



## COMMERCIAL MIXERS



MODEL:GEM120

# INSTRUCTION MANUAL

**THE LEGACY COMPANIES** 

3355 Enterprise Avenue, Suite 160  
Fort Lauderdale, Florida 33331  
Tel: 954.202.7419 Fax: 954.202.7337  
[www.asburyfoodservice.com](http://www.asburyfoodservice.com)

**PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE USING YOUR MIXER**



# GEM120 Mixer Operation Instruction



## Index

1、 General Description .....	1
2、 Technical parameters .....	2
3、 Main External Parts of Mixer .....	3
4、 Operation Instruction .....	3
5、 Accessories and Functions .....	4
6、 Notes .....	4
7、 Maintenances .....	5
8、 Problems and solutions .....	5
9、 exploded assembly drawing .....	5
10、 electrical diagram .....	7
11、 list of part number .....	8

## 1、 General Description

This is a kind of three-speed gear mixer. With its planetary stirring design, it has a compact structure, high efficiency, power saving and easy operation. It will be provided to you as an ideal assistant for bread and cake making.

## 2、 Technical parameters

Name	Barrel Volume (L)	Power (KW)	Weight (Kg)	Speed Of Stirring Shaft (r/min)			Overall Dimensions (mm)
				1 <sup>st</sup> Speed	2 <sup>nd</sup> Speed	3 <sup>rd</sup> Speed	
SM-20	20	1.1	102	108	195	355	560×530×800

## 3、 Main External Parts of Mixer



- ① Gear change hand lever
- ② Stirring shaft
- ③ Mixer
- ④ Stainless bowl
- ⑤ Power switch
- ⑥ Bent lever
- ⑦ Support

## 4、 Operation Instruction

- ① Standard power supply 110V/60Hz AC.(Please use a plug with 3 wide contacts and good grounding.)
- ② Installation of Mixer: Put the stirring shaft 2 in Mixer 3 and rotate it in clockwise direction.
- ③ Starting procedure: Pull the gear change hand lever 1 to position 1 before starting, Safe hood is in closed state. Then turn on the power switch 5, after the mixer is in normal operation, set the speed required.
- ④ Speed transformation: If you want to change the speed, please pull the bent lever 6 to the lowest point ,after pull the gear change hand lever 1 to the position required, then pull the bent lever 6 to the highest point and lift the support 7 to the highest position. The machine can be in normal operation at this time.
- ⑤ Installation procedures for meat Mincer head: stop operation first ,loose stud bolt and lift the top cover of its head. Then put on the mincer and tighten the stud bolt.1<sup>st</sup> speed should be used for mincing meat.
- ⑥ Shutting down: When the operation is completed, turn off the power switch 5 first, then pull the gear change hand lever 1 to position 1, and pull back the hand lever 6 to the lowest point and finally disconnect power supply.

## 5、 Accessories and Functions

- ① Spherical mixer: Used for stirring of liquid materials, such as cream and egg.
- ② Plate mixer: Used for stirring of paste, powder, and fragmental materials,

such as stuffing.

③ Hook mixer: Used for stirring of more sticky materials, such as dough .

## 6、 Notes

① The power socket must be provided with a good ground wire to guarantee the mixer's good grounding through it. There will be a electric shock if no ground wire or an improper grounding mounted. The ground wire can never be connected with gas pipe, water pipe, lightning rod or telephone line. Electric leakage should be checked after installation.

② Don't put your hand into the stirring barrel during operation. Power supply should be disconnected before the mixer is going to be installed.

③ Don't operate the mixer beyond the time limit to prevent reduction of its service life.

④ The mixer should be mounted on a stable and clean place. Keep it away from overheated or over wet places and away from equipment which has strong electromagnet or can produce strong electromagnet.

⑤ Keep the machine clean constantly. Disconnect power supply before maintenance. Clean it with a piece of soft and a bit wet cloth. Don't clean it with liquid or spraying detergent.

