

CyberMedia[®]

First Aid[®]
New For **97**

Fixes Windows Problems... Automatically!

CyberMedia, Inc.
3000 Ocean Park Boulevard, Suite 2001
Santa Monica, CA 90405
Phone: 310.581.4710

<http://www.cybermedia.com>
e-mail: support@cybermedia.com

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Did you try to use the DOS MODE command to configure the printer?

Actions:

(NOTE: MS-DOS 4.x only) The computer freezes because it keeps trying (and failing) to send data to the printer. Microsoft Corporation has confirmed this problem with MS-DOS version 4.0x and PC-DOS version 4.00. The problem does not occur in later versions of MS-DOS.



Press the Enter key several times.

Actions:

Sometimes the distant end needs some additional "attention" to get started.



Are you trying to read the serial port settings with interrupt 14H?

Actions:

If so, use another method to read serial port information. A utility program, for example, is a method. If necessary, the BIOS may be upgraded to one that supports interrupt 14H.



Is the correct mouse driver installed for your version of Windows?

Actions:

- 1) Click on the 'Start' menu button, 'Settings', 'Control Panel'.
- 2) Open the 'Mouse' icon.
- 3) Select the 'General' tab.
- 4) Look at mouse driver shown or selected in the 'Name' list box.
- 5) If the incorrect mouse driver is shown or selected, click 'Change'.
- 6) Select the 'Have Disk' tab and insert the disk or CD into the appropriate drive.
- 7) Install the proper mouse driver.
- 8) Restart the computer so that the new mouse driver will be recognized.



Is everything removed that could block the way between the mouse and base unit?

Actions:

Optical mice require a clear line of site between the mouse and the control/base unit to pass the infrared light. Obstacles such as papers, books and other objects on the desktop obstruct this line of site and prevent the mouse from working.

Clear the desktop of papers, books and other objects. Maintain a clear path between the mouse the base unit.



**Do you have an optical mouse pad and is it turned
long-ways in front of you?**

Actions:

Optical mice require a special mouse pad with a visible grid. The mouse will not work without this special pad. Also if pad is oriented portrait instead of landscape, mouse will not function properly.



Do the mouse buttons act correctly when you use the opposite hand?

Actions:

Most software allows exchanging mouse buttons to support left-handed and right-handed users. The primary mouse button (ordinarily left one) may be switched to the right one via software to accommodate left-handed mouse users.

- 1) The mouse may be set (left-handed or right-handed) opposite of what is expected due to one of the following:
 - a) This user is using someone else's computer that is set opposite of expectations.
 - b) Someone else may have changed the settings on the computer.
- 2) Using the mouse with the opposite hand to determine if setting is reversed (i.e., if right-handed, try to use mouse with left hand). Ordinarily the left button performs most actions; determine if the right button now performs those actions.



Change the mouse control settings in the software.

Actions:

Use the control software that comes with the mouse (or obtain a third-party utility) to change the size, color or style of the mouse pointer, or change the behavior of the mouse pointer so that it leaves a trail.

- 1) Click on the 'Start' menu button, 'Settings', 'Control Panel'.
- 2) Open the 'Mouse' icon.
- 3) Click on the 'Pointers' tab to change the size and style of the pointer.
- 4) Click on the 'Motion' tab to change the trail of the pointer.



Are the keys you're pressing allowed to be used by this field or application?

Actions:

Some programs have input controls that permit only certain entries (e.g., text or numbers or nothing) in certain fields.

- 1) Check the user manual to verify the type of entry that is required here.
- 2) Make sure proper keys are being pressed.



Is the video cable longer than 6 feet (or 2 meters)?

Actions:

Video cables longer than 6 feet or 2 meters long can distort the image and cause characters and colors to drop out of an image that otherwise seems fine.



Is the monitor's power switch on & the power cord secure on both ends?

Actions:

Make sure the power cable is securely connected to the three-pronged connector on the rear of the base unit and to the wall outlet.



Are the video resolution settings on the video card correct for your monitor?

Actions:

Check whether the video resolution settings for the video card match those supported by the display unit:

- 1) Check the display unit manual to determine maximum resolution settings for this display unit.
- 2) Check the video card manual to determine how to change video card resolution settings (via software or via changing jumpers on video card).
- 3) Do one of the following:
 - a) Change resolution via software. Follow instructions accompanying video card software for running utility and changing resolution settings.
 - b) Change jumper settings on video card.



What is the pattern (sequence) of beeps and pauses?

Actions:

Types A series of beeps when you turn on the computer means that the system has diagnosed a problem. The pattern of the beeps reveals the type of problem. For example, a 4-2-4 pattern means an adapter card is bad; a 3-1-1 pattern means a DMA chip is bad, and so on.

Once the beep pattern has been identified, you can tell what the pattern means and what to do about.



What is the problem with your mouse or trackball?

Actions:

Installation, setup, or a configuration problem.

Choose this option when...

- You are having problems trying to install or configure a mouse.

Buttons: the mouse moves OK but the buttons do not work.

Choose this option when...

- None of the buttons work.
- For a two-button mouse, one button works, but the other one does not.
- If you have a mouse with more than two buttons, the mouse works only in one direction.
- If you have a mouse with more than two buttons, some buttons work and others do not.
- The mouse buttons do the wrong thing when clicked.

Dead mouse: Mouse doesn't work at all.

Choose this option when...

- There is no mouse pointer.
- The mouse pointer is frozen on the screen.
- The computer doesn't recognize the mouse.

Movement: Pointer doesn't move properly in all directions.

Choose this option when...

- The pointer may move easily in one direction but not in another.
- The pointer does not move easily in any direction.

Erratic behavior: Acts strange or problem comes and goes.

Choose this option when...

- There is a mouse pointer on the screen, but the pointer does not move as expected.
- The mouse buttons don't work.
- Clicking the mouse does not have the expected effect.



Are you trying to read the serial port settings using the DOS MODE command?

Actions:

The DOS MODE command does not support reading the settings of a serial port.



Are you using a Zenith laptop?

Actions:

Some mice don't work on Zenith laptop serial ports because the ports are not enabled.



Replace the batteries in the cordless mouse.

Actions:

To replace the batteries:

- 1) Refer to the label on underside of the mouse, or refer to the instruction manual, to determine number and size of the batteries required.
- 2) Turn off the mouse.
- 3) Remove the battery compartment cover.
- 4) Take the old batteries out and note how they were placed in the battery compartment.
- 5) Put some fresh batteries in the mouse.
- 6) Replace battery compartment cover.
- 7) Turn mouse back on.
- 8) Make sure the mouse works.



Move cordless mouse receiver away from the PC's monitor.

Actions:

The receiver is too close to the monitor and is probably interfering with it.



Make channel on the cordless mouse receiver and mouse the same.

Actions:

The transmitter and receiver on both the mouse and the base unit must be set to the same frequency. Adjust the channel on the receiver until it is the same for both.



Are you using a 'Plus Hard' card?

Actions:

If you are using a Plus Hard Card, do one of the following:

- 1) Configure the Plus Hard Card to use a different IRQ number.
 - a) Consult the Plus Hard Card documentation for instructions on configuring the card to use another IRQ setting.
 - b) Choose another valid IRQ setting from the options given in the documentation.
 - c) Follow the instructions given in the Plus Hard Card documentation to change the IRQ setting.
- 2) Use the mouse on a serial (COM) port.
 - a) Obtain an adapter that will allow the PS/2 mouse connector to be connected to an unused serial port on the computer.
 - b) Connect the PS/2 mouse to the adapter.
 - c) Connect the adapter to an unused serial port.
 - d) Configure the mouse driver to use the mouse on the serial port.



Does beeping stop by itself after a few minutes of not typing anything?

Actions:

The keyboard buffer may be full; wait for the keyboard buffer to clear.



Was something spilled on your keyboard?

Actions:

To clean the keyboard:

- 1) Save your work, if possible.
- 2) Turn off the computer.
- 3) Unplug the keyboard.
- 4) Use a sponge or towel to carefully wipe up the liquid.
- 5) Place the keyboard in a warm, dry location where it will get good air circulation for 24 hours.
- 6) After keyboard is dry, plug it back into computer and try all the keys.
- 7) If the keys do not work, replace the keyboard.

NOTE: If the keyboard works, expect it to fail in the near future, especially if the liquid was sweet and sticky.



Have you tried using an adapter to connect the keyboard plug to the computer?

Actions:

Two sizes of keyboard connectors currently dominate the market: the older, larger, 15-pin connector and the newer, smaller, round PS/2-style connector. If the newer keyboard has both connectors, try the other one. If it does not, you will need an adapter plug to connect the two (be sure to specify which direction).



Which keyboard layout is your keyboard set for, QWERTY or DVORAK?

Actions:

The two most commonly used keyboard layouts are Qwerty (normal typewriter style layout of keys) and Dvorak. They are named for the first six letters on the top alphabetic row of each layout. Many people who use a keyboard use the Qwerty layout, but some people also use Dvorak. Problems can arise when a user is expecting one type of keyboard layout and is given a keyboard set up with the other.

If using Qwerty keyboard layout instead of Dvorak:

- 1) Run the Drove keyboard layout program.
- 2) Do the following to install the Dvorak keyboard in Windows:
 - a) Open the 'International' icon under the 'Control Panel.'
 - b) Select the down-arrow next to 'Keyboard Layout.'
 - c) Scroll down the list and select 'US-Dvorak.'
 - d) Choose 'OK' to save and close the window.

If using Windows 95, and using Qwerty keyboard layout instead of Dvorak:

- 1) Select the 'Start' button, 'Settings', 'Control Panel'.
- 2) Open the 'Keyboard' icon.
- 3) Select the 'Language' tab.
 - a) In the Language window you should see 'English (United States)'.
 - b) If the language chosen is other than 'English (United States)', either choose 'English (United States)' from the list or click 'Add' and choose 'English (United States)'.
- 4) Click 'Properties'.
- 5) In the 'Keyboard Layout' window choose 'United States-Dvorak'.
- 6) Click 'OK'.
- 7) Click 'Apply', 'OK'.

If using Dvorak keyboard layout instead of Qwerty:

- 1) Run the Qwerty keyboard layout program.
- 2) Do the following to install the Qwerty keyboard in Windows:
 - a) Open the 'International' icon under the 'Control Panel'.
 - b) Select the down-arrow next to 'Keyboard Layout'.

- c)** Scroll through the list and select 'US'.
- d)** Choose 'OK' to save and close the window.

If using Windows 95, and using Dvorak keyboard layout instead of Qwerty:

- 1)** Select the 'Start' button, 'Settings', 'Control Panel'.
- 2)** Open the 'Keyboard' icon.
- 3)** Select the 'Language' tab.
 - a)** In the Language window you should see 'English (United States)'.
 - b)** If the language chosen is other than 'English (United States)', either choose 'English (United States)' from the list or click 'Add' and choose 'English (United States)'.
- 4)** Click 'Properties'.
- 5)** In the 'Keyboard Layout' window choose 'United States'.
- 6)** Click 'OK'.
- 7)** Click 'Apply', 'OK'.



Swap keyboard with one that works on another computer.

Actions:

Find another computer where keyboard is working. Verify that both computers are using the same kind of keyboard. Swap keyboards so that the working keyboard is attached to the computer that was experiencing the keyboard problem and the keyboard that was not working is now attached to the other computer.



Does the keyboard plug fit into the back of the computer?

Actions:

Two sizes of keyboard connectors currently dominate the market: the older, larger, 15-pin connector and the newer, smaller, PS/2-style connector. If newer keyboard has both connectors, try the other one. If not, obtain an adapter plug to connect the two (be sure to specify which direction).



What is the problem with your keyboard?

Actions:

Installation, setup or configuration problem

Choose this option when...

- You are having problems trying to install or configure a mouse.

Beeps: Keyboard beeps inappropriately

Choose this option when...

- A beep doesn't occur when it should, or it sounds when it shouldn't.

Dead: Keyboard Doesn't Respond at All

Choose this option when...

