


PART NO. 613-3181		PART NAME KIT-UPGRADING CUP DISPENSER MECHANISM			DATE 2-10-75		-TOLERANCES- UNLESS OTHERWISE SPECIFIED FRACTIONAL ± 1/4 DECIMAL ± .005 ANGLES ± 1/2° CONCENTRICITY T.I.R..018 DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE		DATE 2-6-89 N-4078 8-19-89 11-21-89	REVISION ① ② ③ ④	CHECKED BY SRP SRP SRP
NO. REQ'D. PER MACHINE ---		MATERIAL SEE BELOW			FINISH ---						
NATIONAL VENDORS® 5055 NATURAL BRIDGE AVE. A DIVISION OF UMC INDUSTRIES, INC. ST. LOUIS, MO. 63115				DRAWN BY JP	DESIGN CHECKED BY 	DRAWING CHECKED BY	SCALE				

QTY.	ASSEM.

THIS ASSEMBLY CONSISTS OF THE FOLLOWING:

<u>QUANTITY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	613-3182	INSTRUCTIONS-INSTALLATION
2	6133048	BUSHING-RETAINER
1	9900-182	SCREW-#10-24 x 5/8 RHS T/CUTTING
2	9900-174	SCREW-#8-32 x 5/16 RHS S/TAPPING
1	9900-207	NUT-#10-32 SELF LOCKING
1	9900-437	RETAINING RING "E" TYPE-.375
4	9900-204	SCREW-#8-32 x 5/8 RHS S/TAPPING
4	9900-166	SCREW-#8-32 x 5/16 THS S/T
1	5220-483	SPRING-NICKEL RATCHET PAWL
1	404-2038	SPRING-COIN RETURN KNOB
1	613-3164	SPRING-DRIVE ARM
1	404-1081	SPACER-MOTOR MOUNTING PLATE
1	404-1082	SCREW-#10-32 x 1-1/2 RHS T/CUTTING
1	Ⓐ 613-3158	SHAFT & INDEX ASSEMBLY
1	613-3075	TUBE ASSY.-TORQUE
1	ⒸⒹ 3153041	ARM ASSY.-DRIVE
1	ⒸⒹ 6203103	FINGER-INDEXING

ALL SUITABLY PACKAGED PER ORDER.

PART NO. 613-3181		PART NAME KIT-UPGRADING CUP DISPENSER MECHANISM			DATE 2-10-75	-TOLERANCES- UNLESS OTHERWISE SPECIFIED FRACTIONAL $\pm \frac{1}{64}$ DECIMAL $\pm .005$ ANGLES $\pm \frac{1}{2}^\circ$ CONCENTRICITY T.I.R. .010 DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE	DATE 2-2-69 11-4-072	REVISION Amals 3153041 WAS 6133173 3153040 WAS 6133172	CHECKED BY SP
NO. REQ'D. PER MACHINE ---	MATERIAL SEE BELOW			FINISH ---					
NATIONAL VENDORS® 5065 NATURAL BRIDGE AVE. A DIVISION OF UMC INDUSTRIES, INC. ST. LOUIS, MO. 63115				DRAWN BY JP	DESIGN CHECKED BY 	DRAWING CHECKED BY	SCALE		

QTY.	ASSEM.

THIS ASSEMBLY CONSISTS OF THE FOLLOWING:

<u>QUANTITY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	613-3182	INSTRUCTIONS-INSTALLATION
2	6133048	BUSHING-RETAINER
1	9900-182	SCREW-#10-24 x 5/8 RHS T/CUTTING
2	9900-174	SCREW-#8-32 x 5/16 RHS S/TAPPING
1	9900-207	NUT-#10-32 SELF LOCKING
1	9900-437	RETAINING RING "E" TYPE-.375
4	9900-204	SCREW-#8-32 x 5/8 RHS S/TAPPING
4	9900-166	SCREW-#8-32 x 5/16 THS S/T
1	5220-483	SPRING-NICKEL RATCHET PAWL
1	404-2038	SPRING-COIN RETURN KNOB
1	613-3164	SPRING-DRIVE ARM
1	404-1081	SPACER-MOTOR MOUNTING PLATE
1	404-1082	SCREW-#10-32 x 1-1/2 RHS T/CUTTING
	Ⓐ	
1	613-3158	SHAFT & INDEX ASSEMBLY
1	613-3075	TUBE ASSY.-TORQUE
1	Ⓑ 3153041	ARM ASSY.-DRIVE
1	3153040	FINGER ASSY.-INDEXING

ALL SUITABLY PACKAGED PER ORDER.

