

# mei®

Valley-Dynamo DBA Pool  
JCM to MEI Conversion Kit



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Valley-Dynamoparts.com • Youtube: ValleyDynamoTV



# TOOLS REQUIRED FOR CONVERSION

- Cordless Drill / Screw Driver
- Small Wood Chisel
- 3/8" Socket for the Rail Bolts
- Wood File or Rasp
- 7/16" Nut Driver
- 7/32" Drill Bit
- 1 1/8" Paddle Bit
- 3/8" Nut Driver
- 1/8" Drill Bit
- 1 1/32" Nut Driver
- #2 Philips Bit
- 1/4 " Nut Driver
- 10" Extension for #2 Philips Bit
- #1 Philips Screwdriver
- #2 Philips Screwdriver
- Jig Saw and Wood Blade
- 2" Hole Saw (Used to Drill Hole for Battery Charger)

# CONTENTS OF KIT

- 800206007 - Motor Universal Mount Bracket
- 820014048 - Template (For Door & Battery Charger placement)
- 880200131 - Motor 12-Volt (To install see PAGE 4)
- 800206035 - Cover Plate for Bottom of Door
- Hardware Kit (See HARDWARE LIST)
- 9680C1000 - 4 Inch Cleat
- 880300265 - Speed Pool Button
- 860300500 - Cable/Wire Ties
- 980600405 - Cable/Wire Stick Pad Mount
- 880200100 - MEI Bill Acceptor
- 730200430 - ZD-X Wire Harness
- 880303210 - Door for MEI Bill Acceptor
- 880200360 - v11 ZD-X PC Board Assembly
- 860300415 - Plastic Cash Tray
- 880400810 - Plastic Relief lock
- 890300700 - Coin Counter
- 800200310 - Battery Charger Hold Down Strap
- 800200300 - Power Cord Relief Bracket
- 880200557 - 12-Volt/3a Battery Charger
- 880200520 - 12-Volt 18Ah Battery
- 880200620 - LCD Display
- DBA Kit (ZD-X manual, Operating Instruction Decal, and Tamper Proof Screw Bit)

# HARDWARE LIST

- Pan Head Philips Screw #8 x 1 ¼" (To mount Extra Cleat, **if needed**) 2
- Carriage Bolt, Black, #10-24 x 1 ¼" (To mount New Door) 8
- Carriage Bolt, Black, #10-24 x 2 ½" (To mount New Door, **if needed**) 8
- Wing Bolt, Zinc, #10-24 x 1 ¼" (To mount the Motor Mount Bracket) 4
- Nut, Kep #10-24 (For the #10-24 Carriage Bolts) 10
- Washer, Flat #10 (For the nut side of the Carriage Bolts) 10
- Tamper Proof, Black, Screw #6 x ½" (To mount LCD Display, **if needed**) 4
- Pan Head Philips Screw #6 x ½" (To mount PCB to block, **if needed**) 4
- Pan Head Philips Screw #6 x ½" (To secure template for Charger) 2
- Truss Head Philips Screw #8 x ¾" (for Coin and Charger Brackets) 8
- Nut, Nylon Lock #6-32 (To secure Eye Bolt to Hinge Bar, **if needed**) 1

# HARDWARE LIST FOR MOTOR UPGRADE

(Page 4 shows an exploded view of the motor assembly)

- Motor Arm 1
- MS, 10-24 x 1- ½ Self Tapping Screws 4
- Washer, Star #10 4
- MS, 8-32 X ½ Screws 1

**For the most current revision of this manual or any other product manuals, guides, breakdowns or helpful hints visit [www.valleydynamoparts.com](http://www.valleydynamoparts.com)**

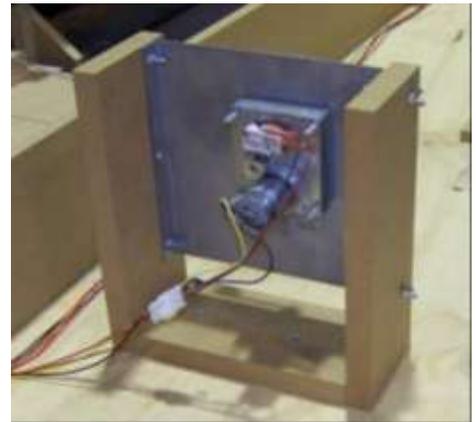
# NEW MOTOR ASSEMBLY INSTRUCTIONS

Remove old motor bracket and motor assembly.



