

INSTALLATION INSTRUCTIONS FOR INSTALLING A RECORDER UNIT ASSEMBLY REPLACEMENT KIT IN A NATIONAL VENDORS®, ACER 2500, ACER 2501, ACER 2505, ACER 2510, ACER 2540, (SERIAL NUMBER 00300 AND UP), OR ACER 5202 COIN MECHANISM

CHECK THE PARTS RECEIVED IN THE KIT WITH THE PARTS LIST IN THESE INSTRUCTIONS. FIGURE 1 SHOWS ALL THE PARTS IN THE KIT. IF ANY PARTS ARE MISSING, CONTACT NATIONAL VENDORS' PARTS DEPARTMENT IMMEDIATELY.

These instructions cover the procedure for installing a Recorder Unit Assembly Replacement Kit in a National Vendors, ACER 2500, ACER 2501, ACER 2505, ACER 2510, ACER 2540 (Serial Number 00300 and up), or ACER 5202 Coin Mechanism. This Kit reforms the ACER 2500, ACER 2501, ACER 2540 (Serial Number 00300 and up), or the ACER 5202 Coin Mechanism to increase the maximum vending price range from \$1.25 to \$1.50 or replaces the Recorder Unit Assembly of the ACER 2505 or ACER 2510 which already has a vending price range of 5¢ to \$1.50.

NOTE

To increase the vending price range from \$1.25 to \$1.50 on FM-72 Merchandisers the \$1.50 Price Board Assembly and Monetary Harness must be ordered separately.

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

These instructions apply to two different Kits.

Kit, Part Number 5201-291, applies only to the ACER 2500, ACER 2501, and ACER 5202 and contains the following parts:

Part Number	Description	Quantity
5201-292	Recorder Unit Assembly	1
5220-260	Wire Clip	1
5205-104	Escrow Unit Insulator	1
5250-222	Recorder Unit Kit	
	Miscellaneous Bag Assembly	
	consists of:	1
9900-130	No.6-32 x 1/4 PHS S/T Screw	3
5201-290	Up-grading Label	1
5205-208	Installation Instructions	1
	* * *	

Kit, Part Number 5205-207, applies only to the ACER 2505, ACER 2510 and ACER 2540 (Serial Number 00300 and up) and contains the following parts:

Part Number	Description	Quantity
5205-200	Recorder Unit Assembly	1
5250-222	Recorder Unit Kit	
	Miscellaneous Bag Assembly	
	consists of:	1
9900-130	No.6-32 x 1/4 PHS S/T Screw	3
5201-290	Up-grading Label	1
5205-208	Installation Instructions	1
	* * *	

TO INSTALL THE KIT

NOTE

Hardware, such as screws, nuts, washers, etc., removed during Parts Removal should be placed in an envelope. The envelope should be labeled to show where the parts came off the Coin Mechanism. The envelope should then be stored until the parts in the envelope are used when the Coin Mechanism is reassembled.

- A. Remove the Coin Mechanism from the Merchandiser. See Figure 2.
- B. Remove the Slug Rejector Assembly from the Coin Mechanism.
- C. Place the Coin Mechanism on a flat surface with the Cover Plates up and the bottom end of the Coin Mechanism toward you.
- D. Remove the Upper Cover Plate (See Figure 2) as follows:
 1. Unlatch the Upper Cover Plate.
 2. Remove the two Screws at the bottom of the Upper Cover Plate and remove the Upper Cover Plate from the Coin Mechanism.
- E. Remove the four Screws and the Lower Cover Plate from the Coin Mechanism. See Figure 2.
- F. Remove the Escrow Unit Assembly (See Figure 2) as follows:
 1. Disconnect the Harness Assembly Connector from the Escrow Unit Assembly.
 2. Raise the right hand side of the Coin Mechanism so that the Coin Mechanism lays on its left side.
 3. Remove the Screw attaching the bottom (rear) of the Escrow Unit Assembly to the Rear Plate Assembly of the Coin Mechanism.