- Nothing appears on-screen when you type.
- The function keys don't work.
- Keystroke combinations don't work.

Incorrect characters: Different letters show than what I typed

Choose this option when...

- You press the letter Q, for example, but a D appears on-screen, or you type a Y but a K appears, and so on.

Keys stick: One or more keys stick or don't type

Choose this option when...

- You depress a key or keys and they don't pop back up, or do so slowly.
- You tap a key but it won't move down.
- Certain keys appear to move properly, but nothing appears on-screen when you type them.



What keys are missing from the keyboard?

Actions:

Key caps are the tops of the keys (with the letter). If a key cap is missing, you will see the spring on the keyboard.



Which type of SCSI host adapter card are you installing?

Actions:

CAUTION: *The installation, diagnostic or maintenance tasks below should be performed by a qualified computer technician.*

To install or replace the SCSI host adapter do the following: NOTE: If removing an old SCSI host adapter is not required, skip to Step 3 for installation steps.

- 1) Remove base unit cover.
- 2) Remove the old SCSI host adapter:
 - a) Carefully disconnect the drive ribbon cables from the SCSI host adapter and set them aside.
 - b) Remove the screw from the top notch of the mounting bracket on the card.
 - c) Touch the chassis to ground any static and, grasping the SCSI host adapter by its edges, remove the card by pulling straight out of the slot gently but firmly. Avoid side-to-side movements (circuit boards crack easily).
 - d) Place the card in a static-resistant envelope.
 - e) If not inserting a replacement card in this slot, replace the rear metal slot plate and secure it in place with a screw.
- 3) Install new SCSI host adapter:
 - a) Remove the SCSI host adapter from its box and the protective anti-static envelope.
 - b) Locate the jumpers or DIP switches on the card, and lay the card down on the anti-static envelope with the jumpers/DIP switches in view.
 - c) Read the SCSI host adapter manual and identify which, if any, settings must be changed on the card for this particular computer and its disk drives. (NOTE: Standard settings given reduce the likelihood of conflict.)
 - 1] With only internal devices, install SCSI host adapter with termination enabled (devices at either end of the SCSI chain (i.e., host adapter) must be terminated).

NOTE: Newer SCSI host adapters automatically switch to enable termination when required during the cold boot.
 - 2] If there are both internal and external SCSI devices, disable termination, because the SCSI adapter will be in the middle.
 - d) NOTES on SCSI devices. SCSI devices must be assigned a unique ID number (0-8). The SCSI devices at the end of the chain must be terminated. All devices connected between the SCSI controller card and the last device, must be assigned a unique ID and not be terminated.
 - 1] Usually, set the first SCSI hard disk to ID #0 and the second SCSI hard disk to ID #1.
 - 2] Make sure the last SCSI device installed is terminated. (Common practice is to assign drive 0 to

SCSI ID #0, terminate it and place it at the furthest end of the SCSI chain.) If this hard disk is the only SCSI device, its termination jumper should be set.

- 3] Keep a log (perhaps on the sticker inside the base unit) of SCSI device IDs, drivers and BIOS locations to prevent conflicts. It is recommended that one SCSI device be installed at a time.
 - e) Move the Jumpers and/or Change the DIP Switches, if necessary.
 - f) Identify a free expansion slot of the proper size, and remove the rear metal slot cover.
 - g) Touch the chassis to ground any static and, grasping the SCSI host adapter by its edges, insert the bottom of the card (part with the gold-stripped bars) into the free slot. Press down firmly until the card is completely seated (especially if it is an EISA card). Avoid side-to-side movements when positioning the card (circuit boards crack easily).
 - h) Insert the screw, previously removed from the rear metal slot cover, into the top notch of the mounting bracket on the card and the screw hole, and tighten it securely.
 - i) Connect the disk drive and other SCSI device ribbon cables to the new SCSI host adapter. Check the manual to verify connector orientation and gently insert the cable connector into the card connection.

NOTE: Usually the red or blue side of ribbon cable connects to pin 1. Pin 1 usually faces toward front of base unit, away from mounting bracket) Make sure the other end of the ribbon cable is securely connected to the disk drive or other device. (NOTE: SCSI drives have 50-pin ribbon cable.)
- 4) Test the new configuration:
 - a) Make sure that all parts or tools are removed from the chassis.
 - b) Replace necessary cables (power, keyboard, video), and plug in the power cable.
 - c) Power up the computer and related peripherals one at a time.
 - d) If also installing a new disk drive, boot from system diskette and run 'Setup' to update drive type.
 - e) Test-access each disk drive and device in the system to ensure proper configuration.
- 5) If unable to access drive(s), turn the computer off and disconnect the power cables.
 - a) Recheck all SCSI ID assignments to ensure there are no conflicts. Also make sure the last device on each end is terminated.
 - b) Reseat SCSI host adapter.
 - c) Recheck all ribbon and power cable connections to both the SCSI host adapter and disk drives.
 - d) Reconnect the power, reboot and retest drive access.
- 6) If still unable to access one or more drives, but computer seems to operate, run 'Setup' and check the setup and the drive type for faulty drives. Make changes, if necessary, and reboot the computer.
- 7) If message appears about interrupt (IRQ) conflicts during use, or another device fails (e.g., the mouse):
 - a) Run a hardware status program (e.g., Microsoft Diagnostics (MSD)) to identify port and interrupt (IRQ) assignments. Enter the following command at DOS prompt and press 'ENTER': C:\DOS\
\MSD
 - b) Identify interrupt (IRQ) assignments using the IRQ Status screen.

CAUTION: Microsoft Diagnostics (MSD) (and some other utilities) report standard interrupt (IRQ) assignments for serial ports rather than determining the actual interrupt being used. If non-standard interrupt assignments are suspected, physically check the interrupt settings on the card or device.
 - c) See IRQ Conflicts for advice on resolving conflicts.
- 8) Replace the base unit cover.
- 9) Create/update a System Rescue Diskette that includes copies of necessary drivers and the following

system-specific files:

DOS/Windows: AUTOEXEC.BAT, CONFIG.SYS, Windows .INI and .GRP files.



What is your monitor or video problem?

Actions:

Installation, setup or configuration problem

Choose this option when...

- You are having problems trying to install or configure a display.



Is the monochrome/color switch on the monitor set on monochrome?

Actions:

To move the monochrome switch to color position:

- 1) Locate monochrome switch on display.
 - a) Look for a button, switch or small lever.
 - b) Check along the lower front and side of display. It could be located along the lower side (check both sides) or rear of display unit.
- 2) Move the button, switch, or lever to the color mode position.



Are you running the DoubleSpace Setup program?

Actions:

DoubleSpace Setup runs in monochrome on the original IBM 8514 video card, the ATI Ultra video card in 8514 mode, and the Paradise 8514/A video card. This is due to video card limitations, and is not attributable to DoubleSpace.



Are you using MS-DOS 6.x ANSI.SYS?

Actions:

When ANSI.SYS is loaded from a multiple configuration menu block, it fails to detect the previous state of the CON device in which certain menu colors were set.



Can you adjust colors settings within the software program that has poor color?

Actions:

Look under 'Controls,' 'Options' or 'Settings,' or consult the user manual.



Plug laptop into wall outlet, or use a charged-up battery pack. Does this work?

Actions:

Do one of the following:

- 1) Switch to the alternate battery pack.
- 2) Switch to electric power using the power adapter and wall receptacle.
- 3) Stop using computer and recharge battery.



Is the mouse you are using on your laptop (external/internal) currently enabled?

Actions:

Some brands of laptops contain a CMOS setting enabling either an external mouse or a built-in mouse/trackball. The external mouse and the internal mouse cannot both be active at the same time in these machines.

To check for this condition, run your computer's 'setup' routine. There may be a setting for \"trackball enabled\" or \"external mouse enabled.\" Make sure this setting is appropriate for the pointing device you are trying to use, restart your computer and try again.



Are you using a serial, PS/2 or bus mouse?

Actions:

A serial mouse is one that is plugged into a serial port (oblong connector with pins in it) on the computer. A PS/2 mouse has a round connector with a few pins inside. A bus mouse is connected to the computer via its own special bus interface board.



Move switch on mouse to two-button setting & restart computer.

Actions:

The 3 button mouse navigates incorrectly because of mouse button switches.

Some mice with 3 or more buttons navigate in only one direction due to differences between software exceptions and button selection switch on bottom of mouse.



Replace the power cable, if power cable is detachable.

Actions:

If the cable not detachable, send the entire unit for further diagnosis and repair.



Does other equipment (like a lamp) plugged into this surge protector work?

Actions:

Make sure the surge protector is on.

Test whether other equipment (such as a lamp) works when plugged into this surge protector.



What is the problem with your CD Drive?

Actions:

Installation, setup or configuration problem

Choose this option when...

- You are having problems trying to install or configure a CD-ROM Drive.



Place a CD in the drive & double-click on the CD-ROM drive's icon.

Actions:

The CD-ROM drive is usually D: You can double-click on the CD-ROM drive by doing one of the following:

- 1) In Windows 95, click on 'My Computer' and then the CD-ROM Drive (usually D).
- 2) In Windows 95, click on the 'Start' menu, 'Programs', 'Explorer', CD-ROM Drive (usually D).



Run CD Player or other program that reads CDs.

Actions:

To get to the CD Player click the following items: 'Start' button, 'Programs', 'Accessories', 'Multimedia', and 'CD Player'.



Is the CD-ROM drive (both internal & external types) connected to the sound card?

Actions:

The CD-ROM requires two connections in order to work properly. The first is the bus connection which allows the transfer of data. Usually this is a SCSI connector or IDE or EIDE connection. The second is the RCA plug on the back of the CD-ROM. External CD-ROM's use RCA connectors that look like speaker plugs on a stereo. Internal CD-ROM's require a connector to the sound card.



Does the sound work correctly with other programs (Media Player, etc.)?

Actions:

If you are using Windows 95, you can play .wav or .mid files (see definitions below) as follows:

- 1) Open 'My Computer', 'Control Panel', 'Sounds'.
- 2) Select a .wav file and click the 'Preview' button to hear the sound.

OR

- 1) Open the Media Player or Sound Recorder by clicking 'Start', 'Programs', 'Accessories', 'Multimedia', and either 'Media Player' or 'Sound Recorder'.
- 2) Open a sound or MIDI file by clicking 'File', 'Open', 'C:', 'Windows', 'Media' and double-clicking any of the filenames.

If sound works correctly with other applications, the problem is probably due to an improper setting (such as a volume control set too low), a conflict, or a lack of support for sound within the current application, not as a result of a bad connection or setting with the sound card or CD Player.

A .wav file is a digitally recorded sound, such as a clank, a gong, a series of beeps, or even a song. You can identify a .wav file by the speaker icon next to the filename.

A .mid, or MIDI, file contains digitized descriptions of the instruments within a musical selection. These descriptions control precisely the variables that determine how and when the instruments play within the selection. A .mid file has a musical note icon next to the filename.

An .avi, or digital video file, can contain a variety of data, such as video, audio and text data. Anything that can be recorded in a video can be stored in an .avi file. An .avi file will have a video camera icon next to the filename.



Increase cache size according to your CD-ROM's speed. Does speed increase?

Actions:

If in Windows 95, to increase the cache size do the following:

- 1) Click the 'Start' button, 'Settings', and 'Control Panel', then open the 'System' icon.
- 2) Click the 'Performance' tab, the 'File System' button, and the 'CD-ROM' tab.
- 3) Look in the drop-down list of "Optimize access pattern for:" and select the speed of the CD-ROM drive you have.
- 4) Move the "Supplemental cache size:" pointer to the desired speed. The following setting guideline is based on 8MB of RAM or more.
 - Single Speed - move pointer to Small
 - Double Speed - move pointer one-third of the distance to the right
 - Triple Speed - move pointer two-thirds of the distance to the right
 - Quadruple Speed - move pointer to Large
- 5) Click on 'Apply', 'OK', 'Close'.
- 6) Answer YES to restart the computer. The changes will now be in effect.



