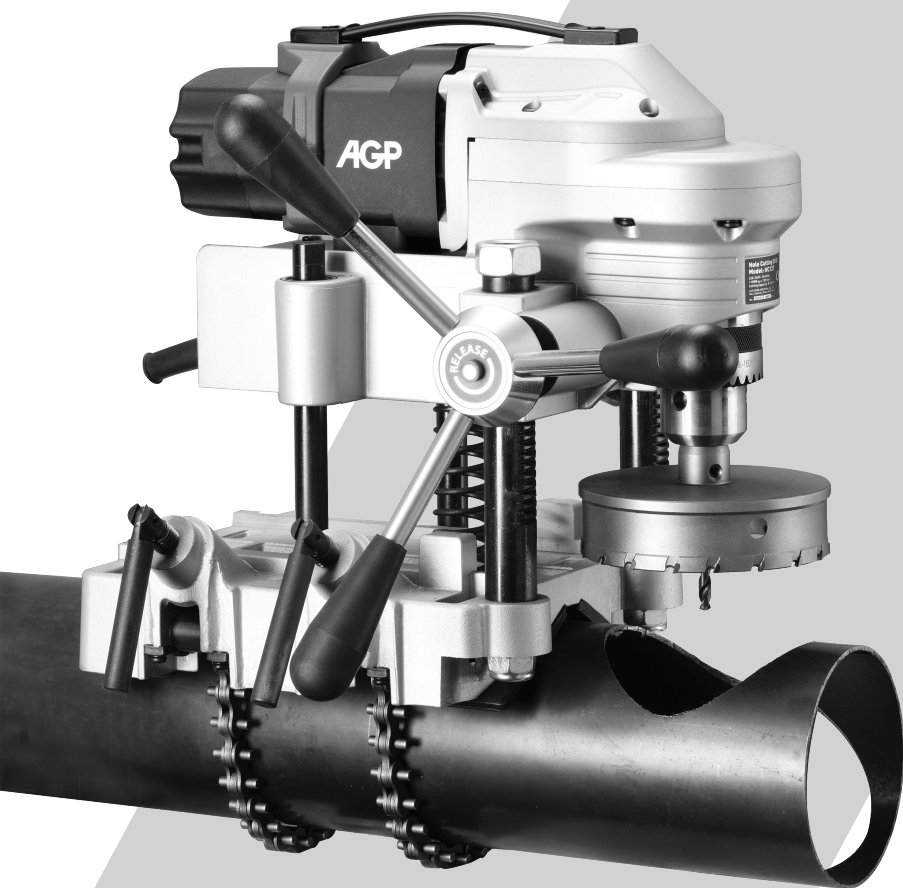


AGP[®]

