

EM Series Planetary Mixer User Manual

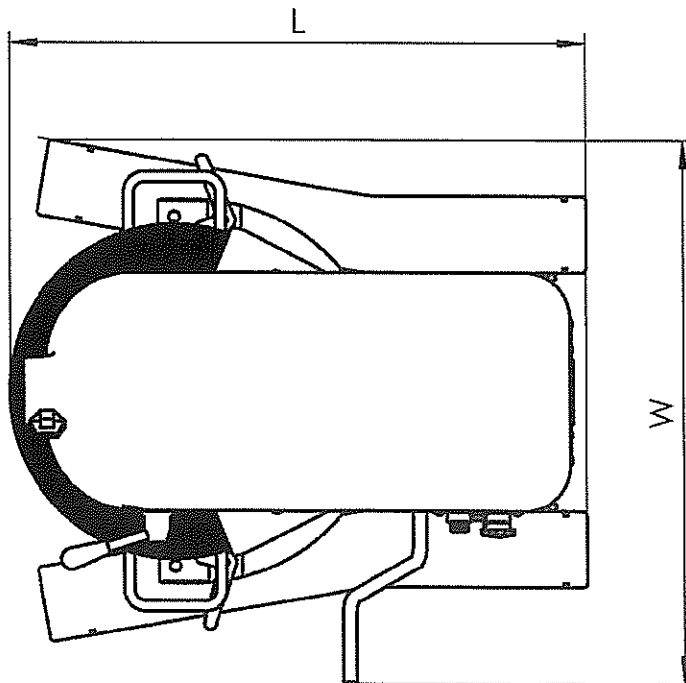
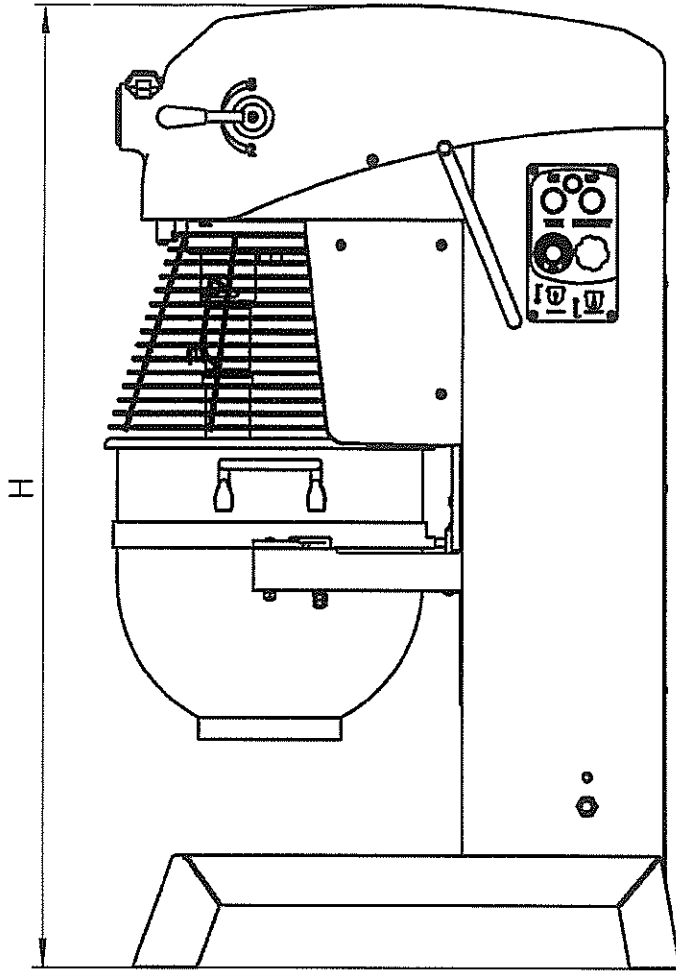
Thank you for choosing our product. Please read this manual carefully before using for better understanding of operation. Please retain this manual for future reference.

