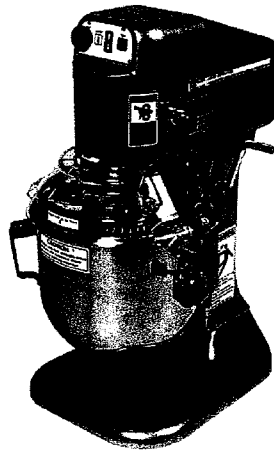


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METCALFE SP80 8 LITRE MIXING MACHINE

OPERATING & MAINTENANCE INSTRUCTIONS



**SUPPLIED WITH GUARD, BEATER, WHISK,
DOUGH HOOK & STAINLESS STEEL BOWL**





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FITTING INSTRUCTIONS FOR GUARD FOR METCALFE SP-80 MIXING MACHINE

PLEASE NOTE

**THE FITTING AND REMOVAL OF THE GUARD
SHOULD ONLY BE DONE WHEN THE BOWL IS IN THE
LOWERED POSITION**

**UNLESS THIS IS STRICTLY ADHERED TO THEN
DAMAGE MAY BE SUSTAINED TO THE GUARD AND
WILL INVALIDATE THE GUARANTEE OF THE
MACHINE**



OPERATING INSTRUCTIONS

YOUR GUARANTEE IS AT RISK

PLEASE READ THIS DOCUMENT CAREFULLY

MAXIMUM RAW FLOUR LOADINGS

MODEL	BOWL SIZE	MAXIMUM LOAD
SP100	10 Litre	2Kgs. flour per mix
SP200	20 Litre	4Kgs. flour per mix
SP30HI	30 Litre	6Kgs. flour per mix
SP40HI	40 Litre	8Kgs. flour per mix
SP60HI	60 Litre	12Kgs. flour per mix

!! WARNING !!

PUTTING TOO MUCH FLOUR IN THE MIXER WILL DAMAGE THE MACHINE

AND INVALIDATE YOUR GUARANTEE

THESE RECIPES ARE SUGGESTIONS ONLY

	SP100	SP200	SP30HI	SP40HI	SP60HI
Flour - Kgs.	2	4	6	8	12
Water - Litres	1.2	2.4	3.5	4.5	7.5
Time - Mins.	15 - 20	15 - 20	15 - 20	15 - 20	15 - 20
Dough - Kgs.	3.5	6.5	10	13	20

USING YOUR PLANETARY MIXER

1. Make sure the bowl and attachments are clean and dry
2. Place only the flour in the bowl **first** (see chart)
3. Raise the bowl and close the bowl guard
4. **ONLY USE 1st SPEED FOR MIXING DOUGH**
5. Ensure **RED** stop button is rotated and released
6. Set timer (if fitted) and press **GREEN** button to start machine
7. Add water through guard - mix for preferred minutes
8. Remove dough - clean machine and bowl immediately

!! WARNING !!

**DO NOT PUT MORE THAN THE MAXIMUM AMOUNT OF FLOUR IN THE BOWL,
OR USE THE WRONG MIXING SPEED**

YOUR GUARANTEE IS AT RISK

SOME POSSIBLE PROBLEMS

PROBLEM	POSSIBLE CAUSE	SOLUTION
Machine makes noise while mixing	OVERLOAD !	Remove product to manufacturers specifications
Machine will not run	No power to machine	Check power supply
Machine will not run	Fault at plug *	Check plug and fuse *
Machine will not turn	Bowl guard not closed	Close guard and press green button
Machine will not turn	Bowl not raised	Raise bowl and press green button
Machine will not turn	Red button not re-set	Rotate red switch and then press green button
Machine will not turn	Timer not activated *	Rotate timer and press green button *
Machine will not turn	Timer stopped *	Re-set timer *
Machine will not turn	Interrupted mains supply	Press green button

* ONLY WHERE APPLICABLE - SP100 AND SP200 DO NOT HAVE TIMERS FITTED

IF PROBLEMS PERSIST, PLEASE CALL YOUR SUPPLIER

PLEASE NOTE POWER SUPPLY

MODEL	POWER SUPPLY
SP100 1 Phase	220/240 volt, 50Hz., 13amp, 3-pin wall plug
SP200 1 Phase	220/240 volt, 50Hz., 13amp, 3-pin wall plug
SP30HI 1 Phase	220/240 volt, 50Hz., 20amp, wall isolator
SP40HI 1 Phase	220/240 volt, 50Hz., 20amp, wall isolator
SP60HI 1 Phase	220/240 volt, 50Hz., 30amp, wall isolator
SP60HI 3 Phase	380/415 volt, 50Hz., 30amp, wall isolator

ALL MACHINES ARE FITTED WITH A **GREEN** NO-VOLT RELEASE SWITCH, A **RED** EMERGENCY STOP SWITCH, A MICRO SWITCH OVER-RIDE ON THE BOWL, A MICRO SWITCH OVER-RIDE ON THE BOWL LIFT AND A 15-MINUTE TIMER (**NO TIMER ON SP100 AND SP200**)

WHEN THE BOWL LIFT IS LOWERED AND/OR THE BOWL GUARD IS OPENED, THE MACHINE WILL STOP! TO CONTINUE, RAISE THE BOWL, CLOSE THE GUARD AND PRESS THE **GREEN** START SWITCH AGAIN!

