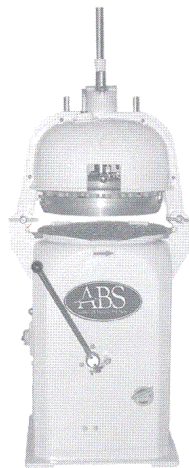


# OPERATIONS & SAFETY MANUAL

## BUN AND ROLL DIVIDER / ROUNDER HEAVY DUTY SERIES

MODEL  
ABSBRD 30-35  
ABSBRD 36-3  
ABSBRD 36-4



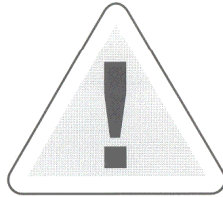
MODEL NO. \_\_\_\_\_ SERIAL NO. \_\_\_\_\_

MANUFACTURED BY  
AMERICAN BAKING SYSTEMS, INC.



3780 4th Avenue, Building A  
Marion, Iowa 52302-3813  
Phone: (319) 373-5006  
Fax: (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 machine 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 this machine 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.

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## GENERAL INFORMATION

### Introduction

The American Baking Systems' Semi-automatic Bun and Roll Divider / Rounder has been designed for years of trouble-free service in today's modern bakery operation. Every feature designed into this machine has been carefully tested. The machine has proven to gently handle a wide variety of doughs and produce a high quality product. It does this while maintaining the highest standards of safety.

Owners and operators should CAREFULLY READ this entire instruction manual before attempting to operate this machine. This will familiarize you with the proper operation and important features of your new Divider / Rounder. This will also ensure that you receive years of safe and trouble-free operation.

All information, illustrations, and specifications presented in this manual are based on the latest product information available at the time of printing. American Baking Systems, Inc. reserves the right to make changes without notice.

### Initial Inspection and Installation

After uncrating your Semi-automatic Bun and Roll Divider / Rounder, check for the following:

- a) Three (3) moulding plates
- b) One (1) pressing lever
- c) One (1) Plastic bottle of transmission oil (check inside base)

Select a location for your bun and roll divider / rounder to allow sufficient room for operating the machine and for tilting the dividing head to the right and/or left for cleaning and servicing. The floor **MUST** be solid and level. The bun and roll divider / rounder must be secured to the floor with four (4) anchor bolts through the holes provided in the lower frame assembly, located inside the base of the machine, as shown in Figure 1.

Before making any electrical connections, be sure that your electrical supply system is compatible with the electrical specifications of your bun and roll

### GENERAL INFORMATION (cont'd)

divider/ rounder. This data is shown on the name plate on the right side of your machine. The standard specifications are:

220 Volt

3 Phase, 60 Hertz

3.0 Amps

The bun and roll divider/ rounder is equipped with a factory installed six foot power cord. The bun and roll divider / rounder is also equipped with a push-button ON/OFF switch located on the left side of the machine. This switch has an integral thermal and magnetic overload protection to disconnect the motor automatically in the event of an electrical overload or malfunction. To reset, press the green ON button.

BEFORE STARTING PRODUCTION WITH YOUR NEW BUN AND ROLL DIVIDER / ROUNDER, AND EACH TIME BEFORE A NEW OPERATOR WILL USE THE MACHINE, BE SURE TO THOROUGHLY FAMILIARIZE EACH INDIVIDUAL WITH ALL THE FUNCTIONS AND ADJUSTMENTS OF THE MACHINE.

Install the pressing lever (30) in the counter weight assembly on top of the machine by moderately tightening the winged bolt. (see Figure 2).

To remove the front and rear hoods (9) remove four thumb screws, located on the perimeter of each hood. (see Figure 2).

For removal of the dough check ring (7), insert one of the moulding plates and lower the dividing head by gently pulling down the pressing lever until it stops. Rotate the dough check ring about 170 degrees until notches are in alignment with the retaining lip. Dough check ring should drop down slightly. Slowly raise the dividing head with the pressing lever. The dough check ring should remain down.

#### CAUTION

NEVER ROTATE DOUGH CHECK RING UNLESS THE  
DIVIDING HEAD IS FULLY IN THE DOWNWARD POSITION.  
DO NOT DROP THE RETAINING RING

## OPERATING INSTRUCTIONS

The entire dividing head can be tilted upwards, either to the right or to the left, for easy cleaning and maintenance. To do this, remove only one trunion pin (36) from the left or right bearing block (35), twisting and pulling, simultaneously.

