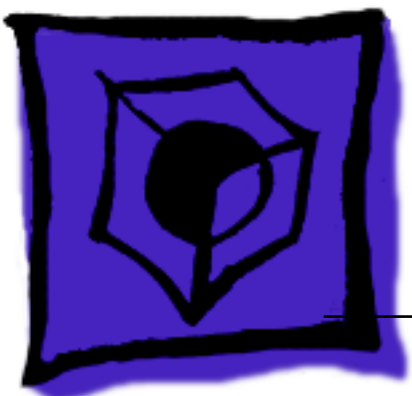
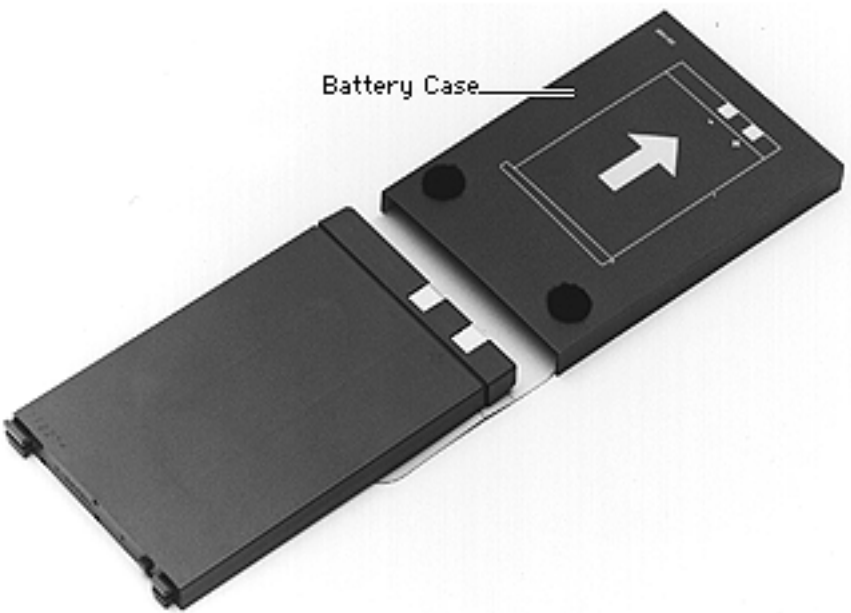
Module Identification



CPU Batteries

PowerBook 100 Battery Assembly **661-0723**

PowerBook 100 Battery Assembly **661-0782**



Apple ships the battery in a protective case; you can return the battery to Apple without the protective case.

PowerBook 140/145/145B/160/165/165c/170/180/180c
Battery Assembly, 2.9 Amp

661-0013

Apple ships the battery in a protective case; you can return the battery to Apple without its protective case.

PowerBook 140/145/145B/160/165/165c/170/180/180c
Battery Assembly, 2.8 Amp

661-0789

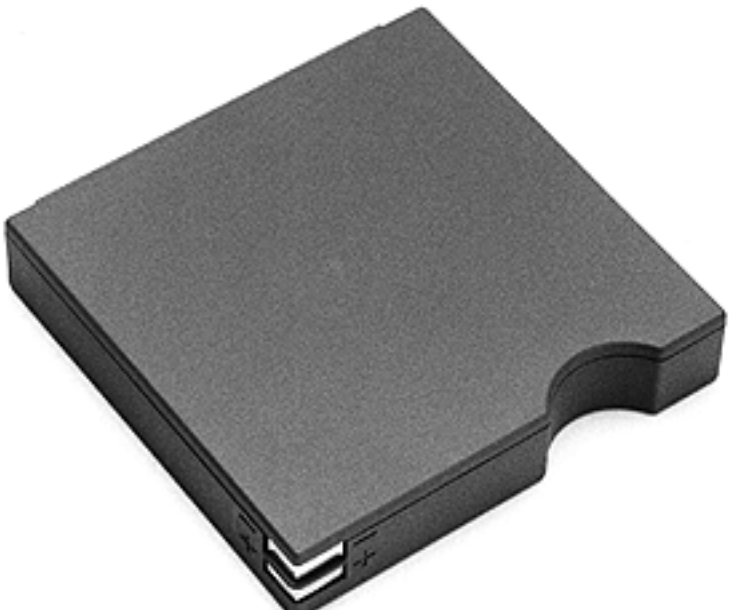
Apple ships the battery in a protective case; you can return the battery to Apple without its protective case.

PowerBook 140/145/170 Battery Assembly, 2.5 Amp **661-0754**

When you return P/N 661-0754, Apple ships you P/N 661-0789.

Apple ships the battery in a protective case; you can return the battery to Apple without its protective case.

PowerBook 140/170 Battery Assembly **661-0721**



When you return P/N 661-0721, Apple ships you P/N 661-0789.

PowerBook 150 Battery Assembly with Door **661-1656**

Photo not Available

PowerBook 190 Series Battery, NiMH **661-1028**

NiMH batteries do not have a built-in battery gauge.

Return the battery WITH the contact cover in place covering the battery contacts.

PowerBook 520/540 Series Battery **661-0055**

Return the battery WITH the contact cover in place and covering the battery contacts.

PowerBook 5300 Series Battery, Lithium Ion **661-0939**

Lithium Ion batteries have a built-in battery gauge consisting of four LEDs and a button.

Return the battery WITH the contact cover in place covering the battery contacts.

PowerBook Duo 210/230/250/270c NiMH Battery Assembly (with Door) **661-1735**

When you return P/N 661-1735; Apple ships you P/N 661-0053.

The PowerBook 210/230/250/270c NiMH battery assembly has the number “2” on the battery label.

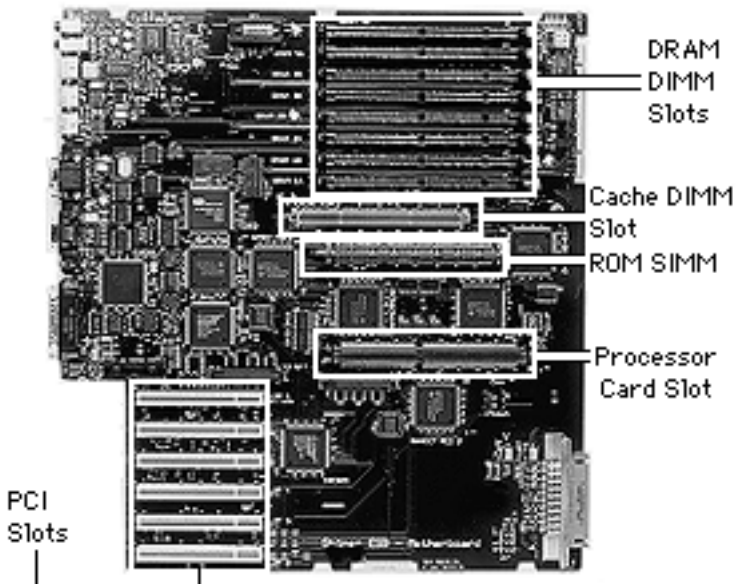
The battery locking button is built into the NiMH battery.

PowerBook Duo Battery with Door, Type 3 **661-0053**

Apple ships the battery in a protective case; you can return the battery to Apple without its protective case.

CPU Logic Boards

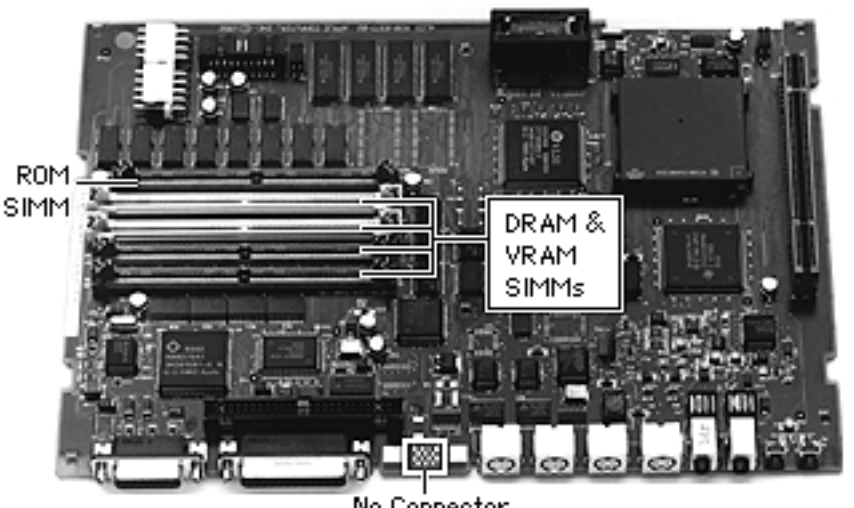
Apple Network Server 500/700 Logic Board **661-1125**



Return this logic board without the following: Processor card, Processor card guides, DRAM DIMMs, Cache DIMM, and PCI cards.

IMPORTANT: Do not remove the ROM SIMM from the logic board.

Centris 610 Logic Board **661-1681**



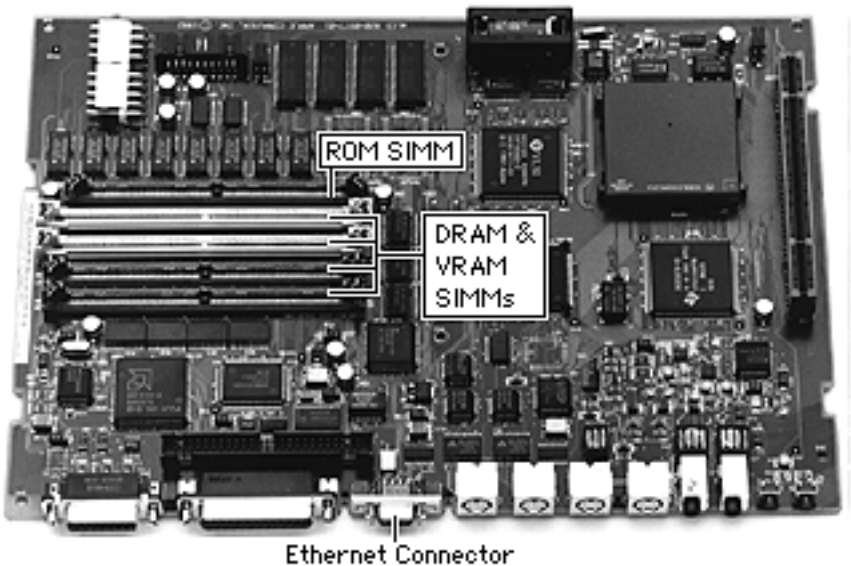
Return the Macintosh Centris 610 logic board without DRAM or VRAM SIMMs.

This logic board does not support Ethernet and can be identified by the vacant connector location indicated.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board. If a ROM SIMM is

present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Centris 610 Logic Board, with Ethernet **661-1682**



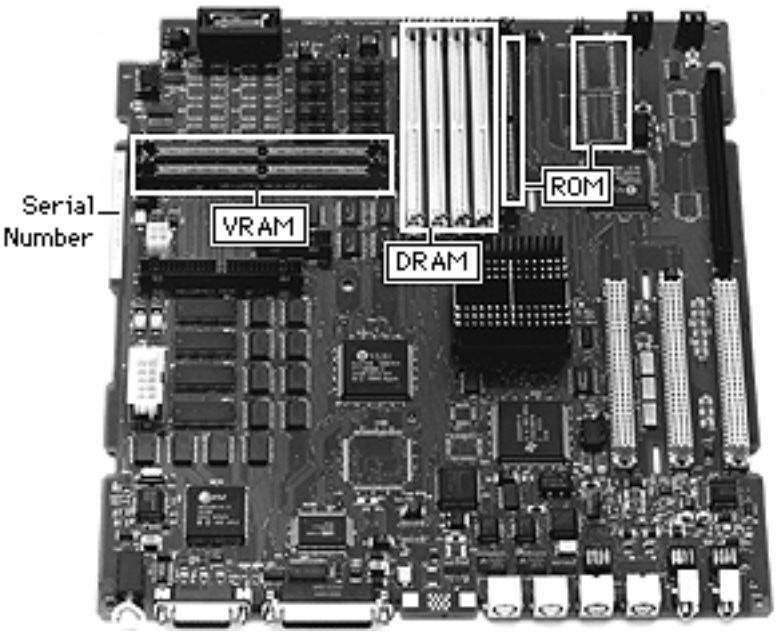
Return the Macintosh Centris 610 logic board without DRAM or VRAM SIMMs.

The logic board supports Ethernet and can be identified by the Ethernet connector indicated.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board. If a ROM SIMM is

present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Centris 650 Logic Board, 4 MB **661-1675**



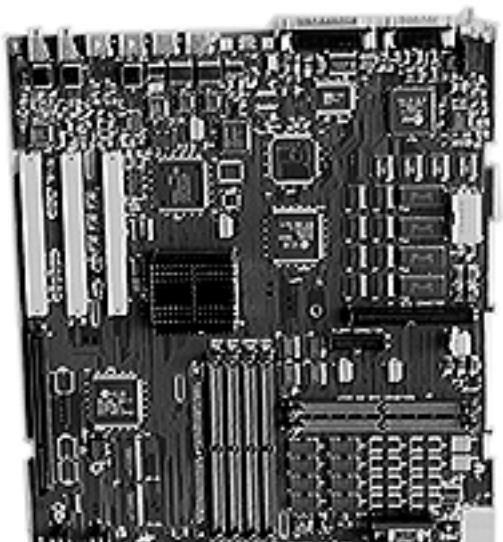
To identify the logic board, refer to the module serial number: The last five characters contain the code Z01.

Return the logic board without DRAM or VRAM SIMMs.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board. If a ROM SIMM is present, return the

defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Centris 650 Logic Board, 4 MB, FPU **661-1679**



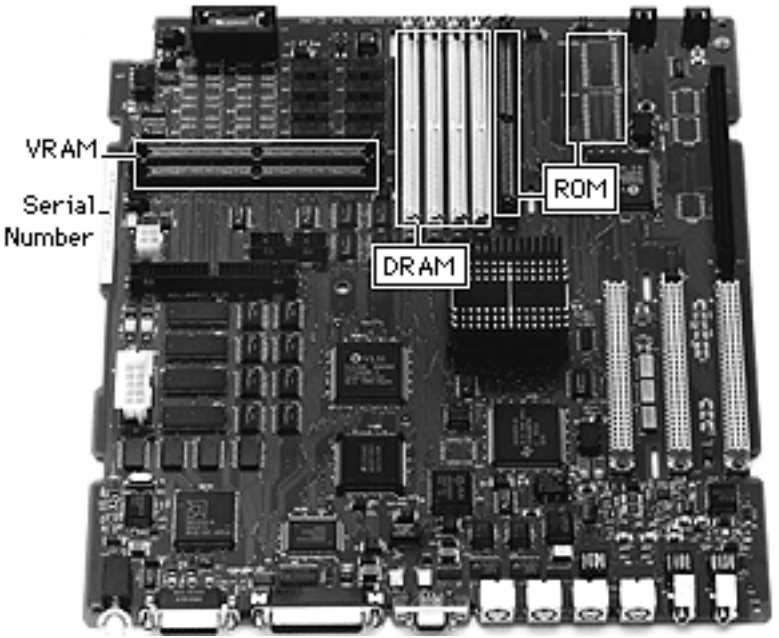
To identify the logic board, refer to the module serial number: the last five characters contain the code Z03.

Return the logic board without DRAM or VRAM SIMMs.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board.

If a ROM SIMM is present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Centris 650 Logic Board, 4 MB, FPU, with Ethernet **661-1677**



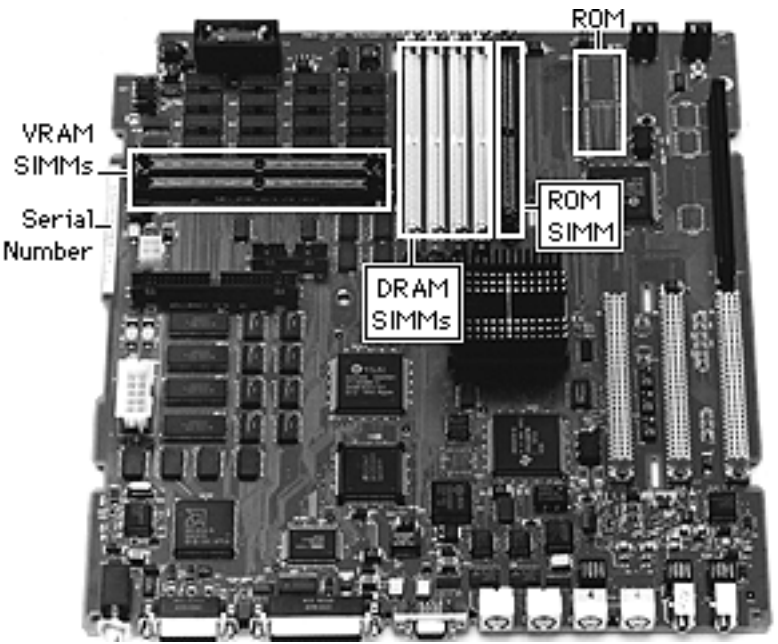
To identify the logic board, refer to the module serial number: The last five characters contain the code ZO2.

Return the logic board without DRAM or VRAM SIMMs.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board.

If a ROM SIMM is present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Centris 650 Logic Board, 8 MB, FPU, with Ethernet **661-1678**



To identify the logic board, refer to the module serial number: The last five characters contain the code Z04.

Return the Macintosh Centris 650 logic board without DRAM or VRAM SIMMs.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board. If a ROM SIMM is

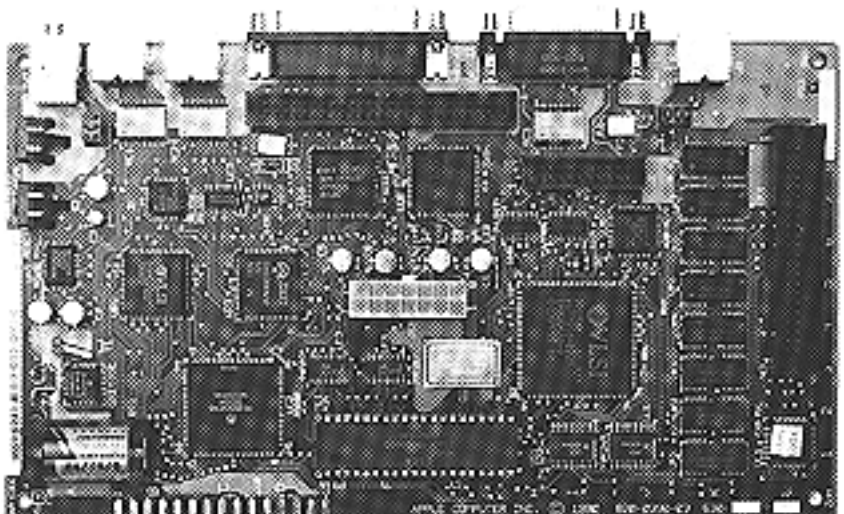
present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Centris 660AV Logic Board **661-1704**

Return the Macintosh Centris 660AV logic board without DRAM SIMMs installed.

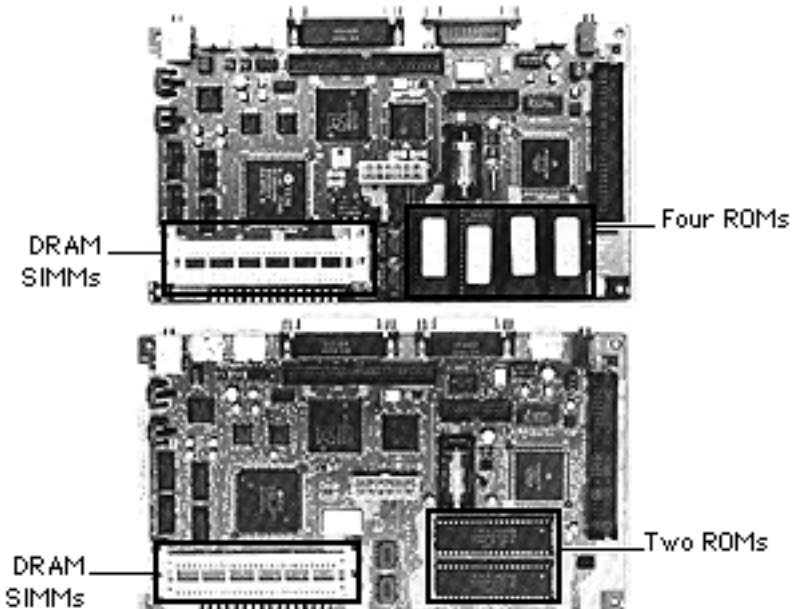
Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board. If a ROM SIMM is present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Classic Logic Board **661-0596**

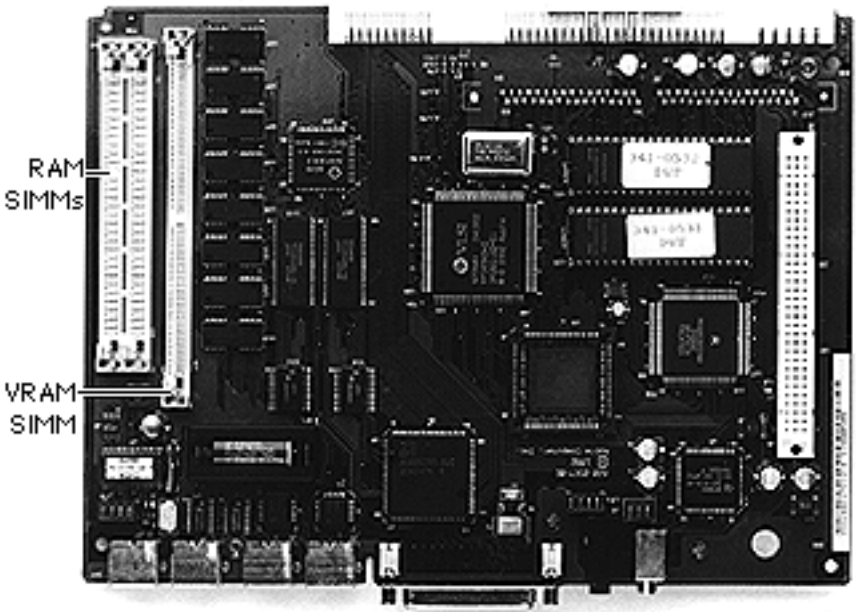


Classic II, Performa 200 Logic Board **661-0672**

Return the logic board without DRAM SIMMs.

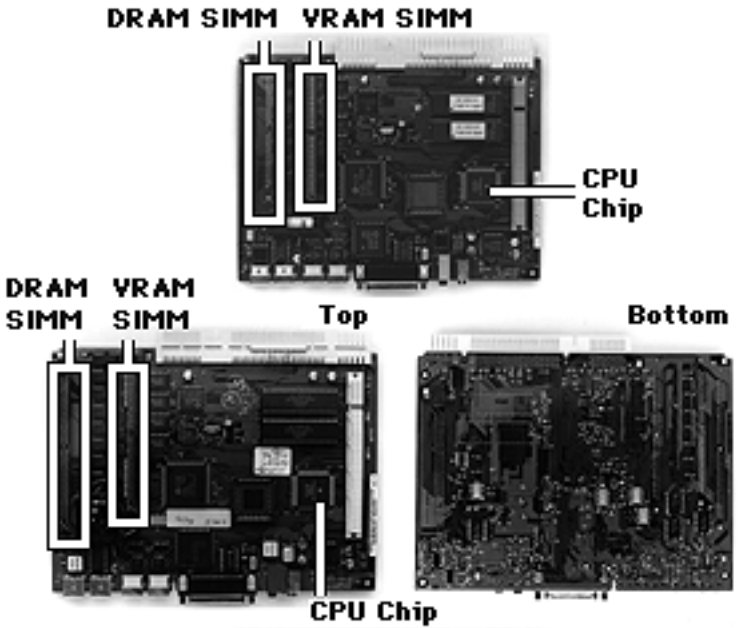


Color Classic Logic Board **661-0733**



Return the Macintosh Color Classic logic board without RAM or VRAM SIMMs.

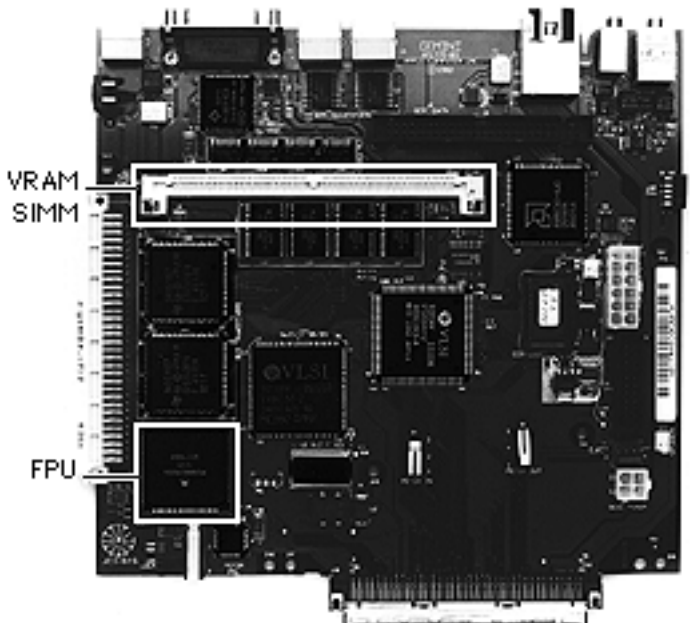
Color Classic II, LC 520/550, Performa 550 Logic Board, 33 MHz **661-1830**



The Macintosh LC 550 (661-1830) and LC 520 (661-0812) logic boards are similar. You can identify the LC 550 logic board by its CPU chip, which has MC68030FE33B printed on it, and by the absence of resistors on its underside (where the LC 520 board has two resistors R75 and R79.) Return the logic board without DRAM or VRAM SIMMs.

DuoDock Logic Board

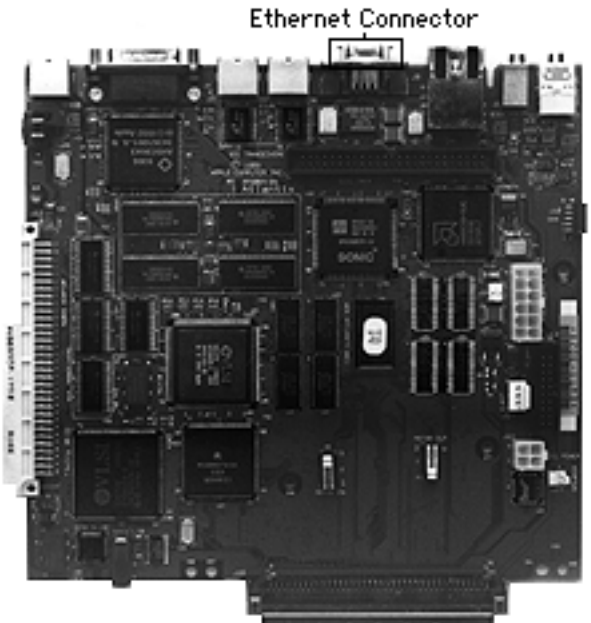
661-1657



Return the Macintosh Duo Dock logic board without the VRAM SIMM.

If the logic board contains an FPU upgrade, transfer the upgraded components to the customer's new logic board.

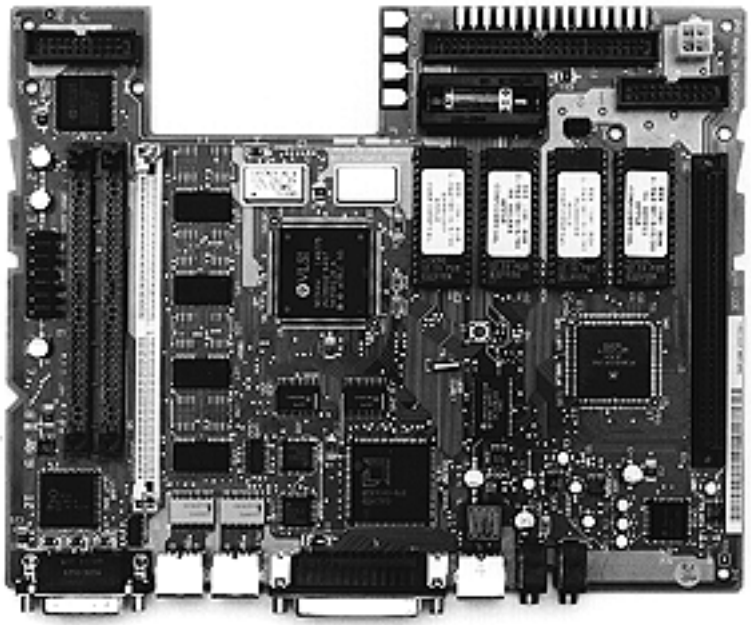
DuoDock II Logic Board, Ethernet **661-1707**



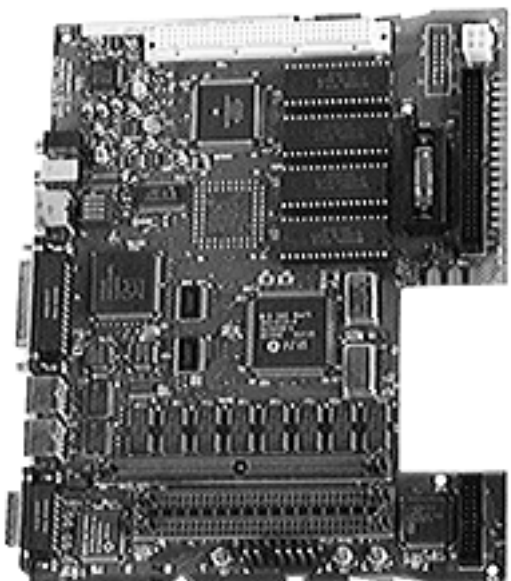
The Macintosh Duo Dock II logic board has an Ethernet connector. The Macintosh Duo Dock logic board does not.

Includes FPU.

LC Logic Board **661-0593**



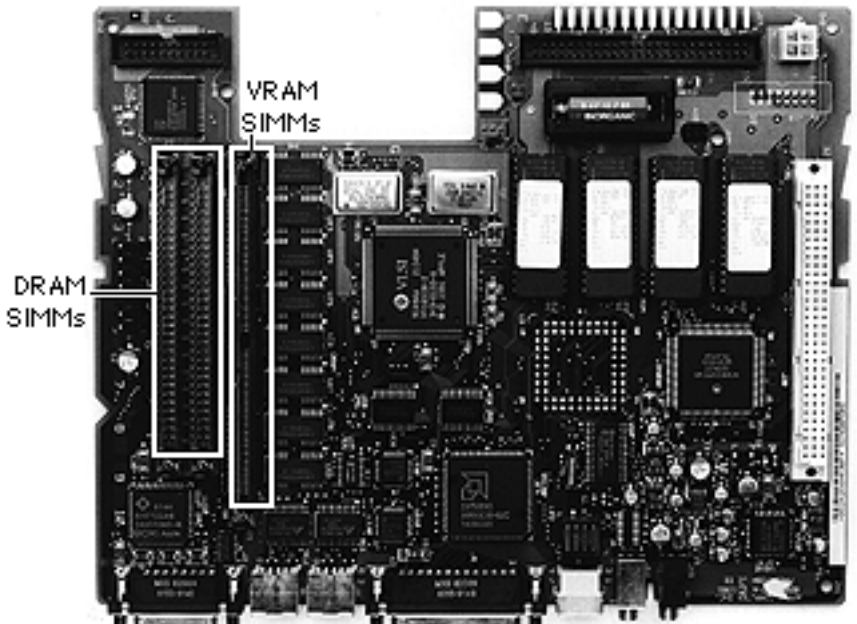
LC II Logic Board, 2 MB **661-0728**



The 2 MB version looks the same as the 4 MB version except that the 2 MB version has four DRAM ICs soldered in locations U12-U19 rather than eight DRAM ICs.

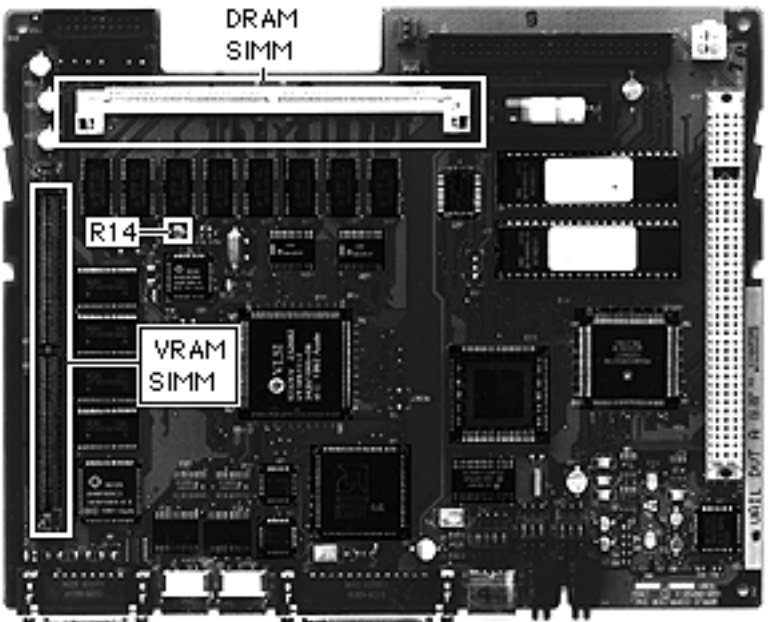
Return the Macintosh LC II logic board without RAM SIMMs or VRAM SIMMs.

LC II, Performa 400/405/410/430 Logic Board **661-0729**



Return the logic board without DRAM or VRAM SIMMs.

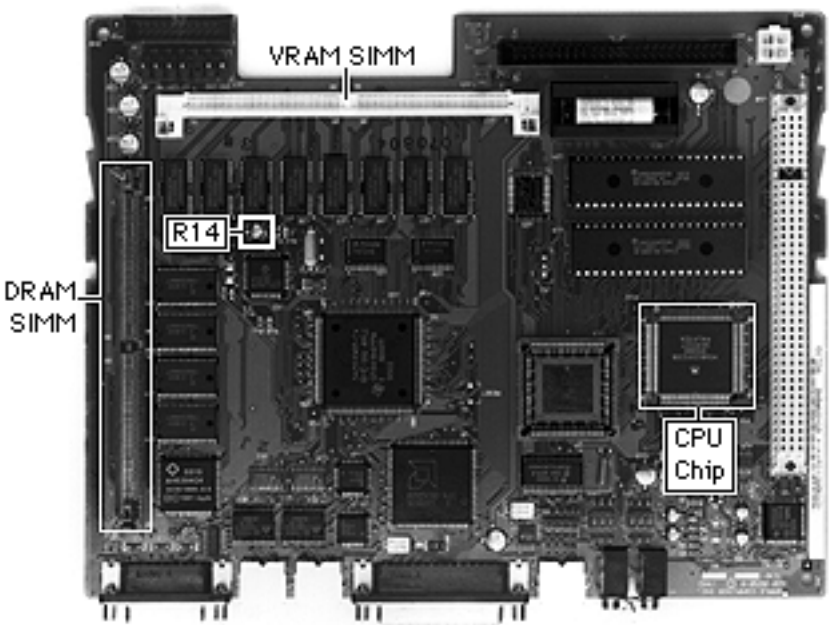
LC III, Performa 450 Logic Board, 25 MHz **661-0720**



The 2 MB version looks the same as the 4 MB version except that the 2 MB version has four DRAM ICs soldered in locations U12-U19 rather than eight DRAM ICs.

Return the Macintosh LC II logic board without RAM SIMMs or VRAM SIMMs.

LC III, Performa 460/466/467 Logic Board, 33 MHz **661-1736**



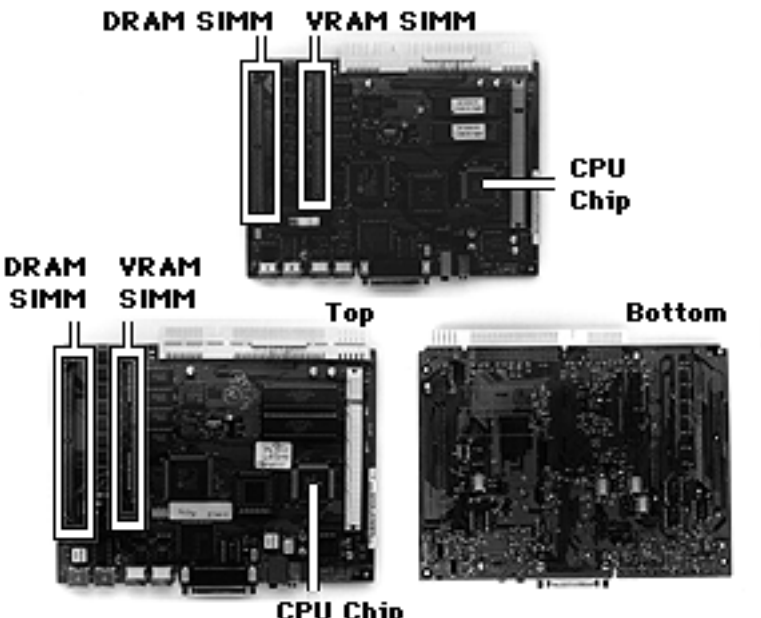
Return the logic board without DRAM or VRAM SIMMs.

This logic board has the part number “MC68030FE33B” on the CPU chip.

The Macintosh LC III, Performa 460/466/467 (661-1736) and the Macintosh LC III, Performa 450 (661-0720) logic boards are similar.

P/N 661-1736 has no resistor installed at location R14. If there is a resistor installed at location R14, return the board as P/N 661-0720.

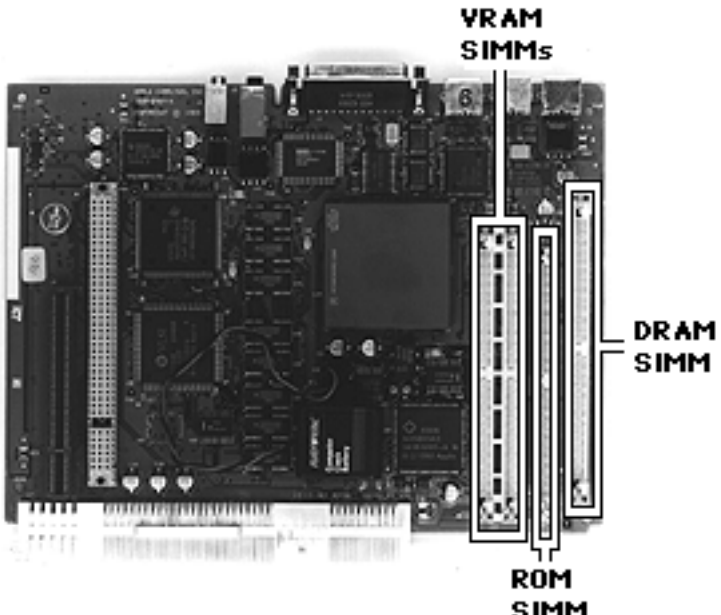
LC 520, Performa 500 Series Logic Board **661-0812**



The Macintosh LC 520 (661-0812) and the Macintosh LC 550 (661-1830) logic boards are similar. You can identify this LC 520 logic board by the two resistors R75 and R79 located on the underside of the board. The LC 550 logic board does not have these resistors.

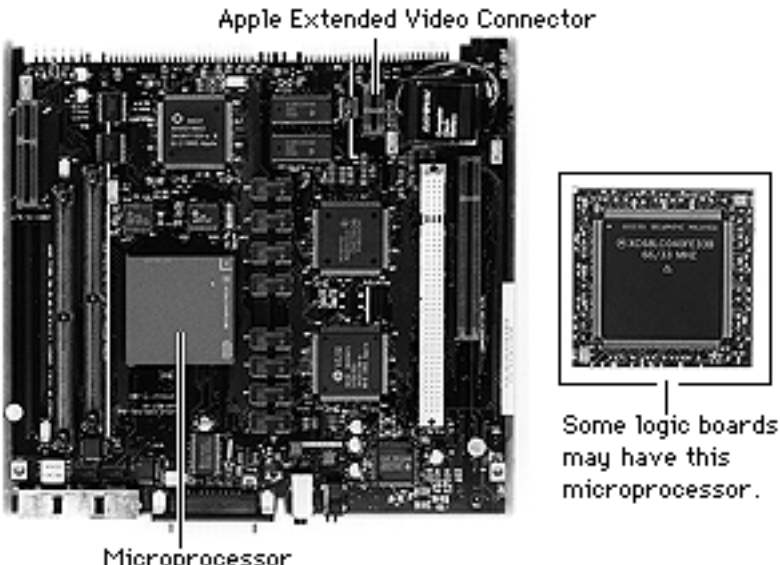
Return the logic board without DRAM or VRAM SIMMs.

LC 575 Logic Board, 33 MHz **661-0867**

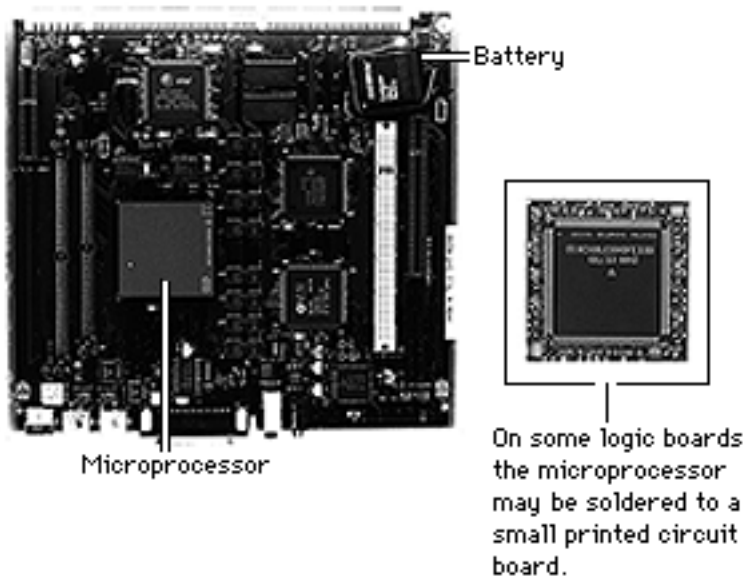


LC 580, Performa 580/631/640 CD, DOS-Compatible Logic Board, without FPU (Replaced by 661-1114)

661-0234



LC 630, Performa 630 Series Logic Board, 1-72 Pin SIMM Slot **661-0158**

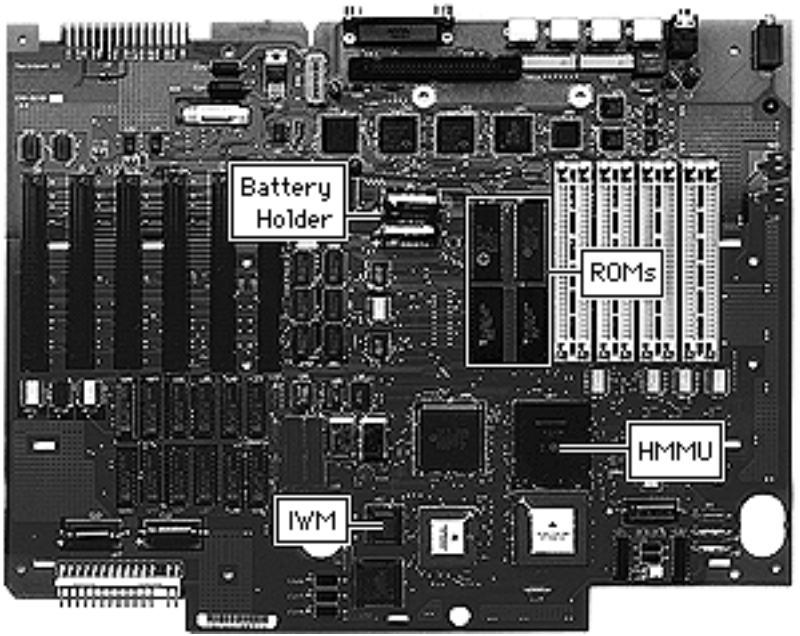


The logic board has a 68LC040 microprocessor in the location indicated.

Disconnect the battery before returning the logic board to Apple.

Return the logic board without DRAM SIMMs.

Mac II Logic Board **661-0374**



When you return P/N 661-0374, Apple ships you P/N 661-0528.

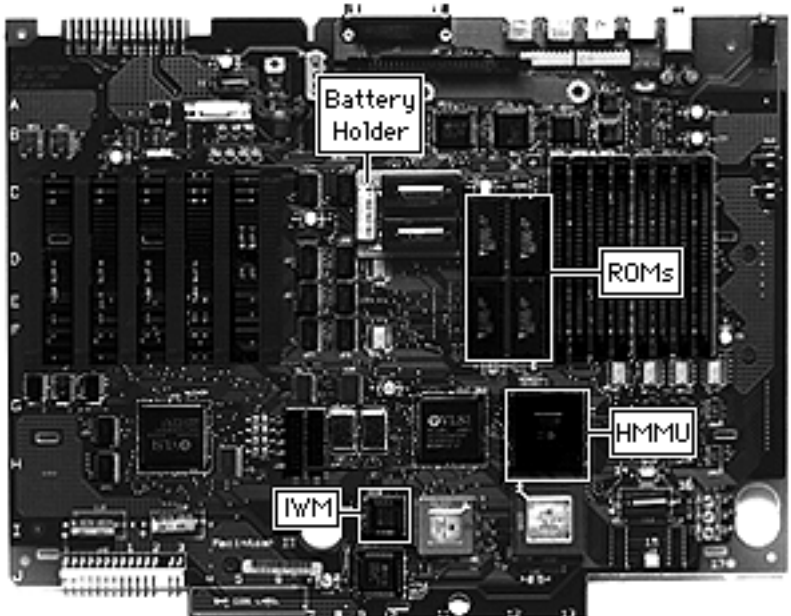
Return the logic board with the four ROMs, the IWM chip, and the HMMU chip. Remove the RAM SIMMs, the on-off switch, and the EMI shield before returning the board to Apple.

For upgrades: If the Macintosh II logic board

contains a PMMU upgrade (P/N 630-8221) or an Apple SuperDrive upgrade (P/N 344S0062) which includes a SWIM chip and the four ROM chips (P/Ns 342-0639, 342-0640, 342-0641, and 342-0642), transfer the upgraded components onto the customer's new logic board. Install the displaced components on the failed logic board.

You can return the logic board with a battery holder board (as shown above) or with soldered bat

Mac II Logic Board **661-0528**



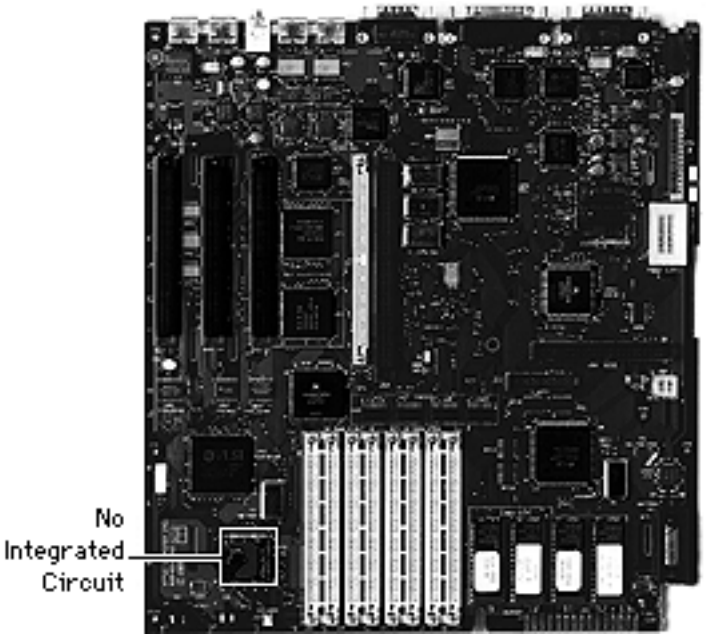
Return the logic board with the four ROMs, the IWM chip, and the HMMU chip in place. Remove the RAM SIMMs, the on-off switch, and the EMI shield before returning the board to Apple.

For upgrades: If the Macintosh II logic board contains a PMMU upgrade (P/N 630-8221) or an Apple SuperDrive upgrade

(P/N 344S0062), which includes a SWIM chip and four ROM chips (P/Ns 342-0639, 342-0640, 342-0641, and 342-0642), transfer the upgrade components onto the customer's new logic board. Install the displaced components on the defective logic board.

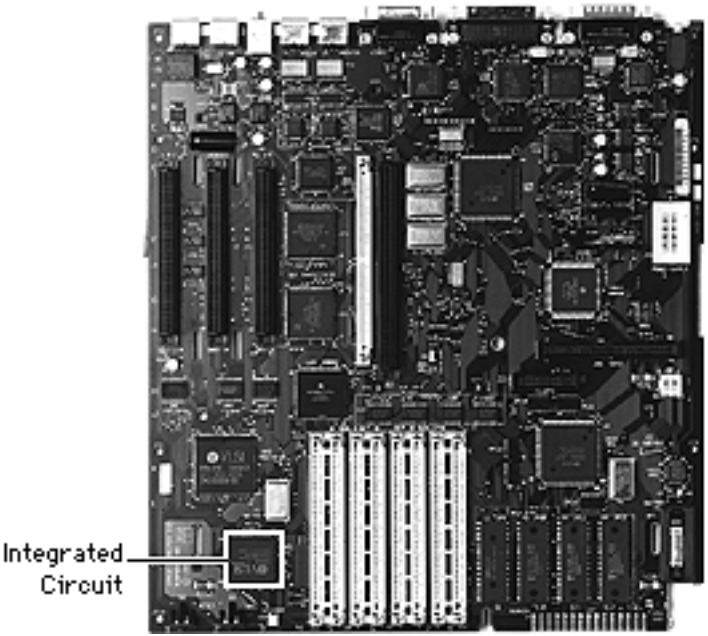
You can return the logic board with a battery holder board (as shown above) or with soldered batteries.

Mac IIci Logic Board **661-0532**



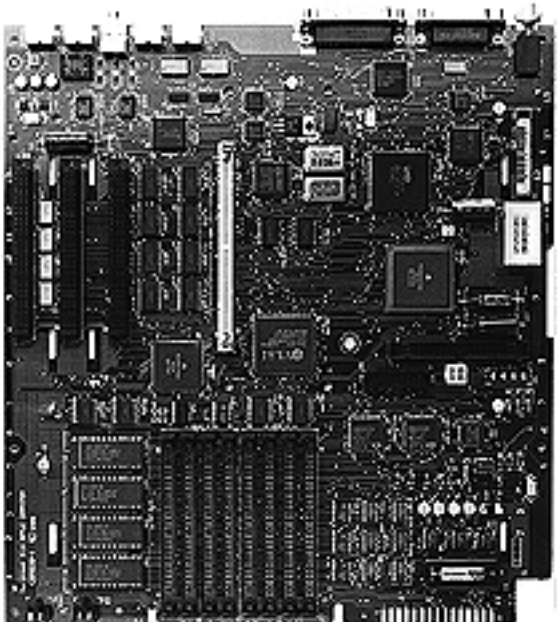
You can distinguish this board from the parity logic board by the absence of an integrated circuit at the location indicated.

Mac IIci Logic Board, with Parity **661-0583**



You can distinguish this board from the nonparity logic board by the presence of an integrated circuit at the location indicated.

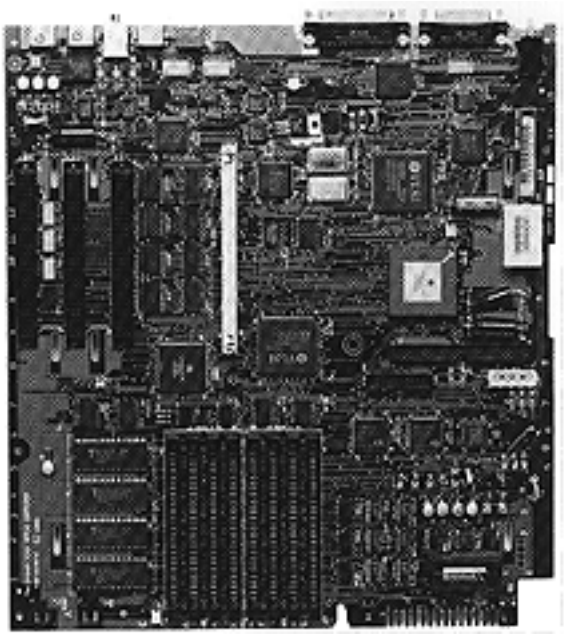
Mac IIcx Logic Board **661-0459**



When you return P/N 661-0459, Apple ships you P/N 661-0537.

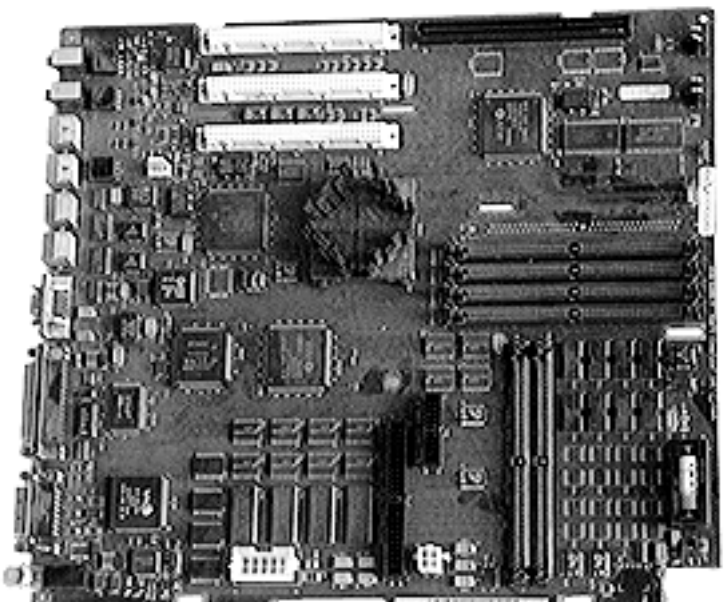
Return the Macintosh IIcx logic board without RAM SIMMs.

Mac IIcx Logic Board **661-0537**

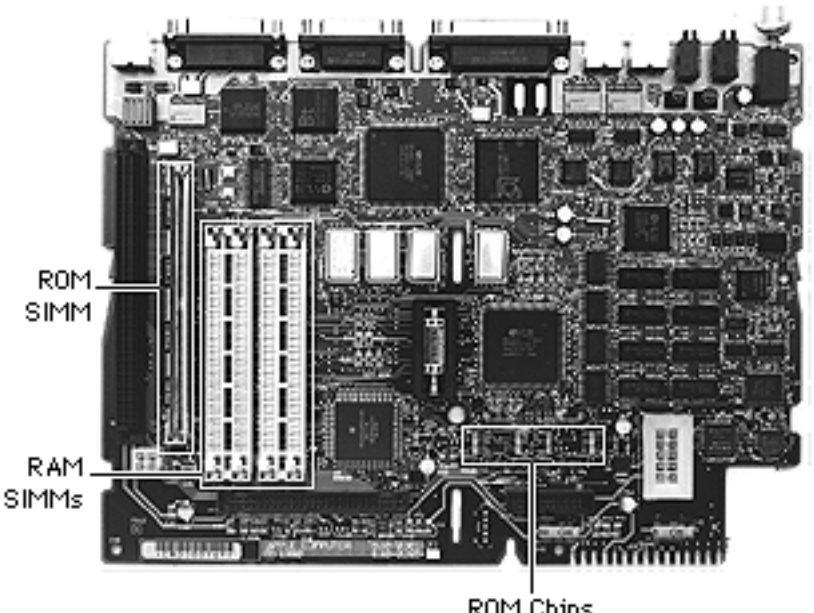


Return the Macintosh IIcx logic board without RAM SIMMs.

Mac IIfx Logic Board **661-0522**



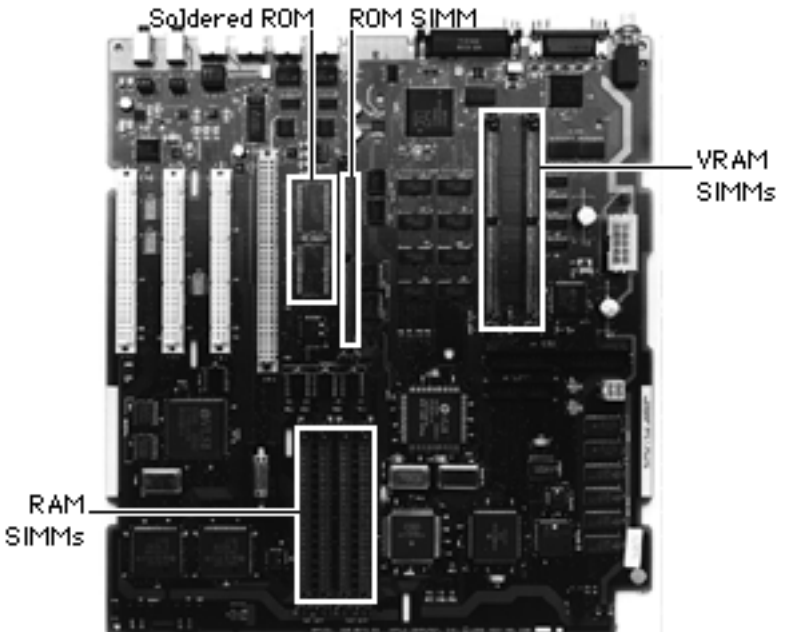
Mac IIsi Logic Board **661-1615**



Return the Macintosh IIsi logic board without RAM SIMMs.

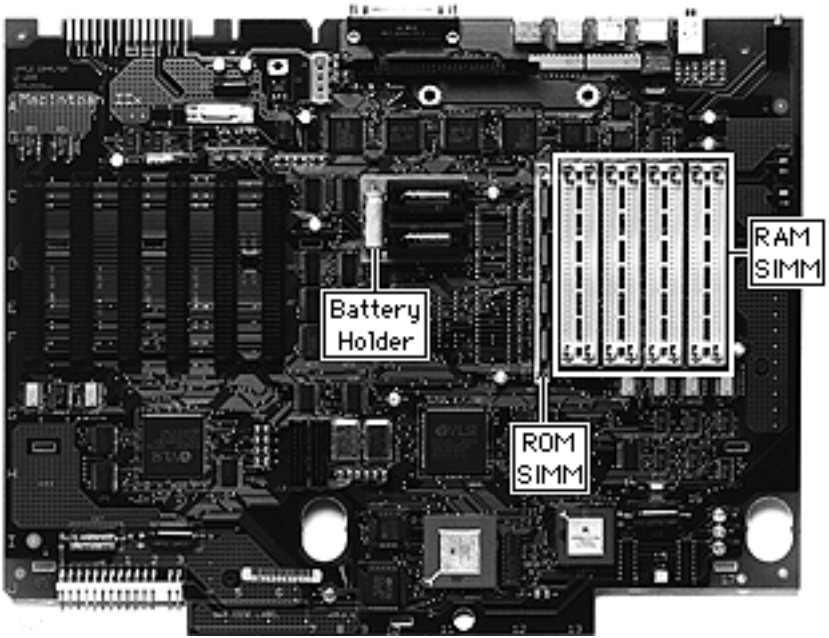
The logic board includes either a 64-pin ROM SIMM or two ROM chips. These ROM configurations are functionally identical. The ROM chips are soldered to the board. The ROM SIMM must remain on the board when you return the board to Apple.

Mac IIvx Logic Board **661-0759**



Return the Macintosh IIvx logic board without RAM or VRAM SIMMs. If the ROM SIMM is present, it must be returned with the board.

Mac IIx Logic Board **661-0529**



Remove RAM SIMMs, on-off switch, and EMI shield before returning the board to Apple. Leave the ROM SIMM in place.

You can return the logic board with a battery holder board or with soldered batteries.

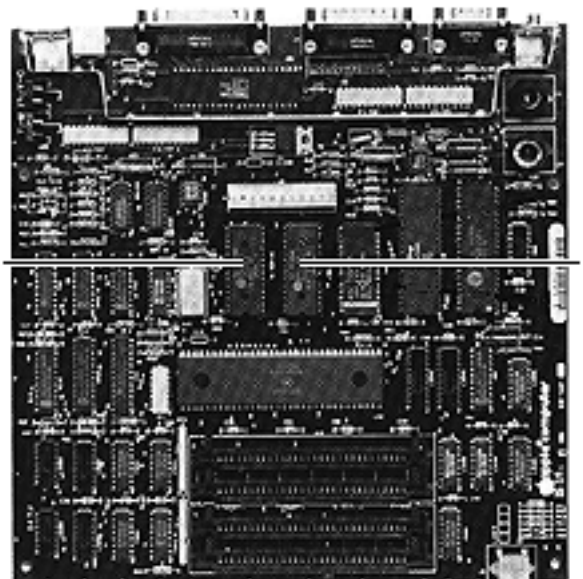
Mac IIx Logic Board **661-0463**

When you return P/N 661-0463, Apple ships you P/N 661-0529.

Remove the on-off switch, EMI shield, and RAM SIMMs before returning the board to Apple.

You can return the logic board with a battery holder board (as shown above) or with soldered batteries.

Mac Plus Logic Board **661-0525**



Return the Macintosh Plus logic board with **both** high and low boot ROMs installed. You must install the boot ROMs in the **correct version combinations**. The only acceptable combinations are:

High-Boot ROM

342-0341-A

342-0341-B

342-0341-C

Low-Boot ROM

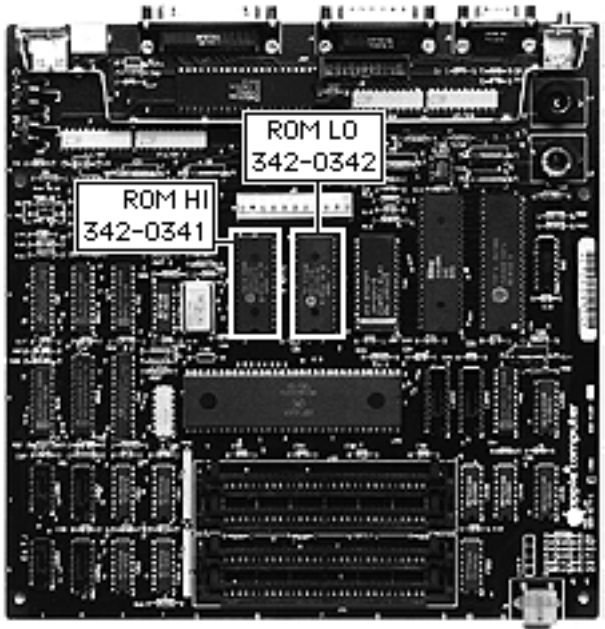
342-0342-A

342-0342-A

342-0342-B

If either or both boot ROMs are missing, or if you install the ROMs with incorrect version combinations, the logic board is not acceptable.Return the Macintosh Plus logic board without RAM SIMMs.

Mac Plus Logic Board **661-0321**



When you return P/N 661-0321, Apple ships you P/N 661-0525.

Return the Macintosh Plus logic board with **both** high and low boot ROMs installed. You must install the boot ROMs in the **correct version combinations.** The only acceptable combinations are:

High-Boot ROM
342-0341-A

342-0341-B
342-0341-C

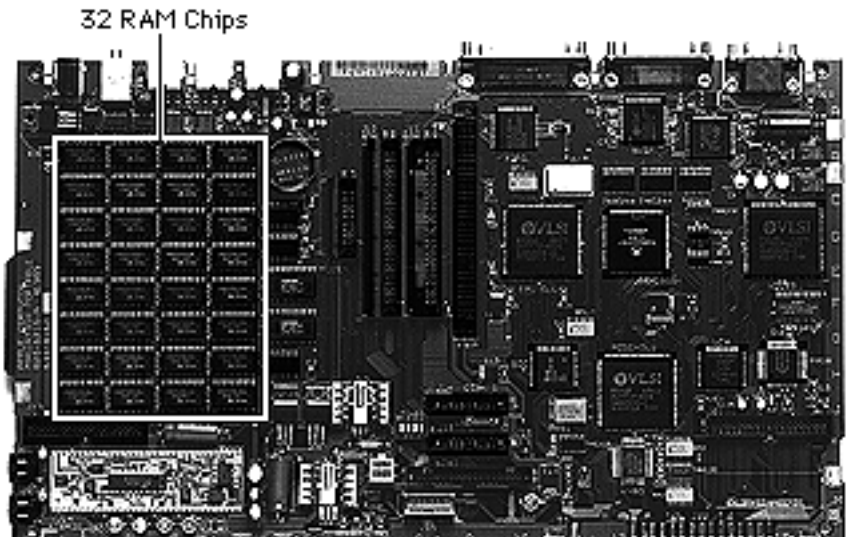
Low-Boot ROM

342-0342-A
342-0342-A
342-0342-B

If either or both boot ROMs are missing, or if you install the ROMs in incorrect version combinations, the logic board is not acceptable.

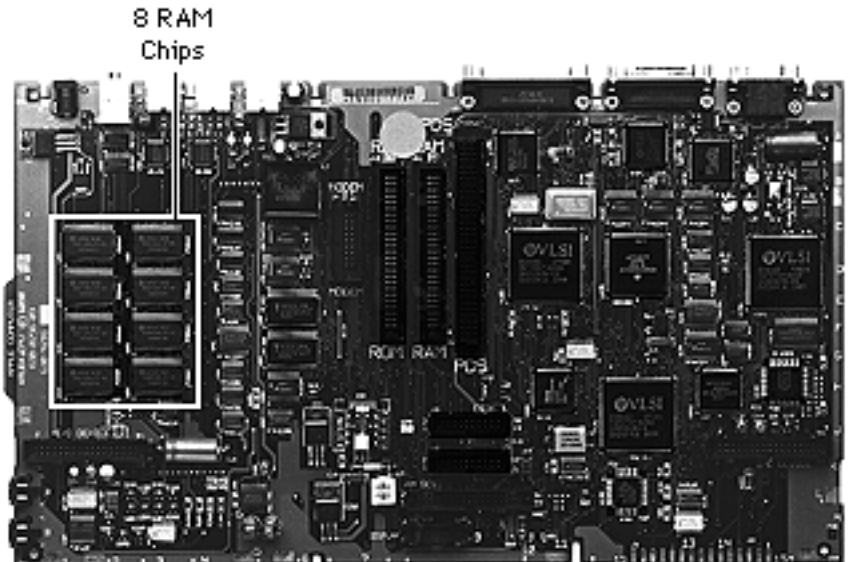
Return the Macintosh Plus logic board without RAM SIMMs.

Mac Portable Logic Board **661-0470**

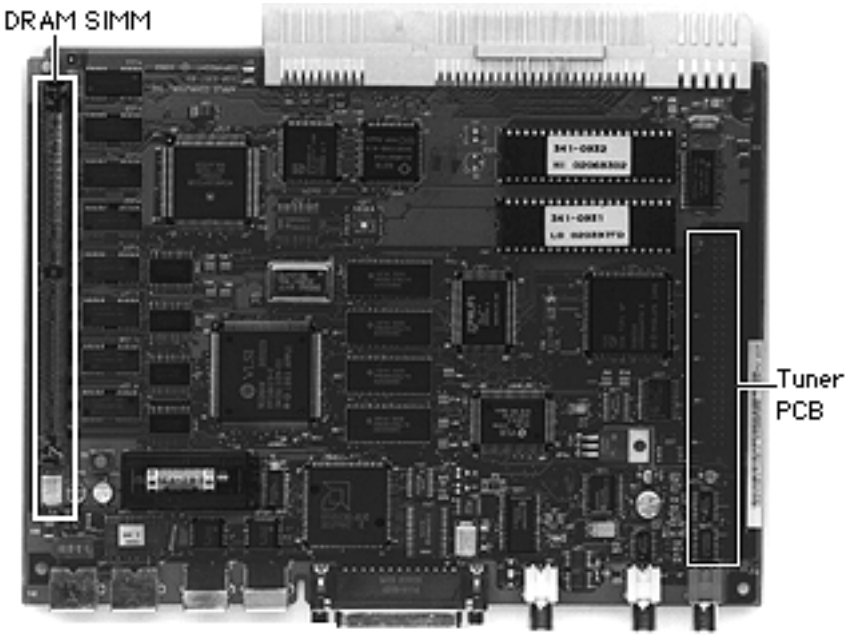


This board has 32 RAM chips.

Mac Portable Logic Board, PSRAM **661-1610**

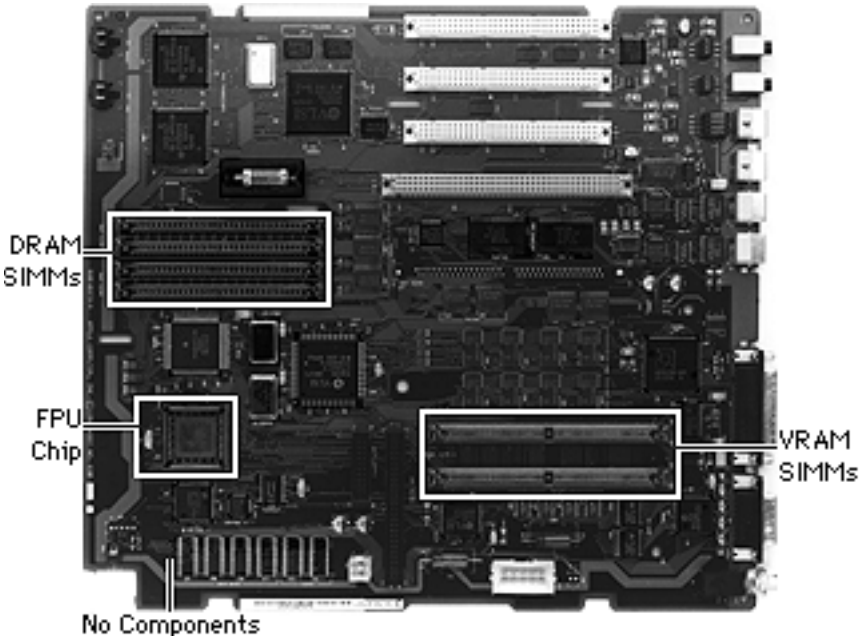


Mac TV Logic Board **661-1724**



Remove the DRAM SIMMs, VRAM SIMMs and tuner printed circuit board before returning the logic board.

Performa 600 Logic Board **661-0761**



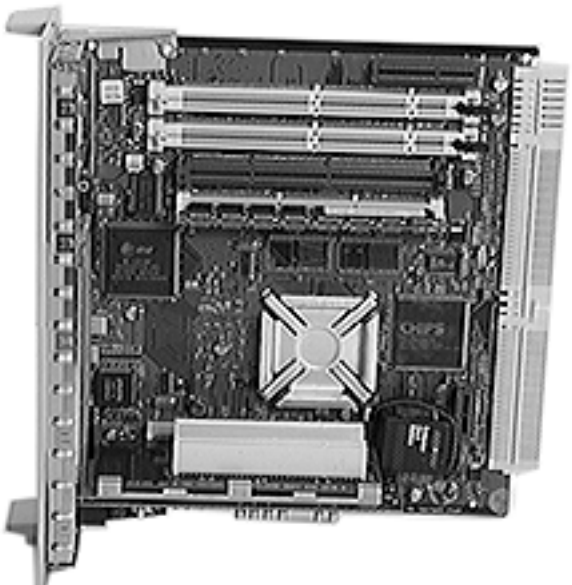
Return the logic board without DRAM or VRAM SIMMs.

The Performa 600 logic board does not have components in the location indicated.

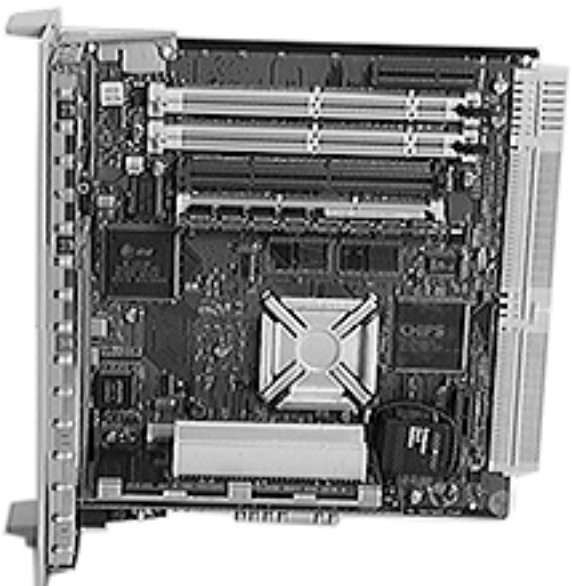
If the Performa 600 logic board has an FPU chip, move it to the replacement board.

Performa 6320 Logic Board, 120 Mhz **661-1175**

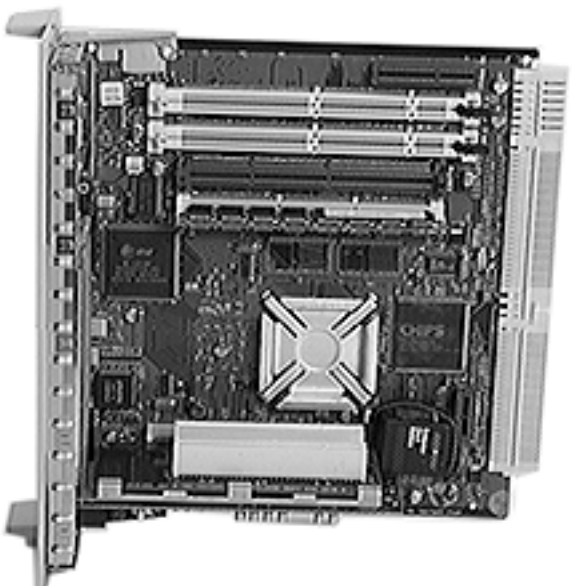
Performa/PM 6400 Series Logic Board, 603ev, 8mb, 180Mhz **661-1199**
(Replaced by 661-1199)



Performa 6400 Series Logic Board, 603ev, 8mb, 160Mhz **661-1201**

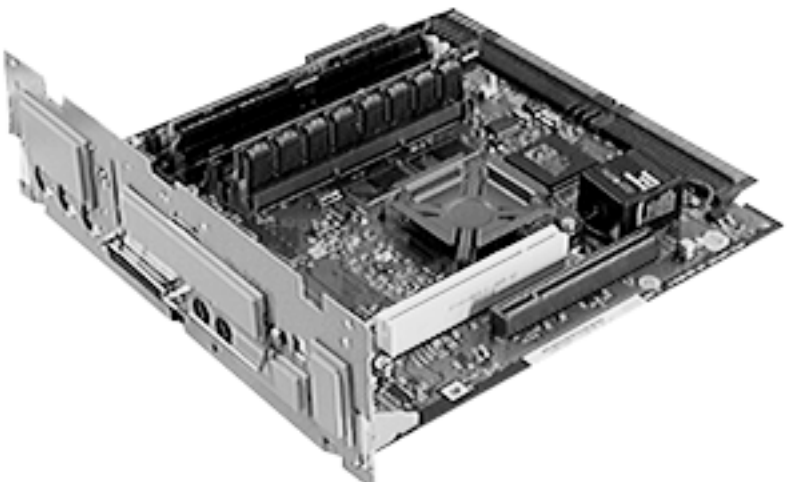


Performa 6400 Series Logic Board, 603ev, 8mb, 200Mhz **661-1271**

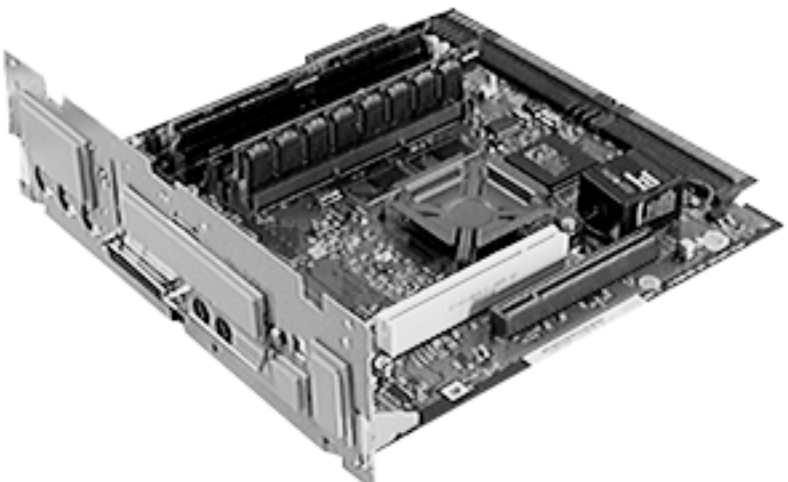


Performa 6400 Series Logic Board, 603ev, 200Mhz, with EDO **661-1325**

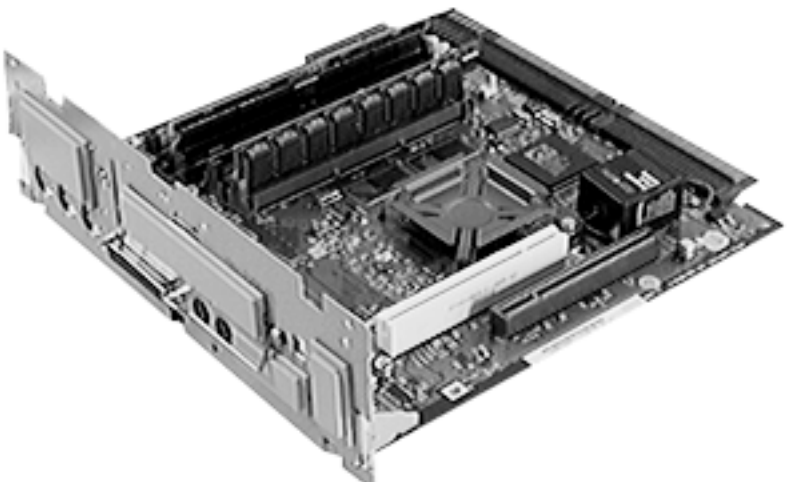
PM 5500/6500 Series Logic Board, 603e, 225Mhz **661-1322**



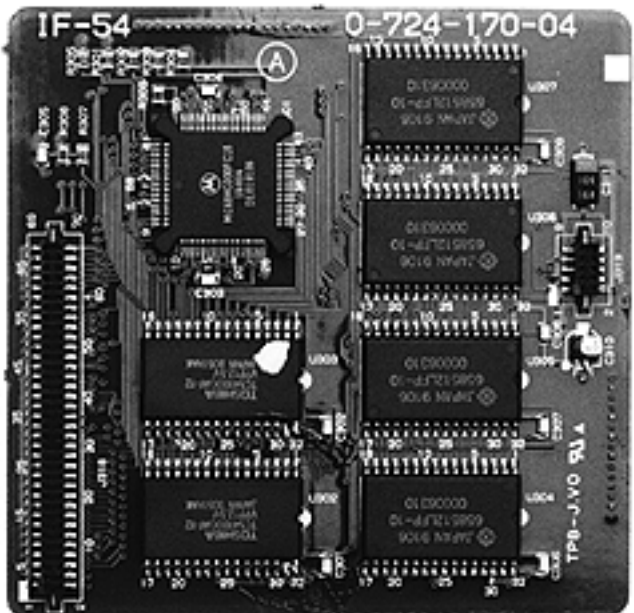
PM 6500 Series Logic Board, 603e, 250 MHz **661-1332**



PM 6500 Series Logic Board, 603e, 275 MHz **661-1320**



PowerBook 100 Daughterboard **661-0674**

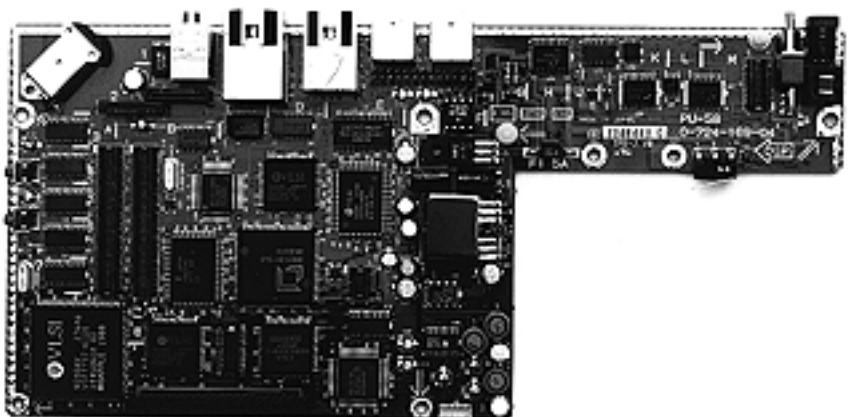


The PowerBook 180c daughterboard has heat sinks over the keystone chip and the 68030 processor. Missing or damaged heat sinks must be replaced. Use the heat sink kit listed in the PowerBook Service Price Pages.

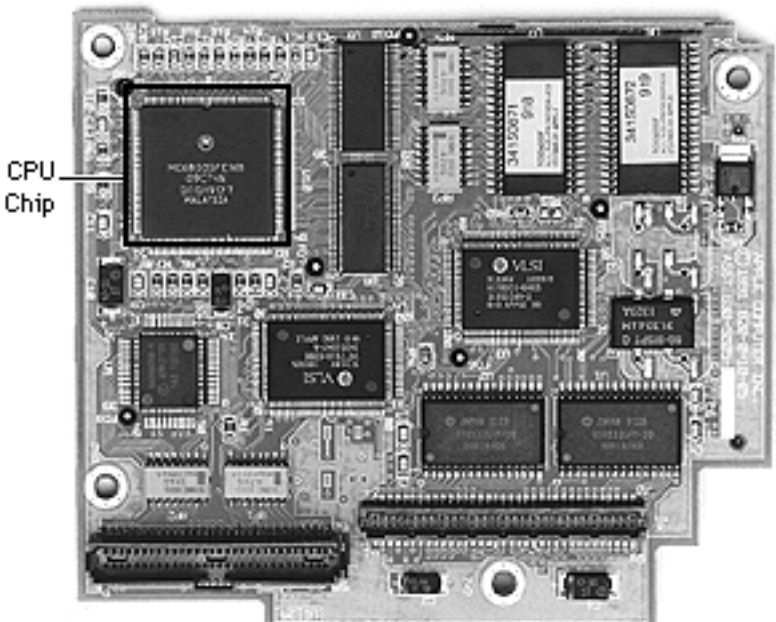
The PowerBook 180c and165c daughterboards look similar.

Both have a connector to hold the cousin card; however, the PowerBook 180c daughterboard does not have a flat-panel display IC (WD90C55) at location U12.

PowerBook 100 Motherboard **661-0673**

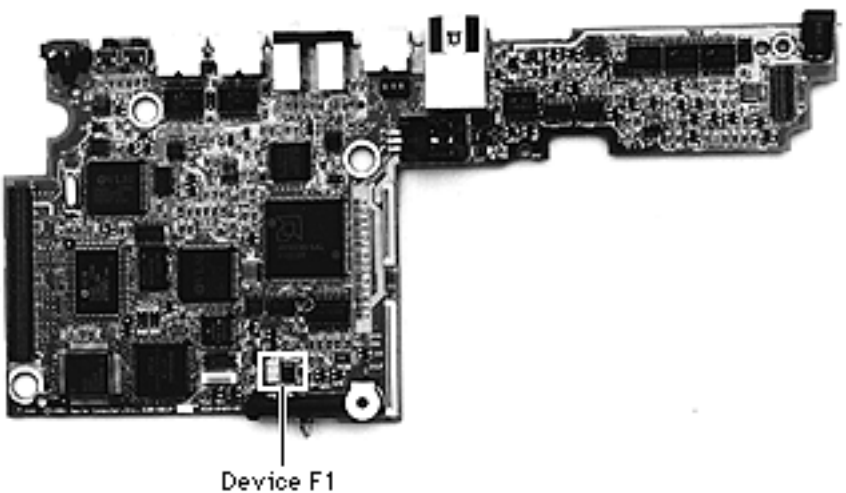


PowerBook 140 Daughterboard **661-0707**



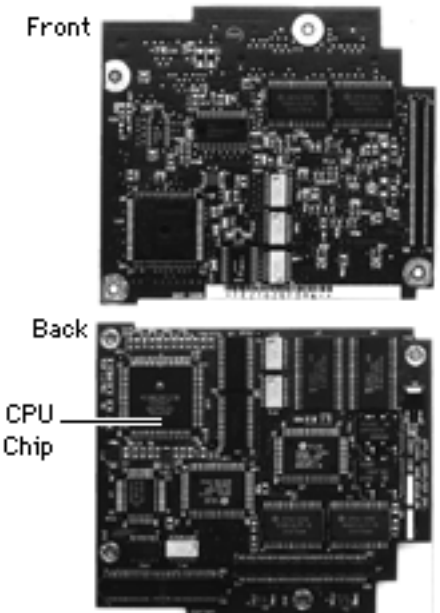
The PowerBook 140, 145, and 170 daughterboards are similar. You can identify the PowerBook 140 daughterboard by the number 16 in the CPU chip part number and by the absence of a 68882 chip on the underside.

PowerBook 140/145/170 Motherboard **661-0708**



The fuse on device F1 can be soldered to the board or in a fuse holder. Check the fuse before replacing the motherboard when failure symptoms suggest a damaged or blown fuse.

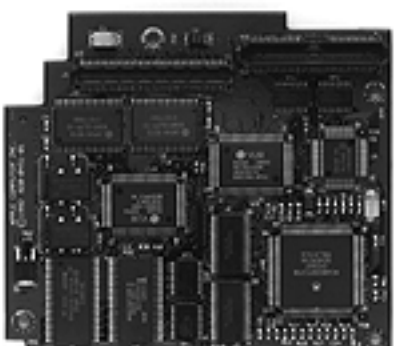
PowerBook 145 Daughterboard **661-0788**



The PowerBook 140, 145, and 170 daughterboards are similar. You can identify the PowerBook 145 daughterboard by the number 25 in the CPU chip part number and by the absence of a 68882 chip on the underside.

PowerBook 145B Daughterboard **661-1715**

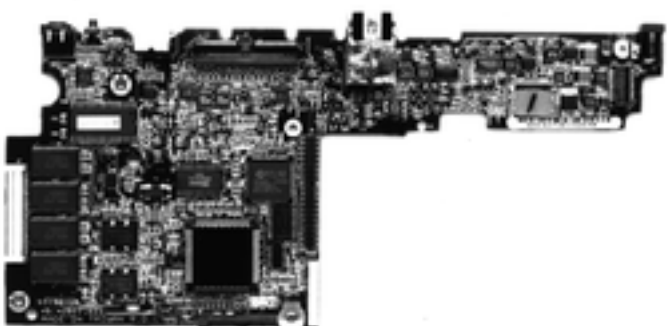
Top



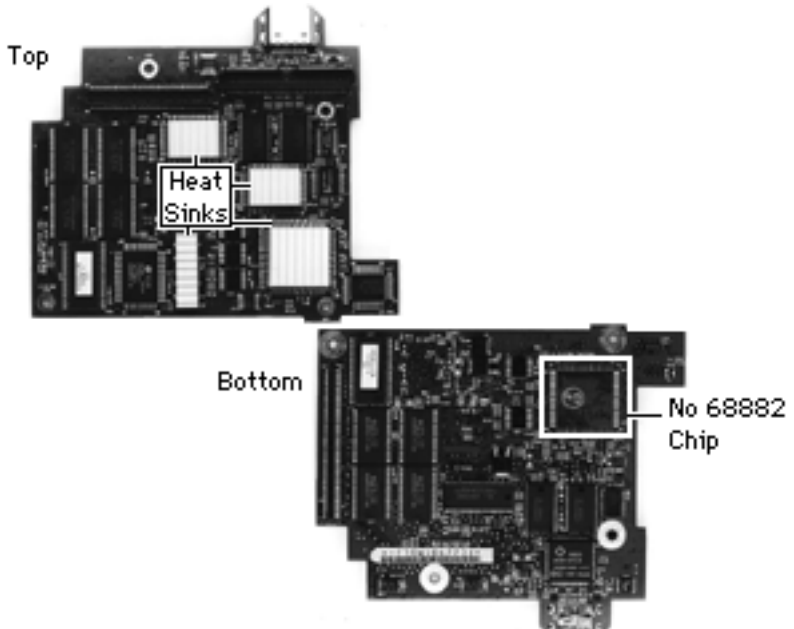
Bottom

PowerBook 150 Logic Board, Motherboard **661-0140**

Return the logic board without DRAM SIMMs.



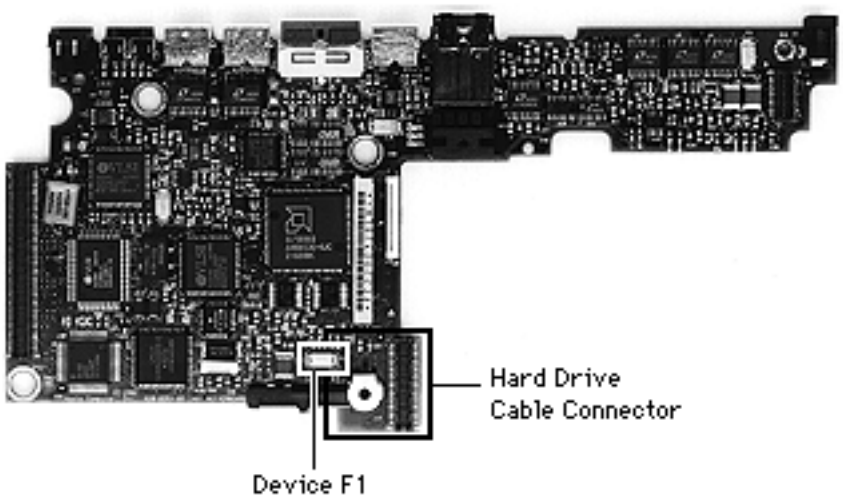
PowerBook 160 Daughterboard **661-0744**



If any of the chromeric heat sinks is missing, return the module to Apple for exchange.

The PowerBook 160 and 180 daughterboards look similar. You can identify the PowerBook 160 daughterboard by the absence of a 68882 chip on the underside.

PowerBook 160/165/180 Motherboard **661-0746**

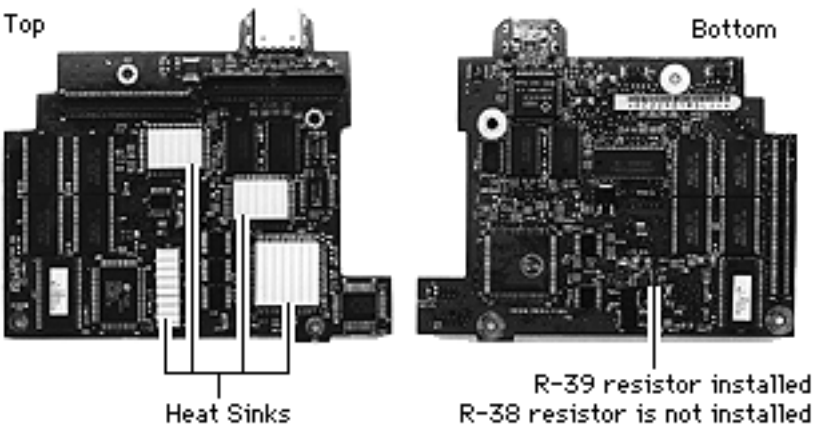


The PowerBook 160/165/180 motherboard and the PowerBook 140/145/170 motherboard are similar. The PowerBook 160/165/180 motherboard is extended at the hard drive cable connector.

The fuse on device F1 can be soldered to the board or in a fuse holder.

Check the fuse before replacing the motherboard when failure symptoms suggest a damaged or blown fuse.

PowerBook 165 Daughterboard **661-1016**

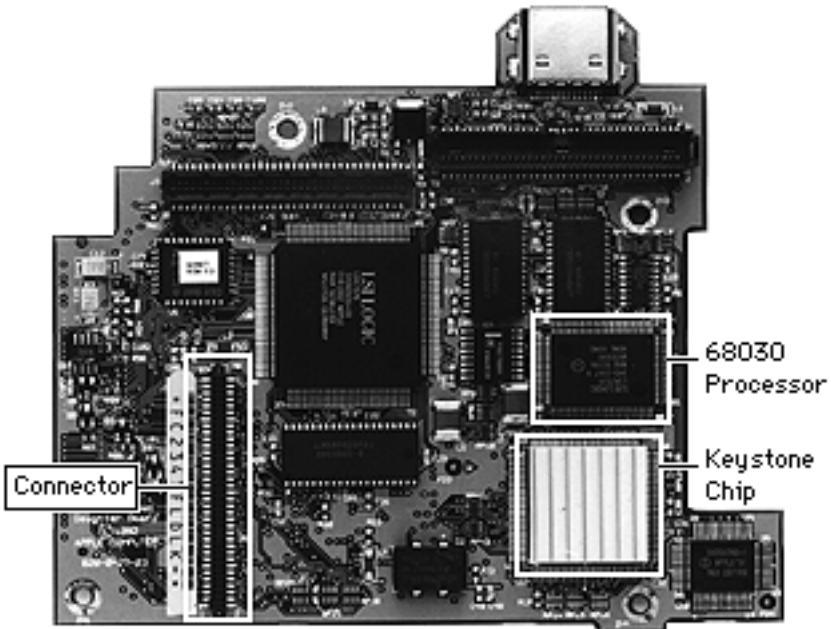


If any of the chromeric heat sinks is missing, return module to Apple for exchange.

The PowerBook 160, 165, and 180 daughterboards look similar. To identify the PowerBook 165 daughterboard, check the underside of the board for resistors R-38 and R-39.

On the PowerBook 165 daughterboard, resistor R-39 is installed and resistor R-38 is missing.

PowerBook 165c Daughterboard **661-0751**

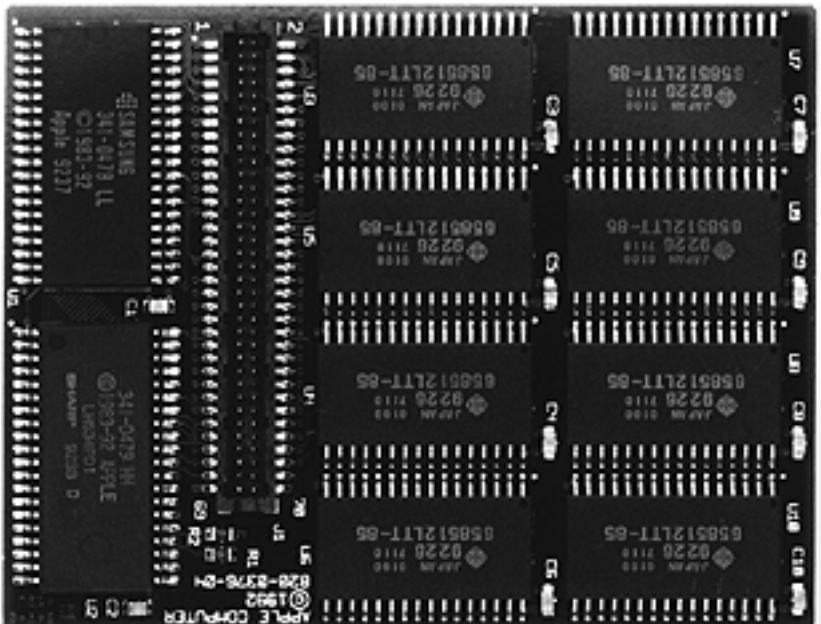


The PowerBook 165c daughterboard has heat sinks over the keystone chip and the 68030 processor. Missing or damaged heat sinks must be replaced. Use the heat sink kit listed in the PowerBook Service Price Pages.

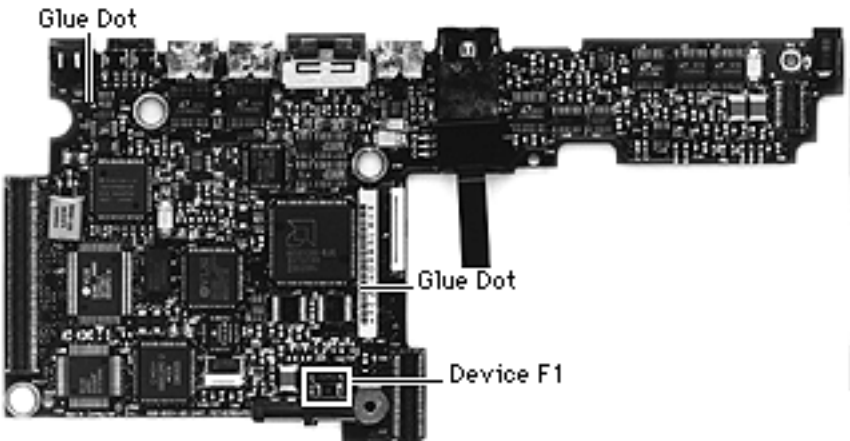
The PowerBook 165c and 180c daughterboards look similar.

Both have a connector to hold the cousin card; however, only the PowerBook 165c daughterboard has a flat-panel display IC (WD90C55) at location U12.

PowerBook 165c/180c Cousin Card **661-0755**



PowerBook 165c/180c Motherboard **661-0765**



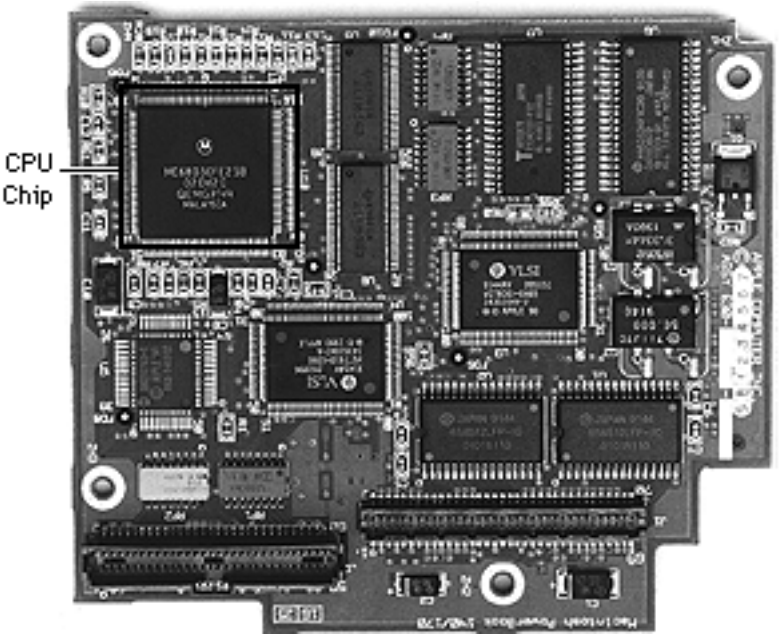
The PowerBook 165c/180c and 160/180 motherboards are similar. You can identify the PowerBook 165c/180c motherboard by the presence of two glue dots.

The fuse on device F1 can be soldered to the board or in a fuse holder.

Check the fuse before

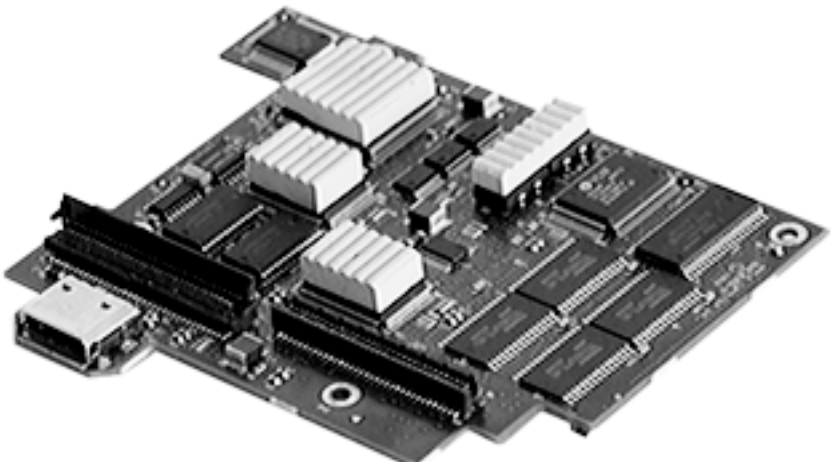
replacing the motherboard when failure symptoms suggest a damaged or blown fuse.

PowerBook 170 Daughterboard **661-0709**



The PowerBook 140, 145, and 170 daughterboards are similar. You can identify the PowerBook 170 daughterboard by the number 25 in the CPU chip part number and by the presence of a 68882 chip on the underside.

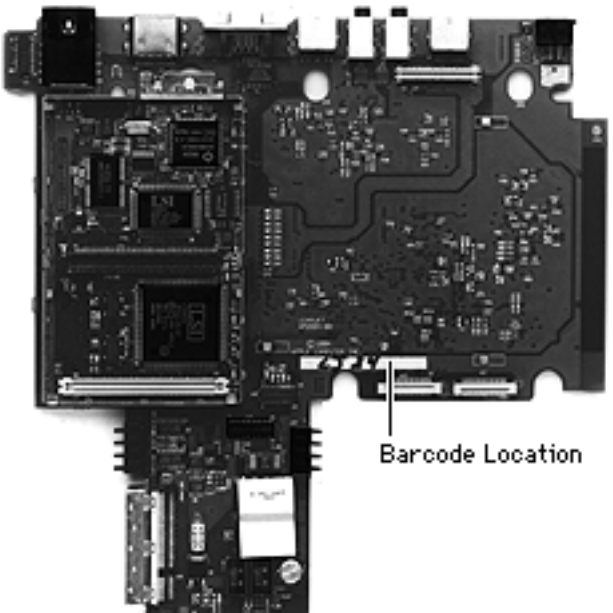
PowerBook 180 Daughterboard **661-0747**



Missing or damaged heat sinks must be replaced. Use the heat sink kit listed in the PowerBook Service Price Pages.

