

BelshawTM

OPERATION AND SERVICE MANUAL

TYPE K DEPOSITORS

Type K Pancake Dispenser

Type K Donut Depositor

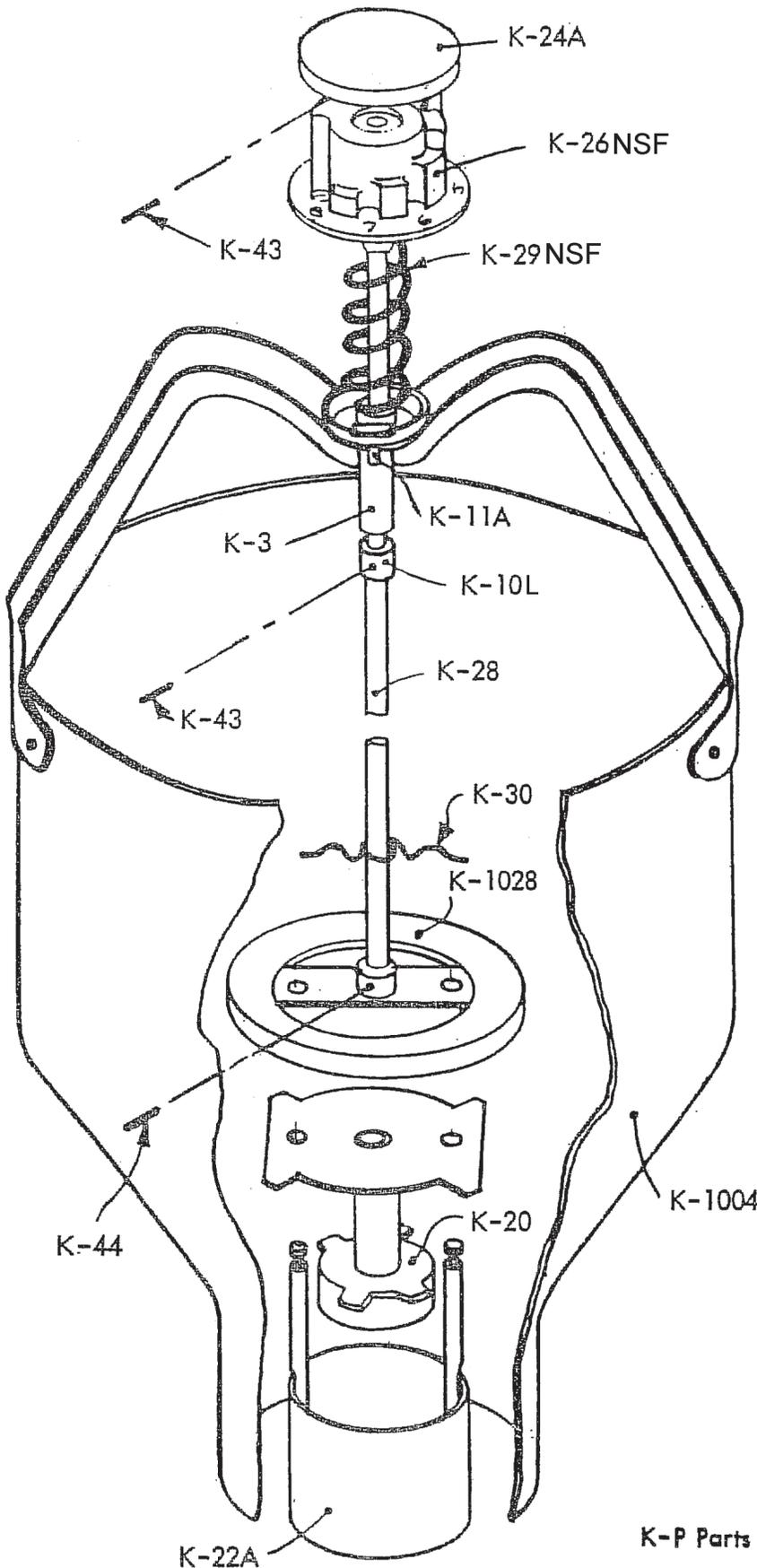
Type K Hushpuppy Depositor

Type G Batter Boy



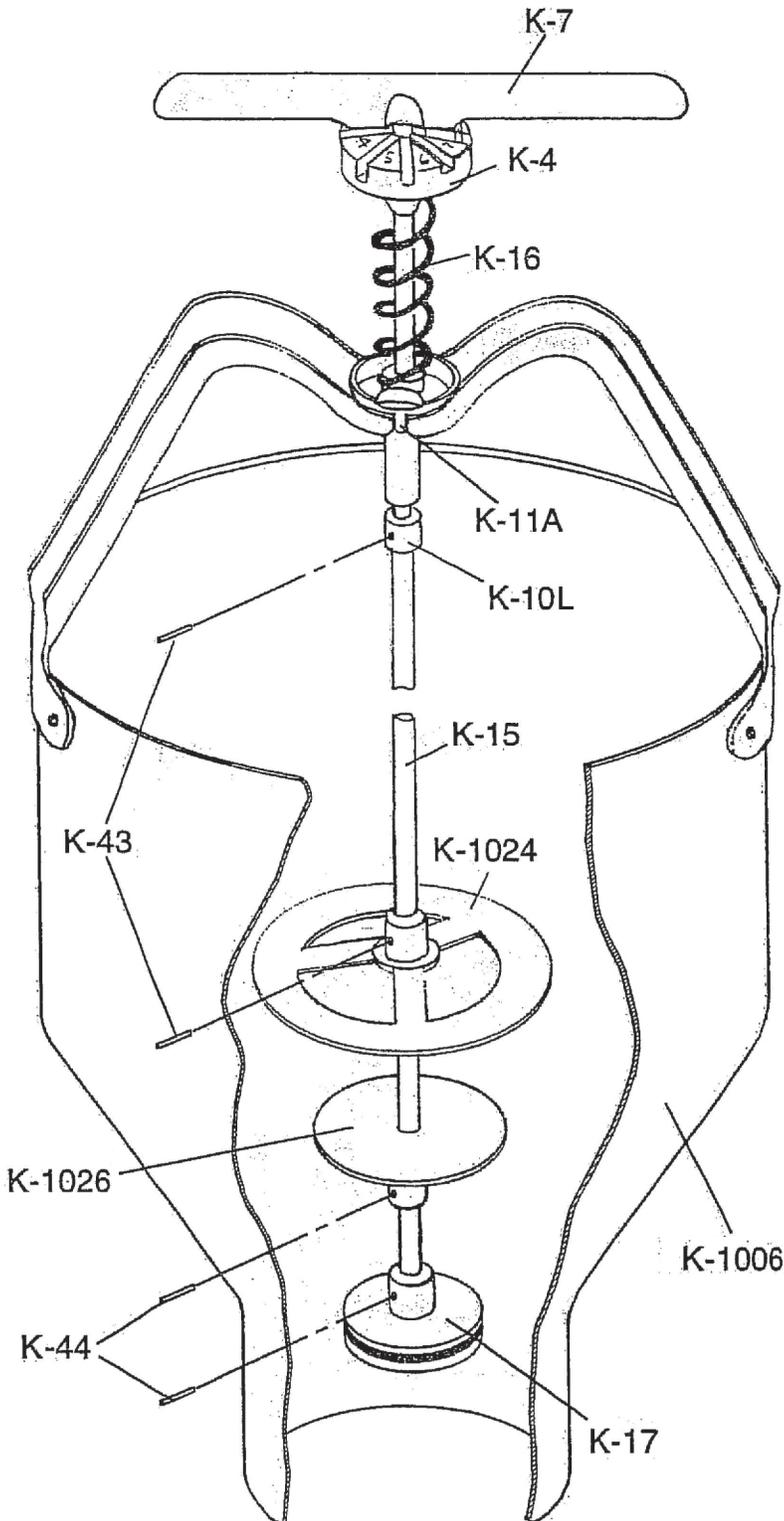
BelshawTM

Quality bakery equipment for over 90 years



- K-3 Notched Lock
- K-10L Collar
- K-11A Spring Cup Lock Assembly
- K-20 Valve Assembly
- K-22A Cage Assembly
- K-24A Pushbutton Ass'y
- K-26NSF Dial
- K-28 Center Rod (must be fitted at factory)
- K-29NSF Operating Spring
- K-30 Lock Spring
- K-43 Spring Pin, 2 used 5/64 x 1/2 SS. ea.
- K-44 Groove Pin 5/64 x 1/2 SS.
- K-1004 Hopper and Bail Assembly
- K-1028 Skirt Valve Ass'y.
- K-1013A Plunger Assembly (not shown separately) consists of K-3, K-10, K-11A, K-20, K-22A, K-24A, K-26, K-28, K-29, K-30, K-43(2), K-44, K-1028.
- K-1013 Upper Plunger Sub-Assembly (same as K-1013A, but without K-20 and K-22A)

