

**LUMBER**  
**JACK**   
**PM1600**

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# Electric Paddle Mixer




**INSTRUCTION MANUAL**



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## General Power Tool Safety Warnings

### WARNING

-  Read all safety warnings and all the instructions before operation. 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.

### Work area safety

- a) Keep the work area clean and well lit.
- b) Do not operate power tools in an explosive environment, Such as in the presence of flammable liquids, gases, or dust.
- c) Keep children and bystanders away while operating any power tool.

### 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 bodily contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric 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 an electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep the cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating any power tools outdoors, use an extension lead suitable for outdoor use.
- 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.

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NOTE The term “residual current device (RCD)” may be replaced by the term “ground fault circuit interrupter (GFCI)” or “earth leakage circuit breaker (ELCB)”.

## 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.

**GB**

a) Use personal protective equipment. Always wear eye protection.

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 energizing 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. Always keep proper footing and balance. This enables better control of the power tool in unexpected situations.

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

g) If the device is provided for the connection of dust extraction and collection facilities ensure these are connected and safely used. Use of dust collection can reduce dust –related hazards.

## 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 tools 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 tools or these instructions to operate the power tool.

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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 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, consider the working conditions and the work that is being performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

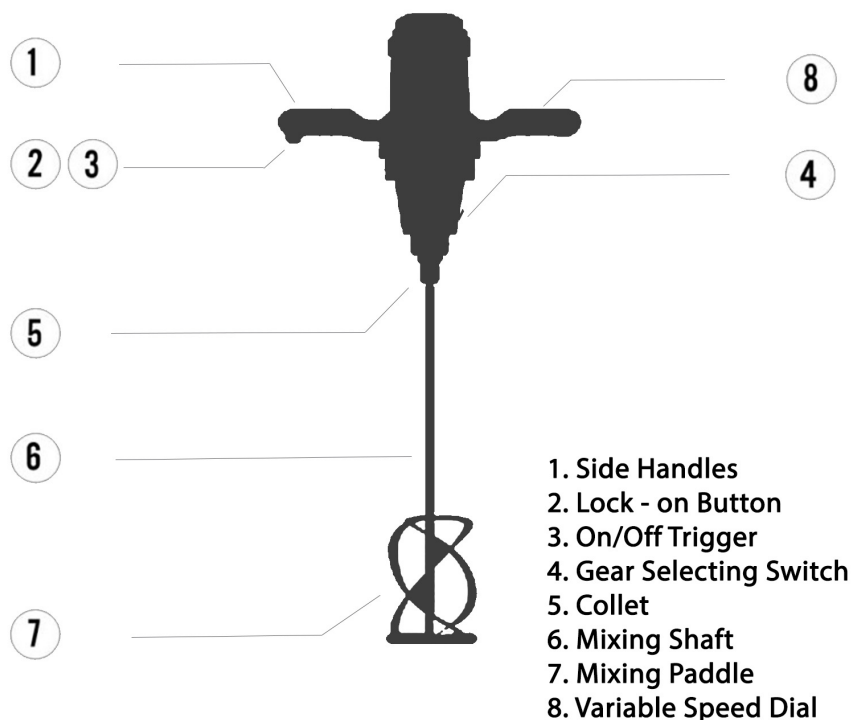
## Service

- a) Have your power tool serviced by a qualified engineer and using only official replacement parts. This will ensure that the safety of the power tool is maintained.

## Guide

Please read and understand this owner's manual before operating the machine, Do-not operate the machine until you have read and understood the manual and understand the operating and troubleshooting for the machine.

### 1. MAIN COMPONENTS



<b>Model Number</b>	<b>PM1600</b>
<b>Voltage</b>	<b>230V</b>
<b>Power</b>	<b>1600w</b>
<b>No Load Speeds</b>	<b>1: 0-500/min 2: 0-800/min</b>
<b>Gear</b>	<b>2-Speed Gearbox</b>
<b>Mixing Paddle</b>	<b>Ø 140mm</b>
<b>Max. Mixing Capacity</b>	<b>120 Litre</b>
<b>Sound pressure level</b>	<b><math>L_{pA} = 87.6\text{dB(A)}</math></b>
<b>Sound power level</b>	<b><math>L_{WA} = 98.6\text{dB(A)}</math></b>
<b>Vibration</b>	<b><math>a_{h, HD} = 3.187\text{m/s}^2</math></b>

## 2. PRODUCTION DESCRIPTION

The mixer is an electrical power mixer, which is fitted with double count-rotating mixing tool. It is used for mixing building materials and chemical materials, for mixing even heavy materials quickly and thoroughly, especially for the difficult mixing materials, such as high-density mortar, dried building materials, two or more kinds mixed materials.

## 3. CAUTIONS

Please read and follow these instructions before operating the machine. DO check the safety situation when the machine is in operating.

- (1) Only operate the machine in the suitable working environment.
- (2) DO keep other persons away from the working space.
- (3) DO avoid the machine affected with damp when the machine operated in the damp working space.
- (4) Ensure that the working space is sufficiently lighted.
- (5) DO check the power source / voltage is same as showed on the machine labels.
- (6) DO check the machine have earth protecting or not.
- (7) The machine CANNOT be over loaded.
- (8) The electrical cable should not be too far away the machine, do not pull the cable to disconnect the plug from the socket directly.
- (9) Always ensure that the mixer is disconnected from the main power source before doing any routine maintenance.
- (10) DO NOT mix materials which have flammable flash point of more than 21°C.
- (11) DO NOT use solvents for cleaning the tools.
- (12) DO NOT install and operate the machine in a flammable and explosivity environment.