INSTALLATION INSTRUCTIONS FOR INSTALLING A CUP DISPENSER UPGRADING KIT IN A NATIONAL VENDORS®, CROWN SEVENTY TWO®, SERIES OR GOLDEN FURNITURE LINE HBM-614 AND HBM-618 HOT BEVERAGE MERCHANDISER

These instructions cover the procedure for installing a Cup Dispenser Upgrading Kit in a Crown Seventy Two®, Series or Golden Furniture Line HBM-614 and HBM-618 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 613-3181, contains the following parts:

Part Number	Description	Quantity
613-3075	Torque Tube Assembly	1
9900-204	No. 8-32 x 5/8 RHS S/T Screw	4
613-3074	Drive Motor Arm Assembly	1
9900-174	No. 8-32 x 5/16 RHS S/T Screw	2
613-3076	Drive Arm Assembly	1
9900-207	No. 10-32 Self Locking Nut	1
613-3158	Shaft and Index Assembly	1
9900-437	.375 Type "E" Retaining Ring	1
613-3173	Drive Turret Arm Assembly	1
613-3048	Retainer Bushing	2
9900-182	No.10-24 x 5/8 RHS S/T Screw	1
404-1081	Spacer	1
613-3172	Indexing Finger Assembly	1
404-1082	No.10-32 x 1 1/2 RHS S/T Screw	1
5220-483	Indexing Finger Spring	1
404-2038	Cup Feeler Spring	1
613-3164	Drive Arm Spring	1
9900-166	No. 8-32 x 5/16 THS S/T Screw	4
613-3182	Installation Instructions	1
	* * *	

TO INSTALL THE KIT

NOTE

The Cup Dispenser Assembly will have to be properly adjusted after the Kit has been installed. See the Set-Up Instructions for the proper procedures.

A. PARTS REMOVAL OF THE CUP TURRET ASSEMBLY

1. Unlock and open the Cabinet Door.
2. Move the Main Switch in the Merchandiser to the OFF position.
3. Release the Cup Dispenser Assembly Latch and rotate the Cup Dispenser Assembly out of the Cabinet.
4. Remove the Cup Turret Cover from the Cup Turret Assembly. See Figure 1.

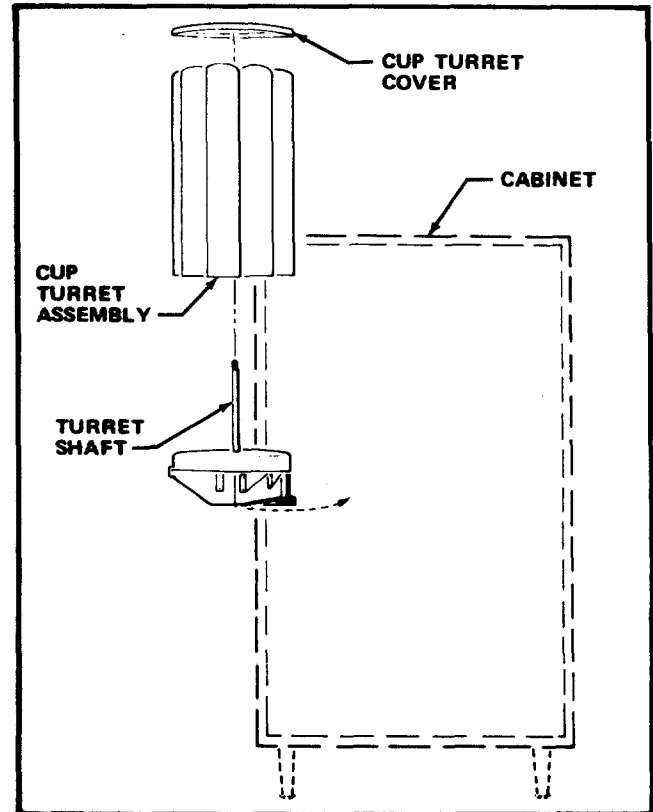


FIGURE 1

5. Lift the Cup Turret Assembly off the Turret Shaft and remove the Cups. See Figure 1.
 6. Remove two No. 8-32 x 5/8 Round Head Self Tapping Screws and the top Turret Plate from the Cup Turret Assembly. See Figure 2.
 7. Remove the Cup Tubes from the Cup Turret Assembly. See Figure 2.
 8. Remove two No. 8-32 x 5/8 Round Head Self Tapping Screws and the Torque Tube Assembly from the bottom Turret Plate. See Figure 2.
- ### B. INSTALLATION OF THE REPLACEMENT TORQUE TUBE ASSEMBLY
1. Attach the replacement Torque Tube Assembly, Part Number 613-3075, included in the Kit, to the bottom Turret Plate using two No. 8-32 x 5/8 Round Head Self Tapping Screws, Part Number 9900-204, included in the Kit. See Figure 2.
 2. Install the Cup Tubes on the bottom Turret Plate. See Figure 2.

