



Force I/O Board Replacement

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PM0667-01

I/O Board Replacement Instructions

CONTENTS:

QTY	PART #	DESCRIPTION
1	SA10068-XX	I/O BOARD
1	MW1507-01	I/O BOARD MOUNTING BRACKET
1	EC0338-01	I/O POWER HARNESS
1	EC0094-01	USB I/O CABLE
4	HW4206	SCREWS, ¼"
4	HW4367	SCREWS, 1" (UPRIGHT ONLY)
1	EC0339-01	CALIBRATION/SETUP METER ADAPTER HARNESS
8	HW6054	NYLON SPACERS (UPRIGHT ONLY)
1	HW8852	CABLE CLAMP (CLASSIC AND ELITE GAMES ONLY)
1	EC0180-01	USB EXTENSION CABLE (ELITE ONLY)
2	EC0340-01	AC POWER HARNESS (VIBE ONLY)
3	HW8811	TIE WRAP (VIBE ONLY)

Follow the instructions for your cabinet.

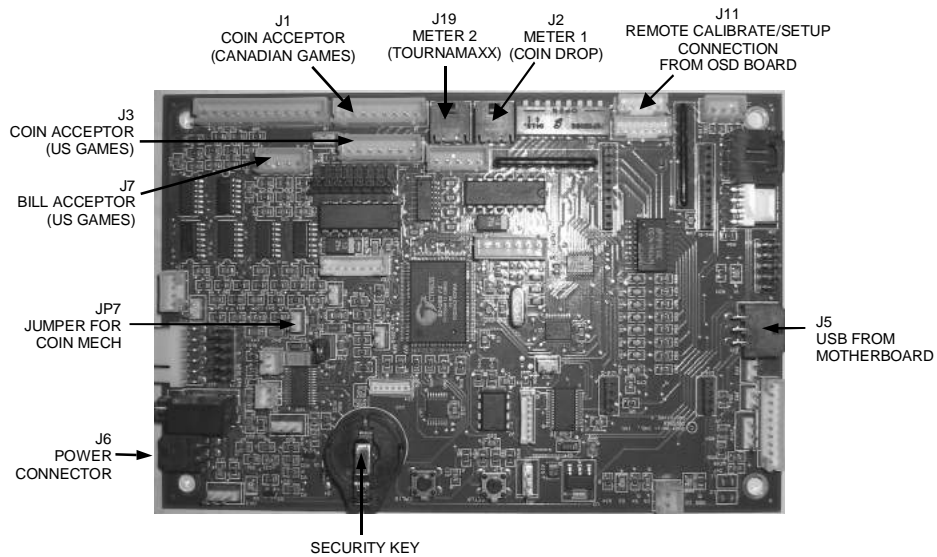


FIGURE 1 - NEW I/O BOARD

Force Classic

1. Turn off and unplug the game.
2. Unlock and open the rear door.
3. Unlock and remove the coin box or coin box/bill acceptor assembly.
4. Disconnect all of the harnesses from the I/O board, noting their positions so that you can connect them to the new board. See Figure 2.

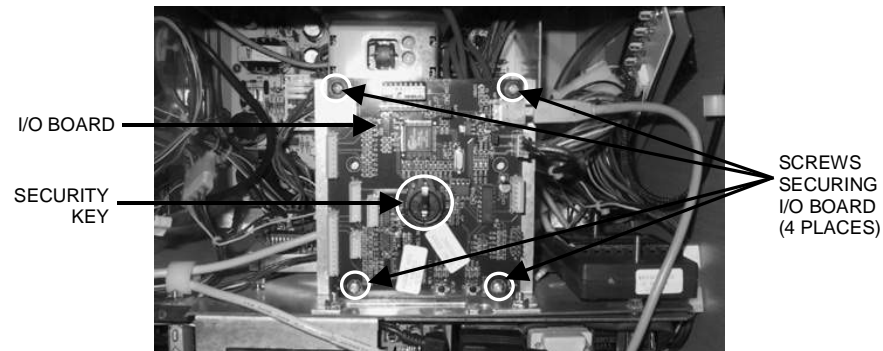


FIGURE 2 - ORIGINAL I/O BOARD IN CLASSIC GAME

5. Remove the 4 screws securing the I/O board and remove the I/O board from the game. See Figure 2.
6. Install the provided metal mounting bracket in the game where the original I/O board was mounted and secure it using the 4 screws removed in step 5 (one screw will now secure a provided cable clamp as well). See Figure 3.
7. Line up the supplied fish paper on top of the mounting bracket. Align the provided I/O board on the fish paper, and secure to the metal mounting bracket using the 4 provided screws. See Figure 4.
8. Locate the meter harness already in the game, then locate the free 6-pin connector on this harness. Connect this 6-pin connector to its mating connector on the provided EC0339 harness (see Figure 4).