I. Features

1. Enclosed gear transmission with low noise
2. High transmission efficiency with low energy consumption
3. Flexible speed change
4. Equipped with overload protection
5. Easy to use

II. Parameter

Type		EM20		EM30	
Bowl cubage (L)		20		30	
Power	Voltage (V)	See nameplate		See nameplate	
	Frequency (Hz)	See nameplate		See nameplate	
Rated power (W)		See nameplate		See nameplate	
Weight (Kg)		See nameplate		See nameplate	
Shaft speed (r/min)	Frequency (Hz)	50 Hz	60 Hz	50 Hz	60 Hz
	Gear I	97	120	93	112
	Gear II	220	272	167	206
	Gear III	316	390	285	351
Dimension L x W x H (mm)		610 x 600 x 918		688 x 641 x 1145	






III. Installation Attentions

1. Mixers to be located in ventilated place.
2. Please leave reserve space around mixers for installation and operation.
Recommended reserve space: not less than 30cm for above, not less than 10cm for back and sides, enough operating space for front.
3. Keep mixers away from heat, sunlight and moisture.
4. Keep location area smooth and solid for supporting mixers.
5. Separate power supply from sharing.
6. Working condition for mixers is between 5°C (humidity below 90%) - 40°C (humidity below 50%). Mixers should not be working outdoors or in rain.

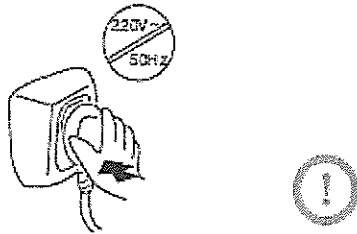
IV. Safety Indications

Dear Customers, please check below for the specification of symbols that appear in this operation manual:

 Prohibition Mark	With the sign any action is to be prohibited, otherwise the product may cause damage or endanger the personal safety of users.
 Warning Mark	With the sign any action should strictly follow the requirements of the operation, otherwise the product may cause damage or endanger the personal safety of users.
 Caution Mark	With the sign any action should be paid attention to, otherwise it will cause product damage because improper operation will cause other losses

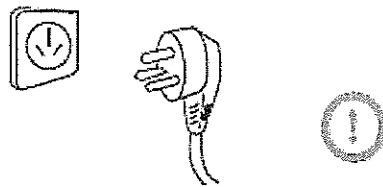
V. Safety Attention

The power parameter please see nameplate. If the voltage range of the power supply is too wide, it may cause the mixer unable to start and the motor burnt. In this case, automatic voltage regulator with big capacity must be installed for support.

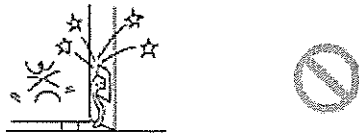


Separate outlet to be used with the guarantee by correct grounding.

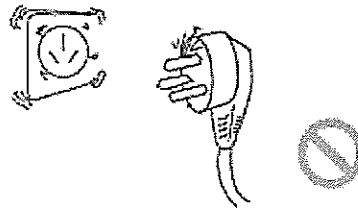
The EM mixers offer a power cord with three-wire (grounded) plug, which is in accordance with the standard of three-wire (grounded) outlet. Do not cut or remove the power cord plug (grounded) in any case. The plug is able to touch the ground when the mixer is installed properly. Warning! The plug should be kept firmly in the socket, otherwise may cause fire.



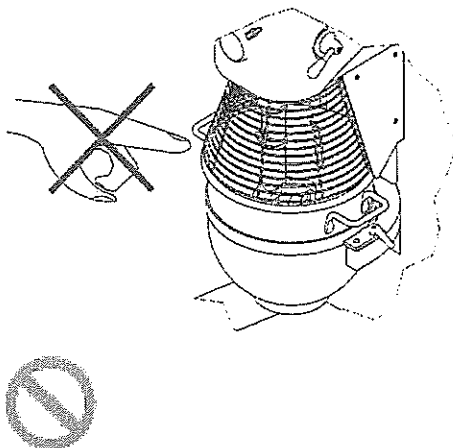
Do not release the plug by pulling the wire. Please release the plug by holding it firmly. Keep the wire free from any extrusion condition. Machine needs to be unplugged before installation or moving.



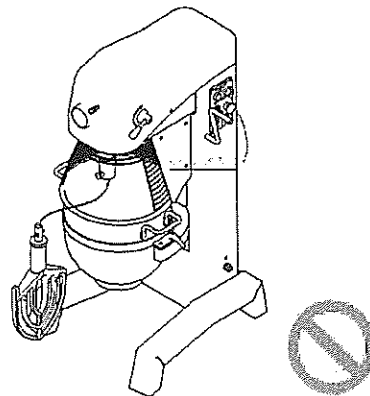
Do not use when wire damaged. The damaged wire must be replaced in professional repairs.