The PowerBook 180 and 160 daughterboards are similar. You can identify the PowerBook 180 daughterboard by the presence of a 68882 chip on the underside.

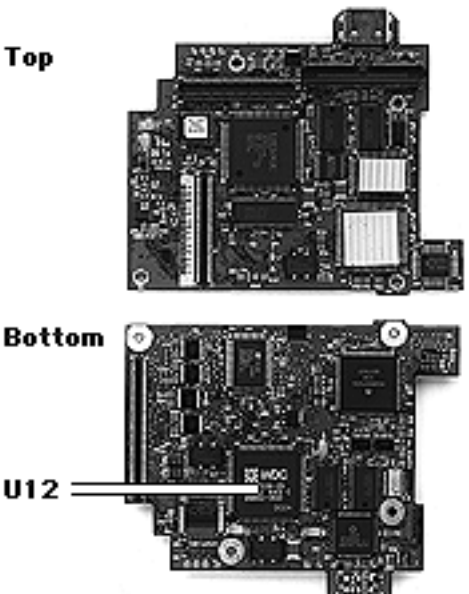
PowerBook 180 Motherboard, Rev. B **661-0108**



This is the Rev. B board.

The PowerBook 520/ 540 Series Rev. A and Rev. B motherboards are similar. The Rev. B motherboard has multiple components mounted in the area under the floppy drive. The Rev. A motherboard does not have any components mounted under the floppy drive.

PowerBook 180c Daughterboard **661-0684**



The PowerBook 180c daughterboard has heat sinks over the keystone chip and the 68030 processor. Missing or damaged heat sinks must be replaced. Use the heat sink kit listed in the PowerBook Service Price Pages.

The PowerBook 180c and 165c daughterboards look similar.

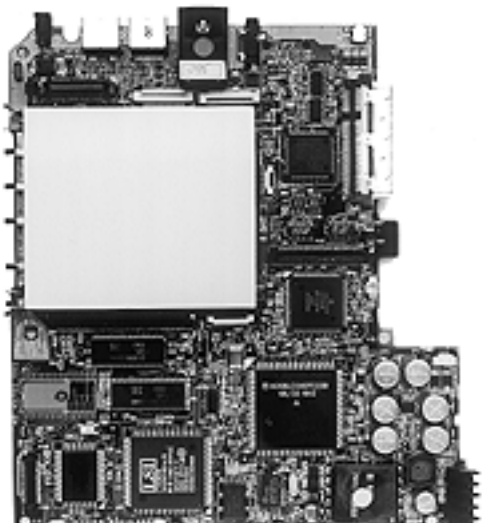
Both have a connector to hold the cousin card; however, the PowerBook 180c daughterboard does not have a flat-panel display IC (WD90C55) at location U12.

Use the chip locations listed below to visually identify PowerBook 190 logic boards:

661-0154 (4MB board)
On the bottom side of the logic board, chip locations U9 and U26 will be empty.

661-1029 (8MB board)
On the bottom side of the logic board, chip locations U9 and U26 will be stuffed.

PowerBook 190 Logic Board, 040, 33 MHz, 4 MB **661-0154**



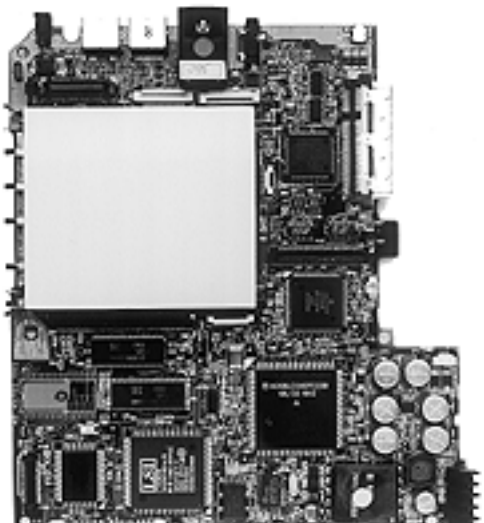
Use the chip locations listed below to visually identify PowerBook 190 logic boards:

661-0154 (4MB board) On the bottom side of the logic board, chip locations U9 and U26 will be empty.

661-1029 (8MB board) Chip locations U9 and U26 on the back of the logic board, and chip locations U10 and

U30 on the front of the logic board will be stuffed.

PowerBook 190 Logic Board, 040, 33 MHz, 8 MB **661-1029**



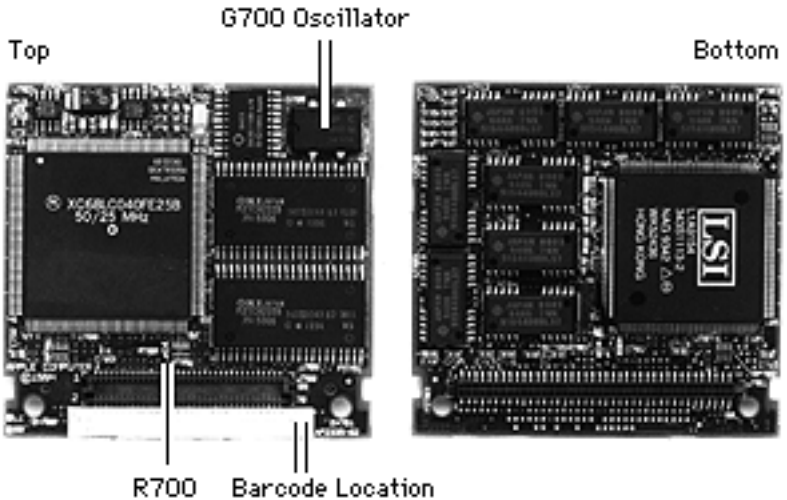
Use the chip locations listed below to visually identify PowerBook 190 logic boards:

661-0154 (4MB board) On the bottom side of the logic board, chip locations U9 and U26 will be empty.

661-1029 (8MB board) Chip locations U9 and U26 on the back of the logic board, and chip locations U10 and

U30 on the front of the logic board will be stuffed.

PowerBook 520/520c Daughterboard, 25 MHz, Rev. B **661-0122**



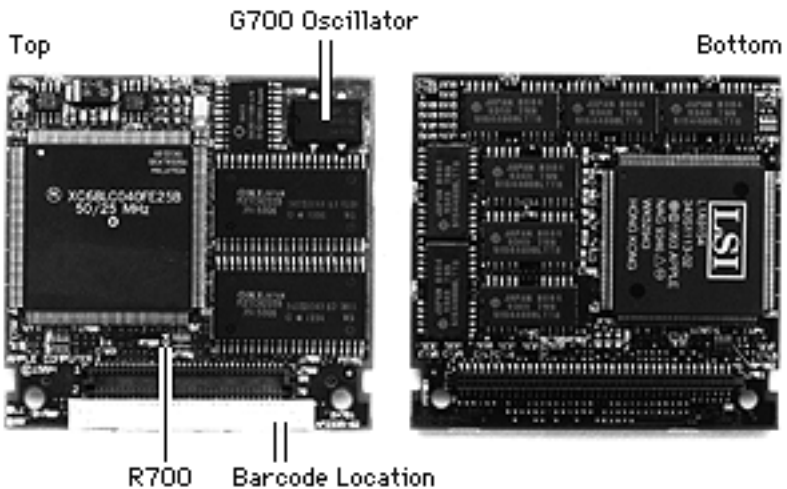
Some Power Book 520 and 520c 25 MHz daughterboards are labeled as 33 MHz boards. The presence of one or more of the following conditions identifies the daughterboard as a 25 MHz board:

- a resistor in the R700 location
- a black line through the 66/33 MHz printing on the

microprocessor
- a 12.5 MHz oscillator installed at location G700

To differentiate the Rev. A 25 MHz daughterboard from the Rev. B 25 MHz daughterboard, check the barcode serial\number label. The last three characters on the Rev. A 25 MHz daughterboard are 11X. Any other characters designate a Rev. B board.

PowerBook 520/520c Daughterboard, 25MHz, Rev. A **661-0059**



Some Power Book 520 and 520c 25 MHz daughterboards are labeled as 33 MHz boards. The presence of one or more of the following conditions identifies the daughterboard as a 25 MHz board:

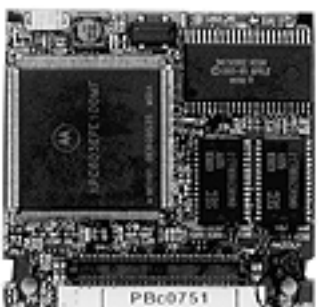
- a resistor in the R700 location
- a black line through the 66/33 MHz printing on the

microprocessor
- a 12.5 MHz oscillator installed at location G700

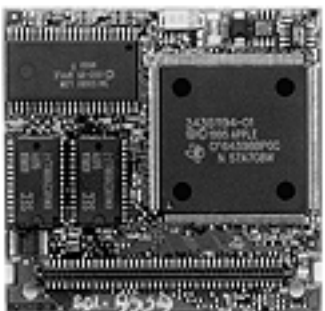
To differentiate the Rev. A 25 MHz daughterboard from the Rev. B 25 MHz daughterboard, check the barcode serial\number label. The last three characters on the Rev. A 25 MHz daughterboard are 11X. Any other characters designate a Rev. B board.

PowerBook 520/540 Series Daughterboard, 603e **661-0151**

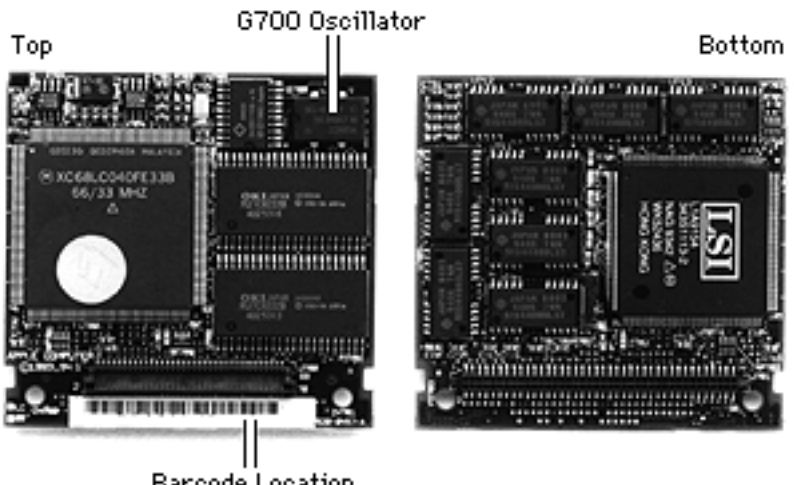
Top



Bottom



PowerBook 540/540c Daughterboard, 33MHz, Rev. B **661-0109**

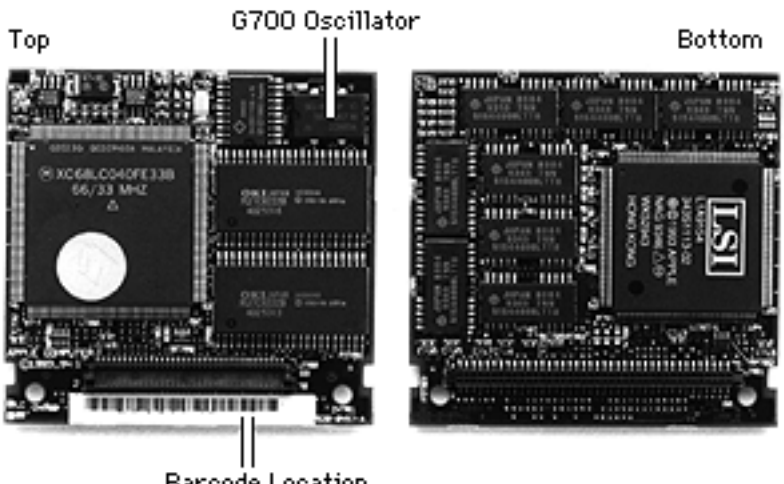


The 540/540c daughterboards have the number 16.667 on the oscillator at location G700. The 520/520c daughterboards have the number 12.500 printed on the oscillator at location G700.

The PowerBook 540/ 540c Rev. B and Rev. A daughterboards are similar.

To differentiate the Rev. B 33 MHz daughterboard from the Rev. A 33 MHz daughterboard, check the last three characters on the barcode serial number label. The number on the Rev. A 33 MHz daughterboard should be 273. Any other serial number designates a Rev. B board.

PowerBook 540/540c Logic Board, 2 MB **661-0057**

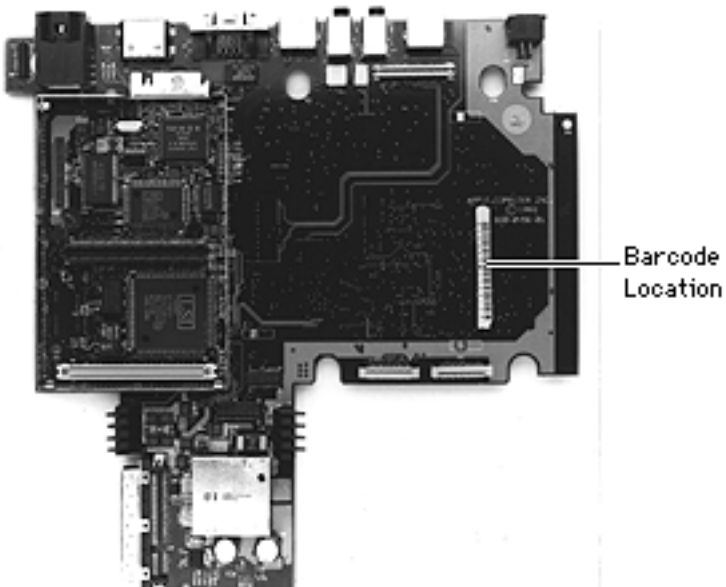


The 540/540c daughterboards have the number 16.667 on the oscillator at location G700. The 520/520c daughterboards have the number 12.500 printed on the oscillator at location G700.

The PowerBook 540/ 540c Rev. A and Rev. B daughterboards are similar. To differentiate the Rev. A 33 MHz daughterboard

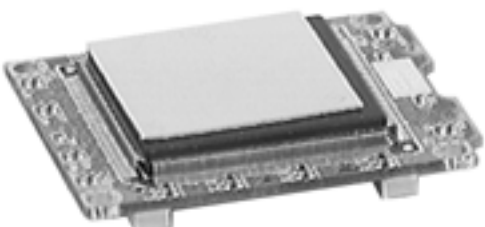
from the Rev. B 33 MHz daughterboard, check the last three characters on the barcode serial number label. The number on the Rev. A 33 MHz daughterboard should be 273. Any other serial number designates a Rev. B board.

PowerBook 520/540 Series Motherboard, Rev. A **661-0054**



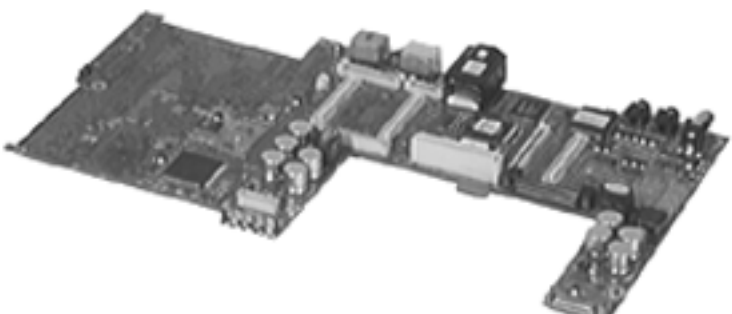
The PowerBook 520/540 Series Rev. A and Rev. B motherboards are similar. The PowerBook 520/540 Series Rev. A motherboard does not have any components mounted in the area under the floppy drive. The PowerBook 520/540 Series Rev. B motherboard has multiple components mounted under the floppy drive.

PowerBook 1400 Daughterboard, Microprocessor, x117MHz **661-1191**

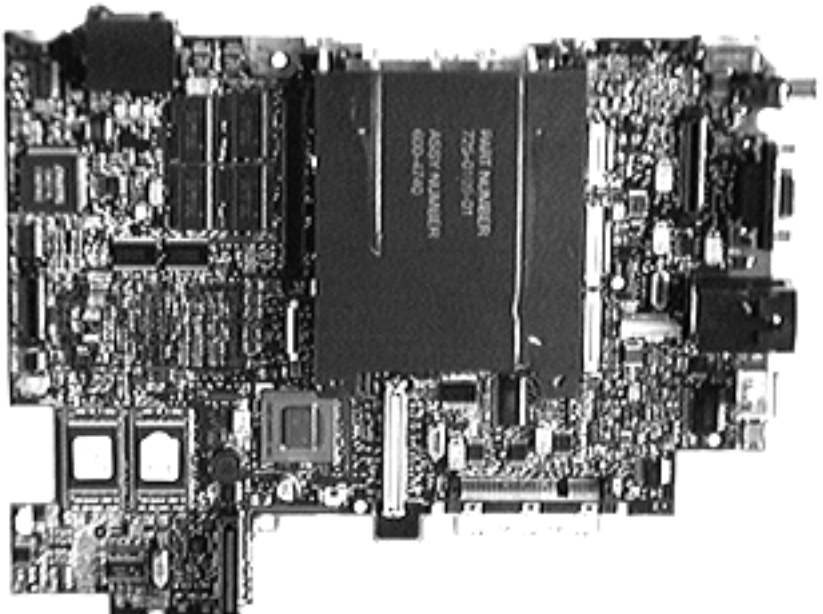


PowerBook 1400 Logic Board, 8 MB **661-1188**

The logic board includes the ADB EMI shield.

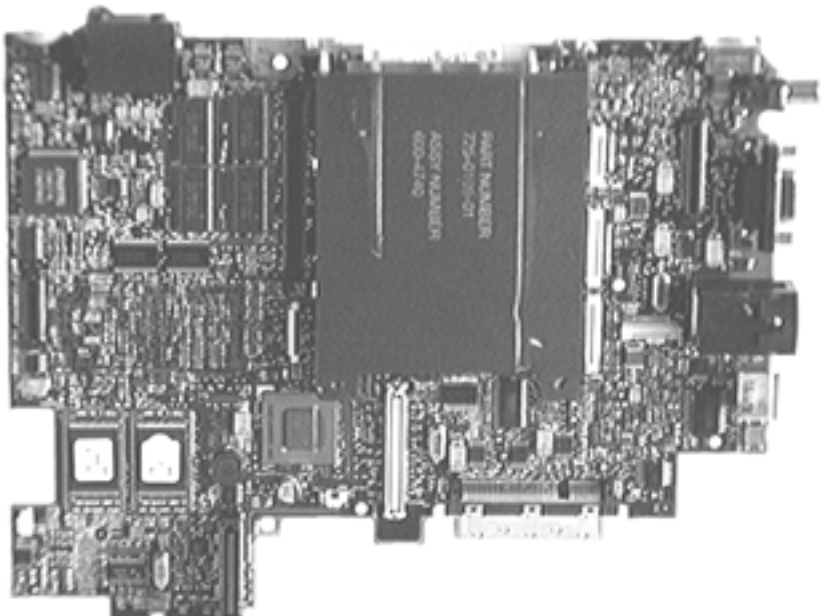


PowerBook 3400 603ev Logic Board, 180 MHz, 16 MB **661-1235**



The logic board includes the PCMCIA mechanism and shield.

PowerBook 3400c 603ev Logic Board, 200 MHz, 16 MB **661-1238**



The logic board includes the PCMCIA mechanism and shield.

PowerBook 5300 Series Logic Board, 603e, 100 MHz, 16 MB, 1 MB, VGA **661-0155**

PowerBook 5300 Series Logic Board, 603e, 100 MHz, 16 MB, 1 MB, VGA **661-0991**

On this Logic Board section U-30 will be stuffed.

The 100MHz Logic Board can be identified by the part number located on the processor; i.e. Motorola / IBM xxxxx100xx.

PowerBook 5300 Series Logic Board, 603e, 100 MHz, 16 MB, 512K **661-0990**

On this Logic Board section U-30 will be empty.

PowerBook 5300 Series Logic Board, 603e, 100 MHZ, 8 MB, 512K **661-0989**

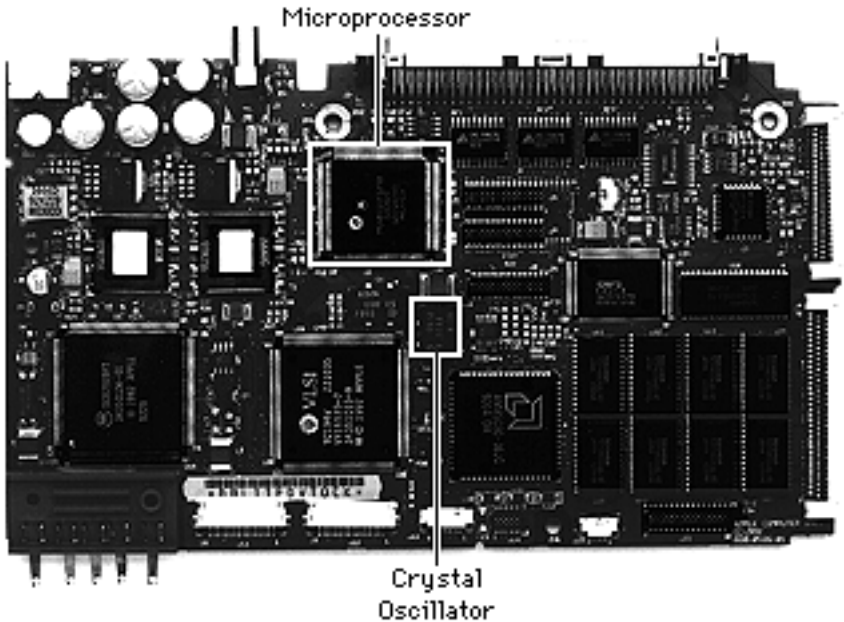
On this Logic Board sections: U-30, U-8, U-9, U-11, U-12 will be empty.

PowerBook 5300 Series Logic Board, 603e, 117 MHz, 16 MB, 1 MB, SVGA **661-0992**

On this Logic Board section U-30 will be stuffed.

The 117MHz Logic Board can be identified by the part number located on the processor; i.e. IBM xxxxx117xx.

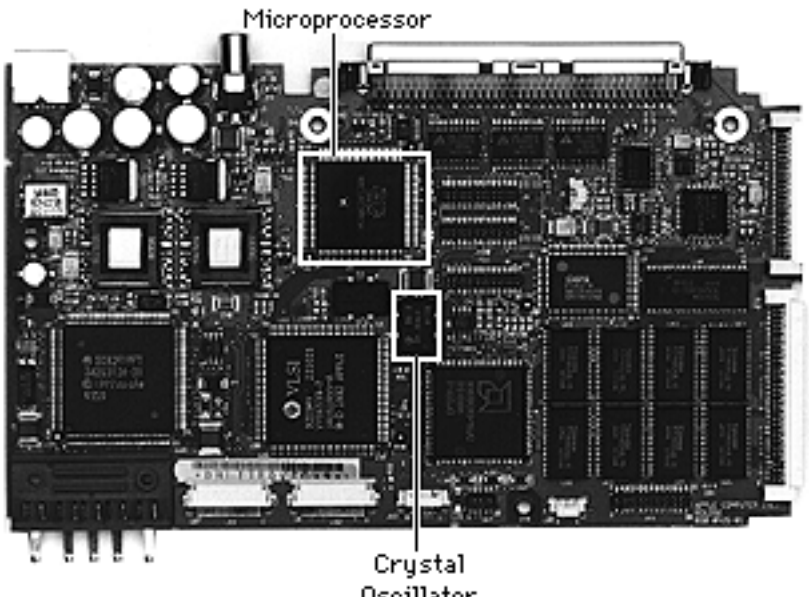
PowerBook Duo 210 Logic Board, 25 MHz **661-1653**



In the U.S., this module is available only to service providers who attend the Macintosh PowerBook Service Course. All other U.S. service providers should contact the Apple toll-free repair hotline, 1-800-SOS-APPL, for return authorization.

The crystal oscillator at location G1 is 50 MHz. The microprocessor at location U5 is 25 MHz.

PowerBook Duo 230 Logic Board, 33 MHz **661-1672**

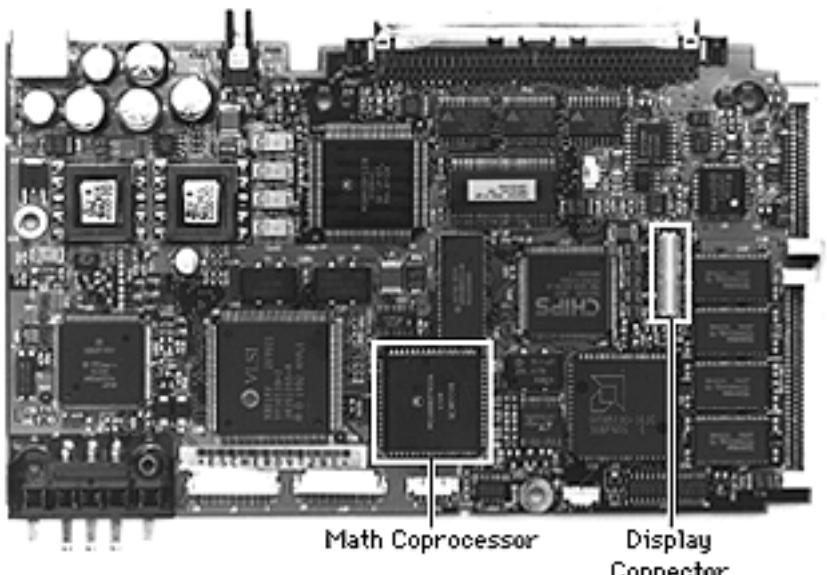


In the U.S., this module is available only to service providers who attend the Macintosh PowerBook Service Course. All other U.S. service providers should contact the Apple toll-free repair hotline, 1-800-SOS-APPL, for return authorization.§

The crystal oscillator at location G1 is 66.6677 MHz.

The microprocessor at location U5 is 33 MHz.

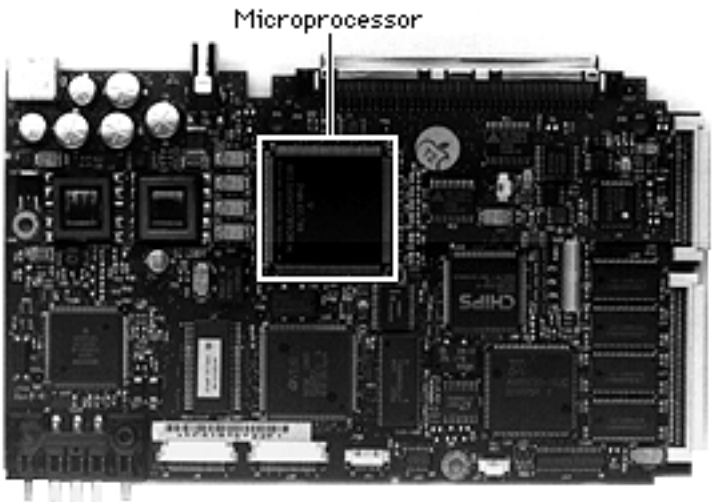
PowerBook Duo 270c Logic Board **661-1717**



The PowerBook Duo 270c logic board has a 68882 math coprocessor. The PowerBook 210/230/250 logic board does not.

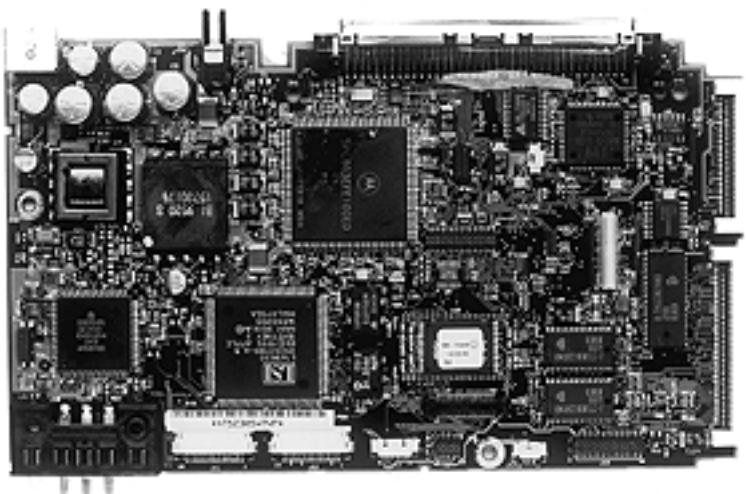
The PowerBook Duo 270c display connector is mounted vertically. The PowerBook Duo 210/230/250 display connector is mounted horizontally.

PowerBook Duo 280/280c Logic Board **661-0051**



The logic board has the part number “XC68LC040FE33B” printed on the microprocessor.

PowerBook Duo 2300c Logic Board, 603e, 100 MHz, 16 MB, 1 MB **661-0153**



This board is an optional upgrade for the Duo 200 Series.

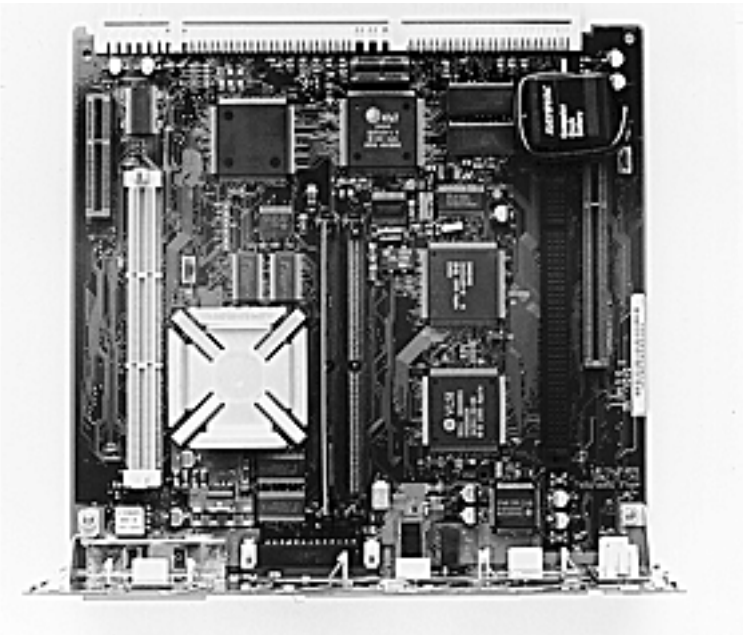
PM/Performa 5200 Series, Performa 6200 Series Logic Board **661-1008**

To differentiate logic board P/N 661-0931 (8-bit sound) from logic board P/N 661-1008 (16-bit sound), check the number printed on the chip at location U6. Number 343S0138 indicates logic board P/N 661-0931. Number 343S1189 indicates logic board P/N 661-1008.

PM/Performa 5200 Series, Performa 6200 Series Logic Board, 75 MHz **661-0931**

To differentiate logic board P/N 661-0931 (8-bit sound) from logic board P/N 661-1008 (16-bit sound), check the number printed on the chip at location U6. Number 343S0138 indicates logic board P/N 661-0931. Number 343S1189 indicates logic board P/N 661-1008.

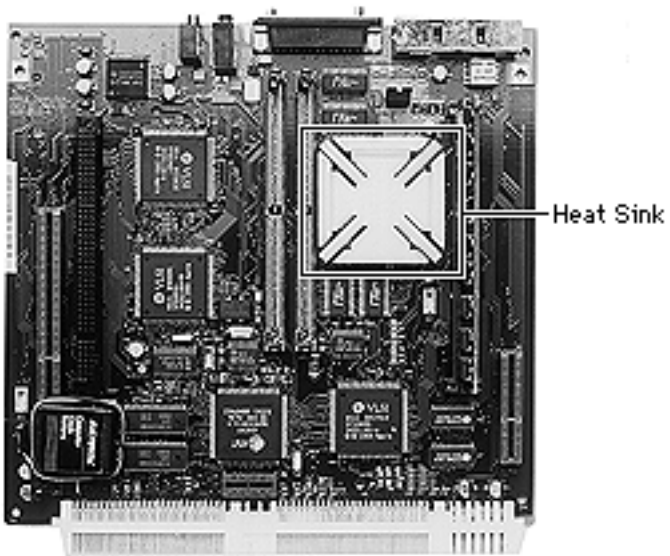
PM 5260/100 Logic Board, 603e/100Mhz **661-1116**



You can identify this board by the last three digits of its EEE code (6UR or 6SB) and/or by the Apple part number FT630-1725 or 630-1725.

PM 5300/100 LC, Performa 5300/6300 Series, Performa 6290 Logic Board

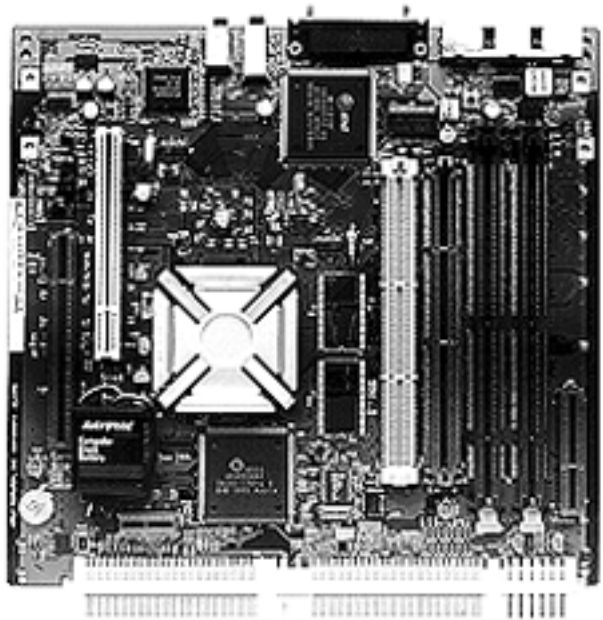
661-1041



Power Macintosh 5300/6300 Series logic boards have a heat sink installed.

Return the logic board without DRAM SIMMs installed.

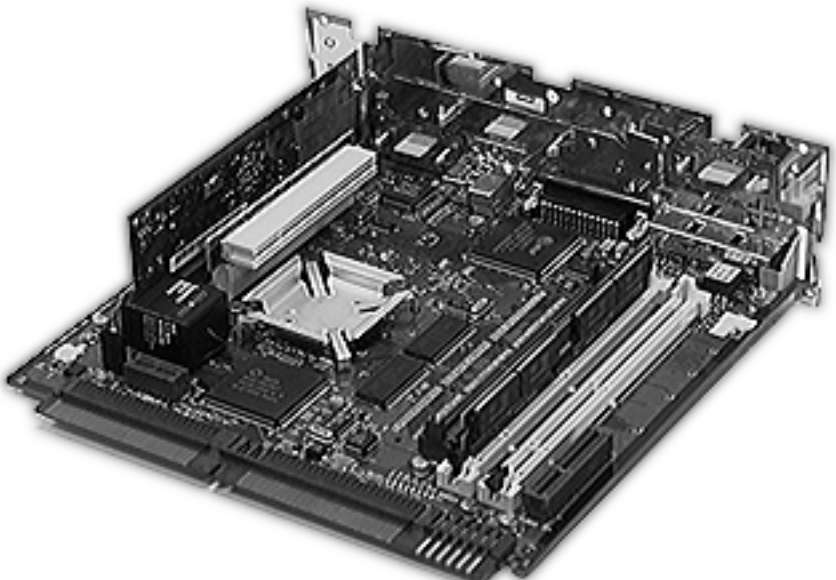
PM 5400/120, Performa 5420, Logic Board, 8MB, 120Mhz **661-1072**



The following numbers may appear on this board. Although this list may not be all inclusive, it may aid in identification:

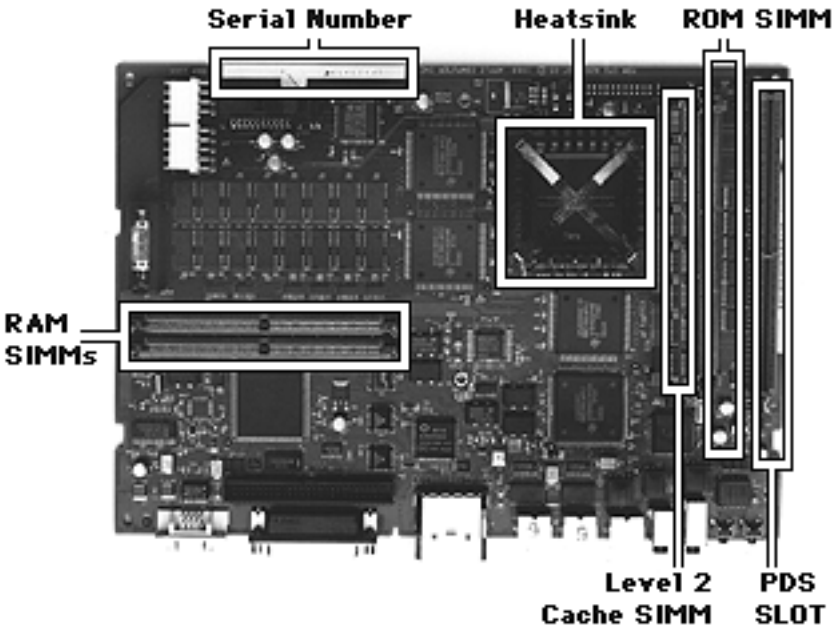
630-1657, 630-1616, FT630-1616 (NAFTA compliant), 630-2300, FT630-2300 (NAFTA compliant)

Performa 5400/160 and 6360 Series 603ev Logic Board, 8MB, 160Mhz, low-profile heat sink **661-1281**



Perf/PM 5400/180 and Perf/PM 6400/180 Series 603ev Logic Board, 180 MHz, 8MB, Low Profile Heat Sink **661-1282**

PM 6100/60, Performa 6116 CD, Workgroup Server Logic Board **661-1022**

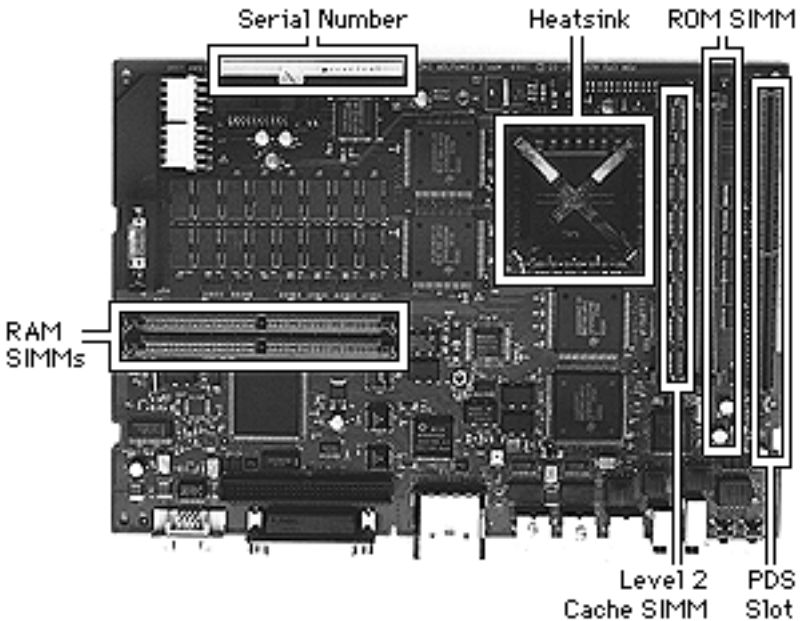


To identify the Power Macintosh 6100/60 logic board, check the module serial number. The last three characters are 347.

Do not attempt to remove the microprocessor's Heat Sink. This will damage the logic board.

Return the board without RAM SIMMs or 256K Level 2 cache SIMM. IMPORTANT: The Power Macintosh 6100/60 logic board has a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the board.

PM 6100/66 Workgroup Server Logic Board **661-0207**

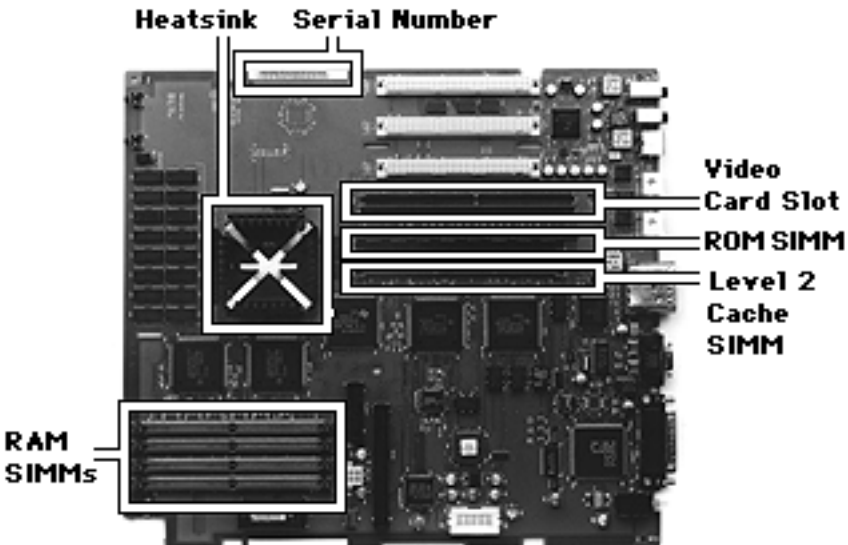


To identify the Power Macintosh 6100/66 logic board, check the module serial number. The last three characters are 4MQ. There may also be a “66 MHz” label near the serial number.

Do not attempt to remove the microprocessor’s heat sink. This will damage the logic board.

Return the board without RAM SIMMs or 256K Level 2 cache SIMM.
IMPORTANT: The Power Macintosh 6100/66 logic board has a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the board.

PM 7100/66 Logic Board **661-0897**



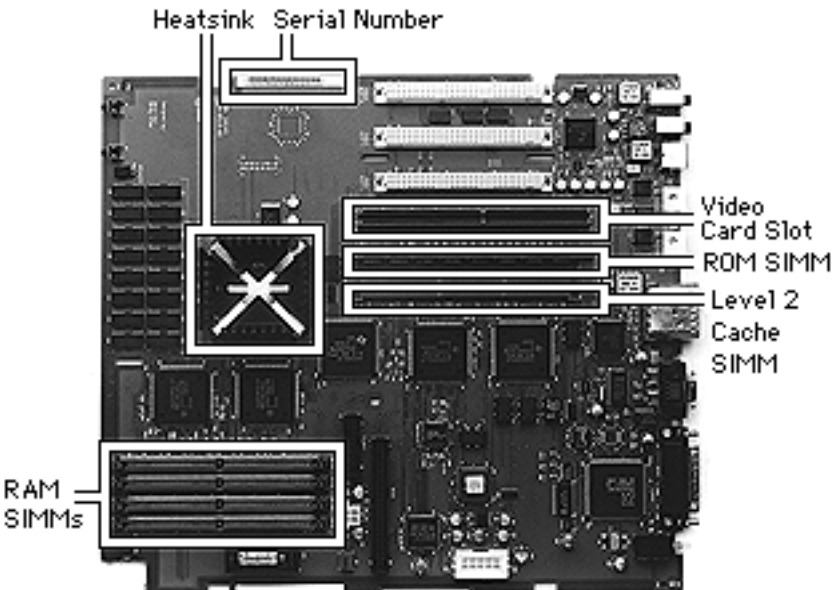
To identify the Power Macintosh 7100/66 logic board, check the module serial number. The last three characters are 2PS.

Do not attempt to remove the microprocessor's heat sink. This will damage the logic board.

Return the board without the following:

256K Level 2 cache SIMM, RAM SIMMs. IMPORTANT: The Power Macintosh 7100/66 logic board has a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the board.

PM 7100/80 Logic Board **661-0208**



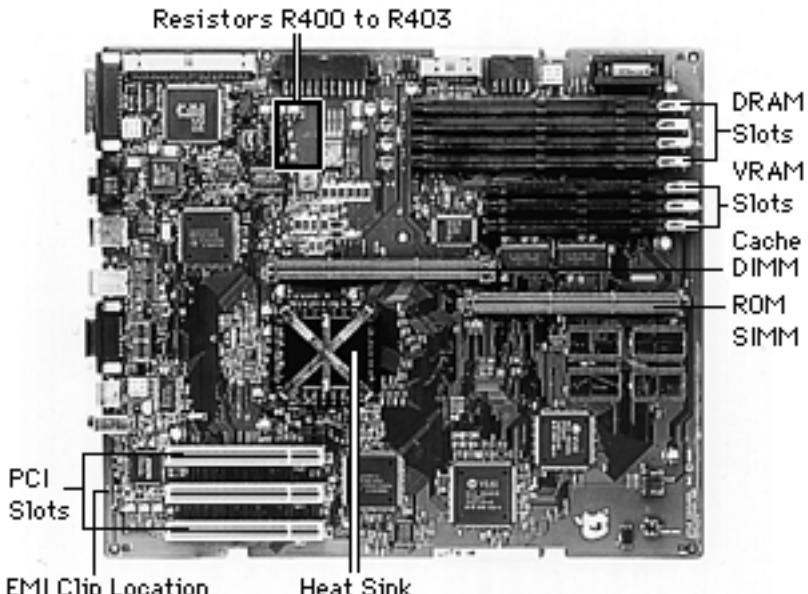
To identify the Power Macintosh 7100/80 logic board, check the last three digits of the EEE code. The EEE code for part number 661-0208 ends in “65M”. There may also be “80 MHz” label near the serial number.

Do not attempt to remove the microprocessor’s heat sink.

This will damage the logic board. Return the board without RAM SIMMs or 256K Level 2 cache SIMM.

IMPORTANT: The Power Macintosh 7100/80 logic board has a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the board.

PM 7200/75 Logic Board **661-1000**



Do not remove the heat sink or you will damage the logic board.

To avoid damaging the board, remove the EMI clip before returning the board to Apple.

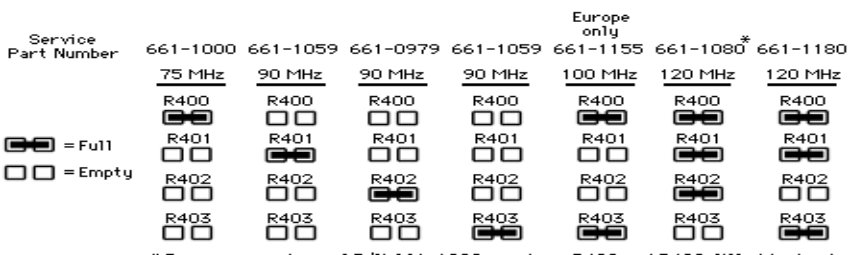
IMPORTANT: Return the board without cache, VRAM, and DRAM DIMMs.

The logic board may have a ROM SIMM rather than

ROMs soldered to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

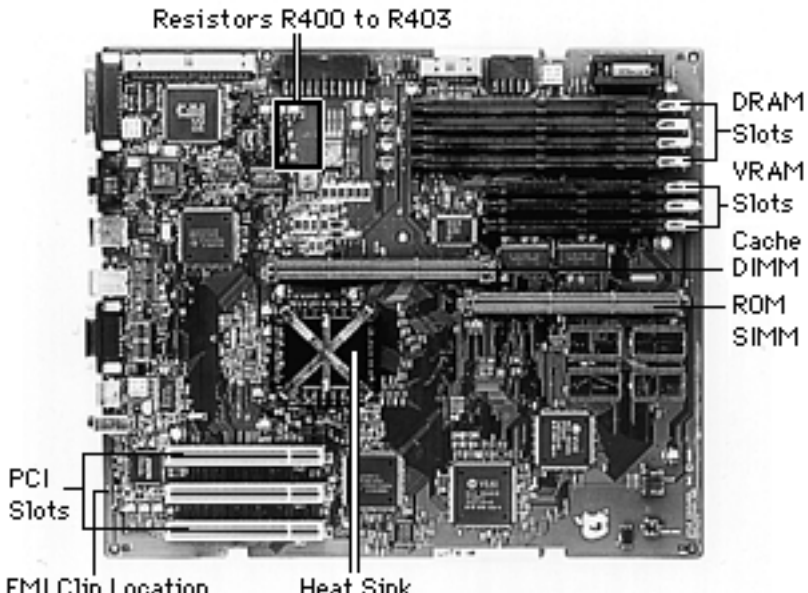
To determine the speed of the logic board refer to the chart on next page.

Logic board speed ID chart.



* European versions of P/N 661-1080 may have R400 and R402 filled instead.

PM 7200/90 Logic Board **661-1059**



Do not remove the heat sink or you will damage the logic board.

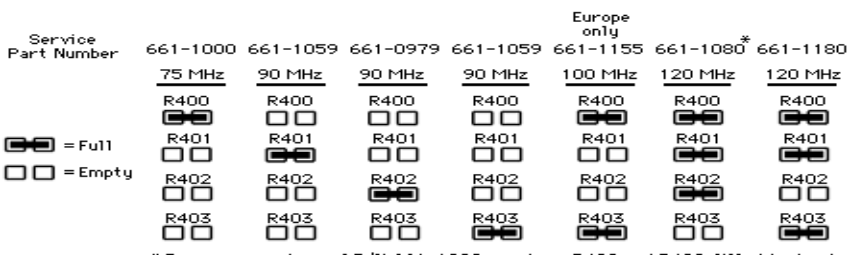
This logic board can be substituted for p/n 661-0979, but p/n 661-0979 cannot be substituted for this logic board. Both boards are functionally equivalent; however, p/n 661-0979 requires an auxiliary fan. IMPORTANT: If you replace the 661-0979

logic board with the 661-1059 board, you must remove the auxiliary fan. Failure to remove the auxiliary fan when installing p/n 661-1059 may result in damage to the logic board.

IMPORTANT: Return the Power Macintosh 7200/90 logic board without the following: EMI clip, cache, DRAM, and VRAM. The Power Macintosh 7200 logic board may have a ROM SIMM rather than ROMs soldered directly to the logic board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

To determine the speed of the logic board refer to the chart on next page.

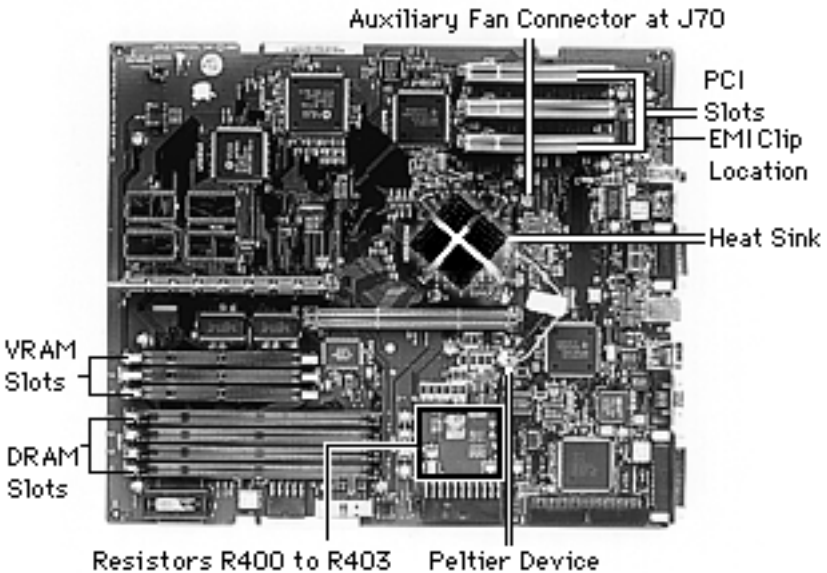
Logic board speed ID chart.



* European versions of P/N 661-1080 may have R400 and R402 filled instead.

PM 7200/120 Logic Board, Requires Auxiliary Fan (Replaced by 661-1080)

661-1180



The heat sink has two wires that plug into the logic board. Do not remove the heat sink. or you will damage the board.

Also, do not unplug the Peltier device (red and black wires attached to the CPU) or you will damage the board.

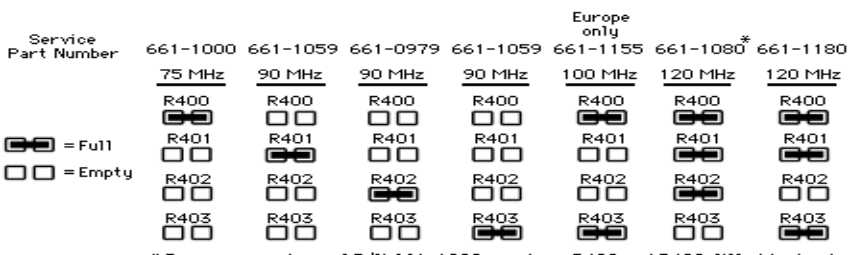
This logic board requires an auxiliary processor fan. Apple

may substitute p/n 661-1080 for p/n 661-1180. Both logic boards are functionally equivalent; however, you must remove the auxiliary processor fan when you replace p/n 661-1180 with p/n 661-1080. Failure to do may result in damage to the 661-1080 board.

IMPORTANT: Return the logic board without the following: EMI clip, cache and VRAM. The Power Macintosh 7200 logic board may have a ROM SIMM rather than ROMs soldered directly to the logic board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

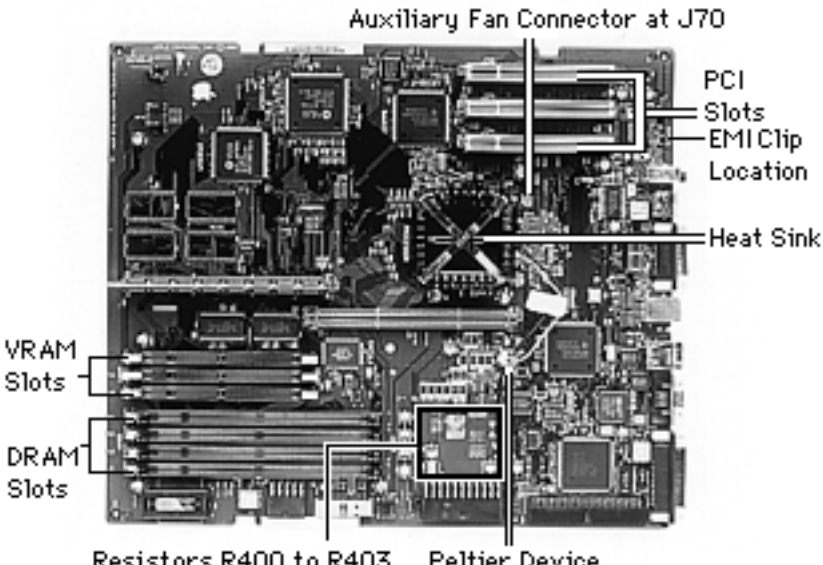
To determine the speed of the logic board refer to the chart on next page.

Logic board speed ID chart.



* European versions of P/N 661-1080 may have R400 and R402 filled instead.

PM 7200/90 Logic Board, Requires Auxiliary Fan **661-0979**



The heat sink has two wires that plug into the logic board. Do not remove the heat sink. or you will damage the board.

Also, do not unplug the Peltier device (red and black wires attached to the CPU) or you will damage the board.

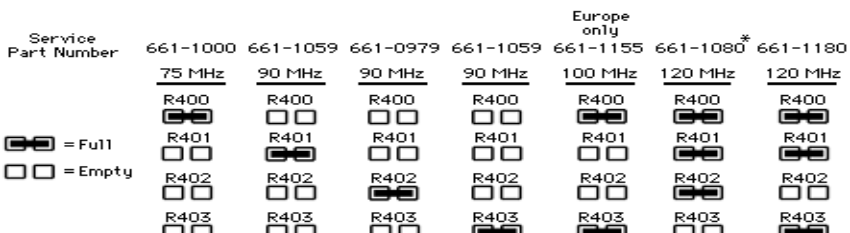
This logic board requires an auxiliary processor fan. Apple

may substitute p/n 661-1059 for p/n 661-0979. Both logic boards are functionally equivalent; however, you must remove the auxiliary processor fan when you replace p/n 661-0979 with p/n 661-1059. Failure to do may result in damage to the 661-1059 board.

IMPORTANT: Return the logic board without the following: EMI clip, cache and VRAM. The Power Macintosh 7200 logic board may have a ROM SIMM rather than ROMs soldered directly to the logic board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

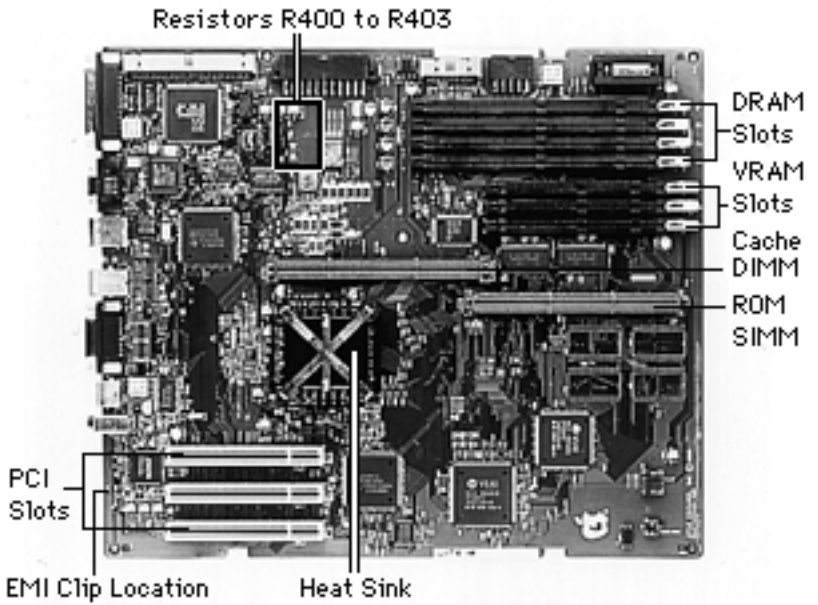
To determine the speed of the logic board refer to the chart on next page.

Logic board speed ID chart.



PM 7200/120 and PM 8200/120 (Europe Only), and Workgroup Server 7250/120 Logic Board

661-1080



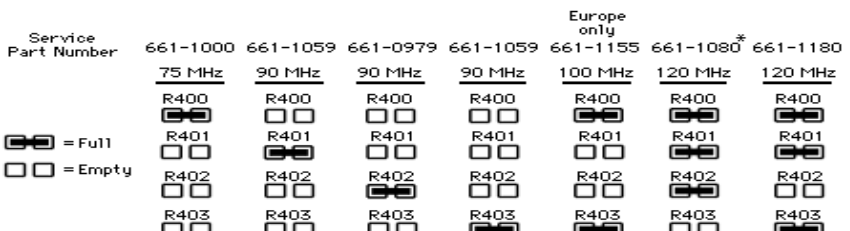
Return this logic board without the following: cache, VRAM, and DRAM DIMMs.

This logic board can be substituted for p/n 661-1180, but p/n 661-1180 cannot be substituted for this version of the logic board. Both boards are functionally equivalent; however, p/n 661-1180 requires an auxiliary fan.

IMPORTANT: If you replace the 661-1180 logic board with the 661-1080 board, you must remove the auxiliary fan. Failure to remove the auxiliary fan when installing p/n 661-1080 may result in damage to the logic board. Return the logic board without the EMI clip or the cache, DRAM, or VRAM DIMMs installed.

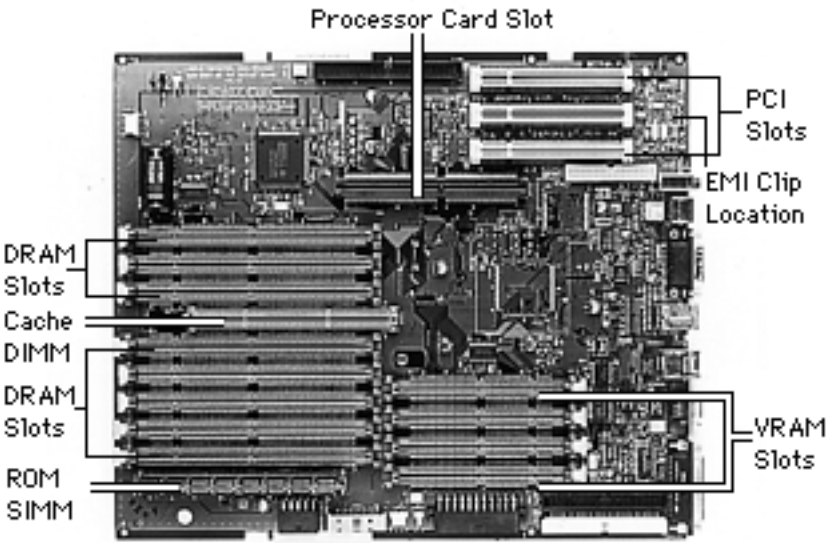
IMPORTANT: The WS 7250/120, PM 7200/120 and PM 8200/120 logic board may have a ROM SIMM rather than ROMs soldered directly to the board. Return the defective logic board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

To determine the speed of the logic board, look at resisters R400 to R403 on the board and consult the matrix on this page.

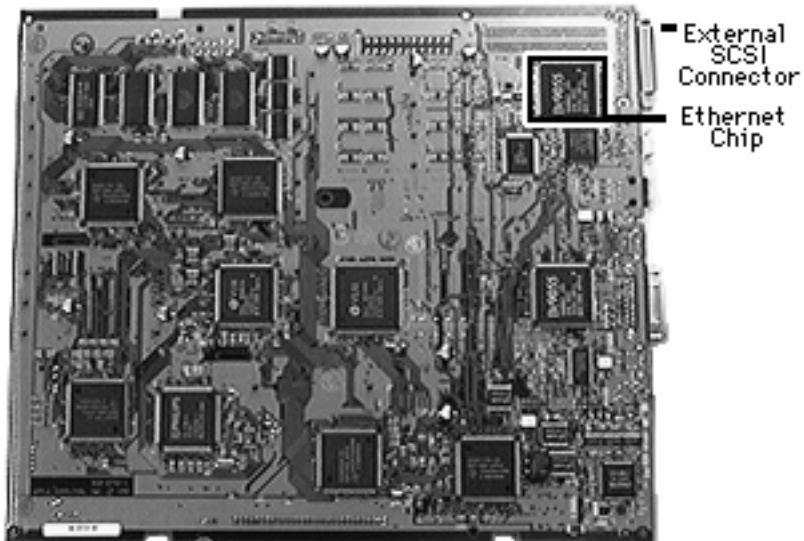


* European versions of P/N 661-1080 may have R400 and R402 filled instead.

PM 7300 Logic Board, 24-Pin **661-1266**

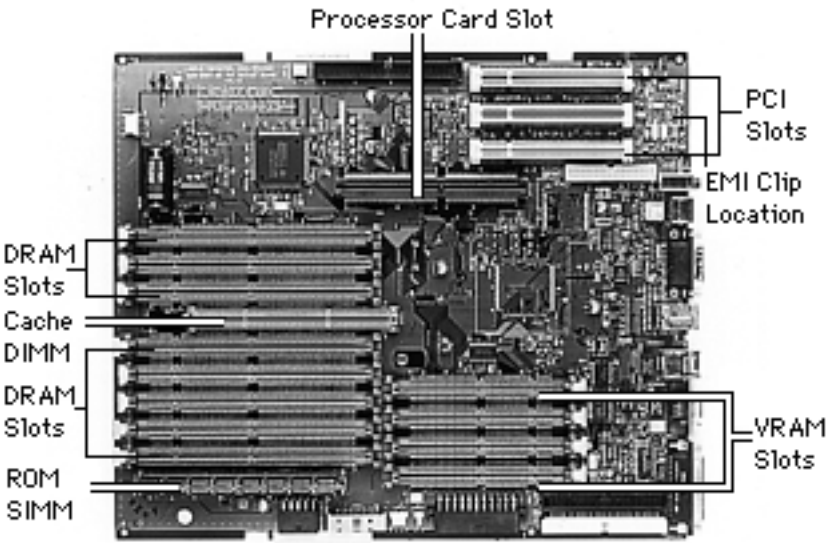


The graphic at left shows the front of the logic board. The back of the logic board is pictured on the following page.



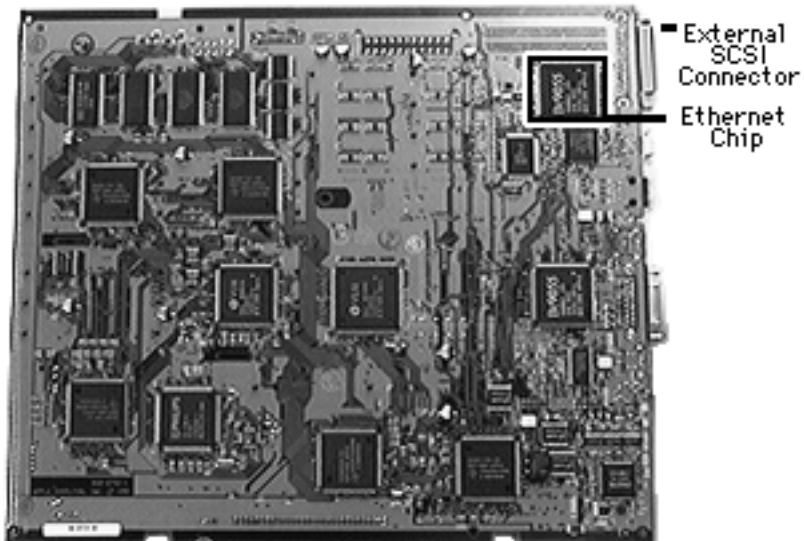
The graphic at left shows the back of the logic board.

PM 7500 Logic Board (Replaced by 661-1783) **661-0916**



To identify the Power Macintosh 7500 logic board, check the module serial number. The last three characters are 4X8.

The Workgroup Server 8550 and Power Macintosh 7600 logic board can be differentiated from the Power Macintosh 7500 logic board by the Ethernet chip on the bottom side of the logic board near the

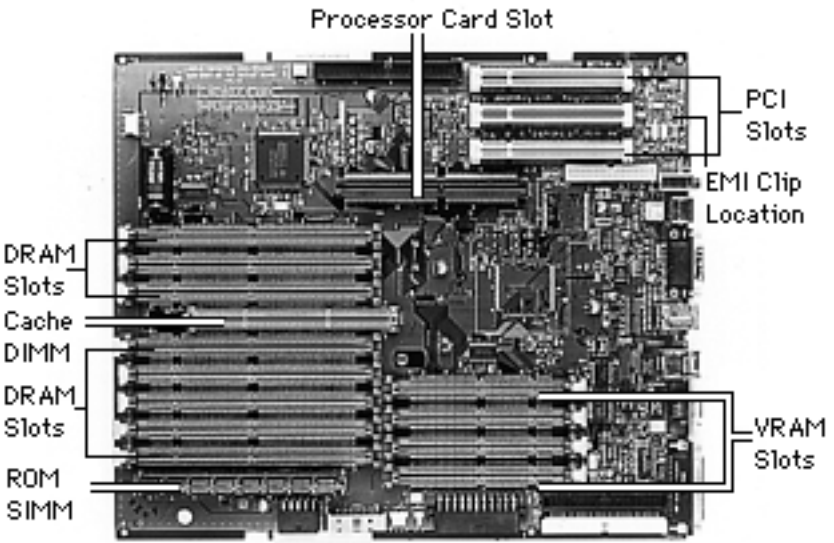


external SCSI port. The new chip, which allows multi-homing and multi node capabilities, is marked with the following character string: AM79C950AKC. The original chip is marked AM79C950KC.

IMPORTANT: Return the logic board without the following: VRAM, DRAM and cache. The Power Macintosh 7500 logic board may have a ROM SIMM rather than ROMs soldered directly to the

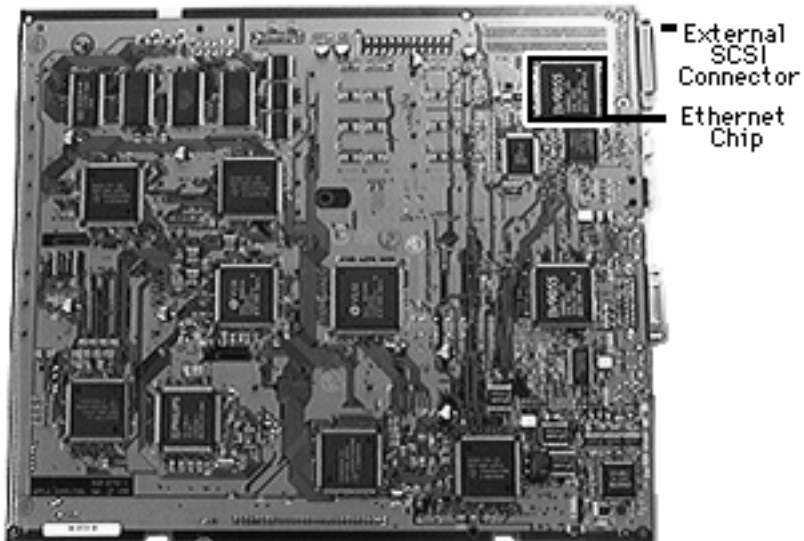
board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

PM 7500/100 Logic Board, 22-Pin **661-1783**



To identify the Power Macintosh 7500 logic board, check the module serial number.

The Workgroup Server 8550 and Power Macintosh 7600 logic board can be differentiated from the Power Macintosh 7500 logic board by the Ethernet chip on the bottom side of the logic board near the external SCSI port. The new chip, which allows

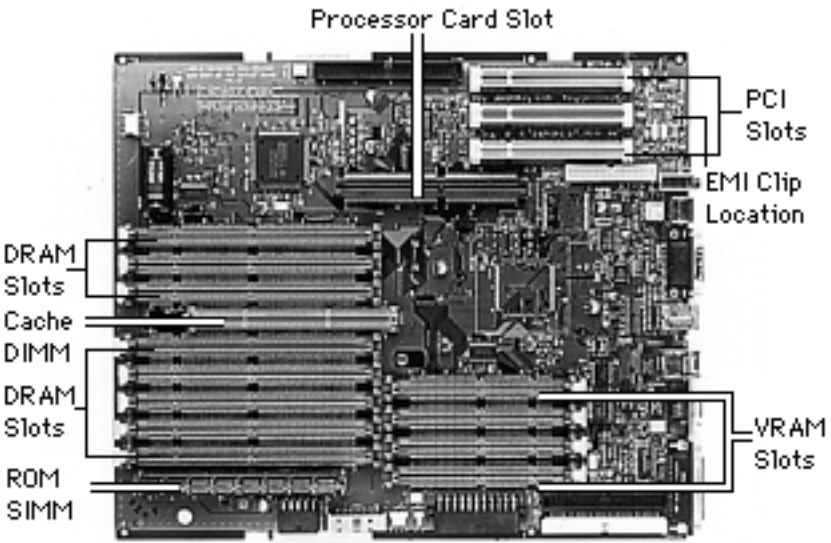


multi-homing and multi node capabilities, is marked with the following character string: AM79C950AKC. The original chip is marked AM79C950KC.

IMPORTANT: Return the logic board without the following: VRAM, DRAM and cache. The Power Macintosh 7500 logic board may have a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the

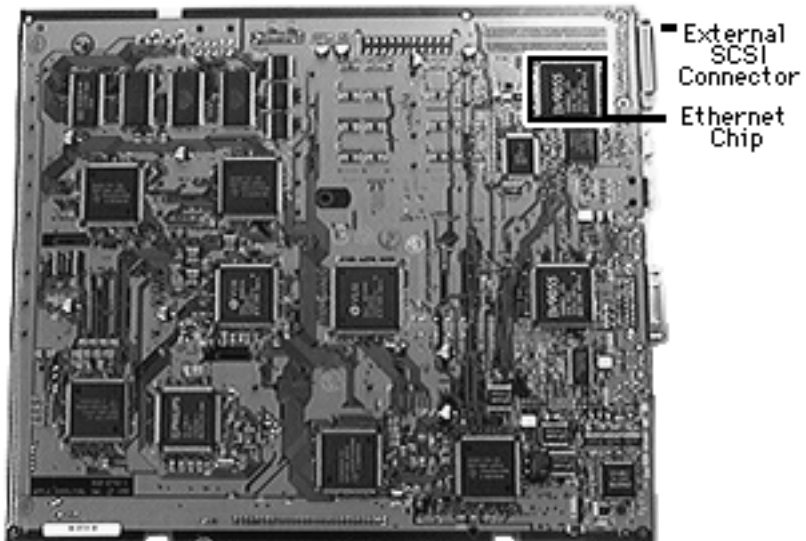
ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

PM 7600 Logic Board, 24-Pin, Rev. B **661-1219**



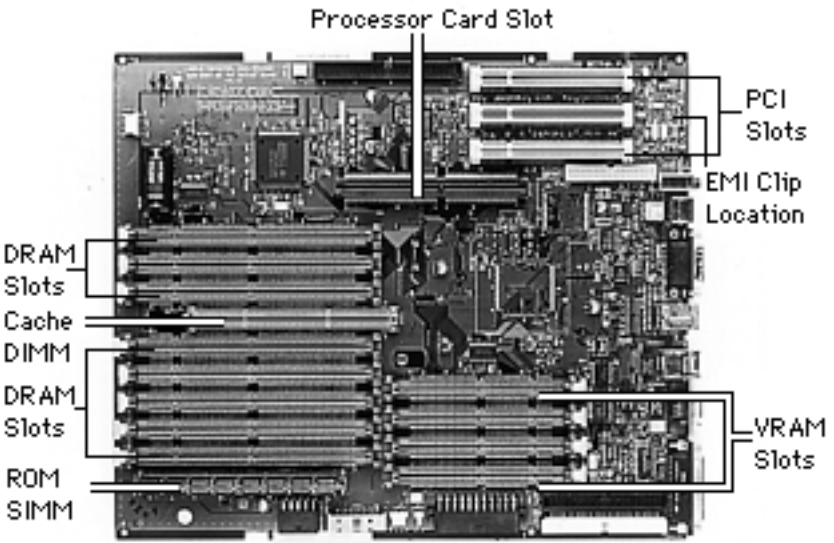
The graphic at left shows the front of the logic board. The back of the logic board is pictured on the following page.

Use this logic board in the PM 7600/200.

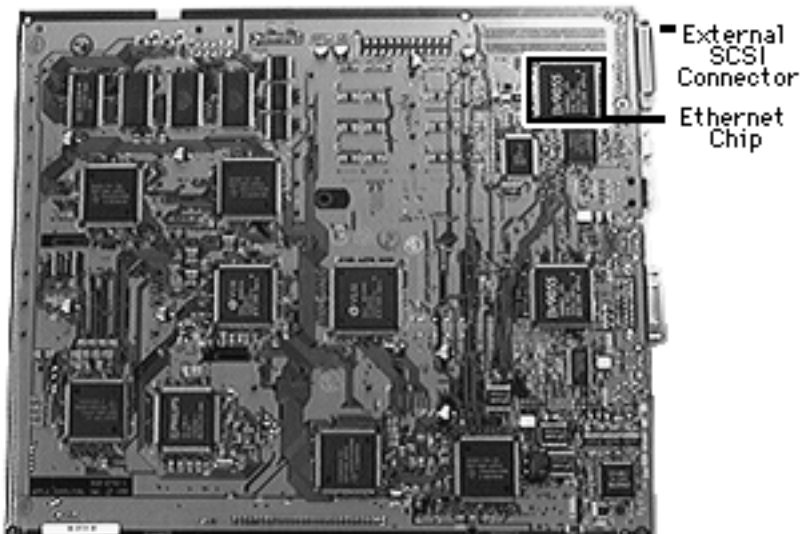


The graphic at left shows the back of the logic board.

PM 7600 and Workgroup Server 8550 Logic Board, 22-Pin **661-1154**



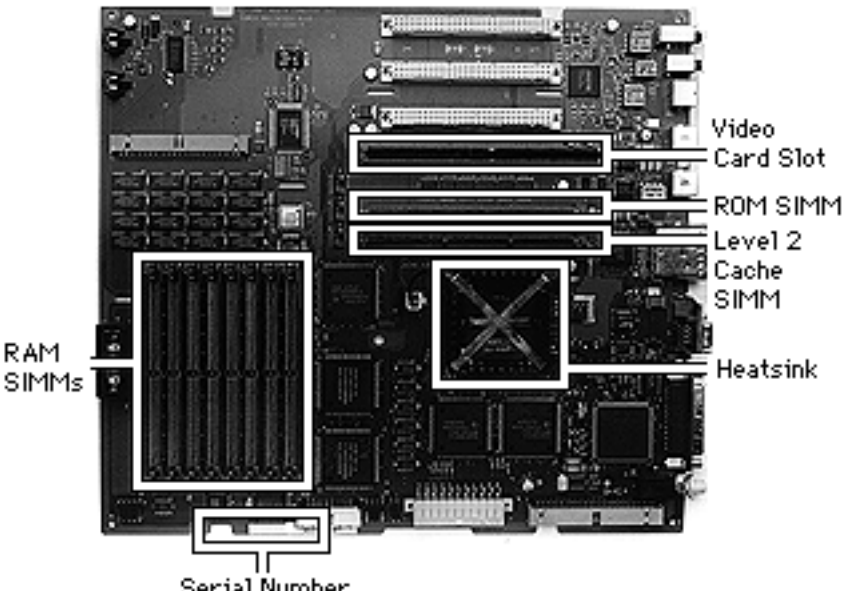
The Workgroup Server 8550 and Power Macintosh 7600 logic board can be differentiated from the Power Macintosh 7500 logic board by the Ethernet chip on the bottom side of the logic board near the external SCSI port. The new chip, which allows multi-homing and multi node capabilities, is marked with the following character string: AM79C950AKC. The original chip is marked AM79C950KC.



Return this logic board without the following: cache, VRAM, and DRAM DIMMs.

IMPORTANT: The WS 8550 and PM 7600 logic board has a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the board.

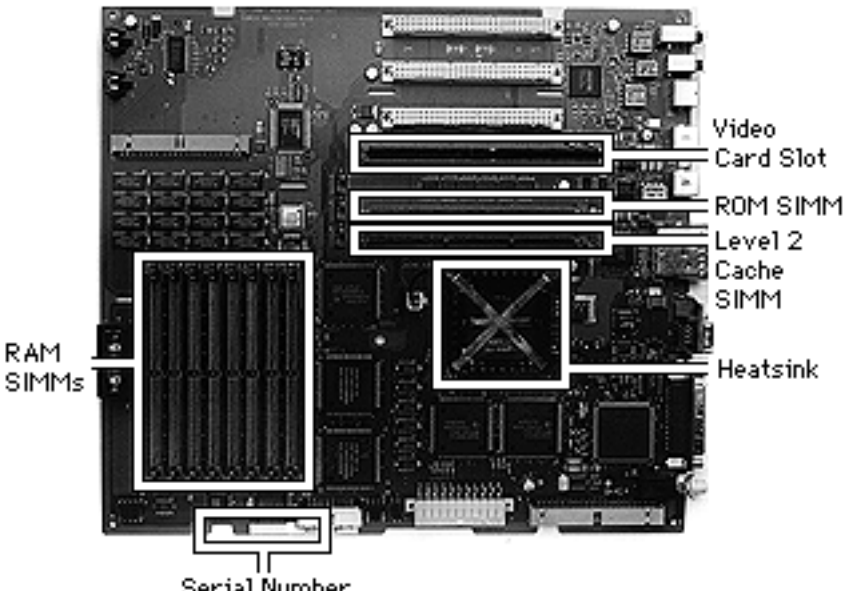
Power Macintosh 8100/100 Logic Board **661-0209**



To identify the Power Macintosh 8100/100 logic board, check the module serial number. The last three characters are 46C. There may also be a “100 MHz” label near the serial number.

Do not attempt to remove the microprocessor’s heat sink. This will damage the logic board.

PM 8100/100 Logic Board **661-0209**



To identify the Power Macintosh 8100/100 logic board, check the module serial number. The last three characters are 46C. There may also be a “100 MHz” label near the serial number.

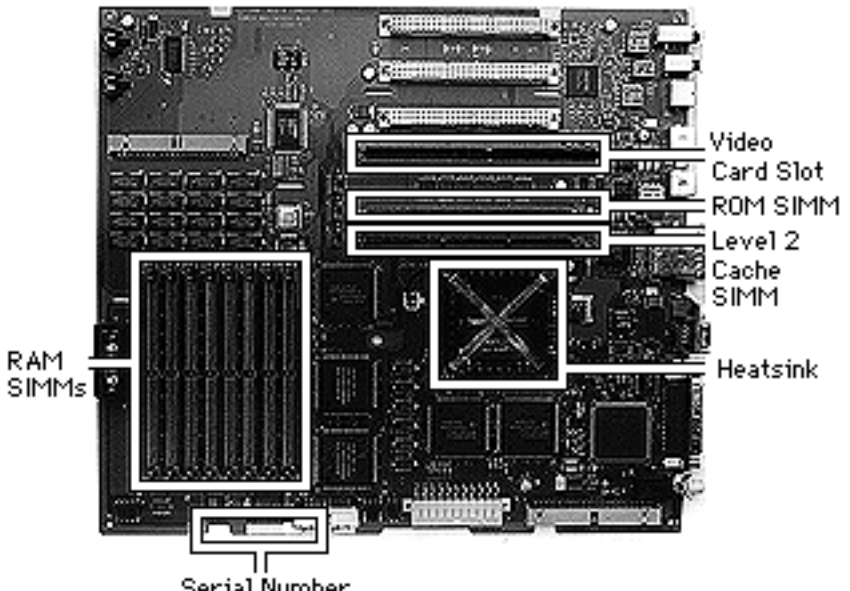
Do not remove the heat sink or you will damage the logic board.

Return the board without the following:

256K Level 2 cache SIMM, RAM SIMMs, and the PDS terminator board in the video card slot.

IMPORTANT: The Power Macintosh 8100/100 logic board has a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the board.

PM 8100/110, Workgroup, Server 8150/110 Logic Board, 33 MHz **661-0199**



To identify the Power Macintosh 8100/110 logic board, check the module serial number. The last three characters are 42M.

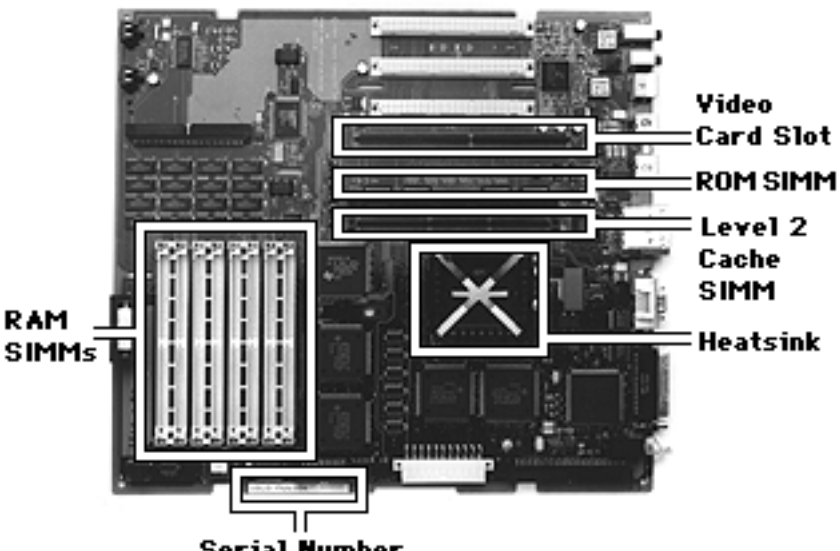
The heat sink has two wires that plug into the logic board. Do not remove the heat sink or you damage the logic board.

Return the board without the following:

256K Level 2 cache SIMM, RAM SIMMs, and the PDS terminator board in the video card slot.

IMPORTANT: The Power Macintosh 8100/110 logic board has a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the board.

PM 8100/80, Workgroup Server 8150 Logic Board **661-1026**



To identify the Power Macintosh 8100/80 logic board, check the module serial number. The last three characters are 346.

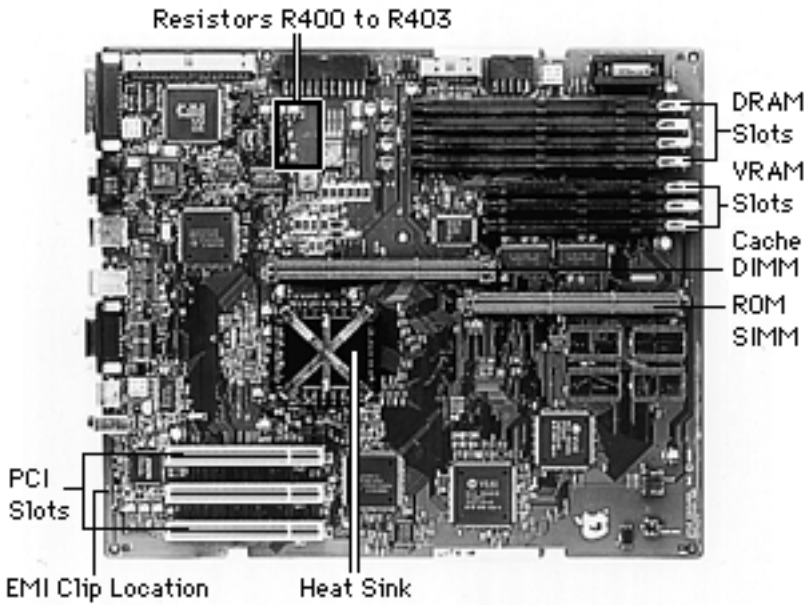
Do not attempt to remove the microprocessor's heat sink. This will damage the logic board.

Return the board without the following:

256K Level 2 cache SIMM, RAM SIMMs, and the PDS terminator board in the video card slot.

IMPORTANT: The Power Macintosh 8100/80 logic board has a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the board.

PM 8200/100 Logic Board (Europe Only) **661-1155**



Do not remove the heat sink or you will damage the logic board.

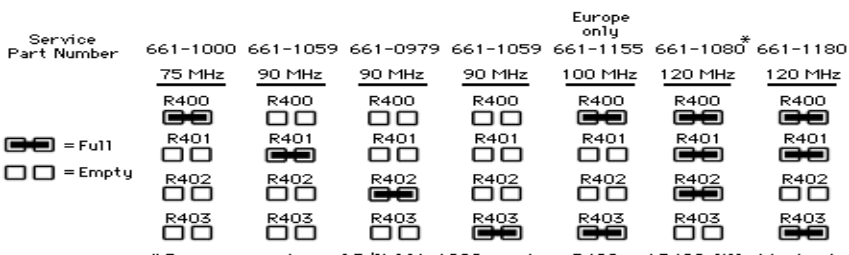
Return the Power Macintosh 8200/100 logic board without the following: EMI clip, cache, DRAM and VRAM.

IMPORTANT: The Power Macintosh 8200 logic board may have a ROM SIMM rather than ROMs soldered directly to the logic board. Return the

defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

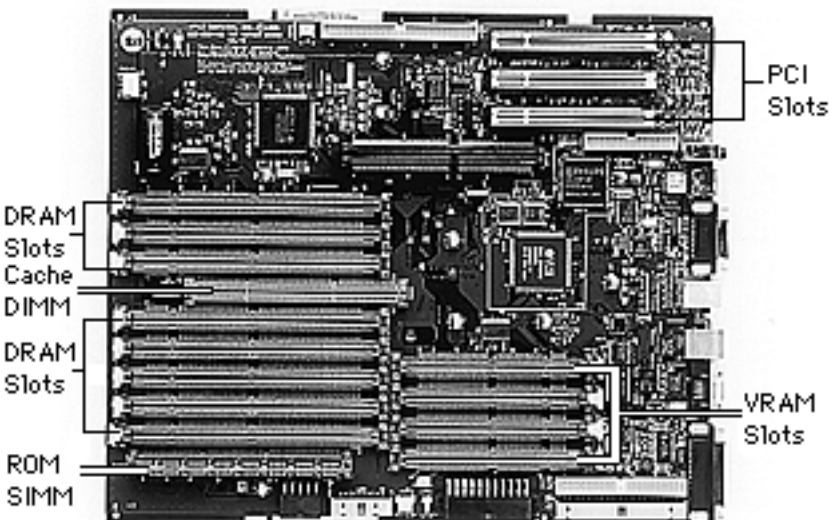
To determine the speed of the logic board refer to the chart on next page.

Logic board speed ID chart.



* European versions of P/N 661-1080 may have R400 and R402 filled instead.

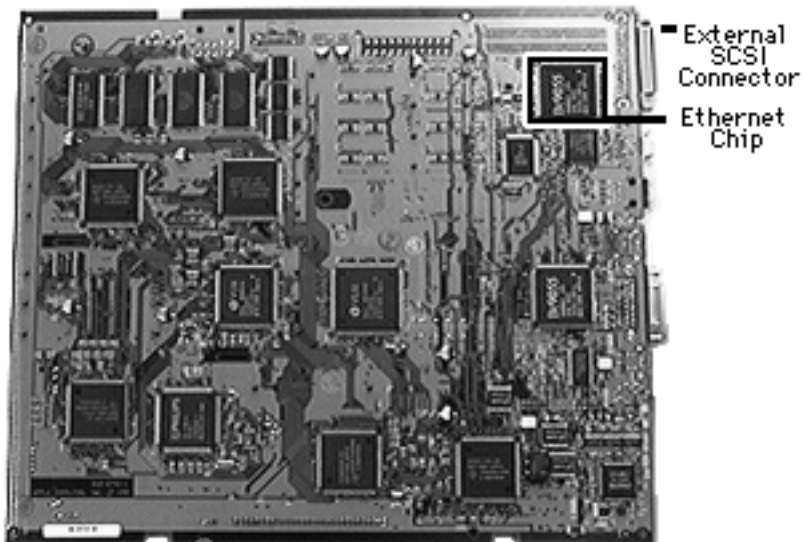
PM 8500 Logic Board Rev. A, 22-Pin (Replaced by 661-1784) **661-0921**



To identify the Power Macintosh 8500 logic board, check the module serial number. The last three characters are 46B.

Return this logic board without the following: cache, VRAM, and DRAM.

IMPORTANT: The Power Macintosh 8500 logic board may have a ROM SIMM rather than ROMs soldered directly to the

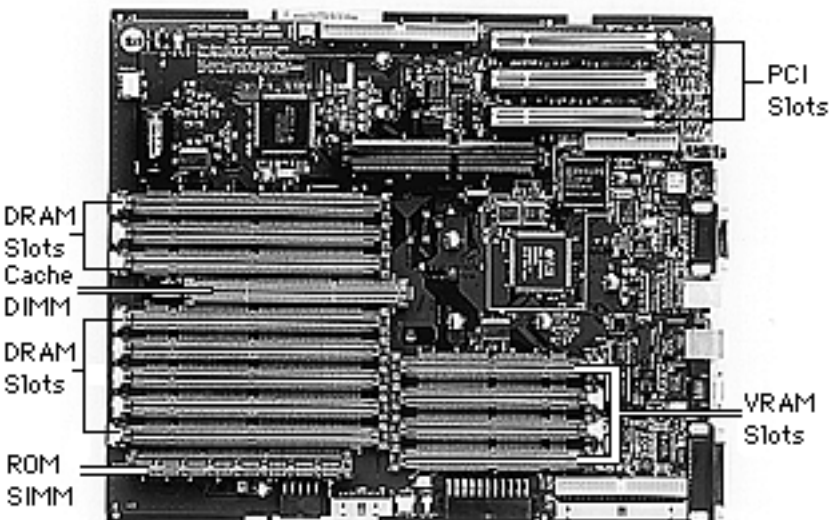


logic board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

To distinguish between Rev A. and Rev B. boards locate the Ethernet chip on the bottom side of the logic board near the external SCSI port. If the Ethernet chip has the numbers AM79C950KC, the board is a Rev. A board. If the Ethernet chip has

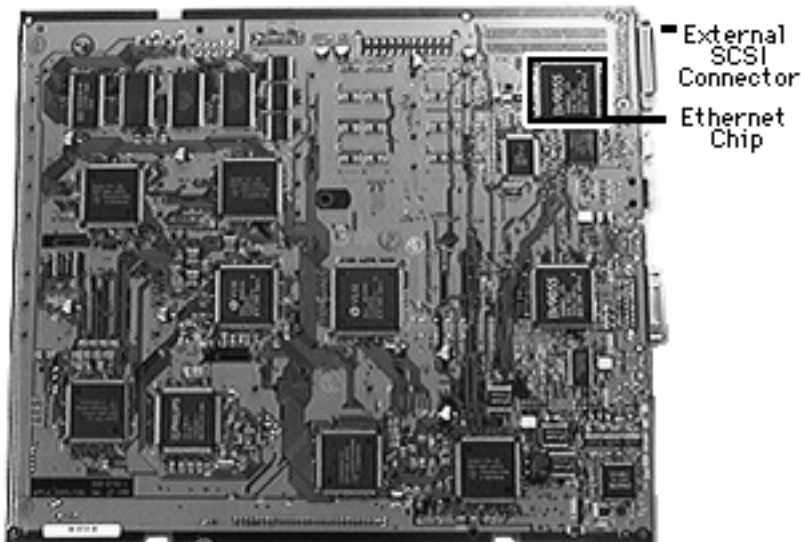
the numbers AM79C950AKC, the board is a Rev. B board, which allows multi-homing and multi-node capabilities.

PM 8500 Logic Board Rev. B, 22-Pin **661-1153**



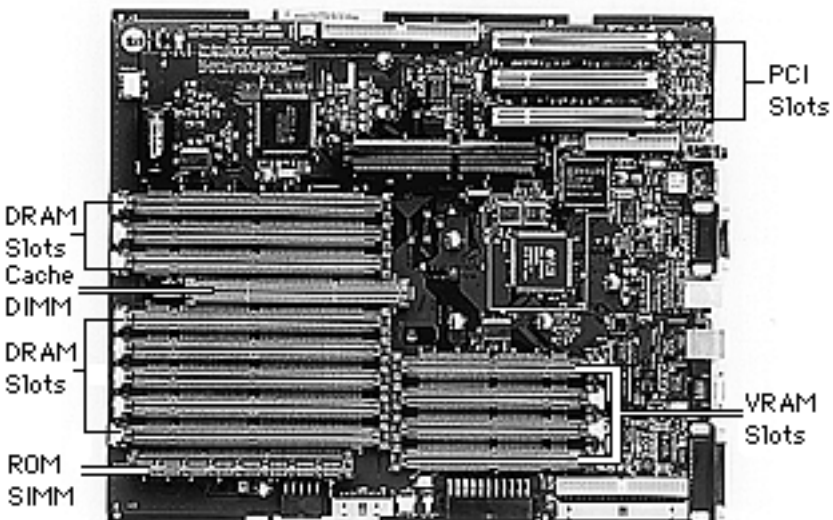
Return this logic board without the following: cache, VRAM, and DRAM.

IMPORTANT: The Power Macintosh 8500 logic board may have a ROM SIMM rather than ROMs soldered directly to the logic board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.



To distinguish between Rev A. and Rev B. boards locate the Ethernet chip on the bottom side of the logic board near the external SCSI port. If the Ethernet chip has the numbers AM79C950KC, the board is a Rev. A board. If the Ethernet chip has the numbers AM79C950AKC, the board is a Rev. B board, which allows multi-homing and multi-node capabilities.

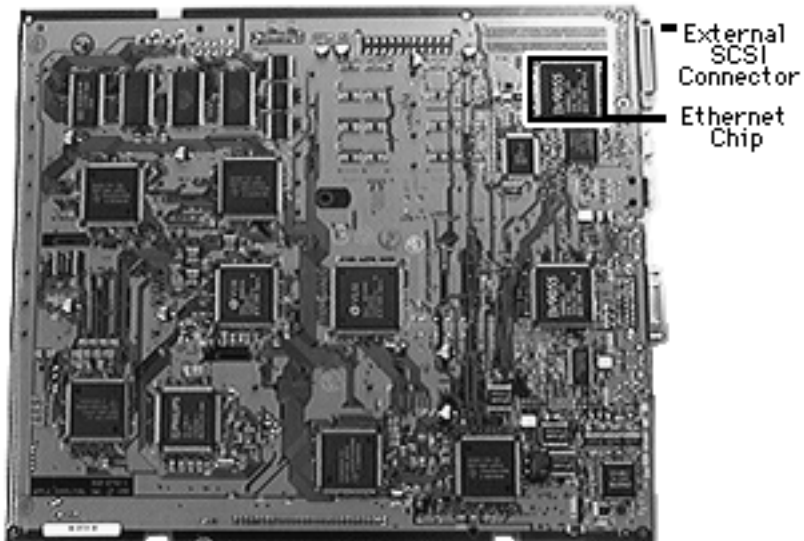
PM 8500 Logic Board, 22-Pin **661-1784**



To identify the Power Macintosh 8500 logic board, check the module serial number.

Return this logic board without the following: cache, VRAM, and DRAM.

IMPORTANT: The Power Macintosh 8500 logic board may have a ROM SIMM rather than ROMs soldered directly to the logic board. Return the defective board with the

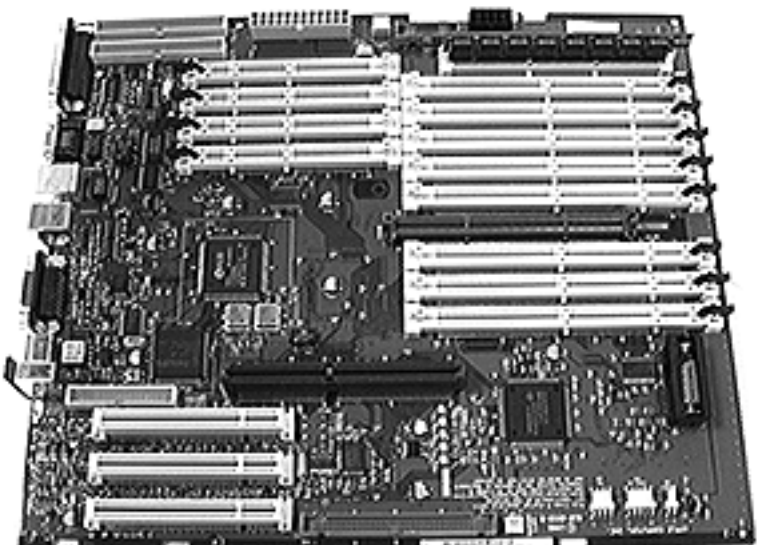


ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

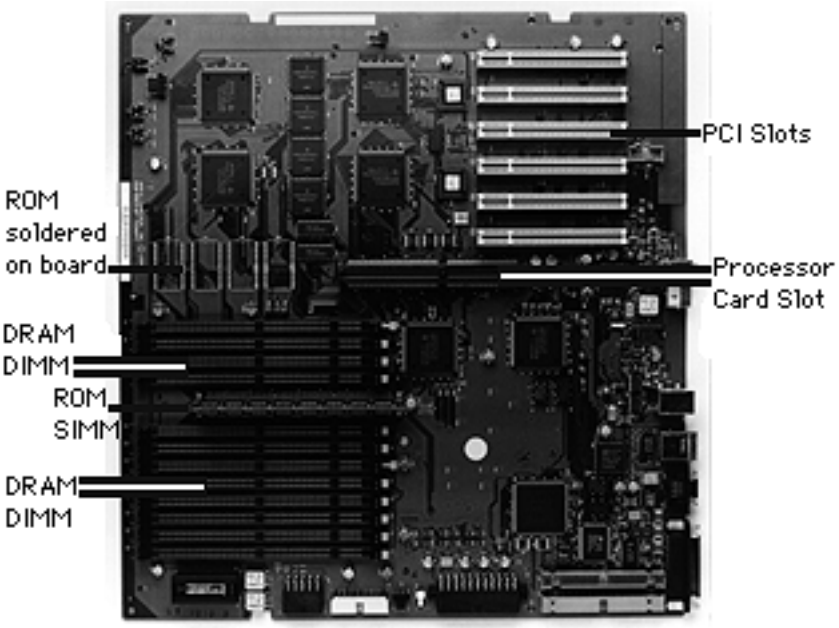
To distinguish between Rev A. and Rev B. boards locate the Ethernet chip on the bottom side of the logic board near the external SCSI port. If the Ethernet chip has the numbers AM79C950KC, the board is a Rev. A board. If the Ethernet chip has the numbers AM79C950AKC, the

board is a Rev. B board, which allows multi-homing and multi-node capabilities.

