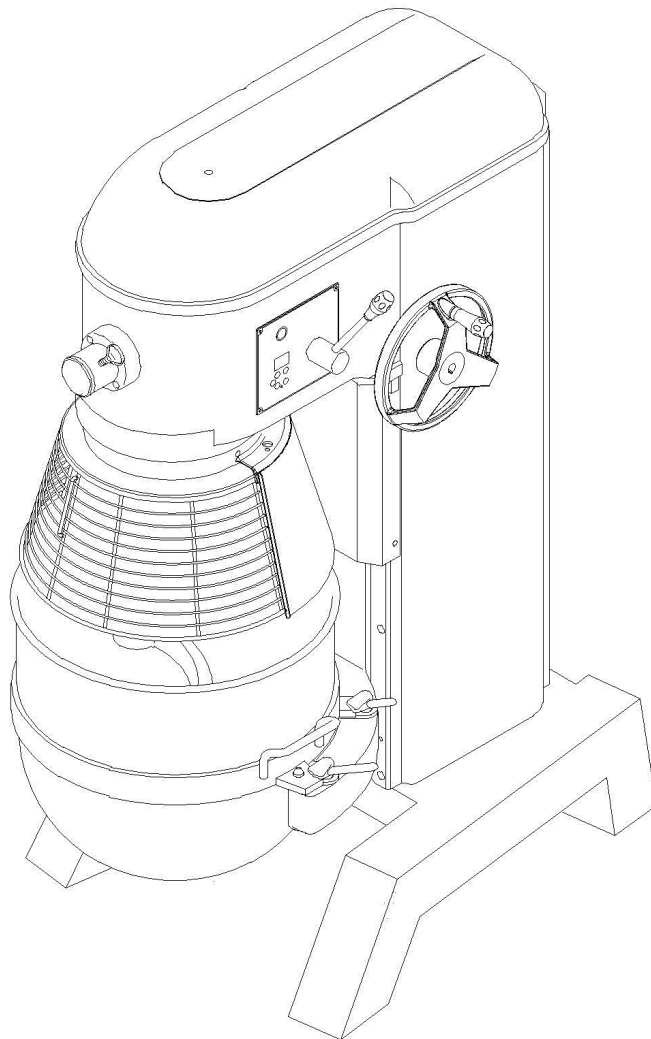


PERFORMANCE[®]

INSTALLATION / OPERATION MANUAL

BM60 Planetary Mixer



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Date Purchased	Serial No.....
Dealer.....	
Service Agent	

Introduction

Introduction

We are confident that you will be delighted with your PARAMOUNT MIXER, and it will become a most valued appliance in your commercial kitchen.

A new mixer can seem very complex and confusing at first glance. To ensure you receive the utmost benefit from your new Paramount, there are two important things you can do.

Firstly

Please read the instruction book carefully and follow the directions given. The time taken will be well spent.

Secondly

If you are unsure of any aspect of the installation, instructions or performance of your oven, contact your Paramount dealer promptly. In many cases a phone call could answer your question.

The Paramount BM60 is a dependable mixer for kneading and mixing all kinds of dough, egg, cream, cookies, mayonnaise etc. The mixer works smoothly and reliably. The mixer has 3 speed selections and an electronic timer. The mixer comes with various style attachments which can be used to obtain the best results. These are made of alloy aluminum or of a food hygiene standard material.

This model Mixer is equipped with a powerful 2HP motor and strong belt and gear drive design. The gears are made of hardened alloy steel and a hardened steel worm wheel. A stainless steel safety guard and electronic timer are available on all models.

With proper operation and maintenance this mixer will give you years of service, and obtain the best results.

Safety Precautions



Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death.

Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment. Failure to do so may result in serious injury or damage.

- Keep hands and clothing away from the bowl and hob attachments when in operation.
- Keep rigid objects away from the bowl and hub attachments when in operation.
- Do not use this machine for any applications other than food processing.
- Use the machine only with the electrical supply specified on the rating plate.
- Disconnect the machine from its power source before carrying out any maintenance.
- Do not disable or remove any of the safety mechanisms included with this machine.
- Do not leave the machine in operation unattended.
- Observe all maintenance and safety inspection schedules.
- Ensure the machine and any accessories / attachments are in stable, upright position before operating.
- Ensure all safety features of the machine are fitted and operate correctly within the safety requirements and procedures before operating the machine.

