



## Gear Driven 30 Qt. Commercial Mixer

**Models:** MX30

Shifting gears while this unit is running will void warranty.

02/2022

***Please read and keep these instructions. Indoor use only.***

## Index

Parts Overview ..... 3

Standard Accessories..... 4

Operation Instructions ..... 4

Figure 1: Gear Axle ..... 5

Figure 2: Initiative Axle ..... 6

Figure 3: Fork ..... 7

Figure 4: Change Speed Axle..... 8

Figure 5: Turning Plate and Mixing Axle ..... 9

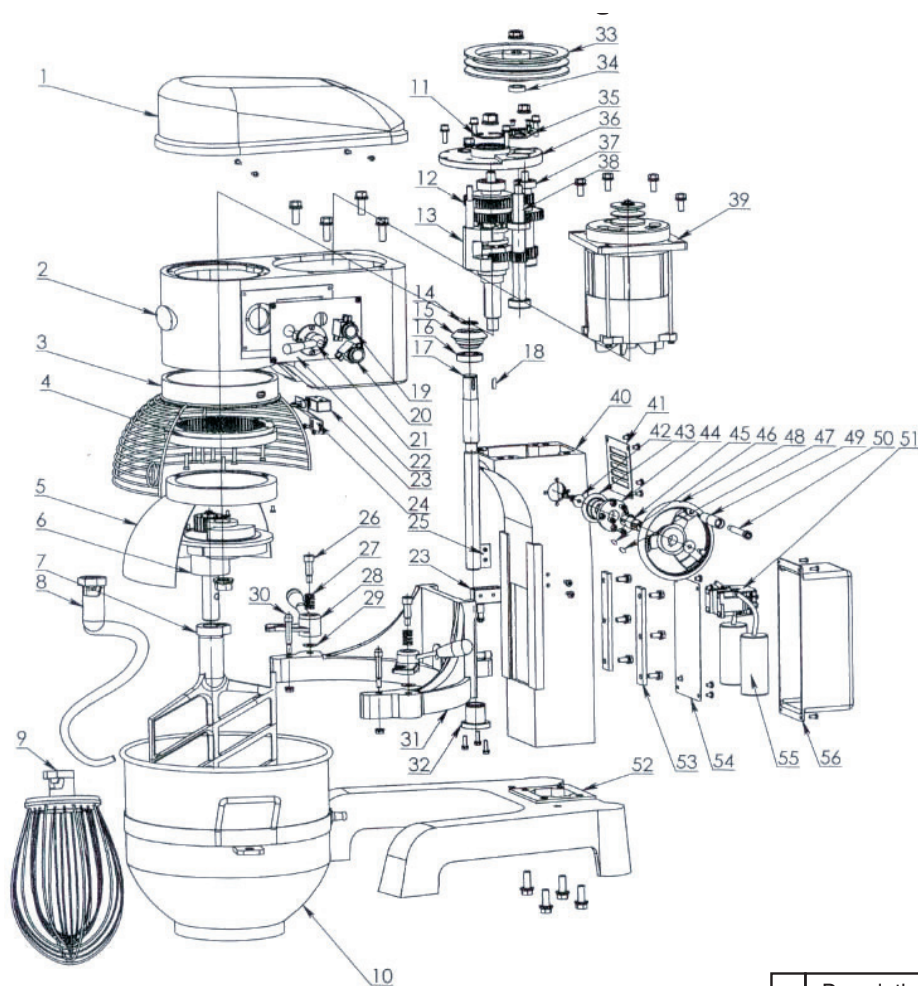
Figure 6: Single Phase Motor Diagram ..... 10

