OBSERVE PRECAUTIONS FOR HANDLING ESD-SENSITIVE DEVICES

# Removal/Installation of Major Assemblies - Ion Aurora

#### **Monitor and Touchscreen Removal**

- 1. Turn off and unplug the game.
- 2. Unlock the rear door and open if it is hinged, or remove if it is detachable.
- 3. Reach under the center of the top of the cover to locate the rotary draw latch (see Figure 1). Turn the wing on the latch counterclockwise to disengage.

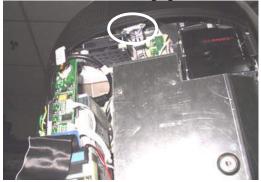


FIGURE 1 - ROTARY DRAW LATCH INSIDE TOP COVER

4. Unscrew the screw located in the center of the bottom of the cover (see Figure 2). Slowly lift the cover and disconnect the ground wire.



#### FIGURE 2 - SCREW IN CENTER OF BOTTOM COVER

5. Place something in front of the game to brace the bezel once the strain relief cord is undone, then remove the screw at the center of the marquee bezel and the 2 screws on the back of the bezel. For 17" games, remove the security screw inside the CPU section; for 19" and Widescreen games, remove the nut and washer securing the security bolt inside the CPU section. See Figure 3.



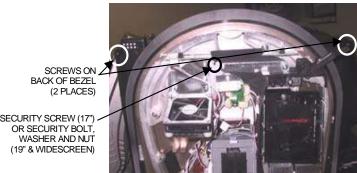


FIGURE 3 - SCREWS ON FRONT AND BACK OF BEZEL

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## Removal/Installation of Major Assemblies - Ion Aurora (cont'd)

6. Open the monitor assembly halfway and remove the screw fastening the strain relief cord. See Figure 4. Open the assembly all the way and rest it on a support.

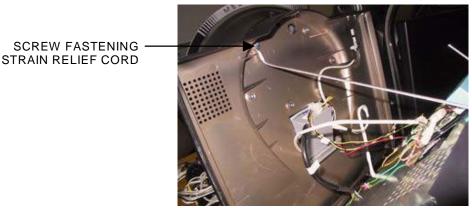


FIGURE 4 - HALFWAY-OPEN MONITOR ASSEMBLY

7. Disconnect the VGA connector from the monitor. Remove the screw securing the VGA and touchscreen controller ground wires to the monitor (17"), or the nut securing the VGA and touchscreen controller ground wires to the ground screw on the back of the monitor (19" & Widescreen). Note: On the Aurora Widescreen this nut may secure only the VGA ground wire. Disconnect the 14-pin OSD cable (white wires) and the LCD power connector (yellow & black wires) from the monitor. Refer to Figure 5 for 17" games, and Figure 6 for 19" and Widescreen games.

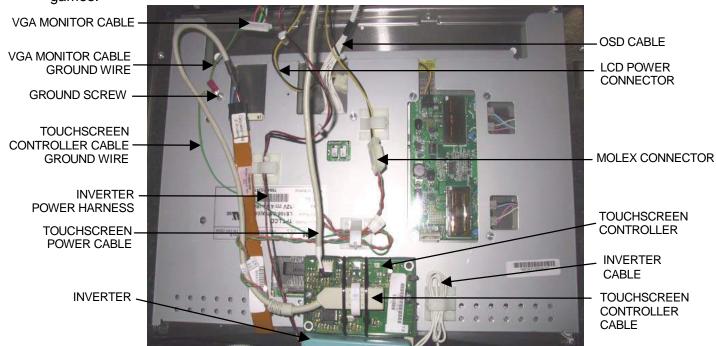


FIGURE 5 - REAR VIEW OF 17" MONITOR

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Megatouch Ion Technical Reference Manual

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# Removal/Installation of Major Assemblies - Ion Aurora (cont'd)