Hole Cutting Drill

HC127

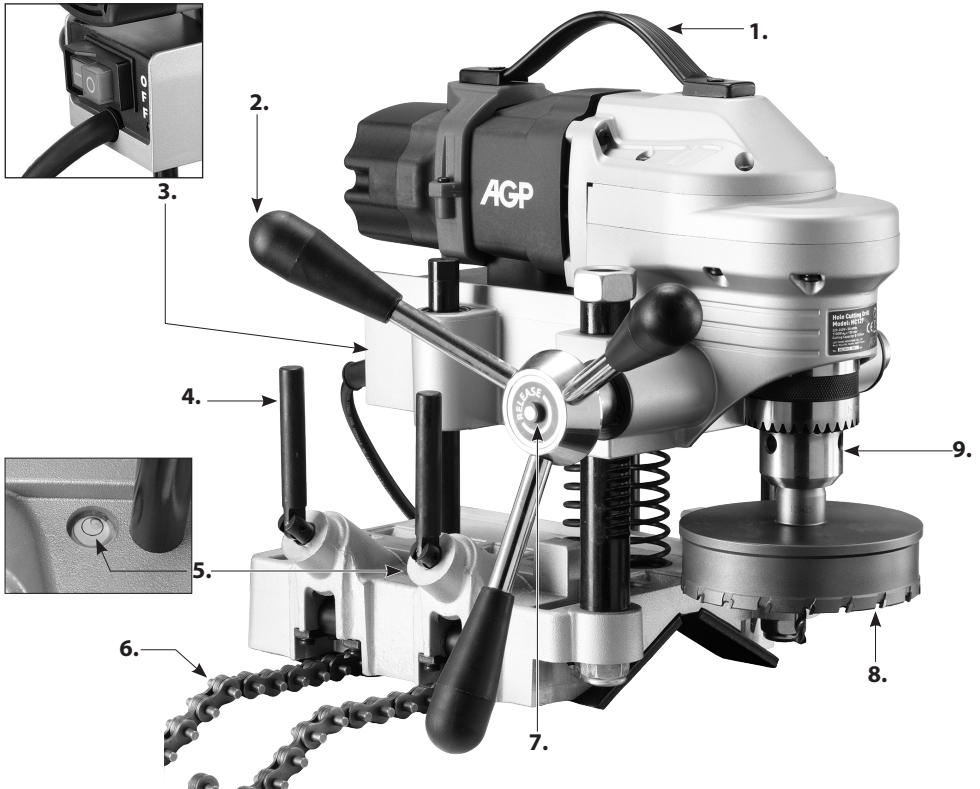


Instruction Manual

CE CB



Power Input	1100W
Voltage	220-240 V~ 50-60 Hz, or 110-120 V~ 50-60 Hz (See Machine Nameplate)
No load min ⁻¹	130
Max. Cutting Capacity	Ø127 mm
Pipe Mounting Capacity	Ø32-203 mm
Drill Chuck Capacity	1 mm - 16 mm Shank
Stroke	76 mm
Overload Protection	With
Soft Start	Without
Overall Dimensions (LxWxH)	319 x 270 x 302 mm
Net Weight	14.5 kg (32.6 lb) not including side handle



- 1.** Carry Handle
- 2.** Crank Handle
- 3.** On/Off Switch
- 4.** Swivel Levers
- 5.** Spirit Level
- 6.** Clamping Chain
- 7.** Release Button
- 8.** Hole Cutter (not included)
- 9.** Chuck

GENERAL SAFETY INSTRUCTIONS



WARNING Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (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 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 a 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 dust-related hazards.
- h. **Do not let familiarity gained from frequent 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 remove the battery pack, if detachable, 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 from oil and grease.** Slippery handles and grasping surfaces 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.

SAFETY INSTRUCTIONS FOR TRANSPORTABLE DRILLS

DRILL SAFETY WARNINGS

- a. **The drill must be secured.** A drill that is not properly secured may move or tip over and may result in personal injury.
- b. **The workpiece must be clamped or secured to the workpiece support.** Do not drill pieces that are too small to be clamped securely. Holding the workpiece by hand during operation may result in personal injury.
- c. **Do not wear gloves.** Gloves may be entangled by the rotating parts or chips leading to personal injury.
- d. **Keep your hands out of the drilling area while the tool is running.** Contact with rotating parts or chips

may result in personal injury.

- e. **Make sure the accessory is rotating before feeding into the workpiece.** Otherwise the accessory may become jammed in the workpiece causing unexpected movement of the workpiece and personal injury.
- f. **When the accessory is jammed, stop applying downward pressure and switch off the tool.** Investigate and take corrective actions to eliminate the cause of the jam. Jamming can cause unexpected movement of the workpiece and personal injury.
- g. **Avoid generating long chips by regularly interrupting downward pressure.** Sharp metal chips may cause entanglement and personal injuries.
- h. **Never remove chips from the drilling area while the tool is running. To remove chips, move the accessory away from the workpiece, switch off the tool and wait for the accessory to stop moving. Use tools such as a brush or hook to remove chips.** Contact with rotating parts or chips may result in personal injury.
- i. **Accessories with speed ratings must be rated at least equal to the maximum speed marked on the power tool.** Accessories running faster than their rated speed can break and fly apart.

Symbols used in this manual

V.....volts

A.....amperes

Hz.....hertz

W.....watt

~.....alternating current

n_0no load speed

min^{-1}revolutions or reciprocation
per minute



.....warning of general danger



.....with electrical earth



.....read these instructions



.....always wear eye protection



.....always wear a dust mask.



.....always wear hearing protection



.....wear safety-approved hard hat



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

TERMINOLOGY USED IN THE MANUAL

- 1. **Warning:** This term means that there is a risk of physical harm or death to the operator or people nearby.
- 2. **Caution:** This term means that there is a risk of damage to the machine, cutting tool or other equipment.
- 3. **Note:** These terms offer useful information relating to the operation of the machine or its maintenance.

