

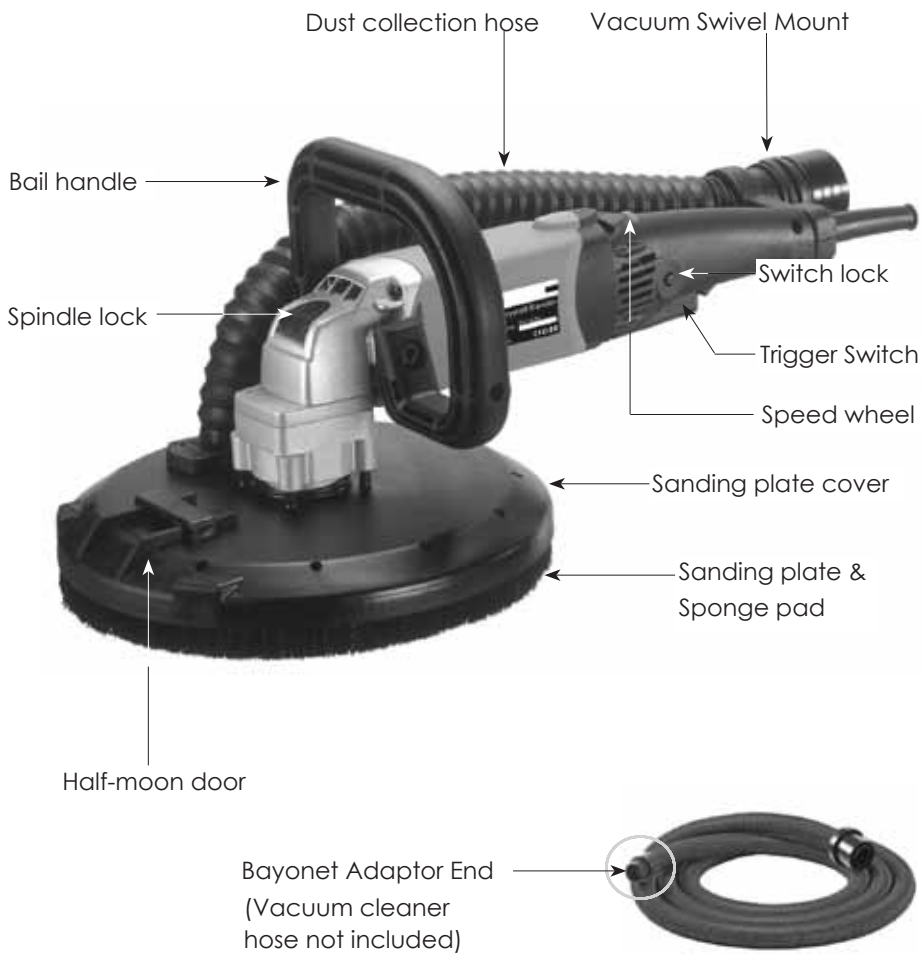
# Hand-Held Drywall Power Sander



**Original instructions**

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

Version:20121118



Voltage	See machine nameplate
Power input	1200W
No load min <sup>-1</sup>	650 ~ 1300
Sanding disc diameter	225mm
Net weight	3.0Kg

## 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) 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 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**

**a) 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

$n_0$ .....no load speed

$\text{min}^{-1}$ .....revolutions or reciprocation per minute

.....class II tool

## SPECIFIC SAFETY RULES

- 1. Keep hands away from rotating sanding head area at all times!**
- 2. Prolonged breathing of airborne dust from drywall sanding may effect respiratory function:**

Always use a vacuum cleaner with a bag approved for drywall dust installed.  
Always wear a respirator approved for dust and mist.
- 3. Sanding LEAD-BASED paint is extremely toxic and should not be attempted.**

Only allow professionals with special training and equipment perform this task.
- 4. Maintain proper footing and balance at all times.** Do not overreach. Use proper scaffolding
- 5. Always wear appropriate safety equipment when operating.**
- 6. Important: After completing sanding,** switch off the switch and wait for the coasting sanding head to stop completely before putting the tool down.
- 7. 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.
- 8. 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.
- 9. Use the machine with both hands at all times.** Loss of control can cause personal injury.
- 10. Keep power supply cord clear from the working range of the machine.** Always lead the cable away behind you.
- 11. Immediately switch off the machine if unusual vibrations or if other malfunctions occur.** Check the machine in order to find out the cause.
- 12. 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.

