

# INSTRUCTIONS FOR INSTALLING A REPLACEMENT PUSH BUTTON ASSEMBLY IN A NATIONAL VENDORS®, CROWN SEVENTY TWO®, SERIES OR GOLDEN FURNITURE LINE, FM-72 FOOD MERCHANDISER

## I. INTRODUCTION

The Push Button Assemblies used in the early or intermediate design FM-72 Merchandisers are no longer available as replacement Assemblies. The current production Push Button Assembly, included in this Kit, will fit current production Selection Panel Assemblies without the need for modification of the Push Button Assembly as included in the Kit. However, if that Push Button Assembly is to be used as a replacement for a Push Button Assembly in an Early or Intermediate Design Selection Panel Assembly, the Push Button Assembly must be modified before installation can be made. After a Current Design Push Button Assembly has been modified and installed, it cannot be distinguished from an Intermediate Design Push Button Assembly. In addition to the aforementioned, the removal and replacement procedures for the three possible Push Button Assemblies differ.

Read this entire Instruction carefully and thoroughly before starting the actual work of Push Button Assembly removal and replacement. After reading the instructions, follow only those steps applicable to the specific Selection Panel Assembly being worked on. It may be advantageous while doing the initial reading of these Instructions, to mark out those parts of the instruction which do not apply to the task at hand, and thus assure that only the required Instructions are followed when the actual installation is made.

### NOTE

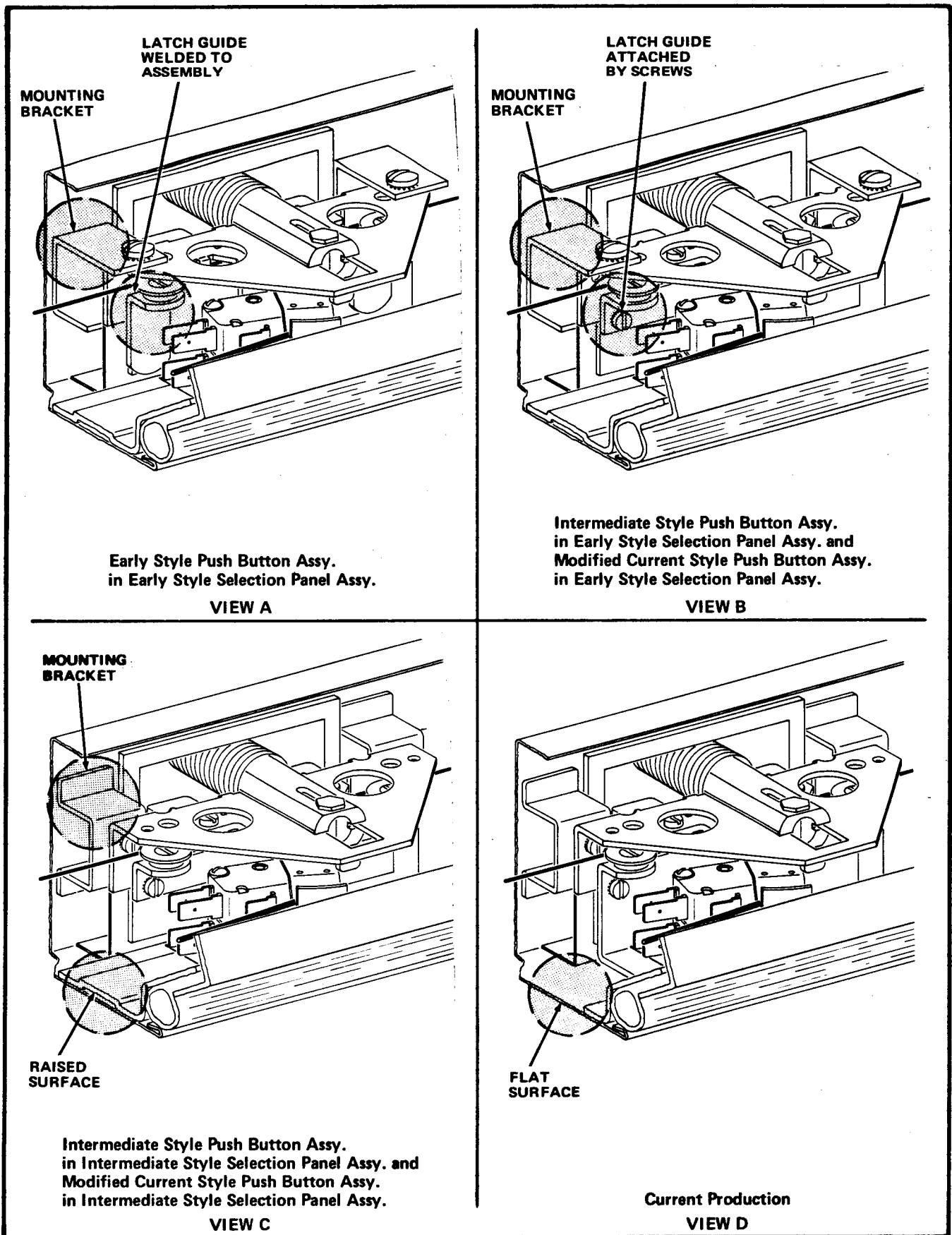
1. *None of the parts included in this Kit are returnable for credit. National Vendors suggests that all unused parts be placed in inventory for future use.*
2. *Because most of the Screws, Nuts, and Washers used in the FM-72 Food Merchandiser are metric system size, National Vendors recommends that these parts be carefully marked as to their use-location and that they be carefully stored for reuse. Small coin-envelopes make excellent storage containers.*

Push Button Assembly Kit, part number 417-2196, contains the following parts:

Part Number	Description	Quantity
417-2202	Push Button Assembly	1
403-5018	4 MG x 4 mm Binding Head Screw	2
417-2206	3 MG x 5 mm Cyl. Head Screw	2
403-5365	External Tooth Lockwasher	2
417-2131	Lockwasher	2
417-2163	Cable Guide Latch Bracket	1
417-2197	Installation Instructions	1
	* * *	

## II. DETERMINING THE DESIGN OF THE SELECTION PANEL ASSEMBLY IN THE MERCHANDISER AND THE DESIGN OF THE PUSH BUTTON ASSEMBLY TO BE REMOVED

1. Remove the Selection Panel Assembly from the Merchandiser. See Section IV of the FM-72 Food Merchandiser Parts And Service Manual - "Removal And Replacement Of The Selection Panel Assembly".
2. Lay the Selection Panel Assembly, flat-stainless-steel-face down on a cleared flat padded surface. Position the Assembly so the Push Buttons face away from you.
3. Determine the design of the Selection Panel Assembly in the Merchandiser and the design of the Push Button Assembly being removed.
  - a. To determine the design of the Selection Panel Assembly in the Merchandiser.
    1. The Early Style Selection Panel Assembly has a Mounting Bracket as shown in Figure 1 View A or View B.
    2. The Intermediate Style Selection Panel Assembly has a Mounting Bracket and a raised surface on the bottom of the Channel as shown in Figure 1 View C.
    3. The Current Style Selection Panel Assembly has a flat surface on the bottom of the Channel as shown in Figure 1 View D.
  - b. To determine the design of the Push Button Assembly being removed.
    1. An Early Style Push Button Assembly in an Early Style Selection Panel Assembly has the Latch Guide welded to the Push Button Assembly as shown in Figure 1 View A instead of attached by screws as shown in Figure 1 View B. See Section III Part A for removal procedures.
    2. The Intermediate and Modified Current Push Button Assembly in an Early Style Selection Panel Assembly has the Latch Guide attached by Screws as shown in Figure 1 View B. See Section III Part B for removal procedures.



**FIGURE 1**

3. If the Selection Panel Assembly is the Intermediate Style, the Push Button Assembly is either an Intermediate Style or Modified Current Style as shown in Figure 1 View C. See Section IV for removal procedures.
  4. If the Selection Panel Assembly is the Current Style, it will only have the Current Style Push Button Assembly as shown in Figure 1 View D. See Section V for removal procedures.
4. After determining the design of the Selection Panel Assembly and Push Button Assembly follow the appropriate procedures of Section III (part A or B), IV or V for removal of parts.

