

protection, when motor has been cut off due to over load, always switch on machine with no load for at least 3 minutes to reduce temperature before switch on again to avoid burn out to the motor.



# 150mm Mode Functional Description Vacuum Port Main Handle Outer Cover Side Handle -Direction of Rotation Spindle lock Trigger Switch Blade





Place as many spacers as necessary to achieve the desired groove width.

Pinch Flange Mode



Depth Stop Lever

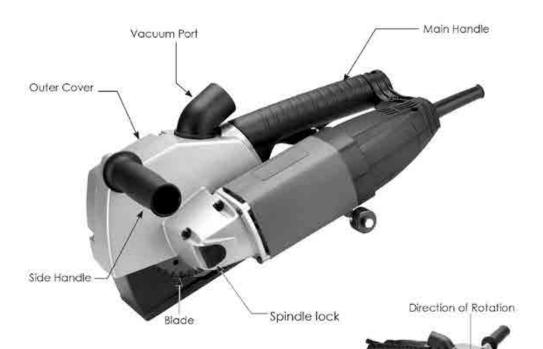
Clockwise blade rotation for safe vertical chasing. Variable width of blades. 18~45 mm. Maximum cutting depth of 45 mm.

## Spacers



They are in sizes: 40mmx22.2mmx6mm (X 2 pcs) 40mmX22.2mmX4mm (X 1 pc) 40mmX22.2mmX10mm (X 1 pc) 40mmX22.2mmX15mm (X 1 pc)

# 125mm Mode Functional Description

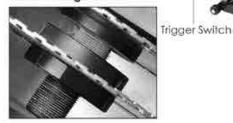


# Spacers Mode



Place as many spacers as necessary to achieve the desired groove width.

### Pinch Flange Mode



Depth Stop Lever

Clockwise blade rotation for safe vertical chasing. Variable width of blades. 18~45 mm. Maximum cutting depth of 45 mm.

### Spacers



## They are in sizes:

40mmx22.2mmx6mm [X 2 pcs] 40mmx22.2mmx4mm [X 1 pc) 40mmx22.2mmx10mm [X 1 pc] 40mmx22.2mmx15mm [X 1 pc]

### 150mm Model

| Model                            | Pinch Flange Model    | Spacers Model   |  |  |
|----------------------------------|-----------------------|-----------------|--|--|
| Power Input                      | 1500 W                |                 |  |  |
| Voltage                          | See machine nameplate |                 |  |  |
| No Load min <sup>-1</sup>        | 6500                  | 6500            |  |  |
| Blade Diameter                   | 150mm                 |                 |  |  |
| Blade Bore Size                  | 22.23mm (7/8")        |                 |  |  |
| Channel Width                    | 18~45mm               |                 |  |  |
| Max. Cutting Depth               | 45mm                  |                 |  |  |
| Soft Start & Overload Protection | With                  |                 |  |  |
| Net Weight                       | 4.8kg(10.58Lbs)       | 4.8kg(10.58Lbs) |  |  |

### 125mm Model

| Model                            | Pinch Flange Model          | Spacers Model |  |  |
|----------------------------------|-----------------------------|---------------|--|--|
| Power Input                      | 1500 W                      |               |  |  |
| Voltage                          | See machine nameplate       |               |  |  |
| No Load min <sup>-1</sup>        | 6500                        | 6500          |  |  |
| Bore                             | 22.2 or 30mm                | 22.2 or 30mm  |  |  |
| Blades Diameter                  | 125mm                       |               |  |  |
| Blade Bore Size                  | 22.23mm (7/8")              |               |  |  |
| Channel Width                    | 18-45mm                     | 18-45mm       |  |  |
| Max Cuting Depth                 | 30mm                        | 30mm          |  |  |
| Soft Start & Overload Protection | With                        | With          |  |  |
| Net Weight                       | 4.4kg(9.7Lbs) 4.4kg(9.7Lbs) |               |  |  |

### 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

- 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

- 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.
- 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.

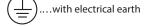
### 5) SERVICE

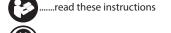
Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

### Symbols used in this manual

V......volts
A.....amperes
Hz....hertz
W....watt
~...alternating current
n<sub>o</sub>....no load speed
min<sup>-1</sup>....revolutions or reciprocation
per minute
.....warning of general danger



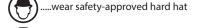




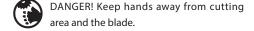




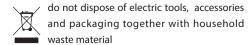
.always wear eye protection











### SPECIFIC SAFETY RULES

- Keep hands away from cutting area and blade at all times! Keep your second hand on an auxiliary handle. If both hands are holding the saw, they cannot be cut by the blade.
- 2. Do not reach underneath the work.
- 3. Hold tool by insulated gripping surfaces when performing an operation where the cutting tools may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- 4. Always use blades with correct size and shape arbor holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- 5. Never use damaged or incorrect arbor flanges or bolts. The arbor flanges and bolt were specially designed for your saw, for best performance and safety of operation.
- 6. Maintain a firm grip on the saw and position your body and arm in a way that allows you to resist KICKBACK forces. KICKBACK forces can be controlled by the operator, if proper precautions aretaken.
- 7. Do not use a dull or damaged blade.
- Use only recommended blades, rated at the machine's maximum rated RPM or higher with correct arbor hole.
- Tighten blade retaining bolt and all clamps before operating.
- **10.** Check the inside surfaces of the arbor flanges as well as the sides of the blade for freedom from any foreign matter.
- 11. Check the blade for cracks or other damage before operation. Replace cracked or damaged blade immediately. Carry out a test run without load for at least 30 seconds before use.
- **12. Never start the tool** with the workpiece against the blade.
- **13. Allow the motor to achieve full speed** before cutting.

