Acer TravelMate 6000/TravelMate 8000 Series

Service Guide

Service guide files and updates are available
on the ACER/CSD web; for more information,
please refer to http://csd.acer.com.tw

Project Code: T41 for TravelMate 6000

Project Code: T42 for TravelMate 8000

PRINTED IN TAIWAN

Revision History

Please refer to the table below for the updates made on TravelMate6000/8000 service guide.

Date	Chapter	Updates
2004/03/26	Chapter 1	Change the left and front panel image on p.7 and p.8 Update keyboard informatin on p.28

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Conventions

The following conventions are used in this manual:

`SCREEN MESSAGES`	Denotes actual messages that appear on screen.
NOTE	Gives bits and pieces of additional information related to the current topic.
WARNING	Alerts you to any damage that might result from doing or not doing specific actions.
CAUTION	Gives precautionary measures to avoid possible hardware or software problems.
IMPORTANT	Reminds you to do specific actions relevant to the accomplishment of procedures.

Preface

Before using this information and the product it supports, please read the following general information.

1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.

2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

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System Specifications

Features

This computer was designed with the user in mind. Here are just a few of its many features:

Performance

❏ Intel® Pentium® M processor at 1.4~1.7GHz with 1MB L2 Cache or 1.5~2.0GHz with 2MB L2 Cache

❏ Intel® 855GME chipset

❏ Memory expandable up to 2GB with 2 slots

❏ Internal removable optical drive (AcerMedia bay)

❏ High-capacity, Enhanced-IDE hard disk

❏ Li-Ion main battery pack

❏ Power management system with ACPI (Advanced Configuration Power Interface)

❏ Smart Card interface with pre-boot authentication system for added security

Display

❏ Thin-Film Transistor (TFT) liquid-crystal display (LCD) displaying 32-bit high colour up to 1024X768 eXtended Graphics Array (XGA) resolution for 14.1" and 1400X1050 Super eXtended Graphics Array+ (SXGA+) resolution for 15.0" (specification varies depending on the model)

❏ 3D graphics engine

❏ TravelMate 8000 series employs ATI Mobility RADEON™ 9700 chipset with VGA RAM of 64MB/ 128MB (manufacturing option) delivering ground breaking 3D graphics performance

❏ Simultaneous display on LCD and CRT

❏ S-video for output to a television or display device that supports S-video input

❏ "Automatic LCD dim" feature that automatically decides the best settings for your display and conserves pwer

❏ Dual indenpendent display

❏ DVI-Digital improves the quality to realistic display, the transmitting via digital means

Multimedia

❏ 16-bit high-fidelity AC'97 stereo audio with 3D sound and wavetable synthesizer

❏ Built-in dual speakers

❏ Built-in microphone

❏ High-speed optical drive (AcerMedia bay)

Connectivity

❏ High-speed fax/data modem port

❏ 10/100/1000 T-based Gigabit Ethernet port

❏ Fast infrared wireless communication

❏ Four (4) USB 2.0 (Universal Serial Bus) ports

❏ IEEE 1394 port

❏ Invilink™ 802.11a/b combo or 802.11g or 802.11a/g wireless LAN (manufacturing optional)

❏ Bluetooth ready (manufacturing optional)

❏ SD/MMC/SM/MS memory slot (manufacturing optional)

Keyboard and Pointing Device

❏ 84-/85-/86-key Windows keyboard

❏ Internet 4-way scroll button

❏ Sleek, smooth and stylish design

❏ Acer FinTouch full-sized curved keyboard

❏ Ergonomically-centered touchpad pointing device

Expansion

❏ One type II CardBus PC Card slot

❏ Upgradeable memory

I/O Ports

❏ One Card bus type II slot

❏ One RJ-11 phone jack (V.90/92)

❏ One RJ-45 jack for LAN (Ethernet 10/100/1000)

❏ One DC-in jack for AC adapter

❏ One VGA port for external monitor

❏ One DVI-digital port

❏ One speaker/headphone/line-out jack (3.5mm mini jack)

❏ One audio line-in jack (3.5mm mini jack)

