

INSTALLATION INSTRUCTIONS FOR INSTALLING A FREEZE-DRIED COFFEE CONVERSION KIT IN A NATIONAL VENDORS®, CROWN SEVENTY TWO®, SERIES OR GOLDEN FURNITURE LINE HBM-614 HOT BEVERAGE MERCHANDISER

These instructions cover the procedure for installing a Freeze-Dried Coffee Conversion Kit in a Crown Seventy Two, Series or Golden Furniture Line HBM-614 Hot Beverage Merchandiser.

Read these instructions carefully and thoroughly before installing the Kit. Retain these instructions for part number and installation information.

Kit, Part Number 613-0100, contains the following parts:

Part Number	Description	Quantity
613-0121	Hopper Freeze-Dried Cam Assembly	1
613-4031	No.6-20 x 5/16 PHS T/C Screw	1
613-0101	Hopper Adapter Slide	1
613-0102	Coffee Hopper Adapter	1
610-4220	Type "E" 3/16 inch Retaining Ring	1
230-2037	NO.6-20 x 7/16 RHS T/C Screw	4
9900-412	Type "E" 1/8 Inch Retaining Ring	1
613-0104	Coffee Hopper Canister	1
613-0103	Coffee Hopper Lid	1
613-0115	Brewer (Freeze-Dried) Basket Assembly	1
613-0118	Housing Assembly	1
613-7157	Vent Hose Coupling	2
613-0120	Exhaust Hose Tee	1
613-7173	Hose Exhaust	1
613-1060	Delay Timer Jumper Plug	1
220-4513	Self Clinching Wire Tie	1
612-2011	Extra Lightner, Extra Sugar Sign Display	1
613-4523	Brew San Jumper Plug	1
613-0122	Installation Instructions	1
	* * *	

Early HBM-614 Hot Beverage Merchandisers were equipped with Coffee Hoppers that had 2 1/2" x 1 5/8" coffee discharge ports, as shown in View A on page 2. Later production Merchandisers and all replacement Coffee Hoppers for the HBM-614 Hot Beverage Merchandisers have 1 1/2" x 1 5/8" coffee discharge ports as shown in View B on page 2. Coffee Hoppers that have the larger discharge ports cannot be converted to vend freeze-dried coffee. These Coffee Hoppers must be interchanged with Coffee Hoppers in other HBM-614 Hot Beverage Merchandisers that have small discharge ports. If no interchange is possible, order Coffee Hopper Base Assembly, Part Number 613-4071, and convert that assembly with the parts in the kit.

CAUTION

Start all Screws with your fingers to avoid stripping the threads, especially of the plastic parts.

TO INSTALL THE KIT

A. REMOVAL OF PARTS ON THE COFFEE HOPPER

WARNING
Complete power must be shut off to the Merchandiser to avoid a possible Shock Hazard.

1. Disconnect the Merchandisers' electrical Service Cord from the wall receptacle.
2. Unlock and open the Cabinet Door.
3. Place the Main Power Switch in the Merchandiser in the "OFF" position. See Figure 1.
4. Disconnect the Coffee Hopper Cable from the Coffee Hopper. See Figure 1.

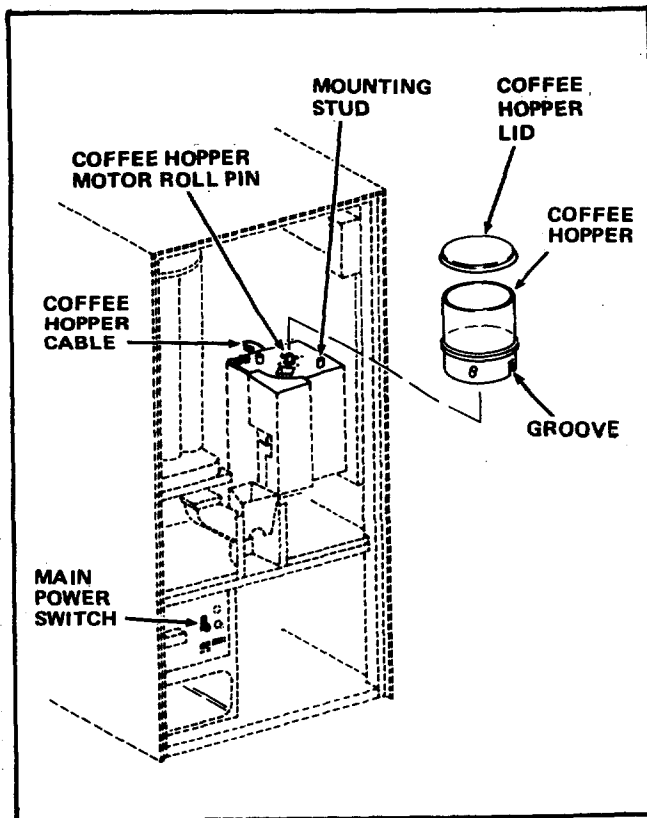


FIGURE 1

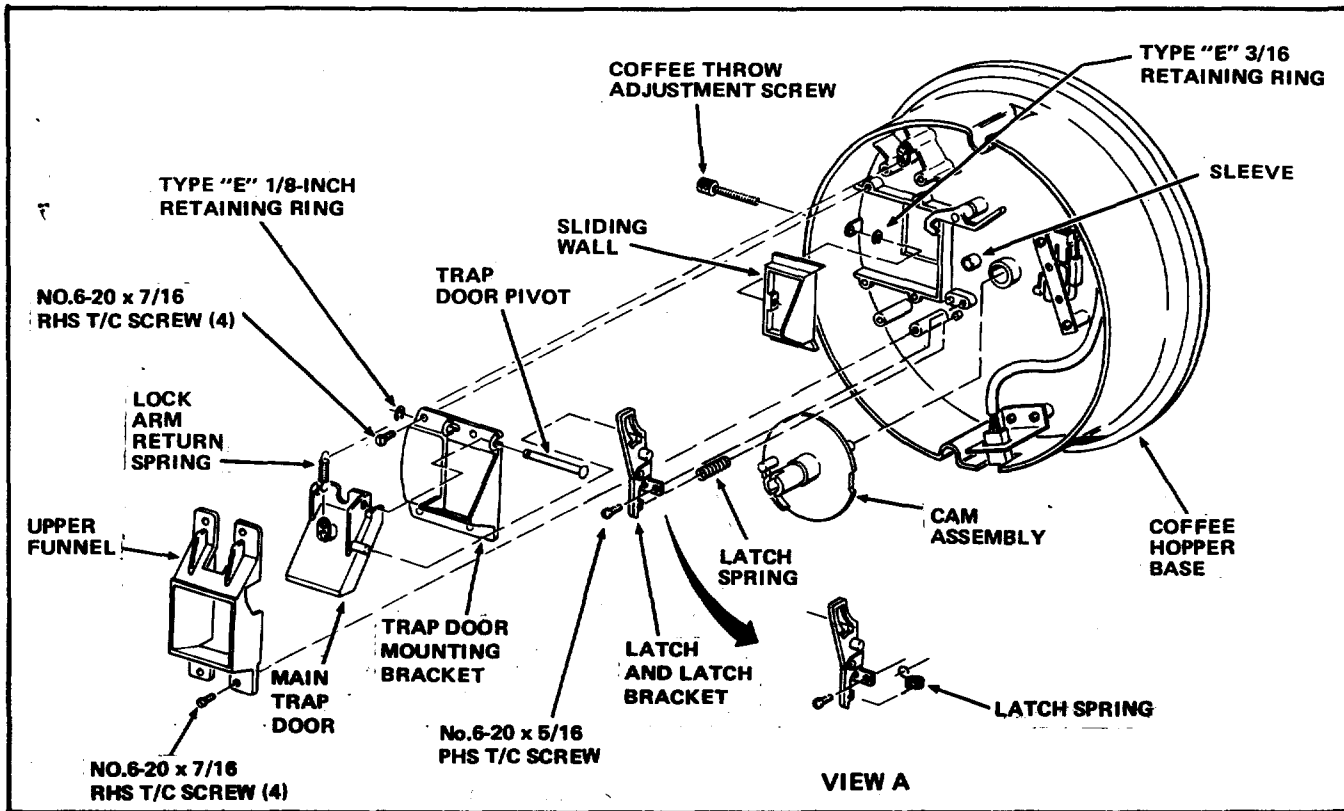


FIGURE 3

18. Remove the Sliding Wall and Coffee Throw Adjustment Screw from the Coffee Hopper Base by unscrewing the Adjustment Screw from the Sliding Wall. See Figure 3.
19. Remove the Latch Spring from the Coffee Hopper Base. See Figure 3 for early style and View A of Figure 3 for later style.
20. Remove the Latch and Latch Bracket from the Coffee Hopper Base by removing one No.6-20 x 5/16 Pan Head Thread Cutting Screw. See Figure 3.

NOTE

The Sleeve on the Boss under the Cam Assembly is loose and may fall off. See Figure 3.

21. Remove the Cam Assembly from the Coffee Hopper Base. See Figure 3.
22. If Agitator Assembly has a Tab as shown in Figure 2, bend or hammer the Tab down so it is flush with the Agitator.

B. INSTALLATION OF THE PARTS ON THE COFFEE HOPPER

NOTE

Place Sleeve over the molded boss on the Coffee Hopper if it came off during Parts Removal.

1. Install the replacement Hopper Freeze Dried Cam Assembly, Part Number 613-0121, included in the Kit, by placing the Shaft of the Cam Assembly through the Center Hole of

the Coffee Hopper Base. Make sure the Switch Roller fits in the cutout of the Cam. See Figure 4.

2. Place the Door Return in the at-rest position as shown in Figure 4, then mount the Latch and Latch Bracket in the Coffee Hopper Base and attach with a No.6-20 x 5/16 Pan Head Thread Cutting Screw, Part Number 613-4031, included in the Kit. See Figure 4.

NOTE

Step 3 applies only to the early style Latch Spring shown in Figure 4.

3. Install the Latch Spring by inserting one end of the Latch Spring over the Coffee Hopper Base Stud and the other end over the tip on the Latch. See Figure 4.