**\*\*\* Warning:** Do not use medium or high speed for kneading dough.

## 7、 Maintenances

a. After using, you should clean the bowl and agitator ect, make sure to keep the

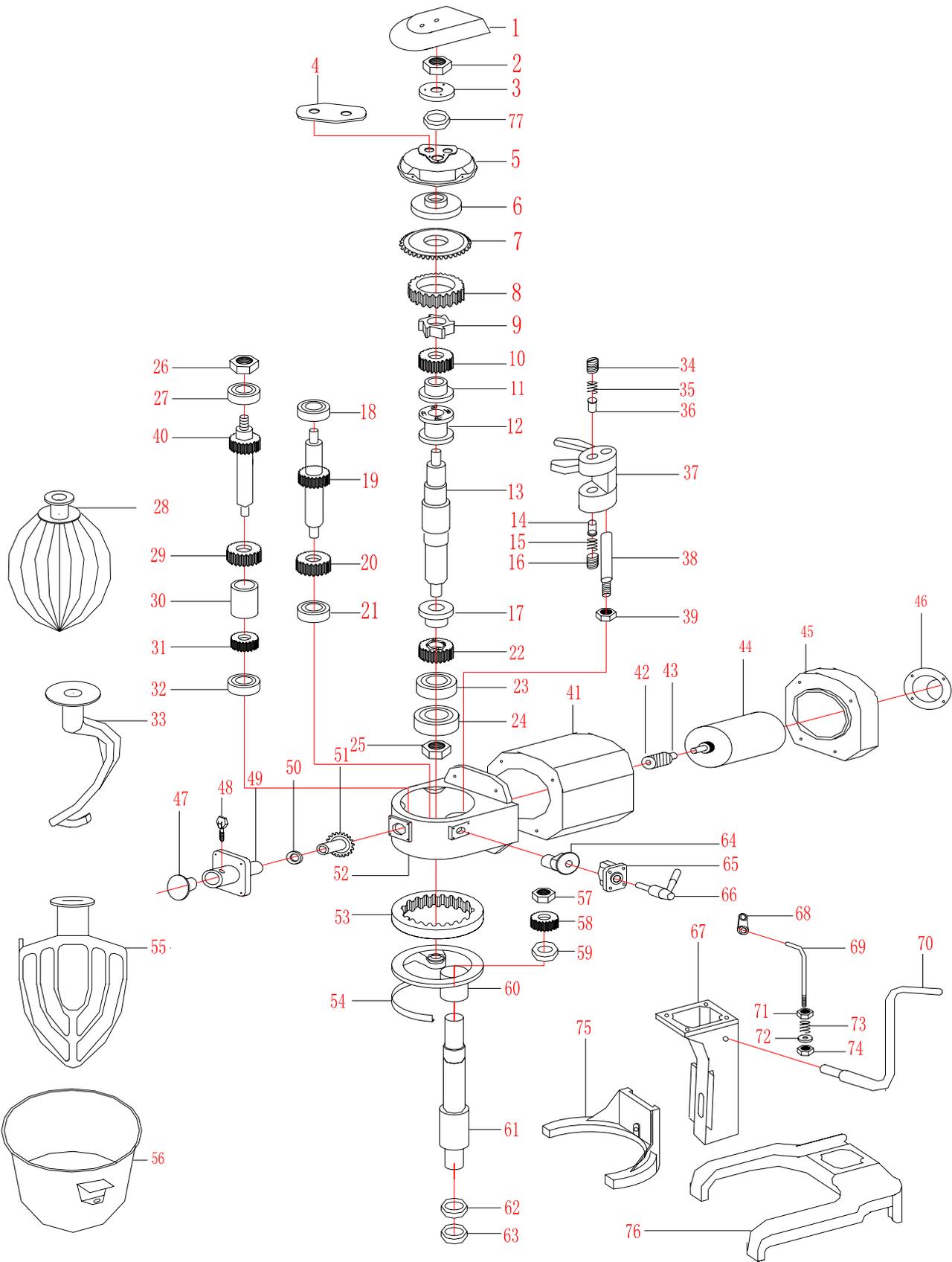
machine clean.

- b. The transmission gear box is packed with special grease, it could be used for six mouths in normal condition. If it need to add or replace the grease, please open the top cover , then pour the grease from aperture or replace the grease directly.