- 14. Important: After completing the cut, release power switch and wait for coasting blade to stop completely before putting the saw down
- **15. Never operate** the tool in an area with flammable solids, liquids, or gases. Sparks from the commutator/carbon brushes could cause a fire or explosion.
- 16. There are certain applications for which this tool was designed. The manufacturer strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the tool until you have written the manufacturer and have been advised.
- 17. Only use the machine for dry cutting in stone, concrete or masonry.
- 18. 18.Use the auxiliary handles supplied with the tool. Loss of control can cause personal injury.
- 19. Use a residual current device (PRCD) (not included) to protect from current surges.
- **20. 20.**Keep power supply cord clear from the working range of the machine. Always lead the cable away behind you.
- 21. Immediately switch off the machine if unusual vibrations or if other malfunctions occur. Check the machine in order to find out the cause.
- 22. Only use and store diamond blades according to the Manufacturer's instructions.
- 23. Pay attention to the dimensions of the blades. The diameter of the center bore must engage the arbor without play. If not use any necessary reduction pieces or adapters (supplied with the blade) to ensure a proper fit.
- **24.** Take care to avoid hidden electric lines, gas and water pipes. Check your working area, e.g. with a metal detector before commencing work.
- 25. The dust that arises when working with this tool can be harmful to health. Use a dust absorption system and wear a suitable dust

protection mask and remove deposited dust with a vacuum cleaner.

### **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

### **INTENDED USE**

This saw is designed exclusively for the creation of masonry grooves (parallel double cuts in concrete, masonry and stone) for the purpose of placing water, electric or gas conduits. The machine is designed to use a pair of parallel diamond blades (not included) with a special adjustable arbor to create different width grooves. This machine should not be used for cutting other materials. The machine should not be converted or modified, e.g. for any other form of use, other than as specified in these operating instructions. The user shall be liable for damages and accidents due to incorrect use.

### **EXTENSION CABLE**

If an extension cable is required, it must have a sufficient cross-section so as to prevent an excessive drop in voltage or overheating. An excessive drop in voltage reduces the output and can lead to failure of the motor. The following table shows you the correct cable diameter as a function of the cable length for this machine. Use only CE, U/L. and CSA listed extension cables. Never use two extension cables together. Instead, use one long one.

| Total Extension    | Cord Size (AWG) |  |  |
|--------------------|-----------------|--|--|
| Cord Length (feet) |                 |  |  |
| 25                 | 16              |  |  |
| 50                 | 12              |  |  |
| 100                | 10              |  |  |
| 150                | 8               |  |  |
| 200                | 6               |  |  |

### 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.

NOTE: An appropriate dry diamond blade must be mounted to the machine before operating. Refer to the section of this manual: "INSTALLING THE BLADE"

### CARTON CONTENTS

- 1. Wall Chaser Machine
- 2. 8mm L-Hex Wrench (Pinch flange
- models) or 6mm L-Hex Wrench (Spacer models)
- 4. 4mm T-Handle Hex Wrench
- 40mm Open-End Wrench(Pinch flange models only)
- 6. Vacuum Hose End Adaptor

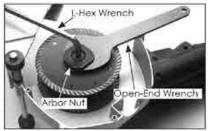
DO NOT OPERATE THIS TOOL UNTIL YOU READ AND UNDERSTAND THE ENTIRE INSTRUCTION MANUAL.

### INSTALLING THE DIAMOND BLADE

-Ensure That Tool Is Disconnected From Power Source.( For Pinch Flange Model)

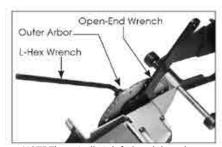
### To install the blade:

- Remove the 3 socket cap screws and lift away the Outer Cover. The Blade Guard may now be rotated down and out of the way.
- 2. Using the 8mm L-Hex Wrench on the Outer Arbor to keep it from turning, use the 40mm Open-End Wrench to loosen and remove the Arbor Nut.



NOTE: The nut is left-hand thread.

3. Use the open end wrench on the flats of the Inner Spindle behind the blade to lock the spindle. Once locked, use the L-Hex Wrench to loosen the Outer Arbor. Remove it.



NOTE: The spindle is left-hand thread.

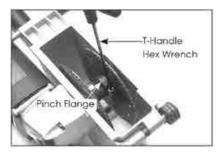
4. Ensure that the Inner Flange is mounted and place the first diamond blade on the flange. Note the direction of rotation of the spindle is clockwise so be sure to orient the blade accordingly. Thread on the Outer Arbor and tighten.

- 5. Remove the Arbor Nut and place the second diamond blade in place. Use the L-Hex Wrench on the Outer Arbor to lock it, and tighten the Arbor Nut securely with the Open-End Wrench.
- Rotate the Blade Guard into position and replace the Outer Cover and the 3 socket cap screws.

NOTE: Use blades that have an arbor bore which can fit, and that are rated for the machine's maximum rated speed or higher.