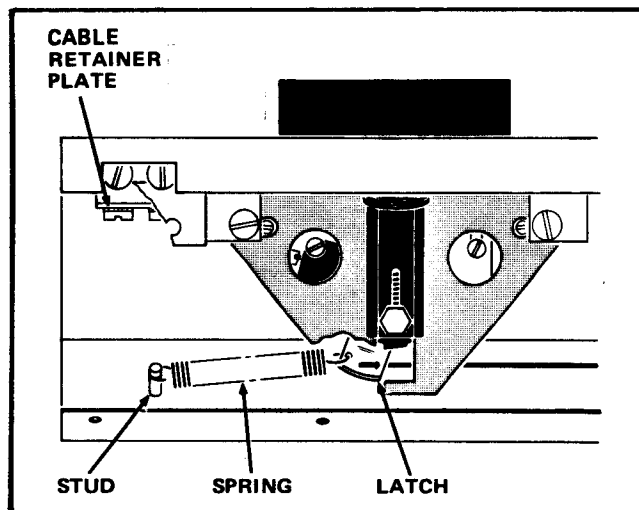


FIGURE 2

### III. THE EARLY DESIGN SELECTION PANEL ASSEMBLY, EARLY DESIGN (PART A) OR INTERMEDIATE AND MODIFIED CURRENT DESIGN (PART B) PUSH BUTTON ASSEMBLY REMOVAL

#### A. To Remove an Early Design Push Button Assembly from an Early Design Selection Panel Assembly.

1. Remove the Coil Spring from the Stud at the upper end of the Selection Panel Assembly. This Spring is also attached to the upper Push Button Assembly Latch. See Figure 2.
2. If the Push Button Assembly to be removed is the first or second Assembly at the lower end of the Selection Panel Assembly, loosen the Screw in the Solenoid Plunger enough to allow the removal of the Solenoid Link from the Solenoid Plunger.

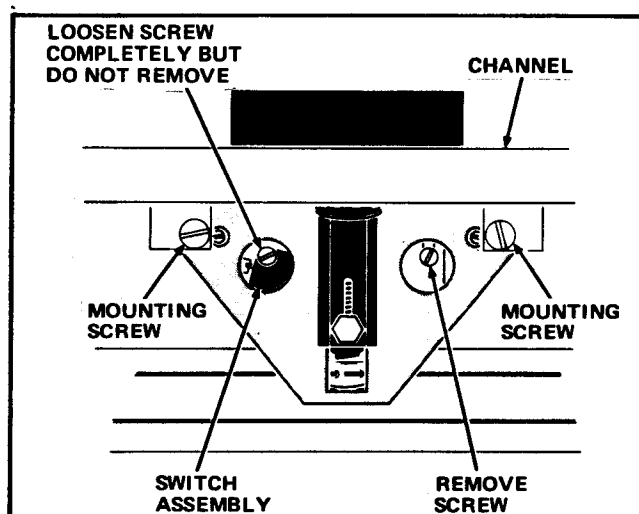


FIGURE 3

3. Each Push Button Assembly has its own Switch Assembly. Each Switch Assembly is attached to the Selection Panel Assembly Channel by two Screws. Detach the Switch Assembly for the Push Button Assembly being removed by:
  - a. Removing the Screw which attaches the Switch Assembly Bracket to the Channel. See Figure 3.
  - b. Unscrewing the Screw that goes through the Switch Assembly at the terminal end of the Switches in the Assembly, and detaching the Assembly from the Channel. Do not remove this Screw from the Switch Assembly. See Figure 3.
4. Remove the 2 Mounting Screws and Lockwashers, which attach the Push Button Assembly being removed. See Figure 3.

5. Remove the Switch Assembly from the Channel. The wires need not be removed from the Switch Assemblies for 9 Drum Merchandisers or for the 5 lower Switch Assemblies for 10 Drum Merchandisers. Wire removal may facilitate Switch Assembly removal for the 5 upper Switch Assemblies for 10 Drum Merchandisers. If the Wires are removed from the Switches, make an accurate record of the individual Wire attachment location to assure correct Wire replacement.
6. To provide more room, before continuing with step 7, perform steps 6a through 6c on adjacent Push Button Assemblies.
  - a. Loosen, but do not remove, the Screw that goes through the Switch Assembly at the terminal end of the Switches in the Assembly.

- b. Loosen, but do not remove, the Screw which attaches the Switch Assembly Bracket to the Channel. Do not remove the Switch Assembly from the Channel.
  - c. Remove the 2 Screws and Lockwashers which attach the one or two adjacent Push Button Assemblies.
7. Remove the 2 Screws and Cable Guides which are accessible through the two holes in the Push Button Assembly. See Figure 4.
  8. Loosen, but do not remove, the 2 Screws which attach the Cable Retainer Plate. This Plate holds the Cable in proper tension. See Figure 2.
  9. Free the Cable from the under the Plate.

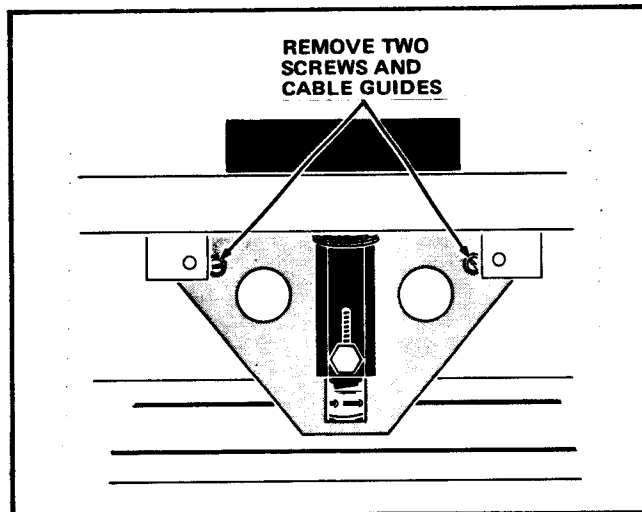


FIGURE 4

**CAUTION**

**DO NOT** pull on the Cable at anytime, especially after it has been freed from under the Cable Retainer Plate. If the ferrule on the end of the Cable is broken off and the Cable is pulled out of one or more Push Button Assemblies, each Push Button Assembly from which the Cable has been removed will have to be removed and replaced. If the Cable breaks, all Push Button Assemblies must be removed and a new Cable installed.

10. Depress the Push Button and move the Push Button Assembly, that is to be removed, out of the Channel. The end of the Assembly that is opposite the Button, must be carefully lifted up and back out of the Channel. See Figure 5.
11. Remove the Nut from the Hexagon Head Screw which attaches the Extension Assembly to the Push Button. See Figure 5. A 7/32" Nut Driver is recommended when performing this step.

**CAUTION**

The Nut **MUST** be removed from the Screw. **DO NOT** attempt to remove the Hexagon Head Screw from the Nut because this will result in the destruction of the Screw.

12. Remove the Hexagon Head Screw from the Push Button and remove the Push Button, Override Spring, and Return Spring from the Channel. See Figure 5.
13. Remove the Shoulder Screw attaching the Latch to the Bracket and detach the Latch from the Bracket. See Figure 6.

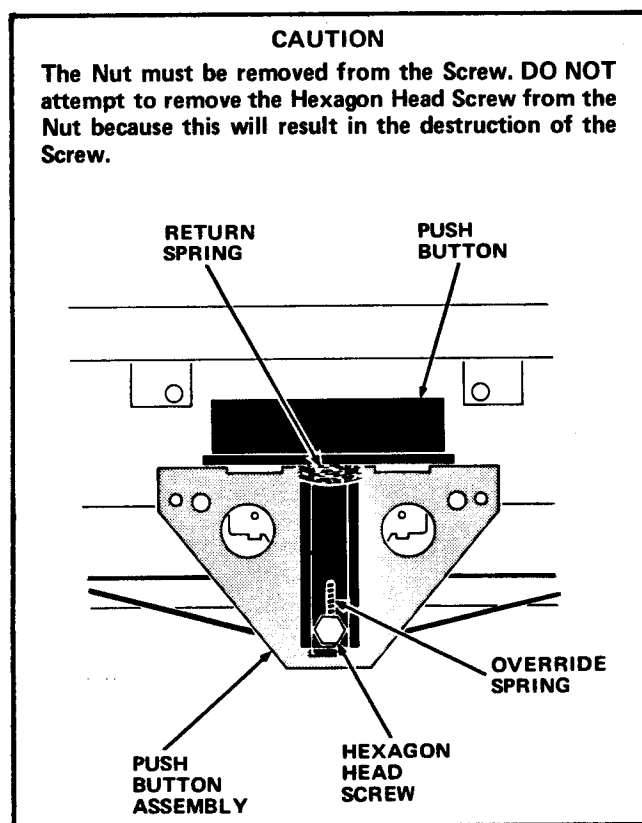


FIGURE 5

14. Remove the remaining Screw and Cable Guide from the Bracket and remove the Bracket from the Channel. See Figure 7.
15. Rotate the Extension Assembly and remove the 2 Screws and Cable Guides. See Figure 8. Remove the Extension Assembly from the Channel.
16. Rotate the Latch and carefully remove the Connector Links. See Figure 9