Restart computer and go to 'Setup'.

Actions:

Setup is a utility for changing hardware-related information. This information tells the operating system and other applications what kind of hardware and devices are available for use.

This system-related configuration information is stored in the CMOS chip. Batteries provide the power to maintain this information, even while the computer is turned off.

Using Setup, the user can change the number and type of hard disk and floppy drives, the video type, and the date and time of day.

To run Setup:

- 1) Do one of the following, depending on computer model:
 - a) All Pentiums, 486s, 386s, most 286s, PS/2 Model 30 and PS/1: Press a specific Keystroke combination while computer is booting up. (NOTE: Look for instructions on screen while computer is booting up.) Often, this Keystroke combination is CTRL+ALT+ESC, CTRL+ALT+ENTER or CTRL+ALT+S.
 - b) Early 286s and all PS/2 MCA computers (except PS/2 Model 30 and PS/1). Insert the Boot Reference Diskette in Drive A, and press CTRL+ALT+DEL. (Computer will boot into setup utility.)
- 2) Carefully read and follow instructions on the 'Setup' screen to navigate, set and change various items.
- 3) The Setup screen usually contains items like the following:

BIOS SETUP PROGRAM

Date (mm/date/year): Mon, August 1, 1994

Time (hour/min/sec): 10:30:01

Base memory: 640KB

Extended memory: 2816

Expanded memory: 0

	Cyln	Head	WPcom	LZone	Sect	Size
Hard disk 0:	Type 40	820 6	820	820	17	41 MB

Hard drive 1: None

Floppy drive A: 1.2 MB, 5 1/4

Floppy drive B: 1.44 MB, 3 1/2

Primary Display: VGA/EGA

Keyboard: Installed

ESC:Exit Arrow keys to select/edit F5 to Save/Exit/Reboot

CAUTION: Beware of changing the hard drive type definition. Changing this is dangerous, because entering the wrong type can cause the primary hard drive (e.g., C:) to seem to disappear. This means the

computer will not completely boot, and DOS and other files on the hard drive will NOT be available.

- 4) Use the arrow keys to navigate between items and bring up valid entries for each item.
- 5) When done, save the information to CMOS by following the instructions on the screen (e.g., F5 to Save).
- 6) Upon exiting Setup, the computer will reboot using the new setup information.
- 7) If configuration is not correct: reboot, and press the Setup key combination to reenter setup.
- 8) Change selected items and repeat steps 5-7.
- 9) EISA computers Only: If an adapter card change is made, EISA computer users must run the EISA Configuration Utility to tell the computer about the hardware changes. The utility is usually provided on a diskette with all EISA adapter cards. To run this utility, refer to the instructions that came with the card.

RECOMMENDATION: Use a utility to make a copy of the computer's CMOS setup information (and the EISA configuration, if applicable), and store it on the System Rescue Diskette in a safe place.



Run 'Add New Hardware' wizard (or manually install).

Actions:

To manually choose a specific CD-ROM do the following:

- 1) Click the 'Start' button, 'Settings', 'Control Panel', and open the 'Add New Hardware' icon.
- 2) Click 'Next'.
- 3) Click 'NO' because you will want to choose the CD-ROM to install.
- 4) Click 'CD-ROM controllers'. (A list of manufacturers and models appears.)
- 5) Choose the manufacturer of your CD-ROM then choose the appropriate model type. Click 'Next'. (You may need to have the CD-ROM driver disk to complete installation)
- 6) If the proper manufacturer and model is not on the list and you have a disk, click 'HAVE DISK'.
- 7) When done with the installation click 'FINISHED'.



Restart computer & install protected-mode drivers in startup files.

Actions:

To install protected mode drivers:

- 1) Comment out the lines in AUTOEXEC.BAT and CONFIG.SYS that load real-mode drivers. (Type \"rem\" before a line to comment it out.)
- 2) For Example:

```
rem device=c:\\sbrpo\\drv\\sbpcd.sys/d:mcd001 /p:220  
rem c:\\windows\\command\\mscdex.exe /s /v /d:mcd001
```
- 3) Restart the computer.



Does the system indicate for the CD controller: 'The device is working properly'?

Actions:

To manually install the CD-ROM controller do the following: (Windows 95 Only)

- 1) Right-click on 'My Computer', click on 'Properties', 'Device Manager'.
- 2) Find the SCSI or IDE controller in the device tree.
- 3) Open the tree/branch for your SCSI or IDE controller by clicking on the + sign.
- 4) Right-click on the controller and then click on 'Properties', 'General'.
- 5) Look in the Device Status area. It should say "The device is working properly" and under Device Usage "Original Configuration (Current)" should be checked.
- 6) Click 'OK' to return to the Device Manager.



Are you using Interlink (MS-DOS 6.x) with a Xircom PPX?

Actions:

Interlink (MS-DOS 6.x) does not work with Xircom Parallel Port Multiplexor (PPX) unless it is attached to the logical port assigned the hardware interrupt (IRQ). Interlink cannot be physically attached to the same port because Xircom is there; thus, they cannot be used together.



Check the sound card settings.

Actions:

If in Windows 95, to correct the sound card settings do the following:

CAUTION: This should be done by a qualified computer technician.

- 1) Click the 'Start' button, 'Settings', 'Control Panel', 'System', 'Device Manager'.
- 2) Click the Sound controller.
- 3) Double-click the sound card that needs to be changed.
- 4) In the sound card's properties, click the Drivers tab. Confirm that the correct driver has been chosen.
- 5) Click the Resources tab and confirm that the IRQ settings are correct.
- 6) Look in the Conflicting Device List in the Resources screen and see if there are any conflicts. Correct any conflicts you find.



Check AUTOEXEC.BAT file.

Actions:

Check the AUTOEXEC.BAT file to see if SMARTDRV.EXE is running with disk caching writes enabled. If so, this will sometimes cause file corruption if the machine is turned off too quickly after accessing the hard disk. By default disk caching is enabled.

If disk caching is disabled, the disk drive name will appear after the SMARTDRV.EXE command.

For example:

Disk Caching disabled

C:\DOS\SMARTDRV.EXE C:

Disk Caching enabled

C:\DOS\SMARTDRV.EXE /p /q.



Check the CONFIG.SYS file.

Actions:

- 1) Check EMM386 for HIGHSCAN command and remove it:
 - a) Edit CONFIG.SYS.
 - b) Locate the EMM386.EXE command line and delete the /HIGHSCAN parameter command, if present.



Check the CONFIG.SYS file.

Actions:

The memory test performed by HIMEM.SYS version 3.10 (shipped with MS-DOS 6.2x) fails when the system uses a hardware cache controller, causing the computer to freeze. This is due to some hardware cache controllers not handling the 16MB and 32MB memory boundaries well.



Are HIMEM.SYS, EMM386 or SMARTDRV preceded with LOADHIGH or DEVICEHIGH commands?

Actions:

Determine if system is attempting to load one of the following commands into high memory:

- 1) Edit AUTOEXEC.BAT and locate the line containing the command SMARTDRV, if present. It should NOT be preceded with the LOADHIGH command.
- 2) Edit CONFIG.SYS and locate lines with HIMEM.SYS (or another memory manager) and EMM386.EXE. EXAMPLE
DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\EMM386.EXE
DEVICE=C:\DOS\SMARTDRV.SYS (DOS 5.0 ONLY)
They should NOT be preceded with a DEVICEHIGH prefix.
- 3) If any of these commands are preceded with LOADHIGH= (AUTOEXEC.BAT) or DEVICEHIGH= (CONFIG.SYS) remove this prefix.
- 4) Save the file and reboot the computer.
- 5) Enter MEM /C /P at the DOS prompt to list programs by memory location.



Check CONFIG.SYS & AUTOEXEC.BAT.

Actions:

This particular TSR (Terminate and Stay Resident) program or device driver may not be capable of running in upper memory.

If so, load and run the program or device driver in conventional (low) memory.



Remove the size switch from drivers or TSR programs.

Actions:

To remove the size switch do the following:

- 1) Edit AUTOEXEC.BAT and locate the line for the TSR program.
- 2) Edit CONFIG.SYS and locate the line with the device driver.
- 3) If the TSR or device driver has a size switch following it (on the same line), write that switch down for reference and remove it (temporarily).
- 4) Save the file and restart the computer.
- 5) Enter MEM /C /P at the DOS prompt to list programs by memory location. Determine if applicable programs/device drivers are loading high (in the UMA).



Try loading TSR programs/device drivers in conventional memory.

Actions:

To load programs/device drivers into low or conventional memory:

- 1) Edit AUTOEXEC.BAT and locate the line for the TSR program.
- 2) Edit CONFIG.SYS and locate line with the device driver.
- 3) Remove the LOADHIGH= (AUTOEXEC.BAT) or DEVICEHIGH= (CONFIG.SYS) prefix from the front of the command line.
- 4) Save the file and reboot the computer.
- 5) Enter MEM /C /P at the DOS prompt to list programs by memory location.



Did you get this error message: 'DoubleSpace found crosslink between files...'?

Actions:

There are one or more crosslinked files on the DoubleSpace drive. Several factors contribute to this problem situation including: drive is too full (90% or more), EMM386.EXE using HIGHSCAN parameter, DoubleSpace drive too large for this disk, and files are badly fragmented on drive.



Is this hard drive over 5 years old?

Actions:

The normal life span of a hard drive is 5-10 years. Thus, if your drive is over 5 years old is nearing the end of its life span.



Update available memory using 'Setup'. Does it show all the memory now?

Actions:

To update memory section of Setup do the following:

- 1) Run 'Setup'.
- 2) Examine the 'Memory' section to determine if the memory added to system is reflected here.
- 3) If all installed memory is not reflected here, update it accordingly.
- 4) Save Setup and reboot computer.
- 5) Run the MEM /C command and/or run program that will access additional memory.



Have you run 'Setup' and formatted the new hard drive?

Actions:

To run Setup:

- 1) Do one of the following, depending on computer model:
 - a) All Pentiums, 486s, 386s, most 286s, PS/2 Model 30 and PS/1: Press a specific Keystroke combination while computer is booting up. (NOTE: Look for instructions on screen while computer is booting up.) Often, this Keystroke combination is CTRL+ALT+ESC, CTRL+ALT+ENTER or CTRL+ALT+S.
 - b) Early 286s and all PS/2 MCA computers (except PS/2 Model 30 and PS/1). Insert the Boot Reference Diskette in Drive A, and press CTRL+ALT+DEL. (Computer will boot into setup utility.)
- 2) Carefully read and follow instructions on the Setup screen to navigate, set and change various items.
- 3) The Setup screen usually contains items like the following:

```
BIOS SETUP PROGRAM
```

```
Date (mm/date/year): Mon, August 1, 1994
```

```
Time (hour/min/sec): 10:30:01
```

```
Base memory: 640KB
```

```
Extended memory: 2816
```

```
Expanded memory: 0
```

	Cyln	Head	WPcom	LZone	Sect	Size
Hard disk 0:	Type 40	820 6	820	820	17	41 MB

```
Hard drive 1: None
```

```
Floppy drive A: 1.2 MB, 5 1/4
```

```
Floppy drive B: 1.44 MB, 3 1/2
```

```
Primary Display: VGA/EGA
```

```
Keyboard: Installed
```

```
ESC:Exit      Arrow keys to select/edit  F5 to Save/Exit/Reboot
```

CAUTION: Beware of changing the hard drive type definition. Changing this is dangerous, because entering the wrong type can cause the primary hard drive (e.g., C:) to seem to disappear. This means the computer will not completely boot, and DOS and other files on the hard drive will NOT be available.

- 4) Use the arrow keys to navigate between items and bring up valid entries for each item.
- 5) When done, save the information to CMOS by following the instructions on the screen (e.g., F5 to Save).