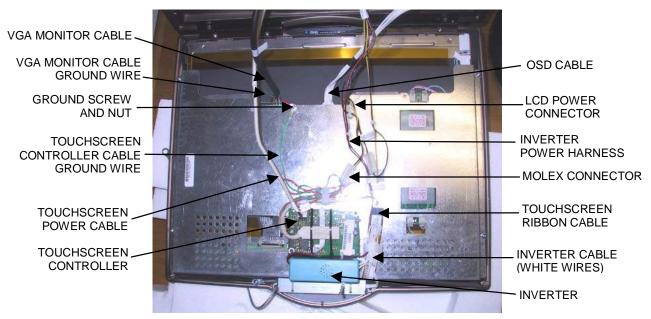


FIGURE 6 - REAR VIEW OF 19" MONITOR

- 8. Disconnect the touchscreen power cable from the touchscreen controller, then disconnect the Molex connector, identified by the orange and gray wires (this does not exist on Aurora Widescreen systems). Refer to Figure 5 for 17" games, Figure 6 for 19" and Widescreen games.
- 9. Release harnesses from clamps; this may include the inverter cable, the inverter power harness, the Molex harness, the touchscreen controller cable, the touchscreen controller cable ground wire, the harness connecting the Molex connector to the power supply, and/or the touchscreen ribbon cable. Refer to Figure 5 for 17" games, and Figure 6 for 19" and Widescreen games.
- 10. <u>For 19" and Widescreen games:</u> Remove the inverter from the Velcro securing it to the LCD bracket (19") or touchscreen controller mounting plate (Widescreen) and carefully place it out of the way of the monitor assembly. See Figure 6.
- 11. Carefully cut the tie wraps around the touchscreen controller cable. If applicable, remove the 2 screws securing the touchscreen controller to its mounting plate (17" and Widescreen) or the LCD bracket (19"). On some 19" games the touchscreen controller is simply secured by Velcro, meaning there are no screws to remove. Remove the controller, as well as the fish paper underneath, though please note there is no fishpaper underneath the touchscreen controller on Widescreen systems. See Figure 7.
  - <u>If you are replacing the touchscreen:</u> Remove the touchscreen controller cable from the touchscreen controller (see Figure 5).
- 12. <u>For Widescreen games:</u> Unscrew the two standoffs that were located under the touchscreen controller. These are going through the mounting plate, securing it to the LCD bracket.

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# Removal/Installation of Major Assemblies - Ion Aurora (cont'd)

FISH PAPER SCREWS SECURING UNDERNEATH TOUCHSCREEN' TOUCHSCREEN CONTROLLER TO CONTROLLER MOUNTING PLATE (17" & 19" GAMES) (17" & WIDESCREEN) OR LCD BRACKET (2 PLACES -**CORNER SCREWS** ARE ON TOUCHSCREEN WIDESCREEN CONTROLLER CABLE SYSTEMS) ON TOUCHSCREEN CONTROLLER

FIGURE 7 - TOUCHSCREEN CONTROLLER

13. Remove the 4 screws securing either the left and right LCD mounting brackets to the bezel (17") or the LCD bracket to the bezel (19" and Widescreen), then carefully slide the monitor assembly out of the bezel. See Figure 8 for 17" games, Figure 9 for 19" and Widescreen games.

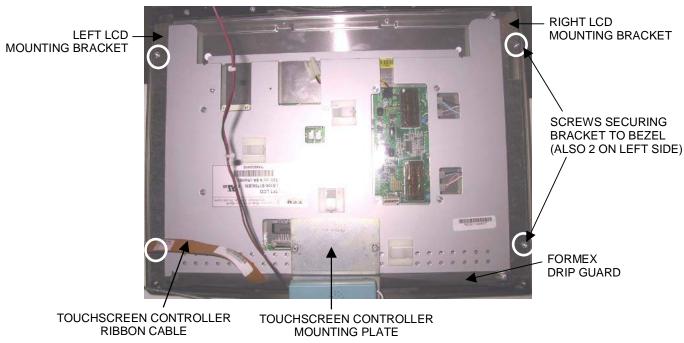


FIGURE 8 - REAR VIEW OF 17" MONITOR

14. <u>For 17" games:</u> Remove the 4 screws securing the LCD mounting brackets to the monitor (2 per bracket). If replacing the monitor, remove the fish paper/foam tape strip attached to the top edge of the monitor. See Figure 8.