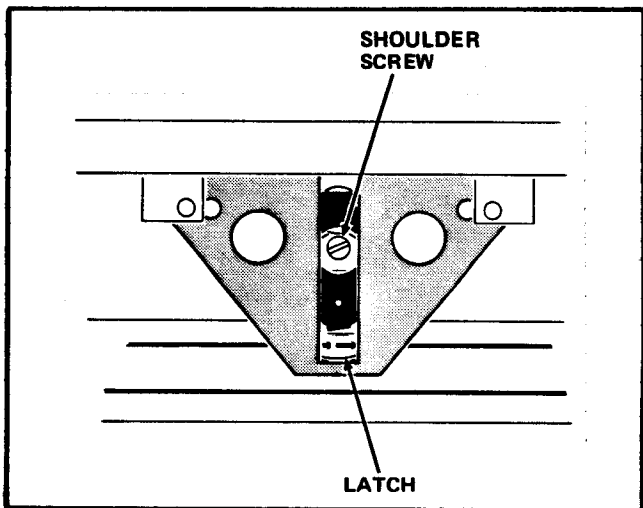


FIGURE 6

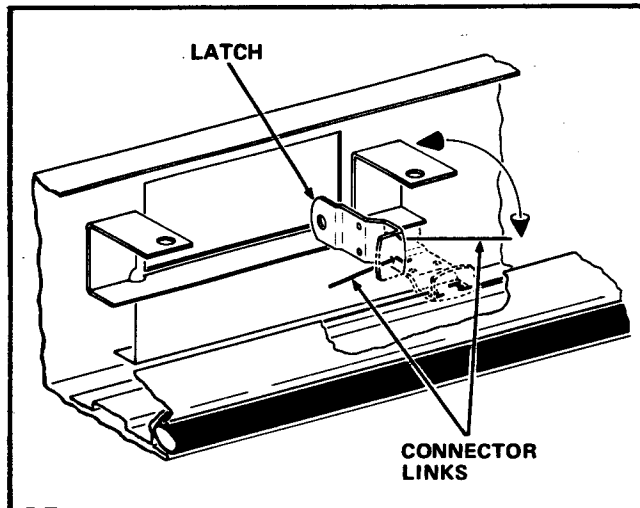


FIGURE 9

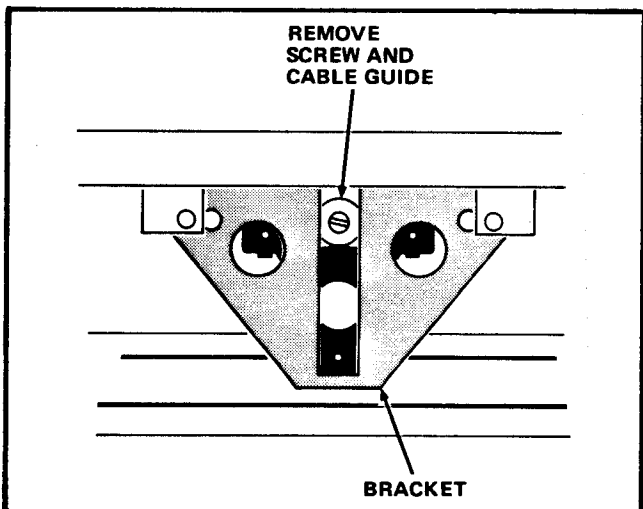


FIGURE 7

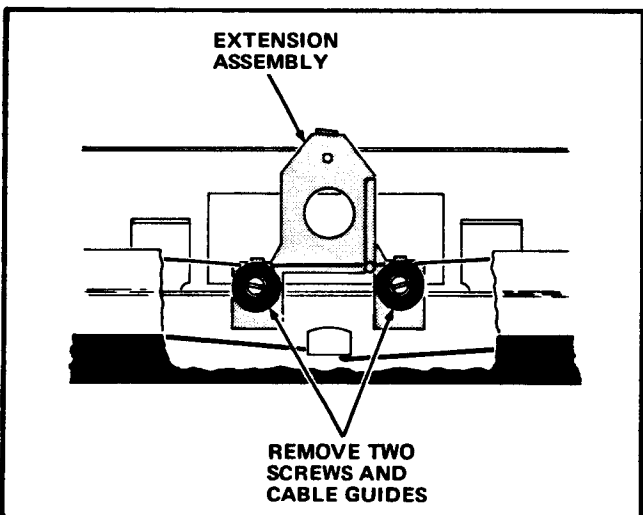


FIGURE 8

**CAUTION**

Extreme care must be taken to prevent the bending or breaking of the Connector Links. Each Link in the Selection Button Assembly is individually formed to fit only that position it occupies in the Assembly when made at the factory. The indiscriminate placement or careless handling of the Connector Links will cause a Merchandiser malfunction.

**B. To Remove an Intermediate or Modified Current Design Push Button Assembly from An Early Design Selection Panel Assembly.**

1. Follow steps III-A1 through III-A6 and steps III-A8 and III-A9.
2. Depress and hold the Push Button depressed to expose the two Screws on the Extension Assembly. Loosen the Screws about 3 1/2 turns. Do not remove the Screws. The Screws retain the position of the Cable as it passes over the Cable Guides on the Extension Assembly. See Figure 10.
3. Remove the Cable from the Cable Guides on the Extension Assembly, and retighten the Screws. See Figure 11.

**CAUTION**

DO NOT pull on the Cable at anytime, especially after it has been freed from under the Cable Retainer Plate. If the ferrule on the end of the Cable is broken off and the Cable is pulled out of one or more Push Button Assemblies, each Push Button Assembly from which the Cable has been removed will have to be removed and replaced. If the Cable breaks, all Push Button Assemblies must be removed and a new Cable installed.

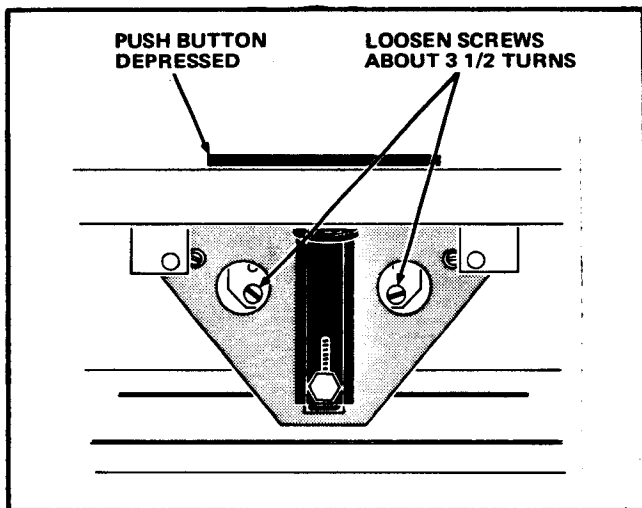


FIGURE 10

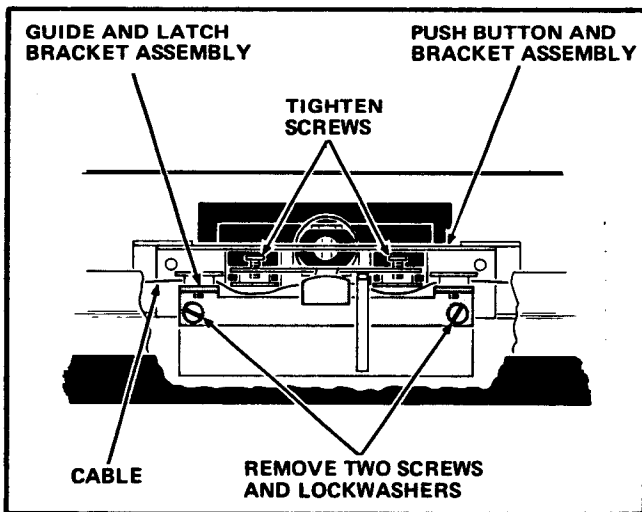


FIGURE 11

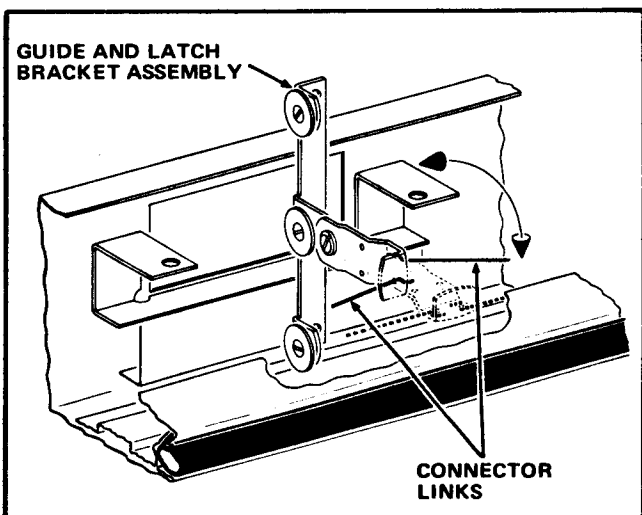


FIGURE 12

4. Remove the 2 Screws and Lockwashers which attach the Guide and Latch Bracket Assembly to the Push Button and Bracket Assembly, and remove the Push Button and Bracket Assembly from the Channel. See Figure 11.