Motor

2 HP (1.5kW) powerful, ball bearing, ventilated within mixer enclosure.

Electrical Supply

230-240 Volts AC, 50Hz, 1P+N+E.
or 400-415 Volts AC, 50Hz, 3P+E.

Transmission

The gears are constantly mesh in a special lubricant assuring long life; transmission gears are of heat treated alloy steel, and high accurate construction. All bearings are ball bearings. Positive timing belt drive eliminates slip and speed variation.

Electronic Timer

The electronic timer will stop the mixer when the desired time has elapsed.

Emergency 'Stop' Button

Located on the Control Panel on the right hand side of the machine. Pressing this button will stop all movement of the machine.

The Emergency Stop Button should only be used in cases of emergency and SHOULD NOT be used as the standard OPERATING method of stopping the mixer.

Safety Guard

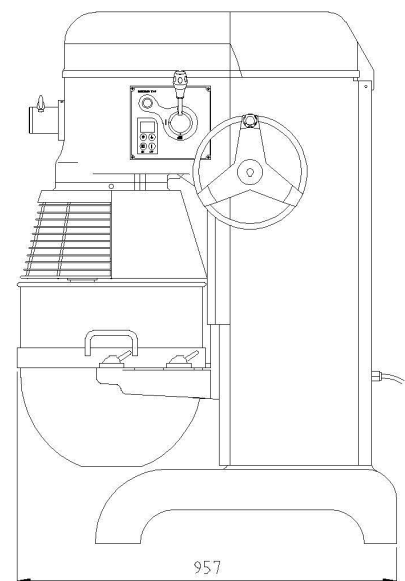
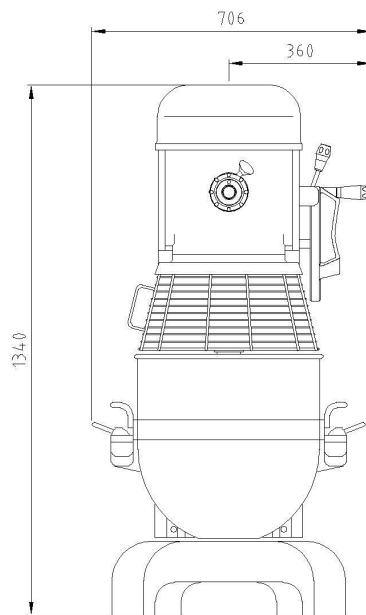
Stainless steel safety guard smoothly rotates open. Fitted with a limit switch to shut off power immediately to protect operator.

Hub

The hub is only for the BM60HAT models.

Dimensions

Model	BM60AT	BM60HAT
Description	60 litre Mixer	60 litre Mixer (with Hub)
Motor Power	2.0 HP (1.5 kW)	
Net Weight (approx.)	405 Kg	
Agitator Speed (RPM)	Low	82
	Med	139
	High	270



Installation



Before installing the mixer, check that the available electrical supply match that of the mixer as stated on the mixer's rating plate.

Unpacking

Immediately after unpacking the mixer, check it for possible shipping damage. If this machine is found to be damaged after unpacking, save the packaging material and contact the carrier within one day of delivery.

Location

Place the mixer in its operating location - this should be a sturdy level surface. There should be adequate space around the mixer for the user to operate the controls and install and remove the bowl.

Holes are provided in the base to permanently secure the mixer, although this not necessary in normal installations.

Floor models must be leveled front-back and side-to-side by sliding shims under the legs as required.

Electrical Connection

The supply cord on this machine is provided with a three-pin 13A fused and earthed plug. It is imperative that the outlet to which this plug is connected is properly earthed (grounded).

Prior to installation, test the electrical service to assure it agrees with the specifications on the machine data plate located on the rear side of the pedestal.

Permissible voltage fluctuation is $\pm 10\%$ of nominal voltage.

Components having adjustments protected (e.g. paint sealed) by the manufacturer, are only allowed to be adjusted by an authorised service agent.

Rotation

To start the motor, push the 'ON' button. The speed selector handle must be on one of the numbers indicating a speed and not located between the numbers.

