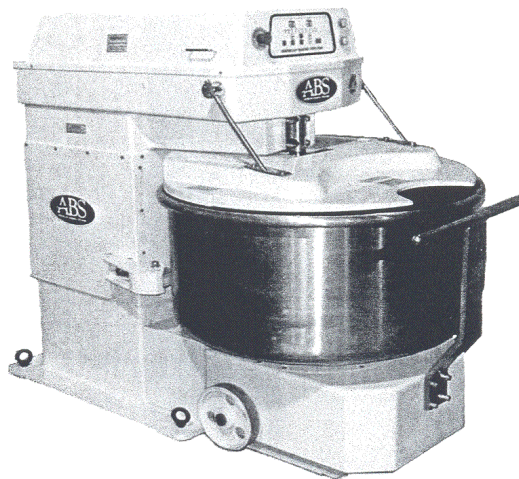

OPERATIONS & SAFETY MANUAL
REMOVABLE BOWL SPIRAL MIXERS
HEAVY-DUTY SERIES

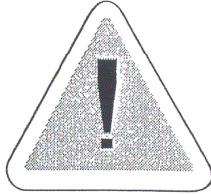


MODEL NUMBER: _____ **SERIAL NO:** _____



AMERICAN BAKING SYSTEMS
290 LEGION CT S.W.
CEDAR RAPIDS, IA 52404
PH 319.373.5006 FX 319.373.5008

AN IMPORTANT NOTICE CONCERNING SAFETY



CAUTION

DO NOT OPERATE, CLEAN OR SERVICE THIS MACHINE BEFORE READING THIS MANUAL AND UNDERSTANDING COMPLETELY THE SAFETY INSTRUCTIONS FOUND IN THE MANUAL AND ON THE MACHINE LABELS.

Please follow these important safety rules...

IMPORTANT

All operators of this dough mixer must be of legal age to operate such equipment and must be familiar with and understand all caution labels!

IMPORTANT

Make certain that the person who is to operate this equipment carefully reads and understands these instructions before starting operations!

Disconnect from the power source when cleaning and/or servicing this machine.

Never attempt to clean the mixing bowl while it is in motion, serious injury could result.

Never operate this machine with safety covers or inspection plates removed or with safety switches inoperative.

MACHINE WARRANTY

Terms of Warranty

Terms of this warranty begin with the date of shipment from the factory, or with installation date if registered with American Baking Systems, Inc. within 7 days after installation, provided the installation date does not exceed the shipping date by more than two months.

The enclosed Warranty Card should be completed in full and returned to American Baking Systems, Inc. to ensure proper installation date and warranty registration. This warranty is intended as protection against failures due to defects in original manufacture only. It does not cover the following.

- A. Transportation and installation.
- B. Ordinary wear and tear from use.
- C. Abuse, misuse, misapplication, alteration, tampering, etc.
- D. Lost time due to site production schedules, rules and regulations.
- E. Accident, fire, flood, vandalism and/or any act of God.

Merchandise becomes the property of the consignee when accepted by the carrier and thereafter travels at risk of purchaser. Notify the carrier in the event of damaged shipment, whether apparent at the time of delivery (or if any concealed damage is discovered after unpacking). Complaints should be filed directly with the carrier to expedite the claim and to ensure that proper attention is received from the carrier.

This warranty refers only to parts and materials supplied by American Baking Systems, Inc.

The obligation of American Baking Systems, Inc., under this warranty, is limited to the furnishing of parts and materials as described herein, and does not cover the following.

- A. Transportation.
- B. Food costs or consequential damage costs.
- C. Overnight travel costs.
- D. Production material losses.

MACHINE WARRANTY

Overview

American Baking Systems, Inc. certifies that all equipment of its manufacture is, to the best of its knowledge, free from defective materials and workmanship when it leaves the factory.

This warranty is intended as protection for its customers against failure due to defects in materials and workmanship in original manufactured items only. American Baking Systems, Inc. will warranty its manufactured equipment as follows.

- A. For a period of one year from date of original consumer purchase, American Baking Systems, Inc. will exchange parts found to be defective due to faulty workmanship and/or materials.
- B. For a period of six months from the date of original purchase, American Baking Systems, Inc. will exchange electrical motors and components found to be defective except in the following cases.
 - 1. Electricity was connected to machine incorrectly.
 - 2. The machine was altered or repaired by an unauthorized mechanic.
 - 3. The serial number has been changed.
 - 4. The machine was misused or overloaded beyond published specifications.
- C. For a period of 90 days from the date of original purchase, American Baking Systems, Inc. will provide or reimburse the labor from Item A and B at no charge to the customer provided American Baking Systems, Inc. was notified in advance and had authorized the labor charges. A Work Service Authorization Number can be obtained by contacting your dealer or the Factory Service Center at (319) 373-5006, prior to contracting repair work.
- D. By executing this warranty, the buyer acknowledges that there are no warranties, either expressed or implied, including (by example and not by limitation) warranties of merchantability and of fitness for particular purpose, in connection with the purpose of this machine.