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## Removal/Installation of Major Assemblies - Ion Aurora (cont'd)

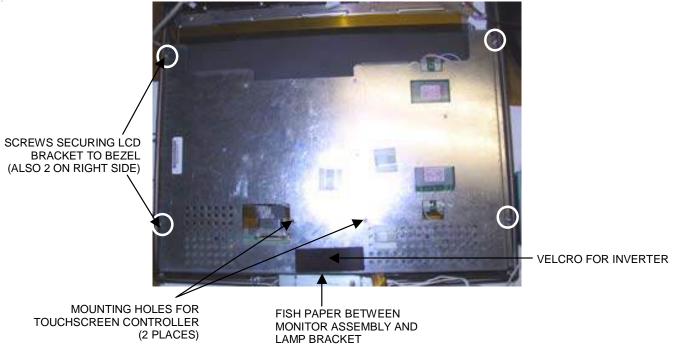


FIGURE 9 - REAR VIEW OF 19" MONITOR

15. Note the orientation of the touchscreen (i.e. the positioning of the ribbon cable and which side is the front) before removing it from the monitor.

<u>For 17" and 19" games:</u> Use dental floss to carefully cut the foam tape holding the screen to the monitor. Once the touchscreen is completely free from the monitor, remove any residual foam tape from the screen with denatured alcohol and clean the glass with the supplied alcohol wipe.

#### Monitor/Touchscreen Installation

1. Clean the glass on the LCD monitor that you will be using with an alcohol wipe.

<u>For 17" and 19" games ONLY:</u> Cut pieces of the supplied 1/2" foam tape long enough to cover the edges of the monitor without overlapping. After the tape is in place, peel off the backing.

<u>For Widescreen games:</u> If the tape on the inside of the front bezel is looking worn, remove it and replace it with the provided neoprene tape. The tape sticks to the bezel, and the backing should NOT be removed.

NOTE: Do NOT remove the backing of the tape that is attached to the Widescreen Touchscreen. If there is no tape attached to the touchscreen you received, cut pieces of the supplied double-sided foam tape long enough to cover each edge of the touchscreen without overlapping. Remove the backing from ONLY ONE side of the tape and place it around the edge of the REAR of the touchscreen. The rear of the touchscreen can be identified by the tracing around the touchscreen. The side of the touchscreen with NO TRACING is the rear, and the tape should be applied to that side. Once the tape is in place, DO NOT remove the backing.

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### **ATTENTION:**

OBSERVE PRECAUTIONS FOR HANDLING ESD-SENSITIVE DEVICES

# Removal/Installation of Major Assemblies - Ion Aurora (cont'd)

- 2. <u>If replacing only the monitor</u>: Carefully place the touchscreen over the new monitor in the same manner it was attached to the old monitor, making sure that the screen is properly and evenly aligned over the monitor glass. Clean the front of the touchscreen with an alcohol wipe once it is in place. Reattach the fish paper foam tape strip to the top edge of the monitor (17" games only; see Figure 8). You may need to attach the provided wire clamps to the rear of the monitor assembly. If so, note their location on the rear of the monitor your removed.
  - <u>If replacing only the touchscreen:</u> Carefully place the new touchscreen over the monitor in the same manner as the old screen, making sure that the screen is properly and evenly aligned over the monitor glass. Clean the front of the touchscreen with an alcohol wipe once in place.
  - If replacing both the monitor and the touchscreen: Carefully place the new touchscreen over the new monitor in the same manner that the old touchscreen and monitor were attached, making sure that the screen is properly and evenly aligned over the monitor glass. Clean the front of the touchscreen with an alcohol wipe once it is in place. Reattach the fish paper foam tape strip to the top edge of the monitor/touchscreen assembly (17" games only; see Figure 8). You may need to attach the provided wire clamps to the rear of the monitor assembly. If so, note their location on the rear of the monitor your removed.
- 3. <u>For 17" games:</u> Replace the left and right mounting brackets on the monitor and secure each with 2 screws. Carefully slide the new monitor into the bezel, making certain that the edge of the monitor with the fish paper is secured underneath the touchscreen controller's mounting plate. Ensure that the monitor is properly centered, then secure the mounting brackets to the bezel with 4 screws. See Figure 8.
  - <u>For 19" and Widescreen games:</u> Carefully slide the new monitor assembly into the bezel, making sure (on standard 19" models) that the strip of fish paper is secured between the edge of the assembly with the Velcro and lamp mounting bracket. Ensure that the monitor is properly centered, then secure the LCD bracket to the bezel with 4 screws. See Figure 9.
- 4. <u>For 17" games:</u> Line up the touchscreen controller on the rectangular piece of fish paper. If you replaced the touchscreen, connect the touchscreen controller cable to the touchscreen controller and secure with 2 tie wraps, making sure that the wraps go around the fish paper. Position this touchscreen controller assembly on the mounting plate and secure with 2 screws. See Figure 7. <u>For 19" games:</u> Replace the inverter on the Velcro. Place the rectangular piece of fish paper on the mounting holes on the LCD bracket. If you replaced the touchscreen, carefully connect the touchscreen controller cable to the touchscreen controller and secure with 2 tie wraps. Position the touchscreen controller on top of the fish paper and secure to the LCD bracket with 2 screws or simply with Velcro. See Figure 7.