SPECIFIC SAFETY RULES AND REGULATIONS

Do not operate with dull or damaged cutting tools. This may overload the motor.

Protect the motor. Never allow cutting fluid, water, or other contaminants enter the motor.

Metal chips are often very sharp and hot. Never touch them with bare hands. Clean up with a magnetic chip

collector and a chip hook or other appropriate tool.

CAUTION: NEVER position machine on a work piece between the electrode and the ground of any arc type welder. Damage to the machine will result, as the welder will ground through the machine's ground cable.

WARNING: NEVER attempt to use machine with incorrect current or abnormally low voltage. Check machine nameplate to ensure that correct voltage and Hz are used.

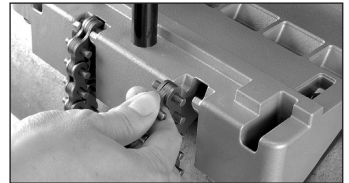
INTRODUCTION

This is a special tool designed to make accurate perpendicular and centered holes in pipes of various materials for the purpose of preparing the pipes for the installation of tapping saddles, tapping sleeves, branch saddles, welded tees, mechanical tee fittings, and similar types of fittings.

It has a chain-clamp system and which securely holds the machine on center, and its crank guidance system ensures straight cuts. The 3-jaw chuck mounts various types of hole cutters as appropriate for the material of the pipe being drilled.

UNPACKING

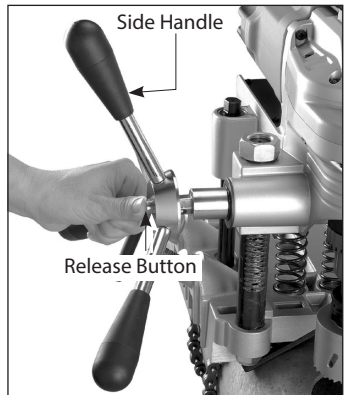
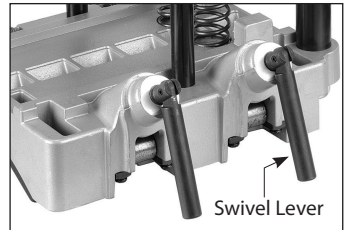
Carefully remove the tool and all loose items from the shipping container. Retain all packing materials until after you have inspected and satisfactorily operated the machine.



SET UP

Unplug the power plug from mains and make sure the switch is OFF before setting up the machine. Always make sure the pipe is de-pressurized before performing any operation!

1. Select the desired hole cutter and mount in the chuck.
2. Place the machine on the pipe. With the swivel levers turned anticlockwise to their slackest (innermost) position, wrap each chain around the pipe and engage in their slots in the base. Turn the swivel levers to take up most of the slack in the chains.
3. Adjust the final position of the machine on the pipe before fully tightening the chains.
4. The crank handle may be mounted on either side of the machine. To change sides, press and hold the release button to pull the handle off the crank spindle, and mount on the other side.

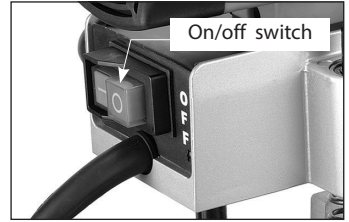


STARTING AND STOPPING THE MACHINE

Press the green ON button to start the machine.

Press the red OFF button to stop the machine.

CAUTION: Always press the ON button fully and deliberately. An overly quick and light pressing of the button will lead to burning of the contacts and shortened switch life.



SPIRIT LEVEL

A bull's eye spirit level is located on the base of the machine. This allows the operator to find the true top of the pipe as the starting point for accurate positioning. This will help in aligning multiple holes.



OPERATION

Warning!! Always make sure the pipe is de-pressurized before performing any operation!

1. After switching on the machine, use the crank handle to feed the hole cutter to the pipe. Feed slowly at the beginning and when breaking through. Allow the tool to determine the feed rate.
2. Once the hole is finished, raise the spindle and shut off the machine.

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.) Clean after every use and make sure frictional metal parts are well lubricated.

THE CARBON BRUSHES

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

Caution: Always replace the brushes as a pair.

