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EM20 - EM30

Product / Produit: _____

Serial number / Numéro de série: _____



EM Series Planetary Mixer User Manual

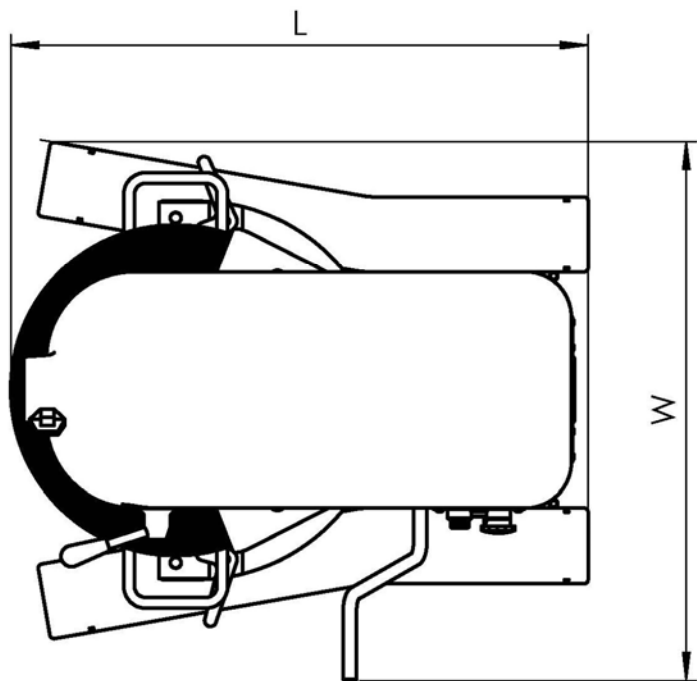
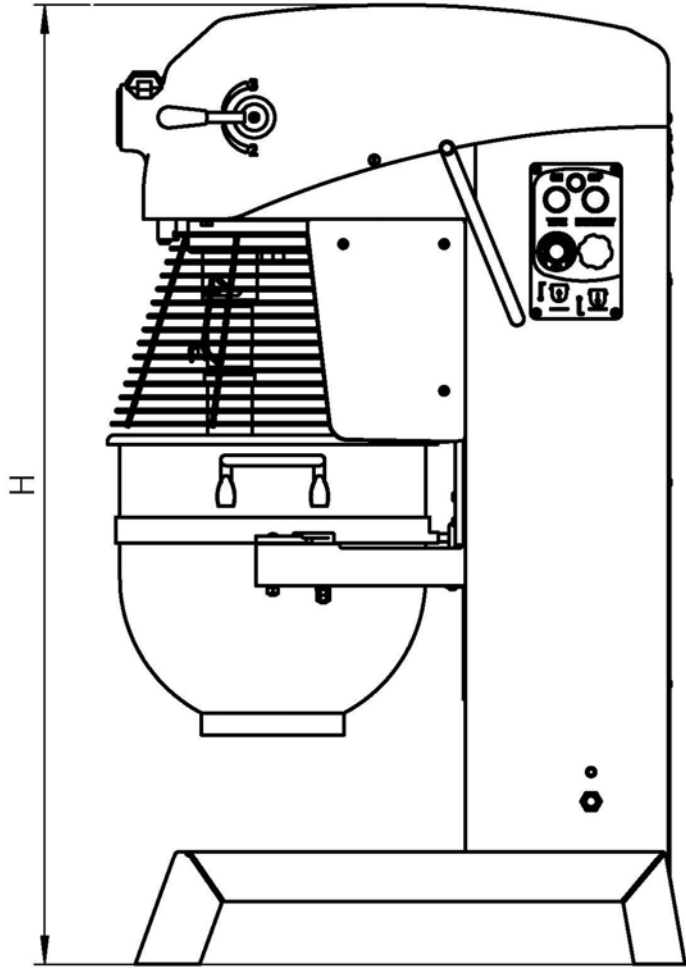
Thank you for choosing our product. Please read this manual carefully before using for better understanding of operation. Please retain this manual for future reference.

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 Attentions

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.



