



INSTRUCTIONS FOR INSTALLING A FILTER PAPER FEED ROLLER KIT, PART NUMBER 611-4126, IN A CROWN SEVENTY TWO SERIES HBM-72 HOT BEVERAGE MERCHANDISER BREWER MECHANISM

Before proceeding with the Kit installation, carefully read the complete Installation Instructions. Then, and only then, make the replacement.

The Filter Tape Feed Roller Kit, part number 611-4126, includes the following parts:

Part Number	Description	Quantity
611-4112	Filter Tape Feed Roll	2
611-4125	Feed Roller Spacer (.070" thick)	1
611-4124	Feed Roller Washer (.020" thick) attaching part	2
611-4111	Feed Roll Holding Screw * * *	2
610-4216	5/32" Diameter Roll Pin	1
610-4133	Self-locking Nut * * *	1
611-4127	Installation Instructions * * *	1

NOTE

1. If the Filter Tape Feed Rollers are attached with Holding Screws, skip Note 3 and do not use the Spacer and Washers included in Kit. Brewers which have Right Side Frames which have the Rollers attached with Holding Screws look the same as the Side Frame in Figure 2.
2. Inspect the Brewer Mechanism Cam Shaft Assembly Drive Gear and Paper Feed Roll Gear And Shaft Assembly Driven Gear for chipped or worn teeth. If the teeth on either or both of these Gears is worn or chipped install a Brewer Mechanism Filter Paper Advance Gear Replacement Kit, part number 610-4466, at the same time the Feed Rollers in this Kit are being installed. See Figure 1.
3. If the Brewer is an early model Brewer Assembly which does not have bearings for the Paper Feed Roll Gear And Shaft Assembly, inspect the holes in the Shaft Assembly mounting ears on the Brewer Right Side Frame for wear. If the holes are elongated, do not install the parts of this Kit, order and install the parts of Brewer Mechanism Assembly Right Side Frame Assembly And Gear Replacement Kit, part number 610-4470. See Figure 1.
4. If the Brewer Mechanism does not have the Stiffener referred to in steps I-F and II-L, National Vendors recommends the installation of Brewer Side Frame Stiffener, part number 610-4307.

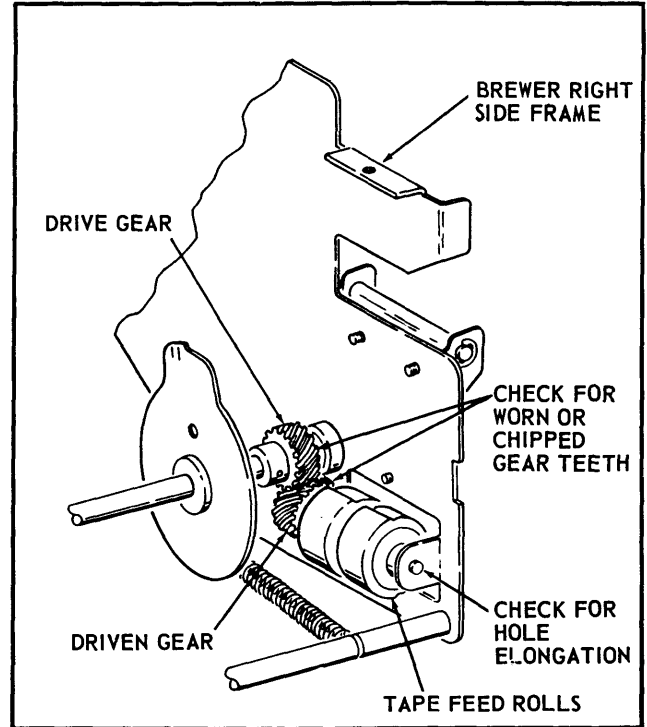


Figure 1.