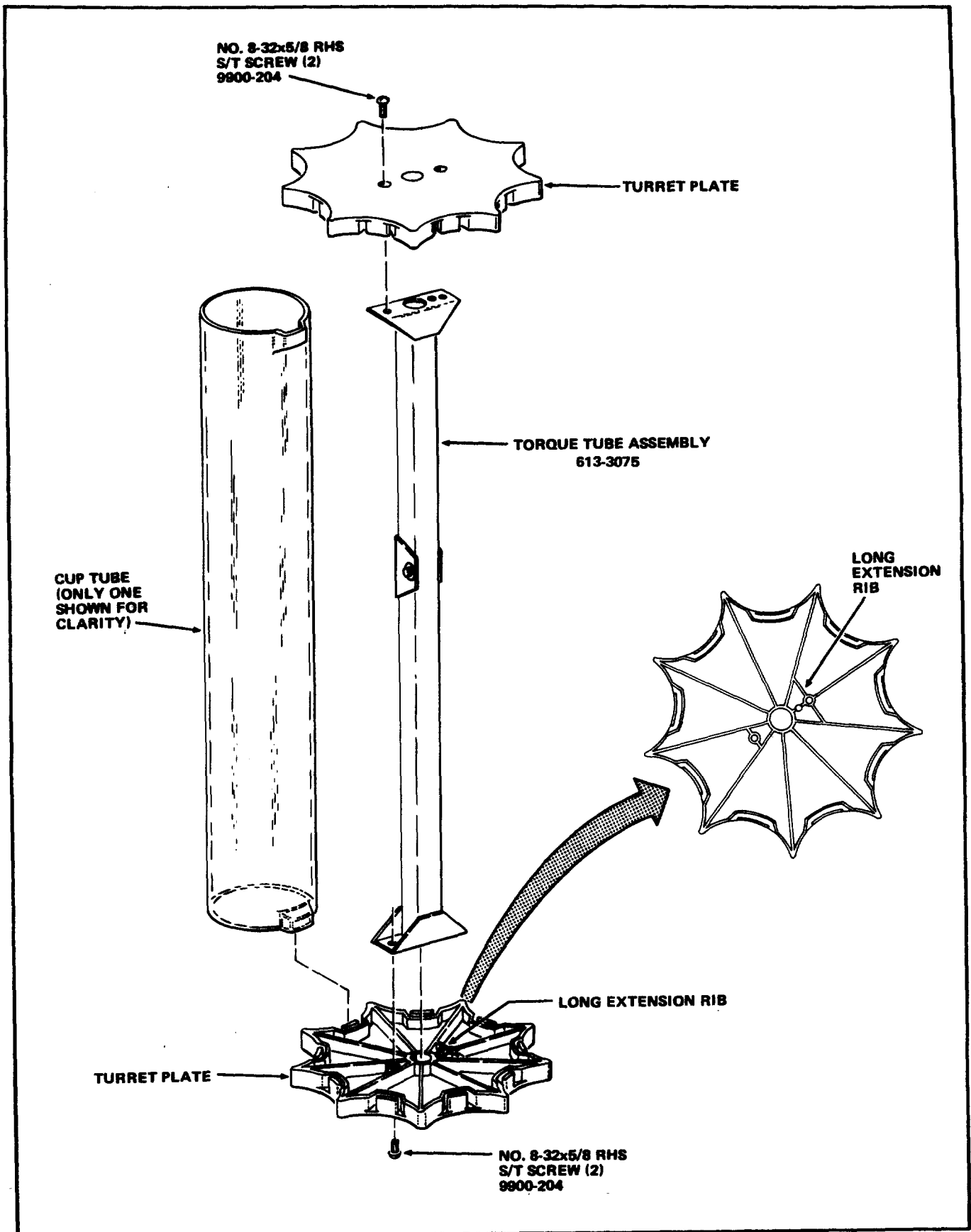


FIGURE 2

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CAUTION

The Long Extension Rib on the top Turret Plate MUST be on the same side of the Torque Tube Assembly as the Long Extension Rib on the bottom Turret Plate. See Figure 2.

