TECH2007 PLUS

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Motherboards:
Beeping Motherboard: Force: ECS & Maxx: Mitsubishi \ Itox \ Unicorn
Symptom: Motherboard is displaying a series of beeps (one to several beeps repeatedly)
This may indicate a DIMM problem. Possible missing, defective or poor edge pins connections on the DIMMs.
Possible solutions:
- Reseat the DIMM.
- Replace the DIMM.
- Clean edge pins on the DIMM.

Note: Possible defective motherboard, this is determined when reseating or replacing the DIMM.

Ion motherboard:
Symptom: Game will power up (example fans, LEDs, etc…are functioning) but no video being displayed.
Possible solution: Try reseating the DDR DIMM (memory)
Note: N-Force (ECS) motherboard does not beep, if the DDR DIMM (memory) is defective or not seated correctly.

I/O board: Force & Ion: 2006 & 2007
Symptom: Error message: fatal error cannot access I/O board. Motherboard cannot communicate with I/O board.
Possible problems: Possible defective I/O board, defective motherboard or USB touch controller.
- Check status of the four red LEDs on the I/O board. *See Tech2007 for more information.*

Dead Motherboard: XL: Telco\DeAmeritek & Maxx – Itox \ Mitsubishi
Symptom: No power up, but power supply is functioning. (Fans are functioning)
Possible poor contact connection between I/O & riser boards and the IDE ribbon cable.
Procedure: Turn the off game. Reseat memory hardware (SIMMs or DIMMs). Then remove the I/O & riser boards and disconnect the IDE ribbon cables from the motherboard. Turn the game back on and what happens?
- **Result A:** Game still does not power up with I/O & riser boards and IDE ribbon cables disconnected. Then this would indicate a possible defective motherboard.
- **Result B:** Game powers up and displays an error message of **Disc boot failure** or **Operating system not found**. Turn the game off. Clean the edge pins on the I/O & riser boards and re-install and reconnect IDE ribbon cables to the motherboard and turn the game back on.
- **Result C:** Game powers up and displays an error message of **Disc boot failure** or **Operating system not found**, Next, re-install the I/O & riser boards and reconnect the IDE ribbon cables. Then turn the game back on and if there is still dark or blank screen, then this may indicate a possible defective I/O-riser boards or IDE ribbon a cable that is loading down the motherboard.

Note: It is possible that the hard drive or CD ROM drive will also be responsible loading down the motherboard.

Unicorn Motherboard: Used in dedicated Maxx games and XL2Maxx conversion kits.
Symptom: Dead Unicorn motherboard: will not power up due to lost of CMOS configuration.
Procedure: Turn the game off. Plug keyboard into the Purple PS2 connector port.
Locate J3 pins (located near the Primary & Secondary IDE ports on the motherboard)
Move the jumper at J3 pins 3 & 4 down to pins 4 & 5. (This changes the motherboard power supply setting from ATX to AT)
Once the jumper is moved: press and hold the **<Del>** key while turning the game on. This forces the Unicorn motherboard to the CMOS configuration setup screen. (Use TECH2007 notes for the Unicorn CMOS configuration) Once the CMOS configuration is completed, turn the game off. Move the jumper at J3 pins 4 & 5 back to pins 3 & 4. Then turn the game back on.
Note: If the game does not power up after moving J3 pins to 4 & 5, the Unicorn MB or power supply maybe defective.

ECS Motherboard: Used in dedicated Ion & Force games and Maxx2Force conversion kits.
Symptom: No power up; due to defective motherboard, power supply or shorted component. (Example: I/O board)
Procedure: Turn the game off locate the GREEN wire coming from the power supply. Using a stripped wire on both ends (About 12" or 5cm long) place one end into the GREEN wire connector and the other end to ground or chassis. Then turn the game on. The following scenarios will result:

- **Result A:** Game will power up with all fans, LEDs, etc functioning, but no motherboard function. Indicates defective ECS motherboard.
- **Result B:** No power up: Possible defective power supply. Replace power supply.
- **Result C:** Power supply replaced and still no power up. Possible shorted component (motherboard, I/O board, etc) Start with unplugging the 20-pin ATX connector at the motherboard and other power connector one at a time until power supply fan comes on.

