INSTRUCTIONS FOR INSTALLING A DRUM DIVIDER KIT TO INCREASE THE CAPACITY OF A DRUM IN A NATIONAL VENDORS®, CROWN SEVENTY TWO®, FM-72 FOOD MERCHANDISER

These instructions cover the installation of the parts of 5 different Drum Compartment Capacity Conversion Kits. When the parts are installed in a Drum the item capacity of that Drum is greater, but the Drum height is unchanged.

Be sure the parts included in the package match the parts listed for the Kit to be installed. Each of the 5 Kits contain either different parts or different quantities of parts. One Kit will convert one Drum Assembly.

These instructions only cover Drum item capacity conversion. A Drum Assembly of one height cannot be substituted for the Drum Assembly of another height unless a substantial amount of Merchandiser rework is performed and these Instructions do not cover such rework.

Some of the attaching parts included in these Kits and many of the attaching parts used in the FM-72 Merchandiser are metric-system size parts which are not readily available in the United States.

National Vendors suggest that to eliminate loss or mis-use, all attaching parts removed during the Kit

installation be placed in small coin-envelopes that have been marked with the attaching parts use location.

Be sure to follow the applicable instructions for the specific conversion being made.

To make part identification easy, Figure 1 shows by scale drawings, the various parts included in the Kit.

KIT 417-7050 FOR CONVERTING A THREE HIGH (4-1/32" MAXIMUM) 18 COMPARTMENT DRUM TO A 24 COMPARTMENT DRUM.

Part Number	Description	Quantity
403-5158	3 High Divider	6
403-5251	Stop Pin	6
403-5424	5MG10 Binding Head	
	Screw	18
403-5367	Internal Tooth Lockwasher	24
403-5198	3 High Wide Mounting Baffle	1
403-5018	4 MG 4 Bind Head Screw	2
417-7055	Installation Instruction	1

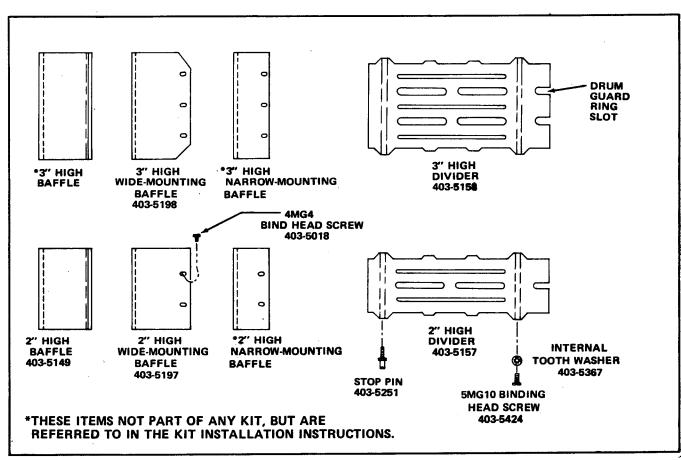


FIGURE 1

KIT 417-7051 FOR CONVERTING A THREE HIGH (4-1/32" Maximum) 18 COMPARTMENT DRUM TO A 36 COMPARTMENT DRUM

Part Number	Description	Quantity
403-5158	3 High Divider	18
403-5251	Stop Pin	18
403-5424	5MG10 Binding Head	
	Screw	54
403-5367	Internal Tooth Lockwasher	72
403-5198	3 High Wide-Mounting Baffle	1
403-5018	4 MG 4 Bind Head Screw	4
417-7055	Installation Instruction * * *	1

KIT 417-7052 FOR CONVERTING A TWO HIGH (2-11/16" MAXIMUM) 12 COMPARTMENT DRUM TO AN 18 COMPARTMENT DRUM

Part Number	Description	Quantity
403-5157	2 High Divider	6
403-5251	Stop Pin	6
403-5424	5MG10 Binding Head	
	Screw	18
403-5367	Internal Tooth Lockwasher	24
403-5149	2 High Baffle	1
403-5018	4 MG 4 Bind Head Screw	2
417-7055	Installation Instruction	1

KIT 417-7053 FOR CONVERTING A TWO HIGH (2-11/16" MAXIMUM) 12 COMPARTMENT DRUM TO A 24 COMPARTMENT DRUM.