### CAUTION

TO PREVENT THE ENTIRE DIVIDING HEAD ASSEMBLY FROM FALLING, NEVER REMOVE BOTH PIN ASSEMBLIES AT THE SAME TIME.

To tilt the dividing head, move to the side of your bun and roll divider/rounder (the side with the pin left in). Use the pressing lever to pull the head over until it securely rests against the stop block in the bearing block. Lower the dividing head in the same manner. Handling the dividing head must be done with EXTREME care.

### CAUTION

KEEP HANDS CLEAR OF THE SUPPORT BLOCK! DO NOT ALLOW THE DIVIDING HEAD ASSEMBLY TO DROP DOWN INTO THE SUPPORT BLOCK OR VERY SERIOUS DAMAGE WILL RESULT!

Lubricate the pin with mineral oil prior to reinstalling. **NEVER** force the pin with a hammer.

To reinstall the dough check ring (7), insert one moulding plate. Carefully set the dough check ring onto the moulding plate. Center carefully. Be sure the stop in is in the proper position so the dough check ring can be rotated about 170 degrees before it hits the stop. Carefully lower the dividing head to the bottom of its travel, using the pressing lever. Verify the dough check ring is free to rotate. Make sure the notches in the rim of the dough check ring are in alignment with the retaining guide blocks on the dividing head. With the dividing head all the way down, carefully lift/rotate the dough check ring into position. Rotate the dough check ring about 170 degrees until stop in hits the stop block.

Slowly raise the dividing head to its fully raised and rest position. Dough check ring should rise evenly and smoothly with the dividing head.



## OPERATING INSTRUCTIONS

### Machine Check Out

Without dough, insert and lock on pin (67) one moulding plate. Be certain the moulding table (42) and the moulding plate are clean and no foreign objects are trapped between them and that the moulding plate is completely flat on the moulding table.

Lower the dividing head by pulling down the pressing lever (1) until it stops in the down position. This is the pressing operation, which evenly distributes the dough in the dividing head to assure uniform weight for each division.

While holding the pressing lever down, slowly push the rounding lever downward to actuate the rounding cycle (see Figure 2, Page 15). The moulding table and the moulding plate will shift sideways and, if the motor were turned on, would cause the moulding platen to move in a circular motion. After several seconds, slowly return the rounding lever to the fully raised rest position. This is the rounding cycle, which rounds the dough pieces into dough balls. Slowly return the pressing lever to the fully raised rest position.

Remove the moulding plate by first pulling it up off the locking pin and then straight out from the front of your bun and roll divider / rounder. **NOTE:** Check dividing plate for any unusual marks or scratches caused by the knives coming into contact with the dividing plate. If marks or scratches are detected, call your dealer or the manufacturer for service advice.

### General Operation

Each day, before beginning production with your bun and roll divider / rounder, check the following:

- a.) Is the machine clean?
- b.) Are all hoods and side panels securely in place?
- c.) Are the knives and the dividing head covered with a thin film of mineral oil?
- d.) Are the moulding plates clean and dry?
- e.) Is the retaining ring (33) in place?
- f.) Are both pins (7) securely in place?
- g.) Is the machine securely fastened to the floor?

## OPERATING INSTRUCTIONS (cont'd)

Calculate the amount of bulk dough required for each press by multiplying the desired weight for each roll by the number of divisions in your particular bun and roll divider / rounder model. For example, if you have a Model ABSBRD 36-3 (36 divisions) and you want each division to be three (3) ounces. Then bulk dough =  $36 \times 3 = 108$  oz. or 6.75 lb.

Observe the following approximate minimum and maximum weight limits for the bulk dough for each press:

TABLE

Model	No. of Divisions	Bulk Dough Wt.	Divided Dough Wt.
		Approx. Min.-Max. LB. (Kg)	Approx. Min.-Max. oz. (Kg)
ABSDRD 30-35	30	1.9-6.5 (.86-3)	1.0-3.5 (.03-.1)
ABSDRD 36-3	36	2.3-6.8 (1.05-3.10)	1.0-3.0 (.03,.09)
ABSDRD 36-4	36	2.3-9.0 (1.05-4.1)	1.0-4.0 (.03-.11)

### LOADING YOUR BUN AND ROLL DIVIDER

Scale the bulk dough into the desired weights for each press as described above and give each press a slight rounding and allow to rest for ten to fifteen minutes. Do not allow the dough to rise too much. The weights mentioned above and dough rest times will be determined by the dough consistency and type. As an example, a soft sweet dough would not have to sit as long as stiff sour dough.

