Upgrading your Valley-Dynamo DBA Pool to the v11.0 PCB

AVOID DAMAGE TO YOUR PC BOARD
FOLLOW THESE INSTRUCTIONS BEFORE APPLYING POWER.

Users with the Mars MEI should locate the main board harness connector J2. Pin one has a green wire and a red wire. Cut the green wire, cover the cut end with electrical tape and secure it to the harness. The red wire does not require modification.

Users with the ICT Bill acceptor need to go to the "Master Settings" and turn International DBA 'ON' Once out of the program mode, press the reset button and refer to the kit's "Programming Instructions" for more details.

YOUR LOGIC BOARD WILL BE DAMAGED IF THESE INSTRUCTIONS ARE NOT FOLLOWED COMPLETELY AND CORRECTLY BEFORE APPLYING POWER. THIS IS NOT A COVERED WARRANTY FAILURE. YOU WILL NEED TO PURCHASE A REPLACEMENT BOARD.

PLEASE FOLLOW THESE INSTRUCTIONS TO SAVE TIME AND TROUBLE

CONTACT TECH SUPPORT IF YOU HAVE ANY QUESTIONS.

Required Tools

- Phillips Screw Driver
- Wire Cutters
- Tamper Proof Hex Bit # 6 (included with your original manual. You can order a replacement using part number 870061160).
- Pliers
- Electrical Tape

Optional Tools

- Drill
- 1⅛" Pedal bit
- 1½ " Pedal bit
- 1⅛" Saw bit or knock out
- Wire Strippers
- Crimper for Insulated quick disconnect terminals
- Volt Meter (Highly recommended)

Conversion Procedure

Determine if you expect the location to charge the battery in the table. If so you will need to remove the Slate for the installation (see last page for directions).

These installation instructions assume you <u>are not</u> installing your new charger in the table. This installation procedure does not require pulling the slate.

1. Open the bill acceptor coin door.
2. Remove the bill acceptor stacker
3. Disconnect the battery and remove it from the table.
4. Use your Drill or Phillips screw driver to remove the two screws holding down the wooden board with your current logic board assembly.
5. Disconnect the 3 white Molex connectors on the left side of the wooden board.
6. Disconnect the 12 pin flat black display cable from the left logic board.
7. Disconnect the 3 pin white Molex connector between the coin meter and the wooden board, and remove the wooden board from the table.
8. Use the Tamper Proof #6 bit to remove the 4 screws holding down the display lens and remove the lens. The 2 screws that held the wooden board into the table can be partially screwed into opposite corners of the lens to help you remove the lens from the rail.
9. Remove the 2 Phillips screws securing the display in place, and lift the display and cable out of the top rail. You may need to cut wire ties inside to free the cable.
10. Pull out the battery harness and cut off the quick disconnect terminals.
11. Strip about ¼ inch of the insulation off of the wire.
12. Twist the two red wires together and thread them into the new larger quick terminal. (Pliers can be used, but a crimper is best). Squeeze the barrel section of the terminal closed around the wires you inserted.
13. Repeat for the two black wires.
14. Move all harnessing out of the way.

Note: Steps 15 – 18 are optional, but recommended to take full advantage of the v11.0 PCB's functions.

15. On the floor of the table between the cash box cleat and the coin door wall about 4" in from the front wall. Drill a 1⅛ inch hole using your paddle bit. We recommend counter sinking the hole on the exterior side of the hole about ¼ inch using a 1 ½" paddle bit.
16. Install the reset button in the hole drilled in Step 15.
17. On your coin door 1" below the lock and in a centered vertical line with the top two buttons, Drill or use your knock out to install a 1⅛ inch hole.
18. Install the blue button marked Speed Pool, with the raised protective bezel, in the hole created in Step 17.
19. Position the new logic board onto the left wall about 6 inches from the door that is part of the mechanical coin box enclosure. It is best if you position this so that the USB and Printer terminals are facing the coin door. This will provide easier access for future use.
20. Install the new harness to the logic board, and connect it to the main table harness.

