

# *Belshaw*



# *TYPE F-YRD*

## Operator's Manual

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## EQUIPMENT RECORD

Please provide the information below when you correspond with Belshaw about your machine.

Purchased by \_\_\_\_\_

Installed by \_\_\_\_\_

Date of Installation \_\_\_\_\_

Model number \_\_\_\_\_

Serial number \_\_\_\_\_

## IN CASE OF DAMAGE TO EQUIPMENT

In case of damage to the equipment upon delivery, follow these steps immediately.

1. Inform the freight carrier. The phone number will be on the shipping receipt or label.
2. Take photographs of the equipment, both inside and outside the box or crate.
3. Do not throw away any packaging.
4. Report the damage to the distributor (or other party) from whom you bought the equipment.
5. Email your photos to the distributor (or other party) AND to Belshaw Customer Service at [service@belshaw.com](mailto:service@belshaw.com). Include a Belshaw Order Number in your communications. Your Order Number will begin with "CO...", followed by 6 digits) and should be marked on the box or crate.

## IN CASE OF MISSING ITEMS

1. If possible, note the missing items on the delivery receipt of the freight carrier.
2. Take photographs of the entire shipment.
3. Follow steps 2 – 5 above.

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# Preface

## UTILITY REQUIREMENTS

<b>Electricity</b>	8.0 amperes at 120 Volts, 60 Hertz, 1 Phase
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The F-YRD Cutter is designed to cut yeast-raised ring donuts. It is not designed to do anything else.

The operator must work safely at all times and read this manual and follow its instructions and warnings. A thorough understanding of how to install, maintain, and safely operate the cutter will prevent production delays and injuries.

To use the cutter safely, heed the following warnings and all other warnings that appear in this manual:

- To avoid electrocution or other injury, unplug the machine before attempting any adjustment, repair, disassembly, or cleaning.
- To avoid damaging the machine, never use force to assemble, disassemble, operate, clean, or maintain it.

- Be careful never to get shortening, water, or other materials on the floor. If anything does get spilled on the floor, mop it up immediately. Materials on the floor can cause people to slip or fall, resulting in serious injury or loss of life.
- To prevent unintentional startup and possible fire, unplug the machine if there is a local power outage. When the power is restored, it is safe to plug the machine in again.
- To avoid electrocution, make sure that all electrical cords are not frayed or cracked and that they do not pass through any water or shortening.
- Make sure that all electrical cords are routed so that no one will trip over them.

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# Installation

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## **Unpacking the Cutter**

To unpack the Cutter:

1. Unpack and remove all the packing materials from the machine, including tape foam and pieces of paper. **NOTE:** If there is damage, notify the shipping company immediately.
4. Thoroughly wash the machine using warm water and mild cleaner. (See Section 3 for cleaning instructions).
5. Rinse off the cleaner and dry the machine.

## **Electrical Installation**

To start the Type F cutter, turn the switch located on the motor to ON. The extruder is cycled by the actuation trigger on cutter. Please see Wiring Diagram inserted in the Technical Supplement.

# Operation

# 2

## CAUTION

**Do not at any time use force to operate the Type F cutter.**

## CAUTION

**Disconnect power cord before assembling, adjusting or disassembling the cutter.**

## Operation

1. Disconnect power cord.
2. Put the upper and lower piston O-ring seals on the plunger, lubricate the O-ring seals with a small amount of vegetable oil and assemble the plunger with the metering tube. Put the cylinder O-ring seal on the cylinder, lubricate the O-ring seals with a small amount of vegetable oil and assemble the cylinder into the hopper. Fit the plunger and hopper assemblies on the extruder.
3. Lubricate the inside of the hopper and the outside of the metering tube with a small amount of vegetable oil.
4. Mix up a batter/slurry of flour and water (approximately 1 cup of flour and 1 ¼ cup of water) to the consistency of heavy cream and pour into the metering tube, to within approximately 3 inches of the top.
5. Fill the hopper with dough. Cut the dough into small long pieces before adding it to the hopper. (Note; add 1 or 2 table spoons of vegetable oil to the mix at the end of the mix

time and mix for 15 more seconds, this will make it much easier to handle the dough and move through the extruder)

6. Plug power cord in.
7. Turn on the Type F cutter. Position the cutter over a table holding frying screens. Adjust the cutter or screens so there is approximately 1 ½ inches between bottom of the cylinder and top of the frying screen.
8. Prime the cutter by holding the actuator trigger until the unit is cutting a uniform product.
9. The desired volume of product is obtained by adjusting the roto-flex adjusting knob. With the drive motor running, screw the knob to a smaller number for less volume, or to a larger number for a greater volume.