Place a scaled piece of bulk dough onto a moulding plate, moist side down, and flatten it by hand so that the center is slightly higher than the outer edge. Spread the dough into a circle reaching to the centers of the outer moulding cups in the moulding plate. Do not dust or grease the moulding plate! The surface of the dough should be dry. To avoid sticking to the dividing head, very soft dough may require a very slight dusting of flour after spreading on the moulding plate.



## OPERATING INSTRUCTIONS (cont'd)

### IMPORTANT

FOR UNIFORM WEIGHTS AND PROPER ROUNDING THE BULK DOUGH MUST BE PLACED ON THE MOULDING PLATE CAREFULLY AND EVENLY, THE CENTER SLIGHTLY HIGHER THAN THE OUTER EDGE. FAILURE TO DO SO WILL TRAP AIR IN THE DIVIDING HEAD, PREVENTING UNIFORM WEIGHT DISTRIBUTION AND PROPER ROUNDING.

### The Pressing Operation

Insert and lock, on pin (67), one moulding plate with dough. Be certain the moulding platen (42) and the moulding plate are clean and no foreign objects are trapped between them and that the moulding plate is completely flat on the moulding table.

Lower the dividing head by pulling down the pressing lever (30) until it stops in the down position. The dough is now pressed evenly in the dividing head to assure uniform weight for each division.

### The Dividing Operation

After completing the pressing operation, pull the dividing lever (69) to the right while holding downward pressure on the pressing lever. This allows the knives to extend downward. The dough is now divided into equal divisions by weight.

### The Rounding Operation

While holding the pressing lever down, slowly push the rounding lever (50) downward to actuate the rounding cycle (see Figure 2, Page 15). The moulding table and the moulding plate will shift sideways and the moulding platen will move in a circular motion. After the desired rounding time, slowly return the rounding lever to the fully raised rest position.

To adjust the moulding cavity for dough weight, the weight adjustment knob (32) can be adjusted upward to downward. The numbers on the adjusting

## OPERATING INSTRUCTIONS (cont'd)

shaft are for reference only and do not represent any specific calibration. Lower the position of the adjusting collar for smaller dough quantities. Raise the position of the adjusting collar for larger dough quantities. When the correct setting is achieved, the dough will be correctly cut for even rounding. No further adjustments should be required for normal operation of your bun and roll divider / rounder.

### CAUTION

DO NOT ALLOW THE DIVIDING KNIVES TO DIRECTLY  
CONTACT THE MOULDING PLATE.

The time required for actual rounding is dependent on specific dough consistency and weight. Generally, larger pieces require less rounding times and small pieces require longer rounding times. Experiment with your particular products and for future reference, note the weight adjustment settings and rounding times that provide optimum results.

After dividing and/or rounding, promptly remove the dough balls from the moulding plate to avoid sticking.

**Turn off** the motor after completing your production run or when the bun and roll divider / rounder is not in use and unattended.

### The Dividing Operation Only

The bun and roll divider / rounder may be used for dividing only. First, turn the machine off. Place an empty moulding plate upside down (smooth side up) in your machine. Take a second moulding plate also upside down and flatten on it a scaled piece of dough you wish to divide. Insert the second moulding plate into the machine on top of the empty plate already in the machine. Then pull the pressing lever to flatten the dough, then release the cutting lever to divide the dough.

### CAUTION

NEVER ENGAGE THE ROUNDING LEVER WHILE TWO MOULDING  
PLATES ARE INSERTED. POWER SWITCH SHOULD BE OFF WHEN  
THE MACHINE IS USED FOR DIVIDING ONLY.

## CLEANING AND MAINTENANCE

### CAUTION

ALWAYS SWITCH OFF AND DISCONNECT POWER TO THE MACHINE BEFORE OPENING COVERS!

This machine has been designed for simple cleaning and easy sanitation compliance.