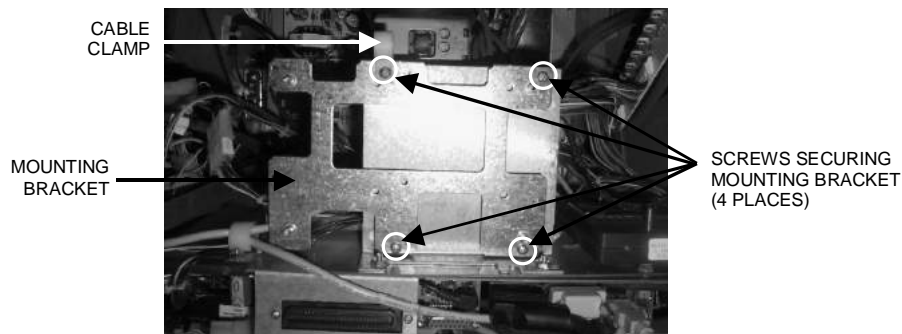


FIGURE 3 - NEW I/O MOUNTING BRACKET IN CLASSIC GAME

9. Connect the other connectors on the EC0339 harness to J2 (meter 1), J11 (setup/calibrate), and J19 (meter 2 - TournaMAXX, if applicable) on the new I/O board. See Figure 1 for connector locations.
10. Connect the appropriate coin and/or bill acceptor harness(es) to the new I/O board, using Figure 1 as a reference. Secure harnesses under the cable clamp, if necessary.
11. If your game has an Imonex coin mech, remove the shunt from JP7. If your game does not have an Imonex coin mech, make sure that the shunt is in place at JP7. See Figure 1.
12. Remove the security key from the original I/O board and install it in the key socket on the new I/O board. Refer to Figure 1.
13. Locate the SA0226 DC power harness already in the game, then locate the free 4-pin connector on this harness. Connect this 4-pin connector to the provided EC0338 harness. Connect the other end of the EC0338 harness to J6 on the new I/O board. See Figure 4.
14. Disconnect the USB cable from the motherboard. See Figure 4. This cable will not be reused. Connect the mating end of the supplied USB cable to the USB connector on the motherboard, and the other end to J5 on the new I/O board. See Figure 4.
15. Replace and lock the coin box or coin box/bill acceptor assembly.
16. Close and lock the rear door.
17. Plug in and turn on the game.

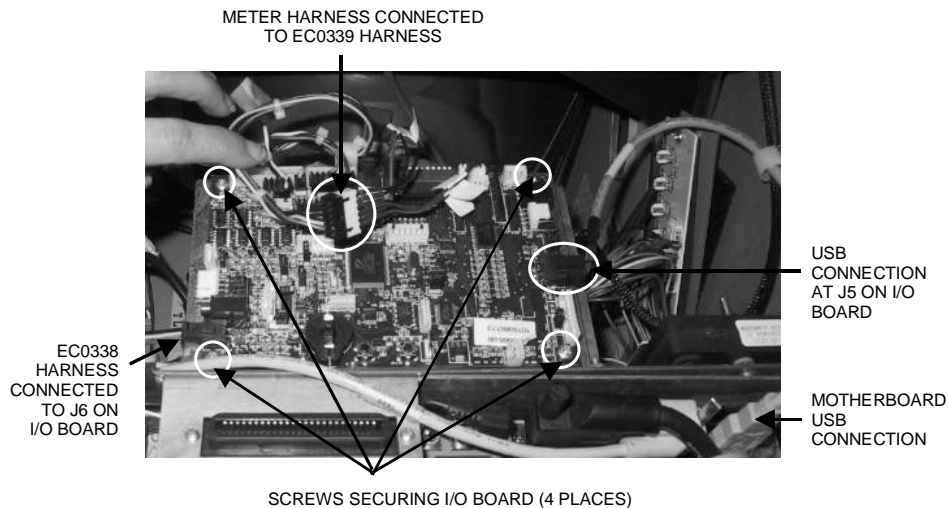


FIGURE 4 - NEW I/O BOARD IN CLASSIC GAME

Force Radion

1. Turn off and unplug the game.
2. Unlock and open the rear door and the cash door (the right door, if facing the front of the game).
3. Remove the 4 screws securing the I/O board (see Figure 5) and remove the I/O

board from the game as far as the cabling will allow. You may need to remove the bezel in order to access the screws securing the I/O board. To do this, unlock and remove the other side door and remove the 7 screws securing the rear bezel (see Figure 5).

