

**INSTRUCTIONS FOR INSTALLING A BREWER MECHANISM GROOVE PIN AND CASTINGS REPLACEMENT KIT IN A NATIONAL VENDORS<sup>®</sup> CROWN SEVENTY TWO<sup>®</sup> SERIES OR GOLDEN FURNITURE LINE, HBM-72Q HOT BEVERAGE MERCHANDISER**

These instructions cover the replacement procedures for the Brewer Mechanism Groove Pin and Castings replacement in any Crown Seventy Two, Series or Golden Furniture Line, HBM-72Q Hot Beverage Merchandiser.

Read these instructions carefully and thoroughly before proceeding with the actual removal and replacement procedures. Retain the instructions for part number and replacement information. Kit 613-4162 includes the following parts:

Part Number	Description	Quantity
610-4133	1/4-20 Self Locking Hex Nut	2
610-4132	Barrel Support Channel	
	Compression Spring	2
611-4277	Barrel Support Channel Screw	2
610-4462	Groove Pin	1
610-4122	Funnel Mount Lever Assembly	1
613-4104	Funnel Mount Pivot Stud	2
610-4409	No.10-32 x 1/2 PHS Screw	
	W/Lockwasher	4
610-4386	Basket Lever Assembly	1
610-4142	Brewer Seal	2
613-4156	Installation Instructions	1
	* * *	

**TO INSTALL THE KIT:**

**A. PARTS REMOVAL**

1. Unlock and open the Cabinet Door.
2. Place the Main Power Switch in the Merchandiser in the "OFF" position.
3. Disconnect the Brewer Mechanism Harness from the Merchandiser. See Figure 1 if Merchandiser is not equipped with a Pulsator Assembly. See Figure 2 if Merchandiser is equipped with a Pulsator Assembly.

**NOTE**

*Step 4 applies only to Merchandisers equipped with a Pulsator Assembly.*

4. Remove the Coffee Funnel Tube from the Coffee Funnel. See Figure 2.

**NOTE**

*Step 5 applies only to Merchandisers not equipped with a Pulsator Assembly.*

5. Disconnect the tubing from the Brewer Valve on the left side of the Brewer Mechanism. See Figure 1.
6. Remove the Tubes from the Brewer Barrel Assembly. See Figure 1.
7. Remove the Brewer Guard from the Brewer Mechanism. See Figure 1.

**NOTE**

*Steps 8 and 11 apply only to Merchandisers equipped to use Filter Paper.*

8. Tear the Filter Paper and discard in the Waste Pail.
9. Unlatch the Brewer Mechanism and carefully slide the Brewer and Housing Assembly out of the Merchandiser. See Figure 1.
10. Remove the Control Switch Cover by removing three No.8-32 x 1/4 Pan Head Screws with Lockwashers. See Figure 1.
11. Remove the Filter Tape Housing and Door Assembly by removing four No.8-32 x 1/4 Pan Head Screws with Lockwashers. See Figure 1.
12. Manually rotate the Cork Brake on the Brewer Mechanism Motor Assembly in a counter-clockwise direction to fully open the Basket Lever Assembly. See Figure 3.
13. 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 4.
14. Rotate the Brewer Barrel Assembly until the ears on the Brewer Barrel align with the slots in the Barrel Support Channel. Lift the Brewer Barrel Assembly out of the Brewer Mechanism. See Figure 4.
15. Remove the Brewer Seal from the Brewer Barrel Assembly. See Figure 4.

**NOTE**

*Step 16 applies only to Merchandisers not equipped with a Pulsator Assembly.*

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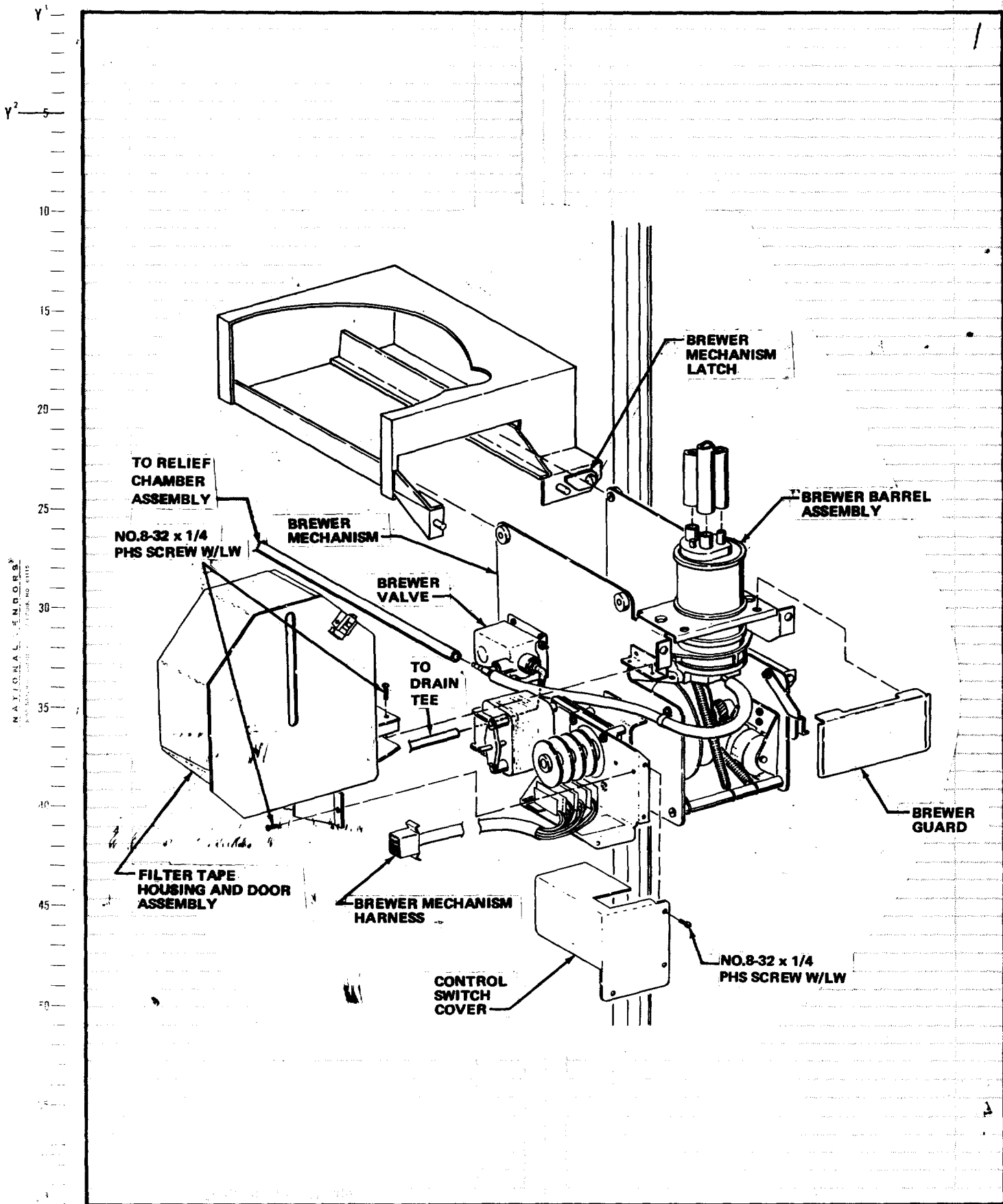