NOTE

Step 4 applies only to the Later style Latch Spring shown in Figure 4.

4. Install Latch Spring by inserting the Straight End of the Latch Spring into the Hole in the Latch and the Loop End of the Latch Spring over the Coffee Hopper Base Stud. See Figure 4.
5. Fit the Hopper Adapter Slide, Part Number 613-0101, into the Coffee Hopper Adapter, Part Number 613-0102, both parts included in the Kit, as shown in Figure 5.

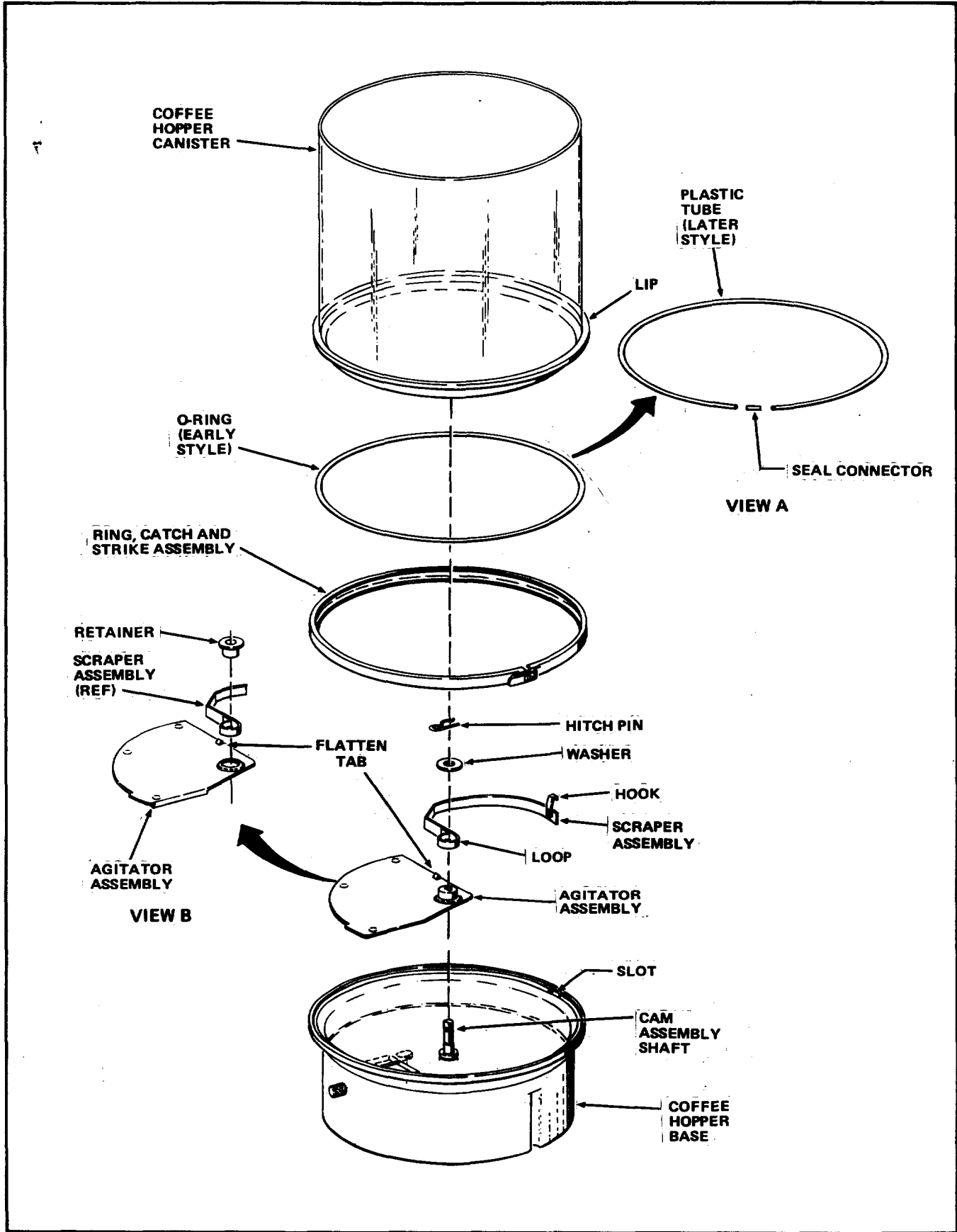


FIGURE 2

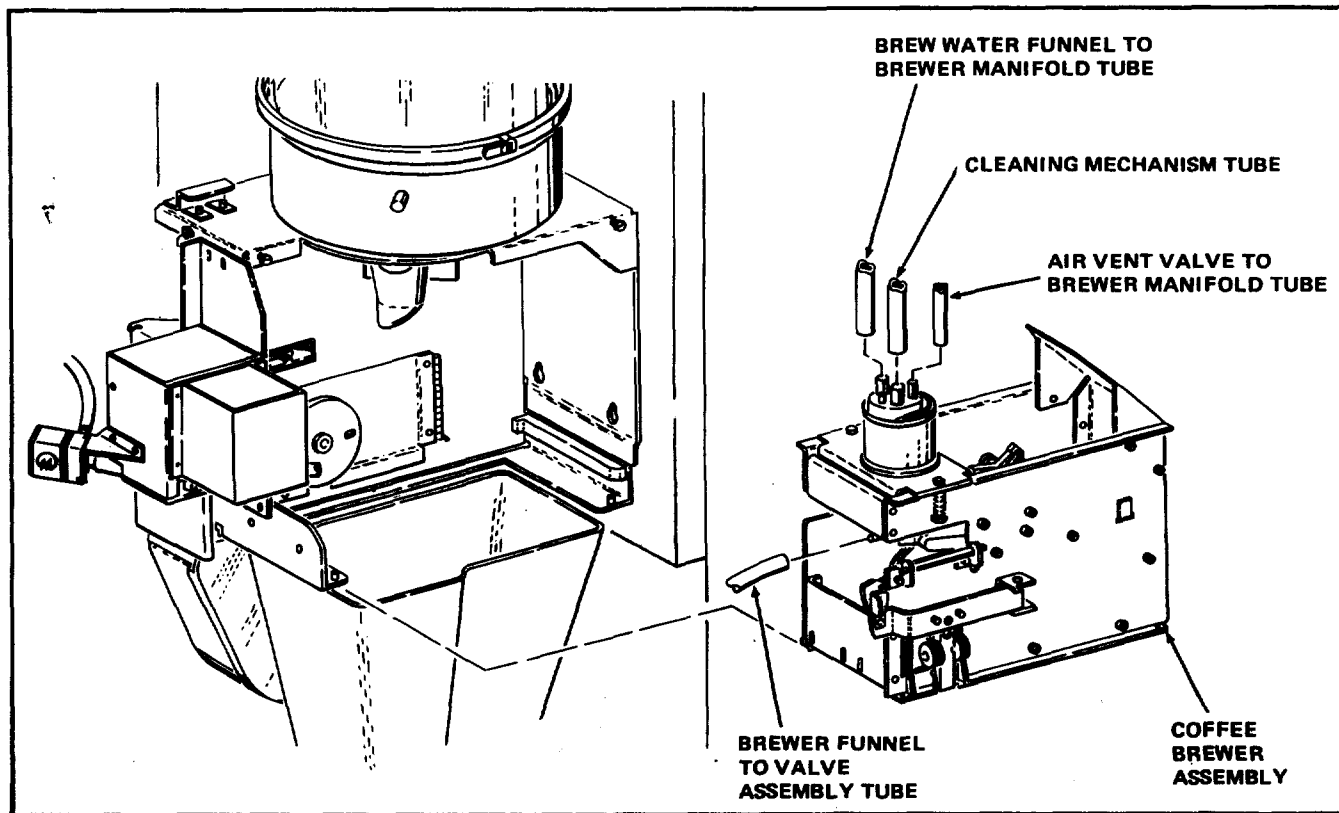


FIGURE 8

3. Disconnect the Brew Water Funnel to Brewer Manifold Tube from the Brewer Manifold. See Figure 8.
4. Disconnect the Cleaning Mechanism Tube (if equipped) from the Brewer Manifold. See Figure 8.
5. Disconnect the Brewer Funnel to Valve Assembly Tube from the Coffee Funnel Assembly. See Figure 8.

NOTE

Filter paper is not used with Freeze-Dried Coffee.

6. Tear the Filter Paper, if equipped, where it starts to come out of the Filter Paper Housing Receptacle and discard in the Waste Pail.
7. Remove the Coffee Brewer Assembly from the Merchandiser. See Figure 8.
8. Rotate the Brewer Basket Assembly one-quarter turn clockwise to align the ears on the Brewer Basket Assembly with the slots in the Basket Lever Assembly. Lower the Brewer Basket Assembly out of the Basket Lever Assembly. See Figure 9.
9. Remove the No.10-32 x 1/2 Stainless Pan Head Screw with Lockwasher, Pivot Stud and

Flip Lever from the Coffee Brewer Assembly. See Figure 9.

D. INSTALLATION OF THE PARTS ON THE COFFEE BREWER ASSEMBLY

1. Install the replacement Brewer (Freeze-Dried) Basket Assembly, Part Number 613-0115, included in the Kit, by placing the Brewer Basket Assembly into the carrier from the underside of the Basket Lever Assembly. Align the ears on the Brewer Basket Assembly with the slots in the Basket Lever Assembly. Rotate the Brewer Basket Assembly counter clockwise one-quarter turn until the Brewer Basket Assembly locks in the Brewer Basket Stop. See Figure 10.
2. Install the Coffee Brewer Assembly in the Merchandiser making sure the two pins on the Coupling Arm Assembly fit in the two holes in the Coupling Plate Assembly of the Brewer Motor Assembly.
3. Connect the Brewer Funnel to Valve Assembly Tube to the Coffee Funnel Assembly. See Figure 8.
4. Connect the Cleaning Mechanism Tube (if equipped) to the Brewer Manifold. See Figure 8.

