



# Tech Info Library

## System 6 Clean Installation (8/94)

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TOPIC -----

This document tells you how to do a clean System 6 installation. A normal system software installation modifies and updates the existing System Folder. A clean installation disables the existing System Folder, leaving most files in place, and forcing the Installer to create a new System Folder.

A clean system installation brings the system software back to the standard configuration. This is necessary when system software has been damaged or modified, preventing a normal installation. It's also useful in troubleshooting, and helps to determine whether a problem is hardware- or software-related.

DISCUSSION -----

### Required Disks

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System 6 software comes as a set of 800K (double-density) disks or a set of 1.44MB (high-density) disks:

- The set of four 800K disks includes System Tools, Utilities 1, Utilities 2, and Printing Tools.
- The set of two 1.44MB disks includes System StartUp and System Additions.

The instructions in this document give the name of the 800K disk first, followed by the name of the 1.44MB disk in parentheses. Follow these instructions in the order presented.

Restart with Utilities 1 or System StartUp

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Shut down your Macintosh computer, insert Utilities 1 (or System Startup) in the

floppy drive, and turn on the computer. At the desktop, the floppy disk's icon should be in the upper-right corner of your screen with the hard disk's icon below it.

If the computer ejects the disk and won't start up from it, check the density of the disk. A high-density (1.44MB) disk requires an Apple SuperDrive (formerly FDHD) to read it. Macintosh computers, except the Macintosh Plus, SE, II and earlier, have SuperDrives.

If your computer doesn't have a SuperDrive, you need the set of 800K System 6 installation disks. To get them, contact your local Apple dealer or User Group for a copy (they may charge a fee).

#### Run Disk First Aid

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Disk First Aid is a utility found on the Utilities 1 (or System StartUp) disk. It can detect and repair problems with the hard disk.

- 1) Double-click the Utilities 1 (System StartUp) icon to open it.
- 2) Double-click on Disk First Aid, and make sure the startup hard drive is selected. If it isn't, click the Drive button to select the startup hard drive.
- 3) Click once on Open and then once on Start. Disk First Aid checks your hard disk for any potential problems. If it finds problems, you should let the software repair them.
- 4) Repeat this procedure for each hard disk attached to the system.
- 5) When you're finished verifying the hard disks, choose Quit from the File menu to return to the desktop.

If Disk First Aid can't repair a hard drive, you should back up the hard drive and reinitialize it using the appropriate formatting utility for that drive. For Apple drives, use Apple HD SC Setup.

#### Check Available Hard Disk Space

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Be sure you have at least 3072K of disk space available on the hard disk where you're installing the system software. Double-click on the hard disk icon, and choose by Icon from the View menu. The upper-right corner of the window displays the amount of available disk space.

If there's less than 3072K available, you'll need to delete some unnecessary files. Copy files to floppy disks or other media if needed. Then drag the files from your hard disk to the Trash, and choose Empty Trash from the Special menu.

#### Disable the System Folder

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You disable the System Folder by moving the Finder and renaming the System Folder.

- 1) Open your hard disk's icon and locate the System Folder.
- 2) Open the System Folder.
- 3) Create a new folder and name it "Old Finder."
- 4) Locate the Finder (within the System Folder) and move it into this new folder.
- 5) Close the System Folder's window and rename the System Folder, "Storage."
- 6) Close any open windows on your desktop.

#### Restart Your Computer

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Choose Restart from the Special menu. The system automatically ejects the floppy disk, and after a few seconds you should see a picture of a disk with a flashing question mark. This indicates that no System Folder is active on the hard disk.

If your Macintosh starts up from the hard disk, you have an extra System Folder on the hard disk. You need to delete it (or disable it as described in the previous section), then restart.

If your computer starts up from a second hard disk connected to your computer, you'll see that disk's icon in the upper-right corner of your screen with the startup hard disk's icon below it. If this happens, you can continue installation without waiting for a blinking question mark.

#### Install System 6

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Install System 6 following these steps:

- 1) Insert System Tools (or System StartUp) into the floppy drive.
- 2) Double-click the Installer application icon.
- 3) Once the "Welcome to the Apple Installer" message appears, click OK.
- 4) The Installer will indicate the name of the disk where it's installing the system software. Click Switch Disk if necessary until you see the name of the correct disk. Then click Install.
- 5) Insert the other disks when the Installer asks you to.
- 6) When installation is complete, quit the Installer program, and restart the Macintosh.

