL SAFETY

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.** 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 jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery 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 dustrelated hazards.
- h. Do not let familiarity gained from freuquent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

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 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 and accessories. 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.
- **h.** Keep handles and grasping surfaces dry, clean and free of oil and grease. Slippery handles do not allow for safe handling and control of the tool in unexpected situations.

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



SAFETY WARNINGS FOR CONCRETE GRINDERS

Safety Warnings Common for Grinding

- This power tool is intended to function as a grinder. 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.
- Operations such as sanding, wire brushing, polishing or cutting-off are not recommended to be performed with this power tool. Operations for which the power tool was not designed may create a hazard and cause personal injury.
- Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.
- The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.
- The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.
- Threaded mounting of accessories must match the grinder spindle thread. For accessories mounted by flanges, the arbour hole of the accessory must fit the locating diameter of the flange. Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.

- Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pad for cracks, tear or excess wear, wire brush for loose or cracked wires. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.
- Wear personal protective equipment. Depending on application, use face shield, safety goggles
 or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron
 capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of
 stopping flying debris generated by various operations. The dust mask or respirator must be capable of
 filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause
 hearing loss.
- Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.
- Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- **Position the cord clear of the spinning accessory.** If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning wheel.
- Never lay the power tool down until the accessory has come to a complete stop. The spinning wheel may grab the surface and pull the power tool out of your control.
- **Do not run the power tool while carrying it at your side.** Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- **Regularly clean the power tool's air vents.** The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- **Do not use accessories that require liquid coolants.** Using water or other liquid coolants may result in electrocution or shock.

Kickback and related warnings

- Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding. For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions. Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.
- Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken.
- Never place your hand near the rotating accessory. Accessory may kickback over your hand.

- **Do not position your body in the area where power tool will move if kickback occurs.** Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- Use special care when working corners, sharp edges, etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- **Do not attach a saw chain woodcarving blade or toothed saw blade.** Such blades create frequent kickback and loss of control.

Additional safety instructions for grinding

- Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel. Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.
- The grinding surface of the centre depressed wheels must be mounted below the plane of the guard lip. An improperly mounted wheel that projects through the plane of the guard lip cannot be adequately protected.
- The guard must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. The guard helps to protect operator from broken wheel fragments, accidental contact with wheel and sparks that could ignite clothing.
- Wheels must be used only for recommended applications. For example: do not grind with the side of the cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding; side forces applied to these wheels may cause them to shatter.
- Always use undamaged wheel flanges that are of correct size and shape for your selected wheel. Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cutoff wheels may be different from grinding wheel flanges.
- **Do not use worn down reinforced wheels from larger power tools.** Wheels intended for larger power tools are not suitable for the higher speed of a smaller tool and may burst.

ELECTRICAL CONNECTION

The network voltage must conform to the voltage indicated on the tool name plate. Under no circumstances should the tool be used when the power supply cable is damaged. A damaged cable must be replaced immediately by an authorized Customer Service Center. Do not try to repair the damaged cable yourself. The use of damaged power cables can lead to an electric shock.

WARNING: Never operate a damaged machine. Always tag a damaged machine and take it out of service until repairs can be made.

SAFETY SYMBOLS

CAUTION: Indicates a potentially hazardous situation, which, if not avoided may result in minor or moderate injury. It may also be used to alert against unsafe practices that may cause property damage.

DANGER: Indicates an imminently hazardous situation which if not avoided will result in death or serious injury.

WARNING: Indicates a potentially hazardous situation which if not avoided will result in death or serious injury.

BEFORE USING THIS TOOL

WARNING: Some dust created by the power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-bases paints
- Crystalline silica from bricks, cement and other masonry products
- Arsenic and chromium from chemically treated lumber.

Your 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 dust masks specially designed to filter out microscopic particles.

UNPACKING

Remove the tool and all loose parts from the carton. Place all parts on a secure, stationary work surface and look the machine over carefully.

LIST OF PARTS

List of Contents

| Basic Assembly 1 |
|-----------------------|
| Operator's Manual1 |
| Lock Nut Wrench1 |
| Face Spanner Wrench 1 |
| L-Hex Wrench1 |
| Flanges2 |

INTRODUCTION

This machine is a special, high-frequency, PMSM power tool (permanent magnet synchronous motor). It must be only be used with its special power converter, which acts as a motor controller.

