
KIT PART NUMBER 6550007
INSTRUCTIONS FOR INSTALLING A SUREVEND™ SYSTEM IN A
HOT DRINK CENTER

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

Read these instructions carefully before installing the kit.
Keep these instructions for part numbers and for future reference.

This kit contains the following :

PART NUMBER	DESCRIPTION	QUANTITY
1675006	INSERT-INSTR.-UPPER-SUREVEND	1
2204513	WIRE TIE-#PLT 1.5IM KB	1
3286019	PCB ASSY-IR SENSOR INTERFACE	1
6231544	CUP DELIVERY ASSY-SV	1
--	IC ASSY	1
6551022	IR REMOTE BRACKET ASSY	1
6559010	HARNESS ASSY-IR PAIR	1
6559011	HARNESS JUMPER TO I/O BOARD	1

Part I: Remove old parts:

1. Turn off power to the machine.
2. Remove existing cup station (See Figure 1).

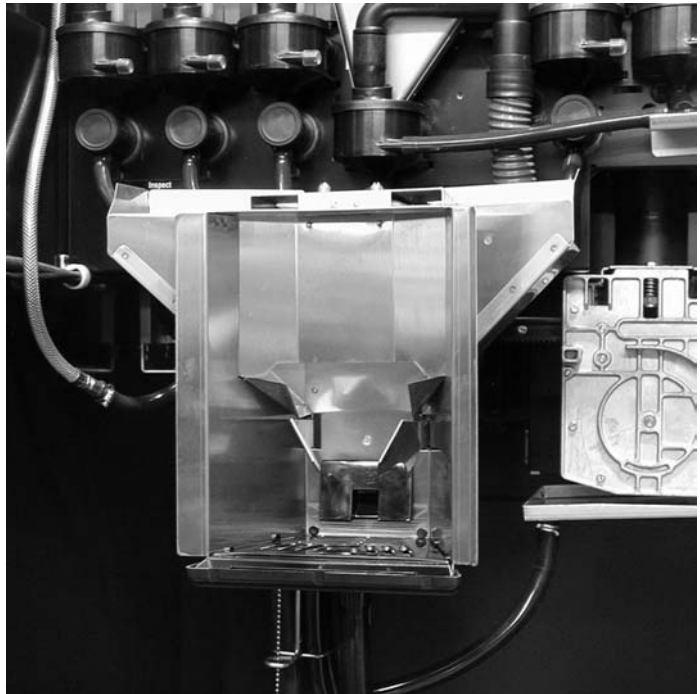


Figure 1

3. Remove the existing sensor mug brackets.
(See Figure 2).
 - a. Remove the existing cup sensor assembly if applicable. The new SureVend™ bracket has already been assembled with the IR transmitter and receiver.

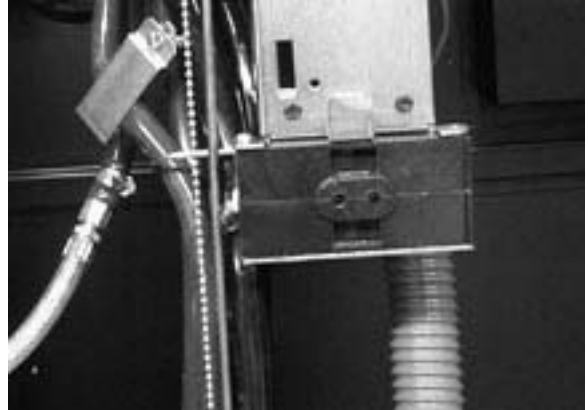


Figure 2

Part II: Install new parts:

1. Mount IR Remote Bracket Assembly:
 - a. Mount the IR Remote Bracket Assembly as shown (See Figure 3) with the nuts and screws provided.

