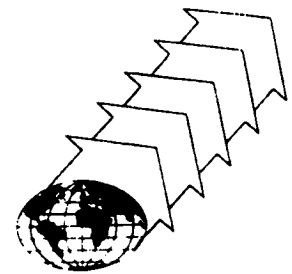


Technical Bulletin



**TOMORROW'S
MANUFACTURING
LEADERSHIP
TODAY**

Bulletin Number: 438 Revision Number: R-08
Release Date: Oct. 20, 1992 Revision Date: Nov. 21, 1995

**SUBJECT: SHIMMING INFORMATION FOR 501T AND 600T
(Including 501 MPC, 600 MPC, 501 SII, 600 SII Venders, 501 SIID and 600 SIID Venders)**

MODELS AFFECTED: Models DNCB 501T, 600T, 501 MPC, 600 MPC, 501 SII, 600 SII, 501 SIID, and 600 SIID

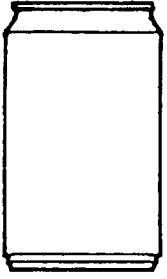
SERIAL BREAKS: Serialized 0001-6090CQ and up (Series 90)
Serialized 0001-6090CQ and up (MPC Series I)
Serialized 0001-6111AR and up (SII)
Serialized 0773-6201CS and up (SIID)

NOTE: For venders serialized prior to 0001-6090CQ see Technical Bulletin #282.

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- B) Package Dimensions Page 3
- C) Settings Page 4
- D) Part Illustrations Pages 5 through 8
- E) Chute Liner Extension Installation Page 9
- F) Bottle Neck Support Installation..... Page 10
- G) Shimming & Set-Up Chart for Series 90 T-Models..... Page A1
Serialized 0001-6090CQ & Up
- H) Individual Column Set-Up & Shimming for.....Pages B1 through B5
Series 90 T-Models Serialized 0001-6090CQ & Up.

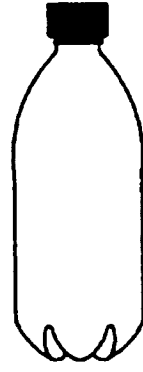
Package Shape Illustrations



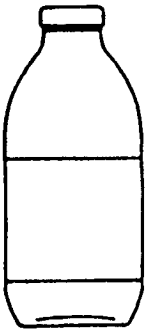
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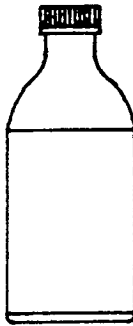
2



3



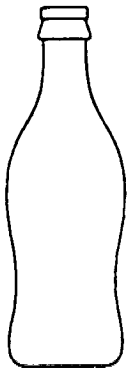
4



5



6



7

Package Dimensions

Description	Package Size	Country/ Township	Shape	Height Inches (mm)	Diameter Inches (mm)
Can (No Brand Name)	12 oz.	United States	1	4.84" (123)	2.59" (65.9)
Can (No Brand Name)	16 oz.	United States	6	6.25" (158.8)	2.59" (65.9)
NR PLB Glass	10 oz.	United States	5	5.92" (150.4)	2.61" (66.3)
NR PLB Glass	296 ml	United States	5	5.92" (150.4)	2.61" (66.3)
NR PLB Glass	16 oz.	United States	2	7.09" (180.2)	2.95" (75)
NR PLB Glass	20 oz.	United States	2	8.22" (208.8)	2.84" (72.2)
NR Wide Mouth Farm Field Glass	10 oz.	United States	4	6" (152.4)	2.59" (65.9)
NR Wide Mouth Juice Bowl Glass	10 oz.	United States	4	6" (152.4)	2.59" (65.9)
NR Wide Mouth Lincoln Glass	10 oz.	United States	4	6" (152.4)	2.59" (65.9)
NR Wide Mouth Motts Glass	10 oz.	United States	4	6" (152.4)	2.59" (65.9)
NR Wide Mouth VeryFine Glass	10 oz.	United States	4	6" (152.4)	2.59" (65.9)
PET (Plastic) Bottle	½ Liter	United States	3	7" (177.8)	2.84" (72.2)
PET (Plastic) Bottle	16 oz.	United States	3	7" (177.8)	2.84" (72.2)
PET Nehi (Plastic) Bottle	16 oz.	United States	3	6.84" (173.8)	2.87" (73)
PET RC (Plastic) Bottle	16 oz.	United States	3	6.84" (173.8)	2.87" (73)
PET Straight Wall (Plastic) Bottle	20 oz.	United States	3	8.22" (208.8)	2.84" (72.2)
Returnable Contour Glass	16 oz.	United States	7		