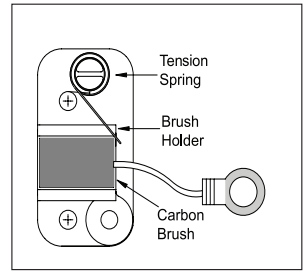
To replace:

1. Remove the 4 screws and remove the motor tail cover.
2. Using pliers rotate the brush spring out of the way and slide the old carbon brush out of the brush holder.
3. Unscrew the screw to remove the brush lead. The old carbon brush may now be lifted away.
4. Install a new brush. Installation is the reverse of removal.
5. Replace the motor tail cover.



CARBON BRUSHES

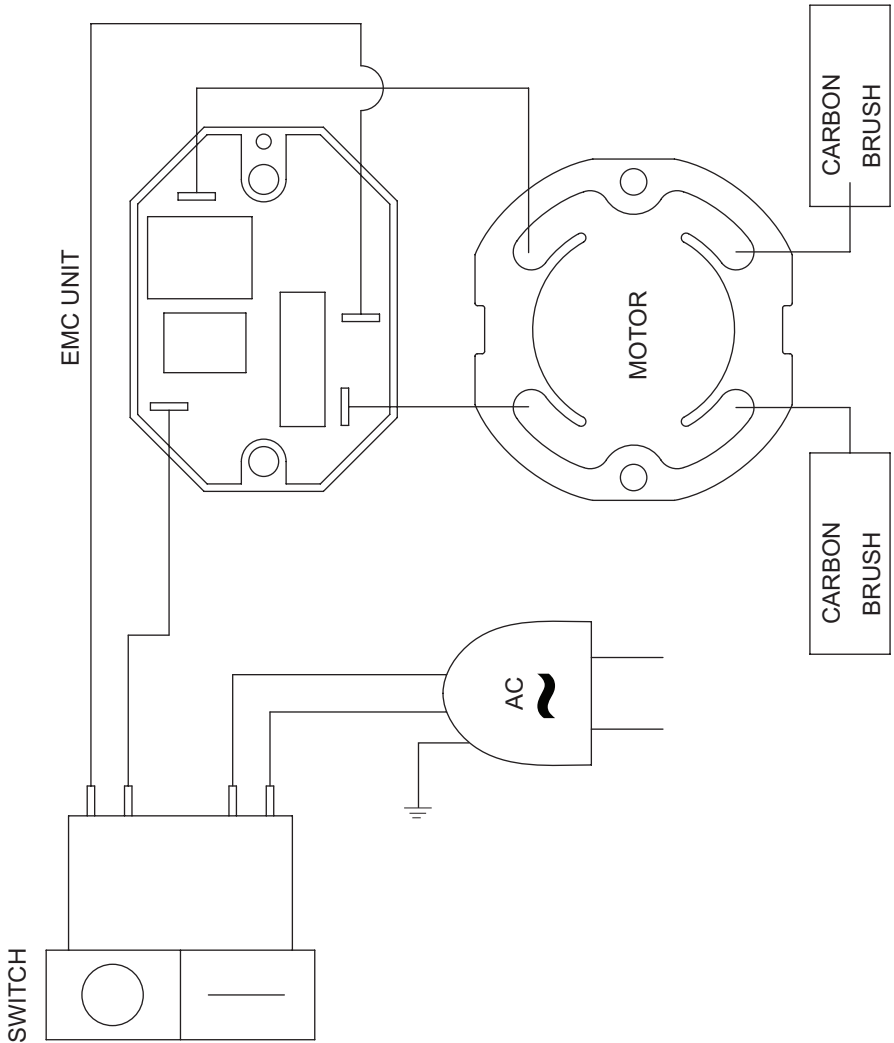
Due to the brush design, if the machine comes to a stop without any reason, the brushes have to be checked. The brush design stops the machine before the carbon brushes are finished for the protection of the motor.