Figure 7: Center Axle ..... 11

Maintenance and Protection..... 12

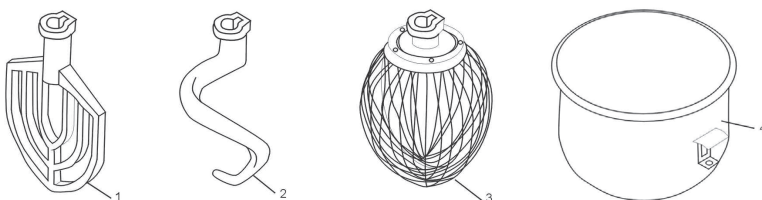
Troubleshooting ..... 13

## Parts Overview



Description	Qty	Description	Qty	Description	Qty	Description	Qty	Description	Qty
1 Top cover	1	12 Centre axle	1	23 Micro-switch	1	34 Sleeve	1	45 Handwheel axle	1
2 Gear box	1	13 Fork	1	24 Micro-switch shelves	1	35 Board	1	46 Key 5*15	1
3 Safety net(move)	1	14 Stop ring 25	1	25 Micro-switch shelves	1	36 Gear box cover	1	47 Key 6*15	1
4 Inner gear	1	15 Big taper gear	1	26 Screw	2	37 Gear axle	1	48 Handwheel	1
5 Safety net(fixedly)	1	16 Bearing 6204	1	27 Spring	2	38 Initiative axle	1	49 Handle sleeve	1
6 Turning plate	1	17 Thread bar	1	28 Handle	2	39 Motor	1	50 Handle axle	1
7 Mixing device I	1	18 Key 5*20	1	29 Gasket	1	40 Stand	1	51 AC contact device	1
8 Mixing device II	1	19 Start switch	1	30 Screw	1	41 Back board	1	52 Seat	1
9 Mixing device III	1	20 Stop switch	1	31 Arm	1	42 Gasket	1	53 Bar	1
10 Bowl	1	21 Change speed axle	1	32 Copper nut	1	43 Small taper gear	1	54 Back cover	1
11 Stop ring 52	1	22 Nameplate	1	33 Big belt wheel	1	44 Flange knot	1	55 Capacitor	1
								56 Electric box	1

## 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.

## Unpacking the Equipment and Initial Setup

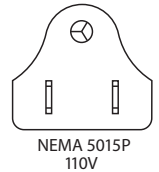
Carefully remove crating or packaging materials from the equipment. Models shipped on pallets are bolted to the pallet. Bolts must be removed to safely separate the equipment from the pallet. Place the equipment on a flat surface with sufficient space around the mixer to allow for safe cleaning and service. Plug only into grounded electrical outlets matching the nameplate rated voltage. Do not use an extension cord with this equipment. Do not plug this equipment into a power strip or multi-outlet power cord.

### 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



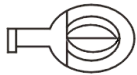
**Please ensure that your power supply matches your machine**



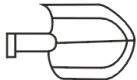
**For changing the speed:** Please stop machine first before changing speed in order to avoid damage to the gear box. Also make sure that the bowl is in fully lifted position and the guard is closed.

- 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	25 lb.
Heavy Bread Dough -55% AR	Dough Hook - 1st only	20 lb.
Pizza Dough, Thin -40% AR	Dough Hook - 1st only	10 lb.
Pizza Dough, Medium -50% AR	Dough Hook - 1st only	15 lb.
Pizza Dough, Thick -60% AR	Dough Hook - 1st only	25 lb.
Raised Donut Dough -65% AR	Dough Hook - 1st and 2nd	12.5 lb.
Mashed Potatoes	Flat Beater	15 lb.
Waffle or Hot Cake Batter	Flat Beater	10 qt.
Egg Whites	Wire Whisk	1.5 qt.
Whipped Cream	Wire Whisk	3 qt.
Cake Batter	Flat Beater	20 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  $5 \div 10 = 0.50 \times 100 = 50\% \text{ AR}$ .

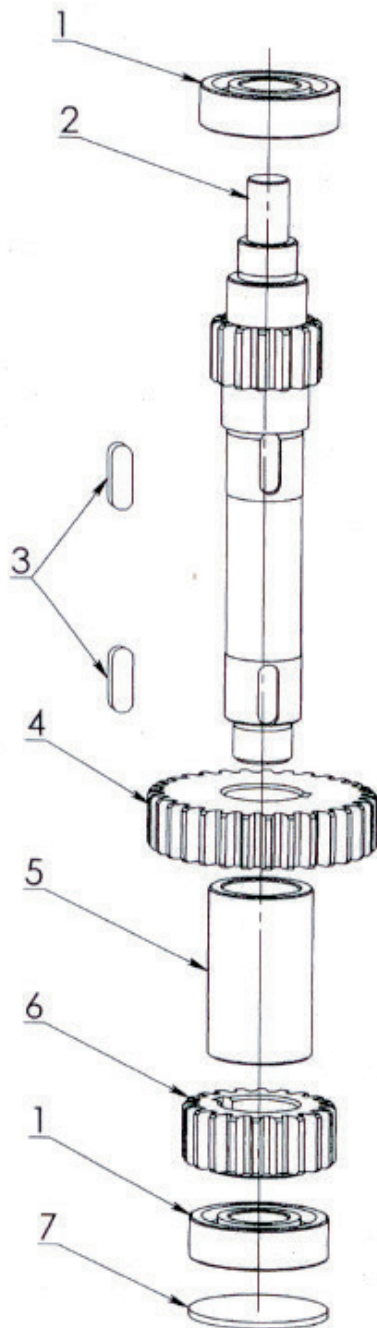
- 2nd Speed should never be used on mixtures with less than 50% AR.
- Do not use attachments on hub while mixing.