The converter also provides variable speed control.

Connection between the converter and motor is made by a motor coupling cable with special plug.

The power converter has overload, thermal, under voltage and over voltage protection.

RECOMMENDED ACCESSORIES

This machine may only be used with diamond cup wheels of 125mm diameter with 22.23mm (7/8") arbor hole or with M14 female thread.All other uses are prohibited.

Bonded abrasive accessories are not allowed to be used with this machine.

BASIC OPERATION

NOTE: 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.

Connect the motor to the converter before turning the converter on.

The connection between the power converter and the motor is by a special motor coupling cable. To connect, unscrew the cap, align the tangs, push in, and screw on the collar. Take care to avoid bending the pins. Keep the cap on when not in use. Do not alter this plug in any way.

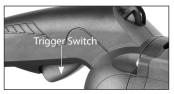
THE SWITCH

The machine has a lockable trigger switch. Squeeze the trigger to start the machine. To lock the switch on, press the lock button while holding the trigger switch on.

To release, squeeze the trigger and release.

CAUTION: After the machine has been switched off, the spindle will continue rotating. Take care that parts of your body do not come into contact with the rotating parts or set the machine down while it is still rotating!

Lock Button



HOW TO USE THE TOOL

Effective control of this machine requires **two-handed** operation for maximum protection and resistance to the start-up and operating torque. Place the work properly and hold the machine firmly **WITH BOTH HANDS** to prevent loss of control, which could cause personal injury. Protect your eyes from injury with safety glasses or goggles.

OVERLOAD PROTECTION, OVERHEAT PROTECTION

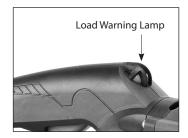
Overload & Load Warning Lamp

When operating within the normal load range, the load warning lamp will glow green.

When full load is reached, the load warning lamp will flash red. If full load is exceeded and sustained for too long, the motor will shut down and the load warning lamp will glow solid red. In this case, the motor must be first shut off and then restarted. When this happens, the motor will very likely be near overheating, so it is also a good idea to run the motor at no load for a few minutes to cool it before continuing.

NOTE: If the motor does not start when the switch is pressed:

A: If the lamp flashes green, this indicates a problem with the switch.B: If the lamp glows solid green, this indicates a problem with the motor.



Overheat Thermal Protection

If the temperature of the motor gets too high, the thermal protection will shut the motor down. The switch must be first shut off and then restarted. When this happens, do not immediately start working after restarting the motor. Always run the machine at no load for a few minutes to return to a normal operating temperature before continuing. (Also see below the section: "POWER CONVERTER LCD SCREEN CODES")

SPEED STABILIZATION

This machine is equipped with an electronic speed stabilization system which maintains constant speed under load.

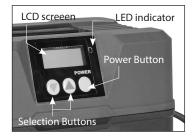
VARIABLE SPEED FUNCTION

The motor's speed can be varied to suit the needs of different work situations. Press the UP and DOWN arrow buttons on the converter to change the speed.

NOTE: The motor must first be turned OFF before the speed can be adjusted.

The available speeds are as below:

5350 min⁻¹, 5050 min⁻¹, 4750 min⁻¹, 4450 min⁻¹ 4150 min⁻¹, 3850 min⁻¹, 3550 min⁻¹



VACUUM CONNECTION

WARNING: Dust developing while working can be harmful to one's health.

This machine is designed specifically for dry grinding of concrete and similar materials. It uses dry diamond cup wheels and must be used with a suitable vacuum cleaner. Never exhaust the dust directly into the atmosphere.

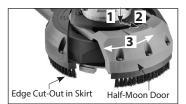
To attach vacuum hose to Dust Port, hold machine firmly with one hand. Then with a twisting motion push the vacuum hose onto the Dust Port.

SAFETY GUARD

The Safety Guard (ie. the Skirt) must be used at all times when operating this machine. It is not adjustable. The Half-Moon Door may be temporarily removed to expose the Edge Cut-Out. See below.

THE EDGE CUT-OUT

When working against a wall or into a corner, the Skirt will prevent the grinding head from reaching all the way to the edge. Press the Tab, slide the Half-Moon Door outward to unlock, then rotate the Half-Moon Door to the side until it clicks.



NOTE: Keep the mechanism clean. Accumulated dust will make it difficult to open.

