
KIT PART NUMBER 1471243

INSTRUCTIONS FOR INSTALLING A SERIAL VALIDATOR

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
1471277	HARNESS-VAL.TO SERIAL VAL.	1
P1471406	IC ASSY-EPROM PROG.-RCE-7 U14	1
9989586	PCB ASSY-VALIDATOR-SERIAL	1
1475052	INSERT-INSTRUCTIONS-MARS	1
1475158	KIT INSTRUCTION SHEET	1

1. Turn the machine power switch OFF and disconnect the machine from electrical source.
2. Remove pulse bill validator from machine.
3. Remove cover from control board.
4. Remove coin mech board located next to machine interface board.

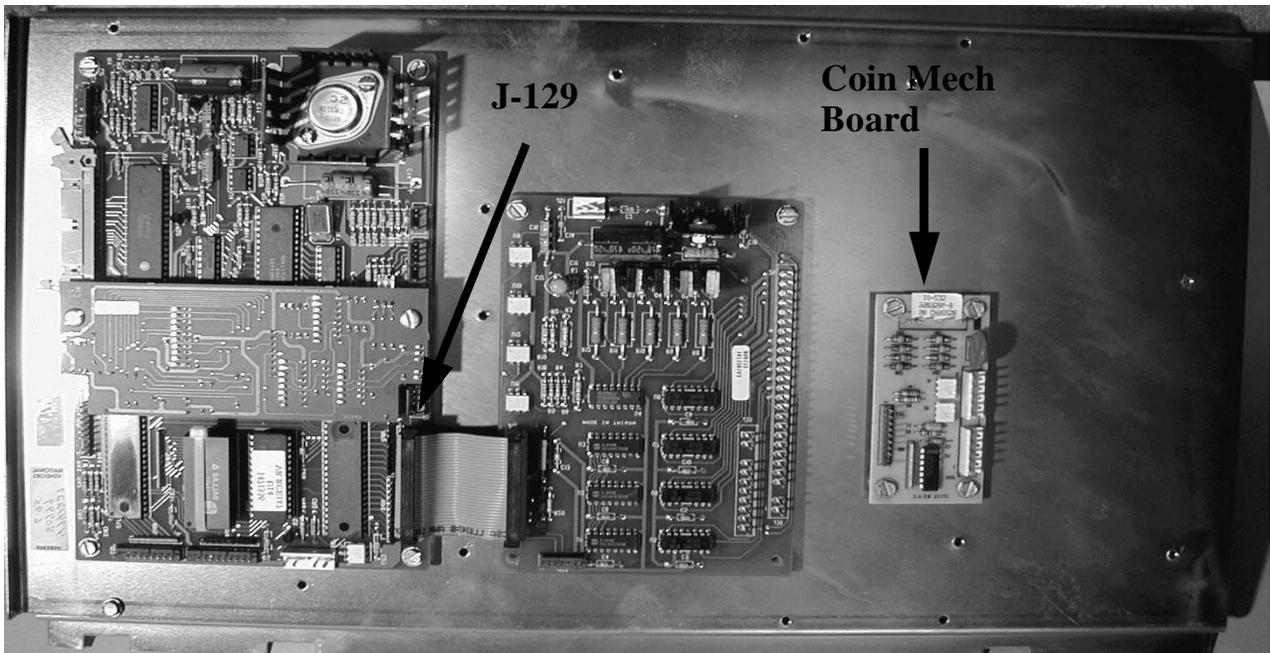


Figure 1

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5. Remove validator harness from machine.
 6. Attach new coin mech board part #9989586 in place of the one that you removed earlier.
 7. Plug bill validator harness part # 1471277 to coin mech board. Connect the plug with the single blue wire to J129 on the main control board. As shown in figure 1.
 8. Wearing electrostatic discharge protection, carefully remove the current EPROM and replace with the new EPROM part # 1471406 per the instructions beginning on the next page.
 9. Replace control board cover.
 10. Remove front bezel assembly from the monetary panel.
 11. Remove instruction plate from bezel.
 12. Install instruction plate part #1475052 into the bezel assembly.
 13. Install bezel assembly back on the monetary panel.
 14. Install serial validator on the monetary panel.
 15. Plug machine back into the outlet and restore power.
 16. Check diagnostics in programming.
 17. Refer to programming manual when programming the machine for serial validator.



CAUTION



PREVENTING CIRCUIT DAMAGE FROM ELECTROSTATIC DISCHARGE

EPROMs are susceptible to physical damage, for example, broken components due to rough handling. In addition, EPROMs are subject to damage by various types of static electricity. Damage of this type is called **ELECTROSTATIC DISCHARGE (ESD)**. ESD can cause immediate damage to components on a circuit board assembly, or it can weaken them to the point where the damage will show up days, weeks, or months later.

PRECAUTIONS TO TAKE WHEN HANDLING PCB ASSEMBLIES

- a. For storage, the best protection for the assembly is to leave it in its shipping carton.
- b. Before handling the EPROM, be sure you are wearing a conductive wrist strap or other suitable ESD protective device. The conductive wrist strap should be connected to ground in the machine. This can be any **PLATED** exposed metal part. **DO NOT CONNECT YOUR WRIST STRAP TO A PAINTED PART.**
- c. Remove the new EPROM from its box.
- d. On Figure 12, see the shaded area representing 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 which 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. Some EPROMs have 28 pins, so it does not use the entire socket. The shaded area on the figure is where the new EPROM will go, leaving the four holes at the bottom of the socket empty.
- e. 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.
- f. 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.
- g. Carefully seat the EPROM into place using uniform pressure all around.
- h. Replace all items you removed.