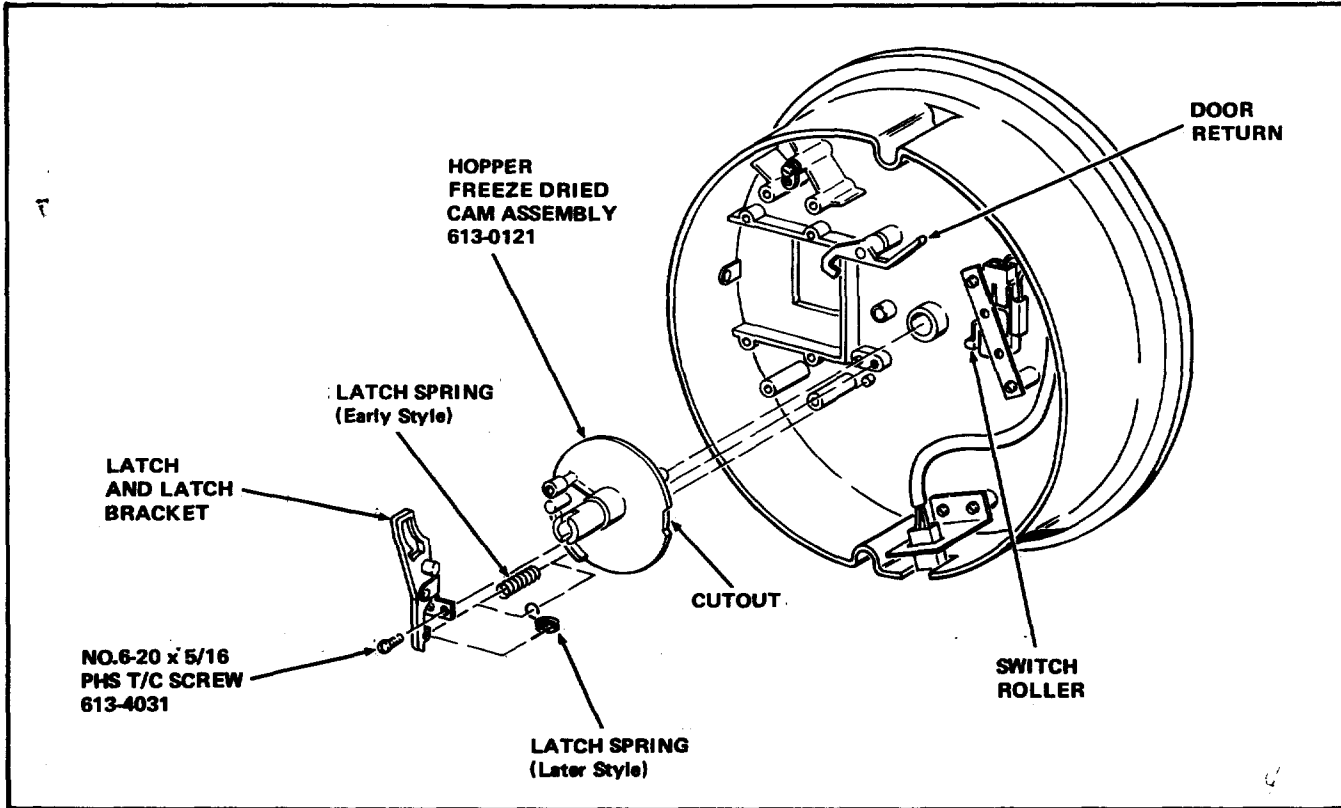


FIGURE 4

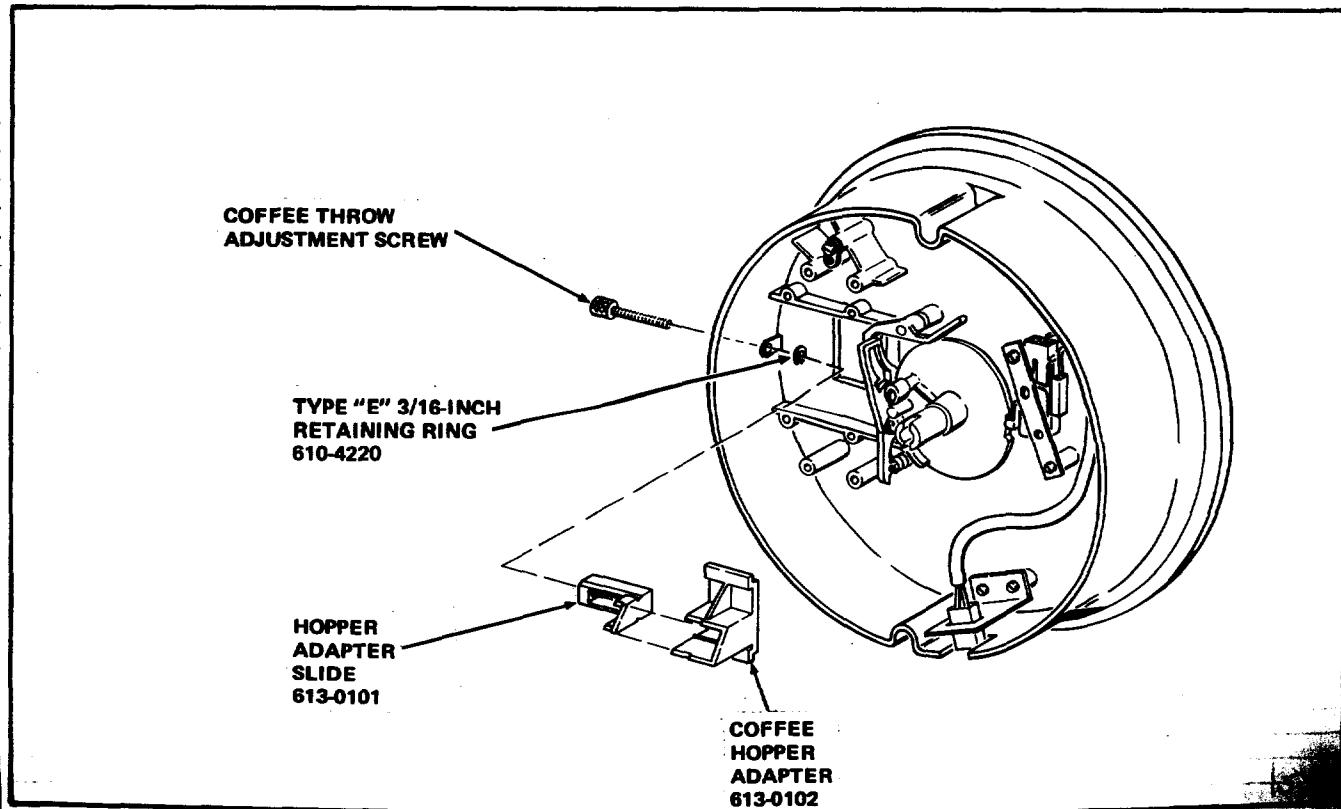


FIGURE 5

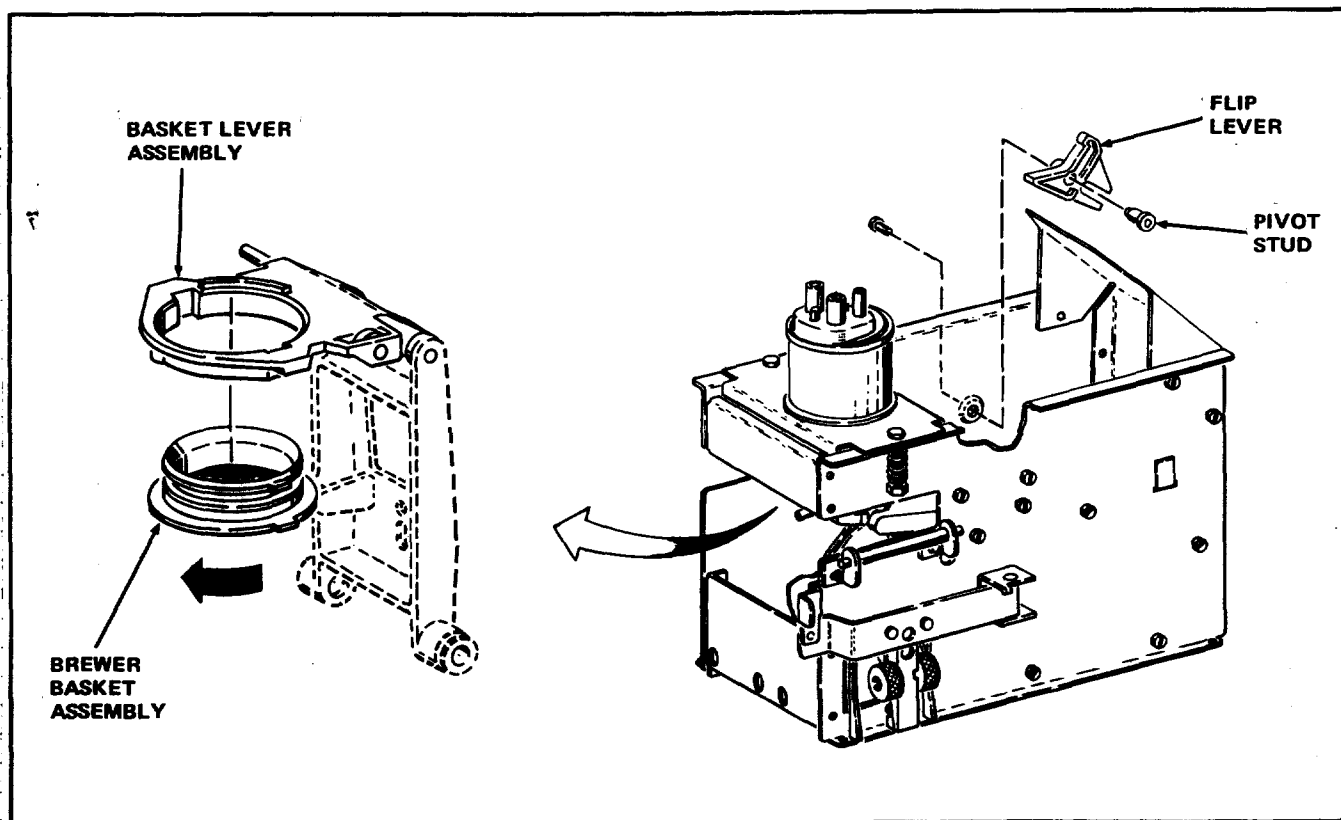


FIGURE 9

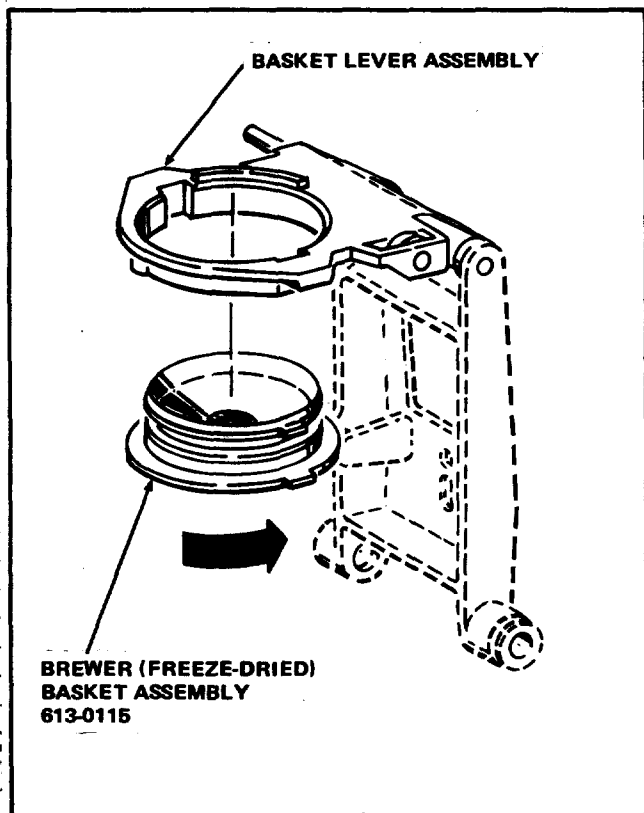


FIGURE 10

5. Connect the Brew Water Funnel to Brewer Manifold Tube to the Brewer Manifold. See Figure 8.
6. Connect the Air Vent Valve to Brewer Manifold Tube to the Brewer Manifold. See Figure 8.
7. Install the Housing Assembly, Part Number 613-0118, included in the Kit, on top of the Coffee Brewer Assembly. Slide the Housing Assembly to the left until the Funnel on the Housing Assembly is in contact with the Coffee Drop Funnel on the Mounting Bracket Assembly. Secure the Housing Assembly by tightening the Thumb Screw. See Figure 11.

E. EXHAUST HOSE CHANGES

1. Cut the Mixing Bowl Hose Exhaust 5 inches from the end that connects to the Mixing Bowl. See Figure 12.
2. Screw the two Vent Hose Couplings, Part Number 613-7157, included in the Kit, in both ends of the Mixing Bowl Hose Exhaust where the cut was made. See Figure 12.

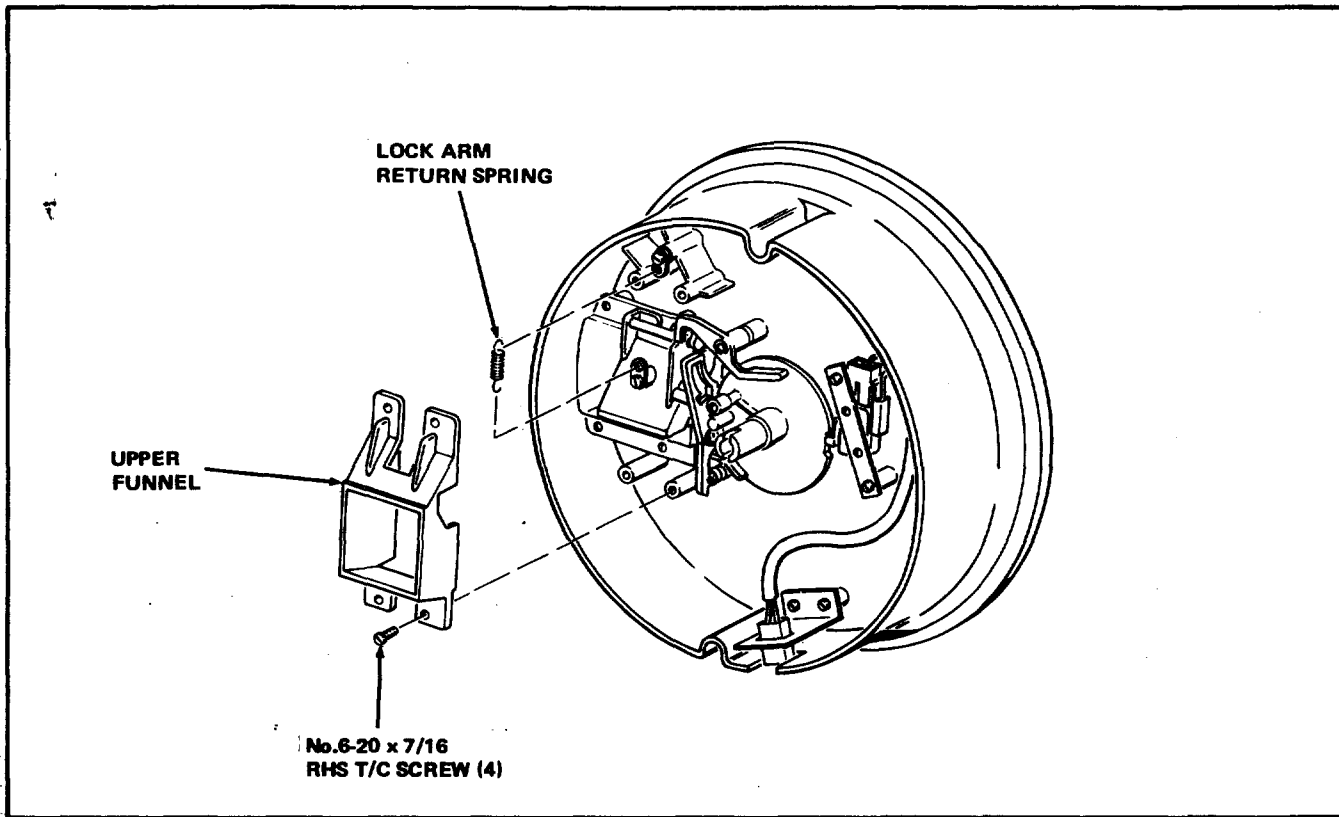


FIGURE 7

NOTE

Steps 14 thru 16 apply only to an Agitator Assembly as shown in View B of Figure 2.

14. Mount the Agitator Assembly on the Cam Assembly Shaft in the Coffee Hopper Base. See View B of Figure 2.
15. Insert the Retainer through the Loop on the Scraper Assembly. Be sure that the large flat side of the Retainer is on the same side of the Scraper Assembly as the Hook. See View B of Figure 2.
