

## **METCALFE SM5 & SM7 PLANETARY MIXER**

### **Operating & Maintenance Instructions**



## SM5 PROFESSIONAL PLANETARY MIXER

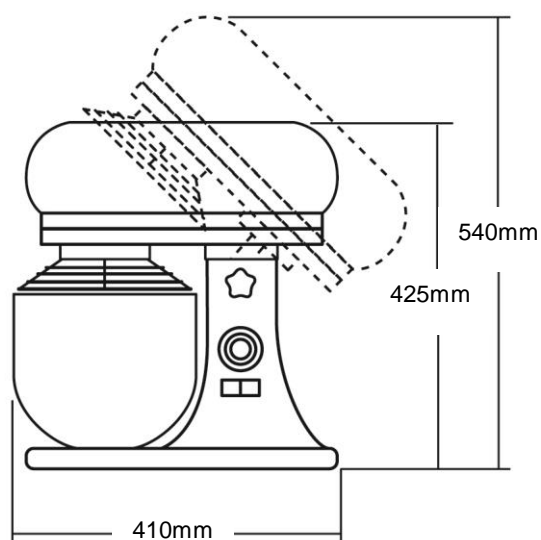
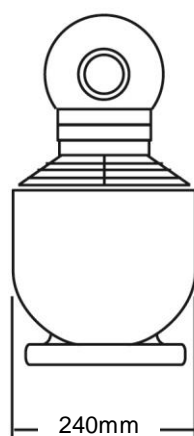
The Metcalfe SM5 Mixer is a professional planetary machine with a powerful, variable speed motor. The SM5 comes complete with a 5 litre stainless steel removable bowl, beater, whisk and dough hook. It is also fully interlocked for safety whilst in use.

### FEATURES

- Head lifts for easy bowl and tool removal
- Removable 5 litre stainless steel bowl
- Beater, whisk and dough hook
- Constant mixing with step-less speed control
- Variable speed DC motor
- Gear drive, planetary transmission
- Overload protection (NVR device)
- Wire safety guard to allow easy addition of liquid to the mixer bowl

### TECHNICAL SPECIFICATIONS

Weight (kg)	Speed of Shaft (r/min)	Electrical Supply	Power (w)	Dimensions (mm)
16	75-660	230V 50Hz	200	410 x 240 x 425



### Capacity (Maximum loads)

Sponge mix	0.9 kg	Liquid/flour mix	0.9 kg
Eggs	12	Croissant	1 kg
Brioche	1 kg	Pizza	0.5 kg
Mash	1.3 kg		

## SM7 PROFESSIONAL PLANETARY MIXER

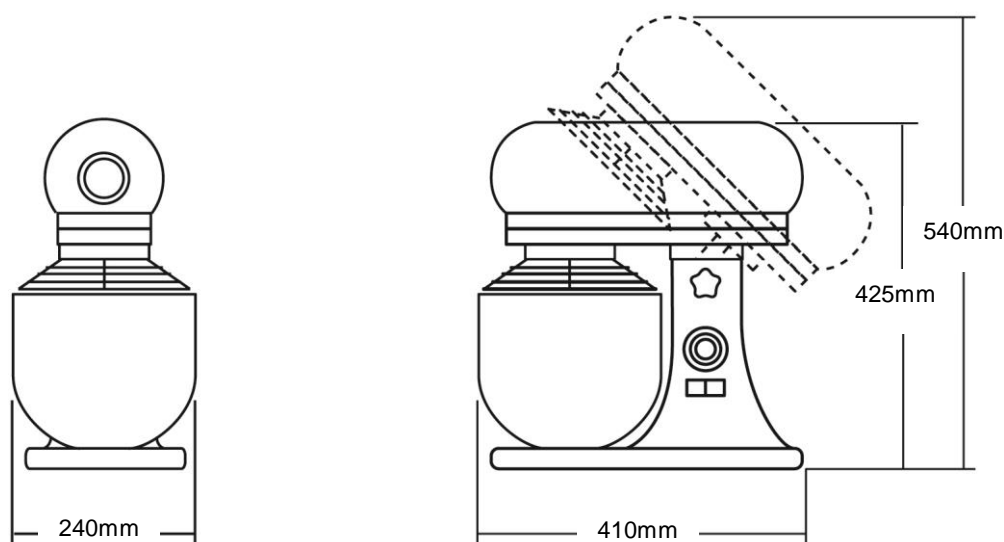
The Metcalfe SM7 Mixer is a professional planetary machine with a powerful, variable speed motor. The SM7 comes complete with a 7 litre stainless steel removable bowl, beater, whisk and dough hook. It is also fully interlocked for safety whilst in use.

