EQUIPMENT AVANTCO

User Manual

Gear Driven 60 Qt. Commercial Mixer

Models: MX60

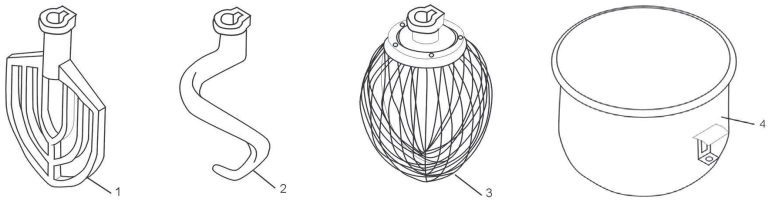
Shifting gears while this unit is running will void warranty.

02/2022

Please read and keep these instructions. Indoor use only.

Index

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 the 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.

Unpacking the Equipment and Initial Setup

Carefully remove crating or packaging materials from the equipment. Models shipped on pallets are bolted to the pallet. Bolts must be removed to safely separate the equipment from the pallet. Place the equipment on a flat surface with sufficient space around the mixer to allow for safe cleaning and service.

This product must be hardwired; it does not plug into a standard wall outlet. Have a licensed electrician connect the unit to the power supply.

INSTALLATION:

1. Read this manual in its entirety prior to installation and operation. DO NOT install if you do not understand everything in this manual.

2. Select a location for the mixer keeping in mind that:
- Surface must be level
- Location should be accessible for maintenance and service
- Location should offer adequate clearance for installing and removing agitators, bowls or attachments
- Location offers sufficient space for adding ingredients to the mixer
- Make sure that the rear ventilation outlet of the mixer is not blocked

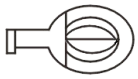
Operation Instructions

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.

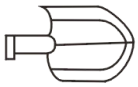
For changing the speed: Please stop machine first before changing speed in order to avoid damage to the gear box. Also make sure that the bowl is in fully lifted position and the guard is closed.

- 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
Bread and Roll Dough -60 % AR	Dough Hook - 1st only	50 lb.
Heavy Bread Dough -55% AR	Dough Hook - 1st only	40 lb.
Pizza Dough, Thin -40% AR	Dough Hook - 1st only	25 lb.
Pizza Dough, Medium -50% AR	Dough Hook - 1st only	35 lb.
Pizza Dough, Thick -60% AR	Dough Hook - 1st only	40 lb.
Raised Donut Dough -65% AR	Dough Hook - 1st and 2nd	25 lb.
Mashed Potatoes	Flat Beater	35 lb.
Waffle or Hot Cake Batter	Flat Beater	20 qt.
Egg Whites	Wire Whisk	2 qt.
Whipped Cream	Wire Whisk	6 qt.
Cake Batter	Flat Beater	35 lb.

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 lb. of water and 10 lb. of flour, then 5 divided by 10 = 0.50 x 100 = 50 %AR.