IF YOU DO NOT DO THIS, THE MACHINE WILL NOT OPERATE

ALWAYS CLEAN THE MACHINE WITH A SOFT CLOTH AND WARM WATER AFTER EACH USE

!! WARNING !!

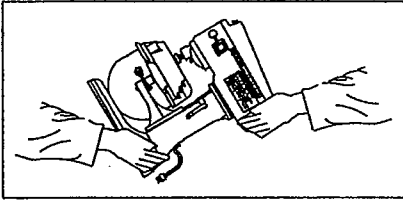
OVERLOADING THE MACHINE WILL INVALIDATE YOUR GUARANTEE

INSTALLATION

The installation of mixer should comply with the requirements.

The machine is supplied factory lubricated and ready to run. It can be positioned on any substantial work surface or bench which is capable of supporting a load of 25kg.

The transportation should require two people.



ELECTRICAL CONNECTION

Before connecting this machine to the electrical supply, check that the details on the rating plate (located on the rear of the machine) correspond to the details of your electrical connection. The mixer is supplied with a trailing lead fitted with a moulded plug. If the style of plug is unsuitable for the socket you plan to use, the plug must be cut off and replaced with an appropriate plug.

The mixer should be plugged into a switched socket which isolates all poles and has a minimum contact clearance of 3mm and located close to the mixer for use in an emergency and to facilitate servicing. (max.2 meters of cable) The machine must be incorporated into a potential equalization system. The leakage current for this appliance is no greater than 1 mA/KW. If the electrical supply cable to the machine becomes damaged, it must be replaced by a qualified electrician using cable which is 0.75 or higher and suitable for a 1/4HP motor load. The ground wire is fixed to the machine and this connection must be kept intact. The mixer **MUST** be grounded.

- The minimum requirement for all electrical equipment is correct operation between air temperature of +5°C and +40°C.

- Electrical equipment is capable of operating correctly when the relative humidity does not exceed 95% at a maximum temperature of +40°C.

- Electrical equipment is capable of operating correctly at altitude up to 1000m.

- Electrical equipment is designed to withstand to protected against the effects of transportation, and storage temperature within a range of -25°C to +55°C and for short periods not exceeding 24h at up to +70°C.

BEFORE USING THE MIXER

Before using the mixer ensure that all users are familiar with the correct operation of the machine. In particular, care should be taken to ensure that the bowl and mixing tools are correctly fitted and that the bowl guard is in position prior to starting the machine.

SAFETY AT WORK

Never place your hand or any kitchen utensil in the bowl when the mixer is in operation. Isolate the machine from the electrical supply by removing the plug from the socket before cleaning or dismantling.

Do not use the machine with any cover or guard removed.

A notice advising operators of the safe use of this mixer is attached to the machine.

OFFICE, SHOPS AND RAILWAY PREMISES ACT, 1963

The above Act requires that this machine and attachments shall be operated only by a properly instructed person or by an employee who is under the supervision of a properly instructed person. The instruction shall include indication of the possible dangers arising and the precautions to be observed. The Act also requires that no person under the age of 18 shall clean a machine if this exposes him to risk of injury from a moving part of that machine or any adjacent machine.

(1) Moving parts can crush and cut. Do not operate with guard removed. Follow lockout procedure before servicing.

(2) **DO NOT IMMERSE IN WATER**
UNPLUG BEFORE CLEANING AND BEFORE ASSEMBLING OR REMOVING PARTS

(3) **OPERATING INSTRUCTION:**
1. Cover the bowl and insert ingredient.
2. Raise bowl to operating position.
3. Select the first speed, press start button.
4. Do not change gears while mixer is turning.

(4) Hazardous voltage. Will cause severe injury or death. Turn off and lock out power at electrical panel before opening panel or servicing.

(1) Push stop button on and off only. Do not pull or twist !!

(2) **CE**

(1)

(2) **Align with ▲ on bowl!**

(3) **CAUTION !**
Please wash bowl thoroughly before first use with soap-based cleaner to remove polishing membrane

CORRECT USE OF THE MIXER

It is the responsibility of the users to use the mixer correctly within the recommended limitations. Always follow the instructions on the side of the machine when changing gear. If the motor labours, stop the machine and reduce the size of the mix immediately. Damage resulting from improper use is not covered by the SPAR warranty. For operator safety, the machine is fitted with a bowl guard which is electrically interlocked to ensure that the mixer cannot operate unless the guard is correctly positioned and the bowl is raised. For additional safety the mixer has a no volt release feature which means that in the event of a power failure, the machine will only restart after the control button has been pressed again. This arrangement ensures that when the supply is restored, the machine cannot restart on its own.

- Careful handling of bagged products by minimizing the height above the bowl base from which they are poured.
- Careful slitting of bags in the lower part of the bowl to allow dust free discharge of flour as far as possible.
- Use of Temporary bowl covers to minimize openings through which flour may escape.