- 6) Upon exiting Setup, the computer will reboot using the new setup information.
- 7) If configuration is not correct: reboot, and press the Setup key combination to reenter setup.
- 8) Change selected items and repeat steps 5-7.
- 9) EISA computers Only: If an adapter card change is made, EISA computer users must run the EISA Configuration Utility to tell the computer about the hardware changes. The utility is usually provided on a diskette with all EISA adapter cards. To run this utility, refer to the instructions that came with the card.

RECOMMENDATION: Use a utility to make a copy of the computer's CMOS setup information (and the EISA configuration, if applicable), and store it on the System Rescue Diskette in a safe place.



Is your computer set up to restart in several different ways?

Actions:

Setting up to restart in multiple configurations

- 1) Edit CONFIG.SYS.
- 2) Locate the MENUDEFAULT command.
- 3) Correct the syntax so that it appears as follows, within a menu block:

```
MENUDEFAULT=<blockname>,<time>
```

(Where <blockname> is the name of the menu block and <time> is the amount of time in seconds DOS will wait before continuing.) EXAMPLE:

```
[MENU]
```

- 4) Do not use more than one word for the block name. To use text to describe an option, use a one-word blockname followed by a comma and the description. EXAMPLE:

```
MENUITEM=WFWG, Windows for Workgroups
```

- 5) When making this the default, do NOT include the descriptor. EXAMPLE:

```
DEFAULT=WFWG,20
```

```
MENUITEM=WINDOWS
```

```
MENUDEFAULT=WINDOWS,15
```



Is the menu of different startup options shown when you restart the computer?

Actions:

- 1) Edit CONFIG.SYS.
- 2) Locate the MENUDEFAULT command.
- 3) Check the syntax to see if it appears as follows, within a menu block:
MENUDEFAULT=<blockname>,<time>
(Where <blockname> is the name of the menu block and <time> is the amount of time in seconds DOS will wait before continuing.) EXAMPLE: [MENU]
- 4) Do not use more than one word for the block name. To use text to describe an option, use a one-word blockname followed by a comma and the description.
EXAMPLE: MENUITEM=WFWG, Windows for Workgroups
- 5) When making this the default, do NOT include the descriptor.
EXAMPLE:
DEFAULT=WFWG,20
MENUITEM=WINDOWS
MENUDEFAULT=WINDOWS,15



Is the software program Looking for data files in the wrong place?

Actions:

Look in the application for the path set up to the files.



Is the toner cartridge low on toner?

Actions:

Shake the toner cartridge to distribute the toner more evenly. This may allow you to print up to 50 more pages before replacing the toner cartridge.



Are you using the recommended brand of paper for this printer?

Actions:

Most laser printers require 16 to 36 bond xerographic paper.

Cotton bond paper, such as that used for company letterhead or resumes may cause problems in some laser printers.

See your printer's manual for precise paper specifications.

Standard paper is 8 1/2 x 11, white, 20 lb., long grain, 4024 DP paper



Is the wire in the bottom of the printer unit (transfer corona wire) dirty?

Actions:

The transfer corona wire is located within the bottom of the laser printer housing unit.

It should be checked periodically for contaminants which usually consist of toner particles clinging to the wire.

It is easy to tell if the wire is contaminated

by performing the following steps:

- 1) Open the laser printer by depressing the button on top of the printer next to the output tray
- 2) Remove the toner cartridge and carefully place it in a stable area. Be careful not to spill any toner during the removal.
- 3) Look in the bottom of the laser printer housing unit. The transfer corona wire is stretched horizontally underneath a series of smaller wires around the middle of the bottom of the unit.
- 4) Check for any contaminants clinging to the wire. Contaminants can consist of excess toner particles, dust, paper particles, or grease from the printer gears.



What type of printer are you using?

Actions:

See printer manual if you do not know.



Are you using a local or network printer?

Actions:

If the printer is connected directly to only your computer then you have a local printer otherwise you have a network printer, which is connected to multiple computers.



Check for paper or things stuck in the paper path.

Actions:

See printer manual for the path the paper takes when printing.



Is the font you are trying to use loaded and available on your printer?

Actions:

Check 'Font Setup' in the application to determine if viewing fonts correspond to printing fonts, and that the printing fonts are actually installed. If they are not there or installed incorrectly, reinstall them, following the instructions accompanying the application or fonts package.



Is the sound on your PC muted or the volume turned down low?

Actions:

If you are running Windows 95, there is a quick way to check if your sound is muted:

- 1) On the right edge of the Task Bar (the bar with the "Start Button"), there is a megaphone icon. This is often located next to the clock.
- 2) Click once on the megaphone icon.
- 3) If the "Muted" box is checked, click in this box to stop muting the sound.
- 4) If the volume indicator is very low, increase the volume.



Check the network path to the printer & correct it.

Actions:

If using a DOS program do the following:

- 1) Open the printers folder.
- 2) Click on the printer you are using.
- 3) Click on the 'File' menu, 'Properties', 'Details' tab.
- 4) In the "\"Print to the following port\" list box check the following:
 - a) Check that the correct port is chosen. If it is not correct change to the correct port.
 - b) Check that the network path is correct. If it is not correct type in the correct path.

If using a Windows95 program do the following:

- 1) Click on 'Start' button, 'Settings', 'Printers' folder.
- 3) Click on the printer you are using.
- 4) Click on the 'File' menu, 'Properties', 'Details' tab.
- 5) Click on "\"Capture Printer Port\"".
- 6) Select the printer port you want to use.
- 7) Type in the path to the printer.
- 8) In "\"Print to the following port\" check the box saying "\"port captured\""



Can you access other computers or printers on the network?

Actions:

If you can print to another printer then you do not have a problem with networking.



Is the network cable connection secure on both ends?

Actions:

Make sure that the power cable is plugged in securely to the your computer, the network port and/or the network server (if accessible).



Attempt to map to a network drive. Is there a problem with the network serve?

Actions:

If you are using Windows95 you will not be able to map to a network drive if there is a problem with the network.

To map to a network drive do the following:

- 1) Click on the 'Start' button, 'Programs', 'Windows Explorer'.
- 2) Click on the 'Tools' menu, 'Map Network Drive'.
- 3) Choose a drive to map to that does not have a path associated with it.
- 4) Choose a path for the drive.
- 5) If you are unable to do this or you get an error message, then you have a network server problem.



Check print drivers and correct as needed. Does printer work?

Actions:

To choose the correct print drivers do the following:

- 1) Click on the 'Start' button, 'Settings', 'Printers'.
- 2) Click on the printer you are using.
- 3) Click on the 'File' menu, 'Properties', 'Details' tab.
- 4) Under \"Print using the following driver\" click on the correct driver.
- 5) Print your document again.



Are the spooler settings correct?

Actions:

To change the spooler settings do the following:

- 1) Click the 'Start' button, 'Settings', 'Printers'.
- 2) Click on the printer you are using.
- 3) Click on the 'File' menu, 'Properties', 'Details' tab.
- 4) Click on 'Spool Settings...!.
- 5) Change the spool settings and click 'OK'.



Are the printer settings correct?

Actions:

To correct printer settings do the following:

- 1) Click on the 'Start' button, then 'Settings', then 'Printers'.
- 2) Choose the printer you are using and press the right mouse button.
- 3) Click on 'Properties', then the 'Details' tab.
- 4) The settings you can change depend on the type of printer you have. Click the different tabs to see all of the options you can set.

Tips:

- 1) For Help on an item, click at the top of the dialog box, and then click the item.
- 2) Changing the printer properties will change them for all documents you print on this printer. To change these settings for one document, use the Page Setup or Print Setup command on the File menu in your program.



Reinstall the printer driver for this printer. Does the printer work?

Actions:

To install the printer driver do the following:

- 1) Click the 'Start' button, 'Settings', 'Printers'.
- 2) Click on the 'Add Printer' Wizard.
- 3) Click 'Next'.
- 4) Choose either local or network for the type of printer you will use.
- 5) Choose the manufacturer from the list given and then the type of printer.

OR

- 6) Click on 'HAVE DISK' and install the print driver from the disk.
- 7) Choose the port you will use and click 'Next'.
- 8) Verify the name of the printer.
- 9) Choose if you will use this with Windows-based programs and click 'Next'.
- 10) Choose if you wish to have a test page and click 'Finish'.



Check that printer is on-line and press the form feed button. Does printer work?

Actions:

- 1) Make sure printer is on-line.
Check the on-line light and press the "on-line button until it comes on.
- 2) Press the 'Form Feed' button.



Check the paper path in the printer. Is there a paper jam?

Actions:

See printer manual to check the paper path.



**Check the document & remove incorrect page breaks.
Does this solve the problem?**

Actions:

Edit the document and remove all errant page breaks and page-end codes.



What type of paper are you trying to print on?

Actions:

Standard Xerographic paper is:

8 1/2 x 11, White, Long grain, 20 lb., 4024 DP paper

Standard Xerographic paper is not:

Letterhead, Glossy, Cardboard, Cardstock, Bond, Tissue, Envelopes, Labels, Colored, Heavy Weight



Run SCANDISK. Does this report any errors and corrections?

Actions:

To run SCANDISK in DOS:

- 1) Add the /TIME switch to the command line as follows: SCANDISK x: /TIME
(Where x is the name of the disk drive to be scanned.)
- 2) Change 'ScanTimeOut' to 'On' from 'Off'.
 - a) Edit SCANDISK.INI.
 - b) Locate the 'Environment' section.
 - c) Locate the 'ScanTimeOut=off' command line and change it to read as follows:
SCANTIMEOUT=ON
 - d) Save the file and exit.
 - e) Enter SCANDISK at the DOS prompt.

In Windows95 to run SCANDISK:

- 1) Click on the 'Start' button, 'Programs', 'Accessories', 'System Tools', 'SCANDISK'.
- 2) Click on the drive you wish to scan.
- 3) Choose the type of test either Standard or Thorough.
- 4) Click 'Start'.



Has the power gone off and on at your home or office (where the computer is)?

Actions:

Electrical power fluctuations, even minor, barely noticeable brown outs, can create havoc with computer data files. If a write operation is in progress during a change in power, some or all of the file may not be successfully written to disk.



Are you using 'FAST! cache' software?

Actions:

FAST! cache may cause file corruption or data loss when used with DoubleSpace in MS-DOS 6 and 6.2 due to software bug in FAST! cache.



Are you having problems using the mouse?

Actions:

PS/2 style mouse ports use interrupt (IRQ)12. Plus Hard Cards, including the Hard Card II (40 MB and 80 MB versions) and the Hard Card Ilxi (50 MB and 105 MB versions) can also use IRQ 12. This causes an Interrupt Request (IRQ) conflict.



Can you successfully read another diskette on this floppy drive?

Actions:

Check and see if the floppy drive can read any diskettes at all.



Run 'Setup' and check the floppy drive information. Is it correct?

Actions:

To run Setup:

- 1) Do one of the following, depending on computer model:
 - a) All Pentiums, 486s, 386s, most 286s, PS/2 Model 30 and PS/1: Press a specific Keystroke combination while computer is booting up. (NOTE: Look for instructions on screen while computer is booting up.) Often, this Keystroke combination is CTRL+ALT+ESC, CTRL+ALT+ENTER or CTRL+ALT+S.
 - b) Early 286s and all PS/2 MCA computers (except PS/2 Model 30 and PS/1). Insert the Boot Reference Diskette in Drive A, and press CTRL+ALT+DEL. (Computer will boot into setup utility.)
- 2) Carefully read and follow instructions on the Setup screen to navigate, set and change various items.
- 3) The Setup screen usually contains items like the following:

```
BIOS SETUP PROGRAM
Date (mm/date/year): Mon, August 1, 1994
Time (hour/min/sec): 10:30:01
Base memory: 640KB
Extended memory: 2816
Expanded memory: 0

Hard disk 0:      Cyln   Head   WPcom   LZone   Sect   Size
                  Type 40    820 6    820     820    17     41
                                      MB

Hard drive 1: None
Floppy drive A: 1.2 MB, 5 1/4
Floppy drive B: 1.44 MB, 3 1/2
Primary Display: VGA/EGA
Keyboard: Installed
ESC:Exit      Arrow keys to select/edit  F5 to Save/Exit/Reboot
```

CAUTION: Beware of changing the hard drive type definition. Changing this is dangerous, because entering the wrong type can cause the primary hard drive (e.g., C:) to seem to disappear. This means the computer will not completely boot, and DOS and other files on the hard drive will NOT be available.