FIGURE 1

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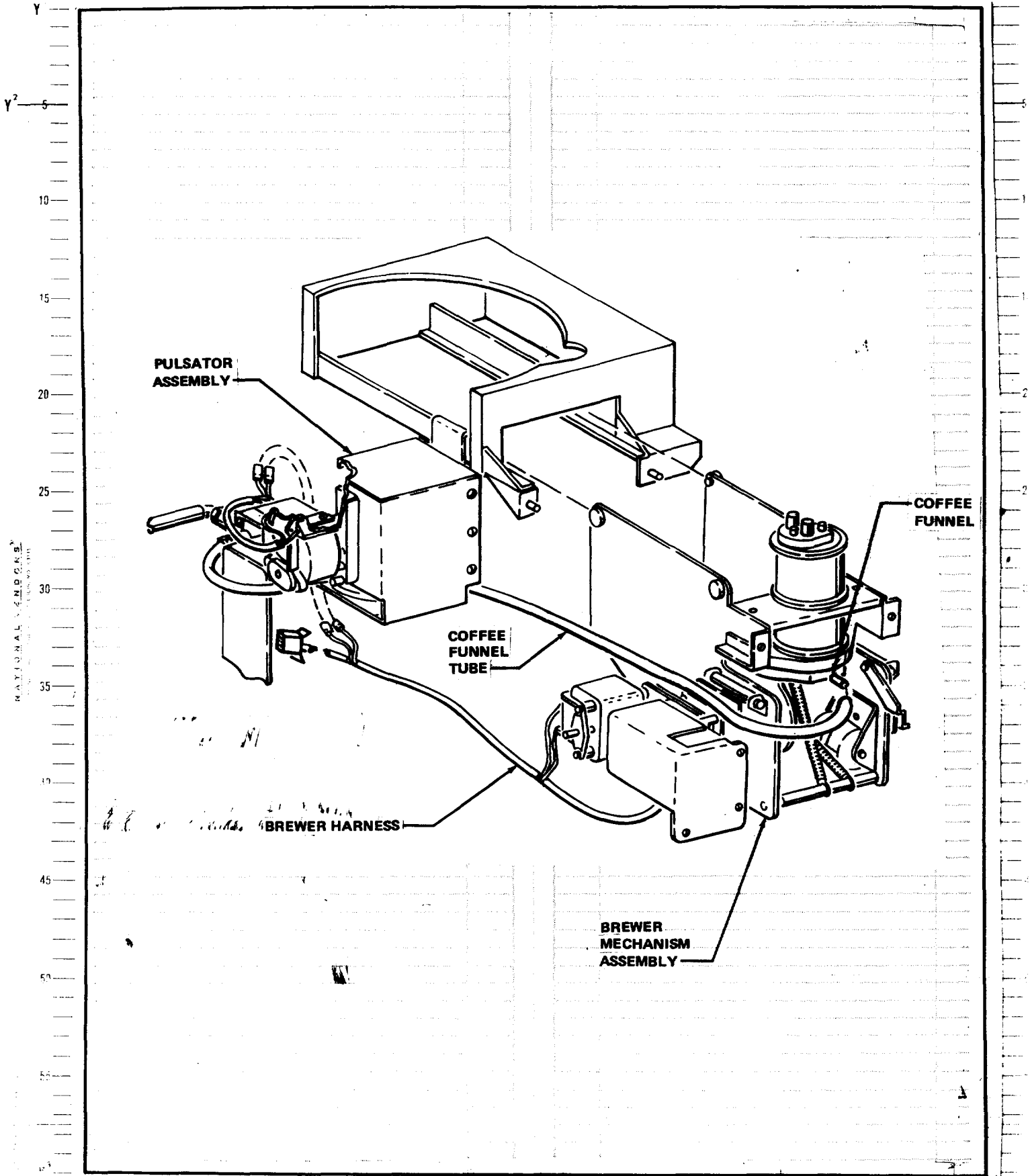


FIGURE 2

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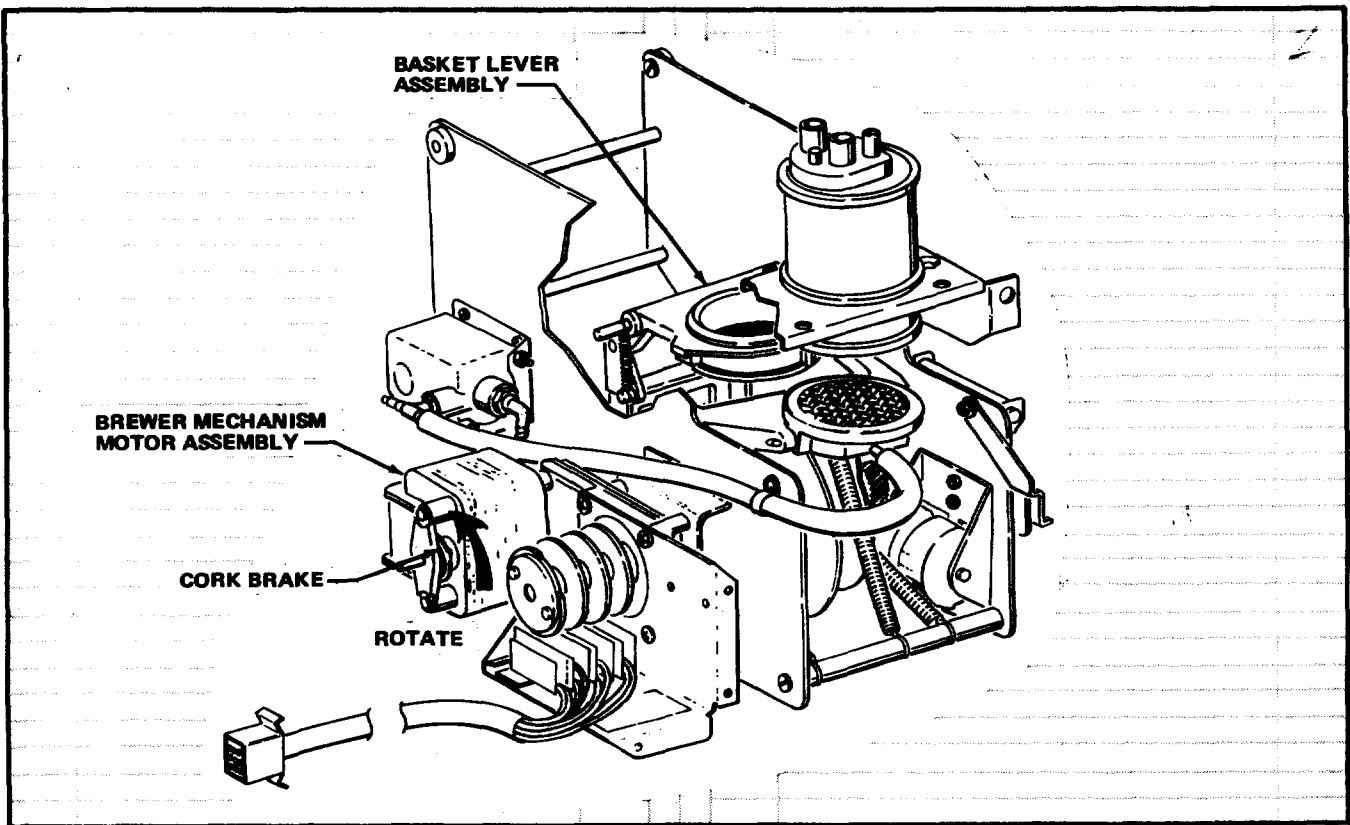


