

Hamilton to Mars Conversion Kit

This instruction set is intended for those with the ACW 4 and 5 autocashiers with the single line display. This display is attached to the control board via a small wiring harness. You **MUST** have this type of display in order to use this kit. Before you begin read and understand **ALL** the instructions.

SAFETY

The installer must use proper protective equipment and follow all instructions.

BEFORE STARTING

It is suggested that all power be turned off to the equipment being converted. Also, remove or protect all nearby components that may be affected by the installation. All tools should be inspected before using. Your new validator has been checked before shipment, but I suggest you "trial test" the unit before installing by:

1. Turn off the power to the unit.
2. Unplug the harness from the original validator and stacker. **NOTE** If a stacker is currently being used you must "bypass" the stacker control by inserting the bypass plug into the stacker harness (this plug is usually tie-wrapped near the end of the stacker cord)
3. Plug the new validator into the original harness and restore the power. Test the new unit by inserting several bills of the denominations you wish to accept. Your new Mars acceptor is factory set (unless a special unit is requested) to accept the bills in all four directions and to accept all bills up to \$20. If a change of settings is desired consult the attached sheet for re-programming the acceptor.
4. The billbox **MUST** be attached for proper operation.

INSTALL NEW CONTROLLER SHELF

Begin by removing the change hopper and loosening the hopper bracket. Place the new shelf to the left side of the hopper with the flat side under the bracket and the left side (with the bent leg) touching the left side of the cabinet (see diagram). The shelf can be held in place by pop-rivets, screws or an adhesive caulking. I have had good luck using the sealant.....just prop up the side until the caulk "sets". Tighten down the hopper bracket. You may wish to complete this a day or two before completing the rest of the conversion.

LOCATE MARS UNITS

To locate the Mars plate set, simply remove the original outside plate and align the supplied template. Mark the holes for the new outside plate studs and drill two 5/16" holes.

INSTALL THE PLATE SET

Locate the outside faceplate in your kit and place it over the new opening (from the outside) so that the studs pass

thru the 5/16 holes. Mount the new outside plate using the existing hardware. Mount the inside plate using the supplied nuts. **HAND TIGHTEN ONLY AT THIS TIME!**

PREPARE DISPLAY

After noting the display orientation, (you don't want to install the display in the new enclosure upside down) unscrew the display from the standoffs and unplug the small connector from the control board. Replace the screws in the standoffs and be sure to save the original small harness. If service is ever needed on the controller it should be returned to it's original configuration before being returned to Hamilton for exchange or repair. Insert the new display harness thru the hole in the side of the new enclosure box and install the grommet. Plug the harness into the display and then loosen the standoff screws in the new enclosure. Working from one side to the other, place the slots in the display board under the screws and tighten....careful....these do not require much pressure to hold in place.

Slide the "lip" of the new enclosure under the mounting plate and, while viewing through the window, line up the display. Wait until you complete the installation so as to fine tune the alignment then tighten the plate nuts. NOTE: Some ACW cabinets are slightly taller. The lip of the new enclosure may not reach the bottom of the plate. If this occurs simply obtain some clear sealant and apply to the lip. Use tape to hold the display in place until the sealant cures.

RELOCATING THE ACW CONTROLLER

Place the controller open side down on the previously mounted new shelf. The controller function buttons should face toward you. Route the new display harness and connect it to the controller. Route display wiring from the door toward the new controller location. It is necessary to add a short length of wiring (provided) to the wires leading to the ACW refund and selection buttons. Make the splices just above the "tee" in the harness near the bottom of the door just as the wires leave the main loom heading toward the buttons. It is suggested these connections be soldered and covered with heat shrink tubing (provided) and that you complete ONE WIRE AT A TIME. There are 2 brown wires that are very similar in color, so pay very close attention to these. Those of you with credit card readers will either have simple wire leads or a PS/2 type cable. The wires can be extended but you must use an extension cable (not provided) to lengthen the PS/2 leads. Those with the credit horn will need to extend this wiring also.

OPTIONAL METHOD: You may relocate the controller **WITHOUT** adding the supplied wire by placing the controller on the new shelf and facing the "action" buttons to the rear of the cabinet.

MOUNT THE NEW VALIDATOR

Align your new validator over the small studs so that the nose is midways thru the outside plate. Install the final nuts (supplied) and **LIGHTLY** tighten. **DO NOT OVERTIGHTEN AS THIS WILL CRACK THE NOSE.**

FINISHING TOUCHES

After all the connections have been made and the wiring neatly re-routed thru the cabinet you can restore power to the unit. Observe the display and adjust if necessary so as to center it in the viewing window. After the display is in the correct position I would mark the perimeter of the enclosure box so as to assist you in relocating it should you ever need to remove it.

TEST THE UNIT

Insert several bills to test acceptance rates and proper operation. If unit does not behave properly first check that the stacker bypass plug is installed. If you are still encountering problems check ALL wiring. Feel free to contact us with any questions.

TIPS AND SUGGESTIONS

- To cut down on the installation time you can complete the conversion in steps. Just complete the shelf installation and wiring extensions before making the actual conversion.
- The Mars validator produces very little heat....no cooling fan should be needed.
- In colder climates if you like you could re-install the heat pad under the controller shelf or the coin hopper.....that way it would prevent wet coins from freezing together.
- If you are considering multiple token or coin acceptance just contact us...we have several solutions.

FINALLY

I hope you have found this installation to go smoothly. I would appreciate any feedback you may have on any of our kits or products.

PROGRAMMING INFORMATION

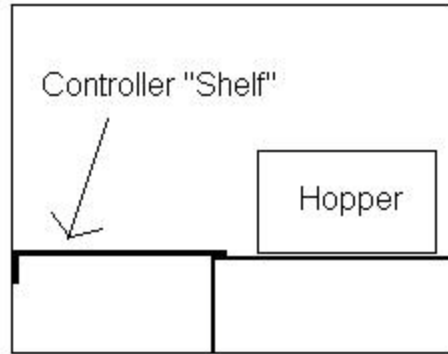
DO NOT change the dip switch settings on the Mars. Any programming will be made using the programming coupon. A copy has been attached to this instruction set. If you desire different acceptance values you may make a copy of the blank coupon found in the Mars manual, fill in the blanks and complete the new program. ***It is very important that the pulse, pulses per dollar and interface selection portion of the programming coupon remain as orginally programmed.*** I suggest you read the Mars manual for further information.

NOTE:

- The billbox MUST be in position before the unit will accept bills.
- The red light at the top of the unit will flash twice whenever the unit is inhibited. This will occur when the controller displays "Carwash Busy".

Diagrams And Notes

In this diagram, you will note how the controller shelf is oriented inside the cabinet. If you choose to use an adhesive caulk, you may want to complete this step a day early.



In this diagram, note the dimensions of the ACW door. These are from the outside and are measured from the edge of the door. If your door does not have very similar measurements, please contact us.