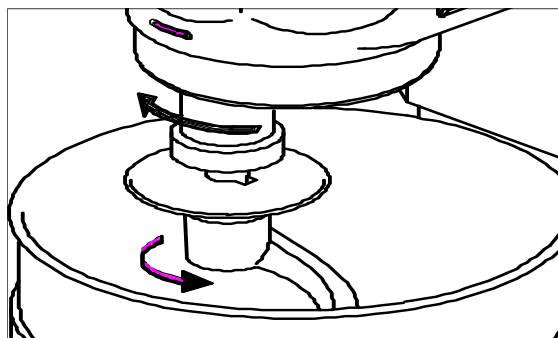


Figure 1

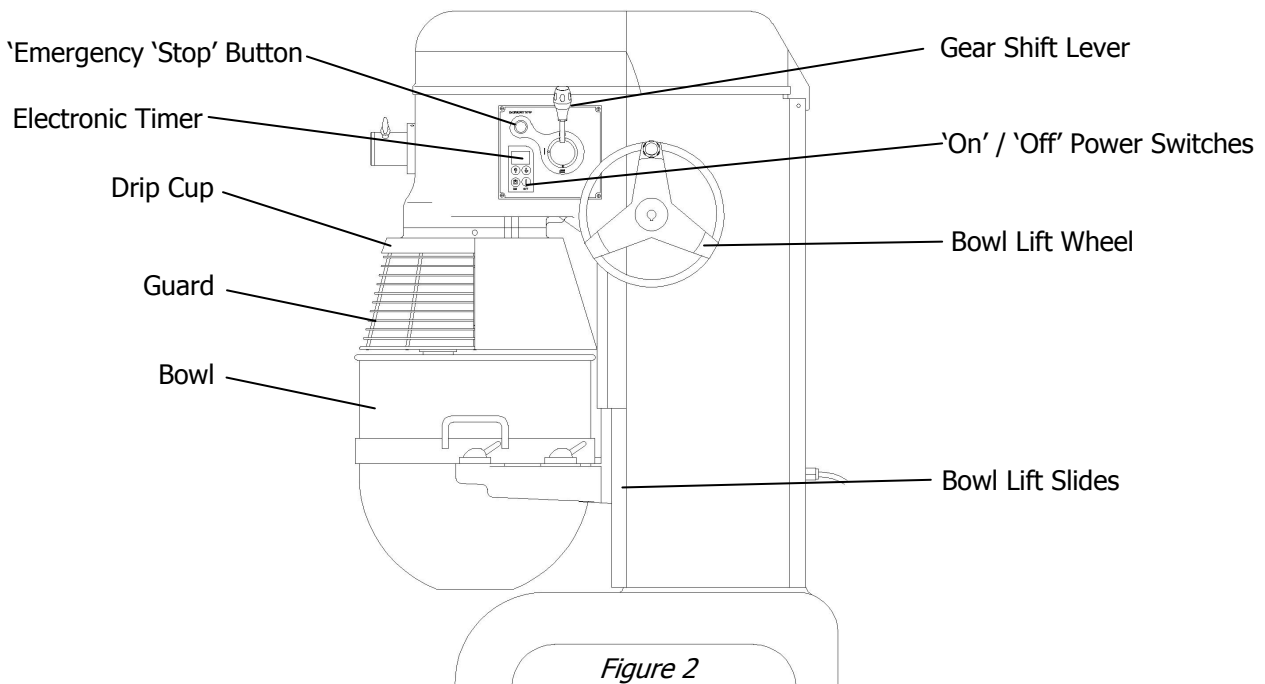


Keep hands, clothing and utensils out of the bowl whilst the machine is in operation.

Failure to follow the operation instructions or improper use of the mixer may result in damage to the mixer, or cause injury to the operator.

Important:

Great care must be taken to minimise dust emission when handling dry ingredients such as flour. Bags should be opened in the lower part of the bowl and poured from as close to the base of the bowl as possible. It is recommended that ingredients suppliers' hazard data sheets are consulted prior to use. The use of respiratory protective equipment may be required during loading of the bowl.



Non-Timed Operation

For non-timed operation, set speed selector at the desired speed, set the timer switch to the '0' position, then depress the 'ON' button. To stop the machine, depress the 'OFF' button.