16. Install the assembled Scraper Assembly and Retainer on the Cam Assembly Shaft and insert the Hook on the Scraper Assembly into the Slot on the rim of the Coffee Hopper Base. Secure by inserting the Hitch Pin thru the small hole in the Cam Assembly shaft. See View B of Figure 2.
17. Place the "O" Ring (early style) or Plastic Tube and Seal Connector (later style) under the lip of the Coffee Hopper Canister, Part Number 613-0104, included in the Kit. See Figure 2 for early style and View A of Figure 2 for later style.

18. Mount the replacement Coffee Hopper Canister on the Coffee Hopper Base and

secure with the Ring, Catch and Strike Assembly. See Figure 2.

19. Install the Coffee Hopper in the Merchandiser by mounting the Coffee Hopper on the Coffee Hopper Motor Roll Pin making sure the Mounting Studs in the Merchandiser fit in the Grooves in the Coffee Hopper. See Figure 1.
20. Carefully fill the Coffee Hopper with Freeze-Dried Coffee. Only vending type Freeze-Dried Coffee is recommended. The Coffee Hopper has a 4 pound maximum capacity.
21. Install the Coffee Hopper Lid, Part Number 613-0103, included in the Kit, on the Coffee Hopper. See Figure 1.
22. Connect the Coffee Hopper Cable to the Coffee Hopper. See Figure 1.

C. REMOVAL OF PARTS ON THE COFFEE BREWER ASSEMBLY

1. Remove the Brewer Cover Assembly from the Merchandiser.
2. Disconnect the Air Vent Valve to Brewer Manifold Tube from the Brewer Manifold. See Figure 8.