PM 8600 Logic Board, 24-Pin **661-1220**

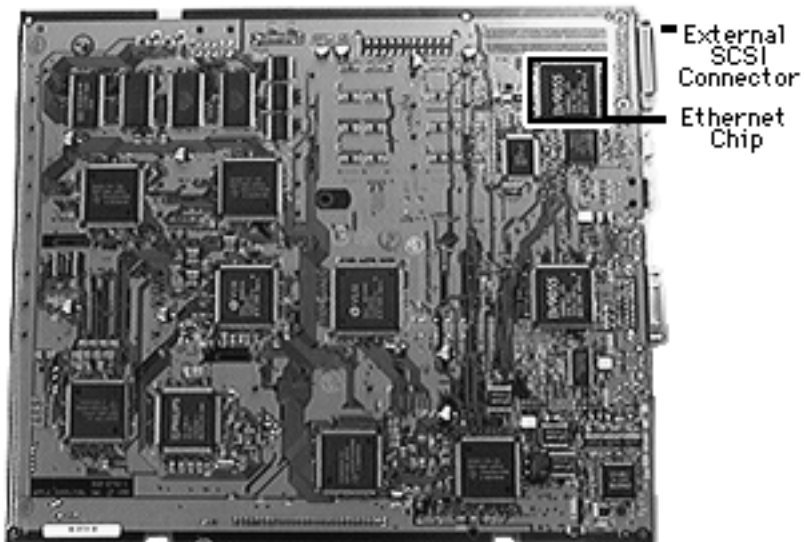


PM 9500 Logic Board Rev. A, 22-Pin **661-0924**



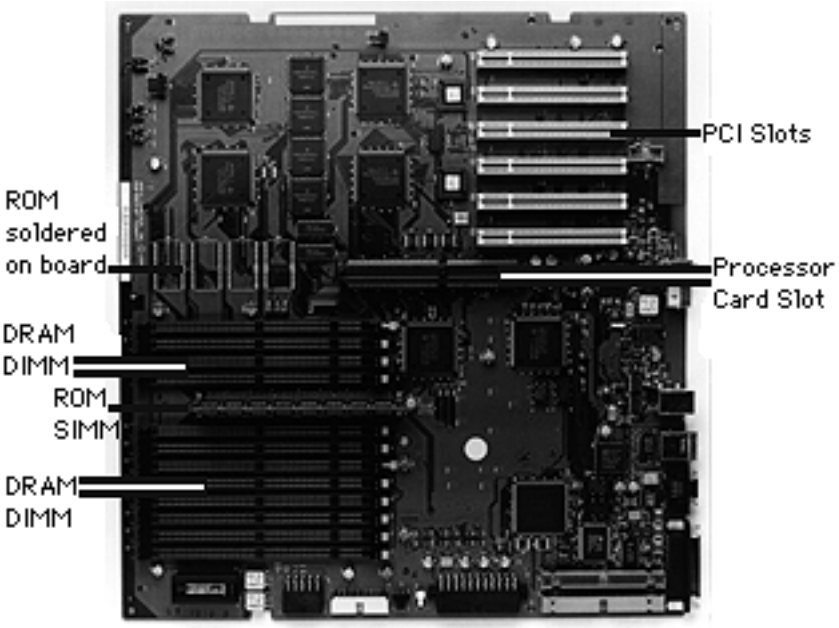
Return the logic board without the processor card or DRAM DIMMs.

IMPORTANT: The Power Macintosh 9500 logic board may have a ROM SIMM rather than ROMs soldered directly to the logic board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the board.



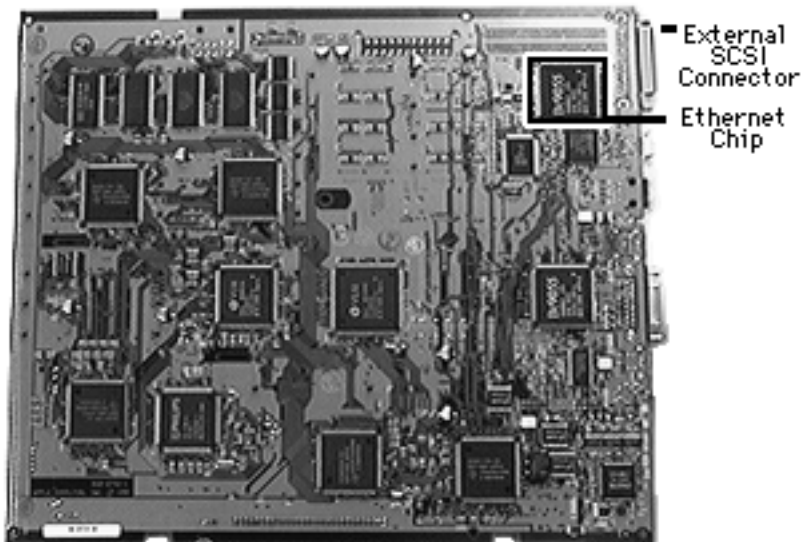
To distinguish between Rev A. and Rev B. boards locate the Ethernet chip on the bottom side of the logic board near the external SCSI port. If the Ethernet chip has the numbers AM79C950KC, the board is a Rev. A board. If the Ethernet chip has the numbers AM79C950AKC, the board is a Rev. B board, which allows multi-homing and multi-node capabilities.

PM 9500 Logic Board Rev. B, 22-Pin **661-1156**



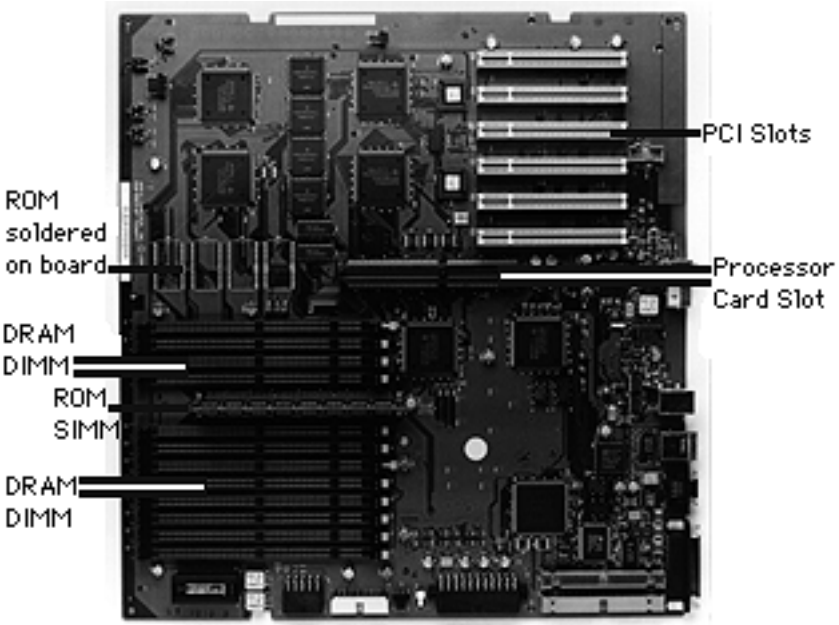
Return the logic board without the processor card or DRAM DIMMs.

IMPORTANT: The Power Macintosh 9500 logic board may have a ROM SIMM rather than ROMs soldered directly to the logic board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the board.

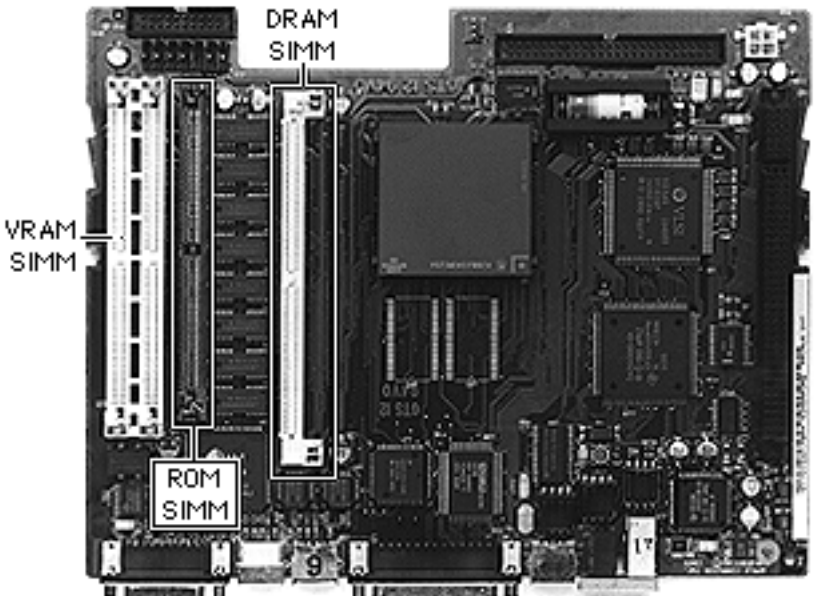


To distinguish between Rev A. and Rev B. boards locate the Ethernet chip on the bottom side of the logic board near the external SCSI port. If the Ethernet chip has the numbers AM79C950KC, the board is a Rev. A board. If the Ethernet chip has the numbers AM79C950AKC, the board is a Rev. B board, which allows multi-homing and multi-node capabilities.

PM 9600 Logic Board, 24-Pin **661-1221**



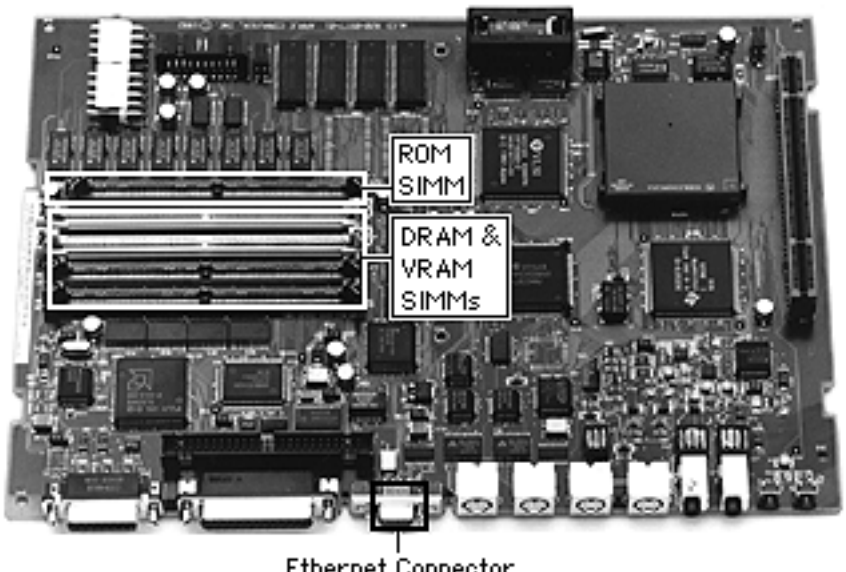
Quadra 605, LC 475, Performa 475, 476 Logic Board **661-1732**



Return the logic board without DRAM or VRAM SIMMs.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board. If a ROM SIMM is present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Quadra 610 Logic Board **661-0043**



The logic board has the part number PC680C040RC25 on the CPU chip.

Return the logic board without DRAM or VRAM SIMMs.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board.

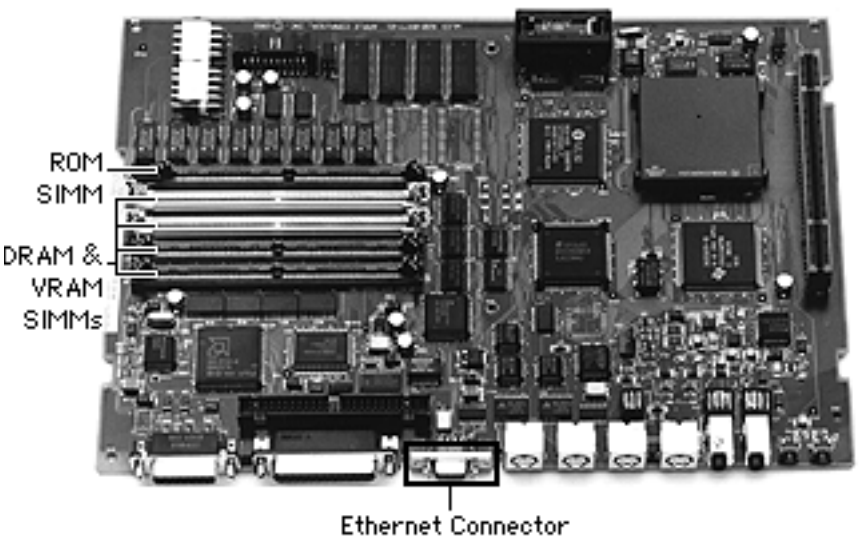
This logic board has the

part number “PC68LC040RC25” on the CPU chip.

Return the logic board without DRAM or VRAM SIMMs.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board. If a ROM SIMM is present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.If a ROM SIMM is present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Quadra 610 Logic Board, without FPU **661-0042**



This logic board has the part number PC68LC040RC25 on the CPU chip.

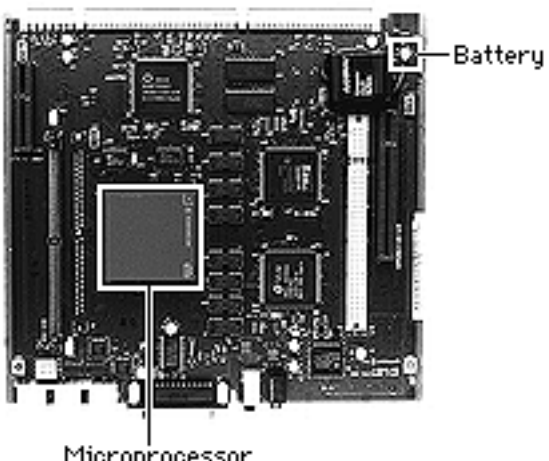
Return the logic board without DRAM or VRAM SIMMs.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board.

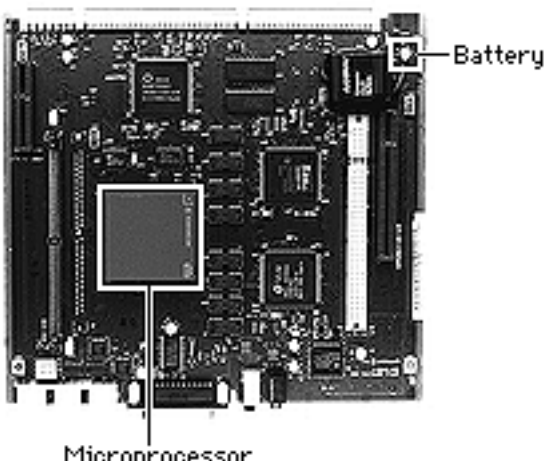
If a ROM SIMM is

present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Quadra 630 Logic Board **661-0189**



Quadra 630 Logic Board **661-0189**



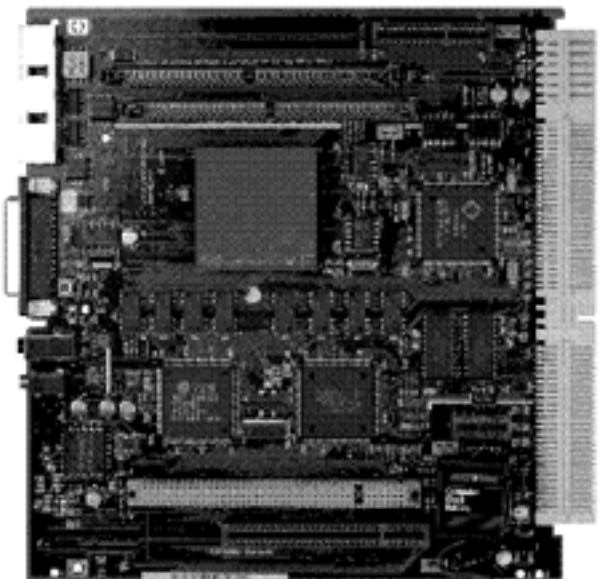
The logic board has a 68040 microprocessor in the location indicated.

Disconnect the battery before returning the logic board to Apple.

Return the logic board without DRAM SIMMs.

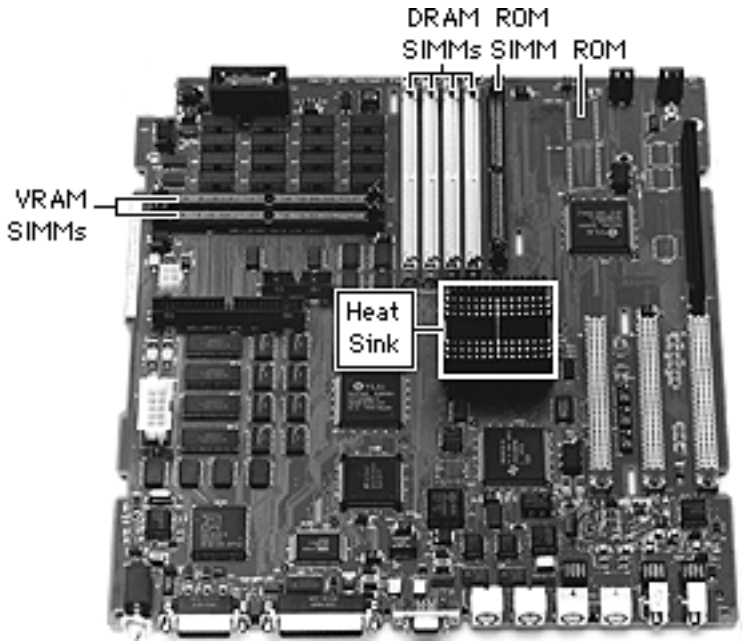
Quadra 630 Logic Board, 2-72 Pin SIMM slots, 4 MB, without FPU, DOS Compatible

661-1114



Quadra 630 Logic Board, 4 MB, with FPU, DOS Compatible, International **661-1115**

Quadra 650 Logic Board, 8 MB **661-0044**



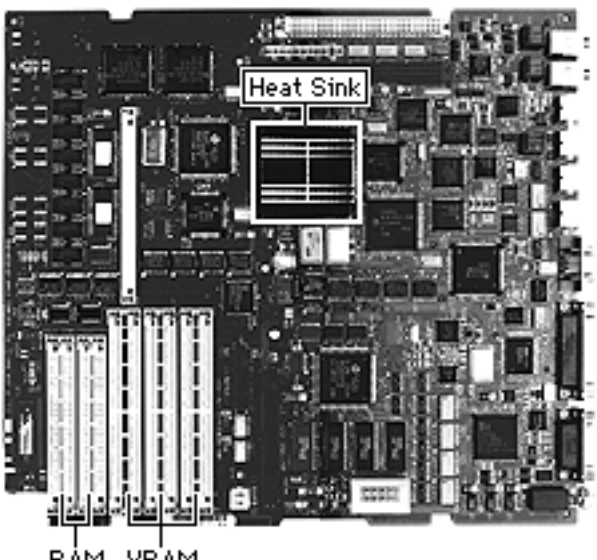
This 8 MB logic board has the part number XC68040RC33E on the CPU chip. You must remove the heat sink to view the part number.

Return the logic board without DRAM or VRAM SIMMs.

The Macintosh Quadra 650 logic board has part numbers 341S1074 and 341S1075 on the ROM chip.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board. If a ROM SIMM is present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

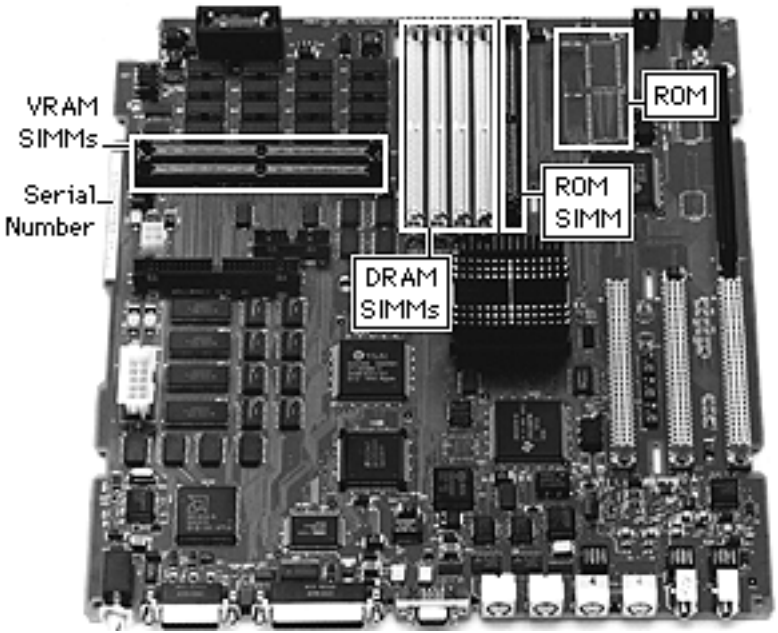
Quadra 700 Logic Board **661-0666**



The heat sink must remain on the board when you return the board to Apple.

Return the Macintosh Quadra 700 logic board without RAM or VRAM SIMMs.

Quadra 800 Logic Board, 8 MB, FPU, with Ethernet **661-1676**



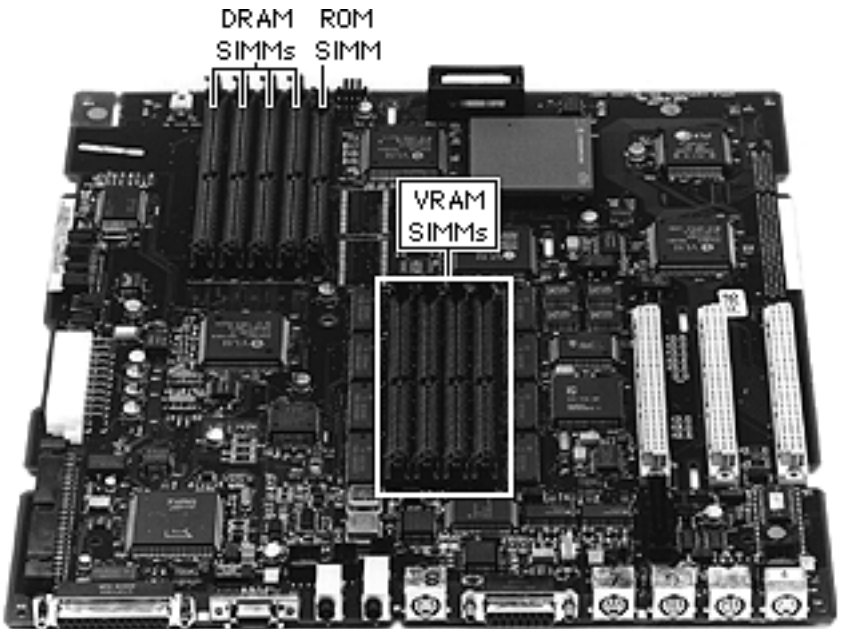
To identify the logic board, refer to the module serial number: the last five characters contain the code Z05.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board. If a ROM SIMM is present, return the defective board with the ROM SIMM in place.

DO NOT REMOVE the ROM

SIMM from the logic board.

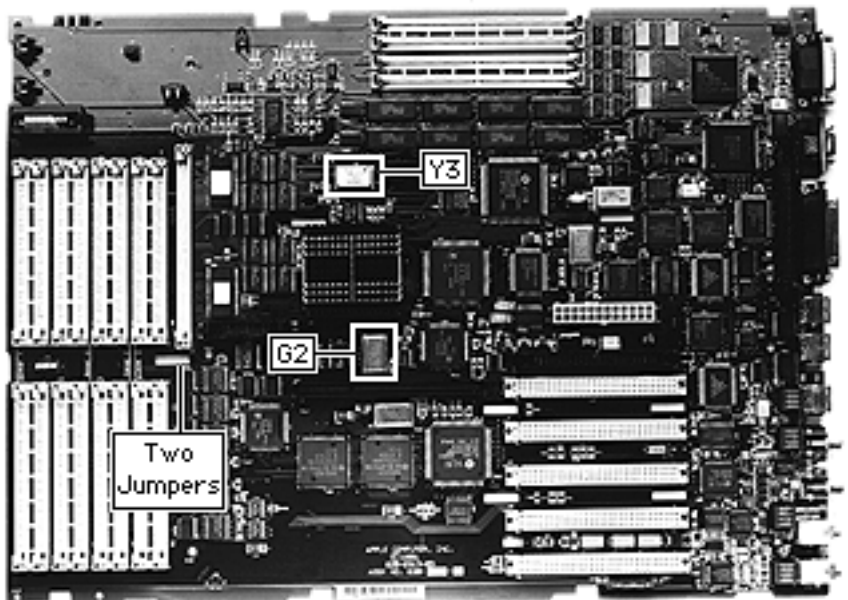
Quadra 840AV Logic Board **661-1700**



Return the Macintosh Quadra 840AV logic board without DRAM or VRAM SIMMs.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the board. If a ROM SIMM is present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Quadra 900 Logic Board **661-0665**



Return the Macintosh Quadra 900 logic board with the two short jumpers— the jumpers connecting pin 1 to pin 2 and pin 3 to pin 4—on connector J16.

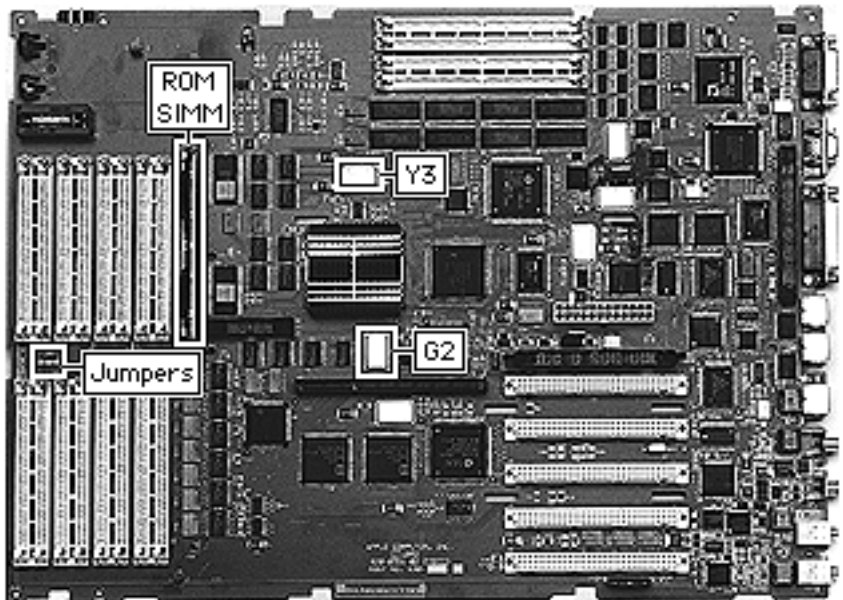
Return the logic board without DRAM or VRAM SIMMs.

Important: Some logic boards have a ROM SIMM rather than ROMs soldered directly to the

board. If a ROM SIMM is present, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Logic board identification: The Macintosh Quadra 900 logic board looks very similar to the Macintosh Quadra 950 and the Apple Workgroup Server 95 logic boards. If component Y3 is labeled 66.6667 MHz and component G2 is labeled 48.56832 MHz, the board is for a Macintosh Quadra 950 or the Apple Workgroup Server 95. If component Y3 is labeled 50.0000 MHz and component G2 is labeled 31.3344 MHz, the board is for a Macintosh Quadra 900.

Quadra 950, Apple Workgroup Server 95 Logic Board **661-0727**



Return this logic board with the two short jumpers—the jumpers connecting pin 1 to pin 2 and pin 3 to pin 4—on connector J16.

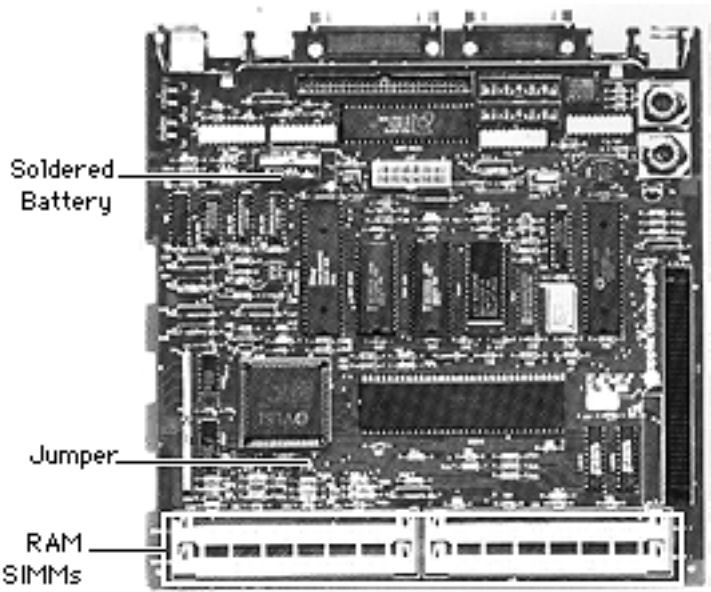
Some of the early logic boards use a ROM SIMM. ROMs on these boards are marked with the word Zydeco or with part numbers 3410291 c/sum 333ca and 341 c/sum 7d96f at locations U23 and U50

respectively. The ROM SIMM must remain on the board when you return the board to Apple. Later version logic boards do not require a ROM SIMM.

Return the logic board without DRAM or VRAM SIMMs.

Logic board identification: This logic board looks very similar to the Macintosh Quadra 900 logic board. If component Y3 is labeled 66.6667 MHz and component G2 is labeled 48.56832 MHz, the board is for a Macintosh Quadra 950 or Apple Workgroup Server 95. If component Y3 is labeled 50.0000 MHz and component G2 is labeled 31.3344 MHz, the board is for a Macintosh Quadra 900.

SE 800K Logic Board **661-0526**



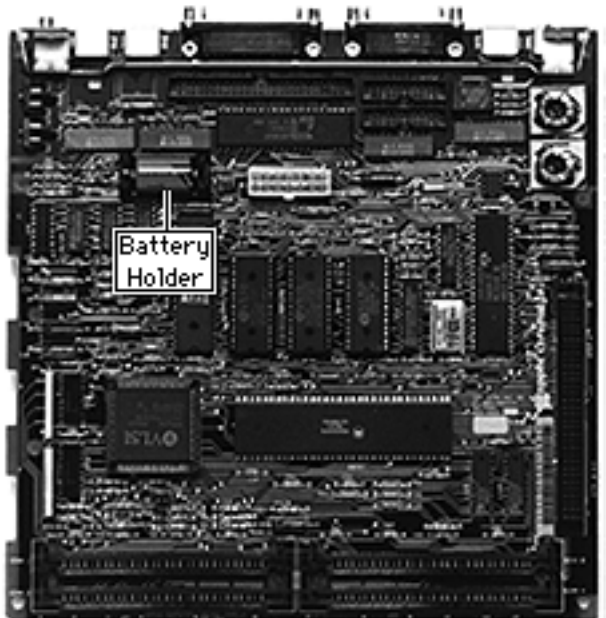
You can identify the 800K logic board by the presence of a jumper block and a soldered battery. You can position the jumper block to configure RAM to 1, 2, 2.5, or 4 megabytes.

If the logic board contains the SWIM chip (P/N 344-0062) and new ROMs (P/N 342-0701 and 342-0702) for the Apple SuperDrive upgrade,

remove these components from the failed logic board and install them on the replacement logic board.

Return the Macintosh SE logic board without RAM SIMMs.

SE Apple SuperDrive Logic Board **661-0536**

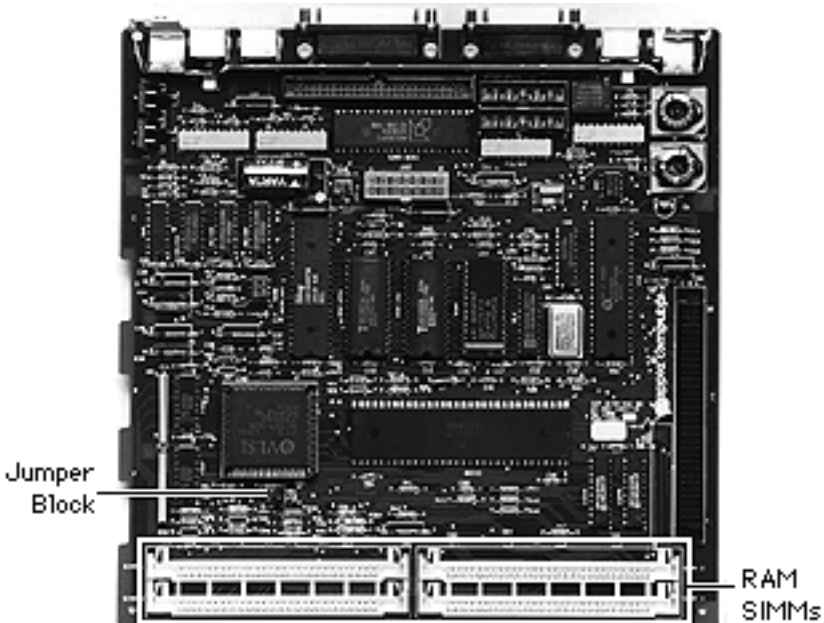


You can identify the Apple SuperDrive logic board by the presence of a battery holder.

Do not use this logic board to replace a failed SE logic board or an SE logic board that has the Apple SuperDrive upgrade. Use this logic board only to replace a failed original Apple SuperDrive logic board. Return the logic board without RAM SIMMs.

SE Logic Board

661-0490

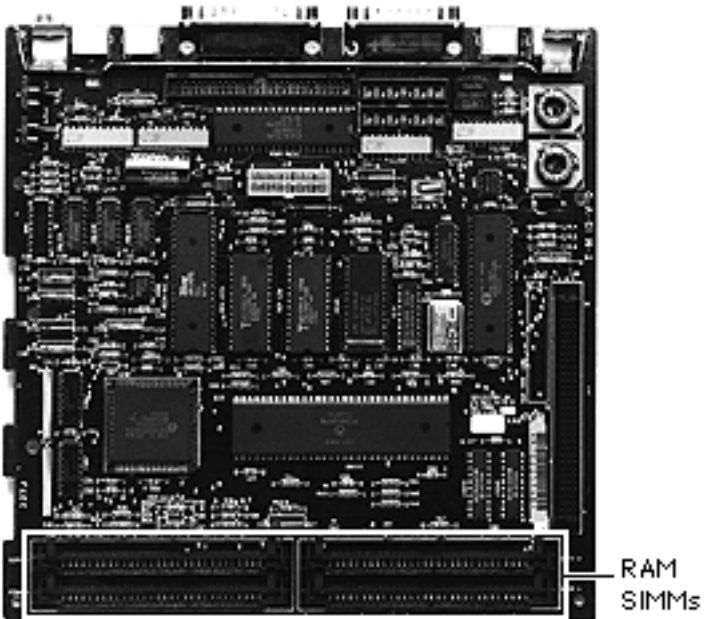


This is a revised logic board. You can identify the revised logic board by the presence of a jumper block. You can position the jumper block to configure RAM to 1, 2, 2.5, or 4 megabytes. The jumper is located in the area noted.

If the logic board contains the SWIM chip (P/N 344-0062) and new ROMs (P/N 342-

0701 and 342-0702) for the Apple SuperDrive upgrade, remove these components from the failed logic board and install them on the replacement logic board.

SE Logic Board **661-0369**

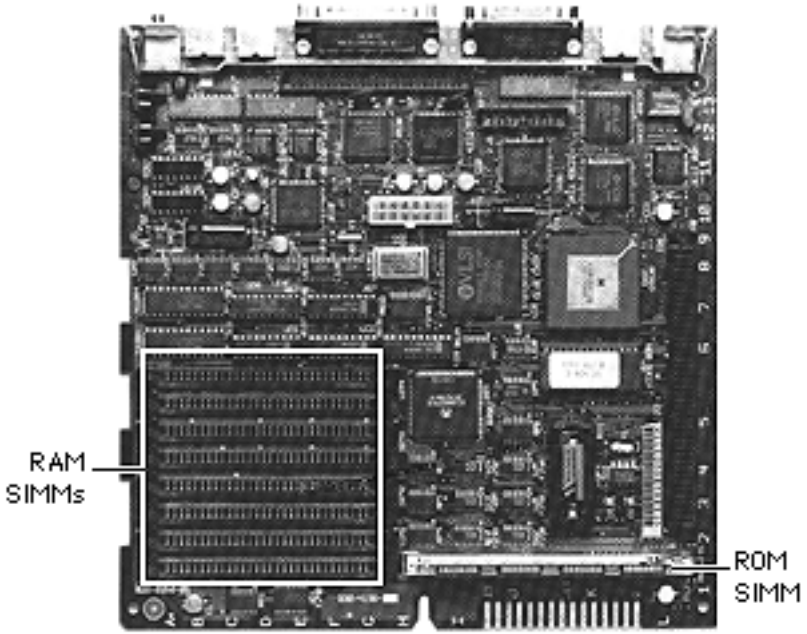


When you return P/N 661-0369, Apple ships you P/N 661-0526.

If the logic board contains a SWIM chip (P/N 344-0062) and new ROMs (P/Ns 342-0701 and 342-0702) for the Apple SuperDrive upgrade, remove these components from the failed logic board

and install them on the replacement logic board.

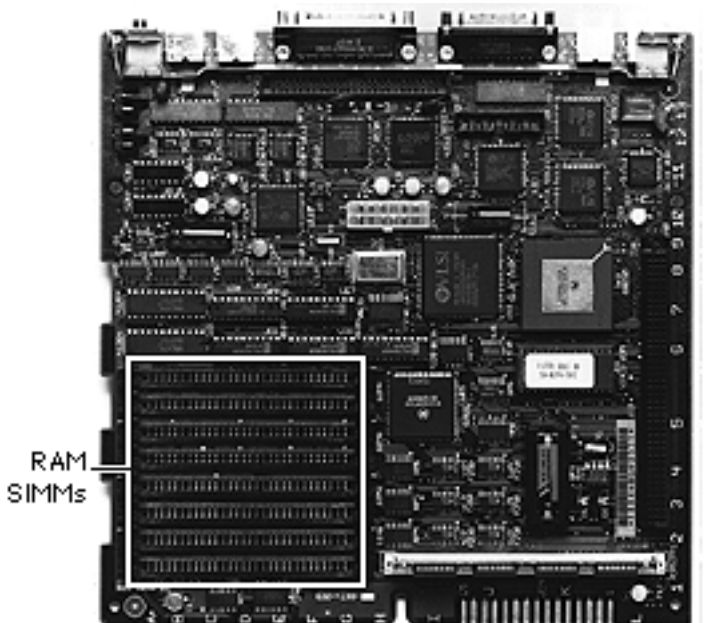
SE/30 Logic Board **661-0527**



When you return P/N 661-0510, Apple ships you P/N 661-0527.

Return the Macintosh SE/30 logic board without RAM SIMMs, but with the ROM SIMM.

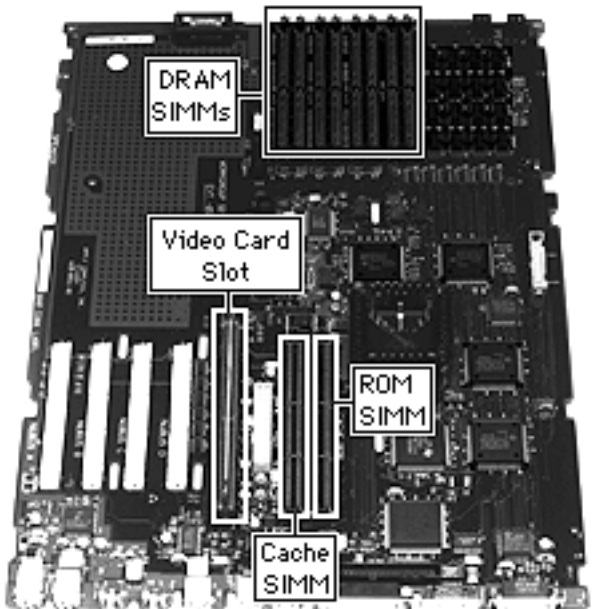
SE/30 Logic Board **661-0510**



When you return P/N 661-0510, Apple ships you P/N 661-0527.

Return the Macintosh SE/30 logic board without RAM SIMMs.

Workgroup Server 9150 Logic Board **661-0132**



Return the Workgroup Server 9150 logic board WITH the following components:

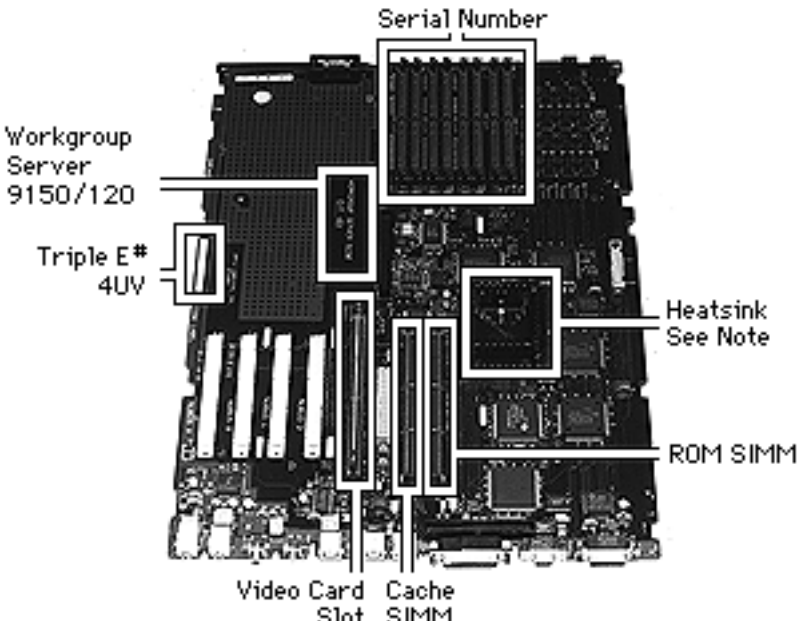
- Video card slot terminator board
- ROM SIMM

Return the logic board WITHOUT the following components:

- DRAM SIMMs
- Cache SIMM

Important: The Workgroup Server 9150 logic board has a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.

Workgroup Server 9150/120 Logic Board **661-0210**



The heatsink on the 9150/120 logic board differs from the Workgroup Server 9150 heatsink and includes a peltier wire.

To identify the 9150/120 logic board, refer to the module serial number.
For P/N 661-0210, the last five characters contain the code 4UV.

The name “Workgroup Server 9150/120 is silkscreened on the board.

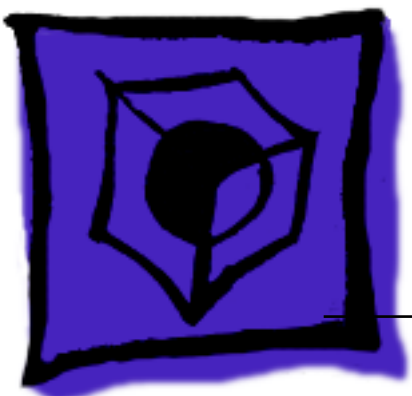
Return the Workgroup Server 9150/120 logic board WITH the following components:

- Video card slot terminator board
- ROM SIMM

Return the logic board WITHOUT the following components:

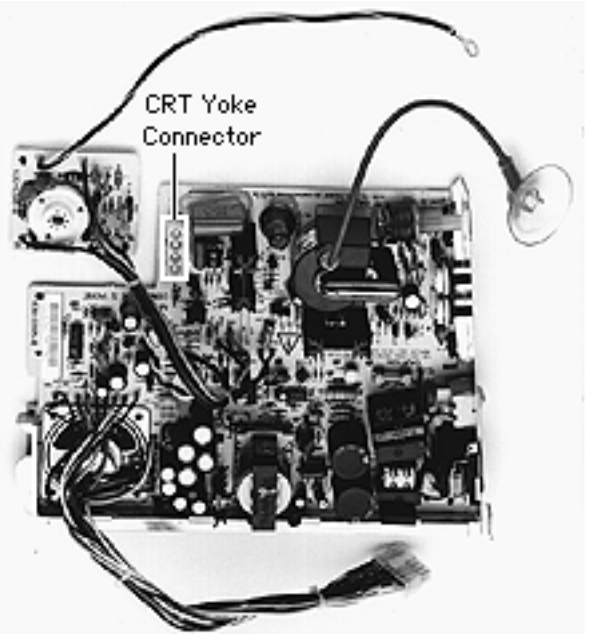
- RAM SIMMs
- Cache DIMM

Important: The Workgroup Server 9150/120 logic board has a ROM SIMM rather than ROMs soldered directly to the board. Return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM from the logic board.



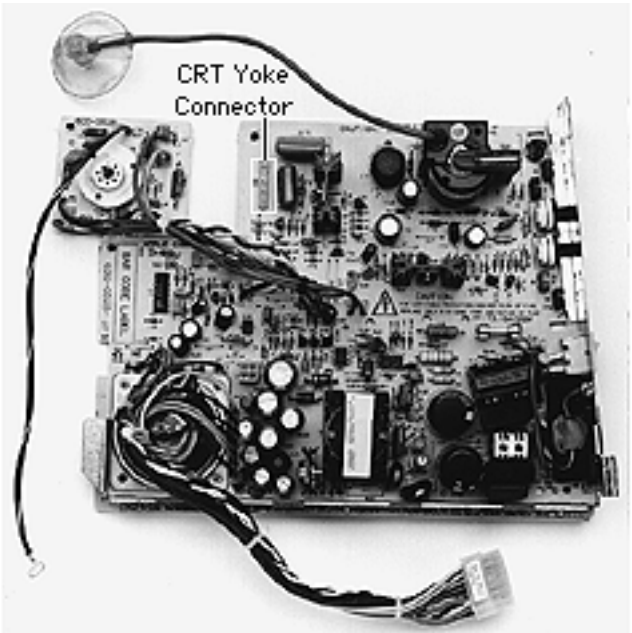
CPU Other Boards

Classic Power Sweep Board (110 V), Rev. A **661-0597**



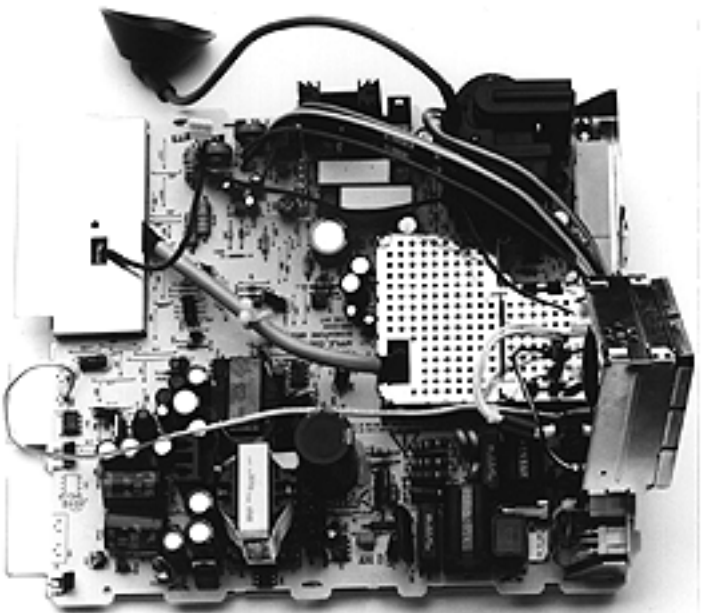
The two versions of the power sweep board, Rev. A and Rev. B, are functionally equivalent, but not interchangeable. The CRT yoke connector on power sweep board Rev. A has plastic sleeves surrounding the prongs.

Classic, Performa 200 Power Sweep Board (110 V), Rev. B **661-0651**

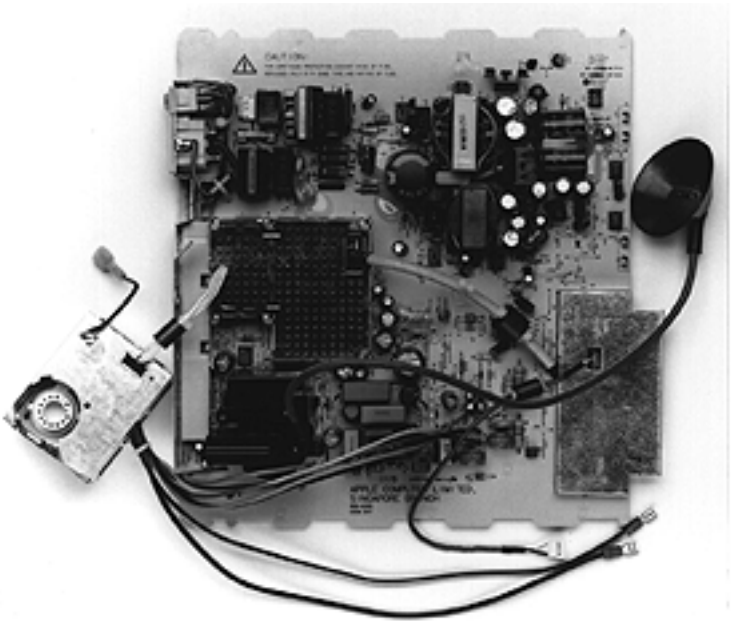


The two versions of the power sweep board, Rev. A and Rev. B, are functionally equivalent but not interchangeable. The CRT yoke connector on power sweep board Rev. B is a series of four exposed prongs.

Color Classic Analog Board **661-0732**



LC 520, Performa 550/575 Analog Board **661-0813**

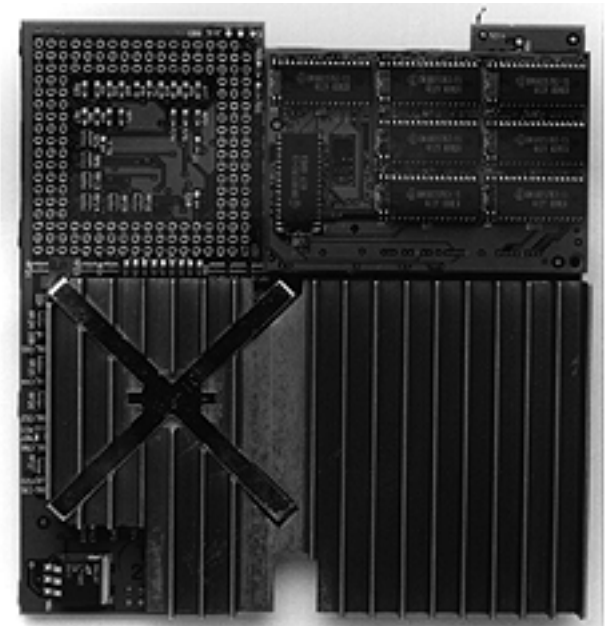


When you return P/N 661-0813; Apple ships you P/N 661-0192.

LC 520/550/575 and Performa 550, Analog Board **661-0192**

Macintosh Processor Upgrade

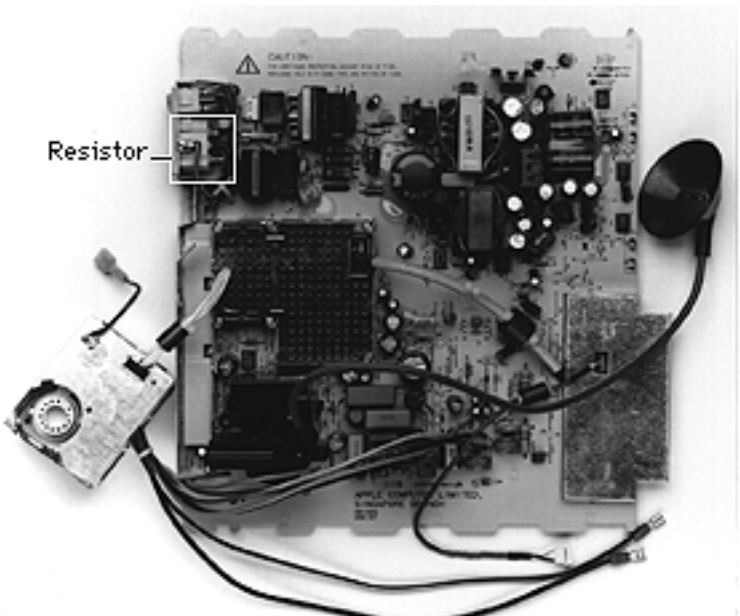
661-0255



Remove the 6840/ 68LC040 processor before returning the Macintosh processor upgrade to Apple.

The 256K cache must be installed on the board.

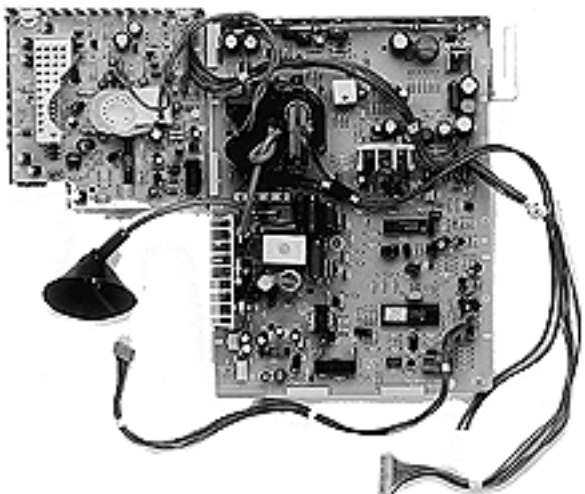
Macintosh TV Analog Board **661-0872**



The Macintosh LC 520 and the Macintosh TV analog boards look similar. The Macintosh TV analog board has a resistor soldered on the back of the AC connector. The Macintosh LC 520 does not.

Performa 5200/5300, PM 5200/5300 Boards Assembly, Analog/CRT Neck

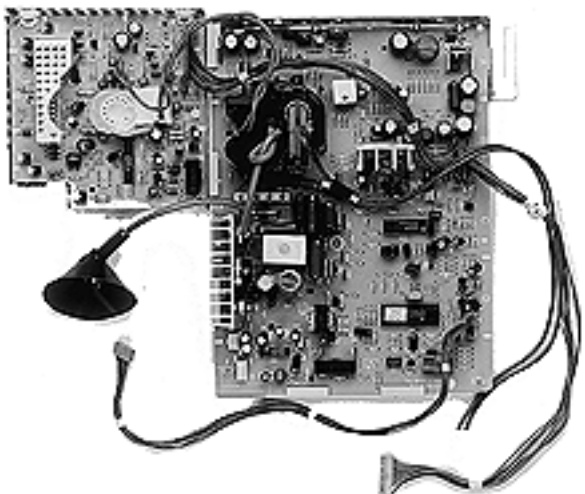
661-1118



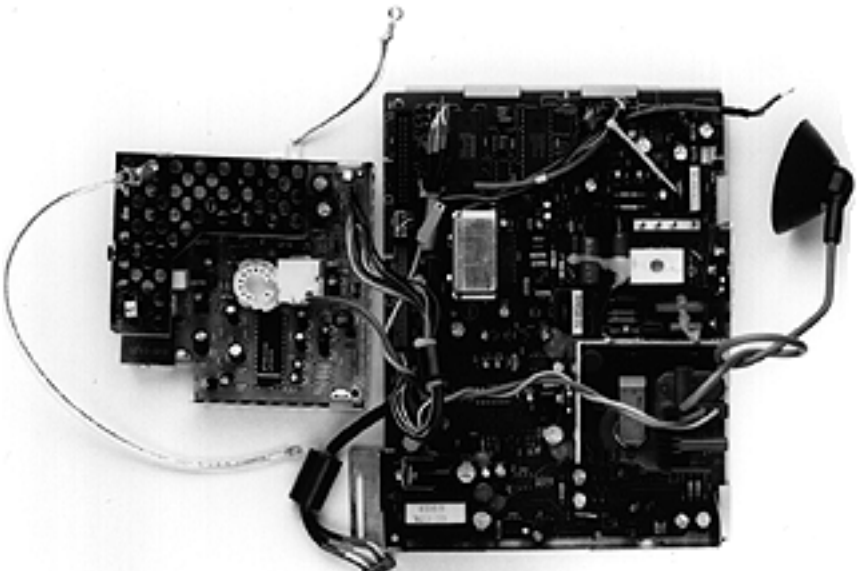
Use only w/661-1117 and/or 922-2043.

The two pin connector for the video adjustment cable is now labeled P102. It is in the lower left quadrant of the board as you are facing the component side of the board.

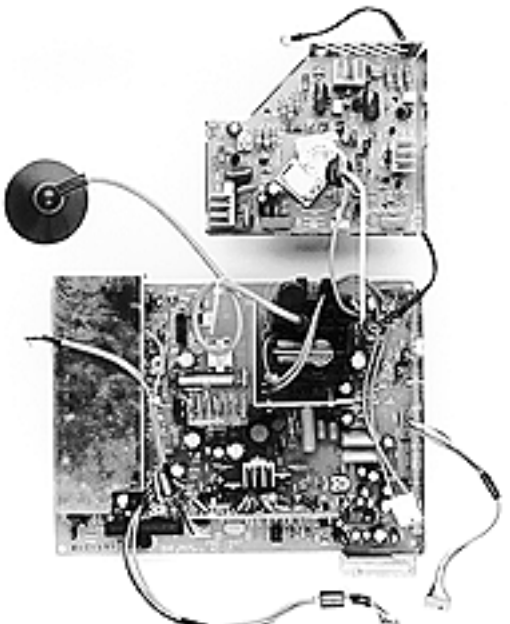
Performa 5420, PM 5400/120 Board, Analog w/Neck **661-1182**



PM 5200/75, LC, Performa 5200 Series Analog/Video Board **661-0928**



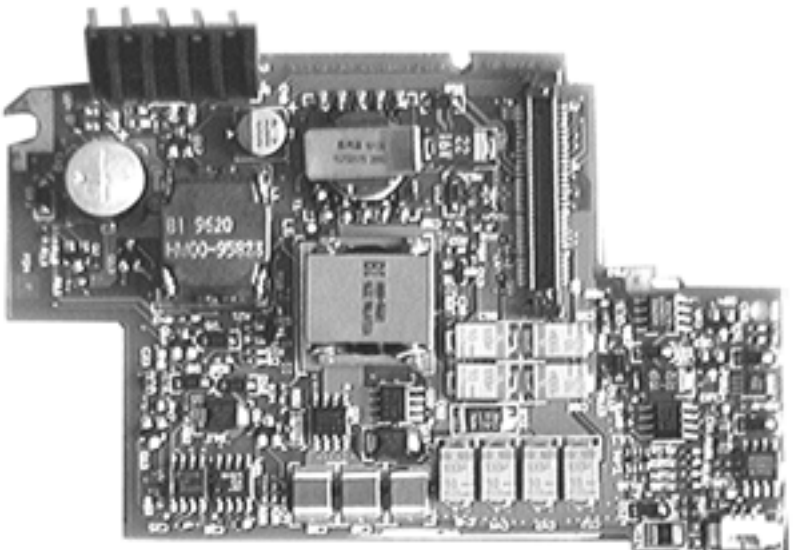
PM 5260/100 Analog/Video Board **661-1134**



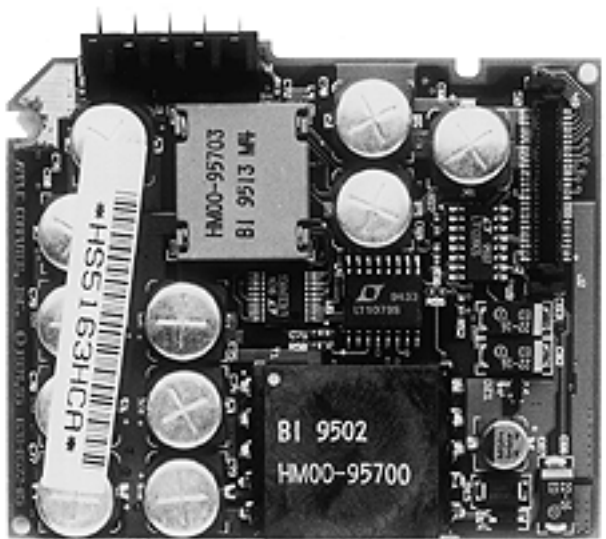
Power Sweep Board (220 V) Power Supply **661-76214**

Return the power-supply-to-logic-board cable to Apple with the defective board. Keep the brightness knob and battery with the customer's replacement board.

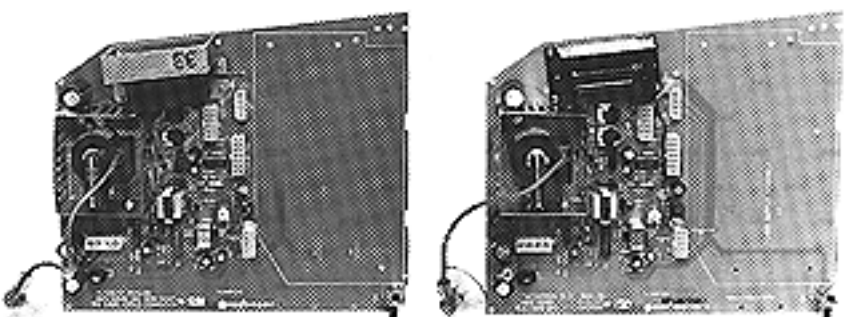
PowerBook 3400 Power Supply Board **661-1237**



PowerBook 5300 Series Power Supply Board **661-1056**



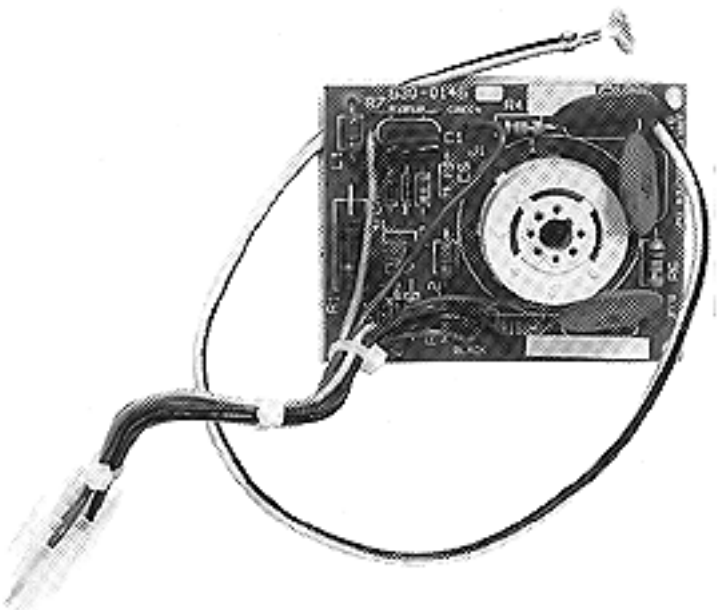
SE Analog Board **661-0371**



Return the anode cable to Apple with the defective board. Keep the brightness knob and all other cables for the customer's replacement board.

Both versions of this board, shown above, are acceptable for return.

SE Video Board **661-0372**



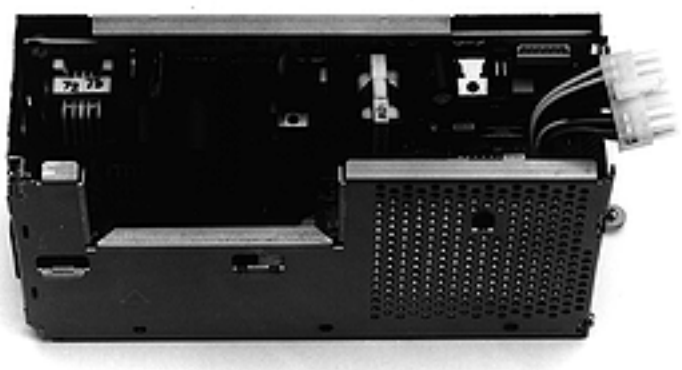
When you return P/N 661-0372, Apple ships you P/N 982-0024.

CPU Power Supplies

DuoDock Power Supply **661-1660**

The Macintosh Duo Dock power supply has the assembly part number 614-0005 on the module label.

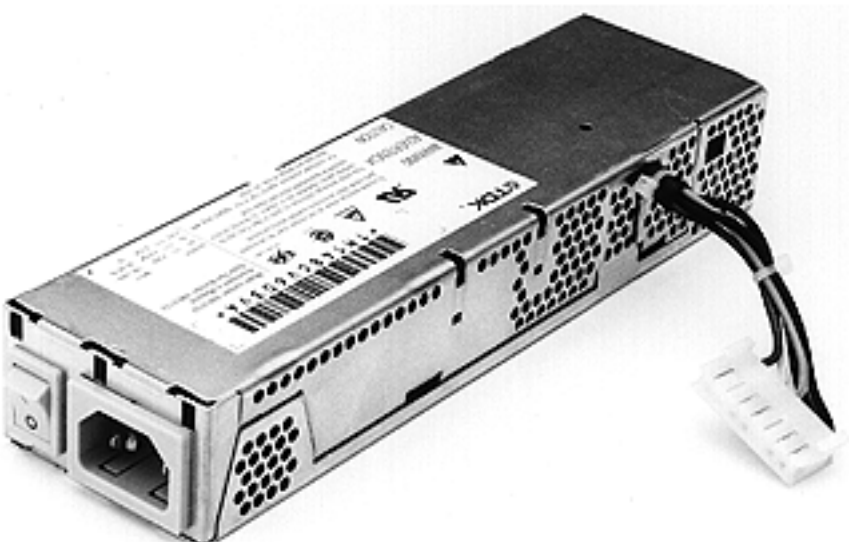
LC, Quadra 630, Performa 6200 Series, Performa 630 Series Power Supply **661-0170**



This part is used in Performa:
6200, 6205CD, 6214CD, 6216CD, 6218CD, 6220CD, 6230CD, 6290, and 6300CD computers.

LC 580, Performa 580 CD Power Supply **661-0940**

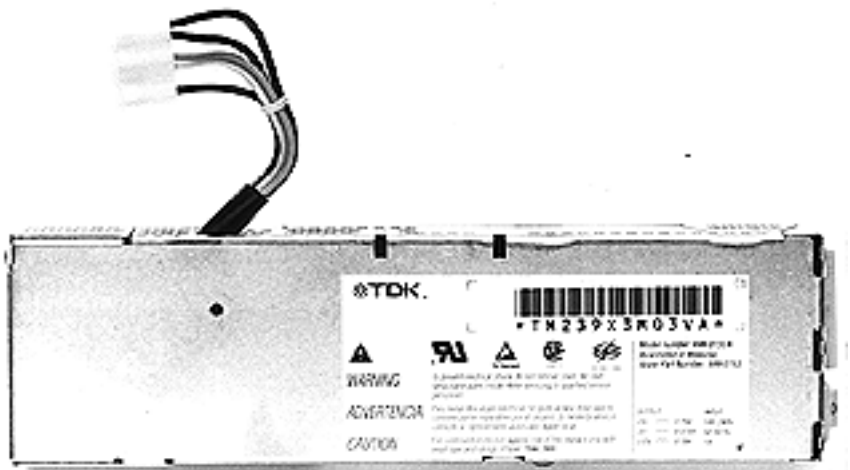
LC/LC II, Performa 400 Series Power Supply **661-0594**



When you return P/N 661-0594, Apple ships you P/N 661-0787.

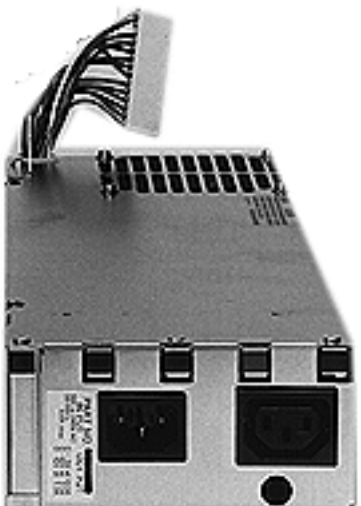
This power supply has the assembly part number 699-0153 on the module label.

LC/LC II/LC III, Performa 450/460 Series, Quadra 605 Power Supply **661-0787**



This power supply has the assembly part number 614-0003 on the module label.

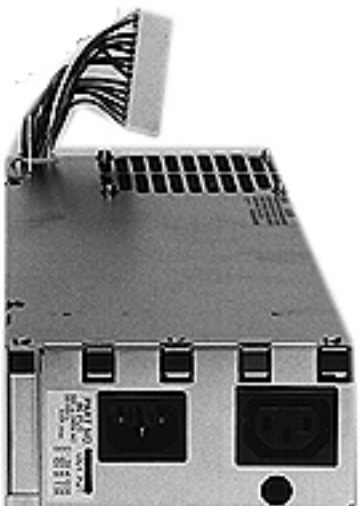
Mac II/IIfx Power Supply **661-0542**



The Macintosh II/IIfx power supplies have the following assembly part numbers on the module label:

Apple P/N 661-0375 = Assembly P/N 699-0389
Apple P/N 661-0542 = Assembly P/N 699-0393

Mac II/IIfx Power Supply **661-0375**



The Macintosh II/IIfx power supplies have the following assembly part numbers on the module label:

Apple P/N 661-0375 = Assembly P/N 699-0389

Apple P/N 661-0542 = Assembly P/N 699-0393

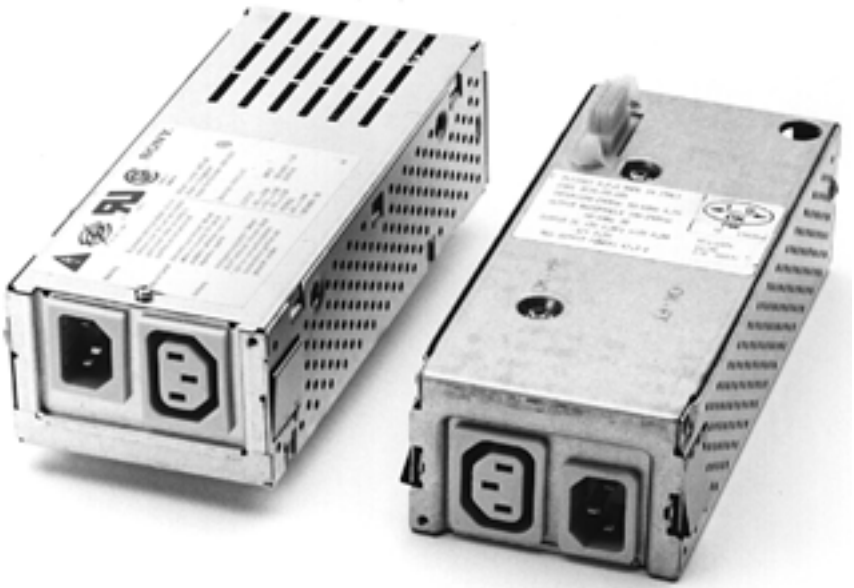
Mac IIcx/IIci/Quadra 700 Power Supply **661-0467**

Mac IIcx/IIci/IIvi, Centris 650, Quadra 700, Power Mac Power Supply, 112 W

661-0758

The Macintosh 112 Watt power supply has the assembly part number 614-0009 on the module label.

Mac IIsi Power Supply **661-1616**



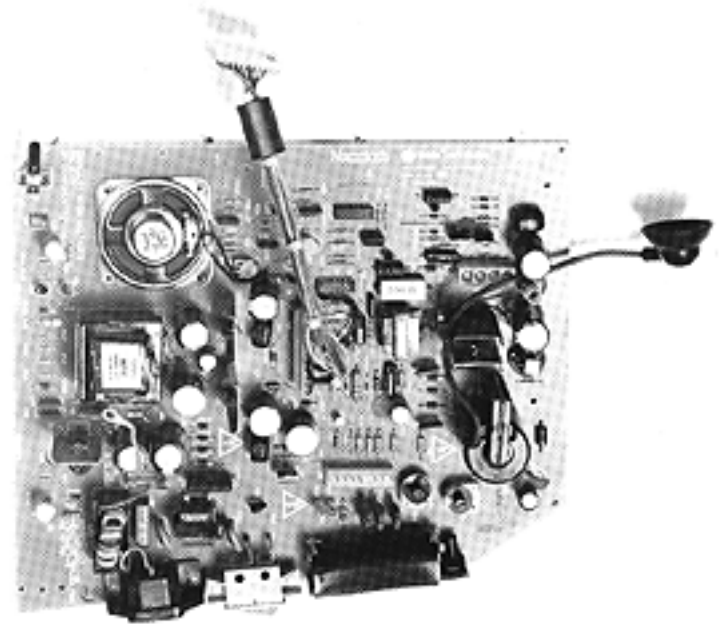
The Macintosh IIsi power supply has the assembly part number 699-0567 on the module label.

Macintosh Power Supply, 86 W

661-1688

The Macintosh 86 Watt power supply has the assembly part number 614-0022 on the module label.

Macintosh Power Supply, 110 V, Beige Switch **661-0461**

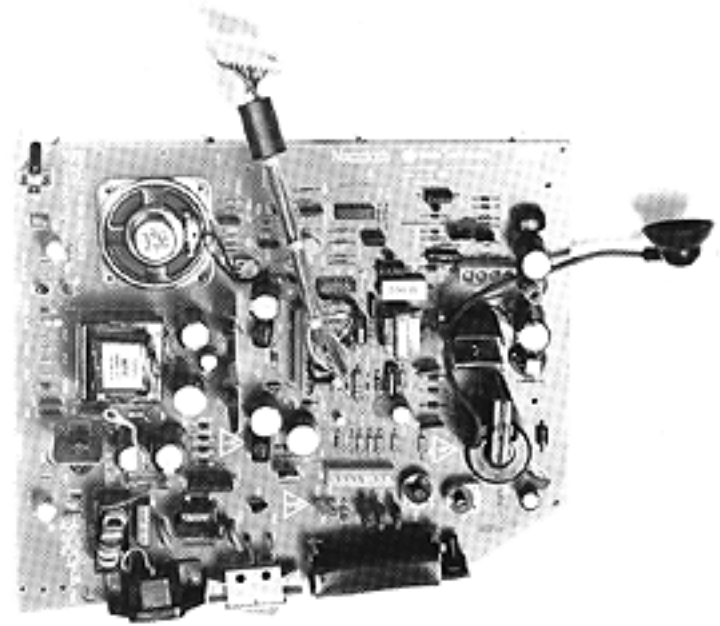


When you return P/N 661-0461, Apple ships you P/N 661-0462.

The previous service module (P/N 661-76153) contained a beige or platinum switch. P/Ns 661-0461 and 661-0462, which specify switch color, replace P/N 661-76153.

Return the power-supply-to-logic-board cable to Apple with the defective board. Keep the brightness knob and battery with the customer's replacement board.

Macintosh Power Supply, 110 V, Platinum Switch **661-0462**



The previous service module (P/N 661-76153) could have either a beige or a platinum switch. P/Ns 661-0461 and 661-0462, which specify switch color, replace P/N 661-76153.

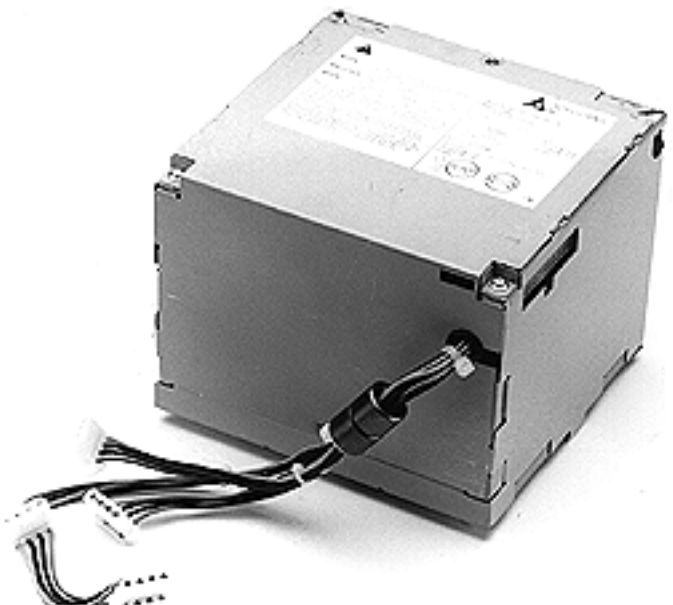
Return the power-supply-to-logic-board cable to Apple with the defective board.

Keep the brightness knob and battery with the customer's replacement board.

Macintosh Power Supply, 200 W **661-1687**

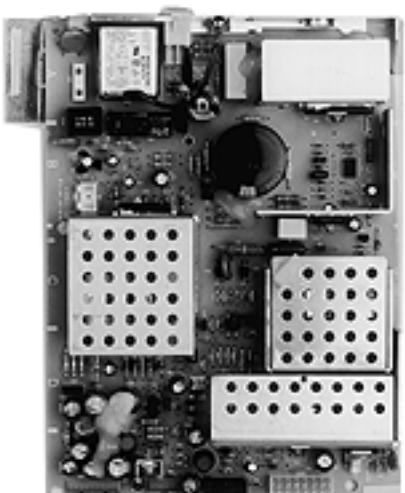
The Macintosh 200 Watt power supply has the assembly part number 614-0012 on the module label.

Macintosh Power Supply, 225 W **661-0232**



This power supply has the assembly part number 614-0040 on the module label.

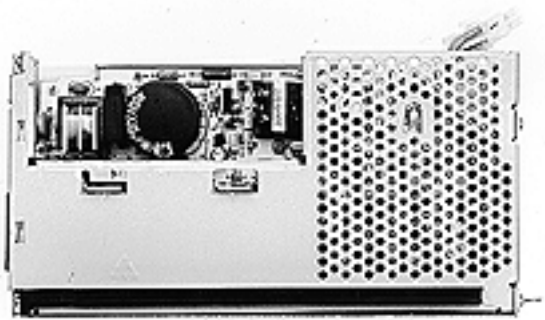
Performa 5200/5300, PM 5200/5300 Power Supply, Rev. B **661-1117**



Use only w/661-1118 and/or 922-2043.

Performa 5420 Board, Power Supply **661-1138**

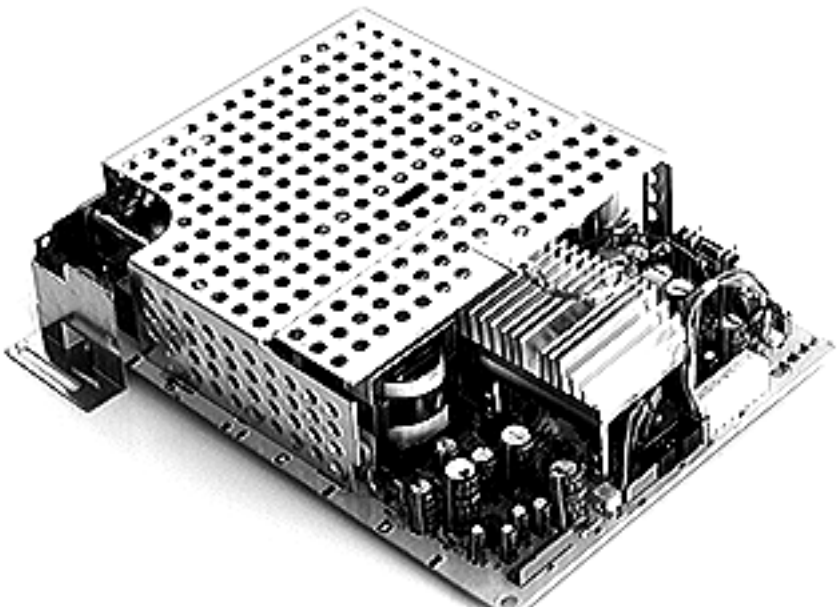
Performa 6320 Power Supply **661-1053**



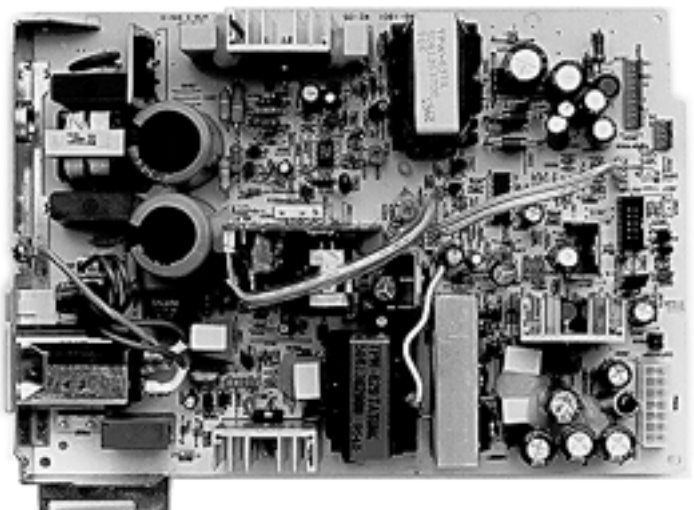
This part is used in Performa 6320 and 6360 computers.

Performa 6400 Series Power Supply **661-1169**

PM 5200/75 LC, Performa 5200 Series Power Supply **661-0930**



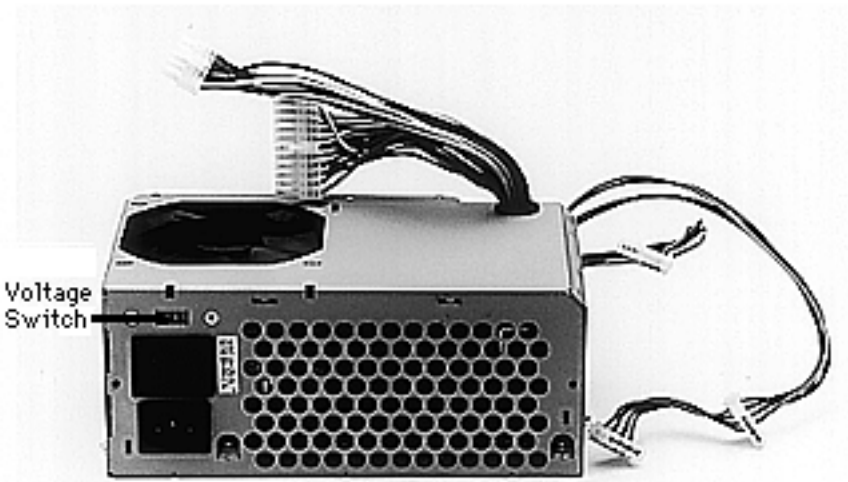
PM 5260/100 Power Supply **661-1133**



PM 9500 Power Supply, 225 W, 3.3 V **661-0923**

The Power Macintosh 9500 power supply has assembly part number 614-0038 located on the module label.

Power Supply, 150 W **661-0920**



This power supply has the assembly part number 614-0039 on the module label.

IMPORTANT: Set the voltage switch correctly on the replacement power supply before installing it into the computer. In the U.S., the voltage switch must be set to 115 V.

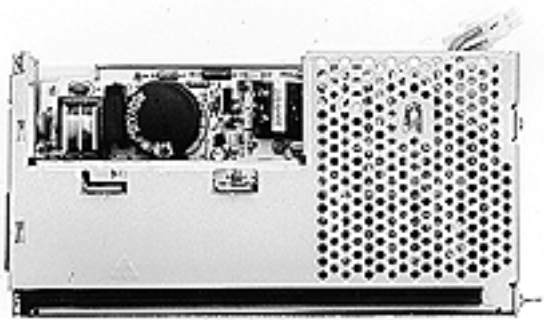
Power Supply, 150 W **661-1244**

Power Supply, 325 W **661-1145**

Power Supply, 390 W **661-1242**

Power Supply, 425 W **661-1131**

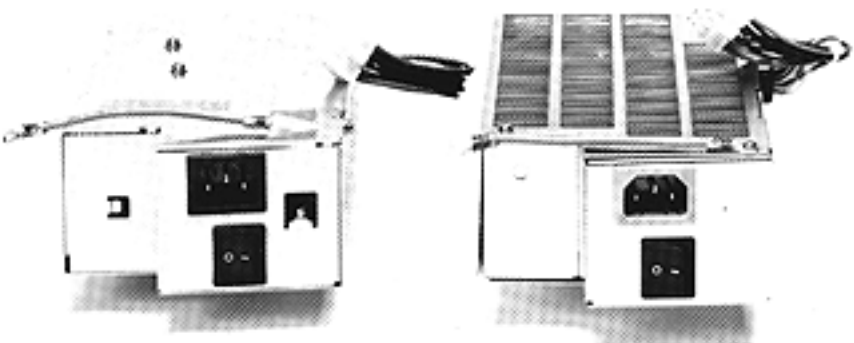
Quadra 630 Power Supply, 82 W **661-1053**



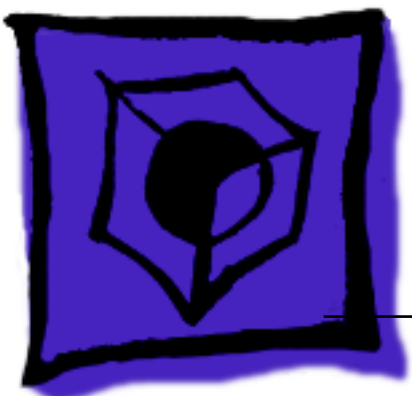
Quadra 900/950 Power Supply **661-0664**

The Macintosh Quadra 900/950 power supply has the assembly part number 699-0394 on the module label.

SE and SE/30 Power Supply **661-0370**



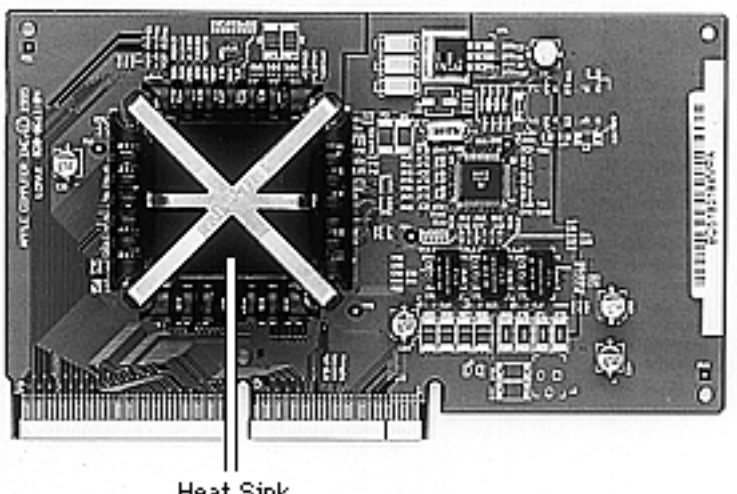
The Macintosh SE and SE/30 power supply has the assembly part number 699-5047 on the module label.



CPU Processor Cards

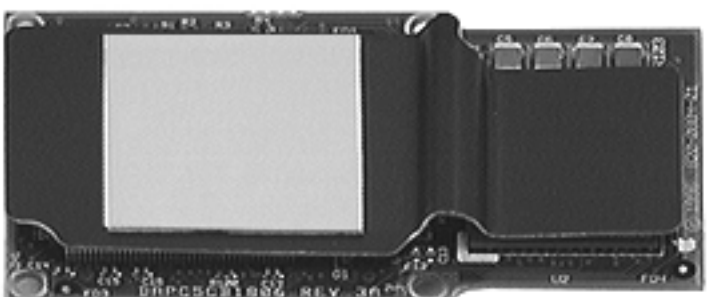
601 100 MHz Processsor Card

661-0917

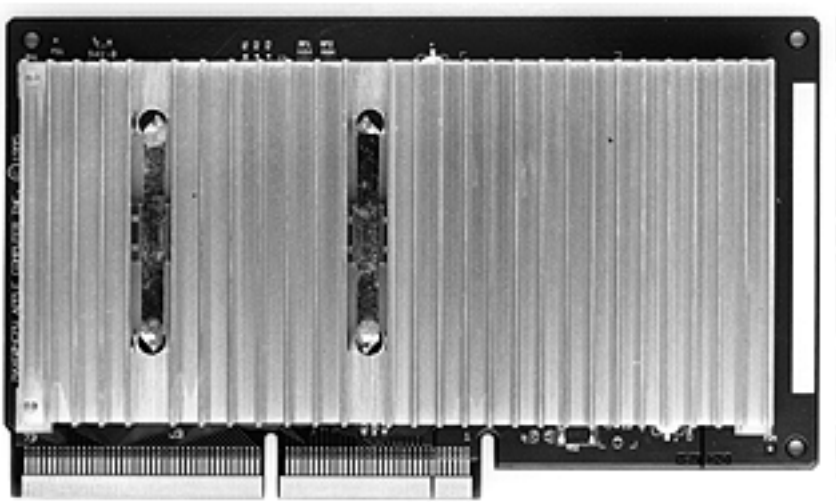


Do not remove the microprocessor's heat sink. This will damage the card.

603e 133 MHz Processor Card, PowerBook 1400c **661-1308**



604 120 MHz Processor Card **661-0925**



This card has assembly part number 630-1733, 630-1734, 630-2054, or 661-2055. When ordering a replacement card, use the assembly part number to determine the correct service part number.

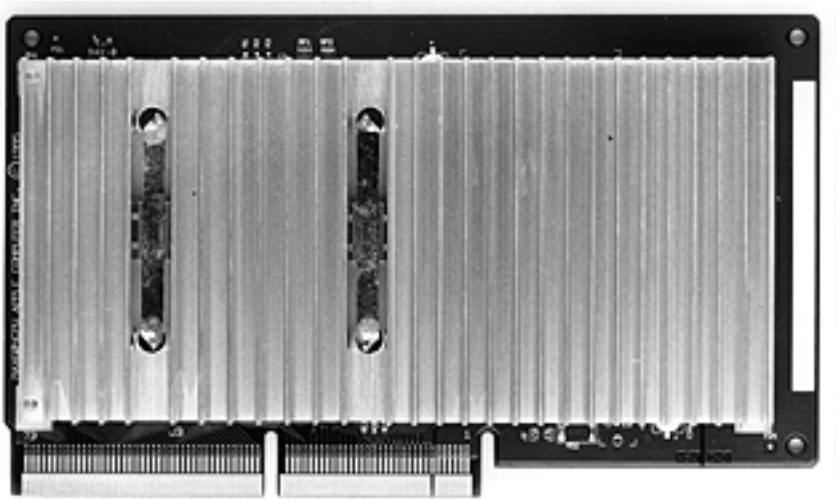
The last six digits of the FCC ID label (located on the underside of the processor cards) identify the processor

type and speed. The FCC label on this card reads FCCxxx604120, indicating a 604 processor operating at 120 MHz.

Install the processor card by aligning the card above the processor card slot and pushing straight down. Verify the processor card is firmly seated along the connector, pushing down again if necessary. Do not attempt to remove the microprocessor's heatsink. This will damage the card.

Note: This processor card does NOT work with the WS 8550.

604 120 MHz Processor Card **661-1272**



The assembly part number 630-1351 or 630-1568 identifies this particular version of the 120 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

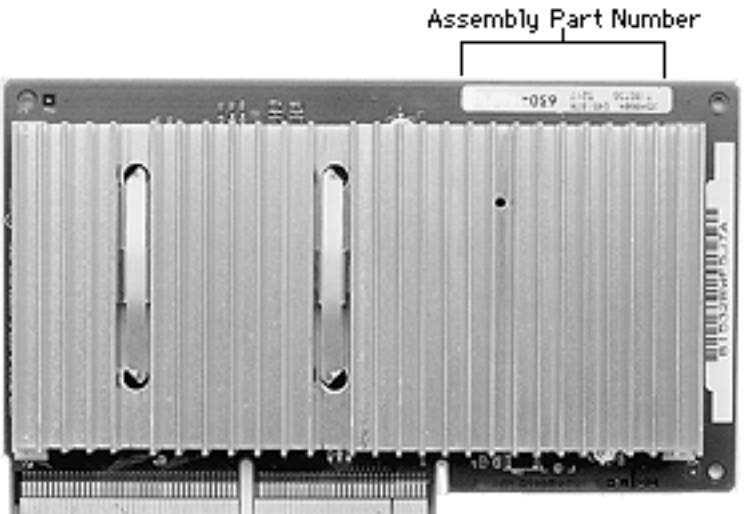
The last six digits of the FCC ID label (on the underside of the card) read FCCxxx604120,

indicating a 120 MHz 604 processor.

Install this card by aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.

Note: This processor card does NOT work with the PM 8500 or WS 8550.

604 132 MHz Processor Card **661-1157**



The assembly part number 630-1885, 630-2059, 630-2269, or 630-2270 to identify this particular version of the 132 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

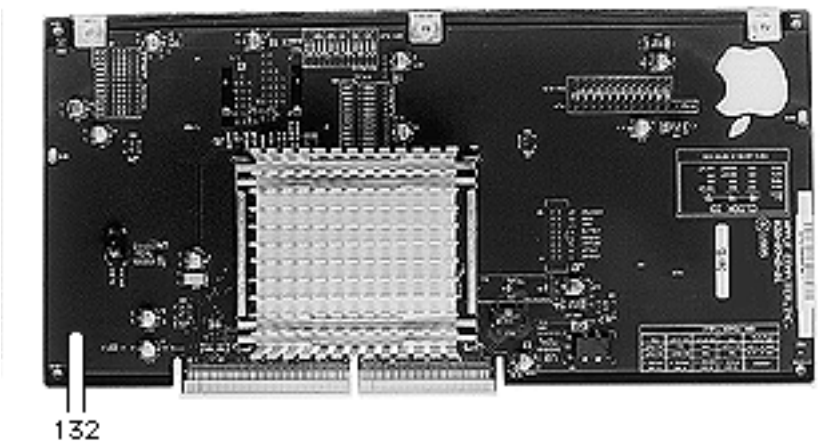
The last six digits of the FCC ID label (on the underside of the card) read FCCxxx604132, indicating a 604 processor operating at 132

MHz.

Install the processor card by aligning the card above the processor card slot and pushing straight down. Verify the processor card is firmly seated along the connector, pushing down again if necessary. Do not attempt to remove the microprocessor's heatsink. This will damage the card.

604 132 MHz Processor Card, For Apple Network Servers

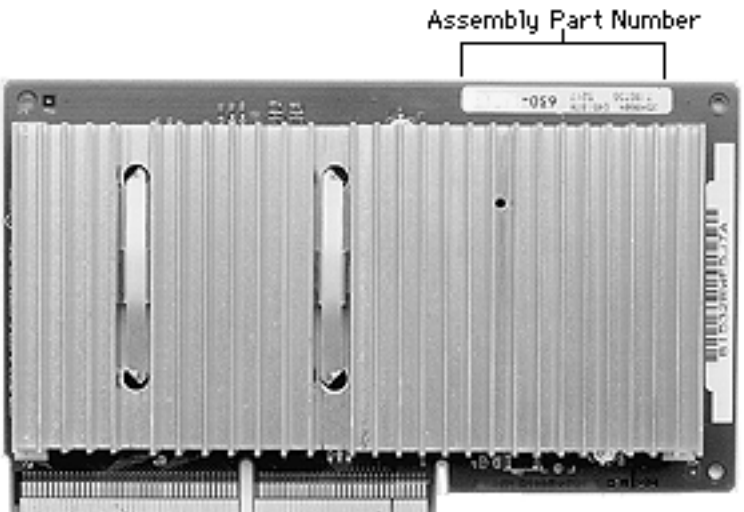
661-1144



Identify this card by the “132” marking in the lower left corner of the card.

IMPORTANT: Do not attempt to remove the microprocessor’s heat-sink. This will damage the card.

604 132 MHz Processor Card, For PM 8500 and PM 9500 Only (Replaced by 661-1157) **661-1259**



Identify this version of the 132 MHz card by its assembly part number (630-2060 or 630-1886). When ordering a replacement card, use the assembly part number to determine the correct service part number.

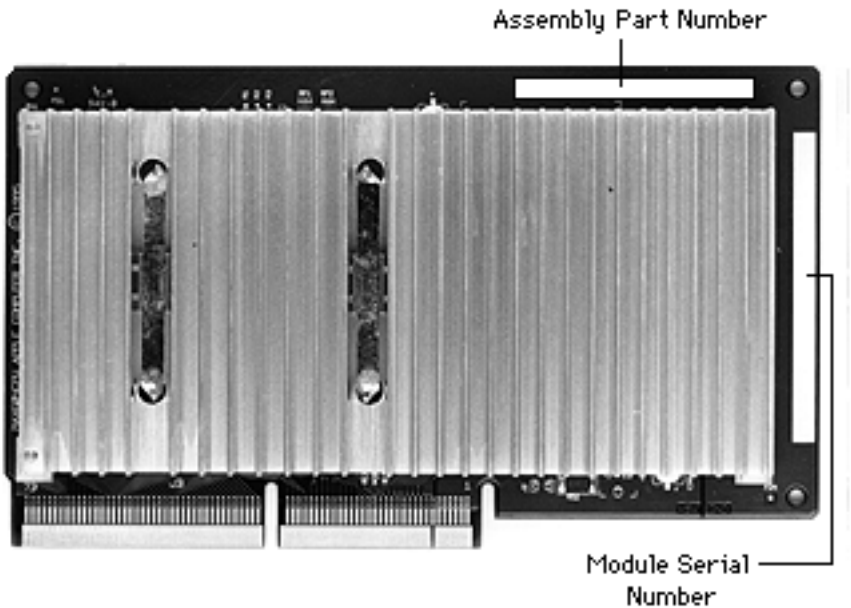
The last six digits of the FCC ID label (on the underside of the card) read FCCxxx604132, indicating a 604

processor operating at 132 MHz.

Install the processor card by aligning the card above the processor card slot and pushing straight down. Verify the processor card is firmly seated along the connector, pushing down again if necessary. Do not attempt to remove the microprocessor's heatsink. This will damage the card.

Note: This card does NOT work with the PM 7500, PM 7600, or the WS 8550.

604 Processor Card, 132 MHz, Rev. A, For PM 9500 Only **661-1002**



This Rev. A version of the 132 MHz card is identified by the assembly part number (630-1451, 630-1735, or 630-1736). When ordering a replacement card, use the assembly part number to determine the correct service part number.

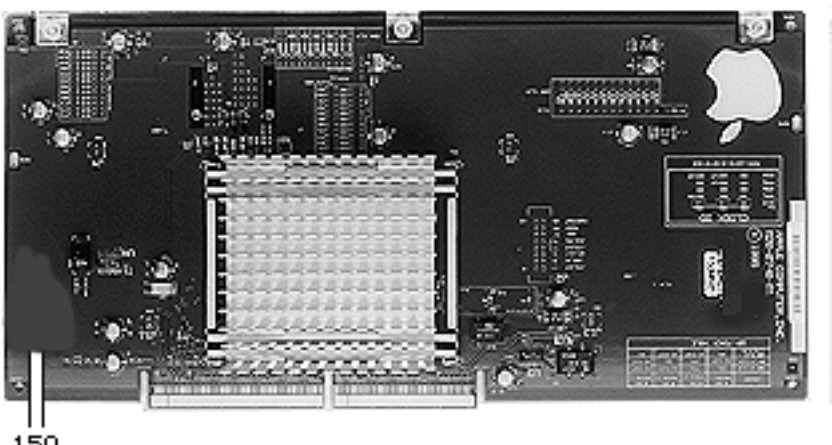
The last six digits of the FCC ID label (on the underside of the card)

read FCCxxx604132, indicating a 604 processor operating at 132 MHz.

Do not attempt to remove the microprocessor's heatsink. This will damage the card.

Note: This processor card only works with the PM 9500.

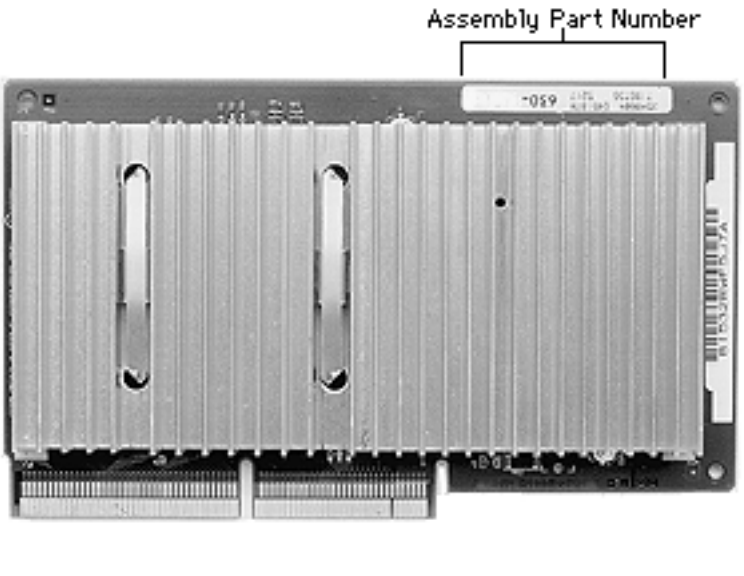
604 150 MHz Processor Card, For Apple Network Servers **661-1126**



Identify this card by the "150" marking in the lower left hand corner of the card.

IMPORTANT: Do not attempt to remove the microprocessor's heat-sink. This will damage the card.

604 150 MHz Processor Card, For PM 8500 and PM 9500 Only **661-1250**



You must use the assembly part number (630-2308, 630-1940, 630-2061, or 630-2088) to identify this particular version of the 150 MHz card.

The last six digits of the FCC ID label (on the underside of the card) read FCCxxx604150, indicating a 604 processor operating at 150 MHz.

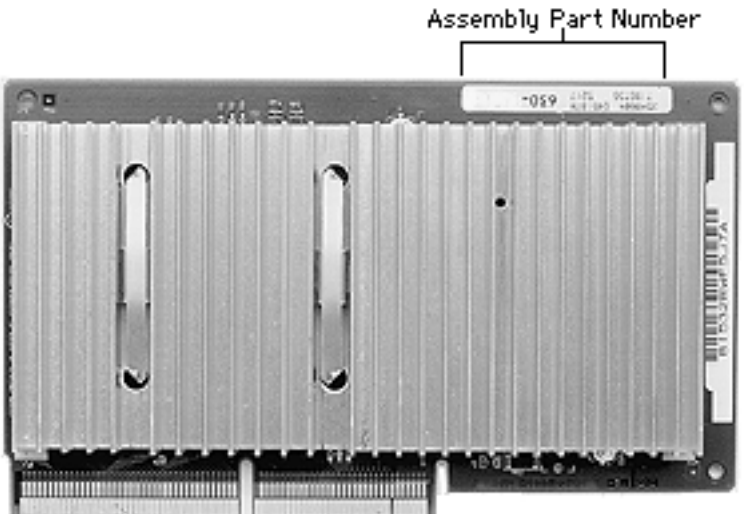
Install the processor card by aligning the card above the processor card

slot and pushing straight down. Verify the processor card is firmly seated along the connector, pushing down again if necessary. Do not attempt to remove the microprocessor's heatsink. This will damage the card.

Note: This card does NOT work with the PM 7500, PM 7600, or WS 8550.

604 150 MHz Processor Card, For PM 9500 Only (Replaced by 661-1250)

661-1146



You must use the assembly part number (630-1737 or 661-2307) to identify this particular version of the 150 MHz card.