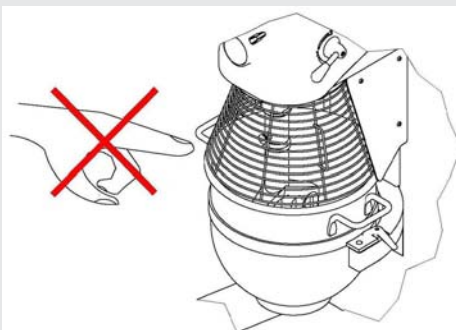
Do not release the plug by pulling the wire. Please release the plug by holding it firmly. Keep the wire free from any extrusion condition. Machine needs to be unplugged before installation or moving.



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



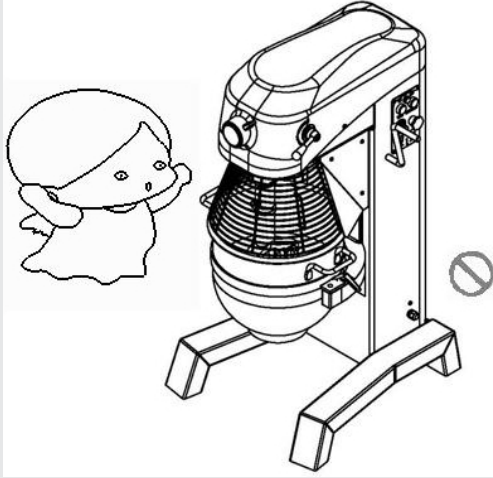
While mixer is running, attempting to put hand(s) or finger(s) into the bucket is strictly prohibited in order to avoid injury.



Turn off the power before accessory change to avoid injury.



Keep kids away from mixers for safety consideration.



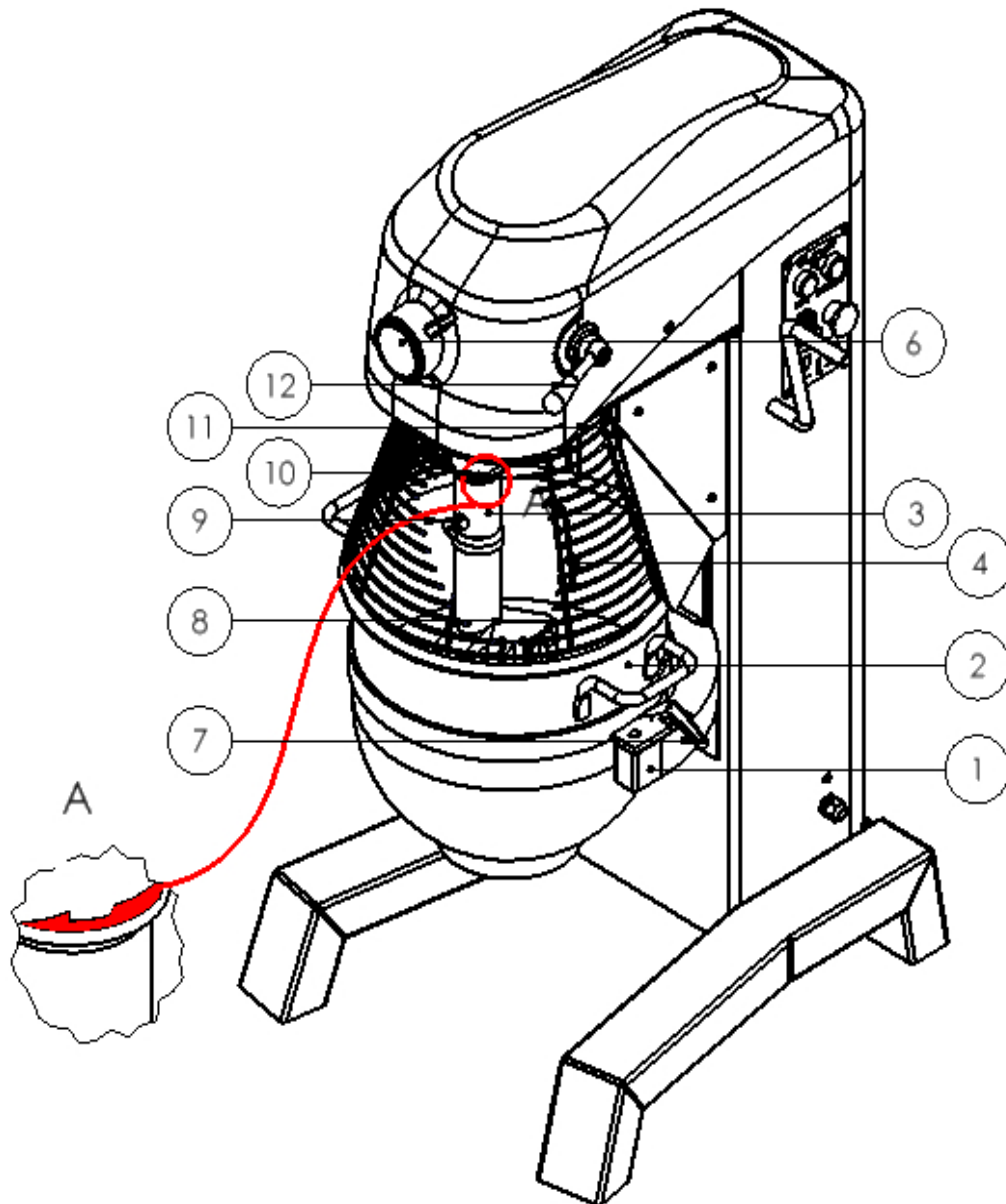
Do not spray wash during cleaning as it will affect the electrical insulation performance, which may cause injury.