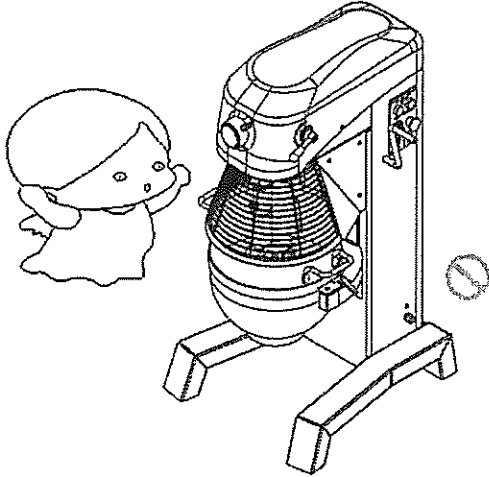
While mixer is running, attempting to put hand(s) or finger(s) into the bucket is strictly prohibited in order to avoid injury.



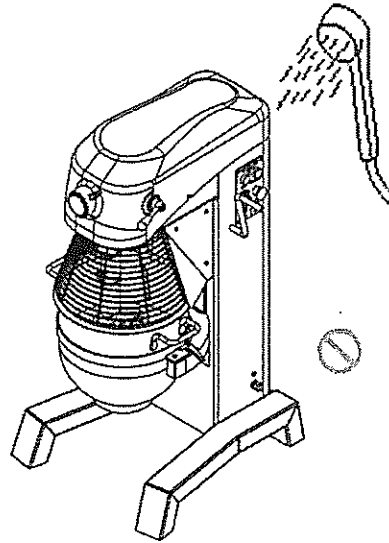
Turn off the power before accessory change to avoid injury.



Keep kids away from mixers for safety consideration.
Keep people with physical defects, Sensory impairments or Mental retardation away for using mixers, unless their safety can be guaranteed with responsibility under supervision and guidance by their guardians.