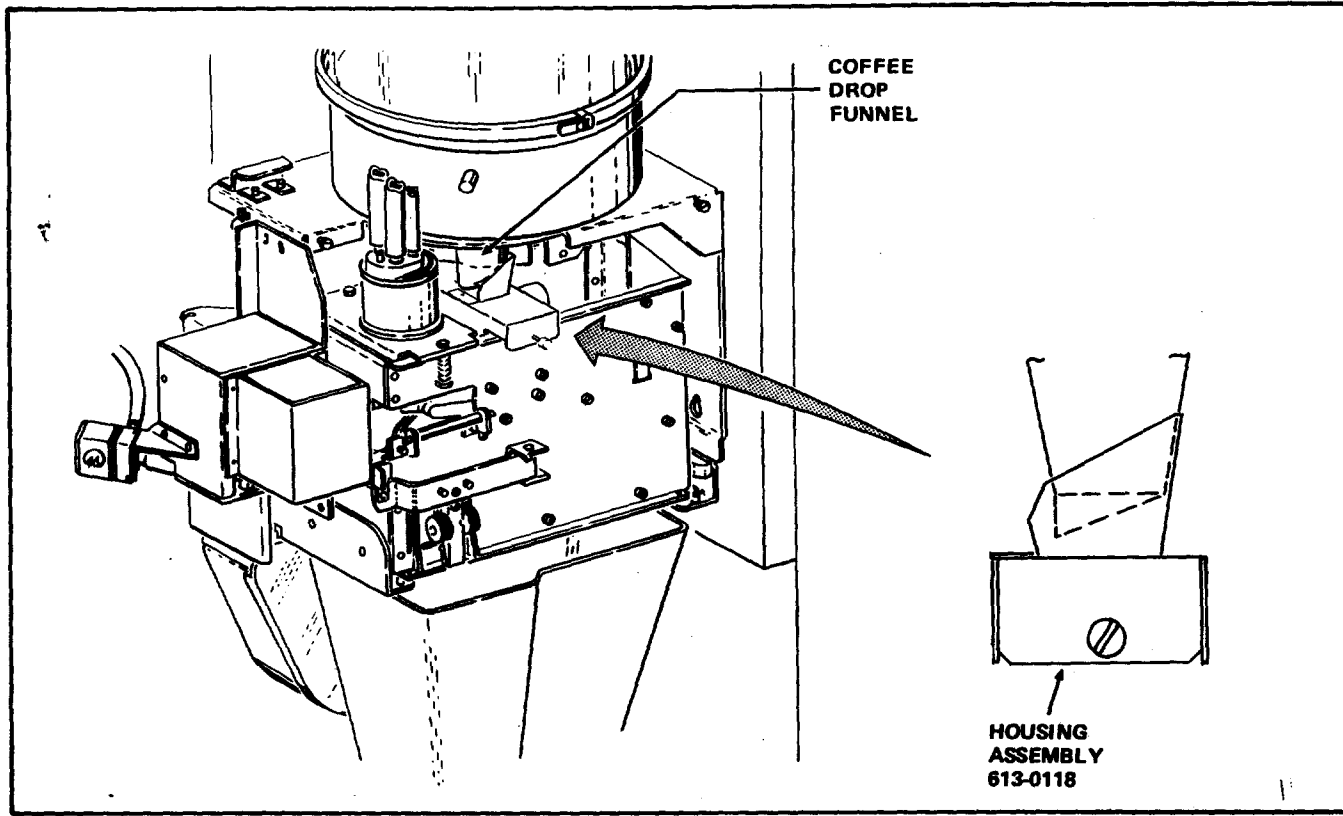


FIGURE 11

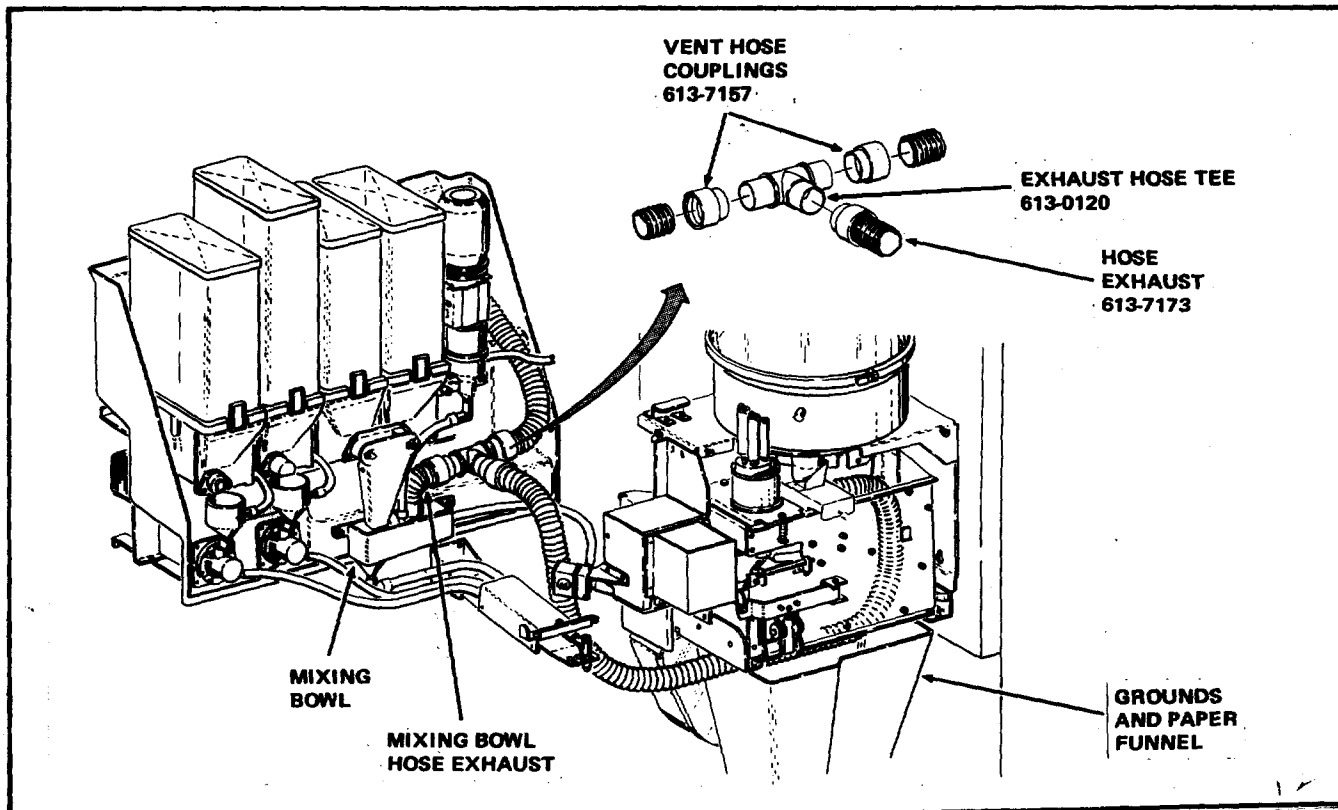


FIGURE 12

3. Fit the Exhaust Hose Tee, Part Number 613-0120, included in the Kit, on the Vent Hose Couplings installed in Step E-2. See Figure 12.
4. Remove the Grounds and Paper Funnel from the Merchandiser. See Figure 12.
5. Install the Hose Exhaust, Part Number 613-7173, included in the Kit, in the Merchandiser by fitting one end of the Exhaust Hose on the Exhaust Hose Tee and the other end on the Exhaust Bushing of the Housing Assembly. See Figure 12.
6. Install the Grounds and Paper Funnel removed in Step E-4 in the Merchandiser. See Figure 12.

F. IF MERCHANTISER HAS AN EXTRA STRONG COFFEE SELECTION, PERFORM THE FOLLOWING STEPS

1. Remove the Thumb Screw and pull down the Control Panel Assembly. See Figure 13.
2. Remove four No.8-32 x 1/4 Round Head Thread Cutting Screws attaching the Delay Timer Box to the Control Panel Assembly. See Figure 14.
3. Disconnect the Delay Timer Harness from the Control Panel Power Plug. See Figure 14.
4. Connect the Delay Timer Jumper Plug, Part Number 613-1060, included in the Kit, to the Control Panel Power Plug. See Figure 14.
5. Tie the Delay Timer Harness away from the other electrical components by using a Self Clinching Wire Tie, Part Number 220-4513, included in the Kit. See Figure 14.

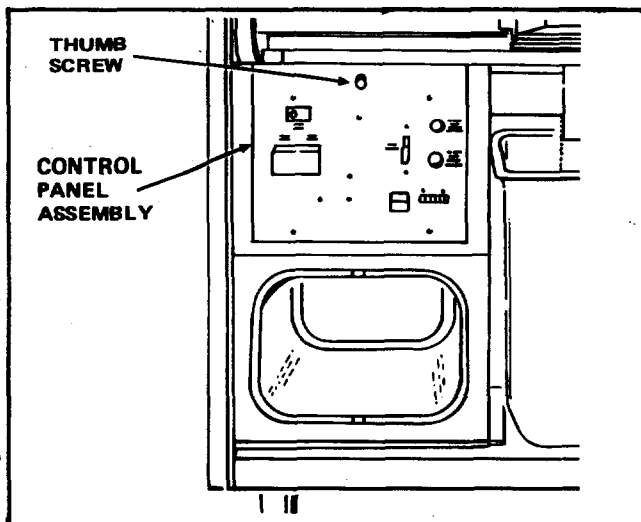


FIGURE 13

6. Attach the Delay Timer Box to the Control Panel Assembly using four No.8-32 x 1/4 Round Head Thread Cutting Screws removed in Step F-2. See Figure 14.
7. Return the Control Panel Assembly to the UP position and secure with the Thumb Screw removed in Step F-1. See Figure 13.
8. Remove the Extra Strong Coffee, Extra Lightener, Extra Sugar Sign Display from the inside of the Door and replace with the Extra Lightener, Extra Sugar Sign Display, Part Number 612-2011, included in the Kit.

G. IF MERCHANTISER HAS A BREW SAN® CLEANING MECHANISM, PERFORM THE FOLLOWING STEPS

1. Disconnect the Brew San Timer Harness from the Brew San Cleaning Mechanism. See Figure 15.
2. Connect the Brew San Jumper Plug, Part Number 613-4523, included in the Kit, to the Brew San Timer Harness. See Figure 15.
3. Connect the Merchandisers' electrical Service Cord to a properly polarized wall receptacle.
4. Move the Main Power Switch in the Merchandiser to the ON position.

H. HEATER THERMOSTAT ADJUSTMENT

Turn the Screw on the Heater Thermostat counter clockwise, to the lowest possible setting (approximately 185°F). See Figure 15.

I. WATER THROW ADJUSTMENT

NOTE

The Water Throw Should be 165cc.

Follow the procedure given in the Set-Up Instructions for testing and adjusting the Water Throw.

J. COFFEE THROW ADJUSTMENT

NOTE

The Coffee Throw should be 1.5 grams or to suit taste.

Follow the procedure given in the Set-Up Instructions for testing and adjusting the Coffee Throw.

K. AIR COMPRESSOR ADJUSTMENT

If Air Compressor is not regulated to 5 lbs. P.S.I., it should be readjusted. Follow the procedure given in the Set-up Instructions for adjusting the Air Compressor.

ROUTINE SERVICE AND SANITATION INSTRUCTIONS

Sanitation is an important phase of Merchandiser operation. The lack of proper Service and Sanitation can cause Merchandiser malfunctions and loss of sales.