Part Number	Description	Quantity
403-5157	2 High Divider	12
403-5251	Stop Pin	12
403-5424	5MG10 Binding Head	
	Screw	36
403-5367	Internal Tooth Lockwasher	48
403-5149	2 High Baffle	1
403-5197	2 High Wide-Mounting Baffle	1
403-5018	4 MG 4 Bind Head Screw	2
417-7055	Installation Instruction	1

KIT 417-7054 FOR CONVERTING A TWO HIGH (2-11/16" MAXIMUM 12 COMPARTMENT DRUM TO A 36 COMPARTMENT DRUM.

Part Number	Description	Quantity
403-5157	2 High Divider	24
403-5251	Stop Pin	24
403-5424	5MG10 Binding Head	
	Screw	72
403-5367	Internal Tooth Lockwasher	96
403-5149	2 High Baffle	1
403-5197	2 High Wide-Mounting-Baffle	1
403-5018	4 MG 4 Bind Head Screw	4
417-7055	Installation Instruction	1

Each Drum Plate has two rows of 72 holes each. Twelve (12) Compartment Drum Assemblies have 5 unused holes between each Divider. Eighteen (18) Compartment Drums must have 3 unused holes between each Divider; twenty-four (24) Compartment Drums 2 unused holes between each Divider and; thirty-six (36) only one unused hole between each Divider. Figure 2 shows the various unused hole spacings referred to in these instructions.

To minimumize the amount of work required to make certain conversions, these instructions cover two different Drum Assembly Conversion situations. The 12 Compartment to 24 Compartment and 36 Compartment Drum conversions and the 18 Compartment to 36 Compartment Drum conversions are covered in Procedure I. The 12 Compartment to 18 Compartment Drum conversion and the 18 Compartment to 24 Compartment Drum conversions are covered in Procedure II.

- I. TO CHANGE A 12 COMPARTMENT DRUM TO A 24 COMPARTMENT DRUM, A 12 COMPARTMENT DRUM TO A 36 COMPARTMENT DRUM, OR AN 18 COMPARTMENT DRUM TO A 36 COMPARTMENT DRUM.
 - A. Remove the appropriate Drum Assembly from the Merchandiser.
 - B. Lay the Drum Assembly on a cleared, flat padded surface.
 - C. Remove the 2 Screws and 2 Lockwashers which attach the top Drum Plate to each Divider.
 - D. Remove the top Drum Plate.
 - E. Install the Dividers, included in the Kit (2 High Divider 403-5157 or 3 High Divider 403-5158), in the appropriate positions and attach each Divider to the bottom Drum Plate at the large circle of holes with a Stop Pin 403-5251 and a Lockwasher 403-5367. Attach each Divider at the small circle of holes with a 5MG10 Binding Head Screw 403-5424 and a Lockwasher 403-5367. All the attaching parts required are included in the Kit. Be sure the added Dividers are properly and evenly positioned in the Drum and that the Drum Guard Ring(s) is in the Slot(s) in the inner edge of the Dividers. See Figures 1 and 2.

NOTE

- 1. A 24 Divider Drum has 2 unused holes between each Divider.
- 2. A 36 Divider Drum has one unused hole between each Divider.