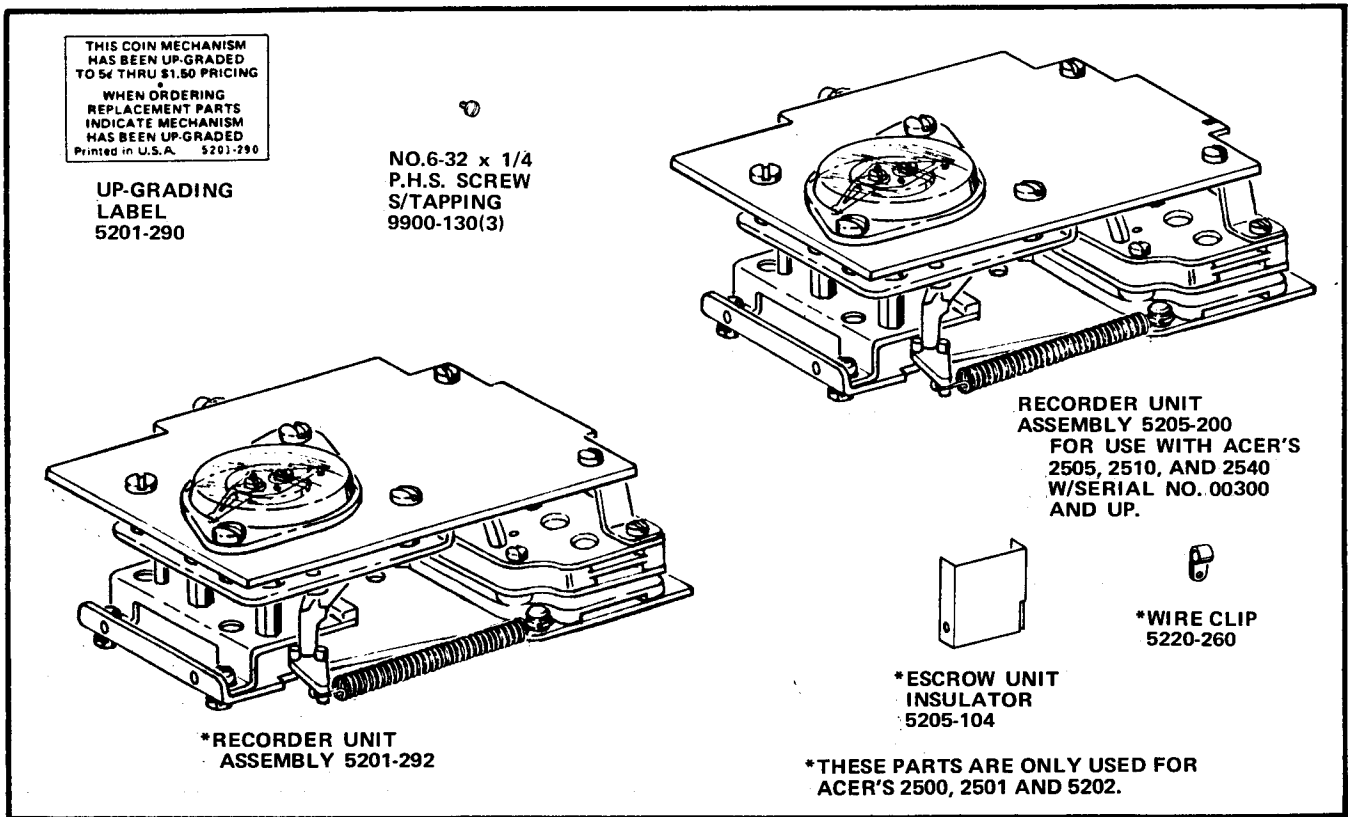


FIGURE 1

4. Tilt the Coin Mechanism to the right and lower it to its original position with the back of the Coin Mechanism laying on the flat surface.
5. Remove the Screw attaching the upper left hand corner of the Escrow Unit Assembly to the left sidewall of the Rear Plate Assembly of the Coin Mechanism.
6. Pull the Escrow Unit Assembly toward you until the tab on the lower left hand side of the unit clears the slot in the Rear Plate Assembly. Lift the Escrow Unit Assembly out of the Rear Plate Assembly.

NOTE

Step G applies only to ACER 2500, ACER 2501, or ACER 5202.