MACHINE WARRANTY

After a part has been acknowledged by the factory to be defective within the scope of this warranty, American Baking Systems, Inc. shall comply with one of the following three methods.

- A. Furnish a free replacement part.
- B. Furnish a replacement part in even exchange for the return of defective part (customer will be invoiced/credited).
- C. Authorize and acknowledge replacement part to be obtained locally.

American Baking Systems, Inc. agrees to pay any Authorized Service Organization for authorized certified labor required to repair or replace at our option any part which proves to be defective due to defects in material or workmanship during the warranty period. This warranty does not include travel time exceeding 2 hours and mileage exceeding 100 miles round trip.

Invoices for warranty labor will not be accepted for payment without a Work Service Authorization Number obtained from American Baking Systems, Inc. prior to facilitating the repair. To obtain a Work Service Authorization Number contact the dealer you purchased the equipment from or contact the factory direct.

Any obligations assumed by American Baking Systems, Inc. under this warranty are only to the person or organization to whom American Baking Systems, Inc. sold the equipment (exceptions must be authorized and acknowledged by American Baking Systems, Inc. and by the authorized dealer selling the equipment).

GENERAL MIXING INSTRUCTIONS

Mixing Guide for Various Types of Dough

DOUGH TYPE:	HEAVY	MEDIUM	LIGHT
% OF WATER:	50 - 54%	54 - 58%	58% Plus
PRODUCT:	Bagels/Pizza	White/Ryes	Italian/French
LOW SPEED:	2 -3 min.	2 min.	2 min.
HIGH SPEED:	3 min.	6 min.	7 - 8 min.
LOW SPEED:	3 min.	---	---

NOTE

Heavy doughs are often finished out in low speed. This produces a softer, more workable dough while reducing excessive stress on your mixer.

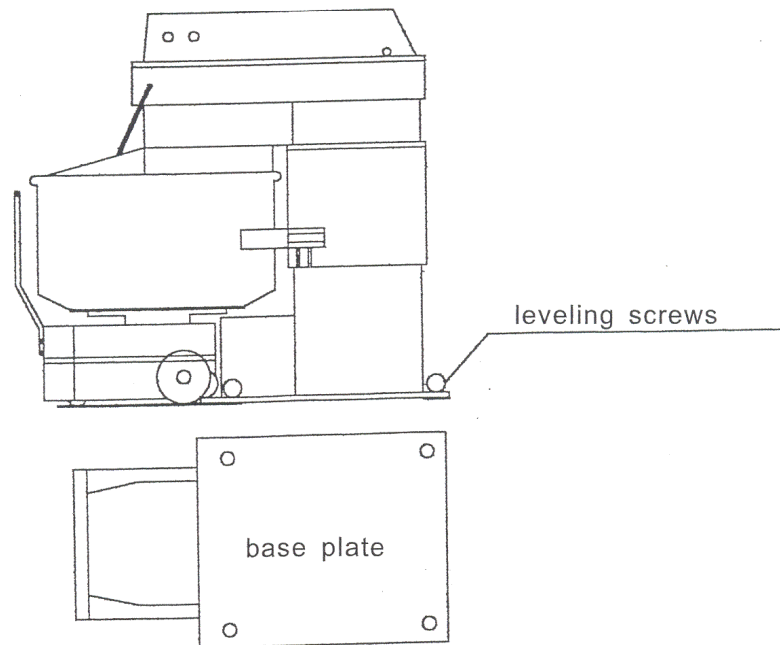
NOTE

For Single-Timer, Single-Speed Models, increase the total mixing time used in Two-Speed Models by 20 - 30%.

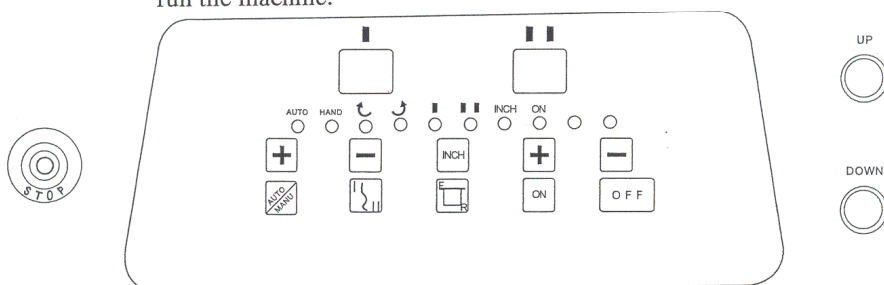
The above mixing times are only base line, starting points. The operator is encouraged to vary the times up or down to achieve the optimum desired result.

