

GENESIS KIT for Standard SC

rev. 3/16/12

1. Turn off power to the changer.
2. Unplug all wires from existing bill acceptor. Remove the existing bill acceptor and stacker from the changer. Remove the stacker mounting brackets.
3. Remove the inside bill acceptor bracket. Should be held with 4 screws, and maybe 4 nuts. The 4 screws are also holding the outside trim bezel trim.
4. Remove the power supply from the bottom of cabinet (unplug from outlet) and harness that goes to the old bill acceptor.
5. Clean out whatever junk and dirt has accumulated over time.
6. Install the outer acceptor trim as shown in fig. 1. Now set in place the inner bracket over the studs from the just installed outer bracket. The two long mounting studs that are closer together should be at the top. Fig. 2. The outer bracket studs will go through one pair of the slotted holes on the inner bracket. The reason for all the up/down movement is to allow for different bill acceptors. Install LOOSELY 4 nuts over the new mounting studs. Do not tighten yet.
7. The new bill acceptor will mount on the long threaded studs of the internal bracket. At this point; hold your bill acceptor up to the mounting bracket and determine where you need to move bracket up/down for nose of acceptor to properly fit through front of machine. Once you have determined proper positioning; you should tighten the 4 nuts to lock the inner bracket in place. Now you can mount the bill acceptor to bracket using the 4 nuts provided.
8. Place the new black control box from the Genesis conversion kit on the cabinet floor. Make sure the on/off switch is OFF. ON/OFF sw., lights, and labeling should all be readily visible where you place unit. .
9. One harness coming out of the control box has a normal power plug. This is the power harness. Plug it into the receptacle where the original power supply was plugged into. Route wire so that it is out of the way.
10. The next harness coming from the control box is long and is for the bill acceptor and out-of-service light. The loose, two wire portion of this harness is for the changer out-of-service light, and the black connector plug will go to the Mars bill acceptor. Route the harness up to the bill acceptor and connect the new harness's black connector to the acceptor at the 30 pin connector on the acceptor side. The 'tab' on a long side of the connector (towards rear of acceptor) should allow it to be plugged in only one way correctly. The 2 loose wires should plug onto the already installed "out-of-service light" on the front bracket. (If you have ordered a kit for something other than the MARS we supply; you may have a different connection for the bill acceptor). (Optional harness is available for Mars AE2400/VN2500.)
11. The third harness will plug into the second, aluminum control box at the connection labeled "Connection to Host". This box will eventually be positioned on the changer floor in an out-of-the-way area; but we still need to hook up some more wires to it. If you have only one coin hopper, we will refer to it as the 'left' hopper. If you have two, the second will be the 'right' hopper. The third hopper (if it exists) will be referred to as the 'center' hopper.
12. Plug the hopper power cords (previously removed from old power supply) into the outlets of the new aluminum control box labeled "Power connections". Be sure to get the cords into the proper outlets.
13. Now we will deal with the data cables from the hoppers (gray 'phone lines'). We will leave them plugged into the hoppers; but the loose end that used to go to the original bill acceptor will now go to the new box. Remove the data cables from whatever harness holders were routing them to the old acceptor, and route them to the new box connections labeled "Control connections". BE SURE to get the data cable from the left hopper into the socket for 'the left hopper'. Failure to have the power and data cables plugged in to their proper sockets will cause all sorts of improper and confusing operation.
14. Any unused "control connections" need to have hopper by-pass plugs installed.
15. All of the connections are now complete, and you should situate the boxes so the aluminum one is out

of the way, and the main black control box is readily accessible.

TESTING OPERATION:

1. Empty hoppers if they aren't already.
2. If you disconnected the changer's power outside the cabinet then restore the power now. Turn the controller switch ON. Once powered-up, you should hear the bill acceptor motors go through their own boot-up cycle. At this point the YELLOW LED on the new controller should be ON STEADY, and the changer out-of-service light should be on. This is an error condition caused because all hoppers are missing or empty. This is good since you should have empty hoppers. Try to insert a bill into the bill acceptor. It SHOULD NOT go in. The acceptor should be disabled with its red light on the rear blinking twice.
3. Now fill the hopper far enough to cover the "empty sensors" to the funnel area. Now push and release the reset button (next to the Yellow LED) on the controller box. You should now get a GREEN LED and the Red and Yellow should be off. The changer out-of-service light should now be off. The bill acceptor should now be enabled and capable of accepting bills. Insert a bill and check coin dispensing.
4. All payouts are divided between all available hoppers. When(if) one hopper becomes empty, the payouts will continue from all remaining available hoppers, if any. When all coin hoppers signal empty (coins no longer surrounding sensing washer), or jammed; the controller will finish whatever payout it may have been working on, and then the Yellow LED will go ON STEADY- indicating a SOLD OUT condition, and the Green LED will be out. This is where we were in step #1 above.
5. Fill hopper with coins. If the Green LED is not on, push the Reset button. The Green LED should come back on. Close up the changer. The changer should be ready to go.

