



Operation and Safety Manual



Model
B15/B20
CVFM
Planetary Mixers

SAFETY ISSUES

1. **NEVER** touch this machine without training and authorisation from your supervisor.
2. Machine **MUST BE** on solid, level support.
3. Guards **MUST BE** in place before plugging in and turning on machine.
4. **ALWAYS** use the three-pronged plug provided.
5. **NEVER** attempt to place foodstuffs in the mixing bowl when the mixer is in operation.
6. **NEVER** touch the agitator drive when the mixer is on.
7. **KEEP** hands, arms, hair and loose clothing **CLEAR** of all moving parts.
8. Should the mixer jam, **SWITCH OFF AND UNPLUG** before removing the obstruction.
9. **SWITCH OFF AND UNPLUG** the machine from its power source before cleaning, sanitizing or servicing.
10. **USE ONLY** the attachments provided by the manufacturer and designed for this machine.

YOUR SAFETY IS OUR PRIMARY CONCERN

DECLARATION OF CONFORMITY		is built in conformity with the provisions of:	
Mixer		98/37/CEE	Machinery Directive
Machine Model:		EN 294	Safety of machinery - Safety distances to prevent danger zones being reached by the upper limbs.
Serial Number:		EN 60204	Electrical equipment of industrial machines: Part 1 - General Design
Dated:		89/109/CEE	Directive for the materials and things destined to come into contact with food.
		89/336/CEE	Directive on Electromagnetic Compatibility (EMC)
		73/23/EEC	Directive on low voltage.

Introduction

Overview

This Operation and Safety Manual has been prepared to introduce you to the Brice Model B15/B20 CVFM Planetary Mixers. It explains the operation, cleaning and maintenance of the food mixers in simple, clear terms and with an emphasis on your safety.

The B15 and B20 mixers are physically and functionally identical. The only difference between them is the mixing capacity.

Throughout the Manual procedures are supported by photographs showing the parts involved and the recommended safe method of handling those parts.

A word to the wise

This Manual is really two sets of instructions in one - some sections are relevant to all Brice food processing machines, while other sections only concern a particular machine or range of machines.

Make sure that you read this Manual carefully so that you are familiar with the features and procedures that are unique to the machine that came with it.

How this Manual is arranged

This Manual is made up of four sections:

- Introduction - which explains the Manual itself, covers safety issues associated with using a mixer, gives a brief introduction to the features and components of the mixer and steps you through the installation of the machine;
- Operation - explains the use of the mixer;
- Cleaning - explains the procedures for keeping the mixer clean; and
- Maintenance & Specifications - details those procedures that you can perform to ensure the trouble-free operation of the mixer, and provides important mechanical and electrical specifications.

Conventions and Symbols used in this Manual

To reduce confusion, and to highlight important points and safety matters, we have established some standard terms and symbols:

- “mixer”; “food mixer”
Whenever we talk about the mixer, or food mixer, we mean the mixer that is covered in this Manual
- “foodstuff”
We use the word “foodstuff” to refer to any kind of food that is usually mixed in a mixer.
- “bowl”; “mixing bowl”
This is the stainless steel container into which you place the foodstuff to be mixed.
- “beater”; “agitator”
This is the fitting that attaches to the end of the planetary drive and does the actual mixing.
- “speed selector”
This device is located on the right side of the machine (as you face it) and controls the speed of the agitator.
- “bowl lift”; “bowl lift handle”; “bowl lift wheel”
This is the mechanism by which you raise and lower the mixing bowl.



- The Special Note flag
This is an upside-down triangle with an exclamation mark inside it. It appears in the left margin of the page, like this, whenever we want to draw your attention to an important point.



- The “No Hands” warning flag
This is a circle with the outline of a hand and a black bar through the hand. It appears wherever we want to warn you that you shouldn’t put your hands in or near a particular component.



- The “Power” warning flags
There are two power warning flags. The first, a lightning bolt inside an upside-down triangle, is used whenever we want to remind and warn you that the machine is connected to the mains power supply. The second warning flag is a circle with the outline of a lightning bolt and a black bar through the bolt. It appears to remind you that a particular procedure must be carried out with the power to the machine turned off at the powerpoint and the machine’s power plug disconnected from the powerpoint.

SAFETY WARNINGS

This is an electrical device that uses mains (either single phase 240 Volt or 3 phase 380 Volt) power. The following special warnings must be complied with for your own safety and the safety of others.