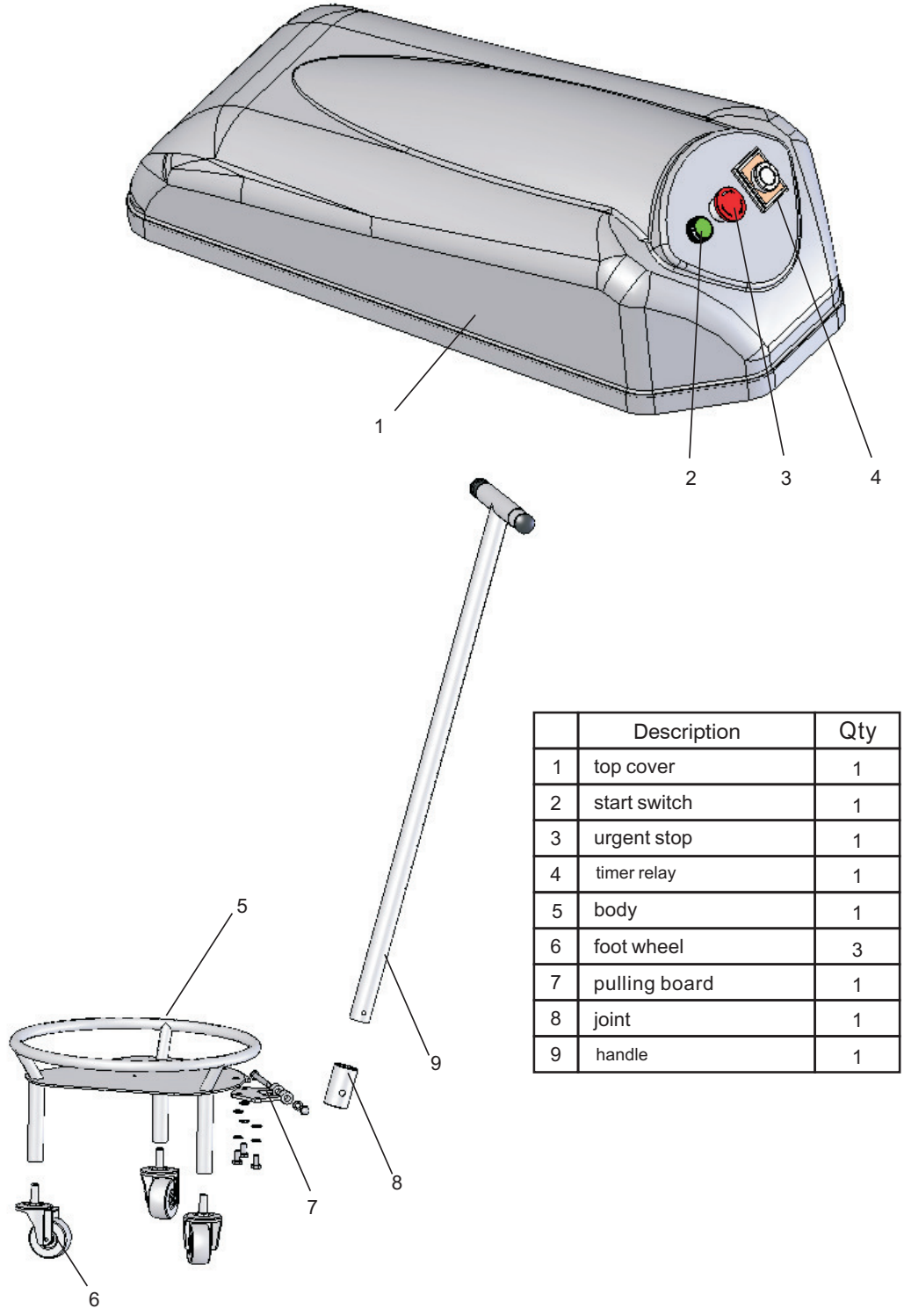
- 2nd Speed should never be used on mixtures with less than 50% AR.
- Do not use attachments on hub while mixing.