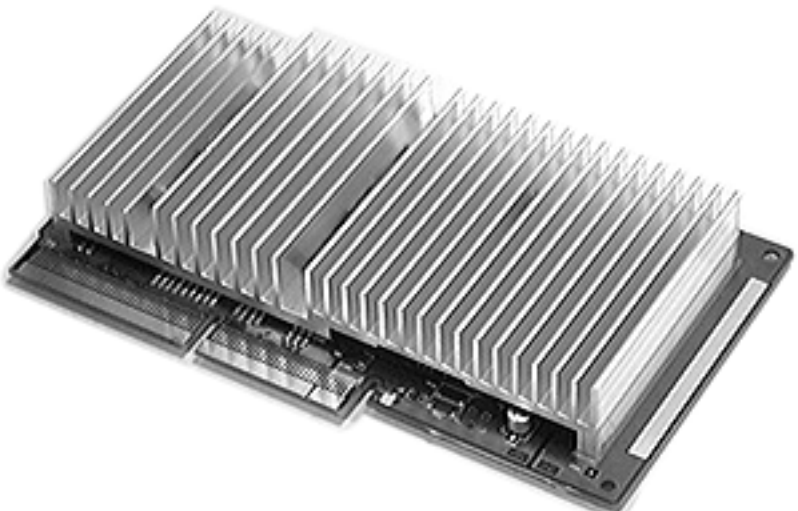
The last six digits of the FCC ID label (on the underside of the card) read FCCxxx604150, indicating a 604 processor operating at 150 MHz.

Install the processor

card by aligning the card above the processor card slot and pushing straight down. Verify the processor card is firmly seated along the connector, pushing down again if necessary. Do not attempt to remove the microprocessor's heatsink. This will damage the card.

Note: This card only works with the PM 9500.

604e 166 MHz Processor Card **661-1267**

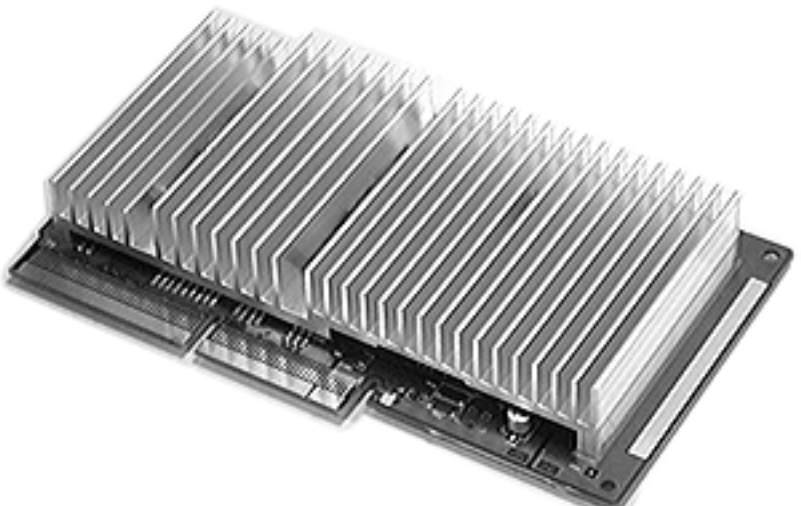


The assembly part number 630-2122 or 630-2248 identifies this particular version of the 166 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

Install this card by aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again

if necessary. Do NOT attempt to remove the microprocessor's heatsink.

604e 180 MHz Processor Card **661-1222**

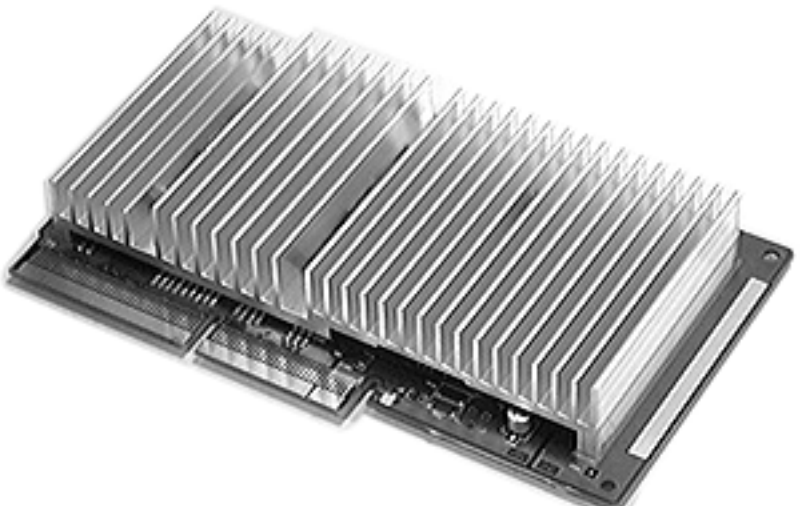


The assembly part number 630-2099-(A,B,C, or D), 630-2224-(A,B, or C), 630-2240, or 630-2249 identifies this particular version of the 180 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

Install this card by

aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.

604e 180 MHz Processor Card **661-1305**



Use this card in the Power Macintosh 7300 Series.

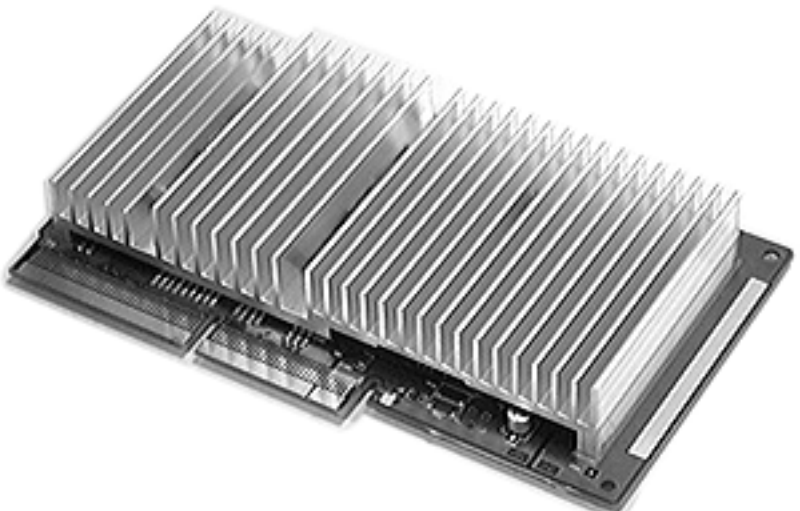
The assembly part number 630-2240 or 630-2249 identifies this particular version of the 180MP MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

A limited number of the first Power Macintosh 7300, 7600/200, 8600, and 9600 systems were shipped with 180 MHz processor cards incorrectly labeled with a use restriction label that says "8500/9500 only." If the assembly number on the card matches one of the numbers listed above, disregard the use restriction label, as it is incorrect.

Note that service providers ordering a 180 MHz replacement card may also receive a part that is incorrectly labeled.

Install this card by aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.

604e 180 MHz MP (MultiProcessor) Card **661-1280**

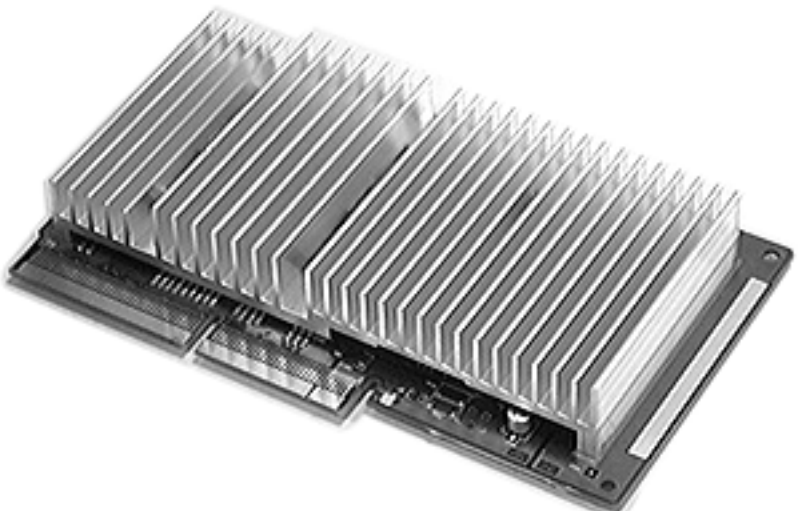


The assembly part number 630-2124, 630-2225, 630-2316, or 630-2380 identifies this particular version of the 180 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

Install this card by aligning the it above the

processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.

604e 200 MHz Processor Card **661-1223**

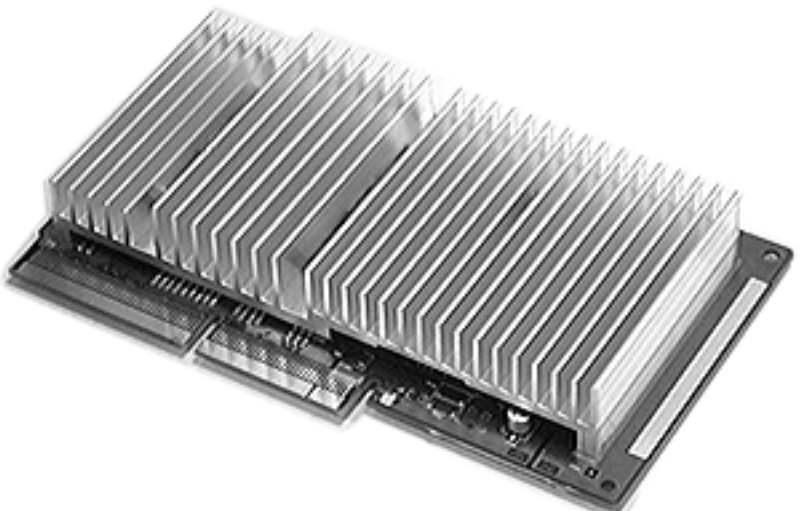


The assembly part number 630-2100, 661-2200, or 630-2201, or 630-2250 identifies this particular version of the 200 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

Install this card by aligning the it above the

processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.

604e 200 MHz Processor Card **661-1307**



The assembly part number 630-2201, 661-2204, or 630-2250 identifies this particular version of the 200 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

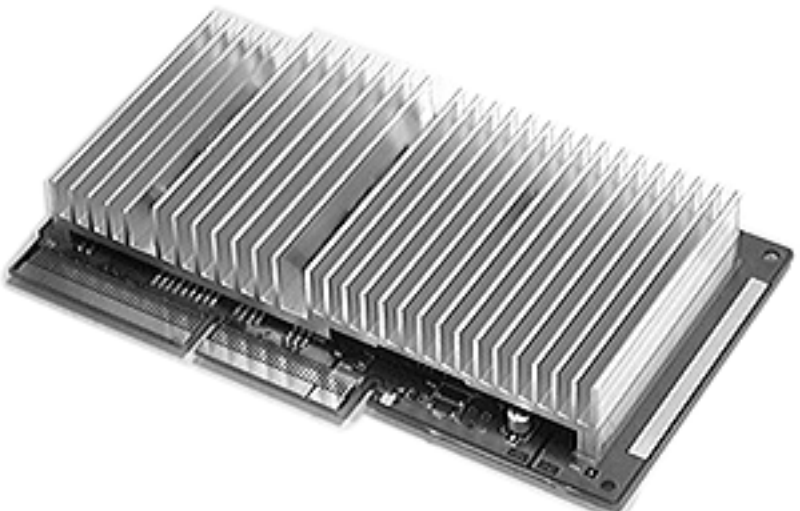
A limited number of the first Power Macintosh 7300, 7600/200,

8600, and 9600 systems were shipped with 200 MHz processor cards incorrectly labeled with a use restriction label that says "8500/9500 only." If the assembly number on the card matches one of the numbers listed above, disregard the use restriction label, as it is incorrect.

Note that service providers ordering a 200 MHz replacement card may also receive a part that is incorrectly labeled.

Install this card by aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.

604e 200 MHz MP (MultiProcessor) Card **661-1269**



The assembly part number 630-2125, 630-2259, or 630-2262 identifies this particular version of the 200MP MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

Install this card by aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again

if necessary. Do NOT attempt to remove the microprocessor's heatsink.

Displays

Color Displays

Apple Basic Color Monitor

661-0031

Apple Basic Color Monitor, 110 V, U.S./Pacific) **661-0009**

There are multiple versions of the Apple Basic Color Monitor. Use the manufacturing part number (located on the product lable under the Apple model number) to identify the monitor version. To obtain a monitor with manufacturing part number 645-0032 or PA645-0032, order Apple part number 661-0009.

Apple Basic Color Monitor, 110 V, U.S./Pacific) **661-0008**

When you return P/N 661-0008, Apple ships you P/N 661-1670.

There are multiple versions of the Apple Basic Color Monitor. Use the manufacturing part number (located on the product lable under the Apple model number) to identify the monitor version.

To obtain a monitor with manufacturing part number 645-0031 or PA645-0031, order Apple part number 661-0008.

Apple Color Plus 14-Inch Display

661-0870

Apple Multiple Scan 14" Monitor

661-0962

This monitor uses the same sense codes as the Apple MultipleScan 15” monitor. It has 4 optimized resolutions available (2 @ 640x480 and 2 @ 800 x 600). The fifth resolution (832x624), although available, is not recommeneded for use.

Apple Multiple Scan 14" Monitor, Whole Unit with Adapter **661-1187**

Apple Multiple Scan 15 Display

661-0128

Apple Multiple Scan 15 Display, without Built-In Video Cable, Int'l Only, POL/NORTH

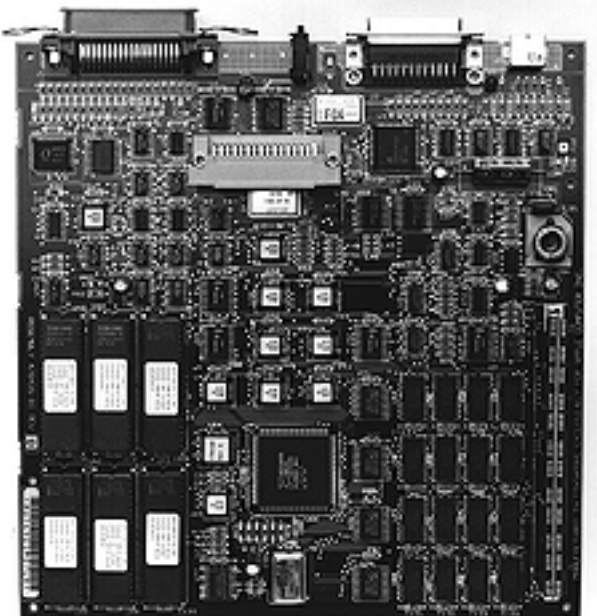
661-0195

Macintosh Performa Plus 500 Series Monitor .29

661-1669

Macintosh Performa Plus 500 Series Monitor .39 (Discontinued) (Replaced by 661-1187)

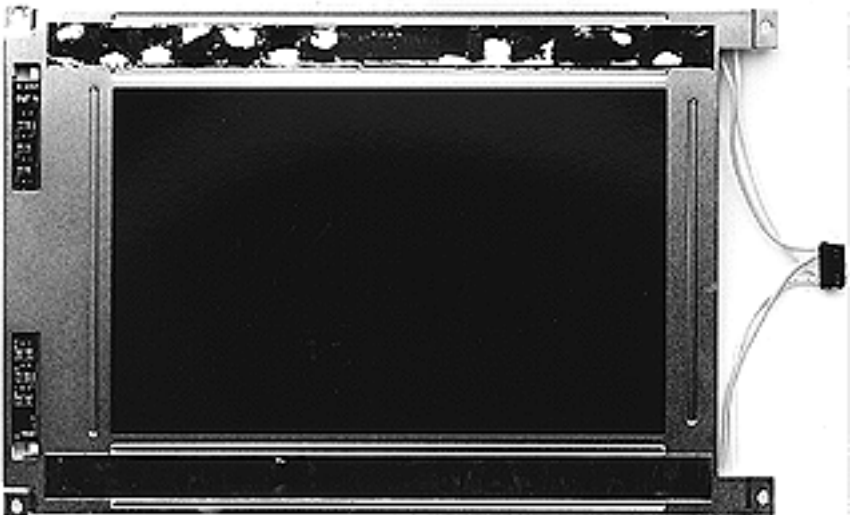
661-1670



PowerBook 145B Display, Flat Panel (replaced by 661-8745) **661-1020**

The two PowerBook displays, P/N 661-0681 and P/N 661-1020, are similar. To differentiate the two, check the type of PowerBook in which the display was installed. P/N 661-0681 was used in the PowerBook 140 and 145; P/N 661-1020 was used exclusively in the PowerBook 145B.

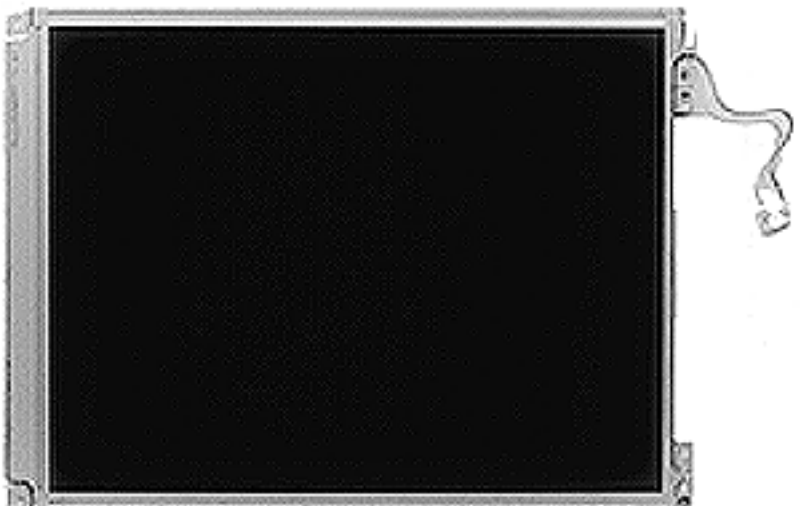
PowerBook 165c Display, CFSTN, Color, 10.4" w/Cable **661-0752**



Transfer any screen protective material, if available, from the new module to the module being returned.

PowerBook 190cs/66, 5300cs/100 Display, CFSTN, Color, 10.4" w/Cable

661-0937



PowerBook 190cs, 5300cs, 5300c, and 5300ce displays look similar.
Use the part number on the display and its cable to distinguish the display.

PowerBook 520c Display, Dual Scan, Color

661-0062

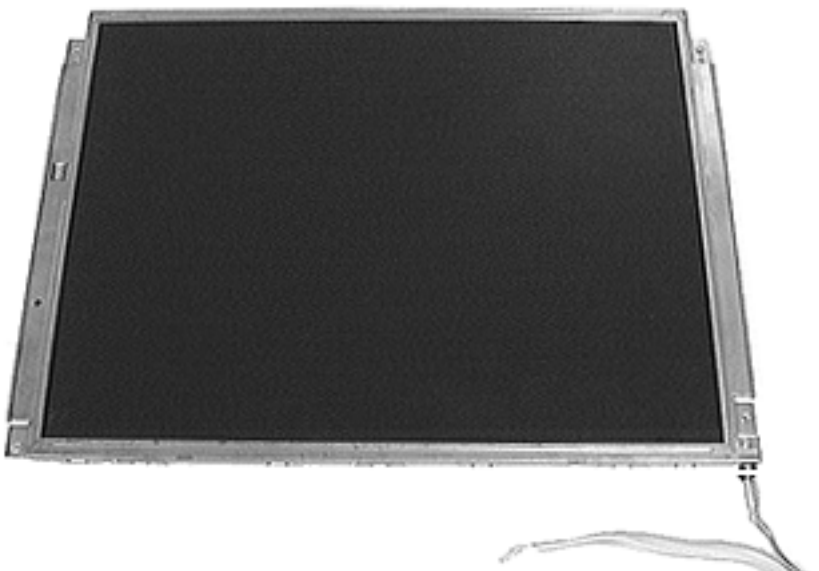
Top

Bottom

Transfer any screen protective material, if available, from the new module to the module being returned.

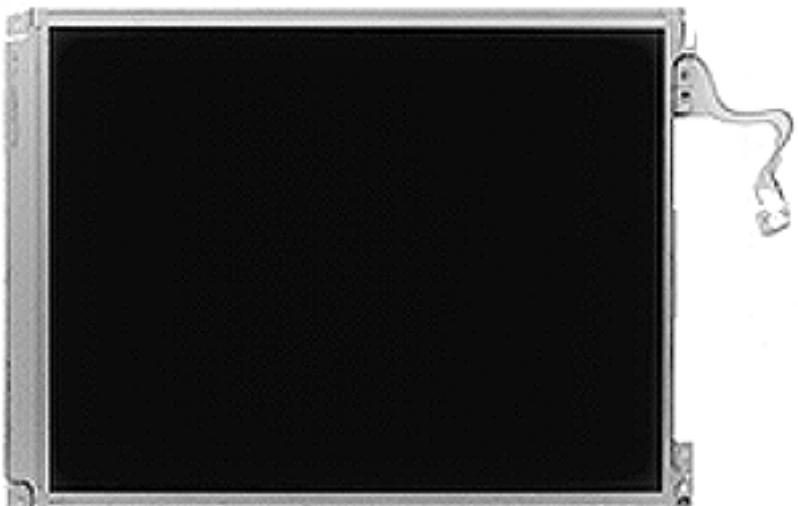
Return the module WITHOUT the display cable attached.

PowerBook 3400 Display, CTFT, SVGA **661-1236**



PowerBook 5300c/100 Display, TFT, Color, 10.4" w/Cable CPRC/Int'l Only

661-0936



PowerBook 190cs, 5300cs, 5300c, and 5300ce displays look similar.

Use the part number on the display and its cable to distinguish the display.

PowerBook 5300ce/117 Display, TFT, Color, 10.4" w/Cable, SVGA **661-1031**

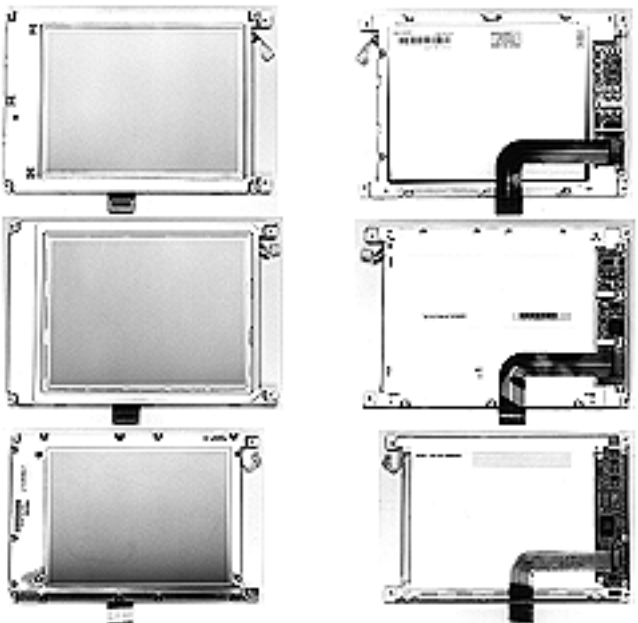
All PowerBook 190cs, 5300cs, 5300c, and 5300ce displays look similar.

Use the part number on the display and its cable to distinguish the display.

PowerBook 5300c Display, TFT, Color, 10.4" w/Cable, SVGA **661-1030**

PowerBook 540c Display, TFT, Color

661-0056



Transfer any screen protective material, if available, from the new module to the module being returned.

Return the module WITH the display cable.

PowerBook Duo 2300c Display, Active Matrix, Color (CPRC/Int'l Only) **661-0233**

PowerBook Duo 250 Display, Active-Matrix, Monochrome **661-1686**

Part number 661-1686 is an international-only part and not available in the U.S. Service providers in the U.S. should call the Technical Assistance Center at 800-919-2775 (select option #6) to arrange repair of this part through CPRC.

PowerBook Duo 270c/280c Display, Active-Matrix, Color **661-1734**

The latest version of this part number includes a latch kit (part number 076-0495).

PowerBook Duo 250/280 Display, Active-Matrix, Monochrome **661-0052**
CPRC/Int'l Only

Displays

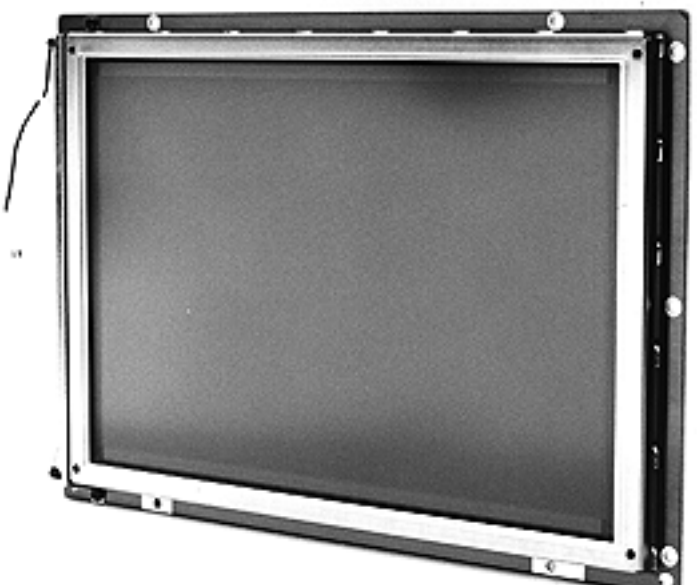
Monochrome Displays

Macintosh Portable Display, LCD **661-0473**

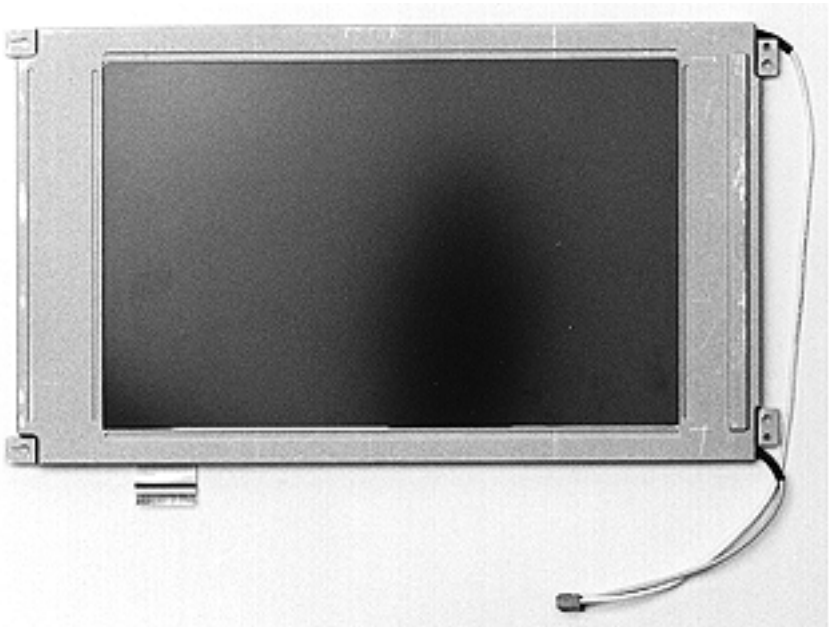
You must return the panel with the electrostatic discharge (ESD) protective tape intact. The tape is located on the back of the panel around all four edges (not shown in photograph). Early production units with the following serial numbers may not have tape:

HK920xxxxxx017A, HK922xxxxxx017A, HK924xxxxxx017A, HK925xxxxxx017A, and HK926xxxxxx017A.

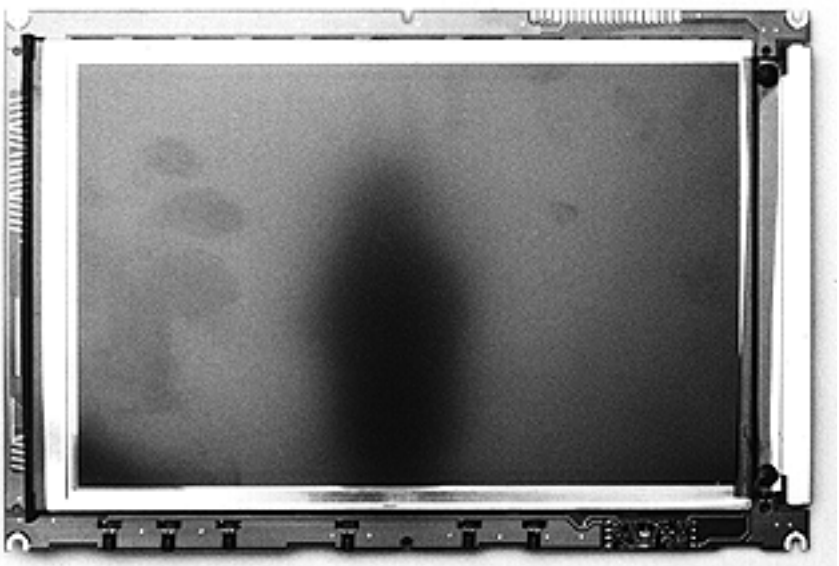
Macintosh Portable LCD Backlit Display **661-0647**



PowerBook 100 Display, FSTN **661-0675**



PowerBook 140 FSTN Display (Rev. B) **661-0681**



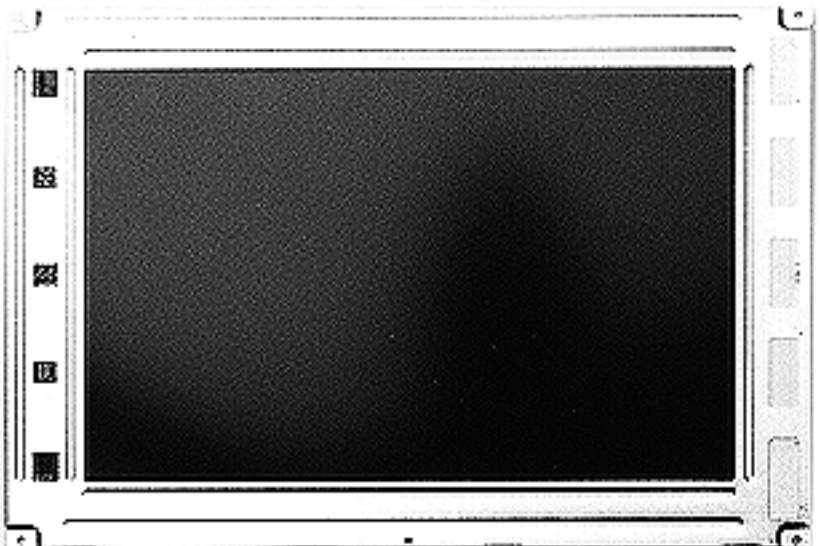
When you return P/N 661-0681, Apple ships you P/N 661-8745.

Transfer any screen protective material, if available, from the new module to the module being returned.§

This module is not available in the U.S.

U.S. service providers should contact the Apple toll-free repair hotline, 1-800-SOS-APPL, for return authorization.

PowerBook 140/145 Display, FSTN (Rev. A) **661-0706**



Transfer any screen protective material, if available, from the new module to the module being returned.

PowerBook 145/160/165 Display Kit, FSTN (Rev. C) **661-0745**

Transfer any screen protective material, if available, from the new module to the module being returned.

PowerBook 150 Display, FSTN

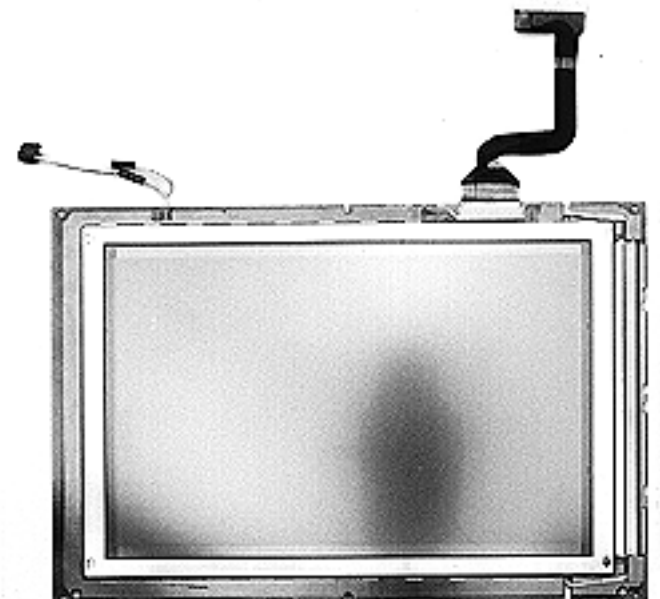
661-0143

PowerBook 160 Display Kit, FSTN (Rev. C) **661-8745**

Transfer the screen protective material, if available, from the new module to the module being returned.

This kit contains the items required to replace the Apple P/N 661-0681 display with the Apple P/N 661-0745 display.

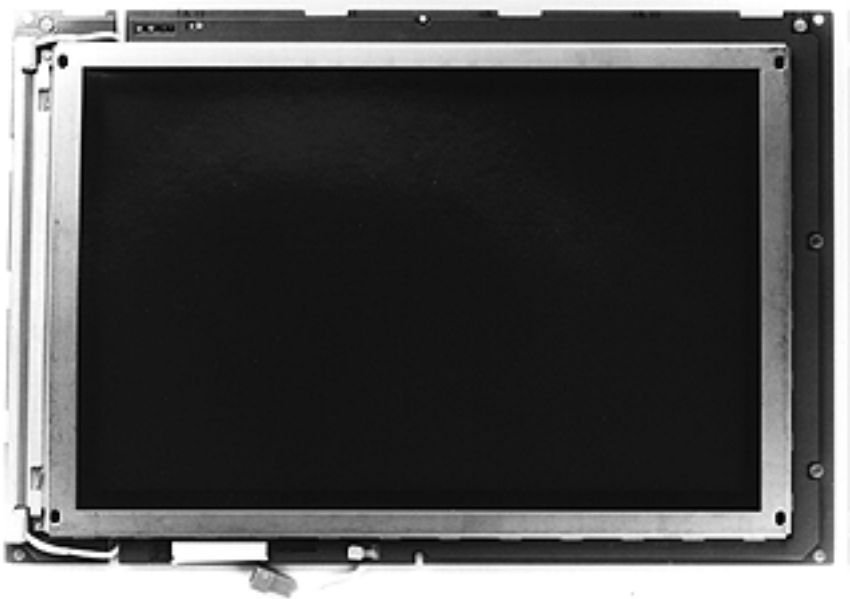
PowerBook 170 Display, Active-Matrix, Monochrome **661-0711**



Transfer any screen protective material, if available, from the new module to the module being returned.

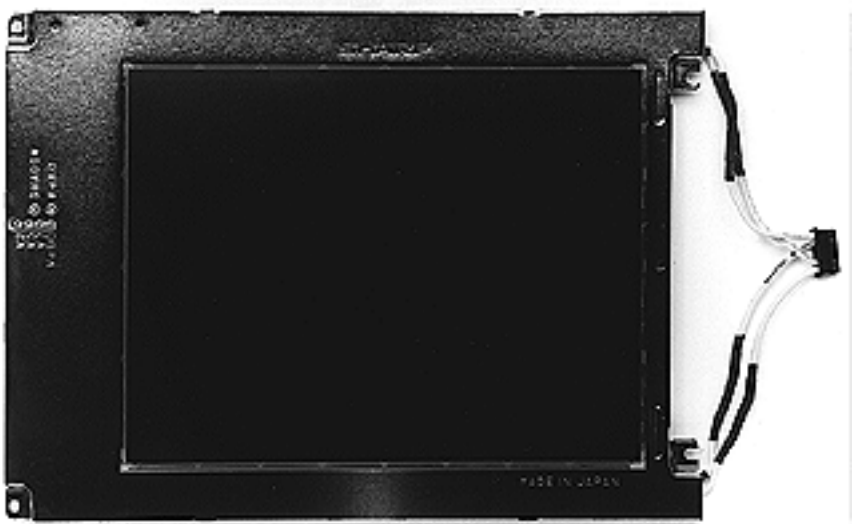
This module is not available in the U.S. U.S. service providers should contact the Apple toll-free repair hotline, 1-800-SOS-APPL, for return authorization.

PowerBook 180 Display, Active-Matrix, Monochrome **661-0748**



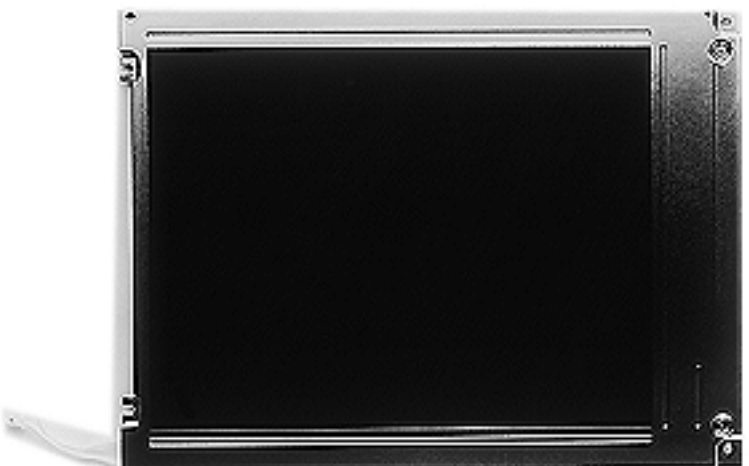
Transfer any screen protective material, if available, from the new module to the module being returned.

PowerBook 165c/180c Display, Active-Matrix, Color **661-0686**



Transfer any protective screen material, if available, from the new module to the module being returned.

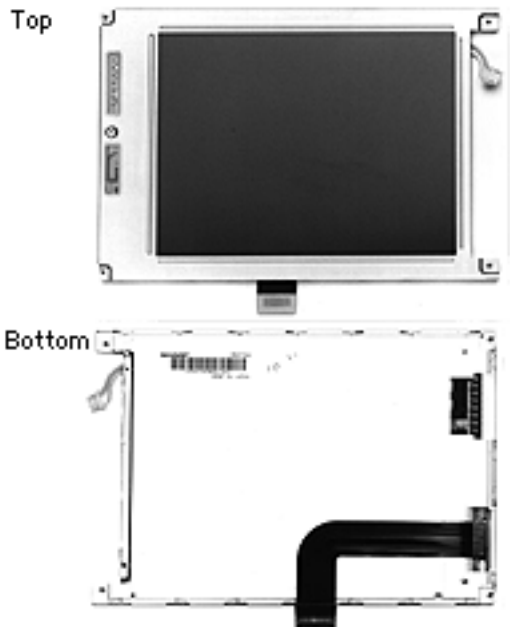
PowerBook 190/66, 5300/100 Display, MFSTN, Greyscale, 9.5" **661-0938**



All PowerBook 190cs, 5300cs,5300c, and 5300ce displays look similar.

Use the part number on the display and its cable to distinguish the display.

PowerBook 520 Dual Scan Grayscale Display **661-0064**

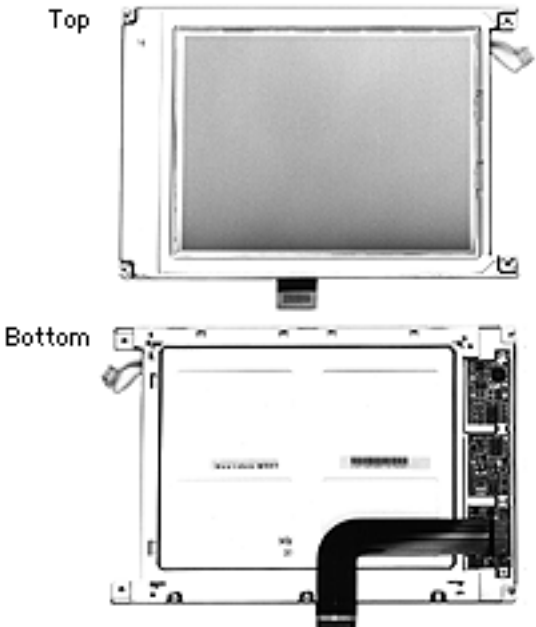


Transfer any screen protective material, if available, from the new module to the module being returned.

Return the module WITHOUT the display cable attached.

PowerBook 540 Display, Active-Matrix, Monochrome

661-0063



Transfer any screen protective material, if available, from the new module to the module being returned.

Return the module WITHOUT the display cable attached.

PowerBook Duo 210 Display, FSTN

661-1655

In the U.S., this module is available only to service providers who attend the Macintosh PowerBook Service Course. All other U.S. service providers must contact the Apple toll-free repair hotline, 1-800-SOS-APPL, for return authorization.

PowerBook Duo 230 Display, FSTN

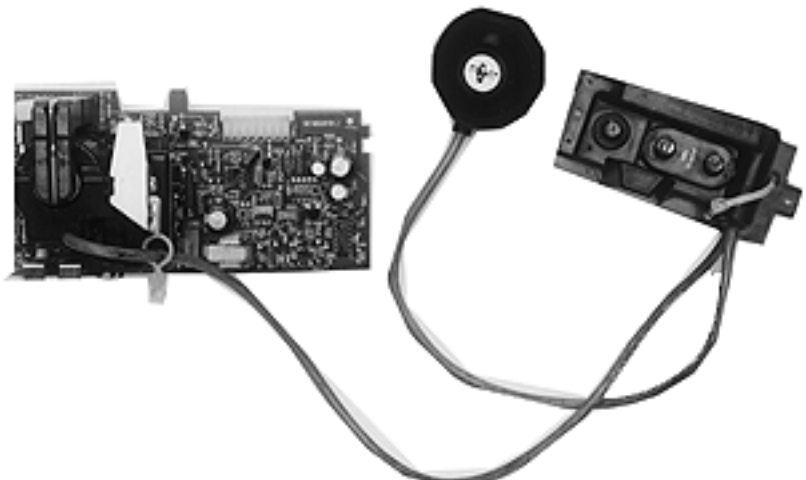
661-1673

In the U.S., this module is available only to service providers who attend the Macintosh PowerBook Service Course. All other U.S. service providers must contact the Apple toll-free repair hotline, 1-800-SOS-APPL, for return authorization.

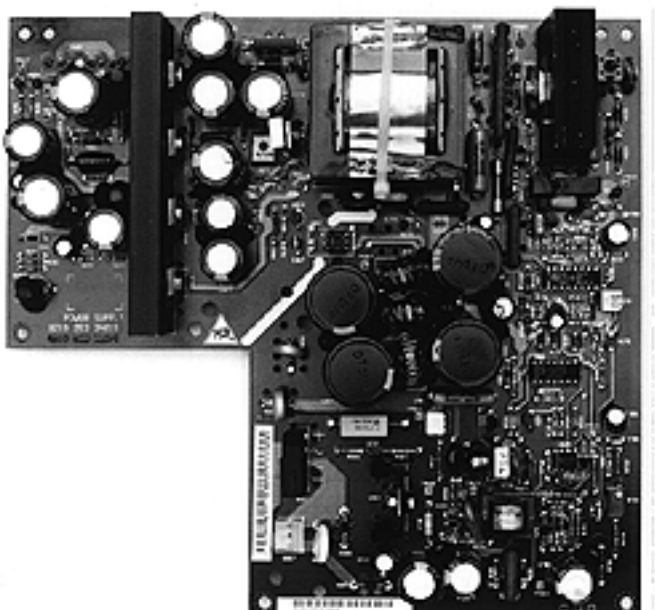
Displays

Display Components

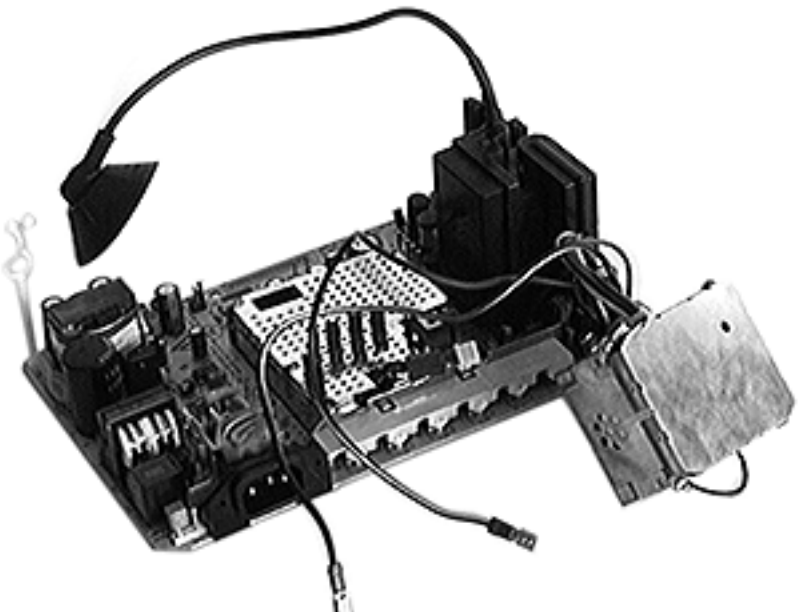
Apple 21-Inch Color Display Flyback Transformer **661-1132**



Apple 21-Inch Color Display Power Supply Board **661-0658**



Apple AudioVision 14 Display Main Deflection Board (With E. Star) **661-1699**

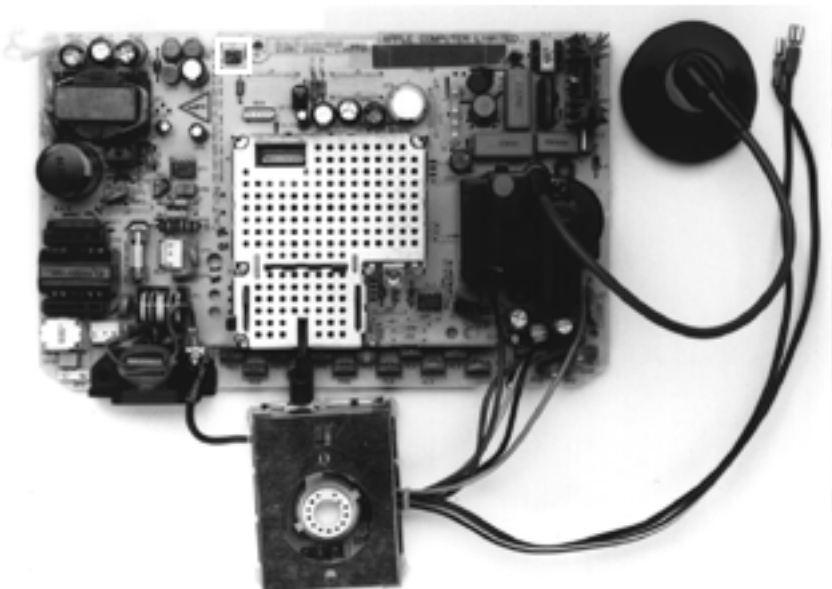


This main deflection board and the Apple Macintosh Color Display main deflection boards look similar.

You can identify the Apple AudioVision 14 Display main deflection board by the presence of a 2-pin power jumper at location BP5 and a marking for an RP20 resistor near the barcode label, but no resistor is present.

Apple AudioVision 14 Display Main Deflection Board Rev. B, with E. Star Compliance

661-0169

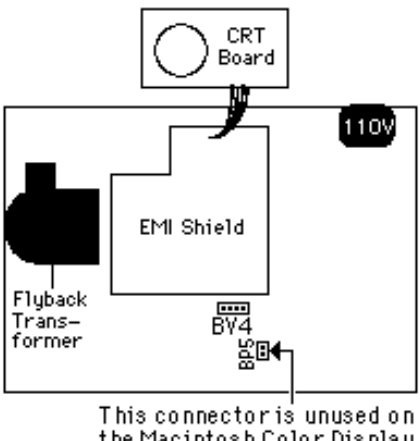


This board has an RP19 (or RF19) resistor near the barcode label.

This board cannot be replaced by the original version of the main deflection board (661-1699).

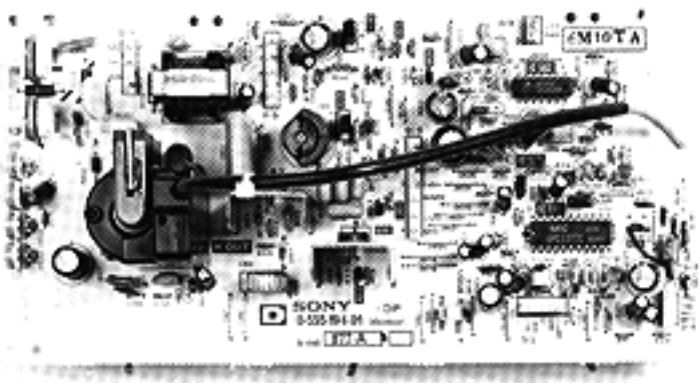
Order like-for-like when replacing boards.

Connector ‘BP5’ (see figure on next page) is not used when this board



is installed in the Macintosh Color Display; However, it is used when the board is installed in the 14” AudioVision Display connecting to the Sound enclosure.

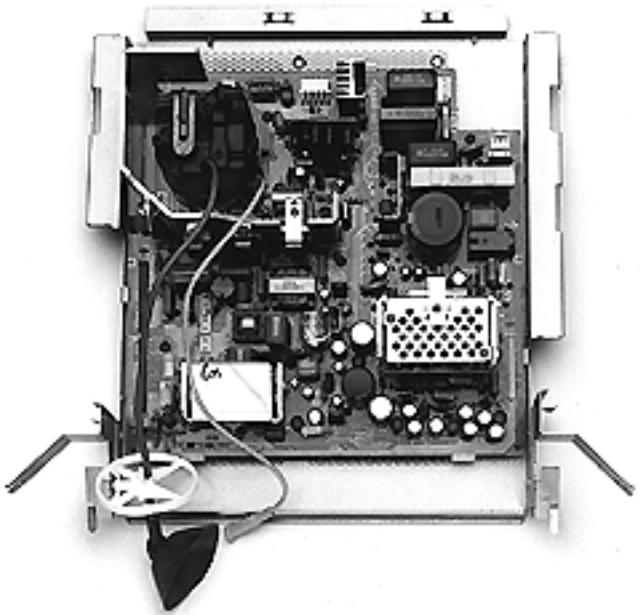
Apple High-Resolution Monochrome Monitor Main Board **661-0396**



Apple High-Resolution Monochrome Monitor Power Supply **661-0395**

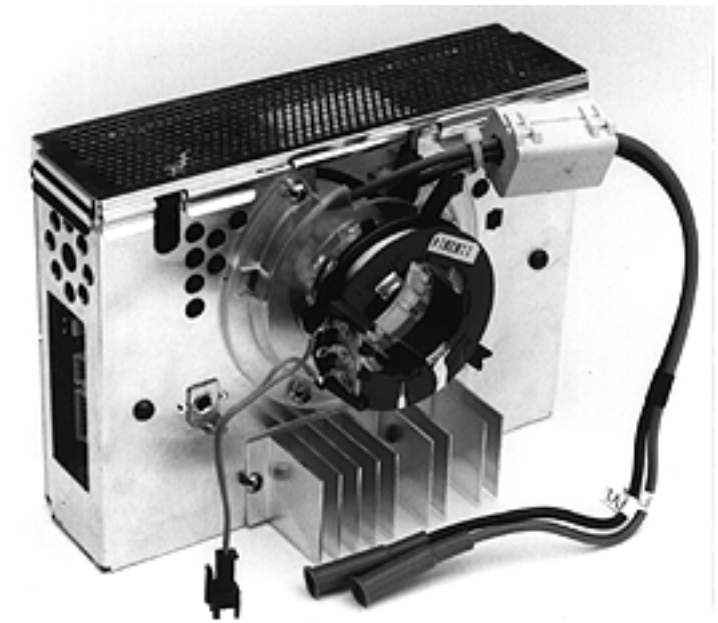
Apple Multiple Scan 17 Display CRT Video Board **661-0882**

Apple Multiple Scan 17 Display Main Deflection Board **661-0881**

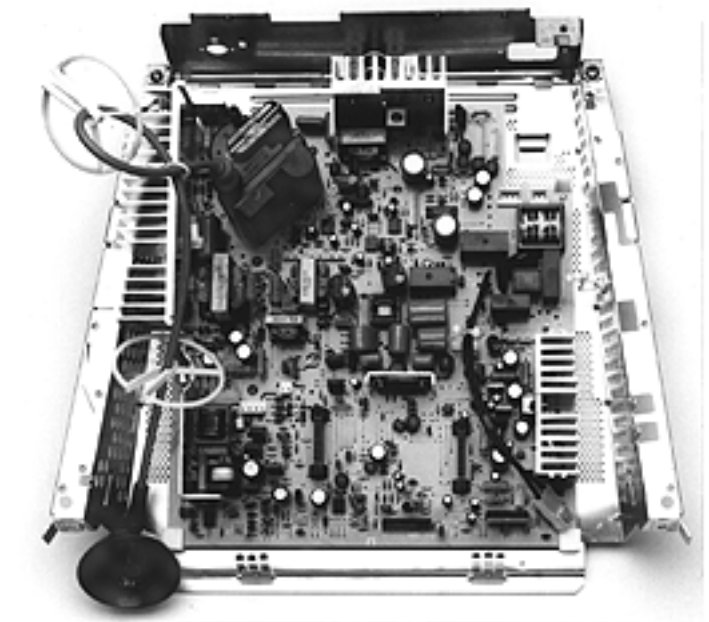


Return the main deflection board without the microprocessor board and cables.

Apple Multiple Scan 20 Display CRT Video Board **661-0507**



Apple Multiple Scan 20 Display Main Deflection Board **661-0506**

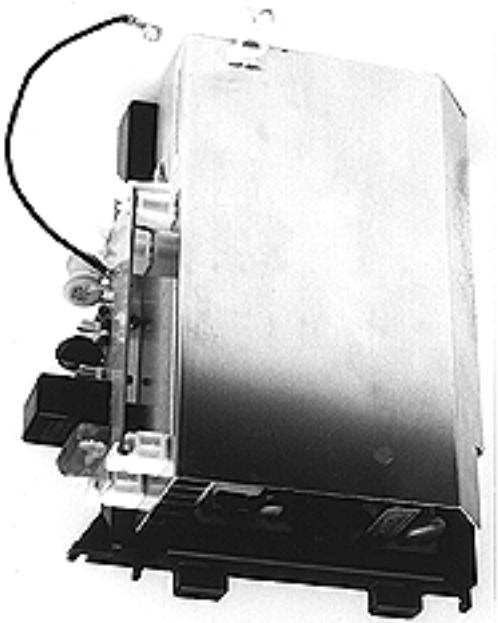


Remove the entire rear connector panel (with video cable, serial I/O board assembly, and AC Inlet assembly) from the failed main deflection board.

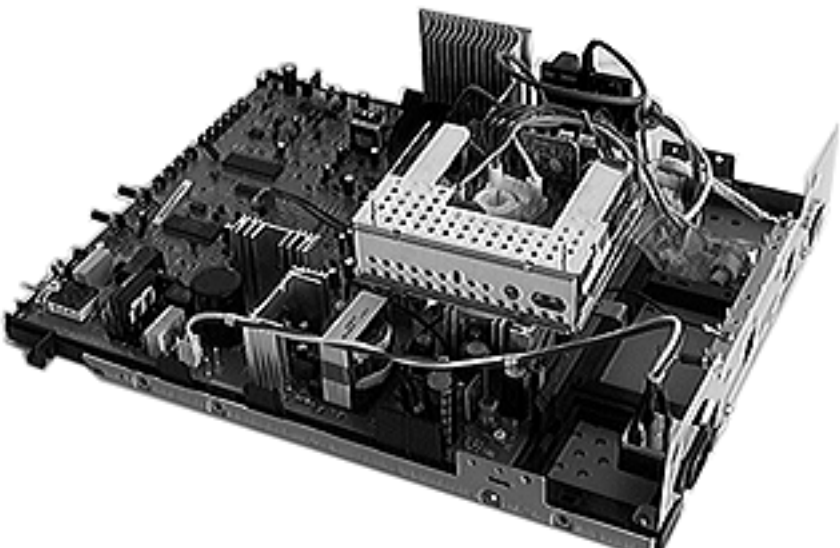
Re-install this assembly on the good board. The Rear Panel received with the new board should be installed on the failed board for strength in shipping.

You must also remove the focus control board, microprocessor control board, and cables as shown in the photo.

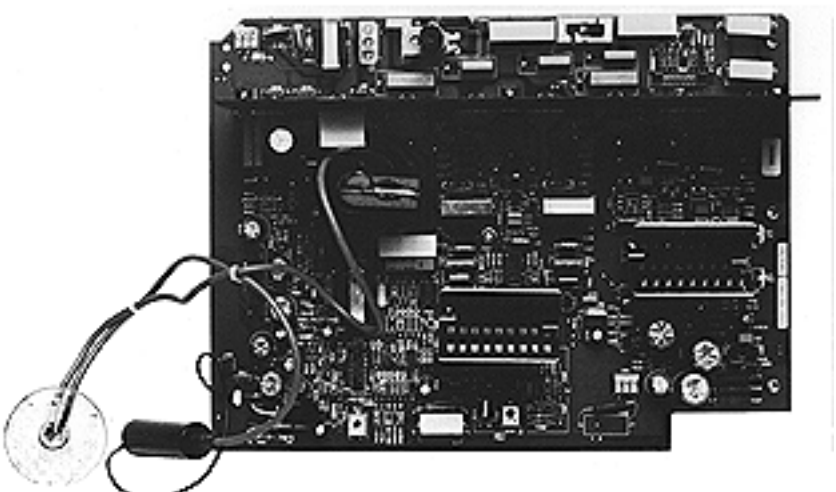
Apple Multiple Scan 20 Display Power Supply Assembly **661-0508**



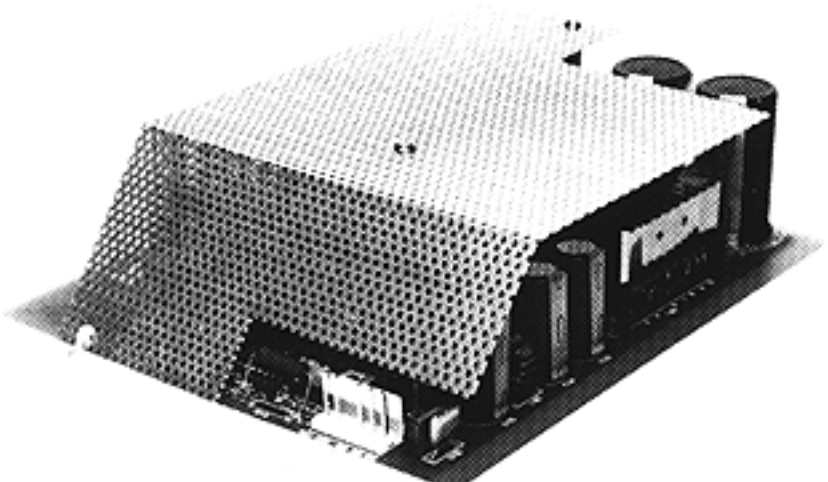
Apple MultiScan 1705 Display Boards, Main Deflection CRT/Video, Rear **661-1070**



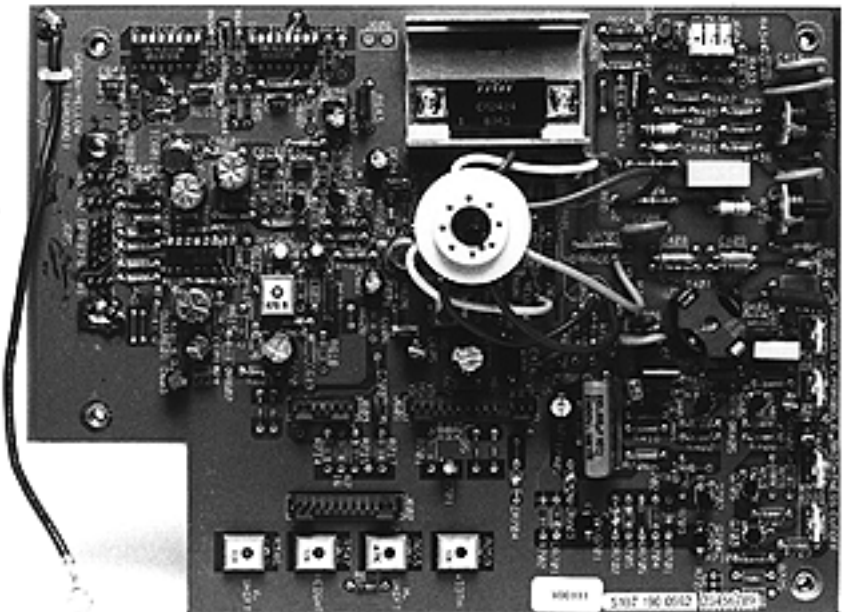
Apple Two-Page Monochrome Monitor Deflection Board **661-0451**



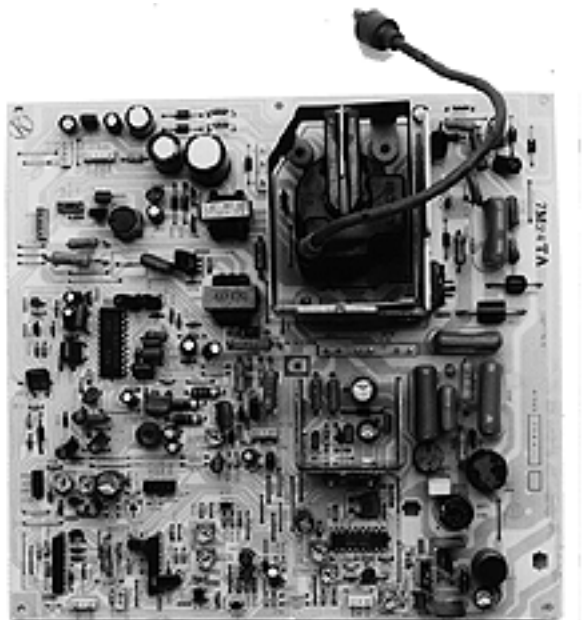
Apple Two-Page Monochrome Monitor Power Supply **661-0453**



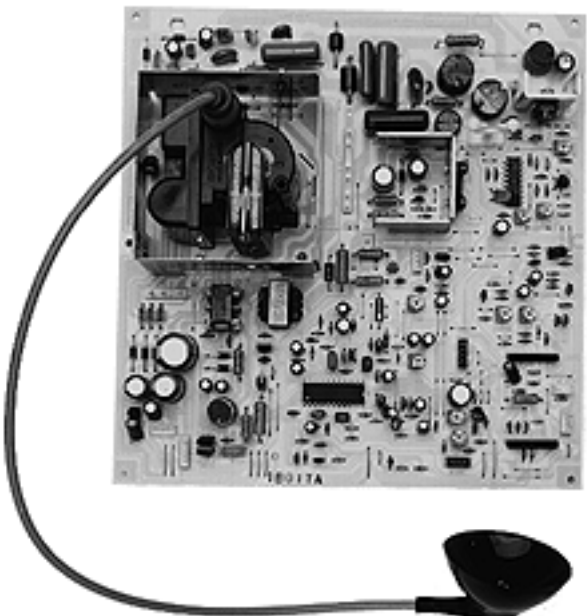
Apple Two-Page Monochrome Monitor Video Board **661-0452**



AppleColor High-Resolution RGB Monitor Deflection Board (Rev. A) **661-0399**



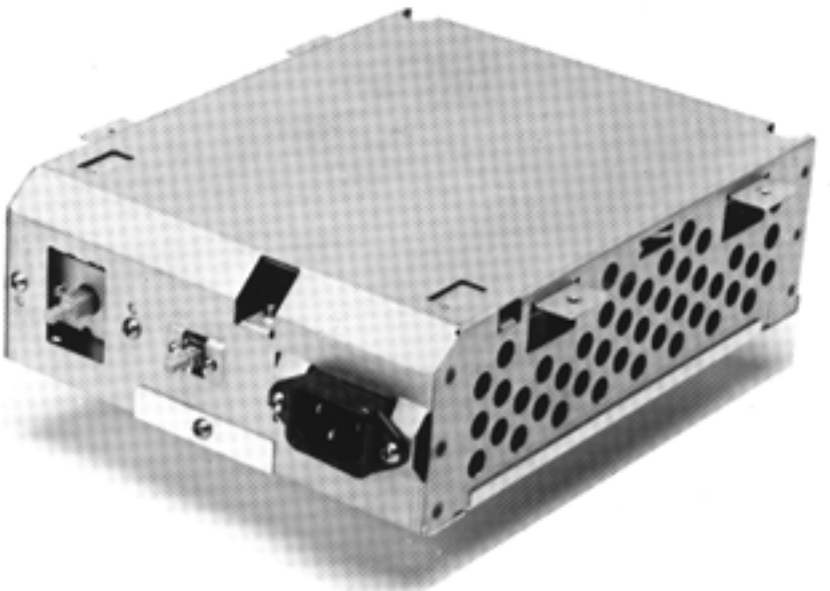
AppleColor High-Resolution RGB Monitor Main Board (Rev. B) **661-0654**



AppleColor High-Resolution RGB Monitor Power Supply (Rev. A) **661-0397**

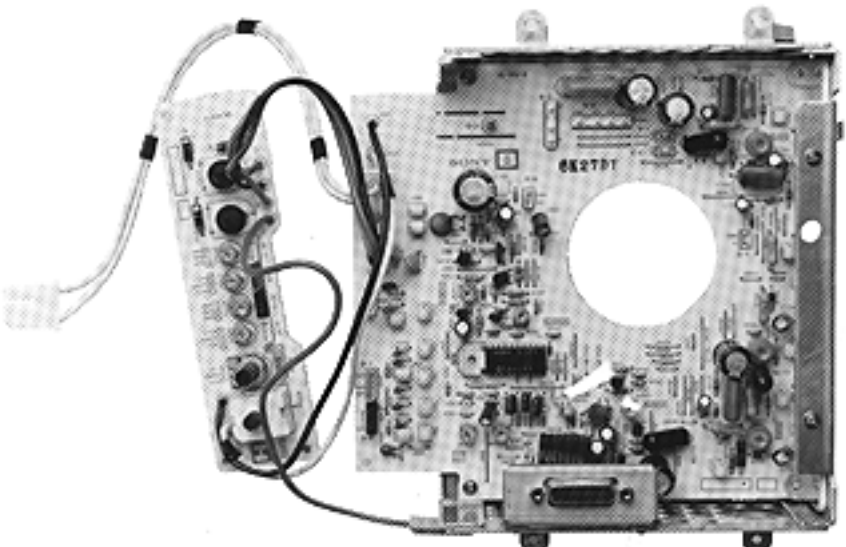
This Rev. A board has the vendor number TK-20 or CRZ700 on it; the Rev. B board (P/N 661-0705) has the vendor number TK-20A or CRZ700A.

AppleColor High-Resolution RGB Monitor Power Supply (Rev. B) **661-0705**



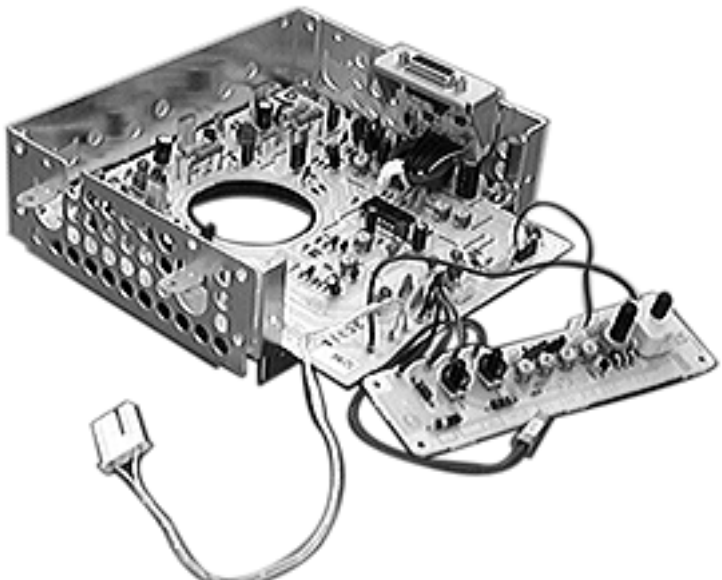
This Rev. B board has the vendor number TK-20A or CRZ700A on it; the Rev. A board (P/N 661-0397) has the vendor number TK-20 or CRZ700.

AppleColor High-Resolution RGB Monitor Video Color Board, Rev. A **661-0398**

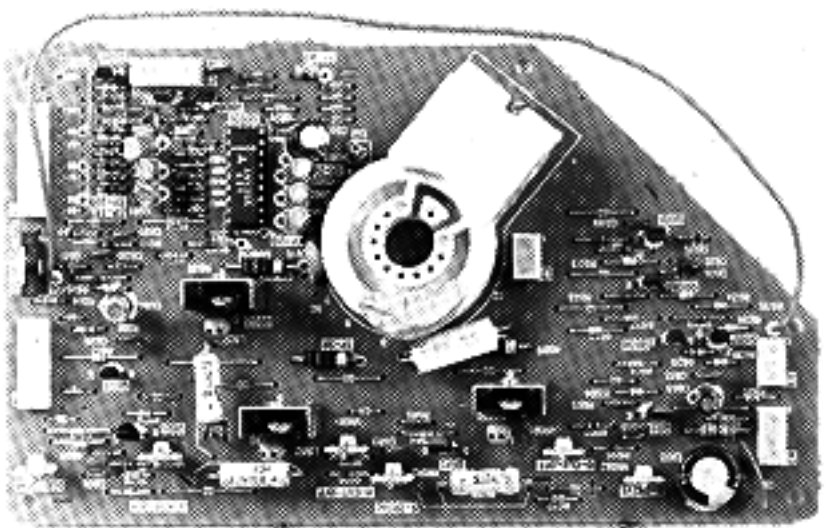


When you return P/N 661-0398, Apple ships you P/N 661-0653.

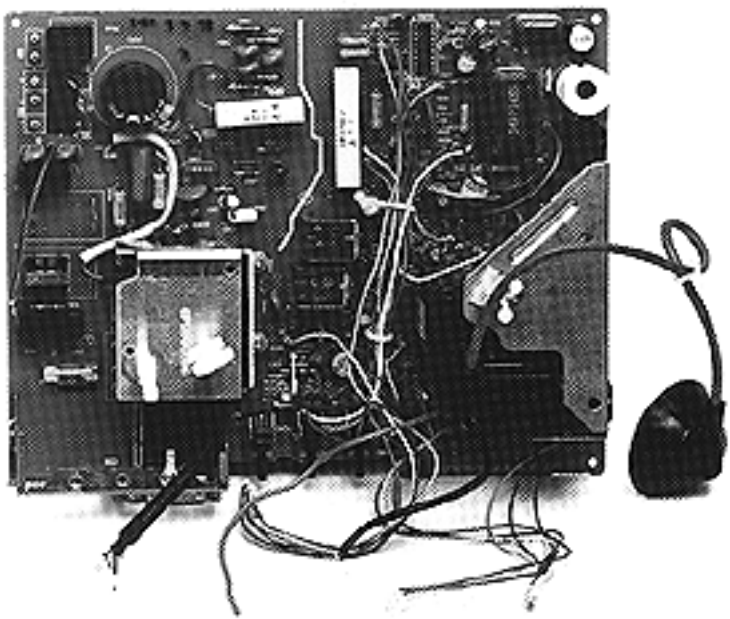
AppleColor High-Resolution RGB Monitor Video Color Board, Rev. B **661-0653**



AppleColor RGB Monitor CRT Video Board **661-0347**

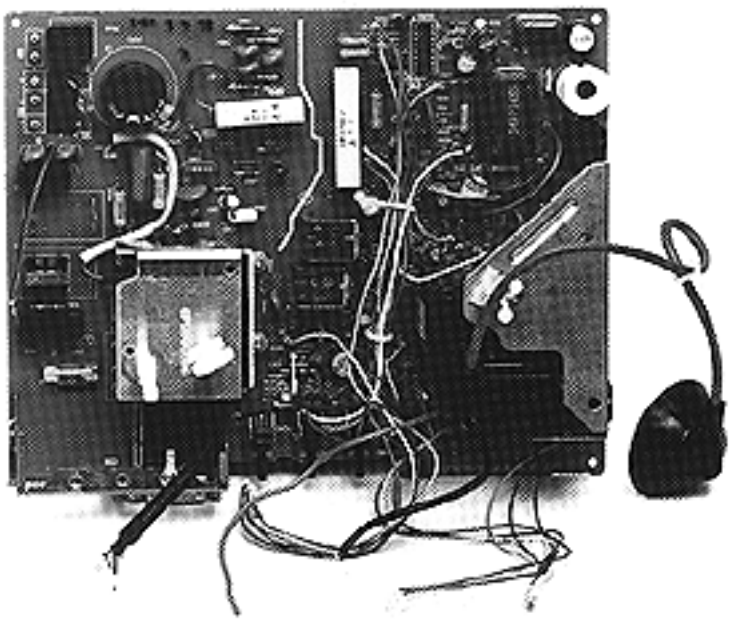


AppleColor RGB Monitor Power Supply Board (110 V) **661-0348**



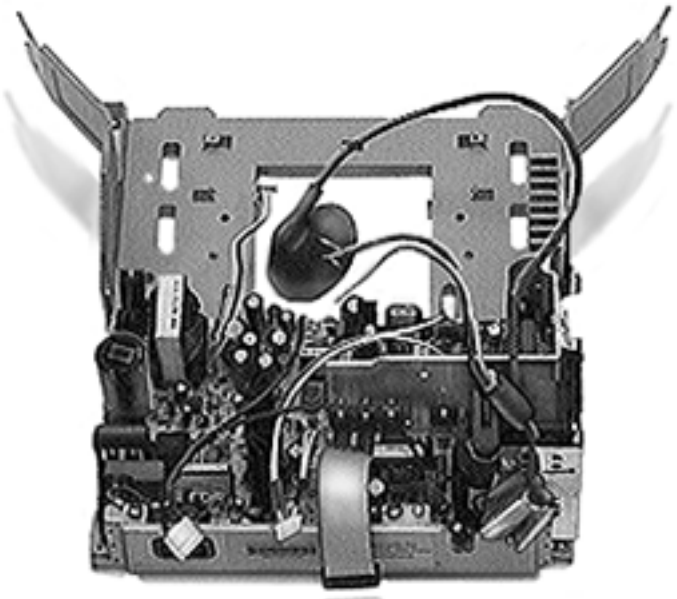
Remove the three control knobs before you return the board to Apple.

AppleColor RGB Monitor Power Supply Board, 220/240 V **661-0358**



Remove the three control knobs before you return the board to Apple.

AppleVision 1710/1710AV Display Board, Main Deflection, With Chassis **661-0910**



Service Providers must use the Display Service Utility 3.0, which is available on the May edition of the MacTest Pro CD, the June edition of Service Source CD, and on AppleLink via the following path:

Apple Service/Training:
Service and Support:
Apple Service
Diagnostics:
MacTest Pro Diagnostic
Update 5/x/96

CRT Assembly

661-0952

CRT Assembly, EQ Pol, Anti-Static/Glare 14", All-In-One (International Only)

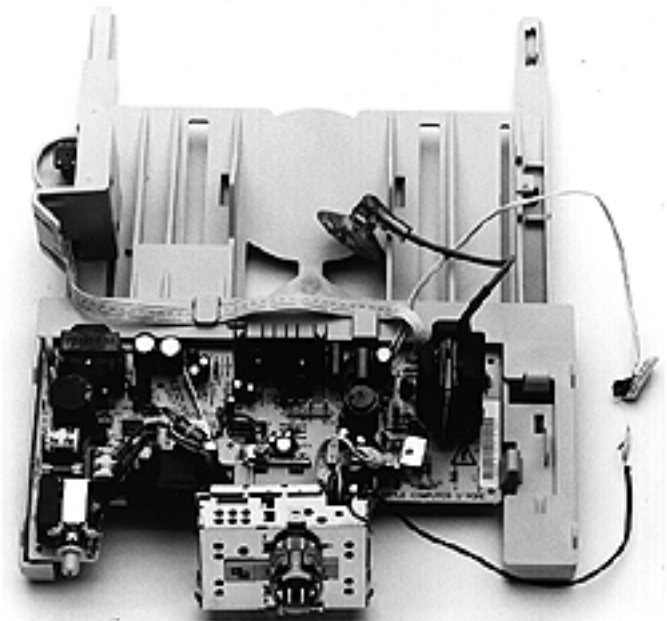
661-1137

CRT Assembly, So. Hemisphere, Anti-Static/Glare, 14", All-In-One (International Only) **661-1136**

CRT Assembly, No. Hemisphere, Anti-Static/Glare, 14", All-In-One **661-1135**
(U.S. and other No. Hemisphere locations)

CRT Assembly, CLR 15" **661-0954**

Macintosh 12-inch Monochrome Display Main Board **661-0615**



Macintosh 12-Inch RGB Display CRT Video Board **661-0618**

Macintosh 12-Inch RGB Display CRT Video Board

661-1618

Apple P/N 661-1618 is the part number for the universal video board. You can identify this board by the 11-digit serial number on the lower edge. The last four digits are 2802.

Macintosh 12-Inch RGB Display Main Board (Domestic Rev. B) **661-0659**

The domestic Rev. B main board has component VR504 mounted next to connector J502.

Please refer to Service Source for detailed information on main board compatibility.

Macintosh 12-Inch RGB Display Main Board (International Rev. B) **661-0660**

You can identify the international Rev. B board by the ID No. CT920A07602, which is behind the AC input connector.

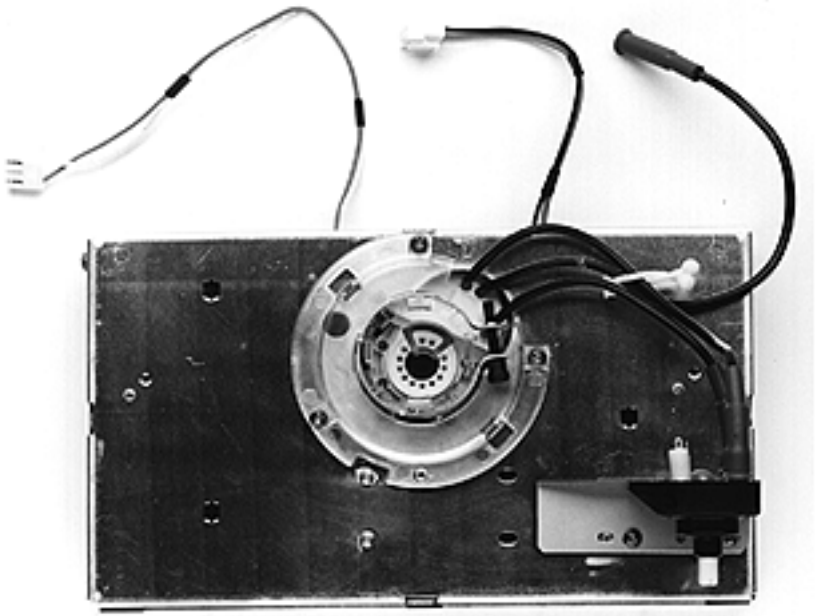
Macintosh 12-Inch RGB Display Main Board, Domestic Rev. B **661-0617**

You can identify the international Rev. A board by the ID No. CT920A05902, which is behind the AC input connector.

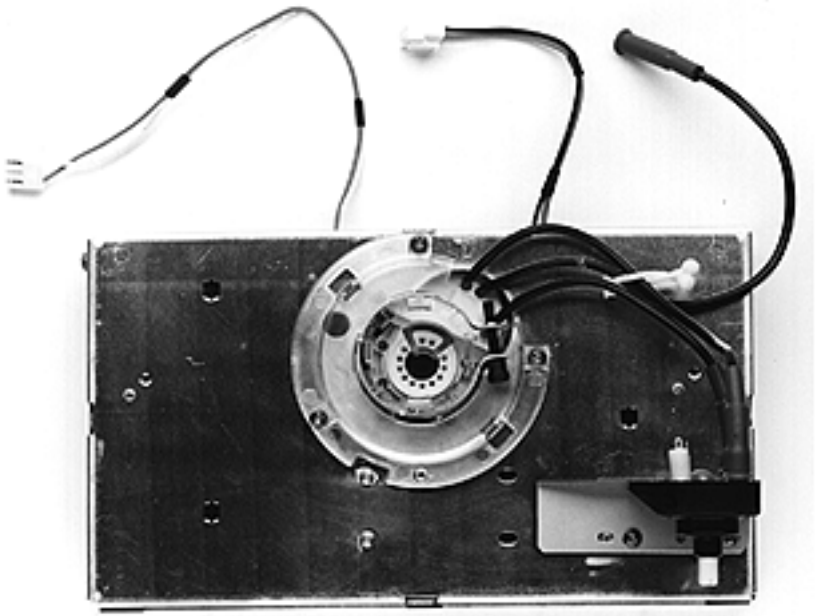
Macintosh 12-Inch RGB Display Main Board, International Rev. A **661-0616**

This Rev. A board has no component VR504; on the domestic Rev. B board (P/N 661-0659), component VR504 is located next to connector J502.

Macintosh 16-Inch Color Display CRT Video Board **661-1635**



Macintosh 16-Inch Color Display Main Board (Rev. A) **661-1634**

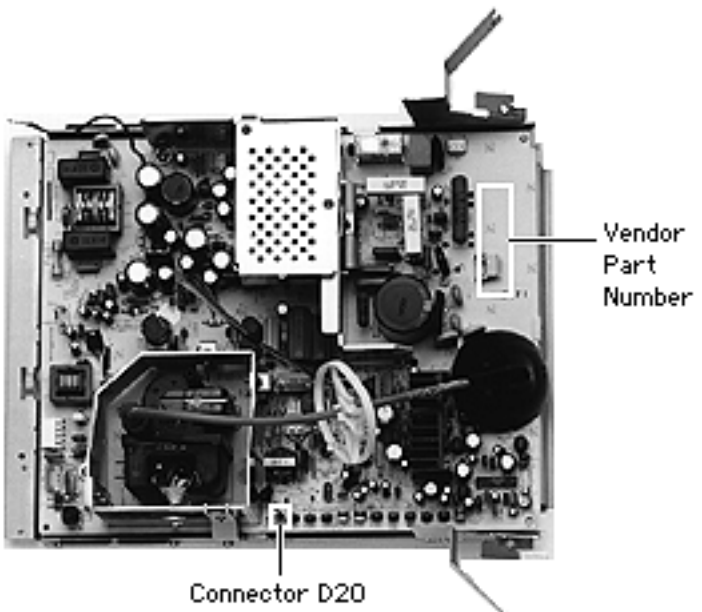


You can identify this board by the vendor number A-1335-028. If the vendor number is different, see P/N 661-1671.

Due to inventory constraints, Apple may substitute 661-1671, which is fully compatible with the Macintosh 16" Color Display. Note: Connecter D20 is NOT required when using

this board to replace the main board (Apple part number 661-1634, which has a vendor part number of A-1335-028 appearing on the board near connector D3).

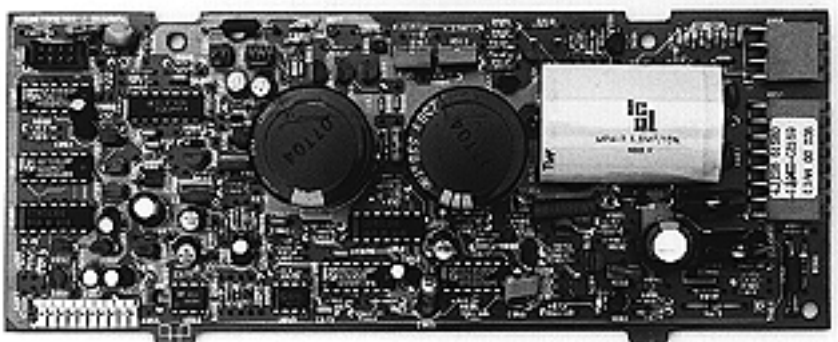
Macintosh 16-Inch Color Display Main Deflection Board (Rev. B) **661-1671**



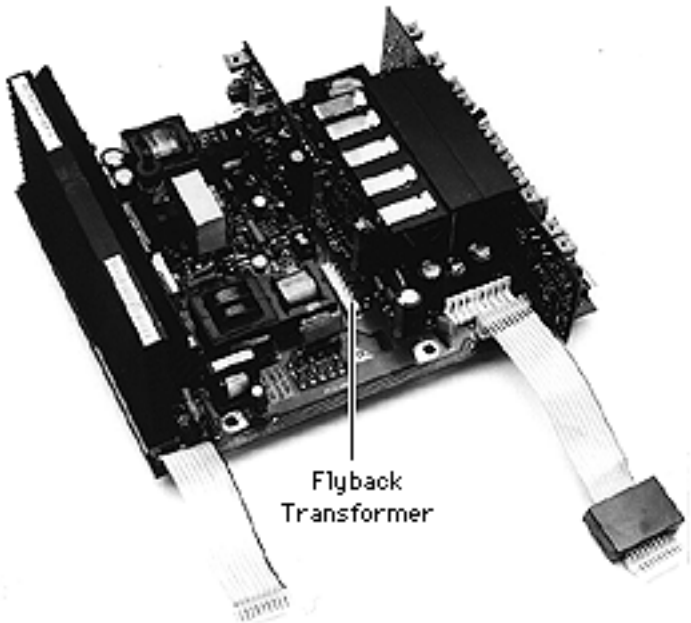
This Rev. B board has a vendor number of A-1335-040 or greater near connector D3. The vendor number of the Rev. A board (P/N 661-1634) is A-1335-028.

Only this Rev. B board has a connector D20.

Macintosh 21-Inch Color Monitor Magnetometer Degauss Board **661-0657**

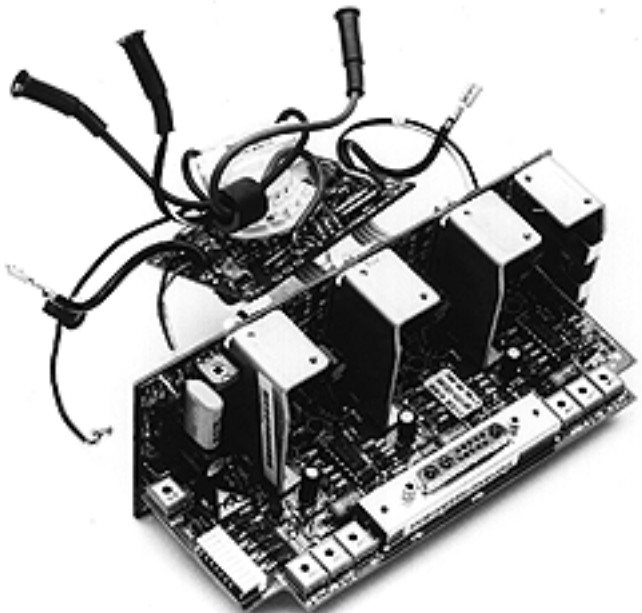


Macintosh 21-Inch Color Monitor Main Board Assembly **661-0656**



Remove the flyback transformer assembly (P/N 076-0399) before you return the main board assembly to Apple.

Macintosh 21-Inch Color Monitor Video/Color Assembly **661-0655**



Return the heat sink when you return a defective video/color assembly to Apple.

Macintosh Color Classic CRT Assembly, 9-Inch RGB, U.S. **661-0004**

Macintosh Color Display Main Deflection Board (Without E.Star) (Replaced by 661-0169)

661-1650

When you return P/N 661-1650, Apple ships you either P/N 661-1650 or P/N 661-0102)

There are two versions of the Macintosh Color Display main deflection board: P/N 661-0102 and P/N 661-1650.

You can differentiate between the boards by checking for the RP 20 resistor located below

the bar code label.
P/N 661-0102 has the resistor; P/N 661-1650 does not.

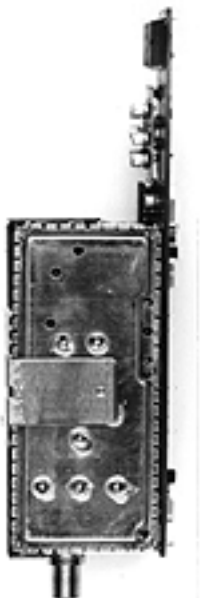
Macintosh Color Display Main Deflection Board (With E. Star) **661-0102**

There are two versions of the Macintosh Color Display main deflection board: P/N 661-0102 and P/N 661-1650.

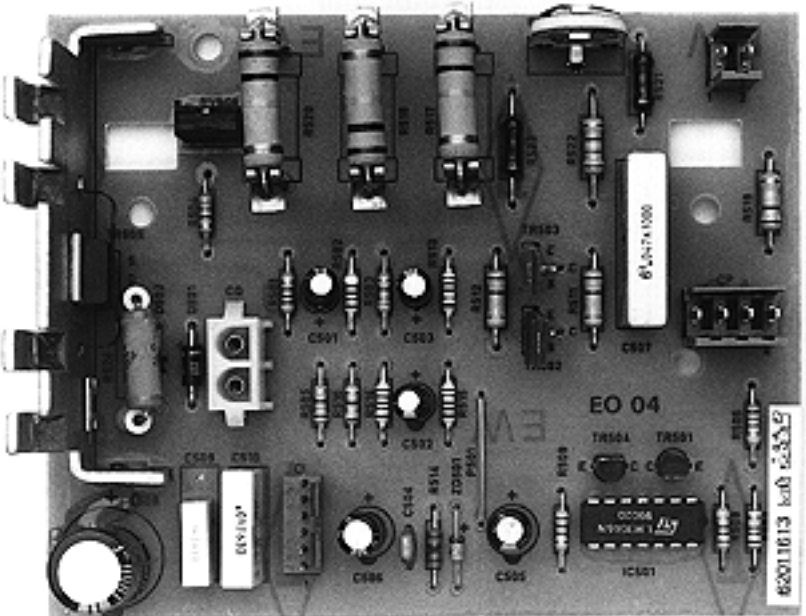
You can differentiate between the boards by checking for the RP 20 resistor located below the bar code label. P/N 661-0102 has the resistor; P/N 661-1650 does not.

Macintosh TV Tuner PCB

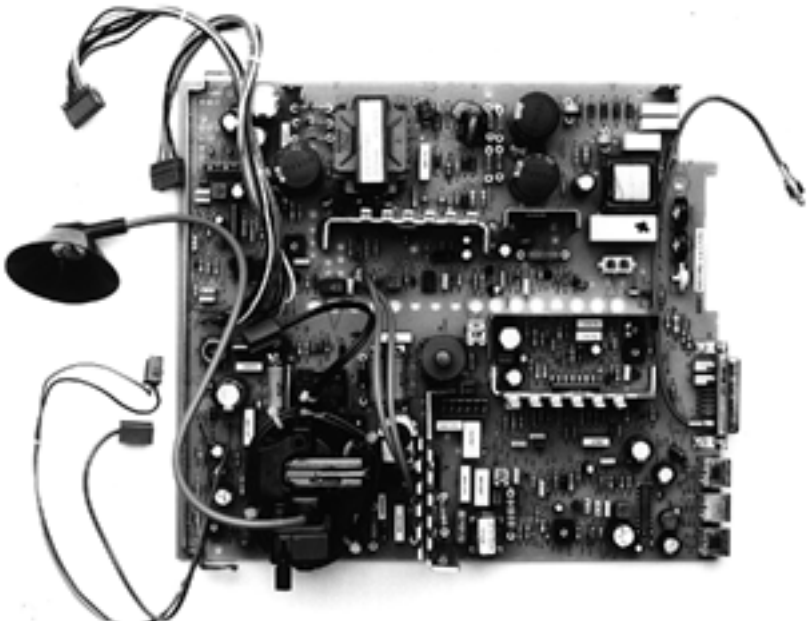
661-1731



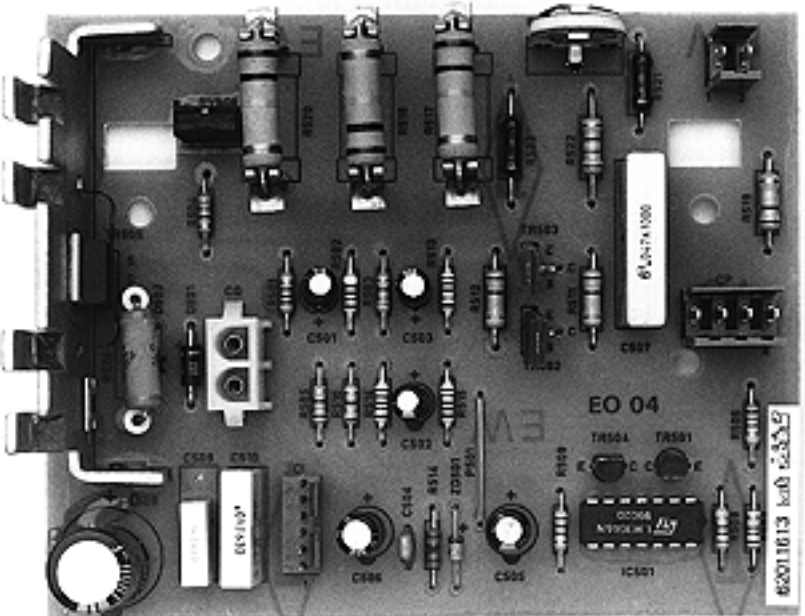
Portrait Display "Series B" Deflection Board, Rev. A **661-1603**



Portrait Display "Series B" Main Deflection Board, VDE-B **661-0580**



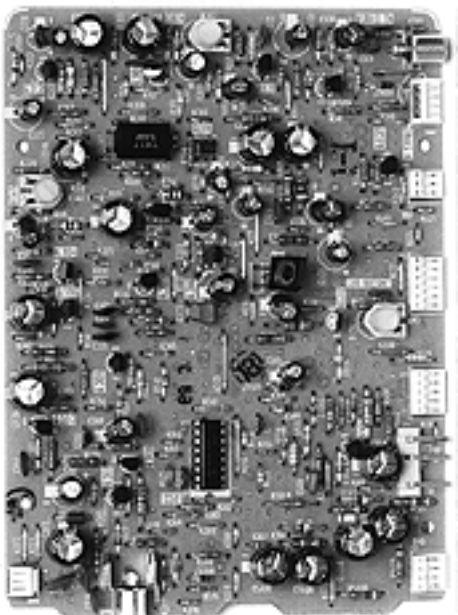
Portrait Display "Series B" Video Color Board, Rev. A **661-0539**



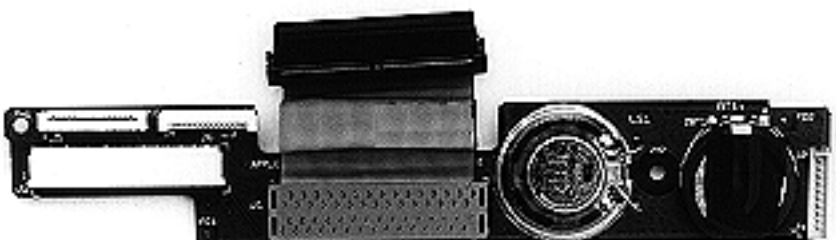
Portrait Display Monitor CRT Video Board **661-0119**

Portrait Display Monitor Power Sweep Board **661-0117**

Portrait Display Monitor Video Board **661-0118**



PowerBook 140/145/170 Interconnect Board **661-0724**



PowerBook 1400c Display, 11.3", CTFT, SVGA
CPRC/Int'l Only

661-1231

The display includes a display cable.

PowerBook 1400cs Display, 11.3", Dualscan, FSTN, SVGA, 661-1189

The display includes a like-for-like display cable (Hitachi or Sharp).

PowerBook 150 Interconnect Board **661-0190**

PowerBook 160/165/180 Interconnect Board **661-0750**

The PowerBook 160/165/180, 140/145/170, 165c, and 180c interconnect boards are similar. You can identify this PowerBook 160/165/180 interconnect board by the presence of an internal microphone and the PCB part number 820-0363 underneath the cable assembly.

PowerBook 165c Interconnect Board **661-0764**

The PowerBook 160/165/180, 140/145/170, 165c, and 180c interconnect boards are similar. You can identify this PowerBook 165c interconnect board by the PCB part number 820-0419 underneath the cable assembly.

PowerBook 180c Interconnect Board **661-0685**

The PowerBook 160/180, 140/145/170, 165c, and 180c interconnect boards are similar. You can identify the PowerBook 180c interconnect board by the PCB part number 820-0438 underneath the cable assembly.

PowerBook 190/5300 Series Video Board

661-1055

Drives

CD-ROM Drives and Components

CD-ROM Drive **661-1150**

CD-ROM Drive, 6X

661-1290

CD-ROM Drive, 6X, PowerBook 1400 **661-1286**

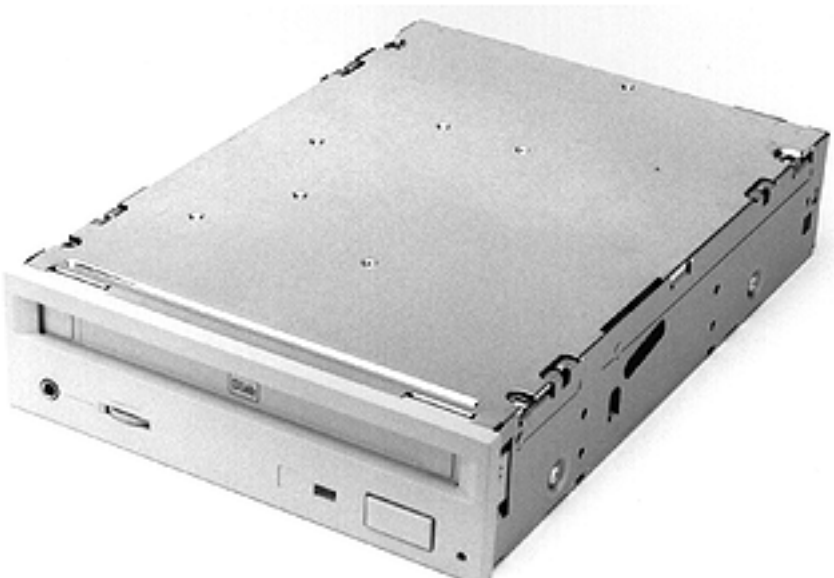
CD-ROM Drive, 8X, PowerBook 1400 Series **661-1426**

CD-ROM Drive, 8X, Graphite, PB 1400, with Enclosure **661-1358**

CD-ROM Drive, AppleCD 150, Caddy Loading, External **661-1646**

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the AppleCD 150/300 manual in Service Source.

CD-ROM Drive, AppleCD 150, Caddy Loading, External **661-1705**



APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the AppleCD 150/300 manual in Service Source.

CD-ROM Drive, AppleCD 150, Caddy Loading, External **661-1645**

Do not return cables, software, or manuals with this CD-ROM drive.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts

chapter of the AppleCD 150/300 manual in Service Source.

CD-ROM Drive, AppleCD 300, Caddy Loading **661-0023**

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

CD-ROM Drive, AppleCD 300, Caddy Loading, External **661-0222**

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

CD-ROM Drive, AppleCD 300+, Trayloading **661-0225**

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

CD-ROM Drive, AppleCD 600, Trayloading **661-0913**

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the AppleCD 150/300 manual in Service Source.

CD-ROM Drive, AppleCD 600e+

661-0959

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the AppleCD 600e Plus manual in Service Source.

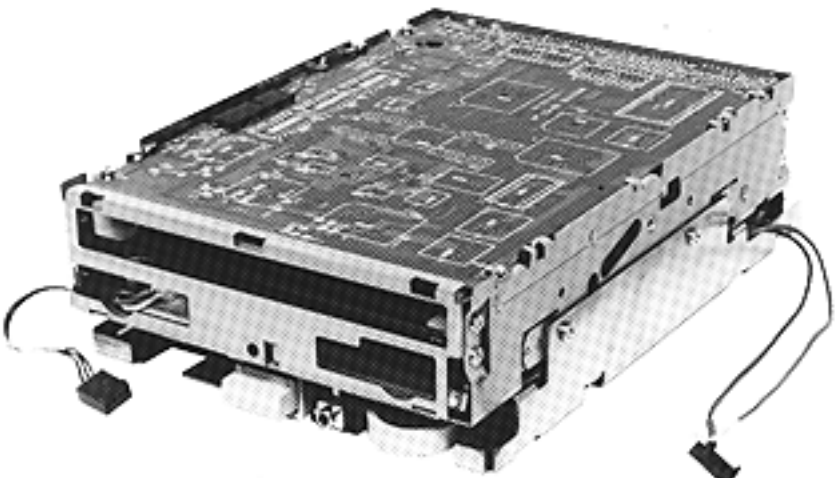
CD-ROM Drive, AppleCD 600i, Rev. B **661-1167**

This drive looks similar to part number 661-0913, however it can be distinguished by its model number: CR-504-K, located on the top label. This drive is not interchangeable with part number 661-0913 when used on the Apple Network Server 500 or the Apple Network Server 700.