FIGURE 3

16. Remove the Coffee Funnel Tube from the Coffee Funnel Assembly. See Figure 4.
17. Tilt the front edge of the Coffee Funnel Assembly down and slide the Funnel off the Pins on the Funnel Mount, Lever Assembly. See Figure 4.
18. Remove the Brewer Seal from the Coffee Funnel Assembly. See Figure 4.
19. Remove the three Extension Springs from the Spring Mounting Spacer to the Flip Lever Assembly, Funnel Mount Lever Assembly and Basket Lever Assembly. See Figure 4.
20. Remove the four No.10-32 x 1-1/2 Pan Head Screws with Lockwashers and lift out the Switch Mounting Bracket Assembly and the Brewer Motor Assembly. See Figure 4.
21. Remove the damaged tapered Groove Pin from the Brewer Mechanism Cam Shaft. See Figure 5.
22. Slightly loosen the six No.10-32 x 1/2 PHS Screws with Lockwashers attaching the two rear Brewer Lever Shafts and the front Spring Mounting Spacer. See Figure 6.
23. Remove the Flip Lever Assembly, Basket Lever Assembly, and Brewer Lever Shaft by removing the two No.10-32 x 1/2 PHS Screws with Lockwashers. See Figure 6.
24. Remove the Funnel Mount Lever Assembly, and the two Funnel Mount Pivot Studs by removing the two No.10-32 x 1/2 PHS Screws Lockwashers. See Figure 6.
25. Remove the two 1/4-20 Self Locking Hex Nuts, two Barrel Support Channel Compression Springs and two Barrel Support Channel Screws attaching the Barrel Support Channel to the Sidewalls. See Figure 6.

**B. INSTALLATION**

1. Attach the Barrel Support Channel to the Sidewalls and secure with the two replacement Barrel Support Channel Screws, Part Number 611-4277, two Barrel Support Channel Compression Springs, Part Number 610-4132, and two 1/4-20 Self Locking Hex Nuts, Part Number 610-4133 all included in the Kit. See Figure 6. Tighten the 1/4-20 Self Locking Hex Nuts until the Barrel Support Channel Screws extend 1/16-inch beyond the Hex Nuts. See insert in Figure 7.