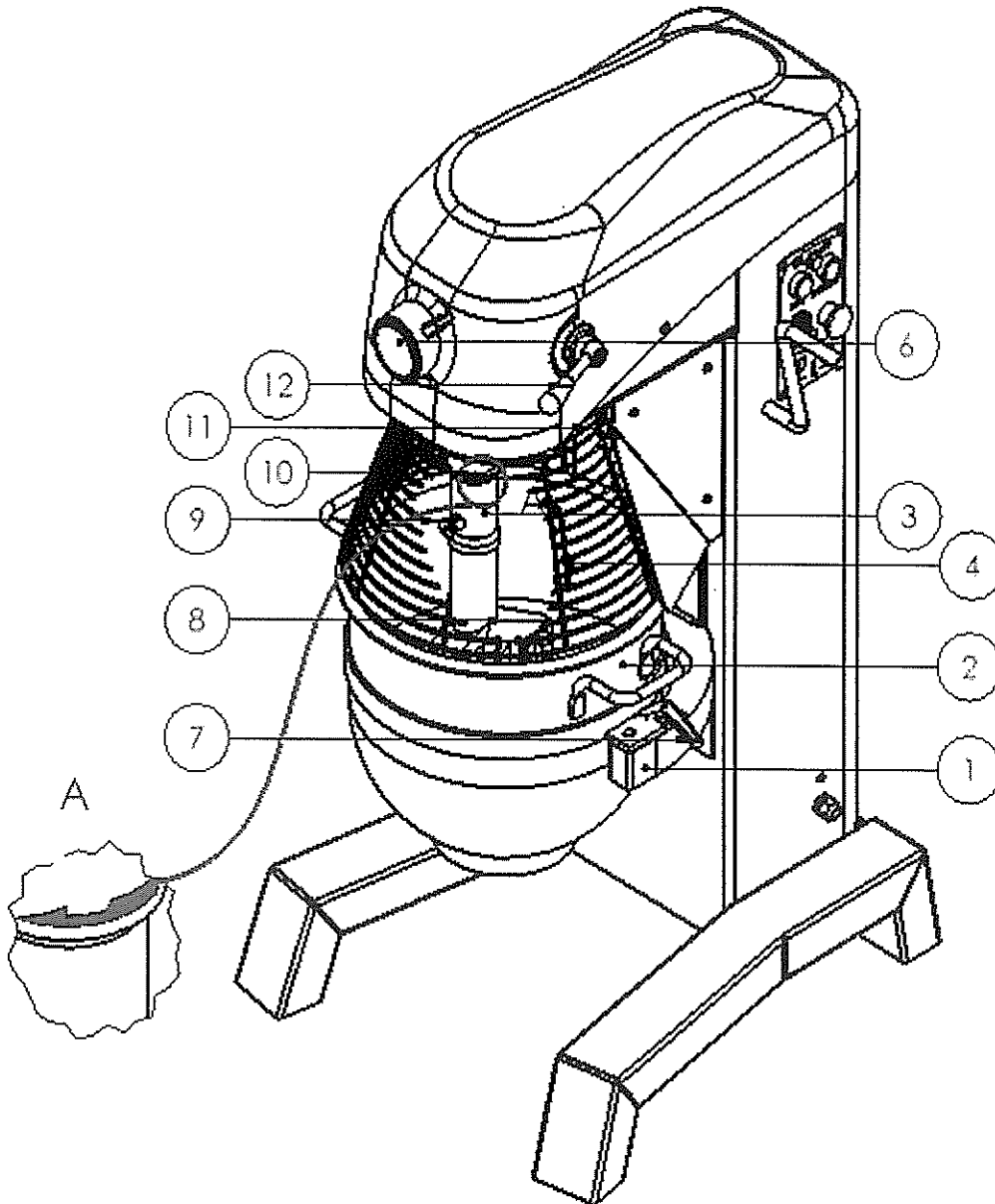


Do not spray wash during cleaning as it will affect the electrical insulation performance, which may cause injury.
Scrub-brush and steel brush are also forbidden for cleaning the mixer to avoid paint damage on the surface of the mixer.