The system will eject the floppy disk and the Macintosh will start up from the hard disk.

### Verify Problem Resolution

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After performing a clean installation, verify that you resolved the problem before adding anything to the new System Folder. Adding items to the System Folder before resolving your problem defeats the purpose of this procedure.

### Install Non-Standard Items

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You can now reinstall the non-standard items from the old System Folder (now named "Storage") such as fonts, screen savers, device drivers, and so on. If possible, you should reinstall these items from their original disks.

If the original disks aren't available, you may move the non-standard items from the Storage folder to the new System Folder. Be careful not to replace anything that's already in the new System Folder. Only move items that aren't already in the new System Folder.

- 1) Open the System Folder and the Storage folder and choose by Name from the View menu. Then compare the contents of the folders as they are open side-by-side.
- 2) Move anything that isn't already in the new System Folder from the Storage folder to the new System Folder.
- 3) Restart your Macintosh.

### Install Fonts and Desk Accessories

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Fonts and desk accessories become part of the System file. You need to reinstall them after a clean installation. Use the original disks to install them. If the original disks aren't available, follow these steps:

- 1) If the Font/DA Mover isn't on your hard disk, copy it from the Font/DA folder located on the Utilities 2 (or System Additions) disk to your hard disk.
- 2) Open the Font/DA folder on the hard disk, and double-click the Font/DA Mover to launch it. You see two windows. The radio button at the top indicates whether you're viewing fonts or desk accessories. The default is to view fonts. The left window displays fonts installed in your system, and beneath it you see "System on <hard disk name>."
- 3) Click the Open button beneath the window on the right.
- 4) When a dialog box appears, navigate to the Storage folder, and open it.
- 5) Double-click the System file to open it. You'll see the fonts in your old system in the window on the right.
- 6) Select the fonts you wish to add to the new system, and click on the <<Copy>> button.

- 7) When finished installing fonts, use the radio button at the top to display desk accessories.
- 8) Select the desk accessories you wish to add to the new system, and click on the <<Copy>> button.
- 9) When finished, quit the Font/DA Mover and restart your computer.

#### Troubleshooting INIT Conflicts

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If you installed any startup documents or control panels, you'll probably see their icons line up across the bottom of the screen when you restart. They load into memory at startup time and modify the standard behavior of the operating system.

If the Macintosh fails to restart or behaves erratically, you probably have an incompatible, or conflicting INIT or control panel. To verify this problem, follow these steps:

- 1) Shut down the computer.
- 2) Insert the System Tools (or System StartUp) disk.
- 3) Restart the computer.
- 4) Create a new folder on the hard disk and name it "INITs."
- 5) Open the System Folder on the hard disk, and move to the INITs folder any third-party (that is, non-Apple) INITs you added since completing the clean installation. Choose by Kind from the View menu to help identify files of Kind - "startup document," "control panel" and "Chooser document" - that you need to move.
- 6) Restart the computer from the hard disk.
- 7) When the Macintosh is ready, try to recreate the erratic behavior.

If the problem no longer occurs, then you have a conflicting INIT. Continue with these steps:

- 8) Move one item from the INITs folder to the closed System Folder and restart the Macintosh.
- 9) Attempt to recreate the original problem.

Repeat steps 8 and 9 for each item in the new folder on the desktop until the problem recurs. The last item returned to the System Folder is probably the cause of the problem. Restart with the System Tools (System StartUp) disk and remove the problem item from the System Folder. Check with the vendor for compatibility information.

#### Final Steps

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Verify that your applications are performing normally. If not, refer to the application manual or contact the vendor.

When the Macintosh behaves as expected, check the Storage folder for items you may not have reinstalled. You may find items including the following:

- INITs, control panels, device drivers (such as scanner drivers), which you should reinstall from the original floppy disks, if possible.
- Application Preference files, which store any changes you made to the application's default settings (for example, if you change the default font in your word processing program). You can drag these settings to the new System Folder, but be aware that Preference files do sometimes become damaged and can cause erratic behavior. If this happens, quit the application, remove the Preference file from the System Folder, and launch the application again. The application recreates the Preference file the next time you launch it, and returns your settings to their defaults.
- Folders installed by applications (such as Claris, Microsoft, and Aldus). You can move these to the new System Folder.

After you move all needed items from the Storage folder, drag the Storage folder to the Trash, and choose Empty Trash from the Special menu.

#### Article Change History:

29 Aug 1994 - Updated for FAX/TIL/QRG maintenance.

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