BOWL LIFT & BOWL GUARD

The bowl cradle and guard are electrically interlocked so that the machine will only operate with the bowl cradle in the raised position. In addition to this, the bowl guard must be placed into position by aligning the upside-down V cut into the safety guard with the small raised portion on the lip of the bowl. Only once the bowl is raised and the guard locked will the machine operate, thus ensuring total user safety at all times. Once the guard has been opened or the bowl lowered, the machine can only be restarted by pressing the start button. During the mixing process additional ingredients can be added by means of the chute located on the right hand side of the bowl guard.

TOOL SELECTION

The beater, whisk and dough hook are meant for the work implied by their names. Do not use the beater for dough making or the whisk for anything other than whisking, aerating or mixing light mixtures. Figure 2 shows the typical uses for each of the tools.

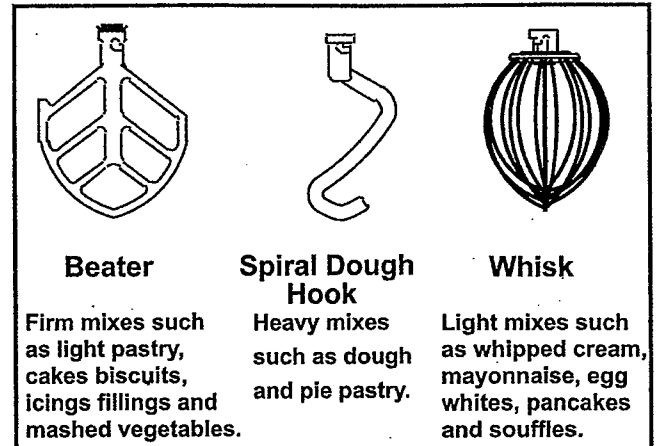
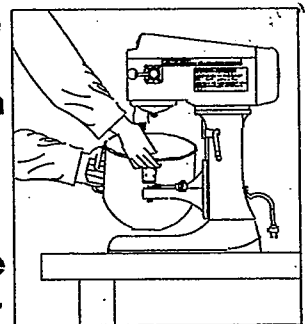


Figure 2

FITTING THE BOWL

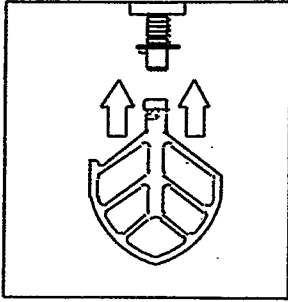
With the bowl cradle lowered, place the chosen mixing tool in the bowl and position the bowl on the cradle. There are three location points for the bowl: a) the locking pin at the rear of the bowl locates

in the hole in the cradle b) the two weld clips in the bowl handles which engage on the pins located on the cradle and c) the bowl locking latches. Ensure that the bowl is seated correctly on the cradle before securing the bowl locking latches prior to use.



FITTING THE MIXING TOOL

Slide the bayonet fitting of the tool onto the drive shaft and twist clockwise to secure it in position. To remove the mixing tool, slide the tool up the shaft slightly and twist counter clockwise.



SPEED SELECTION

Before changing speeds, the mixer must always be stopped. The necessary speed can then be selected before restarting the machine by pressing the green start button. The speed selected depends largely on the quantity and consistency of the product. It is recommended that mixing is always started at the lowest speed and progressively increased to the desired setting. In an emergency situation always use the red emergency stop button to stop the machine. Table 1 shows the recommended speeds for the range of tools.

Table 1

	Recommended speed		
	1st gear	2nd gear	3rd gear
Whisk	→		
Beater	→		
Hook	→		

CAPACITY

The following table lists the recommended capacities of finished weights of regular mixes. Although the machine may be capable of mixing larger quantities, it will lead to excessive and premature wear and possible failure. Overloading also results in lengthy processes and unsatisfactory results.

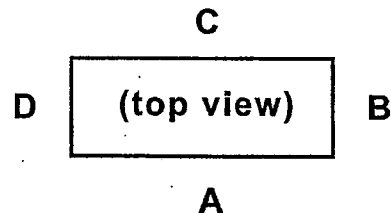
Product	Maximum Regular mix (Kg)	Whip	Beater	Hook
Mashed potato	2.1		★	★
Pie pastry	2.1		★	
cookies	12 dz.		★	
Sponge cake	1.4	★	★	
Pound cake	2.1		★	
Marshmallow	0.36	★		
Fondant	1.4	★		
Whipping cream	2.4 pts	★		
Egg whites	0.4 pts	★		
Mayonnaise	2.4 qts	★		
Batter	3.2 qts	★	★	
Pasta, Egg Noodle	0.5			★
Brioche (kg flour)	3.2			★
Light bread dough (65% moisture content)	2			★
Heavy bread dough (60% moisture content)	1.8			★
Pizza dough (50% moisture content)	1.5			★
Pizza dough (40% moisture content)	1.2			★

1. Recommended weight for a finished mix unless otherwise stated.
2. Water content e.g. 25# flour / 12.5# water = 50% moisture.
3. For pizza dough with lower moisture content consult supplier.
4. For higher gluten flour reduce dough batch by 25%.

Table 2

Noise Test Report:

- (1) Model No.: SP-80.
- (2) Background noise:
Add Flour: background noise level is 54.0dB(A).
Dry running: background noise level is 52.6dB(A).
- (3) Distance: 1m from the surface.
- (4) Height: 1.6m from the floor.