Settings

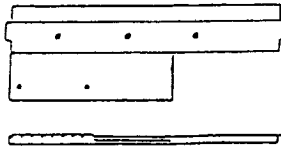
1. Beginning with serial number 0001-6090CQ and up, T-models will be shipped set to vend 12 oz. cans, unless otherwise specified on sales order.
 2. The rotors are for 12 oz. can vending only. If a different package is to be vended the rotors need to be changed for proper vending.
 3. The discharge member and closure strip are set for maximum security. If bottles are to be vended these need to be adjusted for bottle vending. See instructions on inner door of vender.
 4. Page A1 of this bulletin is a chart of how to "set-up" and "shim" T-models for more prevalent packages. For packages not listed, refer to the proper Technical Bulletin or contact Dixie-Narco Factory Service.
-

1. Where the symbols *, + and @ are used refer to the following:
(Use plastic tubes only where called out.)
 - * Where the symbol * appears on the shim chart, place the 10-³/₄" long (9/32"ID, 3/8"OD) yellow plastic tube over the rod.
 - + Where the symbol + appears on the shim chart, place the 10-³/₄" long (9/32"ID, 7/16"OD) red plastic tube over the rod.
 - @ Where the symbol @ appears on the shim chart, place the 10-³/₄" long (9/32"ID, 17/32"OD) white plastic tube over the rod.
2. Where **REAR A/FRONT C** appears on the shim chart, this means the rod is installed (spring end first) in hole "A" at the rear of the rotor and the front end of the same rod is installed in hole "C".

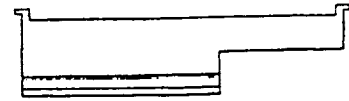
Parts Illustrations



Flat Black Shim
801,901,860.21



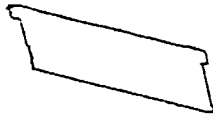
Can Stop Shim
497,070,130.83



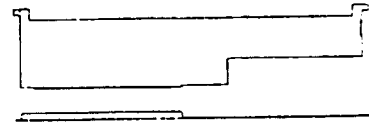
Bubble Shim, Right
361,010,080.43



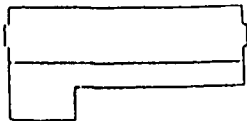
Shim Back
474,040,060.03



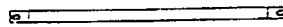
Flat Metal Shim
361,010,070.03



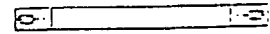
Bottle Shim
497,070,260.03



Special Can Stop Shim
497,070,110.13



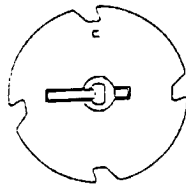
Mounting Strap
Columns 1 & 2



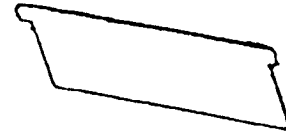
Mounting Strap
Column 3 Only



Flat Shim (Metal)
498,010,060.03



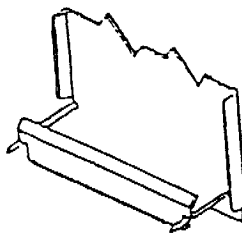
White Vending Cam
801,806,990.11



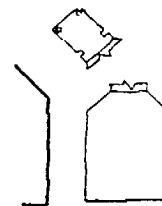
Special Metal Shim
474,040,060.03



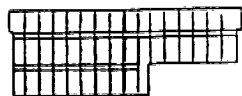
Flat Metal Shim
361,010,130.03



10 oz. PLB Right Form Shim
361,010,110.03



Large Sold-Out Paddle
432,070,270.03



801,804,890.21 Right Ribbed Shim (not shown)
801,804,900.21 Left Ribbed Shim (shown)

WIDE COLUMN INFORMATION

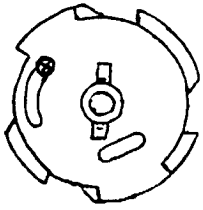


Figure 1

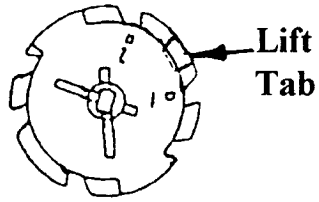


Figure 2

- A. Move the adjustable cam on the vend motor to the number of notches indicated on the shim chart. See figure 1 for Pre-Series 90 cam and figure 2 for Series 90 cam.

OSCILLATOR

- A. Locate can retainers as shown.