Install New Motor Bracket as shown in FIGURE 1.

Mount the New Motor as shown in FIGURE 2.



Install the New Motor Arm as shown in FIGURE 3.  
NOTE: When the motor is in the off position the arm should point the Push Chute Cash Box.

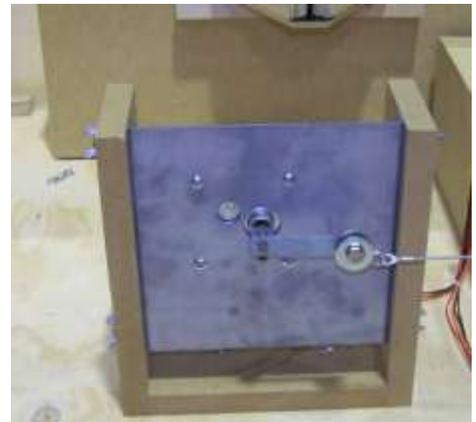


FIGURE 4 shows more detail on how the arm attaches to the motor shaft.



# INSTRUCTIONS FOR REMOVING JCM DBA AND DOOR

Remove the Slate from the table for ease of replacement  
(detailed instructions on slate removal are available at [www.valleydynamoparts.com](http://www.valleydynamoparts.com))

Open the Bill Acceptor Door

Disconnect the JCM Bill Acceptor wire harness by unplugging the Molex Connector.

Remove the JCM Bill Acceptor Door by removing the (6) Bolts and Nuts.

Remove all existing PCB Boards, Counter, and Wire harnesses connected to the (2) PCB Boards.



Please review the components removed from the table :



Install the included template into the existing holes.

Use the two bolts from the old door to secure the template. Make sure the template is straight, all the way up toward the rail, and secure before you drill out the holes using the template (You may want to wait and use the holes in the actual door to drill the holes for the door). These additional holes are used for the MEI Bill Acceptor/Drop Chute Door



Using a Scribe, mark the cutout using the **outside** edge of the cutout.

Remove the template and save for the Charger Installation. Use a Jig Saw (Place tape on Jig Saw base so that the Jig Saw does NOT scratch the table), very carefully make the cut out for the new MEI Bill Acceptor Door. Note that you may slightly cut the Apron Cleat on the right side of the new opening.



The completed cut should resemble this photo



# MODIFICATIONS TO SECURE MEI DBA AND DOOR

The two Cleats shown in FIGURE 7 may have to be removed in order for the door to be secure. Install the new cleat, provided in the kit, as shown in FIGURES 8a & 8b using the #8 X 1 ¼" screws (See Hardware List).

Use the 1/8" drill bit to Pre-Drill the new cleat so that the cleat will not split.

BEFORE



Cleats to be Removed FIGURE 7

AFTER



FIGURE 8a

AFTER

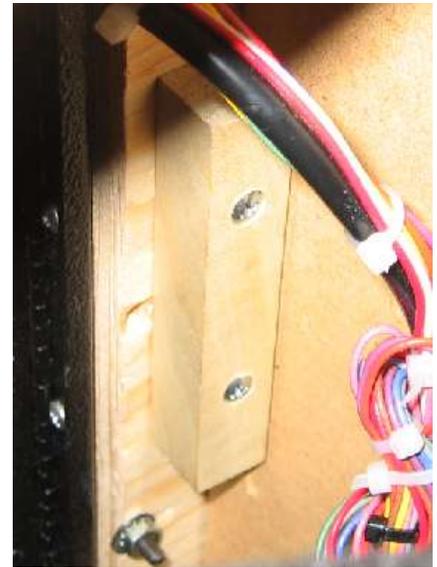


FIGURE 8b

# POWER CABLE AND STRAIN RELIEF INSTALL

Using the 1 1/8" Paddle blade bit or hole saw drill a hole in the floor 1 1/2" in from the inner coin door wall and 2" from the Push chute cash box wall. This hole will be used to install the reset button in a later step.



Following the pictures below, please note the placement of the template in the bottom of the table. Using a 2" hole saw and the hole as a guide, bore a 2" hole into the bottom of the table



After drilling leave the template in place and assemble the power cable strain relief. See Figures 10 and 11. And install it using 4 of the hex head screws provided.