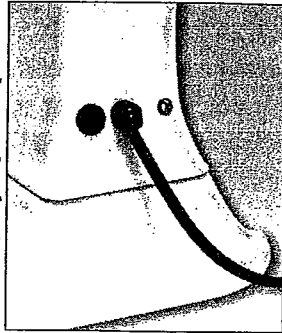


Unit: dB(A)

	A	B	C	D	E
Add Flour	60.9	63.2	63.5	61.3	61.9
Dry running	61.2	61.1	59.4	61.0	63.9

Thermal overload protection (circuit breaker) :

The thermal overload protection (circuit breaker) will shut off and stop the machine automatically. If this occurs, please turn off the mixer and reduce the size of the batch. After waiting one minute, reset the circuit breaker (push it in) and turn on the mixer. If mixers stop again reduce the batch further. If this happens with an extremely small/light batch, contact your nearest authorized service agent for further information.



CONTROLS

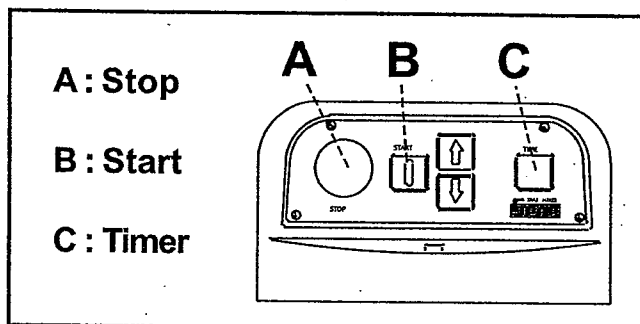


Figure 5

The control panel is shown in Figure 5 start the mixer by setting timer then press "start". Always start mixer at the first speed. Red button is for emergency stop. Set timer at "99" for manual operation. Set timer at 1~55 for automatic operation.

CARE OF YOUR MIXER

The mixer is designed for minimum owner maintenance. It may be necessary from time to time to apply a little oil to the rods on which the bowl cradle slides. If so, use a little food quality lubricant, ensuring that there is no excess oil that could contaminate the food mix.

Water jet cleaning is not allowed. Clean

the mixer thoroughly after use. The body should be wiped down with a damp cloth after first isolating the machine from the electricity supply. Do not spray the machine with or immerse it in water. Do not forget to clean the rear of the machine and do not allow the rear vents to become blocked as this may result in overheating. Pay particular attention to the bowl pins and any surrounding areas of the cradle to prevent a build up of mix as this could prevent correct location of the bowl. For the same reason ensure that the beater shaft and each of the sockets on the tools are cleaned thoroughly. The bowl and tools should be washed in hot soapy water, rinsed and dried before being put into storage. Do not wash the tools in a dishwasher as the polished finish will be adversely affected by the dishwashing chemicals.

- Steady state voltage: 0.9~1.1 of nominal voltage.
- Frequency : 0.99 ~ 1.01 of nominal frequency continuously.
- Avoid exposing to vibration environment.
- Avoid exposing to direct sunlight or heat rays.

The overcurrent protection device should be rated 2A in supply side by user at least.

FAULT FINDING

FAULT	CHECK	POSSIBLE REASON & ACTION REQUIRED
No power to mixer	Check plug socket Check wiring in plug Check fuse in plug Check or change cable Check microswitch	Mixer not plugged into a live socket or not switched on Plug incorrectly wired-Re-wire correctly Possible faulty fuse-Replace fuse Cable damaged or split-Replace cable Limit switch damaged or faulty-replace switch
Mixer fails to operate	Check bowl guard/lift Check timer position Check transmission belt Check gear change lever	Machine will not operate with guards open Mixer will operate on timer or manual position only Belt damaged or broken-Replace belt Machine will not operate if out of gear-Put in gear
Mixer becomes noisy	Check bowl and tools Check work surface Check bearing for wear Check gearbox	Ensure that bowl and tool are correctly seated. Uneven surfaces create excessive resonance Worn bearings-Replace bearings Damaged or faulty gearbox-Replace gearbox
Mixer loses power	Check capacity Check transmission gear Check shaft bias	Overloading of bowl-Reduce load Gear damaged or worn-Replace belt Damaged shaft bias-Replace shaft bias
Motor overheating	Check capacity/speed Check supply voltage	Refer to Tables 2 and 3 for details Voltage should correspond to rating plate
Oil on planetary shaft	Check oil seal	Worn oil seal-Change oil seal

WE RECOMMEND THAT THE ABOVE ACTIONS BE CARRIED OUT BY A TRAINED TECHNICIAN

ISOLATE THE MIXER FROM THE ELECTRICAL SUPPLY BY REMOVING THE PLUG FROM THE SOCKET BEFORE CLEANING OR SERVICING

MAINTENANCE

Regular maintenance is necessary on all machines if they are to remain in good working order. It is strongly recommended that this be carried out by trained technicians from a METCALFE appointed distributor.

ON A REGULAR BASIS

Clean the machine thoroughly after use and lubricate the rods on which the bowl cradle slides (SEE CARE OF YOUR MIXER).