Timed Operation

For timed operation, set speed selector at desired speed, set the electronic timer to the desired time, then depress the 'ON' button. The mixer will automatically shut off after the preset time has elapsed. In timed operation, if the machine is shut off before the preset time has elapsed, the electronic TIMER does not continue. To restart mixing, the electronic TIMER has to be reset, then depress the 'ON' button.

Speed Selection

To change speeds, first turn off the motor by depressing 'OFF' button, then shift the speed selector to the desired speed. The selector must always be positioned over a speed number and never between the numbers.

If shifting is not smooth, or you feel that the selector can not reach the exact position, please depress the 'ON' button, then immediately depress the 'OFF' button. The selector should now reach the exact position easily. Be sure that shifting has finished, then depress 'ON' button to start machine.

Speed Control

Speed 1 (Low) - This speed is for heavy mixtures like dough, heavy batters and potatoes.

Speed 2 (Medium) - This speed is for mixing cake batters, mashing potatoes and for developing dough.

Speed 3 (High) - This speed is for mixing maximum amount of air into light batches. The wire whip is used for whipping cream, beating egg whites, mixing light icings, meringues etc.

Operation

Emergency 'Stop' Button

The Emergency Stop Button should only be used in cases of emergency and **SHOULD NOT** be used as the standard OPERATING method of stopping the mixer.

Located on the right hand side of the machine, on the Control Panel. Pressing this button will stop all movement of the machine. ONLY ATTEMPT TO RE-START AFTER THE FAULT IS CORRECTED.

The machine cannot be re-started until:- The Emergency Stop Button is pulled up to release.

Bowls

The regular bowl for this mixer has a capacity of 60 litres.

Bowl Lift

Mixers without power bowl lift have a hand wheel to raise and lower bowl.

Power Bowl Lift (Optional)

The bowl on mixers with power bowl lift can be raised and lowered through a momentary contact switch lever located on side of the mixer column. From the centre position, if the lever is pushed up, the bowl will raise to the top. If the lever is pushed down, the bowl will lower to the bottom.

Agitators

When placing an agitator on the agitator shaft, lower the bowl, push the agitator up onto the shaft and turn the agitator until the drive pin on the shaft reaches L-shaped slot in the agitator shank.

Dough Arm (Fig 3)

It is frequently used for heavy bread dough, and preferable used at low speed.

The moisture content of heavy dough is a critical when selecting proper mixing speed. Never use 2nd speed when mixing heavy dough.

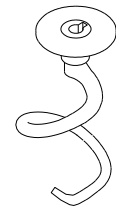


Figure 3

Beater (Fig 4)

It is commonly used for thin batters, cake and mashing potatoes, like stuffing and preferable to be used at middle speed.

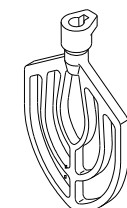


Figure 4

Whip (Fig 5)

It is best for whipping cream and beating eggs and preferable to be used at high speed.

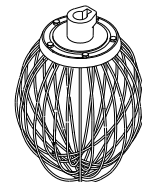


Figure 5

Meat and Food Chopper (Optional)

The mixer is designed to drive the meat and food chopper attachment in the vacant speed "dot position". **Do not use the attachment while mixing.**

To Use: Depress the button marked 'OFF'. Loosen the thumb screw on the attachment hub. Set speed selector at vacant speed marked dot. The selector must always be positioned over the dot and never between numbers and dot. Depress button marked 'ON'.

Attachments - Optional

To install an attachment, loosen the thumb screw on the attachment hub and remove the plug. Insert the attachment into the attachment hub making certain that the square shank of the attachment is in the square driver of the mixer. Secure the attachment by tightening the thumb screw.

Move the gear shift lever to the desired speed and start the mixer to operate the attachment.

The meat and food chopper attachment should be operated in second or third speed. If material in the cylinder stalls the mixer, stop the mixer at once. DO NOT attempt to restart the mixer in a lower speed - remove the adjusting ring, knife, plate, and worm and clear the obstruction.

Mixing Heavy Dough (Mixing Capacities)

The moisture content of heavy dough is a critical factor when selecting proper mixing speed. Do NOT use 2nd speed when mixing heavy dough with an Absorption Ratio (AR) of 60% or less. To determine the Absorption Ratio (AR) of a product, the water weight divide by the flour weight.