CD-ROM Drive, AppleCD 1200i **661-1240**

CD-ROM Drive, AppleCD 1800i **661-1415**

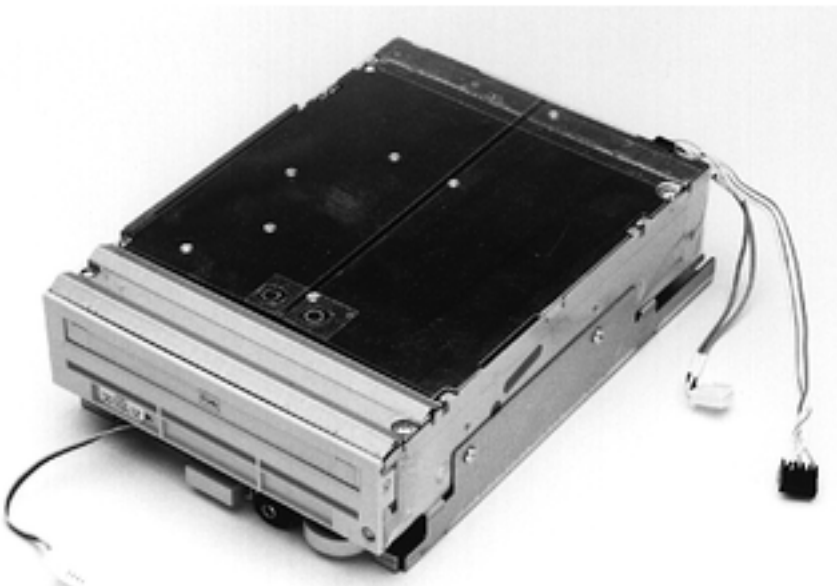
CD-ROM Drive, AppleCD SC, Caddy Loading, External **661-0110**



Return the CD-ROM drive with the SCSI select cable attached.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

CD-ROM Drive, AppleCD SC+, Caddy Loading, External **661-0671**

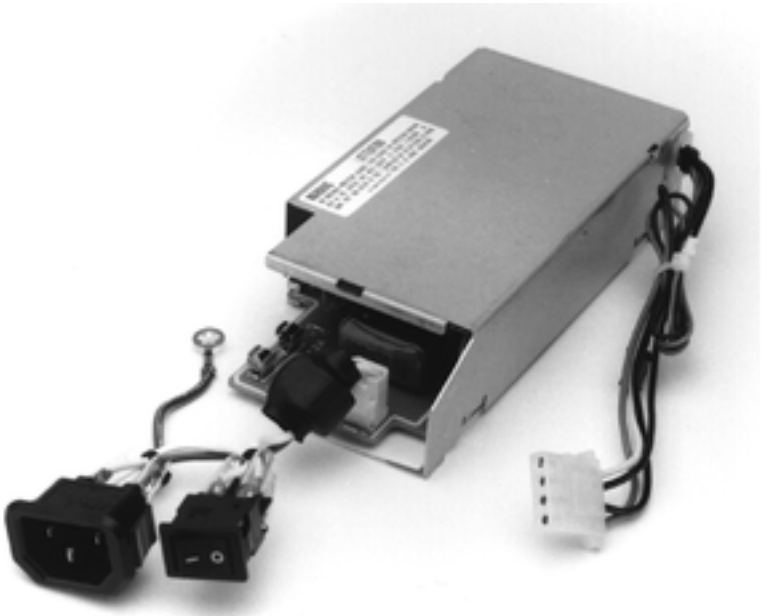


Return the CD-ROM drive with the LED, SCSI select, and rear audio cables attached.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the illustrated Parts

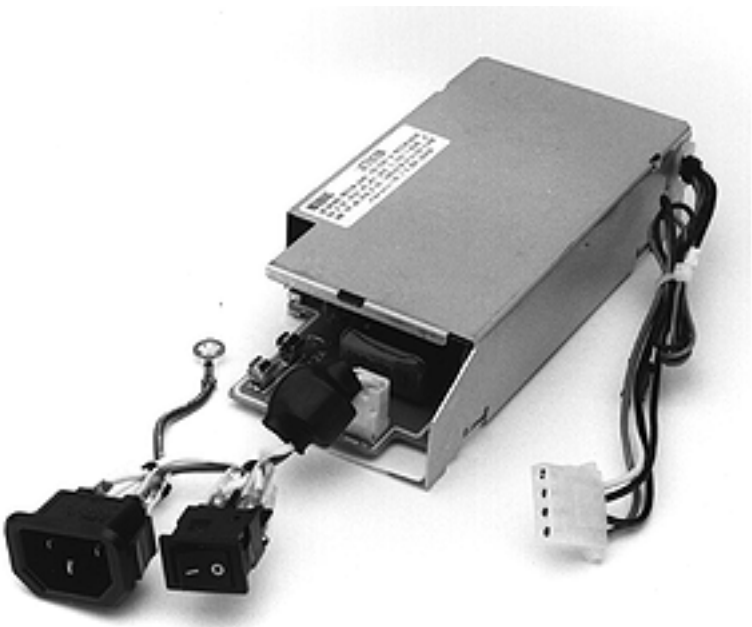
chapter of the AppleCD SC+ manual in Service Source.

Power Supply, AppleCD 150 **661-1648**



Power Supply, AppleCD 300

661-1706

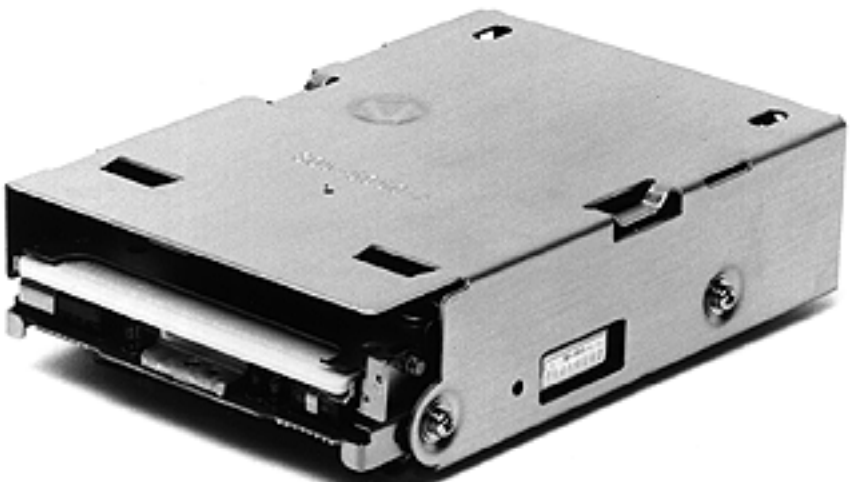


Drives

Floppy Drives

Floppy Drive, 800K, 3.5"

661-0345



When returning the floppy drive to Apple, assemble the shipping fixture and the packing disk as shown. This drive can be identified by a red-on-silver label. Remove the internal drive cable before returning the drive to Apple.

WARRANTY: The drive warranty will be void and Apple will return the module to the service

provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Floppy Drive, 1.4 MB, 19 mm

661-1623

When you return P/N 661-1623; Apple ships you P/N 661-1651.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels

that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

Apple REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the Apple SuperDrive manual in Service Source.

Floppy Drive, 1.4 MB, 19 mm

661-1651

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

Apple REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the Apple SuperDrive manual in Service Source.

Floppy Drive, 1.4 MB, Apple SuperDrive, **661-0474**

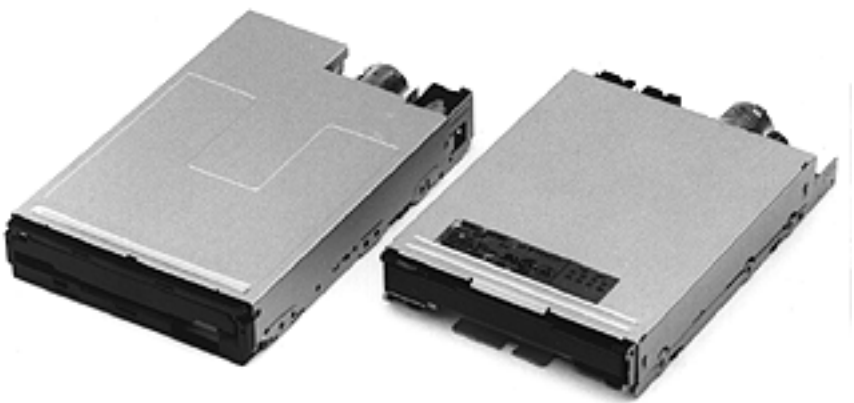
This 1.4 MB floppy drive has a 2 MB designation on the blue model number label and ships with either the 805-5055 or the 805-0961 carrier.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer

identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

Apple REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the Apple SuperDrive manual in Service Source.

Floppy Drive, 1.4 MB, Apple SuperDrive, Manual Insert **661-0121**



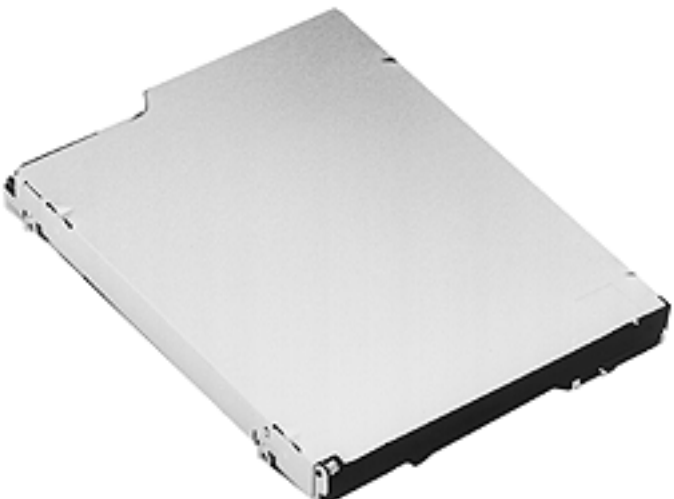
When you return P/N 661-1623; Apple ships you P/N 661-1651.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels

that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

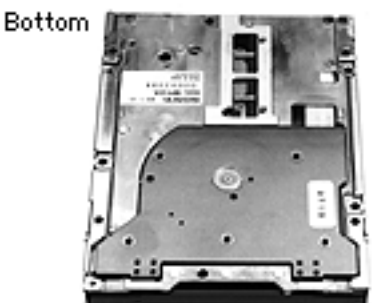
APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Floppy Drive, 1.4 MB, Graphite Door **661-0994**



APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the Hard Drives manual.

Floppy Drive, 1.4 MB, PowerBook 520/540 Series **661-0061**



The PowerBook 520/540 floppy drive does not include the thin, metal ground plate.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels

that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

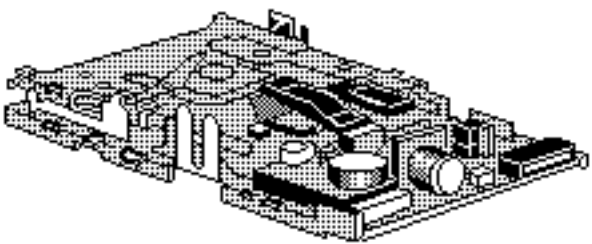
APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Floppy Drive, 1.44 MB, Graphite, PB 1400, with Enclosure **661-1359**

Floppy Drive, 1.44 MB, Graphite, PB 5300, with Enclosure **661-1360**

MAC 3.5" Disk Drive SVCE

661-76156



Drives

Hard Drives and Components

Hard Drive, IDE, 2.5", 120 MB, PowerBook 150 (Discontinued and Replaced by 661-0046) **661-0127**

Hard Drive, IDE, 2.5", 500 MB, PowerBook 190 **661-1058**

When present, the following must be removed before returning the drive to Apple: frame, and LED cable.

This drive may or may not have an Apple logo on it.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without

repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 2.5" IDE drives.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, IDE, 2.5", 500 MB, PowerBook 190 **661-0047**

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 2.5" IDE drives.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the Hard Drives manual.

Hard Drive, IDE, 2.5", 500 MB, In-Warranty Exchange ONLY **661-1751**

This part number should be used ONLY when exchanging a discontinued drive under warranty or AppleCare. For a list of all drives that have been discontinued, refer to the Service Notice entitled “Expanded Lower-Capacity Hard Drive Exchange Program on Service Source CD or on-line at http://service.info.apple.com.

Apple has made every effort to maintain LED support. However, some drives no longer support an LED. We regret any inconvenience this may cause.

Hard Drive, IDE, 2.5", 750 MB, 12.5 mm **661-1253**

Hard Drive, IDE, 2.5", 750 MB, 17 mm

661-0957

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives which support 2.5" IDE.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the Hard Drives manual.

Hard Drive, IDE, 2.5", 750 MB, Int'l Only (Replaced by 661-1298) **661-0943**

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels tha
t say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the Hard Drives manual.

Hard Drive, IDE, 2.5", 1 GB

661-1245

Hard Drive, IDE, 2.5", 1.1 GB

661-0944

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 2.5" IDE drives.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the Hard Drives manual.

Hard Drive, IDE, 2.5", 1.3 GB

661-1333

Hard Drive, IDE, 2.5", 2 GB

661-1241

Hard Drive, IDE, 3.5", 250 MB

661-0070

The IDE drive is distinguished from a SCSI drive by the third (alternate power) connector built into the connector bar on the PCB.

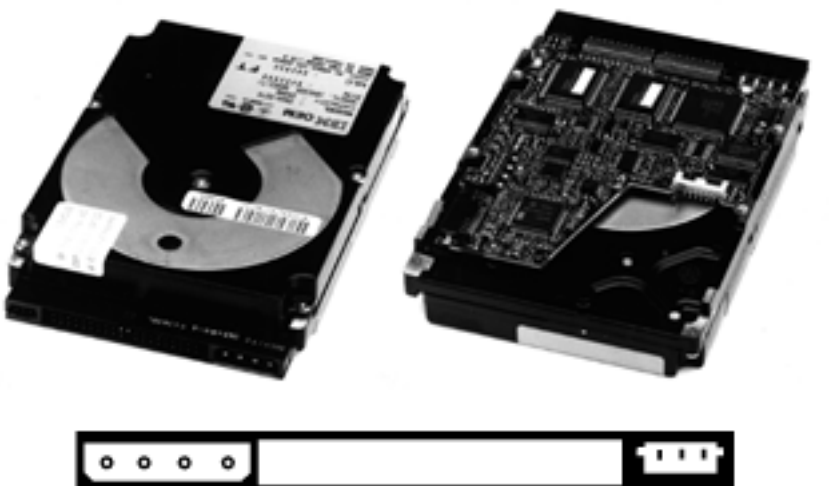
WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer

identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, IDE, 3.5", 350 MB

661-0068



The IDE drive is distinguished from the SCSI drive by the third (alternate power) connector built into the connector bar on the PCB.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, IDE, 3.5", 500 MB

661-0146

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, IDE, 3.5", 800 MB

661-0999

The IDE drive is distinguished from a SCSI drive by the third (alternate power) connector built into the connector bar on the PCB.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer

identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or r
emoved.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, IDE, 3.5", 1 GB

661-0955

The IDE drive is distinguished from a SCSI drive by the third (alternate power) connector built into the connector bar on the PCB.

Hard Drive, IDE, 3.5", 1.2 GB

661-1106

The IDE drive is distinguished from the SCSI drive by the third (alternate power) connector built to the right of the connector bar on the PCB.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive

warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Conner Drive Model # CFS1275A
Quantum Drive Model # 1.2GB FRBLA
Seagate Drive model # ST31276A
Quantum Drive Model # 1.2GB FBTMA

Hard Drive, IDE, 3.5", 1.2 GB

661-1139

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

The IDE drive is distinguished from a SCSI drive by the third (alternate power) connector built into the connector bar on the PCB.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Conner Drive Model # CFS1275A
Quantum Drive Model # 1.2GB FRBLA
Seagate Drive model # ST31276A
Quantum Drive Model # 1.2GB FBTMA

Hard Drive, IDE, 3.5", 1.6 GB

661-1107

Hard Drive, IDE, 3.5", 2.4 GB **661-1202**

Bottom

Top

Hard Drive, IDE, 3.5", 4 GB **661-1342**

Hard Drive, SCSI, 2.5", 40 MB (Discontinued and Replaced by 661-1298)

661-1630

This drive contains a plastic “horseshoe” shaped cover located on the top of the drive.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service

provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 2.5", 40 MB, PowerBook 100 (Discontinued) **661-1632**

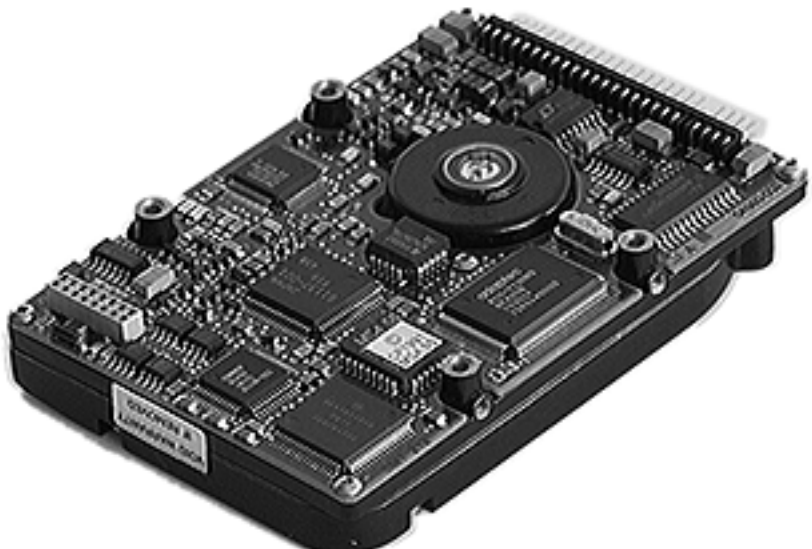
When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 2.5", 40 MB, PowerBook 100 (Discontinued) **661-1644**



When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 2.5", 40 MB, Trayloading (Discontinued) **661-0016**

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal is Broken” have been tampered with or removed.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts chapter of the Hard Drives manual in Service Source.

Hard Drive, SCSI, 2.5", 80 MB (Discontinued) **661-0211**

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 2.5", 120 MB (Discontinued) **661-0772**

Return the hard drive with the screw-in feet attached.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

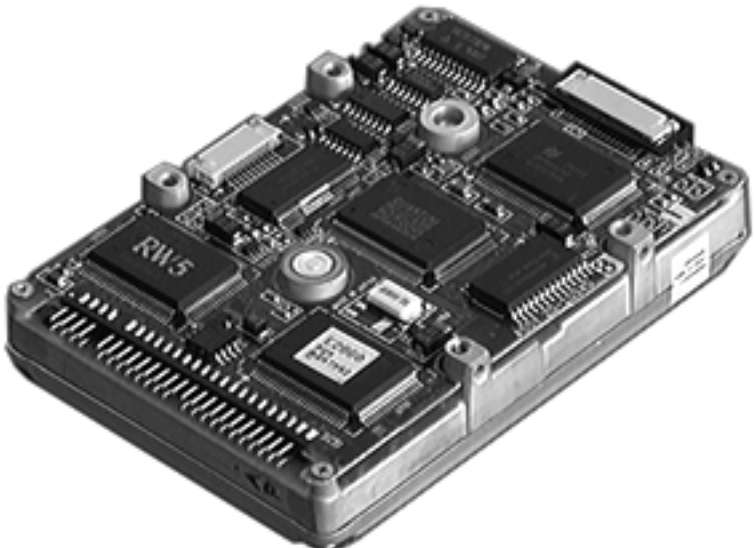
WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without

repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 2.5", 160 MB (Discontinued and Replaced by 661-1298)

661-0213



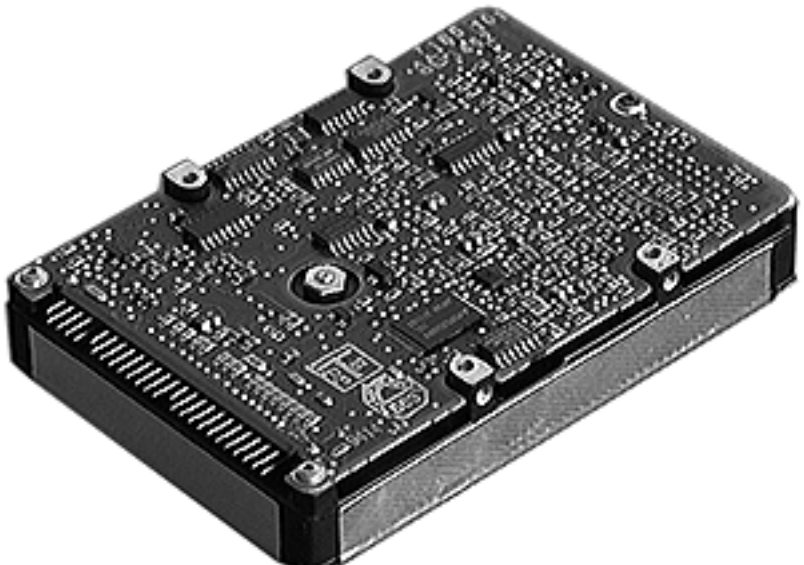
When you return P/N 661-0213, Apple ships you P/N 661-0217.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels

that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 2.5", 200 MB (Replaced by 661-1298) **661-0779**



When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 2.5" SCSI drives.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 2.5", 240 MB (Replaced by 661-1298) **661-0217**

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 2.5" SCSI drives.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 2.5", 320 MB, In-Warranty Exchange ONLY **661-1753**
(Replaced by 661-1298)

Hard Drive, SCSI, 2.5", 320 MB (Replaced by 661-1298) **661-0896**

The 160 MB, 240 MB, and 320 MB, SCSI, 2.5” hard drives are similar. You can identify the 320 MB, SCSI, 2.5” hard drive by the number 320 MB on the drive label.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 2.5" SCSI drives.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 2.5", 500 MB, In-Warranty Exchange ONLY (Discontinued) **661-1752**

This part number should be used ONLY when exchanging a discontinued drive under warranty or AppleCare.

For a list of all drives that have been discontinued, refer to the Service Notice entitled “Expanded Lower-Capacity Hard Drive Exchange Program on Service Source CD or on-line at

http://service.info.apple.com. Apple has made every effort to maintain LED support. However, some drives no longer support an LED. We regret any inconvenience this may cause.

Hard Drive, SCSI, 2.5", 500 MB (Replaced by 661-1298) **661-0175**

The160 MB, 320 MB, and 500 MB, SCSI, 2.5” hard drives are similar. You can identify the 500 MB, SCSI 2.5” drive by the 500 MB on the drive label.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

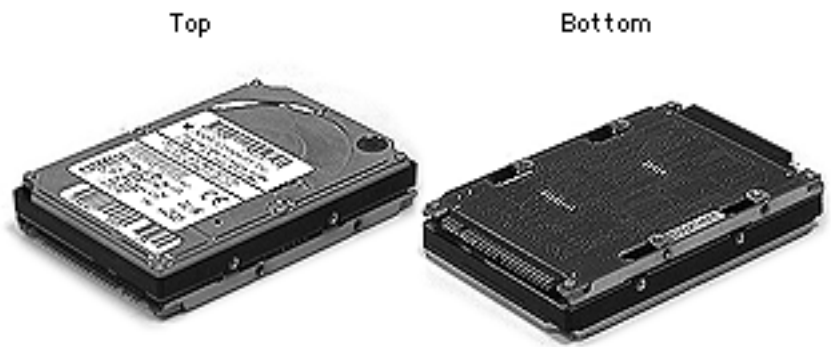
WARRANTY: The drive

warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 2.5" SCSI drives.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 2.5", 1 GB, Use with 922-0006 in PB100-180c **661-1298**



Although the label on this hard drive might indicate that it is an IDE device, it is equipped with a converter card which causes it to perform as a SCSI device. The adapter card is intended to remain with the drive. Do not remove it.

This drive is only compatible with the following Apple products:

- PowerBook Duo 210, 230, 250, 270c, 280, 280c, 2300c
- PowerBook 100*, 140, 145, 145b, 160, 165, 165c, 170, 180, 180c, 500 Series.

This drive is not compatible with the PowerBook 150, 190 Series, 1400 Series, or 5300 Series because these PowerBooks use IDE hard drives.

This drive has not been formatted. Customers and/or AASPs should use the hard drive formatting software that is compatible with the version of Apple System Software they intend to install on the drive, with the exception of the PowerBook 100. *To format the drive to function properly in the PB 100, the drive should be formatted with HD SC Setup v7.3.5, which is available on the System Software 6.0.8 Disk Tools Disk.

Installation Notes:

To install this drive in a PB 100, 140, 145, 145b, 160, 165, 165c, 170, 180, or 180c, a 19mm internal mounting bracket (p/n 922-0006) is required. To install this drive in a PB Duo or PB 500 Series computer, reuse the mounting bracket from the original internal hard drive.

Hard Drive, SCSI, 3.5", 40 MB

661-0216

The callout in this picture points to the “AXX” label, which substitutes for an Apple logo. Two different vendors manufacture this hard drive.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider witho
ut repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 40 MB **661-0540**

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

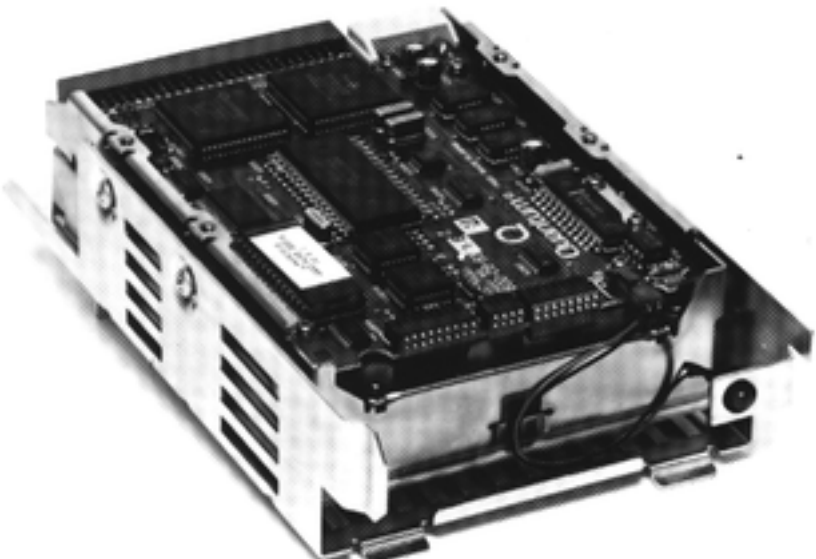
WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 80 MB

661-0561



When you return P/N 661-0561, Apple ships you P/N 661-0613.

The 80 MB, SCSI, 3.5” hard drive with A/UX v. 1.1 has a Version 1.1 label located on the anodized brass plate, which is on the same end of the hard drive as the LED.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 80 MB (Discontinued) **661-0212**

For in-warranty computers:
When you return P/N 661-0212, Apple ships you P/N 661-1750, Hard Drive, SCSI, 3.5”.

For out of warranty computers:
Customers must order a new drive, 250 MB or greater, that is compatible with their system. Return the customer’s original

drive to them, NOT to Apple.
When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 80 MB, HD Adapter Support (Discontinued) **661-0111**

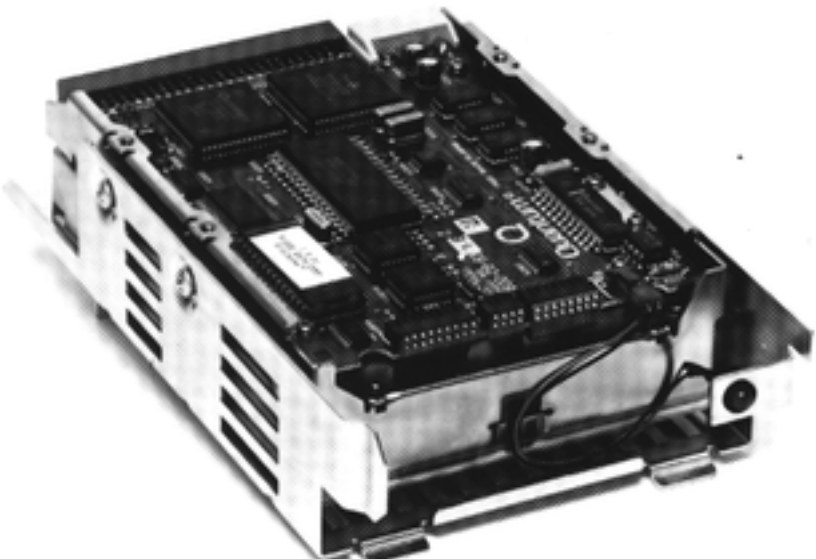
For in-warranty computers:
When you return P/N 661-0111; Apple ships you P/N 661-1750, Hard Drive, SCSI, 3.5”.

For out of warranty computers:
Customers must order a new drive, 250 MB or greater, that is compatible with their system. Return the customer’s original

drive to them, NOT to Apple.
WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 80 MB, with A/UX 2.0 **661-0613**



When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Use the A/UX v2.0 Installation CD (part number) 600-4192 to configure any supported Apple Drive.

Hard Drive, SCSI, 3.5", 120 MB (Discontinued) **661-0021**

When you return P/N 661-0021; Apple ships you P/N 661-1750, Hard Drive, SCSI, 3.5”.

Out of warranty customers must order a new drive, 250 MB or greater, that is compatible with their system. Return the customer’s original drive to them, NOT to Apple.

When present, the following must be removed before returning the drive to
Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 160 MB (Discontinued) **661-0214**

For in-warranty computers:
When you return P/N 661-0214, Apple ships you P/N 661-1750, Hard Drive, SCSI, 3.5”.

For out of warranty computers:
Customers must order a new drive, 250 MB or greater, that is compatible with their system. Return the customer’s original

drive to them, NOT to Apple.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5",160 MB, HD Adapter Support (Discontinued) **661-1649**

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For in-warranty computers:
When you return P/N 661-1649; Apple ships you P/N 661-1750, Hard Drive, SCSI, 3.5”.

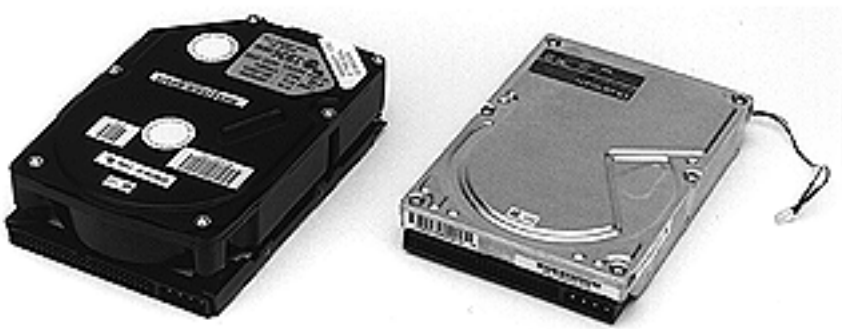
For out of warranty computers:
Customers must order a new drive, 250 MB or greater, that is compatible with their system. Return the customer’s original

drive to them, NOT to Apple.
When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 160 MB with A/UX 2.0.1 **661-1639**



The 160 MB, SCSI, 3.5” hard drive with A/UX has a version 2.0.1 label on the drive.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service

provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Use the A/UX v2.0 Installation CD (part number) 600-4192 to configure any supported Apple Drive.

Hard Drive, SCSI, 3.5", 230 MB (Discontinued) **661-1637**

For in-warranty computers:
When you return P/N 661-1637; Apple ships you P/N 661-1750, Hard Drive, SCSI, 3.5”.

For out of warranty computers:
Customers must order a new drive, 250 MB or greater, that is compatible with their system. Return the customer’s original

drive to them, NOT to Apple.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 250 MB **661-0890**

The 250 MB and 500 MB, SCSI, 3.5” hard drives are similar. You can identify the 250 MB, SCSI, 3.5” internal drive by the number 250 MB on the drive label.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 3.5" SCSI drives.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 320 MB (Replaced by 661-0182) **661-0505**

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

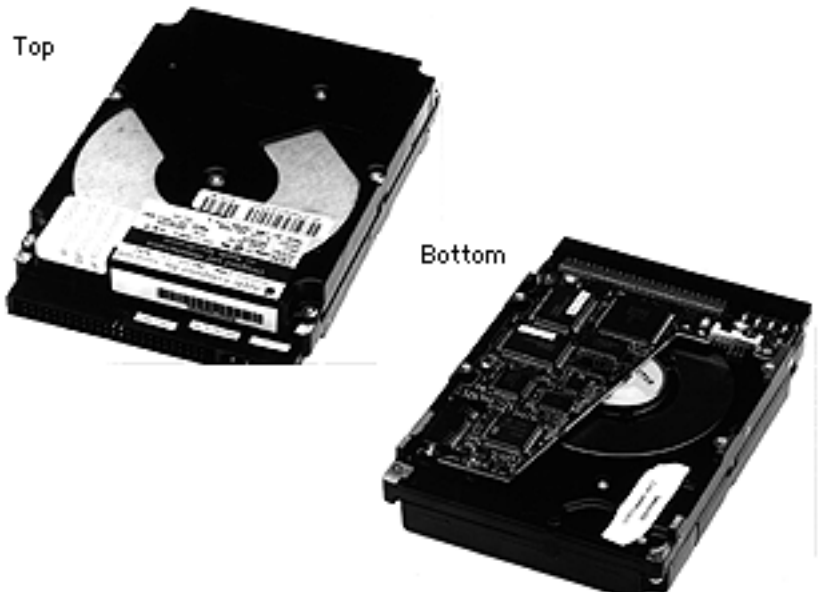
WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 350 MB

661-0182



The 250 MB, 350 MB, and 500 MB, SCSI, 3.5” hard drives are similar. You can identify the 350 MB, SCSI, 3.5” hard drive by the number 350 MB on the drive label.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 3.5" SCSI drives.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 400 MB

661-1636

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge. When present, the following must be removed before returning the drive to
Apple: frame, LED cable, SCSI select cable.

Hard Drive, SCSI, 3.5", 500 MB

661-0974

The 250 MB, 350 MB, 500 MB, and 700 MB, SCSI, 3.5” hard drives are similar. You can identify the 500 MB, SCSI, 3.5” internal drive by the manufacturing model name “maverick” printed on the drive label.

WARRANTY: The drive warranty will be void and Apple will return the module to the service

provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 3.5" SCSI drives.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 500 MB

661-0219

The 250 MB, 350 MB, 500 MB, and 700 MB, SCSI, 3.5” hard drives are similar. You can identify the 500 MB, SCSI, 3.5” internal drive by the number 500 MB on the drive label.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar

code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives that support 3.5" SCSI drives.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 500 MB, In-Warranty Exchange ONLY **661-1750**

Use this part number ONLY when you are exchanging a discontinued drive under warranty or AppleCare. For a list of all drives that have been discontinued, refer to the Service Notice entitled “Expanded Lower-Capacity Hard Drive Exchange Program on Service Source CD or on-line at http://service.info.apple.com.

Apple has made every effort to maintain LED support. However, some drives no longer support an LED. We regret any inconvenience this may cause.

Hard Drive, SCSI, 3.5", 700 MB

661-0184

The 250 MB, 350 MB, 500 MB and 700 MB SCSI 3.5” hard drives are similar. You can identify the 700 MB SCSI 3.5” drive by the number 700 MB on the drive label.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 800 MB **661-1102**

Hard Drive, SCSI, 3.5", 1 GB (Replaced by 661-1142) **661-0228**

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

For maximum compatibility, Apple recommends this drive for use in older Macintosh computers and external drives except those that use Foxconn connectors (i.e., Macintosh LC 520/550/575 computers and Performa® 500 series computers).

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 1.2 GB

661-1142

Warranty: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void if Seal is Broken” have been tampered with or removed.

When present, the following must be removed before returning the drive to Apple:

Frame, LED cable, SCSI select cable.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 2 GB

661-1076

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal is Broken” have been tampered with or removed.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 2 GB **661-0892**

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 2 GB **661-0180**

Return the hard drive without the HDA frame, LED cable, and SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels

that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 2 GB, Fast/Wide, IBM **661-0956**

Top

Bottom

This drive can be identified by its high-density interface connector.

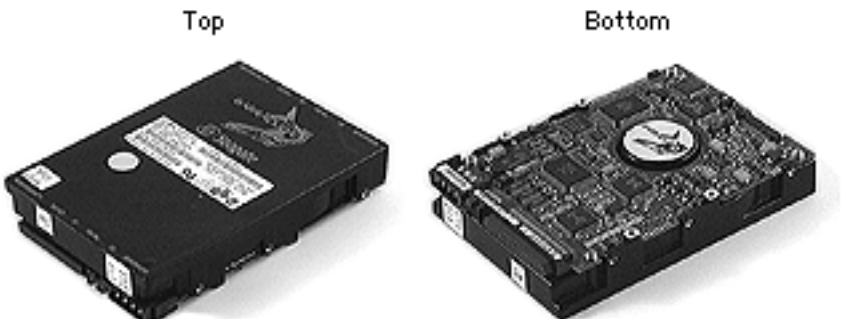
Return the defective hard drive without the SCSI cables, SCSI select cable, LED cable, power cable, and the drive carrier.

Warranty: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification

label, Apple capacity or EPROM label, or labels that say “Warranty Void if Seal Broken” have been tampered with or removed. APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

This drive uses SCSI ID cable, Type 1, P/N 922-2102.

Hard Drive, SCSI, 3.5", 2 GB, Fast/Wide, Seagate **661-1178**



Return the defective hard drive without the SCSI cables, SCSI select cable, LED cable, power cable, and the drive carrier.

Warranty: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity or EPROM label, or labels that say “Warranty Void if Seal Broken” have been tampered with or removed. APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

This drive uses SCSI ID cable, Type 1, P/N 922-2102.

Hard Drive, 4 GB, SCSI, 3.5", 7200 **661-0951**

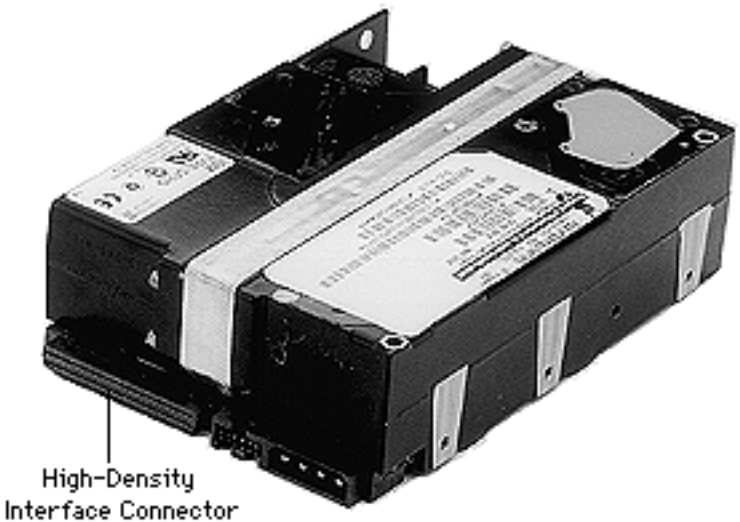
When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label,

Apple capacity or EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

Hard Drive, SCSI, 3.5", 4 GB, Fast/Wide, IBM **661-0958**



This drive can be identified by its high-density interface connector.

Return the defective hard drive without the SCSI cables, SCSI select cable, LED cable, power cable, and the drive carrier.

Warranty: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification

label, Apple capacity or EPROM label, or labels that say “Warranty Void if Seal Broken” have been tampered with or removed. APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

This drive uses SCSI ID cable, Type 1, P/N 922-2102.

Hard Drive, SCSI, 3.5", 4 GB, Fast/Wide, Seagate **661-1179**

Top

Bottom

Hard Drive, SCSI, 5.25", 80 MB, with A/UX **661-0457**

The 80 MB, SCSI, 5.25” hard drive with A/UX has a A/UX label located on the upper-left corner.

When present, the following must be removed before returning the drive to Apple: frame, LED cable, SCSI select cable.

WARRANTY: The drive warranty will be void and Apple will return

the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

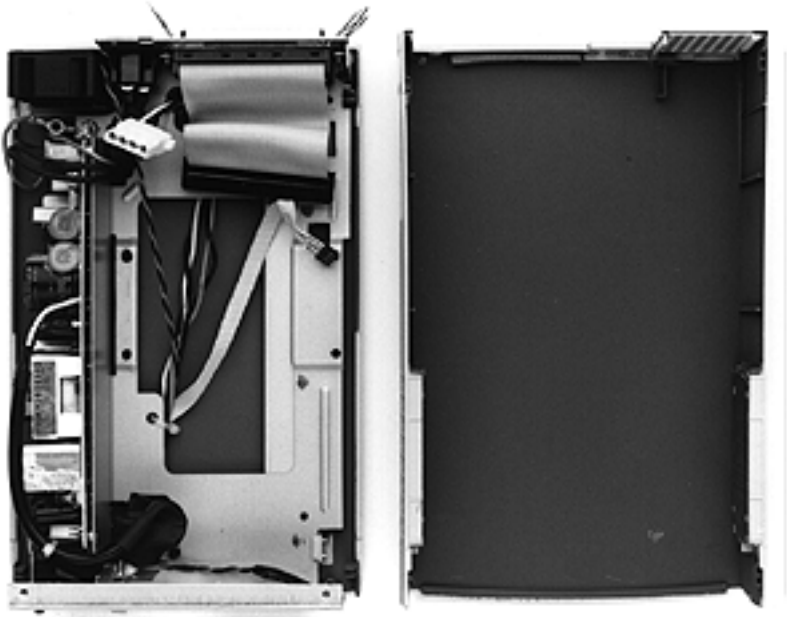
APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Power Supply, Hard Drive, 20 MB, SCSI **661-0343**

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Power Supply with Enclosure, Hard Drive

661-0032



Drives

Tape Drives

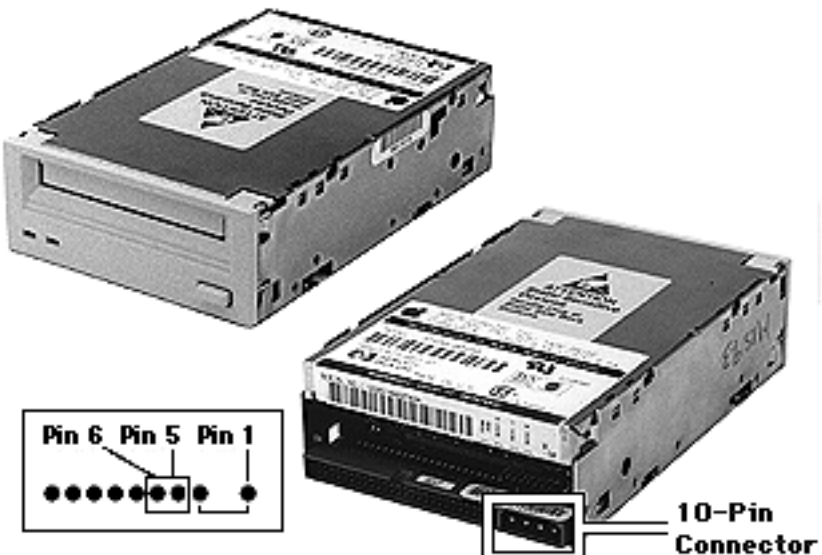
Tape Drive, 40 MB

661-0392

Return the tape drive with the metal frame attached.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Tape Drive, 4 mm, DAT, DDS-DC, SCSI, 2 GB **661-0795**



AWS 95 Note: When you return a defective drive to Apple, remove the SCSI select cable and switch, drive adapter plate, and carrier, if present.

AWS 80 Note: When you return a defective drive to Apple, transfer the SCSI select shorting jumper on rear of the drive, if present, from the defective drive to the service replacement

drive. The jumper shorts pin 5 and pin 6 on the ten-pin connector to select the SCSI ID number 2.

WARRANTY: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

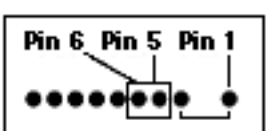
APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Tape Drive, 8 mm, 20/40GB, Network Server **661-1246**

Tape Drive, 120M, DAT, DDS-2, SCSI

661-0039

Note: The Apple DAT, DDS-2, 120M and the Apple 2 GB, DDS-DC SCSI tape drives are similar. You can identify the Apple DAT, DDS-2, 120M tape drive by the number *4 GB* on the drive label.



AWS 9150 Note: When you return a defective drive to Apple, remove the SCSI select cable and switch, drive adapter plate and carrier, if present.

AWS 8150 Note: When you return a defective drive to Apple, transfer the SCSI select shorting jumper on the rear of the drive, if present, from the defective drive to the service

replacement drive. The jumper shorts pin 5 and pin 6 on the ten-pin connector to select the SCSI ID number 2.

Warranty: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity and EPROM label, or labels that say “Warranty Void If Seal Is Broken” have been tampered with or removed.

APPLE REQUIRES SPECIAL PACKAGING: failure to comply with these requirements may result in a packaging noncompliance charge.

Zip Drive

661-1331

Input Devices

Keyboards

Apple Adjustable Keyboard **661-0731**

Apple Keyboard

661-0383

661-0383
661-0383 B/D/E/F/S/T
When you return P/N 661-0383, Apple ships you P/N 661-0603.
Remove the cable before returning the keyboard to Apple.

Apple Keyboard II

661-0603

Remove the cable before returning the keyboard to Apple.

Apple Extended Keyboard **661-0384**

661-0384
661-0384 B/D/F/E/S/T

Apple Extended Keyboard II

661-0543

661-0543
661-0543 D/F/E/T/C

AppleDesigned Keyboard, Graphite (Int'l Only) **661-1148**

AppleDesigned Keyboard with Attached Cable (Discontinued and Replaced by 922-2832) **661-0310**

The US version of this keyboard must now be ordered as 922-2832. Orders are no longer accepted for 661-0310. Do not return this keyboard to Apple.

The international versions of this keyboard (661-0310 B/D/F/E/S/T) are still valid part numbers and should still be returned to Apple for replacement.

AppleDesigned Keyboard with Attached Cable, International

B/ D/ E/ F/ S/ T 661-0310

The international versions of this keyboard (661-0310 B/D/F/E/S/T) are still valid part numbers and should still be returned to Apple for replacement.

Return the keyboard with the cable attached.

Macintosh Plus Keyboard with Cable

661-0416

661-0416 (Platinum)
661-0416 B/C/D/F/E/S/T/C

661-0416 replaces 661-96154

Macintosh Plus Keyboard with Cable (Replaced By 661-0416)

661-0322

When you return P/N 661-0322, Apple ships you P/N 661-0416.

Macintosh Portable Keyboard **661-0476**

661-0476
661-0476 B/C/D/E/F/S/T

The Macintosh Portable keyboard comes in two versions. The original keyboard (661-0476) has a steel mounting plate with a silver finish; the new keyboard (661-1612) has an aluminum mounting plate with a black finish. Also, the keyswitches are different and have a

different feel. When replacing a keyboard, order the replacement module with the same mounting plate as the defective keyboard.

Macintosh Portable Lightweight Keyboard **661-1612**

The Macintosh Portable keyboard comes in two versions. The original keyboard (661-0476) has a steel mounting plate with silver finish; the new keyboard (661-1612) has an aluminum mounting plate with a black finish. Also, the keyswitches are different and have a different feel.

When replacing a keyboard, order the replacement module with the same mounting plate as the defective keyboard.

Macintosh TV Keyboard II (Discontinued and Replaced by 922-2327) **661-1722**

This keyboard must now be ordered as 922-2327. Orders are no longer accepted for 661-1722. Do not return this keyboard to Apple computer.

PowerBook 100 Keyboard **661-0713**

661-0713
661-0713 C/E/J/Z

PowerBook 140/145/160/165/165c/170/180 Keyboard **661-0712**

661-0712
661-0712 B/C/D/E/F/S/T

PowerBook 190/3400/5300 Series Keyboard **661-0935**

661-0935 B/D/E/F/
J/S

PowerBook 520/540 Series Keyboard, U.S. **661-0037**

PowerBook Duo Keyboard, U.S., Rev. A, B, C, and D **661-1652**

661-1652 B/D/E/F/
J/C/S

Some Rev. A keyboards do not have a barcode label.

Input Devices

Keypads

Apple Adjustable Keypad **661-0762**

Macintosh Portable Lightweight Numeric Keypad **661-1611**

The Macintosh Portable lightweight numeric keypad comes in two versions. The original version (661-0477) has a steel mounting plate with a black finish; the new version (661-1611) has an aluminum mounting plate with a silver finish. When you replace a numeric keypad, use the version

with the same mounting plate as the defective keypad.

Macintosh Portable Numeric Keypad **661-0477**

661-0477
661-0477 PA/Z
The Macintosh Portable numeric keypad comes in two versions. The original version (661-0477) has a steel mounting plate with a black finish; the new version (661-1611) has an aluminum mounting plate with a silver finish. When you replace a numeric keypad, use the version

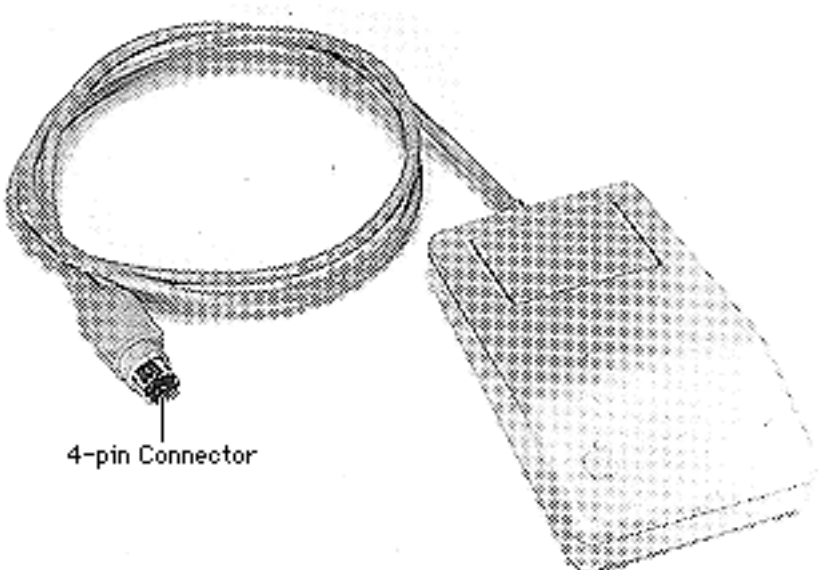
with the same mounting plate as the defective keypad.

Input Devices

Mouse Devices

Apple Desktop Bus Mouse

661-0585



This mouse has a 4-pin connector.
P/N 661-0338 does not. Because this device has a ferrite EMI filter, use it only on the Macintosh Portable.

Apple Desktop Bus Mouse

661-0338

This mouse has a 4-pin connector.

Apple Desktop Bus Mouse

661-0479

This mouse has a 4-pin connector and a low-power icon on the bottom label.

Apple Desktop Bus Mouse II (Discontinued and Replaced by 922-2733) **661-0104**

Apple Desktop Bus Mouse II

661-0763

Apple Desktop Bus Mouse, Graphite
(Discontinued and Replaced by 922-2328)

661-1151

This mouse must now be ordered as 922-2328. Orders are no longer accepted for 661-1151. Do not return this mouse to Apple computer.

Macintosh TV Desktop Bus Mouse II **661-1723**

(Discontinued and Replaced by 922-2328)

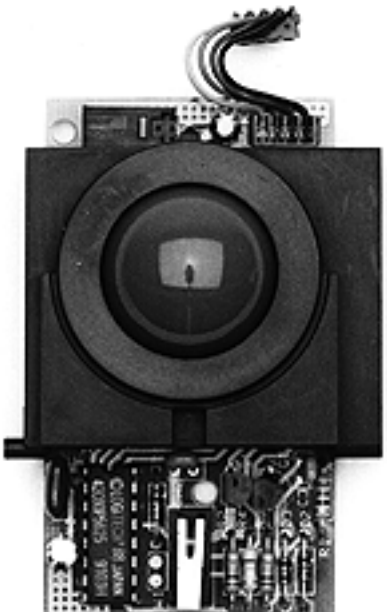
This mouse must now be ordered as 922-2328. Orders are no longer accepted for 661-1723. Do not return this mouse to Apple computer.

Input Devices

Trackballs

Macintosh Portable Trackball Assembly **661-0475**

PowerBook 100 Trackball Assembly **661-0676**

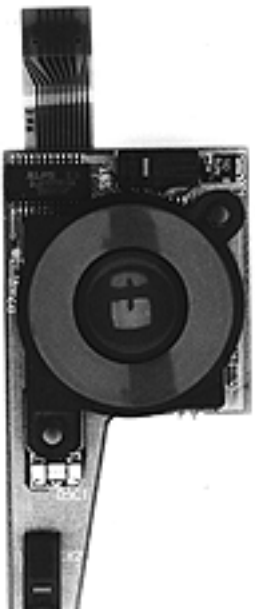


PowerBook 140/145/145B/160/165/165c/170/180/180c Trackball Assembly **661-0730**

PowerBook 140/145/160/170/180 Trackball Assembly **661-0710**

When you return P/N 661-0710, Apple ships you P/N 661-0730.

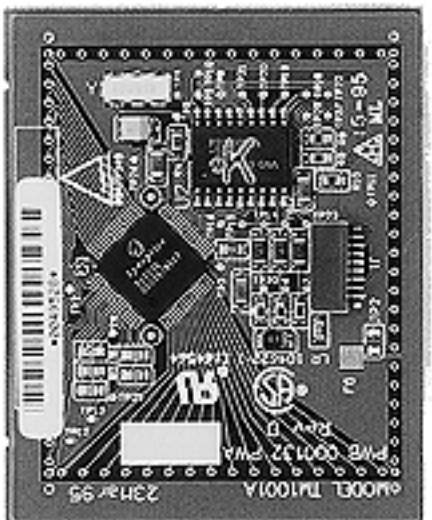
PowerBook Duo 210/230 Trackball Assembly **661-1654**



Input Devices

Trackpads

PowerBook 190/2300 Series Trackpad Board (Replaced by 922-2694) **661-1032**



This trackpad is to be used in the PowerBook 190/2300 Series products:

PB 190, 190cs, 2300c

PowerBook 500 and 5300 Series Trackpad Board **661-0934**

This trackpad is to be used in the PowerBook 500 and 5300 Series products:

PB 520, 520c, 540, 540c, 5300, 5300c, 5300ce, and 5300cs.

PowerBook 520/540 Series Trackpad **661-0038**

Top

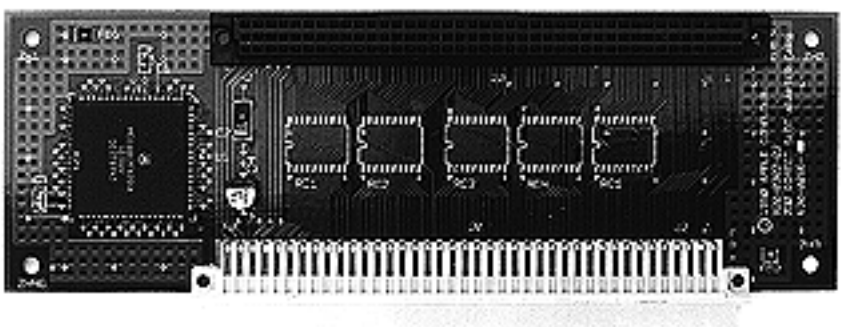
Bottom

When you return P/N 661-0038, Apple ships you P/N 661-9034.

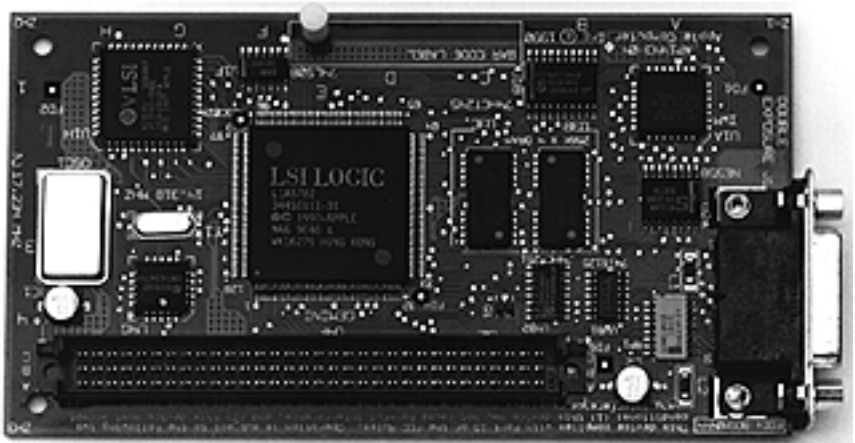
Interface Cards/Data Comm

'030 Direct Slot Adapter Card, Mac IIsi **661-0644**

Retain the ‘030 card-mounting bracket for use with the replacement adapter.

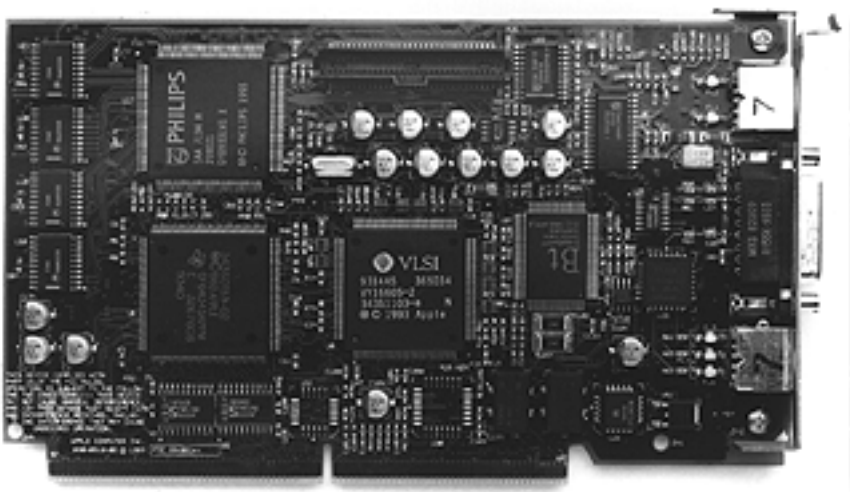


Apple IIe Card, LC/LC II, Performa 400 Series **661-0595**



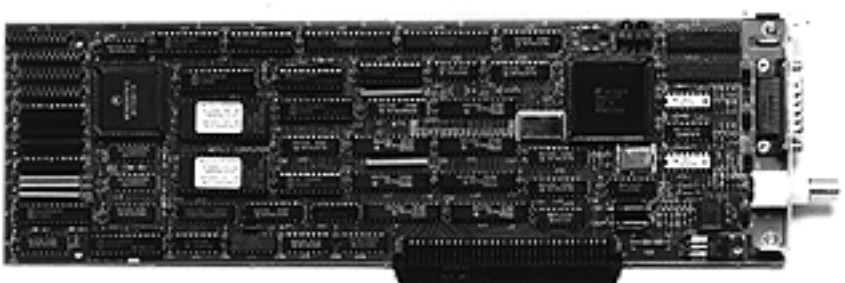
AV Card, Power Macintosh

661-1023



Coax/Twinax Card, Mac II

661-0458



Display Card, Mac II **661-0607**

When you return P/N 661-0607, Apple ships you P/N 661-0677.)

You can distinguish P/N 661-0607 from P/N 661-0677 by the ROM part number (661-0677 has ROM 341-0868). You can upgrade 661-0607 to 661-0677 with a ROM upgrade. See the CPU price pages under P/N 076-0548 (Display

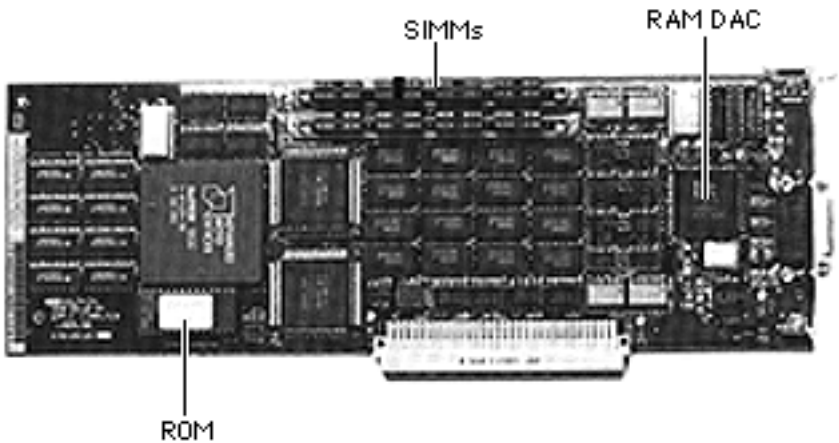
Card 661-0607/661-0608 ROM upgrade). The ROM (P/N 341-0868) provides page-white color correction for hte Macintosh 21-Inch Color Display. The Macintosh 16-Inch Color Display requires the ROM upgrade.

Display Card 4•8, Mac II , Rev. B **661-0677**

You can upgrade P/N 661-0677 to P/N 661-0678 (Display Card 8•24) by installing two VRAM SIMMs (P/N 661-0609, VRAM SIMM, 256K, 100 ns).

Remove the VRAM SIMMs before you return the display card to Apple.

Display Card 8•24, Mac II, GC **661-0606**



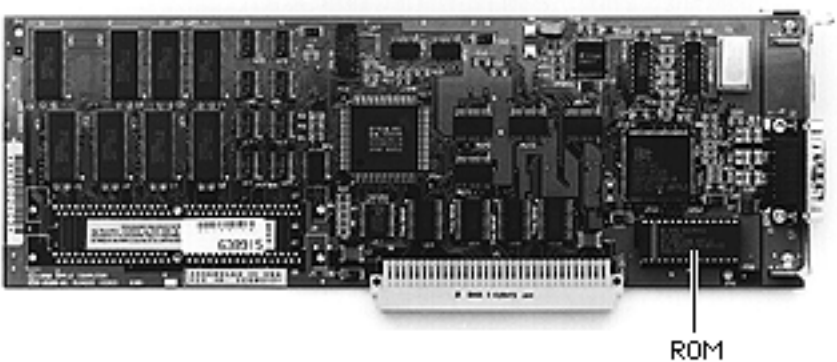
Remove the two 1 MB video expansion SIMMs before you return the display card to Apple.

When you return P/N 661-0606; Apple ships you P/N 661-1642.

P/N 661-0606 has ROM P/N 341-0812 and RAM DAC P/N 357S0010.
You can upgrade 661-0606 to support the

Macintosh 16” Color Display by installing a ROM upgrade. See the Mac II CPU price pages under P/N 076-1019 (Display Card 661-0606 ROM upgrade).

Display Card 8•24, Mac II, GC **661-0608**



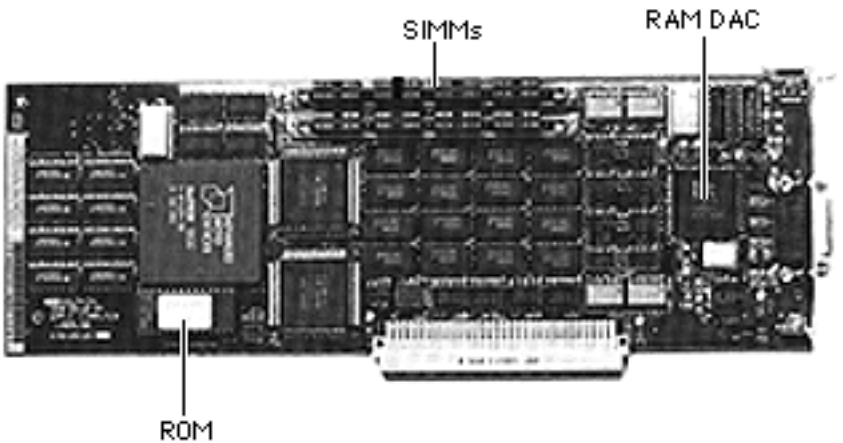
When you return P/N 661-0608, Apple ships you P/N 661-0678.

You can distinguish P/N 661-0608 from P/N 661-0678 by the ROM part number (661-0678 has ROM P/N 341-0868). You can upgrade 661-0608 to 661-0678 with a ROM upgrade. See the CPU price pages under P/N 076-0548 (Display

Card 661-0607/661-0608 ROM upgrade). The ROM (P/N 341-0868) provides page-white color correction for the Macintosh 21-Inch Color Display. The Macintosh 16-Inch Color Display requires the ROM upgrade.

Display Card 8•24, Mac II, GC

661-1642

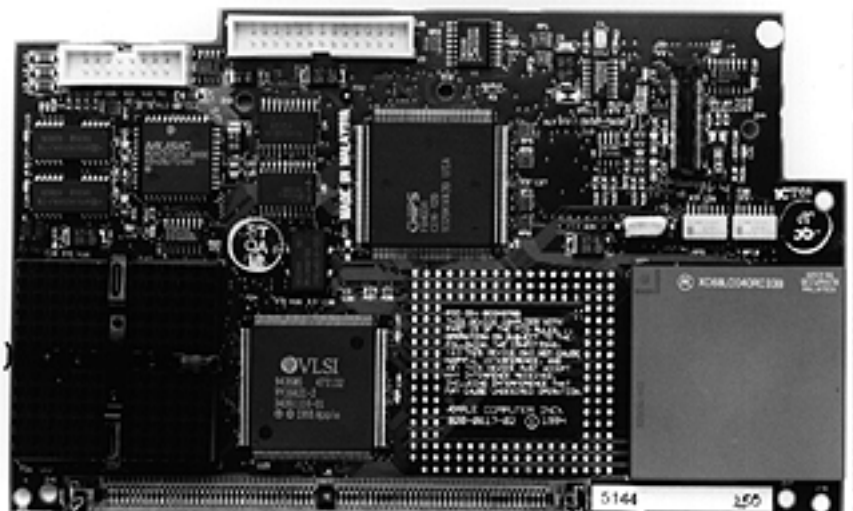


Remove the two 1 MB video expansion SIMMs before you return the display card to Apple.

Display Card 8•24, Mac II, GC, Rev. B

661-0678

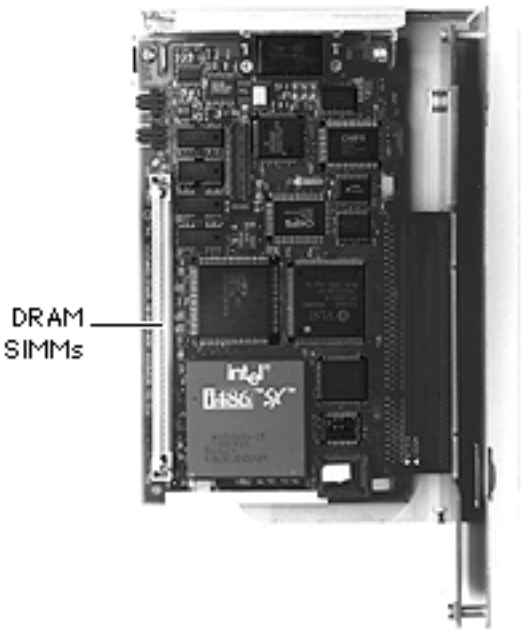
DOS Compatibility Board, LC 630, Performa 640 Series **661-0915**



Return the DOS compatibility card WITH the 68LC040 installed. Remove any DRAM SIMMs before returning to Apple.

DOS Compatibility Card, '486 PC, Quadra 610

661-1017



Return the card without DRAM SIMMs.

DOS Compatibility Card, PM 6100/Performa 6100 Series

661-0230

Ethernet 10T/5 Workgroup Hub

661-0280

Ethernet AAUI Card, Comm Slot, LC/Performa 500 Series, Quadra 630 **661-0889**

This version of the card is also used in the PowerMac and Perfoma 5200, 5300, 6200, and 6300 series.

Ethernet Card, 10Base2/10BaseT/AAUI, PCI **661-0986**

Top View

Side View

Ethernet Card, 10 Base-T, Comm Slot, LC 520/550/575, Performa 500 Series

661-0888

This version of the card is also used in the PowerMac and Perfoma 5200, 5300, 6200, and 6300 series.

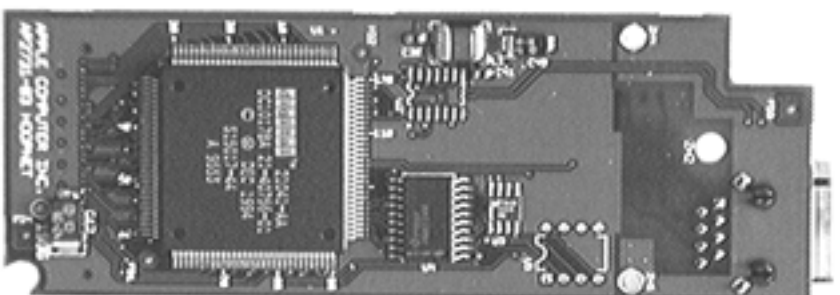
Ethernet Card, 100BaseTX, PCI **661-0985**

Top View

Side View

Ethernet Card, PowerBook 3400

661-1284



To determine which ethernet card is installed (ethernet or ethernet/modem), look at the special label added to the I/O door of the PowerBook. This label specifies which card is installed.

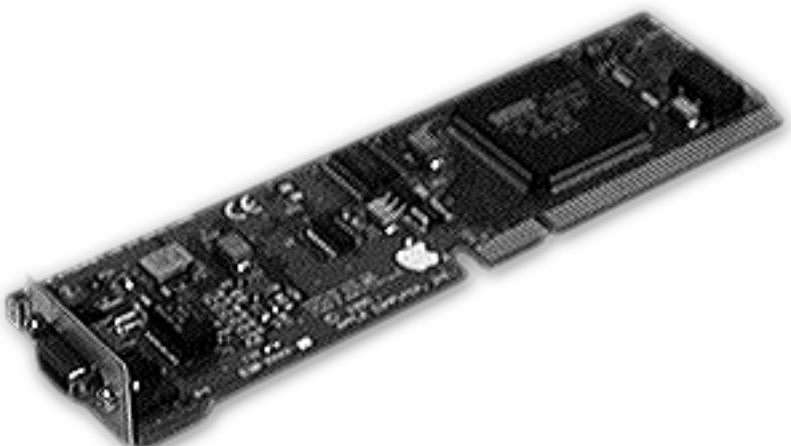
Ethernet Card, Thin-Net, Comm Slot
LC 520/550/575, Performa 500 Series

661-0036

This version of the card is also used in the PowerMac and Perfoma 5200, 5300, 6200, and 6300 series.

Ethernet CS II Card, AAUI

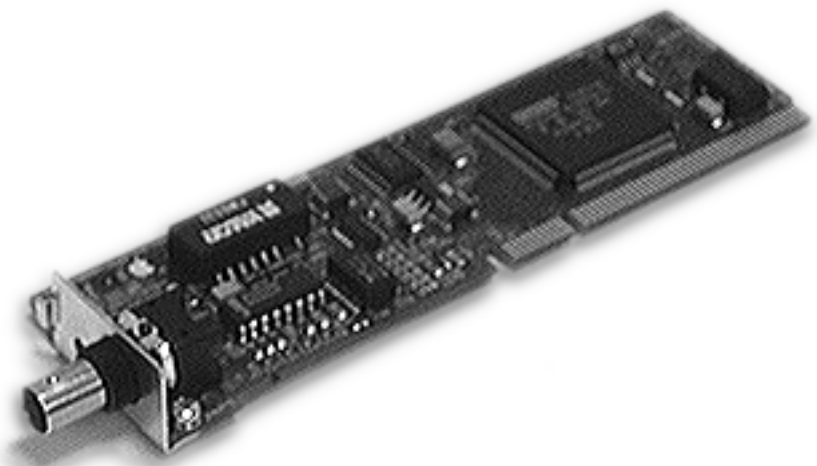
661-1170



The Comm Slot II cards are not interchangeable with the previous Comm Slot cards.

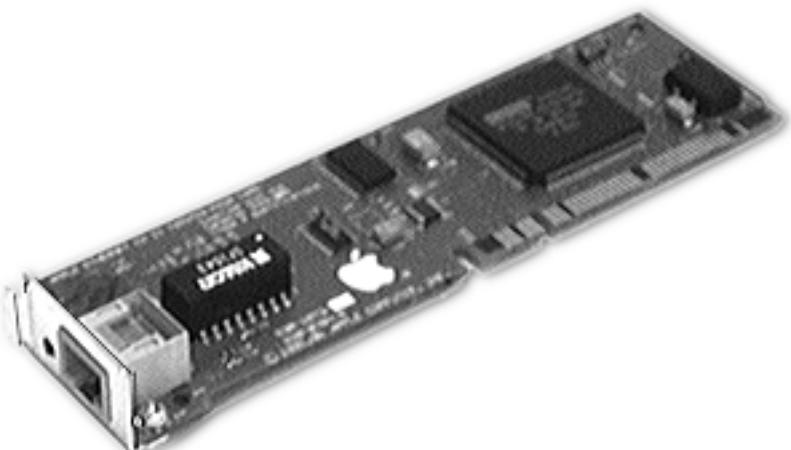
Ethernet CS II Card, Thin Coax

661-1172



The Comm Slot II cards are not interchangeable with the previous Comm Slot cards.

Ethernet CS II Card, Twisted Pair **661-1171**



The Comm Slot II cards are not interchangeable with the previous Comm Slot cards.

Ethernet LC Card, LC/LC II, Performa 400 Series **661-0621**

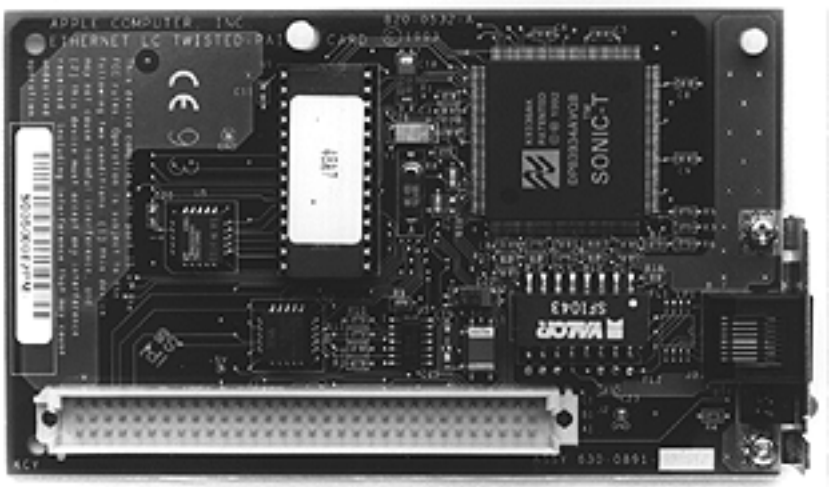
a

b

a) This version of the card uses 341-4070 ROM with the 670-2008 board assembly. This ROM was introduced in March 1992.

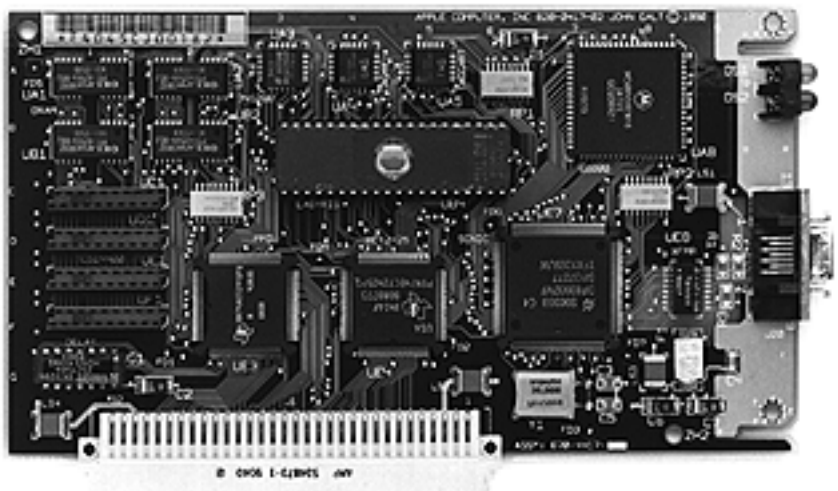
b) The older version of the card uses 341-0842 ROM with the 670-4443 board assembly.

Ethernet LC Twisted Pair Card, LC/LC II Apple **661-0226**



Ethernet NB Card, Mac II

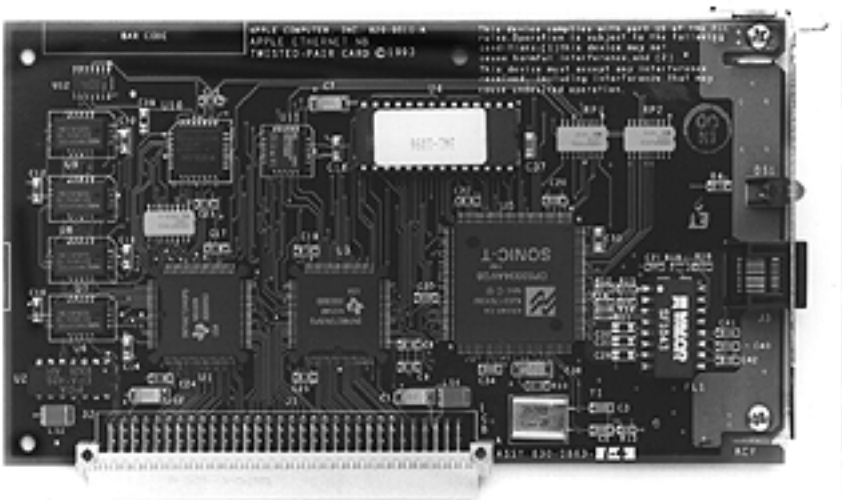
661-0619



Remove the RAM chips before you return card to Apple.

Ethernet NB Twisted Pair Card, Mac II

661-0869



Ethernet/Modem Card, PowerBook 3400 **661-1283**

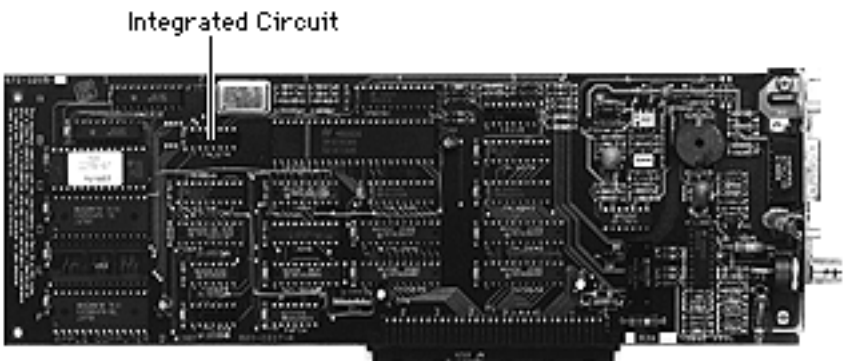
To determine which ethernet card is installed (ethernet or ethernet/modem), look at the special label added to the I/O door of the PowerBook. This label specifies which card is installed.

Ethernet/Modem Card, PowerBook 3400, Japan **J661-1283**

EtherTalk Card, Mac II, Rev. A-K

661-0414

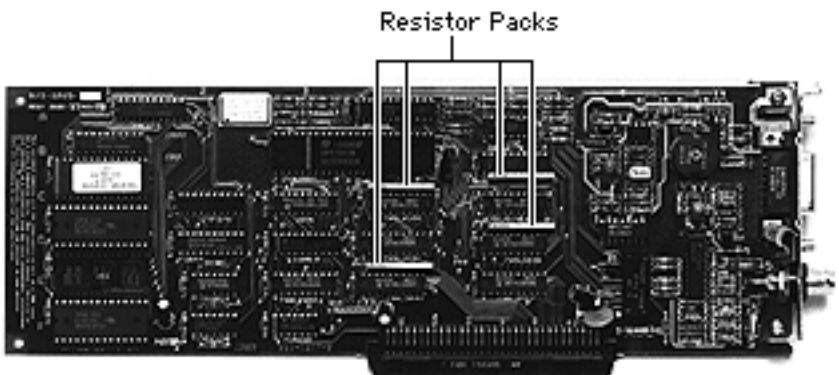
An integrated circuit is in the location shown.



EtherTalk NB Card, Mac II

661-0496

Resistor packs will be in these locations.



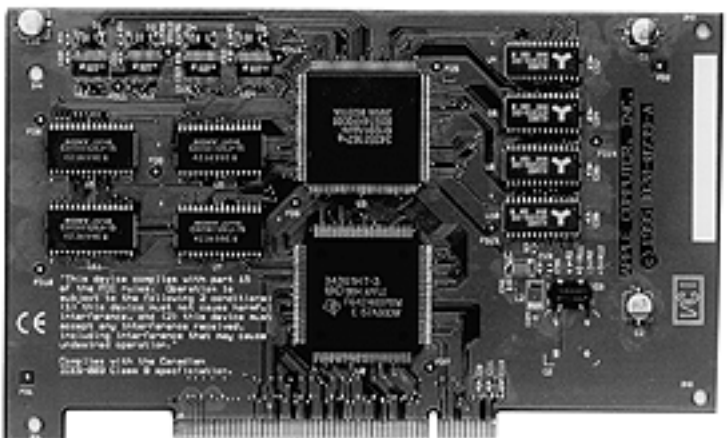
GeoPort Telecom Adapter **661-1703**

Graphics Card, Apple Accelerated **661-0926**

Remove the third party VRAM memory module expansion card (if present)before returning this card.

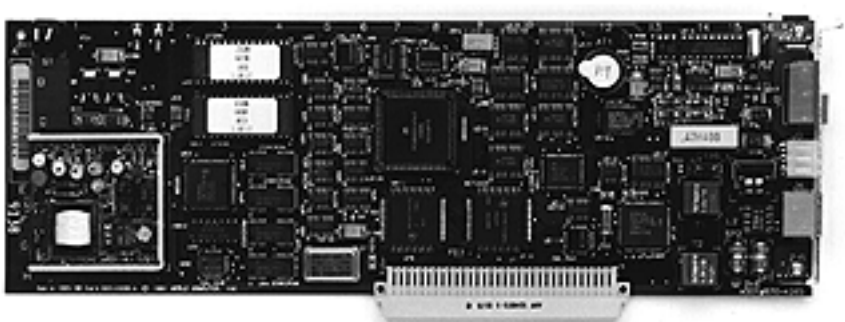
There is only one (DB-15) connector on this board.

Graphics Card, QuickDraw 3D Accelerator **661-1113**



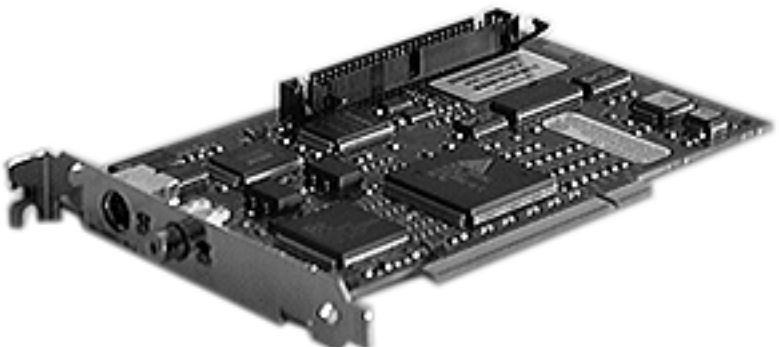
ISDN NB Card, Mac II

661-0620



MJPEG Video Editing Card

661-1165

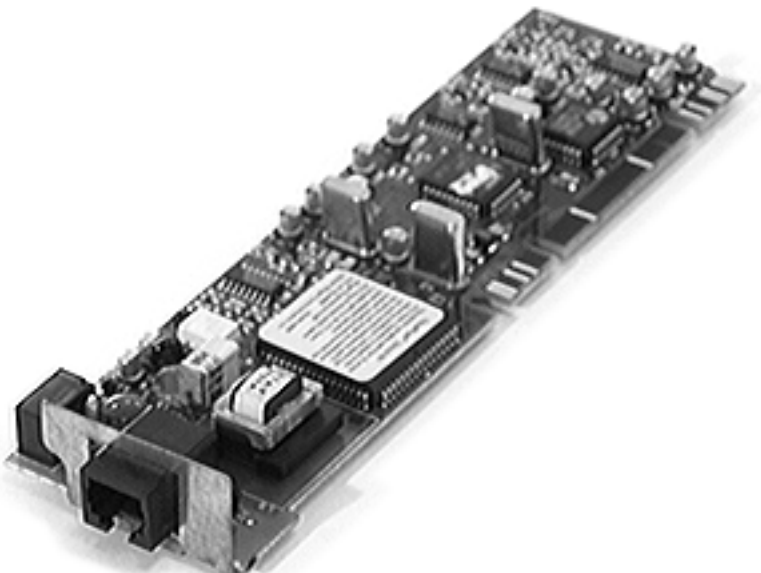


The Avid Cinema Video Editing is required in order to install and run the companion Avid Cinema video editting software.

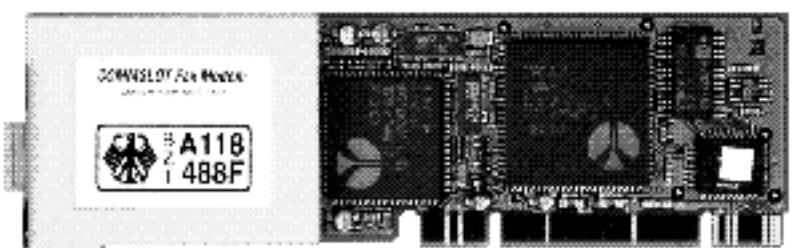
It requires a PCI slot and a 60-pin DAV connector in the computer.

Although this carries the Avid name, it is an Apple only product. Avid is not providing service or support for this product.

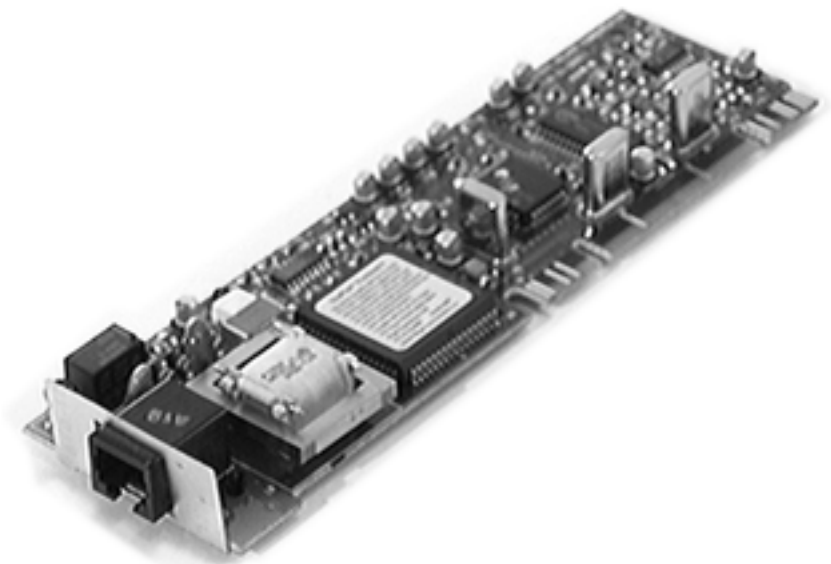
Modem Card, 14.4, Internal **661-1048**



Modem Card, 14.4, Internal , International **661-0409**

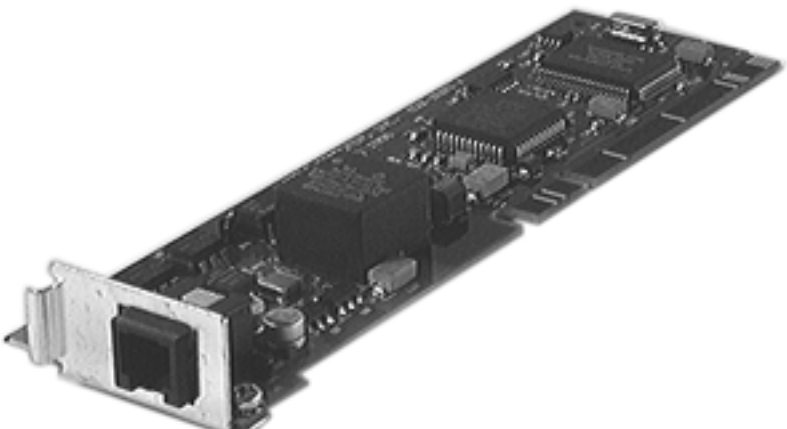


Modem Card, 28.8, Internal, Global Village (Replaced by 661-1301) **661-1078**



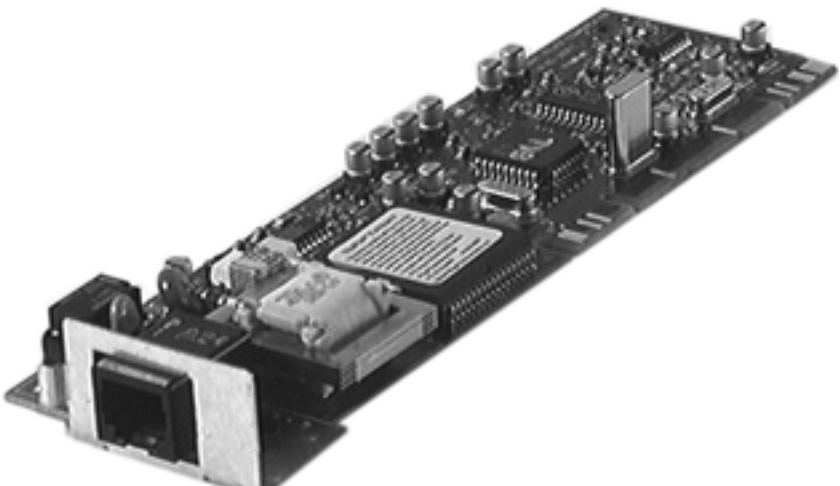
This modem card can be distinguished from part number 661-1301 by the lack of a locking tab on the shield that surrounds the I/O port.

Modem Card, 28.8, Internal, Geoport for US-Canada-Japan-Asia **661-1287**



The shield on this modem card has a cut out with a locking tab that engages the I/O shield on the respective enclosures. This modem card also has the words Apple Computer Inc. stenciled on the top side of the card.

Modem Card, 28.8, Internal, Global Village **661-1301**



The shield on this modem card has a cut out with a locking tab that engages the I/O shield on the respective enclosures. This modem card also has the words Global Village printed on the top side of the card.

Modem Card, Express, 14.4 Baud, Comm Slot, Macintosh LC 520/550/575, Performa 500 Series

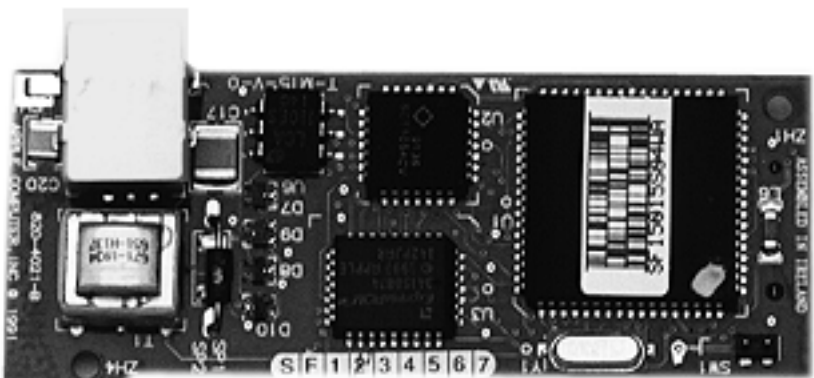
661-0887

Modem Card, Express, 14.4 Baud, U.S.
PowerBook 160/165/165c/180/180c

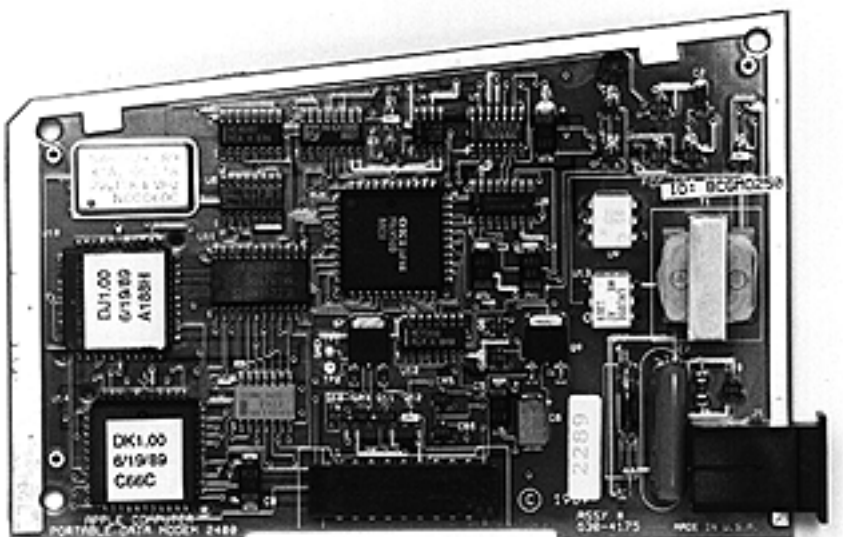
661-0786

Modem Card, Internal Fax/Data, 2400 Baud, Domestic
PowerBook 100/140/145/160/165c/170/180c

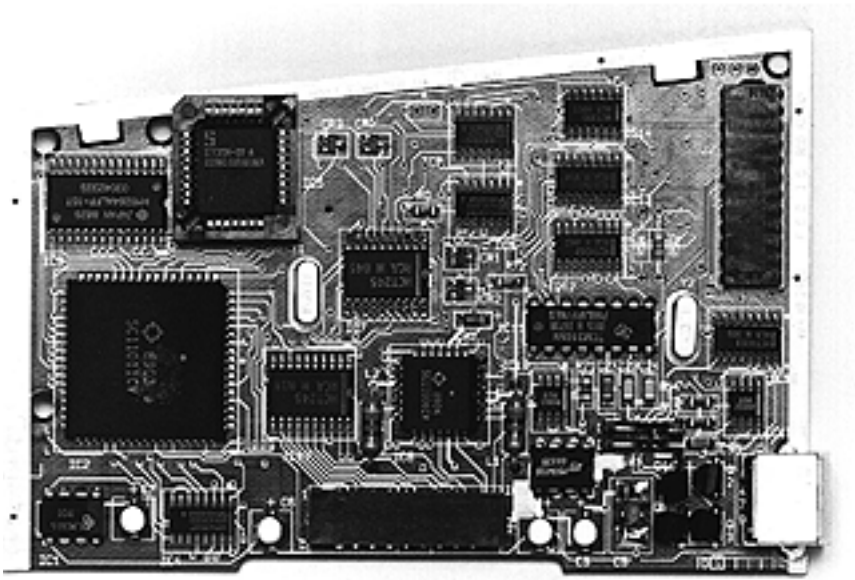
661-1621



Modem Card, Macintosh Portable, Internal, Domestic **661-0468**



Modem Card, Macintosh Portable, XP 2400, International **661-0465**



When you return P/N 661-0465, Apple ships you P/N 661-0623.

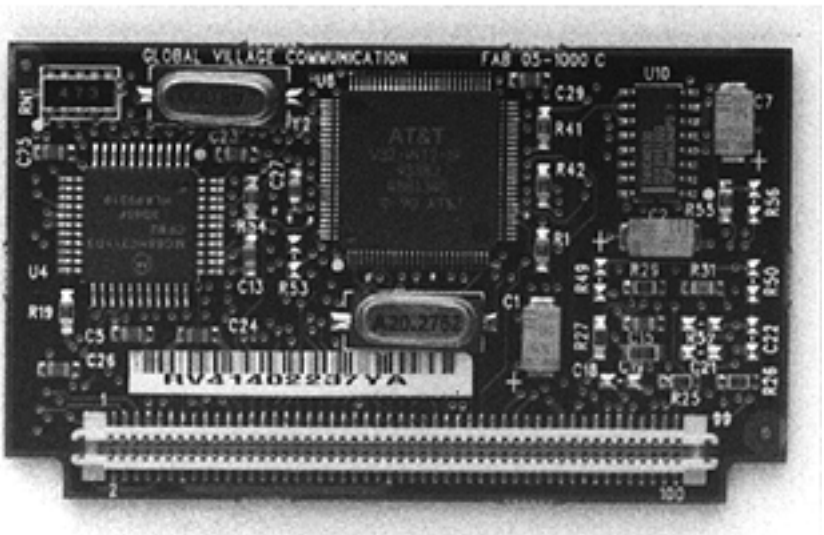
This item is not available in the United States.

Modem, PowerBook 520/540 Series, PCB, International **661-0106**

Photograph Not Available

The U.S. and International versions of the PowerBook 520/540 Series modem are similar. The PowerBook 520/540 Series U.S. modem has the label “Global Village Communication” printed at the top edge of the modem; the International version does not.

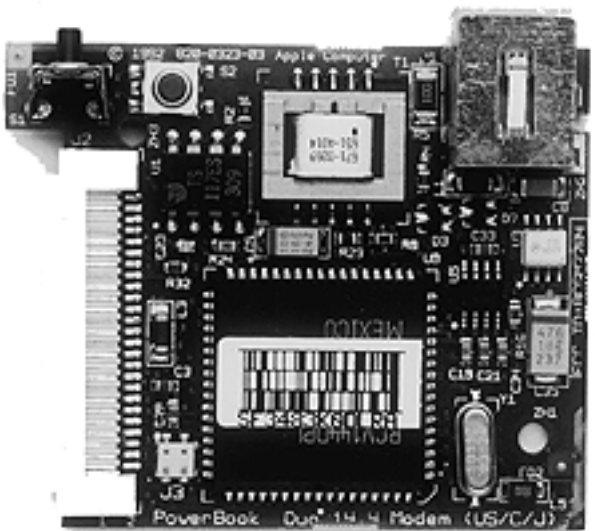
Modem, PowerBook 520/540 Series, U.S. **661-0107**



The U.S. and International versions of the PowerBook 520/540 Series modem are similar. You can identify the PowerBook 520/540 Series U.S. modem by the label “Global Village Communication” printed at the top edge of the modem.

Modem, PowerBook Duo, 14.4 Baud, International

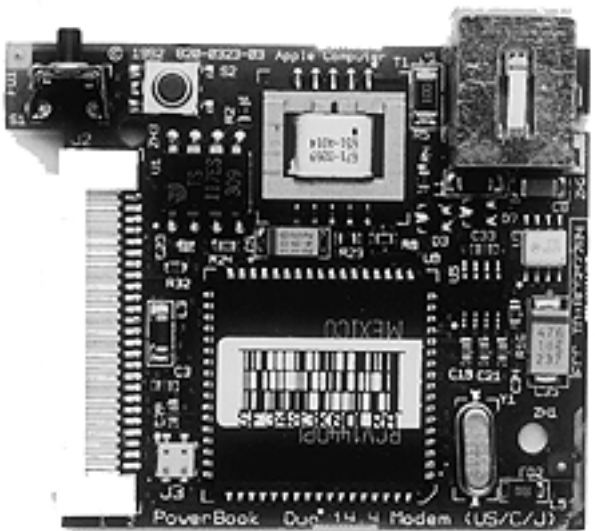
661-1662



The PowerBook Duo international modem has a Mini DIN-8 (8-pin) connector.

In the U.S., this module is available only to service providers who attend the Macintosh PowerBook Service Course. All other U.S. service providers must contact the Apple toll-free repair hotline, 1-800-SOS-APPL, for return authorization.

Modem, PowerBook Duo, Express, 14.4 Baud, U.S. **661-1665**

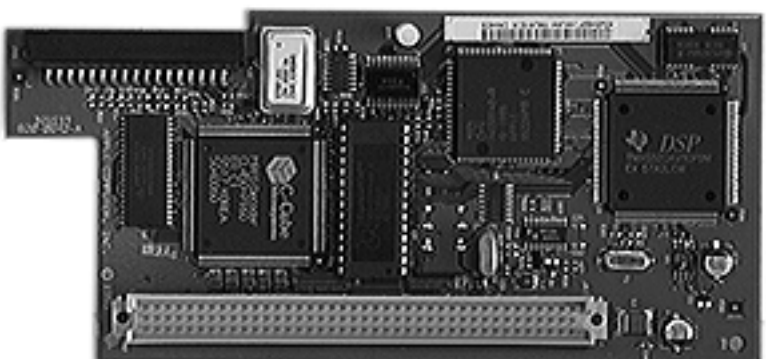


The PowerBook Duo domestic modem has an RJ-11 connector.

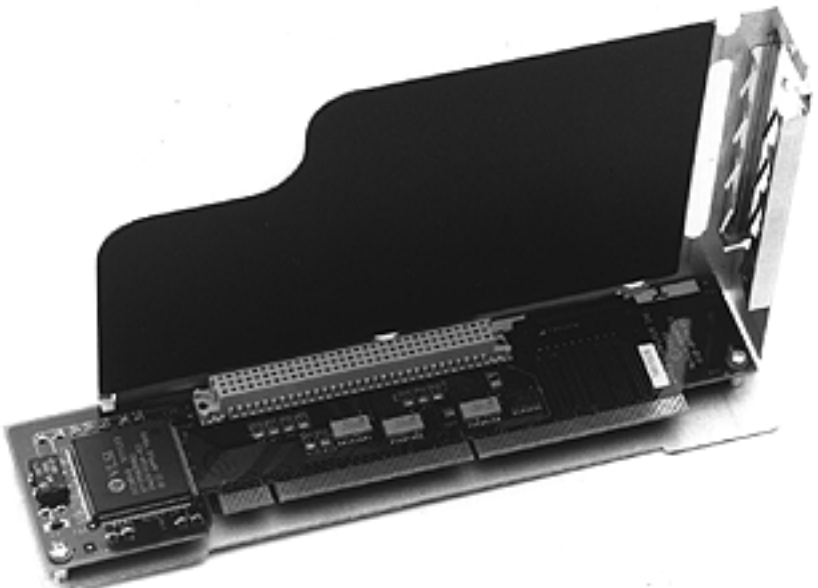
In the U.S., this module is available only to service providers who attend the Macintosh PowerBook Service Course. All other U.S. service providers must contact the Apple toll-free repair hotline, 1-800-SOS-APPL, for return authorization.