ON AN ANNUAL BASIS*

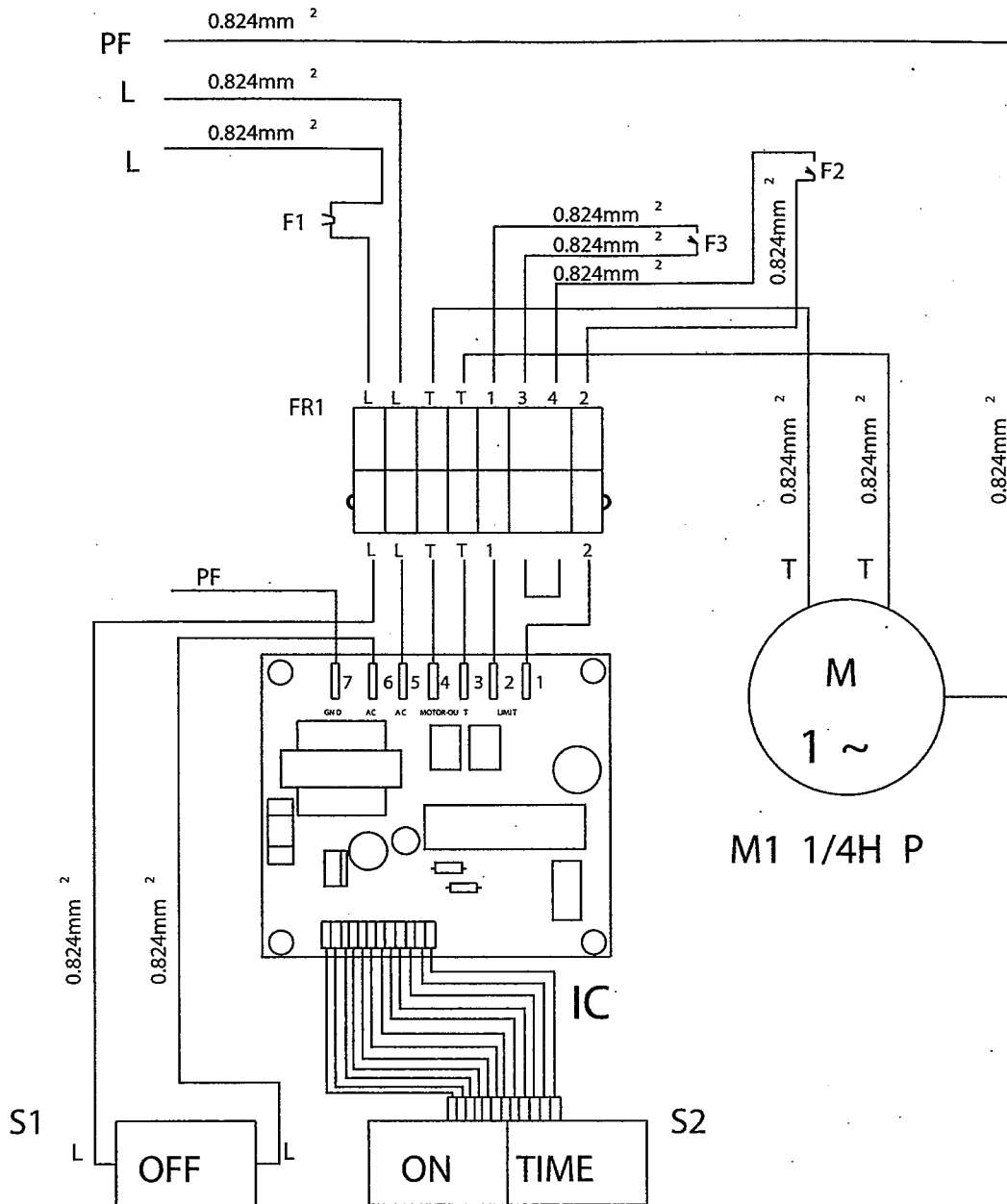
Check that all bolts are tight and bowl guard secure. Check the transmission belt and replace if necessary,