- G. Install the Escrow Unit Insulator, Part Number 5205-104, included in the Kit, as follows:

NOTE

Some Escrow Unit Assemblies already have the Escrow Unit Insulator installed. Steps G-1 through G-3 apply only if there is no Insulator on the Escrow Unit.

1. Place the Escrow Unit Assembly on a flat surface in an upright position. Remove the two Screws shown in Figure 3.

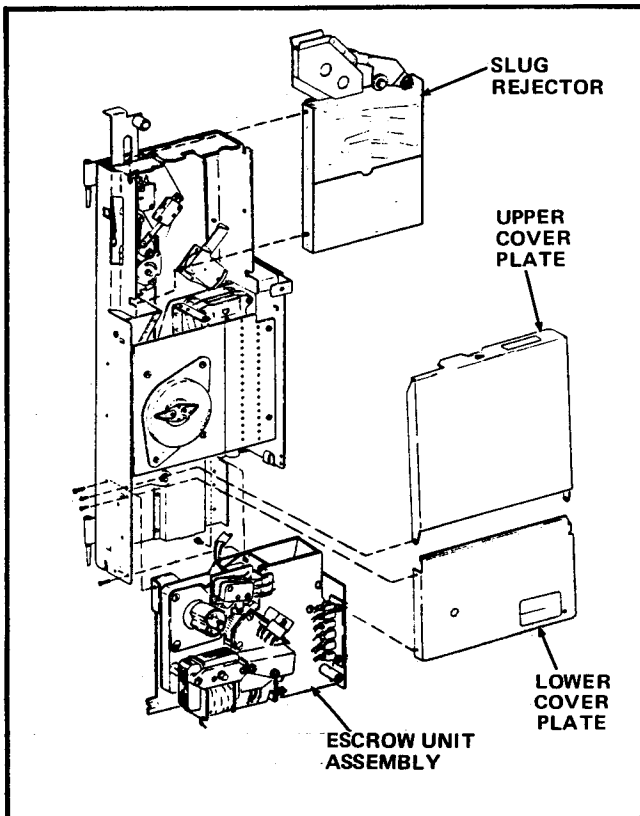


FIGURE 2

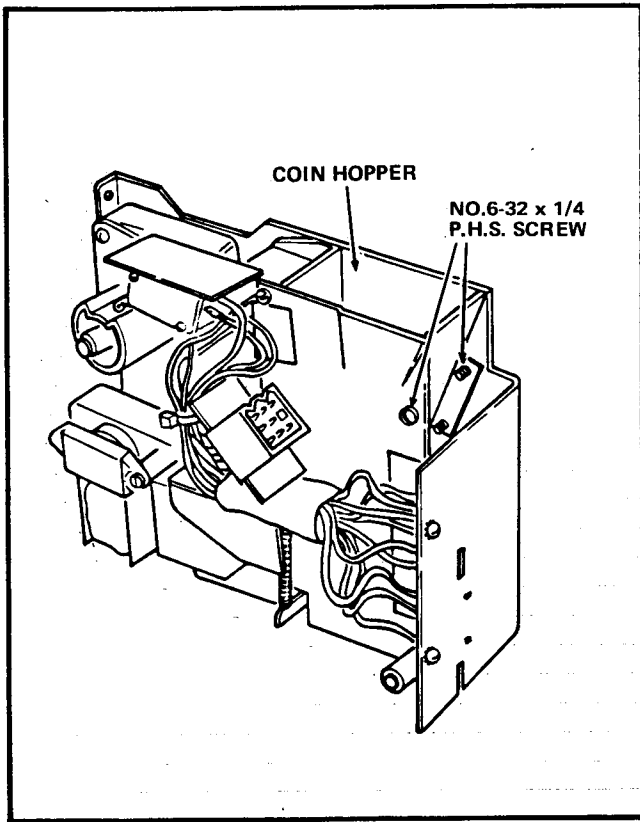


FIGURE 3

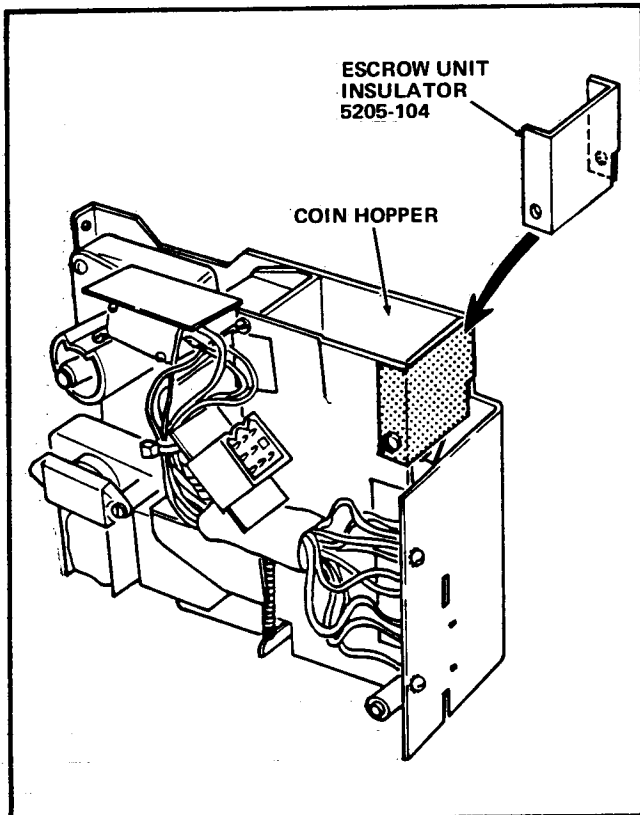


FIGURE 4

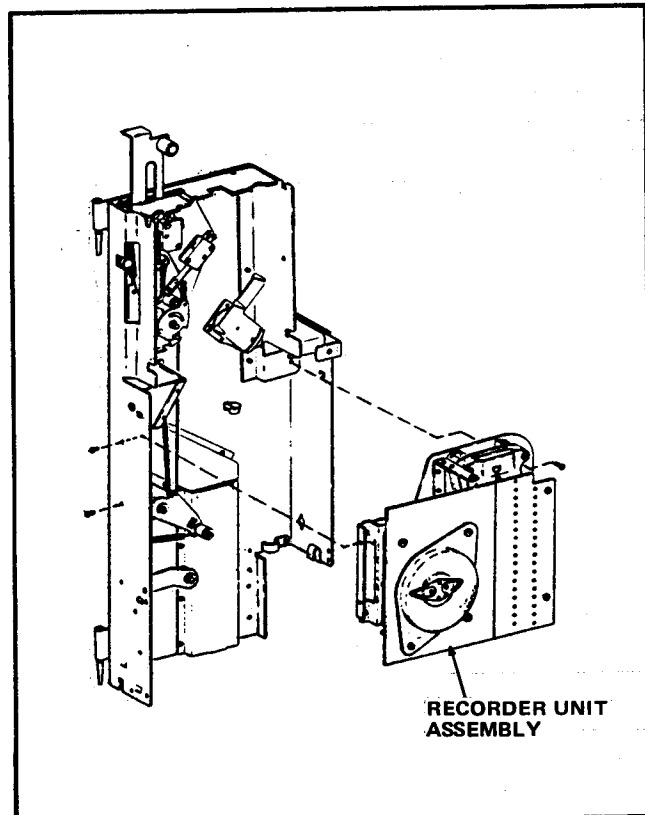


FIGURE 5

2. Bend the Escrow Unit Insulator along the creases to the shape shown in the dashed part of Figure 4.

3. Install the Escrow Unit Insulator using the screws removed in step G-1, as shown in Figure 4.

H. Set the Escrow Unit Assembly aside until instructed to install it in the Rear Plate Assembly later on in these instructions.

I. Remove the Recorder Unit Assembly (See Figure 5) as follows:

1. Place the Coin Mechanism on its back with the bottom end of the Coin Mechanism toward you.

2. Disconnect the Vending Wires from the Recorder Unit Assembly of the Coin Mechanism being up-graded as follows:

a. ACER 2500 and ACER 2505 only - Remove the Plugs of the 5 Coded Wires from the Pricing Receptacles on the Printed Circuit (PC) Board.

b. ACER 2501 and ACER 2510 only - Remove the Plugs of the 10 Coded Wires from the Pricing Receptacles on the Printed Circuit (PC) Board).