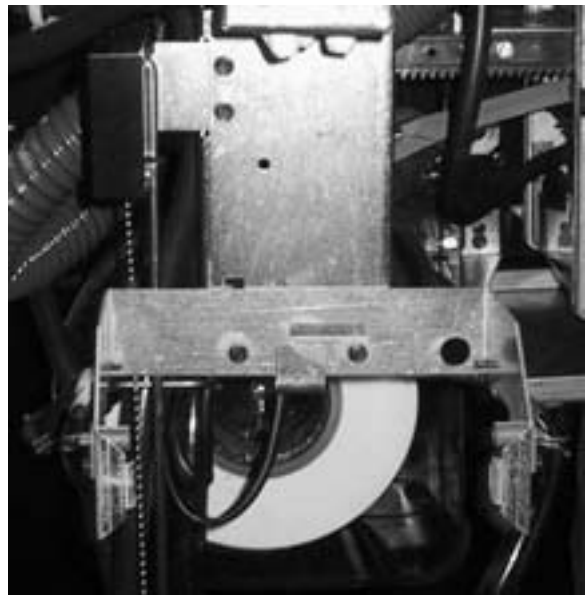


Figure 3

2. Plug interface board onto controller
(See Figure 4):
 - a. Remove the tape from the PCB standoff.
 - b. Plug the interface board J3 connector into the J34 header located on the main controller board.
 - c. Apply pressure to the PCB mount to ensure that it stays connected over an extended period of time.



Figure 4

Do not move the configuration jumper on the sensor interface PCB, connector J2!

3. Plug the cable harness into the interface board (See Figure 5):
 - a. Plug the small four-pin connector on the cable assembly 6559011 into J1 located on the interface board.

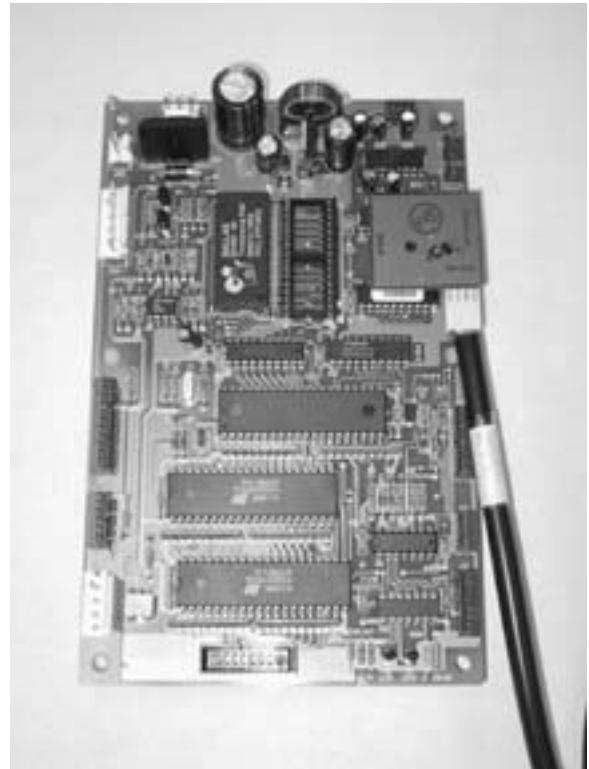


Figure 5

4. Route the cable harness (See Figure 6):
 - a. The cable is shown routed from the cup sensor PCB through the monetary panel.
 - b. Route the full cable through the square cable port in the monetary housing, and down the back side of the monetary housing.

Note

**Solid Line: Cable harness exposed,
Dotted Line: Cable harness hidden.
Make sure that there is a cable tie (provided) on the cable harness to provide strain relief to the connector! If not, the cable harness could slip off the connector over time. Secure the cable tie to the cup sensor harness and the cable harness coming from connector J-31 of the main controller PCB!**