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

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

TOP COVER AND HAND CART

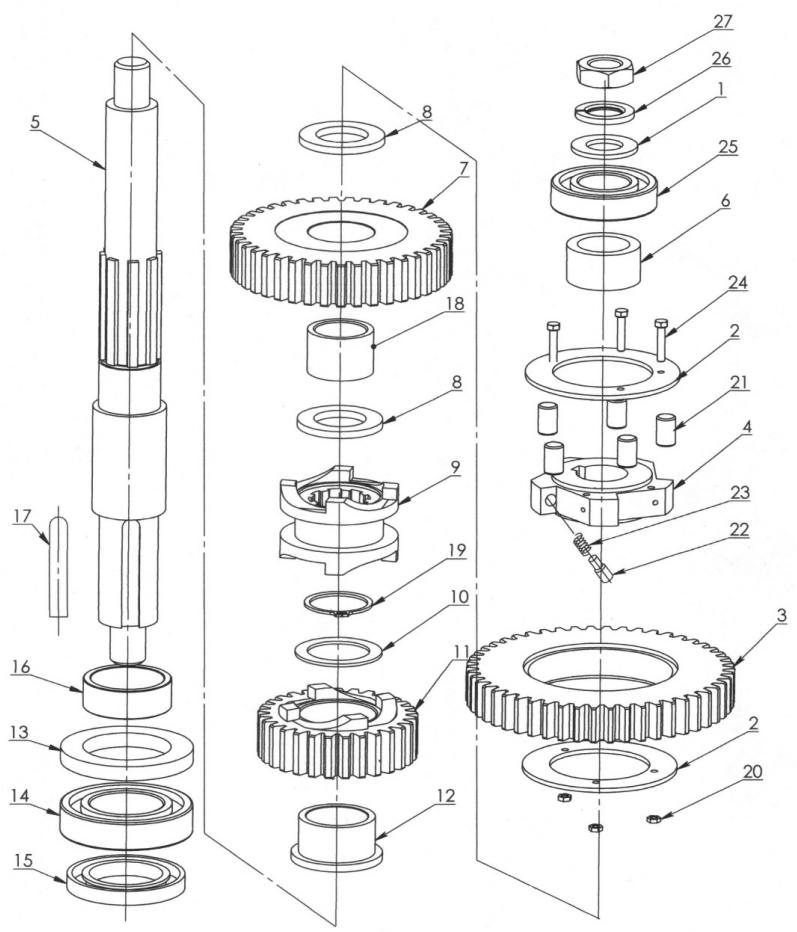
Figure 1



	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



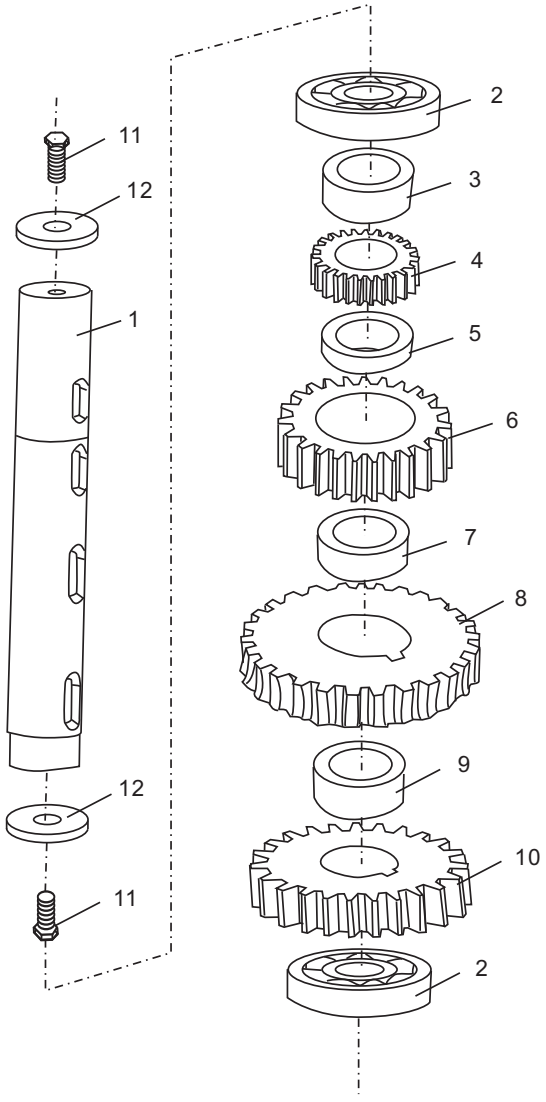
	Description	Qty
1	Center axle roundlet board	1
2	Up board	2
3	Gear ring	1
4	Engager	1
5	Center axle	1
6	Center axle ring	1
7	Mid-speed passive gear	1
8	Gasket	1
9	Small join	1
10	Small join gasket	1
11	High-speed passive gear	1
12	Gigh-speed passive copper	1
13	Oil seal 60*90*10	1
14	Bearing 6210	1
15	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 ϕ42*1.5	1
20	Nut M4	3
21	Roller	5
22	Roller withstand	5
23	Spring ϕ8*1*18	5
24	Screw M4*30	3
25	Bearing 6207	1
26	Spring gasket ϕ24	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