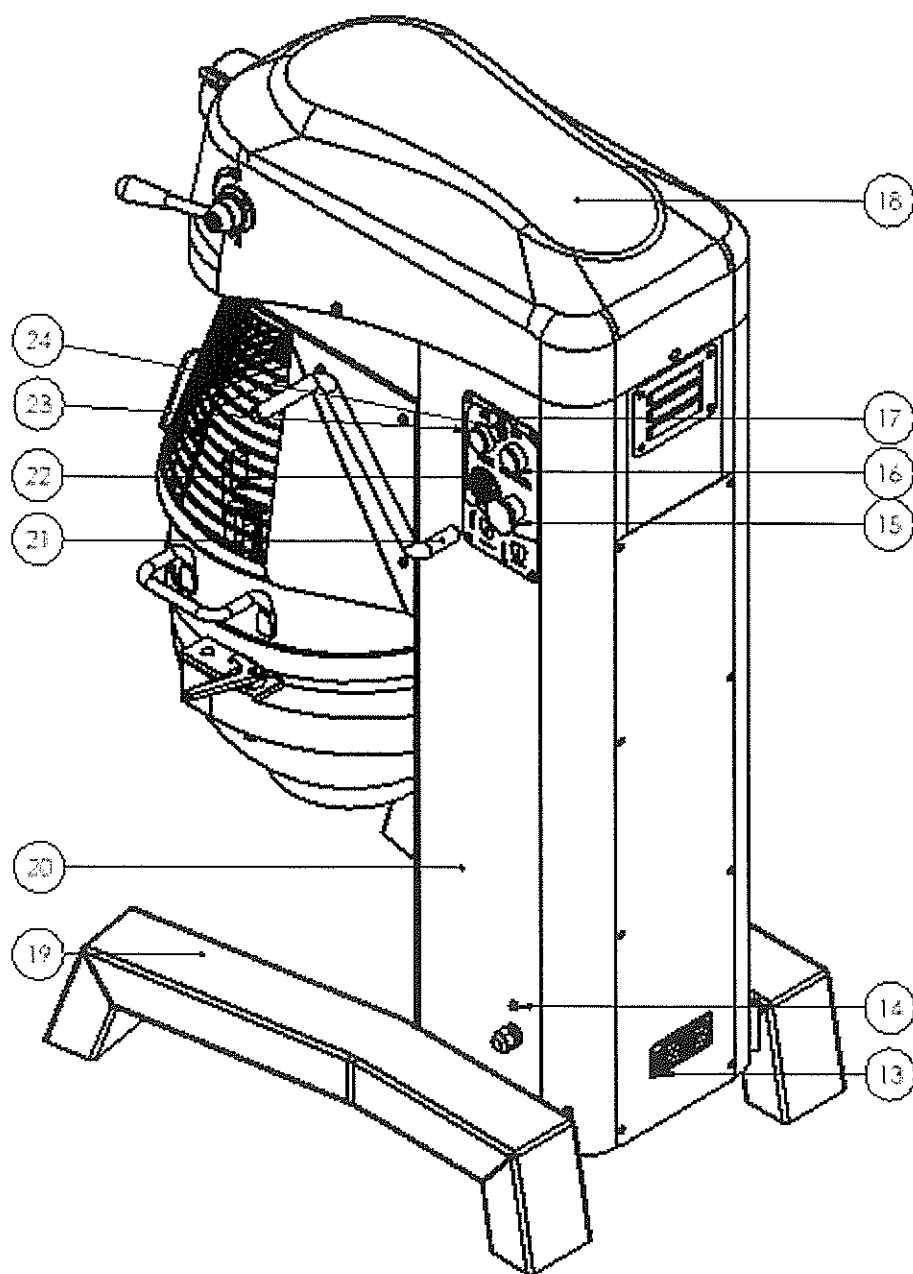
IV. ME20 mixer schematic

1、 Front view



1-Support 2-Stainless steel barrel 3-Stirring shaft 4-Handle 5-Connector for mince processor 6-Press board 7-Mixer 8-Handle for fixate mixer 9-Tool Lock Pin 10-Rotation indication 11-Safety grill 12-Gear change handle

2、 Back view



- | | | | | |
|--------------------|--------------------|-------------------|----------------|---------|
| 13-Nameplate | 14-Overload switch | 15-Emergency stop | | |
| 16-Stop button | 17-Control panel | 18-Cover | 19-Base | 20-Body |
| 21- Lifting handle | 22 -Timer | 23-Start button | 24-Power light | |

VII. Operating Instructions:

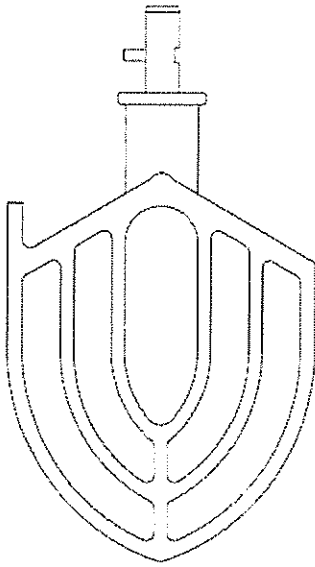
- 1, Power supply to be checked before using to ensure use of the power is in accordance with *13 Parameter badge*. Power outlet must be equipped with a good grounding line for safety.
- 2, Installation of accessory: Use the *21 Lifting handle* to lower the bucket until the lowest point, and fit *8 Mixer* into *3 Stirring shaft*
- 3, Installation of bucket: Use the *21 Lifting handle* to lower the bucket until the lowest point, fit the *2 Barrel* in, and fixate with *7 Press board*
- 4, Transmission Shift: Stop the mixer from running before speed change, and adjust the *12 Gear change handle* to the desired speed location. If the *12 Gear change handle* can not fit properly in position, please turn off the mixer and rotate the *3 Stirring shaft* for assistance.
- 5, Remove the accessory: Use the *21 Lifting handle* to lower the bucket until the lowest point, and pull the *9. Handle for fixate mixer* with one hand and remove *8 Mixer* with the other hand.
- 6, Start operation: After installation of the *2 Barrel* and the *8. Mixer*, put the material for stirring into the *2 Barrel*, and then lift the *2 Barrel* to a fixed position by *21 Lifting handle* (Turn 190 degrees counterclockwise), meanwhile close the *11 Safety grid*. Choose the speed level by turning the *12 Gear change handle* and press the *23. Start button* to start running.
- 7, Safety protection: This mixer is designed with *15 Emergency stop* and *14 Overload switch*. When operator faces special safety problem, *15 Emergency stop* can be pressed for immediate power cut off. The *14 Overload switch* allows the mixer to shut off automatically for the protection of motor when overheat and overload occurs. Under this circumstance, you just need to reduce the load to a normal level and press the *14. Overload switch* for resumption.
- 8, Timing: For convenience, our mixers are equipped with timer with the time range of 0-30 minutes. You can set the timer to by turning *22 Timer* to required minute point and press *23 Start Button* for activation. The mixer will stop working automatically when time is up. If you do

need the function, just adjust 22 *Timer* to marked position “HOLD” in 17. *Control Panel*.

