



Gear Driven 60 Qt. Commercial Mixer

Models: MX60

Shifting gears while this unit is running will void warranty.

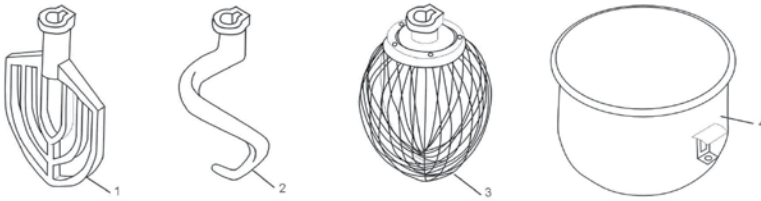
11/2015

Please read and keep these instructions. Indoor use only.

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Standard Accessories



Item	Description	Qty
1	Flat Beater	1
2	Dough Hook	1
3	Wire Whip	1
4	Bowl	1

NOTES:

- Any agitator is easily installed by simply raising it onto the mixing axle, and then rotating it clockwise on the shaft until it locks into place. To remove, raise the agitator on the shaft until it clears the lock and then rotate counter-clockwise and lower.
- All of the accessories are precisely fitted to the bowl, have rounded corners, and are easily removed for cleaning.

Operation Instructions



Please ensure that your power supply matches your machine

This mixer does not come with a plug and must be hard wired. Consult a professional Electrician for installation.



For changing the speed: Please stop machine first before changing speed in order to avoid damage to the gear box. Also make sure that the bowl is in fully lifted position and the guard is closed.

- Slow Speed is the middle, dough hook setting. The knob will be facing forward.
- Medium Speed is the bottom, flat beater setting. The knob will be straight down.
- High Speed is the top, whisk setting. The knob will be straight up.

Mixing: Always use the correct attachment for the job.



A. Wire Whip: Suitable for mixing liquids and soft ingredients, can work in all speeds. Do not run for more than 15 minutes.



B. Flat Beater: Suitable for mixing dry ingredients, can work in low & medium speeds only. Do not use in high speed. Do not run for more than 15 minutes.



C. Dough Hook: Suitable for mixing dough, can work in low & medium speeds only. Do not use in high speed, do not run for more than 20 minutes. Absorption ratio must be more than 50%. Refer to mixer capacity chart.

Mixer Capacity Chart

Product	Agitator and Speed	Maximum Bowl Capacity 30 qt.
Bread and Roll Dough -60 % AR	Dough Hook - 1st only	90 lbs.
Heavy Bread Dough -55% AR	Dough Hook - 1st only	70 lbs.
Pizza Dough, Thin -40% AR	Dough Hook - 1st only	40 lbs.
Pizza Dough, Medium -50% AR	Dough Hook - 1st only	60 lbs.
Pizza Dough, Thick -60% AR	Dough Hook - 1st only	70 lbs.
Raised Donut Dough -65% AR	Dough Hook - 1st and 2nd	40 lbs.
Mashed Potatoes	Flat Beater	45 lbs.
Waffle or Hot Cake Batter	Flat Beater	24 qt.
Egg Whites	Wire Whisk	3 qt.
Whipped Cream	Wire Whisk	3 qt.
Cake Batter	Flat Beater	60 lbs.

When mixing dough (pizza, bread or bagels), check your "AR" absorption ratio - water weight divided by flour weight. Above capacities based on 12% flour moisture at 70°F water temperature. If high gluten flour is used, reduce above dough batch size by 10%.

Example: If recipe calls for 5 lbs. of water and 10 lbs. of flour, then $5 \div 10 = 0.50 \times 100 = 50\% \text{AR}$.