Example: Calculate the Absorption Ratio of a mixture containing 2 kg of water and 4 kg of flour.

$$AR = \frac{2}{4} = 0.50 = 50\%.$$

Maximum Capacity Loading (BM60)

Product	Agitator	Max Load BM60
Egg Whites	Whip	3 ltrs
Mashed Potatoes	Beater	18 kg
Mayonnaise (Litres Oil)	Beater	18 ltrs
Meringue (Litres Water)	Whip	2 ltr
Waffle / Pancake Batter	Beater	22 ltrs
Whipped Cream	Whip	11 ltrs
Cup / Layer Cake	Whip	27 kg
Sponge Cake (with flour & butter)	Whip	20 kg
Sugar Cookie	Beater	18 kg
Bread or Roll Dough (Light / Medium, 60% AR)†	Hook *	Flour 25 kg
Bread or Roll Dough (Heavy, 55% AR)†	Hook *	Flour 22 kg
Thin Pizza Dough, Pasta, Basic Egg Noodle (40% AR†, 5 minutes max mix time)	Hook *	Flour 20 kg
Medium Pizza Dough (50% AR)†	Hook *	Flour 20 kg
Thick Pizza Dough (60% AR)†	Hook *	Flour 25 kg
Raised Donut Dough (65% AR)	Hook *	Flour 20 kg
Whole Wheat Dough (70% AR)	Hook *	Flour 25 kg

* 1st speed only.

** 1st speed & 2nd speed only.

† If high gluten flour is used, reduce above dough batch size by 10 %.

Cleaning / Maintenance

Cleaning Guidelines

CAUTION:

ALWAYS TURN OFF THE POWER SUPPLY BEFORE CLEANING OR MAINTENANCE.

THIS UNIT IS NOT WATER PROOF.

DO NOT USE WATER JET SPRAY TO CLEAN INTERIOR OR EXTERIOR OF THIS UNIT.

The mixer should be thoroughly cleaned daily with a clean damp cloth and plastic scraper (metallic implements are not recommended).

Never use a metal or stiff brush to clean the mixer. Never clean the mixer with a water hose or any fluid pressure.

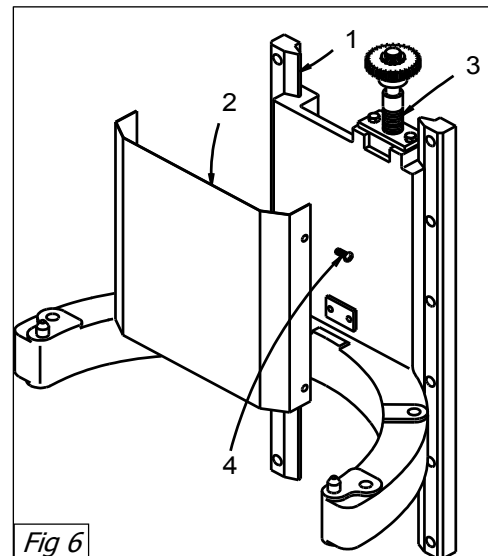
Bowls and agitators should be removed from the mixer and cleaned in a sink. The bowl guard should be removed periodically and wiped clean.

Maintenance Guidelines

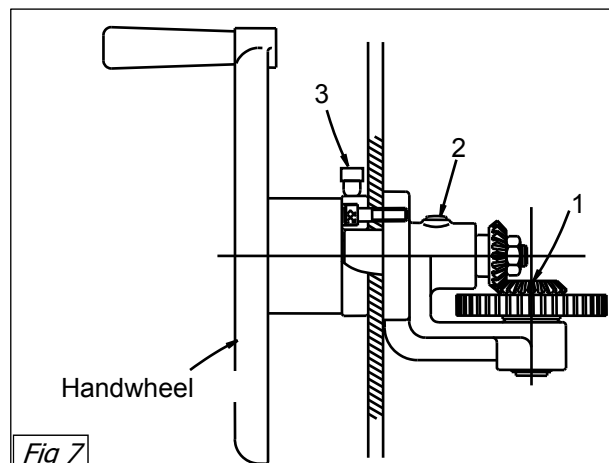
The **Transmission Case** and **Planetary Mechanism** should be inspected weekly for leaks, damage, etc. Should it become necessary to repack the ball bearings, an authorized service technician or the manufacturer should be contacted. Use of non-recommended grease or lubricants may lead to damage and void the unit's warranty.