MPEG Card

661-0995



Nubus Adapter, Centris 660AV **661-1719**

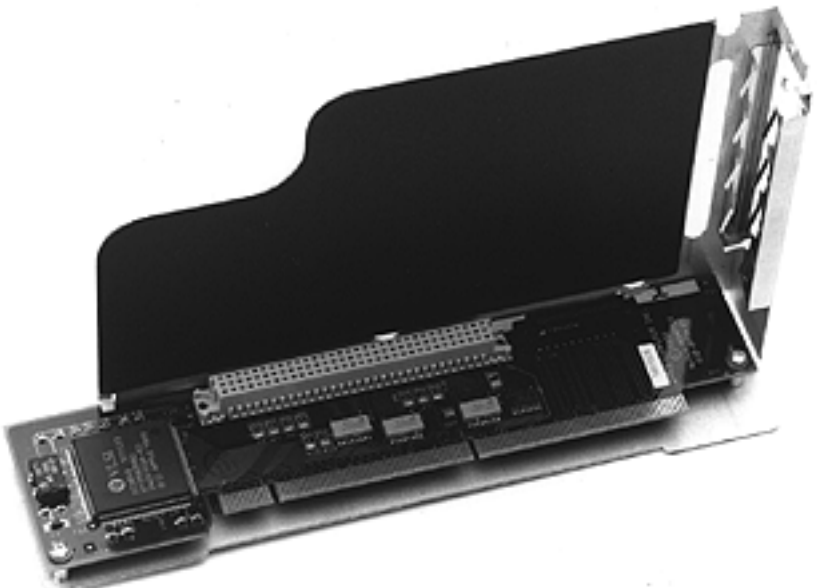


Nubus Adapter, Mac IIsi

661-0645

Retain the thumbscrews that mount the adapter for use with the replacement adapter.

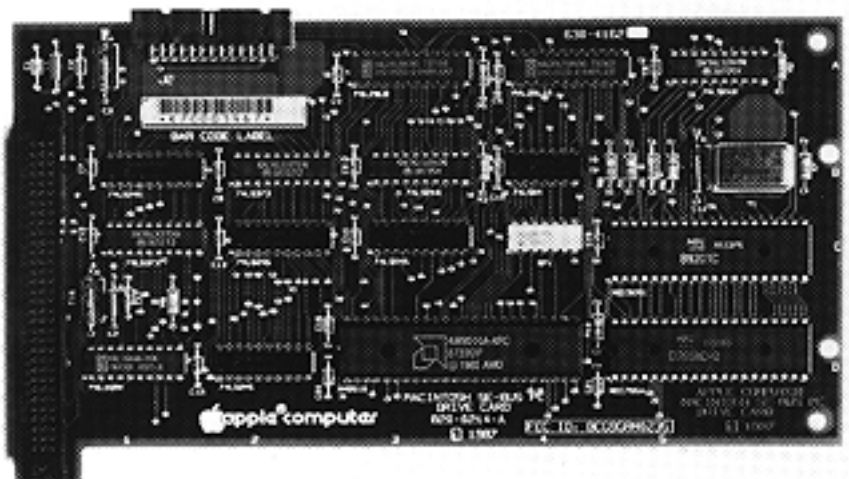
Nubus Adapter, Power Macintosh **661-0049**



NuBus Card, 24-Bit, Mac II

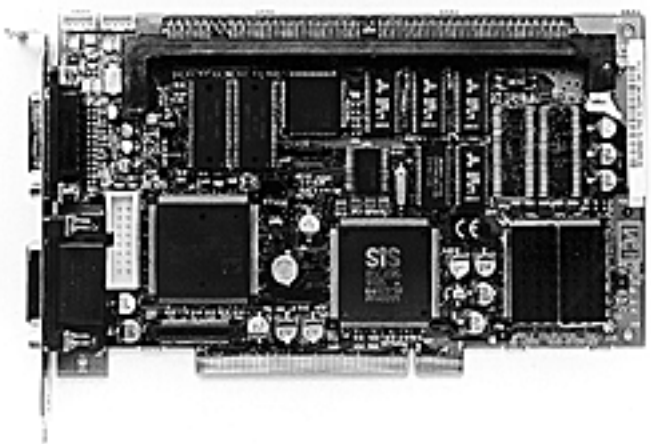
661-0406

Resistor packs are in these locations.



PC Compatibility Card, 7”, PCI

661-1123

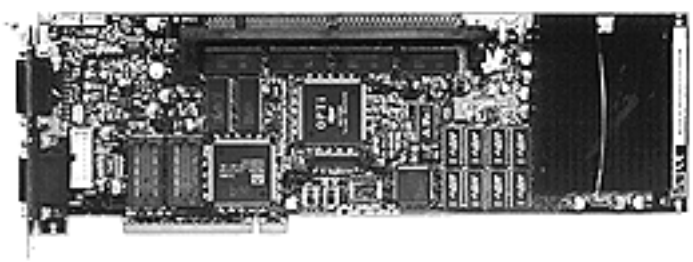


Return the board without the DRAM DIMM.

PC Compatibility Card, 12”

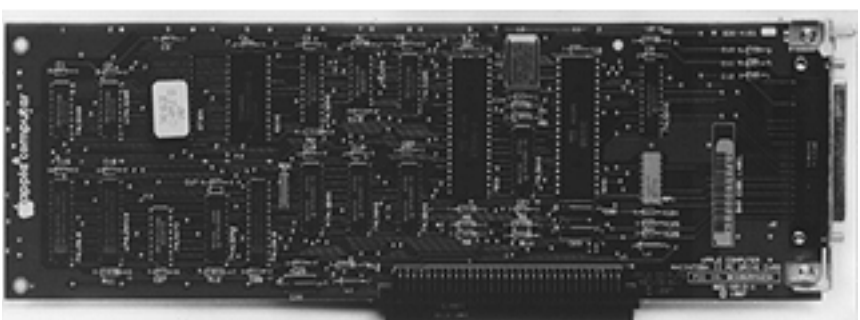
661-1124

Return the board without DRAM and VRAM.

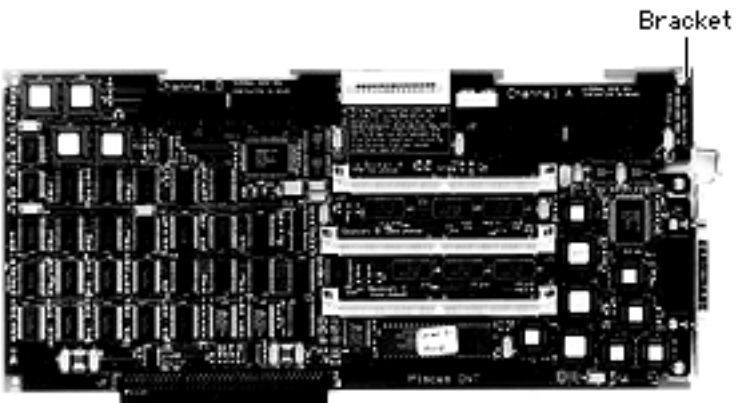


PC Drive Card, Mac II

661-0407



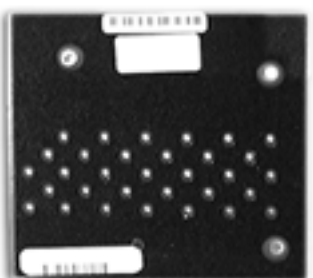
PDS Card, Apple Workgroup Server 95 **661-0794**



You can return the Apple Workgroup Server 95 PDS card with or without the bracket.

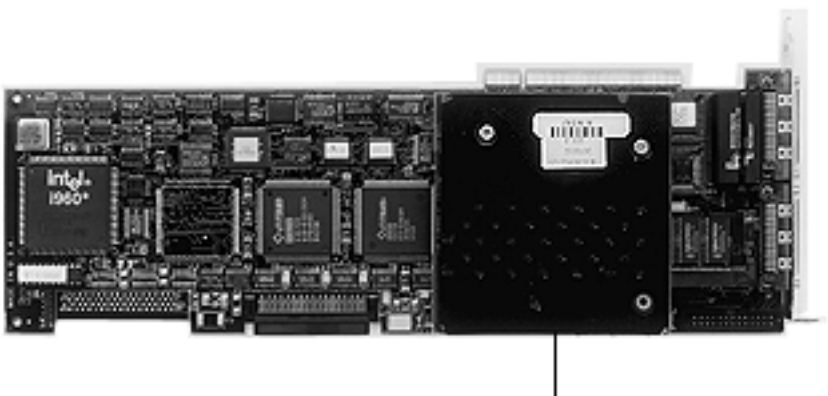
RAID Card Battery Backup **661-1183**

Top



Bottom

RAID Card, with Battery, For Network Server **661-1158**



This card is compatible with the Network Server 500/700 only. Install it in the first slot for internal RAID support and in any slot for external RAID support. You can install up to four RAID cards in one Network Server.

To identify the card, look for the Apple serial number label located on the noncomponent side of the card at the end

opposite the external connectors. The label is an eleven-digit serial number, YLxxxxxx7P5.

The RAID card requires a special backup battery and SIMM. Service stock for the card ships with the backup battery but does not include the SIMM. When replacing the RAID card, transfer the SIMM from the original card to the replacement card and return the original card with its backup battery attached.

The backup battery and RAID card SIMM are available as separate modules. Order P/N 661-1183 for the battery and P/N 661-1184 for the SIMM.

Serial NB Card, Mac II

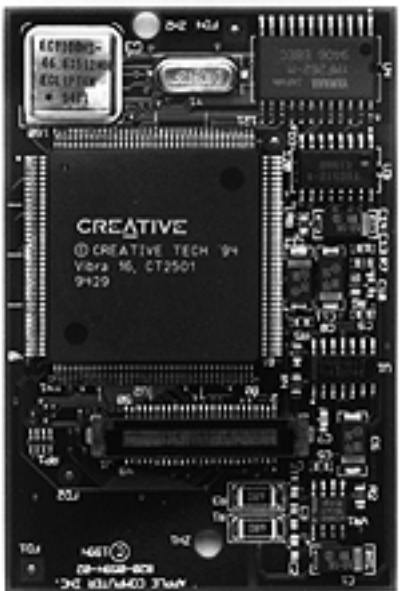
661-0517

Remove the RAM chips before you return the Apple Serial NB Card to Apple.

Sound Card, Apple Media Vision Jazz 16 **661-0100**

Sound Card, LC 630, Performa 640 Series

661-0253



Sound/SCSI Card, CD Multimedia Kit Spectrum 16 **661-1741**

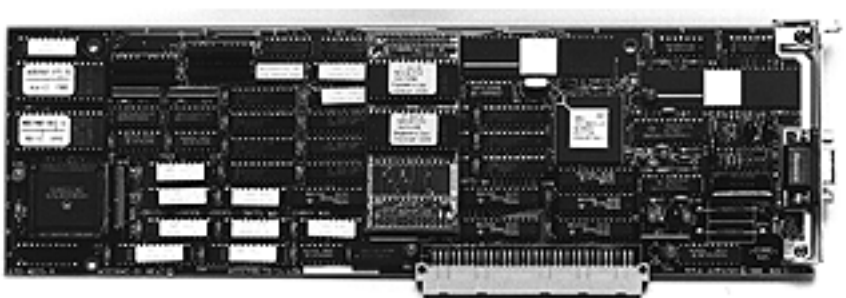
Token Ring 4/16 NB Card, Mac II

661-1617

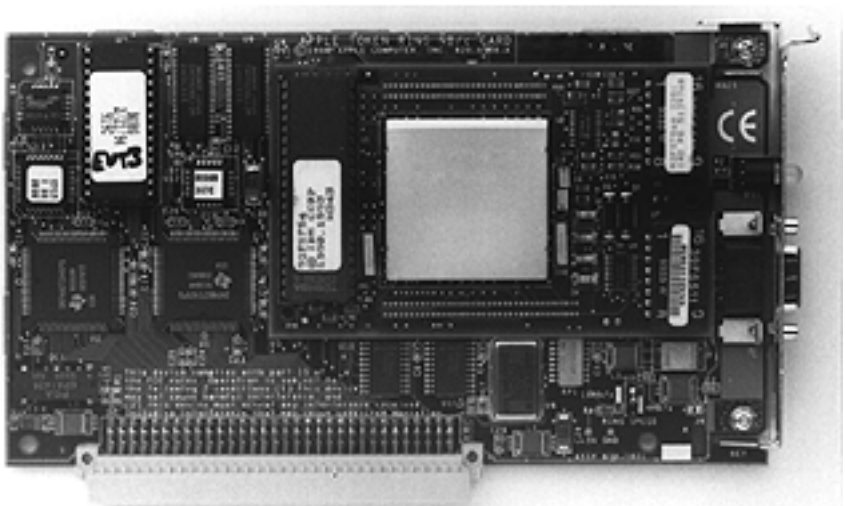
Remove the RAM chips before you return the card to Apple.

Token Ring NB Card, Mac II

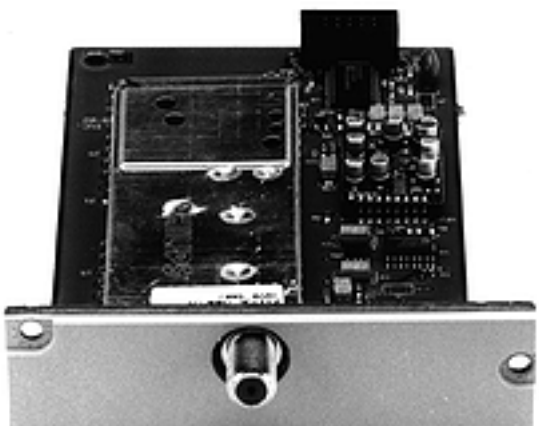
661-0460



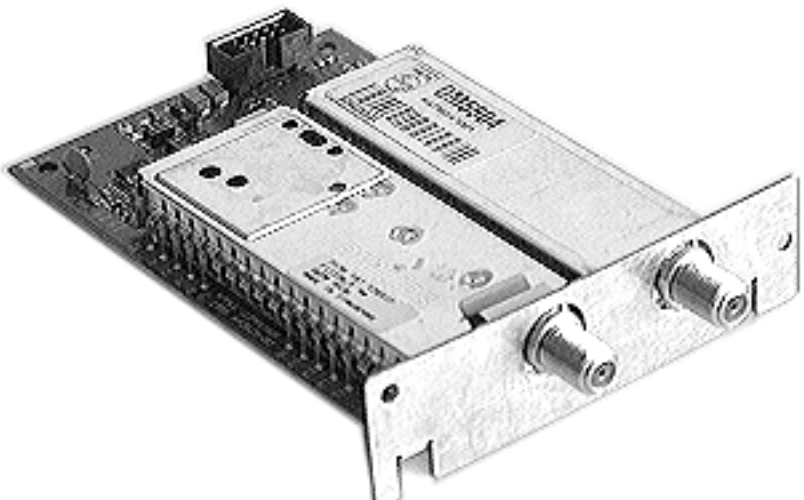
Token Ring NB/c Card, Mac II, 7-inch **661-0136**



TV Tuner Card, LC 630, Quadra 630, Performa 630 Series **661-0160**

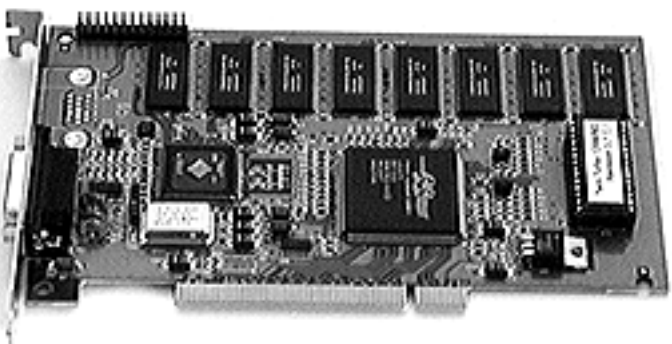


TV/FM Radio System Card, Apple **661-1147**



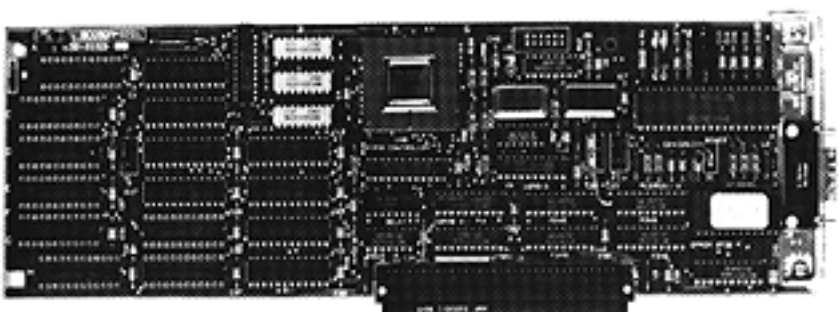
Video Card, IMS

661-1409



Video Card, Mac II

661-0376



This is the 4-bit soldered version of this video card. Remove the eight video expansion RAM chips before you return the video card to Apple.

Video Card, Mac II, 8-Bit Soldered Version **661-0492**

The marketing number on the bracket label can be M6004 or M6004/A.

Apple P/N on ROMs must be 34x-0560 through 34x-0567 (where x=1 or 2). If ROMs are 34x-0711 through 34x-0718, see module P/N 661-1605.

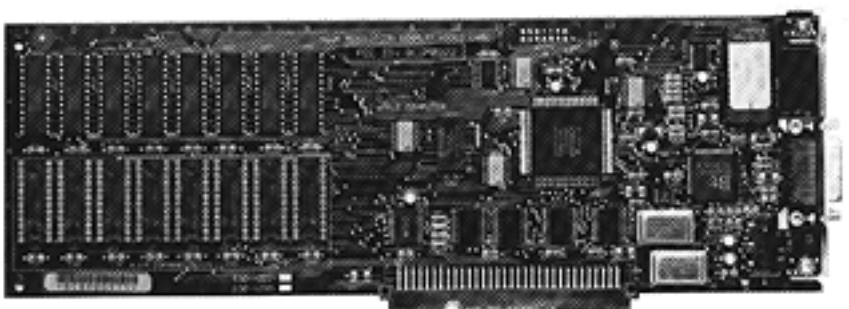
You must return the eight 256K SIMMs with this board.

Video Card, Mac II, Extended High-Resolution Display **661-0533**

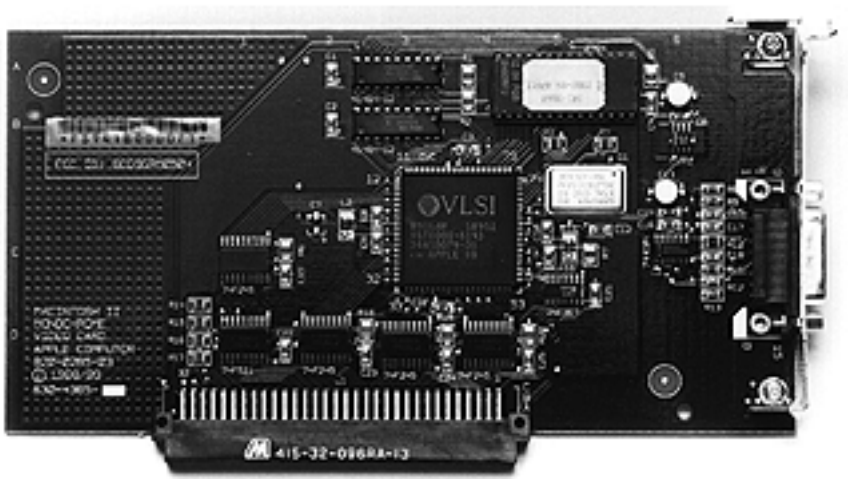
This card has eight video expansion RAM chips soldered to the board. Do not attempt to remove them before returning the video card to Apple.

Video Card, Mac II, Hi-Res Display, 4-Bit Soldered Version **661-0493**

Remove the eight video expansion RAM chips before returning the video card to Apple.

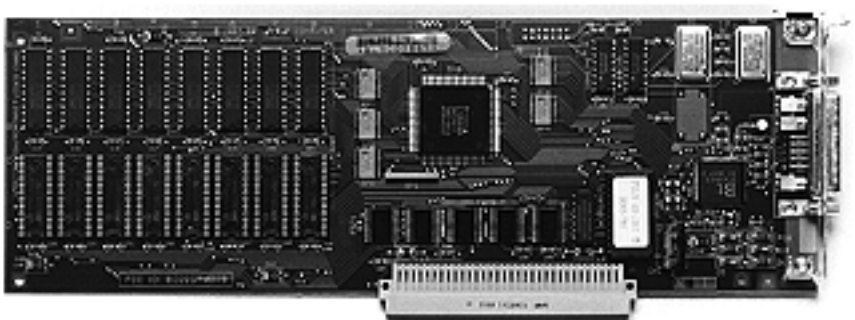


Video Card, Mac II, Monochrome, 1-Bit **661-0518**



Video Card, Mac II, Portrait Display

661-0604



Remove the eight video expansion RAM chips before returning the video card to Apple. P/N 661-0604 is a DB-25 (13-pin mixed connector) card.

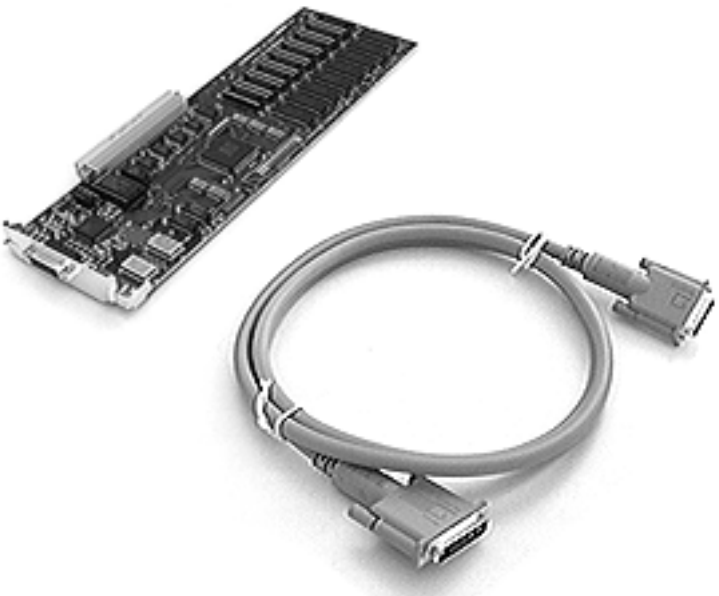
Video Card, Mac II, Portrait Display, 57.4 MHz

661-0586

This part does not include a cable.

Video Card, Mac II, Portrait Display, 57.4 MHz

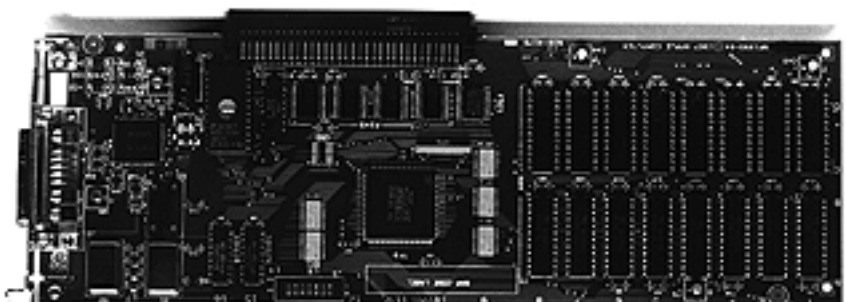
661-0587



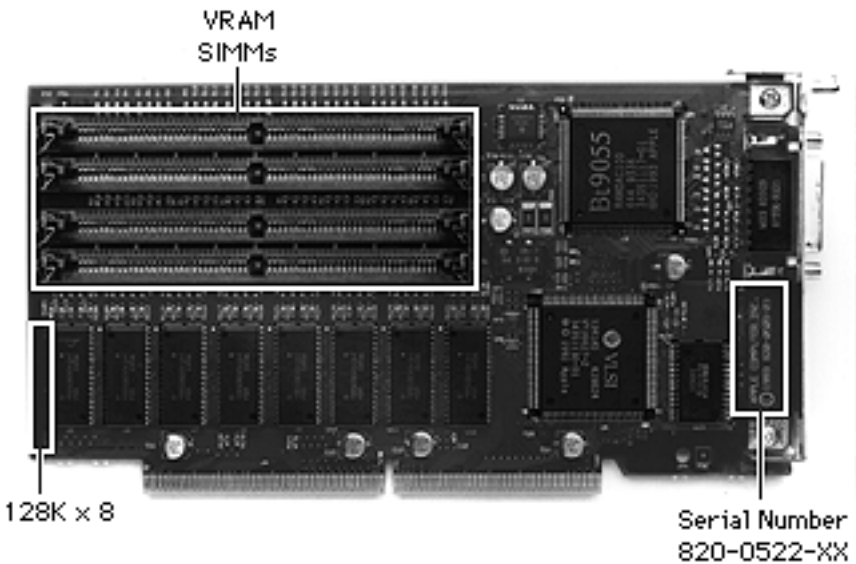
This video card includes a DA-15-to-DB-25 cable (P/N 590-0615).

Video Card, Mac II, Two-Page Monochrome, 100 MHz **661-0456**

Remove the eight VRAM SIMMs before you return the video card to Apple.



Video Card, PM 7100, 2 MB **661-1748**

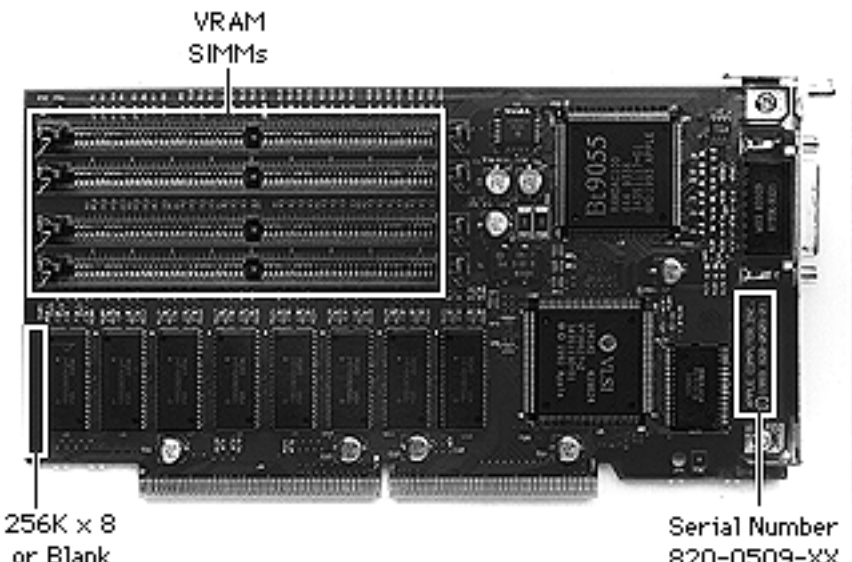


The Power Macintosh 2 MB video card is similar to the 4 MB video card, P/N 661-1027. Identify the 2 MB video card by the module serial 820-0522-XX. The lettering on the 2 MB video card is silkscreened in yellow, and the information 128K x 8 is printed on the lower left corner of the card.

Return the Power

Macintosh video card without VRAM SIMMs.

Video Card, PM 8100, 4 MB **661-1027**

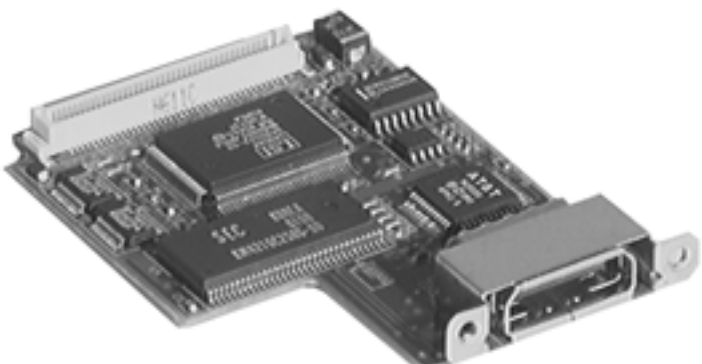


The Power Macintosh 4 MB video card is similar to the 2 MB video card, P/N 661-1748. Identify the 4 MB video card by the module serial number 820-0509-XX. The lettering on the 4 MB video card is silkscreened in white, and the information 256K x 8 may or may not be printed on the lower left corner of the card.

Return the Power Macintosh video card without VRAM SIMMs.

IMPORTANT: Do not attempt to remove the microprocessor's heatsink. This will damage the card.

Video Card, PowerBook 1400 **661-1192**



Video-In Card

661-1181

Video-In Card, LC 630, Quadra 630/635, Performa 630/635 Series **661-0159**

When you return P/N 661-0159; Apple ships you P/N 661-1073.

Video-In Card, Rev. B

661-1073

Rev. A of this card is identified by either the module serial number (the last three characters will be 5J7, 6RY, or 6RZ) or the assembly part number (630-1451, 630-1735, or 630-1736).

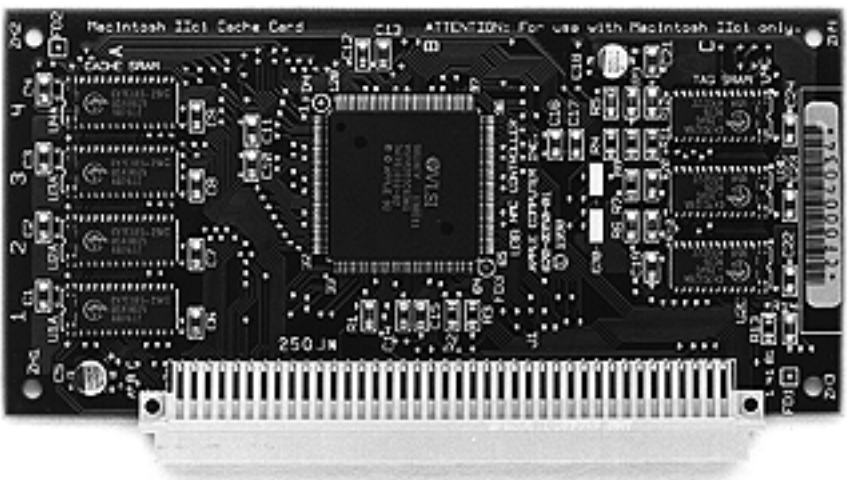
Memory

Cache/SRAM

Cache Card, 256K, L2 **661-1174**

Cache Card, Macintosh IIci

661-1602

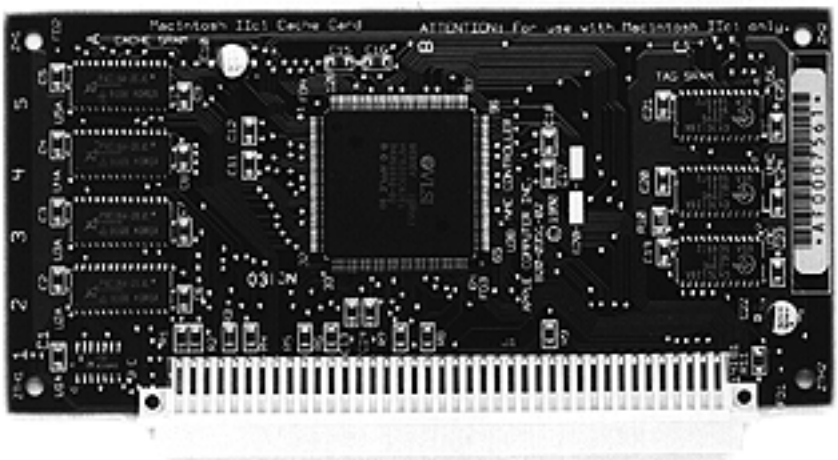


Macintosh IIci cache cards containing serial numbers with a “CF” prefix (that is, CFXXXXXXX) can cause frequent system crashes. Return these cards to Apple.

See P/N 661-1619 if the card has serial number with an “AF” prefix.

Cache Card, Macintosh IIci, Revised

661-1619



This is the revised version of the Macintosh IIci Cache Card. See P/N 661-1602 if the card has serial number with an “CF” prefix.

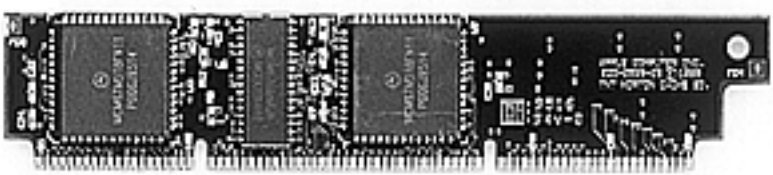
Cache DIMM, 256K, L2, 160-Pin

661 -1239

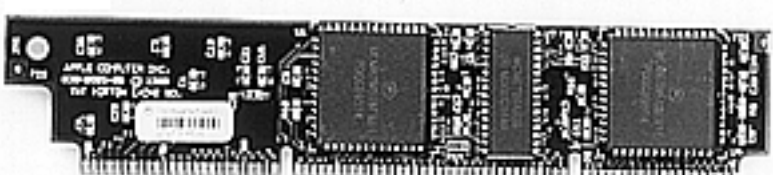
Cache DIMM, 256K, 11ns, 160-Pin

661-1035

Top



Bottom



Cache SIMMs used in earlier Power Macintosh systems are not interchangeable with this cache DIMM.

Use this cache DIMM for the PM 7200 Series, the PM 7600/120 and 7600/132, and the PM 8500 Series.

Cache DIMM, 256K, 11ns, 160-Pin

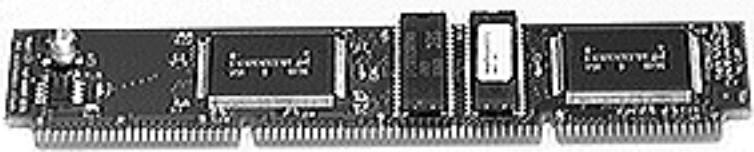
661-1310

Cache SIMMs used in earlier Power Macintosh systems are not interchangeable with this cache DIMM.

This DIMM is the only cache DIMM that can be used in the PM 7500/100.

Cache DIMM, 256K, 11ns, 160-Pin

661-1345



Cache SIMMs used in earlier Power Macintosh systems are not interchangeable with this cache DIMM.

This cache DIMM is for use with the PM 7300, 8600, and 9600 Series and the PM 7600/200.

Cache DIMM, 256K, 160-pin, L2 **661-1239**

Cache DIMM, 512K, 11ns, 160-Pin **661-0927**

Top

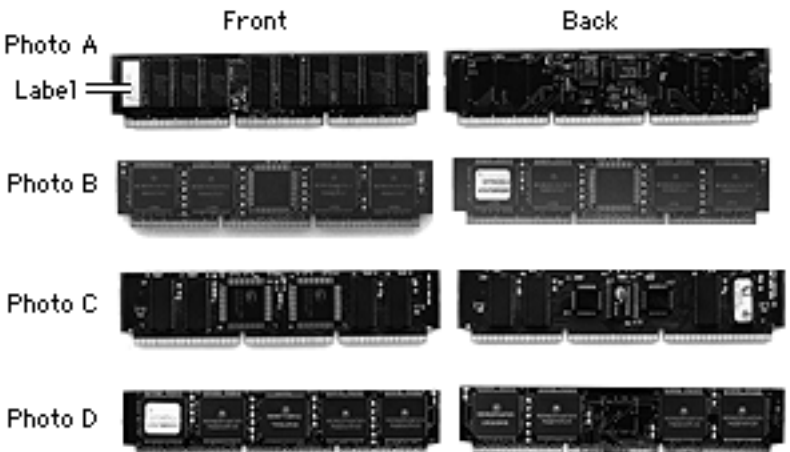
Bottom

Cache SIMMs used in earlier Power Macintosh computers are not interchangeable with this cache DIMM.

Cache DIMM, 1 MB, 11ns, 160-Pin

661-1127

Cache SIMM, 256K, Power Macintosh **661-1024**



There are six different versions of the 256K cache SIMM.
Review the list below for product compatibility.

Photo A
(three versions):
Refer to the label located on the first component of the SIMM.

Version Label:
“7MP6380, S17M/1191, Date Code”

This version is compatible only with the Power Macintosh 6100/60 or
Workgroup Server 6150 and the Power Macintosh 6100/66 or Workgroup Server 6150/66.

Version 2
Label: “7MP6480, S15M/1190, Date Code” This version is compatible only with the Power Macintosh 7100/80, the Power Macintosh 8100/80 and the Workgroup Server 8150.

Version 3
Label: “ 7MP6080, S15M/0285, Date Code”
This version is compatible with all Power Macintosh models.

Photo B:
This version of the 256K cacahe SIMM is compatible with all Power Macintosh models.

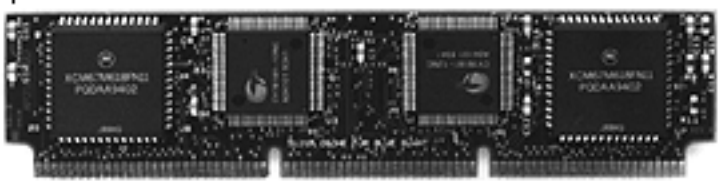
Photo C:
This version of the 256K cache SIMM is only compatible with the Power Macintosh 6100/60 or Workgroup Server 6150 and the Power Macintosh 6100/66 or Workgroup Server 6150/66.

Photo D:
This version of the 256K cache SIMM is compatible with all Power Macintosh models.

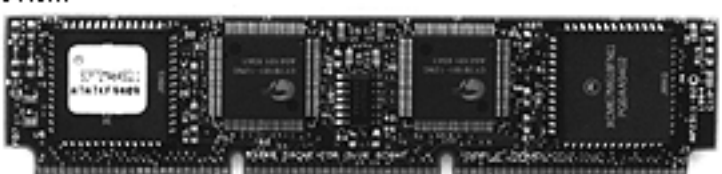
When you order P/N 661-1024, Apple ships you either the Photo B or the Photo D version. The Photo A and Photo C versions ship only in Finished Goods.

Cache SIMM, 512K, Power Macintosh **661-0131**

Top



Bottom



SRAM Cache SIMM, 128K, 17 ns

661-0791

This board has RAM ICs on one side only.

This SIMM is labeled “128KB Upgrade” on one of the ICs.

Front

Back

SRAM Cache SIMM, 256K, 17 ns

661-0792

This board has RAM ICs on both sides.

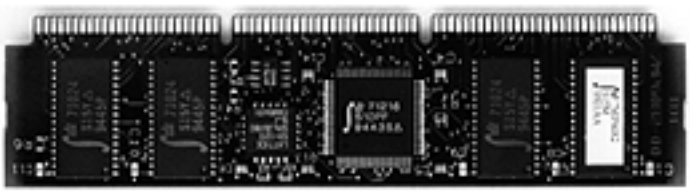
This SIMM is labeled “256KB Upgrade” on one of the ICs.

Front

Back

SRAM Cache SIMM, 1 MB, 15 ns **661-0950**

Front



Back

SRAM Cache SIMM, Tag, 48K, 14 ns

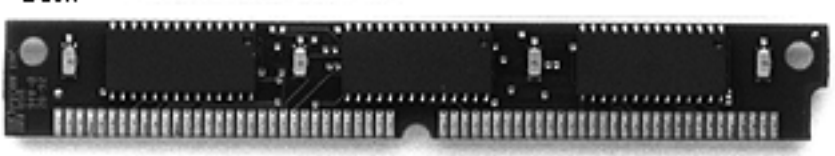
661-0793

This board has RAM ICs on one side only.

This SIMM is labeled “Tag Upgrade” on one of the ICs.

Front

Back

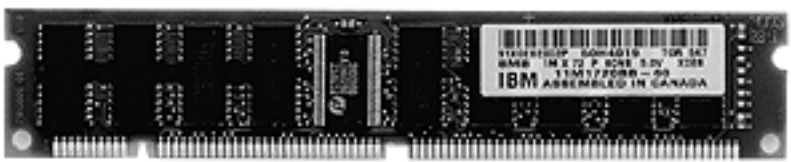


Memory

RAM

DRAM DIMM, 8 MB, 60ns, 168-Pin, Parity **661-1128**

Top



Bottom

DRAM DIMMs are keyed with two notches in the gold pin connector area, as opposed to DRAM SIMMs, which are keyed with only one notch. DRAM DIMMs are also longer than DRAM SIMMs.

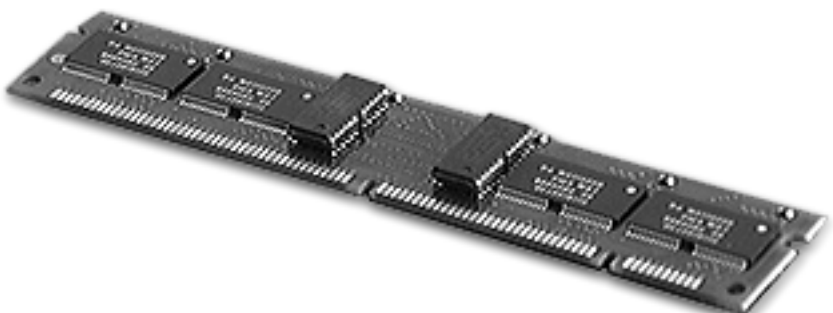
DRAM DIMM, 8 MB, 70 ns, 168-Pin **661-0918**

Front

Back

DRAM DIMMs are keyed with two notches in the gold pin connector area, as opposed to SIMMs, which are keyed with only one notch. DRAM DIMMs are also longer than DRAM SIMMs.

DRAM DIMM, 16 MB, 60ns, 168-Pin, Parity **661-1129**

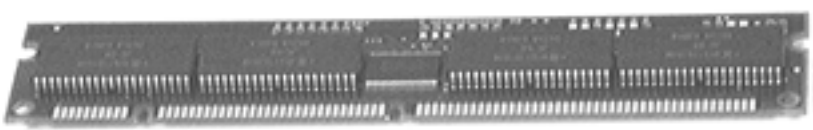


DRAM DIMMs are keyed with two notches in the gold pin connector area, as opposed to SIMMs, which are keyed with only one notch. DRAM DIMMs are also longer than DRAM SIMMs.

DRAM DIMM, 16 MB, 70 ns, 168-Pin **661-0919**

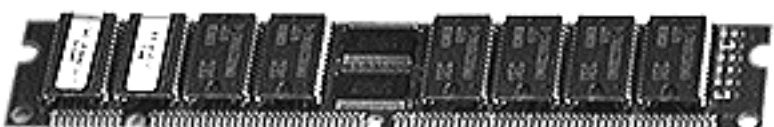
DRAM DIMMs are keyed with two notches in the gold pin connector area, as opposed to SIMMs, which are keyed with only one notch. DRAM DIMMs are also longer than DRAM SIMMs.

DRAM DIMM, 32 MB, 60ns, 168-Pin, Parity **661-1130**



DRAM DIMMs are keyed with two notches in the gold pin connector area, as opposed to SIMMs, which are keyed with only one notch. DRAM DIMMs are also longer than DRAM SIMMs.

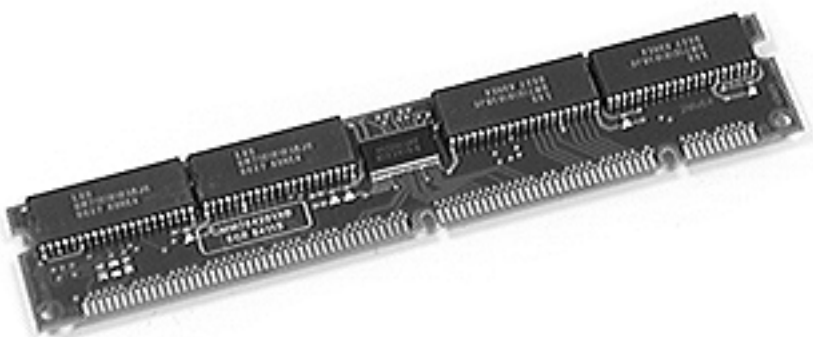
DRAM DIMM, EDO, 8 MB, 70ns, 168-Pin **661-1314**



Use this DRAM DIMM in the PM 7300, 8600, and 9600 Series and the PM 7600/200.

DRAM DIMMs are keyed with two notches in the gold pin connector area, as opposed to SIMMs, which are keyed with only one notch. DRAM DIMMs are also longer than DRAM SIMMs.

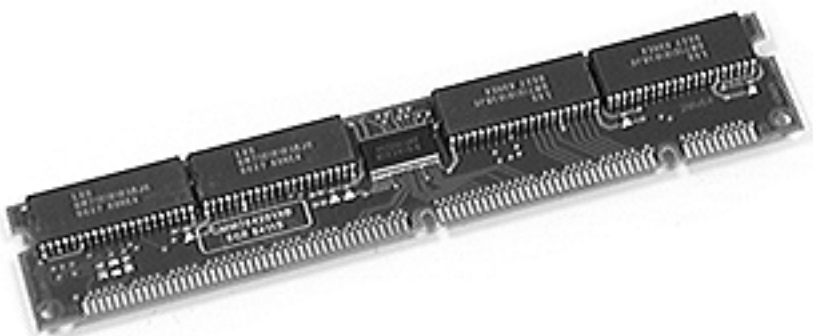
DRAM DIMM, EDO, 16 MB, 70ns, 168-Pin **661-1315**



Use this DRAM DIMM in the PM 7300, 8600, and 9600 Series and the PM 7600/200.

DRAM DIMMs are keyed with two notches in the gold pin connector area, as opposed to SIMMs, which are keyed with only one notch. DRAM DIMMs are also longer than DRAM SIMMs.

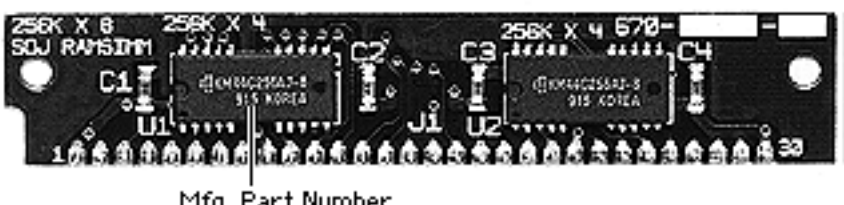
DRAM DIMM, EDO, 32 MB, 70ns, 168-Pin **661-1316**



Use this DRAM DIMM in the PM 7300, 8600, and 9600 Series and the PM 7600/200.

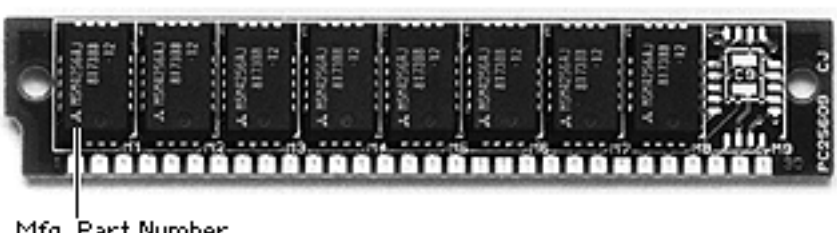
DRAM DIMMs are keyed with two notches in the gold pin connector area, as opposed to SIMMs, which are keyed with only one notch. DRAM DIMMs are also longer than DRAM SIMMs.

DRAM SIMM, 256K, 80 ns **661-0519**



The RAM speed is usually indicated by the -XX after the manufacturer's part number (e.g., -8 indicates 80 ns, -6 indicates 60 ns, etc.). This number is located on the surface of the chip or on the back of the SIMM board. Apple accepts for return only 80 ns or faster RAM SIMMs of this 256K variety.

DRAM SIMM, 256K, 120 ns **661-0402**



The RAM speed is usually indicated by the -XX after the manufacturer's part number (e.g., -10 indicates 100 ns, -12 indicates 120 ns, etc.). This number is located on the surface of the chip or on the back of the SIMM board. Although 150 ns RAM SIMMs are acceptable for return, Apple ships

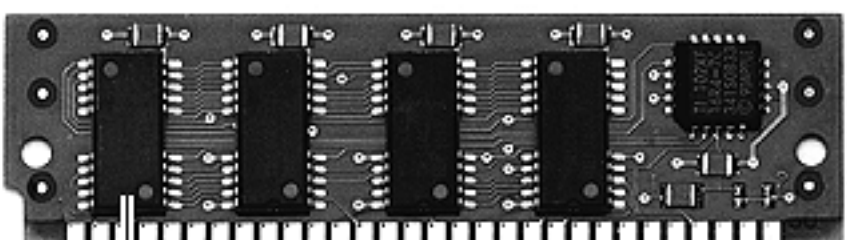
120 ns (or faster) RAM SIMM exchange modules.

DRAM SIMM, 256K, 120 ns, DIP **661-0494**

This DIP (Dual In-line Package) SIMM has eight ICs soldered through the PCB.

This SIMM is for the Macintosh Plus and Macintosh SE computers only. The back of this SIMM is marked “For use only in Mac Plus SIMM positions (1, 2, 3, 4) and Mac SE SIMM positions (3, 4).”

DRAM SIMM, 512K, 80 ns **661-0646**



The RAM speed is usually indicated by the -XX after the manufacturer's part number (e.g., -8 indicates 80 ns, -6 indicates 60 ns, etc.). This number is located on the surface of the chip or on the back of the SIMM board. Apple accepts only 80 ns or faster RAM SIMMs of this 512K MB variety for return.

DRAM SIMM, 1 MB, 80 ns **661-0520**

The RAM speed is usually indicated by the -XX after the manufacture's part number (e.g., -8 indicates 80 ns, -6 indicates 60 ns, etc.). This number is located on the surface of the chip or on the back of the SIMM board. Apple accepts only 80 ns or faster RAM SIMMs of this 1 MB variety for return.

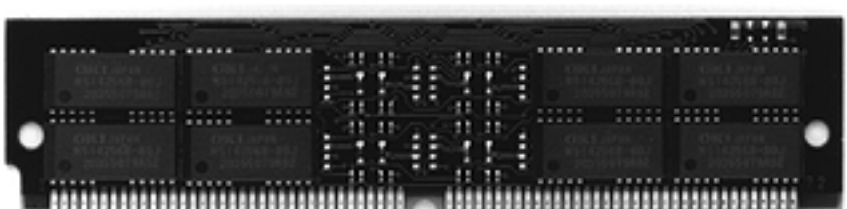
For additional SIMM information, refer to the SIMMs manual in Service Source.

DRAM SIMM, 1 MB, 80 ns **661-0719**

The RAM speed is usually indicated by the -XX after the manufacturer's part number (e.g., -8 indicates 80 ns, -6 indicates 60 ns, etc.). This number is located on the surface of the chip or on the back of the SIMM board. Apple accepts only 80 ns or faster RAM SIMMs of this 1 MB variety for return.

DRAM SIMM, 1 MB, 80 ns, 72-Pin **661-0734**

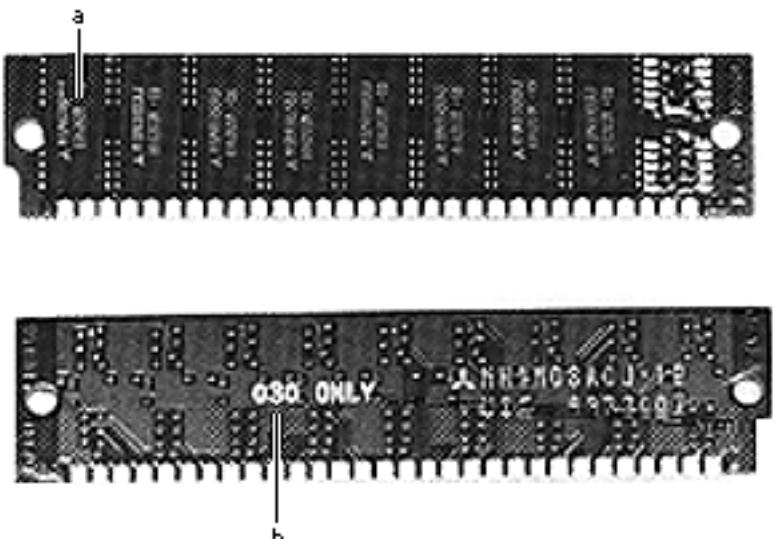
This DRAM SIMM is used in both Macintosh computers and the Personal LaserWriter NTR printer.



DRAM SIMM, 1 MB, 80 ns, Parity **661-0546**

The RAM speed is usually indicated by the -XX after the manufacturer's part number (e.g., -8 indicates 80 ns, -6 indicates 60 ns, etc.). This number is located on the surface of the chip or on the back of the SIMM board. Apple accepts only 80 ns or faster RAM SIMMs of this 1 MB variety for return.

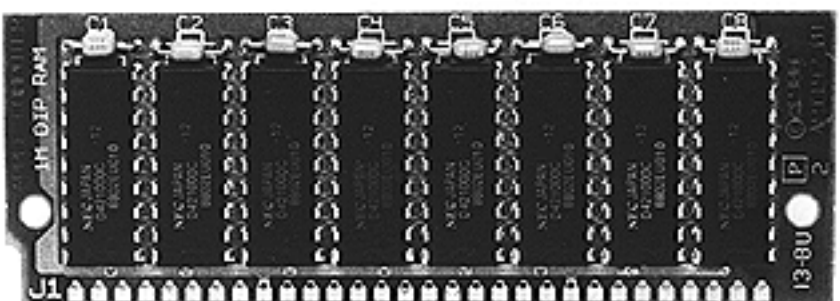
DRAM SIMM, 1 MB, 120 ns **661-0403**



a) The RAM speed is usually indicated by the -XX after the manufacturer's part number (e.g., -10 indicates 100 ns, -12 indicates 120 ns, etc.). This number is located on the surface of the chip or on the back of the SIMM board. Apple accepts for return only 120 ns or faster RAM SIMMs of this 1 MB variety.

b) Please note that this SIMM is for Macintosh units with the 68030 central processing unit only. The back of this SIMM is marked “030 only.”

DRAM SIMM, 1 MB, 120 ns, DIP **661-0410**

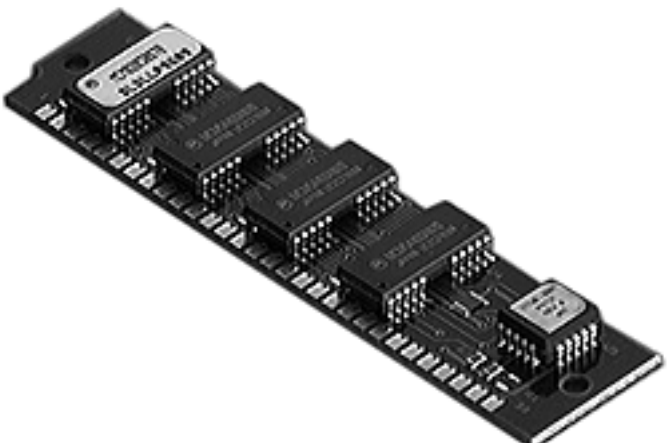


a) These DIP (Dual In-Line Package) SIMMs have eight ICs soldered through the PCB.

b) The RAM speed is usually indicated by the -XX after the manufacturer's part number (e.g., -10 indicates 100 ns, -12 indicates 120 ns, etc.). This number is located on the surface of the chip or on the back of the SIMM board.

Although 150 ns RAM SIMMs are acceptable for return, Apple ships 120 ns (or faster) RAM SIMM exchange modules.

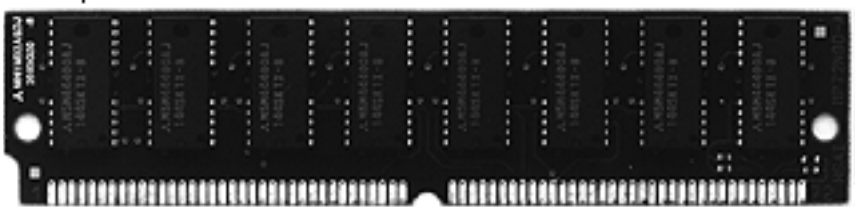
DRAM SIMM, 2 MB, 80 ns **661-0643**



The RAM speed is usually indicated by the -XX after the manufacturer's part number (e.g., -8 indicates 80 ns, -6 indicates 60 ns, etc.). This number is located on the surface of the chip or on the back of the SIMM board. Apple accepts only 80 ns or faster RAM SIMMs of this 2 MB variety for return.

DRAM SIMM, 4 MB, 60 ns, 72-Pin **661-1701**

Top



Bottom

This board has ICs on one side.

The RAM speed is usually indicated by a number after a dash or after a letter at the end of the manufacturer's part number. For example, -80, -8, or S8 indicates 80 ns, where as -60, -6 or S6 indicates 60 ns. These numbers are located on the surface of the chip or on the back of the

SIMM board. Apple accepts only 60 ns or faster RAM SIMMs of this 4 MB variety for return.

DRAM SIMM, 4 MB, 80 ns, 72-Pin **661-0808**

This DRAM SIMM is used in both Macintosh computers and the LaserWriter Pro printer.

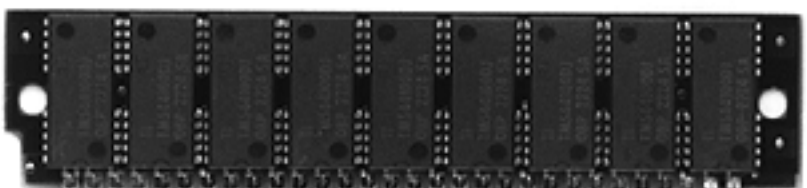
This board has ICs on one side.

The RAM speed is usually indicated by a number after a dash or after a letter at the end of the manufacturer's part number. For example, -80, -8, or

S8 indicates 80 ns, whereas -60, -6, or S6 indicates 60 ns. These numbers are located on the surface of the chip or on the back of the SIMM board. Apple accepts only 80 ns or faster RAM SIMMs of this 4 MB variety for return.

DRAM SIMM, 4 MB x 9, 80 ns, Parity **661-0811**

Front



Back

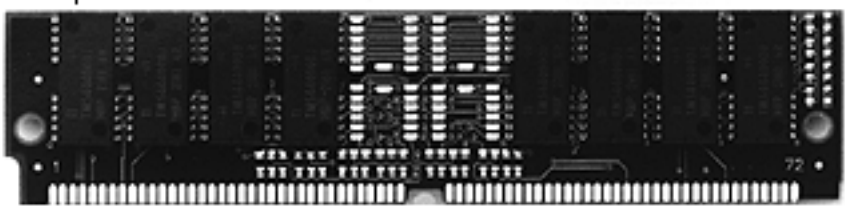
Parity DRAM SIMMs have nine RAM ICs.

The RAM speed is usually indicated by a number after a dash or after a letter at the end of the manufacturer's part number. For example, -80, -8, or S8 indicates 80 ns, where as -60, -6 or S6 indicates 60 ns. These numbers are located on the surface of the chip or on the back of the

SIMM board. Apple accepts only 60 ns or faster DRAM SIMMs of this 4MB variety for return.

DRAM SIMM, 8 MB, 60 ns, 72-Pin **661-1702**

Top



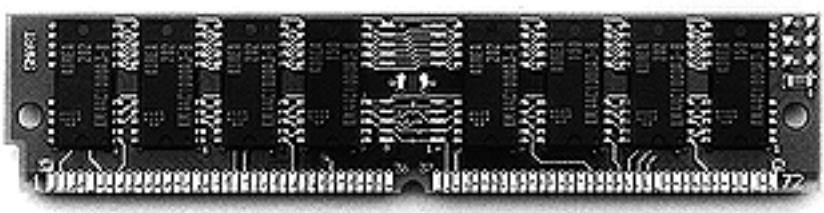
Bottom

This board has ICs on both sides.

The RAM speed is usually indicated by a number after a dash or after a letter at the end of the manufacturer's part number. For example, -80, -8, or S8 indicates 80 ns, whereas -60, -6 or S6 indicates 60 ns. These numbers are located on the surface of the chip or on the back of the

SIMM board. Apple accepts only 60 ns or faster RAM SIMMs of this 8 MB variety for return.

DRAM SIMM, 8 MB, 80 ns, 72-Pin **661-0809**



This DRAM SIMM is used in both Macintosh computers and the LaserWriter Pro printer.

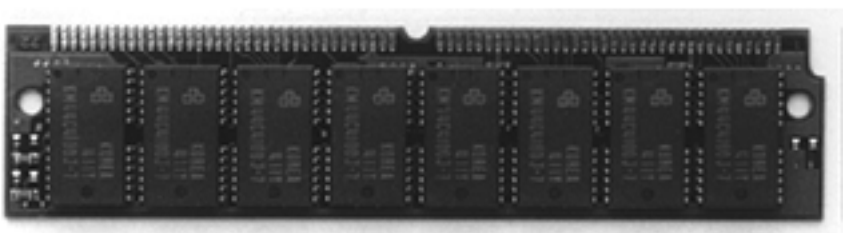
This SIMM has ICs on both sides.

The RAM speed is usually indicated by a number after a dash or after a letter at the end of the manufacturer's part number. For example, -80, -8, or

S8 indicates 80 ns, whereas -60, -6, or S6 indicates 60 ns. These numbers are located on the surface of the chip or on the back of the SIMM board. Apple accepts only 80 ns or faster RAM SIMMs of this 8 MB variety for return.

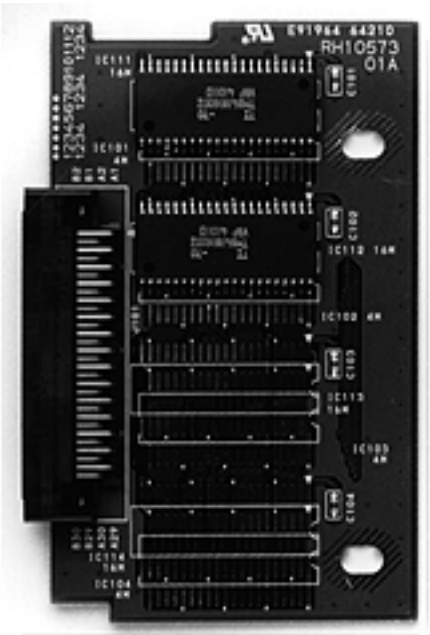
For additional SIMM information, refer to the SIMMs manual in Service Source.

DRAM SIMM, 16 MB, 70/80 ns, 72-Pin **661-0087**

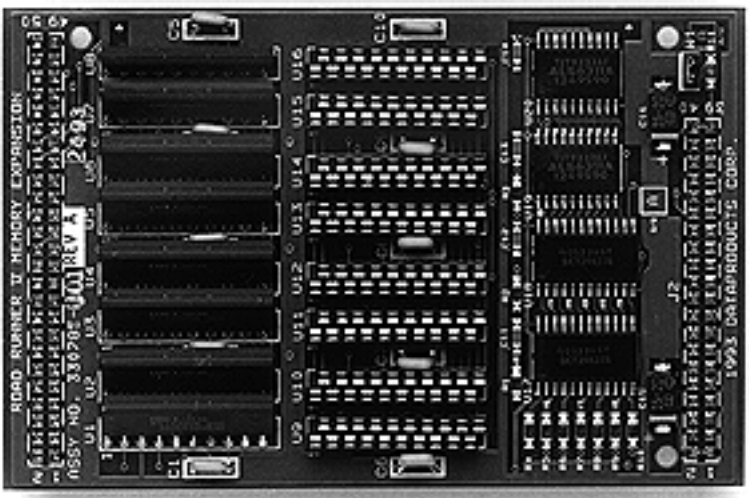


EDRAM SIMM, 4 MB, RAID Card **661-1184**

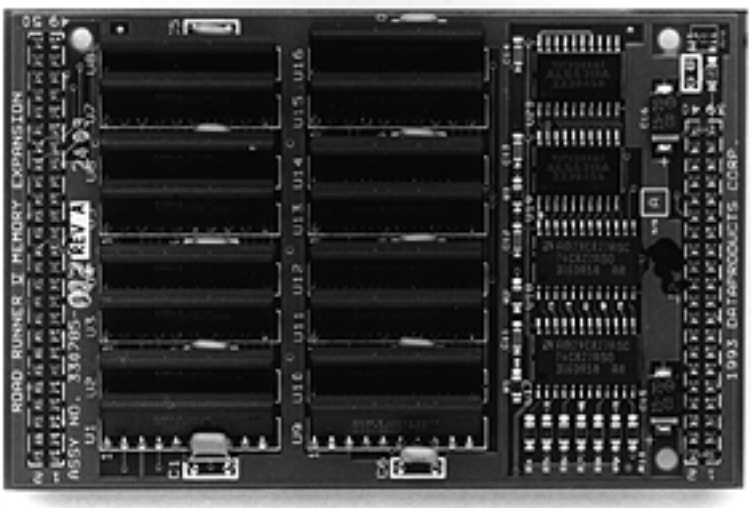
Memory Expansion Card, LaserWriter 4/600 PS, 4 MB **661-0247**



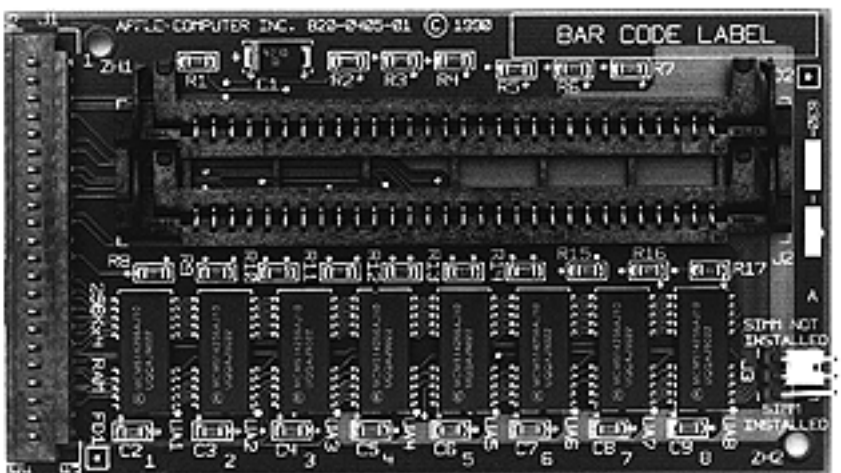
Memory Expansion Card, LaserWriter Pro 810, 4 MB **661-0846**



Memory Expansion Card, LaserWriter Pro 810, 8 MB **661-0847**

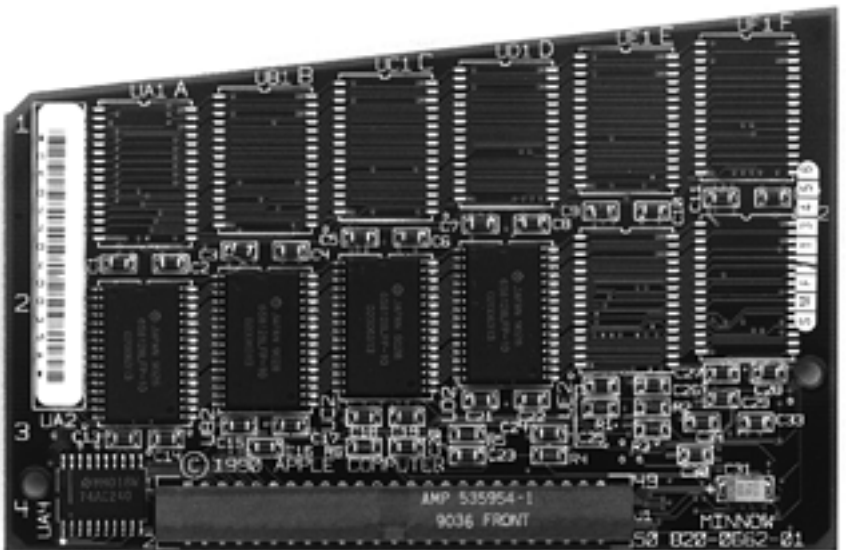


Memory Expansion Card, Macintosh Classic, 1 MB **661-0598**

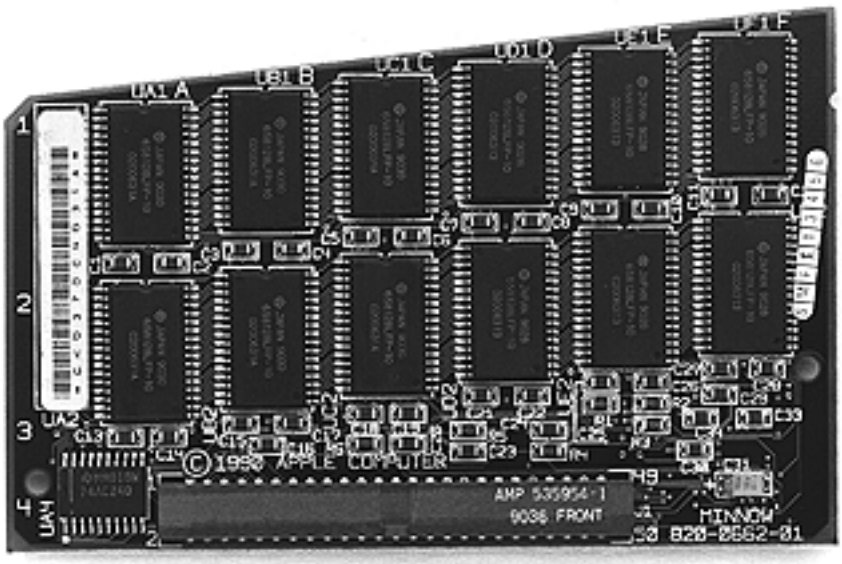


Return the Macintosh Classic memory expansion board without RAM SIMMs.

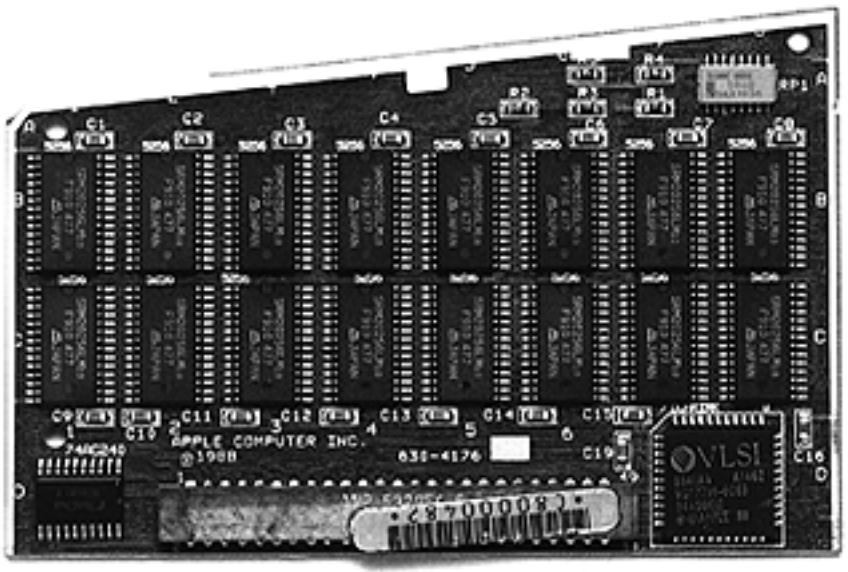
Memory Expansion Card, Macintosh Portable, PSRAM, 1 MB **661-1614**



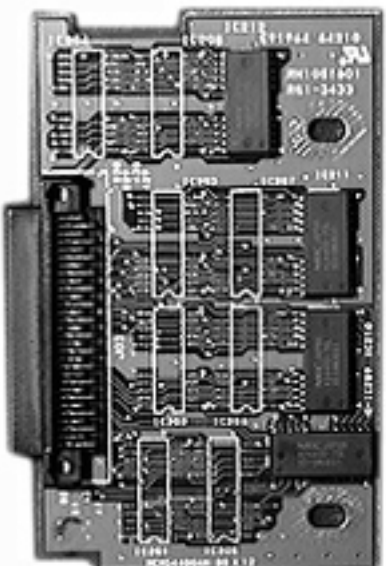
Memory Expansion Card, Macintosh Portable, PSRAM, 3 MB **661-1613**



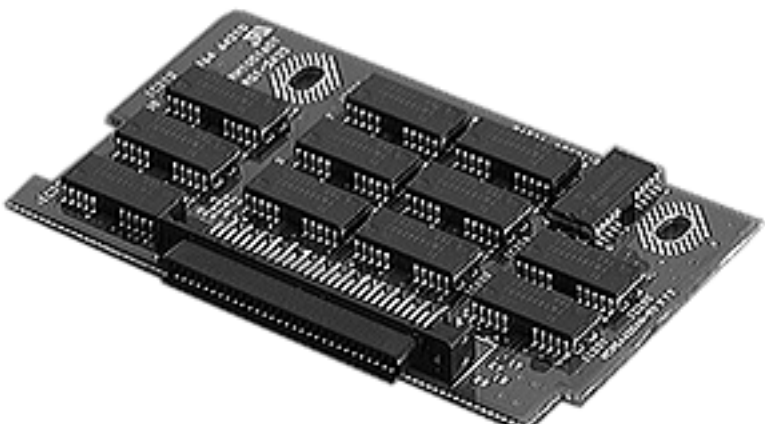
Memory Expansion Card, Macintosh Portable, RAM, 1 MB **661-0480**



Memory Expansion Card, Personal LaserWriter 320, RAM, 2 MB **661-0688**



Memory Expansion Card, Personal LaserWriter 320, RAM, 6 MB **661-0689**



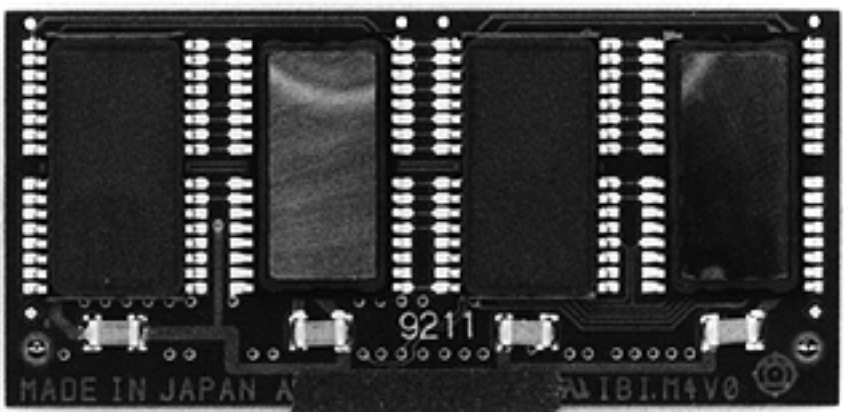
Memory Expansion Card, PowerBook 100, PSRAM, 4 MB, 100 ns **661-1103**

Top

Bottom

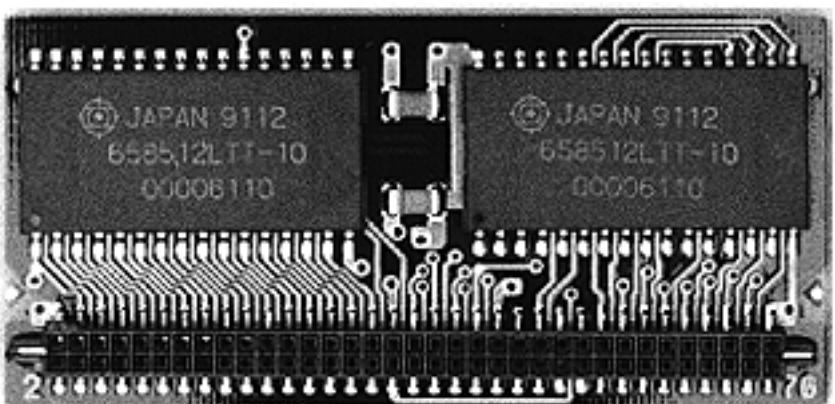
When you return the PSRAM Expansion Card for the PowerBook 140/145/145B/160/165c/170/180c, Apple ships you P/N 661-0790.

Memory Expansion Card, PowerBook 100, PSRAM, 4 MB, 100 ns **661-0714**



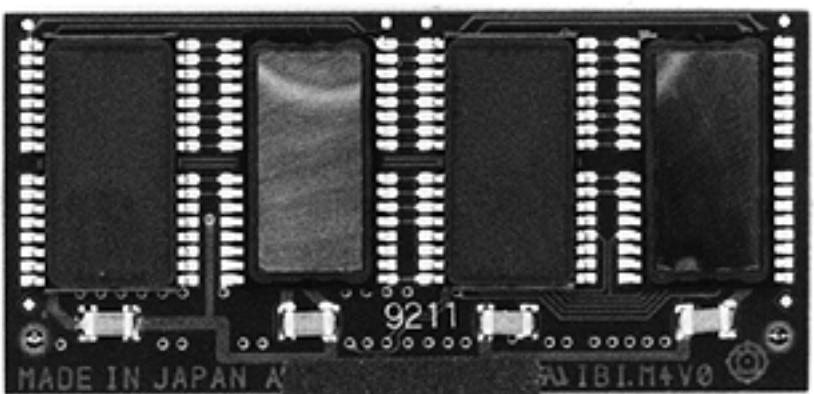
When you return the PSRAM Expansion Card for the PowerBook 100, Apple ships you P/N 661-1103.

Memory Expansion Card, PowerBook 100/140/145/145B/160/170, PSRAM, 2 MB **661-0715**



Memory Expansion Card, PowerBook 140/145/145B/160/165/165c/170/180c, PSRAM, 4 MB, 85 ns **661-0790**

The code HB656132AP-85 appears on the top side of the card.



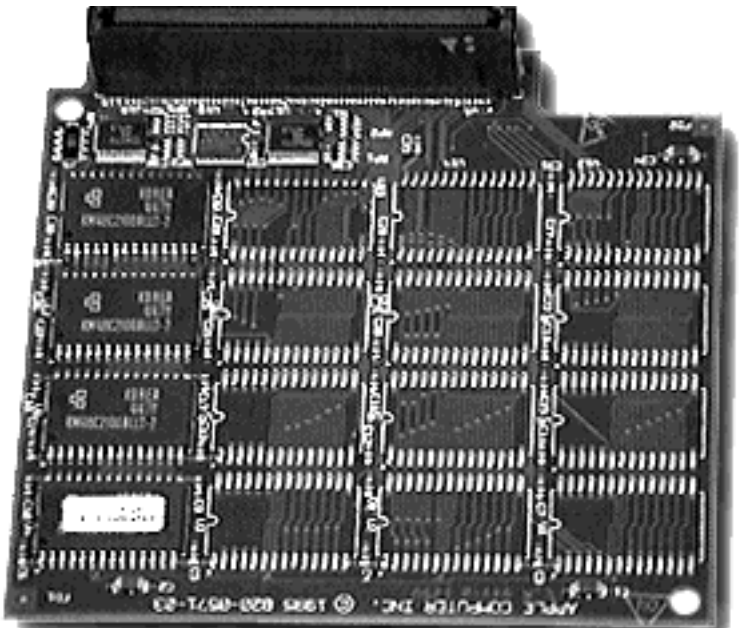
Memory Expansion Card, PowerBook 520/540 Series, RAM, 8 MB **661-0058**

Memory Expansion Card, PowerBook 1400, DRAM, 4 MB (Factory Slot) **661-1292**

Memory Expansion Card, PowerBook 1400, DRAM, 8 MB (Customer Slot) **661-1196**

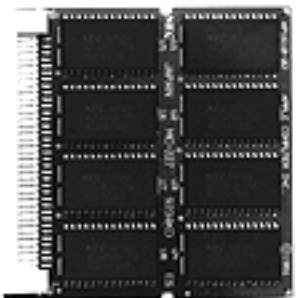
Memory Expansion Card, PowerBook 1400, DRAM, 8 MB (Factory Slot) **661-1293**

Memory Expansion Card, PowerBook 5300 Series, RAM, 8 MB **661-1033**



Memory Expansion Card, PowerBook Duo, DRAM, 8 MB **661-1658**

Front

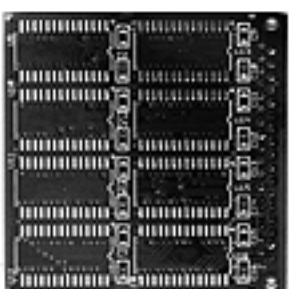


Back

Memory Expansion Card, PowerBook Duo 210/230, DRAM, 4 MB **661-1659**

Front

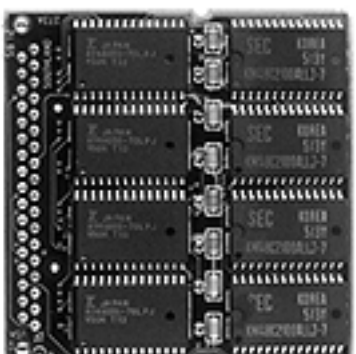
Back



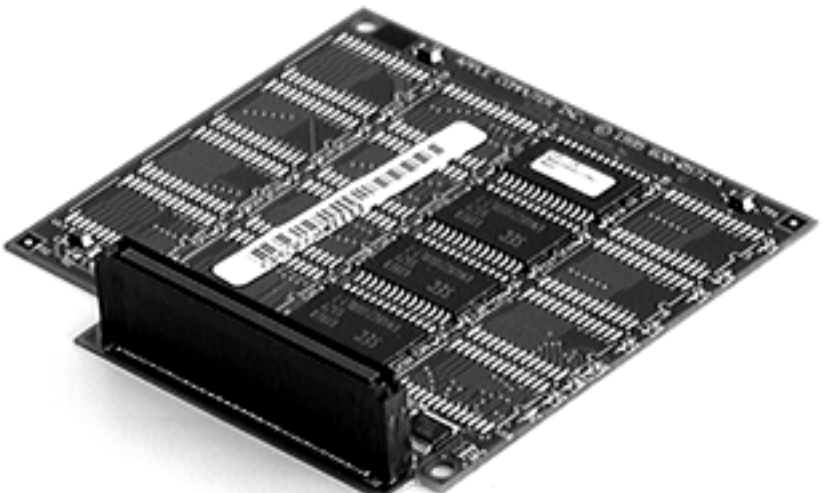
Memory Expansion Card, PowerBook Duo 2300 Series, RAM, 12 MB **661-1067**

Front

Back

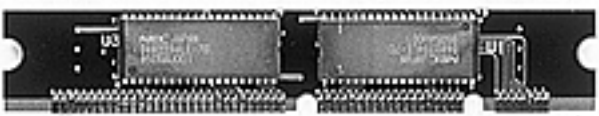


Memory Expansion Card, RAM, 8 MB **661-0156**

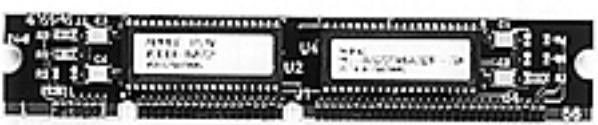


VRAM DIMM, 1 MB, 70 ns, 112-Pin **661-1036**

Top



Bottom



VRAM SIMM, 256K, 80 ns **661-0722**

Return the VRAM SIMM as:
661-0609 if it is to be installed on a Macintosh Display 4•8 card.

661-0722 if it is to be installed on a Macintosh Quadra or a Macintosh LC family logic board.

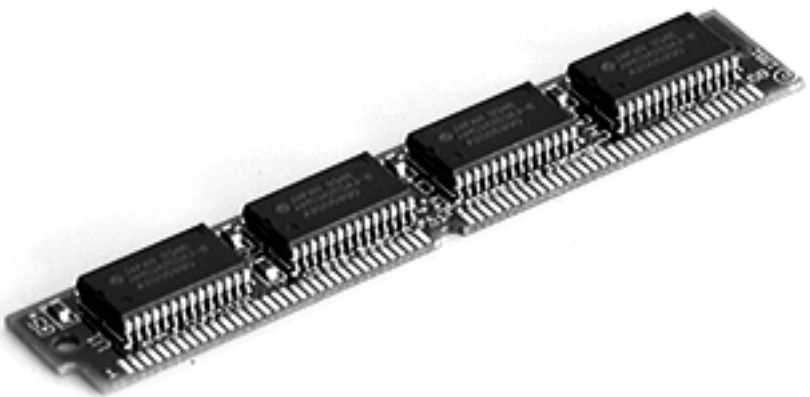
VRAM SIMM, 256K, 100 ns **661-0609**

Return the VRAM SIMM as:
661-0609 if it is to be installed on a Macintosh Display 4•8 card.

661-0722 if it is to be installed on a Macintosh Quadra or a Macintosh LC family logic board.

VRAM SIMM, 512K (Replaced by 661-1021) **661-0649**

VRAM SIMM, 512K, 80ns, 160-pin **661-1021**



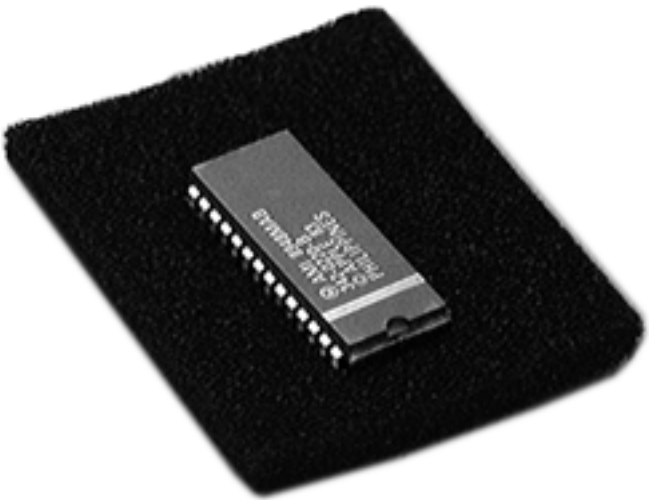
Memory

ROM

ROM Cache DIMM, Power Macintosh **661-1278**

ROM Card, MessagePad 2000 **661-1279**

ROM, Macintosh with 400K Floppy Drive, High **661-0220**



Apple P/N on ROMs must be 34x-0220 or 34x-0221 (where x = 1 or 2).

ROM, Macintosh with 400K Floppy Drive, Low **661-0221**

Apple P/N on ROMs must be 34x-0220 or 34x-0221 (where x = 1 or 2).

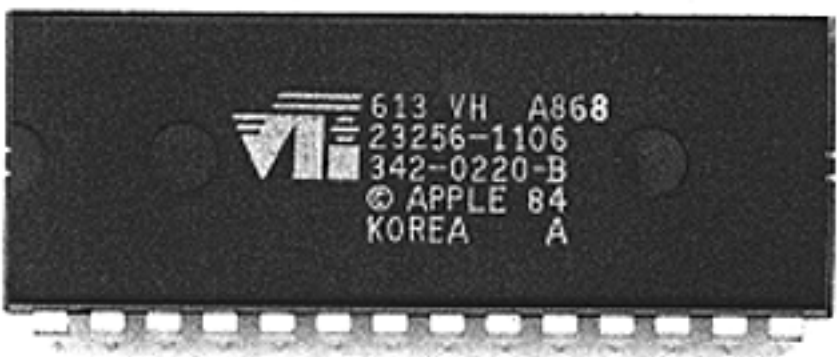
ROM, Macintosh with 800K Floppy Drive, High **661-0632**

Apple P/N on ROM must be 34x-0341 or 34x-0342 (where x = 1 or 2).

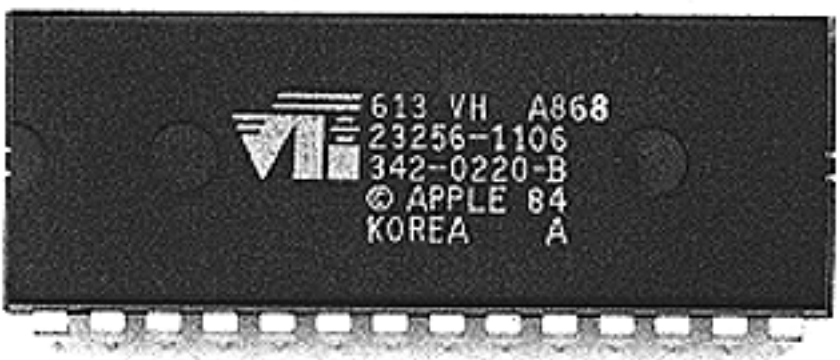
ROM, Macintosh with 800K Floppy Drive, Low **661-0633**

Apple P/N on ROMs must be 34x-0341 or 34x-0342 (where x = 1 or 2).

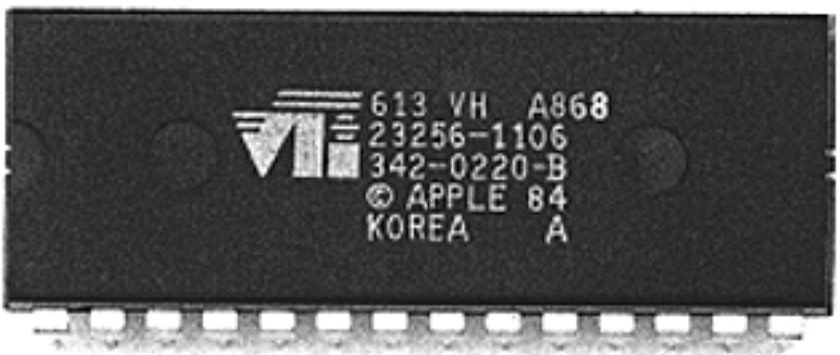
ROM, Macintosh II, High **661-0639**



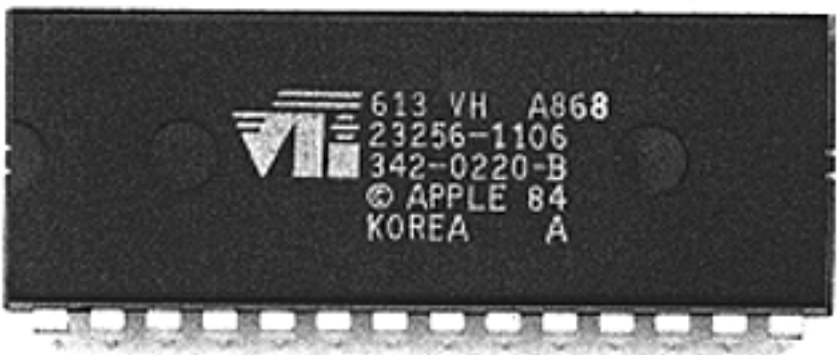
ROM, Macintosh II, Low **661-0642**



ROM, Macintosh II, Medium High **661-0640**



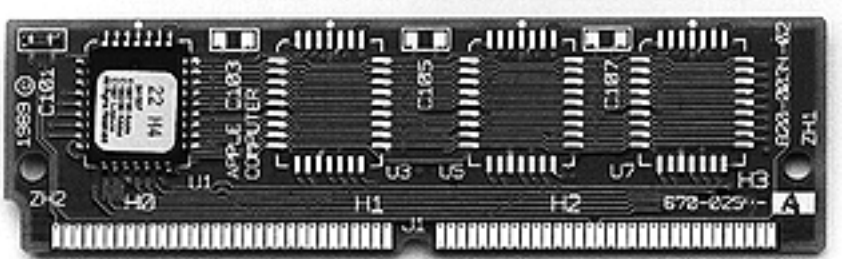
ROM, Macintosh II, Medium Low **661-0641**



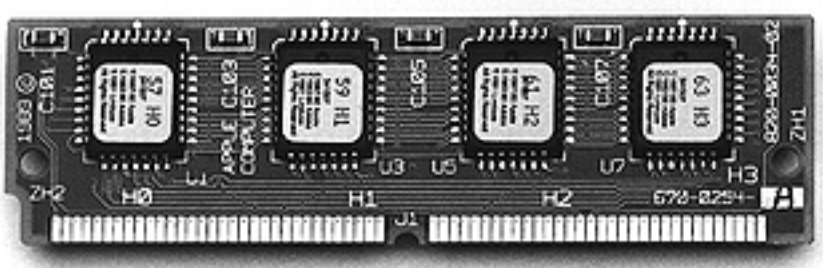
ROM, Macintosh SE, High **661-0701**

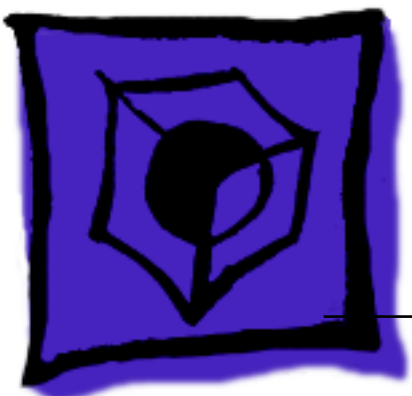
ROM, Macintosh SE, Low **661-0702**

ROM SIMM, Personal LaserWriter, 256K **661-0602**



ROM SIMM, Personal LaserWriter, 1 MB **661-0570**





Miscellaneous Parts

CD 300+ Chassis, Manual Insert, Tray Loading **661-1152**

CD Base, Power CD, Battery Pack/SCSI, Blue **661-1729**

CD Base, Power CD, Battery Pack/SCSI, Gray **661-1730**

CD Player, Power CD, NTSC, Blue **661-1697**

APPLE REQUIRES SPECIAL PACKAGING: The Power CD Player must be packaged with the foam insert inside the player. Failure to do so could damage the drive during shipment. Failure to comply with these requirements may result in a packaging noncompliance charge.

CD Player, Power CD, NTSC, Gray **661-1726**

APPLE REQUIRES SPECIAL PACKAGING: The Power CD Player must be packaged with the foam insert inside the player. Failure to do so could damage the drive during shipment. Failure to comply with these requirements may result in a packaging noncompliance charge.

CD Player, Power CD, PAL, Blue, International **661-1728**

APPLE REQUIRES SPECIAL PACKAGING: The Power CD Player must be packaged with the foam insert inside the player. Failure to do so could damage the drive during shipment. Failure to comply with these requirements may result in a packaging noncompliance charge.

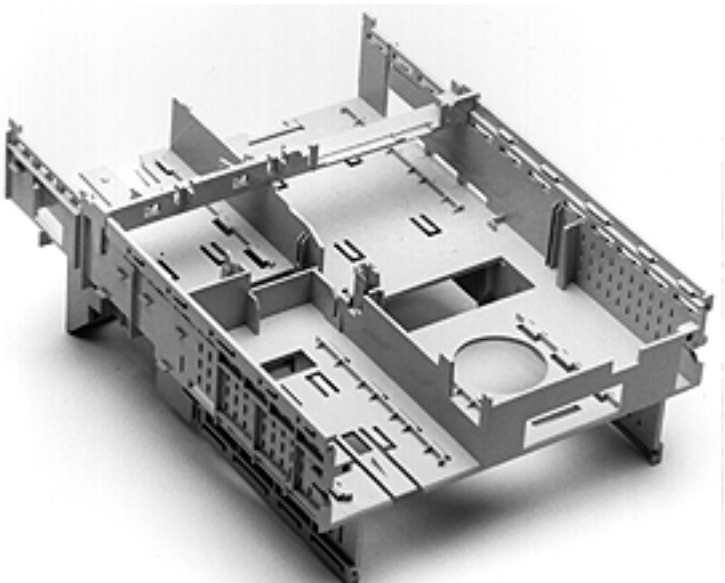
CD Player, Power CD, PAL, Gray, International **661-1727**

APPLE REQUIRES SPECIAL PACKAGING: The Power CD Player must be packaged with the foam insert inside the player. Failure to do so could damage the drive during shipment. Failure to comply with these requirements may result in a packaging noncompliance charge. For more information, select the notes icon in the Illustrated Parts

chapter of the Power CD manual in Service Source.

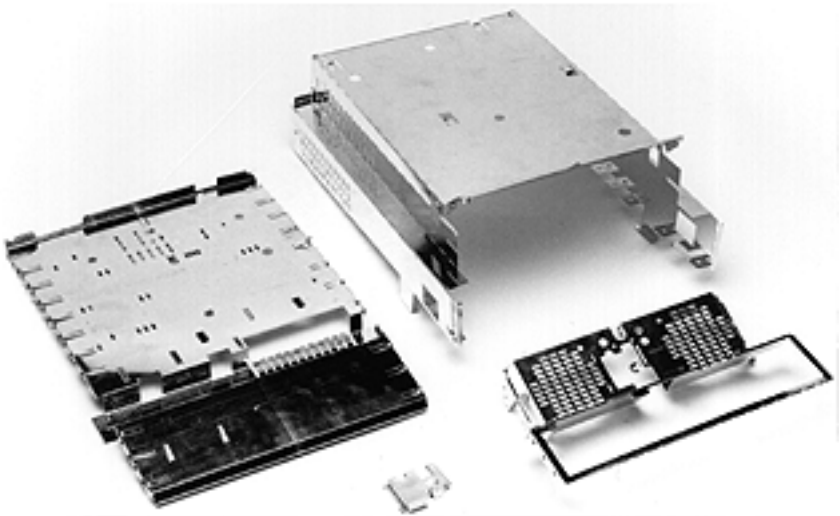
LC 520/550/575 Chassis

661-0980



Part Number 661-0980 replaces P/N 076-0489.

LC 520/550/575 Shield **661-0981**

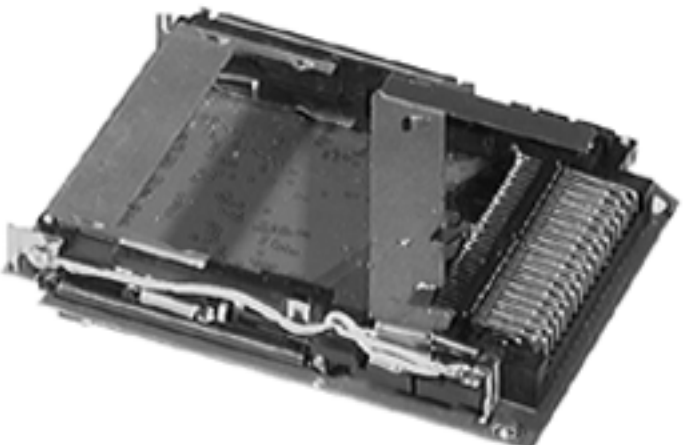


Part number 661-0981 replaces P/N 076-0488.

MessagePad 2000, Whole Unit **661-0997**

PCMCIA Expansion Module (Replaced by 661-1060) **661-0137**

PCMCIA, Mechanism, Eject, PowerBook 1400 **661-1190**



The PCMCIA eject mechanism includes the I/R board.

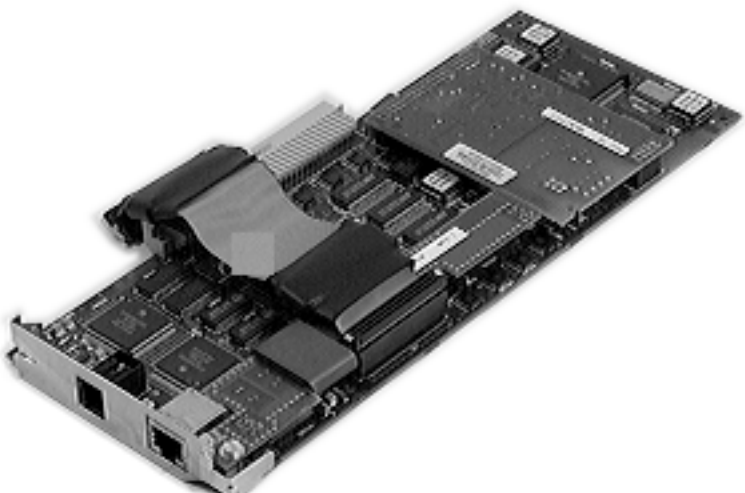
PowerBook Duo Floppy Adapter **661-1663**

QTC Camera 100

661-0977

The QTC ISDN camera is compatible QuickTime conferencing software, as well all Apple A/V capable Quadras, Performas, and Power Macintosh computers. The camera features tilt/swival base, composite video, adjustable focus, privacy shutter and can be attached to any standard tripod.

QTC ISDN Card **661-0978**



The QTC ISDN card is a NuBus card which requires a DAV (Digital Audio Video) connection. As such, it can be used with the Power Macintosh 7100AV series and 8100AV series computer.

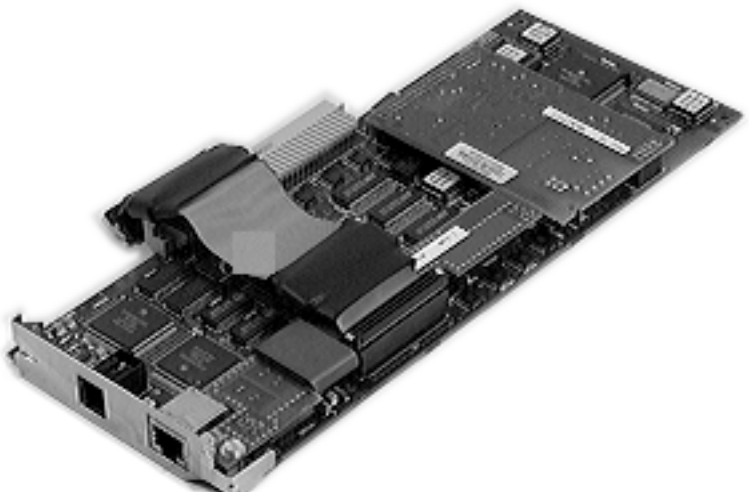
You must have access to the ISDN network in order to use this card. The QTC ISDN card is H.320 compatible and

will allow the user to connect into the worldwide video teleconferencing network. This card can be used with QuickTime conferencing software.

This version of the card is for use in Japan only. It is co-labeled with an NTT (Nippon Telephone and Telegraph) sticker.

There is a sister card which has modifications to meet U.S. EMI standards (see 661-1159).

QTC ISDN Card (U.S. Only) **661-1159**



The QTC ISDN card is a NuBus card which requires a DAV (Digital Audio Video) connection. As such, it can be used with the Power Macintosh 7100AV series and 8100AV series computer.

You must have access to the ISDN network in order to use this card. The QTC ISDN card is H.320 compatible and will allow the user to

connect into the worldwide video teleconferencing network. This card can be used with QuickTime conferencing software.

This version of the card can be used in the U.S. There is a sister card which is for use in Japan only (see 661-0978).

Speaker Assembly, AppleDesign Powered Speakers II, Platinum **661-0048**

Speaker, Main, AppleDesign Powered Speakers **661-1689**

When you return P/N 661-1689, Apple ships you P/N 661-1737.