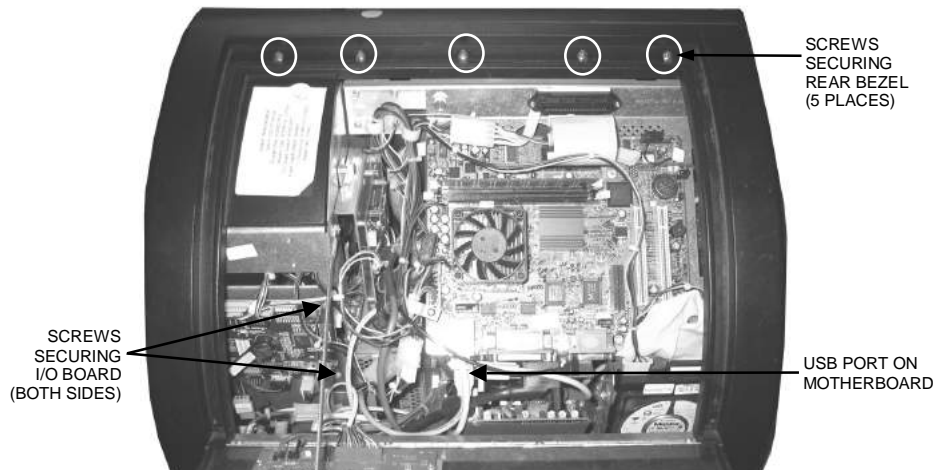


FIGURE 5 - REAR VIEW OF RADION GAME

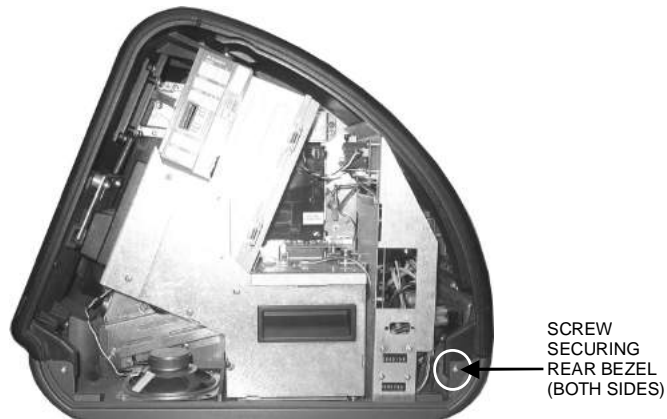


FIGURE 6 - SIDE VIEW OF RADION GAME

4. Disconnect the 4-pin power connector from J6 on the original I/O board and connect it to the mating connector on the supplied EC0338 harness.
5. Disconnect all other connections on the original I/O board.
6. Install the provided metal I/O board mounting bracket in the game where the original I/O board was mounted, and secure it using the 4 screws removed in step 3. See Figure 7.

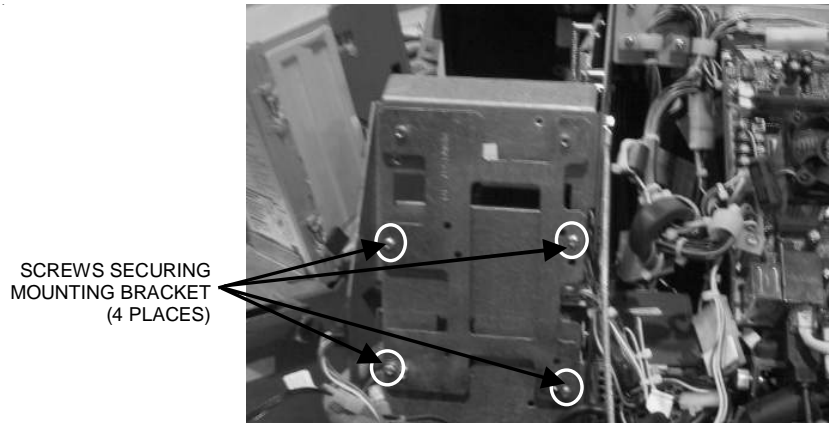


FIGURE 7 - METAL I/O MOUNTING BRACKET IN RADION GAME

7. Connect the supplied EC0339 harness to J11 (setup/calibrate), J2 (meter 1) and J19 (meter 2 - TournaMAXX, if applicable) on the new I/O board. Refer to Figure 1 for connection locations.
8. Line up the supplied fish paper on top of the mounting bracket. Align the provided I/O board on top of the fish paper, and secure to the mounting bracket using the 4 provided screws. See Figure 8.
9. Connect the free 4-pin connector on the EC0338 harness to J6 on the new I/O board. See Figure 8.
10. Connect the free 6-pin connector on the SA0310 harness to the mating end of the supplied EC0339 harness (see Figure 8).
11. Disconnect the USB cable from the motherboard. This cable will not be reused. Connect the mating end of the supplied USB cable to the USB port on the motherboard, and the other end to J5 on the new I/O board. See Figure 8.
12. Connect the appropriate coin and/or bill harness(es) to the new I/O board, using Figure 1 as a reference.
13. If your game has an Imonex coin mech, the jumper must be removed from JP7 on the new I/O board. If your game does not have an Imonex coin mech, the jumper must be in place at JP7. See Figure 1.
14. Remove the security key from the original I/O board and install it in the key socket on the new I/O board. Refer to Figure 1.
15. If you removed the bezel, replace it and secure using the same 7 screws. Refer to Figures 5 and 6.
16. Replace the side door(s) and close and lock the rear door.
17. Plug in and turn on the game.