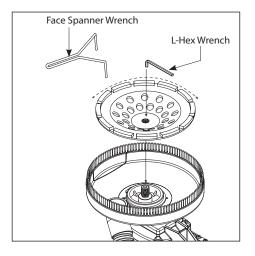
TOOL CHANGE – Removing and Replacing Diamond Cup Wheel

CAUTION: Before Working on or adjusting the machine, switch the machine "OFF" and UNPLUG machine from the socket.

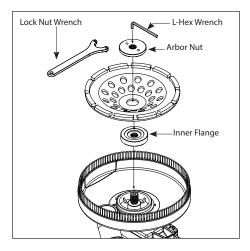
CAUTION: The wheel can become very hot during the working process. Before replacing, allow the wheel to cool down

- 1. Place the machine on a level and sturdy workspace.
- 2. If using a diamond cup wheel with M14 female thread, do not use the flanges. Simply thread the wheel onto the spindle. Use the L-Hex Wrench to keep the spindle from turning and tighten the wheel using the Face Spanner Wrench.
- **3.** If using a diamond cup wheel with arbor hole, first mount the inner flange onto the spindle. Mount the wheel onto the shoulder of the Inner Flange, then thread on the Arbor Nut. Use the L-Hex Wrench to keep the spindle from turning and tighten the Arbor Nut with the Lock Nut Wrench.
- 4. Replacement is the opposite of removal.

INSTALLING DIAMOND CUP WHEELS W/ M14 FEMALE THREAD.



INSTALLING DIAMOND CUP WHEELS WITH ARBOR HOLE.



STORAGE

CAUTION: Do not store machine resting on its bristles – Store on its side.

CAUTION: Do not store machine with its power supply cable pinched. This will result in damage to the cable.

REPLACING DUST SKIRT BRUSHES

The dust skirt brushes may be replaced when worn. To replace, remove the 3 screws to replace the small brush on the half moon door and remove the 6 screws to replace the large brush on the dust skirt.

MAINTENANCE

WARNING: To reduce the risk of injury from unexpected starting or electrical shock, unplug the power cord before working on the machine.

Keep the tool clean. Remove accumulated dust from working parts. Make sure that the tool operates properly. Periodically check screws and bolts for tightness.

KEEPING TOOL CLEAN

Keep the machine and its air inlet slots clean to ensure correct and safe operation. To clean, blow compressed air through the air inlet slots with the motor running at no load.

WARNING: 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.

Do not throw electric power tools into the household waste! In accordance with the European Directive 2002/96/EG on Waste Electrical and Electronic Equipment and transposition into national law, used electricpower tools must be collected separately and recycled in an environmentally friendly manner.

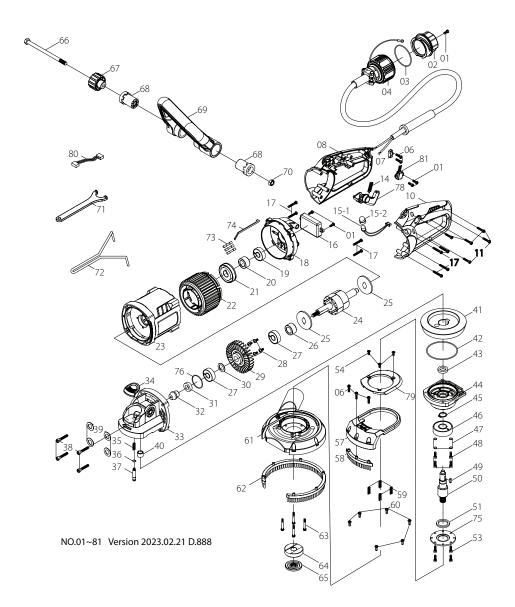
POWER CONVERTER LCD SCREEN CODES:

- **OFF:** When the converter is plugged in, the screen will display the supply voltage. The voltage displayed will depend on the voltage of the supply
- **ON:** When the converter power button is pressed, the tool will be energized and the screen will display the speed setting. Press the UP or DOWN buttons to adjust the speed setting as required.