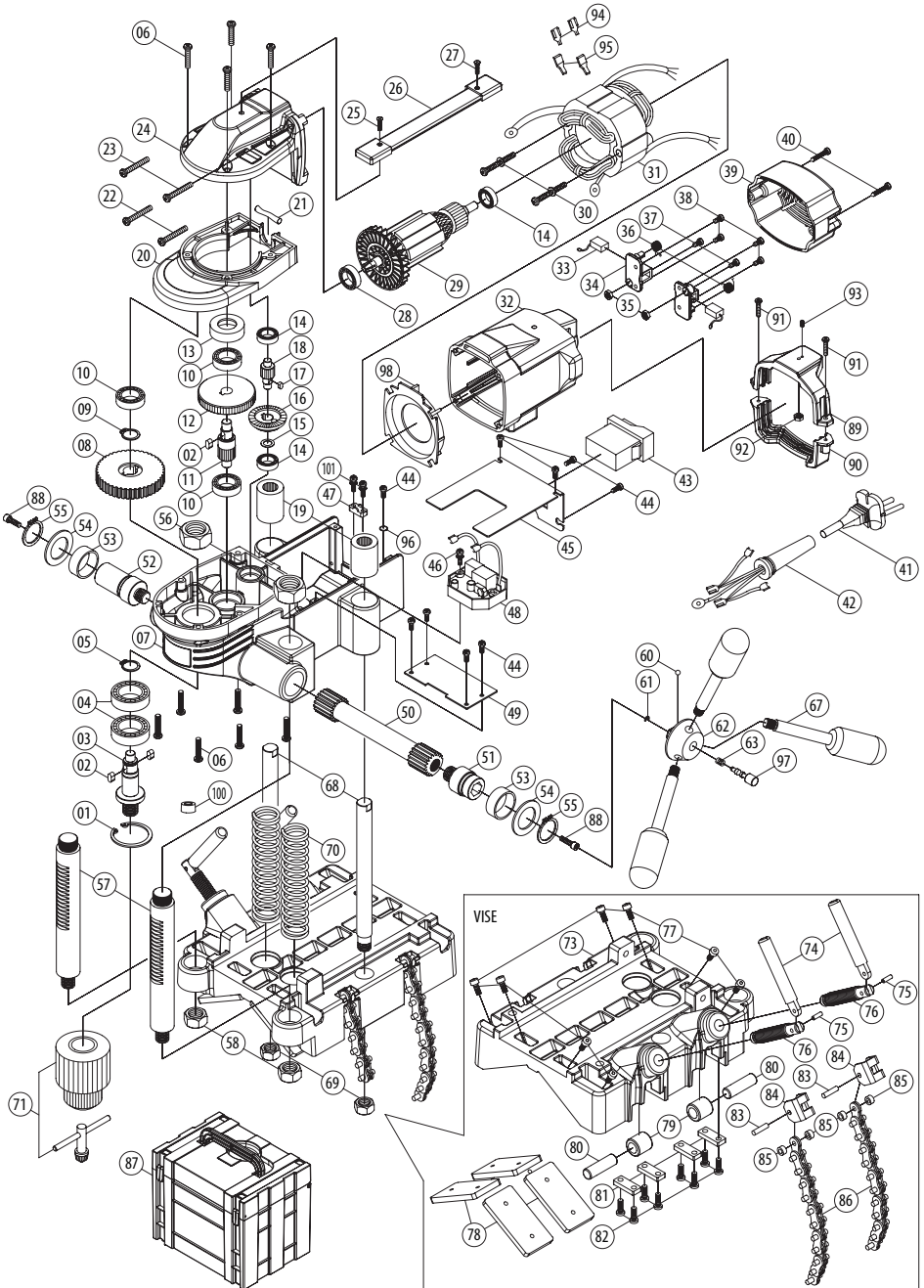
If the replacement of the power supply cord is necessary, this has to be done by the manufacturer or their agent in order to avoid a safety hazard.