### ADJUSTING THE WIDTH OF CUT-DISCONNECT TOOL FROM POWER SOURCE.

- Clean the dust off of the threads on the Outer Arbor.
- Rotate the arbor until the socket cap screw on the Pinch Flange is in view. (Leave the Arbor Nut tight)
- 3. Loosen the socket cap screw with the T-Handle Hex Wrench and then rotate the entire assembly of the Pinch Flange together with the outer blade clockwise or anti-clockwise to achieve the desired cutting width.
- **4.** Retighten the socket cap screw to lock the Pinch Flange in position.



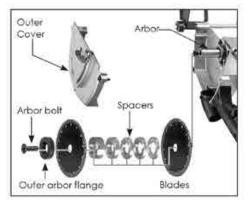
# AND ADJUSTING THE GROOVE WIDTH

-ENSURE THAT TOOL IS DISCONNECTED FROM POWER SOURCE. (For Spacers Model)

### To install the blade:

- Remove the 3 socket cap screws and lift away the Outer Cover. The Blade Guard may now be rotated down and out of the way.
- Place the inner blade in position directly on the arbor making sure the direction of rotation arrow of the blade and the arrow on the machine are in the same direction.
- Place as many spacers as necessary to achieve the desired groove width. They are in sizes 15.10.4 and 2 x 6mm.
- **4.** Place the outer blade in position.
- Place all of the remaining spacers on top of the outer blade (so that the arbor may be tightened).
- **6.** Place the outer flange in position.
- Screw in the arbor bolt and press the Spindle lock to lock the arbor in position (it may be necessary to turn the arbor slightly to allow the lock to engage).
- **8.** Tighten the arbor bolt with the supplied 6 mm hex wrench.

### NOTE: The arbor bolt is left-hand thread



NOTE: Use blades that have an arbor bore which can fit, and that are rated for the machine's maximum rated speed or higher.

# REMOVING THE BLADE-DISCONNECT TOOL FROM POWER SOURCE.

Removal is the opposite of installing the blade.

### TO ADJUST DEPTH OF CUT-DISCONNECT TOOL FROM POWER

DISCONNECT TOOL FROM POWER SOURCE.

Adjust the depth of cut as desired. The machine swivels against a spring and the depth stop limits its lowermost travel.

### To adjust the depth of cut:

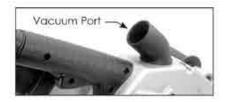
Loosen the Depth Stop Lever and then slide the Depth Stop up or down as desired and retighten.

CAUTION!: Never cut more than 20mm per pass. Otherwise the motor will be easily overloaded. If more depth is required, perform the cut in multiple passes. (To cut to the maximum cutting capacity of 45mm, at least 3 passes would be required.)



### **VACUUM DUST COLLECTION**

There is a vacuum port provided on the blade cover to collect dust when operating. Always make use of it. Simply attach the vacuum cleaner hose to the vacuum port.



### 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

### Switching the machine on and off

Keep the machine steady during switching and during use by holding the main handle and the secondary handle with both hands.



### To switch on:

Simply squeeze the trigger switch to switch on. For safety reasons, the switch is not possible to lock on.

### To switch off:

Release the trigger switch to stop the machine. After the machine has been switched off, the blade will still rotate for a time, take care that parts of your body do not come into contact with the blade while it is still rotating!

### **ELECTRONIC OVERLOAD PROTECTION**

If while cutting the machine reaches too high a temperature, the electronic overload protection will shut the saw off. When this happens, release the trigger and remove the machine from contact with the work surface. Now restart the machine and allow it to run with no load for a minute to allow it to cool. Then return to cutting.

#### HOW TO USE THE TOOL

Effective control of this powerful saw requires twohanded operation for maximum protection. Hold the saw firmly WITH BOTH HANDS to prevent loss of control which could cause personal injury. Always hold the side handle with the left hand and the main handle with the right hand for proper hand support of the saw. Protect your eyes from injury with safety glasses or goggles.

### **OPERATION**

- 1. Adjust the groove width as desired.
- 2. Adjust the depth of cut.
- **3.** Draw a cutting line before beginning cutting so it is easy to make straight cuts.
- **4.** Place the machine in position on the workpiece.
- 5. While it is still raised and the blades are not yet in contact with the workpiece, squeeze the trigger and allow the machine to reach full speed.
- 6. Holding firmly with both hands, slowly lower the blades into the cut, continuing until the depth stop is reached. Start at the top of the wall and pull the machine downwards. Since the blades spin clockwise, one must always move in the pulling direction, not the pushing direction. Take care that the base remains firmly on the workpiece.



CAUTION: Take care not to cut in a curved line.
This will likely shatter the diamond blades
causing a severe hazard.

7. When the cut is finished, raise the machine to the top of its stroke and allow the coasting blade to come to a full stop before setting down.

NOTE: Only operate the machine "backwards" relative to itself (pulling) and never forwards (pushing). If you cut forwards there is the danger that the machine might be accelerated out of the cutting groove (recoil) and cause serious injury.

CAUTION: Keep the cord away from cutting area to prevent it from becoming entangled in the workpiece.

Do not force the cut. Let the saw do the cutting at the rate of speed permitted by the type of cut and workpiece.

### SHARPENING DULL DIAMOND BLADES

If a lot of sparks are seen while cutting, this is a sign that the blade is becoming dull. To create better diamond exposure (sharpen), make several cuts in a special sharpening stone for diamond blades or alternately use calcareous sandstone.