Scrub-brush and steel brush are also forbidden for cleaning the mixer to avoid paint damage on the surface of the mixer.



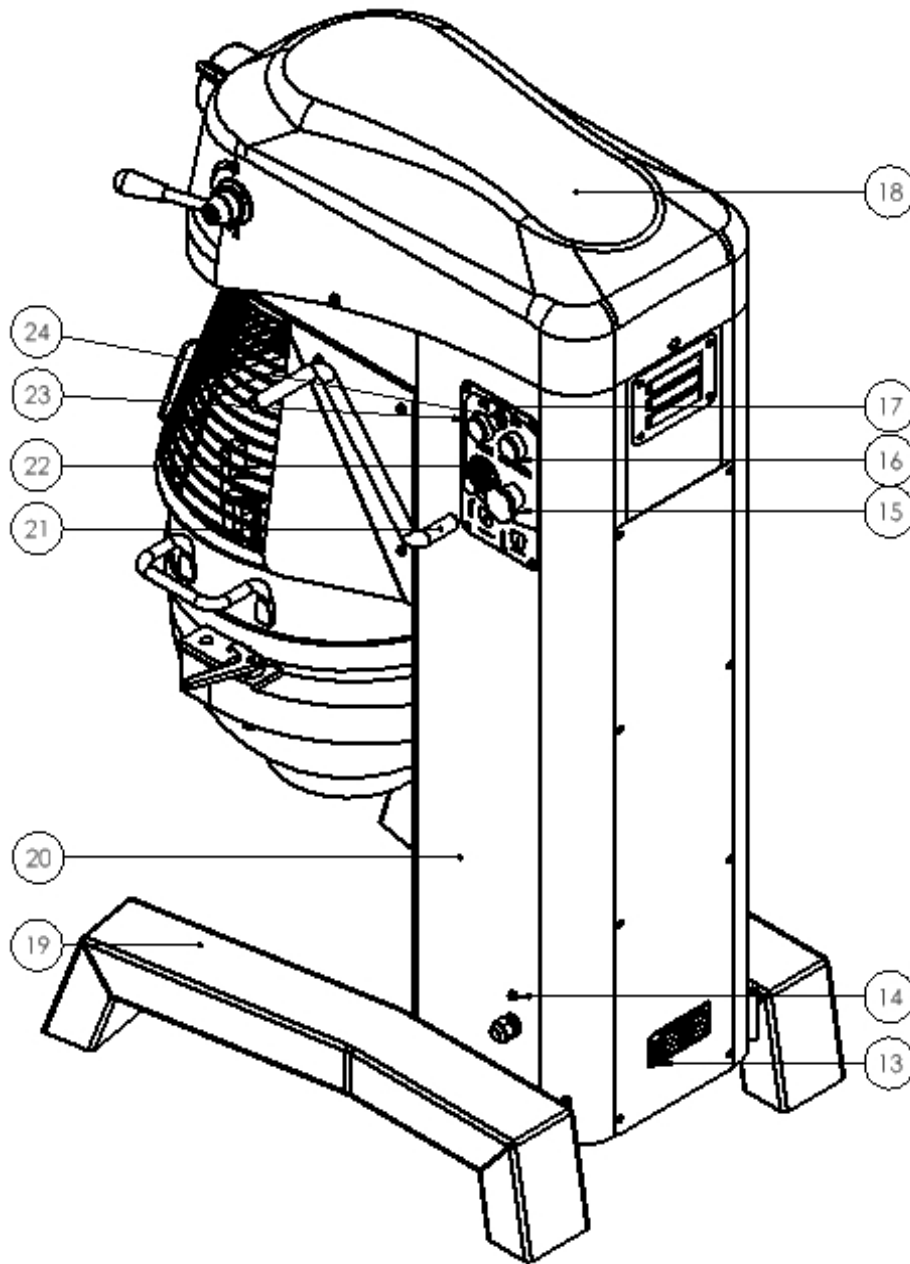
IV. ME20 mixer schematic

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:

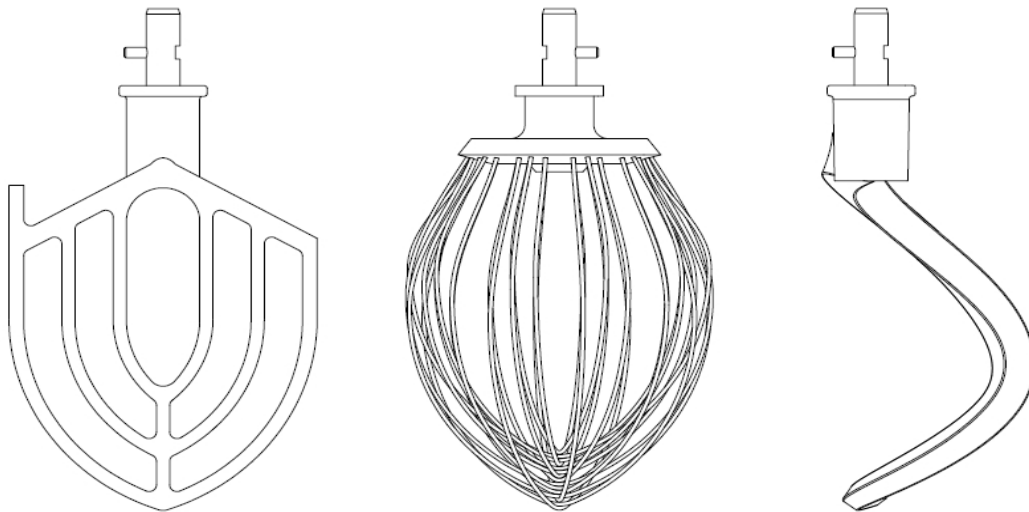
- 1, Power supply to be checked before using to ensure use of the power is in accordance with *13 Parameter badge*. Power outlet must be equipped with a good grounding line for safety.
- 2, Installation of accessory: Use the *21 Lifting handle* to lower the bucket until the lowest point, and fit *8 Mixer* 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

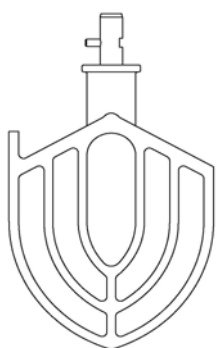
We have prepared 3 kinds of accessories for different food resource as below:



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.



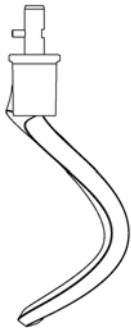
3. Function of accessories

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.



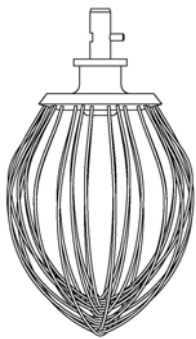
3.2 Hook

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!