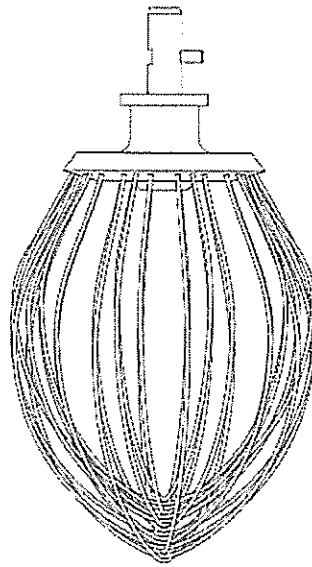
VIII. Accessory Specification

1. Standard Accessories

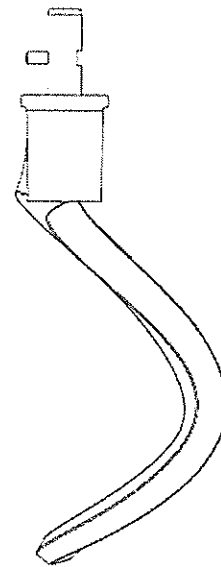
We have prepared 3 kinds of accessories for different food resource as below:



板形搅拌器



球形搅拌器



勾形搅拌器

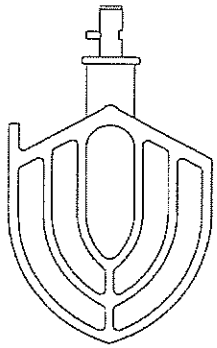
2、Cleaning before operation

Please give a thorough clean to the bucket and accessories before your first use. Please use warm water or neutral detergent for cleaning. Wash with soda solution or acetum to be followed after first cleaning. Final rinse in clean water.



Do not use brush with bristle brush or wire brush. Do not use organic solvent like petrol, acetone for cleaning.

禁止



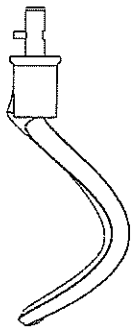
板形搅拌器

3、 Function of accessories

3.1 Beater

The beater is a multi function accessory, with the major functions for crush of potatoes and other vegetables, stirring cake, paste or frozen material.

We recommend Gear I for major operation process. Gear II is only recommended for the ending period of process with no more than 3 minutes for lasting time.



勾形搅拌器

3.2 Hook

The hook is used for kneading and stretching. It is mainly used to stir bread and pizza material. It can also be used for leavened dough.

Recommended speed level is gear I (low speed).



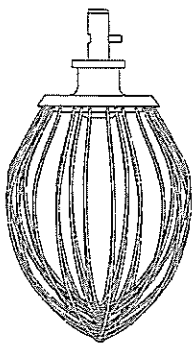
Do not stir highly cohesive material with high speed!

禁止

3.3 Wire whipper

The wire whip can mix into light food material with as much air as possible. It is major used for cheese, egg white, light frozen material and etc.

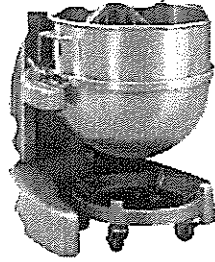
Recommended speed level is gear II (normal speed) and III (high speed).



球形搅拌器

IX. Optional Accessories

Mixers with maximum bucket capacity over 25kg have the option of purchasing supporting transport cart for customer needs. Please find below picture for reference.



transport cart

X. Cleaning

Material left in the mixer bowl can cause corrosion and bacteria growth, so regular cleaning is needed.

1. For safety consideration, please unplug before cleaning.
2. Use soft towel or sponge with warm water for cleaning.(neutral detergent can be used).



Do not use brush with bristle brush or wire brush. Do not use organic solvent like petrol, acetone for cleaning.

禁止

- 3 Please use dry cloth for any water on the surface of the machine.



Please do not use spray wash to avoid effecting insulating property.
Please use dry cloth for cleaning electronic components.

警告

XI. Transportation and storage

1. All mixers from the factory have been packed firmly with wood bars and bolts tightened. Please do not place the mixer during transportation. Do not traverse, press, impact, shake the mixer during

transportation. Do not expose the mixer in the rain. During loading and unloading the angle of inclination should not be over 30 degrees.

2. Mixer should be stored in dry warehouse with good ventilation. Keep away from poison and corrosion.
3. Please place the mixers according to indicative mark.