## Safety Warnings for Sanding Operations:

- 1. This power tool is intended to function as a sander. 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.
- 2. Operations such as grinding, 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.
- 3. 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.
- 4. The rated speed of the accessory must be at least equal to the maximum speed**
- 5. marked on the power tool.** Accessories running faster than their rated speed can break and fly apart.
- 6. The outside diameter and the thickness of your accessory must be within the**
- 7. capacity rating of your power tool.** Incorrectly sized accessories cannot be adequately guarded or controlled.
- 8. The arbor size of wheels, flanges, backing pads or any other accessory must properly fit the spindle of the power tool.** Accessories with arbour holes that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- 9. Do not use a damaged accessory. Before each use inspect the accessory such as backing pad for cracks, tears or excess wear, 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.
- 10. 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 filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- 11. 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.
- 12. 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 accessory.
- 13. Never lay the power tool down until the accessory has come to a complete stop.** The spinning accessory may grab the surface and pull the power tool out of your control.
- 14. 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.
- 15. 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.

16. **Do not operate the power tool near flammable materials.** Sparks could ignite these materials.
17. **Do not use accessories that require liquid coolants.** Using water or other liquid coolants may result in electrocution or shock.

### **Further safety instructions for all operations**

#### **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.

1. **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.
2. **Never place your hand near the rotating accessory.** Accessory may kickback over your hand.
3. **c) 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.
4. **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.
5. **Do not attach a saw chain woodcarving blade or toothed saw blade.** Such blades create frequent kickback and loss of control.

#### **Safety Warnings Specific for Sanding Operations**

**Do not use excessively oversized sanding disc paper. Follow manufacturers recommendations, when selecting sanding paper.** Larger sanding paper extending beyond the sanding pad presents a laceration hazard and may cause snagging, tearing of the disc or kickback.

**FUNCTIONAL DESCRIPTION**

This Electric Drywall Sander is specially designed for the most efficient sanding of drywall or plaster walls and ceilings for both new construction and renovation work. It is designed to work in conjunction with a vacuum cleaner for minimum dust and best sanding results.

**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.

**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 U.L. and CSA listed extension cables. Never use two extension cables together. Instead, use one long one.

<b>Total Extension Cord Length (feet)</b>	<b>Cord Size (AWG)</b>
<b>25</b>	<b>16</b>
<b>50</b>	<b>12</b>
<b>100</b>	<b>10</b>
<b>150</b>	<b>8</b>
<b>200</b>	<b>6</b>



## **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. Drywall Sanding Machine
2. Bayonet Adaptor End (for vacuum cleaner hose)
3. Instruction manual

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

### **To install a sandpaper disc:**

1. Unplug the machine.
2. Peel away the worn out sandpaper disc, leaving the sponge backing pad in place.
3. Carefully center the new sandpaper disc and press into place. It will be held securely by the hook and loop backing.

### **● To replace the Hook and Loop Sponge Pad:**

The sponge pad must be perfectly flat to get good sanding results. If it is deformed or damaged it will cause very uneven sanding. Always replace it when damaged. It is hook and loop on both sides, so to Replace it, peel it away from the hook and loop on the Sanding Plate Base and, taking great care to keep it perfectly centered, affix a new one

## The Brush Bristles on the edge of the Sanding Plate Cover:

The brush bristles on the edge of the Sanding Plate Cover help the efficiency of the dust collection by the vacuum cleaner. These brush bristles will wear with continued use.

The Sanding Plate Cover should be replaced when the bristles are too worn to ensure effective dust collection and stabilization of the sanding head.

### To replace the cover, follow these steps:

Ensure that the machine is unplugged. Press the spindle lock and rotate the sanding plate until the lock engages. Then Rotate the sanding plate counterclockwise to remove.

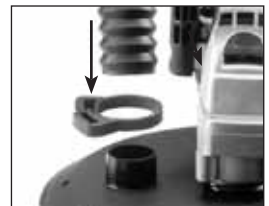


Then, press the cover down against the spring and, using snap-ring pliers, remove the circlip which holds the sanding plate cover to the gearbox.