The periods and suggested procedures for Service and Sanitation are Daily, Weekly, Monthly, Quarterly, and Semi-Annually. These periods and procedures are given as guides only and are not to be construed as absolute or invariable. Local conditions must always be considered. Certain installations require that some or all of the steps under Monthly Service and Sanitation be performed Weekly, etc. Each Merchandiser must be maintained individually in accord with its particular requirements. National Vendors, however, stresses - **A CLEAN MERCHANDISER IS THE MOST PROFITABLE MERCHANDISER.**

NOTE

1. *Contact your Local Health Authorities and obtain their acceptance of the sanitizer you intend to use when cleaning, sanitizing, or washing the Merchandiser.*
2. *When cleaning, sanitizing, or washing the Merchandiser use CLEAN DISPOSABLE PAPER WIPERS rather than cloths.*
3. *The Water Spray Hose, attached to the bracket at the top of the Water Tank, is the source of the clean hot water used when cleaning, sanitizing, or washing the Merchandiser.*
4. *Clean the Screen in the Spray Hose approximately once a month to remove any lime deposits.*
5. *When using water near the Filter Paper Housing DO NOT wet the Filter Paper.*
6. *The Water Filter Cartridge is effective for a maximum of 25,000 vends. Local water conditions may require more frequent Cartridge replacement.*
7. *The designation tea when used in this Section refers to either tea or de-caffeinated coffee. The type of beverage dispensed in this selection depends only on the type of product used in the Merchandiser.*

I. DAILY SERVICE

- A. Replace burned-out or discolored bulbs.
- B. Refill the empty Cup Magazine Tubes.
- C. Check the level of the Freeze-Dried Coffee in the Coffee Hopper and add Coffee if necessary. Be careful, do not spill Coffee outside of the Coffee Hopper.

- D. Check the contents level of the Lightener, Sugar, and Chocolate Canister, and if the Merchandiser is so equipped, the Soup Canister and the Tea Jar. Refill the Canister or replace the Jar if necessary.
- E. Replenish coin tubes in the Coin Mechanism.
- F. Check Water Filter Cartridge vend record. If the Cartridge needs changing, replace it.
- G. Check temperature of the water in the Water Tank, be sure the temperature is approximately 185° Fahrenheit.
- H. Inspect the Mixing Bowl. If there is an accumulation of sugar and lightener, the water velocity in the Mixing Bowl must be adjusted. To adjust the water velocity in the Mixing Bowl:

1. Remove the Mixing Bowl Insert from the Mixing Bowl.
2. Screw the Pan Head Screw at the bottom of the Mixing Bowl Insert until the head of the screw is 1/8-inch from the bottom of the Mixing Bowl Insert.
3. Replace the Mixing Bowl Insert and make several test vends of coffee with lightener and sugar.
4. Observe the flow of water in the Mixing Bowl. If the water splashes out of the Mixing Bowl the speed of the water is too fast. Repeat the adjustment and screw the Pan Head Screw closer to the bottom of the Mixing Bowl Insert.

- I. Test vend the Merchandiser.

II. DAILY SANITATION

NOTE

1. *Contact your Local Health Authorities and obtain their acceptance of the sanitizer you intend to use when cleaning, washing, or sanitizing parts of the Merchandiser.*
2. *When cleaning, washing, or sanitizing parts of the Merchandiser use CLEAN DISPOSABLE PAPER WIPERS rather than cloths.*

- A. Clean the Dry Ingredients Canisters and Coffee Hopper with a soft dry brush. DO NOT use a damp wiper on these units or get them wet.

NOTE

Remove used Teflon Tape from the Coffee Throw Adjustment Screw.

6. Install the assembled Hopper Adapter Slide and Coffee Hopper Adapter over the opening in the Coffee Hopper Base and attach with the Coffee Throw Adjustment Screw as shown in Figure 5.
7. Secure the Coffee Throw Adjustment Screw by fitting the Type "E" 3/16 inch Retaining Ring, Part Number 610-4220 included in the Kit, in the groove of the Coffee Throw Adjustment Screw. See Figure 5.
8. Install the Trap Door Mounting Bracket in the Coffee Hopper Base by fitting the Trap Door Mounting Bracket over the Coffee Hopper Adapter. Attach using four No.6-20 x 7/16 Round Head Thread Cutting Screws, Part Number 230-2037, included in the Kit. See Figure 6.

NOTE

Be sure the Door Return in the Coffee Hopper is positioned to the rear of the Main Trap Door. See Figure 4.

9. Install the Main Trap Door in the Coffee Hopper by fitting the Hinge Flanges of the Main Trap Door between the Hinge Guides of the Trap Door Mounting Bracket. Fit the Arm of the Main Trap Door in the Slot of the Latch. Attach by inserting the Trap Door Pivot through the Hinge Guides of the Trap

Door Mounting Bracket and Hinges Flanges of the Main Trap Door and secure with a Type "E" 1/8 inch Retaining Ring, Part Number 9900-412, included in the Kit. See Figure 6.

10. Install the Lock Arm Return Spring in the Coffee Hopper Base by attaching to the two Spring Retainers. See Figure 7.
11. Install the Upper Funnel over the Main Trap Door in the Coffee Hopper Base by using four No.6-20 x 7/16 Round Head Thread Cutting Screws, removed in Step A-13. See Figure 7.

NOTE

Steps 12 and 13 apply only to an Agitator Assembly as shown in Figure 2. Steps 14 thru 16 apply only to an Agitator Assembly as shown in View B of Figure 2.

12. Mount the Agitator Assembly on the Cam Assembly Shaft in the Coffee Hopper Base. See Figure 2.
13. Install the Scraper Assembly by mounting the Loop of the Scraper Assembly on the Shaft of the Agitator Assembly and the Hook on the Scraper Assembly in the Slot on the rim of the Coffee Hopper Base. Secure by installing the Washer on the Cam Assembly Shaft and insert the Hitch Pin through the small hole in the Cam Assembly Shaft. See Figure 2.