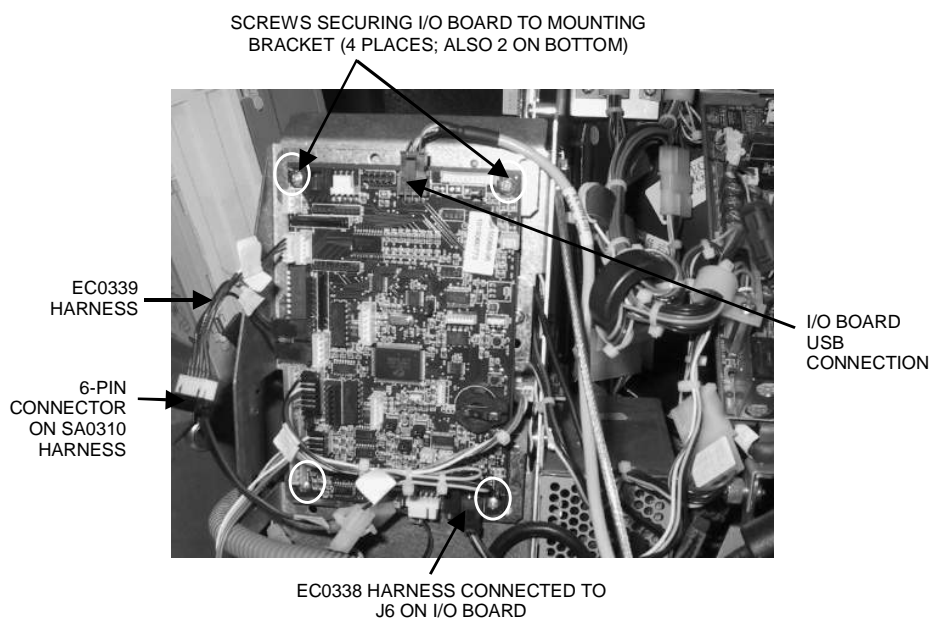


FIGURE 8 - NEW I/O BOARD IN RADION GAME

Force Upright

1. Turn off and unplug the game.
2. Unlock and open the bezel.
3. Pull out the electronics tray. See Figure 9. Disconnect all of the harnesses from the I/O board, taking note of their positions so that you can connect them to the new board.
4. Remove the 4 screws securing the I/O board and remove the I/O board from the tray. See Figure 9.

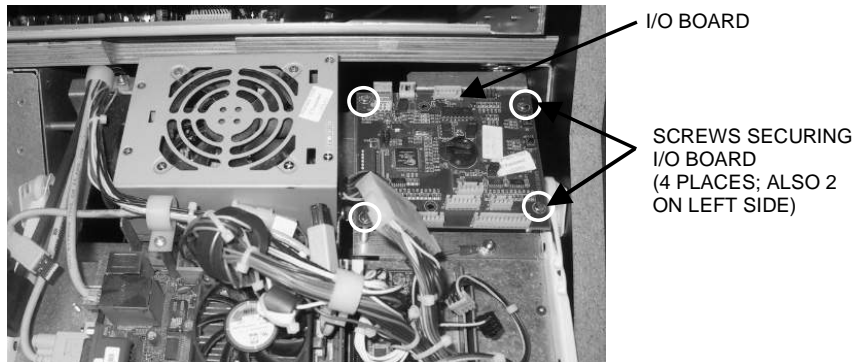


FIGURE 9 - ELECTRONICS TRAY WITH ORIGINAL I/O BOARD IN UPRIGHT GAME

5. Stack two provided nylon washers on each standoff where the original I/O board was previously mounted. See Figure 10.
6. Carefully line up the provided metal mounting bracket on top of the washers, and secure using the 4 provided screws. See Figure 11.

