



merit entertainment

# TECH NOTES

<http://www.meritgames.com>

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## Re: Ion Hard Drive Connector Issues

The majority of hard drives returned to Merit are completely operable and in good, working condition; yet they were returned because boot error messages led operators to believe the hard drive was corrupt. Most of these error messages are a result of a poor connection and not faulty hardware. Operators who are getting a **“DISC BOOT FAILURE”** error (on an ECS motherboard) or a **“Reboot and Select proper Boot device”** error (on an ASUS motherboard) should go over the following troubleshooting steps before returning the hard drive to Merit.

### Check Connections

The hard drive connection is the most likely cause of problems when the above error messages are found. Turn off and unplug your unit, then check these connections to assure that all connectors are seated properly:

For Hard Drives with Quick-Click Adapters:

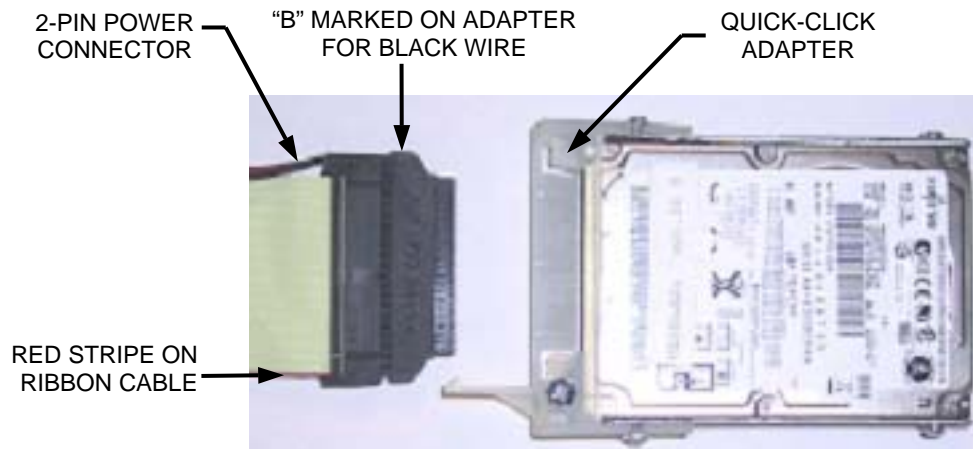


FIGURE 1 – PROPER SEATING OF RIBBON CABLE INTO QUICK-CLICK HARD DRIVE (FRONT VIEW)

- Check to be sure that the adapter going into the hard drive is properly aligned and seated (see Figure 1). To re-seat the adapter, line up the left side of the hard drive adapter with the pins on the hard drive and then carefully insert it all the way into the quick-click adapter. When the hard drive is in place with the adapter connected correctly, both the label on the hard drive and the writing on the plastic part of the adapter itself should be facing out.
- Check to be sure that the 2-pin power connector running into the adapter is seated properly on the side of the adapter marked with a “B” (see Figure 1). When this connector is properly in place, the black wire will be on the outside and the red wire will be on the inside of the unit.

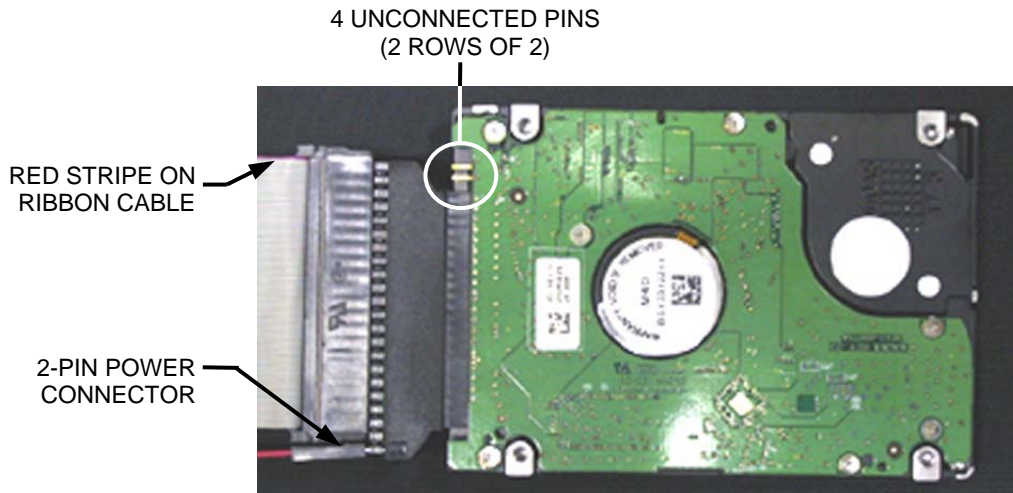
For Hard Drives without Quick-Click Adapters:

FIGURE 2 – HARD DRIVE CONNECTION  
WITHOUT QUICK-CLICK ADAPTER (REAR VIEW)

- Be sure that the hard drive ribbon cable is connected to the hard drive as is shown in Figure 2. Note that 4 pins on the hard drive are set off and will remain unconnected. Make certain that the red stripe on the ribbon cable is inserted facing these unconnected pins.
- Make sure that the 2-pin power connector (the red and black wire running to the hard drive) is connected properly to the hard drive. This 2-pin connector should be on the opposite end of the hard drive as the empty pins mentioned above, with the black wire facing the outside of the unit and the red wire facing the inside (see Figure 2).

### Check the Other Hardware

After ensuring that the hard drive is connected properly, plug in and turn on the game. If you're still getting an error message, follow the ribbon from the hard drive back to the motherboard to check that it's properly connected to the motherboard and fully seated.

If your problem still persists, check the ribbon cable itself. Swap out the ribbon cable that runs from the motherboard to the hard drive with a ribbon cable from another unit that you're sure is working. If this doesn't work, move on to trying a different adapter. Swap out hard drive adapters and see if that resolves the problem.

If you're still getting an error message, take a functioning hard drive from another unit, properly attach this new hard drive, and turn on the unit. If you do not get a disc boot error with the new hard drive, the old hard drive may indeed be the problem.

If you have any questions, or if the above steps do not stop the error from occurring, please contact Merit Customer Service and Technical Support by phone at 215-826-1400 or 800-523-2760, or by e-mail at [TechCenter@meritgames.com](mailto:TechCenter@meritgames.com).