

Instructions to Install Retrofit Kit
6/7000 Machine

Rev. C

****TURN POWER OFF OF MACHINE BEFORE INSTALLATION****
READ ALL INSTRUCTIONS BEFORE STARTING INSTALLATION

Retrofit kit contents:

PART NAME	QUANTITY	PART NUMBER
PCBA, GG Retro VMC2	1	10-0253-00
Cable, Retrofit Display	1	11-1700-01
Cable, Retrofit Keypad 1 (Pin2 = Key)	1	11-1700-02
Cable, Retrofit Keypad 2 (Pin12 = Key)	1	11-1700-03
Cable, MDB Extension	1	11-1700-06
Cable, 6/7000 Micromech	1	11-0187-21
Cable, 6/7000 Power Ext	1	11-0188-21
Front Cover, Retrofit	1	05-0150-02
Hardware Kit	1	05-0169-01
Panel, Retrofit Display Assembly	1	05-0091-00
Lens, Display Retrofit 6/7000 VMC	1	05-0153-00
Retrofit Sensor Assembly	1	10-0073-67
Clamp Kit Assembly	1	05-0157-00
CheckMate Label	1	15-0082-04

Tools Needed:

Screwdriver, Philips
Pliers, needle nose

Additional Accessories Needed:

MDB Coin Changer
MDB Bill Validator

1. Fully open the vending machine door and set door stop to hold door open. Then slide the peripheral panel out to gain access to electronics and connections.

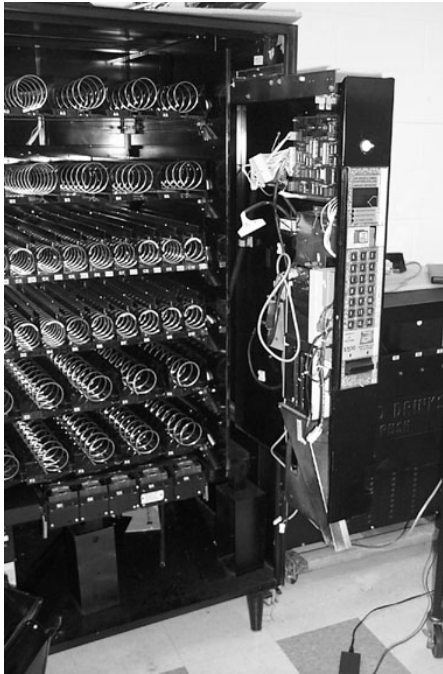


Figure 1.

2. Remove cover, pictured in Figure 2, encasing the Vending Machine control board (VMC) by removing the four retaining screws. You will no longer need this cover.



Figure 2

3. Remove display board by removing the three retaining screws. Refer to Figure 3. Save Screws.



Figure 3

4. Remove the coin return mechanism assembly as follows referring to figure 4:
Remove the E Snap Clip with needle nose pliers and lift pusher bar off axel and slip from push button shaft. Save E snap clip.
Remove four screws retaining the coin-return push button bracket and remove bracket. Save screws.
Remove the base sheet metal box/bell crank assembly by removing the three mounting screws. Save screws. Save all brackets and Return Push Button.