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

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

## GEAR AXLE

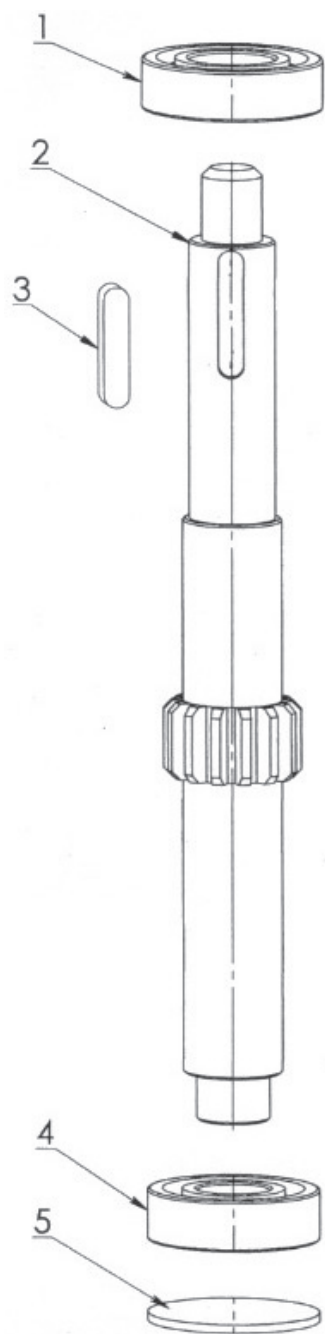
Figure 1



	Description	Qty
1	Bearing 6203	1
2	Gear axle	1
3	Key 6*18	2
4	High-speed gear	1
5	Sleeve	1
6	Low-speed gear	1
7	Gasket	1

## INITIATIVE AXLE

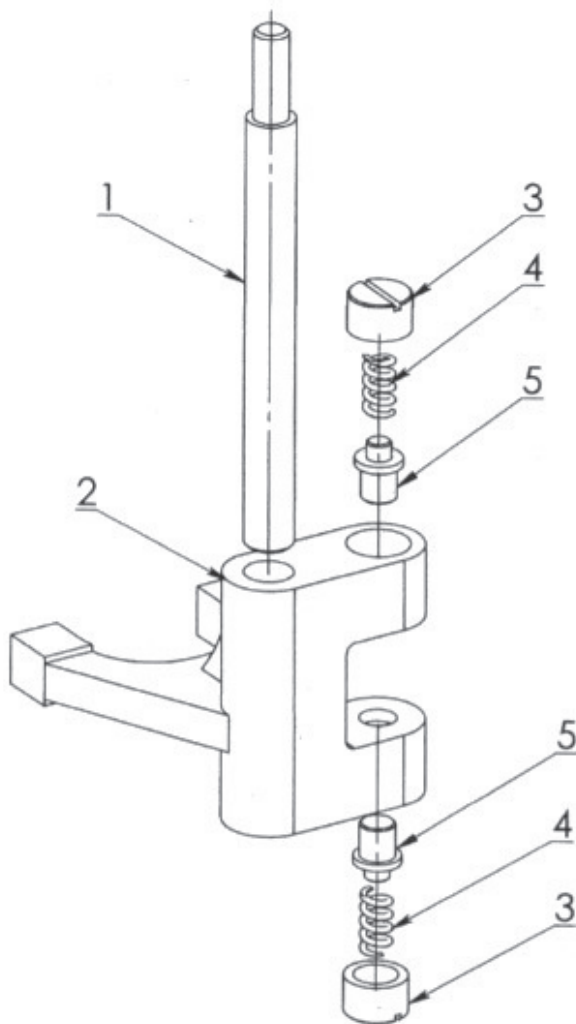
Figure 2



	Description	Qty
1	Bearing 6204	1
2	Initiative axle	1
3	Key 6*28	2
4	Bearing 6203	1
5	Gasket	1