Type "K" Donut Cutter Parts List

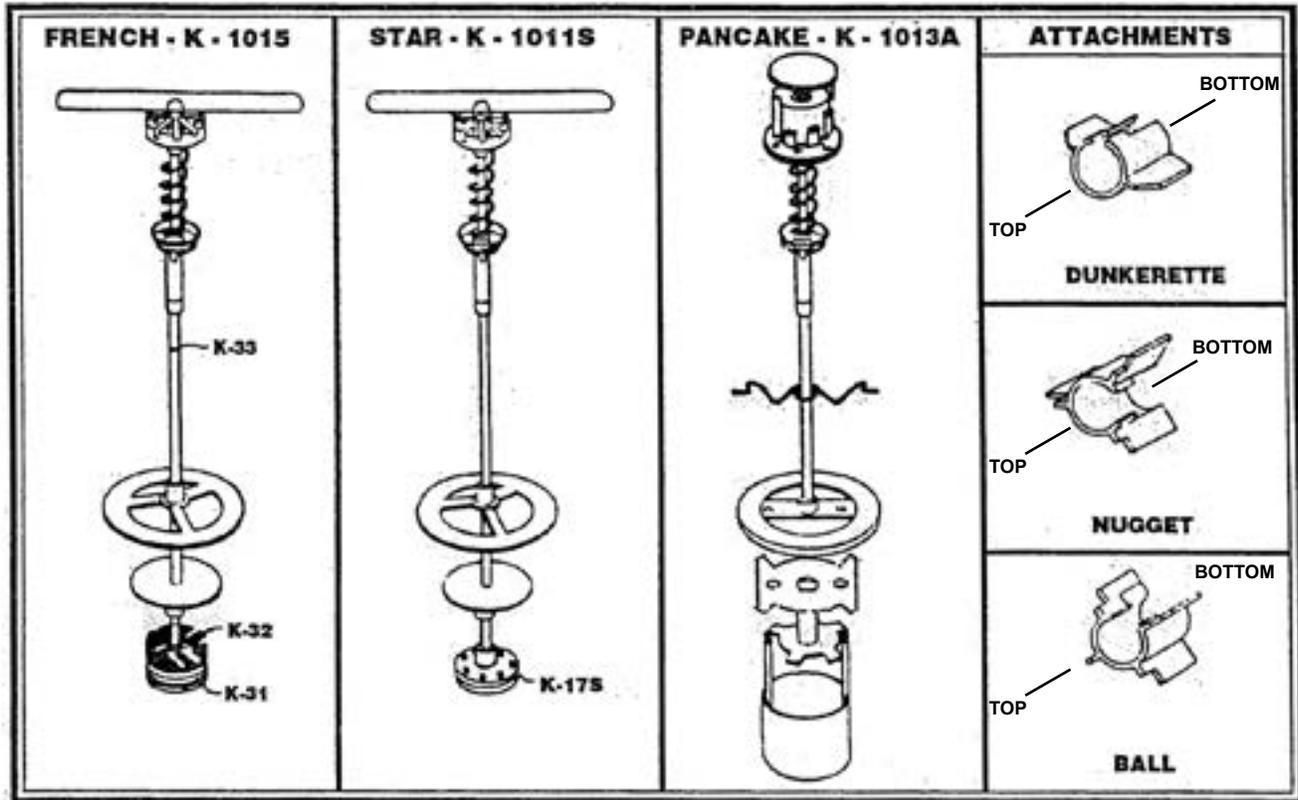


- K-3 Notched lock
- K-4 Dial
- K-7 "T" handle
- K-10L Collar
- K-11A Spring cup lock assembly
- K-15 Center rod (must be fitted at factory)
- K-16 Operating spring
- K-17 Piston, size 1-9/16" only
- K-43 Spring pin (2 required)
- K-44 Groove pin, (2 required)
- K-1004 Hopper & bail assembly, size 1-9/16" only

- K-1024 Spider valve assembly
- K-1026 Floating valve assembly, size 1-9/16" only
- K-1011A Plunger assembly, 1-9/16" (not shown separately) consists of: K-3, K-4, K-7, K-10, K-11A, K-15, K-16, K-17, K-1024, K-1026, K-43, K-44
- K-1011S Star center donut plunger assembly, 1-9/16" only
- K-1013A Pancake dispenser plunger assembly, 1-9/16" only
- K-1015 French donut plunger assembly, 1-9/16" only

OTHER PLUNGERS AND ACCESSORIES AVAILABLE. REFER TO NEXT PAGE.

Type "K" Plungers & Accessories



K-1015 FRENCH PLUNGER ASSEMBLY, 1-9/16" size only

Replacement parts for French Plunger:

K-31 Lower Piston

K-32 Former

K-33 Center Rod

All other replacement parts for the French Plunger are the same as K-1011A, size 1-9/16 shown on the "K" Donut Plunger Parts list

K-1011S STAR CENTER PLUNGER, 1-9/16" size only

Replacement parts for Star Center Plunger:

K-17S Star Piston Assembly

All other parts are the same as K-1011A, size 1-9/16" shown on "K" Plunger parts.

K-1013A PANCAKE DISPENSER PLUNGER, 1-9/16" size only

For replacement parts, see "K" Pancake Dispenser Parts list.

