Important Information

Includes safety information, memory installation and
battery replacement instructions,
and regulatory agency information for your iMac

Safety Instructions for Setting Up Your Computer

When you set up your computer or device, keep these important safety instructions in mind.

Plugging In the Power Cord

Important Your computer or device has a three-wire grounding plug that will fit only a grounded AC outlet. If you are unable to insert the plug in the outlet, contact a licensed electrician to replace the outlet with a properly grounded outlet.

Important The plug on the power cord must be completely inserted into the computer's power socket and firmly seated for your computer to operate correctly.
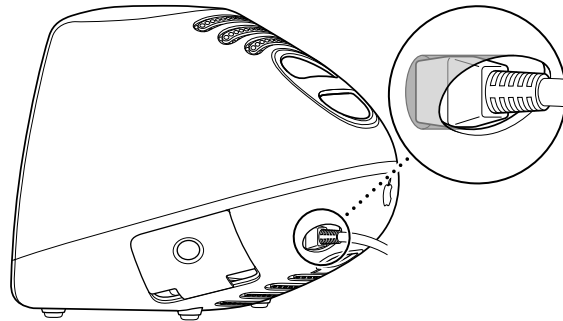
Connecting a Phone Line to the Modem Port

Important Make sure you connect the modem to an analog phone line, the kind typically used in homes.

Disconnecting Power

Important The only way to completely disconnect power from the computer is to unplug the power cord from the outlet or from the back of the computer.

General Safety Instructions

For your own safety and that of your equipment, always take the following precautions.

Disconnect the power plug (by pulling the plug, not the cord) if any of the following conditions exists:

- you want to remove any parts (leave the cord disconnected as long as the cover is off)
- the power cord or plug becomes frayed or otherwise damaged
- you spill something into the case

- your computer or device is exposed to rain or any other excess moisture
- your computer or device has been dropped or the case has been otherwise damaged
- you suspect that your computer or device needs service or repair
- you want to clean the case (use only the recommended procedure described later)

Be sure that you always do the following:

- Keep your computer or device away from sources of liquids, such as washbasins, bathtubs, shower stalls, and so on.
- Protect your computer or device from dampness or wet weather, such as rain, snow, and so on.
- Read all the installation instructions carefully before you plug your computer or device into a wall socket.
- Keep these instructions handy for reference by you and others.
- Follow all instructions and warnings dealing with your system.

Warning Electrical equipment may be hazardous if misused. Operation of this product, or similar products, must always be supervised by an adult. Do not allow children access to the interior of any electrical product and do not permit them to handle any cables.

To clean the case, do the following:

1 Disconnect the power plug. (Pull the plug, not the cord.)

2 Wipe the surfaces lightly with a clean, soft cloth dampened with water.

Important Do not use any substance containing isopropyl alcohol or damage to the plastic will result.

Warning Never push objects of any kind into this product through the openings in the case. Doing so can cause a fire or a dangerous electric shock.

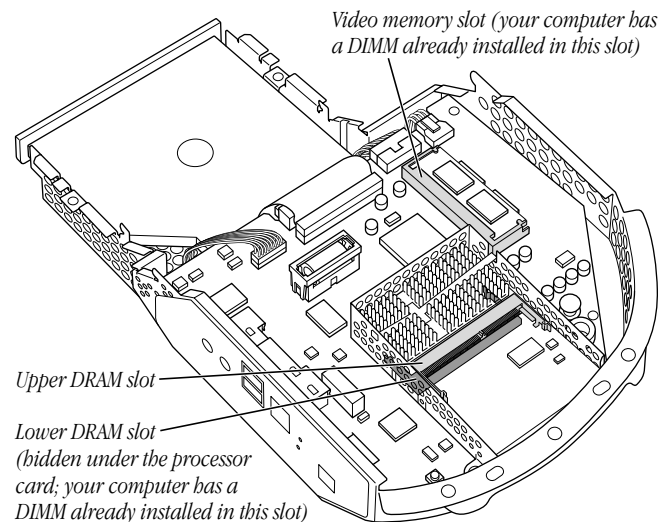## Installing Memory and Replacing the Backup Battery

This section provides information about memory and the backup battery and explains how to install them.

> **Warning** Apple Computer recommends that you have an Apple-certified technician install memory. Apple does not provide telephone support for memory upgrades. Consult the service and support information that came with your computer for instructions on how to contact an Apple-authorized service provider or Apple for service. If you install these items yourself, you risk damaging your equipment, and this damage is not covered by the limited warranty on your computer. See an Apple-authorized dealer or service provider for additional information about this or any other warranty question.

About Memory

Your computer contains two types of memory—dynamic random-access memory (DRAM) and video memory. You can add DRAM to your computer in packages called Small Outline Dual Inline Memory Modules, or SO-DIMMs.

The following illustration shows the locations of memory slots on the logic board. See the sections that follow for important information about DRAM and video memory.

Video memory slot (your computer has a DIMM already installed in this slot)

Upper DRAM slot

Lower DRAM slot (hidden under the processor card; your computer has a DIMM already installed in this slot)

DRAM Configurations

Your computer comes with a 32 megabyte (MB) SO-DIMM pre-installed. You can increase your computer's DRAM up to 256 megabytes (MB) by adding SO-DIMMs to the two RAM DIMM slots on the main logic board.

To increase the memory to the maximum of 256 MB, install a 128 MB DIMM in the user-accessible upper expansion slot. Have a 128 MB DIMM installed in the lower slot. To maintain your Apple warranty, the DIMM in the lower slot must be installed or removed by an Apple-authorized service provider.

For more information about the type of SO-DIMMs you must use, see the technical specifications in your online information, About Your iMac, available via the Help Center in the Help menu.

Important This computer uses Synchronous Dynamic Random-Access Memory (SDRAM) SO-DIMMs. DIMMs from older Macintosh computers are not compatible with your computer and should not be used even though they may fit into the RAM DIMM slots.

Video Memory Configurations

Your computer comes with a total of 6 MB of Synchronous Graphic RAM (SGRAM) video memory; 2 MB are built into the logic board and 4 MB are in the video memory slot.