**ALWAYS REMOVE DOUGH CHECK RING BEFORE YOU TILT THE HEAD. TURN OFF MOTOR AND DISCONNECT POWER TO THE MACHINE.**

For removal of the dough check ring (7), insert one of the moulding plates and lower the dividing head by gently pulling down the pressing lever until it stops. Rotate the dough check ring about 170 degrees until notches are in alignment with the retaining lip. Dough check ring should drop down slightly. Slowly raise the dividing head with the pressing lever. The dough check ring should remain down.

Clean the surface of the dividing disk (74) and moulding table (42) with a nonabrasive pad, such as a Scotch-Brite 3M pad. Then coat all surfaces with a light coat of mineral oil.

### IMPORTANT

ONLY USE MINERAL OIL. OTHER TYPES OF OIL CAN CLOG THE MACHINE CAUSING IT TO FUNCTION IMPROPERLY.

To extend knives fully, turn the weight adjustment screw (32) to the top most limits. With the head tilted, push the dividing lever (69) to the right and hold, then pull down on pressing lever so that knives come out through the slots of the dividing disk.

With the knives fully extended, clean all old dough and other dried particles from all knife blades with a non-abrasive pad. After all knives are clean, coat each blade lightly with mineral oil. To return knives back into the dividing disk, push pressing lever upwards to its fully raised position. Now the head can be brought back down to its original position on the support blocks. Use the pressing lever to lower the head. Be careful not to allow the head to fall.

## CLEANING AND MAINTENANCE (Cont'd)

Lubricate the pin with mineral oil prior to reinstalling. **Never** force the pin with a hammer.

To reinstall the dough check ring (7), insert one moulding plate and lift the dividing head to its fully raised rest position, carefully set the dough check ring on the moulding plate. Center carefully. Be sure the stop pin is in the proper position so the dough check ring can be rotated about 170 degrees before it hits the stop. Carefully lower the dividing head back into position, verify the dough check ring is free to rotate. Using the pressing lever, lower the dividing head all the way down. Make sure the notches in the rim of the dough check ring are in alignment with the retaining guide blocks on the dividing head. With the dividing head all the way down, carefully lift/ rotate the dough check ring into position. Rotate the dough check ring about 170 degrees until stop pin hits the stop block.

Slowly raise the dividing head to its fully raised and rest position. Dough check ring should rise evenly and smoothly with the dividing head.

**NOTE:** The ABSBRD-36-4 model is supplied with a removable head feature that allows for the simple removal of the cutting head and knife assembly, if a more thorough cleaning and lubrication is required.

Remove the head by first removing the front and rear covers, then the dough check ring, as described above, and then pulling the pressing lever down to completely lower the dividing head. With a moulding plate in place, loosen the two hand screws (34), then rotate the dividing head about 90 deg. counter clockwise or until dividing head is free.



### WARNING!

USE EXTREME CAUTION! DO NOT DROP DIVIDING HEAD! CAREFULLY RETAIN THE DIVIDING HEAD WHEN REMOVING. DO NOT LET DIVIDING HEAD DROP ON HANDS OR FINGERS.

## CLEANING AND MAINTENANCE (Cont'd)

With head and knife assembly removed, it is OK to wash it in a pan washer or in a hot soap and water bath. Be sure to thoroughly dry all parts then oil with a light coat of mineral oil before reassembly.

Reverse above procedure to reinstall the dividing and knife head.

With a stiff bristle brush, clean all your moulding plates. Do not use a steel brush! When oiling the rings and knives of the dividing disk, always use mineral oil. Never use vegetable oil. Vegetable oils will mix with flour and create a rubber-like substance. Wipe down the other parts of the machine with a soft cloth or blow off with compressed air.



### WARNING!

DO NOT WASH MOULDING PLATES IN PAN WASHER —  
THEY WILL BE DESTROYED! WASH ONLY WITH LUKE-  
WARM, SOAPY WATER!

## WARRANTY

### Machine Warranty

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

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

A. For a period of one year from date of original consumer purchase, American Baking Systems 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 will exchange electrical motors and components found to be defective except in the following cases:

1. Electricity was connected to machine incorrectly.
2. Machine was altered or repaired by an unauthorized mechanic.
3. Serial number has been changed.
4. Machine was misused or overloaded beyond published specifications.

C. For a period of 90 days from the date of original purchase, American Baking Systems will provide or reimburse the labor from item A and B at no charge to the customer providing American Baking Systems was notified in advance and had authorized the labor charges. A work service authorization number can and must be obtained by contacting the Factory Service Center prior to contracting repair work.