The **Bowl Lift Slides** [1], (Figure 6) should be lubricated every six months, or more often under heavy usage.

Remove the Bowl Support Apron (2) by loosening the Screws (4), then lubricate the Lift Screw (3).



Add machine oil to the oil cup in the Clamping Ring [3], (Figure 7) of the bowl lift unit.

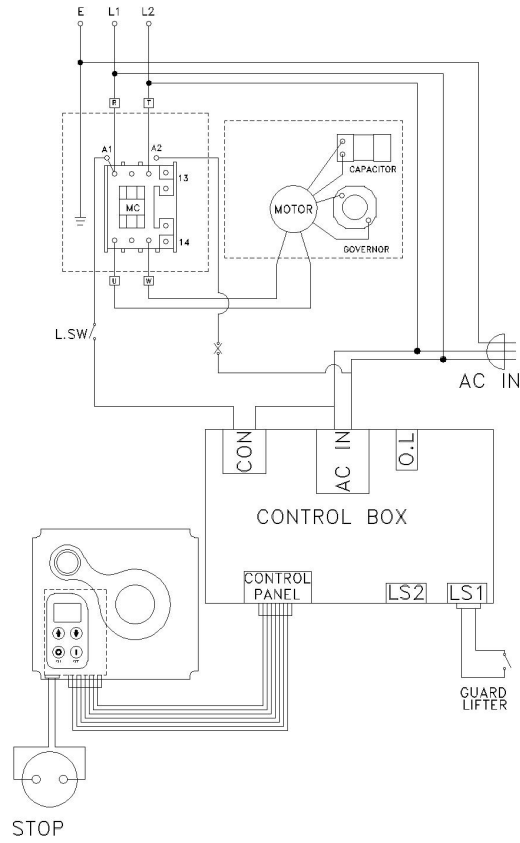


Fault Finding

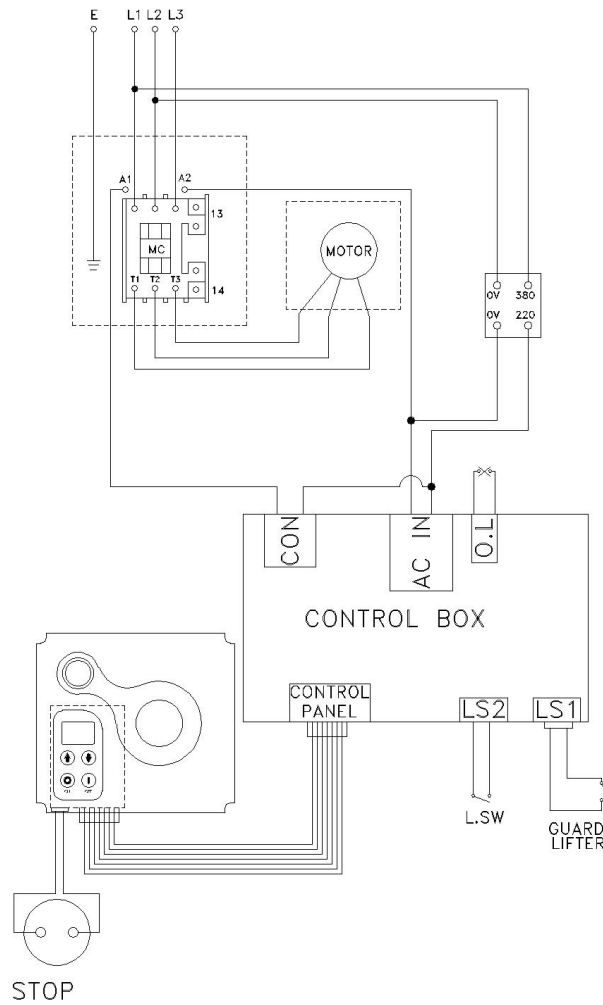
Fault	Possible Cause	Remedy
The mixer does not operate.	The mains isolating switch on the wall, circuit breaker or fuses are 'Off' at the power board. The mixer electronic timer is set to '0'.	Turn 'On'. Set time setting, or set electronic timer to '0' to allow manual operation.
Mixer stops during operation.	Mixer overload tripped. (Ensure that mixer is not being overloaded).	Single phase models: Press reset button at the rear of mixer. Three phase models: Call service.