About the Backup Battery

If you have intermittent problems starting up your computer and the date is reset, you need to replace the lithium backup battery in the computer. Replacing the battery may cause some settings on your computer, such as the desktop patterns, to revert to the factory default settings. You may also have to restore modem settings in any communication programs you are using.

Important Make a note of the settings before you replace the battery.

Installing Memory or Replacing the Battery

Follow these instructions to install additional memory or replace the backup battery.

Important Before installing any of these items, carefully read "About Memory" on page 4 and "About the Backup Battery," above.

Installing additional memory and replacing the backup battery involves four procedures:
- Turning off the computer
- Opening the computer
- Inserting the memory module into a specific slot or replacing the battery
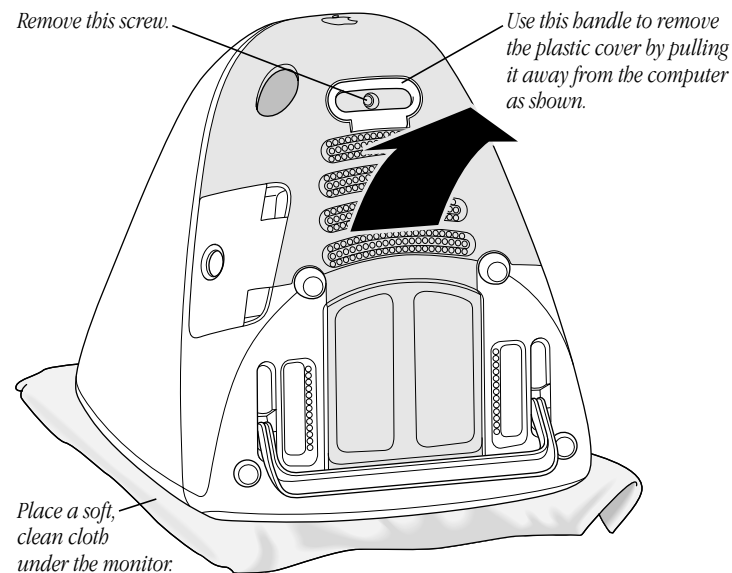- Closing the computer

Turning Off the Computer

1   If your computer is turned on, turn it off by choosing Shut Down from the Special menu.

2   Unplug all the cables from the computer, including the power cord.

> **Warning** If your internal modem is connected to a telephone line, make sure you disconnect the telephone line from the internal modem port before you open the computer's cover. This prevents electric shock.

Now go to the next section, "Opening the Computer."

Opening the Computer

1   If the computer is secured, unlock it by removing the security cable from the handle.

For more information, see the online documentation that came with your computer.

2   Place a soft towel or cloth on the desk or surface.

3   Holding the handle with one hand and the front of the computer with the other, slowly lift up and turn the computer so the screen is facing down on the cloth.

Remove this screw.

Use this handle to remove the plastic cover by pulling it away from the computer as shown.

Place a soft, clean cloth under the monitor.

4   Use a Phillips screwdriver to unscrew the screw on the lower back cover.

Do not use a powered screwdriver. It may damage the screws on your computer.

5   Grab the small plastic handle on the cover and pull the cover away from the computer.
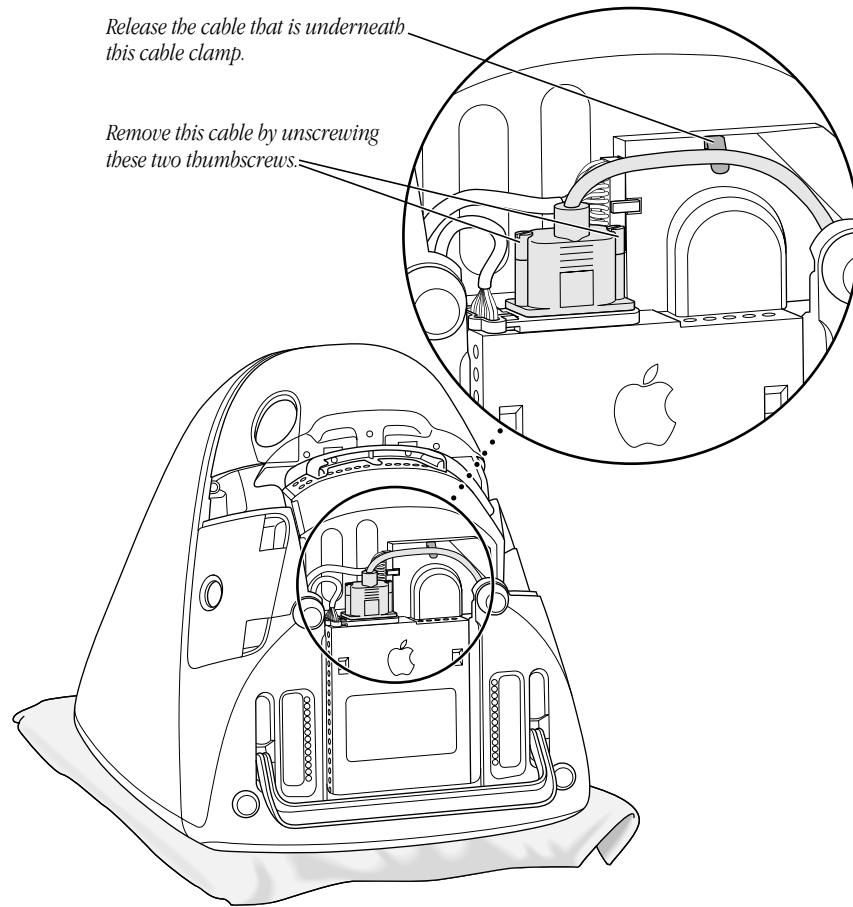
6   Set the cover aside.