NOTES:

- When the coins in the hopper no longer are "strongly touching" the empty sensor of the hopper, a signal will be sent to the controller that the hopper is getting low on coins. The controller will finish the current payout operation it is working on. Once it is finished with its current payout, THEN it will remember that the hopper is no longer available and not use it.
- In the event that a hopper is very dirty or jammed, the controller will shut off the hopper after 40 seconds of running if the coin count has not been satisfied by then. It will consider this hopper as out of order. The reset button needs to be pressed to allow "empty" or "timed-out" hoppers to come back in service after the situation has been corrected.
- Coins are paid-out in groups of twenty-five or less. If the total number of coins needed exceeds 20, there will be a short 4 second pause between paying out multiple groups of coins. This is to allow customer to empty coins from the smaller coin cups in some cabinets.
- The default situation is for the controller to be built and sent out based on 25 cent coin/token value. There is a jumper wire built into the controller circuit board which can be cut to change coin value to \$1. Call for instructions if you need to change this. Other special programming is also available for other coin / token situations.

ERROR CONDITIONS (expanded list):**YELLOW Error LED**

- ON STEADY- all hoppers empty, missing, or `timed-out' (dirty or jammed)
- 1 blink- Left hopper coin detector error when motor should be OFF. Either the coin detector is: out, dim, blocked by foreign object, or the left hopper motor ran too long giving an extra/unexpected coin.
- 2 blinks- Right hopper coin detector error when motor should be OFF. Either the coin detector is: out, dim, blocked by foreign object, or the right hopper motor ran too long giving an extra/unexpected coin.
- 3 blinks- Center hopper coin detector error when motor should be OFF. Either the coin detector is: out, dim, blocked by foreign object, or the center hopper motor ran too long giving an extra/unexpected coin.
- 4 blinks- Bill acceptor vend signal stuck on. Either a faulty bill acceptor, shorted-out harness, or controller.
- 5 blinks- Unrecognized bill vend signal - Example = 3 vends pulses (\$3). Either power to the changer was interrupted when bill acceptor was paying out or a faulty bill acceptor.
- 6 blinks- Bill acceptor internal error. The bill acceptor has a known problem within itself. Check the acceptor for a jammed bill or blocked sensors. The acceptor may need service. Once the acceptor problem is corrected, the system controller should return to service by itself.
- 7 blinks- Coin acceptor signal stuck ON . (Most machines do not use this).
- 9 blinks- Left coin signal on too long while motor ON. (coins not dropping quickly, or jammed).
- 10 blinks- Right coin signal on too long while motor ON. (coins not dropping quickly, or jammed).
- 11 blinks- Center coin signal on too long while motor ON. (coins not dropping quickly, or jammed).
- 12 blinks- Left extra coin.
- 13 blinks- Right extra coin.
- 14 blinks- Center extra coin.

RED LED-

- “unfilled count” LED ON- This light is on whenever the system is busy counting coins. If the changer has gone out of order with an error signal (above), and the red ‘unfilled light’ is ON, then the system knows that it DID NOT properly finish paying out all the coins from the last transaction. If the ‘unfilled LED’ is off, then the last transaction should have been successfully finished.



Fig. 1

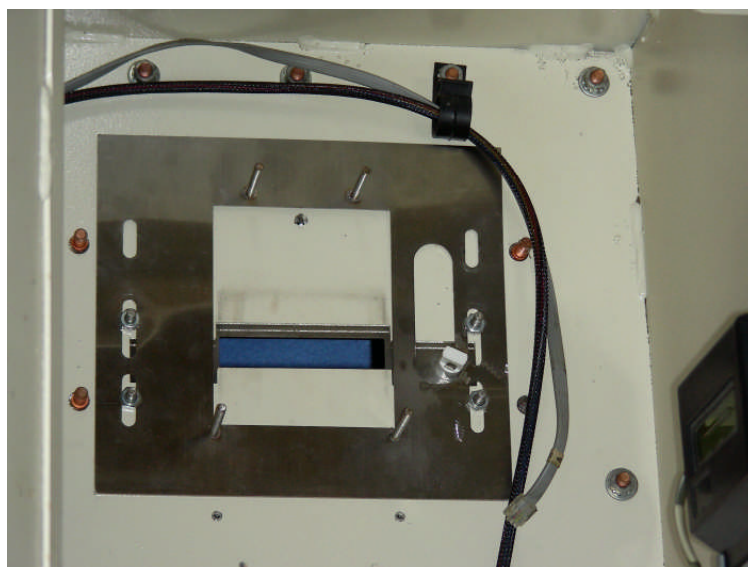


Fig. 2