Wiring Diagrams

Single Phase Models



Three Phase Models



Guide Sheets for Staff Training

The pages in the following section of this manual should be copied and used when training staff to operate the Paramount mixers. It is suggested that the competency assessment checklists be completed, signed, and a copy kept in the personnel files for future reference.

Supervisors to Ensure

- Competency check lists are copied and completed as part of the training of staff.
- Correct training of staff to the required competency expectations.
- The verification section of the competency check list is signed off.
- A copy of the completed and signed competency check list is placed in personnel records as evidence of operator competence.

Operation Competency Checklist

Paramount Planetary Mixer

Element: Implement Safe Work Procedures



Assessment Criteria



"Can the Operator"

Identify the purpose and use of:

- Equipment guards.
- Warning signs.
- Safety features.

Related to this equipment?



Identify:

- Machine-related health and safety risks of this equipment?
- Emergency procedures to be used with this equipment?



Operate this equipment correctly in normal and emergency situations?



Identify:

- OH&S reporting procedures related to hazard reporting for this machine?

Comments:

To gain competency in the use of the **PARAMOUNT PLANETARY MIXER**, the assessor must be satisfied that the operator has consistently applied the knowledge and skills in all of the above elements.

This form should be signed off only when the assessor is satisfied that the employee / trainee is competent to carry out all of the tasks described above.

Applicant's signature: _____ **Date:** / /

Assessor's signature: _____ **Date:** / /

PARA
MOUNT®

SUGGESTION — Use this form to train staff, and place a copy in personnel files.

Daily Cleaning Competency Checklist

Paramount Planetary Mixer

Element: Implement Essential Hygiene and Sanitation Procedures



Assessment Criteria

"Can the Operator"

Maintain sound personal hygiene at all times when working with the **PARAMOUNT MIXER**?

Use appropriate protective and work clothing while working with the **PARAMOUNT MIXER**?

Identify:

- Product handling requirements during production process?
- Critical points in the process where contamination can be introduced?
- Why it is important to monitor hygiene and sanitation performance?
- The effect of poorly maintained equipment on the control of contamination and spoilage?
- Company policies and procedures regarding hygiene and sanitation?
- Actual and potential contamination and spoilage hazards?
- Solutions to rectify contamination and spoilage problems?

Use work practices and methods that reduce the risk of product contamination?

Remove contamination where appropriate in accordance with:

- Workplace hygiene and sanitation procedures?
- Procedures specific to the **PARAMOUNT MIXER**?

Comments:

To gain competency in the use of the **PARAMOUNT PLANETARY MIXER**, the assessor must be satisfied that the operator has consistently applied the knowledge and skills in all of the above elements.

This form should be signed off only when the assessor is satisfied that the employee / trainee is competent to carry out all of the tasks described above.

Applicant's signature: _____ **Date:** / /

Assessor's signature: _____ **Date:** / /

PARA
MOUNT®

SUGGESTION — Use this form to train staff, and place a copy in personnel files.

Replacement Parts List

IMPORTANT:

Only genuine authorized replacement parts should be used for the servicing and repair of this appliance. The instructions supplied with the parts should be followed when replacing components.

For further information and servicing instructions, contact your nearest authorized service branch (contact details are as shown on the reverse of the front cover of this manual).

When ordering replacement parts, please quote the part number and the description as listed below. If the part required is not listed below, request the part by description and quote model number and serial number which is shown on the Rating Plate located on the front lower corner of the right hand side panel.

Part No.	Description
BM60AT-12-001	Stainless Steel Bowl.
BM60AT-12-003	Aluminium Hook.
BM60AT-12-004	Stainless Steel Wire Whip.
BM60AT-12-002	Batter Beater.
BM60AT-06-003	HUB Attachment Drive.
HL-GL12SH	Mincer.
HL-VS12A	Slicer / Shredder.
BM60ATM	30 litre Reduction Kit (includes Bowl, Hook & Beater).
TBD	Electronic Timer.