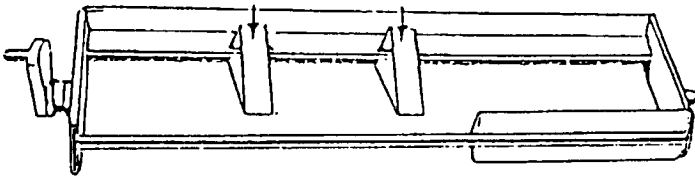


Figure 3

PACKAGE LOADING

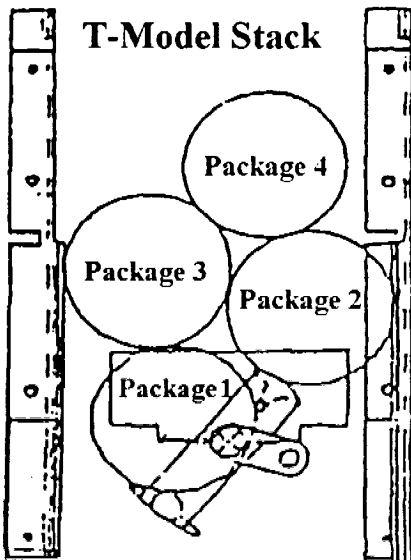


Figure 4

- A. Position the oscillator as shown. Load packages number 1, 2, 3, and 4 as shown in the front, middle, and rear. Front, middle, and rear must be loaded evenly.

Important: When vending bottles, load bottles with caps toward the rear of vender. When a column is sold-out, load first 2 bottles heel down and crop crown up at approximately 45°. Then release the bottle to lay in a horizontal position.

NARROW COLUMN INFORMATION

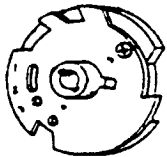


Figure 1

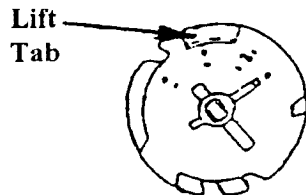


Figure 2

- A. There are five (5) adjustable positions on the narrow column cams. See figure 1 for Pre-Series 90 cam and figure 2 for Series 90 cam.

Important: Each position has a number embossed in the plastic next to the slot or hole. Move adjustable cam to position indicated on the shim chart.

Note: If vending 10 oz. PLB in narrow column and the need for the vend motor to run longer arises, move the adjustable cam to position #2.

ROTOR

Spring Toward Rear

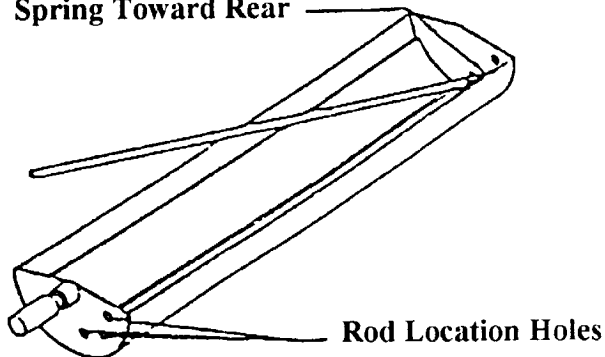


Figure 3

- A. Insert the rod as shown in position indicated on the shim chart.

PACKAGE LOADING

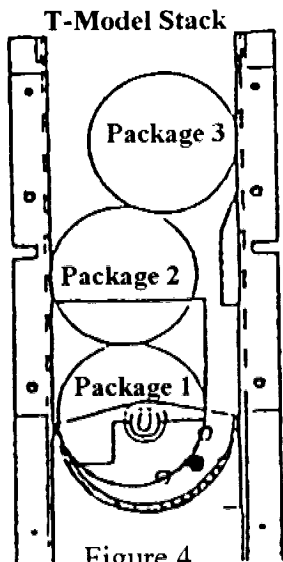


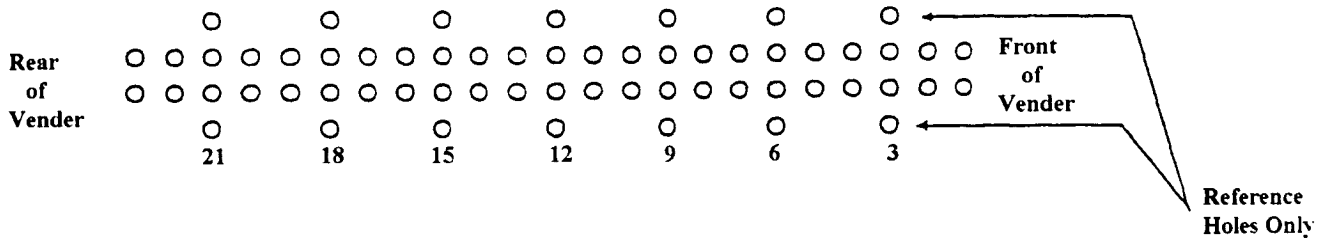
Figure 4

- A. Position the oscillator as shown. Load packages number 1, 2, 3, and 4 as shown in the front, middle, and rear. Front, middle, and rear must be loaded evenly.