Speaker, Main, AppleDesign Powered Speakers, with Subwoofer Jack **661-1737**

Speaker, Satellite, AppleDesign Powered Speakers **661-1716**

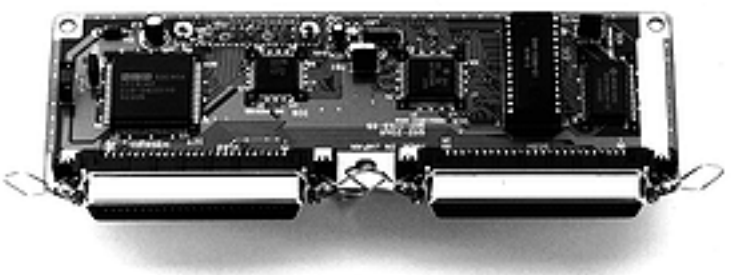
TechStep Assembly **661-0703**

DO NOT return ROM packs, port pack, or battery with this module.

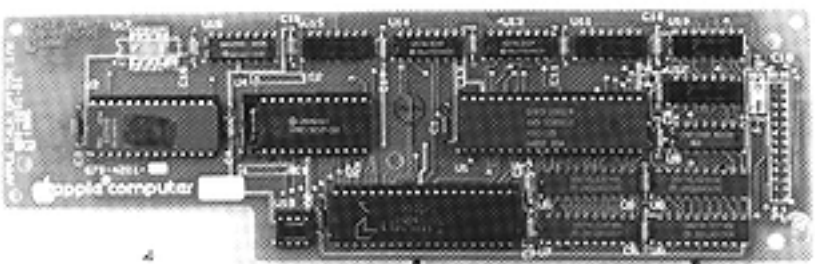
Printers

Cards

Color Printer SCSI Card Assembly **661-1674**



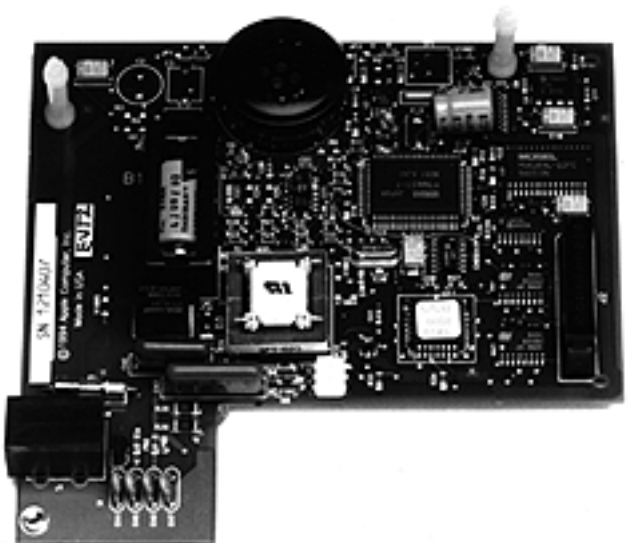
LaserWriter 12/640 PS, LQ LocalTalk Option Card **661-0325**



LaserWriter 12/640 PS, Laser/Scanner Assembly **661-1097**

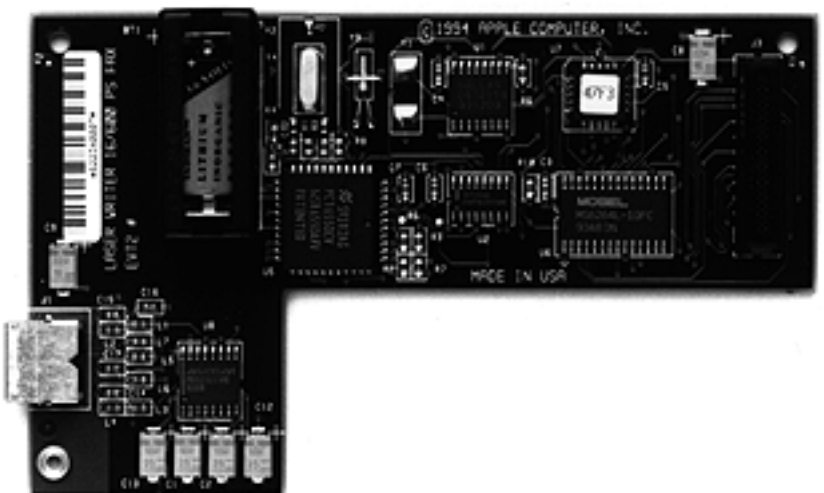
LaserWriter 16/600 PS Fax Card

661-0095

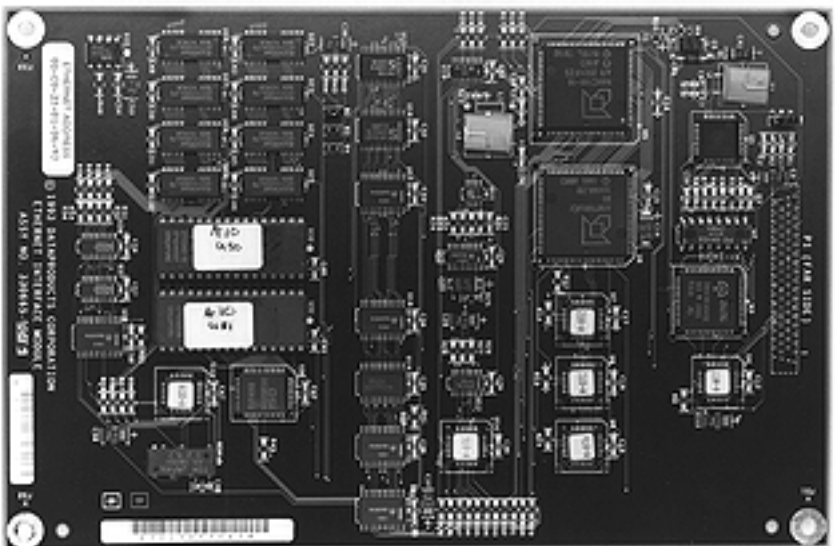


Return the plastic standoffs with the fax card.

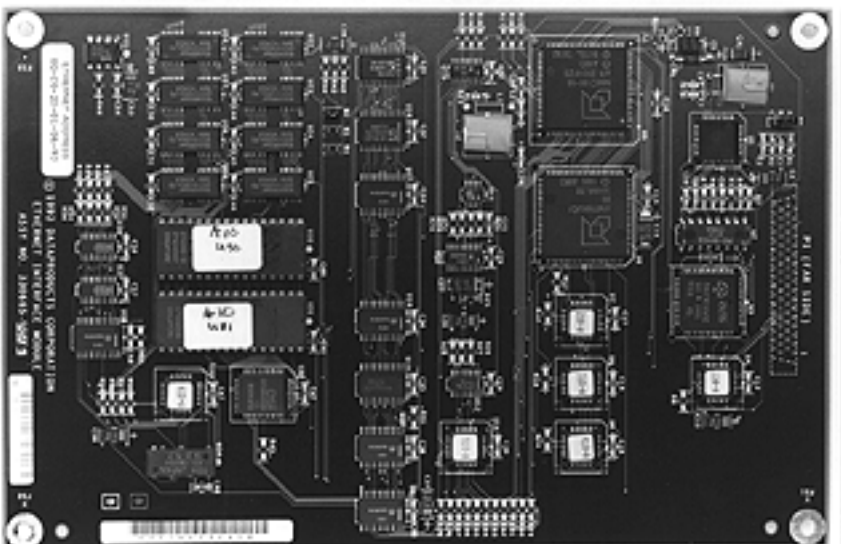
LaserWriter 16/600 PS Fax Card, International **661-0130**



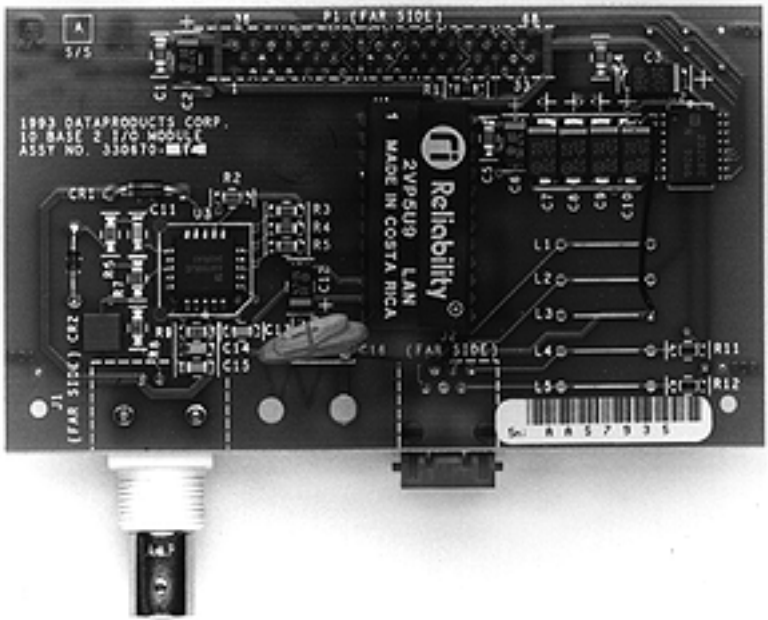
LaserWriter Pro 810 Communications Card **661-0850**



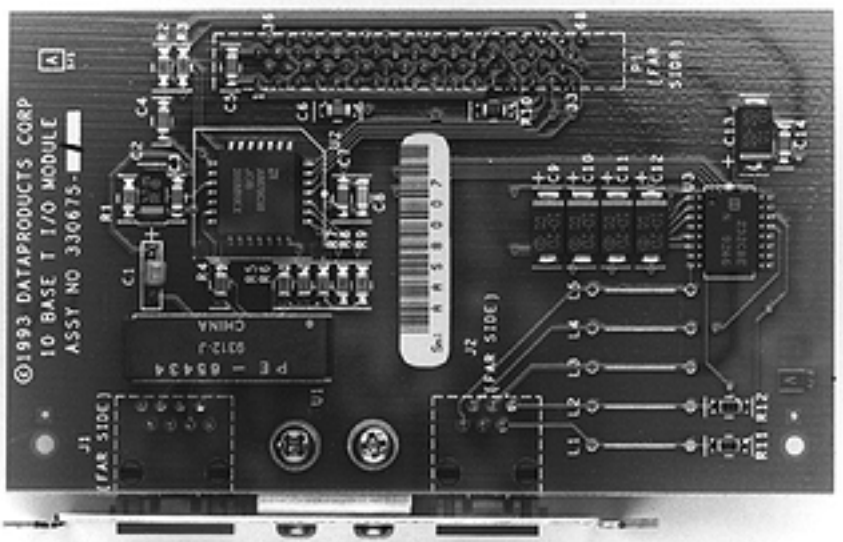
LaserWriter Pro 810 Ethernet Card **661-0852**



LaserWriter Pro 810 Ethernet Card, 10 Base 2 **661-0854**

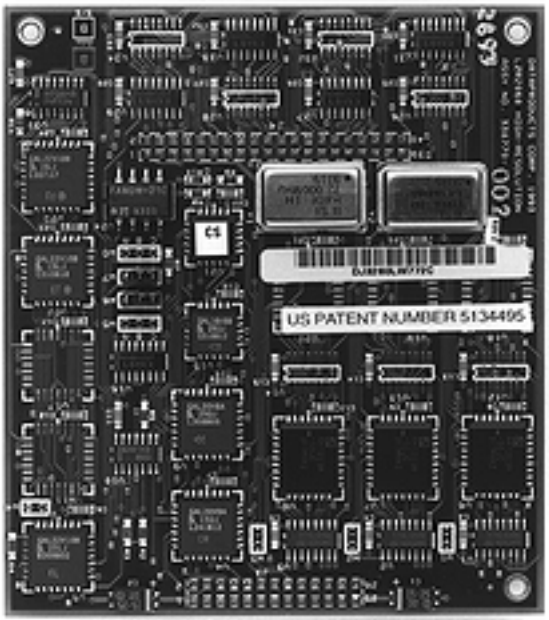


LaserWriter Pro 810 Ethernet Card, 10 Base T **661-0853**

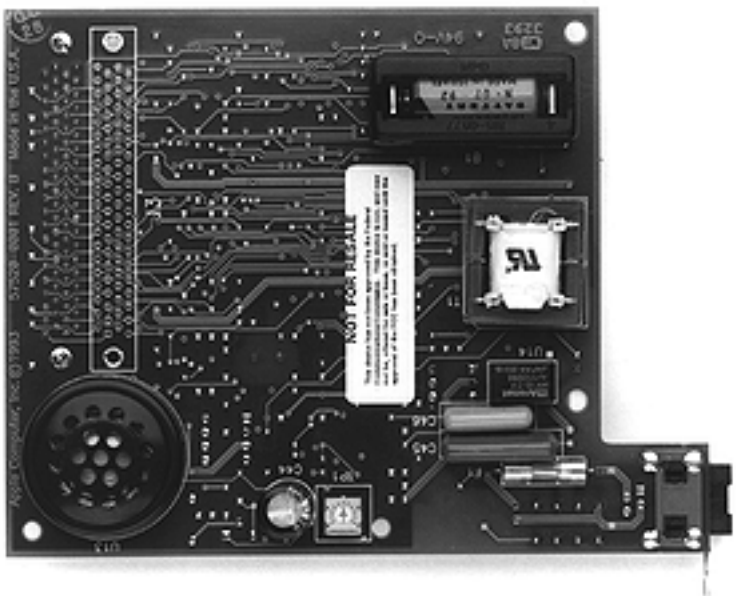


LaserWriter Pro 810 Fax Card **661-0851**

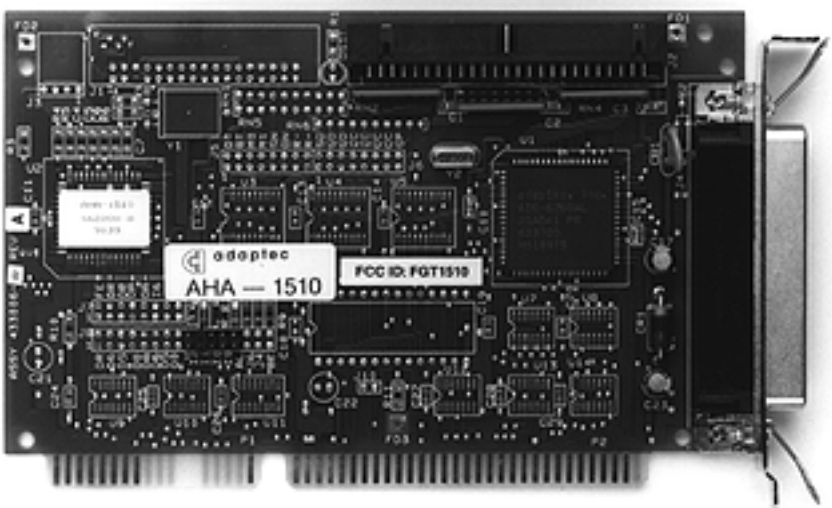
LaserWriter Pro 810 High Resolution Card **661-0849**



LaserWriter Select 360 Fax Card **661-0868**



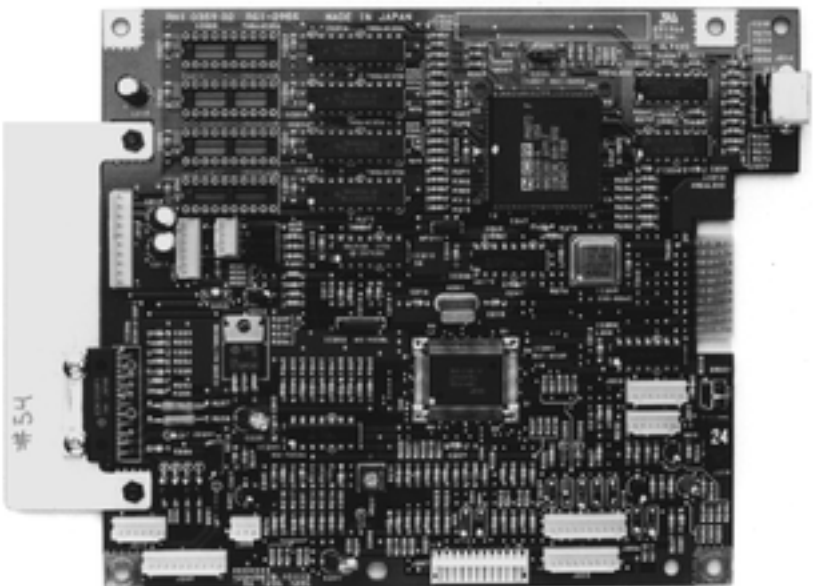
OneScanner for Windows SCSI Card **661-0737**



Printers

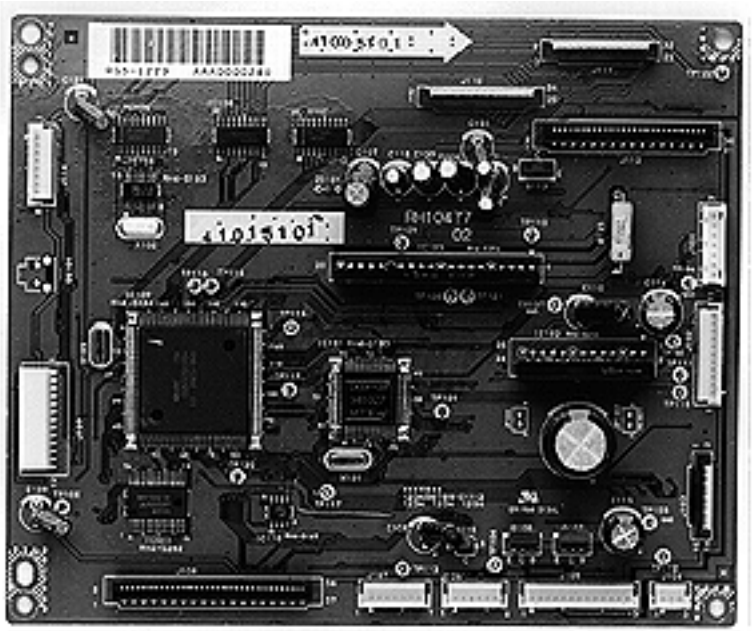
Controller Boards

Apple Personal LaserWriter LS/L Serial Controller **661-0669**

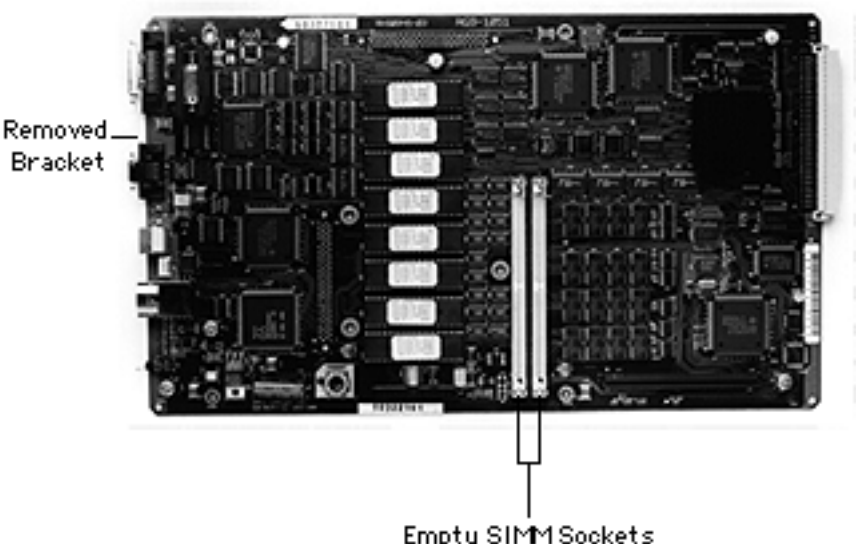


Return the serial controller board in its 512K configuration (that is, with sockets IC217 through IC220 empty).

Color LaserWriter 12/600 PS DC Controller Board **661-0898**

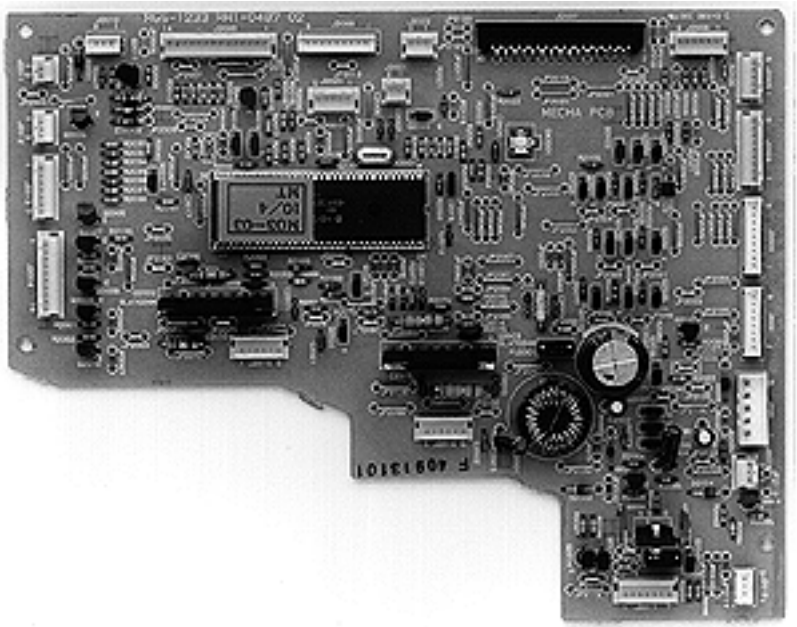


Color LaserWriter 12/600 PS I/O Controller Board **661-0133**



The replacement board comes without the I/O bracket, DRAM SIMMs and battery. Please transfer the I/O bracket, DRAM SIMMs and battery from the customer's I/O board to the replacement board before installation.
Do not return the I/O bracket, DRAM SIMMs or battery to Apple.

Color LaserWriter 12/600 PS Mechanical Controller Board **661-0899**

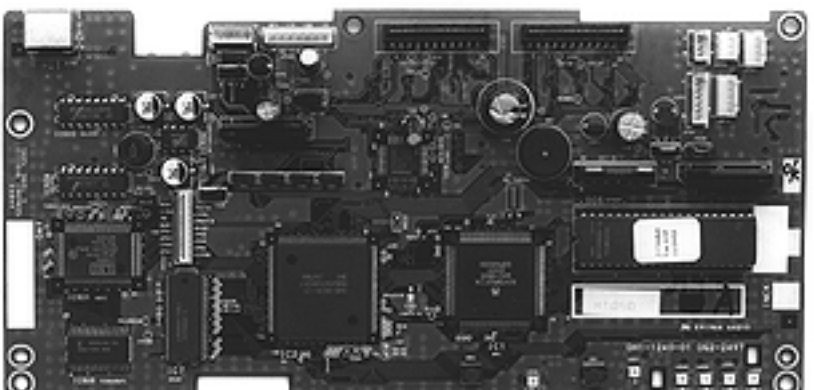


The black plastic mount is not included on this module.

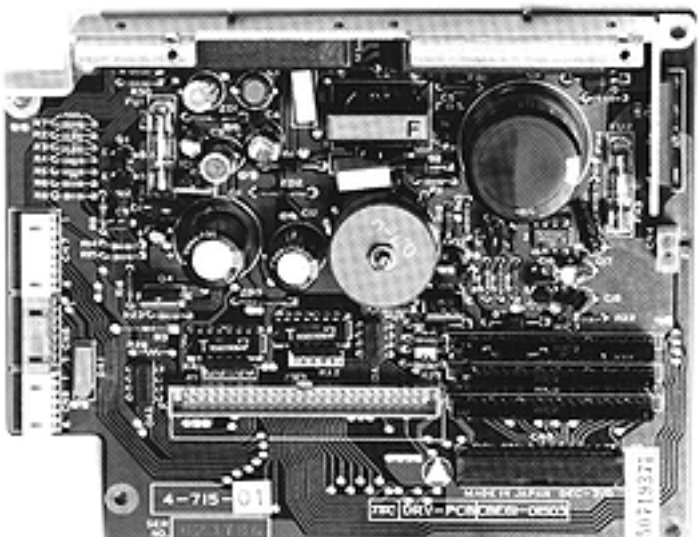
Color StyleWriter 2200 Controller Board **661-0257**

Color StyleWriter 2400 Logic Board **661-0161**

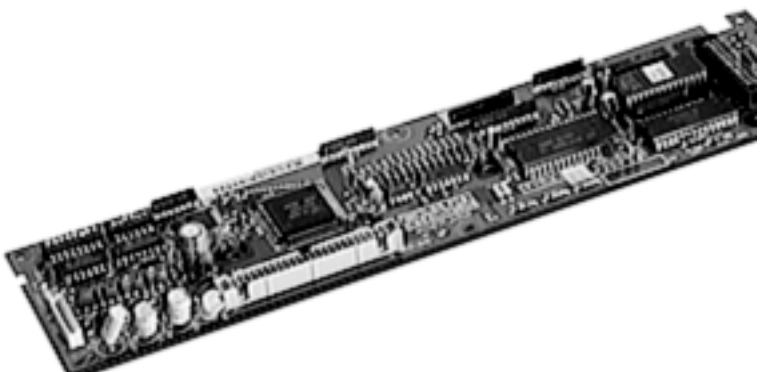
Color StyleWriter Pro Controller Board **661-0876**



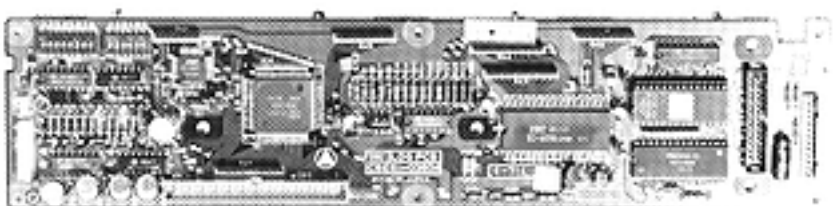
ImageWriter II Drive Board **661-0303**



ImageWriter II Main Logic Board **661-0413**

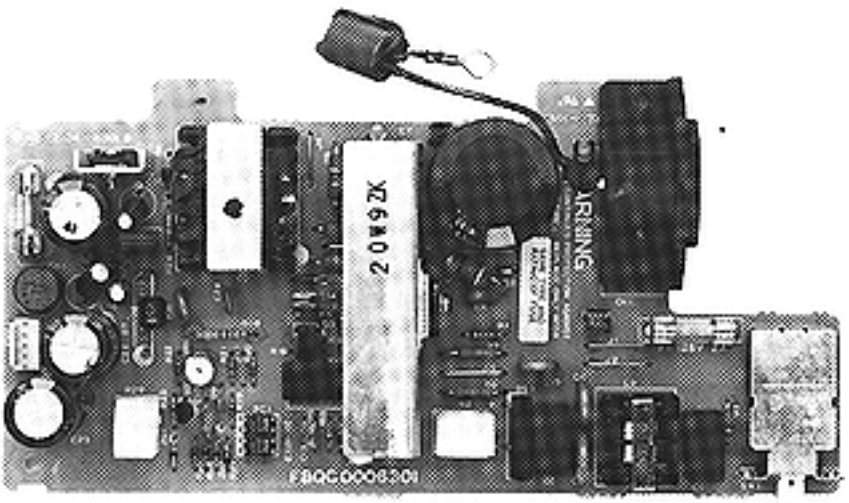


ImageWriter II Main Logic Board **661-0304**

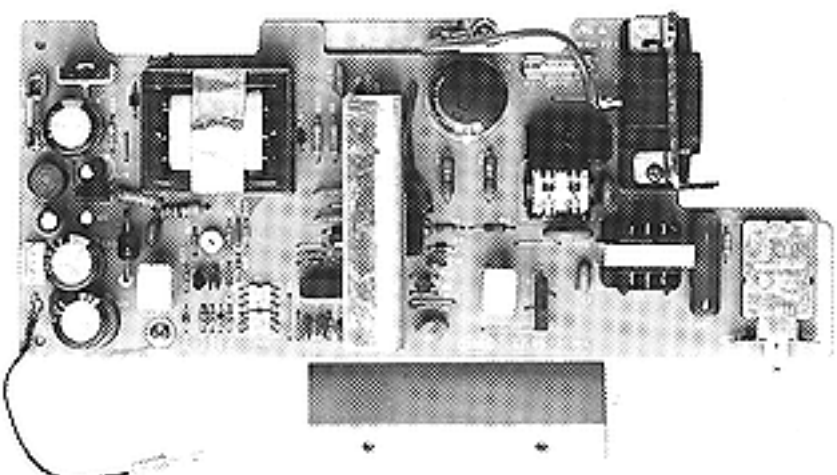


ImageWriter II/L Main CPU PCB **661-0581**

ImageWriter II/L Power Supply Board (110/120 V) **661-0582**

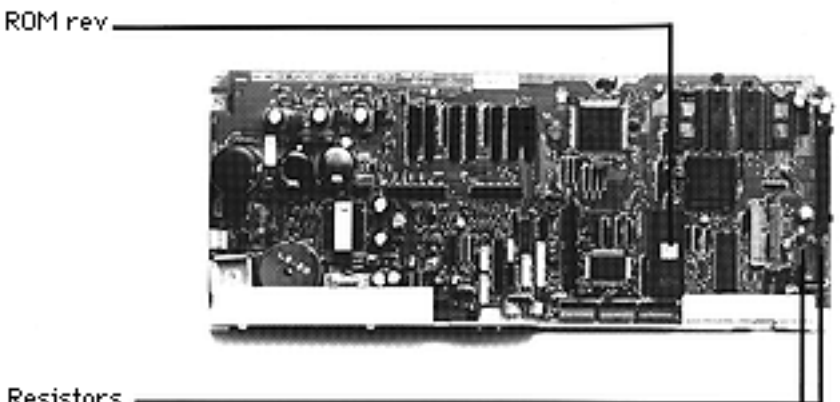


ImageWriter II/L Power Supply Board, 220/240 V **661-1606**

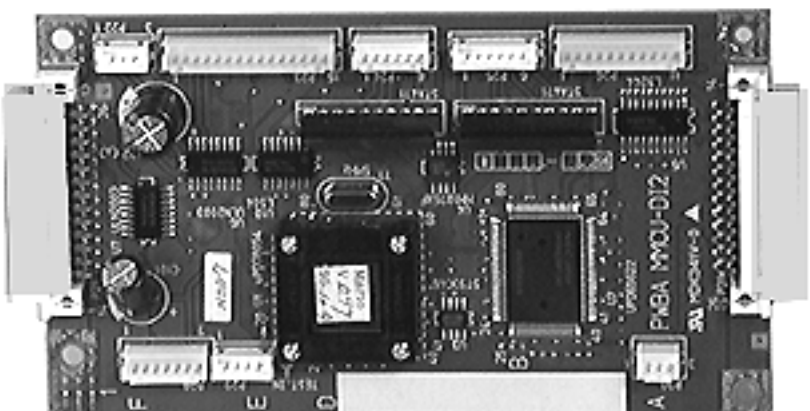


ImageWriter LQ Main Logic Board **661-0563**

ImageWriter LQ Main Logic Board **661-0404**



LaserWriter 12/640 PS, Board, DC Controller **661-1096**



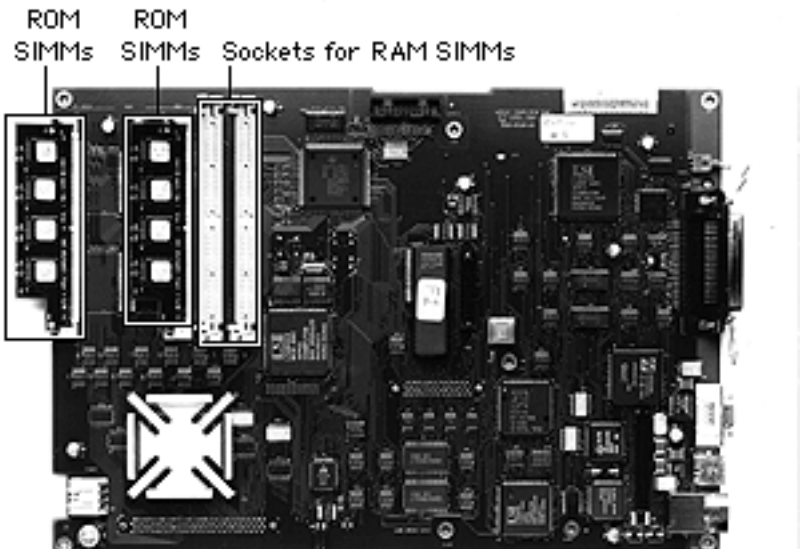
LaserWriter 12/640 PS, Board, I/O Controller **661-1095**

The I/O controller board ships without SIMMs and bracket.

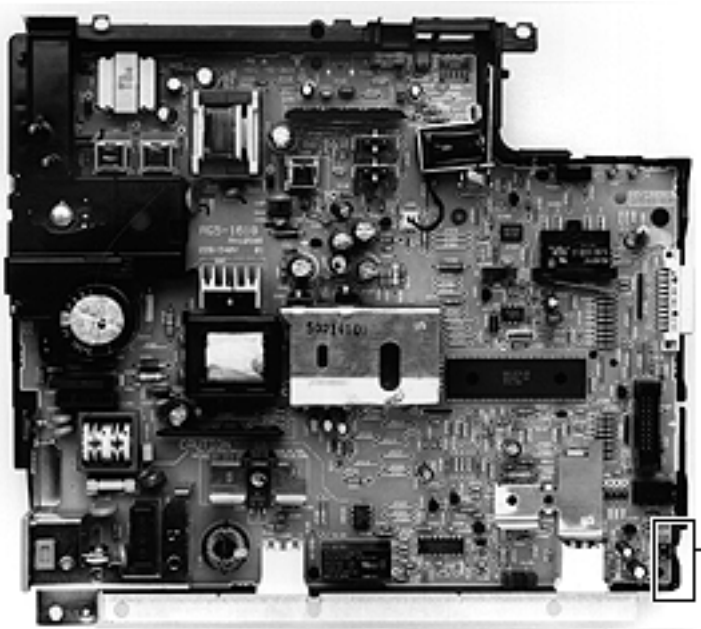
Remove the SIMMs and bracket from the defective board and reinstall them onto the customer's replacement board.

LaserWriter 16/600 PS DC Controller Board **661-0094**

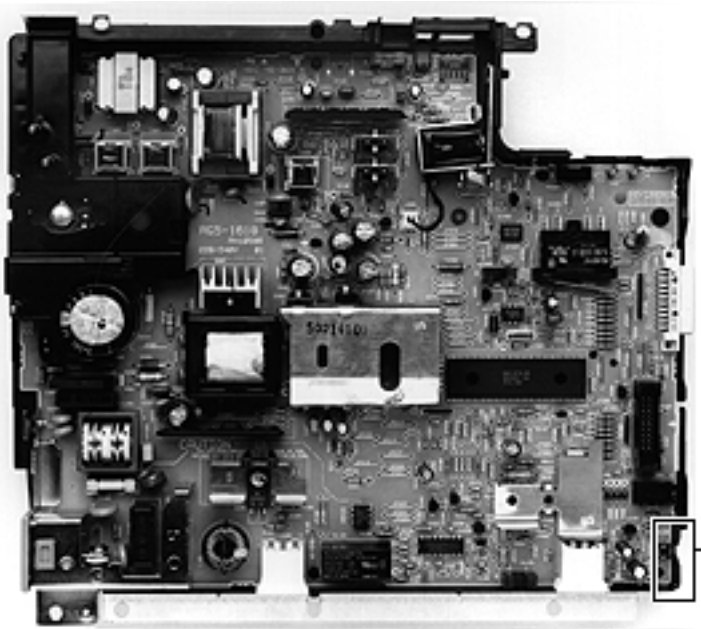
LaserWriter 16/600 PS I/O Controller Board **661-0090**



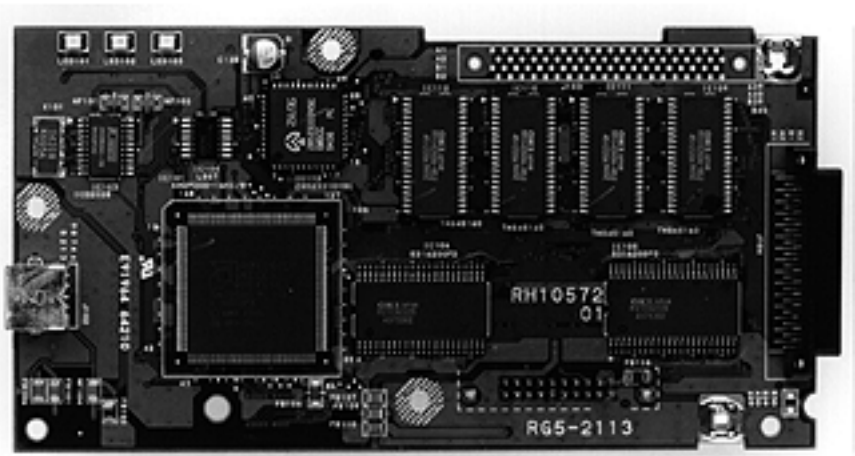
LaserWriter 4/600 PS Controller Assembly, 110/115 V **661-0201**



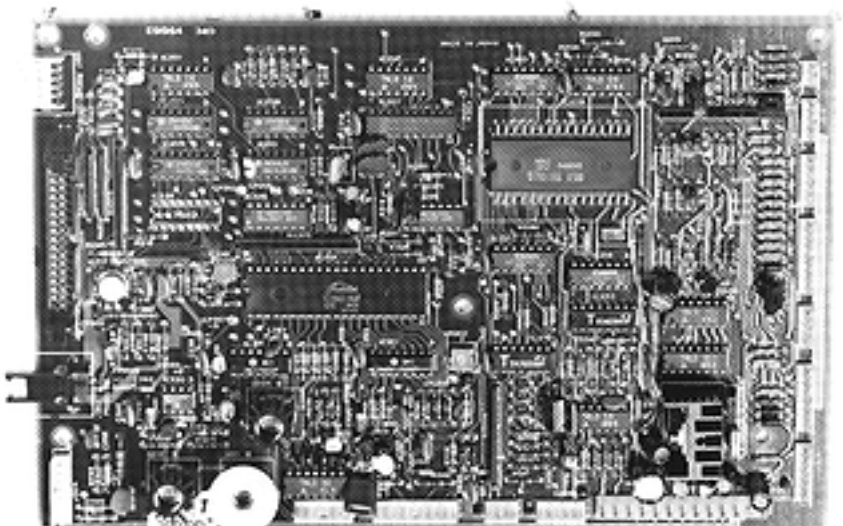
LaserWriter 4/600 PS Controller Assembly, 220/240 V **661-0203**



LaserWriter 4/600 PS I/O Board **661-0200**



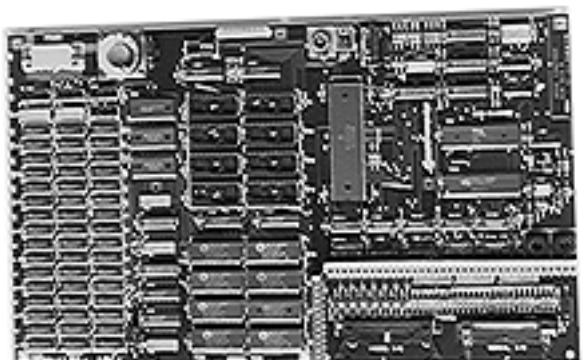
LaserWriter DC Controller Board **661-0267**



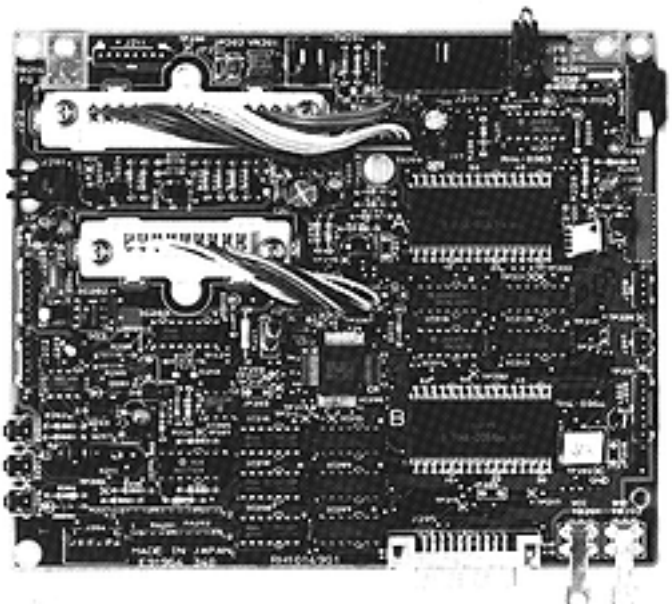
LaserWriter I/O Board

661-0436

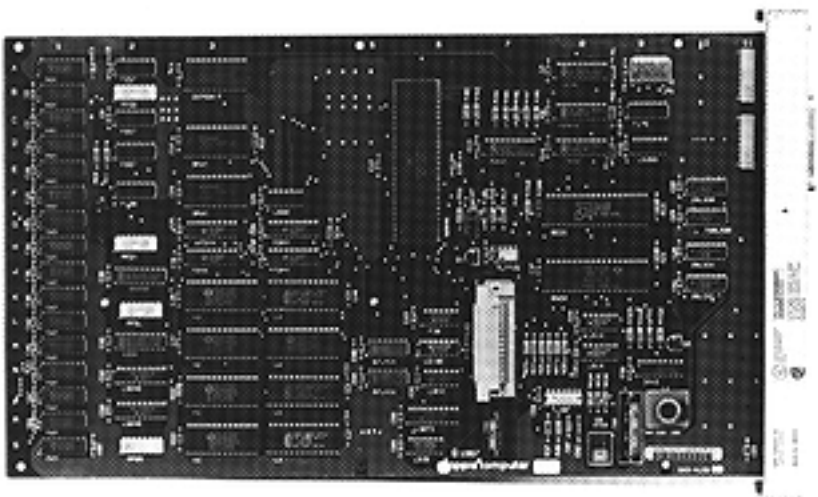
This board has eight 512K ROMs or four 1MB ROMs.



LaserWriter II DC Controller Board **661-0426**

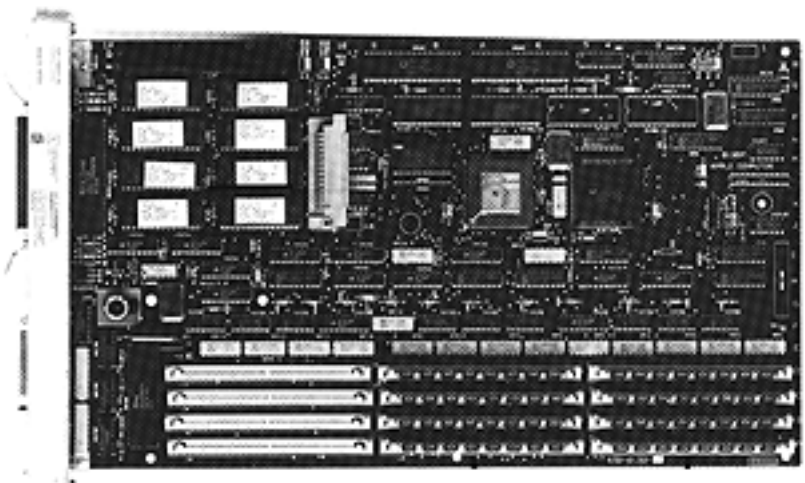


LaserWriter II NT Board **661-0438**



LaserWriter II NTX Board

661-0429

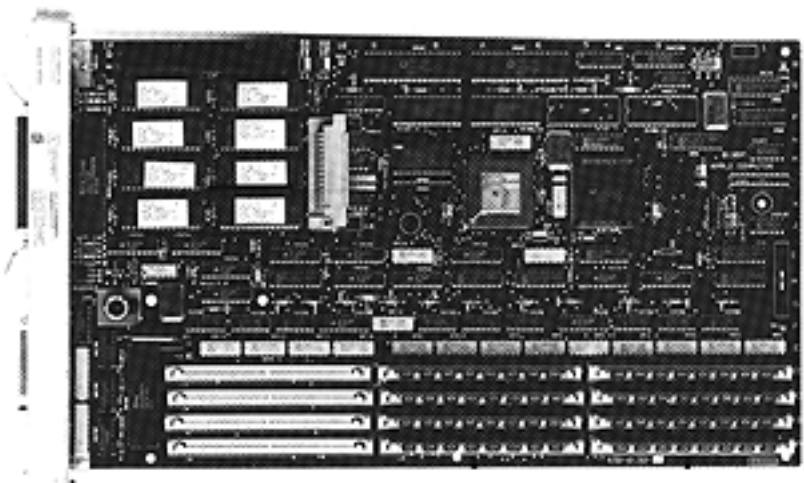


The marketing number on the bracket label can be M6004 or M6004/A.

Apple P/N on ROMs must be 34x-0560 through 34x-0567 (where x=1 or 2). If ROMs are 34x-0711 through 34x-0718, see module P/N 661-1605.

You must return the eight 256K SIMMs with this board.

LaserWriter II NTX I/O Board (Rev. 3.0) **661-1605**

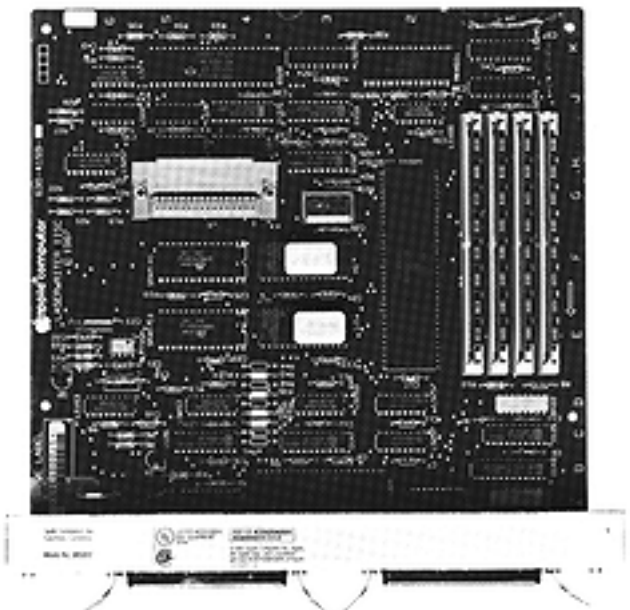


The marketing number on the bracket label can be M6004 or M6004/A.

Apple P/N on ROMs must be 34x-0711 through 34x-0718 (where x=1 or 2). If ROMs are 34x-0560 through 34x-0567, see module P/N 661-0429.

You must return the eight 256K SIMMs with this board.

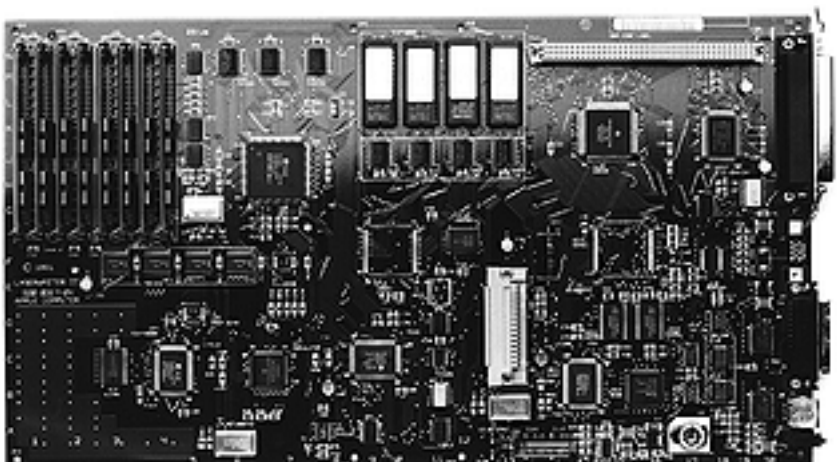
LaserWriter II Serial Controller Board **661-0428**



You must return the four 256K SIMMs with this board.

LaserWriter IIf I/O Board, SIMM-less

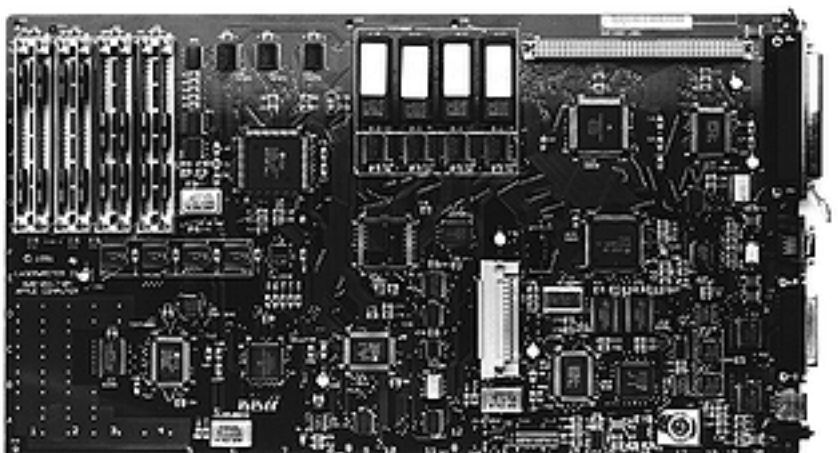
661-0776



When you return P/N 661-0662 or P/N 661-0770, Apple ships you P/N 661-0776.

Because replacement I/O boards do not come with a bracket assembly, you must retain the bracket assembly for use on the replacement I/O board. Do not return the bracket assembly to Apple.

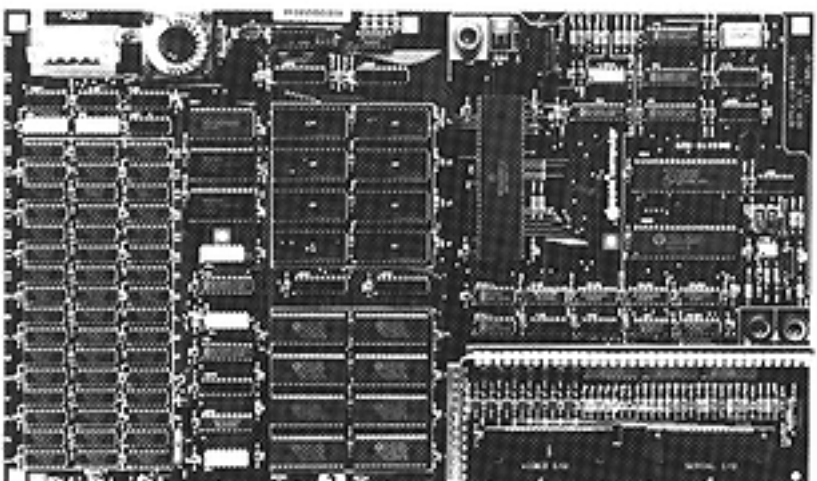
LaserWriter IIg I/O Board, SIMM-less **661-0775**



When you return P/N 661-0661 or P/N 661-0769, Apple ships you P/N 661-0775.

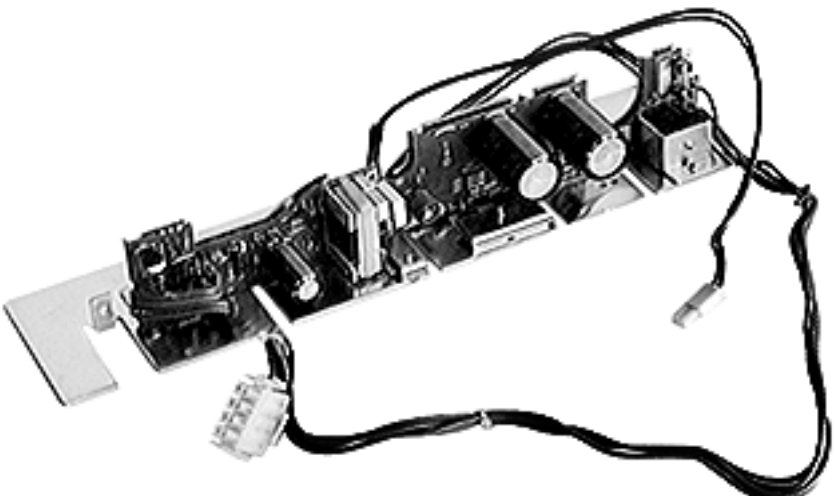
Because replacement I/O boards do not come with a bracket assembly, you must retain the bracket assembly for use on the replacement I/O board. Do not return the bracket assembly to Apple.

LaserWriter Plus I/O Board **661-0437**



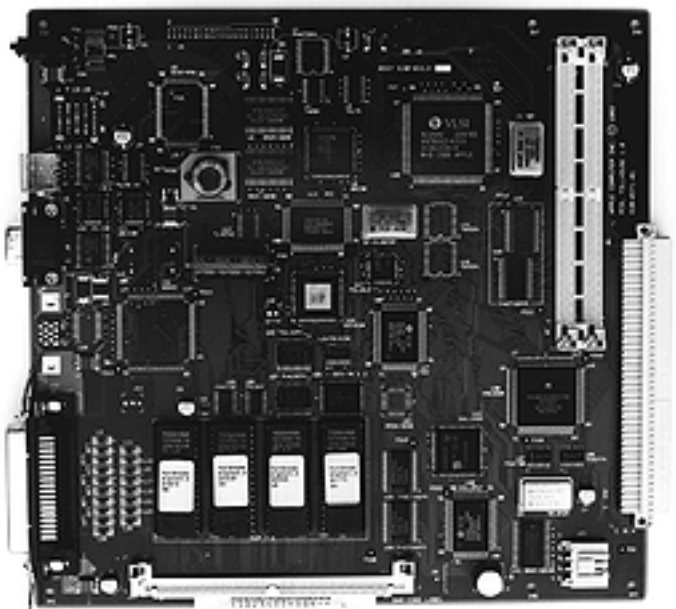
This board has sixteen 512K ROMs or eight 1MB ROMs.

LaserWriter Power Supply, I/O PCB Assembly **661-0323**



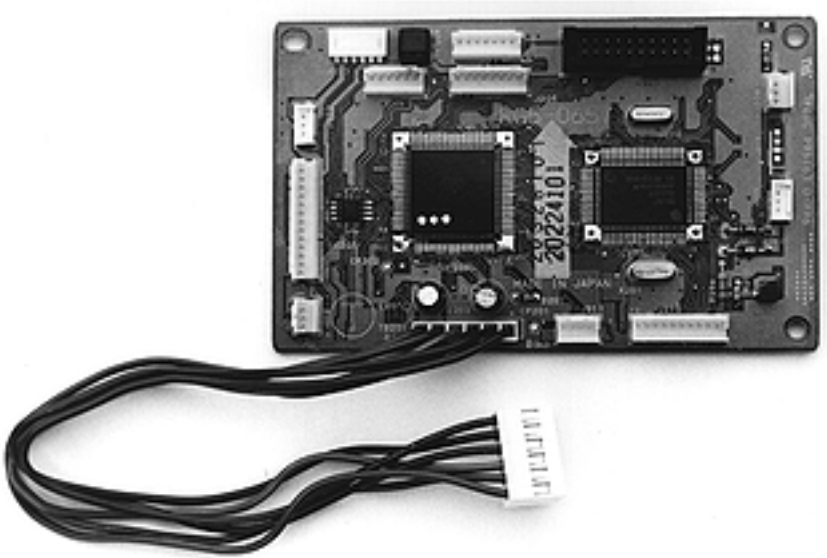
LaserWriter Pro 600 I/O Board

661-0799



The replacement I/O board comes without the I/O shield and without SIMMs. Please transfer the I/O shield and all SIMMs from the customer's I/O board to the replacement board before installation. Do not return the I/O shield or the SIMMs to Apple.

LaserWriter Pro 600/630 DC Controller Board **661-0807**



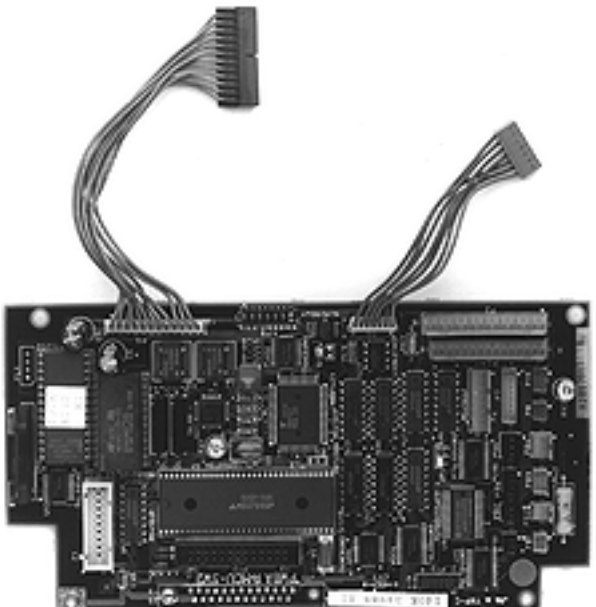
The LaserWriter Pro 600/630 DC controller board and the LaserWriter 16/600 PS DC controller board (P/N 661-0094) are similar. This LaserWriter Pro 600/630 DC controller board has the vendor number RG5-0657; the LaserWriter 16/600 PS controller board has the vendor number RG1-3395.

LaserWriter Pro 630 I/O Board

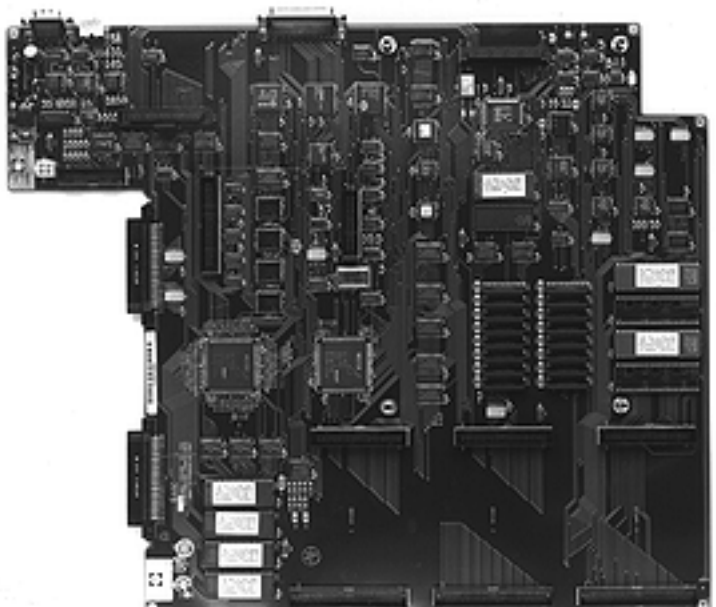
661-0800

The replacement I/O board comes without the I/O shield and without SIMMs. Please transfer the I/O shield and all SIMMs from the customer's I/O board to the replacement board before installation. Do not return the I/O shield or the SIMMs to Apple.

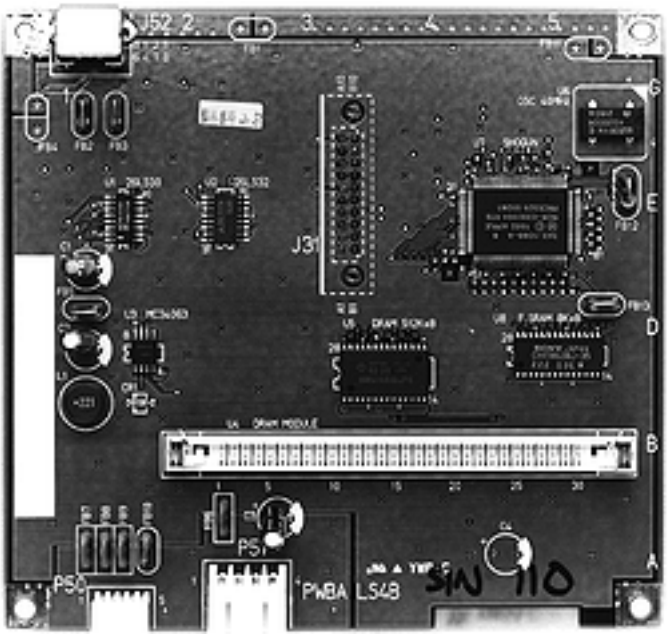
LaserWriter Pro 810 DC Controller Board **661-0833**



LaserWriter Pro 810 I/O Controller Board **661-0842**



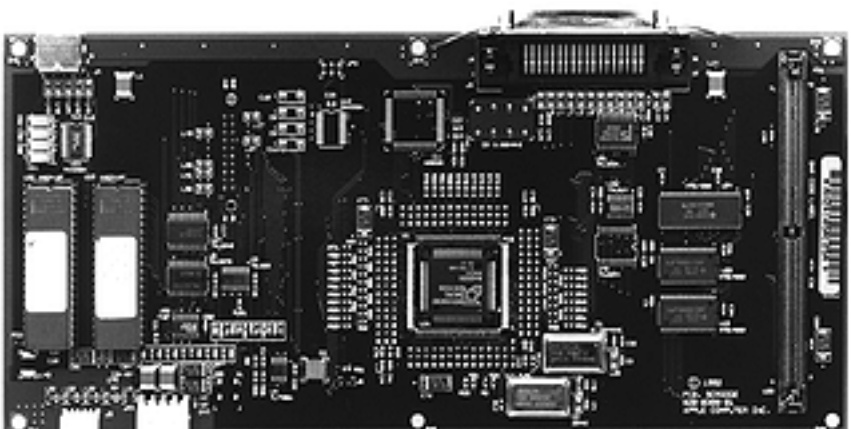
LaserWriter Select 300 I/O Board **661-2000**



The replacement I/O board comes without the I/O shield and without SIMMs. Please transfer the I/O shield and all SIMMs from the customer's I/O board to the replacement board before installation. Do not return the I/O shield or the SIMMs to Apple.

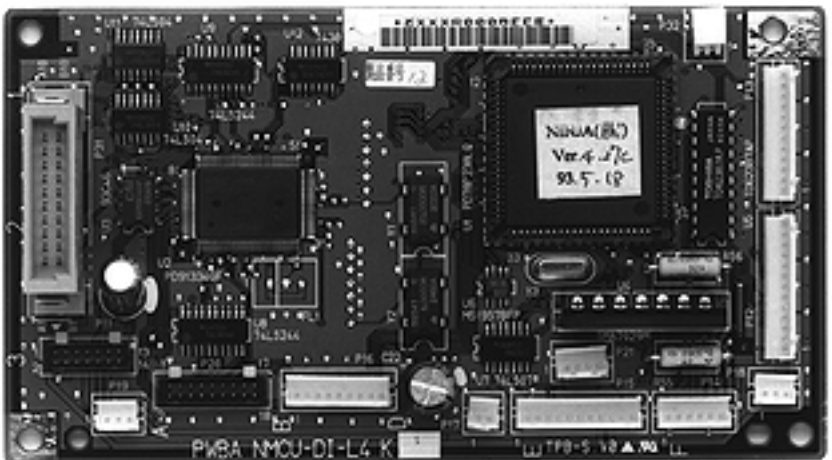
LaserWriter Select 310 I/O Board

661-2001

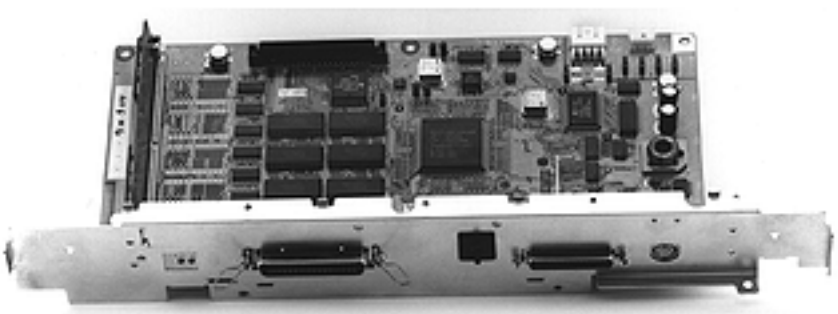


The replacement I/O board comes without the I/O shield and without SIMMs. Please transfer the I/O shield and all SIMMs from the customer's I/O board to the replacement board before installation. Do not return the I/O shield or the SIMMs to Apple.

LaserWriter Select 360 DC Controller Board **661-0821**

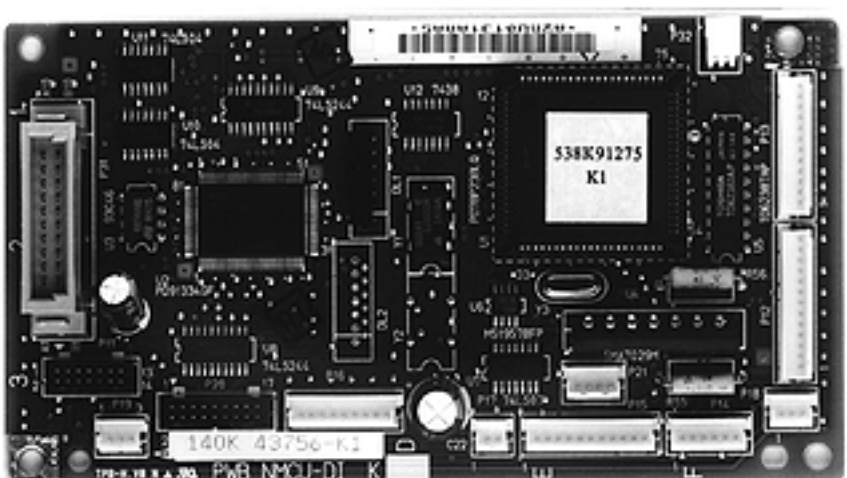


LaserWriter Select 360 I/O Controller Board **661-0820**



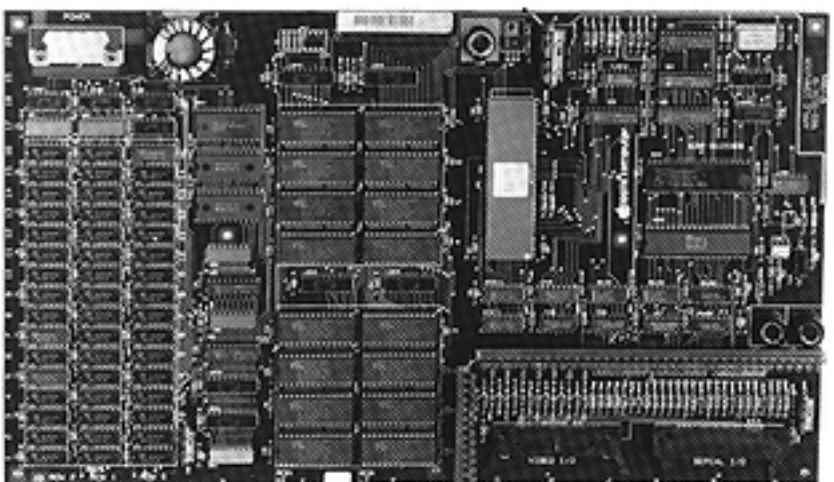
Return the I/O controller board with RAM SIMM installed.

LaserWriter Select DC Controller Board **661-2002**



This LaserWriter Select DC Controller Board and the LaserWriter Select 360 DC Controller Board (P/N 661-0821) are similar. This DC controller board has the vendor number PWB NMCU-DI. The LaserWriter Select 360 DC controller board has the vendor number PWBA NMCU-DI-L4K.

LaserWriter/LaserWriter Plus I/O Board (4MB) **661-0270**

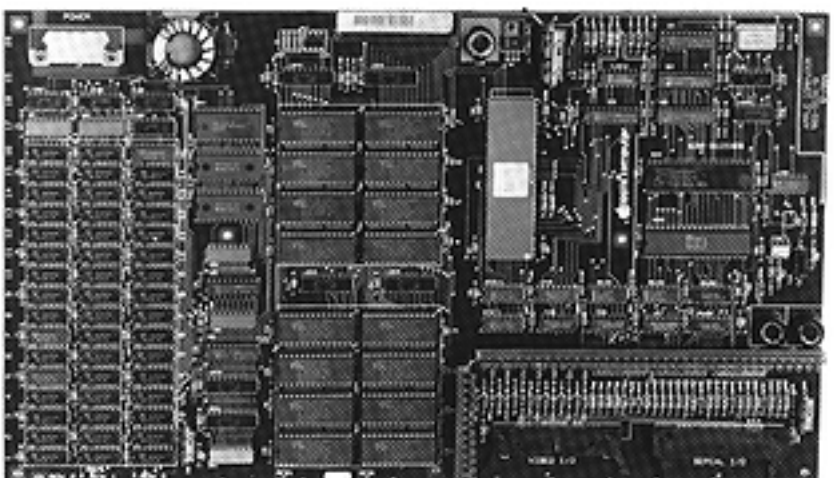


When you return P/N 661-0270, Apple ships you P/N 661-0436. The replacement board comes with eight 512K ROMs or four 1 MB ROMs.

This board has sixteen 256K ROMs or eight 512K MB ROMs. The part numbers for the sixteen 256K ROMs are 34x-0297 and 34x-0309 through 34x-0323. The part

numbers for the eight 512K ROMs are 34x-0081 through 34x-0088. For all the above, x=1 or 2.

LaserWriter/LaserWriter Plus I/O Board (8MB) **661-0324**



This board has sixteen 512K ROMs. The part numbers for the sixteen 512K ROMs are 34x-0089 through 34x-0104. For all the above, x=1 or 2.

When you return P/N 661-0324, Apple ships you P/N 661-0437. The replacement board comes with sixteen 512K ROMs or eight 1 MB ROMs.

Personal LaserWriter 300 Controller Assembly (240 V) **661-0028**

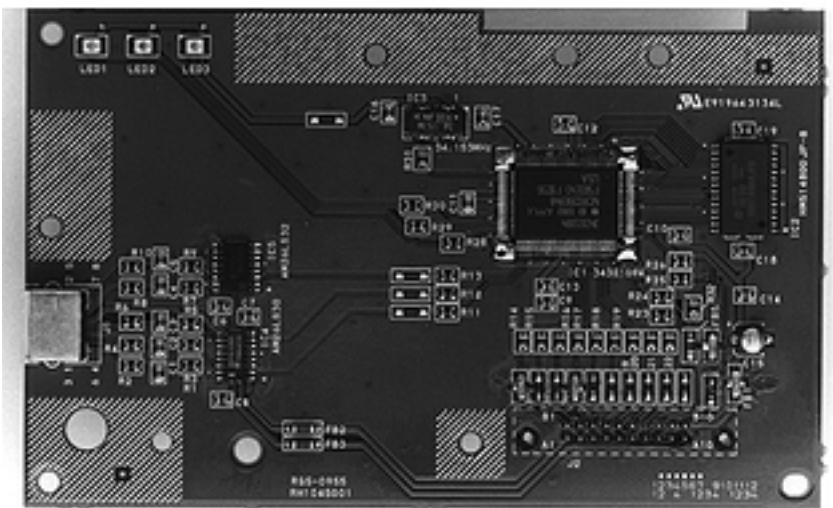
The 240 V Personal LaserWriter 300 controller assembly can be distingushed from the 120 V controller assembly by the voltage rating on the board.

Personal LaserWriter 300 Controller Assembly, 120 V

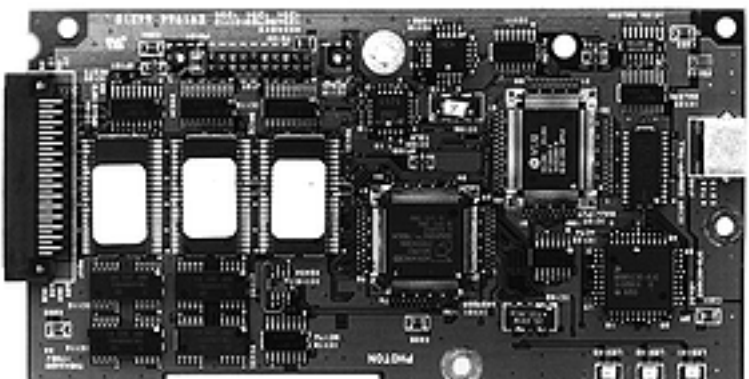
661-0029

The 120 V Personal LaserWriter 300 controller assembly can be distinguished from the 240 V controller assembly by the voltage rating on the board.

Personal LaserWriter 300 I/O Board **661-0030**



Personal LaserWriter 320 I/O Controller Board **661-0687**



Personal LaserWriter LS DC Controller Board **661-0650**

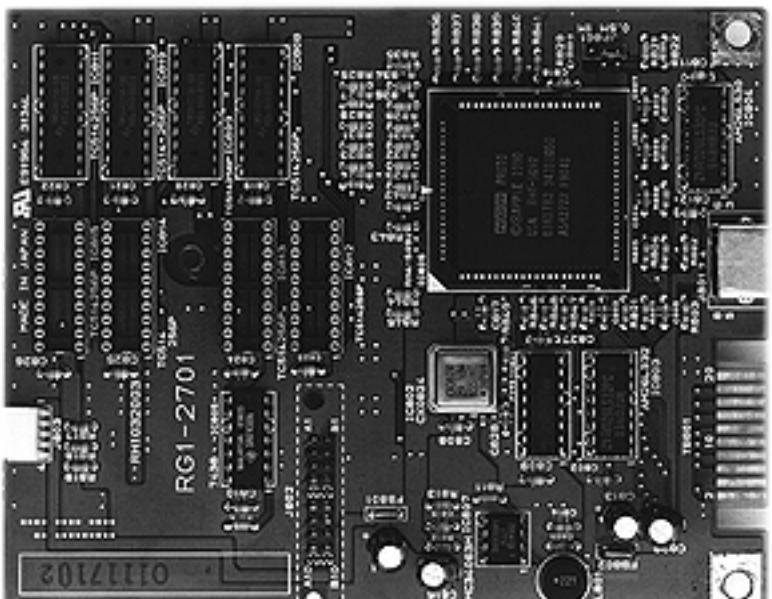
The Personal LaserWriter LS DC controller board is not approved for use on other Apple Personal LaserWriter printers.

Do not interchange DC controller boards between the Personal LaserWriter LS and other Personal LaserWriter printers.

The LS DC controller board has the part

number RGI-2458 printed on the board.

Personal LaserWriter LS Serial I/O Board **661-0631**



Return the serial I/O board in its 512K configuration (that is, with sockets IC812 through IC815 empty).

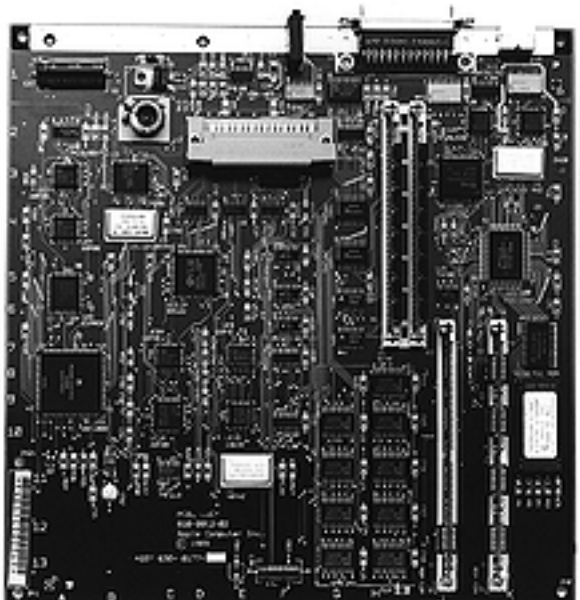
Personal LaserWriter LS/L Power Supply Board, 220/240 V **661-0667**

The Personal LaserWriter LS/L power supply unit is not compatible with the Personal LaserWriter LS, SC, NT, NTR.

The Personal LaserWriter LS/L power supply unit has only one connector; the NT, SC, and NTR power supply units have two. Also, the power rating is lower on the Personal LaserWriter LS/L

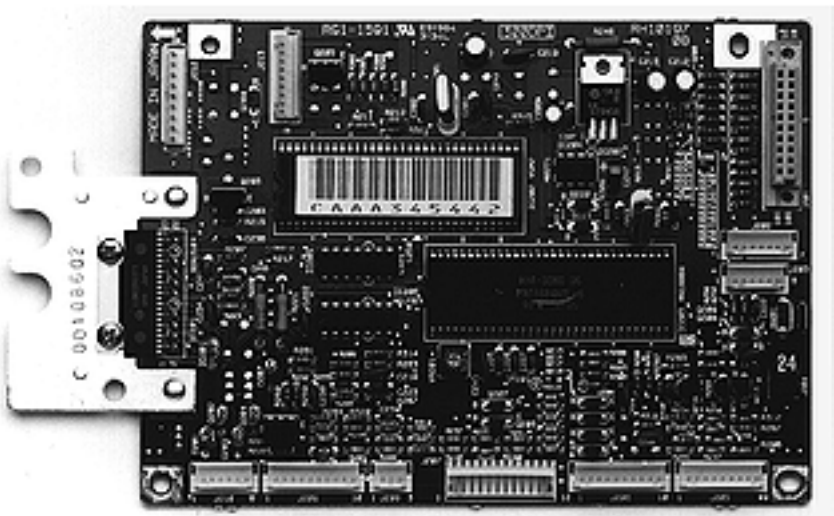
power supply unit. You can distinguish the LS/L power supply from the original LS power supply by the presence of a green 5-volt line on the Personal LaserWriter LS/L power supply.

Personal LaserWriter NT I/O Board **661-0565**



Before you return the Personal LaserWriter NT I/O board, remove the bracket but do not remove the RAM SIMMs or the set of ROM SIMMs.

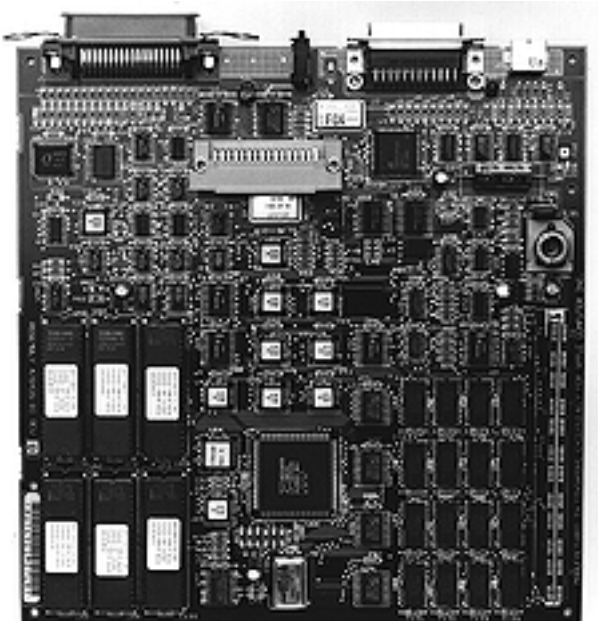
Personal LaserWriter NT, SC, and NTR DC Controller Board **661-0567**



Remove the plastic cable and the interconnect PCB before you return the DC controller board to Apple.

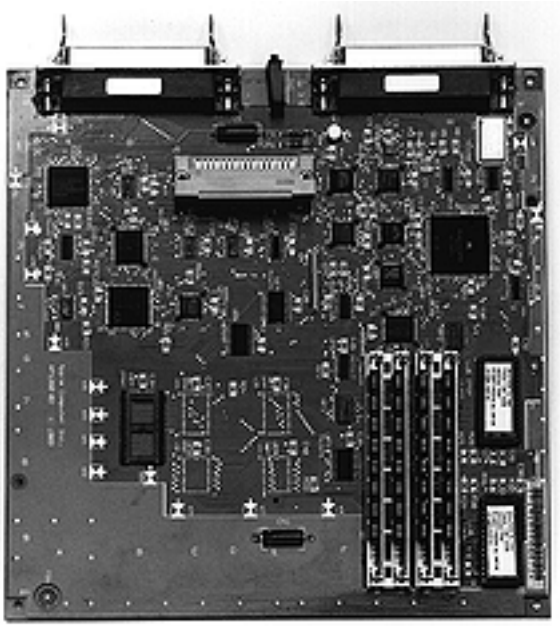
This controller board is not approved for use on the Apple Personal LaserWriter LS or LS/L. This controller board has part number RGI-1591 printed on the board (near connector J213).

Personal LaserWriter NTR I/O Board **661-0725**



Before you return the board, remove the bracket, but do not remove the 1 MB RAM SIMMs.

Personal LaserWriter SC I/O Board **661-0566**



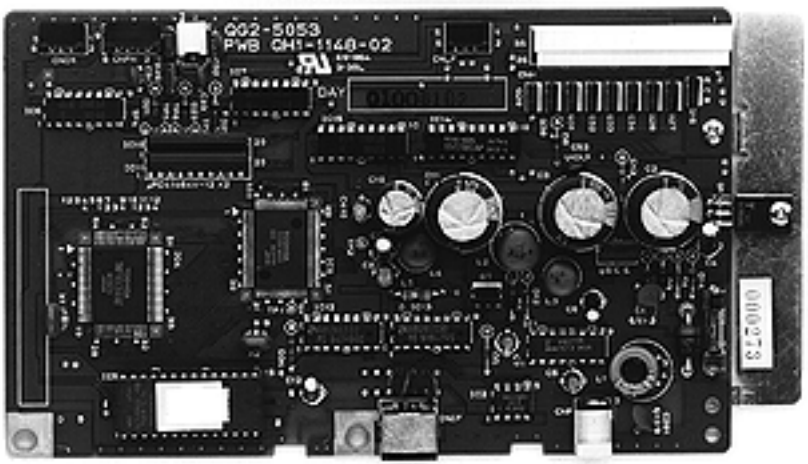
This is a SC I/O board.

Before you return the Personal LaserWriter SC I/O board, remove the bracket but do not remove the four 256K RAM SIMMs.

StyleWriter 1500 Logic Board **661-1111**

StyleWriter 2500 Logic Board **661-1038**

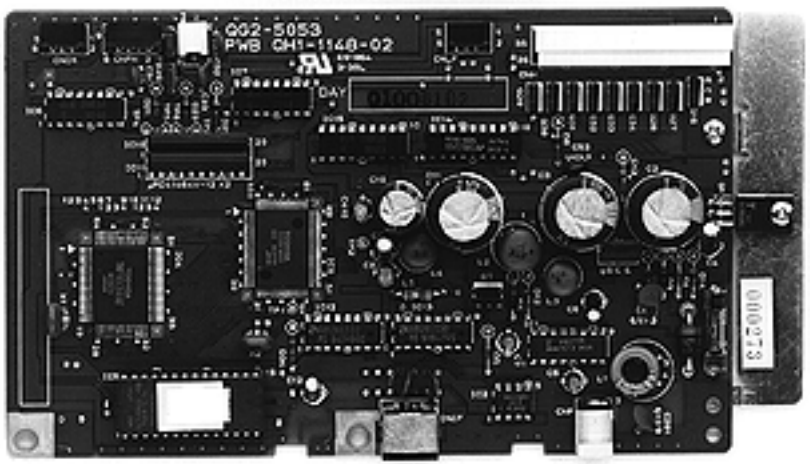
StyleWriter Main Logic Board (Rev. A) **661-0629**



This Rev. A main logic board and the Rev. B main logic board, although they appear identical, are not interchangeable. Identify them by the silkscreen part number located on the front of the board on this Rev. A board. The part number is QG2-5053. On the Rev. B board (P/N 661-0716) the silkscreen part number is QG2-2043.

For additional information refer to the StyleWriter manual on the Service Source CD.

StyleWriter Main Logic Board (Rev. B) **661-0716**



This Rev. B main logic board and the Rev. A main logic board, although they appear identical, are not interchangeable. Identify them by the silkscreen part number located on the front of the board. On the Rev. A board P/N (661-0629) the silkscreen part number is QG2-5053.

On this Rev. B board, the

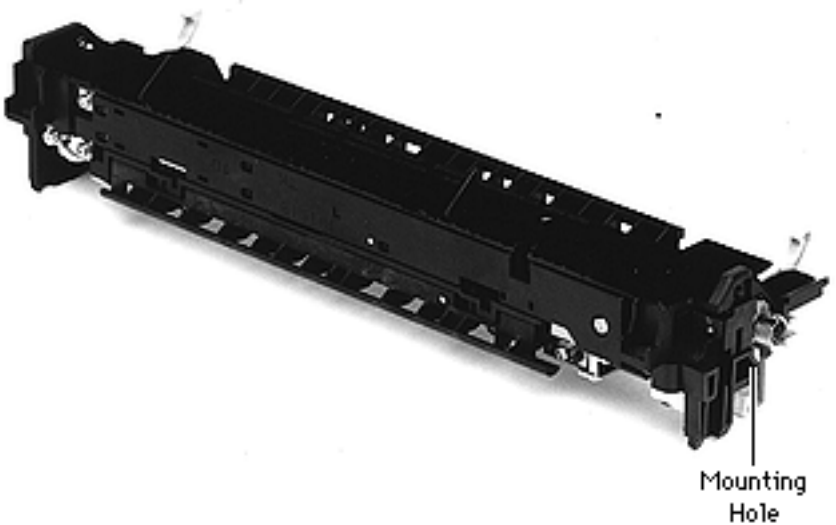
silkscreen part number is QG2-2043. For additional information refer to the StyleWriter manual on the Service Source CD.

Printers

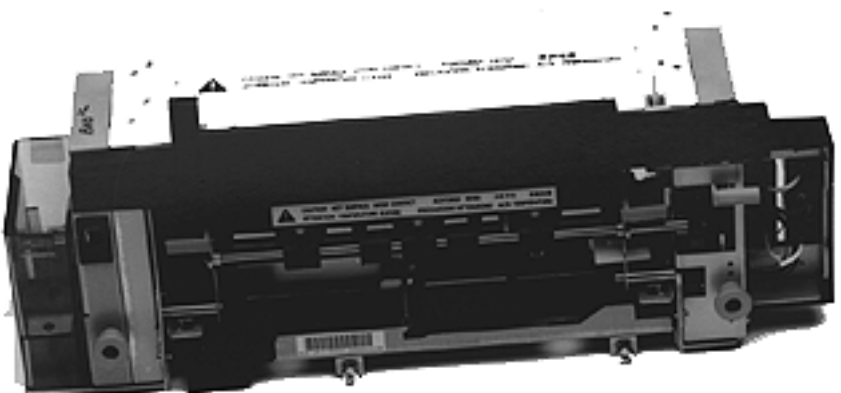
Fuser/Transfer Components

Apple Personal LaserWriter Fuser (220/240 V) **661-0575**

The mounting hole must be in the position shown.



Color LaserWriter 12/600 PS Fuser Assembly, 110 V **661-0900**



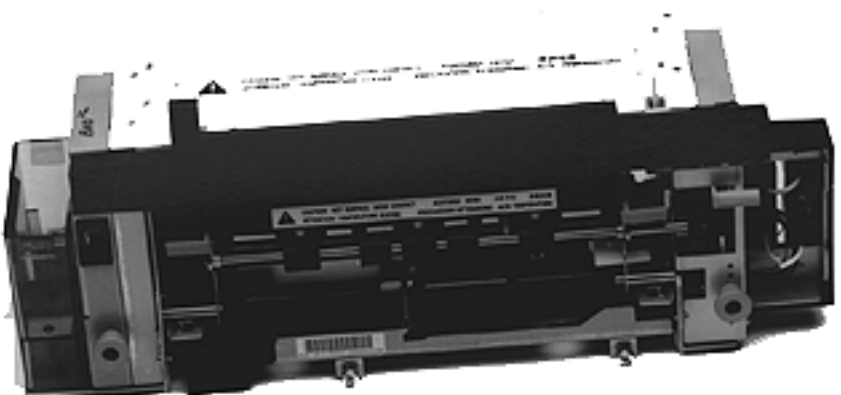
The voltage designation for the fuser assembly, 110 V, is located on the bar code label.

Before returning the fuser to Apple be sure to extract all the oil and insert foam stopper in oil well, as instructed in Service Source. Do NOT return the oil bottle.

Use only the special packaging that comes with the exchange

module. Failure to use special packaging may result in a packaging noncompliance charge.

Color LaserWriter 12/600 PS Fuser Assembly, 220 V **661-0901**



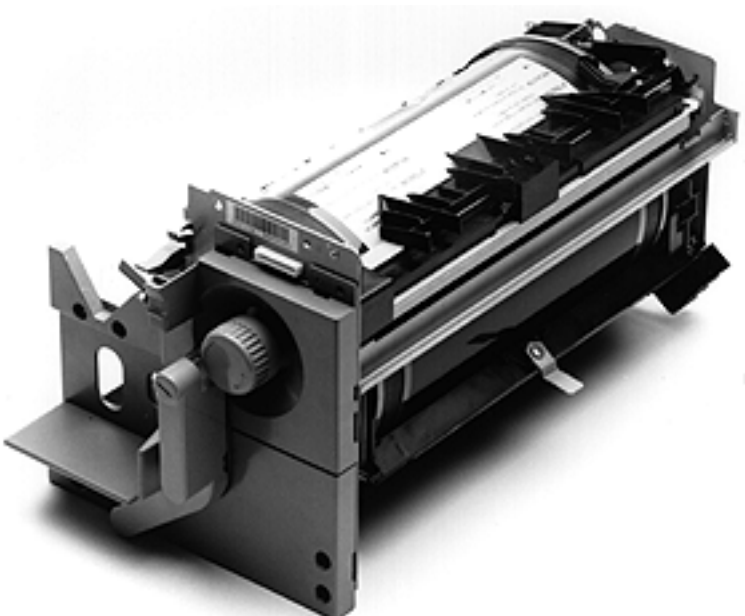
The voltage designation for the fuser assembly, 220 V, is located on the bar code label.

Before returning the fuser to Apple be sure to extract all the oil, and insert foam stopper in oil well, as instructed in Service Source. Do NOT return the oil bottle.

Use only the special packaging that comes with the exchange

module. Failure to use special packaging may result in a packaging noncompliance charge.

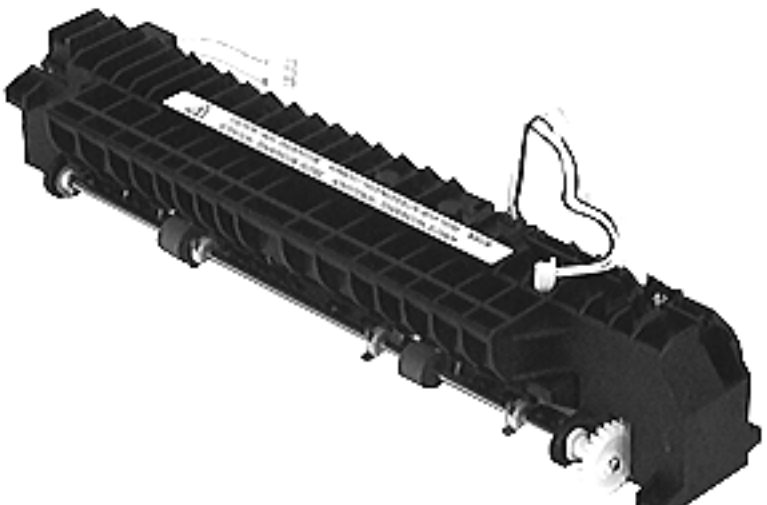
Color LaserWriter 12/600 PS Transfer Drum Assembly **661-0906**



Use the cotton gloves provided with the exchange module when handling the assembly. Do NOT touch the transfer drum. Use only the special packaging that comes with the exchange module.

Failure to use special packaging may result in a packaging noncompliance charge.

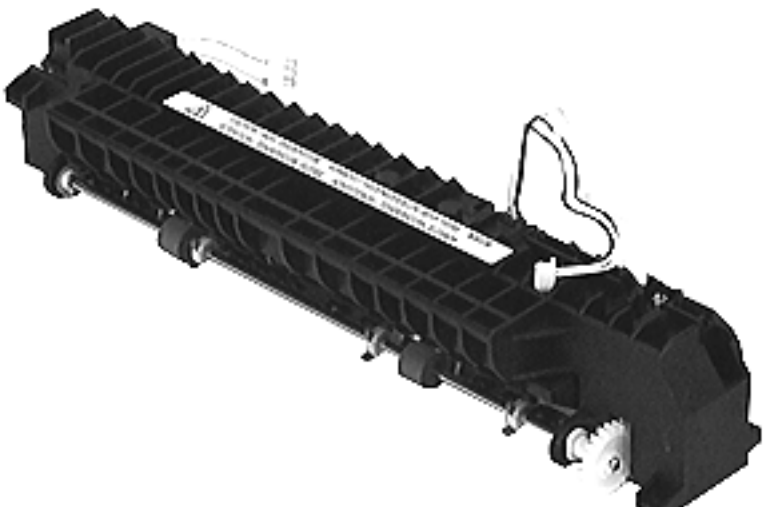
LaserWriter 12/640 PS, Fuser Assembly (110V) **661-1098**



The fuser pressure roller is not included in the fuser assembly but is available separately as part of the fuser pressure roller kit (P/N 076-0537).

A label designating 110 or 220 voltage appears on the fuser assembly.

LaserWriter 12/640 PS, Fuser Assembly (220V) **661-1099**

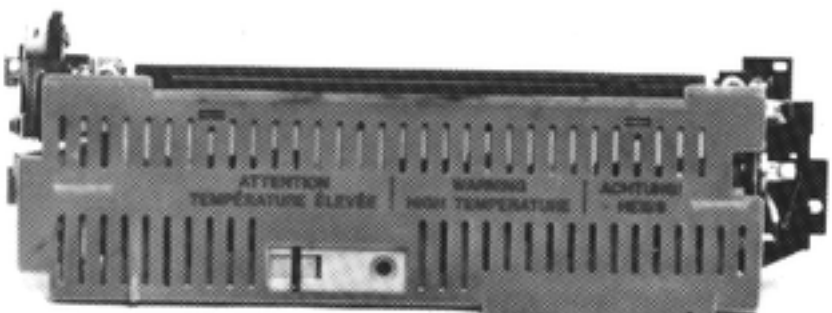


The fuser pressure roller is not included in the fuser assembly but is available separately as part of the fuser pressure roller kit (P/N 076-0537).

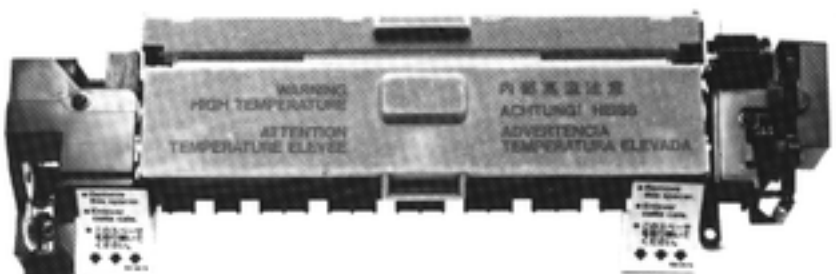
A label designating 110 or 220 voltage appears on the fuser assembly.

LaserWriter Fuser Assembly, 115 V **661-0450**

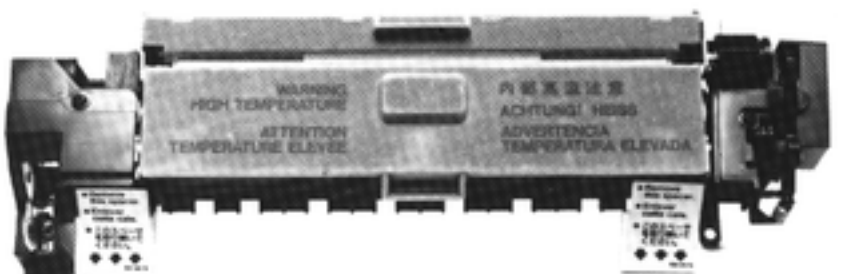
Remove the cleaning belt before returning the fuser assembly to Apple.



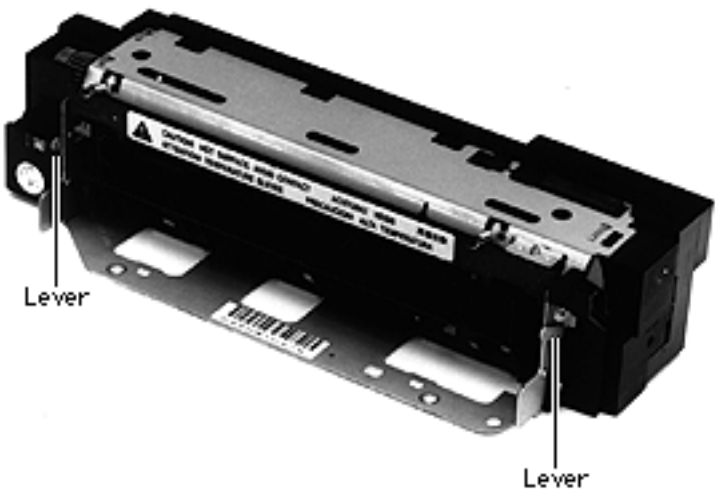
LaserWriter II Fuser Assembly (220/240 V) **661-0444**



LaserWriter II Fuser Assembly, 110 V **661-0440**



LaserWriter Pro 600/630 Fuser Assembly, 110/115 V **661-0805**



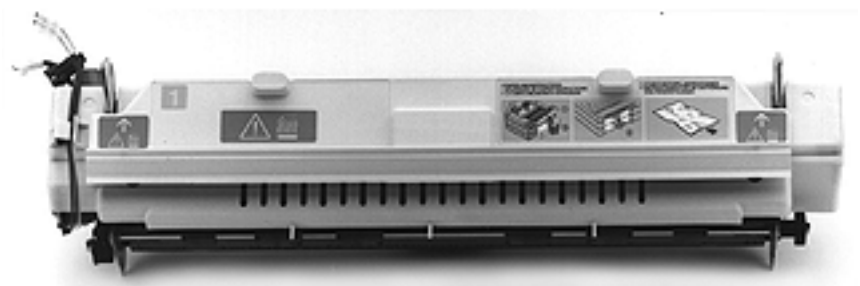
The LaserWriter Pro 600/630 fuser assemblies (P/Ns 661-0805 and 661-0806) and the LaserWriter 16/600 PS fuser assemblies (P/Ns 661-0091 and 661-0092) are similar.

The LaserWriter Pro 600/630 fuser assembly has two small metallic levers on each side of the fuser. The LaserWriter 16/600

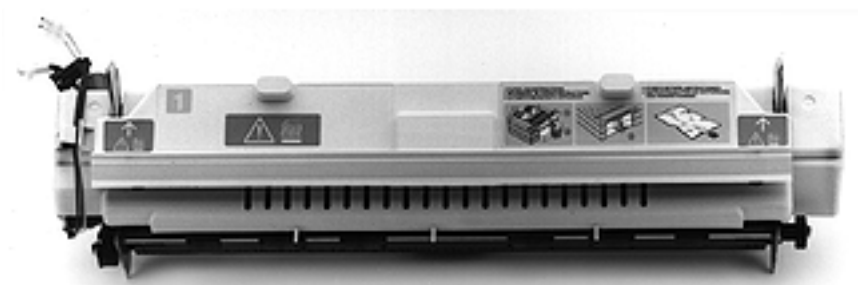
PS fuser assembly has two large green plastic levers. Please return the fuser assembly with the pressure roller levers in the up position.

LaserWriter Pro 600/630 Fuser Assembly, 220/240 V **661-0806**

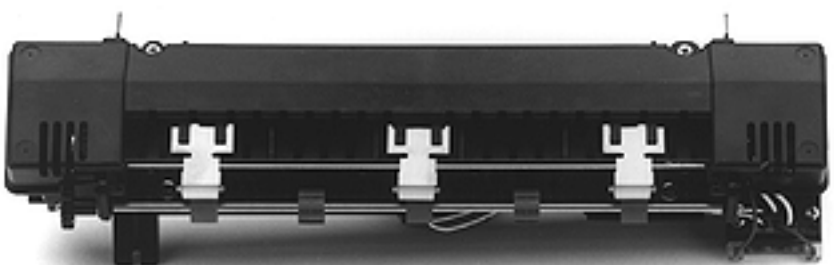
LaserWriter Pro 810 Fuser (110/115 V) **661-0857**



LaserWriter Pro 810 Fuser, 220 V **661-0858**



LaserWriter Select 360 Fuser Assembly, 115 V **661-0825**



LaserWriter Select 360 Fuser, 220 V **661-0826**

LaserWriter Select Fuser Assembly (110/115 V) **661-2008**

LaserWriter Select Fuser Assembly (220/240 V) **661-2009**

Personal LaserWriter 300/320, LaserWriter 4/600
PS Fuser Assembly, 110V

661-0025

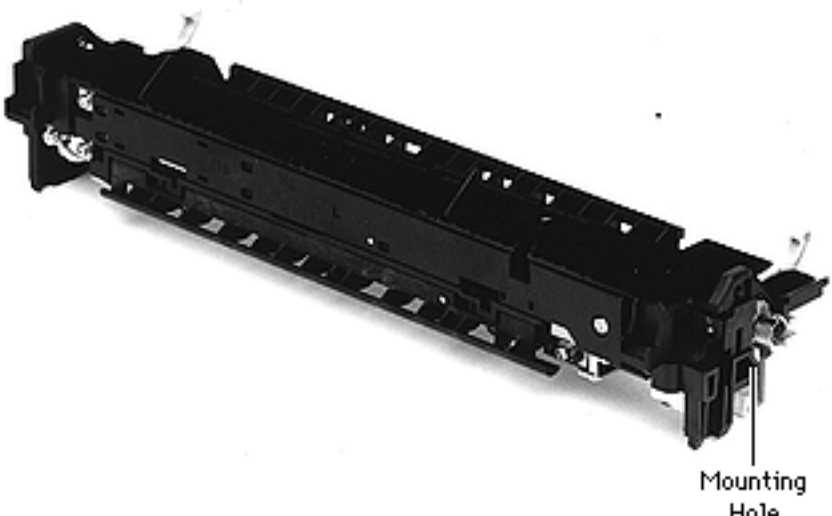
The voltage designation,110 V is located on the bar code label.