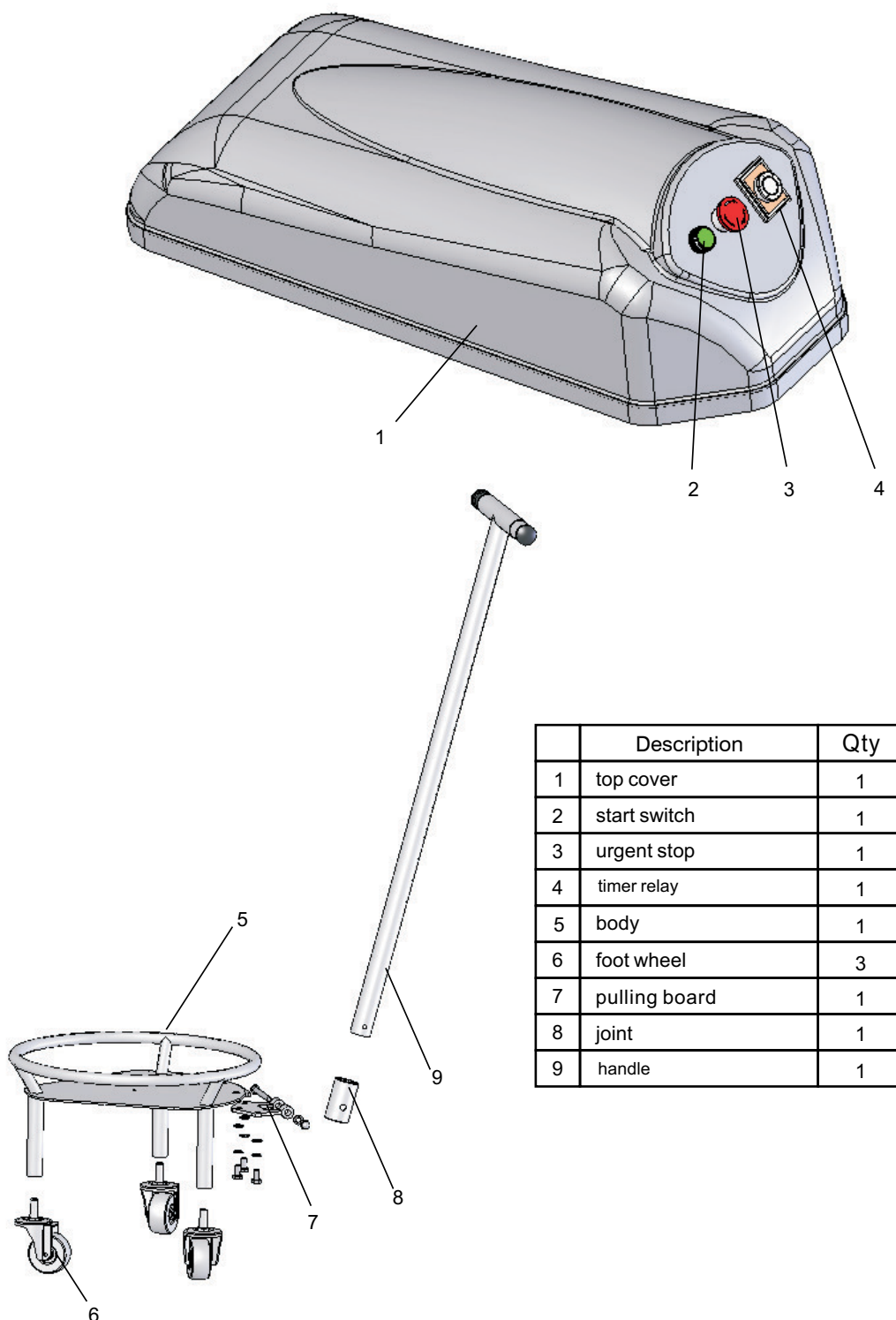
- 2nd Speed should never be used on mixtures with less than 50% AR.
- Do not use attachments on hub while mixing.

When calculating the correct size mixer for your application, here are some helpful weights & measures:

- **8.3 lbs. = 1 gallon of water – 2.08 lbs. = 1 Quart.**

TOP COVER AND HAND CART

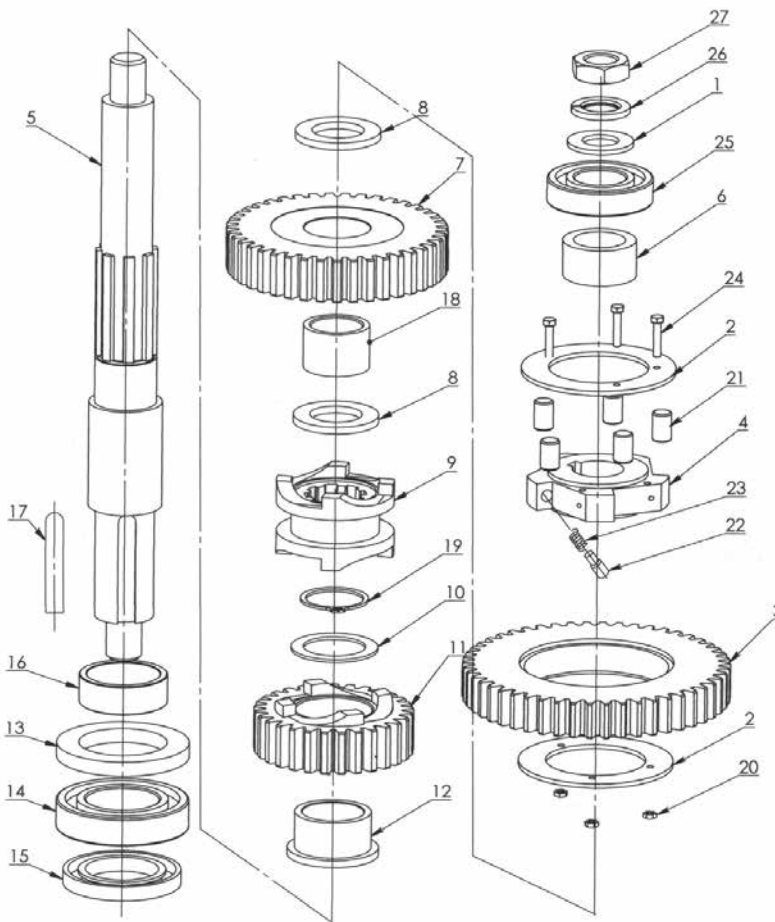
Figure 1



	Description	Qty
1	top cover	1
2	start switch	1
3	urgent stop	1
4	timer relay	1
5	body	1
6	foot wheel	3
7	pulling board	1
8	joint	1
9	handle	1