Finally, carefully work the vacuum hose free then lift sanding plate cover away.

Replacement is the opposite of removal. **Don't forget the spring.** Entrust all repairs to an authorized service center.



## To install the vacuum cleaner hose:

1. First remove the standard end from your vacuum cleaner hose (not included) then thread on the Bayonet Adaptor End (provided) to your existing vacuum cleaner hose.
2. Plug the Bayonet Adaptor into the swivel mount in the back of the machine. Once the tangs of the bayonet mount are fully inserted in the slots, hold the swivel mount from turning and turn the hose bayonet mount clockwise to lock.
3. Removal is the opposite of assembly.



## The vacuum cleaner:

Ensure that you have a bag installed in your vacuum cleaner which is approved and rated for drywall dust.

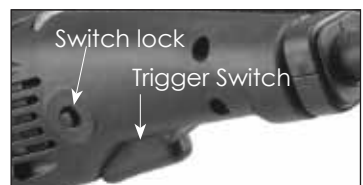
**WARNING: Failure to use an approved dust bag in your vacuum will increase the level of airborne dust in the work area. Prolonged exposure to such dust may cause respiratory harm.**

## 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

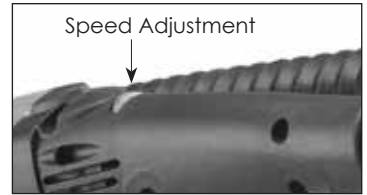
Squeeze the trigger switch to start the tool. Release to stop. If continuous operation is required, the switch may be locked on. To release the lock, first squeeze the trigger, then release. After the machine has been switched off, the sanding disc will still rotate for a time. Take care that parts of your body do not come into contact with the disc and do not set the machine down while it is still rotating! Anticipate and be ready for the start up torque when the machine first starts.



## Adjusting the rotation speed:

The speed of the machine is variable to suit different tasks. It can be adjusted from 650/min up to 1300/min by using the thumb wheel. Using the right thumb, turn to the right to increase the speed and to the left to decrease the speed.

Generally, you should use the higher speed for fast stock removal and the lower speed for more precise control.



## The Half-Moon Door

The sanding plate cover is equipped with a removable half-moon door. This is to allow the operator to sand right up to the edge or into a corner.

Dust collection will not be ideal while the half-moon door is removed, so the door should only be removed when necessary and then replaced immediately.

To remove, first shut down the machine and unplug the power supply cable.

Then press the 2 tangs which retain the half-moon door just enough to release it and lift the door away. Put the door in a safe place where it will not be lost or damaged when it is time to replace it.

To replace, line up the locating pins in the sanding plate cover and snap the tangs in place.



## HOW TO USE THE TOOL

Effective control of this powerful saw requires **two-handed** operation for maximum safety and control.

It is vitally important to keep stable footing at all times, especially when standing on scaffolding or stilts.

## **SANDING OPERATIONS**

- 1** Once the machine and vacuum cleaner are set up and all safety measures and equipment are in place, begin by turning on the vacuum cleaner and then the machine. (If you are using a vacuum cleaner with integrated switching, then simply turn the machine on.)
- 2** Begin sanding and carefully contact the work surface as lightly as possible-just enough to keep the sanding head flat against the surface.
- 3** The best technique is to use overlapping sweeps and keep the head in constant motion. Never stop too long in any one place or there will be swirl marks. With experience it will be very easy to create excellent results.

**NOTE: Ensure that the sandpaper you are using is suited to the task. Overly coarse grit paper may remove material too quickly to control. While overly fine grit paper may clog too often and not shape down the surface.**

**CAUTION: Take care to avoid pointed projections and nails, etc. This will wipe out the sandpaper and probably damage the sponge pad as well.**