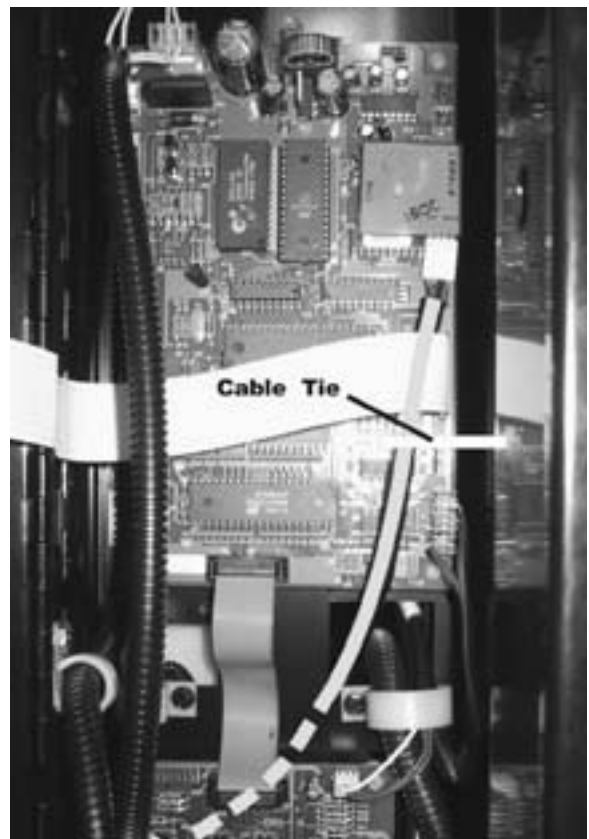


Figure 6

- a. The cable is shown routed between the cup station and the cup sensor PCB (See Figure 7).
- b. Route the cable completely behind the canister support shelf through the "J" clamps and stop at the "J" clamp to the right of the cup station mounting in front of the brewer. Route the harness from the sensor bracket behind the shelf and connect it to the sensor harness from the PCB above the "J" clamp.

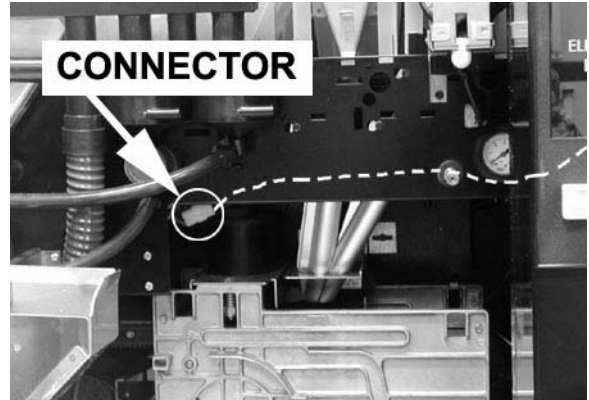


Figure 7

**Make sure that the Cable Harness is routed *behind* the support shelf!
Otherwise the grinder motors could damage it.**

5. Observe the location of the 4-pin connector (See Figure 8):
6. Connect the cup sensor harness four-pin connector to the cup sensor interface cable mounted on the cup sensor bracket.

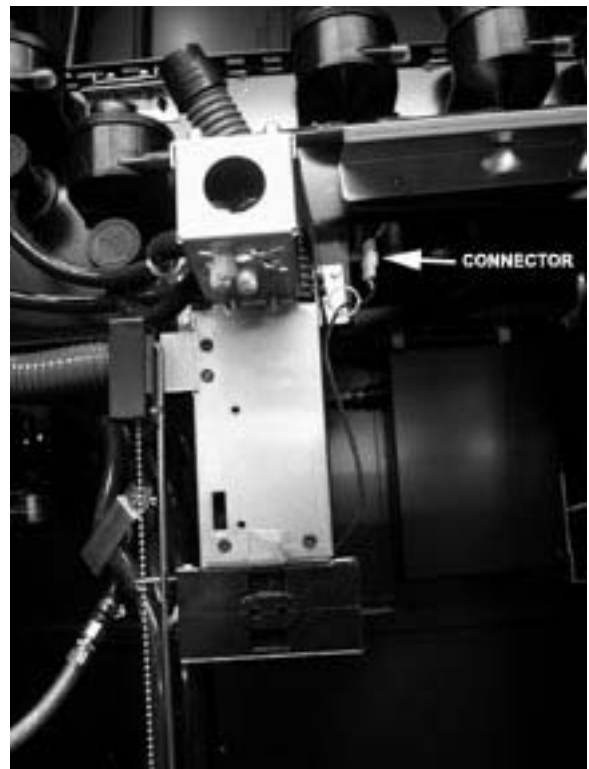


Figure 8

7. Install the new cup station
(See Figure 9).
8. Follow the detailed instructions to correctly install the new EPROM. so that no damage occurs.
(See figures 10 and 11).