THERE ARE NO USER-SERVICEABLE ELECTRICAL COMPONENTS IN THIS MACHINE. ALL ELECTRICAL COMPONENTS ARE ELECTRICALLY ISOLATED TO EARTH AND ARE SEALED FOR YOUR SAFETY. YOU MUST NOT ATTEMPT TO TOUCH ANY ELECTRICAL COMPONENTS OR WIRES - YOU MAY EXPOSE YOURSELF TO THE RISK OF SERIOUS INJURY BY ELECTROCUTION.



UNLESS OTHERWISE INDICATED, ANY CLEANING OR MAINTENANCE PROCEDURE MUST BE PERFORMED WITH THE POWER TO THE MACHINE SWITCHED OFF AND THE MACHINE’S POWER CORD DISCONNECTED FROM THE POWERPOINT. FAILURE TO TURN OFF AND DISCONNECT POWER MAY RESULT IN SERIOUS INJURY CAUSED BY THE MACHINE BEING ACCIDENTLY TURNED ON DURING CLEANING OR MAINTENANCE.

The Brice Model B15/B20 CVFM Planetary Mixers

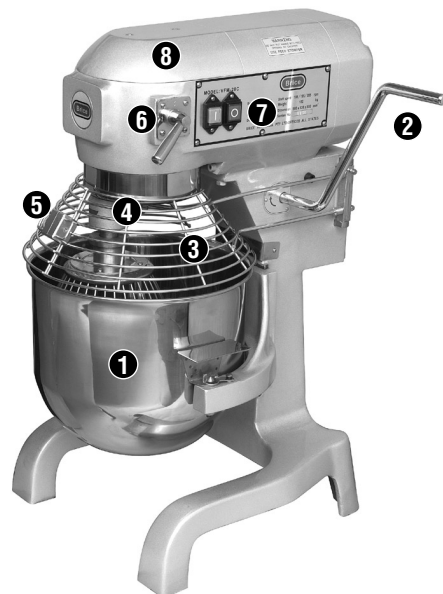
The Brice Model B15/B20 CVFM Planetary Mixer has been designed for strong performance and long life.

Simple operation, large bowl design and fast agitator changes make the B15/B20 CVFM mixer one of the most functional mixers on the market

- manufactured in stainless steel and anodised aluminium to resist oxidation and corrosion;
- constructed for easy cleaning;
- geared bowl carriage and lift for easy loading and unloading;
- 3 mixing speeds to suit every mixing job;
- illuminated power switch;
- forced ventilation to motor to prevent overheating;
- all bearings are self-lubricating and sealed-for-life;
- agitator drive is gear-driven and gears are contained in a sealed transmission casing;
- safety cutout switches for bowl, bowl lift and safety cage.

Components of the model range

The following picture illustrates the main components of the mixer.



1. Mixing bowl
2. Bowl lift handle
3. Safety cage
4. Agitator drive
5. Safety cage lock
6. Speed selector
7. Power switches
8. Motor/transmission housing

Installing the mixer

Positioning the mixer

No matter where you put the mixer, you must allow at least as much space as the overall dimensions indicate. Allowing an additional minimum of 30cm either side of the mixer will make access for cleaning and maintenance easier.

Make sure that the surface that you intend placing the mixer on is solid, flat, level, dry and smooth. Although it is possible to floor-mount the mixer (particularly the larger models in the range), ideally the mounting surface should be between 40cm and 50cm high for operator comfort.

Electrical connections

The mixer connects to either a single phase 240 Volts or a 3 phase 380 Volts power supply using the power cord supplied. Simply connect the plug on the end of the power cord to the powerpoint.

If you don't know whether the mixer uses single phase or 3 phase power, check the identification label on the machine - it will indicate the voltage rating.

Cleaning and function check

Before you use the mixer, we recommend that you wipe down all exposed surfaces with a soft cloth that has been placed in clean warm water and light detergent and squeezed dry. This will remove any traces of machine oil, dirt or grit picked up during manufacture or storage.



Before you wipe down the machine, make sure that the power is turned off at the wall socket/powerpoint.

Once the mixer is clean you can check that it is functioning correctly.

1. Switch on power to the machine from the wall socket/powerpoint.
2. Make sure that the mixer is turned off at the power switch on the side of the machine (located behind the speed selector).
3. Ensure that the bowl safety cage is correctly fitted and that the cage is closed.
4. Check that the bowl carriage and bowl lift handle/wheel moves easily and that neither sticks at any point along its travel.

If the carriage or lift handle/wheel is difficult to move or seems to stick now and then refer to the Maintenance section for instructions on lubrication.