### MAINTENANCE

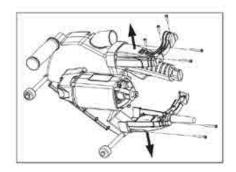
Every 50 hours of operation blow compressed air through the motor while running at no load to clean out accumulated dust. (If operating in especially dusty conditions, perform this operation more often.)

### **KEEP TOOL CLEAN**

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.

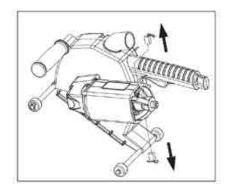
### THE CARBON BRUSHES

The carbon brushes are a normal wearing part and must be replaced when they reach their wear limit. To replace: Unplug the machine, remove the 7 screws to open the two Tail Housing halves. There will still be wires connected to the Tail Housings, so take care that these are not stressed. Simply hold the Tail Housings off to one side.



Pull back on the carbon brush springs to release the tension. Unscrew the screw holding the carbon brush lead. Then pull out the brush.

Repeat for the other side. To reassemble reverse the procedure.



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.

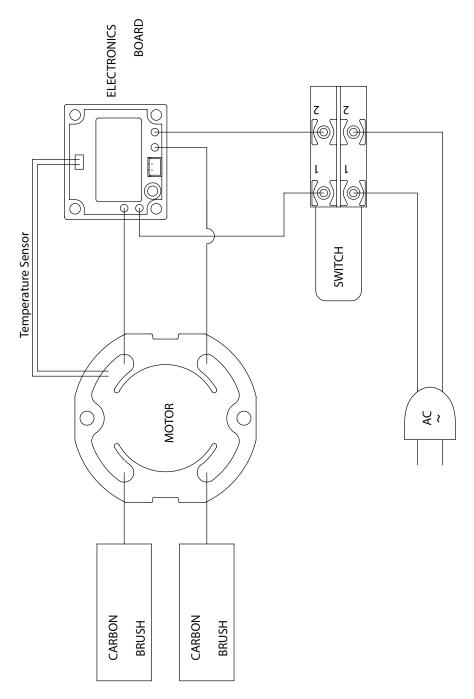
WARNING: All repairs must be entrusted to an authorized service center. Incorrectly performed repairs could lead to injury or death.

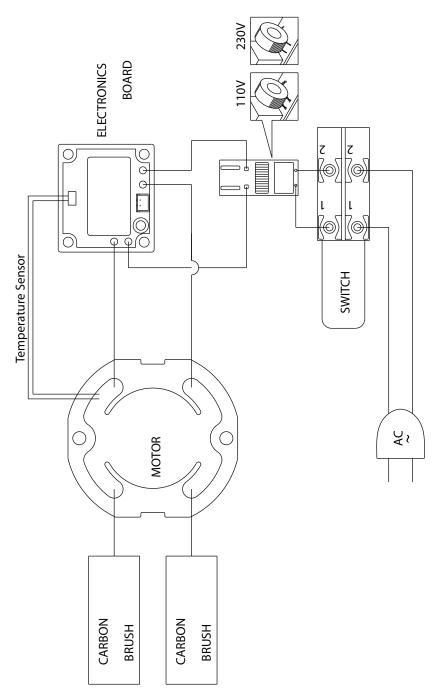
NOTE: To reinstall the same brushes, first make sure the brushes go back in the way they came out. Otherwise a break-in period will occur that will reduce motor performance and increase brush wear.

When Replacing the Tail Housings to the Motor Housing, take great care that all wires are in place and not in a position to be pinched when it is retightened. It is recommended that, at least once a year, you take the tool to an Authorized Service Center for a thorough cleaning and lubrication.

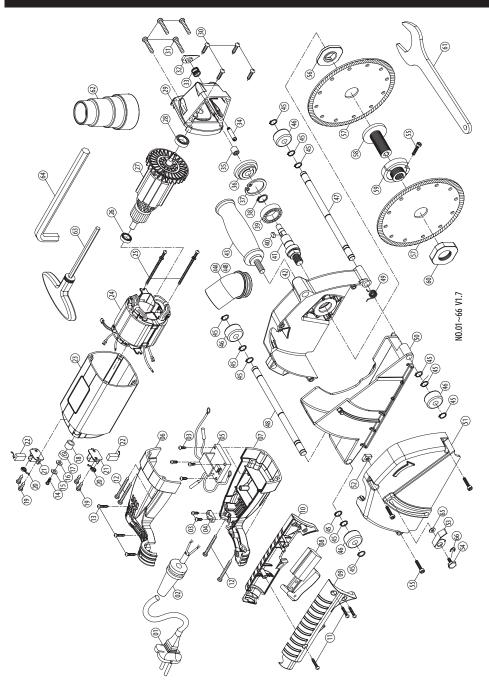
### STANDARD ACCESSORIES

- Side Handle
- 4mm T-Handle Hex Wrench
- Vacuum Hose End Adaptor
- 8mm L-Hex Wrench (Pinch Flange Mode only)
- 40mm Open-End Wrench (Pinch Flange Mode only)
- 6mm T-Handle Hex Wrench (Spacers Mode only)
- Spacers (Spacers Mode only)