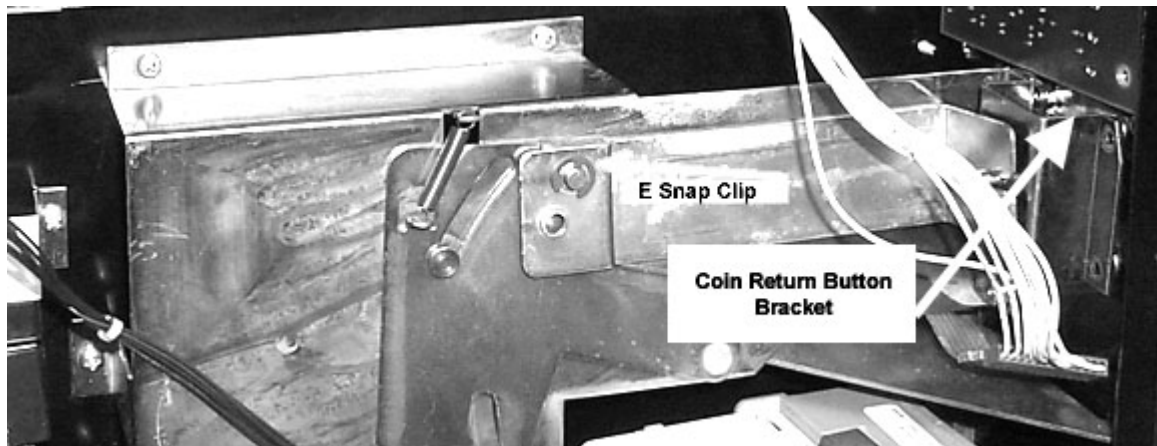


Figure 4

5. Remove Coin Changer by disconnecting the coin changer and then lifting it vertically and with horizontal motion towards technician, away from keyhole mounting studs. Set Coin Changer aside.

6. Remove the Bill Acceptor. Remove the cassette and set aside. Remove four screws, holding the bezel to the VM mounting bosses, two on the right and two on the left side of the validator respectively. Set bill acceptor and screws aside.
Note: the screws for the bill validator are specific for this purpose.
7. Referring to figure 5, locate the two flat-ribbon flex cables exiting the rear of the selection keypad. Remove the extension cables that are connected to them.



Figure 5

8. Referring to figure 6, remove the 10 capped screws on the rear side of the selection panel.

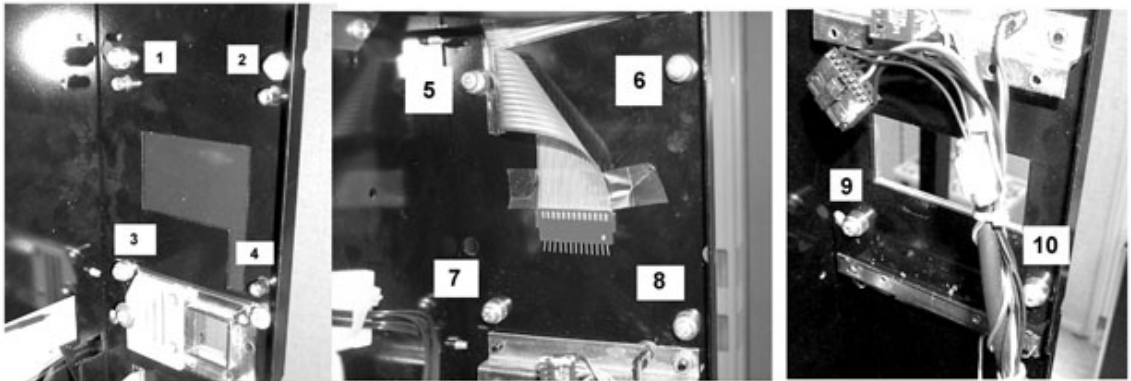


Figure 6

9. Slide the selection keypad bezel apart from the front of the drawer and carefully remove the Red/Silver plastic display cover. Replace this with the Retrofit display cover, 05-0090-01 after its protective plastic cover is removed from both sides. Make sure the cover is oriented like the below figure 7 when looking at front of machine with the door shut.

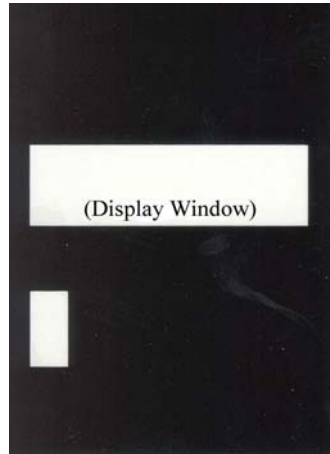


Figure 7

Slide the selection keypad bezel flush to drawer front and re-fasten at the rear with the screws 3-10. When replacing screws 1 and 2, remove the ferrules (caps) and save them.