## FORK

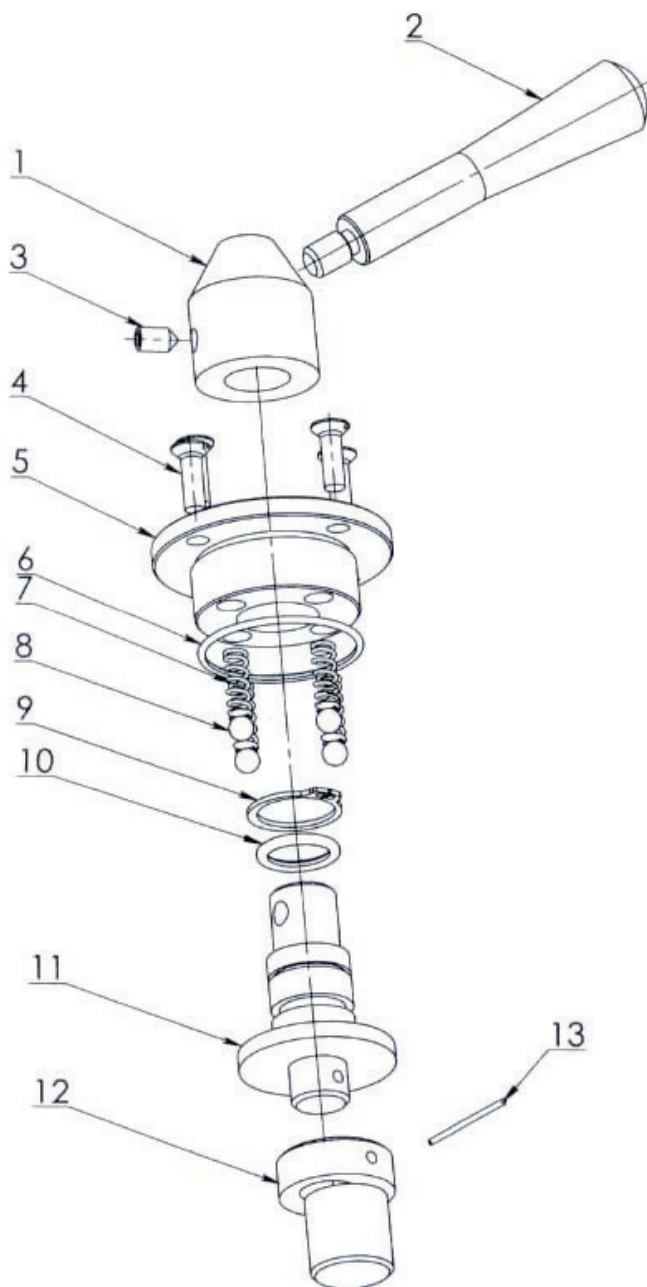
Figure 3



	Description	Qty
1	Fork axle	1
2	Fork	1
3	Nut	2
4	Spring	2
5	Shaft	2

## CHANGE SPEED AXLE

Figure 4

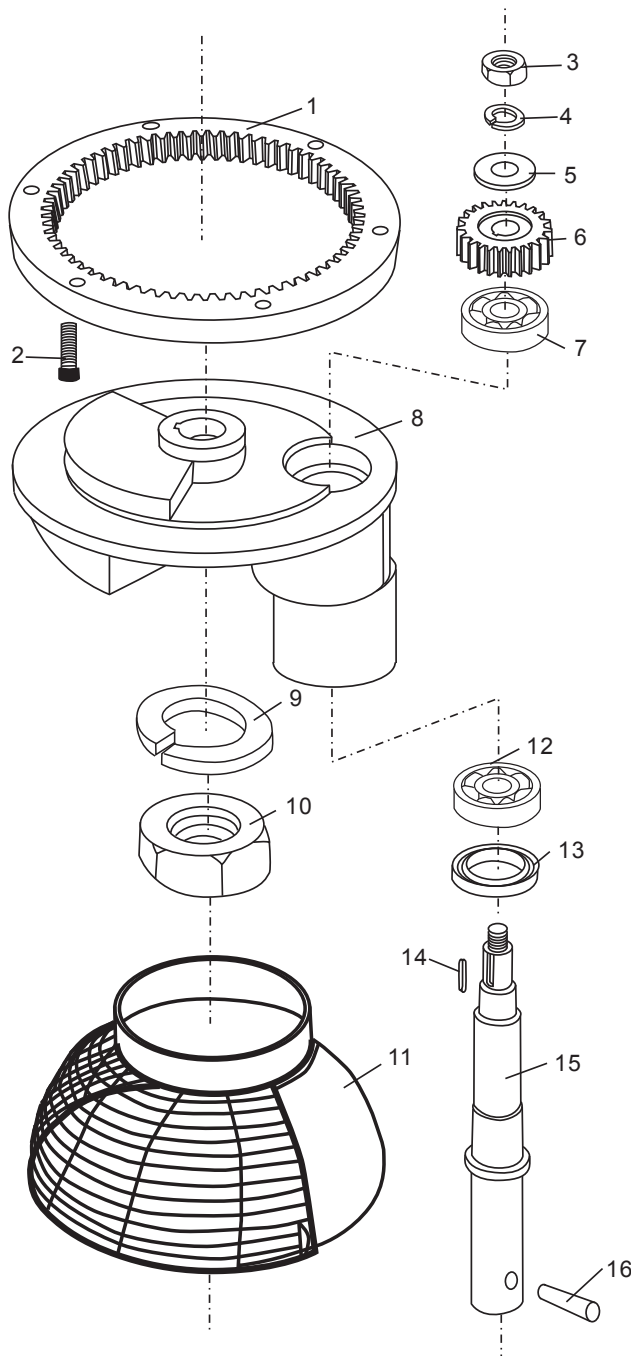


	Description	Qty
1	Handle knot	1
2	Handle	1
3	Screw M6*10	1
4	Screw M5*16	4
5	Speed block	1
6	O ring 36.5*1.8	1
7	Spring	4
8	Steel ball	4
9	Stop ring 20*1.2	1
10	O ring 15*2.65	1
11	Change speed axle	1