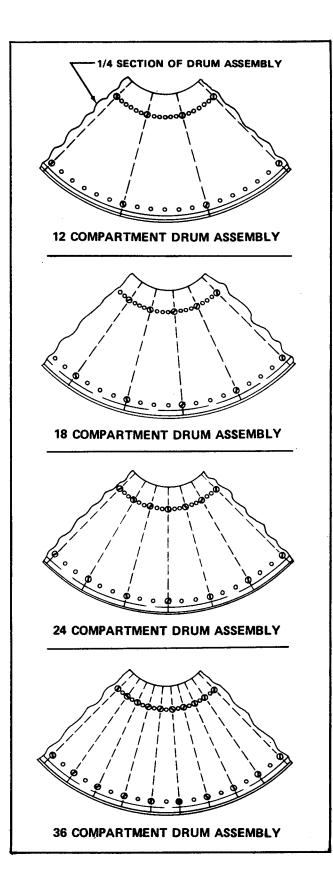


FIGURE 2

- F. Install the top Drum Plate and attach the Plate to each Divider with 2 5MG10 Binding Head Screws 403-5424 and 2-Lockwashers 403-5367. The Screws and Lockwashers removed in step I-C plus those included in the Kit have to be used.
- G. Skip to Procedure III.
- II. TO CHANGE A 12 COMPARTMENT DRUM TO A 18 COMPARTMENT DRUM OR TO CHANGE AN 18 COMPARTMENT DRUM TO A 24 COMPARTMENT DRUM.
 - A. Remove the appropriate Drum Assembly from the Merchandiser.
 - B. Lay the Drum Assembly on a cleared, flat, padded surface.
 - C. Remove the 2 Screws and Lockwashers which attach the top Drum Plate to each Divider.
 - D. Remove the top Drum Plate.
 - E. Select any Divider on the Drum Assembly and remove the Stop Pin, Screw, and 2 Lockwashers that attach the Divider and remove the Divider.

NOTE

- 1. If the Drum is being converted from 12 Compartments to 18 Compartments, follow step II-F through II-J; skip steps II-K through II-R; and follow step II-S.
- 2. If the Drum is being converted from 18 Compartments to 24 Compartments skip step II-F through II-J and follow steps II-K through II-S.
 - F. If the Drum is being converted from a 12 Compartment to 18 Compartment Drum, move the detached Divider to the left 2 holes. There should be a fixed Divider 3 unused holes and the replaced Divider. See Figure 3. Be sure the Drum Guard Ring(s) is in the Slot(s) in the inner edge of the Divider.
 - G. Attach the Divider with the Stop Pin, Screw and Washers removed in step II-E.
 - H. Install one of the Dividers included in the Kit (2 High Divider 403-5157 or 3 High Divider 403-5158) at the fourth hole to the right of the Divider attached in step II-G. Attach the Divider at the large circle of holes with one Stop Pin 403-5251 and one Lockwasher 403-5367. Attach the Divider at the small circle of holes with one 5MG10 Binding Head Screw 403-5424 and one Lockwasher 403-5367. The attaching parts are included in the Kit. Be sure the moved and added Dividers are properly and evenly spaced in the

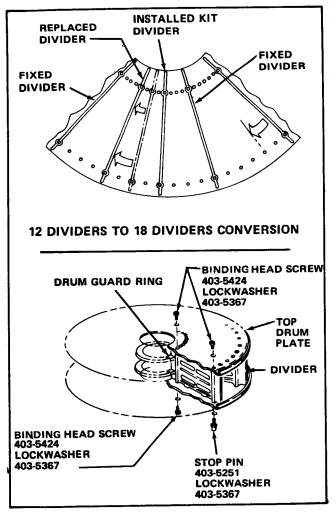


FIGURE 3

Drum and that the Drum Guard Ring(s) is in the Slot(s) in the inner edge of the Divider. See Figures 1 and 2.

NOTE

The new Divider arrangement should now be 1 Divider, 3 unused holes, a Divider, 3 unused holes, and another Divider.

- I. Do not remove the last Divider referred to in the preceding Note but, repeat steps II-F through II-H for the next set of Dividers always maintaining the Divider, 2 unused holes, Divider Pattern.
- J. Skip to step II-R.
- K. If the Drum is being converted from a 18 Divider to a 24 Divider Drum, move the detached Divider one hole to the left. There should be a fixed Divider 2 unused holes and the replacement Divider. See Figure 4. Be sure the Drum Guard Ring(s) is in the Slot(s) in the inner edge of the Divider.