- 4) Use the arrow keys to navigate between items and bring up valid entries for each item.

- 5) When done, save the information to CMOS by following the instructions on the screen (e.g., F5 to Save).
- 6) Upon exiting Setup, the computer will reboot using the new setup information.
- 7) If the configuration is not correct: reboot, and press the Setup key combination to reenter setup.
- 8) Change the selected items and repeat steps 5-7.
- 9) EISA computers Only: If an adapter card change is made, EISA computer users must run the EISA Configuration Utility to tell the computer about the hardware changes. The utility is usually provided on a diskette with all EISA adapter cards. To run this utility, refer to the instructions that came with the card.

RECOMMENDATION: Use a utility to make a copy of the computer's CMOS setup information (and the EISA configuration, if applicable), and store it on the System Rescue Diskette in a safe place.



Is the computer on which diskette was created the same type as yours (PC/MAC)?

Actions:

i.e. PC, Macintosh



Does your floppy drive use high density or low density diskettes?

Actions:

Low density drives cannot read high density diskettes.



If using A/B switch box between computers, check setting. Does printer work?

Actions:

NOTE: Occasionally there is an A/B Switch Box that permits a computer to link to 2 printers or enable 2 computers to share a single printer.

- 1) Check to see if there is an A/B Switch Box present.
- 2) If present, make sure the switch selection is switched to route printer data from your computer to desired printer.



Is the printer set on manual paper feed?

Actions:

To check if the printer is set on manual paper feed click on the 'File' menu, 'Print Setup', 'Source'.



Check power switch is on & power cable secure on both ends. Does printer work?

Actions:

To secure printer power cable to both the power receptacle and the printer (if applicable), do the following:

- 1) Ensure printer power cable is securely plugged in to the surge protector or wall receptacle.
- 2) If printer has detachable power cable, make sure it is securely connected to printer.



What is your startup (POST) error message?

Actions:

The Power On Self Test (POST) is a series of hardware test instructions contained in the BIOS ROM that runs each time the computer is turned on (cold-booted).



Have you recently installed a new adapter card of some kind?

Actions:

Sometimes new cards will cause interrupt (IRQ) conflicts with the mouse.



Are you using MS-DOS or another type of disk operating system (DOS)?

Actions:

When you restart your computer, the message \"Starting MS-DOS...\" will appear if you are using MS-DOS.



Do you have an Internet service provider?

Actions:

EXAMPLES: America Online, Compuserve, Microsoft Explorer, Netscape, etc.



Plug headphones into sound card; Is there static from headphones?

Actions:

Plug headphones into speaker jack on sound card to test the sound card.



Are you running both Windows and DOS communications packages?

Actions:

Types of communication packages:

Procomm Plus, Winfax, Microsoft Mail, Eudora, CC: Mail, Netscape, Pegasus, Smartcom, Crosstalk, Timbuktu, Prodigy, CompuServe, America on line, Microsoft Exchange, Netcom, Netware Connect, Remote Access Service.



Mouse pointer settings wrong; Change size, style, color or trail of pointer.

Cause:

The mouse pointer settings are wrong.

Solution:

Use the control software that comes with the mouse (or obtain a third-party utility) to change the size, color or style of the mouse pointer, or change the behavior of the mouse pointer so that it leaves a trail.

- 1) Click on the Start menu button, Settings, Control Panel.
- 2) Click on Mouse.
- 3) Click on the Pointers tab to change the size and style of the pointer.
- 4) Click on the Motion tab to change the trail of the pointer.



Snap-to snaps to wrong location; This is a known software problem, no solution.

Cause:

Snap-to does not work due to known software bug.

Solution:

The mouse snap-to feature contains a known software bug that causes it to snap to the wrong location.



Zenith laptop serial port disabled; Use a different type of mouse.

Cause:

Some mice don't work on Zenith laptop serial ports due to port disablement.

Solution:

Use a different type of mouse.



Electrical interference from monitor; Move mouse receiver away from monitor.

Cause:

The receiver is too close to the monitor and is probably interfering with it.

Solution:

Move mouse receiver away from monitor.



Wrong channel selected on receiver; Change channel on mouse receiver.

Cause:

Wrong channel selected on receiver.

Solution:

Change channel on mouse receiver.



DOS driver conflict; Use compatible mouse and DOS drivers.

Cause:

The mouse does not work with some DOS applications because these programs load their own drivers which conflict with the mouse drivers.

Solution:

If in DOS, DOS programs are loading drivers that conflict with the mouse drivers.

Use compatible mouse and DOS drivers.



Keyboard buffer full; Wait for keyboard to buffer to clear (stops beeping).

Cause:

Keyboard beeps due to full keyboard buffer..

Solution:

Keyboard buffer full; Wait for keyboard to buffer to clear (stops beeping)



Video card or monitor could be bad; Try another monitor on computer, if possible.

Cause:

Monitor does not work due to bad video card or monitor.

Solution:

Video card or monitor could be bad; Try another monitor on computer, if possible.



Garbage/wrong characters; No solution to provide at this time.

Cause:

This problem could be due to an unknown virus or a problem with your monitor.

Solution:

Check computer for viruses and consult a technician about possible monitor problems.



Laptop set to use wrong mouse; Use SETUP to set whether internal/external mouse.

Cause:

Mouse does not work due to laptop is set to use wrong mouse.

Solution:

Laptop computers often require an explicit setting to indicate whether an external or internal mouse will be used.

To change the setting:

- Run SETUP on your laptop (follow the manufacturer's instructions).
- Look for the pointing device setting; that is, \"Trackball Enabled\" or \"Serial Mouse Enabled.\"
- Change this setting as appropriate and save the settings.
- Reboot the machine.



CD-ROM not connected to sound card; Connect CD-ROM to sound card.

Cause:

CD-ROM is not connected to sound card.

Solution:

***CAUTION:** The installation, diagnostic or maintenance tasks below should be performed by a qualified computer technician.*

The CD-ROM requires two connections in order to work properly. The first is the bus connection which allows the transfer of data. Usually this is a SCSI connector or IDE or EIDE connection. The second is the RCA plug on the back of the CD-ROM. External CD-ROM's use RCA connectors that look like speakers on a stereo. Internal CD-ROM's require a connector to the sound card.

To connect the CD-ROM to the sound card do the following:

- 1) Plug the speakers into the audio jack of the CD-ROM drive.
- 2) Connect the sound card cable to the CD-ROM drive and the sound card.



Autoplay disabled; Activate Autoplay (Activated when PLAY is in bold letters).

Cause:

Autoplay does not work because it is disabled.

Solution:

If in Windows 95, to enable Autoplay after it has been disabled do the following:

- 1) Double-click on My Computer, then click on View, Options, File Types.
- 2) Select AudioCD and then click on Edit.
- 3) Click on Set Default. This is a toggle button. When clicked it will bold or unbold the word Play. If the word Play is in bold letters then AutoPlay is activated. If the word Play is not in bold letters then Autoplay is inactivated.
- 4) Click OK when you have chosen the desired option.



Searched wrong location; Check filename & drive and directory where file is.

Cause:

Application from which you are trying to run the CD is not set up correctly.

Solution:

Your CD-ROM is working properly. You may not have the application from which you were trying to run the CD set up correctly. Check the filename of the application and the path to the application to ensure it is set up correctly.



Sound card settings wrong; Correct sound card settings.

Cause:

The sound card settings are wrong.

Solution:

If in Windows 95, to correct the sound card settings do the following:

- 1) Click the Start button, Settings, Control Panel, System, Device Manager.
- 2) Click the Sound controller.
- 3) Double-click the sound card that needs to be changed.
- 4) In the sound card's properties, click the Drivers tab. Confirm that the correct driver has been chosen.
- 5) Click the Resources tab and confirm that the IRQ settings are correct.
- 6) Look in the Conflicting Device List in the Resources screen and see if there are any conflicts. Correct any conflicts you find. This should be done by a qualified computer technician.



Lines or text missing; No solution to provide at this time.

Cause:

This problem could be due to an unknown virus or a problem with your monitor.

Solution:

Check computer for viruses and consult a technician about possible monitor problems.



Real mode drivers used; Remove device from CONFIG.SYS & run Add New Hardware.

Cause:

Real mode drivers are used.

Solution:

If in Windows 95:

If the device is not detected then manually select your device from the manufacturer and model list available.



Not enough cache memory; Increase the cache memory size.

Cause:

Not enough cache memory.

Solution:

If in Windows 95, to increase the cache size do the following:

- 1) Click Start, Settings, and Control Panel, then double-click the System icon.
- 2) Click the Performance tab, the File System button, and the CD-ROM tab.
- 3) Look in the drop-down list "Optimize access pattern for:" and select the speed of the CD-ROM drive you have.
- 4) Move the 'Supplemental cache size:' pointer to the desired speed. The following setting guideline is based on 8MB of RAM or more.
 - Single Speed - move pointer to Small
 - Double Speed - move pointer one-third of the distance to the right
 - Triple Speed - move pointer two-thirds of the distance to the right
 - Quadruple Speed - move pointer to Large
- 5) Click Apply, OK, Close.
- 6) Answer YES to restart the computer. The changes will now be in effect.



CD-ROM not detected at installation; Choose CD-ROM model from list.

Cause:

CD-ROM is not detected at installation.

Solution:

To manually choose a specific CD-ROM do the following:

- 1) Click Start, Settings, and Control Panel, then Double-click the Add New Hardware icon.
- 2) Click Next.
- 3) Click NO because you will want to choose the CD-ROM to install.
- 4) Click CD-ROM controllers. A list of manufacturers and models will appear.
- 5) First choose the manufacturer of your CD-ROM, then choose the appropriate model type. Click Next (you may need to have the CD-ROM driver disk to complete installation).
- 6) If the proper manufacturer and model is not on the list and you have a disk, click HAVE DISK.
- 7) When you are done with the installation, click Finished.



Real-mode drivers being used; Install protected-mode drivers.

Cause:

Real-mode drivers being used.

Solution:

To install protected-mode drivers do the following:

- 1) Comment out the lines in AUTOEXEC.BAT and CONFIG.SYS that load real-mode drivers. Type 'rem' before a line to comment it out.
- 2) For Example:

```
rem device=c:\sbrpo\drv\sbpcd.sys/d:mcd001 /p:220  
rem c:\windows\command\mscdex.exe /s /v /d:mcd001
```
- 3) Restart the computer.



CD-ROM controller not recognized; Choose CD-ROM controller from list to install.

Cause:

CD-ROM controller not recognized.

Solution:

If in Windows 95, to manually install the CD-ROM controller do the following:

- 1) Right-click MY Computer, then click Properties and Device Manager.
- 2) Find the SCSI or IDE controller in the device tree.
- 3) Open the tree or branch for your SCSI or IDE controller by clicking on the + sign.
- 4) Right-click the controller and then click Properties and General.
- 5) Look in the Device Status area. It should say "The device is working properly," and under Device Usage the "Original Configuration (Current)" option should be checked.
- 6) Click OK to return to the Device Manager.



How to create multiple boot configurations with MS-DOS 6.x

Solution:

To configure multiple boot configurations with MS-DOS 6.x do the following:

SHORT SOLUTION

Define a startup menu in CONFIG.SYS, and add common and distinct configuration blocks that contain commands for each distinct configuration. Enter common commands first. Then, use the CONFIG variable to branch to a different command subset in AUTOEXEC.BAT with the GOTO command. Reboot the machine and test each configuration. NOTE: A COMMON block can be established at the beginning and/or the end of CONFIG.SYS. However, some commands MUST be loaded first (e.g., the SHELL specification, HIMEM.SYS, EMM386.EXE). Therefore, DO NOT move these commands to the end of CONFIG.SYS. Other common commands will probably work fine in a common block at the end of CONFIG.SYS; but thoroughly test the chosen configuration to make sure.