Important: When using bottles, load bottles with caps toward the rear.

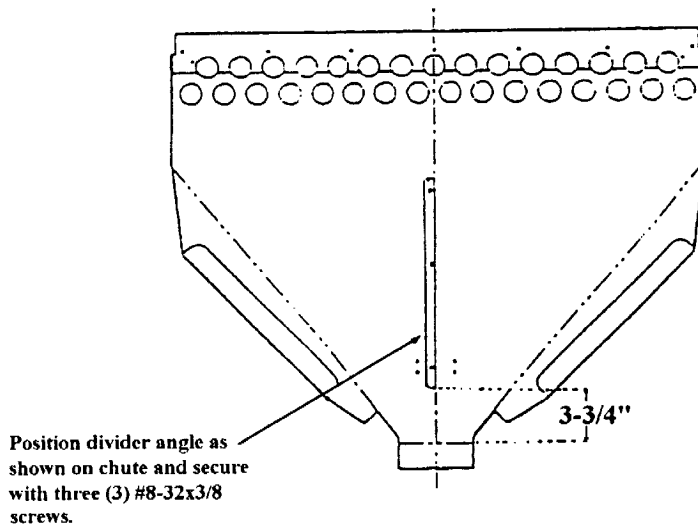
REAR SPACER ADJUSTMENT HOLES

Rear spacer adjustment holes located in the sidewalls of the stacks.

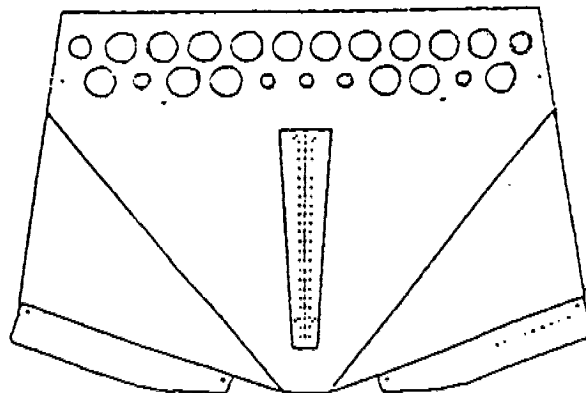


- A. Rear spacers are factory installed in each vender.
- B. Adjust rear spacer to appropriate hole for package being vended.

DIVIDER ANGLE 236,010,010.13 (For 16 oz. Returnable Glass Bottle)



20 oz. BOTTLE CHUTE ASSEMBLY

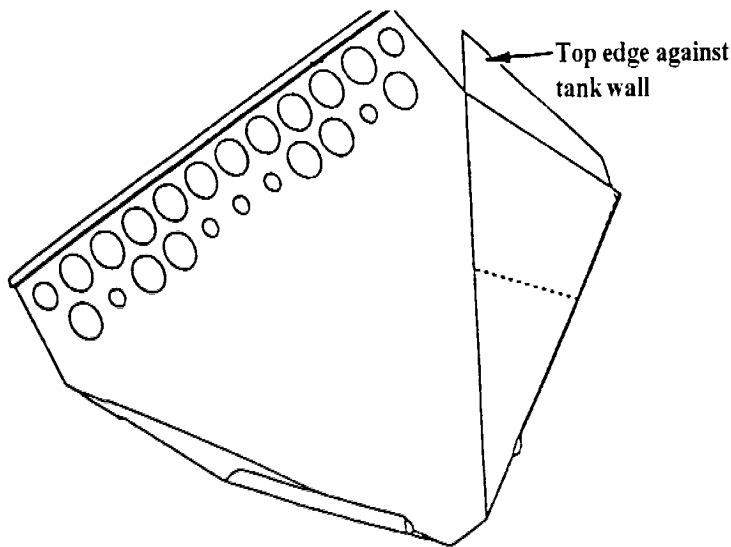


20 oz. Bottle Chute
324,000,200.03

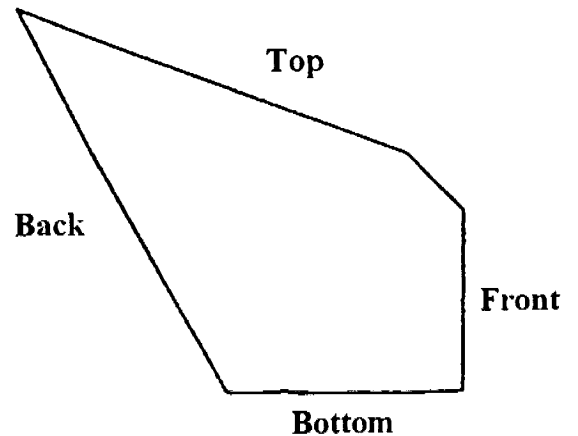
**Chute Liner Extension
(498,010,050.03)
For T-Model Venders**