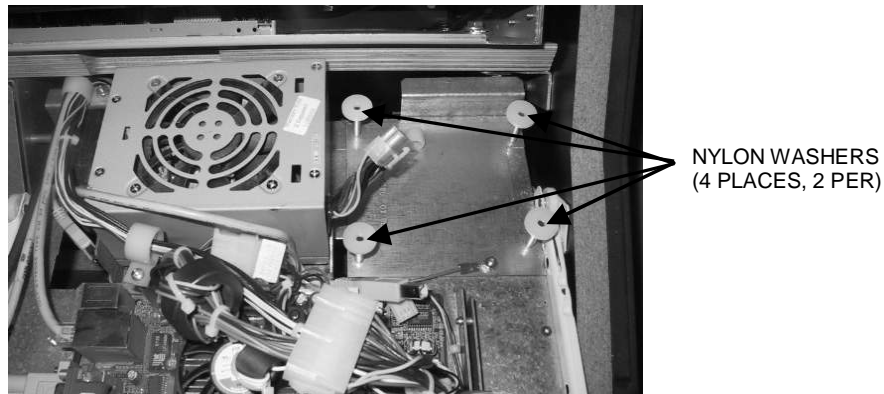


FIGURE 10 - WASHERS SUPPORTING I/O MOUNTING BRACKET IN UPRIGHT GAME

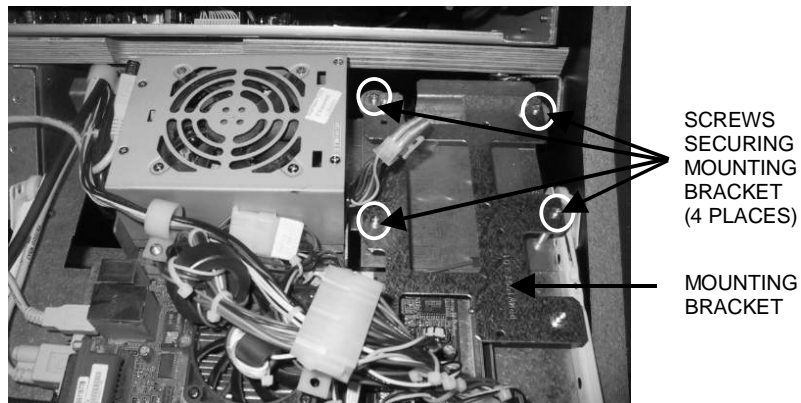


FIGURE 11 - MOUNTING BRACKET FOR NEW I/O BOARD IN UPRIGHT GAME

7. Line up the supplied fish paper on top of the mounting bracket. Align the provided I/O board on the fish paper, and secure to the metal mounting bracket using the 4 screws removed in step 4. Refer to Figure 12.
8. Locate the meter harness already in the game, then locate the free 6-pin connector on this harness. Connect this 6-pin connector to its mating connector on the provided EC0339 harness. Connect the other connectors on the EC0339 harness to J2 (meter 1), J11 (setup/calibrate) and J19 (meter 2 - TournaMAXX, if applicable) on the new I/O board. See Figure 12. Refer to Figure 1 for connection locations.

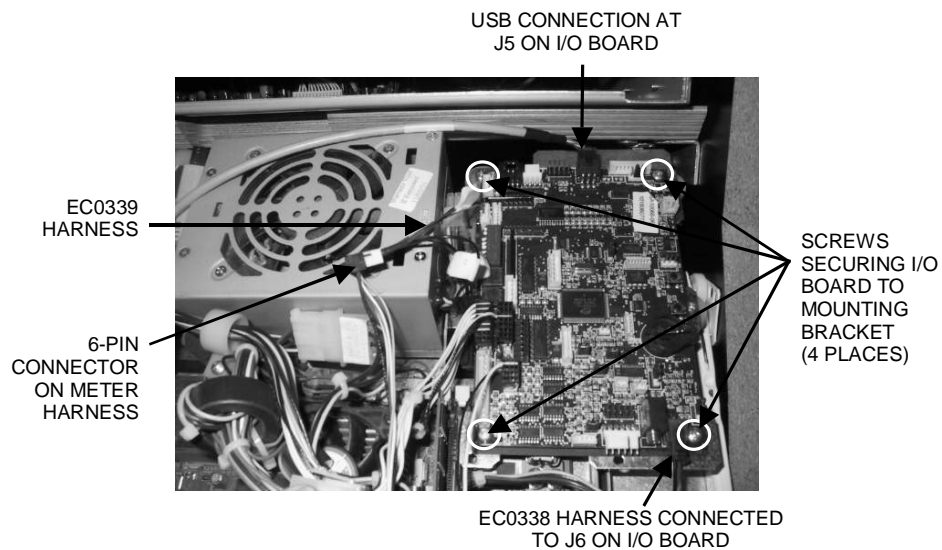


FIGURE 12 - NEW I/O BOARD IN UPRIGHT GAME

9. Locate the SA0226 DC power harness already in the game, then locate the free 4-pin connector on this harness. Connect this 4-pin connector to the provided EC0338 harness. Connect the other end of the EC0338 harness to J6 on the I/O board. See Figure 12.
10. Disconnect the USB cable from the motherboard. Connect the mating end of the supplied USB cable to the USB connector on the motherboard, and the other end to J5 on the new I/O board. See Figure 12.
11. Connect the appropriate coin and/or bill acceptor harness(es) to the new I/O board. See Figure 1.
12. If your game has an Imonex coin mech, remove the shunt from JP7. If your game does not have an Imonex coin mech, make sure that the shunt is in place at JP7. See Figure 1.
13. Remove the security key from the original I/O board and install it in the key socket on the new I/O board. Refer to Figure 1.
14. Replace the electronics tray.
15. Close and lock the bezel.
16. Plug in and turn on the game.