Personal LaserWriter 300/320, LaserWriter 4/600
PS Fuser Assembly, 220V

661-0026

The voltage designation, 220 V, is located on the bar code label.

Personal LaserWriter Fuser (110/115 V) **661-0568**

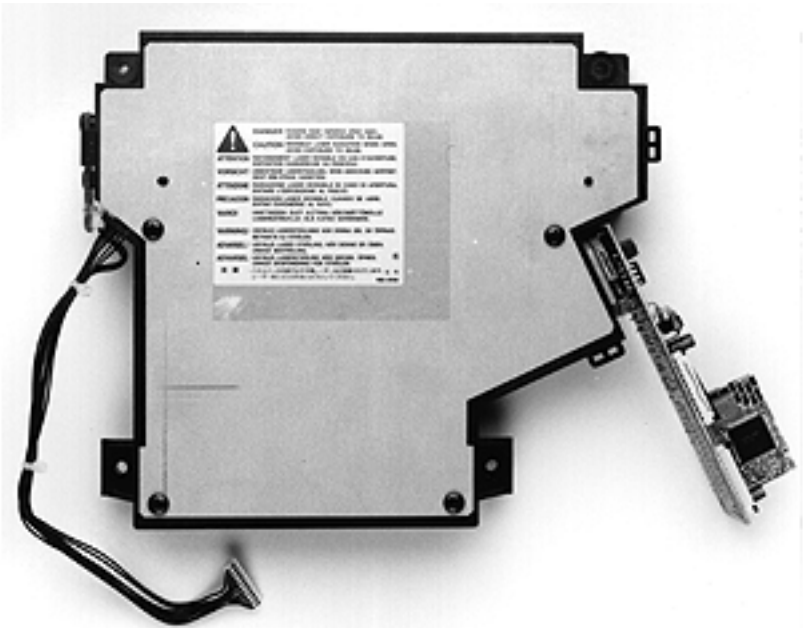


The mounting hole must be in the position shown. The distance between the mounting holes should measure not more than 12” hole edge to hole edge.

Printers

Laser/Scanner Components

Color LaserWriter 12/600 PS Laser/Scanner Assembly **661-0902**



Because of the delicate nature of the laser printed circuit board, use only the special packaging that comes with the exchange module. Failure to use special packaging may result in a packaging noncompliance charge.

LaserWriter 16/600 PS Laser/Scanner Assembly **661-0093**

The LaserWriter 16/600 PS laser/scanner assembly and the LaserWriter Pro 600/630 laser/scanner assembly (P/N 661-0801) are similar.

On the LaserWriter 16/600 PS laser/scanner assembly, connector J151 is located in a square recessed area that is open on the side facing the laser circuit board.

On the LaserWriter Pro 600/630, connector J151 is located in a rectangular recessed area that is fully enclosed.

LaserWriter 4/600 PS Laser/Scanner Assembly **661-0202**

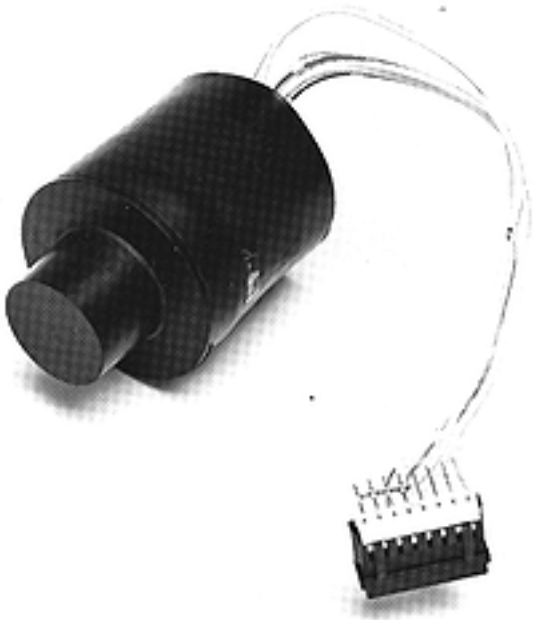
The LaserWriter 4/600 PS laser/scanner assembly is similar to the Personal LaserWriter 300 laser/scanner assembly (P/N 661-0027). The LaserWriter 4/600 PS scanner assembly has part number RG5-0800 located on the bar code label.

The Personal LaserWriter 300 scanner assembly has

part number RG5-0662 located on the bar code label.

LaserWriter II Laser/Scanner Unit **661-0423**

LaserWriter Laser Unit **661-0277**



To prevent ESD damage, use the shorting connector from the service module to short pin 4 to pin 6 before shipping the unit.

LaserWriter Pro 600/630 Laser/Scanner Assembly **661-0801**

This LaserWriter Pro 600/630 assembly and the LaserWriter 16/600 PS laser/scanner assembly (P/N 661-0093) are similar.

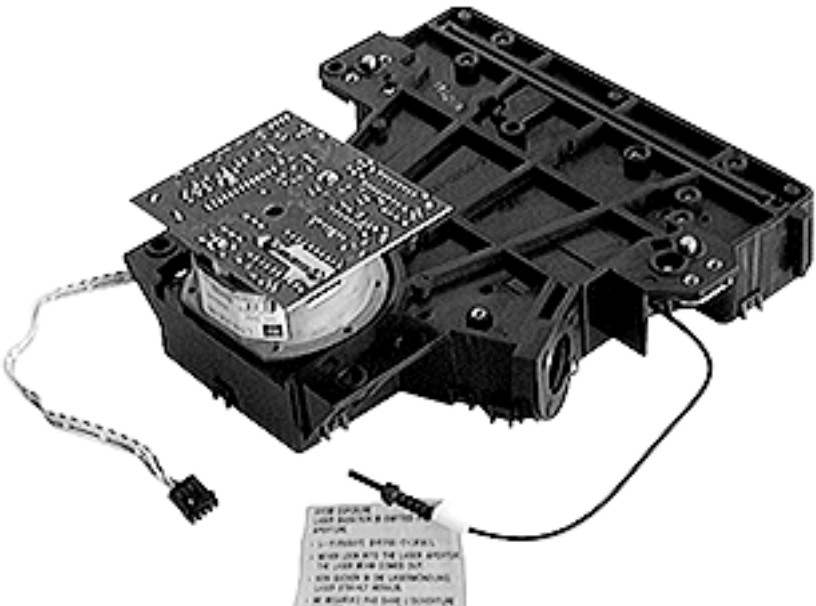
On this 600/630 laser/scanner assembly, connector J151 is located in a rectangular recessed area that is fully enclosed.

On the Laserwriter 16/

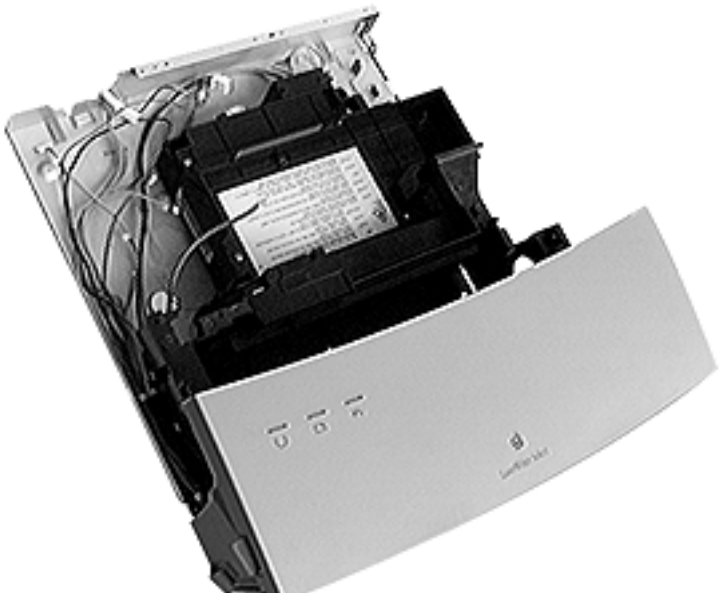
600 PS laser/scanner assembly, connector J151 is located in a square recessed area that is open on the side facing the laser circuit board.

LaserWriter Pro 810 Laser/Scanner Unit **661-0865**

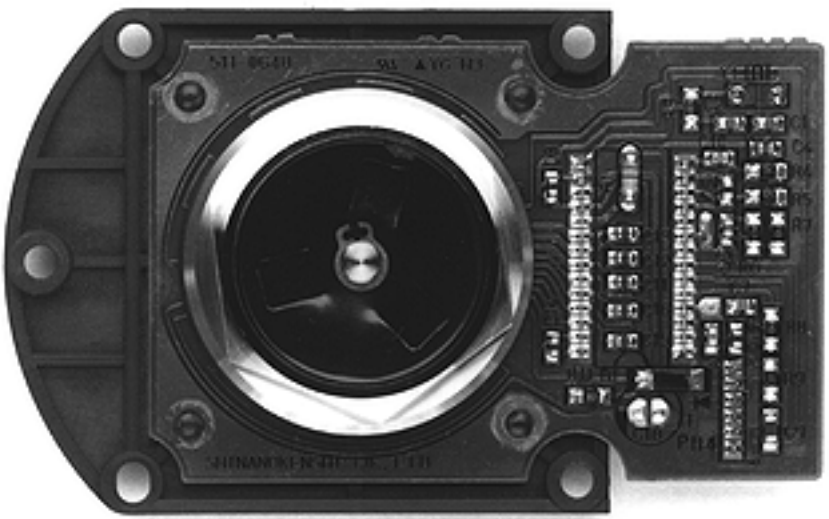
LaserWriter Scanner Unit, 300 dpi **661-0278**



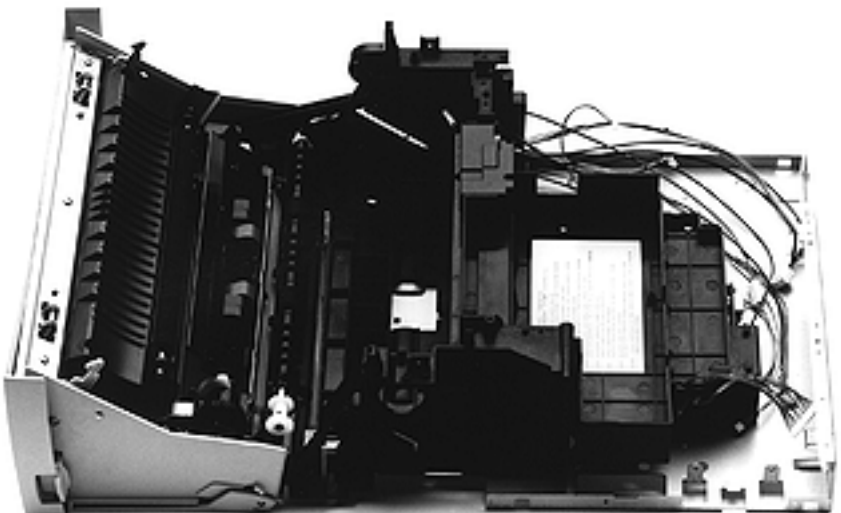
LaserWriter Select 360 Laser Optic Assembly **661-0827**



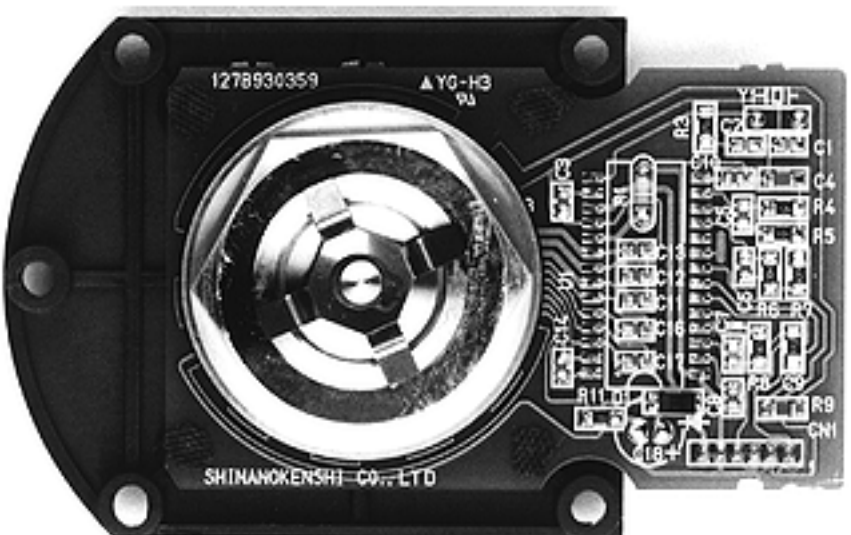
LaserWriter Select 360 Scanner Motor **661-0828**



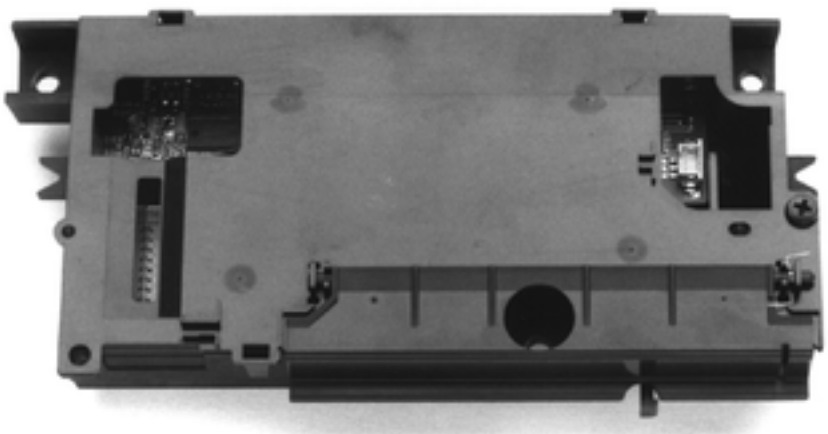
LaserWriter Select Laser Optic Assembly **661-2003**



LaserWriter Select Scanner Motor **661-2004**

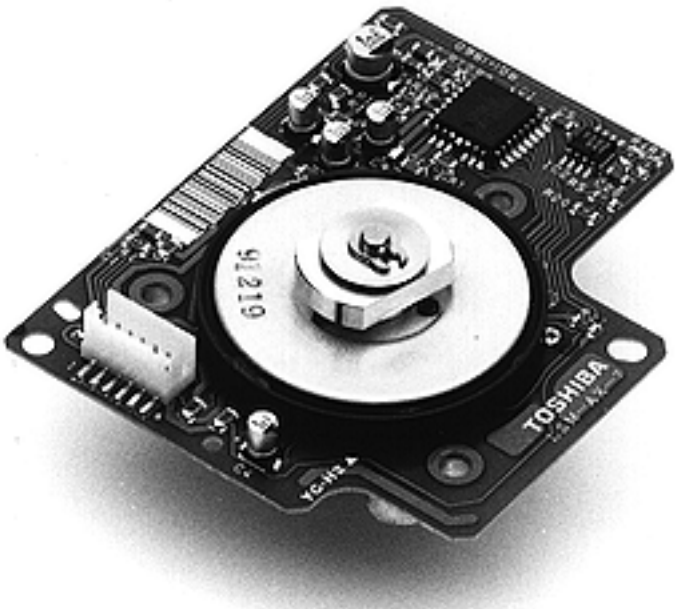


Personal LaserWriter 300 Laser/Scanner Assembly **661-0027**



Personal LaserWriter Laser Assembly **661-0571**

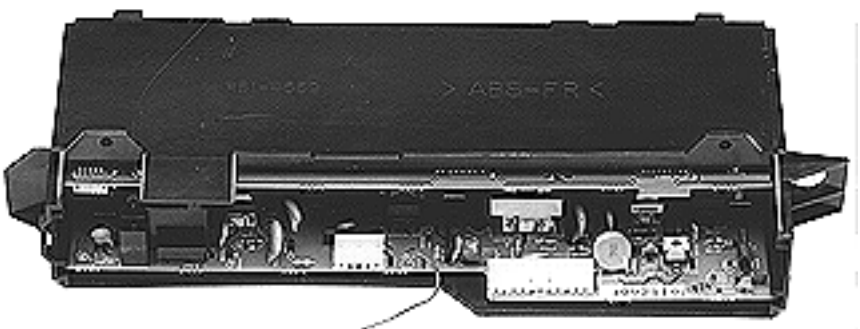
Personal LaserWriter Scanner Assembly **661-0572**



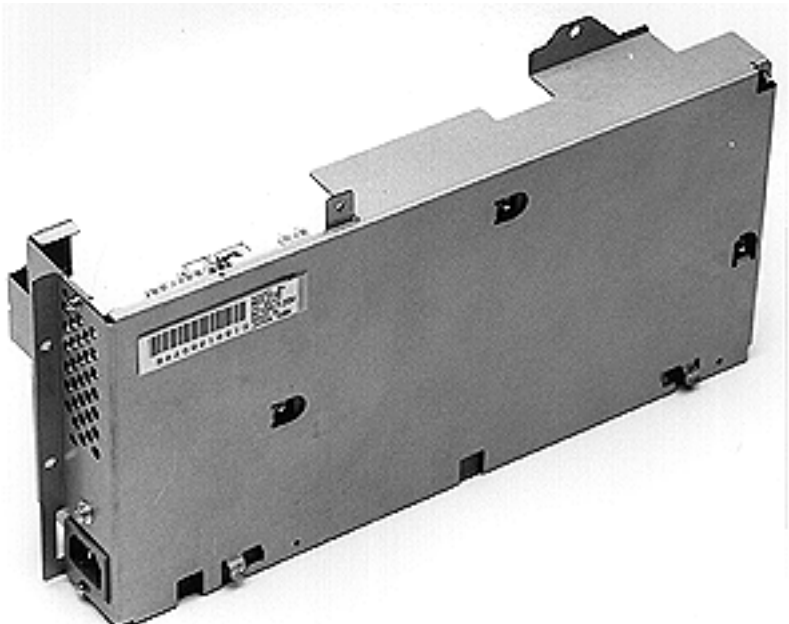
Printers

Printer Power Supplies

Color LaserWriter 12/600 PS High-Voltage Power Supply **661-0905**

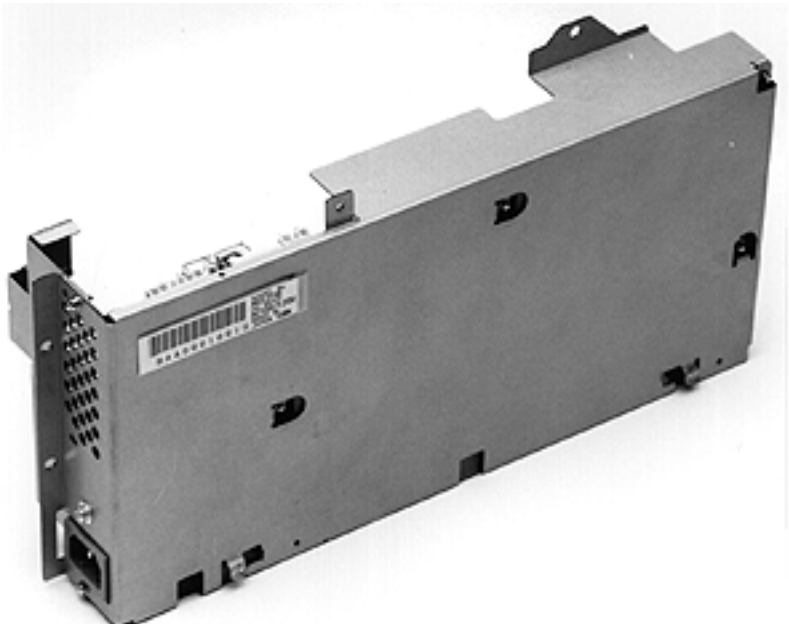


Color LaserWriter 12/600 PS Power Supply, 110 V **661-0903**



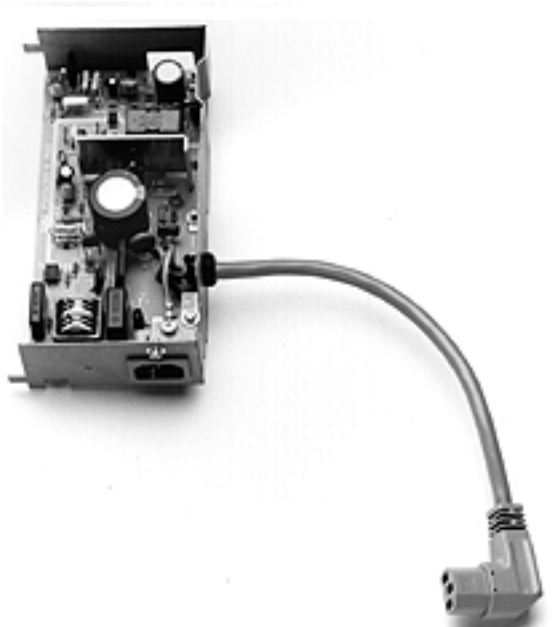
The voltage designation,110 V, is located on the bar code label.

Color LaserWriter 12/600 PS Power Supply, 220 V **661-0904**

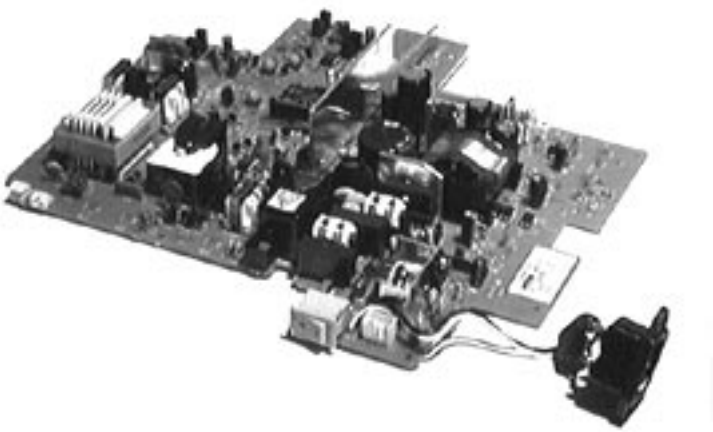


The voltage designation, 220 V, is located on the bar code label.

Color LaserWriter 12/600 PS Power Supply, Sheet Feeder, Universal **661-0932**



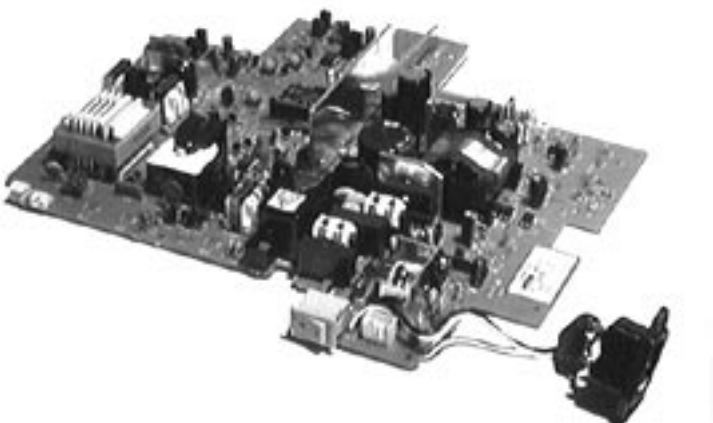
LaserWriter 12/640 PS, Power Supply Assembly (110V) **661-1100**



The power supply assembly is a printed circuit board that contains the high-voltage power supply, top cover interlock switch, three paper sensors, the main power switch and power inlet, fan connector, and various other components.

The power supply mounting shield is not included in this part.

LaserWriter 12/640 PS, Power Supply Assembly (220V) **661-1101**



The power supply assembly is a printed circuit board that contains the high-voltage power supply, top cover interlock switch, three paper sensors, the main power switch and power inlet, fan connector, and various other components.

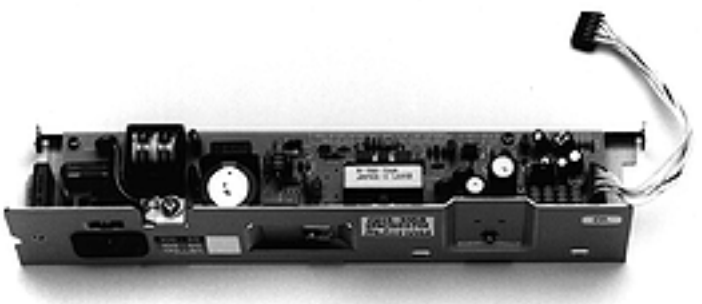
The power supply mounting shield is not included in this part.

Color StyleWriter 2400 Power Supply, 100/120 V

661-0162

This Apple Color StyleWriter 2400 power supply has a voltage identification label on the metal side panel.

Color StyleWriter 2400 Power Supply, 200/240 V **661-0163**

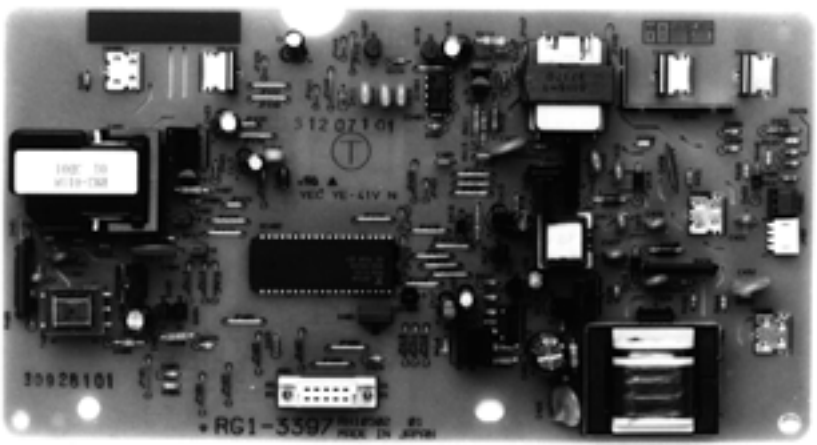


This Apple Color StyleWriter 2400 power supply has a voltage identification label on the metal side panel.

Color StyleWriter Pro Power Supply, 110 V **661-0877**

Color StyleWriter Pro Power Supply, 220/240 V **661-0878**

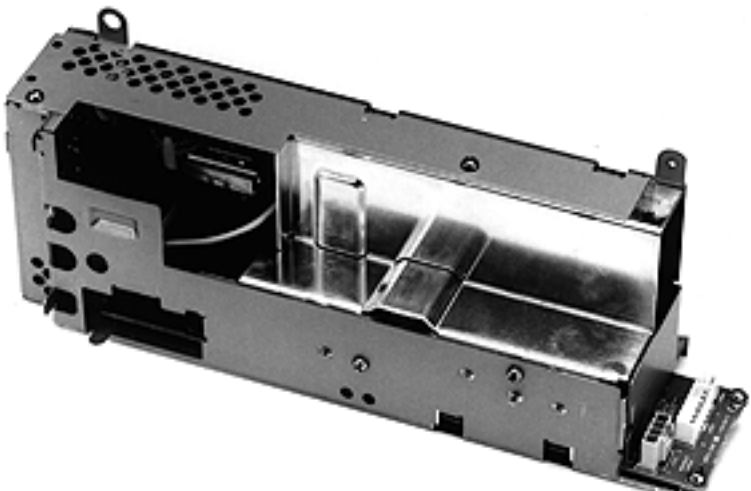
LaserWriter 16/600 PS High-Voltage Power Supply **661-0096**



The LaserWriter 16/600 PS high-voltage power supply and the LaserWriter Pro 600/630 high-voltage power supply (P/N 661-0804) are similar. This power supply has the vendor number RGI-3397 on the bottom of the power supply. The LaserWriter Pro 600/630 high-voltagepower supply has the vendor number RGI-0513.

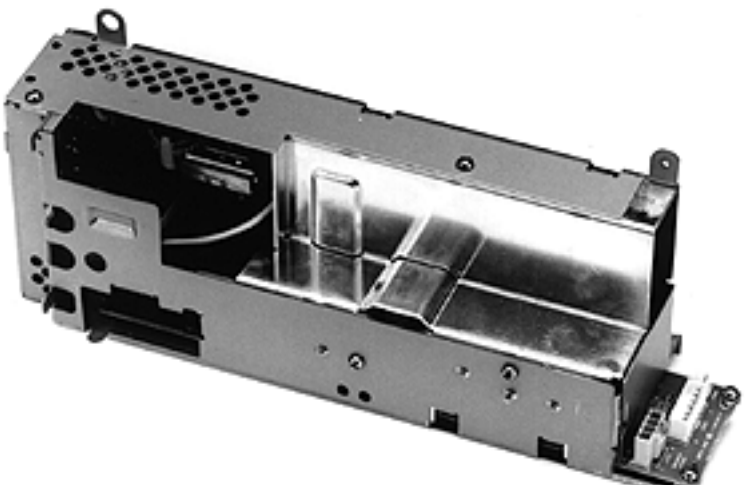
Do not return the plastic tray to Apple.

LaserWriter 16/600 PS Power Supply, 110/115 V **661-0097**



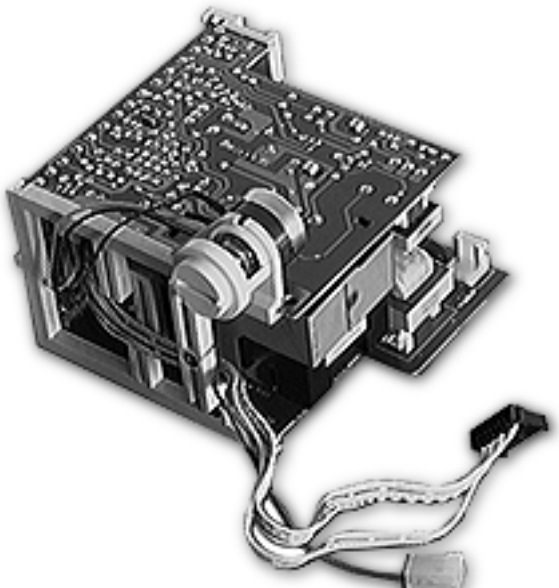
The LaserWriter 16/600 PS power supply and the LaserWriter Pro 600/630 power supply (P/N 661-0802) are similar. This power supply has two flanges at the top edge. The LaserWriter Pro 600/630 power supply does not have flanges.

LaserWriter 16/600 PS Power Supply, 220/240 V **661-0098**



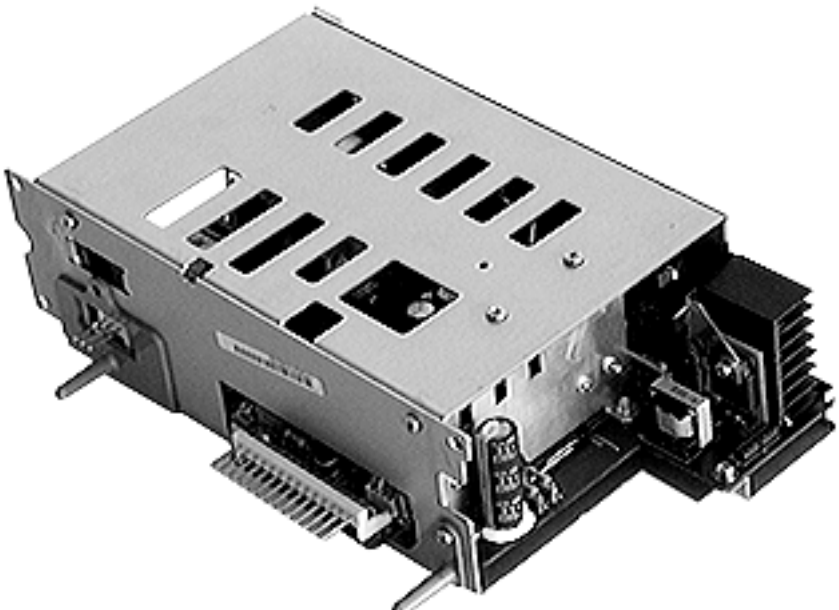
The LaserWriter 16/600 power supplies and the LaserWriter Pro 600/630 power supplies (P/N 661-0802 and 661-0803) are similar. The LaserWriter 16/600 PS power supplies have two flanges at the top edge. The LaserWriter Pro 600/630 power supplies do not have flanges.

LaserWriter High-Voltage Power Supply **661-0266**



LaserWriter II DC Power Supply

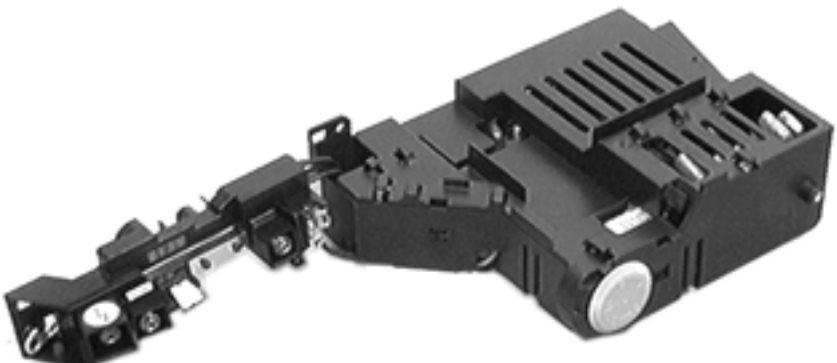
661-0424



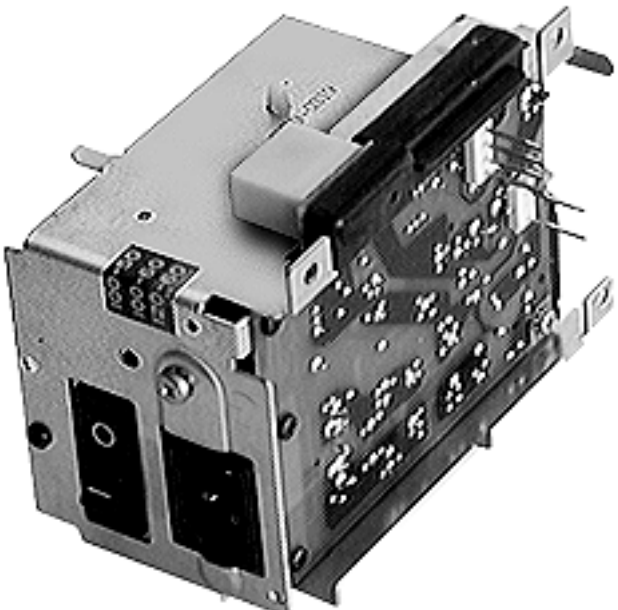
Remove the distribution PCB and cover (as shown) before you return this module to Apple.

The sticker on top indicates the voltage.

LaserWriter II High-Voltage Power Supply **661-0425**

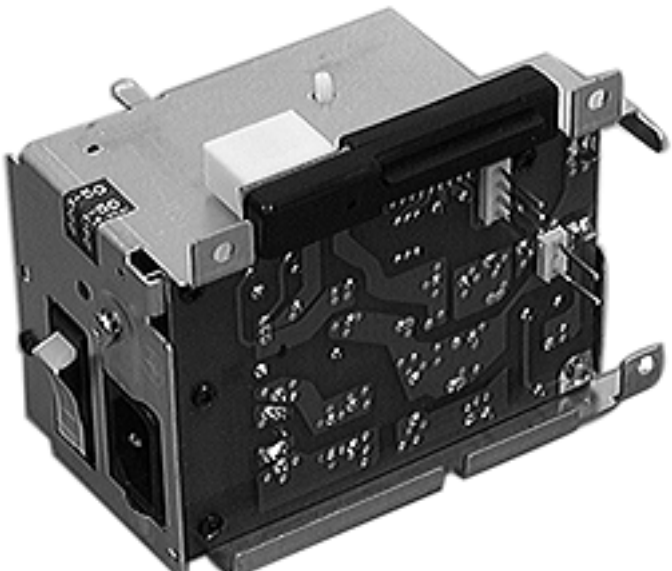


LaserWriter II Power Supply Block, 110 V **661-0427**



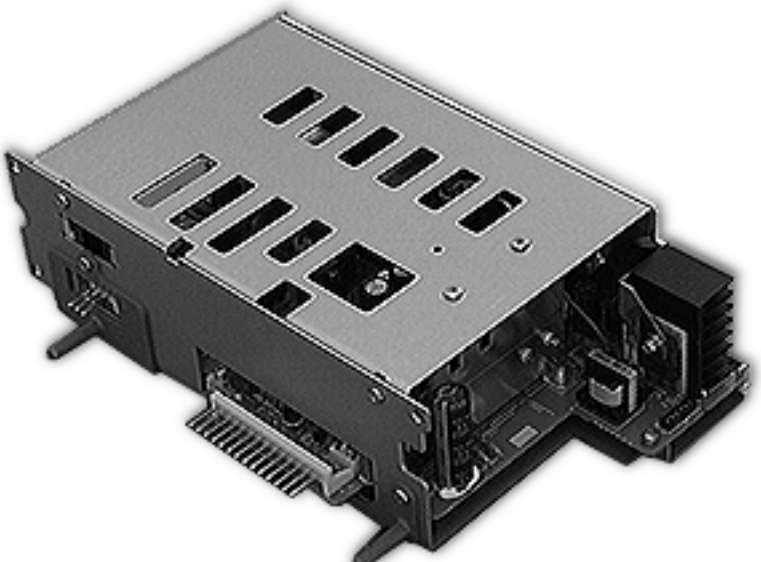
The sticker indicates the voltage.

LaserWriter II Power Supply Block, 220/240 V **661-0443**



The sticker indicates the voltage.

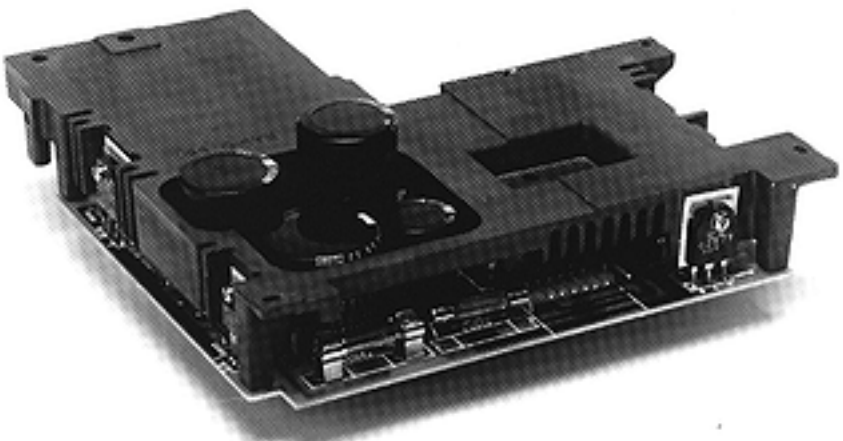
LaserWriter II Power Supply, 220/240 V **661-0442**



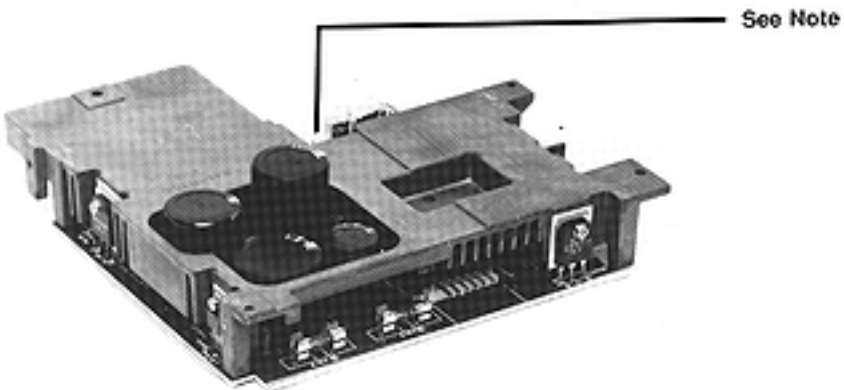
Remove the distribution PCB and cover (as shown) before you return this module to Apple.

The sticker on top indicates the voltage.

LaserWriter Power Supply/Motor Drive, 110 V **661-0273**



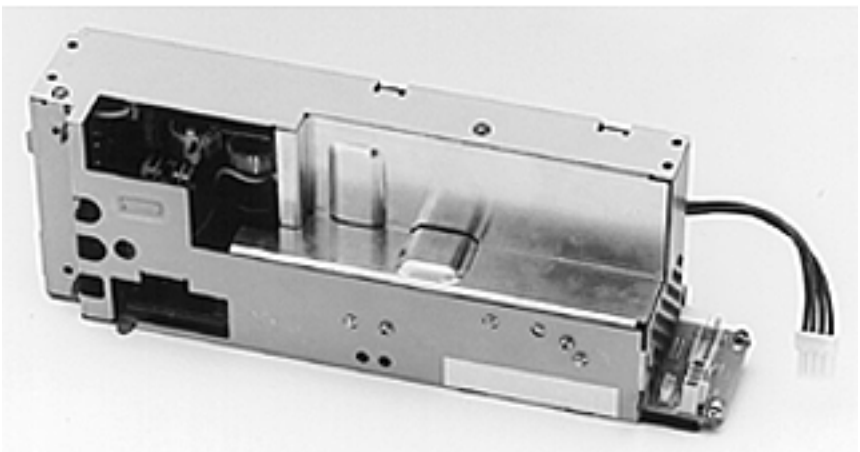
LaserWriter Power Supply/Motor Drive, 220 V **661-0274**



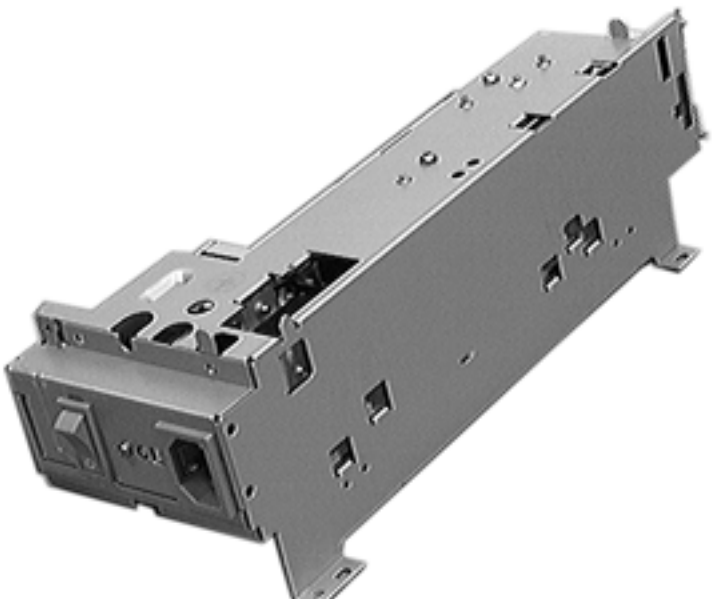
Presence of a relay in the above position indicates a 220/240 V power supply/motor drive.

LaserWriter Pro 600/630 High-Voltage Power Supply **661-0804**

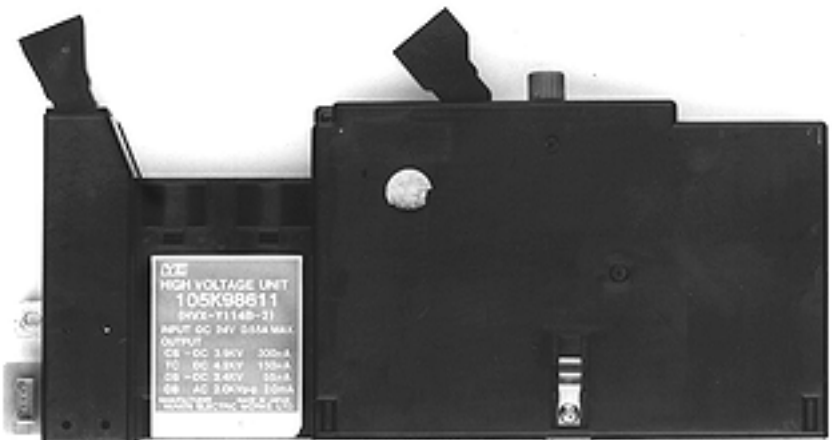
LaserWriter Pro 600/630 Power Supply, 110/115 V **661-0802**



LaserWriter Pro 600/630 Power Supply, 220/240 V **661-0803**

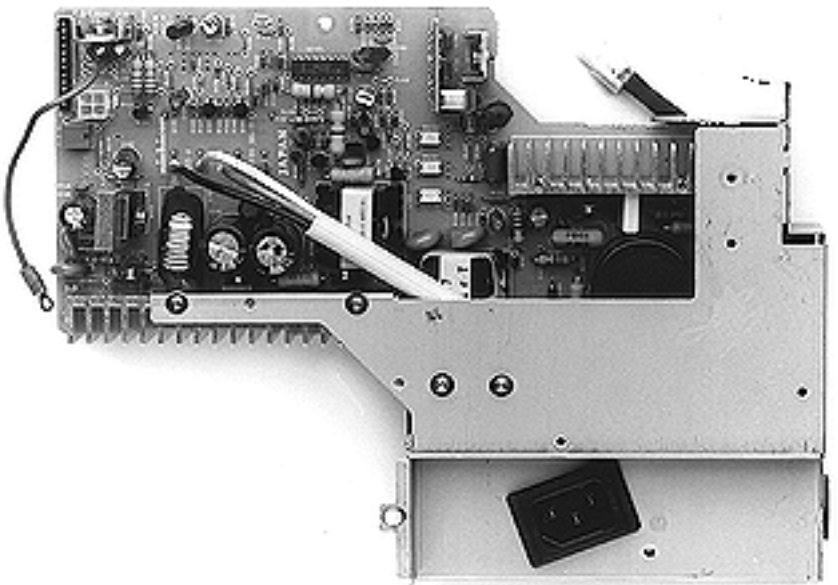


LaserWriter Pro 810 High-Voltage Power Supply **661-0860**



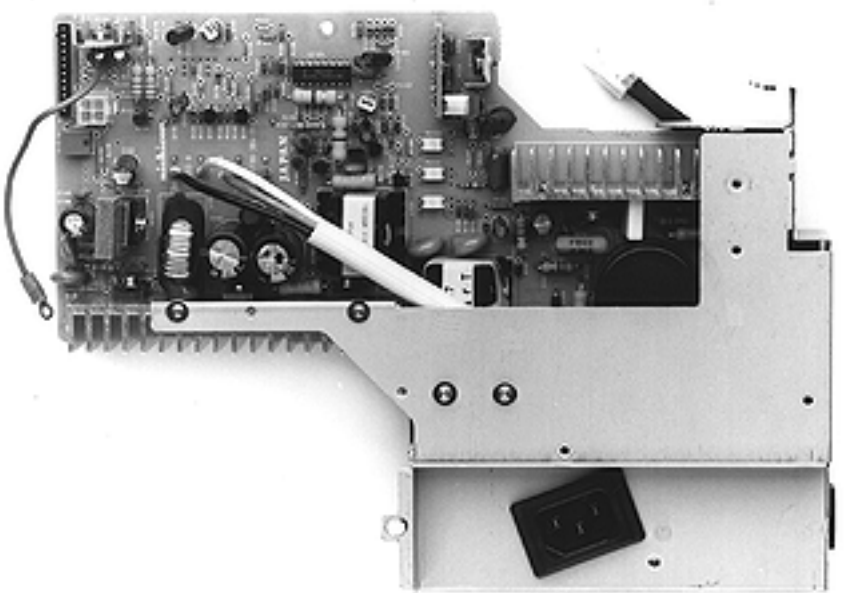
LaserWriter Pro 810 Power Supply, 115 V

661-0836

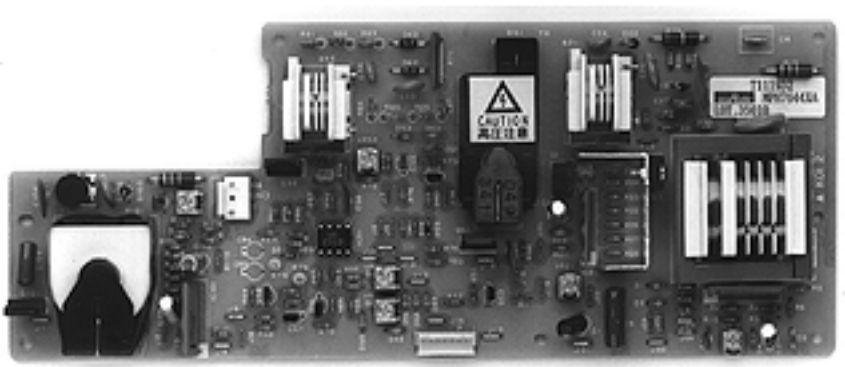


LaserWriter Pro 810 Power Supply, 220 V

661-0837

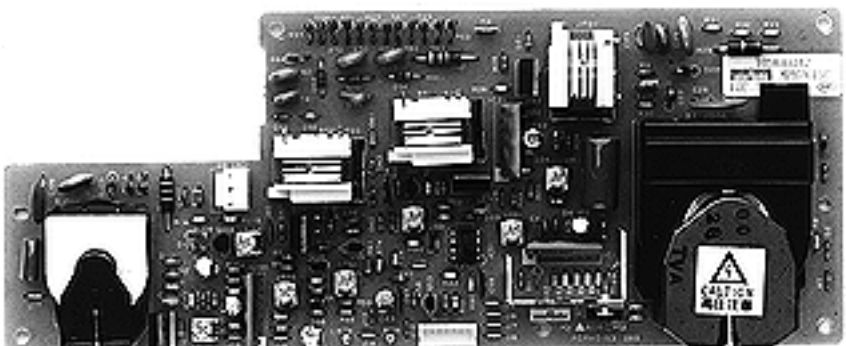


LaserWriter Select 360 High-Voltage Power Supply **661-0822**



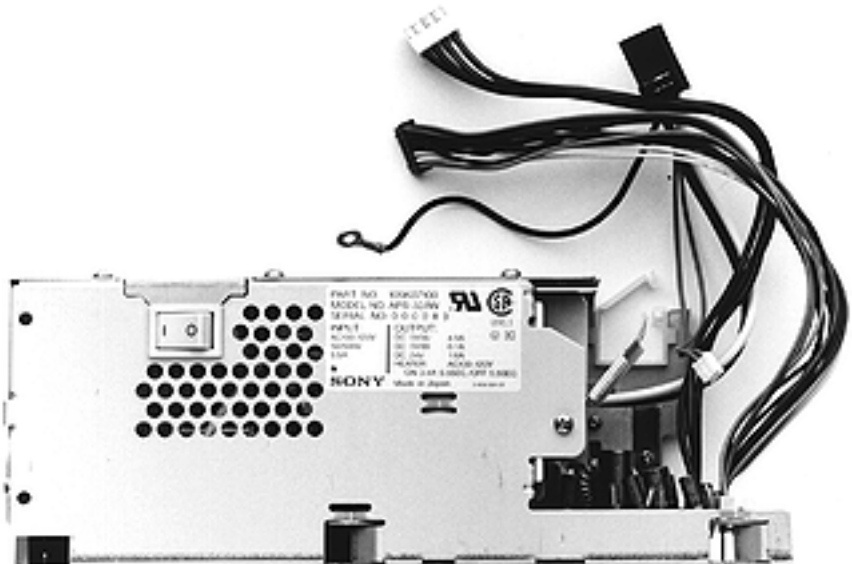
LaserWriter Select High-Voltage Power Supply **661-2005**

The high-voltage power supply does not ship with its plastic tray.

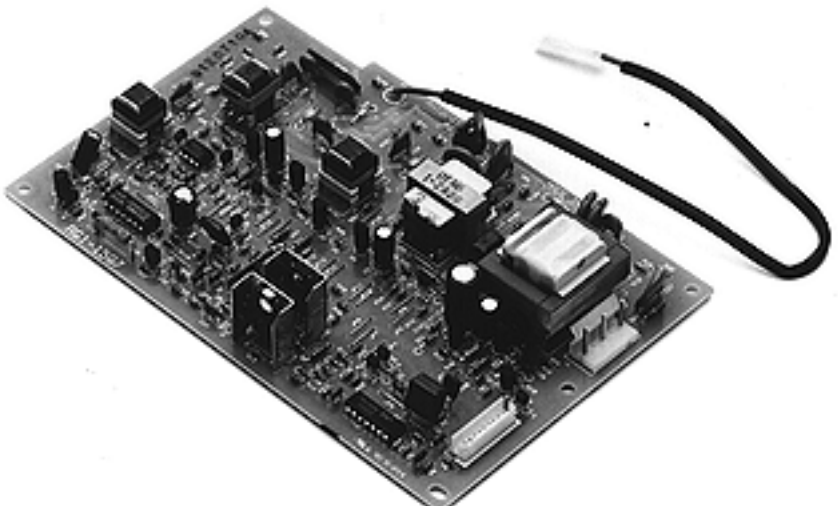


LaserWriter Select Power Supply, 110/115 V **661-2006**

LaserWriter Select Power Supply, 220/240 V **661-2007**

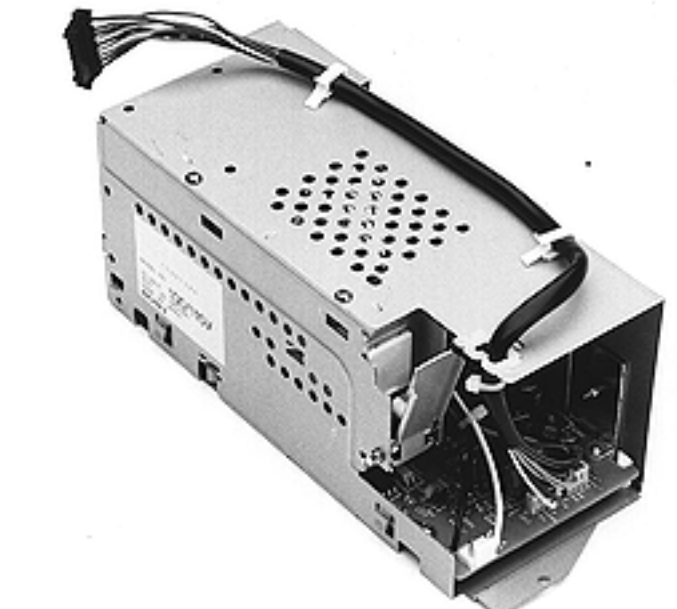


Personal LaserWriter High-Voltage Power Supply **661-0573**



The high-voltage power supply does not ship with the plastic tray or grounding plate. Retain these before returning the power supply.

Personal LaserWriter LS/L Power Supply, 110/115 V **661-0668**



The Personal LaserWriter LS power supply unit is not compatible with the Personal LaserWriter LS/L, SC, NT, or NTR.

The LaserWriter LS power supply unit has only one connector; the NT, SC, and NTR power supply unit has two.

Also, the Personal LaserWriter LS/L power supply unit has a

lower power rating.

You can distinguish the LS/L power supply from the original LS power supply by the presence of a green 5-volt line on the Personal LaserWriter LS/L power supply.

Personal LaserWriter NT, SC, & NTR Power Supply, 110/115 V **661-0569**

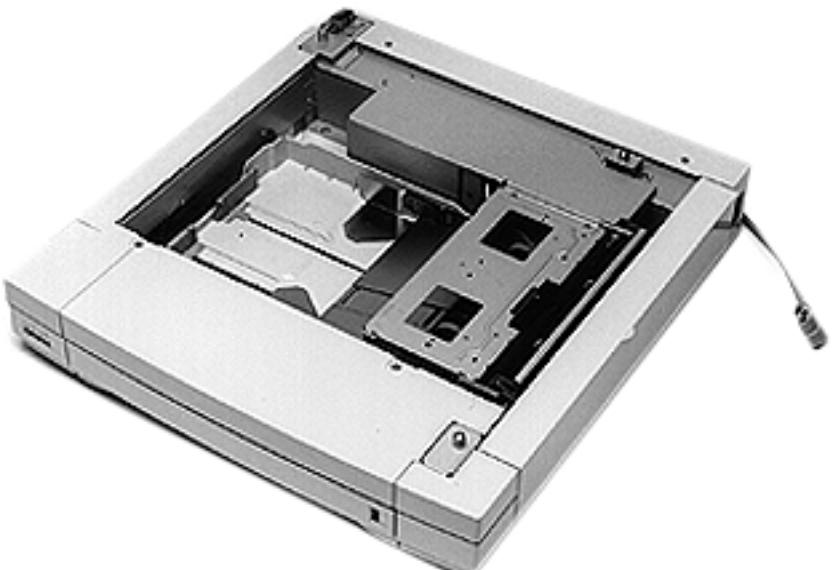
The Personal LaserWriter NT, SC, and NTR power supply unit is not compatible with the Personal LaserWriter LS or LS/L: this unit has two connectors; the LS and LS/L power supply units have only one.

Personal LaserWriter NT, SC, and NTR Power Supply (220/240V) **661-0574**

Printers

Sheet/Envelope Feeders

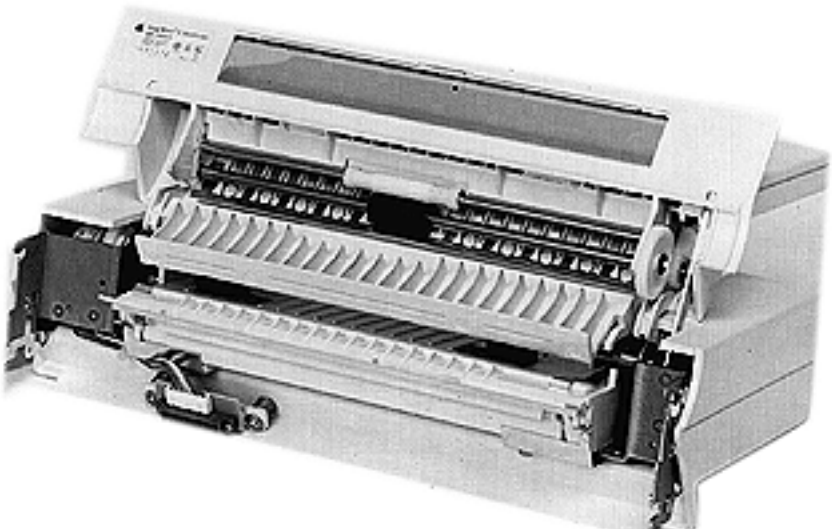
Color LaserWriter 12/600 PS Sheet Feeder, Whole Unit **661-0908**



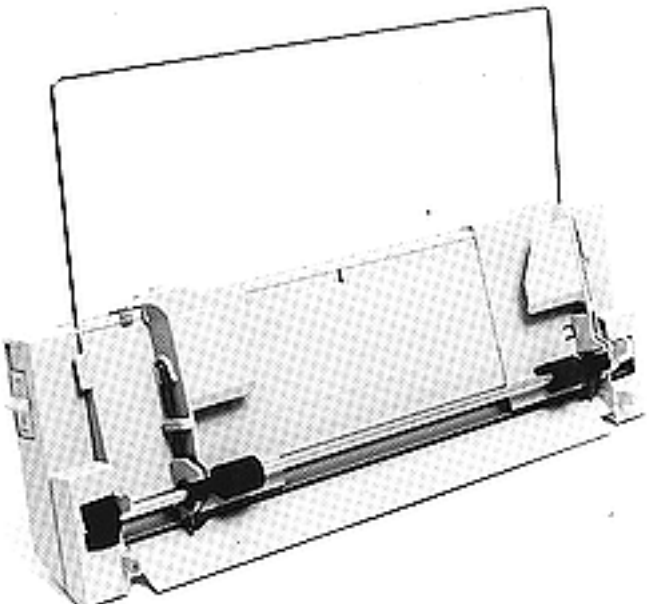
Return the sheet feeder with the universal cassette tray.

ImageWriter II Automatic Sheet Feeder (White) **661-0329**

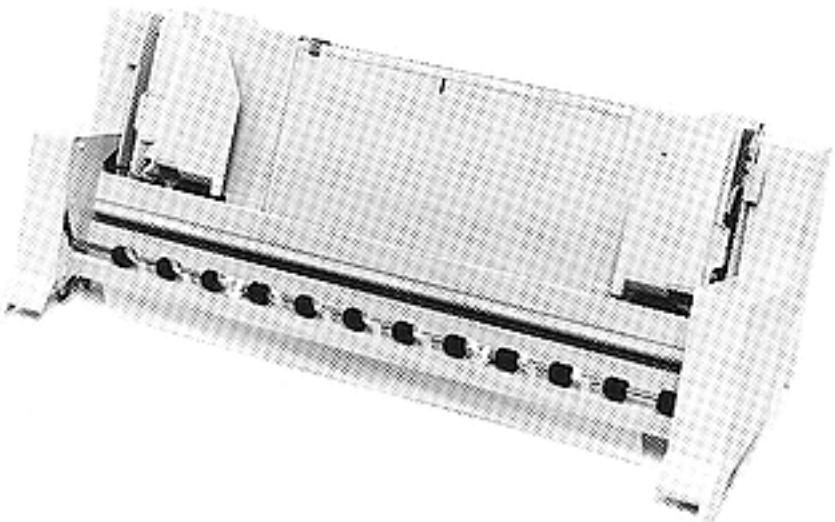
ImageWriter II/L Automatic Sheet Feeder (Platinum) **661-0401**



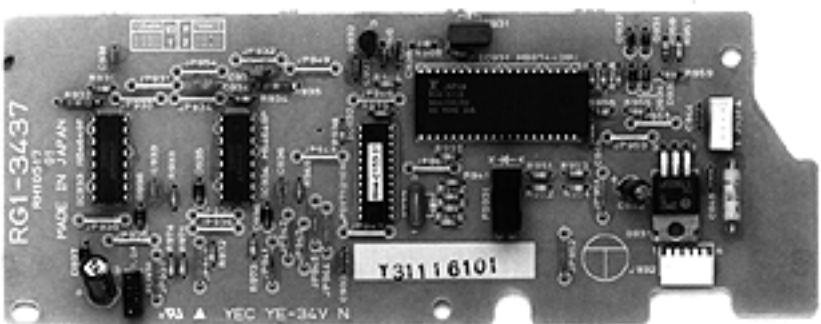
ImageWriter LQ Cut Sheet Feeder, Extension Bin **661-0447**



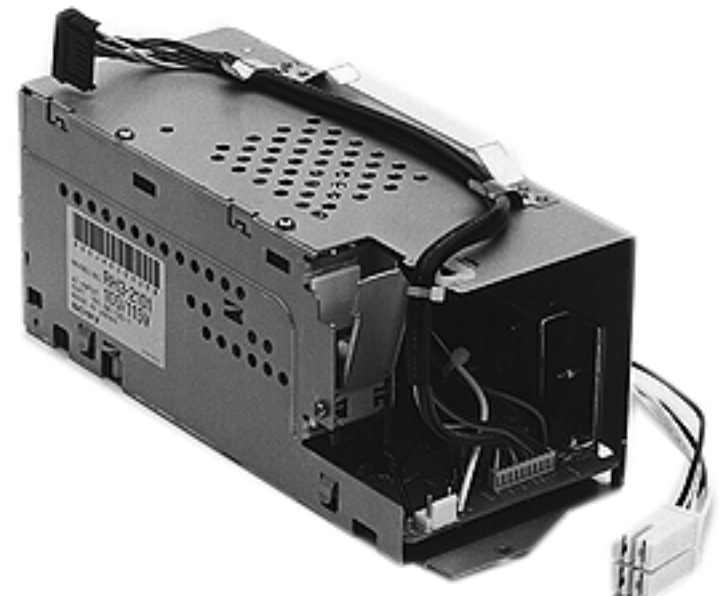
ImageWriter LQ Cut Sheet Feeder, Single Bin **661-0446**



LaserWriter 16/600 PS Envelope Feeder Controller Board **661-0123**



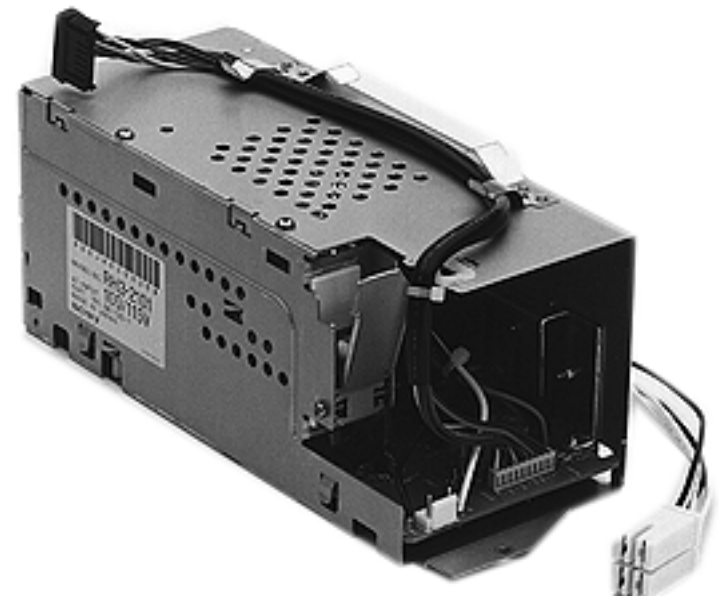
LaserWriter 16/600 PS Envelope Feeder Power Supply, 110/115 V **661-0636**



The Personal LaserWriter LS power supply unit is not compatible with the Personal LaserWriter LS/L, SC, NT, or NTR.

The LaserWriter LS power supply unit has only one connector; the NT, SC, and NTR power supply unit has two. Also, the Personal LaserWriter LS power supply unit has a lower power rating.

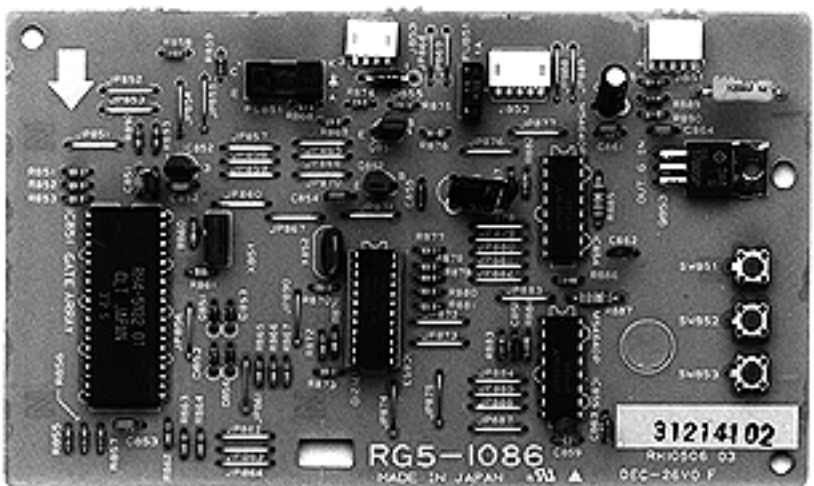
LaserWriter 16/600 PS Envelope Feeder Power Supply, 220/240 V **661-0637**



The Personal LaserWriter LS power supply unit is not compatible with the Personal LaserWriter LS/L, SC, NT, or NTR.

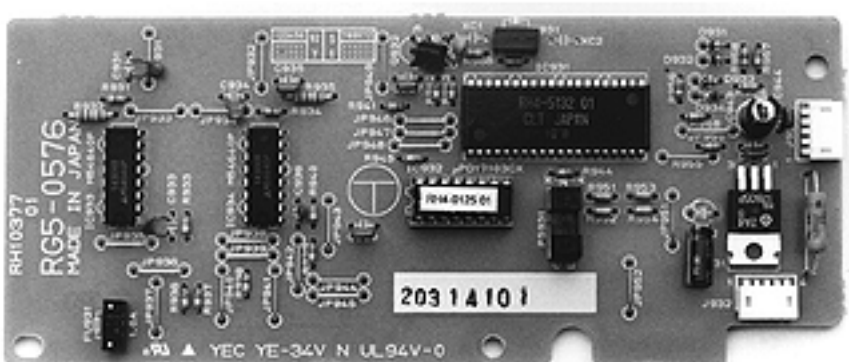
The LaserWriter LS power supply unit has only one connector; the NT, SC, and NTR power supply unit has two. Also, the Personal LaserWriter LS power supply unit has a lower power rating.

LaserWriter 16/600 PS Sheet Feeder Controller Board **661-0124**



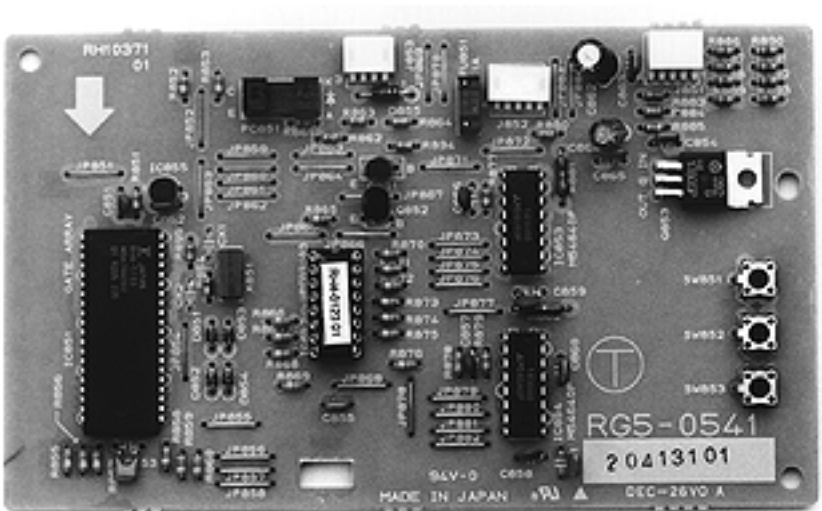
The LaserWriter 16/600 PS sheet feeder controller board and the LaserWriter Pro 600/630 sheet feeder controller board (P/N 661-0798) are similar. This board has the vendor number RG5-1086 on the bottom of the board. The LaserWriter Pro 600/630 board has the vendor number RG5-0541.

LaserWriter Pro 600/630 Envelope Feeder Controller Board **661-0797**



The LaserWriter Pro 600/630 envelope feeder controller board and the LaserWriter 16/600 PS envelope feeder controller board (P/N 661-0123) are similar. The LaserWriter Pro 600/630 board has the vendor number RG5-0576. The LaserWriter 16/600 PS board has the vendor number RG1-3437.

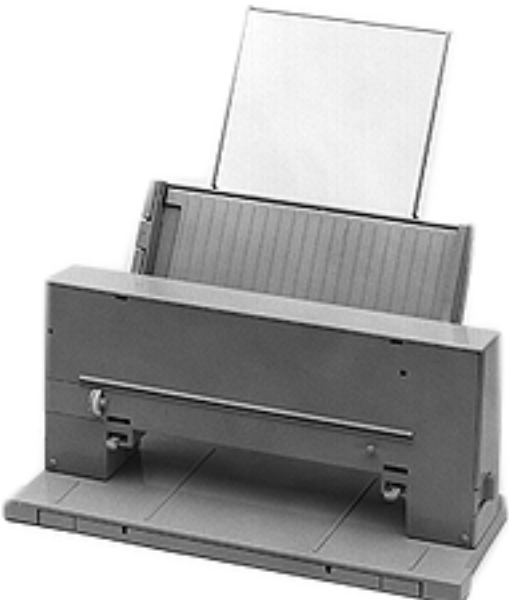
LaserWriter Pro 600/630 Sheet Feeder Controller Board **661-0798**



The LaserWriter Pro 600/630 envelope feeder controller board and the LaserWriter 16/600 PS envelope feeder controller board (P/N 661-0123) are similar. The LaserWriter Pro 600/630 board has the vendor number RG5-0576. The LaserWriter 16/600 PS board has the vendor number RG1-3437.

Portable StyleWriter Automatic Sheet Feeder **661-0831**

StyleWriter Cut Sheet Feeder **661-0628**



Remove the paper rod support from the cut sheet feeder, but be sure to include the paper rod support when you return the cut sheet feeder to Apple.

SPECIAL PACKAGING IS REQUIRED; failure to comply with these requirements may result in a packaging noncompliance charge. Please refer to the StyleWriter manual in

Service Source CD for information on special packaging and procedures.

Printers

Whole Units

LaserWriter II Engine (Whole Unit) (Discontinued)

661-0894

Remove the controller card before returning the LaserWriter II engine to Apple.

Portable StyleWriter Whole Unit **661-0830**

Before you return the Portable StyleWriter, remove the NiCad battery (Apple P/N 661-0866).

StyleWriter 1200 Whole Unit, 110 V

661-0242

StyleWriter 1200 Whole Unit, 220 V

661-0243

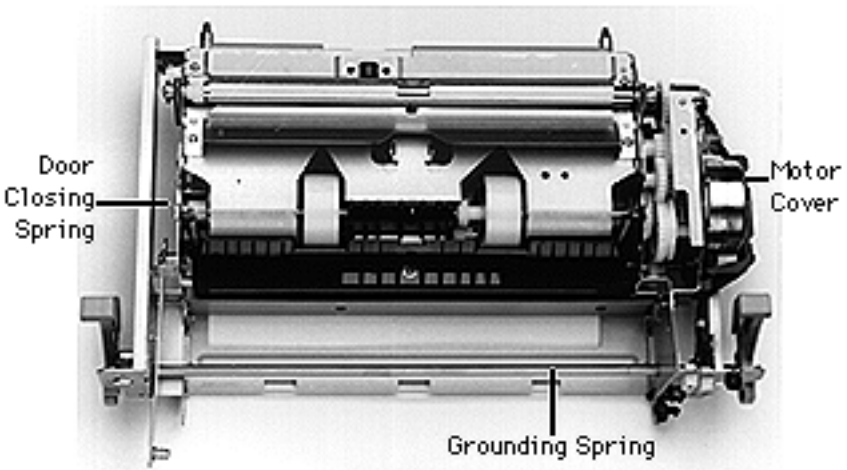
StyleWriter II Whole Unit, Ink Jet (120 V) **661-0785**

StyleWriter Whole Unit, Ink Jet (220 V) **661-1010**

Printers

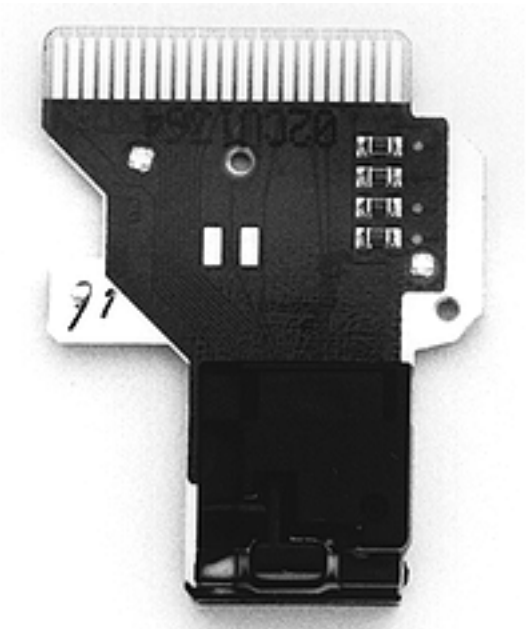
Miscellaneous/Options

Color LaserWriter 12/600 PS Cassette Pickup Assembly **661-0907**



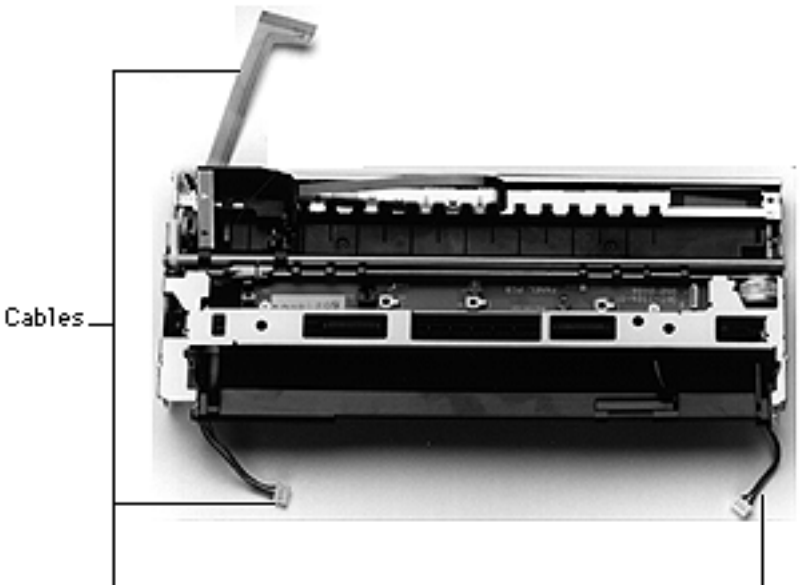
Remove the motor cover, grounding spring and the large door-closing spring at the top of the assembly before returning the cassette pickup assembly to Apple.

Color Printer Bubble Jet Head Unit **661-1685**



Color StyleWriter 2200 Battery, NiMH **661-0697**

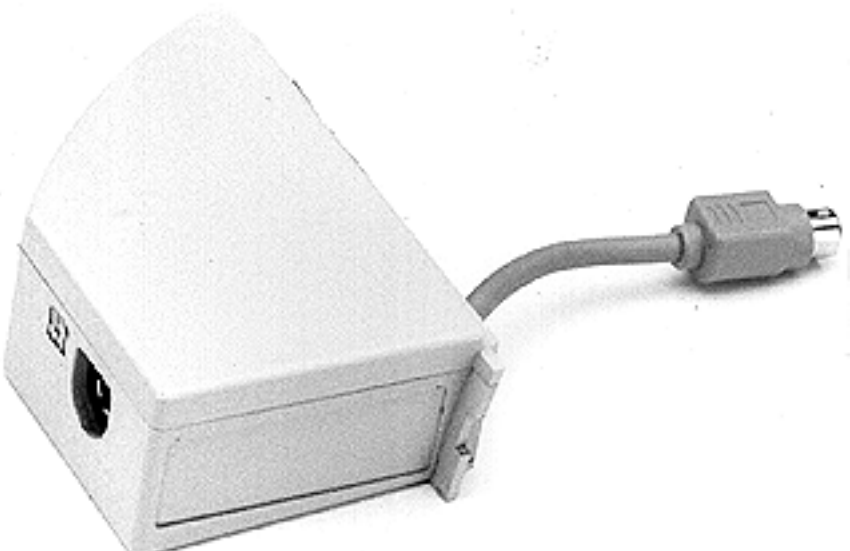
Color StyleWriter 2200 Print Unit Assembly **661-0240**



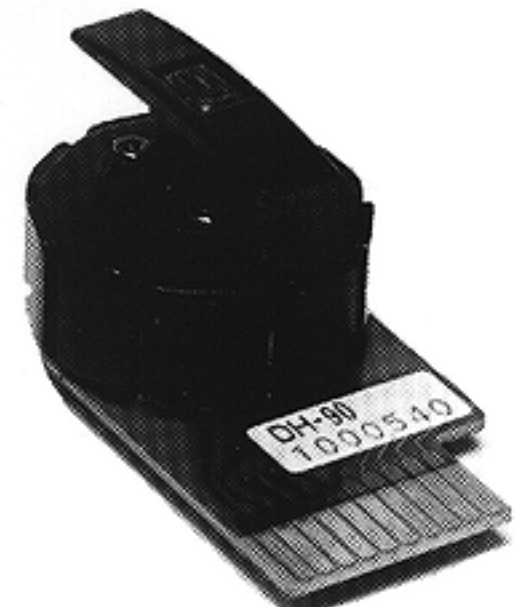
The replacement printer unit comes with the three cables shown. The ribbon cable (P/N 922-1481) is not included.

Transfer the ribbon cable from the customer's print unit to the replacement print unit. Do not return the ribbon cable to Apple.

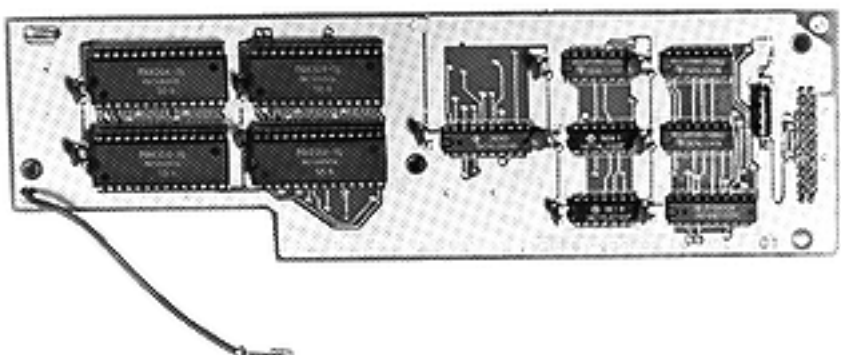
Color StyleWriter 2400 LocalTalk Option, Whole Unit **661-0197**



ImageWriter II/IIL Print Head **661-0316**

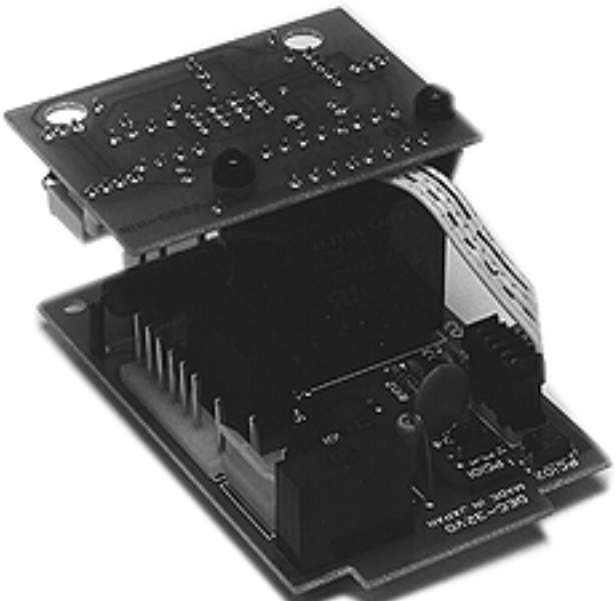


ImageWriter II 32K Option Board **661-0319**

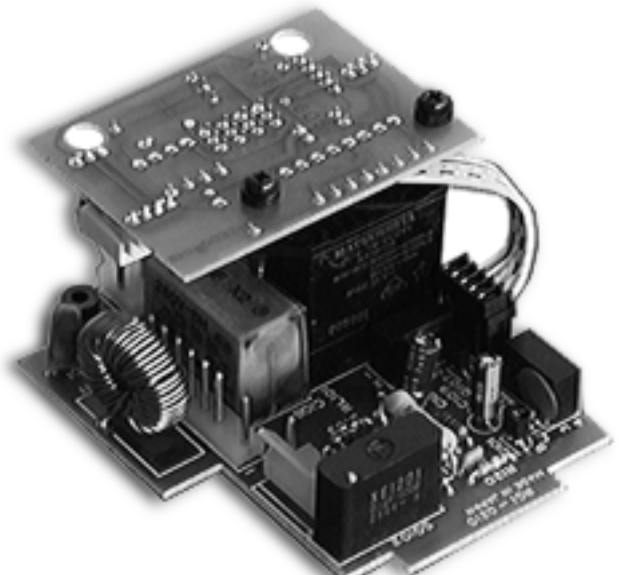


ImageWriter LQ Print Head **661-0405**

LaserWriter Driver, 110 V **661-0268**



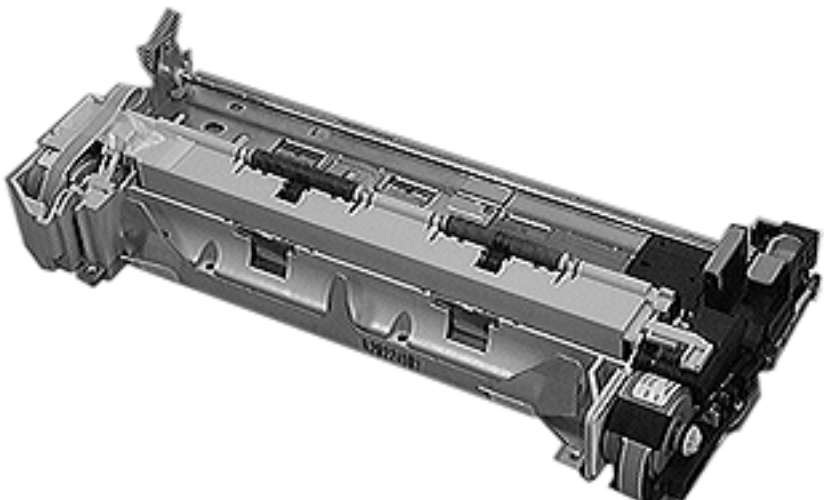
LaserWriter Driver, 220 V **661-0269**

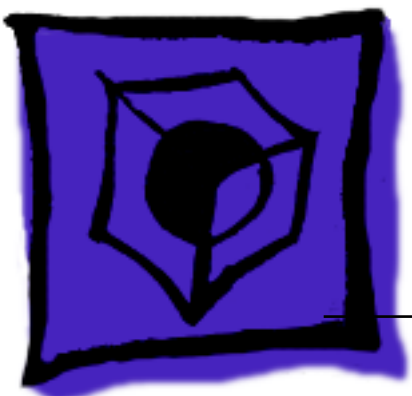


Portable StyleWriter Battery, NiCAD **661-0866**

StyleWriter Printer Frame Assembly (Rev. A) **661-0630**

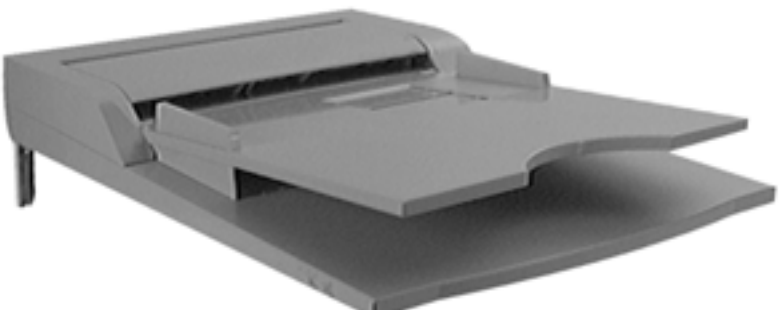
StyleWriter Printer Frame Assembly (Rev. B) **661-0718**





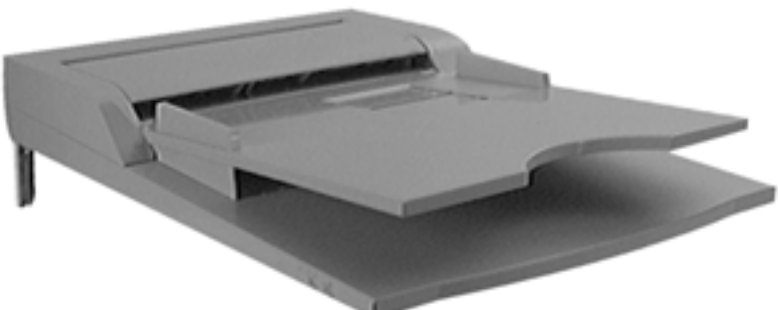
Scanners

Apple Color OneScanner 1200/30 Document Feeder, Whole Unit **661-1119**

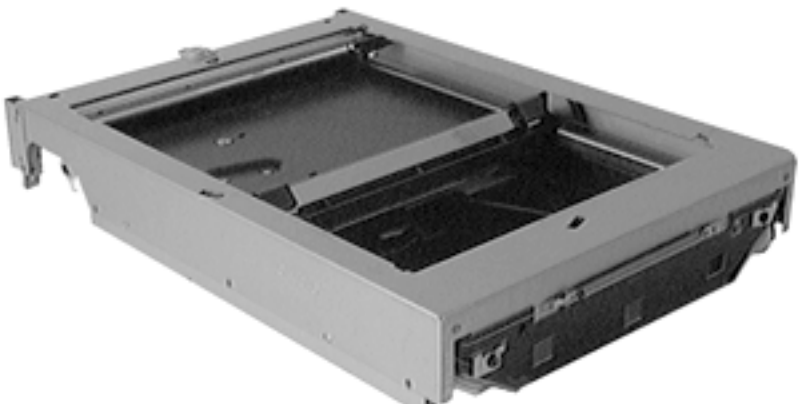


Apple Color OneScanner 1200/30 Transparent Media Adapter, Whole Unit **661-1120**

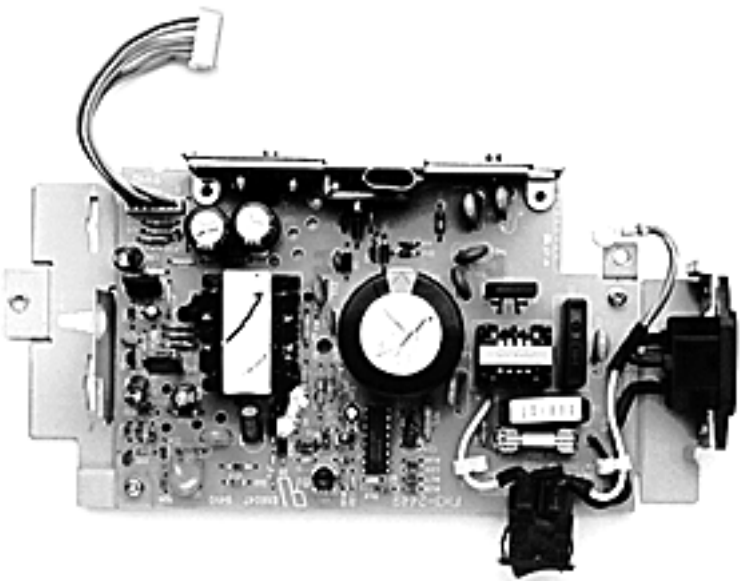
Apple Color OneScanner 600/27 Document Feeder, Whole Unit **661-1119**



Apple Color OneScanner 600/27 Optical Assembly **661-1084**

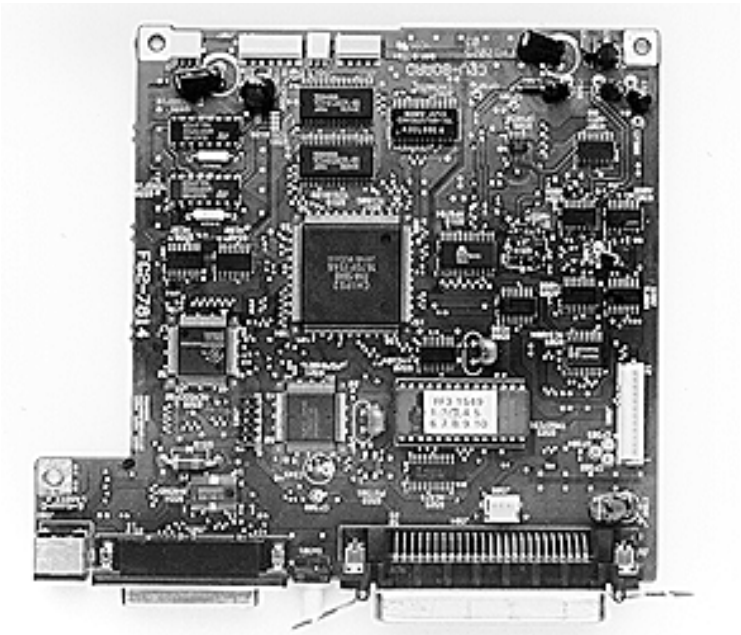


Apple Color OneScanner 600/27 Power Supply without Inverter Board **661-1085**

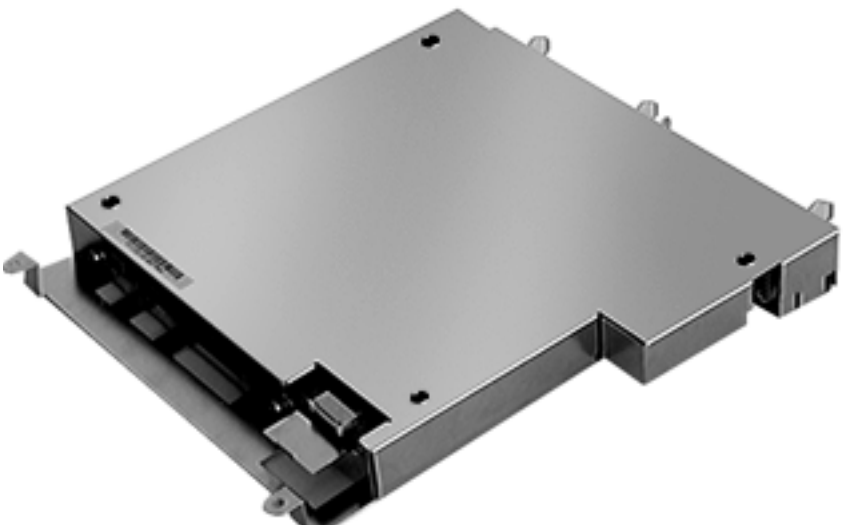


Remove the inverter board from the power supply before returning the power supply to Apple.

Apple Color OneScanner 600/27 Logic Board **661-1083**



Apple Color OneScanner Main Logic Board, 24-Bit **661-0740**



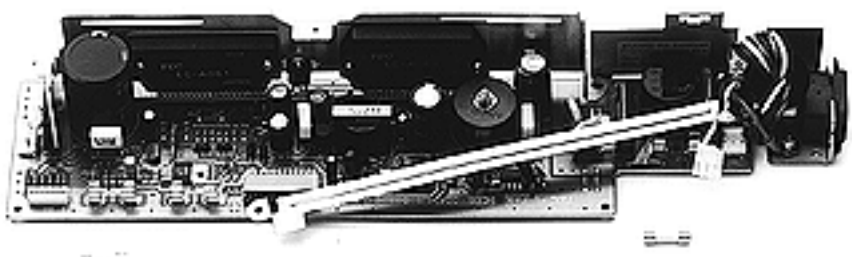
Apple Color OneScanner Optical Assembly, 24-Bit **661-0739**

Return the Apple Color OneScanner optical assembly with the lamp in place. The replacement comes with a lamp installed.

Apple Color OneScanner Power Supply, PCB Assembly, 24-Bit (240V) **661-0810**

International only.

Apple Color OneScanner Power Supply, PCB Assembly, 24-Bit (240V) **661-0738**

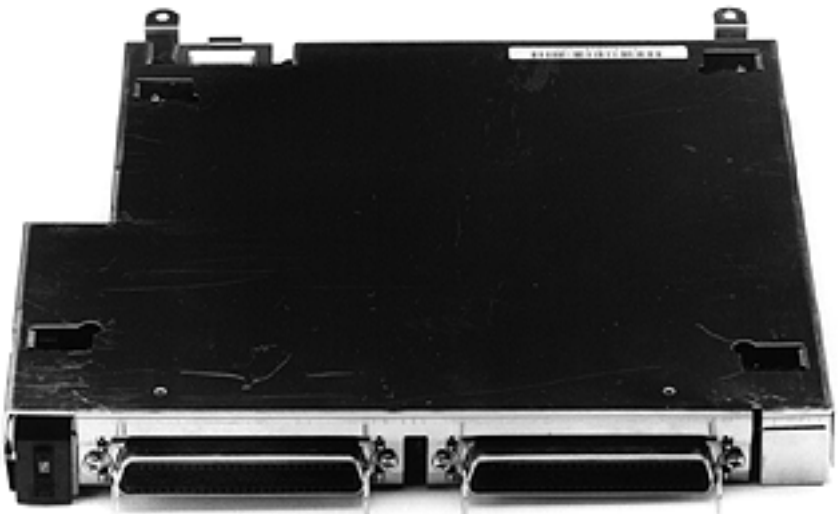


Apple Color OneScanner/B Assembly, Optical **661-0187**

Return the Apple Color One Scanner/B optical assembly with the lamp in place. The replacement comes with a lamp installed.

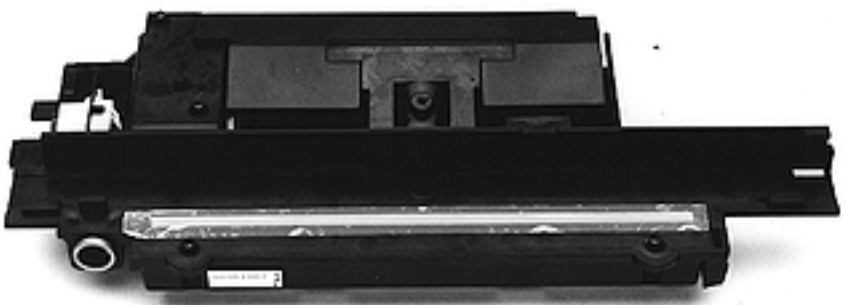
Apple Color OneScanner/B Board, Power Supply **661-0186**

Apple Color OneScanner/B Main Logic Board, 24-Bit **661-0185**



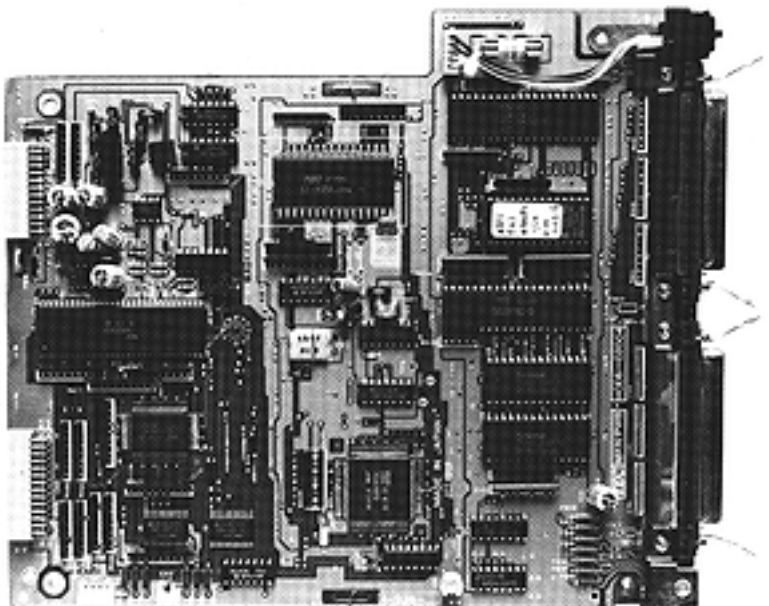
Apple OneScanner Main Logic Board, 8-Bit **661-0635**

Apple OneScanner Optical Assembly, 8-Bit **661-0634**



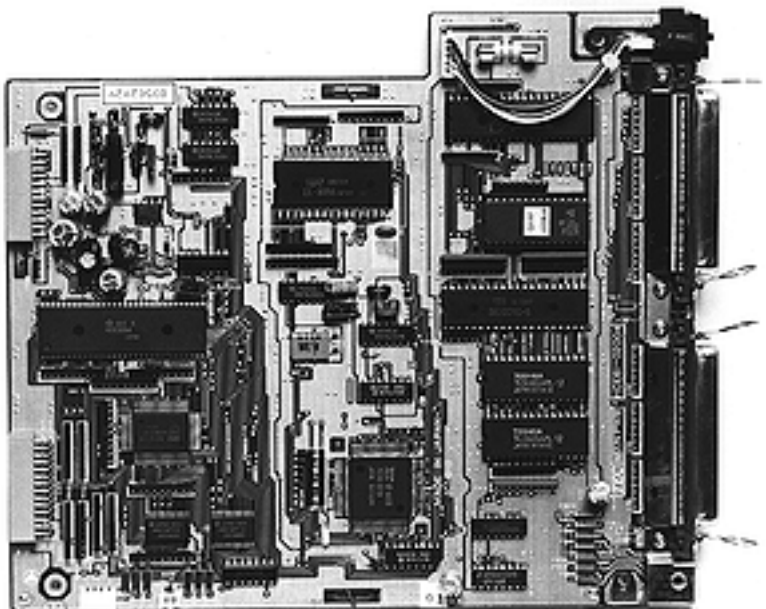
Remove and retain the inverter assembly and the lamp before you return the optical assembly to Apple.

Apple Scanner Main Logic Board, 4-Bit (Rev. A) **661-0430**



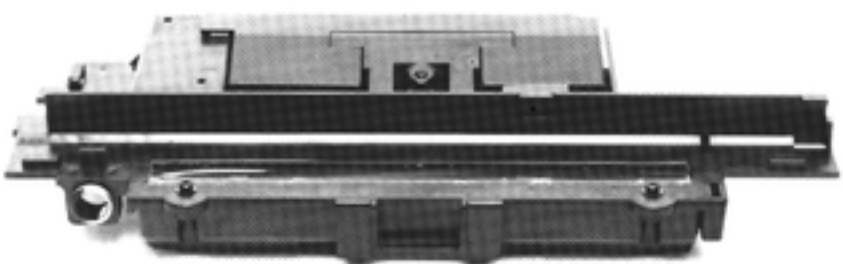
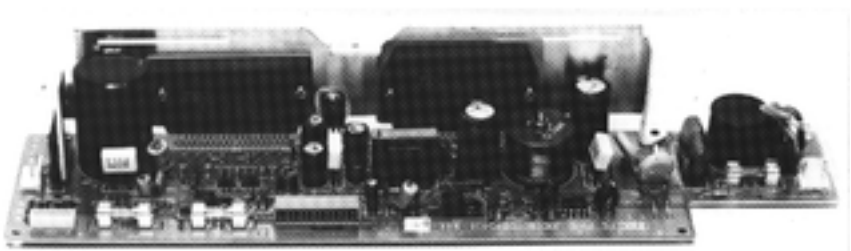
When you return P/N 661-0430, Apple ships you P/N 661-0534.

Apple Scanner Main Logic Board, 4-Bit (Rev. B) **661-0534**



The absence of capacitors (CA 4, 5, 6) in these positions indicates that this is a revision B main logic board.

Apple Scanner Optical Assembly, 4-Bit **661-0449**



Apple Scanner Power Supply, PCB Assembly **661-0431**