To install:

1. The chute liner extension will be positioned between the chute liner and the can/bottle chute (metal).
2. The chute liner and the can/bottle chute must be dry and clean for installation.
3. Before removing tape backing, place the chute liner extension in position to get an idea of how it will mount.
4. Remove chute liner extension.
5. Remove the tape backing from the tape on both sides of the chute liner extension.
6. Lift the can/bottle chute liner so the chute liner extension can be put in position.
7. Place chute liner extension in position so the top edge is against the vender tank wall.
8. Lay the chute liner extension in position on the can/bottle chute.
9. Let the can/bottle chute liner down so it rests on the chute liner extension.
10. Look and ensure the chute liner extension is in the position required.
11. Press the can/bottle chute liner against the can/bottle chute so the tape on both sides of the chute liner extension sticks to the liner chute.
12. Repeat steps 1 through 10 for opposite side.



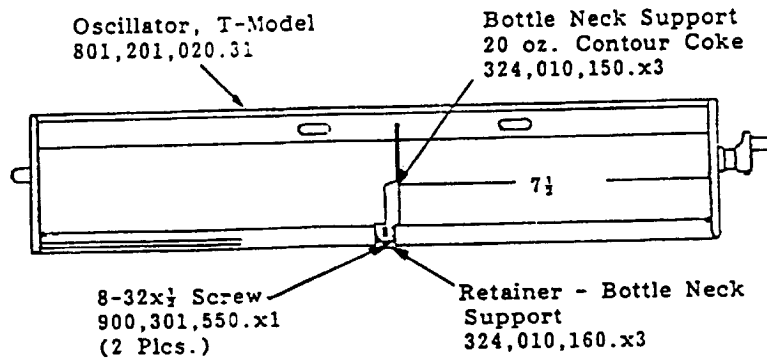
Installed View



Bottle Neck Support Installation

1. Unplug the vender.
2. Remove the can retainers from the oscillators.
3. Install the bottle neck support using figure 1 below.
4. Secure bottle neck support with two (2) #8-32x 1/2 sems screws.
5. Load the bottles cap to cap.

Important: Always load the front bottle first, then the rear bottle, so the caps overlap with the rear bottle's cap on top as shown in figure 3 below.



Oscillator with Bottle Neck Support
Figure 1

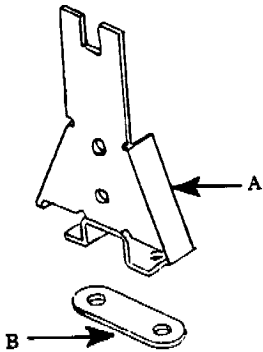


Figure 2

- A.) Bottle Neck Support
324,010,150.13
- B.) Bottle Neck Support Retainer
324,010,160.03

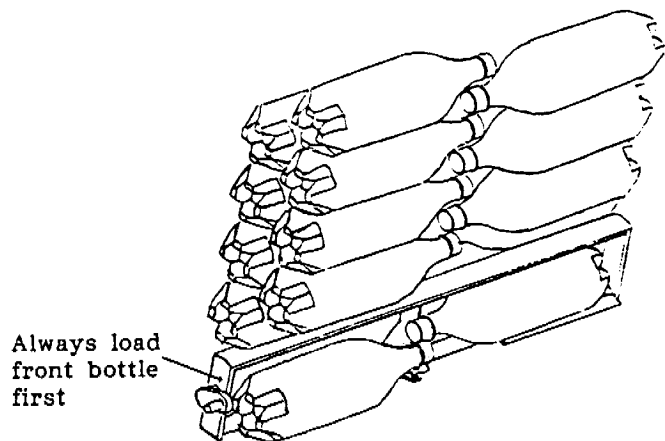


Figure 3

Use this chart to "set-up" and "shim" the T-Model vender.

Series 90, Beginning s/n 0001-6090CQ and up use kits listed on pages B1 through B5.