7   Touch any exposed metal on the logic board/drive assembly.

*Touch the metal part of the
logic board/drive assembly.*
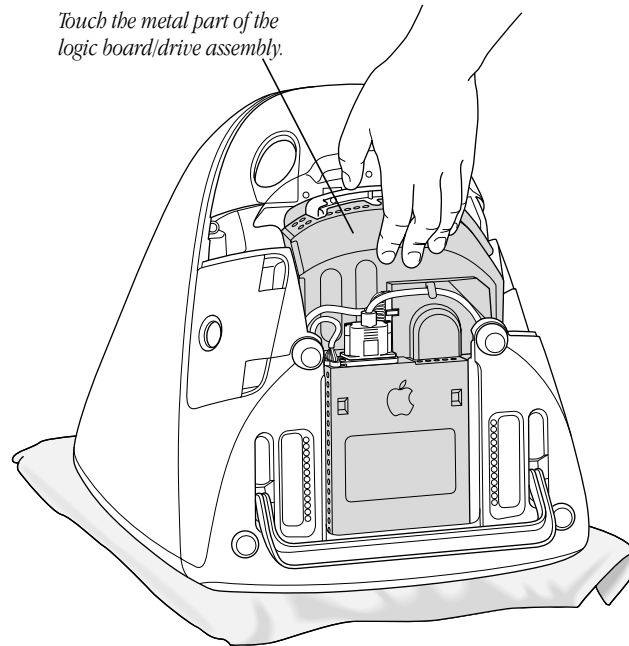
This helps protect the computer from damage caused by electrostatic discharge.
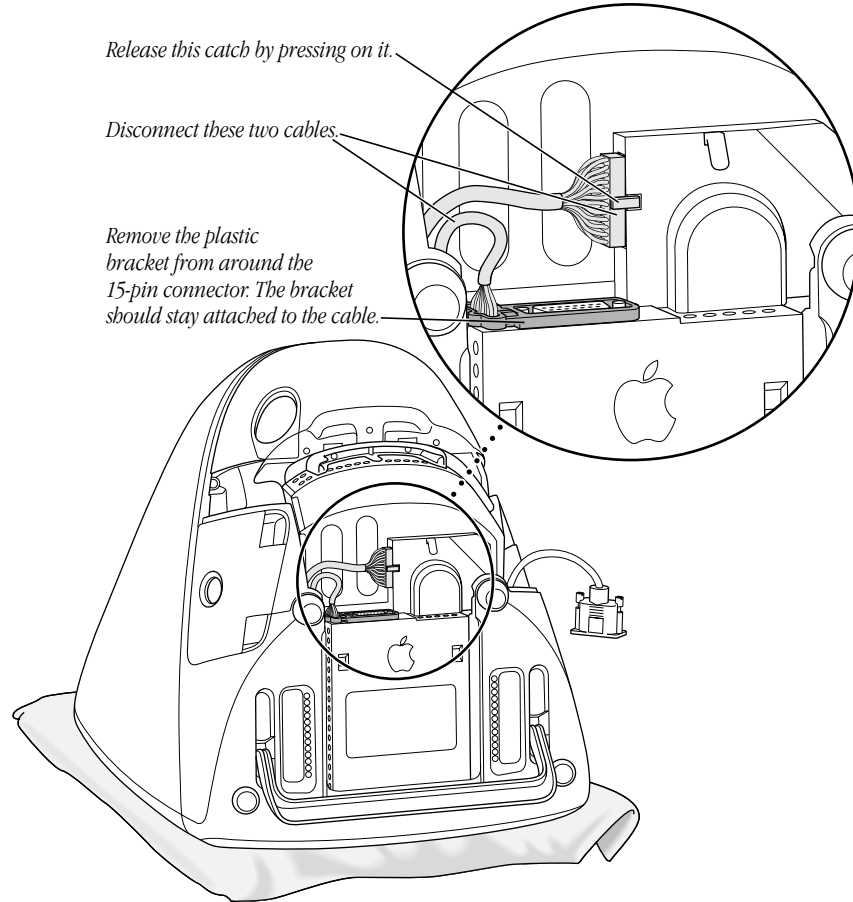
Important Always do this before you touch any parts, or install any components, inside the computer. To avoid generating static electricity, do not walk around the room until you have completed the installation of the memory or replaced the battery and closed the computer.

8   Remove one of the cables from underneath its clamp, then unscrew the thumbscrews
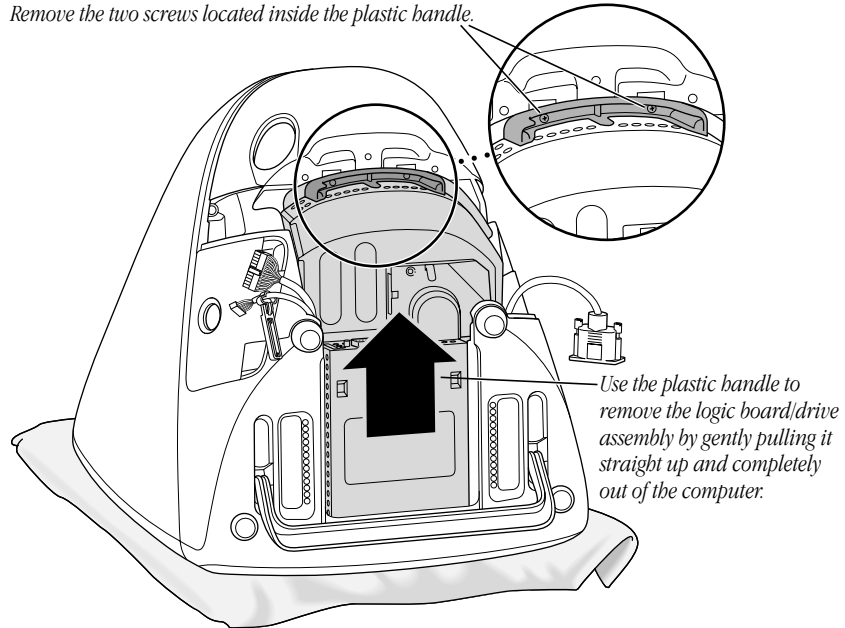connecting the cable, and disconnect the cable.

*Release the cable that is underneath
this cable clamp.*

*Remove this cable by unscrewing
these two thumbscrews.*

9   Disconnect the two cables connected to the main logic board and move them aside.

Release this catch by pressing on it.

Disconnect these two cables.