CAUTION

Make sure that the EPROM has been correctly installed. Damage could occur to the component and/or the Controller PCB if the EPROM is not correctly installed.

9. Observe proper static grounding procedures to prevent damaging circuitry.

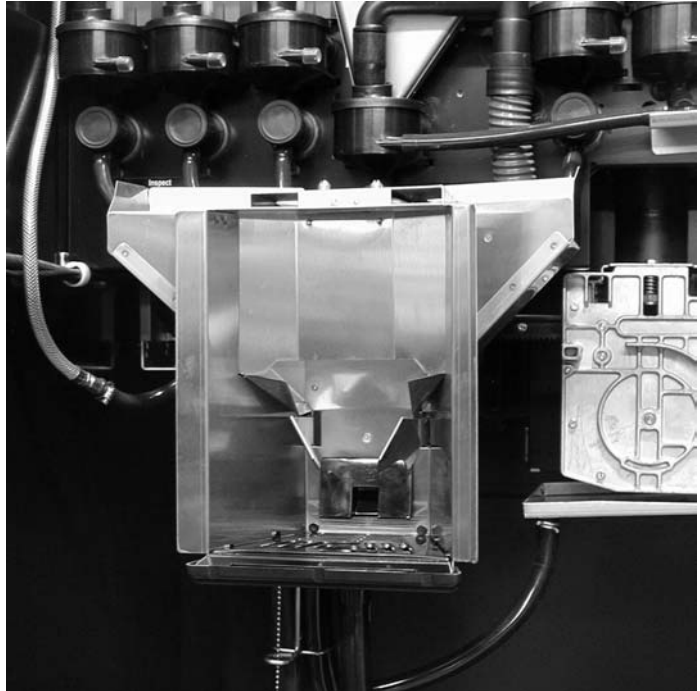


Figure 9

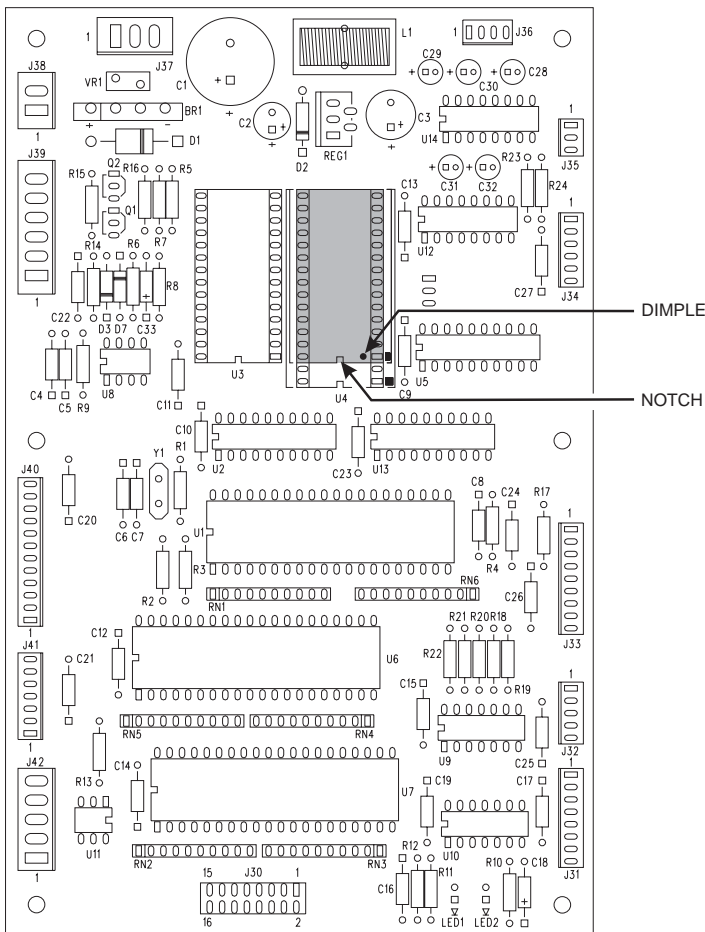


Figure 10



Figure 11

Part III: INSTRUCTIONS FOR REPLACING AN EPROM

CAUTION

You will need to RECORD all times and COUNTERS. The installation of a new EPROM can change counters and times. Do not remove the new EPROM from its shipping carton until you are ready to use it.