- c. ACER 5202 only - Remove the Plugs of the 3 Coded Wires from the Pricing Receptacles on the Printed Circuit (PC) Board.
- 3. Remove three Screws and the Recorder Unit Assembly from the Coin Mechanism Rear Plate Assembly. One Screw is in the upper right hand corner of the Recorder Unit Assembly and the other two screws attach the left side of the Recorder Unit Assembly to the rear left sidewall of the Plate Assembly.
- 4. Disconnect the wire of the Escrow Unit Harness from the Recorder Unit Assembly PC Board. The wire identification for the Coin Mechanism being up-graded is as follows:
 - a. ACER 2500, ACER 2501, ACER 2505, or ACER 2510, - No.9 Blue Wire.
 - b. ACER 2540 (Serial Number 00300 and up) - No.14 Orange Wire.
 - c. ACER 5202 - No.14 Blue Wire.
- 5. Remove the Recorder Unit Assembly from the Rear Plate Assembly.

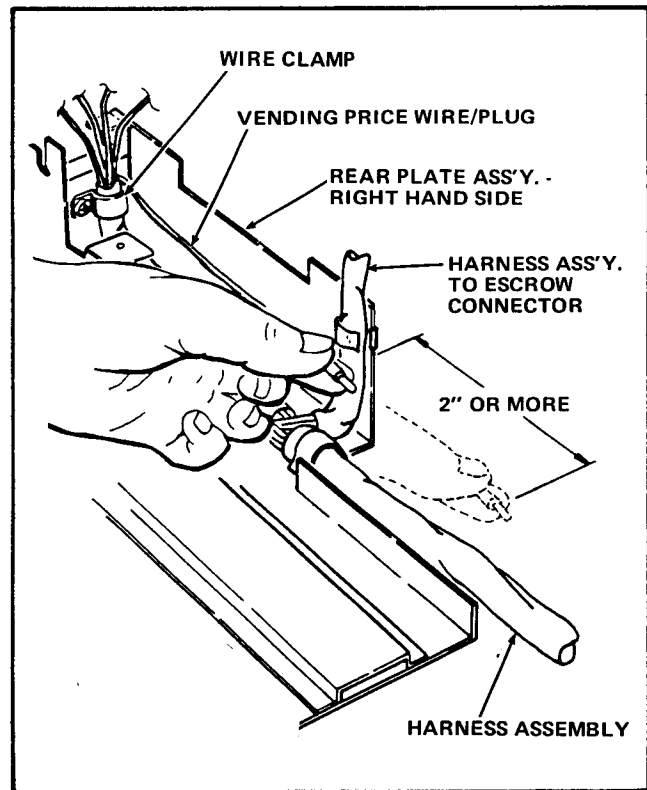


FIGURE 6

NOTE

Step J applies only to ACER 2500, ACER 2501, or ACER 5202.

- J. Determine if the Vending Pricing Wires Harness Assembly needs to be re-routed as follows:
 - 1. Select any one Vending Pricing Wire extending from the Harness Assembly clamped to the Rear Plate Assembly.
 - 2. Grasp the Wire behind the Plug between your fingers and gently pull the Wire straight toward the bottom of the Rear Plate Assembly as shown solid in Figure 6. Proceed as follows:
 - a. If the length of the Wire is such that the Plug extends approximately even with the bottom edge of the right hand sidewall of the Rear Plate Assembly, as shown solid in Figure 6, skip step J-2-b, below, and proceed to step K.
 - b. If the length of the Wire is such that the Plug extends 2 inches or more past the bottom edge of the right hand sidewall of the Rear Plate Assembly, shown dashed in Figure 6, skip step K and proceed directly to step L.

NOTE

Step K applies only if the Harness Assembly has to be re-routed as determined in step J.

- K. Re-route the Harness Assembly containing the Vending Pricing Wires with Plugs as follows:
 - 1. Remove the Screw, the Nut with Lockwasher, and the .302 inch diameter Wire Clamp which attaches the Harness Assembly to the Rear Plate Assembly.
 - 2. Rotate the Rear Plate Assembly counter-clockwise so that the left hand side of the Rear Plate Assembly is toward you.
 - 3. Form a Loop in the Harness Assembly just below the Recorder Unit Assembly mounting tab slot as shown in Figure 7. Hold the loop as flat as possible using a finger and route the free end of the Harness vertically alongside the Escrow Harness. The Loop may not stay in this position and may have to be formed again when the Recorder Unit Assembly is installed.