Remove the plastic bracket from around the 15-pin connector. The bracket should stay attached to the cable.

10 Use a Phillips screwdriver to unscrew the two screws inside the plastic handle.

Remove the two screws located inside the plastic handle.

Use the plastic handle to remove the logic board/drive assembly by gently pulling it straight up and completely out of the computer.

11 With one hand on the plastic handle, gently pull the handle straight up and out of the computer.

12 Lay the logic board/drive assembly on a clean surface.

13 If you moved around the room at all, you may have generated some static electricity. Touch any exposed metal on the logic board/drive assembly. This helps protect the computer from damage caused by electrostatic discharge.

Now go to the next section, "Installing Memory" on page 11 or "Replacing the Battery" on page 14.

Installing Memory

1   Carefully remove the metal shield.

*Carefully unsnap the shield on both sides and lift it off.*
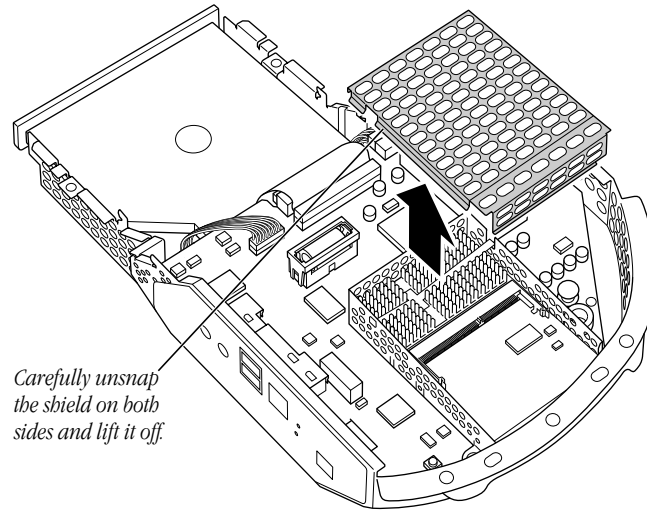
2 To install a DRAM DIMM, align it in the DRAM slot as shown below and push the DIMM down until it snaps into place.

Important Do not touch the DIMM's edge connectors. Handle the DIMM only by the other edges.

The SO-DIMM is designed to fit into the slot only one way. Align the notch in the DIMM with the small rib in the slot and insert the DIMM at an angle, as shown. Snap the DIMM into place by pushing down on it until it is lying flat and parallel to the main logic board. Your DIMM's shape and components may look different.

To remove the SO-DIMM, spread the two arms of the memory slot apart slightly. The DIMM will pop up.
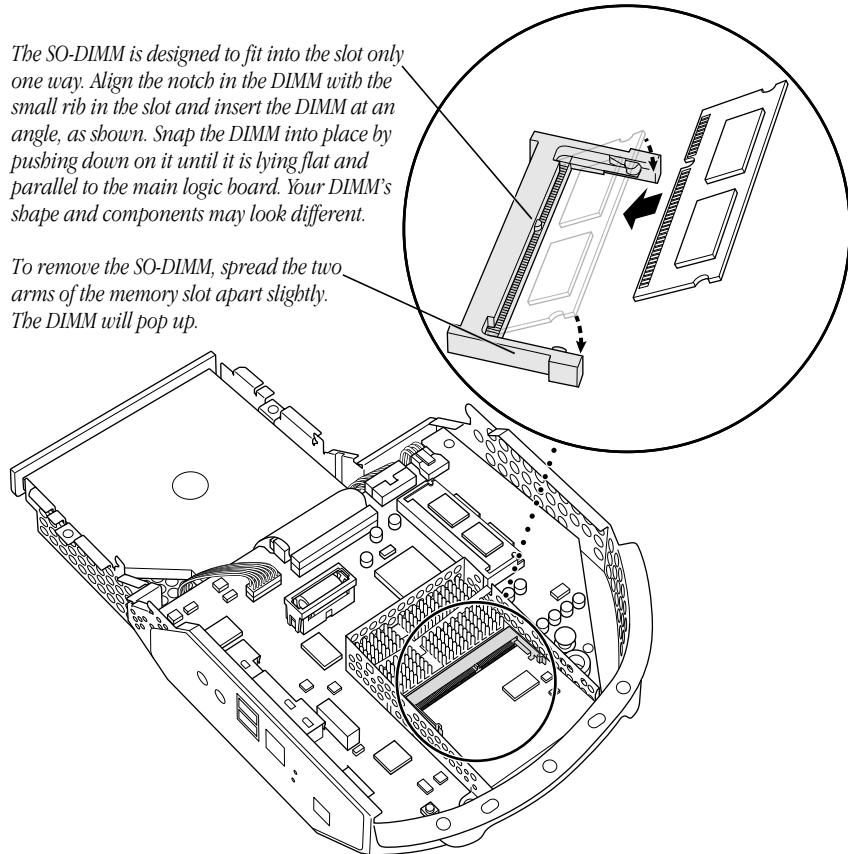
3 Replace the metal shield.

*Snap the shield
back into place.*
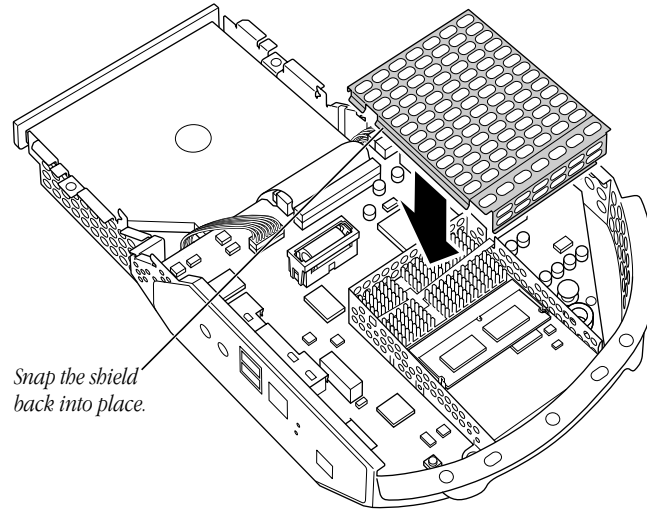
Now go to the section "Closing the Computer" on page 15.