<u>For Widescreen games:</u> Resecure the two standoffs to the touchscreen controller bracket, making sure that the standoffs secure this bracket to the rear of the monitor. If you replaced the touchscreen, carefully connect the touchscreen controller cable to the touchscreen controller, and secure it with two tie wraps. Position the touchscreen controller over the two standoffs and secure it in place with two screws (see Figure 7). Replace the inverter on the Velcro.

OBSERVE PRECAUTIONS FOR HANDLING ESD-SENSITIVE DEVICES

# Removal/Installation of Major Assemblies - Ion Aurora (cont'd)

- 5. <u>For 17" and 19" games:</u> Secure the inverter's cable and power harness under clamp(s) where necessary. See Figures 5 and 6.
- 6. Reconnect the LCD power connector (black and yellow wires), and secure the wires under a clamp where necessary.
- 7. <u>For 17" and 19" games:</u> Reconnect the touchscreen power cable to the touchscreen controller, then reconnect the Molex connector (orange and gray wires). Secure the Molex wires and the touchscreen ground wire under a clamp where necessary. See Figures 5 and 6.
- 8. Reconnect the 14-pin OSD connector and the VGA cable to the monitor. For 17" games, replace the touchscreen and VGA ground wires, and secure with 1 screw (see Figure 5). For 19" and Widescreen games, replace the touchscreen ground wire (where necessary) and VGA ground wire on the ground screw on the LCD bracket and secure with one nut (see Figure 6).
- 9. Replace the strain relief cord and secure in place with one screw. See Figure 4.
- 10. Close the monitor assembly completely, and fasten with 2 screws in the back of the bezel, 1 security screw (17") or security washer and nut (19" & Widescreen), and 1 screw in the front (through the marquee). See Figure 3.
- 11. Reconnect the ground wire to the rear cover and lower the cover into place, carefully lining up the 2 tabs on the cover with the 2 mating holes on the sides of the game (see Figure 10). Make sure that the plastic lip on the bottom of the rear cover is behind the metal base. Tighten the screw securing the bottom of the door. (Figure 2). Turn the wing on the draw latch clockwise to engage the latch (see Figure 1).

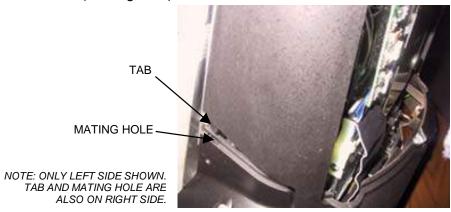


FIGURE 10 - SIDE VIEW OF GAME

- 12. Close (or reattach) and lock the rear door.
- 13. Plug in and turn on the game.
- 14. Once the game has booted up, proceed to **Troubleshooting Your Touchscreen** to perform a touchscreen calibration. After doing so, ensure that the screen is properly aligned, and make any necessary adjustments with the monitor controls on the OSD board.