12	Eccentricity knot	1
13	Pin 3*25	1



## TURNING PLATE AND MIXING AXLE

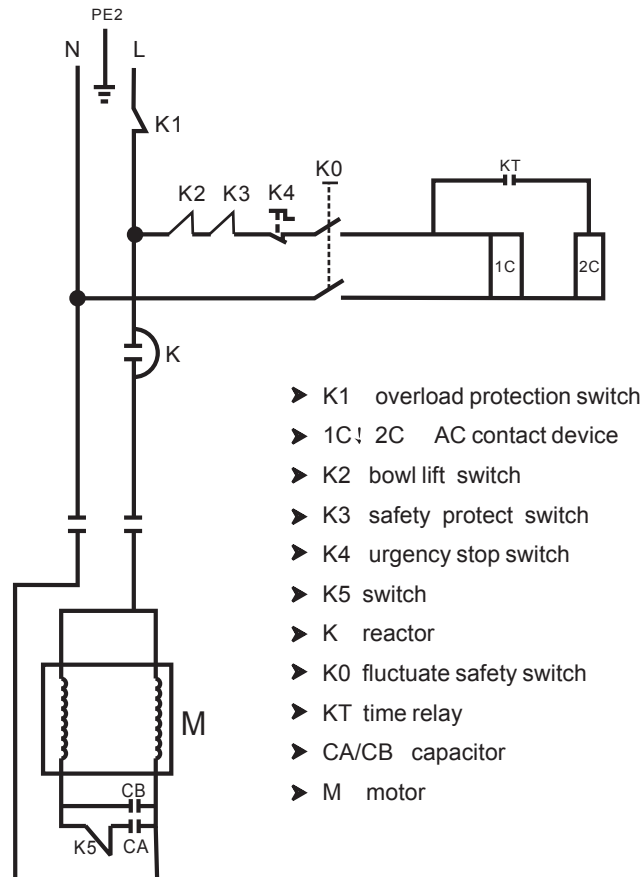
Figure 5



	Description	Qty
1	Inner gear	1
2	Screw	6
3	Nut M14	1
4	Spring gasket 14	1
5	Gasket 14	1
6	Planetary gear	1
7	Bearing 6204	1
8	Turning plate	1
9	Spring gasket	1
10	Nut	1
11	Safe net	1
12	Bearing 6206	1
13	Oil seal 35*56*12	1
14	Key 6*16	1
15	Mixing axle	1
16	Pin 10*37	1