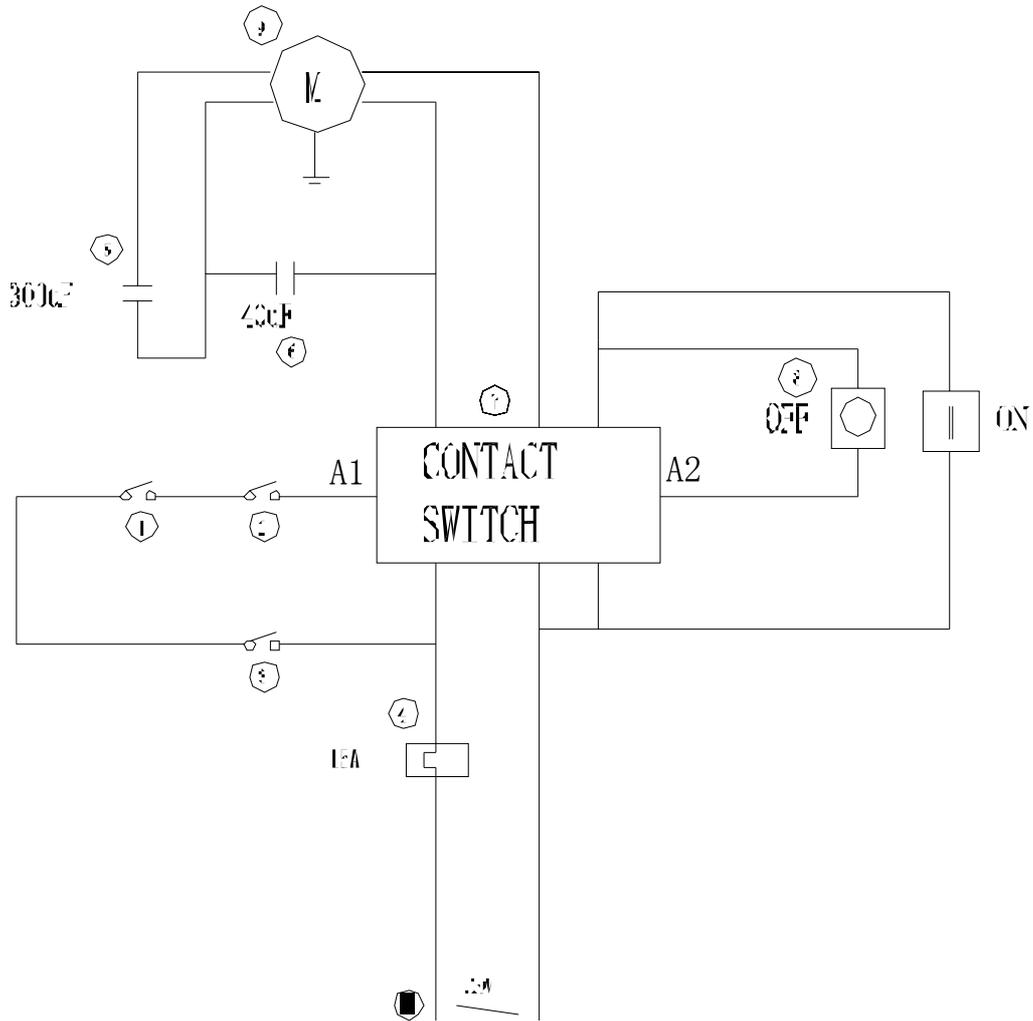
8、 Problems and solutions

Problems	Causes	Solutions
The mixing shaft doesn't rotate after starting the machine	Electric connectors are loose	Check the electric circuit, tighten those loose connects
Oil leakage	The oil seals are worn out	Replace those oil seals
The temperature of the motor becomes higher and the rotating speed becomes lower	Too low voltage	Check the power supply
	Over-load	Lessen the quantity of the mixture
	The speed of mixing is too high or the mixing is not suitable	Select a suitable speed and mixing
The mixing knocks with the bowl	The mixing or the bowl is deformed	repair or replace the mixing or bowl
The noise of the gearbox is serious, its temperature is too high	Lubrication is insufficient	Add or replace the grease

9. exploded assembly drawing



10. electrical diagram



1. DISTANCE SWITCH
2. DISTANCE SWITCH
3. DISTANCE SWITCH
4. OVER LOADING SWITCH
5. CAPACITANCE
6. CAPACITANCE
7. CONTACT SWITCH
8. RED AND GREEN SWITCH
9. MOTOR
10. PLUG LINE