INSTALLATION INSTRUCTION MANUAL FOR ABS SPIRAL
MIXER WITH REMOVABLE BOWL, MODEL ABSRBM-160/200

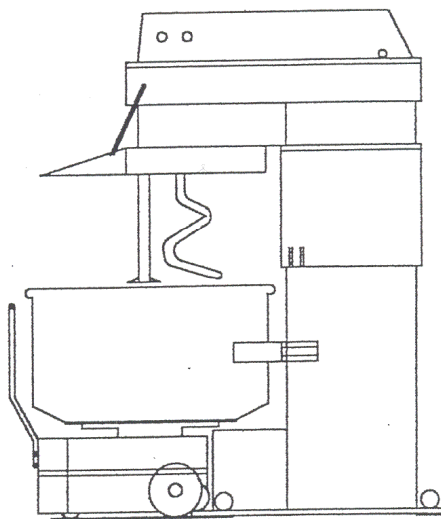
1. UNPACK THE CRATE AND CHECK FOR ANY DAMAGE
2. MOVE THE MIXER TO ITS LOCATION USING THE FOUR EYE HOOKS MOUNTED IN THE BASE PLATE. DO NOT PICK UP THE MIXER IN ANY OTHER MANNER TO MOVE IT TO ITS FINAL PLACE ON A LEVEL AND EVEN FLOOR.
3. FOUR EXPANSION BOLTS SHOULD BE USED TO ANCHOR THE MACHINE TO THE FLOOR THROUGH THE FOUR HOLES LOCATED AT EACH CORNER OF THE BASE PLATE (WHERE THE EYE HOOKS ARE MOUNTED) AFTER THE MIXER IS LEVELED AND SHIMMED WHERE NECESSARY.



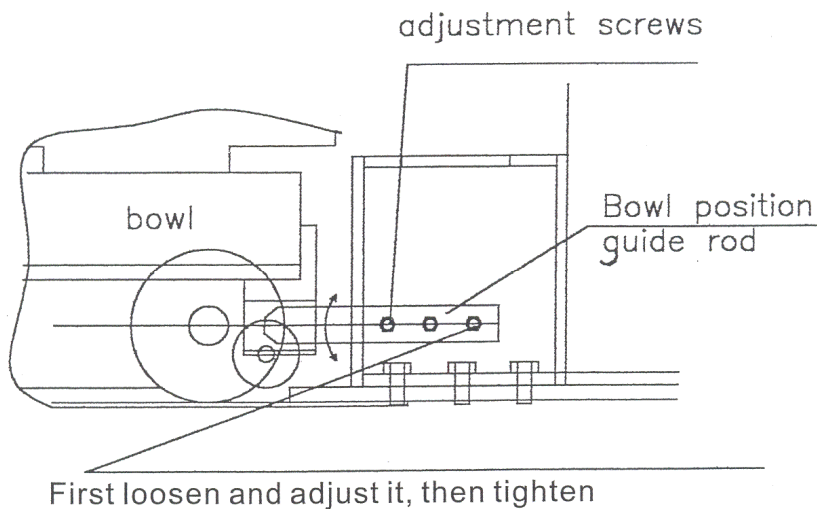
4. Connect electric power to the machine. Push the INCH button to run the machine.



5. Check the direction of rotation of the bowl and the hook. Both should run clockwise when looking down from the top. If the rotation is wrong, exchange the red and black wires in the plug of the machine and re-check.
6. Push the UP button, and the head will move to the top position and stop automatically. Loosen the adjustment screws of the bowl position guide rod (see Diagram, next page)



7. Adjust the four screws in the base plate of the mixer body until it is flat on the floor. Once this is flush all the way across, place a level on the machine and shim with washers if necessary.
8. Pull the bowl out of the machine and push back into the machine. Repeat the leveling process left to right, front to back, until the bowl can be pushed and pulled off the machine easily.

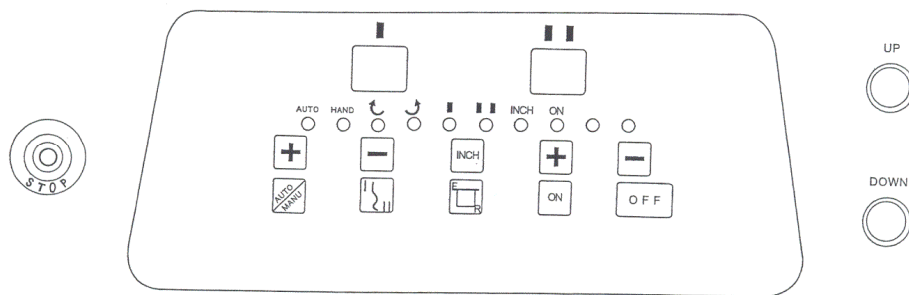


9. Take the four bolts out of the base plate and drill the holes into the concrete floor and anchor the machine in place with expanding anchors.
10. Push the bowl dolly into position on the machine. Tighten the adjustment screws of the bowl guide rod as shown in the drawing above. Try pulling the bowl out and push it back into the machine, making sure the dolly moves smoothly. If there is a catch in the movement, re-adjust the bowl position guide rod adjustment screws until the dolly moves in and out smoothly.