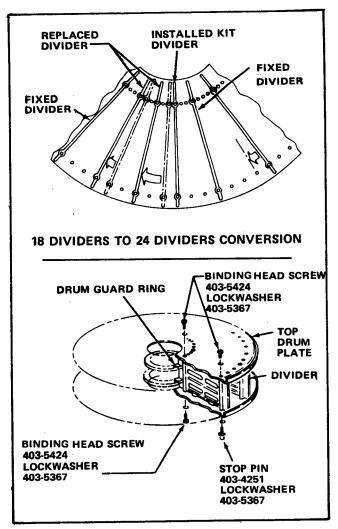


FIGURE 4

- L. Attach the Divider with the Stop Pin, Screw, and Lockwashers removed in step II-K.
- M. Remove the Stop Pin, Screw, and 2 Lockwashers that attach the Divider that is to the right of the Divider attached in step II-L.
- N. Move the detached Divider 2 holes to the left. Be sure the Drum Guard Rings(s) is in the Slot(s) in the inner edge of the Divider.
- O. Attach the Divider with the Stop Pin, Screw, and Lockwashers removed in step II-M.
- P. Install one of the Dividers included in the Kit (2 High Divider 403-5157 or 3 High Divider 403-5158) at the third hole to the right of the Divider attached in step II-O. Attach the Divider at the larger circle of holes with the Stop Pin 403-5251 and one Lockwasher 403-5367. Attach the Divider at the small circle of holes with one 5MG10 Binding Head Screw 403-5424 and one Lockwasher 403-5367. The attaching parts are

included in the Kit. Be sure the moved and added Dividers are properly and evenly spaced in the Drum and that the Drum Guard Ring(s) is in the Slot(s) in the inner edge of the Dividers. See Figure 1 & 2.

NOTE

The new Divider arrangement should now be 1 Divider, two unused holes, a Divider, two unused holes, a Divider, two unused holes, Divider, two unused holes and a Divider. The first and last Divider should be in their original positions.

- Q. Do not remove the last Divider referred to in the preceding Note but, repeat steps II-K through II-P for the next group of Dividers always maintaining the pattern referred to in the Note following step II-P.
- R. Install the top Drum Plate and attach the Plate to each Divider with 2 5MG10 Binding Head Screws 403-5424 and 2-Lockwashers 403-5367. The Screws and Lockwashes removed in step II-C plus those included in the Kit both have to be used.
- S. Skip to Procedure III.

III. TO CHANGE THE DISPLAY BAFFLE ASSEMBLY

The arrangement of each individual Drum Asembly - Inside Baffle and Baffle configuration in the Display Baffle Assembly-must be coordinated with the related Drum Assembly Compartment configuration. This coordination is essential to prevent the possibility of removing more than one item from a given Drum on a single vend, as well as, providing the proper amount of space to permit item removal.

Because all 5 Kits require different conversions of the Display Baffle Assembly, the 5 required procedures for Display Baffle Assembly are given in the order the 5 Kit contents lists are given. Be sure to follow the proper instructions.

- A. TO REVISE THE BAFFLE ARRANGEMENT FOR AN 18 TO 24 COMPARTMENT, 3 HIGH DRUM ASSEMBLY CONVERSION.
 - 1. Remove the 2 Screws which attach the 3 High Narrow-Mounting Baffle to the Display Baffle Assembly-Right Channel.
 - 2. Slide the Mounting Baffle and about 1/2 of the width of the first Baffle, out of the Baffle Holder.
 - 3. Slide the Narrow Mounting Baffle out of the partially exposed Baffle.

- 4. Slide the replacement 3 High Wide-Mounting-Baffle 403-5198, included in the Kit, into the partially exposed Baffle. See Figure 5.
- 5. Push the chain of Baffles, into the Holder until the slotted holes in the replacement Mounting Baffle are aligned with the threaded holes in the Right Channel.
- 6. Attach the replacement Mounting Baffle with the 2 Screws removed in step III-A1 or with the 2 4 MG4 Bind Head Screws 403-5018 included in the Kit.
- 7. Skip to Procedure IV.
- B. TO REVISE THE BAFFLE ARRANGEMENT FOR AN 18 TO 36 COMPARTMENT, 3 HIGH DRUM ASSEMBLY CONVERSION.
 - 1. Remove the 2 Screws which attach the 3 High Narrow-Mounting Baffle to the Display Assembly Right Channel.
 - Slide the Mounting Baffle and the 3 interlinked Baffles out of the Baffle Holder.
 - 3. Slide the 3 High Wide-Mounting Baffle 403-5198, included in the Kit, into the Baffle Holder. The edge of the Mounting Baffle with the 3 slotted holes is to be inserted first and the flush side of the Baffle is to be toward the Vend Door side of the Display Baffle Assembly. See Figure 5.
 - 4. Align the slotted holes in the Mounting Baffle with the threaded holes in the Left Channel.
 - 5. Attach the Mounting Baffle to the Left Channel with 2 of the 4MG4 Bind Head Screws 403-5018 included in the Kit.
 - 6. Insert the chain of 3-Baffles and the Narrow-Mounting Baffle removed in step III-B3 into the Display Baffle Assembly Holder. The hook end of the first Baffle is to be inserted first. The smooth side of the chain is to be toward the Vend Door side of the Display Baffle Assembly. See Figure 5.