**NOTE:** Irregular or uneven product shape is an indication of “gassy” dough, cylinder leakage, or a metering tube leakage. De-gas the dough. If this does not correct the problem, remove the cylinder from the hopper and check to see that the piston seal is in the cylinder and has not been pinched or cut, and that all adjoining surfaces are free from dried dough. All so check the cylinder O-ring for damage.

If the metering tube leaks, the product will have a wet spot after it is cut. This will cause the spot to open up as it is proofed, resulting in an imperfect shape.

This leakage is due to a pinched or cut piston seal, the lack of a piston seal, or the batter in the metering tube is too thin. The problem can be corrected by making certain that the piston seal is properly in position and in good condition, and that the batter in the metering tube is of the correct consistency.



Figure 1.1 Type F-YRD shown with Depositing Table (optional accessory)

# Disassembly and Cleaning 3

## CAUTION

**Do not at any time use force to operate the Type F cutter.**

## CAUTION

**Disconnect power cord before assembling, adjusting or disassembling the Type F cutter.**

## Disassembly

1. Disconnect power cord.
2. Loosen the crown bearing clamp to release the crown bearing.
3. Release and swing away the hopper holding clamp.
4. Remove the cylinder, plunger and hopper as one unit by lifting and tilting forward, allowing the plunger to slip away from the actuator (trip) arm and the cylinder to come free.
5. Remove the plunger and metering tube from the hopper and cylinder. Release the wing nut holding the plunger and metering tube together, and pull the plunger out of the tube. Remove the piston seals from the upper and lower pistons.
6. Remove the cylinder from the hopper by pulling, with even pressure, until free. Remove the piston seal.

## Cleaning

1. Wash the plunger, cylinder and metering tube in hot water with an approved cleaner. Rinse, wipe dry, and dip in edible oil.
2. Wash the hopper in hot water with an approved cleaner; rinse and wipe dry.
3. Wipe the cutter head with a soft cloth, dampened with water and cleaner. Remove the cleaner with a damp cloth.

## CAUTION

**Do not spray power head with water or cleaning solution at any time.**

4. Reassemble by reversing the Disassembly process.

## NOTE

**Clean the extruder as soon as possible after use.**

## **Maintenance**

1. Disconnect the extruder from the power source before attempting to make any adjustments, clear any obstructions, or lubricate any parts.
2. If the extruder sticks or jams, disassemble if necessary to remove any obstructions or to determine the cause of the malfunction.
3. Lubrication is required at several points. Please see the following list.
  - a. Gear box and clutch: Check the oil level in the gear box weekly. Refill with Food Grade SAE 90 oil as necessary; drain and replace once each year.
  - b. Plunger: Daily lubricate the crown bearing and the entire plunger with edible oil.
  - c. Apply a few drops of oil on the clamp screws holding the hopper clamp and on the pivot point of the extruder to assure free operation at these points.



# Belshaw Adamatic Bakery Group

## Limited Warranty / Return Policy

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Subject to the terms and limitations set forth in this limited warranty ("Limited Warranty"), Belshaw Adamatic Bakery Group (also referred to as "the Manufacturer") warrants to the original purchaser ("Purchaser") of Manufacturer's equipment and parts ("Products"), Belshaw Adamatic Bakery Group's manufacture and assembly of Products to be free from defects in workmanship and material which would result in product failure under normal use and service. Belshaw Adamatic Bakery Group's entire liability under this Limited Warranty is limited to either repairing or replacing at Manufacturer's factory or on Purchaser's premises, at Belshaw Adamatic Bakery Group's option, any Products purchased by Purchaser which shall be determined by the Manufacturer to be defective. If necessary to return Products to Manufacturer's factory, Products must be shipped by Purchaser with transportation charges prepaid by Purchaser.

Belshaw Adamatic Bakery Group reserves the right to make changes in design or add any improvement to its Products at any time without incurring any obligations to install the same on Products previously sold.

Possession, use or operation of Products sold hereunder for any other than their designed purpose, or use of Products which are in poor repair, modified, improperly operated, or neglected, is done at the Purchaser's risk. Belshaw Adamatic Bakery Group hereby disclaims any liability for these actions and shall not be liable for defects in or for any damages or loss to any property which is attributable to such actions.