5. Rotate the Guide and Latch Bracket Assembly 90° and carefully remove the Assembly from the Connector Links. See Figure 12.

**NOTE**

*The upper Push Button Assembly only has one link connected to its Latch.*

**CAUTION**

Extreme care must be taken to prevent the bending or breaking of the Connector Links. Each Link in the Selection Button Assembly is individually formed to fit only that position it occupies in the Assembly when made at the factory. The indiscriminate placement or careless handling of the Connector Links will cause a Merchandiser malfunction.

**IV. TO REMOVE AN INTERMEDIATE OR MODIFIED CURRENT DESIGN PUSH BUTTON ASSEMBLY FROM AN INTERMEDIATE DESIGN SELECTION PANEL ASSEMBLY**

1. Follow steps III-A1 through III-A3 and steps III-A5, III-A8, III-A9, III-B2 and III-B3. The Illustrations referred to in these steps show an Early Design Selection Panel Assembly. This however, does not change any of the information given in these steps.

2. Remove the 2 Screws and Lockwashers which attach the Push Button Assembly being removed. See Figure 13.

3. Remove the 2 Screws and Lockwashers which attach the Guide and Latch Bracket Assembly to the Push Button and Bracket Assembly and remove the Push Button and Bracket Assembly from the Channel. See Figure 13.

4. Rotate the Guide and Latch Bracket Assembly 90° and carefully remove the Assembly from the Connector Links. See Figure 14.

**NOTE**

*The upper Push Button Assembly only has one link connected to its Latch.*

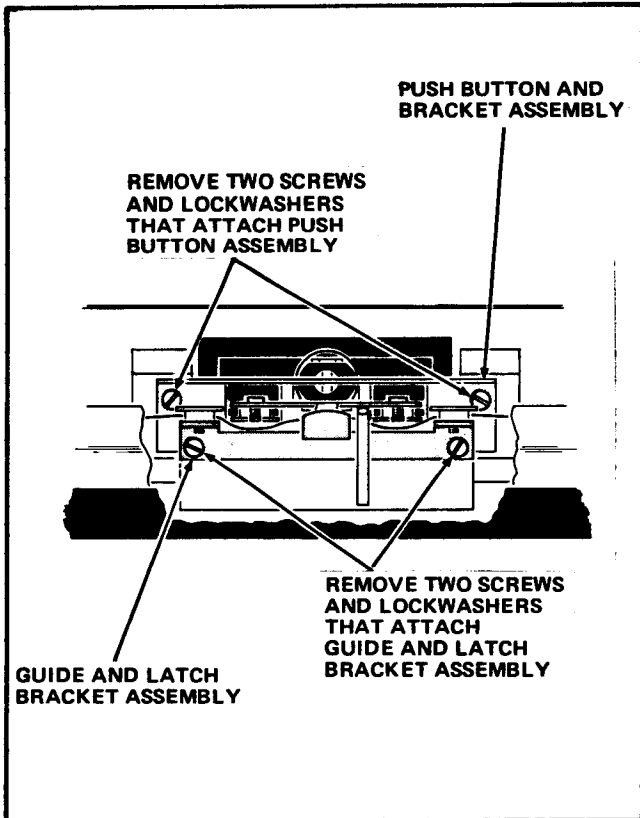


FIGURE 13

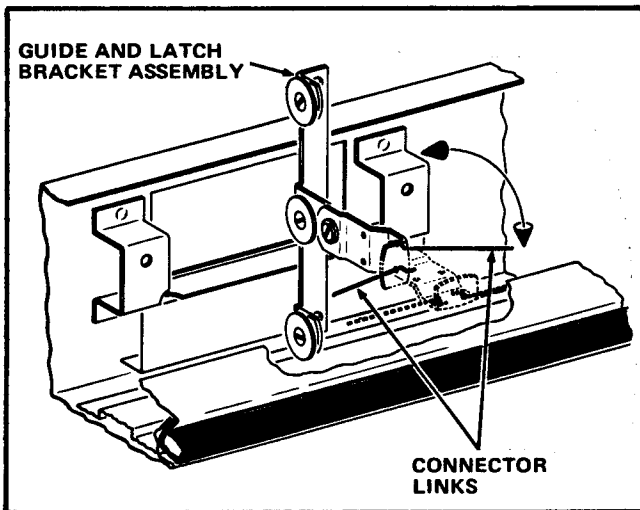


FIGURE 14

**CAUTION**

Extreme care must be taken to prevent the bending or breaking of the Connector Links. Each Link in the Selection Button Assembly is individually formed to fit only that position it occupies in the Assembly when made at the factory. The indiscriminate placement or careless handling of the Connector Links will cause a Merchandiser malfunction.

**V. TO REMOVE A PUSH BUTTON ASSEMBLY FROM A CURRENT DESIGN SELECTION PANEL ASSEMBLY**

1. Follow steps III-A1, III-A8, and III-A9. The illustrations referred to in these steps show an Early Design Selection Panel Assembly. This, however, does not change any of the information given in these steps.
2. If the Push Button Assembly to be removed is the first or second Assembly at the lower end of the Selection Panel Assembly, remove the Retaining Ring on the Solenoid Plunger to allow the removal of the Solenoid Link from the Solenoid Plunger.
3. Remove the Wire Terminals from the Switches on the Push Button Assembly being removed. Make an accurate record of the individual Wire attachment locations to assure the correct Wire replacement.
4. Depress and hold the Push Button depressed to expose the two Screws on the Extension Assembly. Loosen the Screws about 3 1/2 turns. Do not remove the Screws. The Screws retain the position of the Cable as it passes over the Cable Guides on the Extension Assembly. See Figure 15.
5. Remove the Cable from the Cable Guides on the Extension Assembly and retighten the Screws. See Figure 16.

**CAUTION**

DO NOT pull the Cable at anytime, especially after it has been freed from under the Cable Retainer Plate. If the ferrule on the end of the Cable is broken off and the Cable is pulled out of one or more Push Button Assemblies, each Push Button Assembly from which the Cable has been removed will have to be removed and replaced. If the Cable breaks, all Push Button Assemblies must be removed and a new Cable installed.

6. Remove the 2 Screws and Lockwashers, which attach the Push Button Assembly being removed.
7. Depress and hold the Push Button depressed. Move the Push Button Assembly back out of the Channel.

**CAUTION**

Extreme care must be taken to prevent the bending or breaking of the Connector Links. Each Link in the Selection Button Assembly is individually formed to fit only that position it occupies in the Assembly when made at the factory. The indiscriminate placement or careless handling of the Connector Links will cause a Merchandiser malfunction.