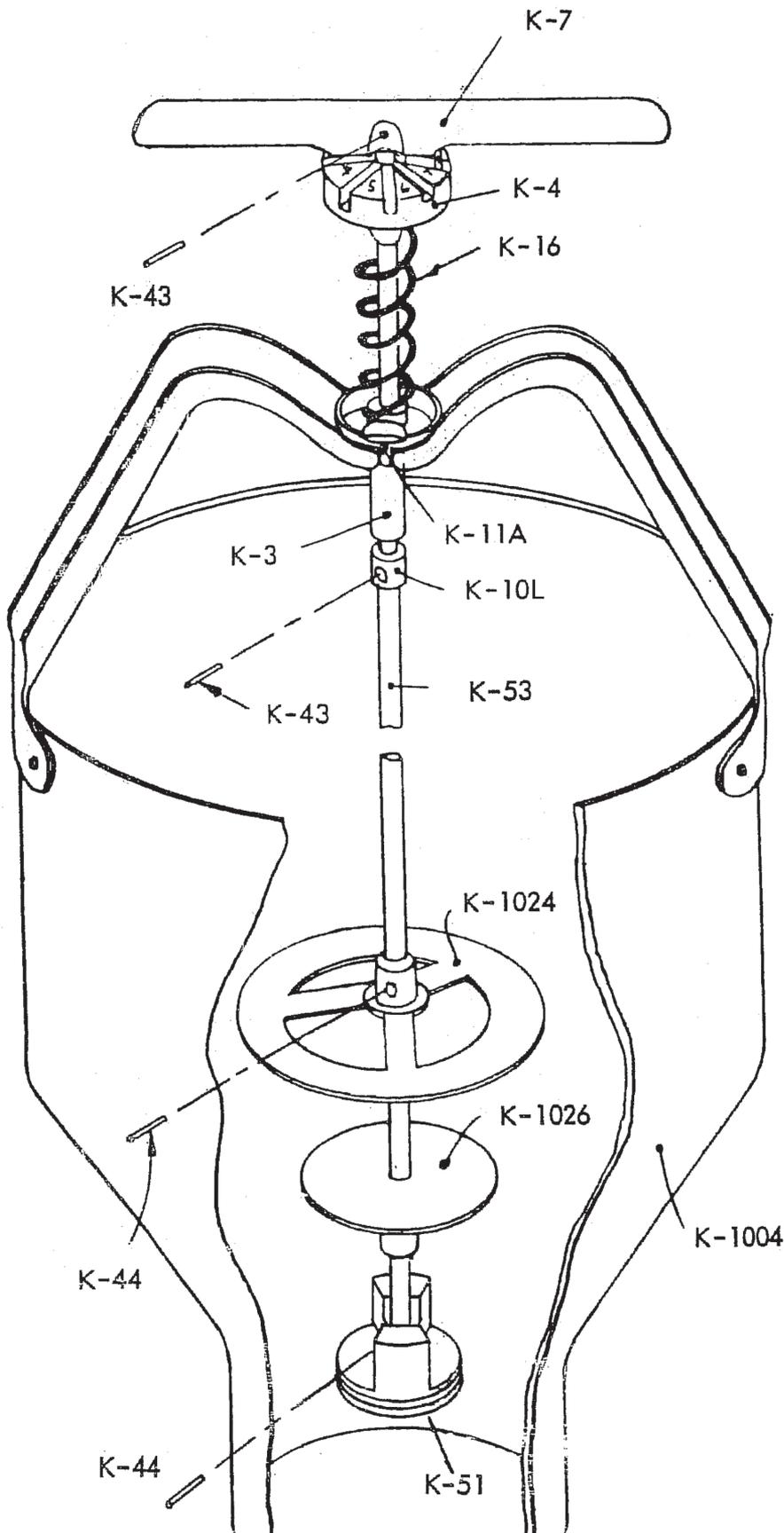
K DONUT ATTACHMENTS, size 1-9/16" only

DR42-1018 Dunkerette Attachment, cuts 2

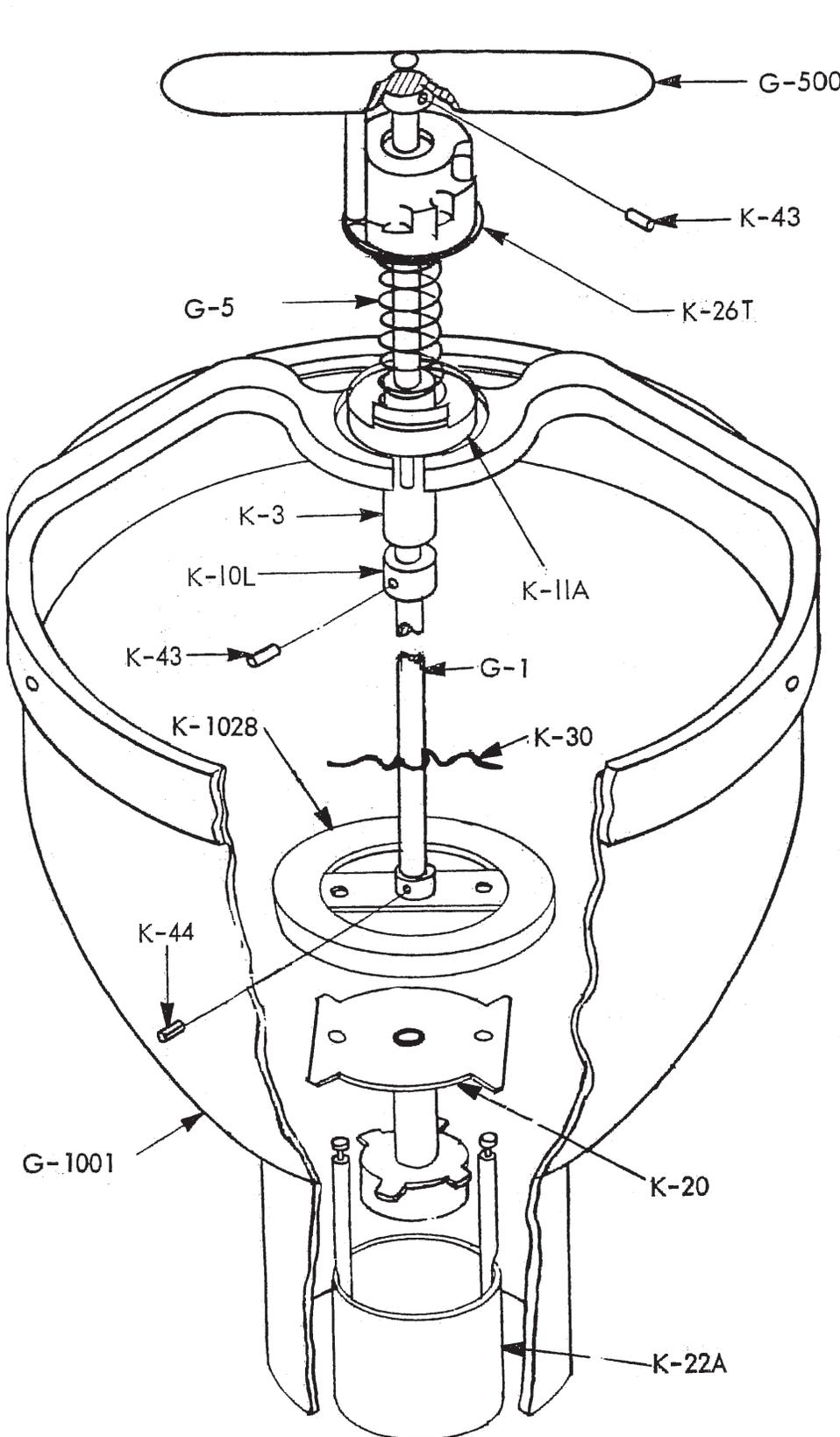
DR42-1016 Nugget Attachment, cuts 3

DR42-1017 Ball Attachment, cuts 4

Note: Attachments fit onto a plain or star plunger only. If fitting onto a 1-9/16" plunger, a 1-9/16" attachment must be chosen. Install the attachment onto the shaft of the plunger near the base, and slide down until it rests on the plunger piston itself. TOP side and BOTTOM side are as indicated in the illustration above.



- K-3 Notched lock