❏ One microphone/line-in jack

❏ One IEEE 1394 port

❏ One S-video TV-out port

❏ One 100-pin port replicator

❏ Four USB 2.0 ports (Disable middle port when docked with SPR)

❏ One FIR (IrDA) port

❏ One smart slot

❏ 4-in-1 Card Reader

❏ EasyPort III support

System Block Diagram
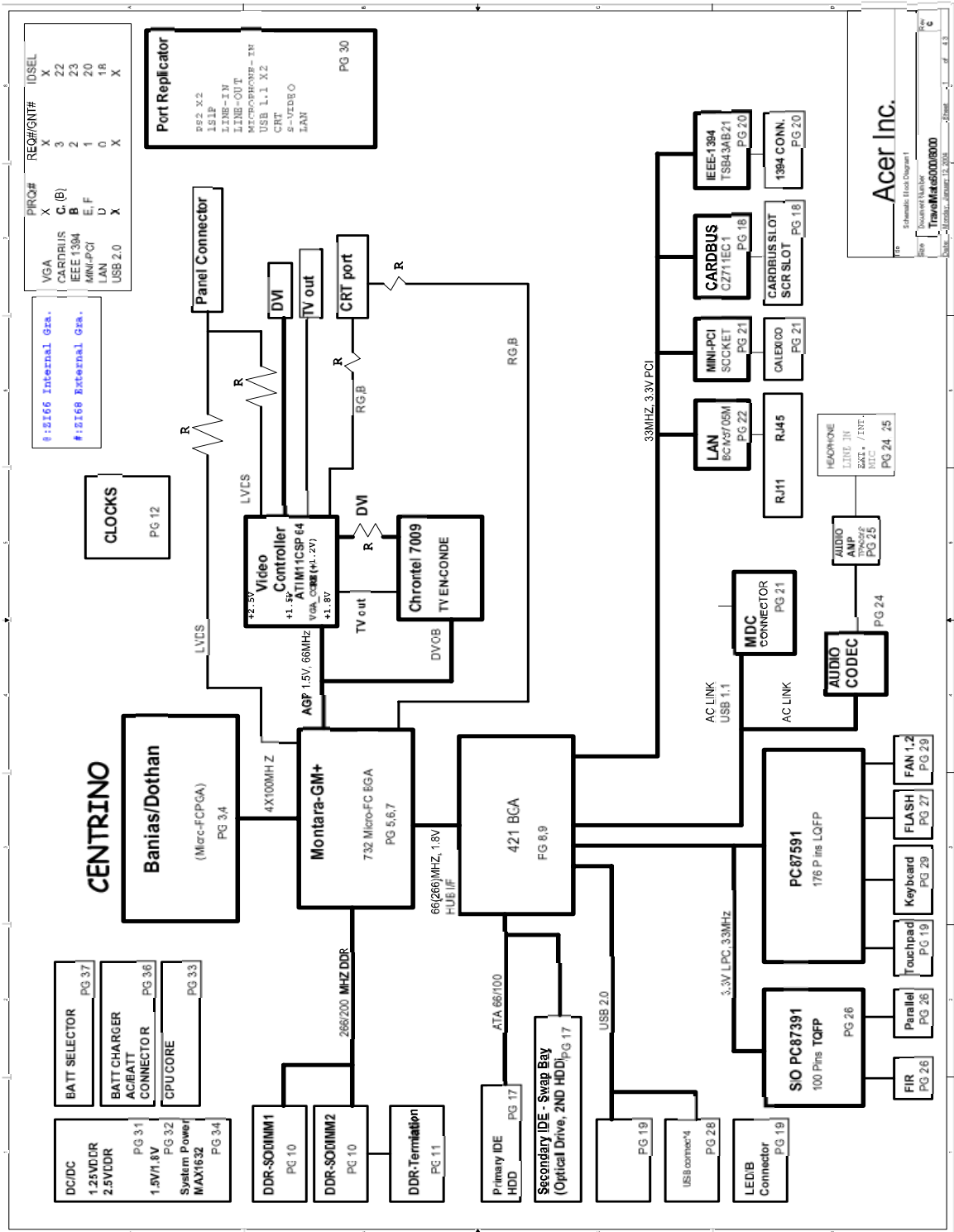
Board Layout

Top View

1	S-Video	13	HDD connector
2	CRT	14	Keyboard connector
3	DVI Connector	15	Touchpad board connector
4	Docking	16	IR
5	RJ45	17	Main battery connector
6	RJ11	18	Second battery connector
7	Power jack	19	Swap bay connector
8	CPU socket	20	DDR Dimm 0
9	Fan connector	21	LCD cable connector
10	USB connector	22	LED board connector
11	1394 connector	23	Internal microphone connector
12	PCMCIA		

Bottom View

1	Modem Cable Connector	6	RTC battery connector
2	MDC connector	7	Line-in connector
3	DDR Dimm 1	8	Microphone-in connector
4	Smart card connector	9	Headphone out connector
5	Mini PCI connector		

Outlook View

A general introduction of ports allow you to connect peripheral devices, as you would with a desktop PC.

Front Open View

#	Icon	Item	Description
1		Display screen	Also called LCD (liquid-crystal display), displays computer output.
2		Power button	Turns on the computer.
3		Touchpad	Touch-sensitive pointing device which functions like a computer mouse. Turns on the computer power.
4		Click buttons (left, center and right)	The left and right buttons function like the left and right mouse buttons; the center button serves as a 4-way scroll button.
5		Palmrest	Comfortable support area for your hands when you use the computer.
6		Keyboard	Inputs data into your computer.
7		Status indicators	LEDs (light-emitting diode) that turn on and off to show the status of the computer, its functions and components.
8		Microphone	Internal microphone for sound recording.