Note: Try reseating the Power-On connector to the right of the IDE connectors on the motherboard.
Note: If an AT or ATX power supply loses any of its voltages (Example +5.0 vdc or –12 vdc) no voltages are produced. The power supply will shutdown completely.
Note: ATX Power supplies used with Maxx: Unicorn, Force: ECS and Ion: ECS will not power up if the motherboard is not detected or defective.

Coin Jam error:
Symptom: Coin jam error message appears on the screen with audio tone after the game boots up.
Once Coin jam error sounds stops (after about 30-40 seconds), try running bills (paper notes) and coins.
If bills (paper notes) and coins are accepted and registered, then the DBA (note acceptor) and coin mech are not in question. The problem is related to the I/O board or harnessing. Refer to the game series for further information.

Force & Ion:
Possible causes:

- Defective DBA or note acceptor.
- Defective coin mechanism.
- Defective I/O board.
- Check jumper setting if I/O board was just replaced.

Force: Radion
Possible causes: Coin jam appears when:

- DBA removed and opto board disconnected: Problem: I/O board problem.
- DBA installed and opto board disconnected: Problem: DBA unit.
- DBA removed and opto board connected: Problem: Opto board problem.

XL & Maxx:
Procedure:
Remove the coin door and disconnect J3 connector from the I/O board. Turn the game back on, if coin jam appears again the problem will be related to the I/O board. Try cleaning the edge pins on the I/O and riser boards. If this does not correct the problem, then the I/O board is at fault.

Possible causes:

- Dirty edge pins on I/O and riser boards.
- Defective DBA.
- Defective coin mech.
- Defective I/O board.

Maxx: Slim\Select games: Coin jam appears when:

- DBA removed and opto board disconnected: Problem: I/O board problem.
- DBA installed and opto board disconnected: Problem: DBA unit.
- DBA removed and opto board disconnected: Problem: Opto board problem.

Jumper settings:
ION: Titan I/O board jumper setting:

- With coin mech: JP8 – Open.
- No coin mech: JP8 – Closed. (Shorted)
- JP1, JP7 & JP8 must closed or shorted, if not coin jam error will occur.

Force: 3 in 1 I/O board (EVO)

- Coin mech: JP7 - Open
- No coin mech: JP7 – Closed. (Shorted)
- JP1 & JP8 must be shorted, if not coin jam error will occur.

Force: USB I/O board: (square I/O board)

- JP1 must be shorted, if not coin jam will occur.

CMOS error messages: Corrupted motherboard.
Serial port or USB port:

- No Touch controller found.
- Fatal error, cannot access I/O board (2006 & 2007 software)
- Invalid key error: Motherboard not USB port.

Primary IDE port: (Hard drive)

- Disc boot failure or operating system not found.
- Bad Command or File Name: hard drive related issue.

Secondary IDE port: (CD\DVD drive)

- Loading problem: CD\DVD drive cannot be accessed.

Other:

- No modem detected: Tournamaxx.
- No sound.

Microtouch controller: Beige (SMT-1, SMT-2, SMT-3), Black (SMT-4) & USB controllers.
Symptom: No green LED or green LED is dim and not responding to touch.

Warning!!! **Do not install another touch controller.**

There is a strong possibility of damaging the replacement controller.
Procedure: With game turned off , start by checking the resistance across connector points 4 & 5, it the resistance measures from 0 to 180 ohms (Possibility higher) than the touchscreen (cable) is defective and the controller damaged. At this point, the touchscreen and controller will both need to be replaced. There should about 2 to 3 Meg ohms across connector points 4 & 5. Should the resistance measure good across connector points 4 & 5, than only the touchscreen controller will need to be replaced. Refer to the diagram for the connector points.