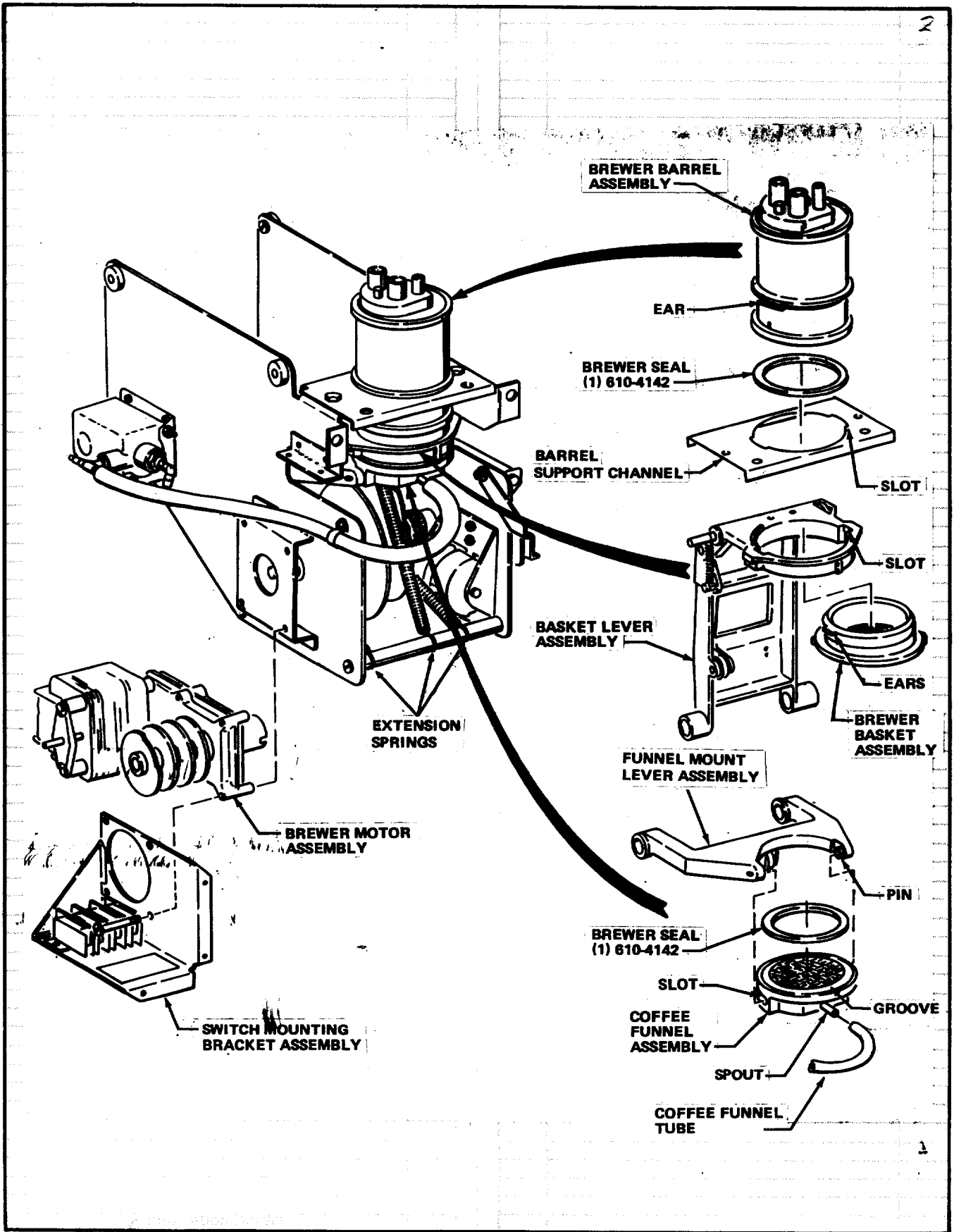


FIGURE 4

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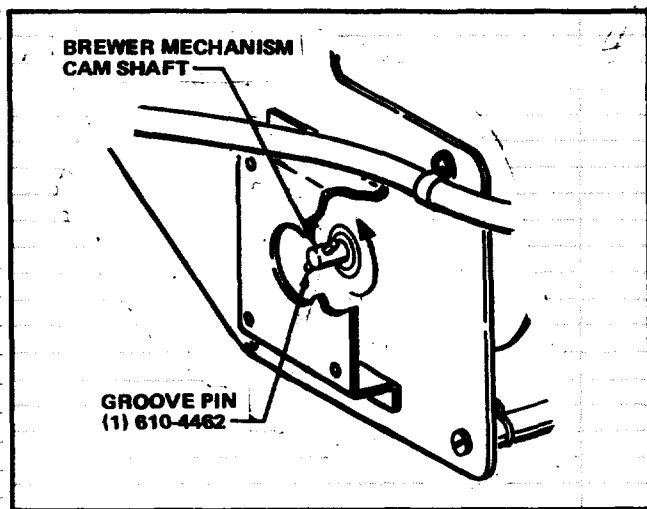


FIGURE 5

2. Install the replacement Funnel Mount Lever Assembly, Part Number 610-4122, and the two replacement Funnel Mount Pivot Studs, Part Number 613-4104, in the Brewer Mechanism and secure with two No.10-32 x 1/2 PHS Screws with Lockwashers, Part Number 610-4409, all included in the Kit. See Figure 6.
3. Remove the defective Basket Lever Assembly from the Brewer Lever Shaft and replace with the replacement Basket Lever Assembly, Part Number 610-4386, included in the Kit. See Figure 8.
4. Install the Flip Lever Assembly, replacement Basket Lever Assembly and Brewer Lever Shaft making sure the Basket Lever Assembly is in the front of the rear Travel Stop and the longer Spring Post is on top of the Flip Arm Assembly; then adjust the Flip Arm Assembly and the Flip Lever Assembly, so the plastic roller fits into the slot of the Flip Arm Assembly. See Figure 9.
5. Align the ends of the Brewer Lever Shaft with the holes in the sidewalls, and position the free end of the Brewer Stiffener over the hole in the Right Sidewall and attach using the two No.10-32 x 1/2 PHS Screws with Lockwashers, Part Number 610-4409, included in the Kit. See Figure 9.
6. Tighten the six No.10-32 x 1/2 PHS Screws which secure the two rear Brewer Lever Shafts and the front Spring Mounting Spacer. See Figure 6.
7. Install the replacement Groove Pin, Part Number 610-4462, included in the Kit. Tap the small end of the tapered Groove Pin in the hole of the Cam Shaft until the Groove Pin is centered in the shaft. See Figure 5.

8. Install the Brewer Motor Assembly and Switch Mounting Bracket Assembly making sure the replacement Groove Pin fits in the slotted Coupling of the Brewer Motor Assembly. Secure with four No.10-32 x 1-1/2 Pan Head Screws with Lockwashers. See Figure 4.
9. Manually rotate the Cork Brake on the Brewer Mechanism Motor Assembly in a counter-clockwise direction until the wheel on the Funnel Mount Lever Assembly is between the two lines on the Funnel Cam. See Figure 10.
10. With the Brewer Mechanism in the position as described in step "9", check that the Brewer Motor Cam holds the Full Cycle Switch and Coffee Drop Switch in the "NO" position and the Brew Safety Switch and C.R.E.M. Switch in the "NC" position. If it does not, remove the Brewer Motor Assembly and Switch Mounting Bracket Assembly, as in Figure 4, rotate the Cam Shaft in the Brewer Mechanism 180 degrees, as in Figure 5, and repeat step 8. See Figure 10.
11. Manually rotate the Cork Brake on the Brewer Mechanism Motor Shaft in a counter-clockwise direction to fully open the Basket Lever Assembly. See Figure 3.
12. Install the Brewer Basket Assembly by placing the Basket 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 Assembly counter clockwise one-quarter turn until the Brewer Basket locks in the Brewer Basket Stop. See Figure 4.
13. Install the Brewer Seal, Part Number 610-4142, included in the Kit, in the groove of the Coffee Funnel Assembly, by pushing the Brewer Seal on opposite sides until it seats in the groove. See Figure 4.
14. Install the Coffee Funnel Assembly by sliding the Funnel onto the Pins of the Funnel Mount Lever Assembly. Check that the flat sides of the slots in the Funnel are aligned with the flat sides of the Pins. Rotate the Funnel into place. See Figure 4.