# INSTALL THE NEW PCB ASSEMBLY & COUNTER

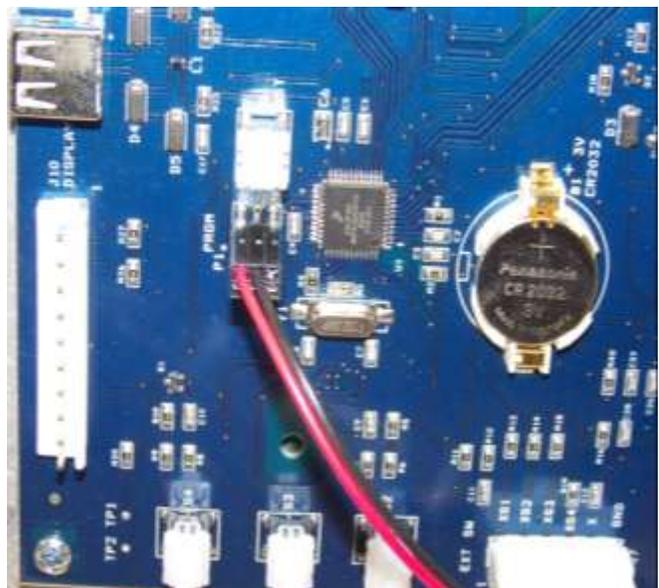
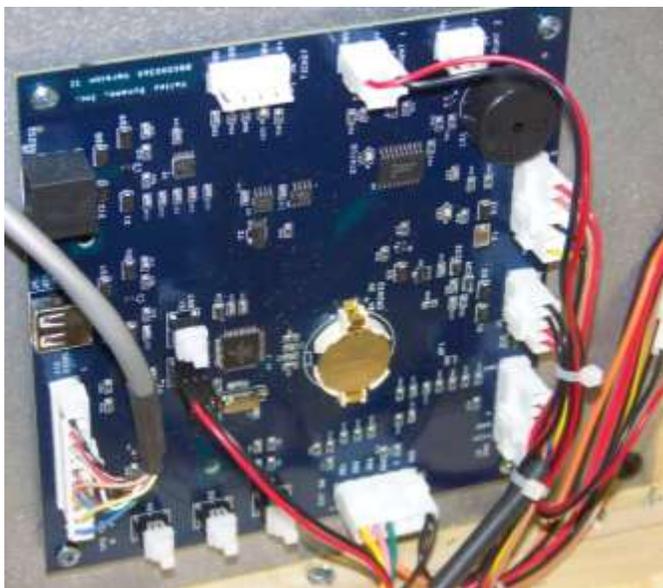
Use the supplied bracket and screws. NOTE: Be sure to connect the Coin Meter.

If Coin Counter is NOT connected, the DBA will not accept bills.



Re-connect the harnesses as required. The connectors on all harnesses will fit only their respective slot in the proper orientation.

Full color photos of this installation can be found in the manual posted at [www.valleydynamoparts.com](http://www.valleydynamoparts.com).



Using one of the old buttons, install it into the hole you drilled earlier. This will be used as a reset button.

# SECURE THE HARNESS TO THE NEW DOOR

Use the Cable/Wire Stick Pad Mount placed on top of the coin drop mech holder. Please make sure that the remote button harnesses are installed in their proper location (FIGURES 13 & 14). Also, all switches are wired in the “normally open” configuration (and keep in mind that the Coin Switch “normally open” configuration is not the same as the other switches).

Place Cable/Wire Stick Pad Mount here



FIGURE 13

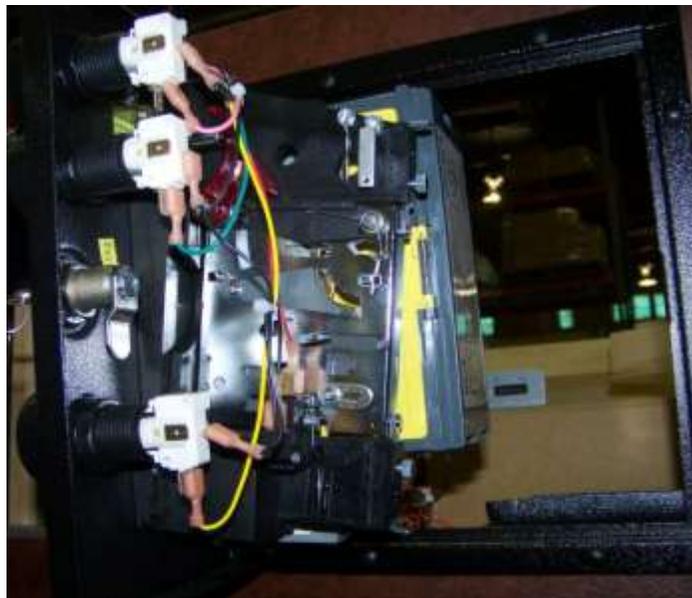


FIGURE 13 A



FIGURE 14

## CONNECT THE NEW LCD DISPLAY

Remove the Display Lens, using the special security tip included with your original kit, and carefully lift out the LCD and remove old harness. Install new LCD Display and harness (FIGURE 15). There are two stand-offs that keep the LCD up off the wood. Do not lose the stand-offs.