- K-4 Dial
- K-7 "T" Handle
- K-10L Collar
- K-11A Spring Cup Lock Assembly
- K-53 Center Rod (Must be fitted at factory)
- K-16 Operating Spring
- K-51 Piston, size 1-9/16"
- K-43 Spring Pin, 2 required
5/64 x 1/2 SST. ea.
- K-44 Groove Pin, 2 required
5/64 x 1/2 SST. ea.
- K-1046 Hopper and Bail assembly
size 1-9/16" only
- K-1024 Spider Valve Assembly
- K-1026 Floating Valve Assembly
size 1-9/16" only
- K-1038 Plunger Assembly, 1-9/16
(Not shown separately)
Consists of: K-3, K-4, K-7,
K-10, K-11A, K-53, K-16,
K-51, K-1024, K-1026



Part No.	Part Name
K-3	Notched Lock
K-10L	Collar
K-20	Valve Assembly
K-22A	Cage Assembly
K-26T	Dial
K-30	Lock Spring
K-43	Spring Pin, 2 used, 5/64 x 1/2 s.s.
K-44	Groove Pin, 5/64 x 1/2 s.s.
K-1028	Skirt Valve Assembly
G-5	Upper Spring
K-11A	Thumb Cup
G-500	Pushbutton Assembly
G-1001	Hopper Assembly
G-1	Center Rod
G-1002	Plunger Assembly (Not shown separately)

Incl: K-3, K-10, K-20
K-22A, K-26, K-30,
K-43, K-44, K-1028, G-1
G-5, K-11A and G-500

Order parts by name and number. For replacement of parts not listed above depositor should be returned to the factory as special tools are required for installation.