1. Turn the machine power switch OFF.
2. The controller cover is located behind the monetary door near the top of the machine. Remove the controller cover:
 - a. Loosen the hex head screws securing the controller cover to the machine.
 - b. Move the controller cover out of your way.

CAUTION

Observe electrostatic discharge precautions to protect the electronics from damage while they are being handled. Wear a grounded wrist strap connected to any unpainted metal part of the machine. If a wrist strap is not available, remove any electrostatic charge (static electricity) from yourself by touching any unpainted metal part of the machine before handling any electronic component. Do this often during the removal and installation process.

3. In Figure 10, notice the shaded area representing the EPROM U4. These devices have various means of showing how they are to be oriented on the circuit board. Some EPROMS will have a small notch that matches the notch printed on the controller board. Other EPROMS may have a small dimple as shown, others may have a painted stripe. Take note of where the locating mark is on the EPROM currently mounted on the controller board. Your new EPROM will be placed in that same orientation. If the replacement EPROM is a 28-pin device, it does not use the entire socket. The shaded area in Figure 10 is where the new EPROM will go, leaving the four holes at the bottom of the socket empty. If the replacement is a 32 pin device, it will fill the entire socket.
4. Carefully remove the old EPROM from the controller board. Use an EPROM removal tool or a thin tool such as a small screwdriver or knife blade to gently rock the EPROM from its socket.
5. Carefully insert the new EPROM in the controller board. **MAKE SURE THE LOCATING MARK (NOTCH, DIMPLE, STRIPE) ON THE EPROM IS FACING THE SAME WAY AS ON THE OLD EPROM!** Make sure each of the pins is in its respective hole in the socket before pushing the EPROM into place.

6. Carefully seat the EPROM into place using uniform pressure all around.

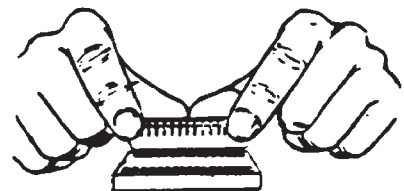
MAKE SURE THE NOTCH ON THE EPROM LINES UP WITH THE NOTCH ON THE SOCKET



USE AN IC PULLER OR A SMALL SCREWDRIVER TO REMOVE THE EPROM











CAREFULLY PLACE THE NEW EPROM IN THE SOCKET, MAKING SURE ALL THE PINS ARE IN THEIR HOLES.



7. Replace the controller cover and tighten both screws.
8. Restore power to the machine.

Part IV: Verifying Operation:

1. Turn the power on.
2. Push , then  until the display shows *SURE.V ON* to make sure that SureVend™ is on. If something else is displayed, push  until *SURE.V ON* is in the display.
3. Press  until the display shows *OPT'NSURE.V*. If *MUSTSURE.V* is displayed, push  until *OPT'NSURE.V* is displayed.
4. Press , then press  until the display shows *IN.MKPHL 12*. An 'M' should appear in the 1st digit to the right of the decimal point when you block the mug sensor. A dash (-) should appear in this location if the cup station is empty.
5. Press  until the display shows *CALLST XXX*. Note the number in the right hand side of the display.
6. If this number is either **0** or **255** with the cup station empty, there is a problem with the installation. Although **51** through **254** are valid numbers, this reading is usually between **180** and **254** with the J2 jumper on the IR sensor interface board in the factory set position.
7. If all is OK to this point, cycle the door switch by pushing it in and then releasing. There shouldn't be any SureVend™ related diagnostics on the display. SureVend cannot be tested in test mode. To test the operation of SureVend, enable FreeVend mode and make a selection.
8. Be sure to clear all the individual data fields for the SureVend™ counters in the data recall list if they are non-zero.