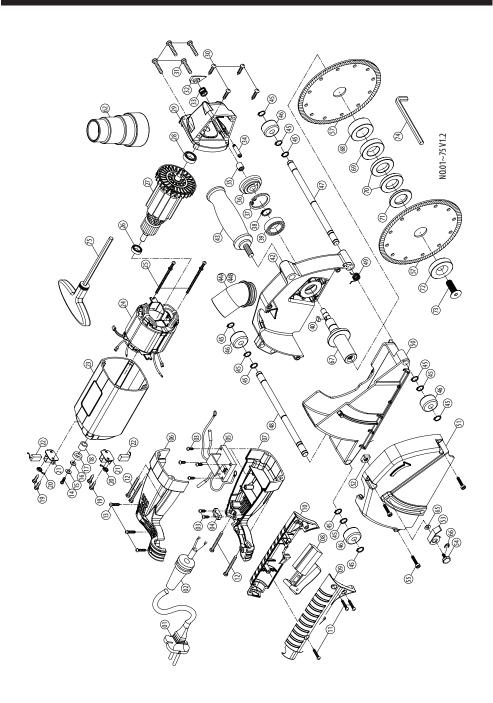
# 150mm EXPLODED VIEW(Pinch Flange Model)



# 150mm PARTS LIST(Pinch Flange Model)

| NO. | Parts Name                                  | Q'TY | NO. | Parts Name               | Q'TY |
|-----|---|------|-----|--------------------------|------|
| 1   | POWER SUPPLY CABLE                          | 1    | 35  | NEEDLE BEARING HK 0810   | 1    |
| 2   | CORD ARMOR                                  | 1    | 36  | BEVEL GEAR M1.5 x 25T    | 1    |
| 3   | SCREW M4 x 14                               | 6    | 37  | INTERNAL CIRCLIP R-35    | 1    |
| 4   | CABLE CLIP                                  | 1    | 38  | EXTERNAL CIRCLIP S-15    | 1    |
| 5   | ELECTRONICS BOARD                           | 1    | 39  | BALL BEARING 6202-2RS    | 1    |
| 6   | TAIL HOUSING-LOWER                          | 1    | 40  | PARALLEL KEY 3 x 3 x 8   | 1    |
| 7   | TAIL HOUSING-UPPER                          | 1    | 41  | SPINDLE                  | 1    |
| 8   | SWITCH                                      | 1    | 42  | INNER COVER              | 1    |
| 9   | HANDLE HALF-RIGHT                           | 1    | 43  | SIDE HANDLE              | 1    |
| 10  | HANDLE HALF-LEFT                            | 1    | 44A | VACUUM PORT              | 1    |
| 11  | SCREW M4 x 20                               | 3    | 44B | VACUUM PORT 35mm         | 1    |
| 12  | SCREW M4 x 38                               | 4    | 45  | EXTERNAL CIRCLIP S-10    | 12   |
| 13  | SCREW M4 x 16                               | 3    | 46  | ROLLER                   | 4    |
| 14  | SCREW M4 x 10                               | 1    | 47  | ROLLER AXLE-FRONT        | 1    |
| 15  | FLAT WASHER Ø4 x Ø10 x 1                    | 1    | 48  | ROLLER AXLE-REAR         | 1    |
| 16  | PLASTIC WASHER Ø4 x Ø11 x 1                 | 1    | 49  | TORSION SPRING           | 1    |
| 17  | PICKUP MAGNET Ø8 x Ø15 x 5                  | 1    | 50  | BLADE GUARD              | 1    |
| 18  | SPACER Ø8 x Ø12 x 10.5                      | 1    | 51  | OUTER COVER              | 1    |
| 19  | SCREW M4 x 10                               | 4    | 52  | SQUARE NUT M8            | 1    |
| 20  | BRUSH SPRING                                | 2    | 53  | DEPTH STOP LEVER         | 1    |
| 21  | CARBON BRUSH HOLDER                         | 2    | 54  | BOLT M8 x 12             | 1    |
| 22  | CARBON BRUSH 7 x 11 x 17 + 33L + FLDNBI-110 | 2    | 55  | SOCKET CAP SCREW M5 x 20 | 4    |
| 23  | MOTOR HOUSING                               | 1    | 56  | INNER FLANGE             | 1    |
| 24  | STATOR                                      | 1    | 57  | DIAMOND BLADE            | 2    |
| 25  | SCREW M5 x 60                               | 2    | 58  | OUTER ARBOR              | 1    |
| 26  | BALL BEARING 608-2RU                        | 1    | 59  | PINCH FLANGE             | 1    |
| 27  | ARMATURE M1.5 x 6T                          | 1    | 60  | ARBOR NUT                | 1    |
| 28  | BALL BEARING 6001-LLU                       | 1    | 61  | OPEN END WRENCH M40      | 1    |
| 29  | GEAR CASE                                   | 1    | 62  | HOSE END ADAPTOR         | 1    |
| 30  | SCREW M5 x 20                               | 4    | 63  | T-HANDLE HEX WRENCH M4   | 1    |
| 31  | SCREW M5 x 25                               | 4    | 64  | L-HEX WRENCH M8          | 1    |
| 32  | SPINDLE LOCK BUTTON                         | 1    | 65  | FLAT WASHER Ø8 x Ø20 x 1 | 1    |
| 33  | SPRING Ø0.9 x Ø10 x Ø11.8 x 13.5L x 4T      | 1    | 66  | E-CLIP E-10              | 1    |
| 34  | SPINDLE LOCK                                | 1    |     |                          |      |