Operation Instructions for Type K & Batter Boy Depositors

(Video of Type K disassembly and reassembly is available at <http://www.belshaw.com/support>)

How to Remove the Plunger

The plunger of the depositor is locked in place with a peg key, held in place by the operating spring. This key is fixed to the release tab, which is located under the lower end of the spring. By lifting on the release tab, the peg key can be raised out of the slot in the hopper arch; then by rotating the release tab and the upper bearing ½ turn, the square key on the upper bearing can be cleared through the slot in the hopper arch. The plunger assembly may then be lifted up and removed from the hopper.

How to Disassemble Plunger for Cleaning

Unlock the lock spring from the two legs on the tube, slide tube from the upper piston. Lift inner valve from the tube, taking care not to force or drop this part as it is very delicate and can be easily damaged. After parts have been cleaned, they should be lightly oiled to prevent sticking. To reassemble, reverse the disassembly procedure. Insert valve into the tube, being certain it is fully seated. Pass the tube legs through the upper piston and when fully seated, re-hook the lock spring.

How to Replace the Plunger

Insert the plunger into the hopper, passing the plunger rod through the slot in the hopper arch. Then start the piston into the cylinder, as the piston enters the cylinder, the square key on the side of the upper bearing should be passed through the slot in the hopper arch. To lock in place, press down on the handle and lift the release tab to allow the upper bearing to be further depressed until the square key on the upper bearing which has passed through the hopper arch can be rotated ½ turn. When the upper bearing has been rotated ½ turn the release tab may be lowered and the peg key on the release tab will lock into the slot in the hopper arch.

How to Use the Dial Adjustment

The machine will deposit 8 different weights of batter by using the dial adjustment. The numbers on the dial, reading the number which is below the slot in which the selector pin is inserted, will indicate the sizes #1-#8. The largest deposit of batter is made by setting #8. 1. Push the dial down from the knob to release it from the peg. 2. Rotate the dial to the desired number. 3. Release the dial, sliding the peg into the slot. **DO NOT** try to change the dial setting without first depressing the spring to release the selector peg. **DO NOT FORCE** or use any tool on the dial. It operates freely when the instructions are followed.

How to Operate the Type K and Batter Boy Depositors

1. See that the plunger is properly locked in place as per instructions on “How to replace plunger.”
2. Operate the machine while it is empty to be certain that it operates freely.
3. Set the dial adjustment as per instructions “How to use the dial adjustment,” to the size desired.
4. Fill the hopper with batter. Hold the machine over the mixing bowl, depress the knob all the way down and release to eject all of the air out of the valves.
5. Hold the bottom of the depositor about 1 ½ inches from the griddle, fryer, or cupcake pan. Depress knob, then release. Keep hopper well filled to prevent air from getting into the valve mechanism.
6. If deposits are not the size desired, change the size by setting the dial adjustment.
7. The machine should be cleaned as soon as possible after use. Remove the plunger following the instructions above. Then disassemble the plunger following the instructions.
8. Wash and dry all parts of the depositor, oil lightly to prevent sticking, then reassemble, following the above instructions.

CARE, MAINTENANCE, and CLEANING INSTRUCTION **for PLUNGERS and HOPPERS**

The plungers and hoppers of your Type K are precision instruments built from alloy steels and aluminum. They should be handled with care to insure continued satisfactory performance.

When cleaning aluminum, selection of the right type cleaner is your most important consideration. Any household dish washing detergent which is safe for aluminum does a good job of cleaning and does not attack aluminum. Strong Alkali cleaners, such as lye, soda ash, and tri-sodium phosphate, will discolor or even corrode aluminum even in weak solutions.

DO NOT Handle roughly or drop on hard surfaces.

DO NOT Mix with other utensils in the sink when washing.