R

L

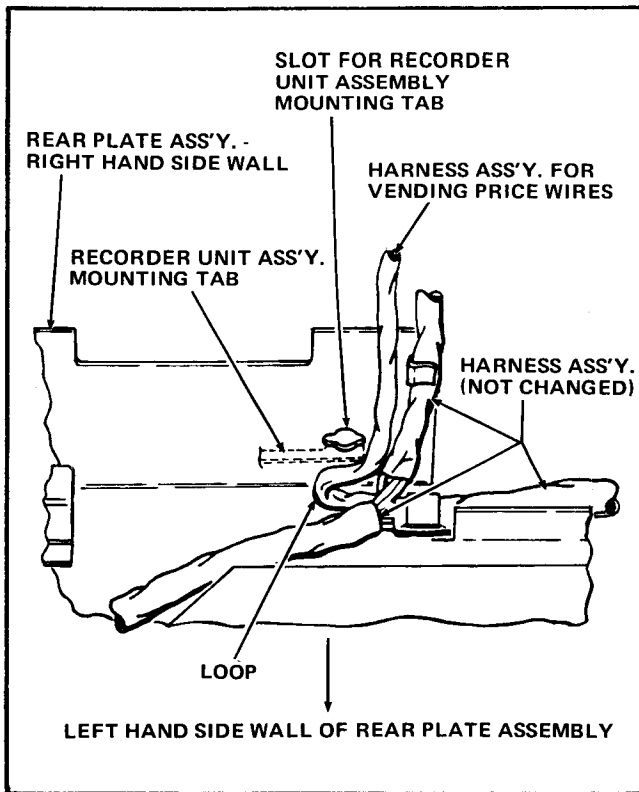


FIGURE 7

L. Install the Recorder Unit Assembly (See Figure 8), included in the Kit, as follows:

1. Position the Rear Plate Assembly on its back with the bottom end of the Rear Plate Assembly toward you.

NOTE

In step L-2, below, if the Coin Mechanism is an ACER 2500, ACER 2501, or an ACER 5202 with the Harness Assembly re-routed, pass the Wire of the Escrow Unit Harness around the left hand side of the Vending Pricing Wires Harness Assembly extending upward.

2. Hold the Recorder Unit Assembly above its mounting position and insert the Plug on the Wire of the Escrow Unit Harness into the Receptacle (pad) underneath the lower right hand corner of the PC Board. The wire of the Escrow Unit Harness was disconnected in step I-4.

NOTE

In step L-3, below, if the Coin Mechanism is an ACER 2500, ACER 2501, or an ACER 5202 with the Harness Assembly re-routed, the Vending Pricing Wires Harness Assembly should be as shown in Figure 7.

3. Lower the Recorder Unit Assembly into place in the Rear Plate Assembly. The tab at the right bottom of the Recorder Unit Assembly must fit into the slot in the right sidewall of the Rear Plate Assembly.

CAUTION

Make sure the Reset Lever Roller, is outside of the Gear Reset Spring on the Recorder Unit Assembly.