## **MAINTENANCE**

### **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.

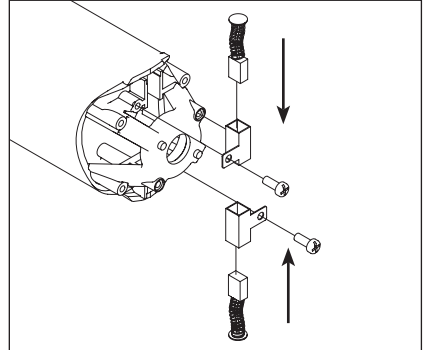
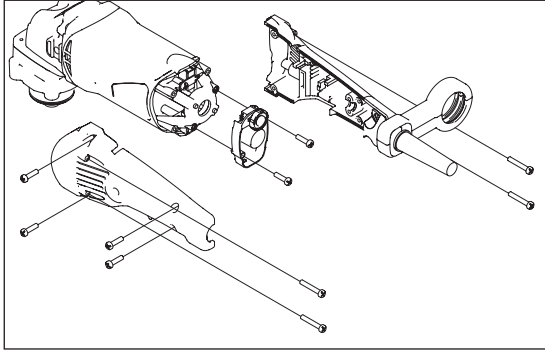
Clean the vacuum swivel connector as too much dust will keep it from turning freely.

### **THE CARBON BRUSHES**

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

**NOTE: Checking and replacing the carbon brushes should be entrusted to a qualified service center.**

The carbon brushes furnished will last approximately 50 hours of running time or 10,000 on/off cycles. Replace both carbon brushes when either has less than 1/4" length of carbon remaining. To inspect or replace brushes, first unplug the machine. Remove the hose clamp, then the right and left handle halves. Remove the 2 screws to remove the electronics unit and carefully hold it off to the side. Avoid straining any of the wires. Remove each brush holder screw and brush holder in turn.



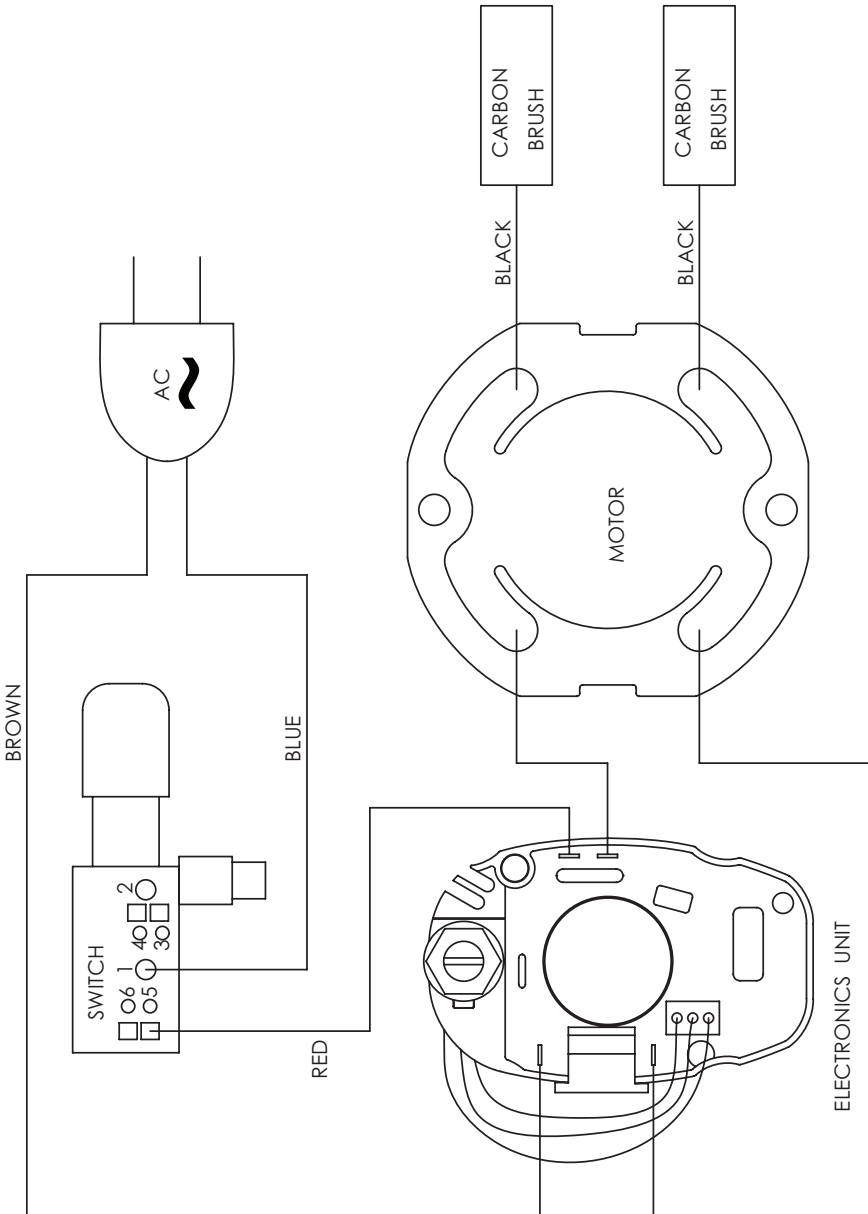
**NOTE: When putting the Carbon Brushes back into the Carbon Brush Holders it is essential that both flanges go back inside the holder.**