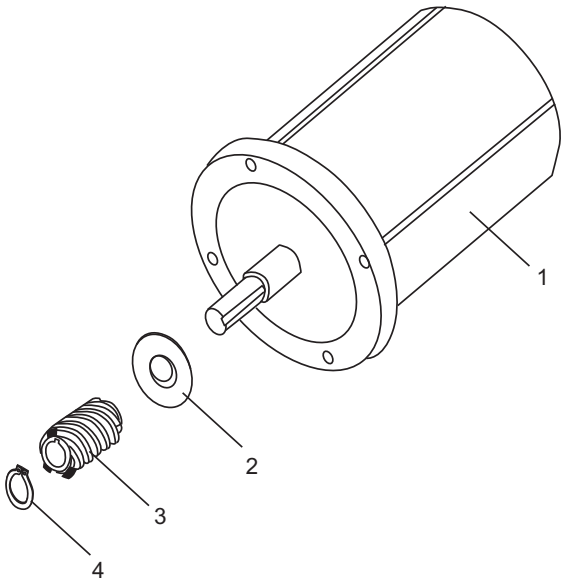
	Description	Qty
1	Axle	1
2	Bearing 80207	2
3	Sleeve	1
4	Gear	1
5	Sleeve	1
6	Gear	1
7	Sleeve	1
8	Gear	1
9	Sleeve	1
10	Gear	1
11	Screw M10*20	2
12	Gasket	2

NOTES:

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

MOTOR

Figure 4



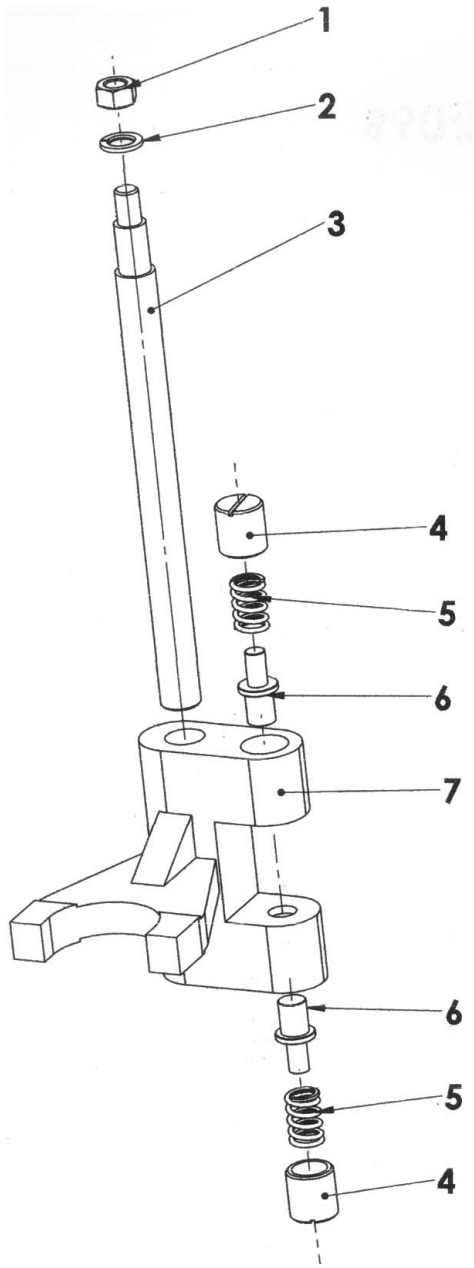
	Description	Qty
1	motor	1
2	oil seal	1
3	spiral	1
4	stop ring	1

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 governer. Motor damage may also be caused by bowl overload during mixing.