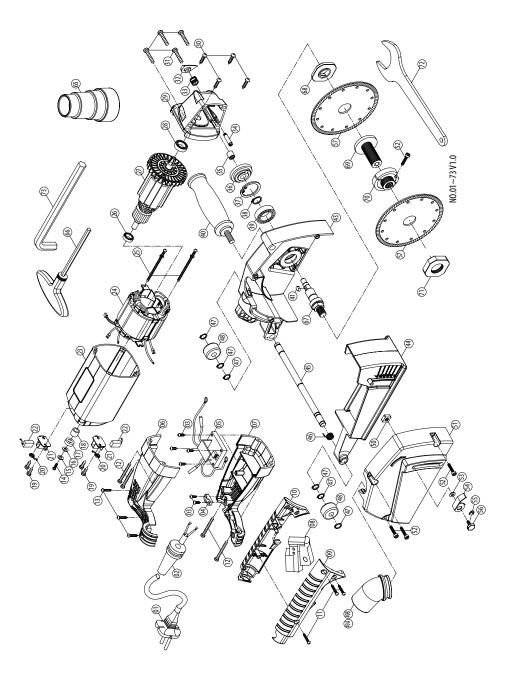
# 150mm EXPLODED VIEW( Spacers Model)



# 150mm PARTS LIST( Spacers Model )

| NO. | Parts Name                                  | Q'TY | NO.   | Parts Name                     | Q'TY |
|-----|---|------|-------|--------------------------------|------|
| 1   | POWER SUPPLY CABLE                          | 1    | 37    | INTERNAL CIRCLIP R-35          | 1    |
| 2   | CORD ARMOR                                  | 1    | 38    | EXTERNAL CIRCLIP S-15          | 1    |
| 3   | SCREW M4 x 14                               | 6    | 39    | BALL BEARING 6202-2NSE         | 1    |
| 4   | CABLE CLIP                                  | 1    | 40    | PARALLEL KEY 3 x 3 x 8         | 1    |
| 5   | ELECTRONICS BOARD                           | 1    | 41    | N/A                            | -    |
| 6   | TAIL HOUSING-LOWER                          | 1    | 42    | INNER COVER                    | 1    |
| 7   | TAIL HOUSING-UPPER                          | 1    | 43    | SIDE HANDLE                    | 1    |
| 8   | SWITCH                                      | 1    | 44A   | VACUUM PORT                    | 1    |
| 9   | HANDLE HALF-RIGHT                           | 1    | 44B   | VACUUM PORT 35mm               | 1    |
| 10  | HANDLE HALF-LEFT                            | 1    | 45    | EXTERNAL CIRCLIP S-10          | 12   |
| 11  | SCREW M4 x 20                               | 3    | 46    | ROLLER                         | 4    |
| 12  | SCREW M4 x 38                               | 4    | 47    | ROLLER AXLE-FRONT              | 1    |
| 13  | SCREW M4 x 16                               | 3    | 48    | ROLLER AXLE-REAR               | 1    |
| 14  | SCREW M4 x 10                               | 1    | 49    | TORSION SPRING                 | 1    |
| 15  | FLAT WASHER Ø4 x Ø10 x 1                    | 1    | 50    | BLADE GUARD                    | 1    |
| 16  | PLASTIC WASHER Ø4 x Ø11 x 1                 | 1    | 51    | OUTER COVER                    | 1    |
| 17  | PICKUP MAGNET Ø8 x Ø15 x 5                  | 1    | 52    | SQUARE NUT M8                  | 1    |
| 18  | SPACER Ø8 xØ12 x 10.5                       | 1    | 53    | DEPTH STOP LEVER               | 1    |
| 19  | SCREW M4 x 10                               | 4    | 54    | BOLT M8 x 12                   | 1    |
| 20  | BRUSH SPRING                                | 2    | 55    | SOCKET CAP SCREW M5 x 20       | 3    |
| 21  | CARBON BRUSH HOLDER                         | 2    | 56    | N/A                            | -    |
| 22  | CARBON BRUSH 7 x 11 x 17 + 33L + FLDNBI-110 | 2    | 57    | DIAMOND BLADE                  | 2    |
| 23  | MOTOR HOUSING                               | 1    | 58~61 | N/A                            | -    |
| 24  | STATOR                                      | 1    | 62    | HOSE END ADAPTOR               | 1    |
| 25  | SCREW M5 x 60                               | 2    | 63~64 | N/A                            | -    |
| 26  | BALL BEARING 608-2RU                        | 1    | 65    | FLAT WASHER Ø8 x Ø20 x 1       | 1    |
| 27  | ARMATURE M1.5 x 6T                          | 1    | 66    | E-CLIP E-10                    | 1    |
| 28  | BALL BEARING 6001-LLU                       | 1    | 67    | SPINDLE Ø22.2                  | 1    |
| 29  | GEAR CASE                                   | 1    | 68    | 15mm SPACER Ø22.2 x Ø40 x 15   | 1    |
| 30  | SCREW M5 x 20                               | 4    | 69    | 10mm SPACER Ø22.2 x Ø40 x 10   | 1    |
| 31  | SCREW M5 x 25                               | 4    | 70    | 6mm SPACER Ø22.2 x Ø40 x 6     | 2    |
| 32  | SPINDLE LOCK BUTTON                         | 1    | 71    | 4mm SPACER                     | 1    |
| 33  | SPRING Ø0.9 x Ø10 x Ø11.8 x 13.5L x 4T      | 1    | 72    | OUTER FLANGE Ø22.2 x Ø40 x 9.5 | 1    |
| 34  | SPINDLE LOCK                                | 1    | 73    | ARBOR SCREW M10 x 30           | 1    |
| 35  | NEEDLE BEARING HK 0810                      | 1    | 74    | L-HEX WRENCH M6                | 1    |
| 36  | BEVEL GEAR M1.5 x 25T                       | 1    | 75    | T-HANDLE HEX WRENCH M4         | 1    |