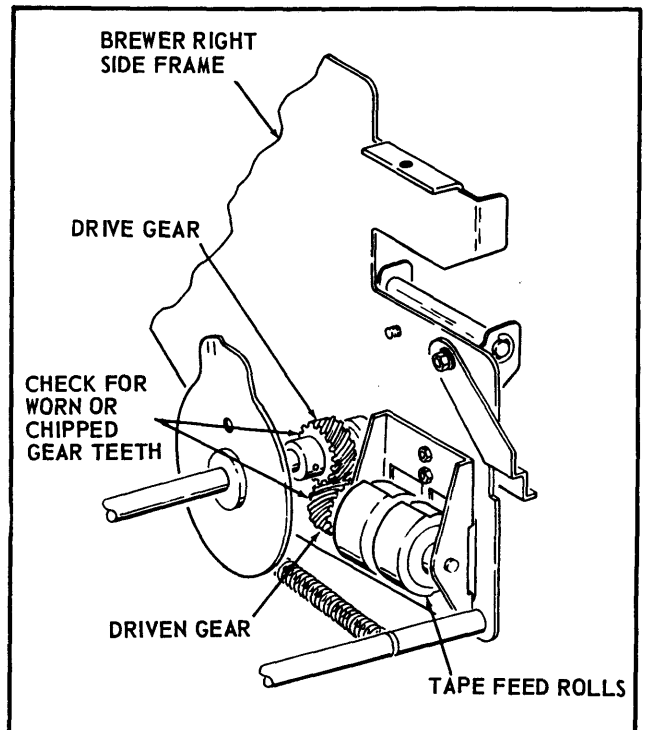


Figure 2.

TO INSTALL THE PARTS OF THE KIT:

I. To Remove The Damaged Feeder Roller From The Brewer Mechanism:

- A. Empty the Brewer of Coffee.
- B. Remove the Brewer Mechanism Assembly from the Merchandiser.
- C. Place the Brewer on a flat surface, in its normal in-cabinet position.
- D. Be sure the Brewer Mechanism Cam Shaft Assembly is in the at-rest position. See Figure 3.
- E. Use a 5/32" drive pin punch to drive the Roll Pin out of the Drive Gear on the Brewer Mechanism Cam Shaft Assembly. See Figure 4.
- F. Remove the three #10-32 x 1/4" Bind Hd. Machine Screws and Lockwashers which attach the Brewer Right Side Frame Assembly at the bottom. See Figure 5. Some Brewer Assemblies may also have a Stiffener which is attached by two of the Screws.
- G. Remove the #10-32 x 1/4" Bind Hd. Machine Screw and Lockwasher which attach the Funnel Lever Stud to the Brewer Right Side Frame Assembly and remove the Stud.

H. Remove the right-hand Self-locking Nut, Barrel Support Channel Compression Spring, and the Barrel Support Channel Screw.

I. Remove the Brewer Right Side Frame Assembly.

NOTE

Inspect the Feed Rollers on the Side Frame:

- 1. If the Feed Rollers are attached with Holding Screws follow step I-J only.
 - 2. If the Feed Rollers are attached with Roll Pins skip step I-J and follow step I-K only.
- J. If the Feed Rollers are attached with Holding Screws remove the Holding Screw from each Roller and pull the Paper Feed Roll Gear And Shaft Assembly out of the Frame Assembly. The Rollers will slide off the Shaft. See Figure 6.

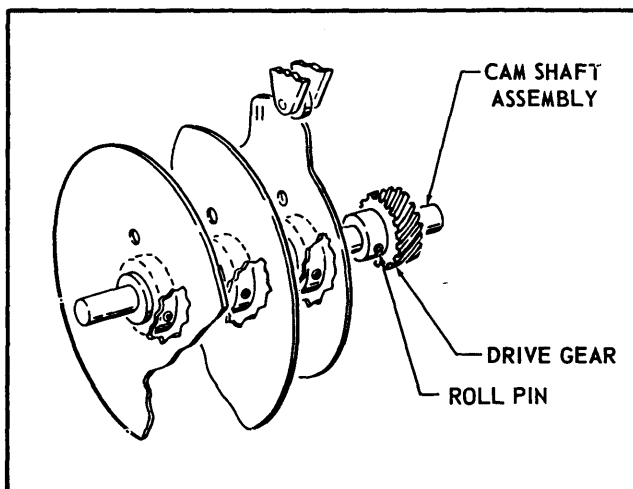


Figure 3.