3. Install the top Turret Plate by fitting the Cup Tubes in the Turret Plate. Attach the Turret Plate to the Torque Tube Assembly with two No. 8-32 x 5/8 Round Head Self Tapping Screws, Part Number 9900-204, included in the Kit. See Figure 2.

C. PARTS REMOVAL OF THE CUP DISPENSER MECHANISM

1. Remove four No. 8-32 x 5/16 Truss Head Self Tapping Screws attaching the Cup Dispenser Cover to the Cup Dispenser Top Plate Assembly and lift the Cup Dispenser Cover from the Turret Shaft. See Figure 3.
2. Unhook the Cup Feeler Spring from the Cup Feeler and Cover Support and remove the Spring from the Cup Dispenser Mechanism. See Figure 3.
3. Unhook the Drive Arm Spring from the Drive Arm Assembly and Drive Motor Arm Assembly and remove the Spring from the Cup Dispenser Mechanism. See Figure 3.

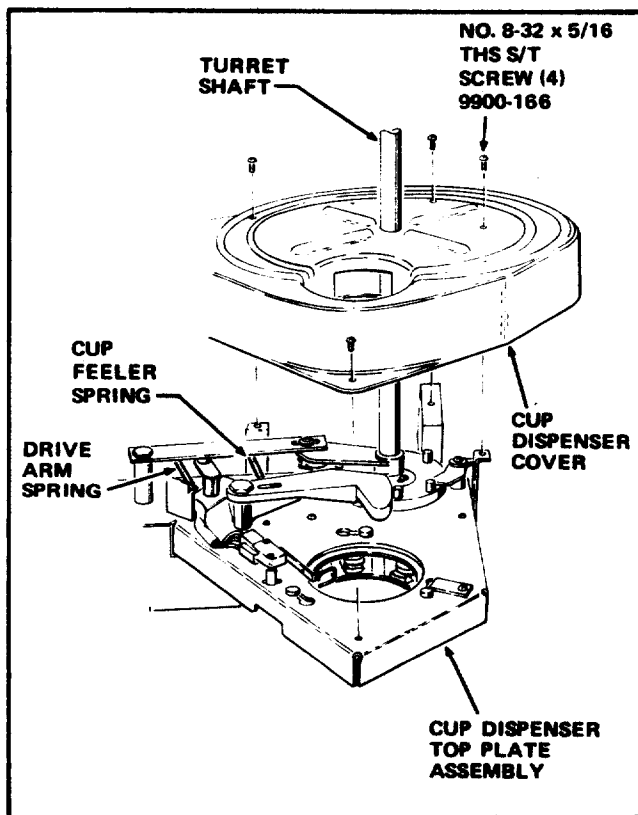


FIGURE 3

4. Remove the No. 10-24 x 5/8 Round Head Self Tapping Screw and Retainer Bushing from the top of the Drive Arm Assembly. See Figure 4.
5. Lift the Drive Turret Arm Assembly from the Turret Shaft. See Figure 4.
6. Remove the Indexing Finger Spring from the Cover Support on the Cup Dispenser Mechanism. See Figure 4.
7. Remove the No. 10-32 x 1 1/2 Round Head Self Tapping Screw, Retainer Bushing, Indexing Finger, Indexing Finger Spring and Spacer from the Cup Dispenser Top Plate Assembly. See Figure 4.
8. Remove the .375 Type "E" Retaining Ring from the bottom of the Cup Dispenser Mechanism and remove the Shaft and Index Assembly from the Cup Dispenser Mechanism. See Figure 4.
9. Remove the No. 10-32 Self Locking Nut, Bushing Insert, Pivot Stud and Drive Arm Assembly from the Cup Dispenser Mechanism. Retain the Bushing Insert and Pivot Stud. See Figure 4.
10. Remove the No. 8-32 x 5/16 Round Head Self Tapping Screws attaching the Drive Motor Arm Assembly to the Cup Dispenser Top Plate Assembly. See Figure 4.
11. Slide the Arm and Screw Assembly over and lift the Drive Motor Arm Assembly from the Cup Dispenser Mechanism. See Figure 4.