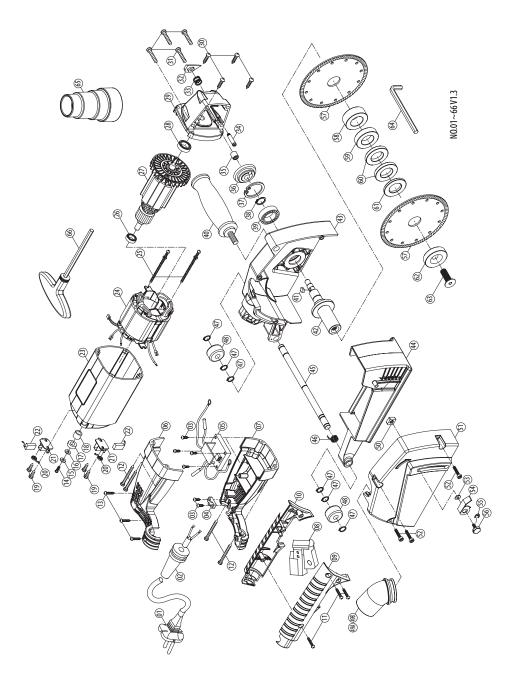
# 125mm EXPLODED VIEW(Pinch Flange Model)



# 125mm PARTS LIST(Pinch Flange Model)

| NO. | Parts Name                                  | Q'TY | NO.   | Parts Name               | Q'TY |
|-----|---|------|-------|--------------------------|------|
| 1   | POWER SUPPLY CABLE                          | 1    | 35    | NEEDLE BEARING HK 0810   | 1    |
| 2   | CORD ARMOR                                  | 1    | 36    | BEVEL GEAR M1.5 x 25T    | 1    |
| 3   | SCREW M4 x 14                               | 6    | 37    | INTERNAL CIRCLIP R-35    | 1    |
| 4   | CABLE CLIP                                  | 1    | 38    | EXTERNAL CIRCLIP S-15    | 1    |
| 5   | ELECTRONICS BOARD 110V                      | 1    | 39    | BALL BEARING 6202-2NSE   | 1    |
| 5   | ELECTRONICS BOARD 220V                      | 1    | 40    | SIDE HANDLE              | 1    |
| 6   | TAIL HOUSING-LOWER                          | 1    | 41    | PARALLEL KEY 3 x 3 x 8   | 1    |
| 7   | TAIL HOUSING-UPPER                          | 1    | 42    | N/A                      | -    |
| 8   | SWITCH                                      | 1    | 43    | INNER COVER              | 1    |
| 9   | HANDLE HALF-RIGHT                           | 1    | 44    | BLADE GUARD              | 1    |
| 10  | HANDLE HALF-LEFT                            | 1    | 45    | ROLLER AXLE              | 1    |
| 11  | SCREW M4 x 20                               | 3    | 46    | TORSION SPRING           | 1    |
| 12  | SCREW M4 x 38                               | 4    | 47    | EXTERNAL CIRCLIP S-10    | 6    |
| 13  | SCREW M4 x 16                               | 3    | 48    | ROLLER                   | 2    |
| 14  | SCREW M4 x 10                               | 1    | 49A   | VACUUM PORT              | 1    |
| 15  | FLAT WASHER Ø4 x Ø10 x 1                    | 1    | 49B   | VACUUM PORT 35mm         | 1    |
| 16  | PLASTIC WASHER Ø4 x Ø11 x 1                 | 1    | 50    | SQUARE NUT M8            | 1    |
| 17  | PICKUP MAGNET Ø8 x Ø15 x 5                  | 1    | 51    | OUTER COVER              | 1    |
| 18  | SPACER Ø8 x Ø12 x 10.5                      | 1    | 52    | SOCKET CAP SCREW M5 x 20 | 4    |
| 19  | SCREW M4 x 10                               | 4    | 53    | FLAT WASHER Ø8 xØ20 x 1  | 1    |
| 20  | BRUSH SPRING                                | 2    | 54    | DEPTH STOP LEVER         | 1    |
| 21  | CARBON BRUSH HOLDER                         | 2    | 55    | E-CLIP E-10              | 1    |
| 22  | CARBON BRUSH 7 x 11 x 17 + 33L + FLDNBI-110 | 2    | 56    | BOLT M8 x 12             | 1    |
| 23  | MOTOR HOUSING                               | 1    | 57    | DIAMOND BLADE(OPTIONAL)  | 2    |
| 24  | STATOR                                      | 1    | 58~64 | N/A                      | -    |
| 25  | SCREW M5 x 60                               | 2    | 65    | HOSE END ADAPTOR         | 1    |
| 26  | BALL BEARING 608-2RU                        | 1    | 66    | T-HANDLE HEX WRENCH M4   | 1    |
| 27  | ARMATURE M1.5 x 6T                          | 1    | 67    | SPINDLE                  | 1    |
| 28  | BALL BEARING 6001-LLU                       | 1    | 68    | INNER FLANGE             | 1    |
| 29  | GEAR CASE                                   | 1    | 69    | OUTER ARBOR              | 1    |
| 30  | SCREW M5 x 20                               | 4    | 70    | PINCH FLANGE             | 1    |
| 31  | SCREW M5 x 25                               | 4    | 71    | ARBOR NUT                | 1    |
| 32  | SPINDLE LOCK BUTTON                         | 1    | 72    | OPEN END WRENCH M40      | 1    |
| 33  | SPRING Ø0.9 x Ø10 x Ø11.8 x 13.5L x 4T      | 1    | 73    | L-HEX WRENCH M8          | 1    |
| 34  | SPINDLE LOCK                                | 1    |       |                          |      |