IT IS RECOMMENDED THAT ANY SERVICING OR MAINTENANCE WORK IS CARRIED OUT BY A TRAINED TECHNICIAN OR ELECTRICIAN

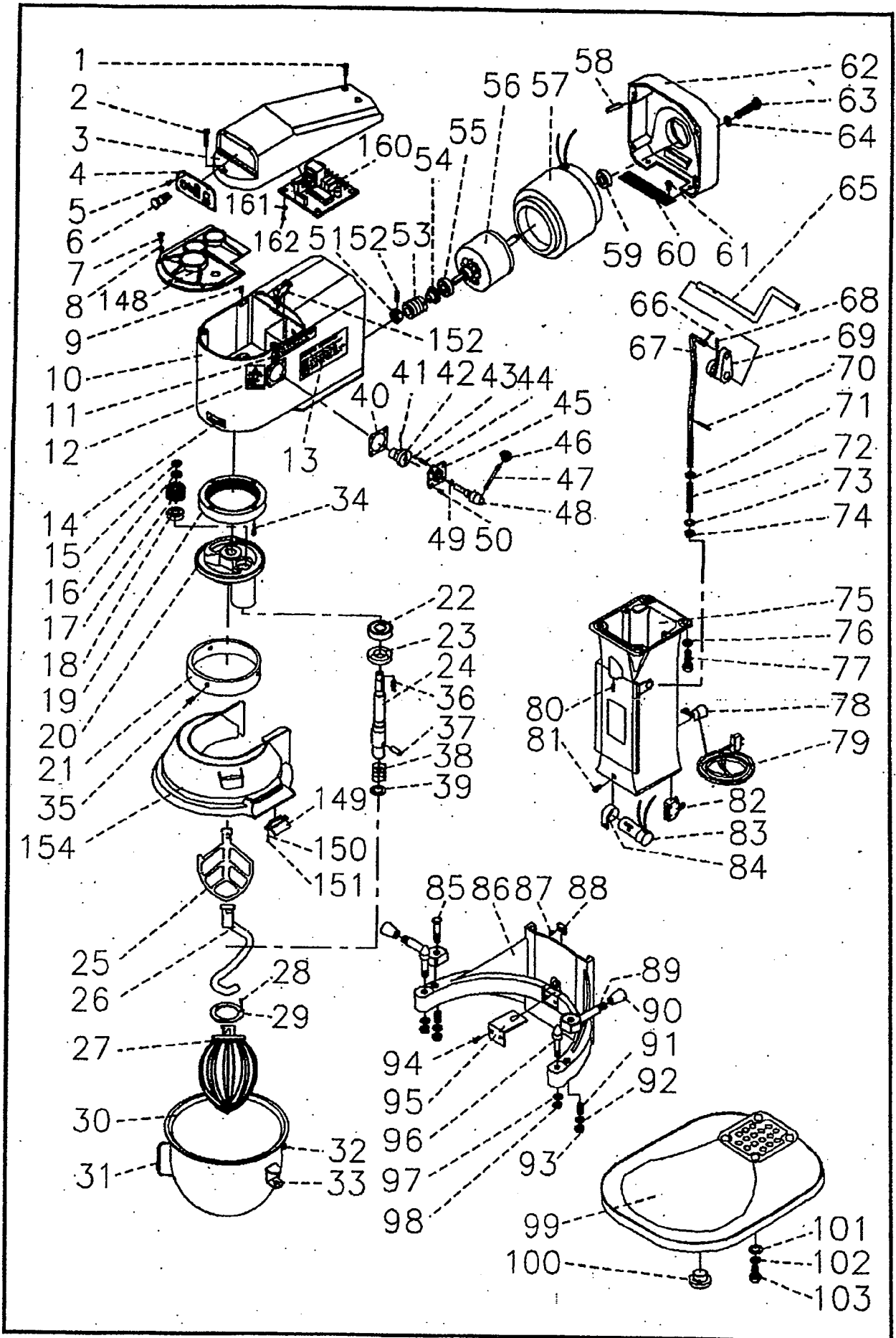
ISOLATE THE MIXER FROM THE ELECTRICITY SUPPLY BY REMOVING THE PLUG FROM THE SOCKET BEFORE CLEANING OR SERVICING

*Carry out on a more frequent basis if machine is arduously used.

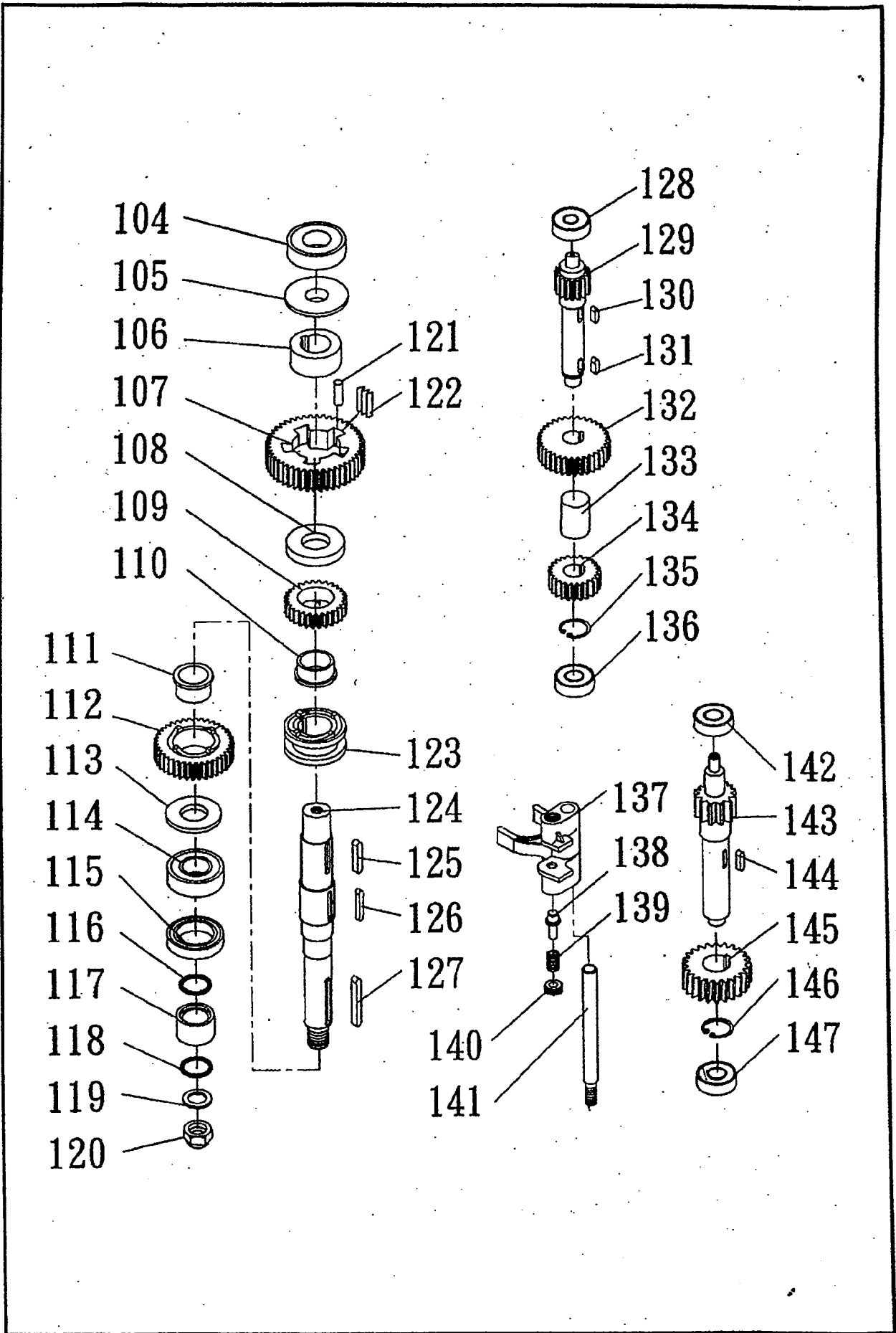
*Refer to parts list and exploded view diagrams on pages 9-13.