DO NOT Allow to rust. Always wash parts thoroughly. Dry completely and then lubricate with mineral oil or liquid shortening before storing or reinstalling in unit.

DO NOT Force the machine if it becomes jammed. Disassemble and remove any obstruction to prevent damage to the plunger.

Washing Plungers and Hoppers by Hand:

1. Remove plunger from hopper.
2. Use plenty of warm water.
3. Add cleaner approved for aluminum in concentrations recommended by manufacturer.
4. Presoak to loosen stubborn or dried-on deposits.
5. Use a non-scratching plastic scour cloth to remove soil and restore luster.
6. Rinse in clear hot water (170-190 deg.)
7. Wipe completely dry.
8. Dip plungers in mineral oil or liquid shortening to prevent rust and sticking.

<p>NOTE: "O" Rings are not used on plungers for Type K Depositors</p>
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SPECIAL INSTRUCTIONS FOR THE CARE OF PANCAKE PLUNGERS:

The pancake plunger must be disassembled and cleaned thoroughly after every use.

1. Remove plunger – Using thumb lift up on Spring Cup Lock Assembly (K-11A), turn 180 degrees, plunger should release from handle.
2. Remove Cage Assembly (K-22A) by releasing Lock Spring.
3. Remove Valve Assembly (K-20) from Cage Assembly (K-22A).
4. Clean all parts in warm water with recommended detergents.
5. Dry completely.
6. Reassemble plunger.

TABLES AND FORMULAS USED IN DONUT MAKING

Calculating Correct Water Temperature

The following is an example of how to calculate the correct water temperature to use. You must

use your own room temperature, dry mix temperature, desired batter temperature, and, if you are making yeast-raised donuts, estimated temperature increase during mixing.

	Cake Donuts		Yeast-Raised Donuts	
	°F	°C	°F	°C
Room temperature	72	22.2	72	22.2
Dry mix temperature	<u>+70</u>	<u>+21.1</u>	<u>+70</u>	<u>+21.1</u>
Total A	142	43.3	142	43.3
Desired batter temperature	75	23.9	80	26.7
	<u>x3</u>	<u>x3</u>	<u>x3</u>	<u>x3</u>
Total B	225	71.7	240	80.1
Total B	225	71.7	240	80.1
-Total A	<u>-142</u>	<u>-43.3</u>	<u>-142</u>	<u>-43.3</u>
Desired water temp. for cake donuts	83°F	28.4°C	98	36.8
			↓	↓
		Figure from above	98	36.8
		Temperature increase during mixing (average: 30°F/17°C)	<u>-30</u>	<u>-17</u>
		Desired water temperature for yeast-raised donuts	68°F	19.8°C

Ratios of Plunger Sizes to Donut Weights

The weights given are for donuts without icings or other toppings. They are provided for reference only, as weights vary according to the density of the batter.

Plunger Size	Donut Weight per Dozen
1"	5-8 oz/142-227 g
1 7/16"	10-17 oz/283-482 g
1 9/16"	14-21 oz/397-595 g
1 13/16"	19-23 oz/539-652 g

Temperature Conversion

To convert temperatures from Fahrenheit to Celsius, subtract 32 from °F and divide the result by 1.8. For example, $212^{\circ}\text{F} - 32 / 1.8 = 100^{\circ}\text{C}$.

To convert temperatures from Celsius to Fahrenheit, multiply °C by 1.8 and add 32 to the result. For example, $(100^{\circ}\text{C} \times 1.8) + 32 = 212^{\circ}\text{F}$.

°F	°C	°F	°C
55	12.8	340	171.1
60	15.6	345	173.9
65	18.3	350	176.7
70	21.2	355	179.4
75	23.9	360	182.2
80	26.7	365	185.0
325	162.8	370	187.8
330	165.6	375	190.6
335	168.3	380	193.3

Belshaw Adamatic Bakery Group Limited Warranty / Return Policy

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 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.

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

Office Hours: Monday – Friday, 6am to 4pm, USA Pacific Time