CENTER AXLE

Figure 2



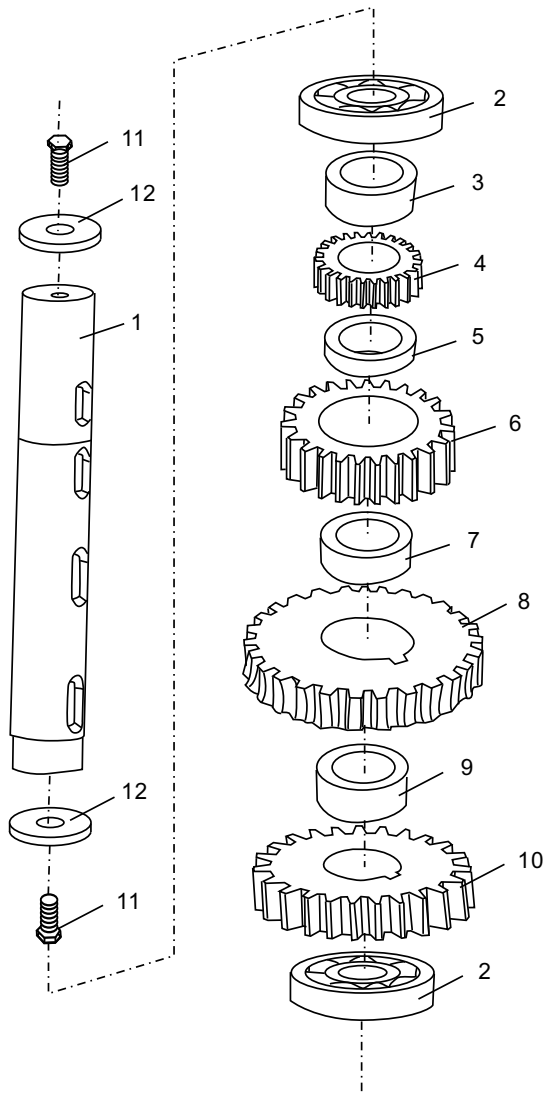
	Description	Qty
1	Center axle roundlet board	1
2	Up board	2
3	Gear ring	1
4	Engager	1
5	Center axle	1
6	Center axle ring	1
7	Mid-speed passive gear	1
8	Gasket	1
9	Small join	1
10	Small join gasket	1
11	High-speed passive gear	1
12	Gigh-speed passive copper	1
13	Oil seal 60*90*10	1
14	Bearing 6210	1
15	Oil seal 50*80*10	1
16	Ring for center axle	1
17	Key 12*8*60	1
18	Mid-speed passive gear copper	1
19	Ring for axle $\phi 42 \times 1.5$	1
20	Nut M4	3
21	Roller	5
22	Roller withstand	5
23	Spring $\phi 8 \times 1 \times 18$	5
24	Screw M4*30	3
25	Bearing 6207	1
26	Spring gasket $\phi 24$	1
27	Nut M24	1

NOTES: ➤ Be sure that the keys are inserted for each gear.

➤ Check oil seal (15), if serious oil leaks from drip cup.

GEAR AXLE

Figure 3



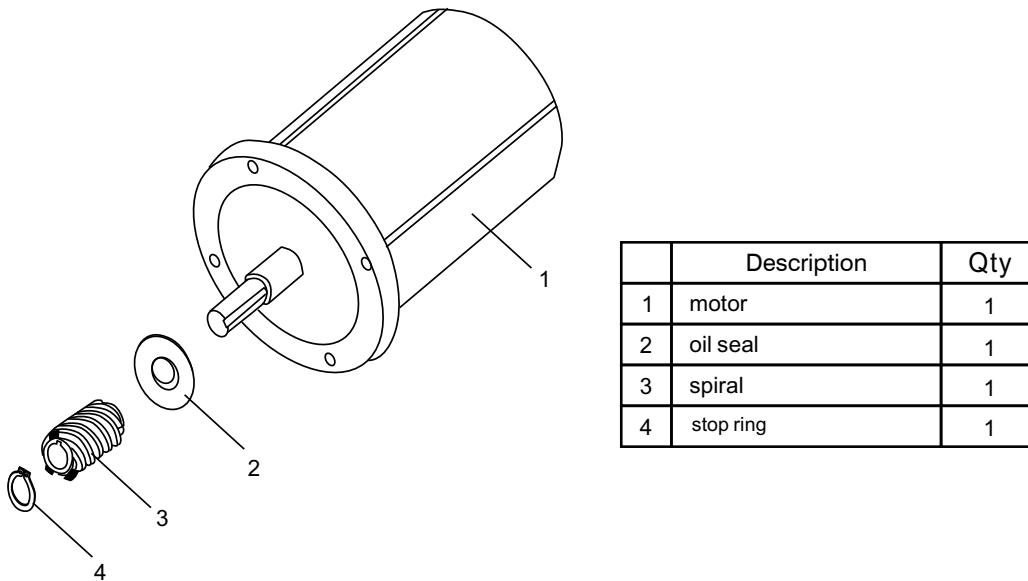
	Description	Qty
1	Axle	1
2	Bearing 80207	2
3	Sleeve	1
4	Gear	1
5	Sleeve	1
6	Gear	1
7	Sleeve	1
8	Gear	1
9	Sleeve	1
10	Gear	1
11	Screw M10*20	2
12	Gasket	2