PACKAGE DESCRIPTION	SEE PAGE(S)	Wide Columns				All Columns	Narrow Columns				OTHER PARTS	
		LOADING DEPTH	PARTS PER COLUMN	CAM SETTING	CAM(S) REQ'D	REAR SPACER LOCATION	LOADING DEPTH	PARTS REQ'D PER COLUMN	ROD IN	ROD IN		CAM SETTING
12 oz. Can	2, 3, 5, 6, 7, 8, 9, 10, & B1	3	2 ribbed shims each side & 2 can retainers	6 notches	green/gold	Hole 22	3	1 rotor, narrow 1 can stop shim right side	-	-	#1	none
16 oz. Can (Dia. 2.60", Ht. 6.25")	2, 3, 5, 6, 7, 8, 9, 10, B1, & B2	2	1 right & left formed shim each side	4 notches	green/gold	wide hole 16 narrow hole 17	2	1 rotor, wide 1 can stop shim right side	B	-	#5	none
10 oz. Non Returnable PLB and 296 ml (Glass Bottle)	2, 3, 5, 6, 7, 8, 9, 10, & B2	2	1 ribbed shim 1 flat shim each side	4 notches	green/gold	Hole 14	2	1 rotor, wide 1 right formed shim	B	-	#3	none
16 oz. Non Returnable PLB (Glass Bottle)	2, 3, 5, 6, 7, 8, 9, 10, B2 & B3	2	0	4 notches	green/gold	Hole 21	2	1 rotor, wide 1 bubble shim right 4 flat shims left side	-	-	#5	none
20 oz NR PLB Glass Bottle and 20 oz Plastic PET Straight Wall Bottle	2, 3, 5, 6, 7, 8, 9, 10, & B3	1	0	2 notches	blue/gold	Hole 5	1	1 rotor, wide	-	-	#4	none
10 oz. Wide Mouth Juice Bottles: Motts, Veryfine, Farnfield, Lincoln, and Juicebowl	2, 3, 5, 6, 8, 9, 10, & B3	2	1 ribbed, 1 flat, 1 metal, shim each side	4 notches	green/gold	Hole 14	0	DO NOT VEND	NA	NA	NA	none
16 oz. Plastic PET Bottle (1/2 Liter)	2, 3, 5, 6, 7, 8, 9, 10, & B4	2	1 flat shim each side	4 notches	green/gold	Hole 21	2	1 rotor, wide 1 bubble shim right side	-	-	#5	none
16 oz. RC and Nehi Plastic PET Bottle	2, 3, 5, 6, 7, 8, 9, 10, & B4	2	0	4 notches	green/gold	Hole 21	2	1 rotor, wide 1 bubble shim right side	-	-	#5	none
20 oz. Plastic PET Straight Wall Bottle	2, 3, 5, 6, 7, 8, 9, 10, B4, & B5	2	bottle neck support & retainer	4 notches	white	wide hole 23 narrow hole 5	1	1 rotor, wide	-	-	#4	can divider
16 oz. Returnable (Glass Bottle)	2, 3, 5, 6, 7, 8, 9, 10, & B5	1	2 ribbed shims each side	2 notches	blue/gold	Hole 13	1	1 rotor, wide 1 right formed shim	A	C	#4	can divider

NA = Not Applicable
*, +, and @ see page 4.

**INDIVIDUAL COLUMN SET-UP AND SHIMMING
SERIES 90 VENDERS
SERIALIZED 0001-6090CQ AND UP**

12oz. Can (Kit #497,010,300.04)

Kit Contents:

6 - 901,700,650.01	can retainer - oscillator
6 - 801,804,900.01	left hand ribbed shim - wide column
6 - 801,804,890.01	right hand ribbed shim - wide column
5 - 497,070,130.83	can stop shim, right - narrow column
5 - 801,201,230.01	triple depth can rotor

Wide Column Set-Up 3 deep:

2 - 801,804,900.01	left ribbed shims
2 - 801,804,890.01	right ribbed shims
2 - 901,700,650.01	can retainers (triangles)
1 - 801,806,410.41	green vending cam
1 - 801,806,400.11	gold adjustable cam

Cam setting #2 or 6 notches.
Rear spacer set in hole #22.

Narrow Column Set-Up 3 deep:

1 - 497,070,130.83	can stop shim, right side
1 - 801,201,230.01	rotor, narrow

Cam Setting #1 or 3 notches.
Rear spacer set in hole #22.

16oz. Can (Dia. 2.60", Ht. 6.25") (Kit #497,010,400.04)

Kit Contents:

5 - 361,010,120.03	can stop shim, right - narrow column
3 - 361,010,210.03	right formed shim - wide column
3 - 361,010,220.03	left formed shim - wide column
5 - 801,201,220.01	rotor, wide
5 - 361,010,100.03	rod & spring assy.