10. Referring to figure 8, remove the cover of the High Voltage PCB. Next, locate cable originally connected to P1 (extending from the Jones plug). This is a 3 pin connector with pin 2 keyed. Connect 11-0188-21 to this cable with the male pins and the other end into P1 of the small PCB. You can now replace the cover to this PCB.

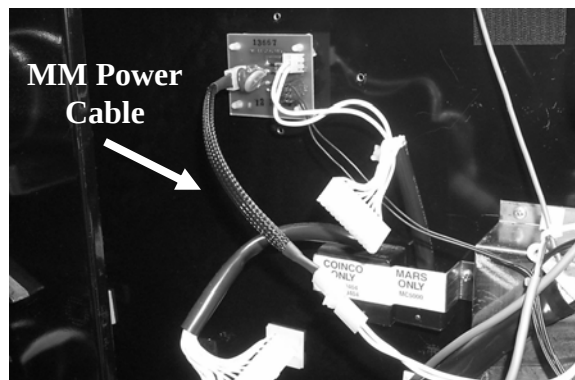


Figure 8

10. Reposition the Green-Yellow ground wire as shown. This new hole is to the right and above the current one. Assure it is fastened securely.

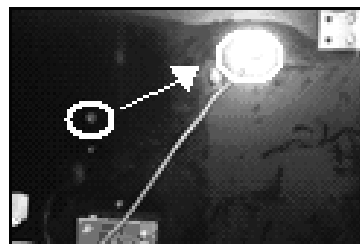


Figure 9

11. **If using MDB:** Install the MDB Bill Acceptor. Attach using the 4 screws saved from step 6 above. Install the MDB Coin Changer. Re-install the coin return button, brackets and bell crank assembly removed in step 4.

12. There are two flat ribbon cable male connectors coming directly from the selection keypad. These connectors are attached to the new control board using two extension cable assemblies, 11-1700-02 and 11-1700-03. Connect these cables as follows:

13. Mount the retrofit display assembly. Remove the protective cover on the display before installing. Locate the top two studs used to mount the previous display board, attach the display assembly at its two upper holes using the ferrules that were saved from Step 8. Place the ferrules over the two studs and screw the assembly in. The display should match up with the window from the display cover already installed from Step 8.

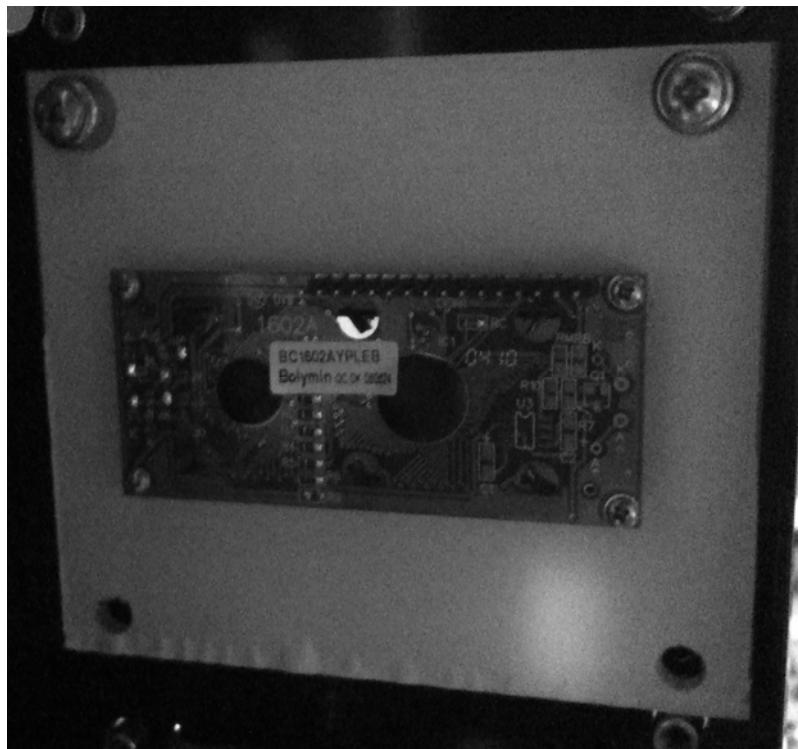


Figure 10.