**NOTE**

*Step 15 applies only to Merchandisers not equipped with a Pulsator Assembly.*

15. Attach the Coffee Funnel Hose to the spout on the Coffee Funnel Assembly. See Figure 4.

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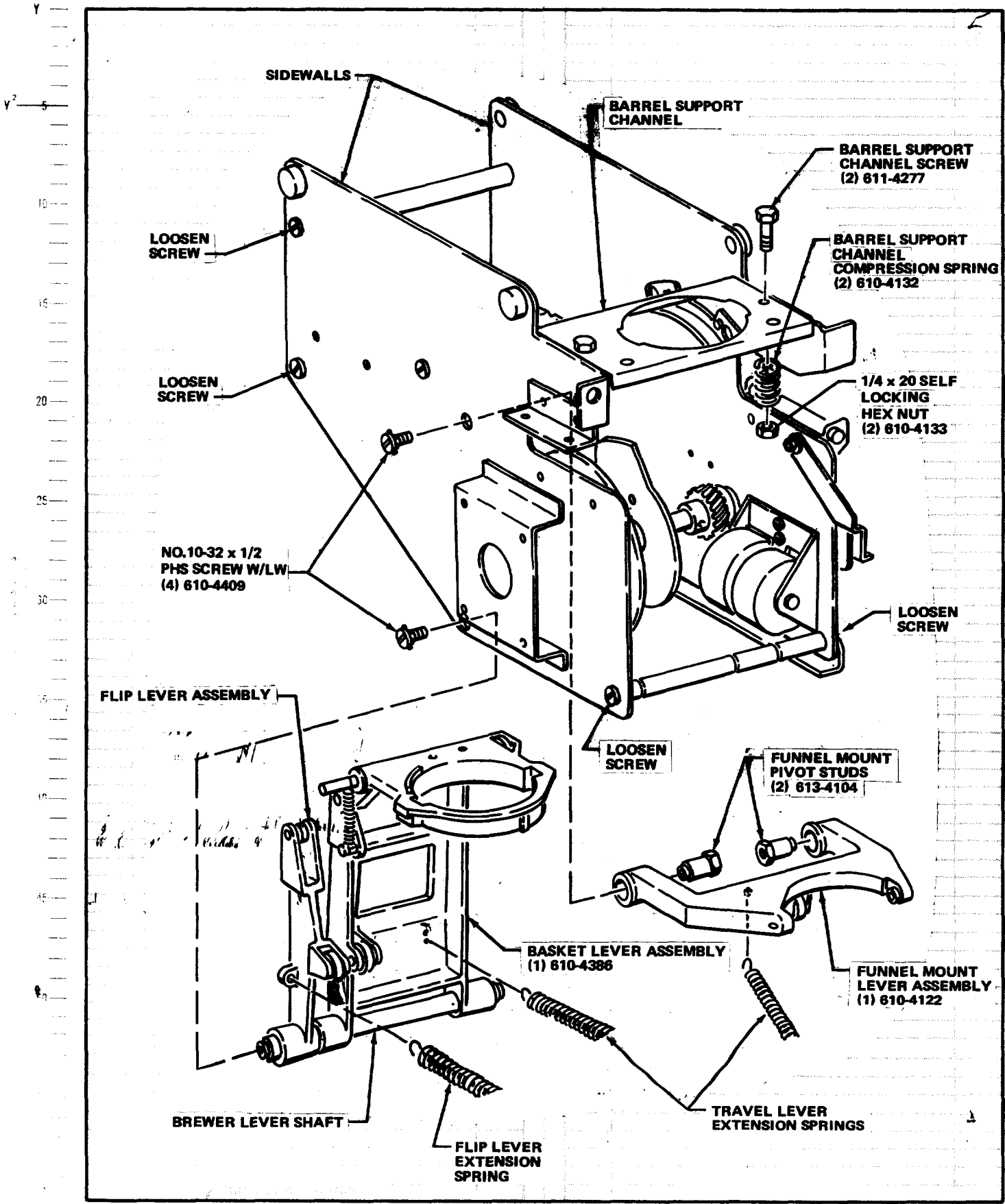


FIGURE 6

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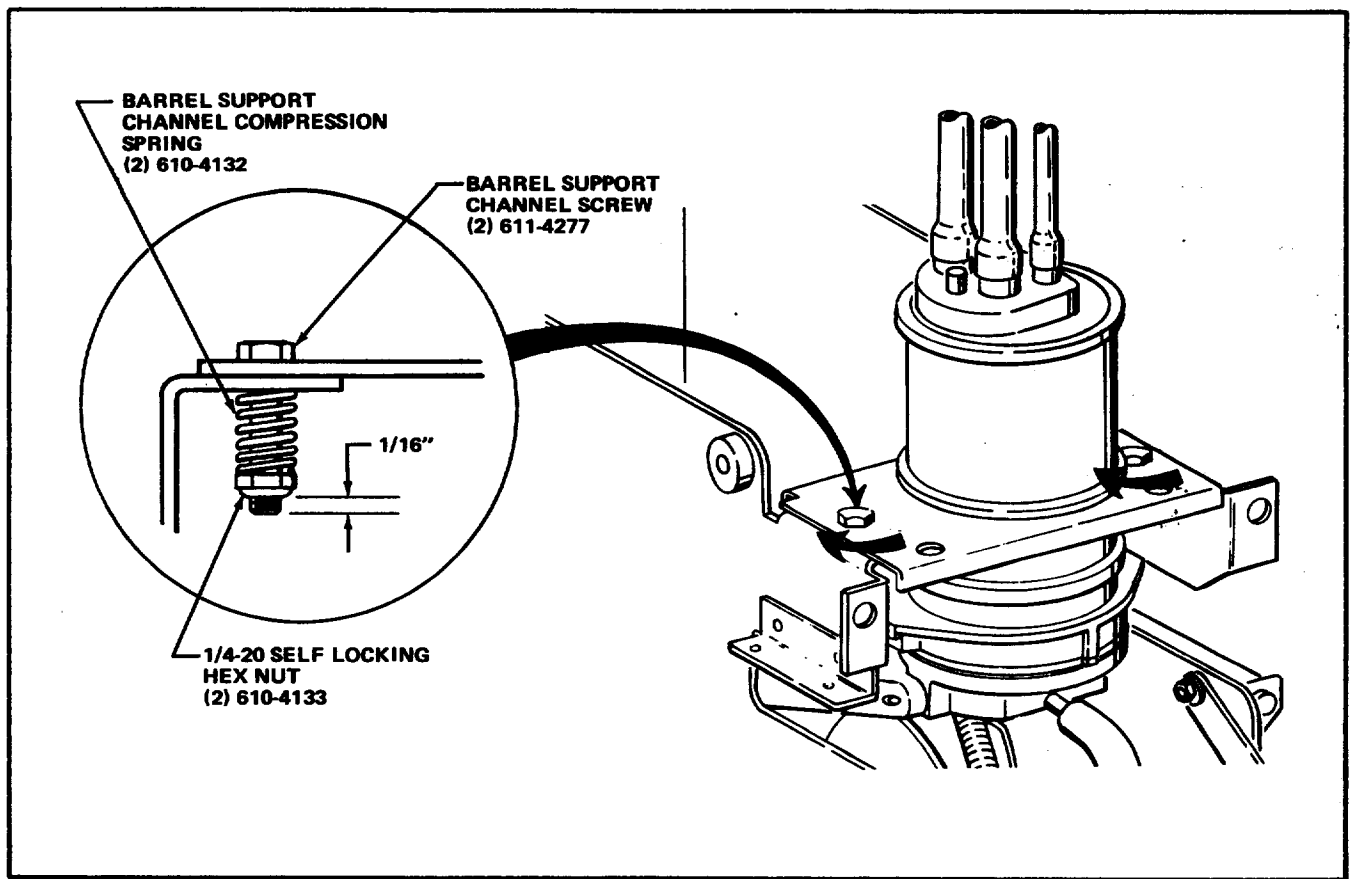