NOTES:

- Be sure that the keys are inserted for each gear.

MOTOR

Figure 4

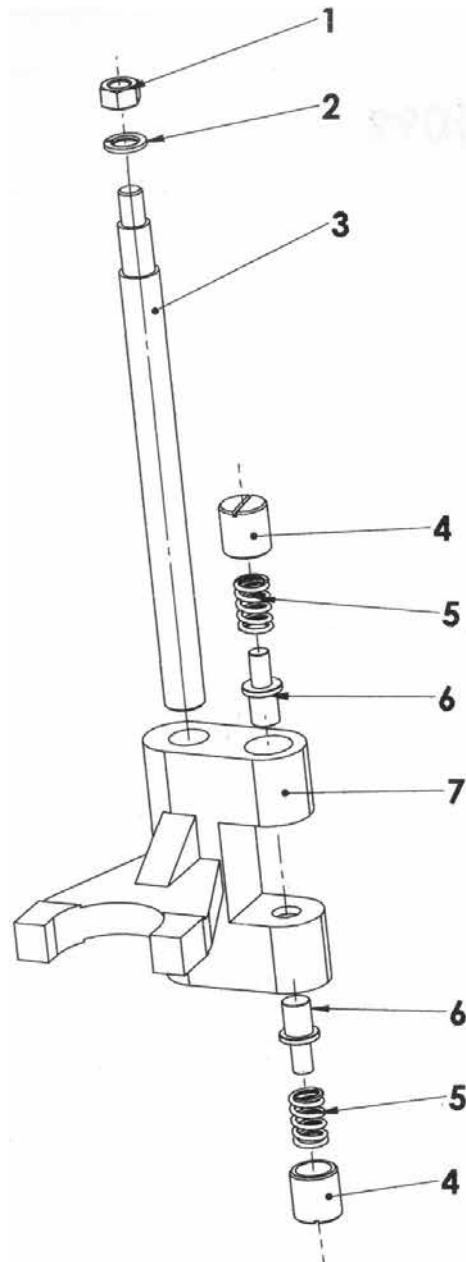


NOTES:

If the motor does not work, first verify that the power source and connection are correct. Next, check for damaged or faulty wiring or connections inside of the mixer. A non-functioning mixer may be the result of inappropriate voltage, broken wires, a defective capacitor or a defective centrifugal governor. Motor damage may also be caused by bowl overload during mixing.