D. By executing this warranty, the buyer acknowledges that there are no other 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 purchase of this machine.



## WARRANTY

### Terms of Warranty

Terms of this Warranty begins with date of shipment from the factory, or with installation date if registered with American Baking Systems, Inc. within five 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 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:

- 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 shipments, 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:

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

## WARRANTY

### **Terms of Warranty (cont'd)**

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 two hours and mileage exceeding 100 miles round trip.

Invoices for warranty labor will not be accepted for payment without a Work/Labor Authorization Number obtained from American Baking Systems prior to facilitating the repair. To obtain a Work 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 (except as authorized and acknowledged by American Baking Systems, Inc. and by authorized dealer selling equipment).

## MOUNTING BOLT PATTERN

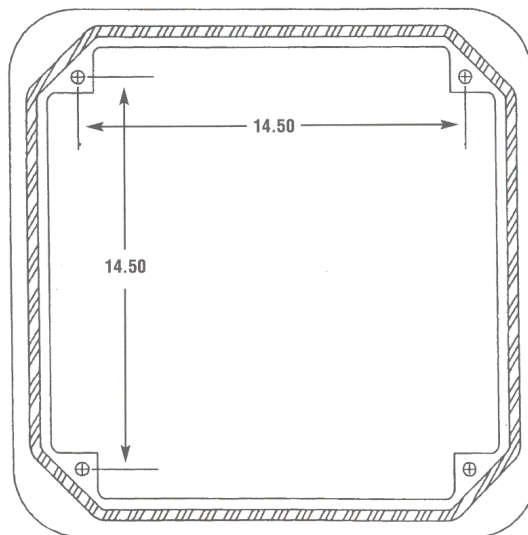
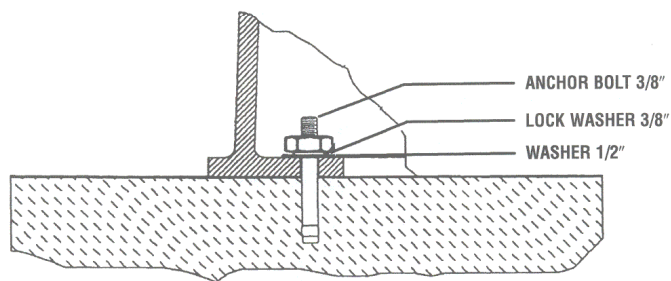


Figure 1.

## NOMENCLATURE

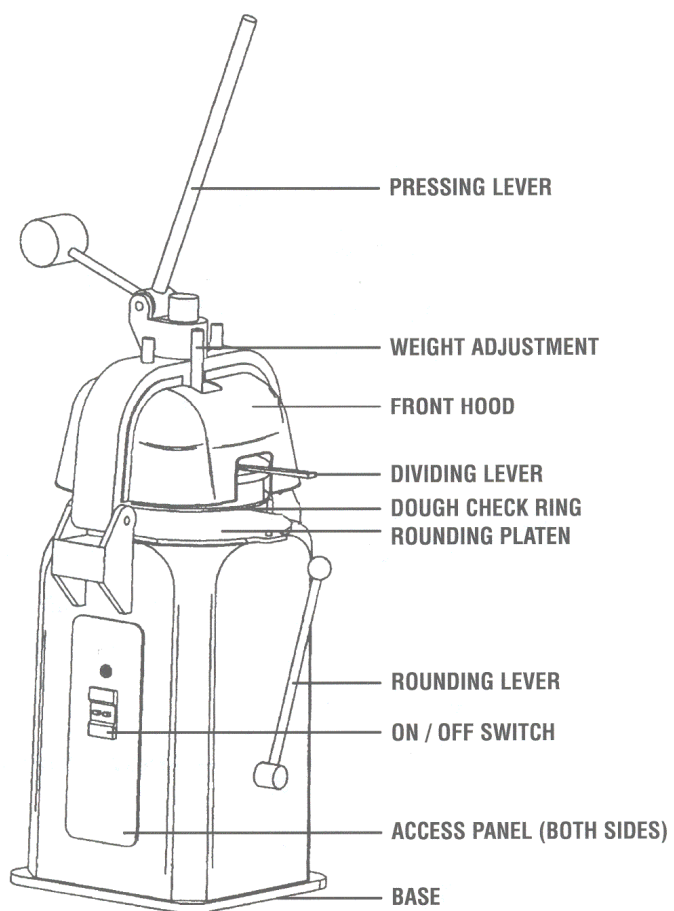


Figure 2.