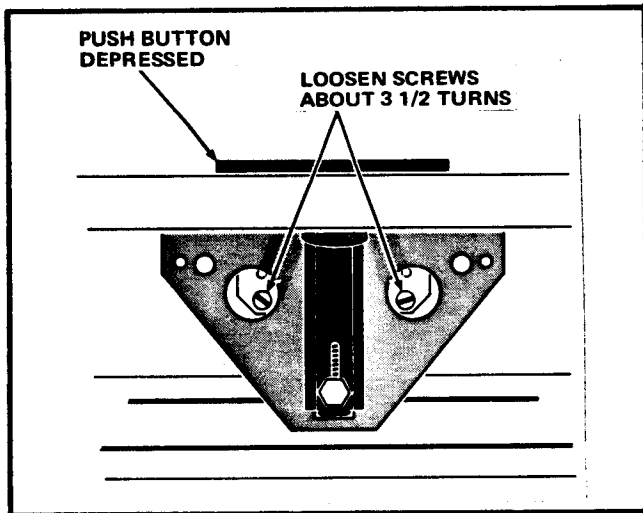


FIGURE 15

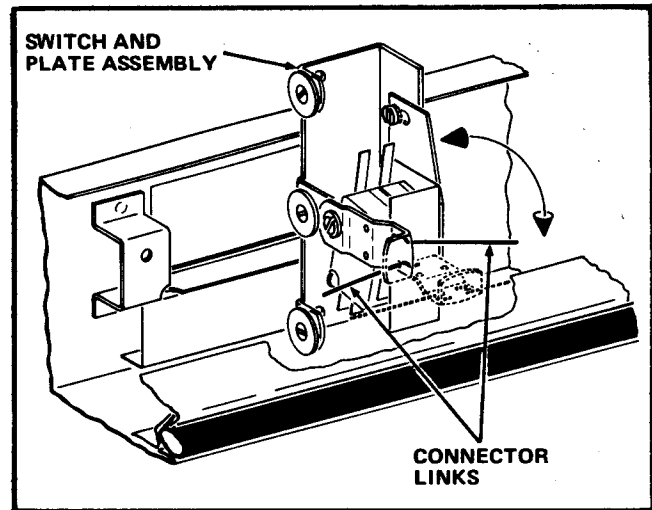


FIGURE 17

**NOTE**

*The upper Push Button Assembly only has one link connected to its Latch.*

**VI. PREPARATION OF THE REPLACEMENT PUSH BUTTON ASSEMBLY FOR INSTALLATION**

If the replacement Push Button Assembly, Part Number 417-2202 included in the Kit, is to be installed in an Early or Intermediate Design Selection Panel Assembly, the steps of procedure VI-A are to be followed. If the replacement Push Button Assembly is to be installed in a Current Design Selection Panel Assembly the steps of procedure VI-B are to be followed.

A. Preparing the Push Button Assembly for use in an Early or Intermediate Design Selection Panel Assembly.

1. Remove the 2 Screws and Lockwashers which attach the Switch and Plate Assembly to the Push Button and Bracket Assembly. See Figure 18.
2. Slide the Switch and Plate Assembly off of the Push Button and Bracket Assembly. See Figure 18.
3. Remove the Screw which attaches each of the 3 Cable Guides to the Switch and Plate Assembly and remove the Cable Guides. See Figure 18.
4. Remove the Shoulder Screw which attaches the Latch to the Switch and Plate Assembly and remove the Latch. See Figure 18.

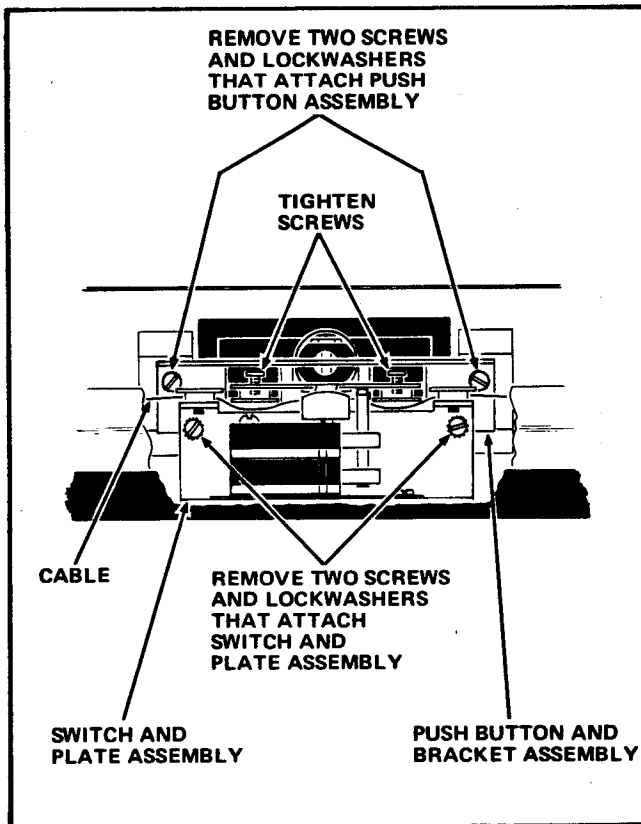


FIGURE 16

8. Remove the 2 Screws and Lockwashers which attach the Switch and Plate Assembly to the Push Button and Bracket Assembly. See Figure 16.
9. Remove the Push Button and Bracket Assembly from the Channel.
10. Rotate the Switch and Plate Assembly 90° about the Push Button Shaft axis and carefully remove the Assembly from the Connector Links. See Figure 17.



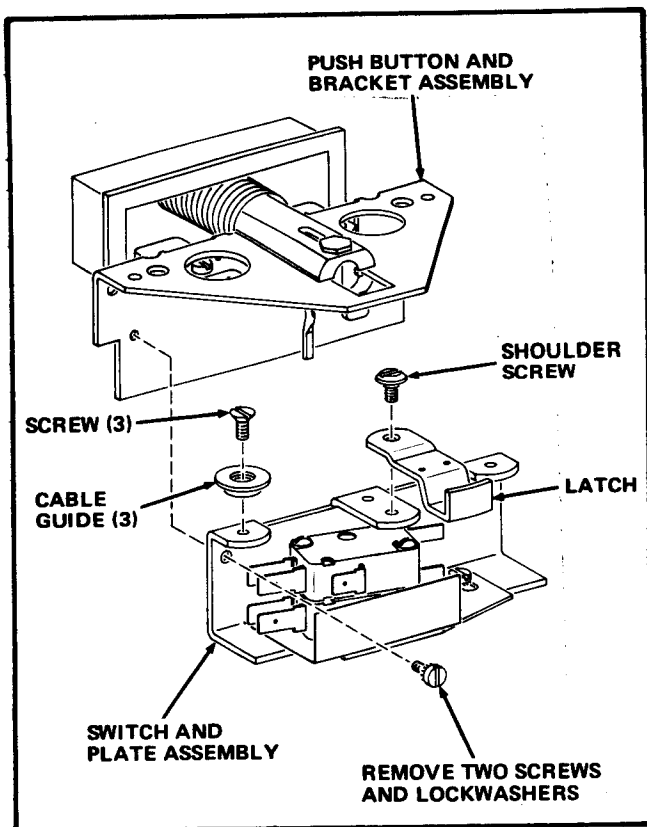


FIGURE 18

5. Install the Latch on the Cable Guide Latch Bracket, Part Number 417-2163, included in the Kit and attach the Latch with the Shoulder Screw removed in Step 4. See Figure 19.
6. Install the 3 Cable Guides on the Cable Guide Latch Bracket and attach them with the 3 Screws removed in Step 3. See Figure 19.
7. Depress and hold the Push Button depressed to expose the two Screws in the Extension Assembly. Loosen the screws about 3 1/2 turns. Do not remove the Screws. The Screws retain the position of the Cable as it passes over the Cable Guides on the Extension Assembly. See Figure 20.
8. National Vendors suggests that, if there is any question about the condition of the Switches for the Push Button Assembly being replaced, the Switch and Bracket Assembly which is attached to the Plate Assembly, removed in Step VI-A2, be used instead of the original Switch and Bracket Assembly in the Selection Button Assembly. If the Switches require replacement:
  - a. Loosen the Screw that attaches the Switch and Bracket Assembly to the Plate Assembly. See Figure 21.