FORK

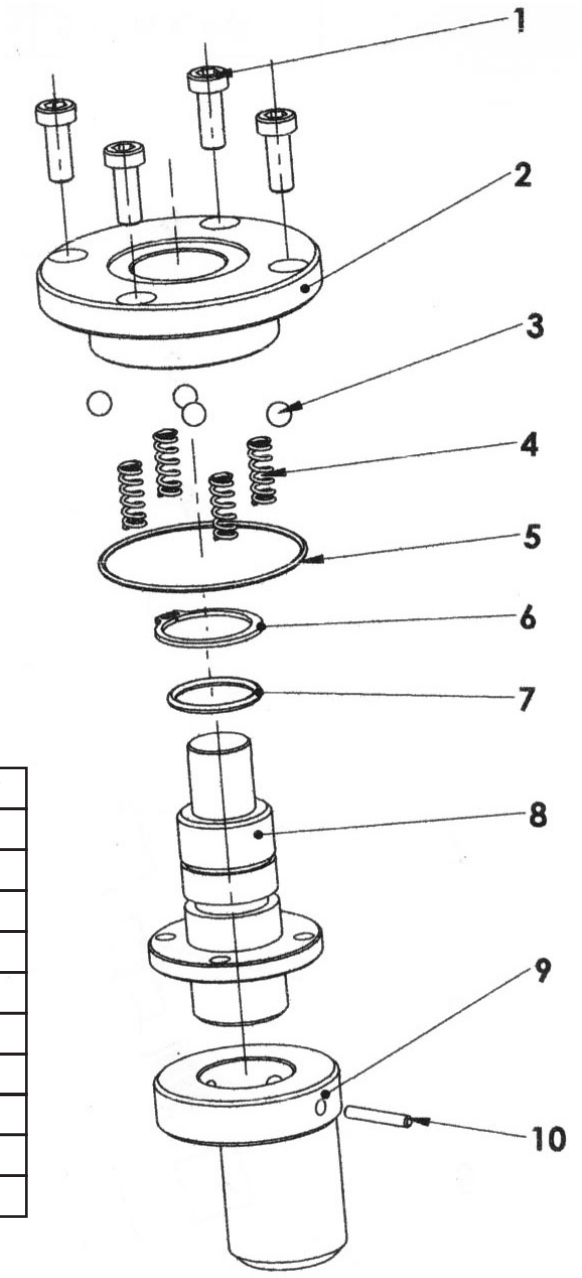
Figure 5



	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

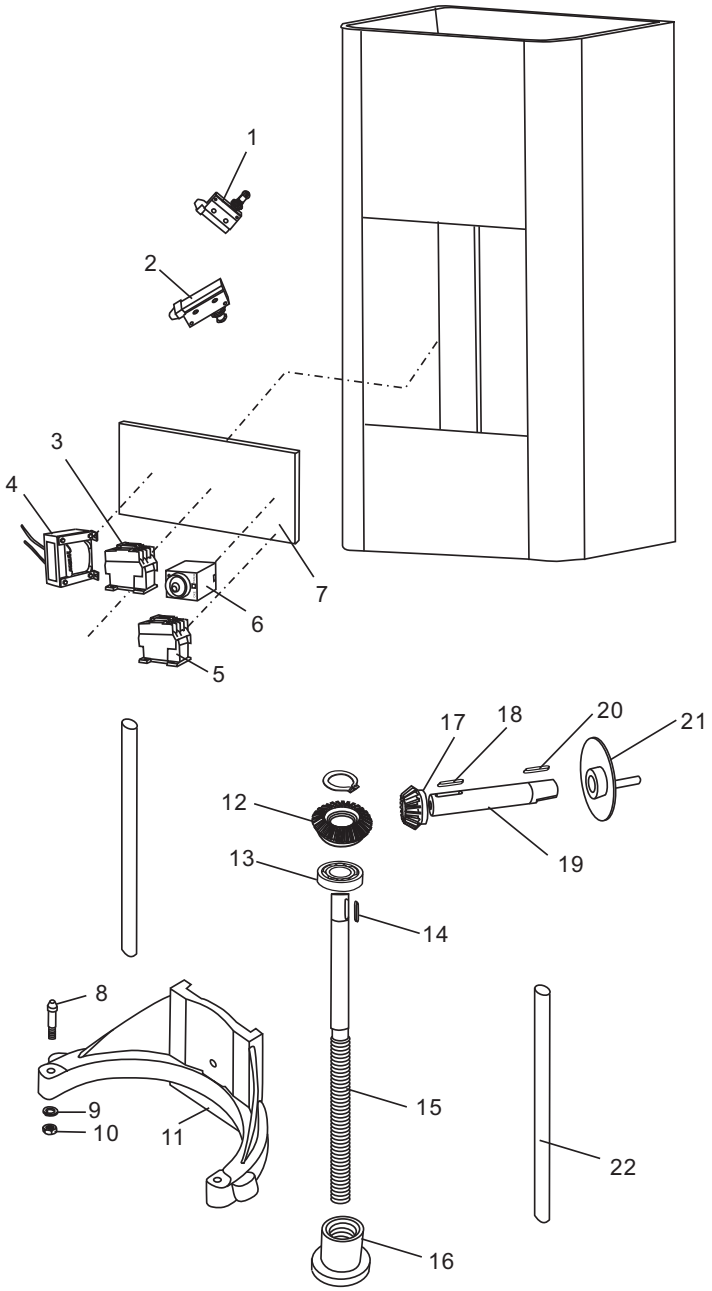
Figure 6



	Description	Qty
1	Screw	4
2	Speed block	1
3	Steel ball	4
4	Spring	4