OPERATION TOUCH DIGITAL PANEL USED ON THE ABSRBM-160/200 SPIRAL MIXERS.

American Baking Systems offers a touch digital panel that allows us to give the baker more operation features in a compact, easy to clean panel. The digital timers offer a large, highly visible display that can be seen easily by the operator. Once more, if there is ever a malfunction with the control panel, there are non-timed back-up controls on the side of the machine that will keep your machine operating until a new panel can be installed.





A) Description Of the Digital Panel:



2.1) Timers I and II are at the top of the panel and display in green. Each timer, Low (I) and High (II) speeds, has a 20-minute maximum time. Set the desired time by depressing the + or – keys until the desired time is displayed. During AUTOMATIC operation, the timers will count down in succession. While in Auto mode, any time the safety cover is opened, the timer will stop in their current position. After lowering the bowl cover, press ON and the machine will resume with the remaining time. If the machine is re-starting in high speed, the machine will ALWAYS start in slow speed and will run for 5 seconds and then shift into high and resume the timed mix. This saves the mixer from high amperage starts under load and saves the belts. When the OFF key is pressed, the timers will return to their original settings. The memory will retain your original settings until the + or – keys are depressed under either timer.

2.2 INDICATION LAMPS

The lamps on the display indicate the following operational conditions:

- A) AUTO or MANUAL modes: when the AUTO lamp is illuminated, the mixer will automatically change from low to high speed, finish mixing, and reset the timers upon mix completion. Timers count down in this mode. In manual mode (on digital panel) the mixer will run until the off button is depressed, in either speed. There is no timed operation in the MANUAL mode.
- 
- B) Bowl Direction Indicator. When clockwise arrow is lit, the mixer will shift from low to high – this is the standard and recommended direction to run the bowl during mixing. Counter clockwise operation of the bowl will allow the mixing bowl to “run against” the hook aiding the early incorporation of dry ingredients. This mode may only be necessary when mixing very small batches of product that may be considered below minimum capacity of the mixer. It is recommended that the machine be left in the clockwise setting during all but the most extreme mixing situations.
- 
- C) Speed condition: When the light by the ‘I’ is lit, the mixer is in low speed, when the light by ‘II’ is lit, the mixer is in second speed.
- 
- D) INCH – Shows that the mixer is in the INCH or JOG mode. Inch is used to aid in dough removal from the back of the bowl. The hook does not run in INCH mode on all but the 25 and 50-kilo spiral mixers.
- 
- E) O.L. Lamp: An Overload is present and needs to be reset. This situation can be brought on by a loose connection, a bad motor starter overload, or a voltage drop that causes the amp draw of the mixer to be higher than the trip setting of the motor overloads.

2.3 FUNCTION KEYS

UP – THE HEAD OF THE MIXER LIFTS AND THE BOWL DOLLY IS UNLOCKED FROM MIXER.

DOWN – THE BOWL MUST BE IN THE PARK POSITION FOR THE MACHINE TO ALLOW THE HEAD TO COME TO THE DOWN AND LOCKED POSITION.



AUTO/MANU – switches controls from AUTOMATIC timed operation, while MANU allows you to run the mixer to be run until the off button is depressed.



Bowl Direction Key: Changes bowl from clockwise to counter-clockwise.



Speed Selection Key: Changes mixer from low to high speed in manual mode. REMEMBER: THE MIXER WILL ALWAYS START IN LOW SPEED – EVEN WHEN HIGH SPEED IS SELLECTED. THIS SAVES YOUR BELTS, AND KEEPS AMPS FROM SPIKING AT START UP.



ON: STARTS MIXER IN AUTO AND MANUAL MODES.



OFF: STOPS MIXER AND RESETS TIMERS BACK TO ORIGINAL TIMER SETTINGS.



INCH: BOWL WILL ROTATE IN SELECTED DIRECTION AS LONG AS THE BUTTON IS DEPRESSED. HOOK WILL NOT ROTATE IN THIS MODE.

3. AUTO OPERATION: Set timers for desired mixing times, make sure AUTO/Manu button is set to AUTO mode, the bowl is set to CLOCKWISE setting and press ON. Machine will run through preset times and then shut off. During AUTO mode, the bowl cover can be opened at any time to add ingredients or check dough temperature, and then the mixer will be able to restart and the time will continue from where it was paused. DO NOT PRESS OFF KEY WHEN TRYING TO PAUSE MIXER. Doing this will reset the timers.