## TILTING DIVIDING HEAD

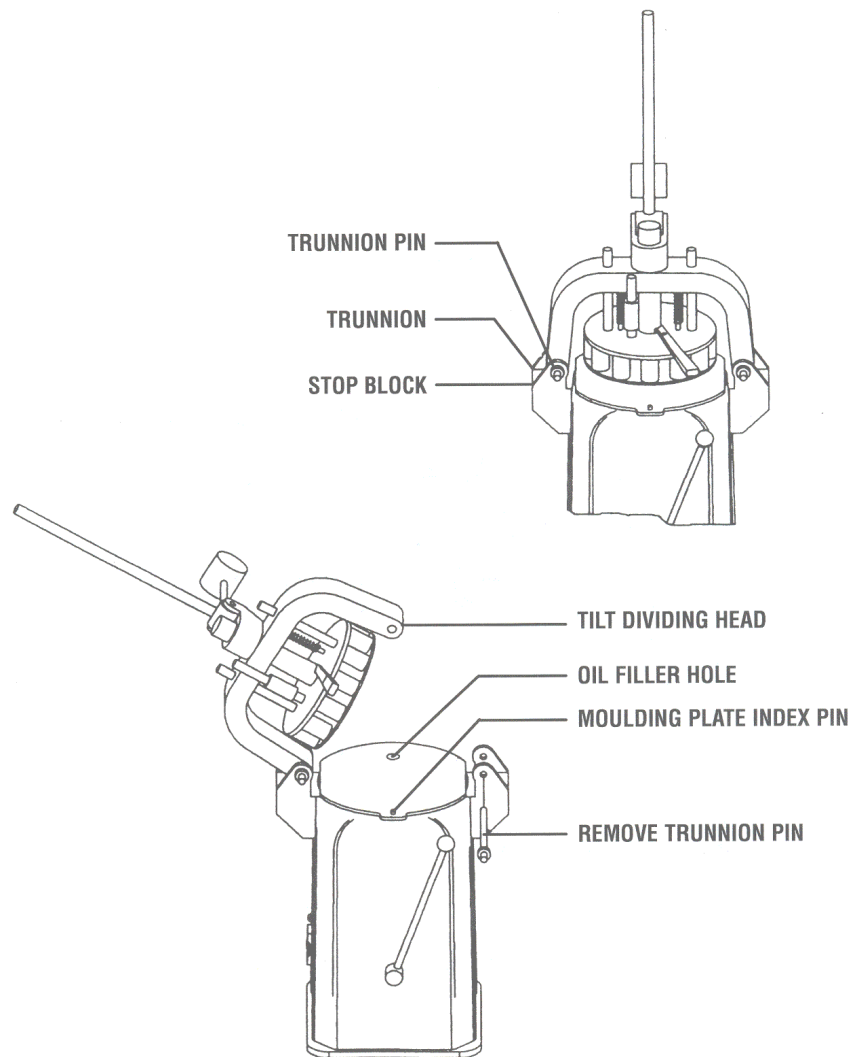
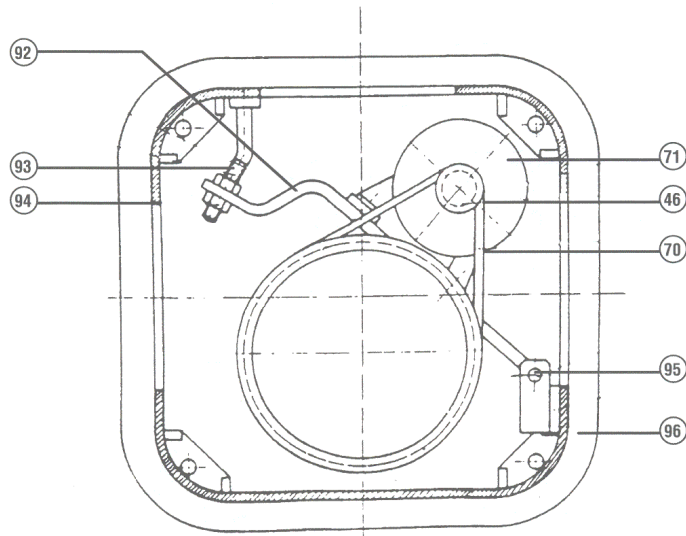
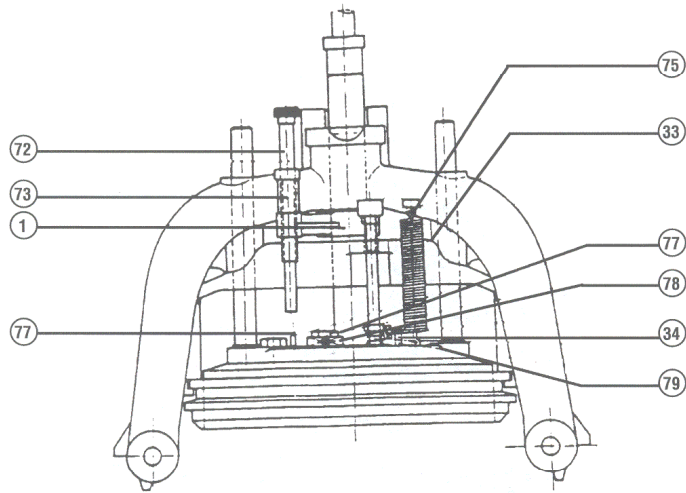