FORK

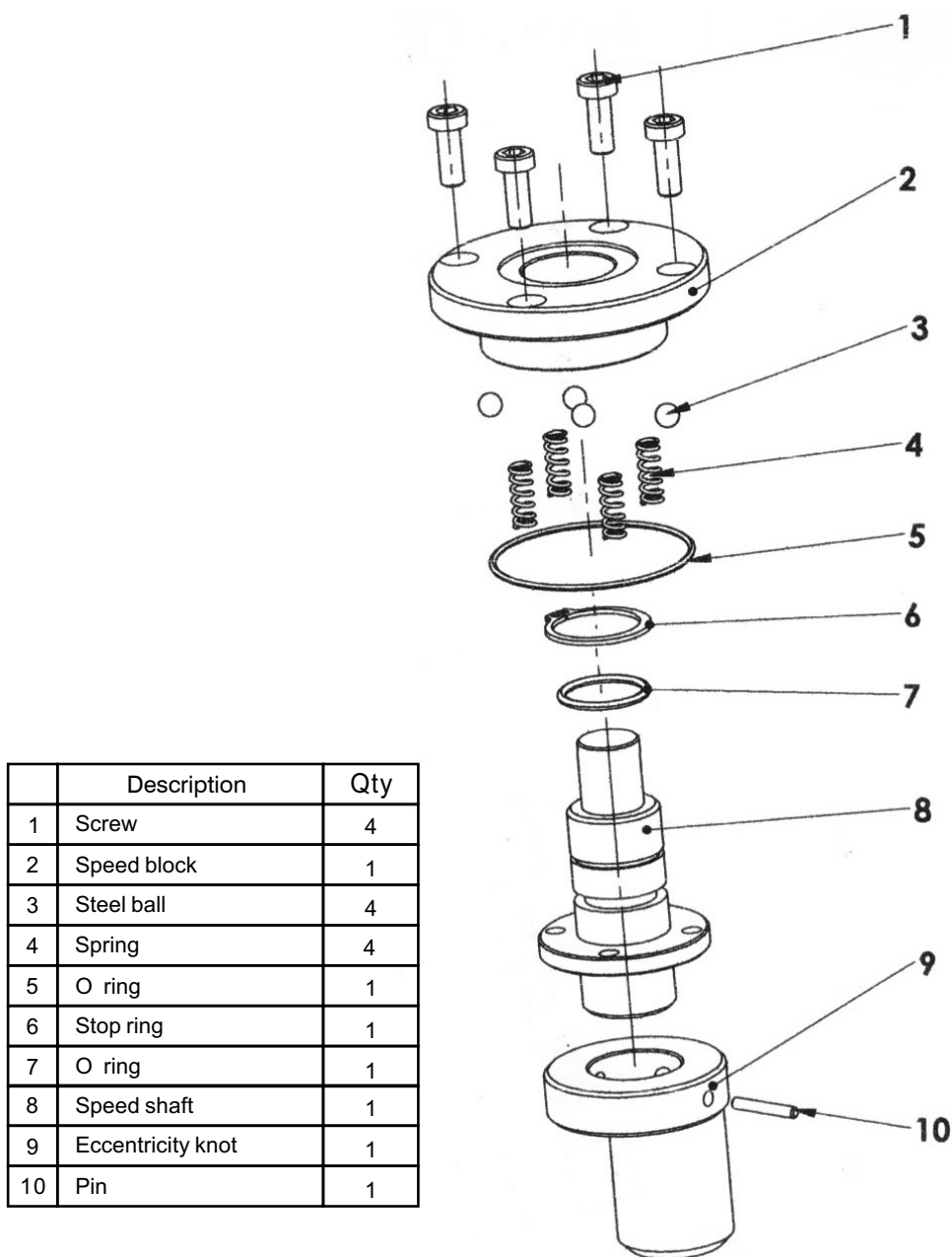
Figure 5



	Description	Qty
1	Nut	1
2	Spring gasket	2
3	Fork axle	1
4	Fork nut	2
5	Fork spring	2
6	Fork small axle	2

