

# *Larson Systems Inc.*



*060-40000-0101-00*

*FLASH Hard Drive Corruption Repair*



## About This Manual

This manual could contain technical inaccuracies or typographical errors. Changes are periodically made to the information contained herein. These changes will be incorporated in new editions of the manual.

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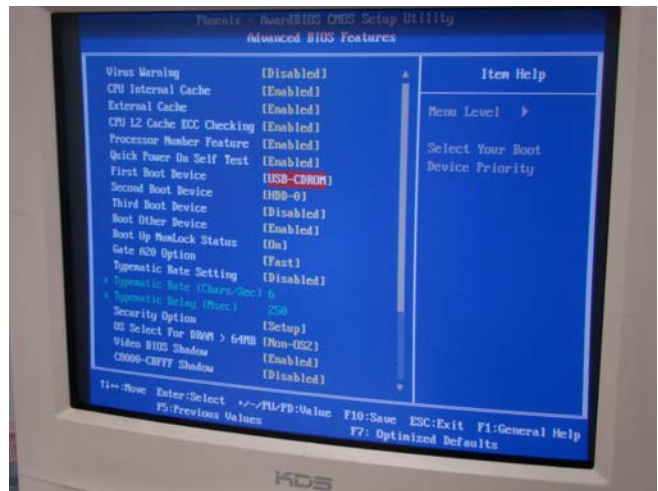
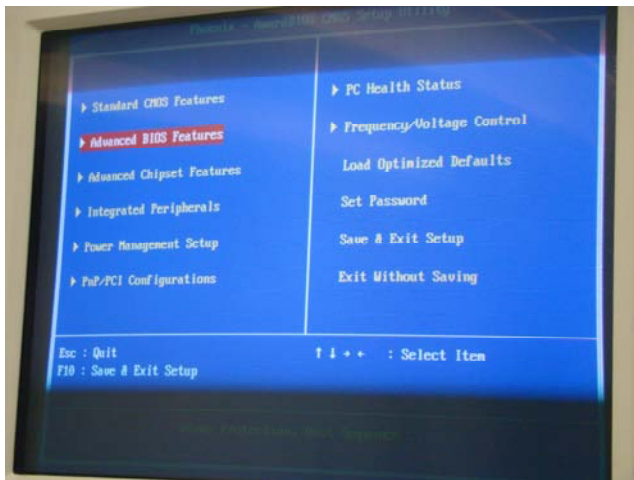


# 1 INVALID SYSTEM DISK

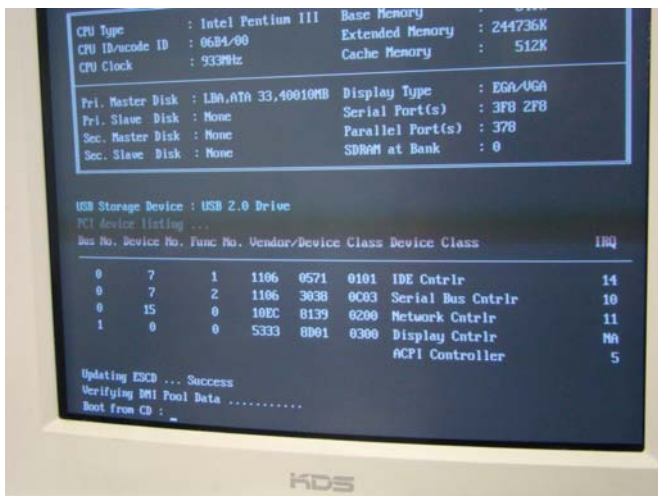
Because the FLASH tester uses a typical hard disk it is vulnerable to corruption. The PC motherboard of the tester has a power monitor circuit that resets the board if the +5 volts either falls below 4.75V or above 5.25V. When Windows is not shut down properly, as in the case of a power failure due to power loss or board reset, the hard drive can become corrupted. Depending on the level of corruption it may be possible to recover the drive using a CD drive and the original XP install CD.

If an external USB CD drive is available then the attempt can be made to repair the hard drive with it still in the FLASH head.

The BIOS settings may have to be changed to allow the CD drive or the USB CD drive to be the first boot device. This setting is in the Advanced Settings under the label First Boot Device. Write down whatever changes are made to make the CD drive the first boot device. The following pictures are for FLASH testers running the PCM-3370 motherboard.



When the CD drive is used as a boot device the normal XP Install startup is started. The Windows Installer environment will begin to load immediately, however if a USB CD drive is used it may take a few minutes for the environment to load completely.



Follow these steps in order until one succeeds. You may have to reboot after each step.

- 1) Boot to the Recovery Console.



- a. Enter the command `fixboot`
    - i. This command attempt to fix any errors with the boot sector of the hard drive.
  - b. Enter the command `chkdsk /r`
    - i. This command perform a `chkdsk` to look for damaged files and repairs them. When this finishes remove the CD and allow the system to boot normally.
- 2) Attempt a normal install. The install program will do one of two thing
    - a. It will see the original install and ask to simply overwrite the existing install. This is the preferred method of repair. Allow this to happen. This will re-install damaged files and reset certain section of the registry without deleting it entirely.
    - b. The installer will attempt to perform a normal, blank hard drive install. **DO NOT LET THIS HAPPEN.** Turn the power off and allow the CD to reboot.
  - 3) The disk is currently unrecoverable.

Reset the boot devices in the BIOS.