DETAILED SOLUTION

- 1) Enter the following command at the DOS prompt to make backup copies of AUTOEXEC.BAT and CONFIG.SYS:

```
COPY C:\AUTOEXEC.BAT AUTOEXEC.OLD  
COPY C:\CONFIG.SYS CONFIG.OLD
```
- 2) Enter the following commands to print a copy of AUTOEXEC.BAT and CONFIG.SYS:

```
PRINT AUTOEXEC.BAT    (When prompted for a port, enter:)  
LPT1 (or LPT2, where ever printer is assigned)  
PRINT CONFIG.SYS
```
- 3) Review the configuration and installation section of each application's user manual to identify the CONFIG.SYS and AUTOEXEC.BAT lines required to setup an optimal configuration for that application.
- 4) Write new AUTOEXEC.BAT and CONFIG.SYS files for each application that contain ONLY the commands necessary to support the configuration determined in step 3).
- 5) Review each CONFIG.SYS file and identify common commands. Add any additional items that should always be available in all configurations (e.g., DOSKEY) to the common command list.
- 6) Compare all the configuration file sets to determine if any are similar enough to use a single shared one (eliminating the other).
- 7) Edit CONFIG.SYS and assemble the following parts into a new multi-config CONFIG.SYS file:
 - a) Create a menu with 'menu items' for each different configuration. EXAMPLE:
[MENU]

MENUITEM=Red
MENUITEM=Green
MENUITEM=Blue
SUBMENU=Individual Users
MENUDEFAULT=RED, 30
MENUCOLOR=15,1
NUMLOCK=OFF

NOTE: This example defines a menu with 4 entries: The first three 'menu items' start different configurations (defined below). The 4th leads to a submenu with configurations for different users.

After 30 seconds, the configuration will be set to RED by default. The menu will appear in white (15) on a blue (1) background.

- b)** Create a 'COMMON' block that contains the shared CONFIG.SYS commands for each configuration that **MUST** be loaded first (see below).
- c)** Create separate blocks containing distinct commands for each menu item, preceded by a block label (see below).
- d)** Create a final 'COMMON' block to contain shared commands added later (e.g., when new applications are installed) (see below).

EXAMPLE (continued)

```
[COMMON]
DOS=HIGH
BUFFERS=30
DEVICE=C:\DOS\HIMEM.SYS
[RED]
FILES=40
DEVICE=C:\DOS\EMM386.EXE 1024
[GREEN]
FILES=30
DEVICE=C:\NET\NETWORK.SYS
[BLUE]
FILES=50
SHELL=C:\DOS\COMMAND.COM /E:1024 /P
DEVICE=C:\CDROM\CDROM.SYS /D:MSCD000
[COMMON]
```

- 8)** Edit AUTOEXEC.BAT and assemble these components into blocks that execute a different set of commands for each different configuration, as follows:

- a)** List commands common to all blocks first in the file (see below).
- b)** Enter the following command next:

```
GOTO %config%
```

(It tells DOS to find the block matching the value of the environment variable, and to execute only the commands in that block.)

- c) Create command blocks for each different configuration that contain commands specific to that configuration. End each block with the statement 'GOTO END'. (See below)

EXAMPLE

```
C:\DOS\SMARTDRV.EXE
SET TEMP=C:\TEMP
C:\DOS\MSAV
GOTO %CONFIG%

:RED
PATH=C:\DOS;C:\LOTUS
123
GOTO END

:GREEN
PATH=C:\DOS;C:\DESKPUB
C:\DOS\MOUSE.COM
PUBLISH
GOTO END

:BLUE
PATH=C:\DOS;C:\UTILS;C:\NETWORK
NET LOGON RICH /Y
GOTO END

:END
```

NOTE: This AUTOEXEC.BAT always loads SmartDrive first, sets TEMP, and starts the MS anti-virus program. Then, it moves to the block whose title matches the current value of the environment variable CONFIG, executes those commands (bypassing commands under other named blocks), and goes to the end.

- 9) Save the new AUTOEXEC.BAT AND CONFIG.SYS files, reboot the machine and test each configuration.
- 10) Create/update a System Rescue Diskette that includes necessary drivers, and updated AUTOEXEC.BAT, CONFIG.SYS, WIN.INI and SYSTEM.INI files.

NOTE: MemMaker, the DOS program for analyzing AUTOEXEC.BAT and CONFIG.SYS to optimize the memory configuration, will not support multiple configuration files. Run MemMaker separately on the files that contain only one configuration at a time. Then, map those optimized results back into the multiple configuration version.



How to install a network card.

Solution:

CAUTION: *The installation, diagnostic or maintenance tasks below should be performed by a qualified computer technician.*

To install or replace an Ethernet card:

Remove the base unit cover, set jumpers/DIP switches on card, insert card in empty slot, connect ribbon cables (if applicable), install driver, power up and test computer system and peripherals, replace cover and update rescue diskette.

NOTE: If removing an old Ethernet card is not required, skip to Step 3 for installation steps.

- 1) Remove the base unit cover. <Photo: Removing cover>
- 2) Remove the old Ethernet card:
 - a) Remove the screw from the top notch of the mounting bracket on the card.
 - b) Touch the chassis to ground any static and, grasping the Ethernet card by its edges, remove the card by pulling it straight out of the slot gently but firmly. Avoid side-to-side movements (circuit boards crack easily).
 - c) Place the card in a static-resistant envelope.
 - d) If not inserting a replacement card in this slot, replace the rear metal slot cover and secure it in place with a screw.
- 3) Install new Ethernet card:
 - a) Remove the Ethernet card from its box and the protective anti-static envelope.
 - b) Locate the jumpers or DIP switches on the card and lay the card down on the anti-static envelope with the jumpers/DIP switches in view.
 - c) Read the Ethernet card manual and identify which, if any, settings must be changed on the card for this particular computer.
 - d) Move Jumpers and/or Change DIP Switches, if necessary. <Photo: Moving jumpers> <Photo: DIP Switches>
 - e) Identify a free expansion slot of proper size, and remove the rear metal slot cover.
 - f) Touch the chassis to ground any static and, grasping the Ethernet card by its edges, insert the bottom of the card (part with the gold-stripped bars) into the free slot. Press down firmly until the card is completely seated (especially if it is an EISA card). Avoid side-to-side movements when positioning the card (circuit boards crack easily).
 - g) Insert the screw, previously removed from the rear metal slot cover, into the top notch of the

mounting bracket on the card and the screw hole and tighten it securely.

- h)** If the Ethernet card attaches to another device, connect the two devices using the supplied ribbon cable. Check the manual to verify connector orientation, and gently insert the cable connector into the card connection and the other device.
 - i)** Attach additional ports to back of base unit in provided 9-pin or 25-pin holes, if desired. Connect ribbon cables between proper pins on the Ethernet card and the ports.
 - j)** Attach desired peripherals to new ports.
- 4)** Install drivers and test new configuration:
- a)** Make sure no parts or tools remain in chassis.
 - b)** Replace necessary cables (power, keyboard, video), and plug in the power cable.
 - c)** Power up computer and related peripherals one at a time.
 - d)** Install networking software from diskette that accompanies the card, following the installation/setup instructions in the card's manual.
 - e)** Locate logon and access instructions in the manual. Logon to check that the network is functioning properly.

NOTE: If problems arise, check cable attachments on this computer and others on the network.

- f)** Power down computer system and remove network connection before replacing base unit cover.
- g)** Replace base unit cover.
- h)** Reconnect network connection.
- i)** Create/update a System Rescue Diskette that includes copies of necessary drivers and the following system-specific files:

DOS/Windows: AUTOEXEC.BAT, CONFIG.SYS, Windows .INI and .GRP files.

OS/2: OS2.INI, OS2SYS.INI, AUOTEXEC.BAT (for DOS sessions), CONFIG.SYS (OS/2 version),
STARTUP.CMD



Video card not seated properly; Re-insert the video card.

Cause:

Video card not seated properly.

Solution:

***CAUTION:** The installation, diagnostic or maintenance tasks below should be performed by a qualified computer technician.*

To reseal the video card do the following:

- 1) Remove base unit cover:
 - a) Turn the power off on the computer and all peripherals.
 - b) Switch the surge protector off and unplug the power cable from the wall socket. **WARNING:** Make sure all components are turned off and the power cable is disconnected.
 - c) Pull the base unit out slightly, so that the rear panel is accessible.
 - d) Carefully remove all cables from back of base unit.
 - 1] Check each cable for screw or finger-screw connections. Unscrew connectors.
 - 2] Note the location and orientation of each connector as it is removed. (If necessary, draw a wiring diagram or tag the end of each cable to note its destination.)
 - 3] Gently remove each cable. **DO NOT FORCE** or bend connectors: this will prevent costly damage to the connector or pins.
 - e) Remove screws from the top and sides of the back edge of the base unit. Store them together in a safe location.
 - f) Grasp the cover along the sides with two hands. **SLOWLY** and **GENTLY** slide the cover forward and off. Set it aside. **CAUTION:** Watch carefully to make sure parts of cover **DO NOT CATCH** on power or ribbon cables inside the base unit.
 - g) Dissipate any static electricity (to ground) by touching the metal chassis with a finger.
- 2) Locate video card (card with video cable attached at rear of base unit).
- 3) Touch the chassis again to ground any static and, grasping the video card by its edges, press straight down firmly and evenly to make sure the card is fully seated in bus slot. Avoid side-to-side movements (circuit boards crack easily).
- 4) Reconnect the power cables and turn on the computer.
- 5) If display image is still not visible, reseal video card:

- a) Turn off computer and disconnect power cables.
- b) Remove video cable from back of video card.
- c) Remove the screw from the top notch of the mounting bracket on the card.
- d) Touch the chassis to ground any static and, grasping the video card by its edges, remove the card by pulling straight up on it gently but firmly. Avoid side-to-side movements (circuit boards crack easily).
- e) Grasping the video card by its edges, reinsert the bottom of the card (part with the gold-stripped bars) into the same slot. Press straight down firmly until card is completely seated. Avoid side-to-side movements when positioning the card (circuit boards crack easily).
- f) Insert the screw, previously removed from the rear metal slot cover, into the top notch of the mounting bracket on the card and the screw hole, and tighten it securely.
- g) Reconnect the video cable from the display unit to the socket on the back of the video card. Secure connector with attached screws.
- h) Ensure no parts or tools remain in chassis.
- i) Replace necessary cables (power, keyboard, mouse, etc.) and plug power cable into surge protector or wall outlet.
- j) Turn on the computer.
- k) Determine if display image is visible.