ERROR CODES

| 8888 | Loss of communication between the motor electronics board, the converter electronics board and the LCD module when powering up | Check the connection of the coupling cable | | |
|------|--|--|--|--|
| E1 | Overload of the converter. | At the tool, turn the switch OFF and then ON again | | |
| E2 | Overheat of the converter | As soon as temperature returns to normal, at the tool, turn the switch OFF and then ON again | | |
| E3 | Under voltage | As soon as supply voltage returns to normal, at the tool, turn the switch OFF and then ON again | | |
| E4 | Over voltage | As soon as supply voltage returns to normal, at the tool, turn the switch OFF and then ON | | |
| E5 | Excessive back voltage from the motor brake to the converter | At the converter, press the POWER button to turn the powe OFF and then back ON again (If the problem persists, bring the unit to an authorized service center for repair) | | |
| E6 | RCD current leak detection between the converter and the voltage supply | Check connections and then, at the converter, press the POWER button to turn the power OFF and then back ON again (If the problem persists, bring the unit to an authorized service center for repair) | | |
| E7 | Hall effect sensor error | At the converter, press the POWER button to turn the power OFF and then back ON again (If the problem persists, bring the unit to an authorized service center for repair) | | |
| E8 | Motor overheat | Allow the motor to cool. Then, at the tool, turn the switch OFF and then ON again (If the temperature has sill not dropped sufficiently, wait longer for the temperature to drop to the acceptable range) | | |
| E91 | Loss of communication between the converter electronics board and LCD module during operation | At the converter, try pressing the POWER button to turn the power OFF and then back ON again. (If the problem persists, bring the unit to an authorized service center for repair) | | |
| E92 | Loss of communication between the motor electronics board and the LCD module during operation | Check the connection of the coupling cable. Then, at the tool, try turning the switch OFF and then ON again (If the problem persists, bring the unit to an authorized service center for repair) | | |
| E16 | No signal from the motor temperature sensor | At the tool, try turning the switch OFF and then ON again (If the problem persists, bring the unit to an authorized service center for repair) | | |
| E17 | Motor temperature sensor short circuited | At the tool, try turning the switch OFF and then ON again (If the problem persists, bring the unit to an authorized service center for repair) | | |