**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.**

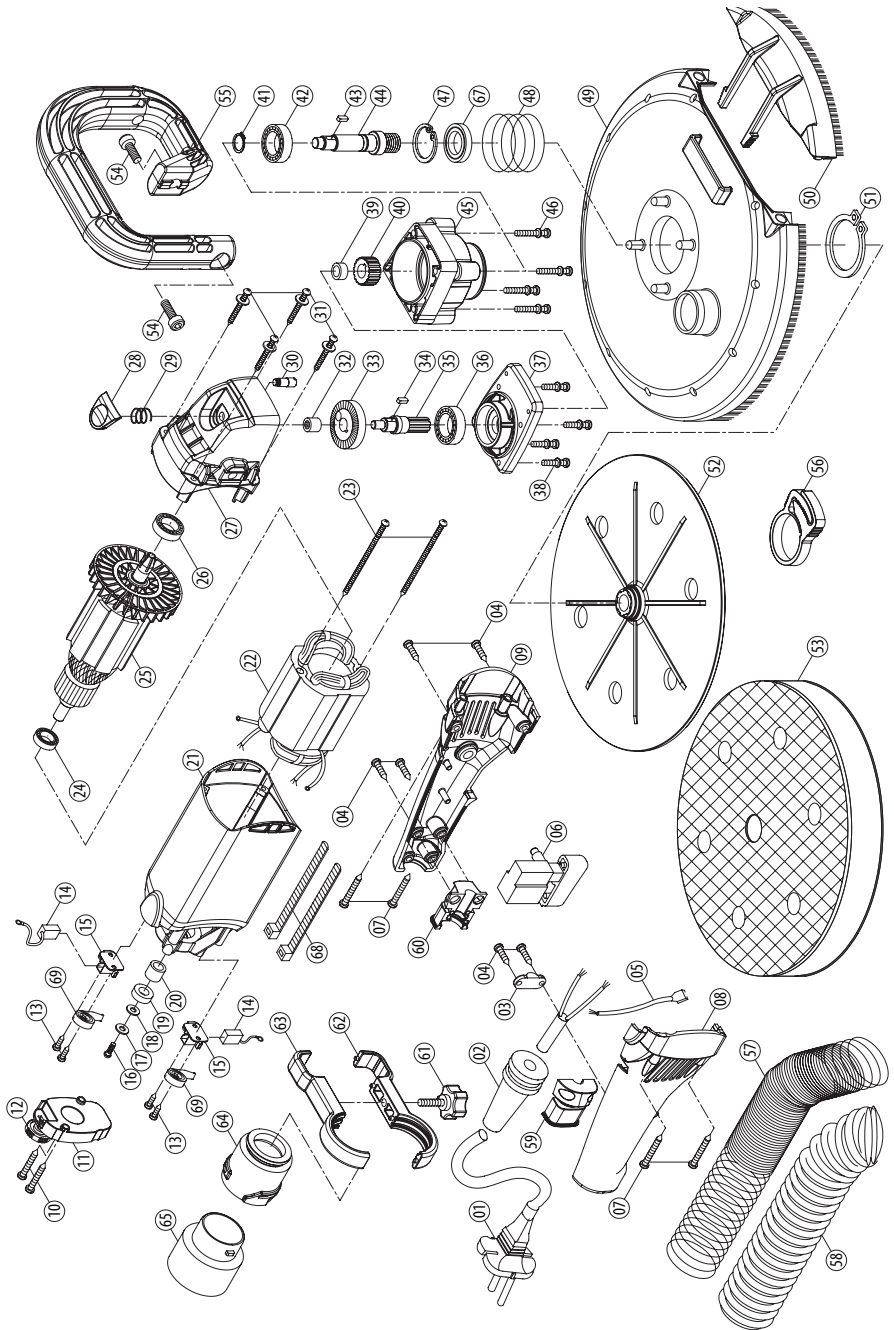
Replacing is the reverse of removal. Replace the brushes in the holders then put the holders in place in the housing and secure the screws. When Replacing the handle cover halves take great care that all wires are in place and not in a position to be pinched when it is retightened. It is recommended that, at least once a year, you take the tool to an Authorized Service Center for a thorough cleaning and lubrication.