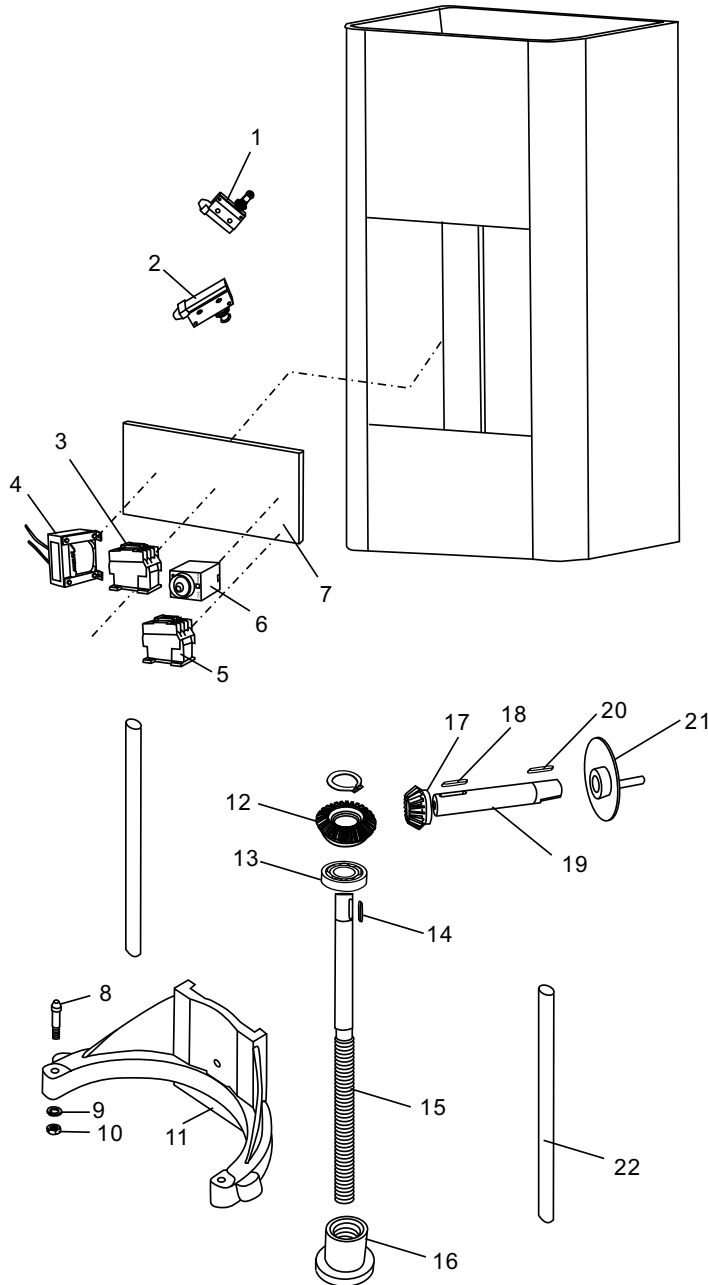
SPEED BLOCK

Figure 6



BOWL LIFTER UNIT

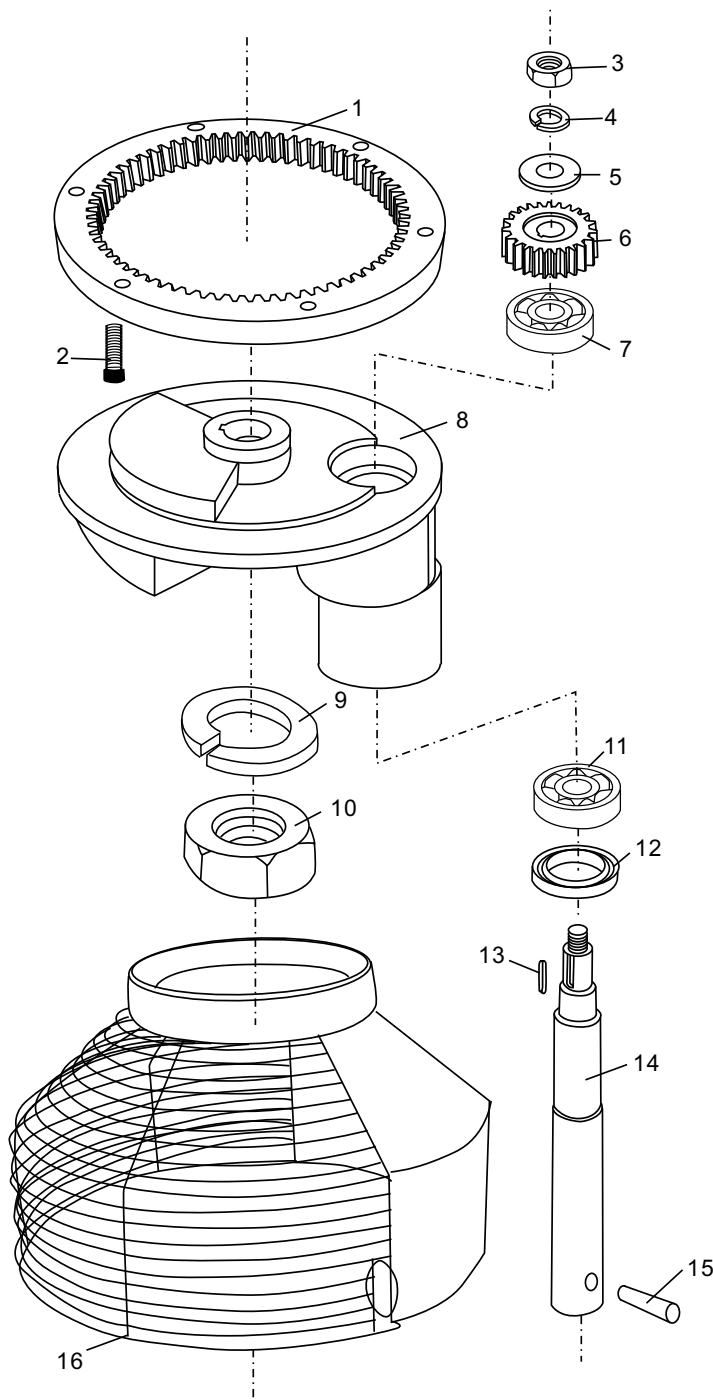
Figure 7



Item	Description	Qty
1	safety covering switch	1
2	fluctuate safety switch	1
3	AC contact device	1
4	reactor	1
5	AC contact device	1
6	timer relay	1
7	board	1
8	screw	2
9	ring	2
10	nut	2
11	arm	1
12	gear	1
13	bearing	1
14	key	1
15	thread bar	1
16	nut	1
17	gear	1
18	key	1
19	handle axle	1
20	key	1
21	handwheel	1
22	arm lead pole	2