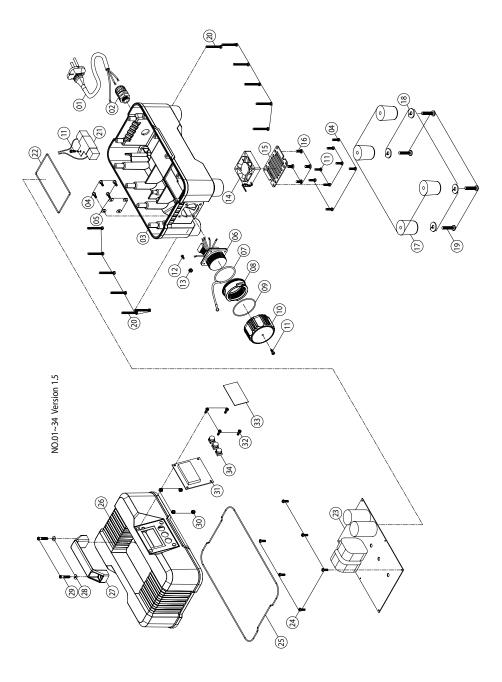
EXPLODED VIEW



PARTS LIST

| NO. | Parts Name | Q'ty | N0. | Parts Name | Q'ty |
|-----|--------------------------------------|------|-----|---------------------------------|------|
| 1 | PANHEAD TAPPING SCREW (M4x12) | 5 | 42 | 0-RING (Ø72x2) | 1 |
| 2 | PLUG CAP | 1 | 43 | OIL SEAL (Ø15xØ24x5) | 1 |
| 3 | 0-RING (AS-137) | 1 | 44 | GEAR PLATE | 1 |
| 4 | MOTOR COUPLING CABLE SET | 1 | 45 | EXTERNAL CIRCLIP (S-17) | 1 |
| 6 | PANHEAD TAPPING SCREW (M4x14) | 5 | 46 | BALL BEARING (6303) | 1 |
| 7 | CABLE CLIP | 1 | 47 | SPRING WASHER (M4) | 4 |
| 8 | HANDLE HALF-RIGHT | 1 | 48 | SOCKET CAP SCREW (M4x20xP0.7) | 4 |
| 10 | HANDLE HALF-LEFT | 1 | 49 | PARALLEL KEY (5x5x15) | 1 |
| 11 | PANHEAD TAPPING SCREW-A (M4x20) | 5 | 50 | SPINDLE (M14xP2.0-112.1MM) | 1 |
| 14 | SPRING (Ø0.8 x Ø6.4 x Ø8 x 9T x 26L) | 1 | 51 | OIL SEAL (Ø24xØ32x4) | 1 |
| 15 | LED INDICATOR LIGHT | 1 | 53 | SOCKET CAP SCREW (M4x10xP0.7) | 4 |
| 16 | ELECTRONICS UNIT | 1 | 54 | FLAT HEAD TAPPING SCREW (M4x10) | 3 |
| 17 | PANHEAD TAPPING SCREW (M4x25) | 8 | 57 | HALF-MOON DOOR | 1 |
| 18 | MOTOR TAIL CASTING | 1 | 58 | CLEANING BRUSH | 1 |
| 19 | BALL BEARING (6200-ZZ) | 1 | 59 | SPRING (Ø0.55xØ4.9xØ6x15Lx6T) | 4 |
| 20 | ROTOR SPACER | 1 | 60 | PANHEAD TAPPING SCREW (M4x10) | 6 |
| 21 | MAGNET HOLDER | 1 | 61 | DUST SKIRT | 1 |
| 22 | STATOR | 1 | 62 | CLEANING BRUSH | 1 |
| 23 | MOTOR HOUSING | 1 | 63 | SHOULDER BOLT (M4xP0.7x26L) | 4 |
| 24 | ROTOR | 1 | 64 | INNER FLANGE (Ø22.2-12.4mm) | 1 |
| 25 | ROTOR END PLATE | 2 | 65 | OUTER FLANGE (M14) | 1 |
| 26 | ROTOR SPACER | 1 | 66 | HEX BOLT (M8x130xP1.25) | 1 |
| 27 | BALL BEARING (6002) | 2 | 67 | CLAMPING KNOB | 1 |
| 28 | TRUSS HEAD TAPPING SCREW (M4x8) | 4 | 68 | CLAMPING SLEEVE | 2 |
| 29 | FAN | 1 | 69 | FRONT HANDLE | 1 |
| 30 | PRESSURE DISC (Ø15xØ21x2) | 1 | 70 | HEX NUT (M8) | 1 |
| 31 | OIL SEAL (Ø12xØ22x7) | 1 | 71 | LOCK NUT WRENCH (30MM) | 1 |
| 32 | BEVEL PINION GEAR (M1.5 x 11T) | 1 | 72 | FACE SPANNER WRENCH (78MM) | 1 |
| 33 | GEAR HOUSING | 1 | 73 | HEAT SHRINK BUTT CONNECTOR | 3 |
| 34 | SPINDLE LOCK BUTTON | 1 | 74 | ZIP TIE (2.5x100MM) | 1 |
| 35 | SPRING (Ø0.9xØ7.4xØ9.2x5Tx16L) | 1 | 75 | BEARING PLATE | 1 |
| 36 | 0-RING (Ø5x1) | 1 | 76 | 0-RING (Ø32x1.5) | 1 |
| 37 | ARBOR LOCK | 1 | 78 | SWITCH ACTUATOR (LOCK-ON) | 1 |
| 38 | PANHEAD TAPPING SCREW (M5x30) | 4 | 79 | COVER PANEL | 1 |
| 39 | SPRING WASHER (M5) | 4 | 80 | ELECTRONICS HARNESS | 1 |
| 40 | NEEDLE BEARING (HK 1010) | 1 | 81 | HALL EFFECT SWITCH | 1 |
| 41 | BEVEL GEAR (M1.5 x 37T) | 1 | | | |

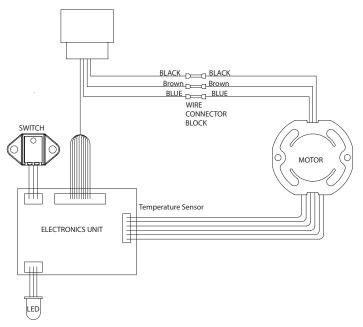
EXPLODED VIEW (Power Converter)