9		Launch keys	Special keys for launching Internet browser, E-mail program and frequently used programs. Located at the top of the keyboard are five buttons. They are designated as E-mail button, Web browser button and two programmable buttons.

Front Panel
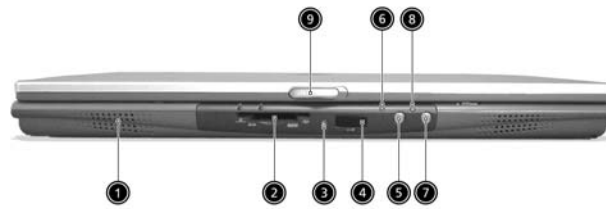
#	Icon	Item	Description
1		Left Speaker	Outputs sound for the left stereo speaker.
2		4-in-1 memory reader[1]	Reads cards from Smart Media, Memory Stick, MultiMedia, and Secure Digital cards.
3		4-in-1 status indicator[1]	Displays activity of 4-in-1 memory reader.
4	▬··◁	Infrared port	Interfaces with infrared devices (e.g., infra-red printer, IR-aware computer).
5		Bluetooth button[2]	Enables or disables Bluetooth functionality.
6	❁	Bluetooth indicator[2]	Indicates that (optional) Bluetooth is enabled.
7		InviLink button[3]	Enables or disables wireless LAN feature.
8	◯	InviLink indicator[3]	Indicates status of wireless LAN communication.
9		Latch	Latch for opening and closing the laptop.

NOTE: 1. Four-in-one card reader is a manufacturing option, subject to configuration. Only one card can operate at any given time.

NOTE: 2. Bluetooth button and indicator work on models with Bluetooth only.

NOTE: 3. InviLink button and indicator work on models with wireless LAN only.

Left Panel
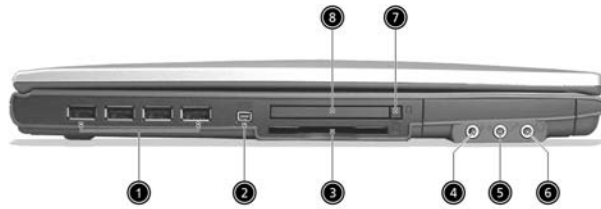
#	Icon	Item	Description
1		Four (4) USB ports	Connect to Universal Serial Bus devices (e.g., USB mouse, USB camera).
2	1394	IEEE 1394 port	Connects to IEEE 1394 devices.
3		Smart Card slot	Slot for Smart Card interface with pre-boot authentication system.
4	((↔))	Line-in jack	Accepts audio line-in devices (e.g., audio CD player, stereo walkman).
5		Microphone Jack	Accepts input from external microphones.
6		Headphone Jack	Connect to headphones for other line-out audio devices (speakers).
7		PC Card eject button	Ejects the PC Card from the slot.
8		PC Card slot	Accepts one Type II 16-bit PC Card or 32-bit CardBus PC Card.