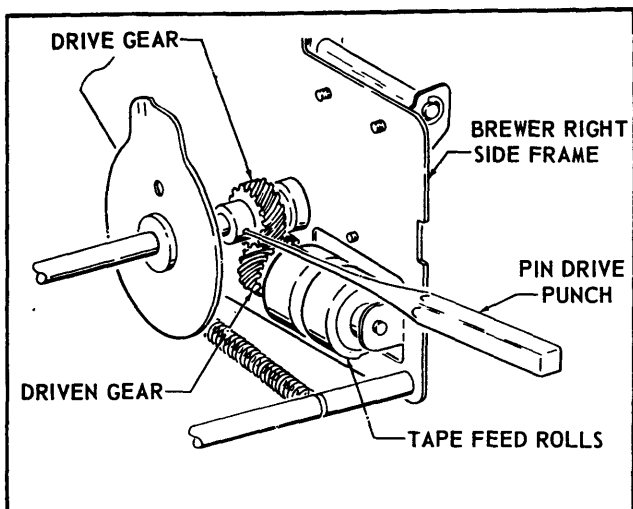


Figure 4.

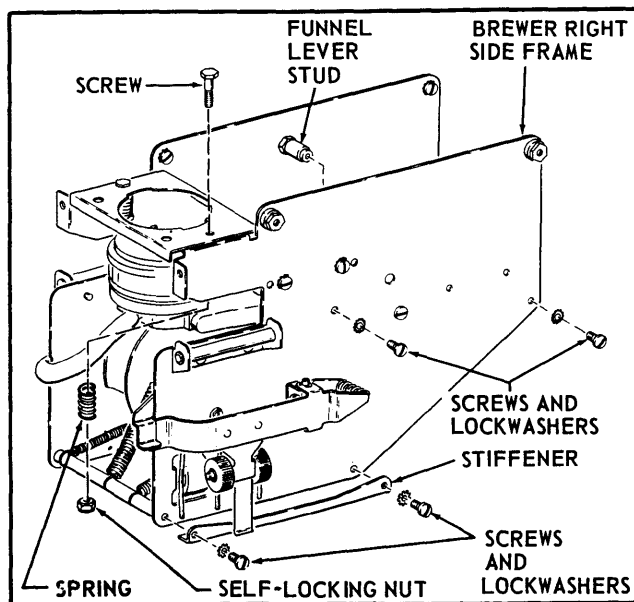


Figure 5.

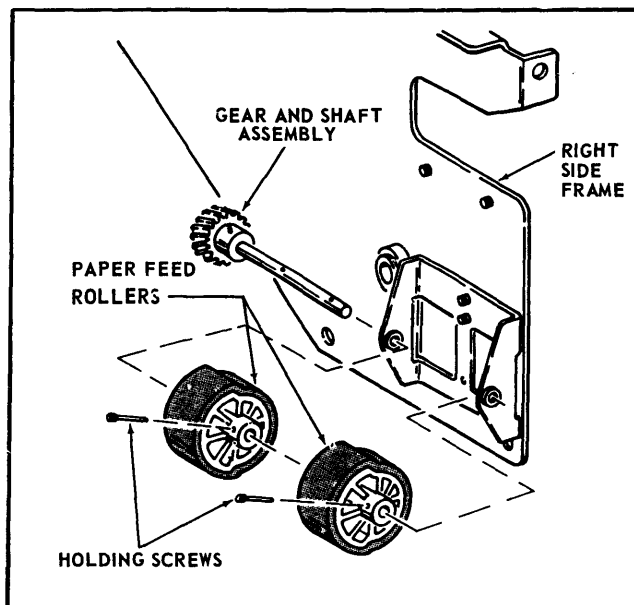


Figure 6.

K. If the Feed Rollers are attached with Roll Pins use a 3/32" drive pin punch to drive the Roll Pin out of each Roller and pull the Paper Feed Roll Gear And Shaft Assembly out of the Frame Assembly. The Rollers will slide off the Shaft. See Figure 7.

II. To Install The Replacement Feeder Rolls In The Brewer Mechanism:

A. If the original Feed Rollers were attached with Holding Screws, insert the Paper Feed Roll Gear And Shaft Assembly into the hole in the Shaft mounting tab on the Right Side Frame Assembly. See Figure 6.

B. Place the two replacement Feed Rollers, part number 611-4112, on the Shaft with the Hubs on the Rollers away from the Gear.

C. Insert the Shaft through the hole in the second Shaft mounting tabs.

D. Attach the replacement Feed Rolls with the Holding Screws removed in step I-J or the two Holding Screws, part number 611-4111, included in the Kit. Be sure the indented face of both Rollers are aligned with each other. Skip to step II-L.