TURNING PLATE AND MIXING AXLE

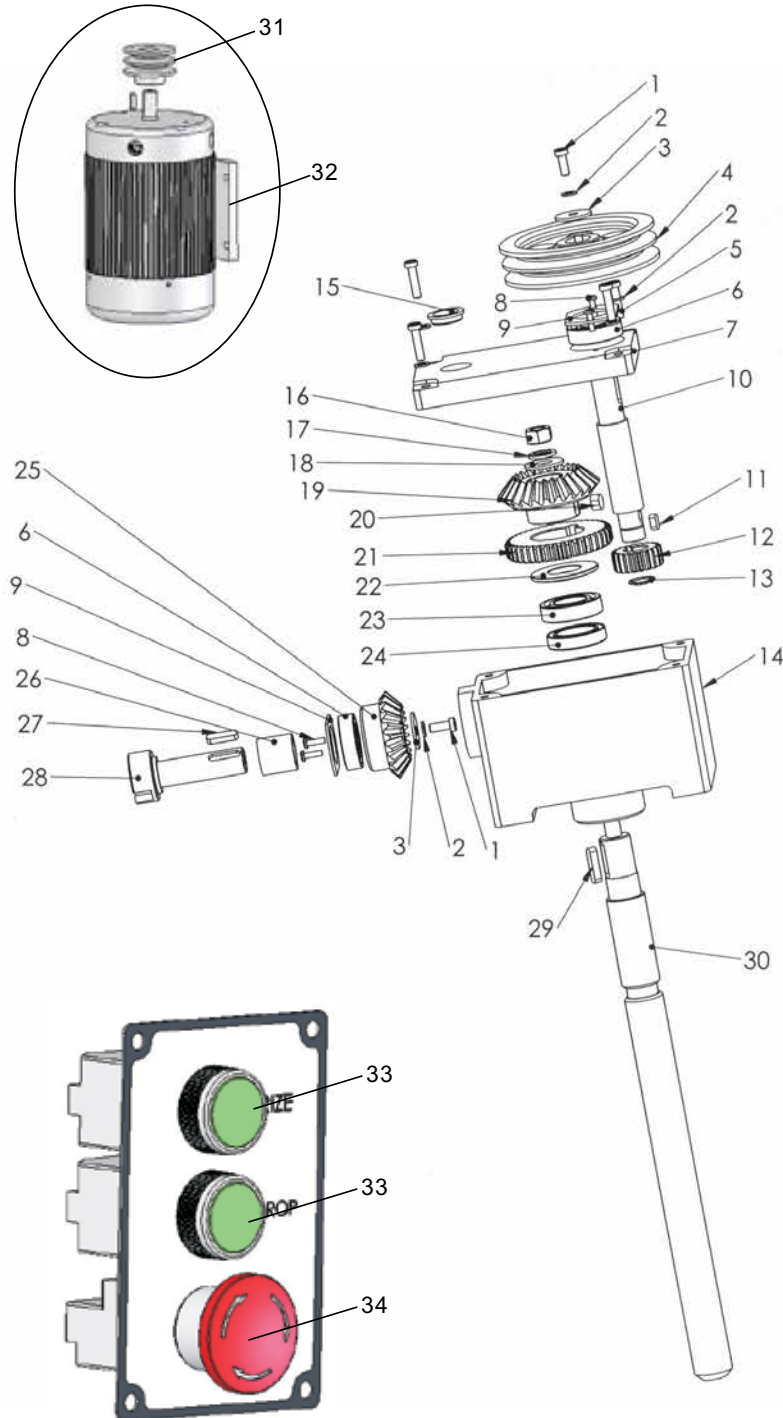
Figure 8



	Description	Qty
1	Inner gear	1
2	Screw	6
3	Nut	1
4	Spring gasket	1
5	Gasket	1
6	Plantaty gear	1
7	Bearing	1
8	Turning plate	1
9	Spring gasket	1
10	Nut	1
11	Bearing	1
12	Oil seal	1
13	Key	1
14	Mixing axle	1
15	Pin	1
16	Safety net	1