# 125mm EXPLODED VIEW( Spacers Mode)



# 125mm PARTS LIST( Spacers Mode )

| NO. | Parts Name                                  | Q'TY | NO. | Parts Name                     | Q'TY |
|-----|---|------|-----|--------------------------------|------|
| 1   | POWER SUPPLY CABLE                          | 1    | 34  | SPINDLE LOCK                   | 1    |
| 2   | CORD ARMOR                                  | 1    | 35  | NEEDLE BEARING HK 0810         | 1    |
| 3   | SCREW M4 x 14                               | 6    | 36  | BEVEL GEAR M1.5 x 25T          | 1    |
| 4   | CABLE CLIP                                  | 1    | 37  | INTERNAL CIRCLIP R-35          | 1    |
| 5   | ELECTRONICS BOARD 110V                      | 1    | 38  | EXTERNAL CIRCLIP S-15          | 1    |
| 5   | ELECTRONICS BOARD 220V                      | 1    | 39  | BALL BEARING 6202-2NSE         | 1    |
| 6   | TAIL HOUSING-LOWER                          | 1    | 40  | SIDE HANDLE                    | 1    |
| 7   | TAIL HOUSING-UPPER                          | 1    | 41  | PARALLEL KEY 3 x 3 x 8         | 1    |
| 8   | SWITCH                                      | 1    | 42  | SPINDLE Ø22.2                  | 1    |
| 9   | HANDLE HALF-RIGHT                           | 1    | 43  | INNER COVER                    | 1    |
| 10  | HANDLE HALF-LEFT                            | 1    | 44  | BLADE GUARD                    | 1    |
| 11  | SCREW M4 x 20                               | 3    | 45  | ROLLER AXLE                    | 1    |
| 12  | SCREW M4 x 38                               | 4    | 46  | TORSION SPRING                 | 1    |
| 13  | SCREW M4 x 16                               | 3    | 47  | EXTERNAL CIRCLIP S-10          | 6    |
| 14  | SCREW M4 x 10                               | 1    | 48  | ROLLER                         | 2    |
| 15  | FLAT WASHER Ø4 x Ø10 x 1                    | 1    | 49A | VACUUM PORT                    | 1    |
| 16  | PLASTIC WASHER Ø4 x Ø11 x 1                 | 1    | 49B | VACUUM PORT 35mm               | 1    |
| 17  | PICKUP MAGNET Ø8 x Ø15 x 5                  | 1    | 50  | SQUARE NUT M8                  | 1    |
| 18  | SPACER Ø8 xØ12 x 10.5                       | 1    | 51  | OUTER COVER                    | 1    |
| 19  | SCREW M4 x 10                               | 4    | 52  | SOCKET CAP SCREW M5 x 20       | 3    |
| 20  | BRUSH SPRING                                | 2    | 53  | FLAT WASHER Ø8 x Ø20 x 1       | 1    |
| 21  | CARBON BRUSH HOLDER                         | 2    | 54  | DEPTH STOP LEVER               | 1    |
| 22  | CARBON BRUSH 7 x 11 x 17 + 33L + FLDNBI-110 | 2    | 55  | E-CLIP E-10                    | 1    |
| 23  | MOTOR HOUSING                               | 1    | 56  | BOLT M8 x 12                   | 1    |
| 24  | STATOR                                      | 1    | 57  | DIAMOND BLADE(OPTIONAL)        | 2    |
| 25  | SCREW M5 x 60                               | 2    | 58  | 15mm SPACER Ø22.2 x Ø40 x 15   | 1    |
| 26  | BALL BEARING 608-2RU                        | 1    | 59  | 10mm SPACER Ø22.2 x Ø40 x 10   | 1    |
| 27  | ARMATURE M1.5 x 6T                          | 1    | 60  | 6mm SPACER Ø22.2 x Ø40 x 6     | 2    |
| 28  | BALL BEARING 6001-LLU                       | 1    | 61  | 4mm SPACER                     | 1    |
| 29  | GEAR CASE                                   | 1    | 62  | OUTER FLANGE Ø22.2 x Ø40 x 9.5 | 1    |
| 30  | SCREW M5 x 20                               | 4    | 63  | ARBOR SCREW M10 x 30           | 1    |
| 31  | SCREW M5 x 25                               | 4    | 64  | L-HEX WRENCH M6                | 1    |
| 32  | SPINDLE LOCK BUTTON                         | 1    | 65  | HOSE END ADAPTOR               | 1    |
| 33  | SPRING Ø0.9 x Ø10 x Ø11.8 x 13.5L x 4T      | 1    | 66  | T-HANDLE HEX WRENCH M4         | 1    |