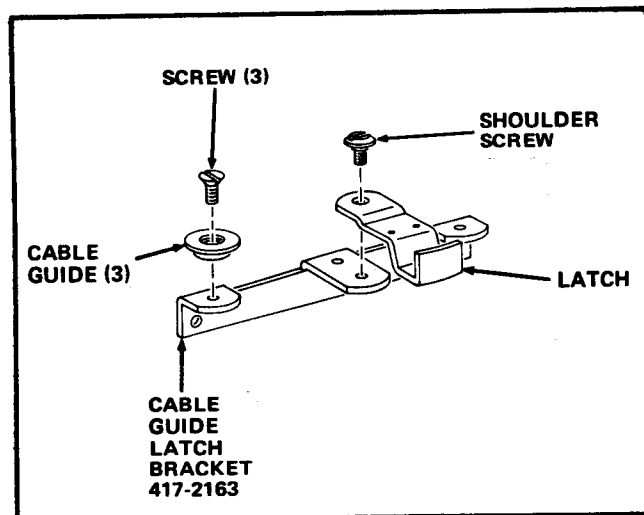


FIGURE 19

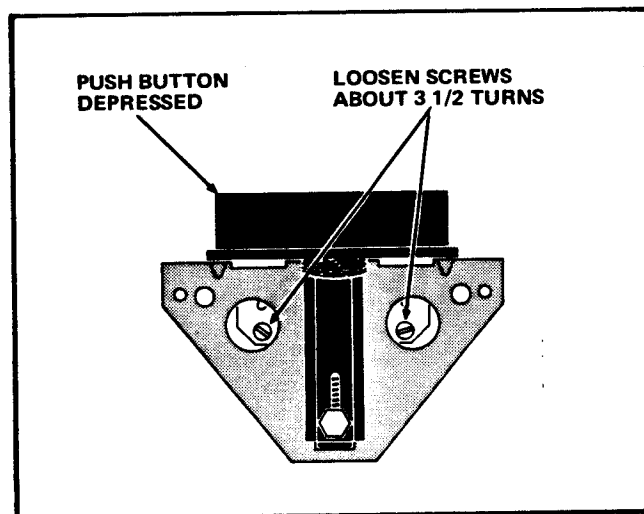


FIGURE 20

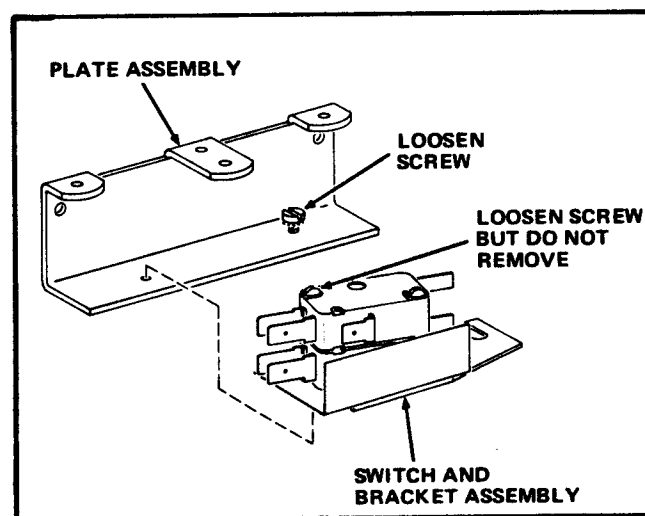


FIGURE 21

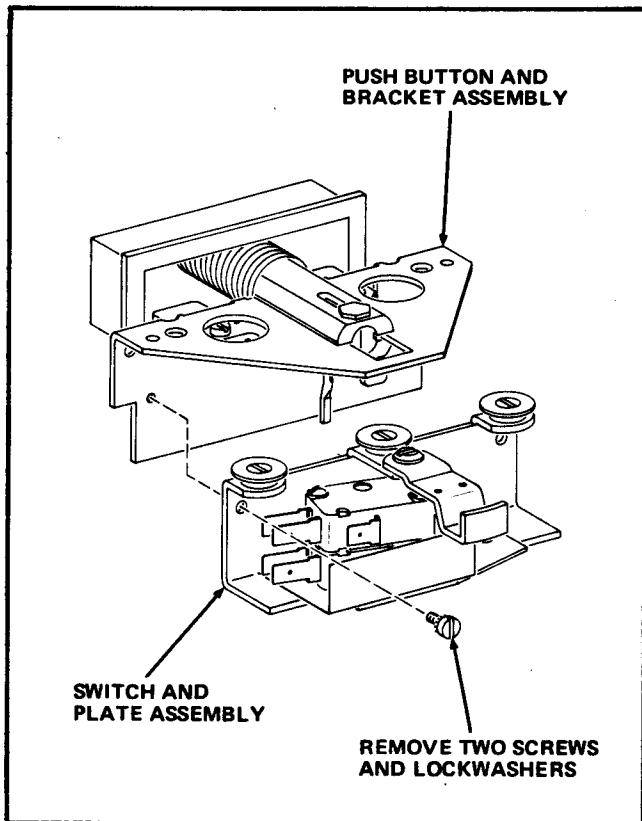
- b. Loosen, but do not remove, the Screw that goes through the Switch Assembly at the terminal end of the Switches. Do not remove the Switches from the Bracket. See Figure 21.

**NOTE**

*If the Switches are not used as immediate replacements, place them in inventory for future use.*

**B. Preparing the Push Button Assembly for use in a Current Design Selection Panel Assembly.**

1. Depress and hold the Push Button depressed to expose the two Screws in the Extension Assembly. Loosen the screws about 3 1/2 turns. Do not remove the Screws. The Screws retain the position of the Cable as it passes over the Cable Guides on the Extension Assembly. See Figure 20.
2. Remove the 2 Screws and Lockwashers which attach the Switch and Plate Assembly to the Push Button and Bracket Assembly and separate them. See Figure 22.



**FIGURE 22**

**VII. INSTALLATION OF A MODIFIED CURRENT DESIGN, PUSH BUTTON ASSEMBLY IN AN EARLY DESIGN SELECTION PANEL ASSEMBLY**

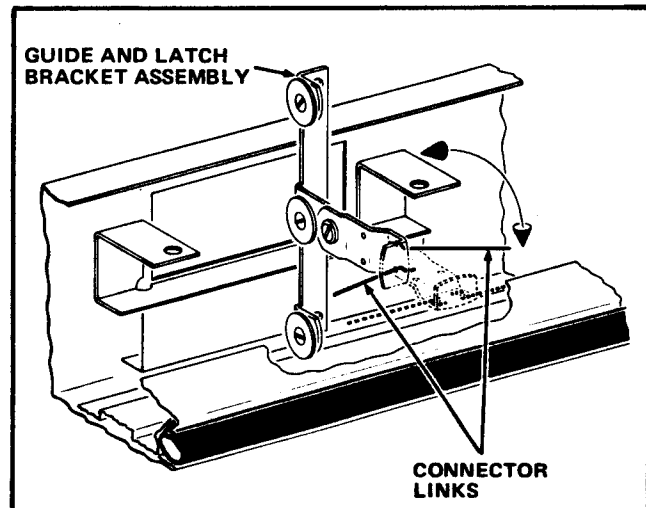
1. Install the Guide and Latch Bracket Assembly created in Section VI-A in the Selection Panel Channel. Hold the Assembly at 90° to the Channel with the Cable Guides toward the upper end of the Channel. See Figure 23.
2. Place the ends of the two Connector Links in the two holes in the Guide and Latch Bracket Assembly.

**NOTE**

1. *The Link from the upper end Push Button Assembly fits into the lower hole in the Latch and the Link from the lower end Push Button Assembly fits into the upper hole in the Latch, next to the other link. See Figure 23.*
2. *If the Push Button Assembly being replaced is the one next to the Solenoid, the link from the Solenoid fits into the lower hole of the set of holes closest to the Pivot of the Lever, in line with the other link. See Figure 24.*

**CAUTION**

Extreme care must be taken to prevent the bending or breaking of the Connector Links. Each Link in the Selection Button Assembly is individually formed to fit only that position it occupies in the Assembly when made at the factory. The indiscriminate placement or careless handling of the Connector Links will cause a Merchandiser malfunction.



**FIGURE 23**

3. Carefully rotate the Guide and Latch Bracket Assembly into position in the Channel. When in proper position the Cable Guides are up.
4. With one hand lift the free end of the Guide and Latch Bracket Assembly out of the Channel. Be careful not to damage the Links.
5. With the other hand depress the Button on the replacement Push Button and Bracket Assembly and place the Bracket Assembly over the replacement Guide and Latch Bracket Assembly. Be sure the Cable Guide end of the Guide and Latch Bracket Assembly is between the Wire Form on the Extension Assembly and the base of the Bracket on the Push Button and Bracket Assembly.
6. Rotate the unit partially into position in the Channel and guide the Cable under and around the unit.
7. Install the unit with the Push Button in place in the Channel. Be sure the Cable is between the Wire Form which actuates the Switches and the base of the Bracket on the Push Button and Bracket Assembly, and that the Push Button unit is under the tabs on the Channel. See Figure 25.
8. Guide the Cable under the Cable Guides on the Guide and Latch Bracket Assembly. See Figure 25. Depress another Push Button to apply tension to the Cable, which will set the Cables position.