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

WIRING



Exploded View



Parts list

NO.	Parts Name	Q'TY	NO.	Parts Name	Q'TY
1	INTERNAL CIRCLIP (R-40)	1	49	MOUNTING PLATE	1
2	PARALLEL KEY (5x5x10)	3	50	CRANK SPINDLE	1
3	SPINDLE (5/8"-16)	1	51	CRANK SPINDLE CASING (M14xP2.0-L)	1
4	BALL BEARING (6203)	2	52	CRANK SPINDLE CASING (M14xP2.0-R)	1
5	EXTERNAL CIRCLIP (S-17)	1	53	BUSHING (Ø28xØ32x12)	2
6	PANHEAD MACHINE SCREW (M5x25xP0.8)	10	54	PRESSURE DISC (Ø25.5xØ40x2)	2
7	GEAR PLATE	1	55	EXTERNAL CIRCLIP (S-25)	2
8	OUTPUT GEAR (M1.5x44T)	1	56	HEX NUT (M20xP1.5)	2
9	EXTERNAL CIRCLIP (S-15)	1	57	COLUMN	2
10	BALL BEARING (6200)	3	58	NYLOCK NUT (M14xP2.0)	2
11	COUNTERSHAFT (M1.5x9T)	1	60	CHECK BALL (Ø5)	1
12	LAY GEAR (M1.25x47T)	1	61	E-CLIP (E-3)	1
13	HEAD LOCKING KNOB (Ø30xØ36x11)	1	62	CRANK HUB	1
14	BALL BEARING (608)	3	63	SPRING (Ø0.6xØ4.1xØ5.3x4Tx6.5L)	1
15	BEVEL WASHER (Ø10.1xØ14x1.2)	1	67	CRANK HANDLE	3
16	BEVEL GEAR (M1.0x46T)	1	68	BEARING BOLT	2
17	PARALLEL KEY (4x4x7)	1	69	HEX NUT (M12xP1.75)	2
18	INPUT SHAFT (M1.25x9T)	1	70	SPRING (Ø3xØ23xØ29x16Tx160L)	2
19	LINEAR BEARING (LM 16UU)	2	71	CHUCK (5/8")	1
20	GEAR PLATE	1	73	BODY CASTING	1
21	SEAL(SCM)	1	74	SWIVEL LEVER	2
22	PANHEAD TAPPING SCREW (M5x25)	2	75	ROLL PIN (Ø4x10)	2
23	PANHEAD TAPPING SCREW (M5x30)	2	76	WISE SCREW (M14xP2.0)	2
24	GEAR HOUSING (SILVER)	1	77	SOCKET CAP SCREW (M5x12xP0.8)	8
25	FLAT HEAD MACHINE SCREW (M5x15xP0.8)	1	78	TABLE PLATE	4
26	STRAP COVER (BLACK)	1	79	DRIVE GUIDE ROLLER (Ø12xØ20x20)	2
27	FLAT HEAD MACHINE SCREW (M5x20xP0.8)	1	80	ROLLER AXLE	2
28	BALL BEARING (6001)	1	81	ROLLER PLATE	4
29	ARMATURE (110V/220V-73x42x45)	1	82	PANHEAD MACHINE SCREW (M5x15xP0.8)	8
30	PANHEAD TAPPING SCREW (M5x60)	2	83	SPRING PIN (Ø5x20)	2
31	STATOR (110V/220V-73x42x45)	1	84	CHAIN HOLDER BRACKET	2
32	MOTOR HOUSING	1	85	SPACER (Ø5.1xØ9x4.8)	4
33	CARBON BRUSH (7x11x17)	2	86	CHAIN (45 segments)/(124 segments)	2
34	CARBON BRUSH HOLDER (7x11)	2	87	CARRY CASE	1
35	HEX NUT (M4xP0.7)	2	88	SOCKET CAP SCREW (M5x25xP0.8)	2
36	BRUSH SPRING (0.35x3x3T)	2	89	BRACKET-TOP	1
37	PANHEAD MACHINE SCREW (M4x10xP0.7)	2	90	BRACKET-BOTTOM	1
38	PANHEAD TAPPING SCREW (M4x12)	4	91	PANHEAD TAPPING SCREW (M4x16)	2
39	MOTOR TAIL CASTING	1	92	HEX NUT (M5xP0.8)	1
40	PANHEAD TAPPING SCREW (M4x25)	2	93	SOCKET SET SCREW (M4x8xP0.7)	1
41	POWER SUPPLY CABLE (VDE-1.0x3Cx2.5M-H05VVf)	1	94	FEMALE SPADE TERMINAL	2
42	CORD ARMOR	1	95	SPADE TERMINAL BOOT	2
43	MOTOR SWITCH (110V/220V)	1	96	EXTERNAL STAR WASHER (M5)	1
44	PANHEAD MACHINE SCREW (M4x8xP0.7)	9	97	PLUNGER	1
45	SWITCH BRACKET	1	98	FAN SHROUD (BLACK)	1
46	PANHEAD MACHINE SCREW (M4x16xP0.7)	1	100	BULLS-EYE LEVEL	1
47	CABLE CLIP	1	101	PANHEAD MACHINE SCREW (M4x12xP0.7)	2
48	OVER LOAD PROTECTION (110V/220V)	1			