Wide Column Set-Up 2 deep:

1 - 361,010,210.03	right formed shim
1 - 361,010,220.03	left formed shim
1 - 801,806,410.41	green vending cam
1 - 801,806,400.11	gold adjustable cam

Cam setting #1 or 4 notches.
Rear spacer set in hole #16.

16oz. Can (Dia. 2.60, Ht. 6.25) (Kit #497,010,400.04)

Narrow Column Set-Up 2 deep:

1 - 361,010,120.03 can stop shim, right
 1 - 801,201,220.01 rotor, wide
 1 - 361,010,100.03 rod & spring assy.
 Cam setting #5 or 2 notches.
 Rear spacer set in hole #17.
 Place rod & spring assembly in hole B of rotor.

10 oz. NR PLB and 296ml Glass Bottle (Kit #497,010,200.04)

*Kit Contents:

6 - 801,901,860.01 flat shim - wide column
 5 - 361,010,110.03 right formed shim - narrow column
 5 - 801,201,220.01 rotor, wide
 5 - 361,010,100.03 rod & spring assy.

Wide Column Set-Up 2 deep:

1 - 801,804,900.01 left ribbed shim
 1 - 801,804,890.01 right ribbed shim
 2 - 801,901,860.01 flat black shim (one each side)
 1 - 801,806,410.41 green vending cam
 1 - 801,806,400.11 gold adjustable cam

Cam setting #1 or 4 notches.
 Rear spacer set in hole #14.
 Remove can retainer (triangles) from oscillator.
 Load product with caps toward rear of cabinet.

Narrow Column Set-Up 2 deep:

1 - 361,010,110.03 right formed shim
 1 - 801,201,220.01 rotor, wide
 1 - 361,010,100.03 rod & spring assy.
 Cam setting #3 or 2 notches.
 Rear spacer set in hole #14.
 Place rod & spring assembly in hole B of rotor.

16oz. NR PLB Glass Bottle (Kit #497,010,500.14)

Kit Contents:

5 - 361,010,080.43 bubble shim, right - narrow column
 20 - 361,010,070.03 flat shim, left - narrow column
 5 - 801,201,220.01 rotor, wide

Wide Column Set-Up 2 deep:

No shims required.
 1 - 801,806,410.41 green vending cam
 1 - 801,806,400.11 gold adjustable cam
 Cam setting #1 or 4 notches.
 Rear spacer set in hole #21.

* Important: Kit contents do not include right and left ribbed shims for wide columns.

16oz. NR PLB Glass Bottle (Kit #497,010,500.14)

Continued

Narrow Column Set-Up 2 deep:

1 - 361,010,080.43 bubble shim, right
4 - 361,010,070.03 flat shim, left
1 - 801,201,220.01 rotor, wide

Cam setting #5 or 2 notches.

Rear spacer set in hole #21.

SET DISCHARGE MEMBER AND CLOSURE STRIP FOR BOTTLES.

20 oz. NR PLB Glass Bottle & 20 oz. Plastic PET Straight Wall Bottle (Single Depth) (Kit #497,010,700.04)

Kit Contents:

3 - 801,806,390.21 blue vending cam - wide column
5 - 801,201,220.01 rotor, wide

Wide Column Set-Up 1 deep:

No shims required.

1 - 801,806,390.21 blue vending cam
1 - 801,806,400.11 gold adjustable cam

Cam setting #1 or 2 notches.

Rear spacer set in hole #5.

Narrow Column Set-Up 1 deep:

1 - 801,201,220.01 rotor, wide

Cam setting #4 or 1 notch.

Rear spacer set in hole #5.

SET DISCHARGE MEMBER AND CLOSURE STRIP FOR BOTTLES.

10 oz. Wide Mouth Juice Bottle (Kit #361,010,310.04) (Motts, VeryFine, Farmfield, Lincoln & Juice Bowl)

*Kit Contents:

6 - 801,901,860.01 flat black shim - wide column
3 - 361,010,200.03 metal shim 10 oz., left - wide column
3 - 361,010,300.03 metal shim 10 oz., right - wide column

Wide Column Set-Up 2 deep:

1 - 801,804,900.01 left ribbed shim
1 - 801,804,890.01 right ribbed shim
2 - 801,901,960.01 flat black shim (one each side)
1 - 361,010,200.03 10 oz. metal shim, left
1 - 361,010,300.03 10 oz. metal shim, right
1 - 801,806,410.41 green vending cam
1 - 801,806,400.11 gold adjustable cam

Cam setting #1 or 4 notches.

Rear spacer set in hole #14.

Narrow Column Set-Up:

VENDING NOT RECOMMENDED IN NARROW COLUMNS.