14. The new control board can now be installed. Remove existing control board. Slide the new control board on to the four right pegs and secure.

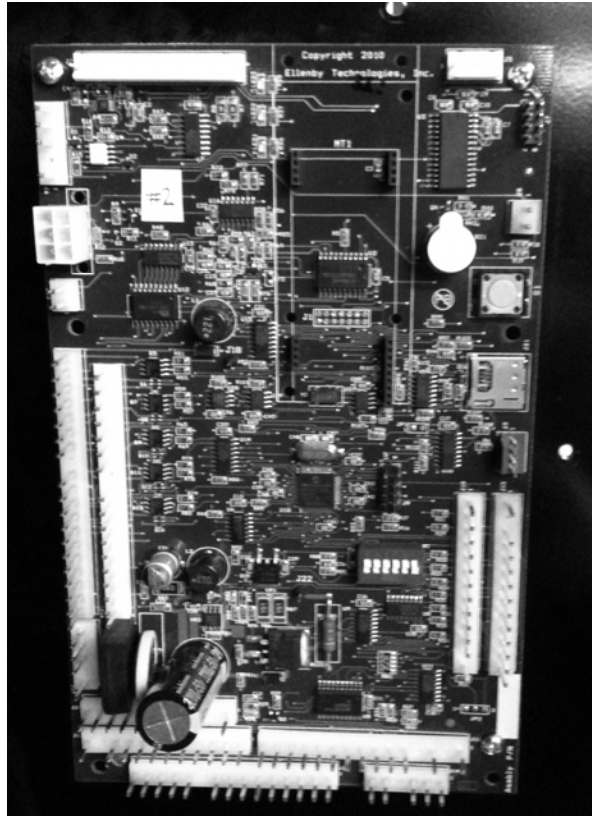


Figure 11.

15. Connections:

- Connect the display to **J2** of the retrofit control board using the Retrofit Display cable assembly.
- The power will be connected using the original connector. In order for this cable and the motor cable to reach and plug into the new control board, you will have to undo the cable harness that guides these cables. This harness is located near the back of the pull out door. It is a small white “hook”. Simply, lift the end facing the front of the machine and slide the cable sleeve out.



Figure 12.

This will allow the power and motor connectors to plug into the board. The power connector will be a five (5) pin connector with pin 4 keyed. This will plug into **J19** of the new control board.

- The motor connector will be the 18 pin connector with pin 11 keyed. This will plug directly in **J17** of the new control board.
- The MDB coin mech and bill validator will be connected to each other. There will be a 2 x 3 connector coming off of their connecting cable. This will plug directly into the cable assembly included in the kit, 11-1700-06. The other end of this extension cable will plug directly into **J4** of the new control board. Make sure that the coin mech and validator are connected to each other.
- There is a switch located on the front of the pull out door. Its connector is a two pin 0.156" spacing connector. This will plug into the new control board at location **J8**.
- Connect the keypad extension cables to the control board. Connect 11-1700-02 to Control board connector J13. Connect 11-1700-03 to Control board connector J10.
- The DEX header, **J5**, will be connected to the panel mounted connector on the front cover. Be careful when plugging this in. This should be the last connection you make on the board.

After all these connections are made, you may carefully line up the front cover with the standoffs that are on the control board. Once this is done, you may screw the front cover on with the screws included in the kit, 08-0632-00.