ELECTROMOTION TYPE BOWL LIFTER UNIT

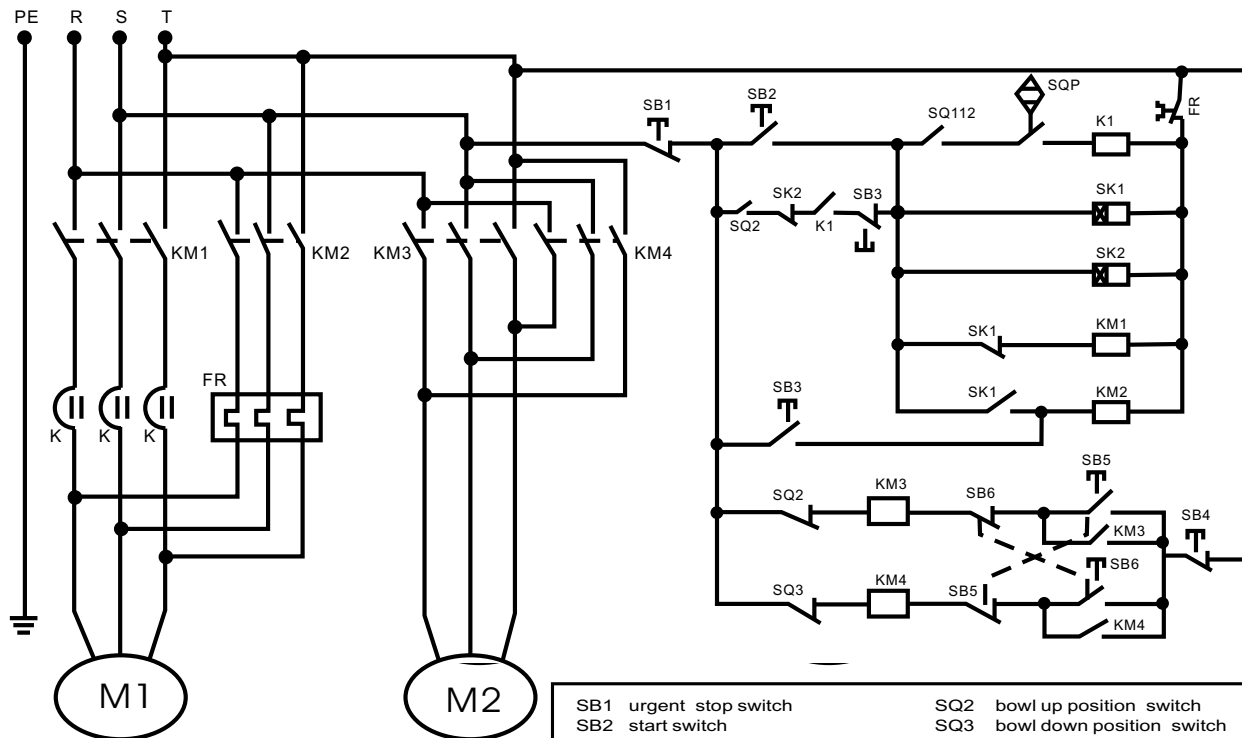
Figure 9



	Description	Qty
1	Screw M6*16	2
2	Spring gasket 6	4
3	Gasket	2
4	Lift big belt wheel	1
5	Screw M6*25	2
6	Bearing 6004	2
7	Lift gear box cover	4
8	Screw M4*14	2
9	Bearing cover	2
10	Motor transmission axle	1
11	Key 5*12	1
12	Gear	1
13	Stop ring 18	1
14	Lift gear box	1
15	Oil cover	1
16	Nut M12	1
17	Spring gasket 12	1
18	Gasket	1
19	Lift big taper gear	1
20	Key 8*12	1
21	Gear	1
22	Gear gasket	1
23	Bearing 6005	1
24	Oil seal 30*45*10	1
25	Lift small taper gear	1
26	Ring	1
27	Key 6*25	1
28	Lift wheel axle	1
29	Key 6*28	1
30	Lift thread bar	1
31	Lift motor belt wheel	1
32	Lift motor	1
33	Switch	2
34	Urgent switch	1




THREE PHASE MOTOR DIAGRAM

Figure 9



SB1	urgent stop switch	SQ2	bowl up position switch
SB2	start switch	SQ3	bowl down position switch
SB3	inching switch	KM1	mixer reduction voltage AC contact device
SB4	bowl stop switch	KM2	mixer running AC contact device
SB5	bowl rise switch	FR	relay
SB6	bowl drop switch	KM3	bowl rise AC contact device
K1	relay	KM4	bowl drop AC contact device
SK1	30S timer	K	reactor
SK2	30M timer	M1	motor
SQP	proximity switch	M2	lift motor
SQ1	safety protect switch		

SPECIFICATIONS

Type	MX60
Capacity (Qt)	60
Power Supply (V)	220-240
Input Power (W)	2300
Mixing Speed (r.p.m.)	 98
	 186
	 98
Max Flour Capacity (kg)	21
HP	3

Troubleshooting

Trouble	Possible Causes	Solution
The axles can't work when operating the machine	Poor contact of the electrical equipment	Check the Plug
The mixing bowl is out of position	Moving direction is not correct	Change
Leaks oil	Sealing washer is damaged	Change
Difficult to move the bowl up and down	Slideway is rusted	Clean the slideway and lubricate
The motor is overheated and speed is down	The voltage is not enough, or incorrect speed	Check the voltage or use lower speed
Noise and overheating	Poor lubrication	Add or change lubrication
Mixer touches bowl	The mixing device or bowl deformed	Repair or change the bowl or mixing device

Limited Warranty

All equipment, which is sold under Avantco trademark and used for commercial purpose is warranted against defects in materials and workmanship. The warranty runs for one year from the date of original installation and is for the benefit of the original purchaser only. All other Warranties, Expressed or Implied, Statutory or Otherwise, including Without Limitation any implied Warranty of Merchantability or Fitness for Purposes are excluded. The Seller shall in no event be liable for direct, indirect or consequential damages in connection with Avantco commercial products.

This warranty is not effective if damage occurs because of accident, carelessness, improper installation, lack of proper set – up, supervision when required or if the equipment is installed or operated in any manner contrary to the installation and operating instructions. In these cases, repairs will be made at a reasonable cost. Work performed by unauthorized personnel or unauthorized service agencies voids this Warranty.

Items not covered under warranty:

Changing Gears on the Mixers while Unit is Running and Overloading as Determined by an Approved Certified Technician.

This warranty does not apply to, and Avantco is not responsible for, any warranty claims made on products sold or used outside of the United States.