To reseal the video card do the following:

- 1) Remove base unit cover:
 - a) Turn the power off on the computer and all peripherals.
 - b) Switch the surge protector off and unplug the power cable from the wall socket. **WARNING:** Make sure all components are turned off and the power cable is disconnected.
 - c) Pull the base unit out slightly, so that the rear panel is accessible.
 - d) Carefully remove all cables from back of base unit.
 - 1] Check each cable for screw or finger-screw connections. Unscrew connectors.
 - 2] Note the location and orientation of each connector as it is removed. (If necessary, draw a wiring diagram or tag the end of each cable to note its destination.)
 - 3] Gently remove each cable. **DO NOT FORCE** or bend connectors: this will prevent costly damage to the connector or pins.
 - e) Remove screws from the top and sides of the back edge of the base unit. Store them together in a safe location.
 - f) Grasp the cover along the sides with two hands. **SLOWLY** and **GENTLY** slide the cover forward and off. Set it aside. **CAUTION:** Watch carefully to make sure parts of cover **DO NOT CATCH** on power or ribbon cables inside the base unit.
 - g) Dissipate any static electricity (to ground) by touching the metal chassis with a finger.
- 2) Locate video card (card with video cable attached at rear of base unit).
- 3) Touch the chassis again to ground any static and, grasping the video card by its edges, press straight down firmly and evenly to make sure the card is fully seated in bus slot. Avoid side-to-side movements (circuit boards crack easily).
- 4) Reconnect the power cables and turn on the computer.
- 5) If display image is still not visible, reseal video card:

- a)** Turn off computer and disconnect power cables.
- b)** Remove video cable from back of video card.
- c)** Remove the screw from the top notch of the mounting bracket on the card.
- d)** Touch the chassis to ground any static and, grasping the video card by its edges, remove the card by pulling straight up on it gently but firmly. Avoid side-to-side movements (circuit boards crack easily).
- e)** Grasping the video card by its edges, reinsert the bottom of the card (part with the gold-stripped bars) into the same slot. Press straight down firmly until card is completely seated. Avoid side-to-side movements when positioning the card (circuit boards crack easily).
- f)** Insert the screw, previously removed from the rear metal slot cover, into the top notch of the mounting bracket on the card and the screw hole, and tighten it securely.
- g)** Reconnect the video cable from the display unit to the socket on the back of the video card. Secure connector with attached screws.
- h)** Ensure no parts or tools remain in chassis.
- i)** Replace necessary cables (power, keyboard, mouse, etc.) and plug power cable into surge protector or wall outlet.
- j)** Turn on the computer.
- k)** Determine if display image is visible.



Searched wrong location; Check on drive and directory names for the program.

Cause:

Searched wrong location.

Solution:

Check on drive and directory names for the program.



Fiber optic cable bad; Take the printer in for factory-authorized service.

Cause:

The fiber optic cable is bad.

Solution:

Take the printer in for factory-authorized service.



Cotton bond paper; Use xerographic paper or store paper in dry area.

Cause:

The paper does not go through the feed properly because you are using cotton bond paper.

Solution:

If you use bond paper with a high cotton content instead of xerographic paper, you may have problems with misfeeds, print quality, and curling. Use 16 pound to 36 pound Xerox copy paper instead.

If the paper dries out, static electricity will cause multiple feeds. If the paper gets too damp, it may curl and jam in the printer.



Toner cartridge low on toner; Shake toner cartridge (temporary fix) or replace.

Cause:

The toner cartridge is low on toner.

Solution:

Shake toner cartridge (temporary fix) or replace.



Wrong brand of paper; Switch to recommended brand for your printer.

Cause:

You are using the wrong brand of paper.

Solution:

Switch to recommended brand for your printer.



**Corona wire dirty; Clean the primary corona wire
with the brush provided.**

Cause:

The Corona wire is dirty.

Solution:

Clean the primary corona wire with the brush provided.



Incorrect printer driver; Install correct printer driver.

Cause:

An incorrect printer driver is installed.

Solution:

Open 'Printer Setup' and select correct printer driver and set other print options to match this printer's capabilities.



Sound muted or turned down low; Turn off mute, increase volume.

Cause:

The sound is muted or turned down low.

Solution:

If you are running Windows 95, there is a quick way to check if your sound is muted:

- 1) Click once on the little, yellow speaker icon, which is located at the bottom right corner of the screen (the far right side of the Task Bar).
- 2) If the Mute box is checked, click this box to stop muting the sound.
- 3) If the volume indicator is very low, slide the indicator upward to increase the volume.



Power switch off and/or power cable loose; Turn power switch on, secure cable.

Cause:

The power switch is turned off and/or power cable is loose.

Solution:

To secure printer power cable to both the power receptacle and the printer (if applicable), do the following:

- 1) Ensure printer power cable is securely plugged in to the surge protector or wall receptacle.
- 2) If printer has detachable power cable, ensure it is securely connected to printer.



Vents dirty or blocked; Move printer away from blocking obstacle & clean vents.

Cause:

The vents are dirty or blocked.

Solution:

Move printer away from blocking obstacle and clean vents.



Path to printer port wrong; Check that correct port is chosen for printer.

Cause:

The path to the printer port is wrong.

Solution:

If using a DOS program do the following:

- 1) Open the printers folder.
- 2) Click on the printer you are using.
- 3) Click on the File menu, Properties, Details tab.
- 4) In the "\"Print to the following port\" list box check the following:
 - a) Check that the correct port is chosen. If it is not correct change to the correct port.
 - b) Check that the network path is correct. If it is not correct type in the correct path.

If using a Windows95 program do the following:

- 1) Click on Start button, Settings, Printers folder.
- 2) Click on the printer you are using.
- 3) Click on the File menu, Properties, Details tab.
- 4) Click on "\"Capture Printer Port\"".
- 5) Select the printer port you want to use.
- 6) Type in the path to the printer.
- 7) In "\"Print to the following port\" check the box saying "\"port captured\"".



Network cable not secure; Secure network cable.

Cause:

The network cable is not secure.

Solution:

Secure the network cable.



Network server problem; Contact network server administrator.

Cause:

There is a network server problem.

Solution:

Contact the network server administrator.



Defective port or printer cable; Replace parallel port, I/O card, and data cable.

Cause:

Defective port or printer cable.

Solution:

Diagnose/replace parallel port and/or I/O card.

***CAUTION:** The installation, diagnostic or maintenance tasks below should be performed by a qualified computer technician.*

To replace printer data cable do the following:

- 1) Turn computer base unit off and disconnect power cable.
- 2) Disconnect old printer cable:
 - a) Go to the rear of the printer and disconnect connector clips or screws from the data cable running to computer. Note type and location of connector.
 - b) Trace this cable to the rear of the computer base unit and unscrew connector screws and carefully remove the printer cable.
- 3) Connect the new printer cable:
 - a) Orient and attach identical new printer cable to the same port from which the old one was removed on the back of the base unit. It only goes one way. Secure connector screws.
 - b) Carry the other end of this cable to the rear of the printer, orient and connect it to the same port where the old one was removed. It also only goes one way. Secure connector clips or screws. **CAUTION:** Do not force connection. Pins and/or the connector may be damaged.
- 4) Power on computer system and printer.
- 5) Open application and reprint document.



Not enough memory to print; Create some free disk space.

Cause:

There is not enough memory to print.

Solution:

To create some free disk space do the following:

- 1) Empty the Recycle Bin.
- 2) Use ScanDisk to check for errors that may be using up disk space.
- 3) Back up unneeded files and remove them from your hard disk.
- 4) Remove Windows components that you don't use.
- 5) Create more disk space by using DriveSpace disk compression .



Spooler settings not correct; Change spooler settings.

Cause:

The spooler settings are not correct.

Solution:

To change the spooler settings do the following:

- 1) Click the Start button, Settings, Printers.
- 2) Click on the printer you are using.
- 3) Click on the File menu, Properties, Details tab.
- 4) Click on Spool Settings....
- 5) Change the spool settings and click OK."



Incorrect printer settings; Correct printer settings.

Cause:

Incorrect printer settings.

Solution:

To correct printer settings do the following:

- 1) Click on the Start button, Settings, Printers.
- 2) Choose the printer you are using.
- 3) Click on the File menu, Properties, Details tab.
- 4) The settings you can change depend on the type of printer you have.

Click the different tabs to see all of the options you can set.

Tips:

- 1) For Help on an item, click  at the top of the dialog box, and then click the item.
- 2) Changing the printer properties will change them for all documents you print on this printer. To change these settings for one document, use the Page Setup or Print Setup command on the File menu in your program.



Printer driver not installed; Install printer driver.

Cause:

The printer driver is not installed.

Solution:

To install the printer driver do the following:

- 1) Click the Start button, Settings, Printers.
- 2) Click on the Add Printer Wizard.
- 3) Click Next.
- 4) Choose either local or network for the type of printer you will use.
- 5) Choose the manufacturer from the list given and then the type of printer.

OR

- 6) Click on have disk and install the print driver from the disk.
- 7) Choose the port you will use and click Next.
- 8) Verify the name of the printer.
- 9) Choose if you will use this with Windows base programs and click Next.
- 10) Choose if you wish to have a test page and click Finish.



Printer is off-line & form feed is off; Put printer on-line & turn form feed on.

Cause:

The printer is off-line and form feed is off.

Solution:

Put the printer on-line and turn form feed on.



Incorrect printer setup; Correct printer setup.

Cause:

Incorrect printer setup.

Solution:

Check printer setup:

- 1) Open 'Printer Setup' within the application or in Windows or OS/2.
- 2) Make sure the correct printer driver for this printer is installed and active.
- 3) Examine all other print options (e.g., form feed) to ensure they are set properly.
- 4) Reprint the document.

NOTE: If this occurs within an application (not at the DOS or OS/2 prompt) report the problem to second level support for further analysis and a solution.



Using non-standard paper; Use standard Xerographic paper.

Cause:

Using non-standard paper.

Solution:

Use standard Xerographic paper.



Paper too thick; Remove paper, replace with higher-quality paper.

Cause:

The paper is too thick.

Solution:

Remove paper, replace with higher-quality paper.



Hard disk may be failing; Makes copies of all files and programs, replace disk

Cause:

Hard disk may be failing.

Solution:

Squeaking, grinding, and grating noises are all signs that this drive is about to fail. Intermittent access errors also start to occur more often.

Make sure all files and programs are backed up, run a disk resuscitation program such as SpinRite, and prepare to replace drive soon.



Error message; Refer to manual

Cause:

Error message.

Solution:

Refer to manual.



Unknown problem; Hard disk could be old or damaged.

Cause:

Unknown problem. Hard disk could be old or damaged.

Solution:

The normal life span of a hard drive is 5-10 years. Thus, if your drive is over 5 years old is nearing the end of its life span.



Diskette is defective; Use another diskette.

Cause:

Diskette is defective.

Solution:

Use another diskette.



Switches and computer set fast; Delete 'n,' 'f' switch and add time delay.

Cause:

The volume on the slide bars in audio mixer are too low.

Solution:

To set timed delay in CONFIG.SYS and set switches:

- 1) Edit CONFIG.SYS.
- 2) Delete the 'n' or 'f' from the 'SWITCHES=' line in CONFIG.SYS.
- 3) Add the following five lines to CONFIG.SYS:

```
[COMMON]
```

```
[MENU]
```

```
MENUITEM=STANDARD, The standard configuration
```

```
MENUDEFAULT=STANDARD,15
```

```
[ONE]
```

- 4) Save the changes to CONFIG.SYS and exit the editor.

NOTE: The above statements in CONFIG.SYS will allow a 15 second pause before the system files are processed. The added statements do not affect the content of the rest of CONFIG.SYS. Press ENTER to start the computer during the delay, press F5 to bypass the system files, or press F8 to step through CONFIG.SYS.

- 5) Press CTRL+ALT+DEL to reboot the computer for this change to take effect.

See Multiple Configurations for additional information.



How to use the Disk Defragmenter (Windows 95)

Solution:

In Windows 95 do the following using a hard disk drive:

- 1) Click on the Start button, Programs, Accessories, System Tools, Disk Defragmenter
- 2) Click on the drive you wish to defragment and click OK.

NOTE: You cannot use Disk Defragmenter on a floppy disk drive.



How to use DriveSpace.

Solution:

In Windows 95 do the following when using a hard disk drive:

- 1) Click on the Start button, Programs, Accessories, System Tools, DriveSpace
- 2) Click on the drive you wish to compress.
- 3) Click on the Drive menu, Compress or choose the option you wish to perform.

NOTE: DriveSpace cannot be used on a floppy disk drive.



DoubleSpace cannot be run on a floppy drive.

Solution:

DoubleSpace cannot be run on a floppy drive.



DriveSpace cannot be run on a floppy drive.

Solution:

DriveSpace cannot be run on a floppy drive



How to use the SCANDISK command.

Solution:

Enter the following command at the DOS prompt:

```
SCANDISK x: /AUTOFIX
```

(Where x is the logical name of the drive with file problems.)