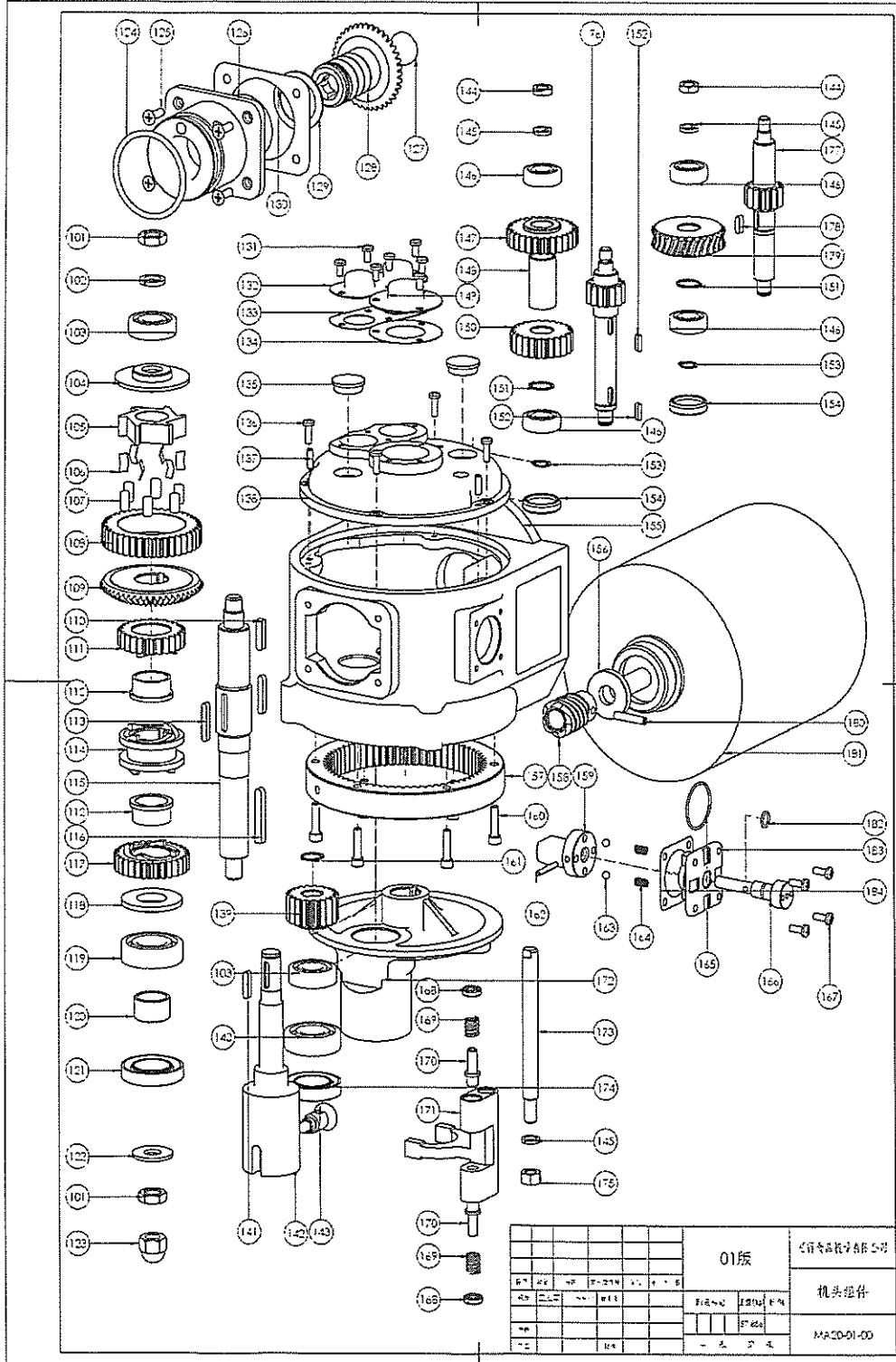
XII. Maintenance

1. In time cleaning of mixer and bucket should be applied after using for food safety.
2. High quality lubrication oil has been applied in the gear box of new mixers, which can ensure a 6 months smooth operation under normal circumstances. If you need to add or change lubrication, please open the top cover and add lubrication from lubrication adding hole.