* Important: Kit contents do not include right and left ribbed shims for wide columns.

16oz. Plastic PET Bottle (1/2 Liter)**(Kit #497,010,800.04)**

Kit Contents:

6 - 801,901,860.01	flat black shim - wide column
5 - 361,010,080.43	bubble shim, Right - narrow column
5 - 801,201,220.01	rotor, wide

Wide Column Set-Up 2 deep:

2 - 801,901,860.01	flat black shim (one each side)
1 - 801,806,410.41	green vending cam
1 - 801,806,400.11	gold adjustable cam

Cam setting #1 or 4 notches.
Rear spacer set in hole #21.

Narrow Column Set-Up 2 deep:

1 - 361,010,080.43	Bubble Shim, Right
1 - 801,201,220.01	Rotor, wide

Cam setting #5 or 2 notches.
Rear spacer set in hole #21.

SET DISCHARGE MEMBER AND CLOSURE STRIP FOR BOTTLES.

16oz. RC and Nehi Plastic PET Bottle**(Kit #497,010,100.04)**

Kit Contents:

5 - 361,010,080.43	bubble shim, right side-narrow column
5 - 801,201,220.01	rotor, wide

Wide Column Set-Up 2 deep:

1 - 801,806,410.41	green vending cam
1 - 801,806,400.11	gold adjustable cam

Cam setting #1 or 4 notches.
Rear spacer set in hole #21.

Narrow Column Set-Up 2 deep:

1 - 361,010,080.43	bubble shim, right side
1 - 801,201,220.01	rotor, wide

Cam setting #5 or 2 notches.
Rear spacer set in hole #21.

Load product with caps toward rear of cabinet.

SET DISCHARGE MEMBER AND CLOSURE STRIP FOR BOTTLES.

20 oz. Plastic PET Bottle (Straight Wall)

Parts Needed:

3 - 801,806,990.11	white vending cam - wide column
5 - 801,201,220.01	rotor, wide
1 - 324,000,200.03	20 oz. bottle chute assy.
3 - 324,010,150.03	bottle neck support (1 per oscillator)
3 - 324,010,160.03	bottle neck support retainer (1 per oscillator)
6 - 900,301,550.11	#8-32x1/2 sems screw (2 per bottle neck support)

* Important: Kit contents do not include right and left ribbed shims for wide columns.

20 oz. Plastic PET Bottle (Straight Wall)

Continued

Wide Column Set-Up 2 deep:

No shims required.

- 1 - 801,806,990.11 white vending cam (Do not use gold adjustable cam)
- 1 - 324,010,150.03 bottle neck support
- 1 - 324,010,160.03 bottle neck support retainer
- 2 - 900,301,550.11 #8-32x1/2 sems screw
- 1 - 324,020,200.03 can/bottle chute assy., 20 oz. (1 per vender)

Remove can retainer (triangles) from oscillator.

Install bottle neck support and retainer.

Cam will show 4 notches.

Rear spacer set in hole #23.

Narrow Column Set-Up 1 deep:

- 1 - 801,201,220.01 rotor, wide

Cam setting #4 or 1 notch.

Rear spacer set in hole #5.

SET DISCHARGE MEMBER AND CLOSURE STRIP FOR BOTTLES.

16oz. Returnable Glass Bottle (Kit #497,010,600.04)

*Kit Contents:

- 1 - 236,010,010.03 divider angle - can/bottle chute
- 3 - 900,301,560.01 #8-32x3/8 sems screw
- 5 - 361,010,110.03 right formed shim - narrow column
- 10 - 361,010,100.03 rod & spring assy.
- 5 - 801,201,220.01 rotor, wide
- 3 - 801,806,390.21 blue vending cam - wide column

Wide Column Set-Up 1 deep:

- 2 - 801,804,900.01 left ribbed shim
- 2 - 801,804,890.01 right ribbed shim
- 1 - 801,806,390.21 blue vending cam
- 1 - 801,806,400.11 gold adjustable cam
- 1 - 236,010,010.13 divider angle (1 per vender)

Cam setting #1 or 2 notches.

Rear spacer set in hole #13.

Narrow Column Set-Up 1 deep:

- 1 - 361,010,110.03 right formed shim
- 1 - 801,201,220.01 rotor, wide
- 2 - 361,010,100.03 rod & spring assy.

Place one rod & spring assembly in hole C of rotor.

Place one rod and spring assembly in hole A of rotor.

Cam setting #4 or 1 notch.

Rear spacer set in hole #13.

SET DISCHARGE MEMBER AND CLOSURE STRIP FOR BOTTLES.

* Important: Kit contents do not include right and left ribbed shims for wide columns.