### FEATURES

- Head lifts for easy bowl and tool removal
- Removable 7 litre stainless steel bowl
- Beater, whisk and dough hook
- Constant mixing with step-less speed control
- Variable speed DC motor
- Gear drive, planetary transmission
- Overload protection (NVR device)
- Wire safety guard to allow easy addition of liquid to the mixer bowl

### TECHNICAL SPECIFICATIONS

Weight (kg)	Speed of Shaft (r/min)	Electrical Supply	Power (w)	Dimensions (mm)
18	75-660	230V 50Hz	280	410 x 240 x 425



### Capacity (Maximum loads)

Sponge mix	1.1 kg	Liquid/flour mix	1.1 kg
Eggs	14	Croissant	1.3 kg
Brioche	1.3 kg	Pizza	0.7 kg
Mash	1.5 kg		

## OPERATION

The machine works off 230volt 50Hz 1Phase supply, and comes fitted with a 3-pin 13amp fused plug.

**Installation of attachments:** Loosen securing knob on side, raise head and lock in place using securing knob. Place attachment on shaft and turn 45° counter clockwise.

**Installation of stainless steel bowl:** Place bowl on bowl seat and turn bowl to lock into position.

**Procedure for starting machine:** After ingredients have been placed in the bowl, lower the head and tighten the securing knob, turn speed control switch to lower setting, turn on machine by pressing green "start" button, and then set required speed gradually after attachment is lowered. When operation is complete, turn speed control switch to lower setting, then press red "off" switch.

## ACCESSORIES & FUNCTIONS

**Wire whisk:** used for stirring liquid ingredients, such as cream and eggs.

**Beater:** used for stirring batters, powder and shredded ingredients, such as fillings.

**Dough Hook:** used for stirring more sticky ingredients, such as dough.

## SAFETY NOTES

Always unplug the machine from the mains when not in use.

Do not place your hand into the mixing bowl during operation.

Please clean the attachments by using hot, soapy water – **do not place them in a dishwasher.**

Do not operate the machine beyond the limited time to avoid reducing its service life.

Do not lift head or move machine by using the wire safety guard.

The machine should be mounted on a stable and clean surface. Keep it away from heated or wet conditions, and away from equipment which have strong electromagnetic fields or which can produce such conditions.