Force Elite

1. Turn off and unplug the game.
2. Unlock and open the rear door.
3. Disconnect all of the harnesses from the I/O board, noting their positions so that you can connect them to the new board.
4. Remove the 4 screws securing the I/O board, and then remove the I/O board from the game. See Figure 13.

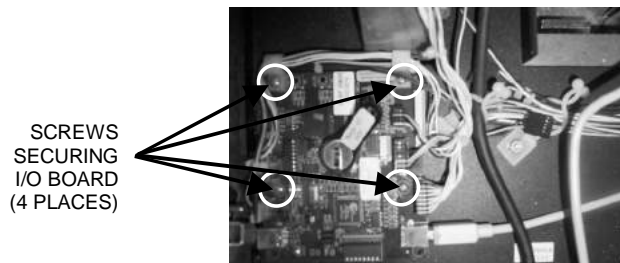


FIGURE 13 - ORIGINAL I/O BOARD IN ELITE GAME

5. Install the provided metal mounting bracket in the game where the original I/O board was mounted and secure it using the 4 screws removed in step 4 (one screw will also secure a provided cable clamp). See Figure 14.

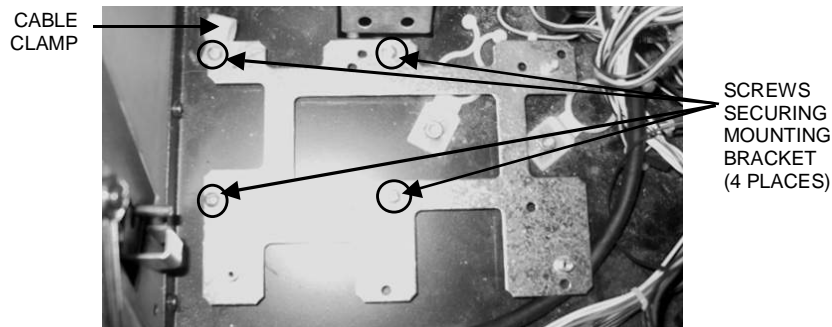


FIGURE 14 - NEW I/O MOUNTING BRACKET IN ELITE GAME

6. Connect the supplied EC0339 harness to J2 (meter 1), J11 (setup/calibrate), and J19 (meter 2 - TournaMAXX, if applicable) on the new I/O board. See Figure 15 (and Figure 1, if necessary).
7. Connect the supplied EC0338 harness to J6 on the new I/O board. See Figure 15.
8. Connect the supplied EC0094 USB cable to J5 on the new I/O board. See Figure 15. Disconnect the USB cable from the motherboard, and replace it with the supplied EC0180 USB extension cable. Connect the other end of EC0180 to its mating connector on the EC0094 USB cable. Secure EC0180 under cable clamps as necessary.

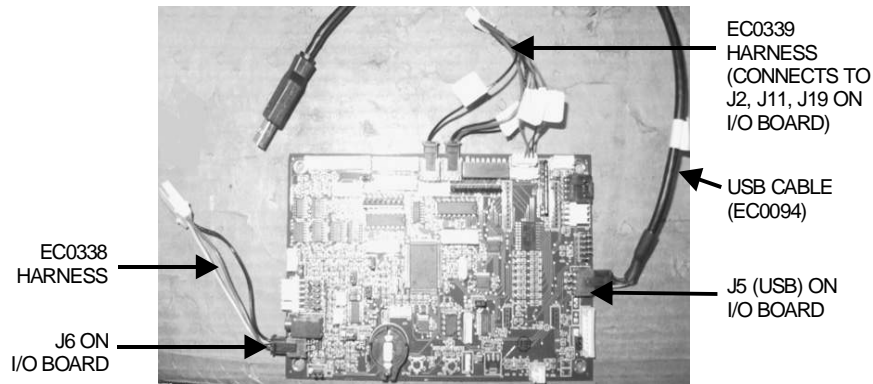


FIGURE 15 - NEW CONNECTIONS ON I/O BOARD

9. Align the supplied fish paper on top of the mounting bracket. Line up the provided I/O board on the fish paper, and secure to the mounting bracket using the 4 provided screws. See Figure 16.
10. Locate the SA0350 DC power harness already in the game, and then locate the 4-pin connector on this harness. Connect this 4-pin connector to its mating connector on the provided EC0338 harness. Secure the SA0350 harness under the cable clamp. See Figure 16.