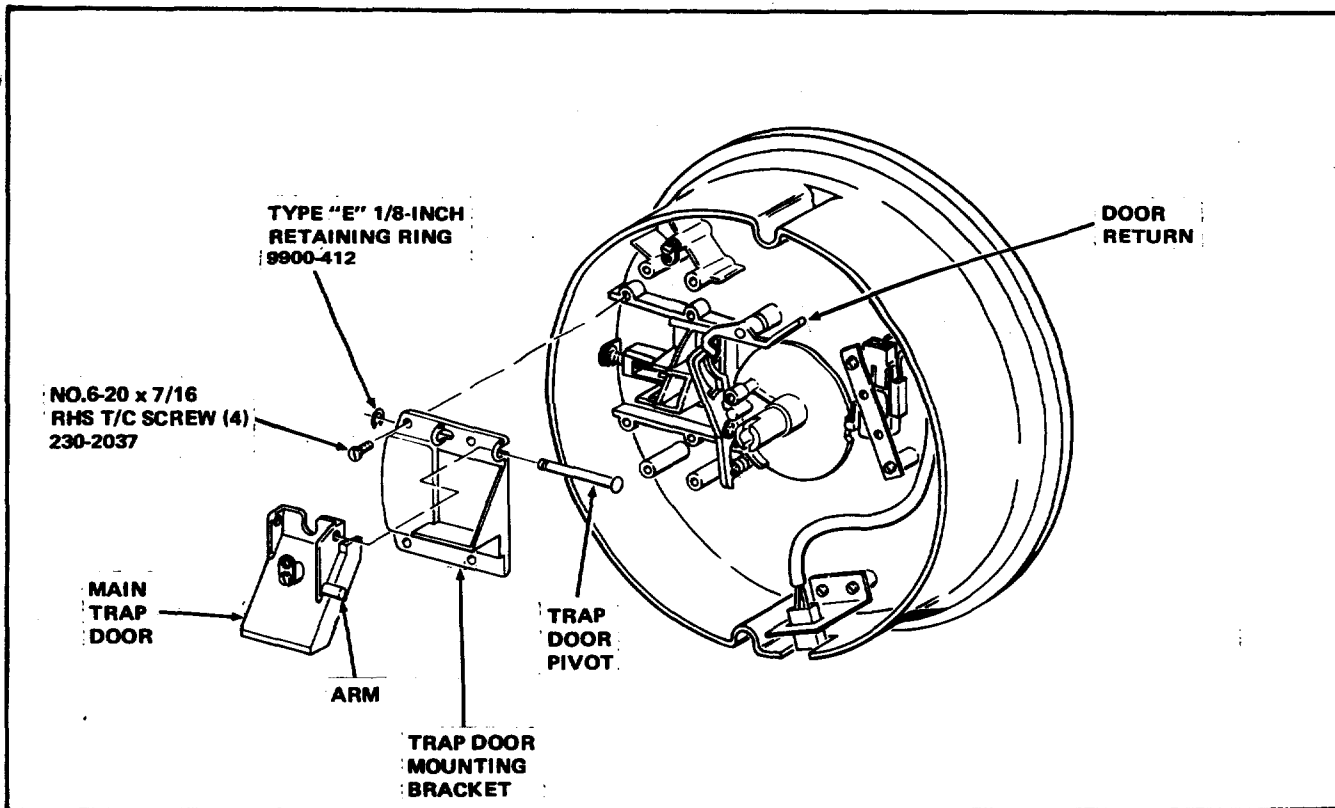


FIGURE 6

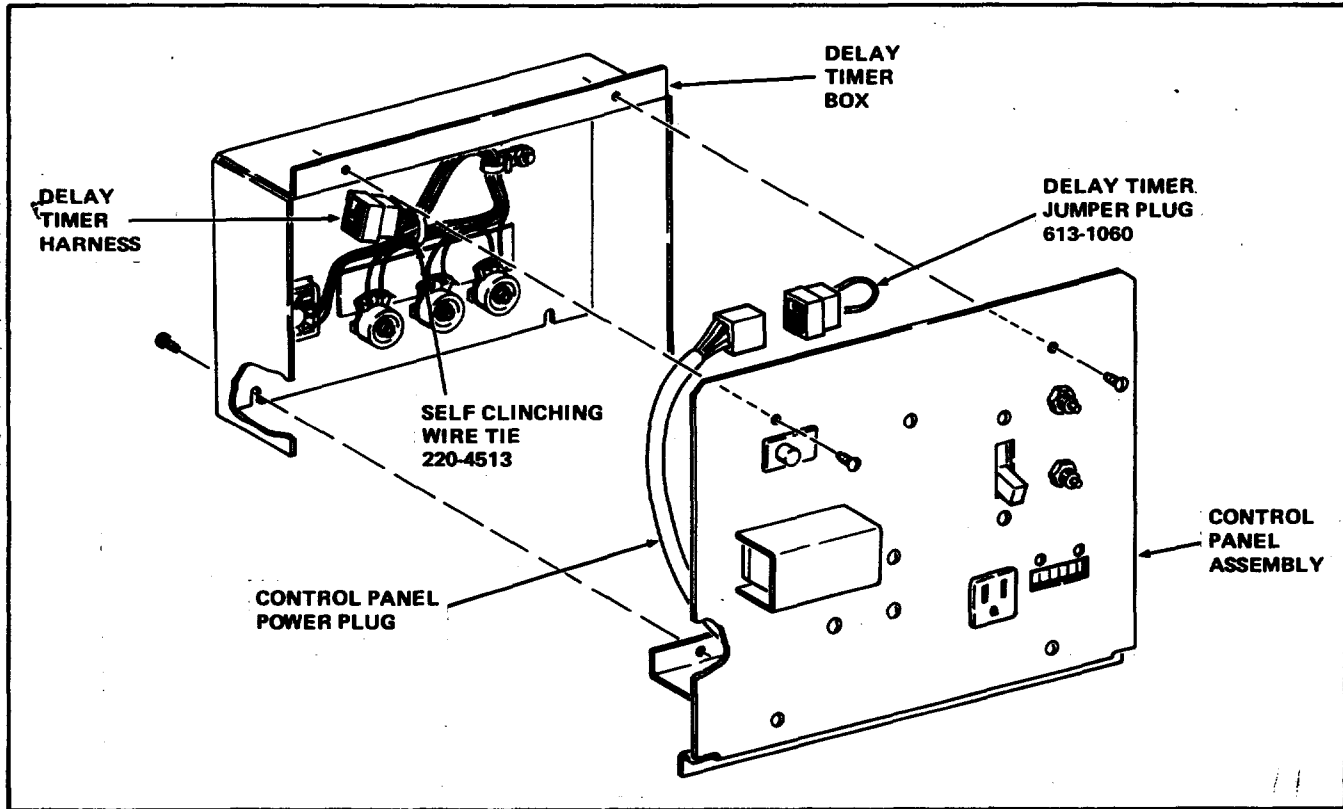


FIGURE 14

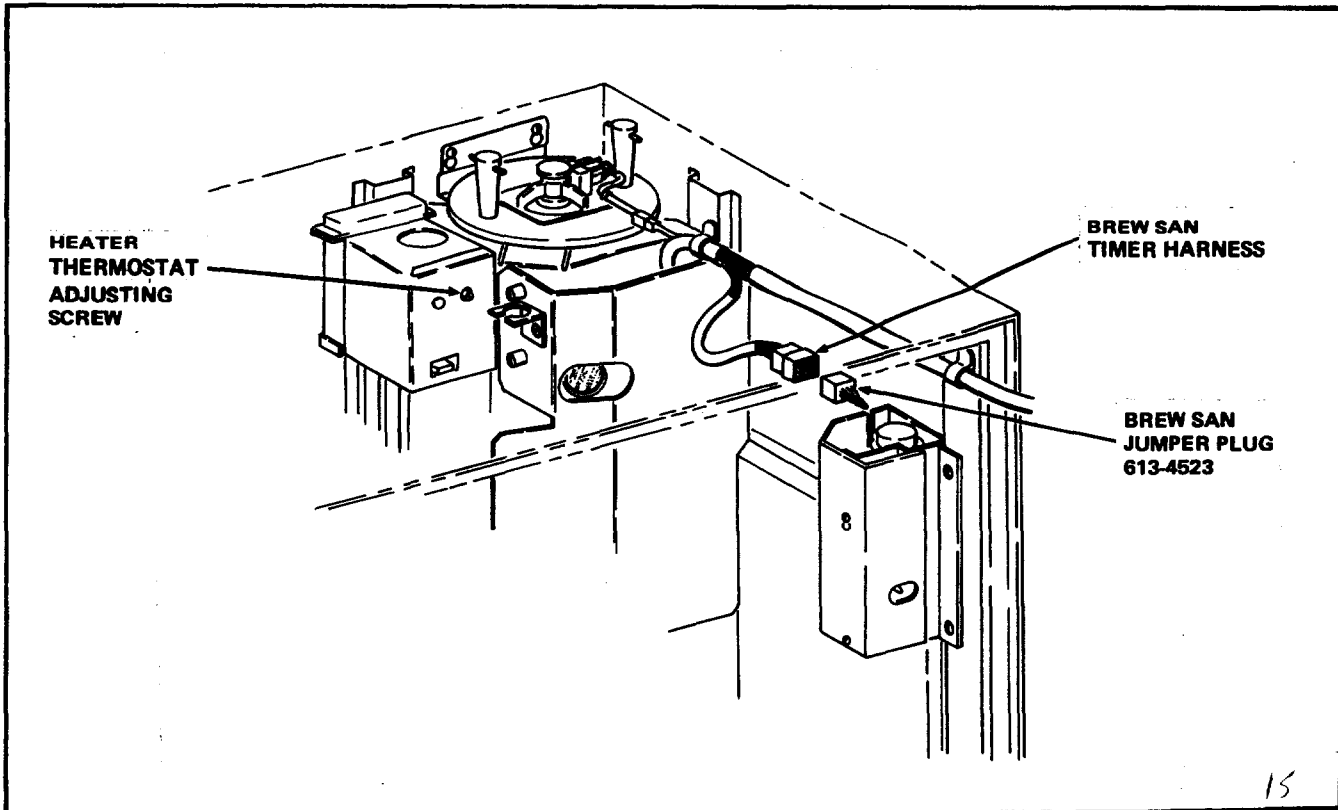


FIGURE 15

- B. Use clean hot water to flush the Dry Ingredients (Chocolate, Soup, and Tea) Funnels. DO NOT wet the Canister Exit Tube.
- C. Remove and clean the Sugar and Lightener Dispensing Chute. Dry thoroughly.
- D. Flush the Mixing Bowl with clean hot water.
- E. Clean the Dry Ingredients Shelf with a clean damp disposable paper wiper. Dry thoroughly.
- F. Clean the Coffee Drop Funnel on the Mounting Bracket Assembly and Housing Assembly on the Coffee Brewer Assembly with a clean damp disposable paper wiper. Dry thoroughly.
- G. Clean the Sanitation Tray with a clean damp disposable paper wiper. Dry thoroughly.
- H. Empty the Waste Pail.
- I. Wash and sanitize the Cup Delivery Compartment and Waste Pail with a chlorinated detergent or equivalent approved chemical. Rinse with clean hot water and dry thoroughly.
- J. Clean the base of the Merchandiser and Storage Compartment with a clean damp disposable paper wiper. Dry thoroughly.
- K. Wash the Cabinet Door inside and out, with a clean hot damp disposable paper wiper. Dry thoroughly.
- L. Sprinkle approximately 1/2 handful of detergent powder in the Waste Pail. This will help prevent odors which may emanate from the pail.

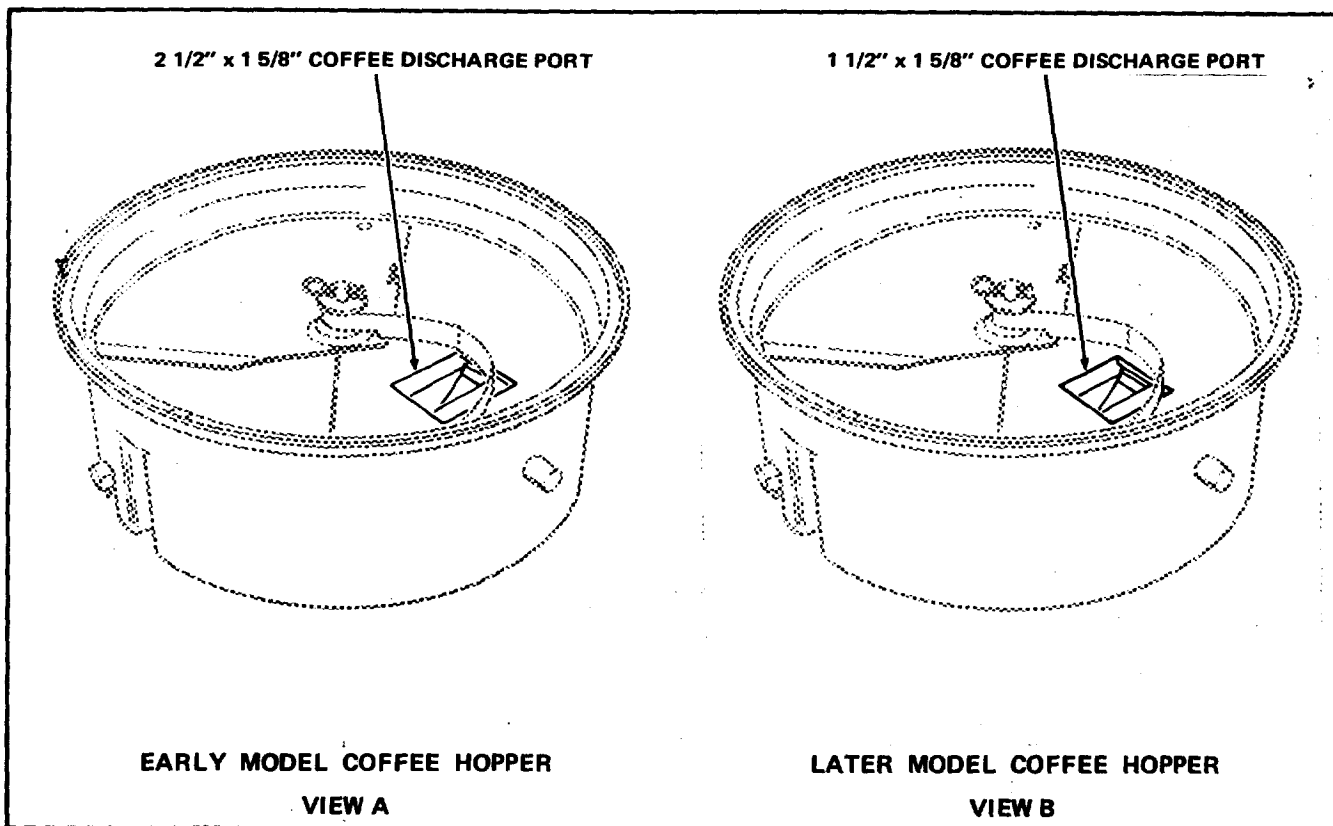
III. WEEKLY SERVICE

- A. Follow the Daily Service Instructions.
- B. Inspect the Vapor Exhaust Filter and replace before it becomes clogged.
- C. Inspect the Coin Mechanism Slug Rejector and clean if necessary.
- D. Brush the Vent Screens (upper and lower).
- E. Invert the Chocolate, the Sugar, and the Lightener Canisters to air-fluff and prevent the packing of the powders.
- F. If the Merchandiser is equipped to vend soup and/or tea, invert the Soup and/or Tea Canister to prevent packing of the powder.