Replacing the Battery

1 Remove the top cover of the battery holder. You may need to use a small screwdriver and insert it into the notch on the side of the cover to gently pop the cover off.

Important Do not touch the screwdriver to any part of the main logic board.

To replace the battery, remove the top cover of the battery holder. You may need to use a small screwdriver inserted into the notch on the side of the cover to gently pop the cover off. Be sure not to touch the screwdriver to any part of the main logic board.
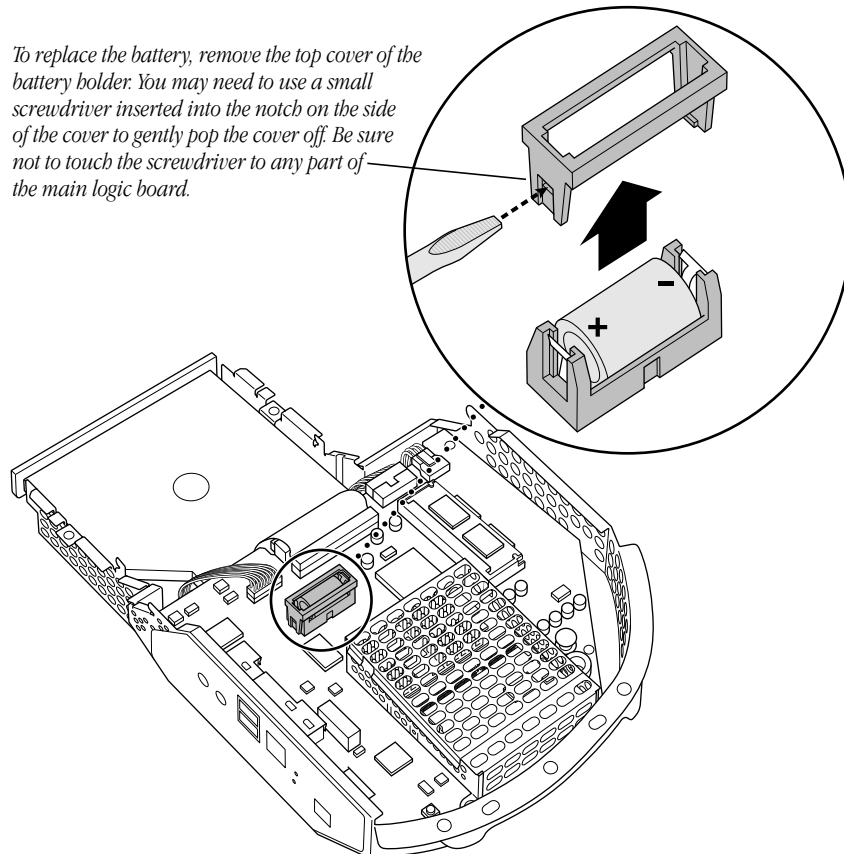
2 Remove the old battery, noting the orientation of the positive and negative ends of the battery.

Important Batteries contain chemicals, some of which may be harmful to the environment. Please dispose of used batteries according to your local environmental guidelines.

3 Insert the new lithium battery, with the positive and negative ends in the correct orientation.

Important Installing the battery incorrectly may cause an explosion. Use only the same type of battery or an equivalent battery recommended by the manufacturer. For more information, contact an Apple-authorized service provider or Apple.

4 Replace the cover of the battery holder.

Now go to the next section, "Closing the Computer."

Closing the Computer

**1** With one hand on the plastic handle, gently lower the logic board/drive assembly straight down into the computer until it is in place.

Use the plastic handle to lower the logic board/drive assembly straight down into the computer until it is seated.

Reinsert the two screws located inside the plastic handle.
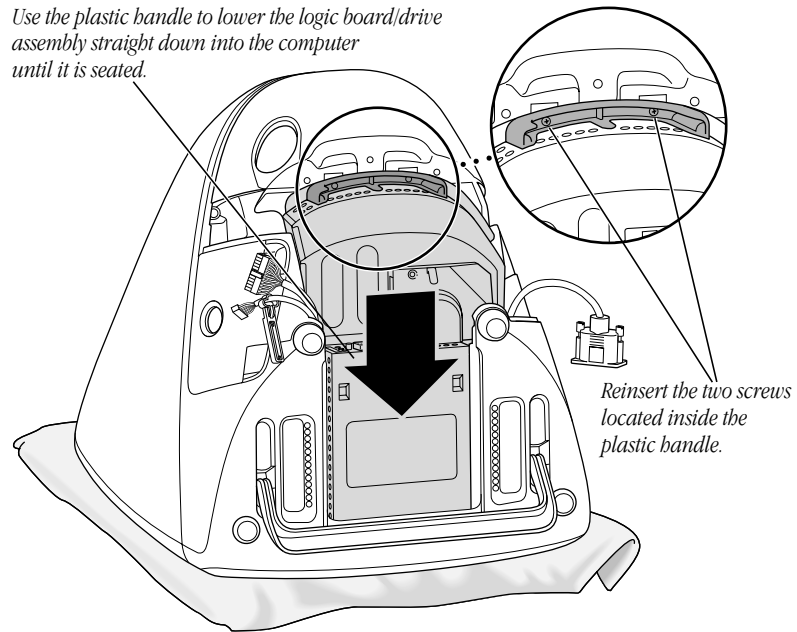
2 Use a Phillips screwdriver to screw the two screws back inside the plastic handle.

3 Reconnect the two cables to the logic board, attaching them as shown.

Reconnect these two cables.