**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.**

# WIRING



# EXPLODED VIEW



NO.01~69V1.6



## PARTS LIST

NO.	Parts Name	QTY	NO.	Parts Name	QTY
1	POWER SUPPLY CABLE	1	34	PARALLEL KEY 4 x 4 x 8	1
2	CORD ARMOR	1	35	INPUT GEAR SHAFT 9T	1
3	CABLE CLIP	1	36	BALL BEARING 6001 zz	1
4	SCREW M4 x 14	6	37	GEAR PLATE	1
5	WIRE LEAD 20#9L+5 +110	1	38	SCREW M4 x 16	4
6	SWITCH	1	39	BUSHING Ø8 x Ø12 x 6	1
7	SCREW M4 x 25	4	40	SPINDLE GEAR 22T	1
8	RIGHT HANDLE COVER	1	41	EXTERNAL CIRCLIP S-12	1
9	LEFT HANDLE COVER	1	42	BALL BEARING 6001-2RSH	1
10	SCREW M4 x 20	2	43	PARALLEL KEY 3 x 3 x 8	1
11	ELECTRONICS UNIT (110V)	1	44	SPINDLE	1
11	ELECTRONICS UNIT (220V)	1	45	GEAR COVER	1
12	THUMB WHEEL	1	46	SCREW M4 x 25	4
13	BRUSH SCREW M4 x 10	4	47	INTERNAL CIRCLIP R-28	1
14	CARBON BRUSH 7 x 11 x 17 +33L+FLDNBI-110	2	48	SPRING Ø2 x Ø45x Ø49 x 40L x 4T	1
15	CARBON BRUSH HOLDER	2	49	SANDING PLATE COVER	1
16	SCREW M4 x 10	1	50	HALF-MOON DOOR	1
17	FLAT WASHER Ø4 x Ø10 x 1	1	51	EXTERNAL CIRCLIP S-40	1
18	PLASTIC WASHER Ø4 x Ø11 x 1	1	52	SANDING PLATE BASE	1
19	PICKUP MAGNET Ø8 x Ø15 x 5	1	53	HOOK & LOOP SPONGE PAD	1
20	SPACER Ø8 x Ø12 x 10.5	1	54	SOCKET CAP SCREW M8 x 16	2
21	MOTOR HOUSING	1	55	BAIL HANDLE	1
22	STATOR	1	56	PLASTIC HOSE CLIP	1
22	STATOR	1	57	SPRING Ø1 x Ø30 x Ø32 x 403L x 200T	1
23	STATOR SCREW M4 x 60	2	58	VACCUUM HOSE	1
24	BALL BEARING 608-2RU	1	59	CLAMP PIECE-RIGHT	1
25	ARMATURE M1.0 x 6T	1	60	CLAMP PIECE-LEFT	1
25	ARMATURE M1.0 x 6T	1	61	THUMB SCREW M5 x 16	1
26	BALL BEARING 6000-2RS	1	62	HOSE BRACKET-LOWER	1
27	GEAR CASE	1	63	HOSE BRACKET-UPPER	1
28	SPINDLE LOCK BUTTON	1	64	BAYONET SWIVEL CONNECTOR	1
29	SPRING Ø0.9 x Ø10 x Ø11.8 x 13.5L x 4T	1	65	VACUUM HOSE SWIVEL CONNECTOR	1
30	SPINDLE LOCK	1	66	N/A	-
31	SCREW M4 x 30	4	67	RADIAL SHAFT SEAL Ø17 x Ø28 x 5	1
32	NEEDLE BEARING HK0608	1	68	ZIP TIE 2.4 x 80mm	2
33	BEVEL GEAR M1.0 x 46T	1	69	SPIRAL TORSION SPRING	2