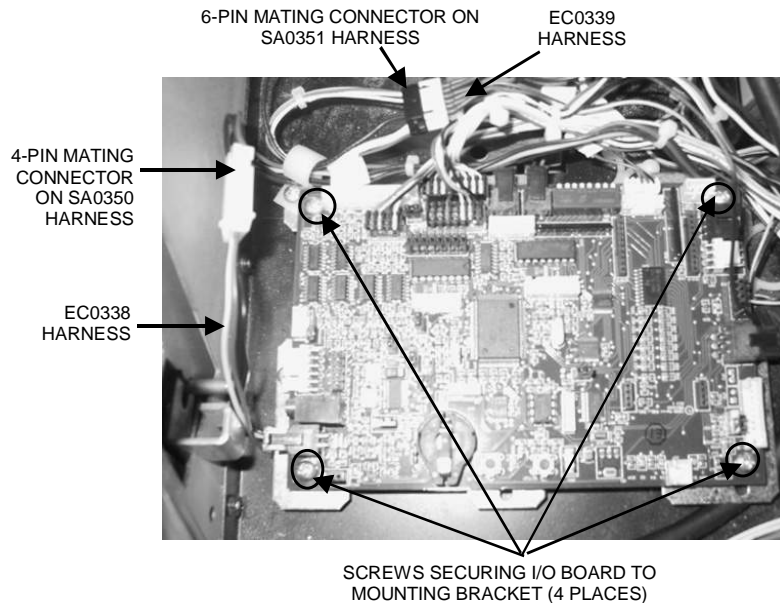


FIGURE 16 - NEW I/O BOARD IN ELITE GAME

11. Locate the SA0351 main signal harness already in the game, and then locate the 6-pin connector on this harness. Connect this 6-pin connector to its mating connector on the provided EC0339 harness. See Figure 16.
12. Connect the other connectors on the SA0351 harness to the appropriate coin and/or bill acceptor connections on the new I/O board. Refer to Figure 1 for connection locations. Secure the SA0351 harness under the cable clamp. See Figure 16.
13. If your game has an Imonex coin mech, remove the shunt from JP7. If your game does not have an Imonex coin mech, make sure that the shunt is in place at JP7. Refer to Figure 1
14. Remove the security key from the original I/O board and install it in the key socket on the new I/O board. Refer to Figure 1.
15. Close and lock the rear door.
16. Plug in and turn on the game.

Force Vibe

1. Turn off and unplug the game.
2. Unlock the lock on the processor cover and loosen the 3 screws on either side of the cover (see Figure 17). Slide the cover away from the connector side of the processor and lift the cover off of the unit.

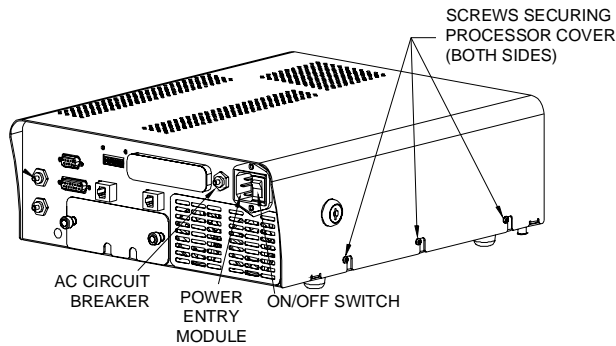


FIGURE 17 - FORCE VIBE WITH COVER

3. Disconnect all of the harnesses from the I/O board, taking note of their positions so that you can connect them to the new board. See Figure 18.
4. Remove the 4 screws securing the I/O board and remove the I/O board from the game. See Figure 18.
5. Remove the 2 screws securing the cable clamps located to the right of the now-absent board, and set the screws aside. Free any cables from the clamps, and set the clamps aside. See Figure 18.