5	O ring	1
6	Stop ring	1
7	O ring	1
8	Speed shaft	1
9	Eccentricity knot	1
10	Pin	1

BOWL LIFTER UNIT

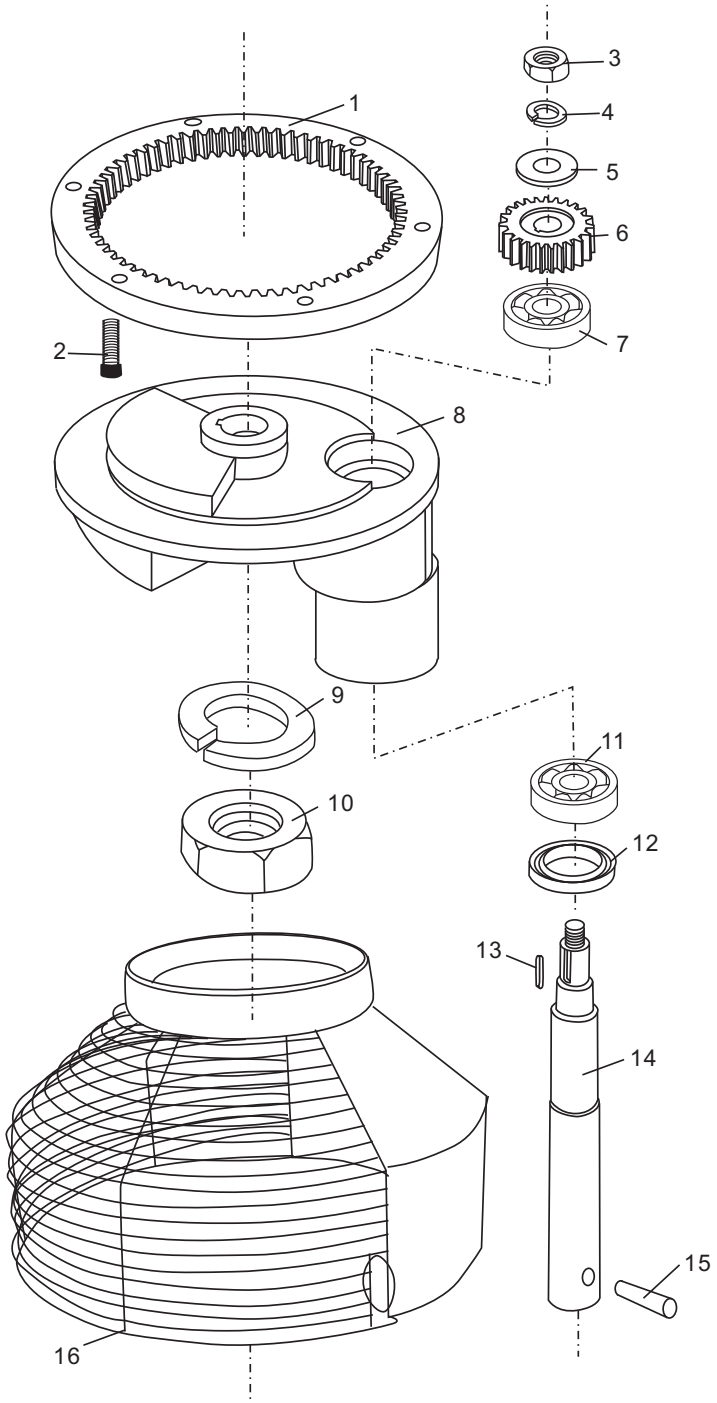
Figure 7



Item	Description	Qty
1	safefy 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