**Under no circumstances shall Belshaw Adamatic Bakery Group be liable for any indirect, special, incidental, or consequential damages arising out of, or from the use of its Products by Purchaser, its assignees, employees, agents or customers.**

**THIS LIMITED WARRANTY SHALL BE PURCHASER'S SOLE AND EXCLUSIVE REMEDY WITH RESPECT TO DEFECTIVE PRODUCTS.**

### Warranty Period

This Limited Warranty covers Products manufactured by Belshaw Adamatic Bakery Group and sold by Belshaw Adamatic Bakery Group or its authorized distributor ("Distributor") or authorized dealer ("Dealer"), and this Limited Warranty shall extend for a period of one (1) year from date of shipment to Purchaser, and to the original Purchaser only.

### Limited Warranty

With respect to products not manufactured by Belshaw Adamatic Bakery Group, warranty coverage shall be limited to the warranty of the original manufacturer of the product, or the Belshaw Adamatic Bakery Group Limited Warranty, whichever is the lesser coverage period.

Replacement Products provided under the terms of this Limited Warranty are warranted for the remainder of the original warranty period applicable to the Product.

### Exclusions

This Limited Warranty excludes from its coverage and does not apply to: (a) solenoid and relay coils; (b) lamps; (c) "O" rings; (d) belts; and (e) impellers. This Limited Warranty also excludes the cost of labor for removing and replacing Products subject to a warranty claim, other than the labor incurred directly by the

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Manufacturer when, in Belshaw Adamatic Bakery Group's opinion, a repair of the Product by the Manufacturer is justified.

### **Warranty Claims**

In case of warranty claims relating to your Product, you must follow the instructions below.

### **Report Claims to Your Authorized Distributor or Dealer or to Belshaw Adamatic Bakery Group**

As soon as you discover a problem, contact the Distributor or Dealer from whom you purchased the Product or Belshaw Adamatic Bakery Group. Your Distributor or Dealer will notify Belshaw Adamatic Bakery Group for you. **Only Belshaw Adamatic Customer Service can approve or authorize warranty claims.**

You must state the following:

1. Your name, company name, and telephone number
2. The location, phone number, and contact name where the Product is located
3. The invoice number and date of purchase of the Product
4. The Model and Serial Number of the Product, as written on the data tag attached to the Product
5. A description of the problem and how it occurred

### **Shipping Damage and Missing Items**

**Damage to the Packaging or Crate.** On delivery, promptly check all packages thoroughly for any sign of damage. In cases of visible damage, **always note the damage on the Delivery Receipt.** Failure to note damage is taken by the Freight Carrier to mean that the package is in good condition at time of receipt, and can result in denial of a Freight Claim. Take photographs that clearly show the damage.

**Damage to Products.** If you find any damaged Product inside the shipment, photograph the damage both inside and outside of the package. Do not throw the packaging away. Photos of the package and contents are needed to show the condition of the Product at the time it was received.

**Missing Items.** As soon as you believe any items to be missing from a shipment, promptly report this to the Distributor or Dealer from whom the Product was purchased or to Belshaw Adamatic Bakery Group. If possible, photograph the entire contents of the delivery and email this to your Distributor or Dealer, or to Belshaw Adamatic Customer Service at [service@belshaw.com](mailto:service@belshaw.com).

### **Returning Products to Belshaw Adamatic Bakery Group**

Under the terms of the Limited Warranty, you may be asked to return to Belshaw Adamatic Bakery Group any Product that is the subject of a warranty claim. These Products must be clearly labeled with a Return Goods Authorization Number ("RGA Number") given to you by your Distributor or Dealer, or by Belshaw Adamatic Customer Service. Products received without an RGA Number will not be processed. All Products must be shipped freight prepaid by the Purchaser to Belshaw Adamatic Bakery Group at the address below.

### **Contacting Belshaw Adamatic Bakery Group**

At any time, you can contact Belshaw Adamatic Bakery Group customer service for assistance

Belshaw Adamatic Bakery Group Customer Service  
814 44th St. NW, Suite 103,  
Auburn WA 98001, USA  
Phone: 800-578-2547 (USA/ Canada) or (+1)206-322-5474 (Worldwide)  
Email: [service@belshaw.com](mailto:service@belshaw.com)  
Office Hours: Monday – Friday, 6am to 4pm, USA Pacific Time