## SINGLE PHASE MOTOR DIAGRAM

Figure 6

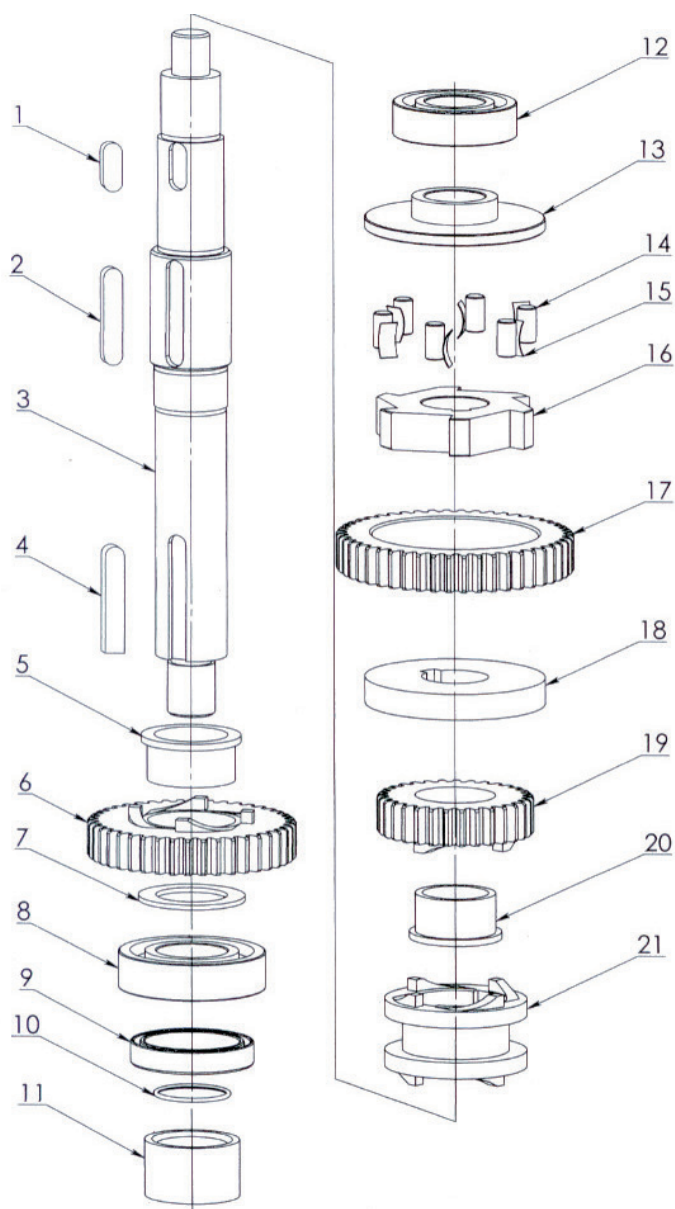


### 177MX30 SPECIFICATIONS

Type	<b>MX30</b>
Capacity	<b>30 QT.</b>
Power Supply	<b>120V</b>
Phase	<b>1</b>
Input Power	<b>1000W</b>
Hertz	<b>60 Hz</b>
Horsepower	<b>1 3/4 HP</b>
Max. Flour Capacity	<b>18 LB.</b>

## CENTER AXLE

Figure 7



	Description	Qty
1	Key 8*7*20	1
2	Key 8*7*45	1
3	Centre axle	1
4	Key 8*7*50	1
5	Bearing ring	1
6	Gear	1
7	Gasket	1
8	Bearing 6206	1
9	Oil seal 40*52*10	1
10	O ring 30*1.8	1
11	Sleeve	1
12	Bearing 6205	1
13	Cover	1
14	Roller	5
15	Spring	10
16	Engager	1
17	Gear ring	1
18	Dividing ring	1
19	Gear	1
20	Above bearing ring	1
21	Joint	1

## 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 deformed	Repair or change the bowl or mixing device