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- (13) DO NOT use the slide or movable mixing drum.
  - (14) DO NOT start the mixer until the mixing tools is in the mixing drum or other drums.
  - (15) DO NOT run the machine idle.
  - (16) DO NOT take out the sample until the machine is has completely stopped. DO NOT touch into the mixing drum when the machine is in operation.
  - (17) DO NOT start the machine when there are dried materials in the drum or stick to the drum.
  - (18) Please wear goggles and ear defenders when operating the machine.
  - (19) Only use original spare parts for the machine maintenance.

#### 4. MIXING TOOLS CHOICE

For the mixer with double counter-rotating tools, we supply P1 mixing tool as standard fitting,

P1: heavy duty, multifunction, suitable for heavy viscous materials, mortar, sand mixed ethoxy line, heat proof paints etc., it is also suitable for thin materials.

For the mixer with single mixing tool, we supply K3 mixing tools as standard fitting K1-k10 mixing tools etc.

#### 5. MAINTENANCE

Correct maintenance for the machine can prolong the working life; The handle switch must always keep in proper function and maintained regularly;

The mixing tools should only be cleaned once the operation is finished

Normally flowing water or quartz sand can clean the mixing tools well. DO not force any mechanical stress in the machine, such as POUND, because it can cause unavoidable damaged;

The hole of hexagonal socket must always be put protecting cover.

The vent of motor housing cannot be covered when the machine is in operation, there cannot be any flammable materials in the machine;

The vent must be often cleaned;

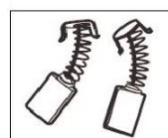
Only original parts can used in this machine.

The carbon brushes must be checked when the machine operation is up to 60hours, please

Carbon Brushes:

When the carbon brushes wear out, the mixer will stop. Discontinue use of the mixer. Carbon brushes are a wearing component of the Mixer and therefore not covered under warranty. Continuing to use the Mixer when carbon brushes need changing may cause permanent damage to the machine.

Always replace both carbon brushes at the same time.



## 6. OPERATION

### SINGLE MIXING

1. Screw the mixing paddle into the end of the mixing shaft by rotating in a clockwise direction by hand (Fig.1).
2. Screw the mixing shaft into the collet at the base of the mixer housing (Fig.2).
3. Tighten the collet using the provided 22mm spanners, face spanners in opposite directions(Fig.2).
4. Tighten the mixing paddle nut using a 22mm spanner (Fig.1).



Fig. 1



Fig. 2

### STARTING THE MACHINE

1. To start the mixer, depress the On/Off trigger (Fig.3).
2. To stop the mixer, release the On/Off trigger (Fig.4).

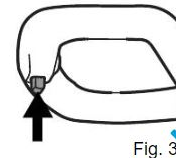


Fig. 3

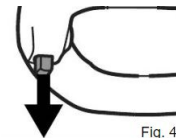


Fig. 4

### LOCK-ON BUTTON

1. Start the mixer by depressing and holding the On/Off trigger (Fig.3)
2. Depress the lock-on button, Once it has been pressed, the On/Off switch can be released while the mixer remains on.
3. To stop the mixer, depress the On/Off trigger down and then release (Fig.5).

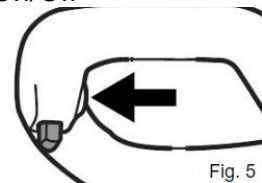


Fig. 5

### VARYING THE SPEED & GEARS

#### Variable Speed:

1. To reduce the speed rotate the variable speed dial by turning it to the left (Fig.6).
2. To increase the speed rotate the variable speed dial by turning it to the right (Fig.6.)

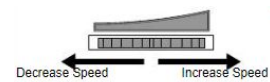


Fig. 6

#### Gear Changing:

1. To change to 2nd gear for faster speeds, push the gear selecting switch down (Fig.7)
2. To change to 1st gear for slower speeds, push the gear selecting switch up (Fig.7)

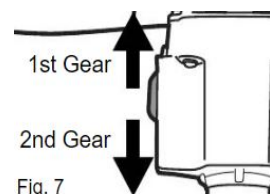


Fig. 7

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## CE Declaration of Conformity

We: Toolsave, Unit C, Mander Ind Est, Old Heath Rd, Wolverhampton, WV1 2RP

Declare that the Product detailed below:

Hand mixer  
Model: **PM1600**

Satisfies the requirement of the Council Directives:

Machinery Directive 98/37/EC  
*Electromagnetic Compatibility Directive 89/336/EEC*  
*amended by 93/68/EEC and conforms with the norms:*

**EN 60745-1/A11:2010**  
**EN 60745-2-1:2010**  
**EN 55014-1/A2: 2011**  
**EN 55014-2/A2: 2008**  
**EN 61000-3-2/A2: 2009**  
**EN 61000-3-11:2000**

Position of Signatory:

Director of Toolsave



Date: 02-06-2020

Bill Evans