- 7. Push the chain of Baffles into the Holder until the Slotted holes in the Narrow-Mounting Baffle are aligned with the threaded holes in the Right Channel.
- 8. Attach the Narrow-Mounting Baffle with the 2 Screws removed in step III-B1 or with the remaining 2 4MG4. Bind Head Screws 403-5018 included in the Kit.
- 9. Skip to Procedure IV.
- C. TO REVISE THE BAFFLE ARRANGEMENT FOR A 12 TO 18 COMPARTMENT 2 HIGH DRUM ASSEMBLY CONVERSION.
 - 1. Remove the 2 Screws which attach the 2 High Narrow-Mounting Bracket to the Display Baffle Assembly Right Channel.
 - Slide the Mounting Baffle and about 1/2 of the width of the first Baffle out of the Baffle Holder.
 - 3. Slide the Mounting Baffle out of the partially exposed Baffle.
 - 4. Slide the 2 High Baffle 403-5149, included in the Kit, into the partially exposed Baffle and push the chain of Baffles into the Holder until only 1/2 the width of the added Baffle is exposed. See Figure 5.
 - 5. Slide the 2 High Narrow-Mounting Baffle removed in step III-C3 into the exposed Baffle.
 - 6. Push the chain of Baffles into the Holder until the slotted holes in the Mounting Baffle are aligned with the threaded holes in the Right Channel.
 - 7. Attach the replacement Mounting Baffle with the 2 Screws removed in step III-C1 or with the 2-4MG4 Bind Head Screw 403-5018 included in the Kit.
 - 8. Skip to Procedure IV.
- D. TO REVISE THE BAFFLE ARRANGEMENT FOR A 12 TO 24 COMPARTMENT, 2 HIGH DRUM ASSEMBLY CONVERSION.
 - 1. Remove the 2 Screws which attach the 2 High Narrow-Mounting Baffle to the Display Assembly-Right Channel.
 - 2. Slide the Mounting Baffle and about 1/2 the width of the first Baffle out of the Display Baffle Assembly Holder.

- 3. Slide the Narrow-Mounting Baffle out of the partially exposed Baffle.
- 4. Slide the 2 High Baffle 402-5149 included in the Kit into the partially exposed Baffle and push the chain of Baffles into the Holder until only 1/2 the width of the added Baffle is exposed. See Figure 5.
- 5. Slide the replacement 2 High Wide-Mounting Baffle 403-5197, included in the Kit, into the partially exposed Baffle.
- 6. Push the chain of Baffles into the Holder until the slotted holes in the replacement Mounting Baffle are aligned with the thread holes in the Right Channel.
- Attach the replacement Mounting Baffle with the 2 Screws removed in step III-D1 or the 2-4 MG4 Bind Head Screws 403-5018 included in the Kit.
- 8. Skip to Procedure IV.
- E. TO REVISE THE BAFFLE ARRANGEMENT TO A 12 TO 36 COMPARTMENT, 2 HIGH DRUM ASSEMBLY CONVERSION.
 - 1. Remove the 2 Screws which attach the 2 High Narrow-Mounting Baffle to the Display Assembly Right Channel.
 - 2. Slide the Mounting Baffle and the 2 interlinked Baffles out of the Baffle Holder.
 - 3. Slide the 2 High Wide-Mounting Baffle 403-5197, included in the Kit, into the Baffle Holder. The edge of the Mounting Baffle with the 2 slotted holes is to be inserted first and the flush side of the Baffle is to be toward the Vend Door side of the Display Baffle Assembly. See Figure 5.
 - 4. Align the slotted holes in the Mounting Baffle with the threaded holes in the Left Channel.
 - 5. Attach the Mounting Baffle to the Left Channel with 2 of the 4MG4 Bind Head Screws 403-5018 included in the Kit.
 - 6. Insert the 2 High Baffle 403-5149, included in the Kit, 1/2 way into the Display Baffle Assembly Holder. The hook end of the Baffle is to be inserted first. The smooth side of the Baffle is to be toward the Vend Door side of the Display Baffle Assembly.