E. If the original Feed Rollers were attached with Roll Pins, insert the Paper Feed Roll Gear And Shaft Assembly into the hole in Shaft mounting tab on the Right Side Frame Assembly. See Figure 8.

F. Place the .070" thick Spacer, part number 611-4125 on the Shaft.

G. Place the two replacement Feed Rollers, part number 611-4112, on the Shaft.

H. Insert the Shaft through the hole in the second Shaft mounting tab.

I. Attach the replacement Feed Rollers with the two Holding Screws, part number 611-4111, included in the Kit.

J. Move the Gear Shaft and Feed Roller Assembly toward the mounting tab. With the Gear touching the mounting tab use one of the .020" thick Washers, part number 611-2124, included in the Kit as a gauge and check the space between the mounting tab and the Spacer installed in step II-F. The space should be no larger than the .020" thickness of the Washer. See Figure 9.

NOTE

1. If the original Feed Rollers were attached with Holding Screws follow steps II-A through II-D, skip to steps II-E through II-K, and follow the steps II-L through II-Z.
2. If the original Feed Rollers were attached with Roll Pins skip steps II-A through II-D and follow steps II-E through II-Z.

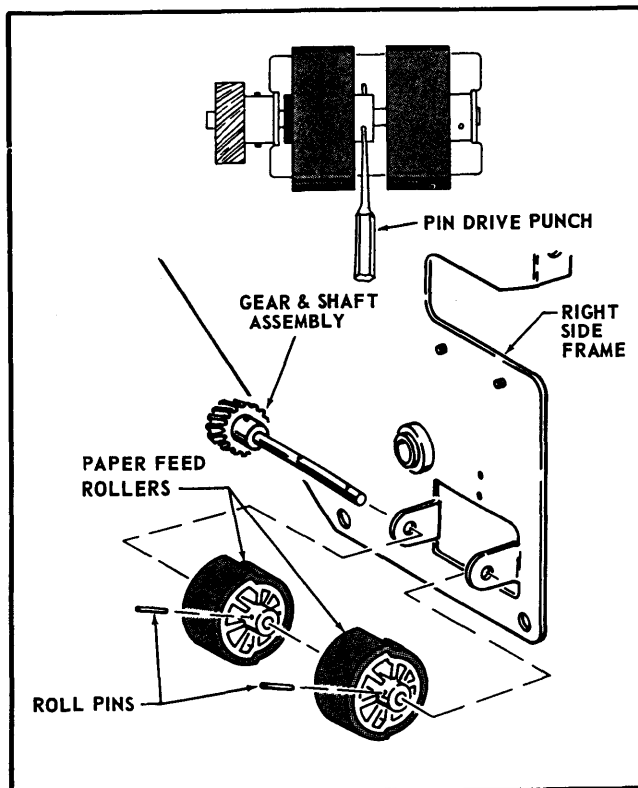


Figure 7.

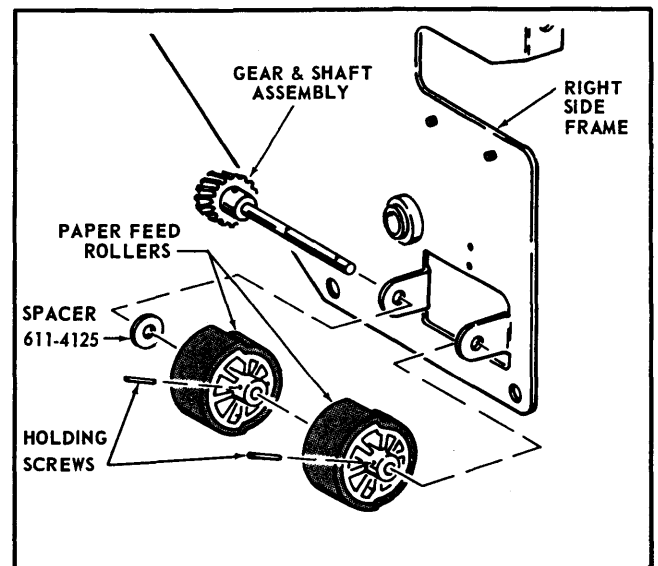


Figure 8.