**CAUTION**

**DO NOT pull on the Cable. If the end of the Cable is pulled out of one or more of the Push Button Assemblies, each Push Button Assembly from which the Cable has been removed will have to be removed and replaced. If the Cable breaks, all Push Button Assemblies must be removed and a new Cable installed.**

9. Loosely install the 2 Screws and Lockwashers that attach the Guide and Latch Bracket Assembly to the Push Button and Bracket Assembly. See Figure 25.
10. Check the Cable routing. Be sure the Cable is between the 3 Cable Guides on the Guide and Latch Bracket Assembly and the Push Button and the Bracket Assembly and that it goes over the 2 Cable Guides on the Push Button and Bracket Assembly. It must have freedom of movement through the unit. See Figure 25.
11. Tighten the 2 Screws installed in step 9.
12. Depress the Push Button and tighten the 2 Screws that retain the Cable on the Push Button and Bracket Assembly. See Figure 26.

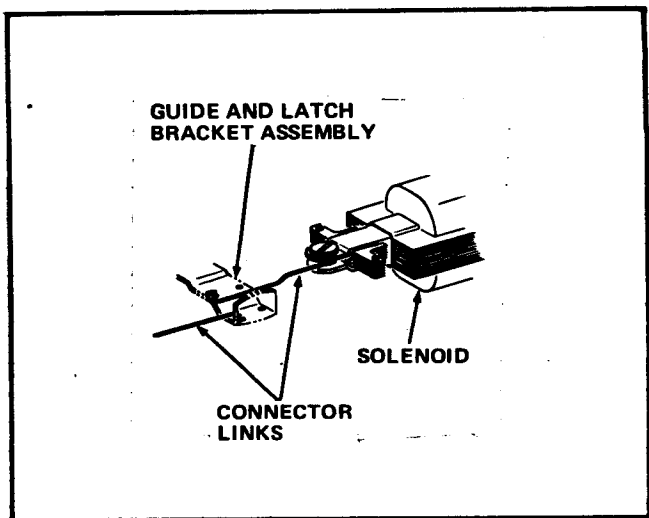


FIGURE 24

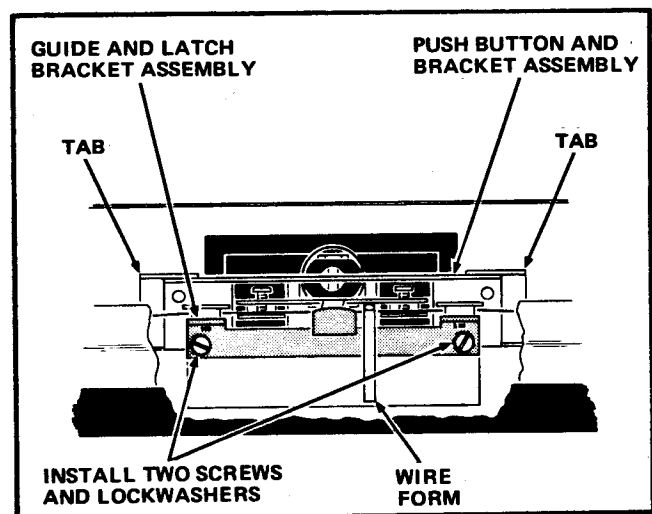


FIGURE 25

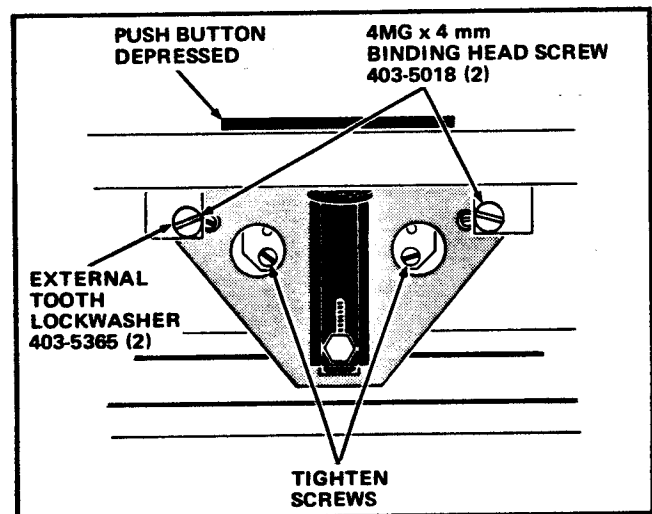


FIGURE 26

13. Center the Push Button Assembly in the Channel and attach the Push Button Assembly to the Channel with the two 4MG x 4 mm Binding Head Screws, Part Number 403-5018, and the two big External Tooth Lockwashers, Part Number 403-5365, both included in the Kit. See Figure 26. These Screws attach the replacement Push Button Assembly in the same way the original Push Button Assembly was attached, through the Channel tabs.

14. Install the Switch and Bracket Assembly. If the Switches are to be replaced by the Switch Assembly referred to in step VI-A8, install the replacement Switch and Bracket Assembly. Be sure the Switch Blades are not under the Wire Form on the Extension Assembly.

- a. The Screw referred to in step III-A3a should be in the slot in the Bracket and the Screw tightened. Be sure the Washer is between the Switch Mounting Bracket and the Screw Head.
- b. Tighten the Screw which goes through the Switches and into the Channel.
- c. If the Wires were disconnected from the Switches make the Wire connections.

15. Install the Coil Spring on the Stud at the upper end of the Selection Button Assembly. See Figure 27.

16. Adjust the tension of the Cable. See Section IV of the FM-72 Part and Service Manual - "Adjustment Of The Selection Button Assembly Cable Tension".

17. Adjust and tighten the Push Button Assemblies loosened in step III-A6.

18. Test the operation of the Solenoid-Connector Link-Lever chain positioning.

- a. Attach the Solenoid Link to the Solenoid Plunger if the Solenoid Link was disconnected from the Solenoid Plunger in step III-A2. Manually move the Solenoid Plunger to the in-position and hold it in the in-position.
- b. Press the Button of the replacement Push Button Assembly. The Push Button Latch should be in a position which will prevent the full depression of the Push Button.
- c. Release the Push Button and the Solenoid Plunger.

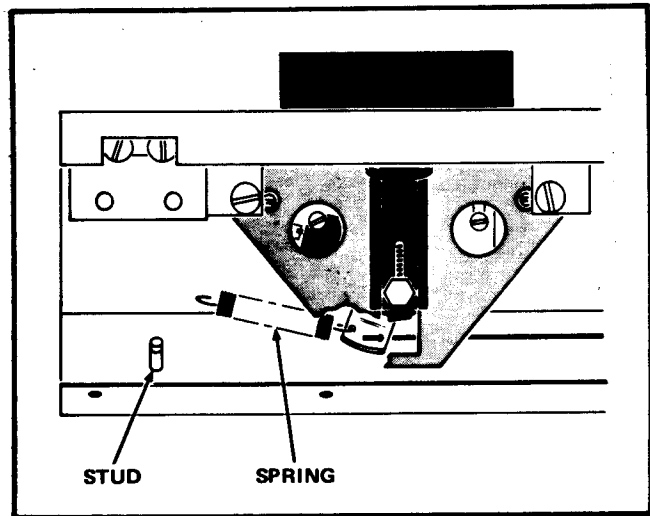


FIGURE 27

- d. Press the Push Button again. The Latch should be far enough out of the way to permit full depression of the Push Button. Hold the Push Button fully depressed.
- e. Manually move the Solenoid Plunger to the in-position and hold it in the in-position through step 18g.
- f. Release the depressed Push Button. The Latch should hold the Push Button in the depressed position.
- g. Press all other Push Buttons, one at a time. The Latch for each Push Button should be in a position to prevent the full depression of the Push Button.
- h. Release the Solenoid Plunger. The depressed Push Button should return to the at-rest position.
- i. Repeat step 18 for each Push Button.

**NOTE**

*If the operation of any one of the Push Buttons tested is not as described, one or more of the Connector Links may have to be length-adjusted. The adjustment may be made with a pair of pliers. Use extreme care when making this adjustment to prevent the breaking of the Links.*

19. Install the Selection Panel Assembly in the Merchandiser. See Section IV of the FM-72 Food Merchandiser Parts And Service Manual "Removal And Replacement Of The Selection Panel Assembly".
20. Test vend the Merchandiser thoroughly before putting the Merchandiser into service. The Drums should be loaded when the test is made.