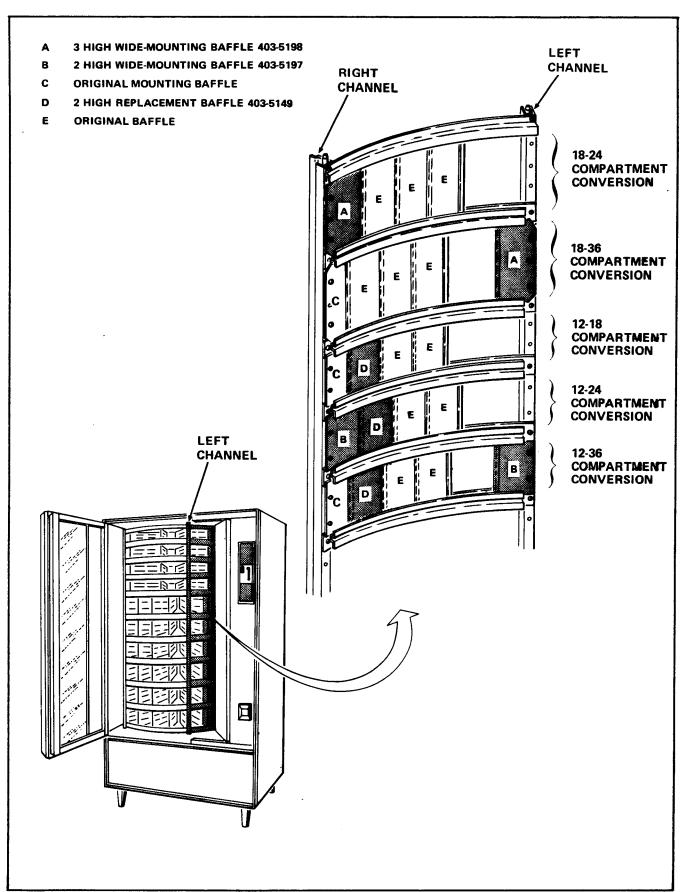


FIGURE 5

- 7. Slide the first Baffle on the chain of 2 Baffles and Narrow-Mounting Baffle removed in step III-E2 onto the partially exposed Baffle installed in step III-E6.
- 8. Push the chain of 3 Baffles and Narrow-Mounting Baffle into the Holder until the slotted holes in the Mounting Baffle are aligned with the threaded holes in the Right Channel.
- Attach the 2 High Wide-Mounting Baffle with the 2 Screws removed in step III-E1 or with the 2 - 4MG4 Bind Head Screws. 403-5018 included in the Kit.
- 10. Skip to Procedure IV.

IV. TO PREPARE THE MERCHANDISER FOR VENDING

A. Install the converted Drum Assembly in the Merchandiser.

NOTE

Be sure the Drum is properly seated. Refer to the Set-Up Instruction included in the FM-72 Food Merchandiser when shipped from the factory for information on proper Drum Assembly installation and seating and merchandiser test vending.

- B. Check the relationship of the revised Drum Assembly Compartment spacing with the revised spacing of the Baffles in the Display Baffle Assembly. The spacing should be same in both the Drum Assembly and the Display Baffle Assembly.
- C. Test vend the merchandiser both without and with products in the Drum Assemblies and both with and without coins.
- D. Place the Merchandiser in service.