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).

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.

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.

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.

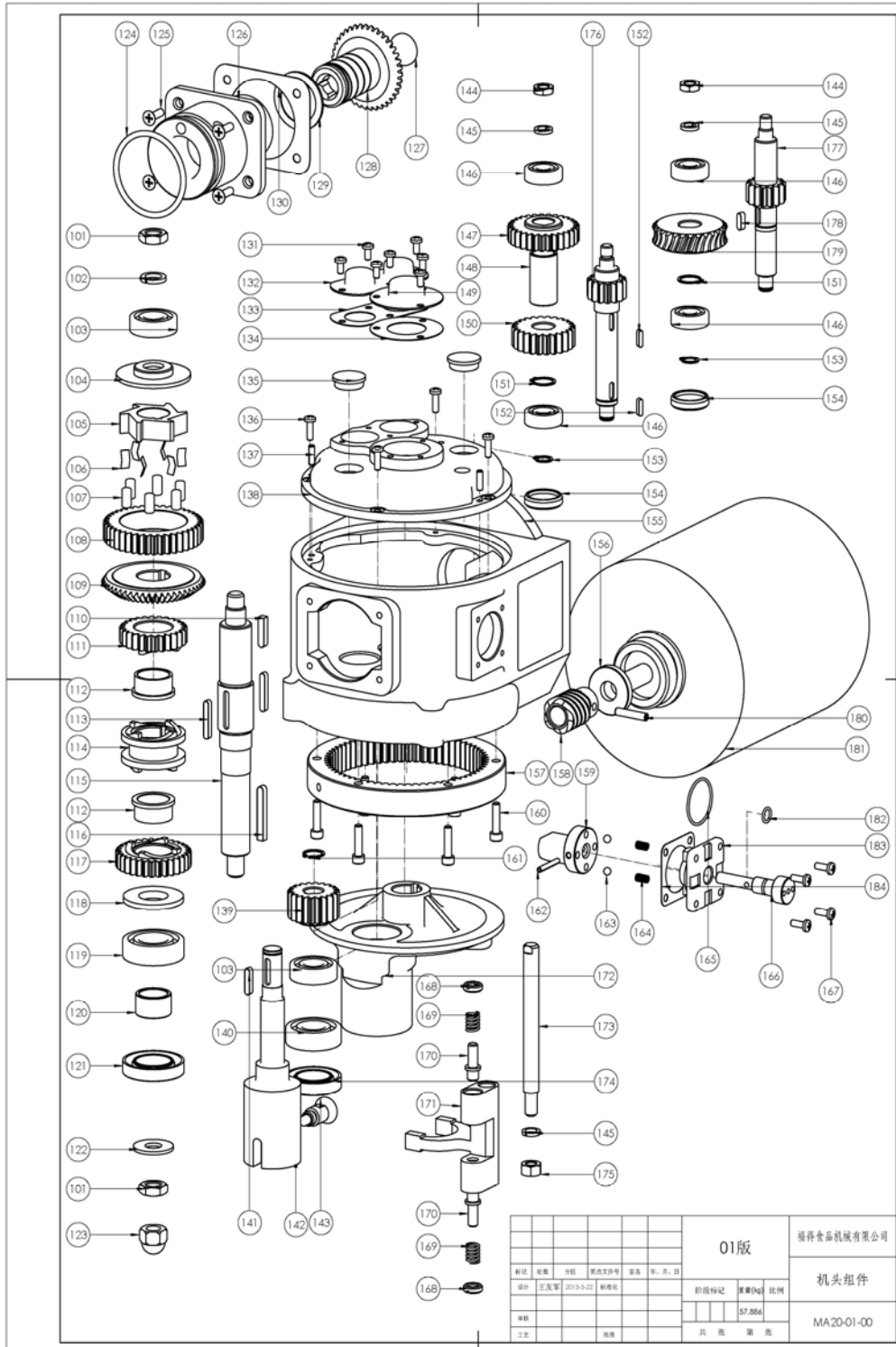
XII. Maintenance

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 EM20

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. | | | |