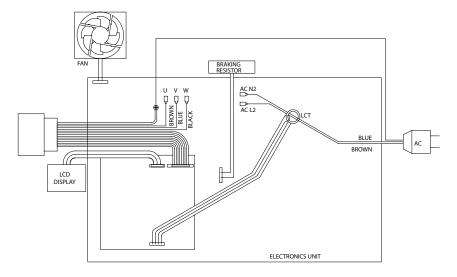
PARTS LIST (Power Converter)

| NO. | Parts Name | Q'ty |
|-----|--|------|
| 1 | POWER SUPPLY CABLE | 1 |
| 2 | CABLE GLAND | 1 |
| 3 | HOUSING - LOWER | 1 |
| 4 | SOCKET CAP SCREW (M4-0.7 x 10) | 8 |
| 5 | SPRING WASHER (M4) | 4 |
| 6 | MIL-SPEC SOCKET RECEPTACLE | 1 |
| 7 | TETHER | 1 |
| 8 | BAYONET COLLAR | 1 |
| 9 | O-RING (Ø52.07 x 2.62) | 1 |
| 10 | CAP | 1 |
| 11 | PANHEAD TAPPING SCREW (M4 x 12) | 6 |
| 12 | PANHEAD MACHINE SCREW (M5-0.8 x 8) | 1 |
| 13 | NYLOCK NUT (M5-0.8) | 1 |
| 14 | FAN UNIT | 1 |
| 15 | FAN GRILL | 1 |
| 16 | PANHEAD TAPPING SCREW (M5 x 10) | 4 |
| 17 | FOOT | 4 |
| 18 | FLAT WASHER (Ø6.5 x Ø13 x 1) | 4 |
| 19 | PANHEAD SCREW | 4 |
| 20 | PANHEND TAPPING SCREW (5/32" x 1 1/2") | 12 |
| 21 | BRAKING RESISTOR | 1 |
| 22 | MOLDED GASKET (Ø2 x 37cm) | 1 |
| 23 | ELECTRONICS UNIT | 1 |
| 24 | TRUSS HEAD TAPPING SCREW (M4 x 12) | 6 |
| 25 | MOLDED GASKET (Ø2 x 87cm) | 1 |
| 26 | HOUSING - UPPER | 1 |
| 27 | TOP HANDLE | 1 |
| 28 | FLAT WASHER (Ø5 x Ø12 x 1) | 2 |
| 29 | PANHEAD TAPPING SCREW (M5x25) | 2 |
| 30 | HEX NUT (M4-0.7) | 4 |
| 31 | LCD DISPLAY | 1 |
| 32 | PANHEAD MACHINE SCREW (M4-0.7 x 12) | 4 |
| 33 | WINDOW (65 x 35 x 1) | 1 |
| 34 | BUTTON | 1 |

Concrete Grinder:



Power Converter:



Noise/vibration information

Measured in accordance with EN 61029-2-6

Model no.: BG125

Noise level: L_{pA} :87.0 db(A) L_{wA} :100.0 db(A) K= 3 db(A)

The vibration emission level has been measured in accordance with a standardised test given in EN 61029; it may be used to compare one tool with another and as a preliminary assessment of exposure to vibration when using the tool for the applications mentioned

- using the tool for different applications, or with different or poorly maintained accessories, may significantly increase the exposure level

- the times when the tool is switched off or when it is running but not actually doing the job, may significantly reduce the exposure level

protect yourself against the effects of vibration by maintaining the tool and its accessories, keeping your hands warm, and organizing your work patterns

CE Declaration of Conformity

•We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents: EN 61029-1:2009+A11:2010 & EN 61029-2-6:2010 EN 55014-1:2006+A1:2009+A2:2011; EN55014-2:1997+A1:2001+A2:2008; EN 61000-3-2:2014; EN61000-3-3:2013 in accordance with the regulations 2014/30/EU, 2006/42/EC, 2011/65/EU

•Technical file at: LEE YEONG INDUSTRIAL CO., LTD., NO.2, KEJIA RD., DOULIU CITY, YUNLIN COUNTY 64057, TAIWAN

You-Chun, Liu Operation & Engineering

You chan Liu

Chih-Hao, Lai Approval Manager

chih Hao Lai

LEE YEONG INDUSTRIAL CO., LTD., NO.2, KEJIA RD., DOULIU CITY, YUNLIN COUNTY 64057, TAIWAN

07.15.2018

LEE YEONG INDUSTRIAL CO., LTD.

NO.2, KEJIA RD., DOULIU CITY, YUNLIN COUNTY 64057, TAIWAN TEL: 886-5-5518689 (REP) Fax: 886-5-5518635