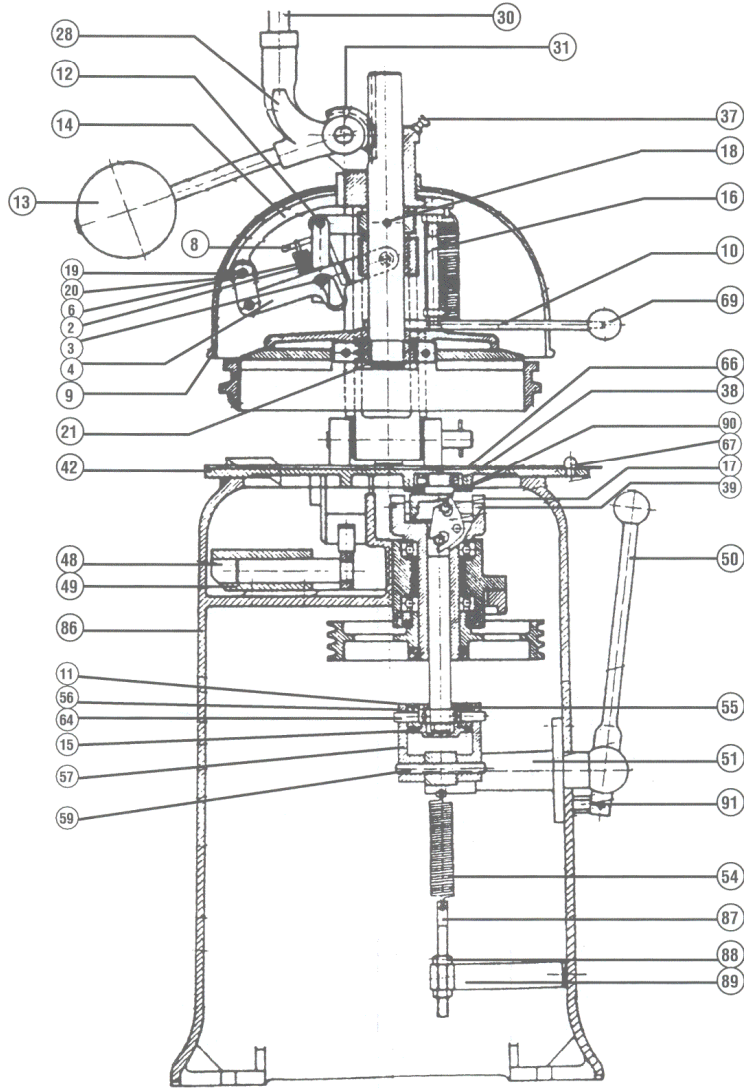
Figure 2.