FIGURE 7

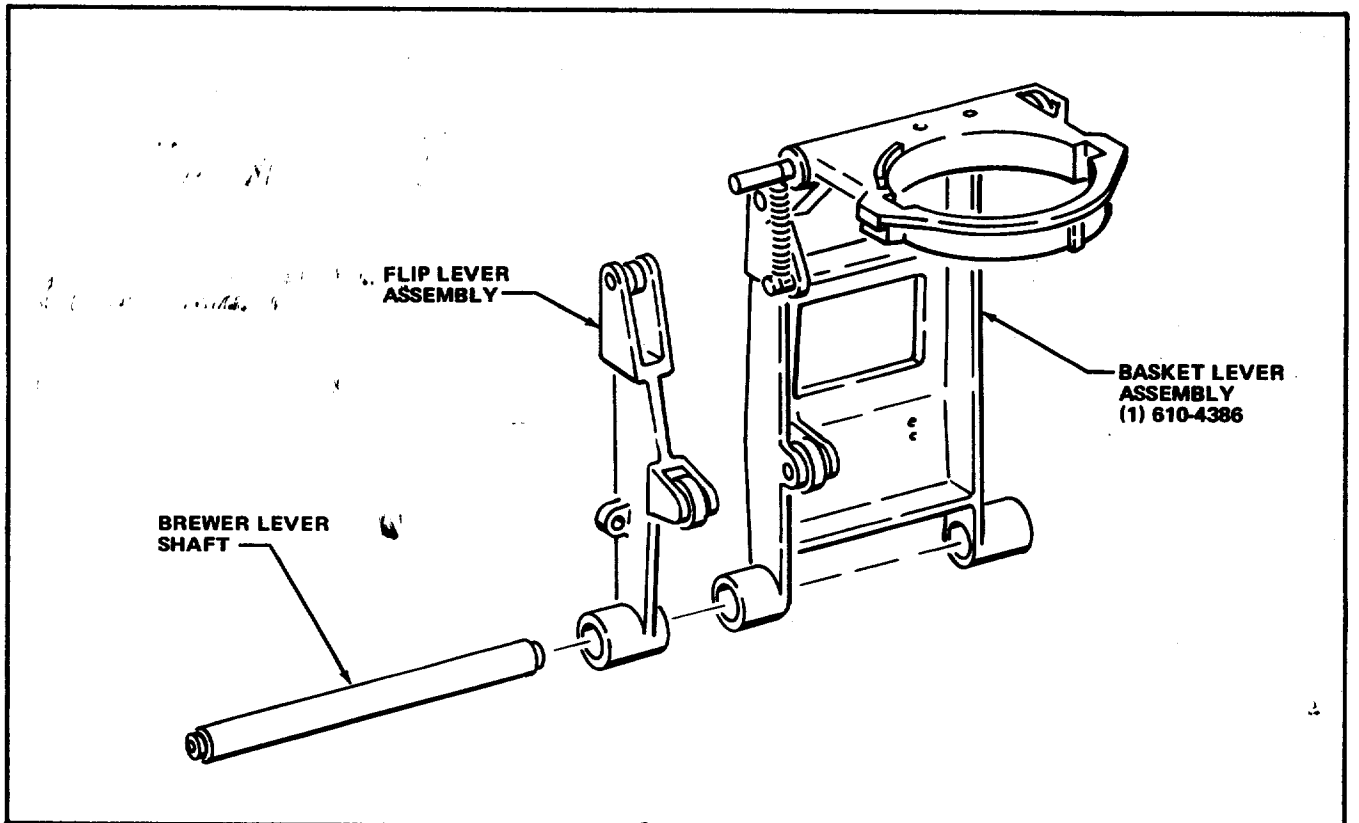


FIGURE 8



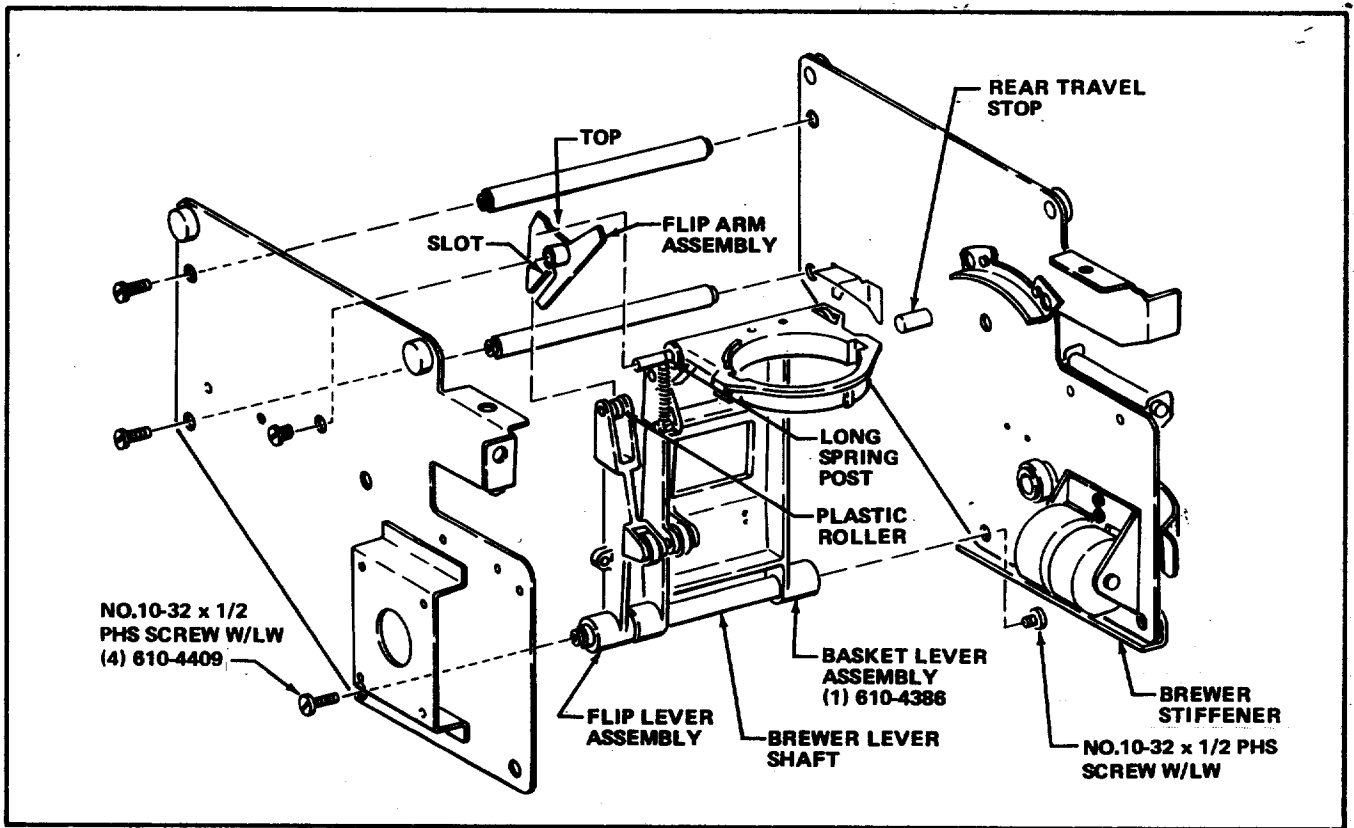


FIGURE 9

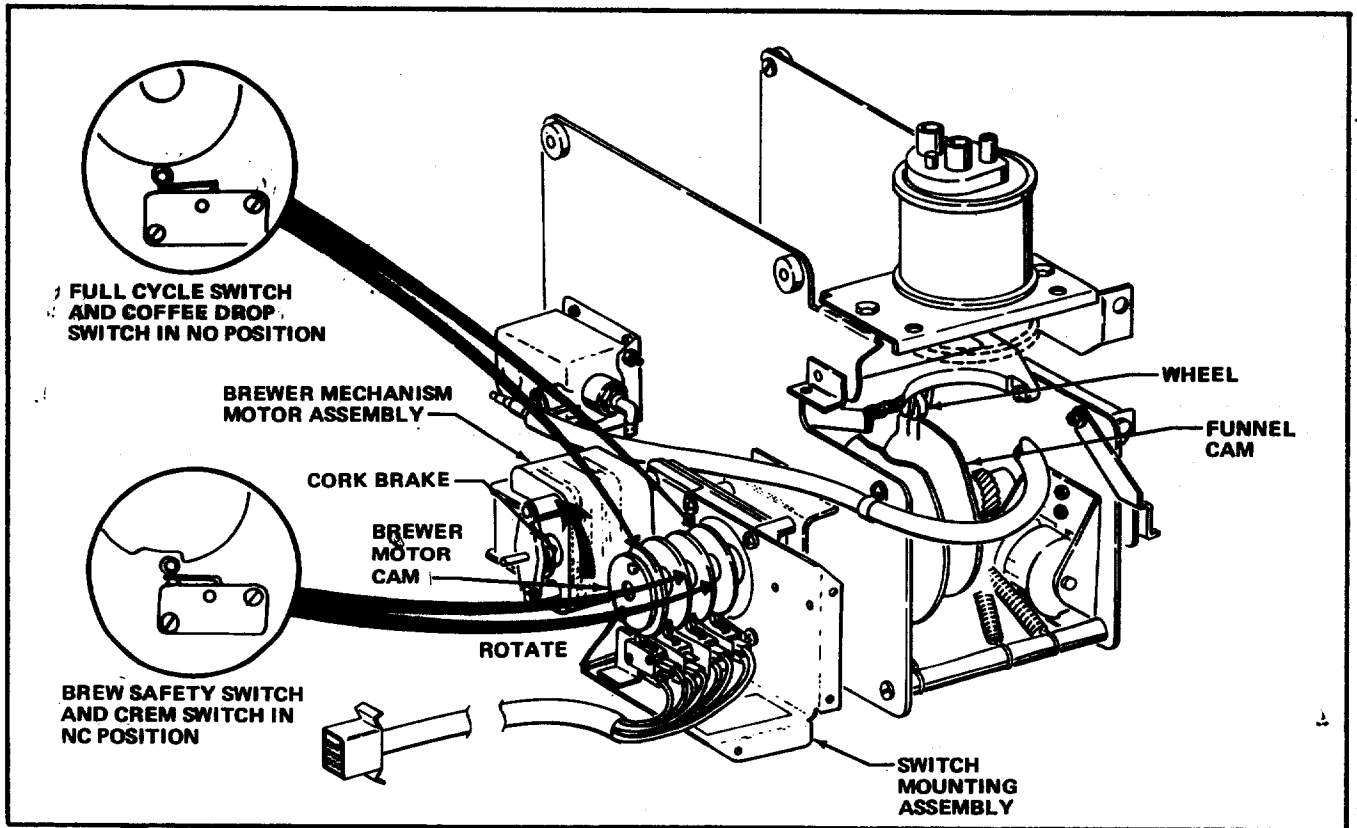


FIGURE 10

16. Install the Brewer Seal, Part Number 610-4142, included in the Kit, in the groove of the Lower Brewer Barrel Assembly by pushing the Brewer Seal on opposite sides until it seats in the groove. See Figure 4.

17. Install the Brewer Barrel Assembly by fitting the ears on the Barrel into the slots in the Barrel Support Channel. Rotate the Barrel until the word "REAR" on the top of the Brewer Barrel Assembly is towards the rear of the Brewer Mechanism. See Figure 4.

18. Install the longer Flip Lever Extension Spring, from the groove in the left side of the Spring Mounting Spacer to the hole in the Flip Lever Assembly. See Figure 6.

19. Install the Travel Lever Extension Spring, from the middle groove in the Spring Mounting Spacer to the hole in the Funnel Mount Lever Assembly. See Figure 6.

20. Install the second Travel Lever Extension Spring, from the groove in the right side of the Spring Mounting Spacer to the hole in the Basket Lever Assembly. See Figure 6.

**NOTE**

*Steps 21 and 24 apply only to Merchandisers equipped to use Filter Paper.*

21. Install the Filter Tape Housing and Door Assembly on the Left Sidewall and secure with four No.8-32 x 1/4 Pan Head Screws with Lockwashers. See Figure 1.

22. Install the Control Switch Cover on the Switch Mounting Bracket Assembly and secure with three No.8-32 x 1/4 Pan Head Screws with Lockwashers. See Figure 1.

23. Slide the Brewer and Housing Assembly into the Merchandiser and lock into place with the Brewer Mechanism Latch. See Figure 1.

24. Lift the Pinch Roll Arm Retainer and hold open the Pinch Roll Arm Assembly. Thread the Filter Paper over the Coffee Funnel Assembly, over the right hand roller, between the Filter Paper Feed Rollers and Idler Rollers, and down into the Waste Pail. See Figure 11.