Item	Description	M	aker	Part number	Qty	Rem
F1	Overload Protection		SANG MAO	110V/5A 220V/4A	1	
F2	Microswitch of Safety Guard		ROUZET	125V/ 250V 5A	1	
F3	Microswitch of Height Adjuster		Omron	V-212 - 1C6	1	
FR1	Terminal Block		GEM	300V/12V	1	
IC	IC Board		ZEON	2-MH 29009	1	
S1	Emergency Stop Button		Switchlab	DC/6A 24V AC/5A 250V	1	
S2	Start Button,Timer IC Control		Microchip	PAC 16C57-C/P	1	
M1	Motor 1/4HP,1PH,120V/220V,50/60Hz		Shiun Jiann	1/4HP 120V/220V	1	
				APPROVED:		
				DRAW:	S.S.R	
				MECH NO:	SP-800A	
				ITEM NO:		
				DATE:	2002.1.15	



CPM08



CPM08

NO.	QTY	DESCRIPTION	US\$	NO.	QTY	DESCRIPTION	US\$
1	2	screw : M5x20		82	1	circuit breaker	
2	1	screw : M4x30		83	1	motor capacitor	
3	1	transmission case cover		84	1	capacitor attachment	
4	1	digital control panel		85	2	hex screw : M5x45	
5	4	screw : M3x6		86	1	bowl cradle	
6	1	emergency stop button		87	2	screw : M4x4	
7	4	hex screw : M6x16		88	1	clip	
8	4	spring washer : M6		89	2	bowl locking latches	
9	2	pin : M6x15		90	2	plastic knobs	
10	1	transmission case		91	2	spring	
11	1	cleaning instructions		92	2	washer : M5	
12	1	stop to change gear label		93	4	nut-stop : M5	
13	1	general instructions		94	2	screw : M5x10	
14	1	agitator direction arrow		95	1	bowl lift bracket	
15	1	nut : M6		96	2	bowl lock pins	
16	1	washer : M6x16x1		97	2	spring washer : M8	
17	1	pinion beater : 17T		98	2	nut-stop : M8	
18	1	ball bearing #6001Z		99	1	base	
19	1	planetary gear : 56T		100	4	bottom rubber knobs	
20	1	planetary holder		101	4	washer : M8x16	
21	1	planetary holder cover		102	4	spring washer : M8	
22	1	ball bearing : #6002Z		103	4	hex screw : M8x16	
23	1	oil seal : 32x17x7		104	1	ball bearing : #6203Z	
24	1	planetary shaft		105	1	lead-in oil pad	
25	1	flat beater		106	1	bushing	
26	1	dough hook		107	1	first speed gear : 46T	
27	1	wire whip		108	1	bushing	
28	3	hex screw : M4x10		109	1	gear clutch : 25T	
29	1	stainless whip top		110	1	third speed bushing	
30	1	bowl		111	1	second speed bushing	
31	1	bowl handles		112	1	second speed gear 36T	
32	1	bowl knob		113	1	bearing pad	
33	2	bowl weld clip		114	1	ball bearing : #6203Z	
34	4	screw : M6x13		115	1	oil seal : 35x25x7	
35	3	screw : M2.6x4		116	1	o-ring : S15	
36	1	key-way : 4x8x8		117	1	oil bushing	
37	1	planetary pin		118	1	o-ring : S15	
38	1	planetary spring		119	1	s/s flat washer : M8x22x2	
39	1	planetary washer : 13.1x1		120	1	screw and nut : M8	
40	1	gear arm gasket		121	5	rollers : 6.5x12.9	
41	1	o-ring : 3x18		122	5	slice spring	
42	1	ball socket		123	1	clutch sleeve	
43	2	spring		124	1	drive shaft	
44	2	spring		125	1	key-way : 5x5x18	
45	1	gear arm plate		126	2	key-way : 4x4x28	
46	1	black plastic gear knob		127	1	key-way : 5x5x26	
47	1	gear arm		128	1	ball bearing : #6200Z	
48	1	gear arm shaft		129	1	transmission shaft	
49	1	screw		130	1	key-way : 5x5x12	
50	4	nut : M4x10		131	1	key-way : 5x5x14	
51	4	nut : M10		132	1	third speed gear : 36T	
52	1	pin : 3x10		133	1	bronze bushing	
53	1	worm / 60HZ		134	1	second speed gear : 25T	
53-1	1	worm / 50HZ		135	1	c-ring : S15	
54	1	oil seal		136	1	ball bearing : #6200Z	
55	1	ball bearing : #6203Z		137	1	shifter yoke	
56	1	motor shaft and core		138	2	shifter yoke plunger	
57	1	motor coil		139	2	shifter yoke spring	
58	1	pin spring : 6x12		140	2	nut : M3	
59	1	ball bearing : #6202Z		141	1	shifter guide rod	
60	1	motor cooling screen		142	1	ball bearing : #6200Z	
61	1	screw : M4		143	1	master shaft : 18T	
62	1	rear cover		144	1	key-way : 5x5x14	
63	4	screw : M5x50		145	1	bronze worm gear / 60HZ : 24T	
64	4	spring washer : M5		145-1	1	bronze worm gear / 50HZ : 20T	
65	1	bowl raise handle		146	1	c-ring : S15	
66	1	pin spring		147	1	ball bearing : #6200Z	
67	1	bowl lift rod		148	1	transmission case top	
68	1	pin spring : 5x24		149	2	clip	
69	1	bowl lift connection		150	1	washer	
70	1	pin spring : 3x18		151	1	screw	
71	2	washer : M8x16x15		152	1	micro switch	
72	1	spring washer		153			
73	1	washer : M8x16x1.5		154	1	safety guard	
74	1	nut : M8		155	4	nut : M3	
75	1	mixer column		156	2	screw : M5	
76	4	spring washer : M8		157	1	microswitch fixture	
77	4	hex screw : M8x25		158	1	microswitch for bowl lifting	
78	1	strain reliever		159	2	screw : M3	
79	1	cord and plug		160	1	digital control board	
80	1	screw : M5x20		161	4	washer : Mx6x1	
81	1	screw : M5x21		162	4	screw : M3x10	