MicroMech Option for VMC-6000/7000 Kits

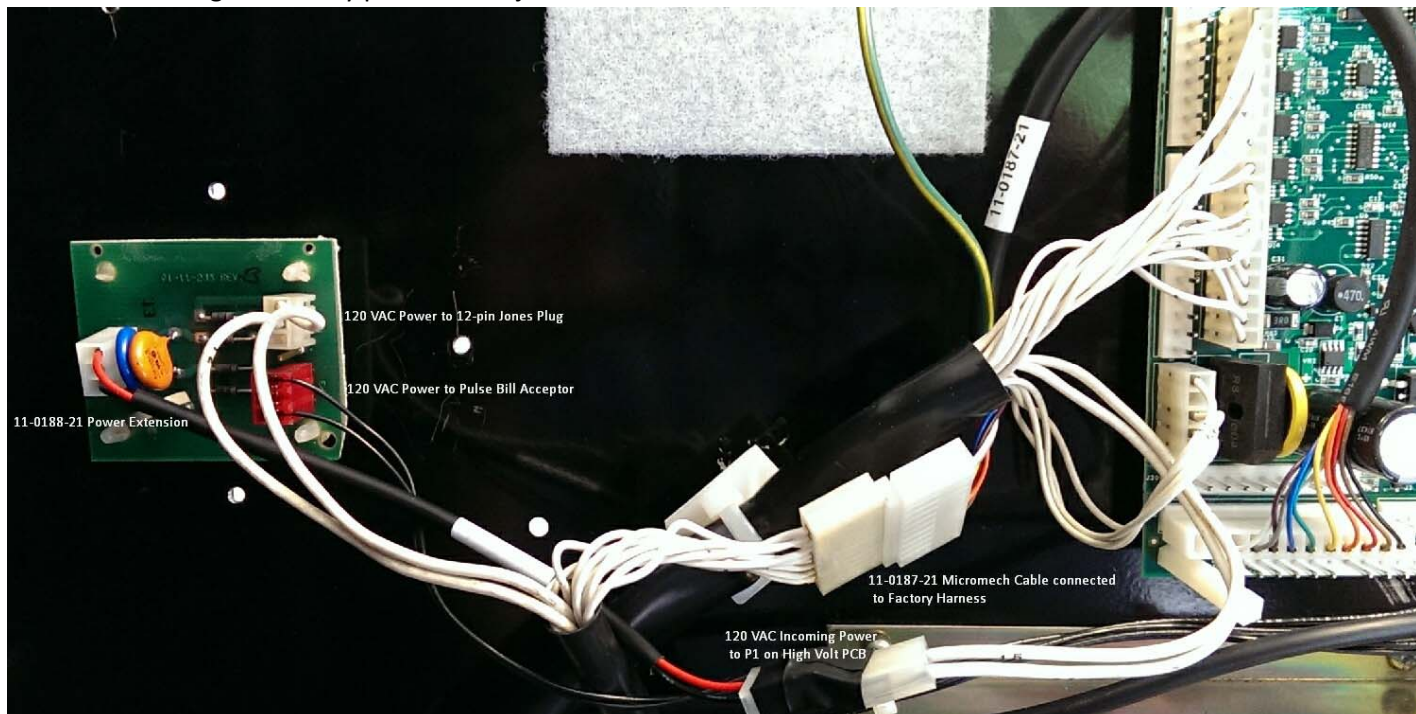
Items Needed:

- 11-0187-21 : Cable, 6/7000 Micromech
- 11-0188-21 : Cable, 6/7000 Micromech Power Extension

1. Unplug machine from wall outlet
2. Remove cover of the High Voltage PCB. Please note this is 120 VAC so care is needed to prevent shock.

