

**HAND MIXER** 

# M12 LIGHT 230 V (UK)



# HAND MIXER INSTRUCTION FOR USE AND MAINTENANCE

#### PRODUCT DESCRIPTION

This machine is designed specifically for mixing liquids and powder based building products such as paints, plaster, mortar, adhesives and similar substances.

Different mixing tool stirrers are available separately to suit different consistencies and types of materials. It has a single speed trigger type switch with lock button and a speed control thumb wheel.

#### **SPECIFICATIONS**

Power: 1220w

Voltage: 220/2300V - 50/60Hz

Gears: 1
RPM under load: 0-800
Recommended mixing tool: 120 mm
Spindle neck: 52 mm
Net weight: 3.4 kg

Protection: Class two. Double insulated.

Switch: Locking trigger switch with thumb wheel-controlled electronic

speed control with current feed back.

#### **GENERAL SAFETY RULES**

**WARNING!** Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and / or serious personal injury.

#### SAVE THESE INSTRUCTIONS

Work area.

Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquid, gases, or dust. Power tools create sparks which may ignite the dust or fumes.

**Keep bystanders, children, and visitors away while operating a power tool**. Distractions can cause you to lose control.

#### Electrical Safety.

Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adaptor plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.

If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.

**Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.

**Don't expose power tools motor internals to rain or wet conditions**. Water entering a power tool will increase the risk of electric shock.

Don't abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

## Personal Safety.

Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

**Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch ON invites accidents.

**Remove adjusting keys or switches before turning the tool on**. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

**Do not overreach. Keep a proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.

**Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

#### Tool use and care.

Use clamps or other practical way to secure and support the workpiece to a stable platform.

Holding the work by hand or against your body is unstable and may lead to loss of control.

**Do not force tool. Use the correct tool for your application**. The correct tool will do the job better and safer at the rate for which it is designed.

**Do not use tool if switch does not turn it on or off**. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

**Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool**. Such preventive safety measures reduce the risk of starting the tool accidentally.

**Store idle tools out of reach of children and other untrained persons**. Tools are dangerous in the hands of untrained users.

**Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

**Use only accessories that are recommended by the manufacturer for your model**. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

#### Service.

**Tool service must be performed only by qualified repair personnel**. Service or maintenance performed by unqualified personnel could result in a risk of injury.

When servicing tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

# Symbols used in this manual

V	volts
Α	amperes
Hz	hertz
W	watt
~	alternating current
n0	no load speed
/min	revolutions or reciprocation per minute

# **SPECIFIC SAFETY RULES**

Always start, run, and run down machine with mixing tool stirrer inside the mixing container only. Stirrer may cause danger.

Do not use this machine to mix any solvents or solvent-containing substances with a flash point of below 22 degrees Celsius. An explosive condition may result.

Never reach into the mixing container with your hands or insert any other objects while mixing. Do not wind cables or leads around any parts of the body.

## **ASSEMBLY**

Screw a mixing tool with a size M14 male thread tightly into the arbor. Use the two open ended wrenches.

#### OPERATION

Always hold the machine with both hands.

Always insert the stirrer portion of the mixing tool into the material before beginning operation.

To begin simply squeeze the trigger switch and lock on if desired.

Speed is controlled by the speed control thumb wheel.

It is recommended to begin work with the speed control thumb wheel adjusted to low speed and add speed as needed to reach the most efficient speed.

For two-speed gearbox equipped machines, two speed ranges are available. To change gears, first stop the machine, then simply push in while sliding the gear selector slider on the side of the gearbox case. Slide forward (toward the arbor) for high speed range and slide back (toward the handle) for low speed range.

NOTE: Ensure that the gear selector is all the way in position. It may sometimes be necessary to wiggle the arbor to allow the gears to fully engage.

Guide the machine around the mixing container to ensure complete mixing.

To stop working, squeeze and release the trigger switch to release the lock.

# WARNING: Shut down machine before removing from mixing container.

Always clean mixing tool after finishing mixing.

# **MAINTENANCE**

Keep the machine and mixing tool clean.

Ensure that the ventilation slots are clear so that motor can be cooled normally.

Always entrust all repairs to an authorized service agent.