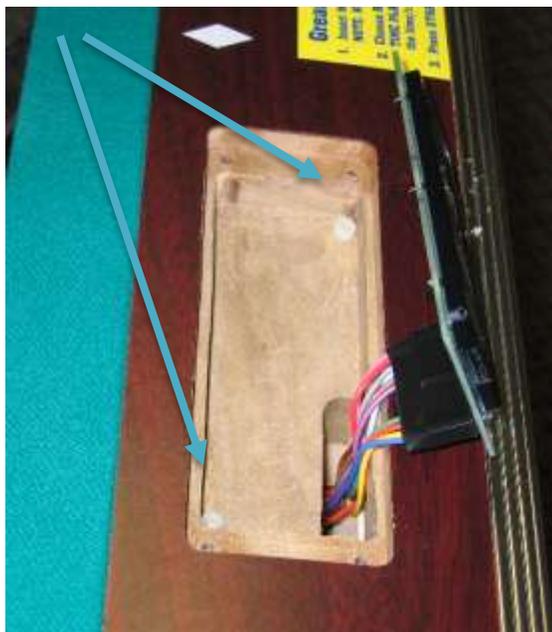


FIGURE 15



Figure 15 A



Figure 15 B

Attach the new Display harness so that it locks into place See figure 15A

Secure the Ground wire to the upper left mounting hole. See figure 15 B

# INSTALL THE MEI BILL ACCEPTOR

BE SURE TO CHECK the DIP switch settings on the Dollar Bill Acceptor before you install it.

**\*\* All switches should be OFF except 1, 2 and 3.**

Install the new MEI Bill Acceptor on the door, then install the new MEI Bill Acceptor/Drop Chute Door using the (8) Long Back Bolts and Nuts (See Hardware List).

There are two lengths of bolts. On some models the cleats will interfere. Use the 2 ½ " length bolts as needed.

Please note the filler plate at the bottom of the Door Frame (FIGURE 16), use the smaller black bolts. Make certain all fasteners are tight.

Bill Acceptance Switch		
	1	2
1 way	ON	OFF
2 way	OFF	ON
4 way	ON	ON
Switch 3		
High Security	OFF	
High Acceptance	ON	
Switch 4 5		
	\$2	\$20
Accept=	OFF	Reject=ON
Switch 6		
Harness Enable	OFF	
Always Enable	ON	
Switch 7		
1 Pulse Per Dollar	OFF	
4 Pulse Per Dollar	ON	
Switch 8		
Gaming Interfaces	OFF	
Vending Interfaces	ON	



# INSTALL THE CHARGER AND BATTERY

Place the Charger on top of the ball return tunnel next to the coin meter and secure it using the Charger Bracket provided.



Figure 16



Figure 16 A



Figure 16 B

Install the battery cable as shown in figure 17. Please note when moving the table or transporting the Battery, the protective cover should be in place.



Figure 17



Figure 17 A

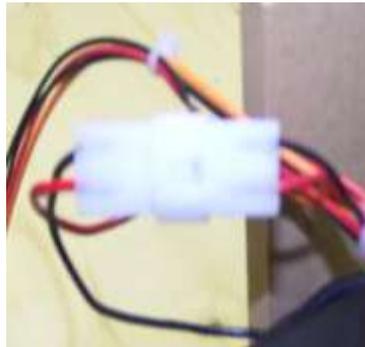


Figure 17 B



Figure 17 C

For the final step: connect the Battery Cable to the Charger cable using the single position safety connectors. See figure 18 Connect the 2 pin Molex connector from the Charger to the Main Harness. See figure 19.



Perform necessary tests to make sure that the unit is functioning properly. The MEI Bill Acceptor is designed to accept 1, 5, 10, and 20 Dollar Notes and the drop down chute accepts US quarters.

**Reinstall the slate and refer to the Panther ZD-X manual for programming instructions**