## 11. list of part number

### GEM120 Planetary Mixer Spare Parts List

#	PART #	DESCRIPTION	REMARK	#	Part #	DESCRIPTION	REMARK
1	SM20-01-19	COVER		42	SM20-01-06	WORM WHEEL	
2	GB54	NUT		43	GB119	SPRING	
3	GB97.1	CLAMP PLATE		44	SM20-DQ-09	MOTOR	
4	SM20-01-15	Pressing plate		45	SM20-01-02	BACK CASING	
5	SM20-01-07	TRANSMISSION SUPPORT		46	SM20-01-01	BACK COVER	
6	SM20-01-14	SPACER-LOWER		47	SM20-01-25	PLUG ATTACHMENT HUB	
7	SM20-01-13	Taper gear wheel 1		48	SM20-01-38	PLUG	
8	SM20-01-18 -01	tooth GEAR		49	SM20-01-24	ATTACHMENT HUB	
9	SM20-01-18 -02	GEAR		50	SM20-01-26	RING	
10	SM20-01-20	GEAR		51	SM20-01-23	PINION	
11	SM20-01-21	BUSHING		52	SM20-01-30	GEAR BOX	
12	SM20-01-22	SLEEVE		53	SM20-01-32	INTERNAL GEAR	
13	SM20-01-16	MAIN SHAFT		54	SM20-01-34	DRIP RING	
14	SM20-01-44	PLUNGER-SHIFTER YOKE		55	SM20-06-01	BEATER	
15	SM20-01-43	SPRING		56	SM20-04-00	BOWL	
16	SM20-01-42	RETAINER-SPRING		57	GB591.1	WASHER	
17	SM20-01-21	BUSHING		58	SM20-01-33	GEAR	
18	201	BEARING		59	203	BEARING	
19	SM20-01-09	SHAFT WORM GEAR		60	SM20-01-35	PLANETARY	
20	SM20-01-08	GEAR		61	SM20-01-36	WORKING SHAFT	
21	201	BEARING		62	204	BUSHING	
22	SM20-01-27	Claw type gear wheel		63	HG4-692	OIL SEAL	
23	205	BEARING		64	SM20-01-39- 01	CAM-GEAR SHIFTER	
24	HG-692	OIL SEAL		65	SM20-01-39- 02	PLATE-SHIFTER INDEX	
25	GB54	NUT		66	SM20-01-39- 04	HANDLE-SHIFTER	
26	GB54	NUT		67	SM20-05-01	PEDESTAL	
27	201	BEARING		68	SM20-05-12	ARM-BOWL LIFT	
28	SM20-06-02	Wire Whip		69	SM20-05-11	ROD-BOWL LIFT	
29	SM20-01-11	GEAR		70	SM20-05-13	LIFT HANDLE	
30	SM20-01-05	BUSHING		71	GB97.1	SPRING	
31	SM20-01-04	GEAR		72	GB97.1	WASHER	
32	201	BEARING		73	SM20-05-10	WASHER	

33	SM20-06-03	HOOK		74	GB6171	RING	
34	SM20-01-44	PLUNGER-SHIFTER YOKE		75	SM20-05-05	BOWL SUPPORT	
35	SM20-01-43	SPRING		76	SM20-05-06	BASE	
36	SM20-01-42	RETAINER-SPRING		77	203	BEARING	
37	SM20-01-41	SHIFTING YOKE		78	SM20-03-00	SAFETY GUARD	
38	SM20-01-40	DECLUTCH SHIFT SHAFT		79	SM20-3-05-07Z	Bowl locker, left	
39	GB6171	NUT		80	SM20-3-05-07Y	Bowl locker, right	
40	SM20-01-12	GEAR SHAFT		81		Back cover, electrical	
41	SM20-01-03	CASE					
			electrical	101(1\2\3)	SM20-DQ-01	Distance switch	
				102(10)	SM20-DQ-02	Power cord	
				103(7)	SM20-DQ-03	Contact switch	
				104(8)	SM20-DQ-04	Green button	
				105(8)	SM20-DQ-05	Red button	
				106(4)	SM20-DQ-06	Overload switch	
				107(5)	SM20-DQ-07	Capacitor 300uf	
				108(6)	SM20-DQ-08	Capacitor 40 uf	



**FOR SERVICE CALL**  
**1 877 368 2797**

24 HOURS, 7 DAYS A WEEK  
U.S. AND CANADA