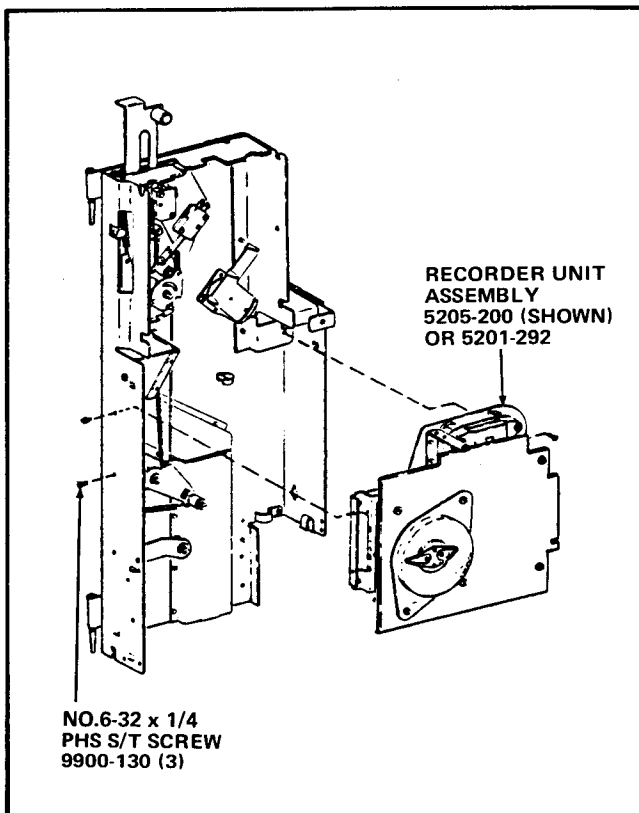


FIGURE 8

4. Move the Reset Lever Roller, attached to the Rear Plate Assembly, to the left so that the Roller is outside (Escrow Unit Assembly side) of the Gear Reset Spring of the Recorder Unit Assembly.

5. Attach the Recorder Unit Assembly by installing three No.6-32 x 1/4 Pan Head Self Tapping Screws, Part Number 9900-130, included in the Kit.

M. Install the Escrow Unit Assembly as follows:

1. On the Recorder Unit Assembly, move the Reset Arm Assembly all the way to the left to set the Switch Cap Assembly to the zero position.

CAUTION

DO NOT ROTATE the Motor Switch Cam CLOCKWISE.

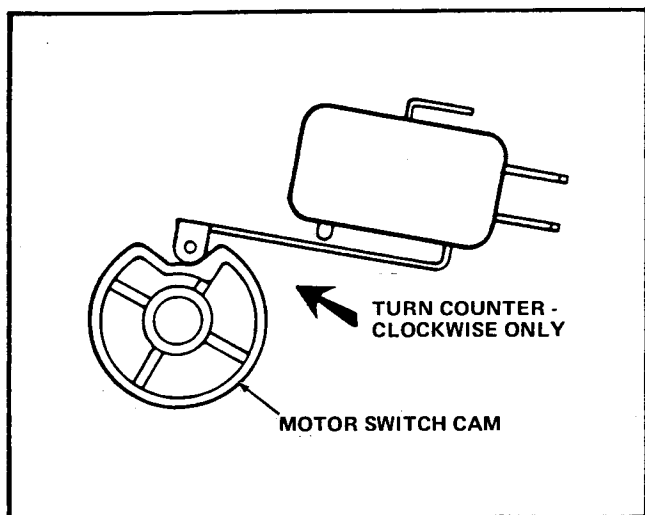


FIGURE 9

2. On the Escrow Unit Assembly, rotate the Motor Switch Cam counter-clockwise until the Switch Arm is on the flat side of the Cam as shown in Figure 9.

CAUTION

When installing the Escrow Unit Assembly, make sure the Motor Cam Switch Insulator of the Escrow Unit Assembly does not get caught underneath the PC Board of the Recorder Unit Assembly.

3. Slide the Escrow Unit Assembly into the bottom of the Rear Plate Assembly until the tab on the lower left of the Escrow Unit Assembly fits into the slot on the Rear Plate Assembly.
4. Attach the upper left hand corner of the Escrow Unit Assembly to the left sidewall of the Rear Plate Assembly using the Screw removed in step F-5.
5. Raise the right hand side of the Rear Plate Assembly so that the Rear Plate Assembly lays on its left side.
6. Attach the back of the Escrow Unit Assembly to the Rear Plate Assembly using the Screw removed in step F-3. See Figure 2 for location of the screw hole.
7. Tilt the Rear Plate Assembly to the right and lower it to its original position with the Rear Plate Assembly laying on its back and the bottom of the Rear Plate Assembly toward you.
8. Connect the Escrow Unit Harness Assembly Connector to the Escrow Unit Assembly.