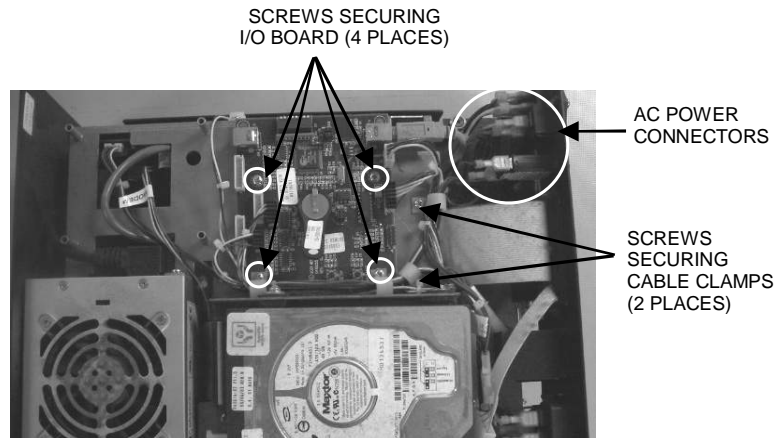


FIGURE 18 - ORIGINAL I/O BOARD IN VIBE GAME

6. Locate the group of AC power connectors behind the on/off switch, power entry module and AC circuit breaker on the rear panel of the game. Refer to Figures 17 and 18.
7. Disconnect the AC power connector running from the top prong behind the circuit breaker to the top prong behind the on/off switch, and set it aside. **Note: This connector might be fed through a ferrite; in order to free it, you will need to remove the nut securing the green ground wire to the ground screw, then feed the ground wire through the ferrite to make room for the AC power connector. You will also need to cut any tie wraps securing the connector harnesses together.** Replace with the other provided AC power connector. See Figure 19. If you removed the ground wire, wind it back through the ferrite and secure to the ground screw with the same nut. Tie-wrap connector harnesses as necessary.
8. Disconnect the AC power connector running from the bottom prong behind the circuit breaker to the bottom prong behind the power entry module, and set

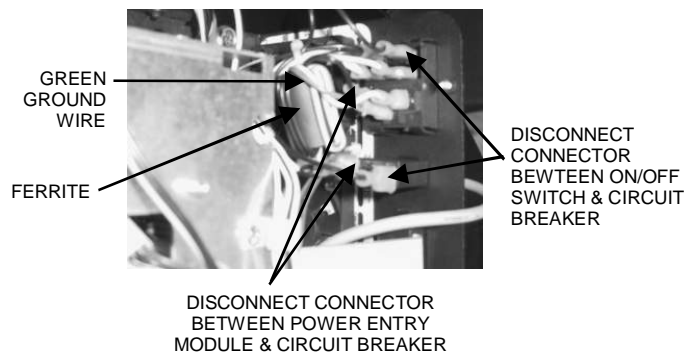


FIGURE 19 - AC POWER CONNECTORS IN VIBE GAME

9. Install the provided metal I/O board mounting bracket in the game where the original I/O board was mounted, and secure it using the 4 provided screws. See Figure 20.

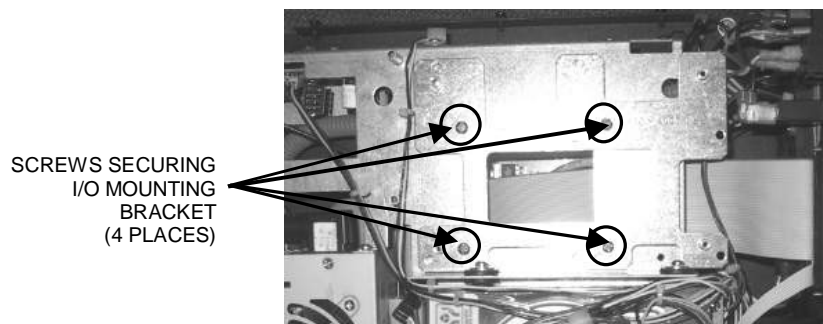


FIGURE 20 - NEW I/O MOUNTING BRACKET IN VIBE GAME

10. Line up the supplied fish paper on top of the mounting bracket. Align the new I/O board on the fish paper, and secure it to the metal mounting bracket using the 4 provided screws. See Figure 21.
11. Locate the SA0345 DC power harness already in the game then locate the free 4-pin connector on this harness. Connect this 4-pin connector to the provided EC0338 harness. Connect the other end of the EC0338 harness to J6 on the I/O board. See Figure 21.
12. Locate the meter harness already in the game, then locate the free 6-pin connector on this harness. Connect this 6-pin connector to the provided EC0339 harness. See Figure 21.
13. Connect the other connectors on the EC0339 harness to J2 (meter 1), J11 (setup/calibrate) and J19 (meter 2 - TournaMAXX, if applicable) on the new I/O board. Refer to Figure 1 for connector locations.
14. Connect the appropriate coin and/or bill acceptor harness(es) to the new I/O board. See Figure 1 for connector locations.
15. If your game has an Imonex coin mech, remove the shunt from JP7. If your game does not have an Imonex coin mech, make sure that the shunt is in place at JP7. See Figure 1.
16. Remove the 2 screws securing the hard drive mounting bracket closest to the I/O board, and use them to secure the 2 cable clamps that were removed in step 5 to the hard drive mounting bracket. See Figure 21. Secure cables under clamps.
17. Disconnect the USB cable from the motherboard. Connect the mating end of the supplied USB cable to the USB connector on the motherboard, and the other end to J5 on the new I/O board. See Figure 21.
18. Remove the security key from the original I/O board and install it in the key socket on the new I/O board. Refer to Figure 1.
19. Replace and lock the processor cover, and tighten the 3 screws on each side. See Figure 17.
20. Plug in and turn on the game.



FIGURE 21 - NEW I/O BOARD IN VIBE GAME

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

I/O BOARD REPLACEMENT
PM0667-01