#### THE CARBON BRUSHES

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

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

# **CORRECTIVE ACTION IN CASE OF FAILURE**

# (1) The operating switch is switched on, but the motor is not working.

Wires in the mains plug or in the socket are loose.	Have socket and plug checked or repaired.	
The switch is faulty.	Have the switch replaced.	
(2) The operating switch is switched on, but unuworking or only very slowly.	usual noises can be heard, the motor is not	
Switch contact has failed.	Have the switch replaced.	
Component jammed.	Have the electric tool checked or repaired.	
Too much thrust, as a result the motor is dragging.	Use less thrust during the task.	
(3) Motor gets ho.		
Foreign substances have got inside the motor.	Have the foreign substances removed.	
Lack of or contaminated lubrication grease.	Have lubricating grease applied or replaced.	
Pressure too high.	Use less thrust during the task.	
(4) Frequent or strong sparks on the commutat	or.	
Short circuit on the armature.	Have the armature replaced.	
Carbon brushes worn out or jammed.	Have the carbon brushes checked.	
Rough running of the commutator.	Have the surface of the commutator cleaned or ground.	

For your own safety, never remove parts or accessories of the electric tool during operation. In case of fault or damage have the electric tool repaired only by a specialist workshop or by the manufacturer.

# **ENVIRONMENTAL PROTECTION**

Do not dispose of in general household waste. Instead dispose of in an environmental friendly way, contact your local recycling centre of council for advice. Please take the care of the environment very seriously.



PART №	CODE	SPARE PARTS
1	M12LIGHT R01	OUTPUT SHAFT
2	M12LIGHT R02	OIL SEAL
3	M12LIGHT R03	SCREW ST5×55
4	M12LIGHT R04	Head housing
5	M12LIGHT R05	BEARING 6003-2Z
6	M12LIGHT R06	CIRCLIP FOR AXES 35
7	M12LIGHT R07	CIRCLIP FOR AXES 17
8	M12LIGHT R08	BIG GEAR
9	M12LIGHT R09	CIRCLIP FOR AXES 15
10	M12LIGHT R10	KEY 5×12
11	M12LIGHT R11	NEEDLE BEARING HK1010
12	M12LIGHT R12	VARIABLE AXES
13	M12LIGHT R13	KEY 4×8
14	M12LIGHT R14	GEAR FOR SHIFT SHAFT
15	M12LIGHT R15	MIDDLE COVER
16	M12LIGHT R16	ROTOR SUBASSEMBLY+
17	M12LIGHT R17	SCREW ST5×65-F
18	M12LIGHT R18	STATOR SUBASSEMBLY
19	M12LIGHT R19	SCREW ST4×18-F
20	M12LIGHT R20	MAGNETIC SPRING
21	M12LIGHT R21	BEARING 608Z
	M12LIGHT R22	COVER OF BEARING 608
23	M12LIGHT R23	CABLE PLATE
24	M12LIGHT R24	SCREW ST4×14-F
25	M12LIGHT R25	SWITCH
26	M12LIGHT R26	CABLE SLEEVE
27	M12LIGHT R27	CABLE
28	M12LIGHT R28	INDUCTOR ASSEMBLY
29	M12LIGHT R29	CAPACITANCE
30	M12LIGHT R30	SCREW ST4×22-F
31	M12LIGHT R31	TAIL COVER
32	M12LIGHT R32	SCREW ST3×10
33	M12LIGHT R33	INTEGRATING BLOCK
34	M12LIGHT R34	CARBON HOLDER
35	M12LIGHT R35	CARBON BRUSH
36	M12LIGHT R36	HOUSING
37	M12LIGHT R37	HANDLE COVER
38		POTENTIOMETER
39	M12LIGHT R38	POTENTIOMETER KNOB
40		POTENTIOMETERS BUSHING
41	M12LIGHT R41	O-RING
42	M12LIGHT R42	BEARING 609Z
43	M12LIGHT R43	SEAL PAD
44	M12LIGHT R44	DIAGONAL GEAR
45	M12LIGHT R45	CIRCLIP FOR AXES 12
46	M12LIGHT R46	KEY 3X8
47	M12LIGHT R47	MAIN DRIVING SHAFT
48	M12LIGHT R48	NEEDLE BEARING HK0810