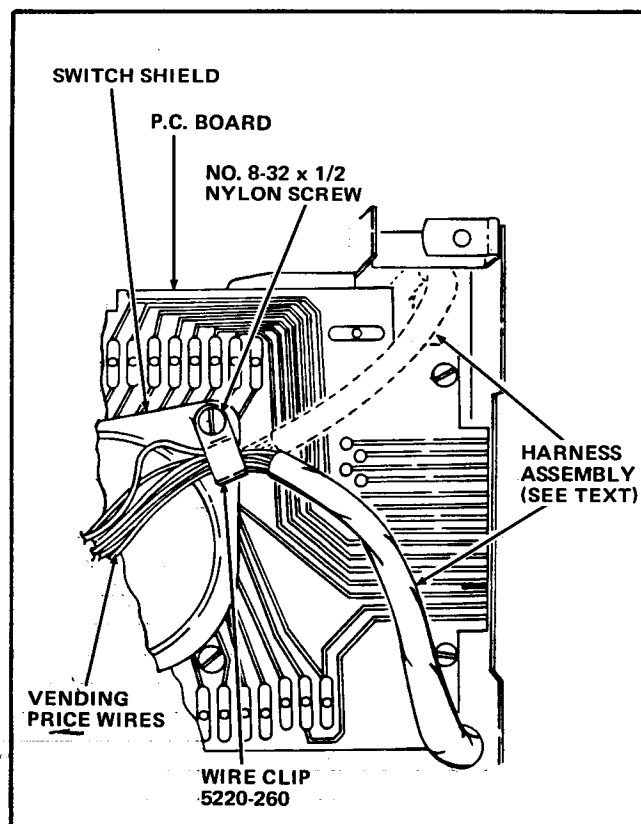


FIGURE 10

NOTE

Step N applies only to ACER 2500, ACER 2505, ACER 2501, ACER 2510 or ACER 5202.

- N. Attach the Vending Pricing Wires Harness Assembly to the Recorder Unit Assembly as follows:

1. On the Recorder Unit Assembly, remove the No.8-32 x 1/2 Pan Head Nylon Screw attaching the upper right end of the Switch Shield to the PC Board. See Figure 10.

NOTE

Step N-2, below, applies only to ACER 2500, ACER 2501, or ACER 5202 with the Vending Pricing Wires Harness Assembly re-routed.

2. Route the Vending Pricing Wires Harness Assembly as shown solid in Figure 10. Attach the Harness Assembly to the PC Board as shown using the Wire Clip, Part Number 5220-260, included in the Kit, and the No.8-32 x 1/2 Nylon Screw removed in step N-1, above.

NOTE

Step N-3, below, applies only to ACER 2500, ACER 2501, or ACER 5202 WITHOUT the Vending Pricing Wires Harness Assembly re-routed.

3. Route the Vending Pricing Wires Harness Assembly as shown dashed in Figure 10. Attach the Harness Assembly to the PC Board as shown using the Wire Clip, Part Number 5220-260, included in the Kit, and the No.8-32 x 1/2 Nylon Screw removed in step N-1, above.
4. Check to make certain that each Vending Pricing Wire is long enough for the Plug to be inserted into any Pricing Receptacle.

NOTE

The installation of this Kit does not alter the method of pricing. Vending prices are set the same as always except the new price range is now 5¢ to \$1.50 instead of 5¢ to \$1.25. To increase the vending price range from \$1.25 to \$1.50 on FM-72 Merchandisers, the \$1.50 Price Board Assembly and Monetary Harness must be ordered.

5. Insert the Plugs of the Vending Pricing Coded Wires in the proper Pricing Receptacles on the PC Board.

O. On the Lower Cover Plate, removed in step E, attach the Up-grading Label, Part Number 5201-290, included in the Kit, directly above the Coin Mechanism Identification Plate.

P. Install the Lower Cover Plate using the four Screws removed in step E.

Q. Install the Upper Cover Plate removed in step D. Attach the Cover Plate with the two Screws removed in step D-2.

R. Install the Slug Rejector Assembly in the Coin Mechanism.

S. Place the Coin Mechanism in the Merchandiser.

T. Test the Coin Mechanism.

NOTE

Any part supplied in this Kit may be purchased individually without purchasing a complete Up-grading Kit. If a part should need replacing in the future, order the part by the Part Number and Description listed in the front part of these Installation Instructions. Be sure to indicate on your order that the Coin Mechanism has been up-graded to 5¢ through \$1.50 pricing range.