D. INSTALLATION OF THE PARTS ON THE CUP DISPENSER MECHANISM

1. Install the replacement Drive Motor Arm Assembly, Part Number 613-3074, included in the Kit, through the cut out section of the Cup Dispenser Top Plate Assembly and place the Drive Motor Arm Coupling on the Cup Dispenser Motor Shaft. Fit the roll pin of the Cup Dispenser Motor Shaft in the slot in the Drive Motor Arm Coupling. See Figure 5.
2. Attach the Cup Mechanism Harness, Wire Clamp, and Drive Motor Arm Assembly to the Cup Dispenser Top Plate Assembly with two No. 8-32 x 5/16 Round Head Self Tapping Screws, Part Number 9900-174, included in the Kit. See Figure 5.
3. From underneath the Cup Dispenser Mechanism fit the Cup Drop Ring Lever in the square hole in the end of the Arm and Screw Assembly. See Figure 6.

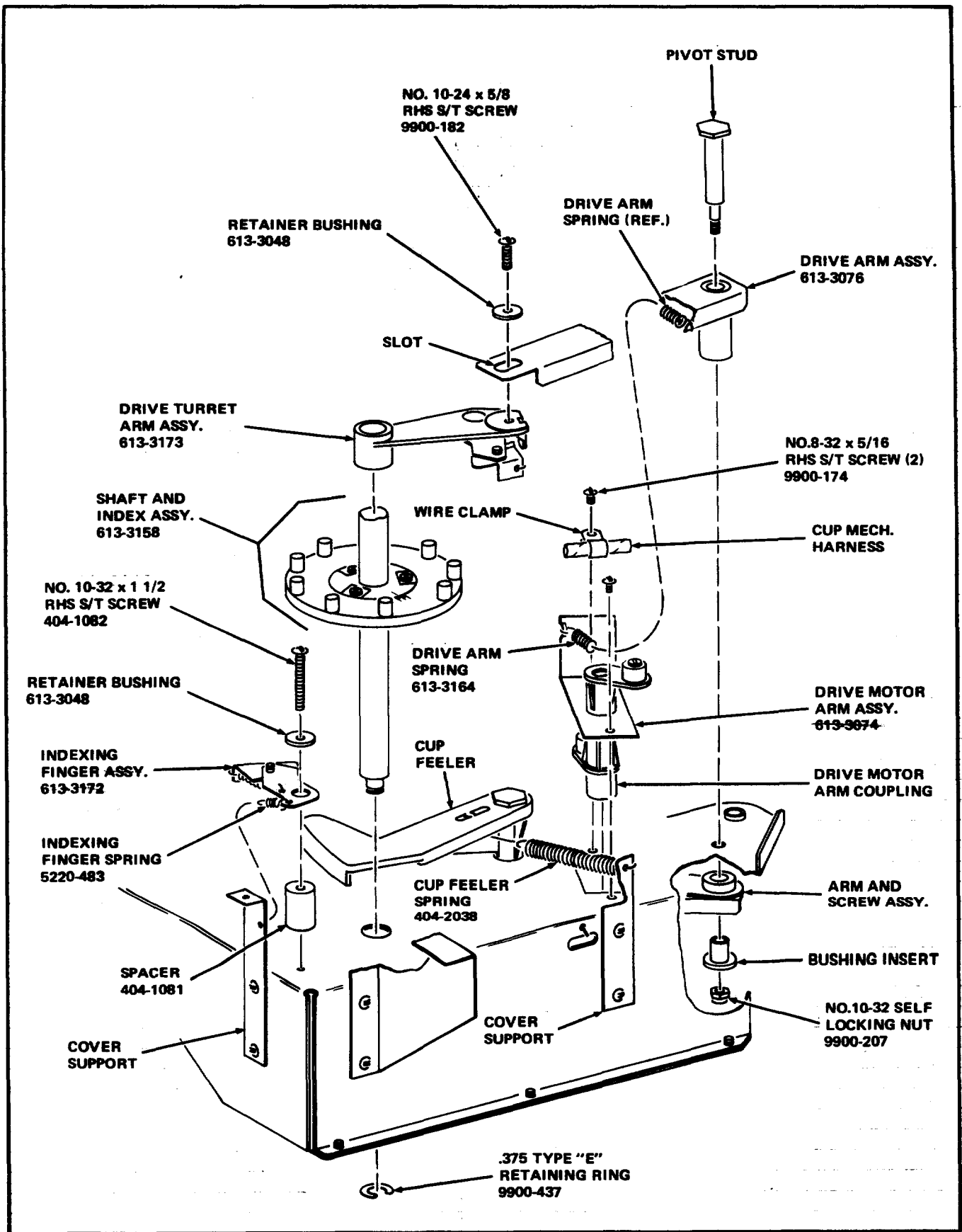


FIGURE 5

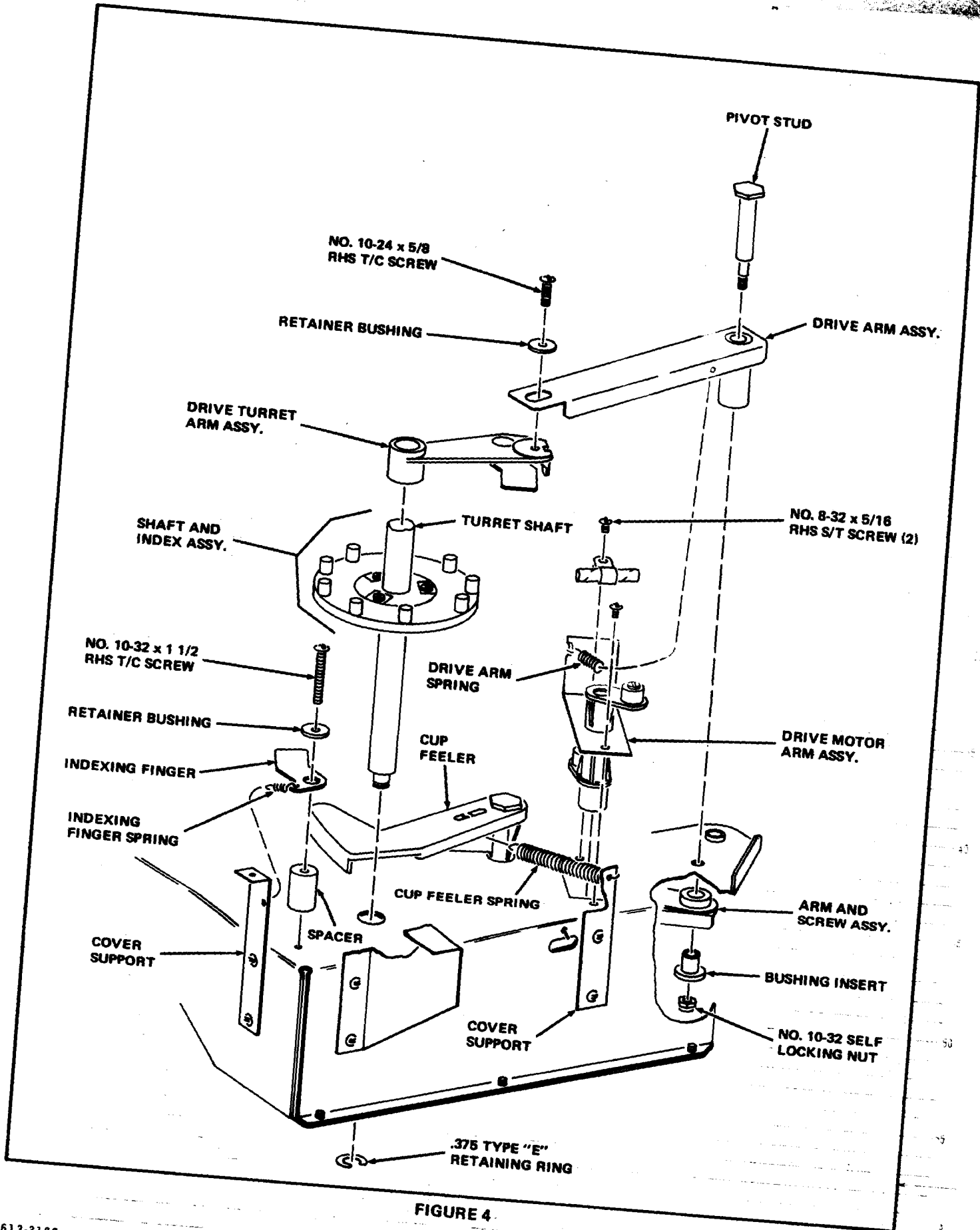


FIGURE 4

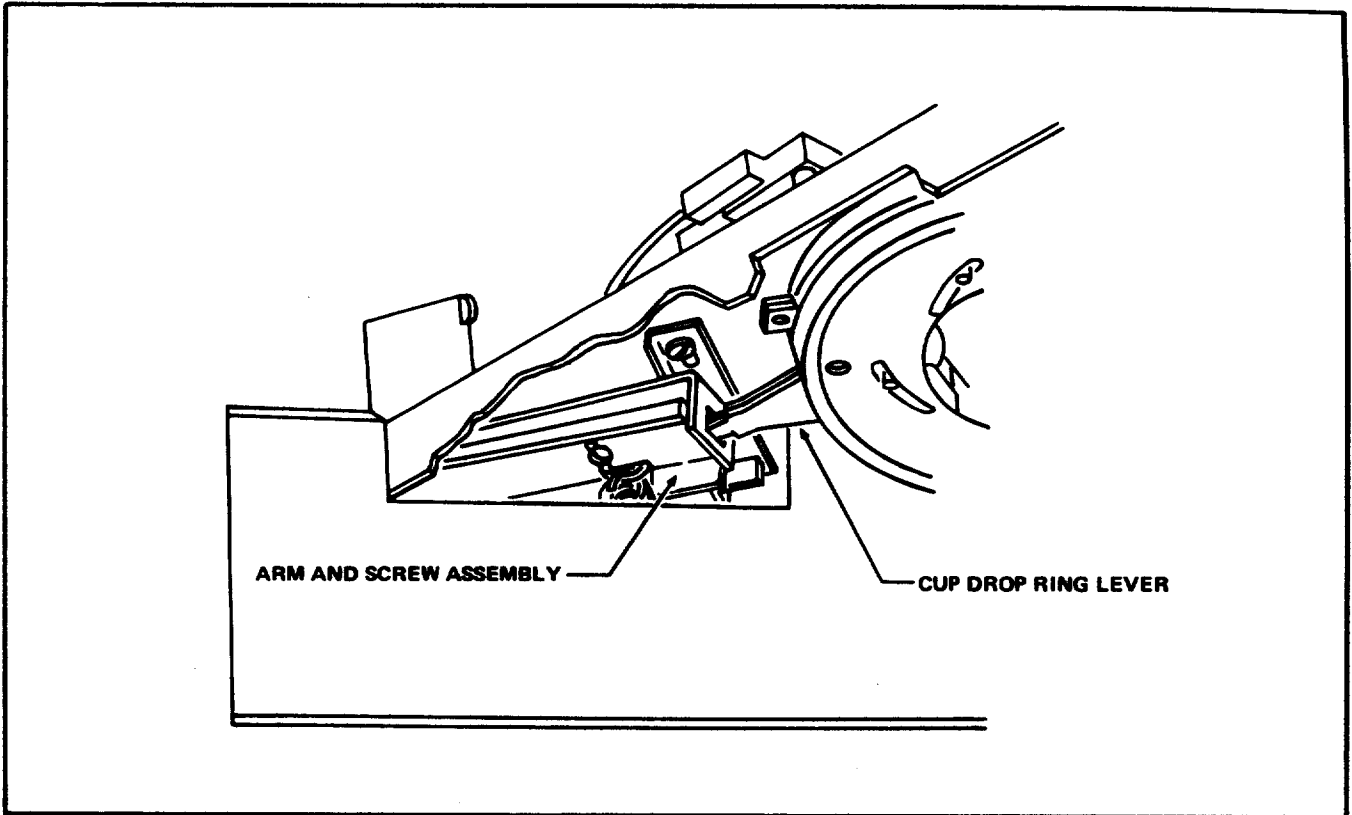


FIGURE 6

4. Place the replacement Drive Arm Assembly, Part Number 613-3076, included in the Kit, on top of the Cup Dispenser Top Plate Assembly and fit the Pivot Stud, removed in Step C-9, through the Drive Arm Assembly, Cup Dispenser Top Plate Assembly, and Arm and Screw Assembly. Attach with the Bushing Insert removed in Step C-9 and a No. 10-32 Self Locking Nut, Part 9900-207, included in the Kit. Be sure the Cup Drop Ring Lever is in the square hole of the Arm and Screw Assembly. See Figures 5 and 6.
5. Install the Shaft and Index Assembly, Part Number 613-3158, included in the Kit, by fitting the bottom of the Shaft through the Cup Dispenser Mechanism. Attach a .375 Type "E" Retaining Ring, Part Number 9900-437, included in the Kit, to the bottom of the Shaft from underneath the Cup Dispenser Mechanism. See Figure 5.
6. Slide the Drive Turret Arm Assembly, Part Number 613-3173, included in the Kit, down the Turret Shaft making sure the Indexing Finger Assembly is toward the bottom of the Drive Turret Arm Assembly. Fit the corner of the Indexing Finger Assembly behind one of the Studs on the Turret Index Assembly as shown in Figure 7. Rotate the Turret Index Assembly until the Hole in the Drive Turret Arm is directly under the Slot in the Drive Arm Assembly. See Figure 5 and 7.