5. Select the low speed (1) setting on the speed selector (located ahead of the power switch).
6. Turn the mixer on using the power switch on the side of the machine. Immediately the switch will light up, showing power is on, and the agitator drive will spin in an anti-clockwise direction.
7. Turn the mixer off at the power switch.

Operation



Standard operating procedure

1. Load ingredients into bowl
2. Select and fit correct agitator for the job
3. Raise the bowl using the bowl lift wheel
4. Close the safety cage
5. Select the appropriate speed
6. Turn the machine on at the power switch



Things to keep in mind

1. Always double-check that the agitator has fully engaged the locating pin on the agitator drive shaft **BEFORE** switching on the machine.
2. The recommended, and only, safe way of changing the speed of the mixer is to stop the machine and then select the desired speed. **DO NOT** attempt to change speed while the mixer is running.
3. Always match the mixing speed to the foodstuff being mixed. The general rule-of-thumb is that the heavier and denser the ingredients, the slower the mixing speed. Refer to the Mixing Selector Guide below for examples and speed settings.
4. When a mixing job is completed, be sure to leave the bowl safety cage open and the bowl lift in the lowered position. This makes it easier to start the next job and leaves the machine with all its safety interlocks engaged.
5. It is usually easier, and safer, to fill the mixing bowl at the machine.

Mixing Selector Guide

	Agitator	Speed selector	Model	RPM	Purpose/Usage
Dough hook			B15 B20-F B25	} 91	Heavy bread doughs. Only fill the bowl with flour to the indicated mark. Liquid to be 47% - 50%, by weight, of flour.
			B20 CVFM B30 B50		
Beater			B15 B20-F B25	} 164	Batters, cake mixes, stuffing mixes, mashing potatoes.
			B20 CVFM B30 B50		
Whisk			B15 B20-F B25	} 294	Whipping cream, beating eggs.
			B20 CVFM B30 B50		

Standard operation

1. Fill the mixing bowl with the required ingredients.
2. Select and fit the correct agitator for the job.
Use the Mixing Selector Guide on the previous page to help you decide which agitator to use.
3. Raise the bowl using the bowl lift handle.
Turn the bowl lift handle clockwise to raise the bowl on the bowl carrier until it reaches the carrier stop.
4. Close and lock the bowl safety cage.
This will disengage the safety cutout and allow the machine to run.
5. Select the appropriate mixing speed using the speed selector.
To move the speed selector from one position to another, grasp the handle of the selector and depress the button on the end of the handle with your thumb. This unlocks the selector. Move the selector to the required speed and release the button to lock the handle in that position.
Refer to the Mixing Selector Guide on the previous page to help you decide which speed to use.
6. Turn the machine on using the power switch.
7. When mixing is completed, switch off the power at the power switch, unlock the safety cage, lower the bowl by turning the bowl lift handle anti-clockwise until it reaches the lower carrier stop, and either remove the bowl or remove the mixed contents of the bowl.

Changing or fitting an agitator

1. Make sure that the machine is switched off.
2. Grasp the agitator firmly and turn it clockwise to disengage the tool from the locating pin on the agitator drive shaft. Draw the agitator down the drive shaft. If no agitator is fitted, go to Step 3.
3. Slide the selected agitator onto the drive shaft, lining up the channel on the top of the agitator shank with the locating pin on the drive shaft.
4. Continue to slide the agitator up the drive shaft until the locator pin reaches the base of the "L" - shaped slot in the shank. Turn the agitator anti-clockwise to lock the tool onto the shaft.

Cleaning the Mixer



This section deals with cleaning your mixer.

We recommend that, before cleaning or maintenance tasks are undertaken, the machine operator(s) receive some training from authorised Brice representatives, preferably during the installation phase.

Before carrying out cleaning or maintenance tasks, it is important that power to the mixer is disconnected at the powerpoint.

General Cleaning

The mixer has been designed and built for efficient and speedy cleaning to ensure hygienic operation.

Before using the mixer

1. Before the mixer is switched on for the first time each day, quickly wipe over all exposed surfaces with a cloth that has been placed in warm water and squeezed dry. This removes any dust or other matter that may have been deposited over night.
2. Before the start of each mixing operation, and with the mixer switched off at the power switch on the side of the machine, wipe out the inside of the mixing bowl, the agitator and the agitator drive to remove any residual material left from the last mixing operation.