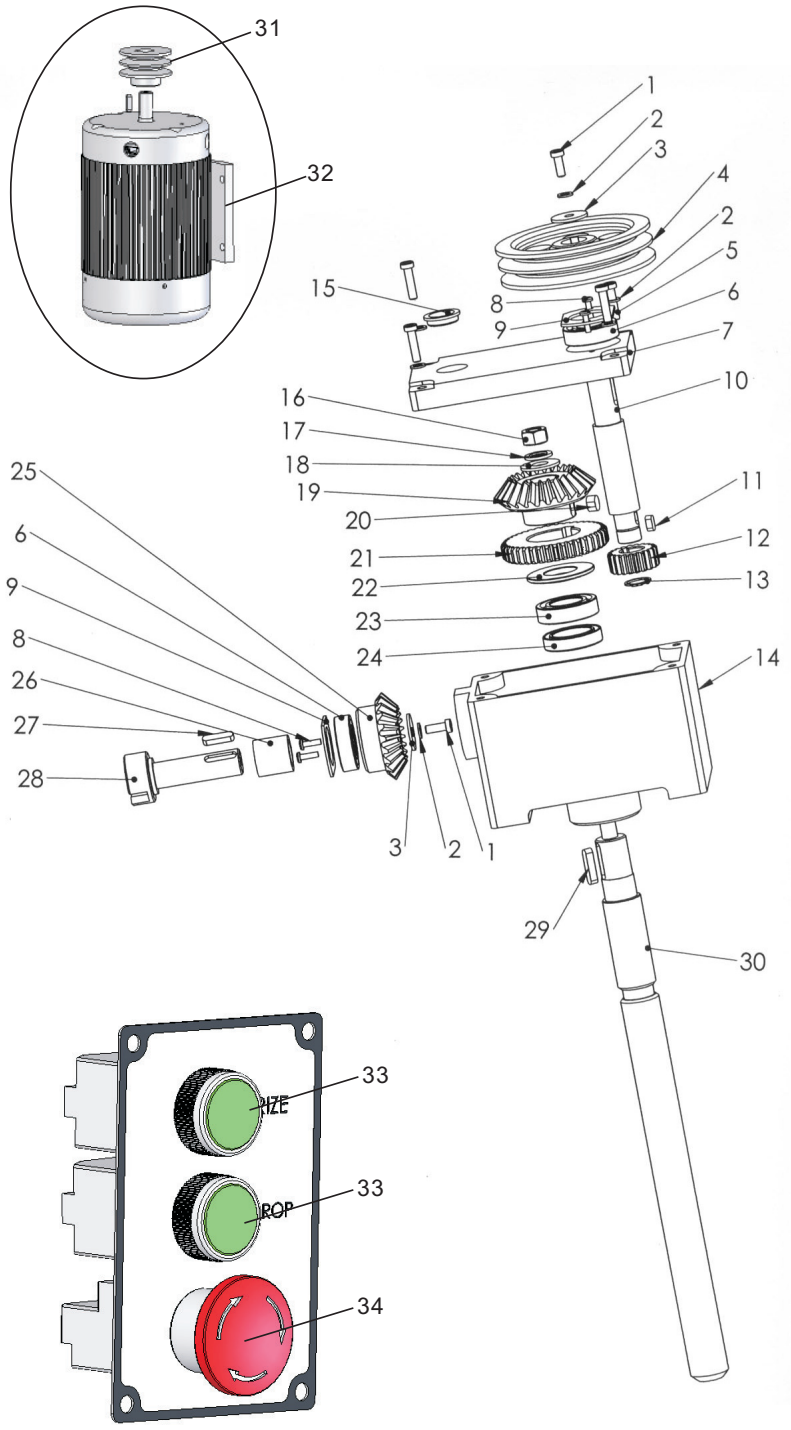
Figure 8



	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

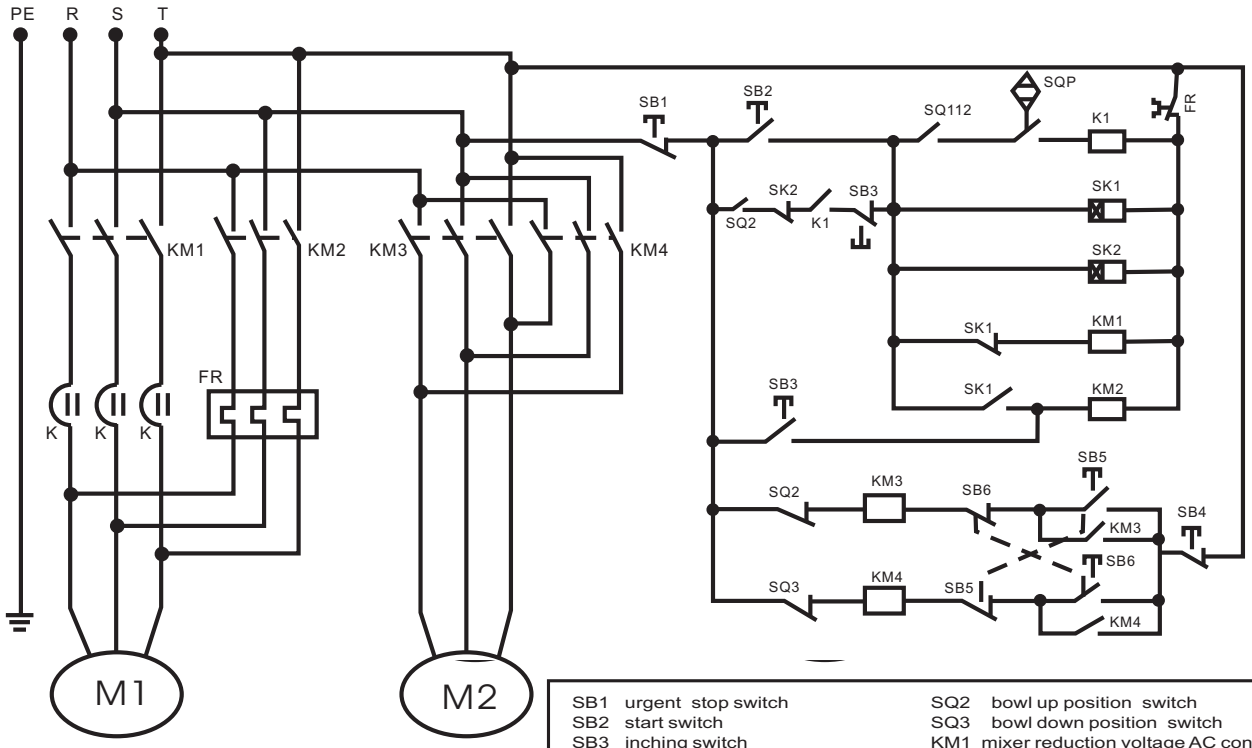
Figure 9



	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	

177MX60 SPECIFICATIONS

Type	**MX60**
Capacity	**60 QT.**
Power Supply	**240V**
Phase	**3**
Input Power	**1750W**
Hertz	**60 Hz**
Horsepower	**2 1/2 HP**
Max. Flour Capacity	**50 LB.**

Cleaning

WARNING: DISCONNECT THE MACHINE FROM THE POWER SOURCE BEFORE CLEANING

All new mixer bowls and accessories including whips, beaters, and dough hooks should be properly washed before use.

Wash with hot water and a mild soap solution and then rinse off with either a mild vinegar or soda solution and then rinse again with clean water. It is highly recommended this cleaning procedure is followed for bowls and accessories prior to whipping egg whites or whole eggs. The mixer should be cleaned daily with a clean damp cloth.

If the unit has not been used for some time, it is recommended that the procedure above is followed before mixer use. It is important that the rear bowl lift guides are greased every three months to prevent corrosion.

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 de-formed	Repair or change the bowl or mixing device