NOTE: If using Windows95 to get to the DOS prompt click on the Start button, Programs, MS-DOS Prompt.



Computer noise due to aging power supply fan; Replace power supply fan.

Cause:

Computer noise is due to an aging power supply fan.

Solution:

***CAUTION:** The installation, diagnostic or maintenance tasks below should be performed by a qualified computer technician.*

Remove the top cover of the PC and replace the power supply fan.



Power supply fan dead; Replace power supply fan.

Cause:

Power supply fan is dead.

Solution:

***CAUTION:** The installation, diagnostic or maintenance tasks below should be performed by a qualified computer technician.*

Remove the top cover of the PC and replace the power supply fan.



9xx Parallel printer adapter error; Secure printer cables and connectors.

Cause:

9xx Parallel printer adapter error.

Solution:

Make sure the printer is on and operational. Check the printer or device connected to the printer port for jammed paper. Try using another cable to interconnect the devices.

NOTE: The following will work effectively only on a dot matrix printer.

Check the cables and the printing or parallel device by switching the cable from (LPT2) to (LPT1) and following the steps as follows:

- 1) With the printing device on and the cable to the printing device connected to the (LPT1) connector at the back of the computer, at the DOS prompt, press ALT-P to open the print port to the computer. This command toggles the printer on and off.
- 2) Type some upper case characters and some lower case characters followed by a RETURN. The string of characters entered will be sent out the (LPT1) port and will print correctly if the cables are correctly connected.
- 3) Close the port by entering ALT-P again.
- 4) Unless there is an intermittent failure, If the characters printed, the cable and the printer can be eliminated from the fault scenario.



14xx Matrix printer errors; Ensure printer is on and paper is in tray.

Cause:

14xx Matrix printer errors.

Solution:

Check whether the printer is turned on and that paper is in the printer. Check if printer is LPT1 or LPT2.
Check the printer by connecting to another system.



12xxxx SCSI device error code; Contact qualified technician.

Cause:

12xxxx SCSI device error code.

Solution:

Verify proper installation of SCSI adapter card and SCSI device. If the problem persists, refer to a qualified technician.



13xxxx SCSI system board error; Secure cables and connectors.

Cause:

13xxxx SCSI system board error.

Solution:

***CAUTION:** The installation, diagnostic or maintenance tasks below should be performed by a qualified computer technician*

Check the cables and connectors. Verify that the SCSI device is working by either checking it in another system or by substituting a KGU (Known Good Unit).



1xx Serial COM1type error message; Check connections & communication protocols.

Cause:

1xx Serial COM1type error message.

Solution:

Check connections and verify communications protocol (baud rate, word length, stop bits, etc.) is correct. If all is correct and problem persists, refer to qualified technician.



12xx COM2/COM3/COM4 errors; Check setup for the device connected to COM port.

Cause:

12xx COM2/COM3/COM4 errors.

Solution:

Check the setup for the device connected to the failed COM port. Recheck the cables and connections. Eliminate the serial device from the list of possible failures by connecting it to a working system and checking performance.



4xx Mono/display printer adapter error; Re-insert card, check cable connections.

Cause:

4xx Mono/display printer adapter error.

Solution:

A failure with this card that is otherwise seated properly in its system connector and has the printer cable and monitor connector correctly fitted to the connectors, typically means replacement. If the problem persists, refer to a qualified technician.



5xx CGA errors; Replace CGA monitor.

Cause:

5xx CGA errors.

Solution:

Substitute the CGA monitor and connector with a known good unit and see if the problem persists. If problem persists, try another adapter card. If the problem persists, refer to a qualified technician.



13xx Game adapter errors; Correct program setup, recheck cables and connectors.

Cause:

13xx Game adapter errors.

Solution:

The game adapter changes analog signals to digital signals. The adapter card, connectors, cables, program application, configuration and analog device (usually a joystick or a test instrument) should all be checked for failures. Most likely problem is setup. Check the application program setup. Verify the correct configuration for the system and recheck the cables and connectors. Check the device by substituting a KGU (Known Good Unit) for it.



7xx Math coprocessor errors; Check for installation errors.

Cause:

7xx Math coprocessor errors.

Solution:

Check for installation errors and excessive heat. Examine the processor speed and check that the coprocessor is properly matched or is able to run faster than the processor. To see if reported errors cease, slow down the system by turning off the 'turbo' switch on the case or through software.



104xx series ESDI or MCA IDE; Re-insert connectors, clear fan obstructions.

Cause:

104xx series error codes represents failures of either the drive or drive controller of either an ESDI device or MCA IDE device.

Solution:

The 104xx series of error codes represents failures of either the drive or drive controller of either an ESDI device or MCA IDE device.

Failed or intermittent ESDI or MCA IDE fixed disk/controller adapter, caused by the devices themselves, their installation, interconnecting cables or environment. Suspect damage from electrostatic discharge, poor solder connections, misaligned cabling, bad connections, bad bearings, worn parts, failed discrete components, wrong jumper connections, virus contamination and/or excessive heat.

Electrostatic discharge, or ESD, is commonly known as static electricity. The spark you see--and painfully feel--sometimes when you touch a person or a metal object is ESD. What it does to your finger is only a fraction of the damage it can cause to your computers delicate electronic circuitry. It is important to take steps to prevent ESD from damaging expensive computer equipment.

Your goal should be to reduce or eliminate the conditions in which ESD becomes a problem by preventing a buildup of static electricity in anyone or anything that comes into contact with your computer. Humidity reduces buildup, as do certain types of flooring, clothing, footwear and other materials. Control the environment around your computer to minimize the risk of ESD.

New equipment must be shipped in static-safe containers and packed in pink (not white) bubble-wrap or foam peanuts, which are ESD-safe. Be sure to wear a static strap (a cord connected to you and a grounded surface which prevents static electricity buildup) before touching anything inside your computer.

CAUTION: The installation, diagnostic or maintenance tasks below should be performed by a qualified computer technician.

- 1) Check the connections and verify that the computer environment is no higher than 85 degrees.
- 2) Check and that the computer cooling fan is not obstructed.
- 3) Make sure power cable is securely connected to power connector on drive.

- 4) Inspect and correct data cable installation between the controller card and all hard disk drives. Make sure cables are securely connected.
- 5) Verify correct jumper settings on hard disk drive(s) with owner's manual.
- 6) Try swapping controller card to isolate problem to the controller card. Replace the original controller card if the second controller card solves the problem.
- 7) Switch hard disks to isolate problem to hard disk. Replace the original hard disk if the second hard disk works properly.



10xx Alternate parallel printer adapter error; Secure cables and connectors.

Cause:

Loose cables and connectors can cause a 10xx Alternate parallel printer adapter error.

Solution:

Make sure the printer is on and operational. Check the printer or device connected to the printer port for jammed paper. Try using another cable to interconnect the devices.

NOTE: The following will work effectively only on a dot matrix printer.

Check the cables and the printing or parallel device by switching the cable from (LPT2) to (LPT1) and following the steps as follows:

- 1) With the printing device on and the cable to the printing device connected to the (LPT1) connector at the back of the computer, at the DOS prompt, press ALT-P to open the print port to the computer. This command toggles the printer on and off.
- 2) Type some upper case characters and some lower case characters followed by a RETURN. The string of characters entered will be sent out the (LPT1) port and will print correctly if the cables are correctly connected.
- 3) Close the port by entering ALT-P again.
- 4) Unless there is an intermittent failure, If the characters printed, the cable and the printer can be eliminated from the fault scenario.



Incorrect mouse configuration; Configure the computer for this mouse.

Cause:

Incorrect mouse configuration.

Solution:

In Windows 95, do the following:

- 1) Click on the Start menu button, Settings, Control Panel.
- 2) Click on Mouse.
- 3) Click on the General tab.
- 4) Look at mouse driver shown or selected in the Name list box.
- 5) If the incorrect mouse driver is shown or selected, then click Change.
- 6) Click the Have Disk tab and insert the disk or CD into the appropriate drive.
- 7) Install the proper mouse driver.
- 8) Restart the computer so that the new mouse driver will be recognized.



Software problem; Call software manufacturer to fix or send updated program.

Cause:

Software problem.

Solution:

Contact the software manufacturer technical support to report problem and request a fix or an updated program.



Mouse, port, or receiver problem; Use new mouse, change mouse port destination.

Cause:

Mouse, port, or receiver problem.

Solution:

Do the following:

- 1) Try a new mouse.
- 2) Change mouse port destination:
 - a) Edit AUTOEXEC.BAT or Edit CONFIG.SYS and locate a line with the word 'MOUSE...' similar to one of the following:
 - 1] In AUTOEXEC.BAT: C:\\DOS\\MOUSE\\MOUSE.COM /x
 - 2] In CONFIG.SYS: DEVICE=C:\\DOS\\MOUSE\\MOUSE.SYS /x
 - b) After the word 'MOUSE' there may be a '/1' or '/2'. If the digit is a 1, change it to 2; if it is a 2, change it to a 1.
 - c) Save the file and reboot the computer.
 - d) Watch for message about loading mouse driver during boot process.
 - e) Load application that uses the mouse (e.g., Windows or OS/2).
 - f) Attempt to use the mouse.
- 3) Have a computer technician troubleshoot the receiver.



Slow performance by possible low memory; Add memory to computer.

Cause:

Slow performance by possible low memory.

Solution:

If your computer is performing slow all of the time, or when using graphics, performance may be improved by adding more RAM to your machine.



Speakers may be damaged or sound card located too close to computer cooling fan.

Cause:

Speaker static may be caused by damaged speakers, or the sound card may be located too close to computer cooling fan.

Solution:

Before replacing speakers, attempt to attach them to another computer to see if static continues. If speakers still under warranty, contact manufacturer.

If static continues, the physical location of the sound card within the computer may be too close to the computer's cooling fan. Contact the computer's manufacturer to see if there is any resolution to the problem.



Speaker wires bad; Replace damaged speaker wires.

Cause:

The speaker wires are bad.

Solution:

Replace damaged speaker wires.



Probably setup problem; Contact your Internet service provider.

Cause:

Probably setup problem.

Solution:

Contact your Internet service provider .



Software not installed; Install software from your Internet service provider.

Cause:

Software not installed.

Solution:

Install software from your Internet service provider.



Install a stereo sound card to receive stereo sound.

Cause:

Stereo sound requires a stereo sound card.

Solution:

Install a stereo sound card.



MIDI files are corrupt; Reinstall the MIDI files.

Cause:

MIDI files are corrupt.

Solution:

Reinstall the MIDI files.



Connector pin is bent; Try to gently bend the pin back and try installing again.

Cause:

The connector pin is bent.

Solution:

Try to gently bend the connector pin back and try install again.



Possible defective sound card; Contact manufacturer.

Cause:

Possible defective sound card.

Solution:

Contact the manufacturer of the sound card.



"Printouts are wrong or nonsense" answer is inconsistent with "[No printout]".

Cause:

Answers to print questions are inconsistent.

Solution:

Please review your answers to these two questions and change one of your answers:

"Printouts are wrong or nonsense"

"[No printout]"



Contact the vendor's technical support line for the software application.

Cause:

Problem due to vendors software.

Solution:

Contact the vendor's technical support line for the software application.



Win 95, OS/2: Incorrect print driver/settings; Correct the print driver/settings.

Cause:

Win 95, OS/2: Incorrect print driver/settings.

Solution:

To correct the print driver/settings, do the following:

- 1) Ensure correct printer driver for this printer is installed and active.
- 2) Examine all other print options (e.g., form feed) to ensure they are set properly.
- 3) Reprint the document.



"[Not a printer installation question]" is inconsistent with previous answer.

Cause:

Inconsistent answers to printer installation questions.

Solution:

Please review your answers to these two questions and change one of your answers.



"[I do not have an error message]" is inconsistent with previous answer.

Cause:

Inconsistent answers to error message questions.

Solution:

Please review your answers to these two questions and change one of your answers:

"[I do not have an error message]" is inconsistent with previous answer.