XIII. Troubleshooting

Problem	Cause	Solution
Mixer shaft failed to activate after mixer turned on	Electrical contact failure	Check electrical contact
Oil leak	Sealing ring wear out	Change sealing ring
Low speed and high temperature of motor	Under voltage	Check voltage
	Overload	Reduce load
	Improper operation	Choose proper operation tool or speed level
Loud noise and high temperature of gear box	Poor lubrication	Add or change lubrication
Accessory scratching bucket	Accessory or bucket deformation	Adjust or change accessory or bucket

XIV. Exploded view



Base assembly E.V. for MA20

Fenghua Founter Food Machinery CO., LTD.

Date:

Version: 01

2015-06-02

Item	FOUNTER part no.	Part Name	QTY/ Unit
101	50304020	Hex nut M14x1.5	2
102	50308008	Spring washer 14	1
103	50301005	Bearing 6203	2
104	40501300	Main shaft oil pad	1
105	40501600	Planetary gear	1
106	40509000	Spring	6
107	50306039	Roller pin 8x15	6
108	40501500	Slow speed gear	1
109	50405135	Bever gear	1
110	50313024	Key C6x25	1
111	40501700	Clutch gear	1
112	50405041	Bushing	2
113	50313020	Flat key 5x32	2
114	40501800	Sleeve clutch	1
115	40501400	Main shaft	1
116	50313026	Key C6x45	1
117	40502000	Clutch gear	1

118	40502100	Washer	1
119	50301007	Bearing 6205	1
120	40502200	Bushing	1
121	50310010	Oil seal	1
122	50405027	Gasket	1
123	50304032	Cap nut M14x1.5	1
124	50399041	O-Ring 55x5G	1
125	50305053	Phillips screws M6x16	4
126	42201100	Attachment hub	1
127	50405075	Level drive gear pad	1
128	50405136	Level drive gear	1
129	50405026	O-Ring	1
130	608034	Gasket	1
131	50305013	Phillips screws M5x10	7
132	50405487	Cover	1
133	608034	Gasket	1
134	608034	Gasket	1
135	50405032	Grease plug	2
136	50305015	Phillips screws M5x16	4
137	50306015	Pin 5x16	2
138	40500700	Cover, gear housing	1
139	40502600	Planetary gear	1

140	50301006	Bearing 6204	1
141	50313019	Flat key 5x22	1
142	42201500	Planetary shaft	1
143	42202600	Agitator Joint Shaft	1
144	50304018	Hex nut M10x1	2
145	50308006	Spring washer 10	3
146	50301003	Bearing 6201	4
147	40501000	Gear	1
148	40500600	Bushing	1
149	50405486	Main shaft cover	1
150	40500500	Gear	1
151	50312006	Shaft circlips 18	2
152	50313013	Flat key 4x14	2
153	50312002	Shaft circlips 12	2
154	40503800	Plug cover	2
155	42201000	Gearbox	1
156	50310002	Oil seal 16x40x6	1
157	40502400	Internal gear	1
158	50405025	Worm wheel	1
159	40502900	Shaft bias	1
160	50303081	Socket head cap screws M6x25	6

161	50312004	Shaft circlips 16	1
162	50306003	Pin 4x30	1
163	50399006	Steel Ball	2
164	50406021	Spring	2
165	50399049	Sealing O-Ring 33.5x1.8G	1
166	42200900	Handle shaft	1
167	50305014	Phillips screws M5x12	4
168	50405064	Adjusting screw	2
169	50406021	Spring	2
170	50405029	Pin shaft	2
171	40503600	Fork	1
172	40502700	Shaft holder	1
173	40503500	Fork shaft	1
174	50310008	Oil seal 28x47x10	1
175	50304006	Nut M10	1
176	40501100	Mid-gear wheel	1
177	40500900	Shaft worm gear	1
178	50313015	Flat key 5x14	1
179	40500800	Worm Gear	1
180	50306009	Pin 6x30	1
181	50501186	Motor	1
	50501187	Motor	1

	50501188	Motor	1
	50501189	Motor	1
182	50399050	Sealing O-Ring 9x1.8G	1
183	40503100	Handle seat	1
184	608034	Gasket	1

XV. Illustrated wiring diagram

XVI. Packing list

Name		Qty	Remarks
Major	Mixer	1	
Accessories	Wire whipper	1	
	Beater	1	
	Hook	1	
	User Manual	1	
Please contact the sales when finding item missing checking from packing list. Please keep the package carefully for future use.			