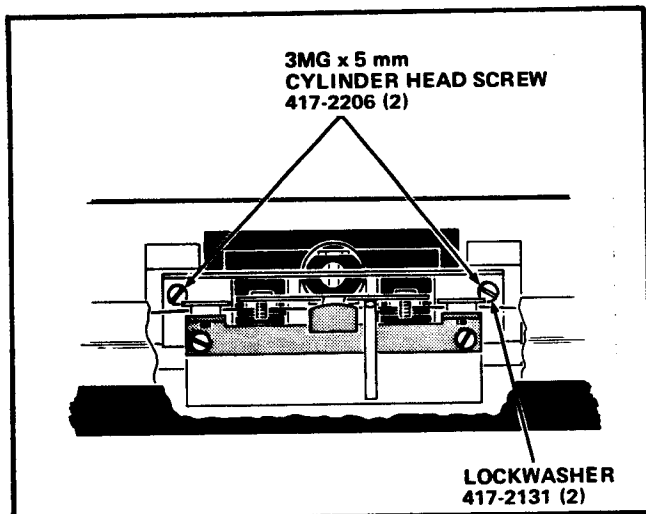


FIGURE 28

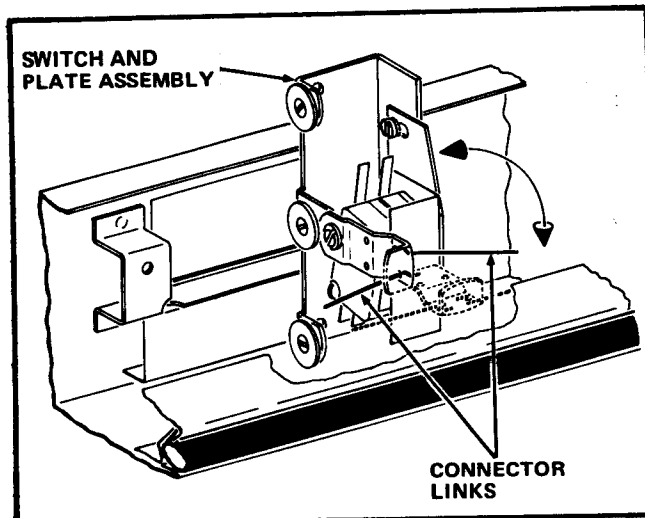


FIGURE 29

### VIII. INSTALLATION OF A MODIFIED CURRENT DESIGN PUSH BUTTON ASSEMBLY IN A INTERMEDIATE DESIGN SELECTION PANEL ASSEMBLY

1. Follow steps VII-1 through VII-12. The Illustrations referred to in these steps show an Early Design Selection Panel Assembly. This, however, does not change any of the information given in these steps.
2. Center the Push Button Assembly in the Channel and attach the Push Button Assembly to the Channel with the two 3MG x 5 mm Cylinder Head Screws, Part Number 417-2206, and the two small Lockwashers, Part Number 417-2131, both included in the Kit. See Figure 28. These Screws attach the replacement Push Button Assembly in the same way the original Push Button Assembly was attached, through the Button Bracket into the Channel.
3. Follows steps VII-14 through VII-16 and steps VII-18 through VII-20.

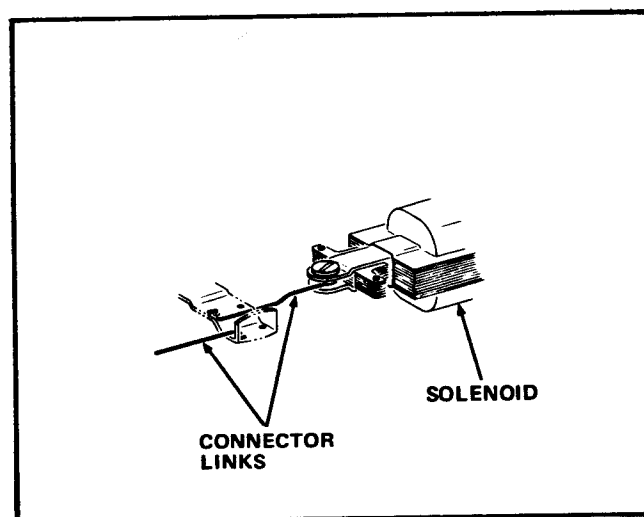


FIGURE 30

#### NOTE

### IX. INSTALLATION OF A CURRENT DESIGN PUSH BUTTON ASSEMBLY IN A CURRENT DESIGN SELECTION PANEL ASSEMBLY

1. See Section VI-B for Preparation of the Push Button Assembly for installation.
2. Install the Switch and Plate Assembly in the Channel by rotating it 90° to the Channel. Place the ends of the two Connector Links in the two holes in the Latch Bracket. See Figure 29.

1. The Link from the upper end Push Button Assembly fits into the lower hole in the Latch and the Link from the lower end Push Button Assembly fits into the upper hole in the Latch, next to the other link. See Figure 29.
2. If the Push Button Assembly being replaced is the one next to the Solenoid, the link from the Solenoid fits into the lower hole of the set of holes closest to the Pivot of the Lever, in line with the other link. See Figure 30.

**CAUTION**

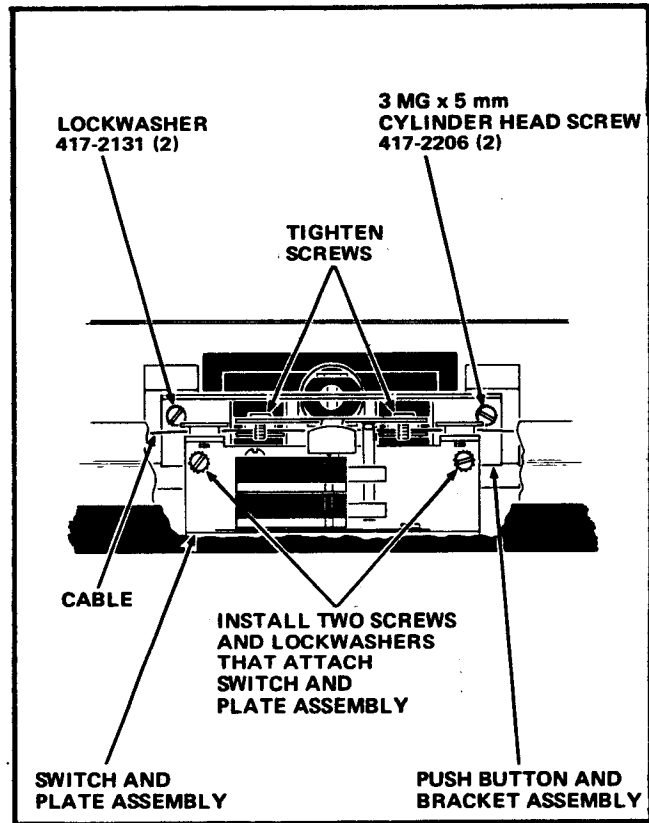
Extreme care must be taken to prevent the bending or breaking of the Connector Links. Each Link in the Selection Button Assembly is individually formed to fit only that position it occupies in the Assembly when made at the factory. The indiscriminate placement or careless handling of the Connector Links will cause a Merchandiser malfunction.

3. Install (do not secure with screws) the Push Button and Bracket Assembly in the Channel. The Switch and Plate Assembly will have to be backed up and out of the Channel a little. Make sure the Cable is between the Push Button and Bracket Assembly and the Switch and Plate Assembly.

**CAUTION**

DO NOT pull on the Cable at anytime, especially after it has been freed from under the Cable Retainer Plate. If the ferrule on the end of the Cable is broken off and the Cable is pulled out of one or more Push Button Assemblies, each Push Button Assembly from which the Cable has been removed will have to be removed and replaced. If the Cable breaks, all Push Button Assemblies must be removed and a new Cable installed.

4. Slip the Cable into the 2 Cable Guides on the Push Button and Bracket Assembly and tighten the 2 Screws. See Figure 31.
5. Secure the Switch and Plate Assembly to the Push Button and Bracket Assembly using 2 Screws and Lockwashers, making sure the Cable has freedom of movement in the Cable Guides between the two assemblies and not pinched between them. See Figure 31.
6. Secure the Push Button Assembly to the Channel Brackets with the two 3 MG x 5 mm Cylinder Head Screws, Part Number 417-2206, and the two small Lockwashers, Part Number 417-2131, both included in the Kit. See Figure 31.
7. Recheck the Cable routing. Be sure the Cable is in the Cable Guides between the Switch and Plate Assembly and the Push Button Bracket and also



**FIGURE 31**

that it goes over the 2 Cable Guides on the Push Button and Bracket Assembly. See Figure 31.

8. Make the proper wire terminal connections on the switches of the Replacement Push Button Assembly.
9. Follow step VII-15. The illustration referred to in this step shows an Early Design Selection Panel Assembly. This, however, does not change any of the information given in the step.
10. Adjust the tension of the Cable. See Section IV of the FM-72 Part and Service Manual - "Adjustment Of The Selection Button Assembly Cable Tension".
11. Follow steps VII-18 through VII-20.