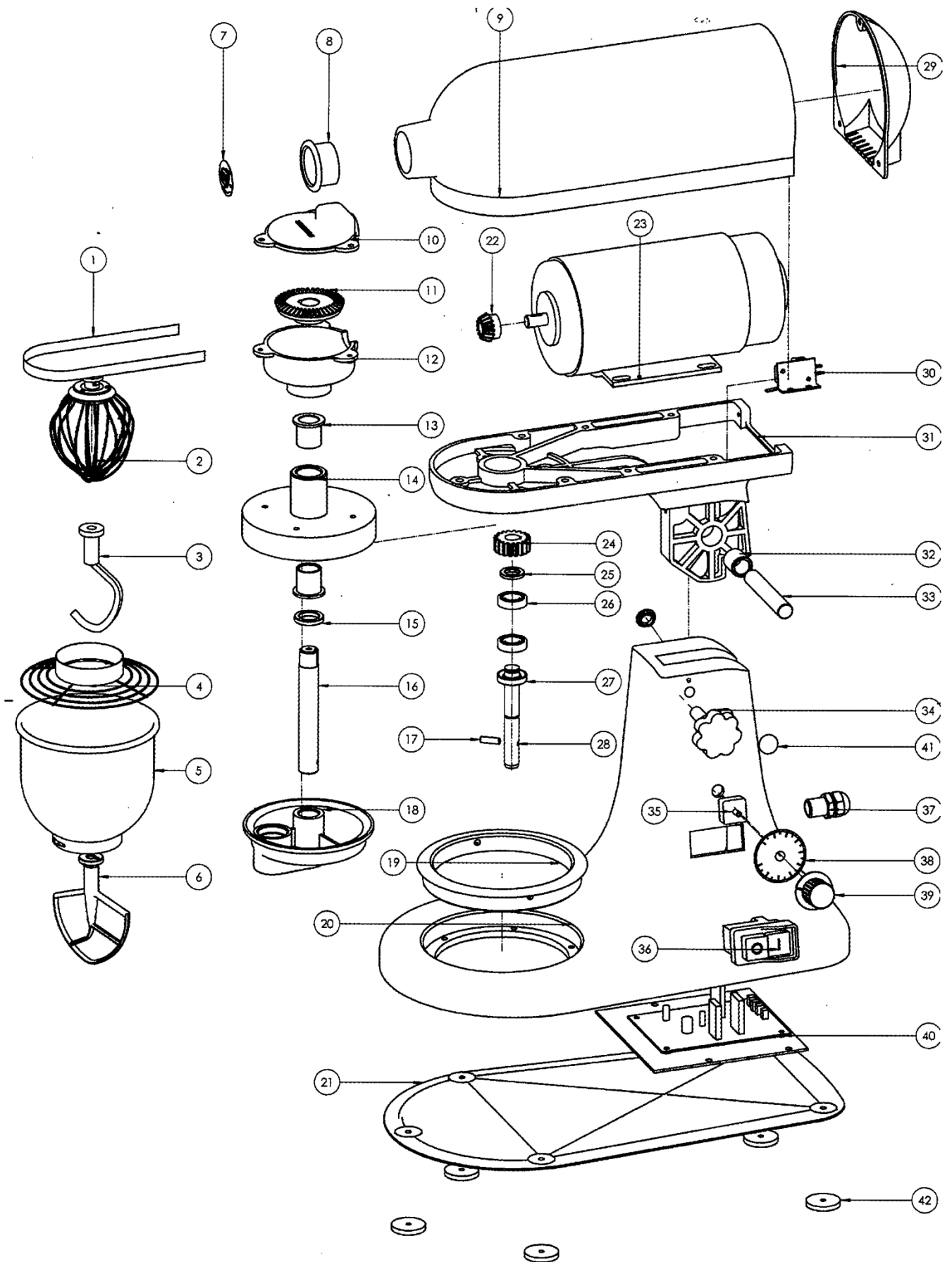
Keep the machine in a clean condition at all times. Make sure it is unplugged prior to cleaning. Use only a soft wet cloth. Do not use any harsh or spray detergents.

## TROUBLESHOOTING

<b>Fault</b>	<b>Problem</b>	<b>Solution</b>
Shaft will not rotate when machine on	Power is connected incorrectly	Check the plug
	Fuse has blown	Replace fuse (13amp)
Motor is overheating and rotating speed slows down	Voltage is too low	Check voltage
	Overload	Reduce amount of ingredients
	Incorrect attachment is fitted	Choose correct attachment
Attachments hit inside of bowl	Attachment is misshapen	Check attachment