# PARTS LIST

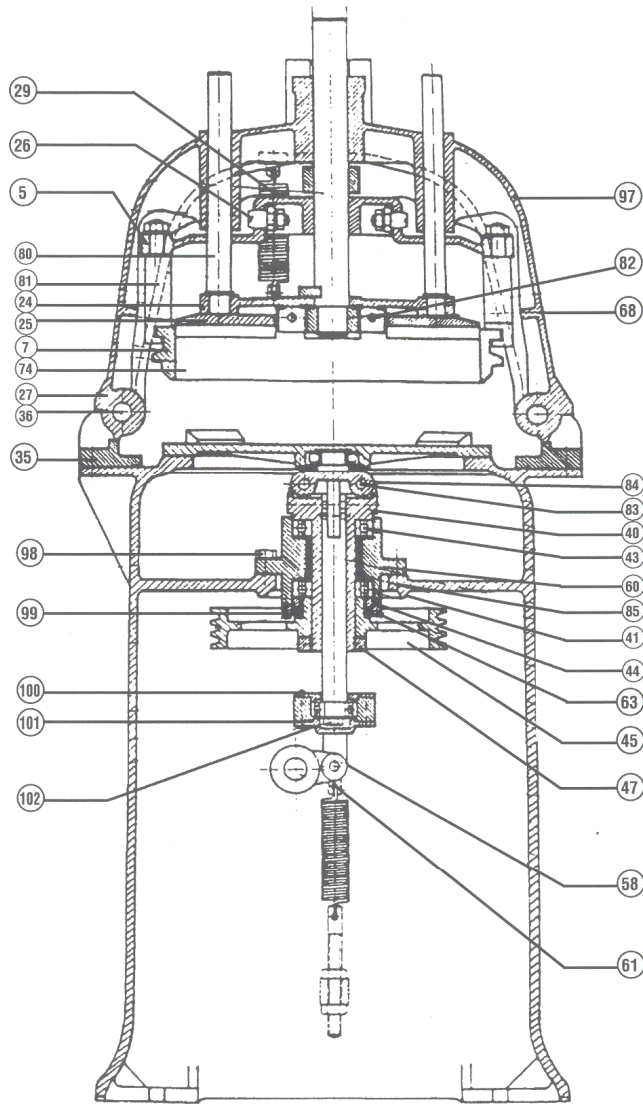




# PARTS LIST (Cont'd)



# PARTS LIST (Cont'd)



## PARTS LIST (Cont'd)

No.	Designation	No.	Designation
1	Stop bracket	52-53	<i>Reserved</i>
2	Joint support bar	54	Tension spring
3	Support bolt roller	55	Pivot bearing
4	Support fork	56	Bearing housing
5	Guide bridge ring	57	Connection piece
6	Tension spring support	58	Lever
7	Dough check ring	59	Bolt
8	Spring strap	60	Ram shaft
9	Top Cover	61	Switching shaft
10	Cutting Lever	62	<i>Reserved</i>
11	Bearing cap	63	Felt seal
12	Support bolt	64	Bolt
13	Counterweight	65	<i>Reserved</i>
14	Support strap	66	Moulding plate
15	Bearing cap	67	Pin
16	Adjustment screw	68	Fitting screw
17	Angle lever bolt	69	Dividing lever
18	Roll pin	70	V-belt
19	Link connection	71	Motor
20	Bolt	72	<i>Reserved</i>
21	Lock ring	73	Adjuster sleeve
22	Bolt	74	Dividing knife head
23	<i>Reserved</i>	75	Eye bolt
24	Flange	76	Limitation pin
25	Piston	77	Locking collar
26	Collar screw	78	Tension spring (small)
27	Strap	79	Eye bolt
28	Segment gear	80	Guide bolt
29	Rack	81	Head bolt
30	Pressing lever	82	Cross yoke
31	Gear segment bolt	83	Guide bolt
32	Adjusting screw	84	Slide yoke
33	Tension Spring	85	Flange bushing
34	Support screw	86	Base
35	Bearing block	87	Eye bolt
36	Trunnion pin	88	Lock nut
37	Adjusting screw	89	Support arm
38	Roller bearing	90	Bearing cap
39	Lever angle	91	Stop bolt
40	Bushing	92	Lever
41	Flange bearing	93	Motor support
42	Moulding platen	94	Lock nut
43	Ball bearing	95	Bolt
44	Felt seal	96	Mounting fork
45	V-belt pulley	97	Lock nut
46	V-belt pulley	98	Screw
47	Setting ring	99	Screw
48	Slide	100	Screw
49	Slide bearing	101	Disk
50	Rounding lever	102	Screw
51	Flange bearing		