**NOTE**

*Step 25 applies only to Merchandisers equipped with a Pulsator Assembly.*

25. Connect the Coffee Funnel Tube to the Coffee Funnel. See Figure 2.

26. Install the Brewer Guard on the Brewer Mechanism. See Figure 1.

27. Install the tubing from the Brewer Water Valve Funnel, Cleaning Mechanism, and Air Vent Valve to the Brewer Barrel Assembly. See Figure 12.

**NOTE**

*Step 28 applies only to Merchandisers not equipped with a Pulsator Assembly.*

28. Install the tubing from the Relief Chamber Assembly and the Drain Tee to the Brewer Valve on the left side of the Brewer Mechanism. See Figure 1.

29. Connect the Brewer Mechanism Harness to the Merchandiser. See Figure 1 if Merchandiser is not equipped with a Pulsator Assembly. See Figure 2 if Merchandiser is equipped with a Pulsator Assembly.

30. Position the Main Power Switch in the Merchandiser to the "ON" position.

31. Test vend the Merchandiser.

32. Check for leaks around the Brewer Seal when the Brewer Barrel Assembly, Brewer Basket Assembly and Coffee Funnel Assembly seal.

33. If a leak is noticed, tighten the two Barrel Support Channel Screws by rotating both Screws one-half turn in a clockwise direction. See Figure 7.

34. Test vend the Merchandiser.

35. If a leak still exists, repeat steps 33 and 34.

36. Close the Cabinet Door.

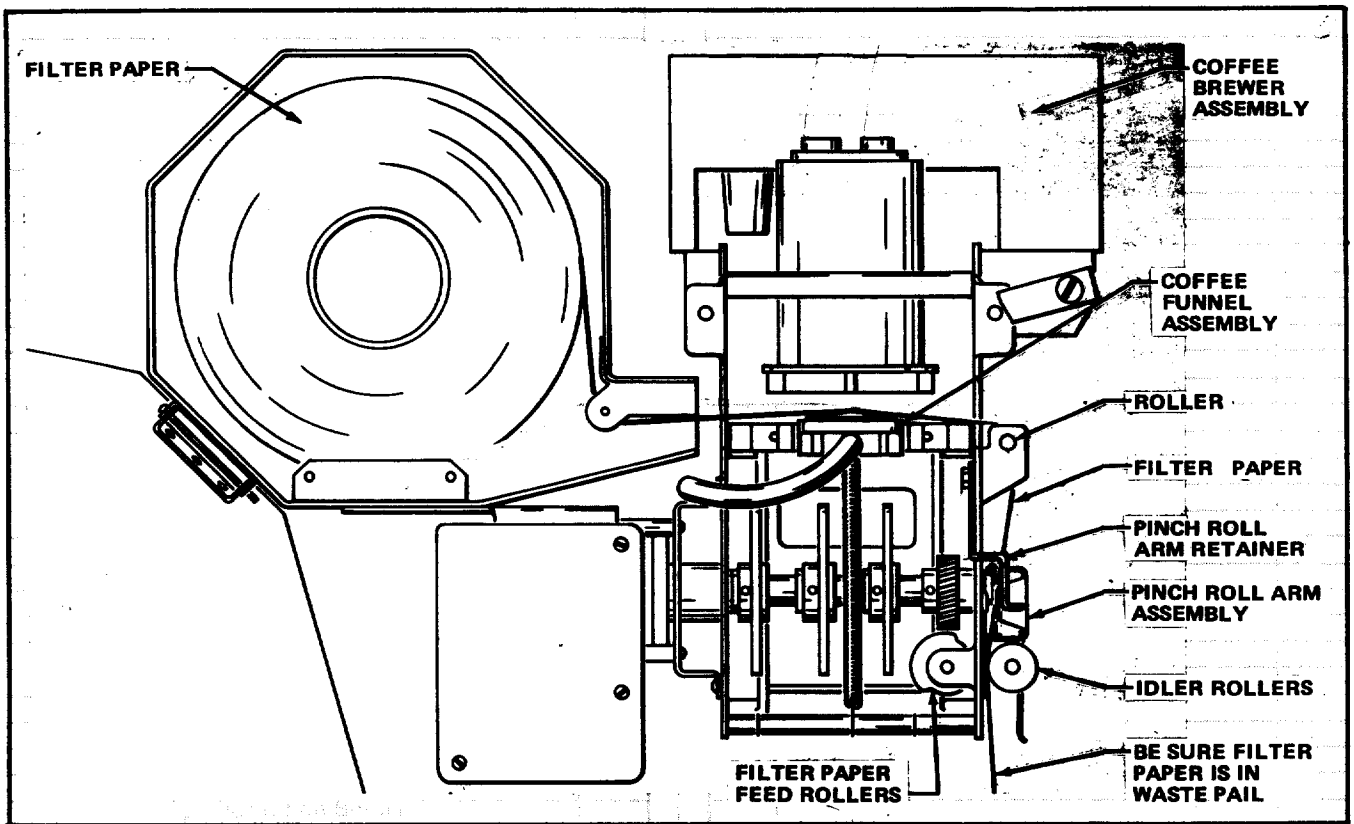


FIGURE 11

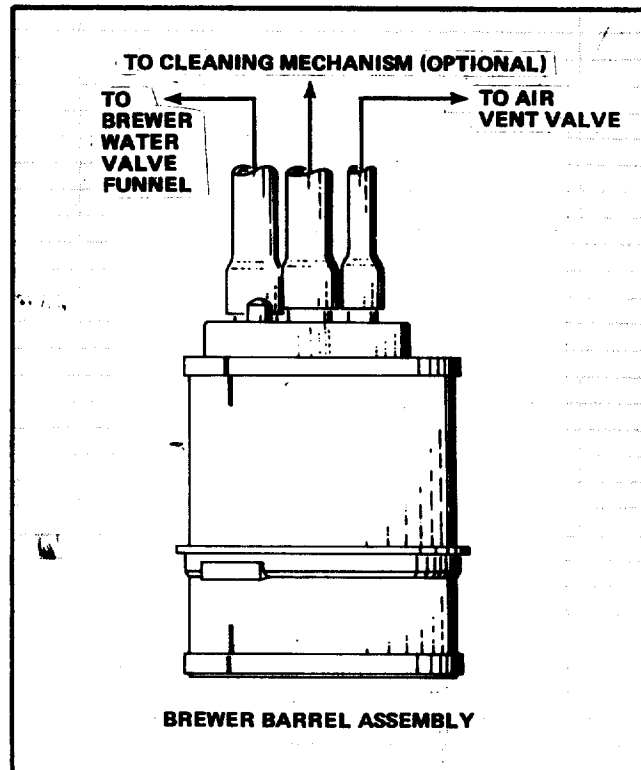


FIGURE 12

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