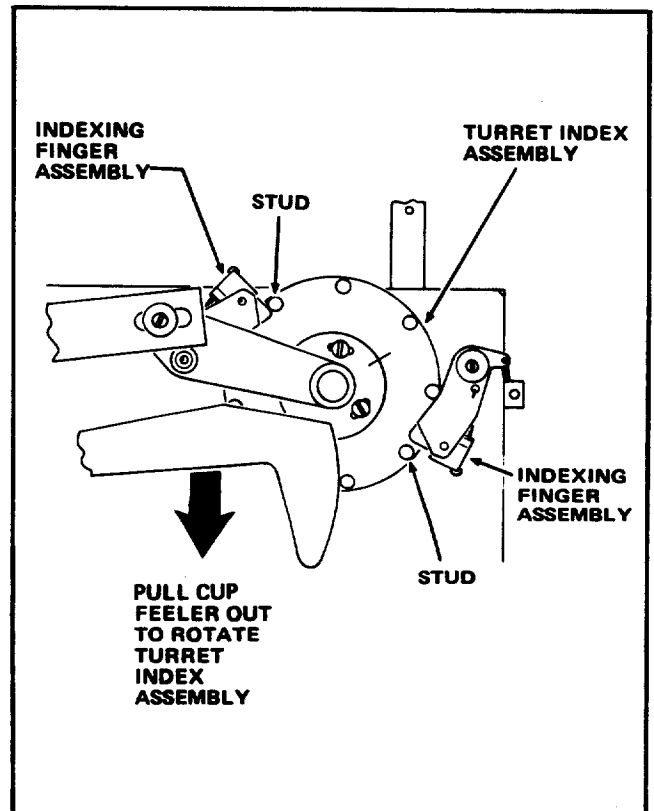


FIGURE 7

7. Attach the Drive Arm Assembly to the Drive Turret Arm Assembly with a Retainer Bushing, Part Number 613-3048, and a No.10-24 x 5/8 Round Head Self Tapping Screw, Part Number 9900-182, both included in the Kit. See Figure 5.
8. Place the Spacer, Part Number 404-1081, under the hole in the Indexing Finger Assembly, Part Number 613-3172, and connect with a Retainer Bushing, Part Number 613-3048, and No. 10 x 32 x 1 1/2 Round Head Self Tapping Screw, Part Number 404-1082, all included in the Kit. See Figure 5.
9. Attach the assembled Spacer, Indexing Finger Assembly, Retainer Bushing and Screw to the Cup Dispenser Top Plate Assembly, making sure the corner of the Indexing Finger Assembly fits behind one of the Studs on the Turret Index Assembly. See Figure 7.
10. Attach the Indexing Finger Spring, Part Number ~~5220-483~~, included in the Kit, to the hole in the Indexing Finger Assembly and Cover Support on the Cup Dispenser Mechanism. See Figure 5.

CAUTION

Both Springs must be replaced. Do not replace one Spring without replacing the other.

11. Install the replacement Cup Feeler Spring (longer Spring) Part Number 404-2038, included in the Kit, in the Cup Dispenser Mechanism by attaching one end of the Cup Feeler Spring to the Cup Feeler. Attach the other end of the Cup Feeler Spring to the Cover Support. See Figure 5.

12. Install the replacement Drive Arm Spring, Part Number 613-3164, included in the Kit, in the Cup Dispenser Mechanism by attaching one end of the Drive Arm Spring to the Drive Arm Assembly EXACTLY as shown in Figure 5. Attach the other end of the Drive Arm Spring to the hole in the Drive Motor Arm Assembly EXACTLY as shown in Figure 5.

NOTE

See the Set-Up Instructions for adjustment of the Cup Dispenser Assembly.

13. Install the Cup Dispenser Cover on the Turret Shaft and attach with four No.8-32 x 5/16 Truss Head Self Tapping Screws, Part Number 9900-166, included in the Kit. See Figure 2.
14. Install the Cup Turret Assembly on the Turret Shaft and rotate the Cup Turret Assembly until the Shaft Pin engages the notch in the Turret Shaft. See Figure 1.
15. Load the Cup Turret Assembly with Cups.
16. Install the Cup Turret Cover on the Cup Turret Assembly. See Figure 1.
17. Rotate the Cup Dispenser Assembly back into the Cabinet, locking the latch.
18. Move the Main Switch in the Merchandiser to ON position.
19. Test vend the Merchandiser.
20. Close and lock the Cabinet Door.