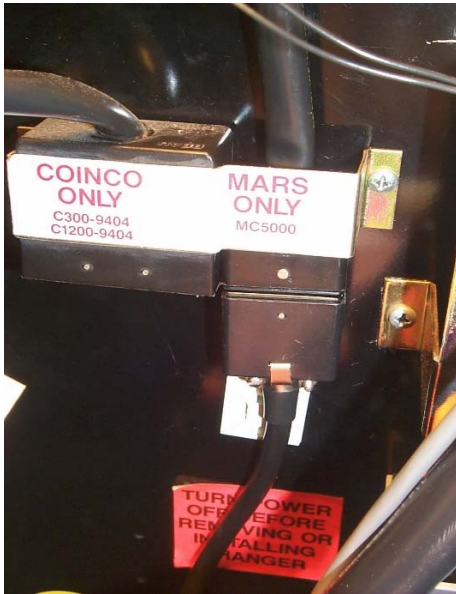


3. Locate P1 on left side of PCB. Next, locate cable originally connected to P1 and unplug, this is a 3-pin connector with pin 2 keyed, white wires. You are extending this cable using the 11-0188-21 Power Extension Cable. Plug the female end of the 11-0188-21 cable into P1 on the PCB. Next, plug the opposite male end of the 11-0188-21 cable into the original factory power cable just removed. Photo below shows the 11-0188-21 cable extension

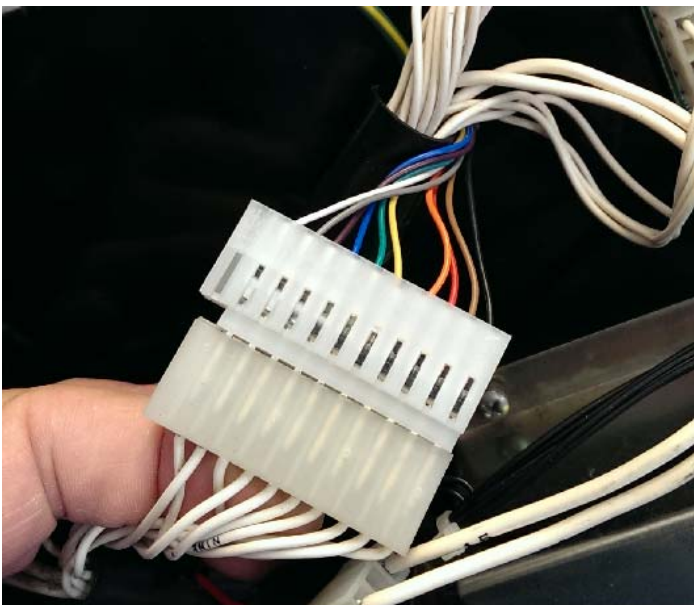


Installing MicroMech Coin acceptor:

4. The coin acceptor can connect directly to the Jones plug labeled “MARS ONLY”, typically TRC-6000 changer.



5. Next, locate the 11-0187-21 Micromech Cable. This cable will plug directly into the existing changer harness which has an 11-pin connector with pin 11 keyed extending from the Jones plug. Plug in the 11-0187-21 to this 11-pin connector using the male pins. Note correct orientation as shown below.



6. Now, plug the opposite end of the 11-0187-21 cable to J12 on the bottom of the controller, middle row, left side. This is a 12-pin connector with pin 11 keyed.
7. The bill validator should connect directly to a 3x3 connector (9-pin) located in the machine. The other end of this cable has a 3-pin connector connected to the High Voltage PCB (red connector-2 black wires) and a 6-pin connector with pin 4 keyed (all black wires, red connector end). Plug the 6-pin connector to J14 of the Retrofit Control board as shown.



8. The replacement controller is set for MDB payment devices from the factory. You must go into "Options" menu and change "Bill Val" to Pulse and "Coin Lev Mem" to ON. These are critical settings to support micromech changers and pulse validators. If using a Mars VN2500 bill acceptor, turn switch 7 on and 8 off to enable short pulse. Refer to the Usage & Configuration Guide for other model pulse bill acceptor switch settings.
9. Ensure high voltage PCB cover is reinstalled and plug machine back into wall outlet.
10. Turn power switch on and go into service mode and set option in step 8. Then go into "Fill/Dispense" and prime the controller using a handful of nickels, dimes, quarters, around 5 of each through the coin slot on the door, like a customer would. Once completed, turn machine off and back on. Try a few test vends with coins first. Now try a bill. The validator must have a solid red light on the back to accept bills. If double flashes occur, make sure you set "Coin Lev Mem" to ON in "Options" menu and then go back into "Fill/Dispense mode" and prime the board with coins. If settings are correct, the controller will ensure coin tube levels stay full and "use exact change" message will not be present on the display assembly.