After each mixing job

1. Remove the bowl and agitator and wash thoroughly in warm water and mild detergent.
2. Wipe down exposed portions of the machine with a cloth that has been placed in warm water and mild detergent and squeezed dry. Be sure to clean off any foodstuff that is stuck to the machine

At the end of the day

1. After the mixer has been used for the last time, turn the machine off at the power switch and at the powerpoint, and disconnect the power cord.
2. Turn the the bowl lift handle anti-clockwise to lower the bowl carrier to its lowest position. If the bowl is still in place, remove it and set it aside for cleaning.
3. Open the bowl safety cage and remove the agitator from the agitator drive. Set it aside for cleaning.
4. With a cloth that has been placed in warm water and mild detergent and squeezed dry, wipe down all visible surfaces. Place the bowl and agitators in warm water and mild detergent and wash thoroughly.

How frequently the mixer is cleaned will depend on how heavily the machine is used. However, we recommend that you adopt the following cleaning schedule as a MINIMUM requirement to maintain hygiene.

The cleaning schedule

	Before first use	After every use	After last use
Wash bowl and agitators; wipe down agitator drive		✓	
Wipe down all exposed surfaces (no disassembly)	✓		
Clean all surfaces including bowl lift and motor housing			✓

Maintenance & Troubleshooting



This section deals with routine maintenance and troubleshooting for your mixer. Technical specifications for your model of mixer are also included.

We recommend that, before cleaning or maintenance tasks are undertaken, the machine operator(s) receive some training from authorised Brice representatives, preferably during the installation phase.

Before carrying out cleaning or maintenance tasks, it is important that power to the mixer is disconnected at the powerpoint.

Routine Maintenance

The robust design of the mixer means that there is very little required in the way of routine maintenance. Generally, the only maintenance required is cleaning (discussed in the previous section) and lubrication of the bowl carrier guides.

Cleaning

Normal cleaning, as specified in the previous section and in accordance with the recommended schedule, is all that is required to maintain the external surfaces of the mixer.

We recommend that you clean the machine prior to any other maintenance operation so that all surfaces are free of dirt and grease. This makes the machine easier and safer to handle.

Normal lubrication

1. Switch the mixer off at the power switch and at the powerpoint, and disconnect the power cord.
2. Lower the bowl carrier to expose the carrier guides by turning the bowl lift handle anti-clockwise.
3. Deposit two or three drops of light machine oil or grease directly onto each carrier guide. Smear the oil or grease over the full exposed length of the guides using your finger.
4. Wind the bowl lift handle clockwise to the upper stop, and anti-clockwise to the lower stop to move the carrier up and down. Repeat twice. This will evenly spread the oil or grease.

Troubleshooting Guide

Problem	Probable cause	Remedy
The agitator drive shaft doesn't rotate when the power is turned on.	Power turned off at powerpoint. Electrical connections are loose.	Turn on power at powerpoint. Check the electrical circuit and tighten connectors if required. WARNING: This should only be performed by a qualified electrical contractor.
Oil leakage.	Oil seals are damaged or worn out.	Contact your Brice Maintenance specialist to arrange replacement.
Bowl lift handle difficult to turn.	The lead screw, bevel gear or handle shaft have no lubrication.	Place two or three drops of light machine oil on each of the parts. Turn the lift handle back and forth to spread the oil.
The motor seems to be getting too warm, but the mixer is running slowly.	Voltage drop in power supply. Mixer is over-loaded. The mixer speed is too high for the foodstuff being mixed, or the agitator being used isn't suitable for the foodstuff being mixed.	Check the power supply. WARNING: This should only be performed by a qualified electrical contractor. Remove some of the contents of the bowl. Change the speed of the mixer, or select a more suitable agitator.

Technical Specifications

Model	Capacity (ltr.)	Phase	Frequency	Voltage	Power output	Speed	Weight	Dimensions (LxWxH)
B15	15	~	50Hz	240V	1000/810W	91/164/294 rpm	90kg	530x415x740
B20-F	20	~	50Hz	220/380V	1080/1000W	91/164/294 rpm	98kg	530x415x780
B25	25	~	50Hz	220/380V	1500/1240W	91/164/294 rpm	110kg	530x435x820
B20-CVFM	20	~	50Hz	240V	750W	108/195/355 rpm	102kg	560x530x800
B30	38	~	50Hz	220/380V	2240/1840W	65/102/296 rpm	192kg	608x531x1016
B50	50	3	50Hz	380V	1920W	84/163/373 rpm	242kg	802x575x1132



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Printed in Australia