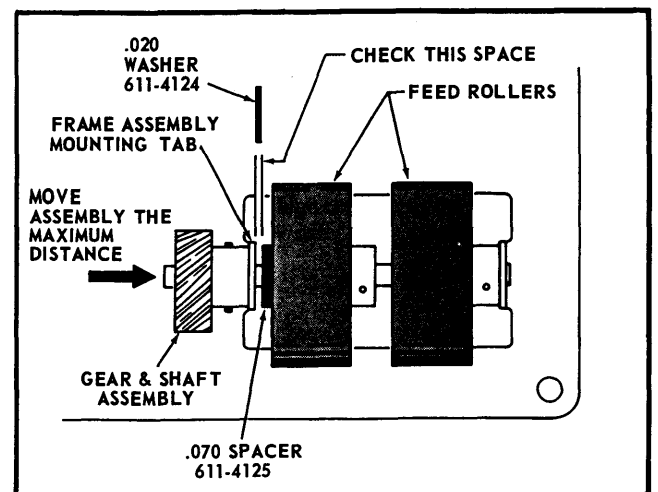


Figure 9.

K. If the space is greater than the thickness of the Washer, reverse steps II-G through II-J and add one of the .020" thick Washers on the Shaft. If the space available is as wide as two .020" thick Washers, add both of the .020" thick Washers. Add the second .020" thick Washer only if the two Washers still allow some side play and permit free rotation of the Gear Shaft and Feed Rollers when installed and attached per steps II-G through II-K.

L. Install the Brewer Right Side Frame Assembly and Stiffener if so equipped, on the Brewer Mechanism. See note 4 at beginning of Instructions.

M. Attach the Frame Assembly with the three Screws and Lockwashers removed in step I-F. Do not tighten the Screws.

N. Install the Funnel Lever Stud, removed in step I-G and attach the Stud with the Screw and Lockwasher removed in step I-G.

O. Tighten the Screws installed in steps II-M and II-N.

P. Install the Barrel Support Channel Screw and the Compression Spring removed in step I-H. Attach the Screw with the Self-locking Nut, part number 610-4133, included in the Kit. DO NOT excessively tighten the nut. The Barrel Support Channel must have free movement to prevent Brewer Barrel damage.

Q. Be sure the Brewer Mechanism Cam Shaft Assembly is in the at-rest position. See Figure 3.

R. Rotate the Tape Feed Rolls until the leading tip of the elevated surface of the Rolls is 45° above the horizontal. See Figure 10. Hold the Feed Rollers securely in this position.

S. Note the position of the Roll Pin hole in the Brewer Mechanism Cam Shaft Assembly. Align the hole in the Drive Gear with the hole in the Shaft and slide the Drive Gear into mesh with the Drive Gear on the Paper Feed Roll Gear and Shaft Assembly. The Drive Gear will rotate slightly as it meshes with the Driven Gear on the Feed Roll Shaft and the Feed Roll will have to be moved slightly to re-align the Roll Pin holes in the Drive Gear and Shaft Gear and Cam Shaft. Use a 1/8" drift to assure the proper alignment of the holes in the Gear and Shaft.

T. Place the 5/32" Diameter Roll Pin, part number 610-4216, on a 1/16" drive pin punch. See Figure 11.

U. Insert the drive pin punch into the Roll Pin hole in the Gear and Shaft and hold the Roll Pin in place with the drive pin punch. See Figure 12.

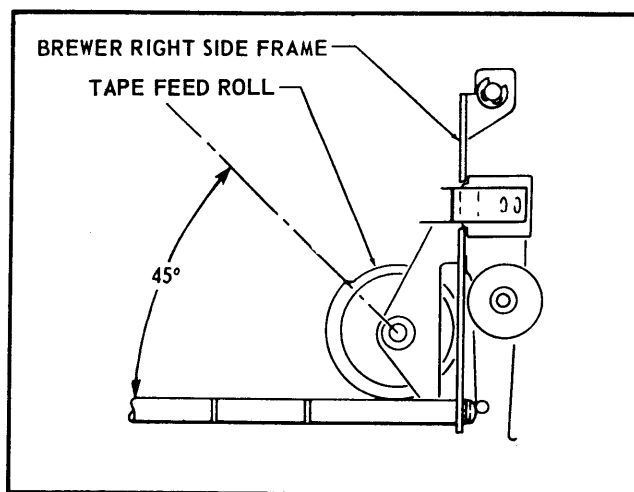


Figure 10.