Reposition the plastic bracket over the 15-pin connector.
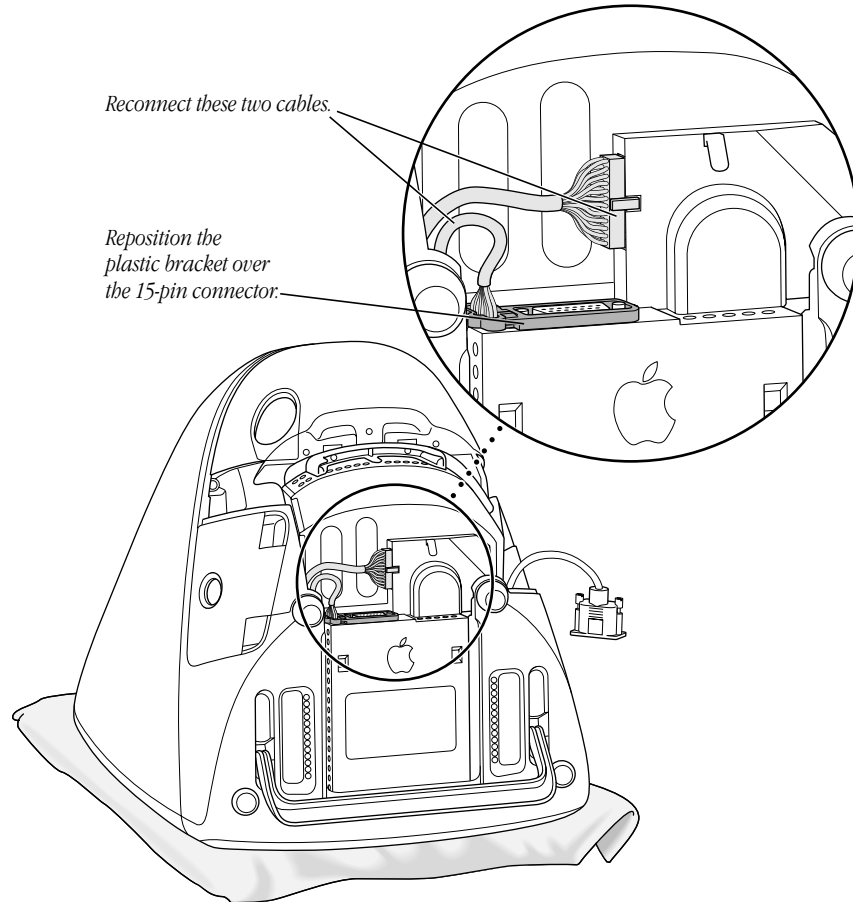
4 Reconnect the third cable, tucking it underneath the clamp, then tightening the two thumbscrews.

Tuck the cable back into place underneath the clamp.

Reattach this cable and tighten the two thumbscrews.
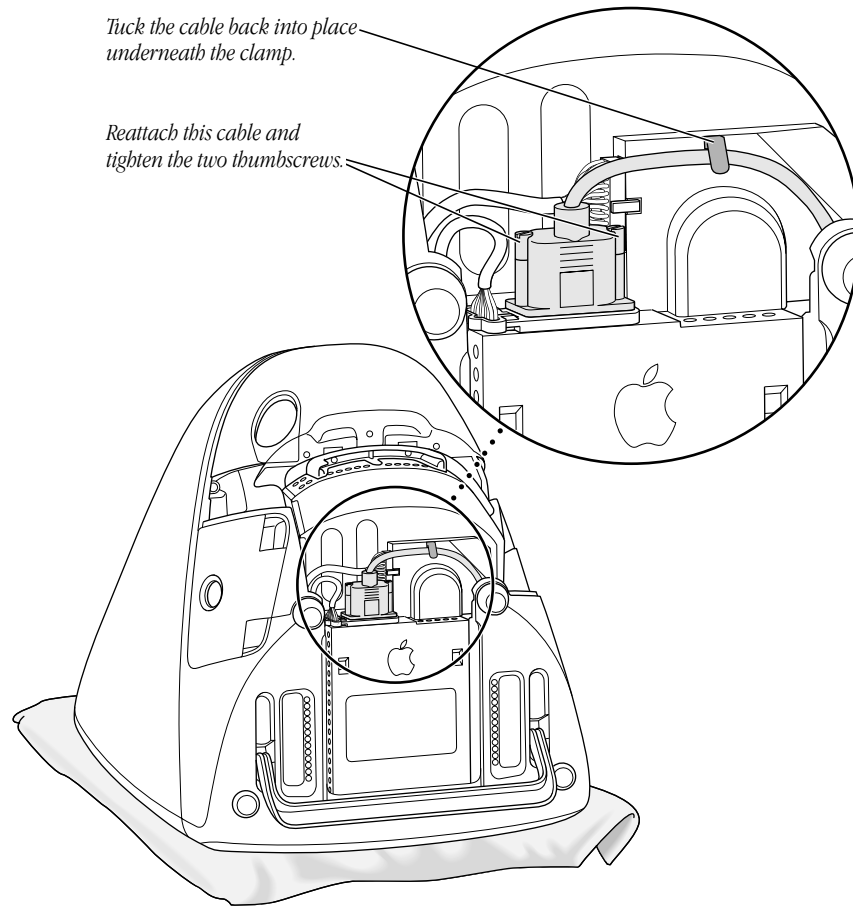
5   Replace the cover, making sure it snaps into place.

If the cover doesn't fit properly, check the cable connections to make sure the cables are layered properly.

Replace the plastic cover. Be sure to snap the cover back into place all around its edges.

Reinsert this screw.
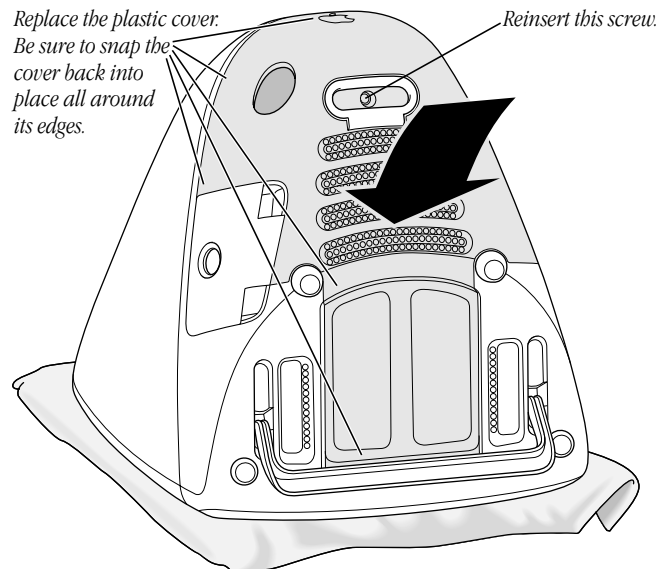
6   Use a Phillips screwdriver to screw the screw back on the lower back cover.