IV. WEEKLY SANITATION

NOTE

1. Contact your Local Health Authorities and obtain their acceptance of the sanitizer you intend to use when cleaning, washing, or sanitizing parts of the Merchandiser.
2. When cleaning, washing, or sanitizing parts of the Merchandiser use CLEAN DISPOSABLE PAPER WIPERS rather than cloths.
 - A. Follow the Daily Sanitation Instructions.
 - B. Remove, wash, and sanitize the Chocolate and Soup Blender and Funnel, and the Tea Funnel.
 - C. Remove, wash, and sanitize the Sugar and Lightener Dispensing Chute. Dry thoroughly.
 - D. Remove, wash, and sanitize the Mixing Bowl.
 - E. Remove, wash, and sanitize the Beverage Discharge Nozzles.
 - F. If the Merchandiser is equipped with the optional Heat Exchanger, sanitize the Heat Exchanger.
 1. Remove the Tubes from the Heat Exchanger.
 2. Dip the Tube Cleaner Brush in a solution of urn cleaner and thoroughly brush the Beverage Tube in the Heat Exchanger.
 3. Rinse the Cleaner Brush thoroughly with clean hot water and brush the Beverage Tube thoroughly between each rinse-brushing in clean hot water.
 - G. Sanitize the Coffee System as follows:
 1. Remove the Coffee Brewer Assembly from the Merchandiser.
 2. Remove the Brewer Basket Assembly, Brewer Barrel and Coffee Funnel Assembly from the Coffee Brewer Assembly.
 3. Rinse the Brewer Basket Assembly, Brewer Barrel, and Coffee Funnel Assembly in hot water and dry thoroughly.
 4. Rinse the Coffee Brewer Assembly in hot water and dry thoroughly.
 5. Replace the Brewer Basket Assembly, Brewer Barrel, and Coffee Funnel Assembly.
 6. Install the Coffee Brewer Assembly in the Merchandiser.



5. Lift the Coffee Hopper out of the Merchandiser. See Figure 1.
6. Remove the Coffee Hopper Lid from the Coffee Hopper. See Figure 1.
7. Empty the coffee grounds from the Coffee Hopper and wipe the inside of the Coffee Hopper clean.
8. Unlatch the Ring, Catch and Strike Assembly and remove from the Coffee Hopper. See Figure 2.
9. Lift the Coffee Hopper Canister from the Coffee Hopper Base. See Figure 2.
10. Remove the "O" Ring (early style) or Plastic Tube and Seal Connector (later style) from the Coffee Hopper Canister. See Figure 2 for early style and View A of Figure 2 for later style.
11. Remove the Scraper Assembly from the Coffee Hopper Base by removing the Hitch Pin and Washer (early style) or Retainer (later style). See Figure 2 for early style and View B of Figure 2 for later style.
12. Remove the Agitator Assembly from the Coffee Hopper Base. See Figure 2 or View B of Figure 2.
13. From underneath the Coffee Hopper, remove the Upper Funnel by removing four No.6-20 x 7/16 Round Head Thread Cutting Screws. See Figure 3.
14. Remove the Lock Arm Return Spring from the Coffee Hopper Base. See Figure 3.
15. Remove the Main Trap Door from the Coffee Hopper Base by removing the Type "E" 1/8 inch Retaining Ring and the Trap Door Pivot. See Figure 3.
16. Remove the Trap Door Mounting Bracket from the Coffee Hopper Base by removing four No.6-20 x 7/16 Round Head Thread Cutting Screws. See Figure 3.
17. Remove the Type "E" 3/16 inch Retaining Ring attaching the Coffee Throw Adjustment Screw to the Coffee Hopper Base. See Figure 3.

- 7. Remove the Cup Turret and clean the top of the Cup Mechanism with a damp wiper. Dry thoroughly.
- 8. Inspect the Merchandiser for over-all cleanliness, especially the corners.

V. MONTHLY SERVICE

- A. Follow the Weekly Service Instructions.
- B. Clean the Coin Chute and Slug Rejector. See the procedures for Cleaning the Slug Rejector and Coin Chute in this Section.
- C. Remove the Brewer Basket Assembly, Brewer Barrel, and Coffee Funnel Assembly.
 - 1. Check the parts for worn Brewer and Brewer Coffee Funnel Seals. If a Seal has lost its resiliency or if a cut is visible in a Seal, replace the defective Seal.
 - 2. Check the Brewer Basket Assembly for a clogged or broken Screen. Replace the Screen if necessary.
- D. Replace the Brewer Barrel, Brewer Basket Assembly, and Coffee Funnel Assembly.
- E. Remove the Brew Water Valve Outlet and Seat Assembly. Inspect the Valve Seat for a worn or damaged seal. Replace seal if necessary.
- F. Remove the Cabinet Vent Fan Filter. Clean the Fan with a dry cloth, and wash the Filter with a warm detergent solution, rinse and dry. Clean the Screen thoroughly and reassemble the Assembly.
- G. Clean the Screen in the Spray Hose to remove any accumulated lime deposits.

VI. MONTHLY SANITATION

NOTE

- 1. *Contact your Local Health Authorities and obtain their acceptance of the sanitizer you intend to use when cleaning, washing, or sanitizing parts of the Merchandiser.*
- 2. *When cleaning, washing, or sanitizing parts of the Merchandiser use CLEAN DISPOSABLE PAPER WIPERS rather than cloths.*

Follow the Weekly Sanitation Instructions.

VII. QUARTERLY SERVICE

- A. Follow the Monthly Service Instructions.

- B. Recheck the In-Cup Water Volume for coffee, chocolate, soup, and tea.
- C. Recheck the throw of the Freezed-Dried Coffee. The proper throw should be 1.5 Grams or to suit taste.
- D. Recheck the throw of the Sugar, Lightener, Chocolate, Soup, and Tea Powder.
- E. Inspect the Water Tank for liming. If the Tank shows evidence of liming, de-lime the Tank. Follow the instructions given on the De-liming Product. Rinse the Tank thoroughly before refilling.

VIII. QUARTERLY SANITATION

NOTE

- 1. *Contact your Local Health Authorities and obtain their acceptance of the sanitizer you intend to use when cleaning, washing, or sanitizing parts of the Merchandiser.*
- 2. *When cleaning, washing, or sanitizing parts of the Merchandiser use CLEAN DISPOSABLE PAPER WIPERS rather than cloths.*

- A. Follow the Monthly Sanitation Instructions.
- B. Empty the Chocolate, Sugar, Lightener, Soup and Tea Canisters. Wash and sanitize the Canisters. Thoroughly rinse Canisters with clean hot water and dry thoroughly before replacing and refilling them.
- C. Remove and clean the Coffee Brewer Assembly. The Coffee Brewer Assembly can be cleaned with detergent and hot water, but it has to be completely dry before it is replaced in the Merchandiser. An air hose may be used to accelerate the drying of the Coffee Brewer Assembly.
- D. Remove and sanitize the Sanitation Tray.
- E. Remove the Coffee Drop Funnel from the Merchandiser and clean and dry thoroughly.
- F. Remove the Storage Compartment and clean the Storage Compartment and the area behind the Compartment with a clean damp paper wiper. Dry thoroughly.

IX. SEMI-ANNUAL SERVICE

- A. Follow the Quarterly Service Instructions.
- B. Inspect the Merchandiser for worn parts and replace where necessary.

- C. Inspect the springs. Replace any springs that are over-stretched.
- D. Lubricate all moving parts that do not come in contact with Freeze-Dried Coffee or dry ingredients.

CAUTION

Do not use Silicone lubricants. Silicone can cause electrical failures.

X. SEMI-ANNUAL SANITATION

NOTE

1. *Contact your Local Health Authorities and obtain their acceptance of the sanitizer you intend to use when cleaning, washing, or sanitizing parts of the Merchandiser.*
 2. *When cleaning, washing, or sanitizing parts of the Merchandiser use CLEAN DISPOSABLE PAPER WIPERS rather than cloths.*
- A. Follow the Quarterly Service Instructions.

- B. Empty the Coffee Hopper and thoroughly clean with a soft brush the inside and outside of the Hopper.
- C. Replace all of the tubing which carries a beverage. Use new tubing.

XI. CLEANING THE SLUG REJECTOR AND COIN CHUTE

The Slug Rejector and Coin Chute should be inspected at regular intervals and cleaned on approximately a monthly schedule.

Remove the Slug Rejector Assembly from the Merchandiser and clean the Coin Chute with a tube cleaning brush to remove any accumulated dust and foreign matter.

Clean the Slug Rejector thoroughly or replace the assembly with a clean unit from the shop. The Slug Rejector can be cleaned with detergent and hot water, but it has to be completely dry before it is replaced in the Merchandiser. An air hose may be used to accelerate the drying of the Slug Rejector.