● FEATURES

- * heat treated hardened steel alloy gears, 25% thicker than industry's leader
- * abrasion resistant transmission design
- * efficient, custom made, powerful motor
- * high torque transmission for heavy loads
- * long lasting lubricant
- * quiet operation
- * stainless steel revolving safety guard with ingredient chute
- * overload protection
- * metal-rubber composite gear type belt, non-slip
- * simple maintenance
- * front mounted controls for easy access and operation
- * unprecedented 5 year transmission warranty (available only in the US and Canada) on most models, see warranty for details



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e enquiries@metcalfecatering.com
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metcalfe WARRANTY

All **METCALFE** products are guaranteed against defects in material and workmanship for a period of one year from date of Invoice, except where specially noted.

The Company's obligation under this warranty is limited to repairing or replacing, without charge, any part or parts found to be defective under normal use, in accordance to the specified operations manual and capacity ratings.

On all return to factory warranty items, it is the responsibility of the purchaser to return the entire unit to the factory, properly packed and labelled.

All repairs, alterations or replacement of materials or parts not authorised by **METCALFE** will automatically void all warranties in their entirety.

There is a limited **6-month warranty** on the following

- Mixer attachments (beater, whisk and dough hook)
- Parts purchased or supplied for the repair of **METCALFE** equipment

This warranty does not cover the following

- Failure due to neglect, abuse, careless handling or misuse of machine
- Failure caused due to improper maintenance
- Blender clutches
- Knives and gears on can openers
- Sharpening of slicer blades

METCALFE and its suppliers reserve the right to make changes in design and specification to any product without prior notification.



Registered England 386634
WEEE Registration WEEE/HB0069TY

Electrical PAT Certificate

Test Detail	Results
Item:	
Class:	Class 1 / Class 2
Date:	/ /
Appliance ID:	
User ID:	M.C.E.
Visual:	
Earth Current:	amps
Class 1 Earth Result/RPE:	Ω
RISO:	MΩ
1 EA:	MA
Class 2 RISO:	MΩ
1 EA:	MA
Insulation (500V):	MΩ
Load:	KVA
Leakage:	MA
Polarity (leads only):	

Test Detail	Results
Item:	
Class:	Class 1 / Class 2
Date:	/ /
Appliance ID:	
User ID:	M.C.E.
Visual:	
Earth Current:	amps
Class 1 Earth Result/RPE:	Ω
RISO:	MΩ
1 EA:	MA
Class 2 RISO:	MΩ
1 EA:	MA
Insulation (500V):	MΩ
Load:	KVA
Leakage:	MA
Polarity (leads only):	

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Polarity (leads only):	