**WARNING – IF EQUIPMENT DOES NOT WORK, PLEASE ENSURE IT IS SERVICED BY A METCALFE APPOINTED ENGINEER**

# BREAKDOWN DRAWING



## SM PARTS LIST

Item	Part Number	Part Name
<b>1</b>	SM57/50402004 SM7/50402115	Long labels
<b>2</b>	SM57/40102800	Wire whip
<b>3</b>	SM57/40102000	Hook
<b>4</b>	SM5/40101800 SM7/40200100 SM7/50405382	SM5 Safety Guard SM7 Safety Guard (Wire) SM7 Safety Guard (Plastic)
<b>5</b>	SM5/50401001 SM7/50401016	Bowl (SM5) Bowl (SM7)
<b>6</b>	SM57/40101900	Flat beater
<b>7</b>	SM57/50402071	Round stickers
<b>8</b>	SM57/50405014	Front cover
<b>9</b>	SM57/40100800	Cover
<b>10</b>	SM57/50405003	Upper cover of gear
<b>11</b>	SM57/50405008	Large spiral bevel gear
<b>12</b>	SM57/50405006	Lower cover of gear
<b>13</b>	SM57/50405005	Gear set
<b>14</b>	SM57/40100500	Inner gear
<b>15</b>	SM57/40101400	Ring gear lining
<b>16</b>	SM57/40100900	Gear shaft
<b>17</b>	SM57/50306015	Pin 5x16
<b>18</b>	SM57/40101000	Operations frame
<b>19</b>	40100700	Bowl seat
<b>20</b>	40100100	Base
<b>21</b>	SM57/50405007	Toe-boards

Item	Part Number	Part Name
<b>22</b>	SM57/50405076	Small spiral bevel gear
<b>23</b>	SM5/50501004 SM7/50501006	Motor (SM5) Motor (SM7)
<b>24</b>	SM57/40101200	Planet gear
<b>25</b>	50404010	Planet gear pad
<b>26</b>	SM57/50301018	Bearing 6901
<b>27</b>	SM57/50310001	Oil seal 24x12x5
<b>28</b>	SM57/40101300	Planet shaft
<b>29</b>	SM57/50405013	Back cover
<b>30</b>	SM57/50506057	Distance switch
<b>31</b>	SM5/40100400	Rotating base
<b>32</b>	SM57/50405004	Shaft set
<b>33</b>	SM57/40100300	Rotating shaft
<b>34</b>	SM57/50405070	Plum wrench 40x10x35
<b>35</b>	SM57/50506068	Potentiometer
<b>36</b>	SM57/50506072	Power switch
<b>37</b>	SM57/50514001	Waterproof joint PG9
<b>38</b>	SM57/50402088	Speed mark
<b>39</b>	SM57/50506042	Speed control
<b>40</b>	SM5/50508012 SM7/50508009	PCB (SM5) PCB (SM7)
<b>41</b>	50405019	Rotating Shaft Cover
<b>42</b>	SM57/50405189	Rubber Mat

## METCALFE WARRANTY

All Metcalfe products are guaranteed against defects in material and workmanship for a period of one year from date of Invoice, except where specially noted.

The Company's obligation under this warranty is limited to repairing or replacing, without charge, any part or parts found to be defective under normal use, in accordance to the specified operations manual and capacity ratings.

On all return to factory warranty items, it is the responsibility of the purchaser to return the entire unit to the factory, properly packed and labelled.

All repairs, alterations or replacement of materials or parts not authorised by Metcalfe will automatically void all warranties in their entirety.

There is a limited **6-month warranty** on the following:

- Mixer attachments (beater, whisk and dough hook)
- Parts purchased or supplied for the repair of Metcalfe equipment

This warranty does not cover the following:

- Failure due to neglect, abuse, careless handling or misuse of machine
- Failure caused due to improper maintenance
- Blender clutches
- Knives and gears on can openers
- Sharpening of slicer blades

Metcalfe and its suppliers reserve the right to make changes in design and specification to any product without prior notification.



## Notes

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### Electrical PAT Certificate

Test Detail	Results
Item:	
Class:	Class 1 / Class 2
Date:	/ /
Appliance ID:	
User ID:	M.C.E.
Visual:	
Earth Current:	amps
<b>Class 1</b> Earth Result/RPE:	$\Omega$
RISO:	M $\Omega$
1 EA:	MA
<b>Class 2</b> RISO:	M $\Omega$
1 EA:	MA
Insulation (500V):	M $\Omega$
Load:	KVA
Leakage:	MA
Polarity (leads only):	

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