Wire Connector	Board Location	Purpose
6 Pin, White, Brown w/ black stripe, Brown, _, _, Red/Green	J7	Buttons
7 Pin	J2 DBA	DBA & Coins
4 Pin	J1	Battery 12v, Battery Ground
6 Pin, Red, Purple, _, Black, _, Tan	J3 Motor	Motor
3 Pin	J5 Count 1	Coin Meter
10 Pin	J10 Display	Display

21. You will find one white wire with a crimped pin blocking your connection of the 9 pin Molex connector. Remove this pin with the white wires from the new harness and insert it in the same position of the table's original 9 pin connector (Connector position 5). This is for your Speed pool buttons.
22. Connect the Coin Meter harness to connector J5, and the other end to your coin counter.
23. Connect the black 6-pin connector on the board to P1 PRGM, making sure the black wires are connected to pins 2 and 4.

Note: All switches need to be wired Normally Open

24. Connect the one of the leads to the COM of the reset switch and the other to the N.O. (Normally Open.)
25. Connect the black 10-pin connector to R10 on the display board. Secure by wrapping electrical tape around the connection. If not R10 is present, purchase a new display, part # 880200605, available from your Distributor or www.valleydynamoparts.com
26. Feed the other end of the harness through the cut out in the top rail.
27. Position one white spacer on the lower right corner and one on the upper left corner over the original holes used to secure the display before. Place the display over the spacers.
28. Place one screw through the ground wire harness eyelet, the board, and spacer on the upper left corner, and screw it in. Use the other screw to secure the lower right corner.
29. Replace the rubber gasket over the display and finally the display lens. Secure the lens with the original security screws using the Tamper Proof Hex Bit.
30. Attach the display harness to the logic board J10.
31. Attach your dollar bill harness to the 9-pin DBA (new) harness from the logic board.
32. On the new harness locate the white wires you connected in Step 20, the longer harness (approximately 9' long) needs to be routed over the ball return tube and toward your left side. Open the trap door on the bottom of the table to route this harness to the end wall to the speed pool button, mounted on the cue ball return end wall.
33. **If you performed steps 17-18** route the shorter of the two harnesses (approximately 36" long) to the coin door and attach to the new Speed Pool button you installed.

Note: may find it easier to cut the original harness in front of the trap door, cut off the terminals that are on the new harness, and use butt spices to connect them.

34. Open the clean out door to reach the harness and attach it to button marked Start.
35. Install the battery and attach the battery terminals.
36. Close the doors; you have just completed your installation. Please refer to the manual for programming instructions.

INSTALL THE CHARGER AND BATTERY

If you choose to install the 3a charger inside the table, locate the Charger on top of the ball return tunnel next to the coin meter and secure it using the Charger Bracket provided.

Install the battery cable as shown below. For easier access the battery is not secured – **When moving the table the battery should be removed or secured to prevent damage. When the battery is removed – put the protective cover on the battery cable.**

For the final step: connect the Battery Cable to the Charger cable using the single position safety connectors
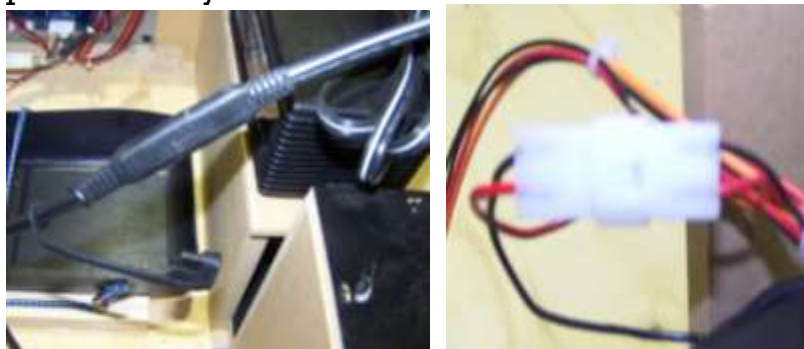
Connect the 2 pin Molex connector from the Charger to the Main Harness.

Test to confirm that the unit is functioning properly. The Bill Acceptor is designed to accept 1, 5, 10, and 20 Dollar Notes and the drop down chute accepts US quarters.