Do not use a powered screwdriver. It may damage the screws on your computer.

7   If necessary, to secure your computer, place the security cable through the handle and lock it.

For more information, see the online documentation that came with your computer.

8   Reconnect the cables and power cord you disconnected from your computer and turn on the computer.

If you need help reconnecting your cables, see the setup instructions that came with your computer.

> **Warning**   Never turn on your computer unless all of its internal and external parts are in place. Operating the computer when it is open or missing parts can be dangerous and damage your computer.

Communications Regulation Information

FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. See instructions if interference to radio or television reception is suspected.

Radio and Television Interference

The equipment described in this manual generates, uses, and can radiate radio-frequency energy. If it is not installed and used properly—that is, in strict accordance with Apple's instructions—it may cause interference with radio and television reception.

This equipment has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications in Part 15 of FCC rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

You can determine whether your computer system is causing interference by turning it off. If the interference stops, it was probably caused by the computer or one of the peripheral devices.

If your computer system does cause interference to radio or television reception, try to correct the interference by using one or more of the following measures:

■ Turn the television or radio antenna until the interference stops.

■ Move the computer to one side or the other of the television or radio.

■ Move the computer farther away from the television or radio.

■ Plug the computer into an outlet that is on a different circuit from the television or radio. (That is, make certain the computer and the television or radio are on circuits controlled by different circuit breakers or fuses.)

If necessary, consult an Apple-authorized service provider or Apple. See the service and support information that came with your Apple product. Or, consult an experienced radio/television technician for additional suggestions.

Important Changes or modifications to this product not authorized by Apple Computer, Inc., could void the FCC Compliance and negate your authority to operate the product.

This product was tested for FCC compliance under conditions that included the use of Apple peripheral devices and Apple shielded cables and connectors between system components. It is important that you use Apple peripheral devices and shielded cables and connectors between system components to reduce the possibility of causing interference to radios, television sets, and other electronic devices. You can obtain Apple peripheral devices and the proper shielded cables and connectors through an Apple-authorized dealer. For non-Apple peripheral devices, contact the manufacturer or dealer for assistance.

Responsible party (contact for FCC matters only): Robert Steinfeld, Apple Computer, Inc., 1 Infinite Loop, Cupertino, CA 95014-2084, 408-974-2618.

Industry Canada Statement

This Class B device meets all requirements of the Canadian interference-causing equipment regulations.

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

VCCI Class B Statement

情報処理装置等電波障害自主規制について

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

Laser Information

Warning Making adjustments or performing procedures other than those specified in your equipment's manual may result in hazardous radiation exposure.

Do not attempt to disassemble the cabinet containing the laser. The laser beam used in this product is harmful to the eyes. The use of optical instruments, such as magnifying lenses, with this product increases the potential hazard to your eyes. For your safety, have this equipment serviced only by an Apple-authorized service provider.

If you have an internal Apple CD-ROM drive in your computer, your computer is a Class 1 laser product. The Class 1 label, located in a user-accessible area, indicates that the drive meets minimum safety requirements. A service warning label is located in a service-accessible area. The labels on your product may differ slightly from the ones shown here.

Class 1 label   **Service warning label**

High-Risk Activities Warning

This computer system is not intended for use in the operation of nuclear facilities, aircraft navigation or communications systems, or air traffic control machines, or for any other uses where the failure of the computer system could lead to death, personal injury or severe environmental damage.

Telephone and Modem Information

Your computer may contain an optional internal modem. Some telephone companies require that you notify the local business office when you hook up a modem to their lines.

Information You Need in the United States

The internal modem complies with Part 68 of the FCC rules. On the back of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN). If requested, provide this information to your telephone company.

- *Ringer equivalence number (REN):* 0.8 The REN is useful to determine the quantity of devices you may connect to your telephone lines and still have all those devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

- *Telephone jack type: USOC, RJ-11* An FCC-compliant telephone cord and modular plug are provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack that complies with Part 68 rules. See the installation instructions for details.

Telephone Line Problems

If your telephone doesn't work, there may be a problem with your telephone line. Disconnect the modem to see if the problem goes away. If it doesn't, report the problem either to your local telephone company or to your company's telecommunications people.

If disconnecting the modem eliminates the problem, the modem itself may need service. See the service and support information that came with your Apple product for instructions on how to contact Apple or an Apple-authorized service provider for assistance.

If you do not disconnect your modem when it is adversely affecting the telephone line, the telephone company has the right to disconnect your service temporarily until you correct the problem. The telephone company will notify you as soon as possible. Also, you will be informed of your right to file a complaint with the FCC.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of your equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications to maintain uninterrupted service.

The internal modem will not work with party lines, cannot be connected to a coin-operated telephone, and may not work with a private branch exchange (PBX).

Telephone Consumer Protection Act

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone fax machine unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it was sent and an identification of the business or other entity, or individual sending the message and the telephone number of the sending machine of such business, entity, or individual.

Information You Need in Canada

The Industry Canada (IC) label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The Department does not guarantee the equipment will operate to a user's satisfaction.

Before installing this equipment, make sure that you are permitted to connect to the facilities of the local telecommunications company. Be sure you use an acceptable method of connection to install the equipment. In some cases, you may extend the company's internal wiring for single-line individual service by means of a certified telephone extension cord. Be aware, however, that compliance with these conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any equipment malfunctions or repairs or alterations that you make to this equipment may cause the telecommunications company to request that you disconnect the equipment.

In Canada, contact Apple at: 7495 Birchmount Road, Markham, Ontario, L3R 5G2, 800-263-3394

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Warning Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority or electrician.