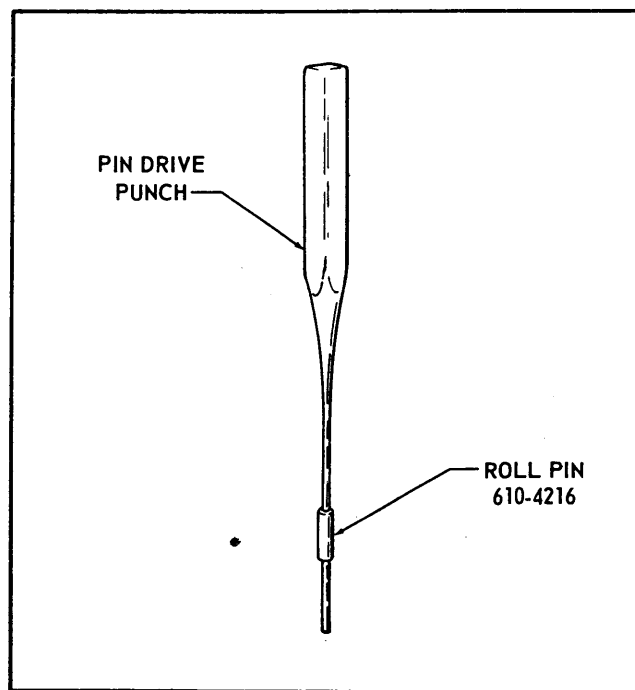


Figure 11.

V. Place a screwdriver against the Roll Pin and drive the Pin into place. See Figure 12.

W. Install the Brewer Mechanism Assembly in the Merchandiser.

X. Install the Filter Paper in the Brewer Mechanism.

Y. Make several coffee test vends. The first one will be clear water because the Brew Basket is empty.

Z. Observe the operation of the Filter Paper. Be sure it moves at the proper time in the Brew cycle. The Tape Feed Rolls should not start to move the Filter Paper until the Brewer Basket is all the way back in the Brewer and is starting to rotate to dump the wet grounds. The Tape Feed Rolls should stop moving the Filter Paper just as the Brewer Basket starts moving forward after being loaded with fresh coffee grounds and into position over the Coffee Discharge Funnel. If the movement of the Filter Paper is out of phase, recheck the position of the Cams on the Brewer Mechanism Cam Shaft Assembly (Figure 3) and the Tape Feed Rolls (Figure 10), when the Brewer is in the at-rest position. If these assemblies are not properly positioned steps I-A through I-E and II-Q through II-Z, must be repeated to correct the timing of the Filter Paper movement.

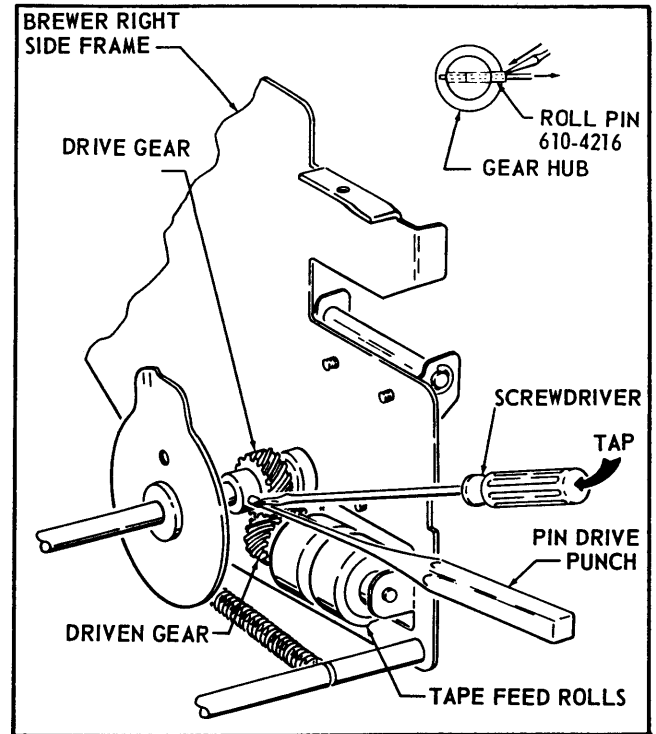


Figure 12.