- *Load number:* 0.3 The load number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to the telephone loop that is used by the device, to prevent overloading. The termination of a loop may consist of any combination of devices, subject only to the requirement that the sum of the load numbers of all devices does not exceed 100.
- *Telephone jack type:* CA-11

Informations destinées aux utilisateurs canadiens

L'étiquette d'Industrie Canada identifie un matériel homologué. Cette étiquette certifie que le matériel est conforme à certaines normes de protection, d'exploitation et de sécurité des réseaux de télécommunications. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder au réseau de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. Dans certains cas, le câblage appartenant à l'entreprise utilisé pour un service individuel à ligne unique peut être prolongé au moyen d'un dispositif homologué de raccordement (cordon prolongateur téléphonique).

L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêche pas la dégradation du service dans certaines situations. De fait, les entreprises de télécommunication ne permettent pas que l'on raccorde un matériel aux prises d'abonnés, sauf dans les cas précis prévus par les tarifs particuliers de ces entreprises.

Les réparations de matériel homologué doivent être effectuées par un centre d'entretien canadien autorisé désigné par le fournisseur. La compagnie de télécommunications peut demander à l'utilisateur de débrancher un appareil suite à des réparations ou à des modifications effectuées par l'utilisateur ou en raison d'un mauvais fonctionnement.

Veuillez contacter Apple pour des informations supplémentaires :

Apple Canada, Inc.
7495 Birchmount Road
Markham, Ontario
Canada L3R 5G2
Service à la clientèle d'Apple Canada: 800-263-3394

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre du secteur, des lignes téléphoniques et les canalisations d'eau métalliques, s'il y en a, soient raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

Avertissement L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques ou à un électricien, selon le cas.

- *Numéro de charge :* 0,3 L'indice de charge (IC) assigné à chaque dispositif terminal indique, pour éviter toute surcharge, le pourcentage de la charge totale qui sera raccordée à un circuit téléphonique bouclé utilisé par ce dispositif. La terminaison du circuit bouclé peut être constituée de n'importe quelle combinaison de dispositifs pourvu que la somme des indices de charge de l'ensemble des dispositifs ne dépasse pas 100.

- *Type de prise téléphonique :* CA-11

Information You Need in the United Kingdom

This terminal equipment is intended for direct connection to the analogue Public Switched Telecommunications Network and is approved for use within the United Kingdom with the following features:

- Modem facility

- Autocalling facility

- Autoanswer facility

- DTMF signaling

- Operation in the absence of proceed indication or upon detection of proceed indication

This product is in conformity with relevant regulatory standards following the provisions of European Council Directives 73/23/EEC (Low Voltage Directive) and 89/336/EEC amended by 92/31/EEC (EMC Directive).

Information You Need in Germany

Diese Modem-Karte ist als Endeinrichtung vorgesehen und muss an ein TAE mit F-Kodierung angeschlossen werden.

Diese Endeinrichtung ist in Konformität gemäss Niederspannungsrichtlinie 73 / 23 / EWG sowie EMC-Richtlinien 89 / 336 / EWG und 92 / 31 / EWG.

Information You Need in France

Ce matériel est conforme aux normes applicables de sécurité éléctrique d'après la directive 73 / 23 / CEE et aux normes applicables de comptabilité éléctromagnétique d'après la directive 89 / 336 / CEE, modifié par la directive 92 / 31 / CEE.

Information You Need in Australia

All telecommunications devices are required to be labelled as complying to the Australian telecommunications standards, ensuring the health and safety of the operator and the integrity of the Australian telecommunications network. To provide compliance with the Australian Communications Authority's technical standards, please ensure that the following AT commands are maintained:

- ATB0 (ITU/CCITT operation)

- AT&G0 (no guard tone)

- AT&P1 (33/66 pulse dial make/break ratio)
- ATS0 = 0 or ATS0 = 1 (no answer or answer greater than one ring)
- ATS6 = 95 (DTMF period between 70–255 ms)
- ATS11 = 95 (DTMF period between 70–255 ms)

For calls that are automatically generated, a total of three call attempts are allowed to a telephone number, with a minimum period between calls of 2 seconds. If the call does not connect after three attempts, 30 minutes must expire before automatic redialing may be initiated. Failure to set the modem (and any associated communications software) to the above settings may result in the modem being non-compliant with Australian telecommunications standards. Under these circumstances a user could be subject to significant penalties under the Telecommunications Act 1997.

Warning This card must be properly secured in order for you to use it. Telecommunications network voltages exist inside the computer and the telecommunications line connection must be removed before opening the computer.

Information You Need in New Zealand

This modem is fully approved to operate on the New Zealand telecommunications network under Telepermit number PTC 211/98/119. All telecommunications devices are required to hold a Telepermit and be labelled accordingly with the approved Telepermit number to comply with the New Zealand telecommunications standards, ensuring the health and safety of the operator and the integrity of the New Zealand telecommunications network.

Note: Customers in New Zealand who are prompted to choose a country for their modem should choose the "Australia" country code setting.

To ensure compliance, all calls that are automatically generated should not make more than 10 call attempts to the same number within any 30 minute period with a minimum period between calls of 30 seconds. Failure to adhere to these standards may result in the modem being non-compliant with New Zealand Telecom standards. Under these circumstances a user could be subject to significant penalties.

Important If pulse dialing is required for any reason, the communications software must be set up to record numbers according to the following translation list.

- Number to be dialed: 0; number to be entered into computer: 0
- Number to be dialed: 1; number to be entered into computer: 9
- Number to be dialed: 2; number to be entered into computer: 8
- Number to be dialed: 3; number to be entered into computer: 7
- Number to be dialed: 4; number to be entered into computer: 6
- Number to be dialed: 5; number to be entered into computer: 5
- Number to be dialed: 6; number to be entered into computer: 4
- Number to be dialed: 7; number to be entered into computer: 3
- Number to be dialed: 8; number to be entered into computer: 2
- Number to be dialed: 9; number to be entered into computer: 1
- Number to be dialed: 0; number to be entered into computer: 0

The preferred method of dialing is to use DTMF tones as this is faster than pulse (decadic) dialing and is readily available on almost all New Zealand telephone exchanges.

Mouse Information

This product complies with the requirements of European Directives 72/23/EEC and 89/336/EEC.

Complies with the Canadian ICES-003 Class B Specification.