Right Panel
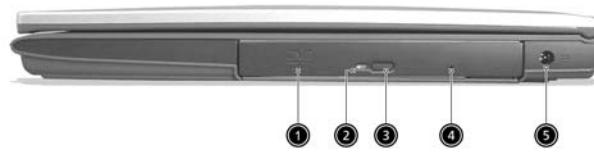
#	Icon	Item	Description
1		AcerMedia drive	Houses a removable media drive module.
2		AcerMedia indicator	Lights up when the AcerMedia drive is active.
3		Eject button	Ejects the drive tray.
4		Emergency eject slot	Ejects the drive tray when the computer is turned off.
5	▬▬ ▬▬▬	Power jack	Connects to an AC adapter.

Rear Panel
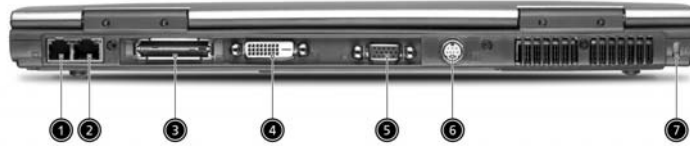
#	Icon	Item	Description
1	⬚	Modem jack	Connects to a phone line.
2	品	Network jack	Connect to an Ethernet 10/100-based network.
3	▣	Expansion port	Connects to I/O port replicator or EasyPort expansion devices.
4		Digital visual interface port	Provide a better quality digital connection between a PC and a display device.
5	▭		Connects to a display device (e.g., external monitor, LCD projector) and display up to 16.7 million colors and upt 1400X1050 resolution.
6	⑤→	S-video	Connects t a television or display device with S-video input.
7		Cooling fan	Helps keep the computer cool
8	🔒K	Security keylock	Connects to a Kensington-compatible computer security lock.

Bottom Panel
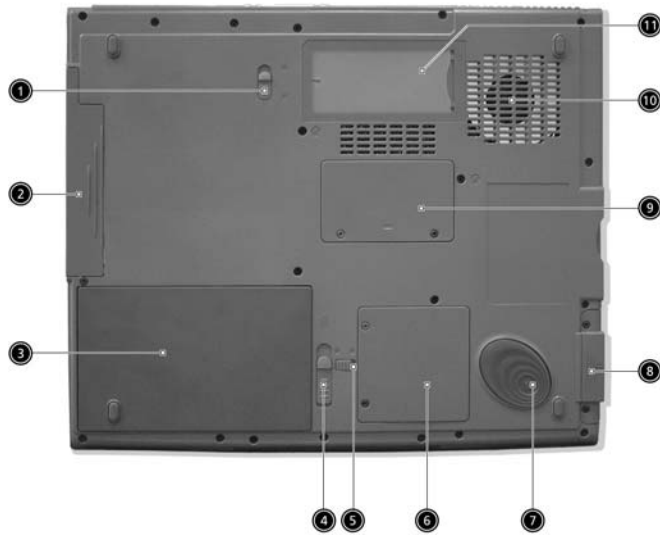
#	Icon	Item	Description
1		AcerMedia bay release latch	Unlatches the AcerMedia drive for removal or swapping.
2		AcerMedia bay	Houses an AcerMedia drive module.
3		Battery bay	Houses the computer's battery pack.
4		Battery release latches	Unlatches the battery to remove the battery pack.
5		Battery lock	Locks the battery in place.
6		Mini-PCI slot	Slot for adding mini-PCI cards.
7		Hard disk protector	Protects the hard disk from accidental bumps and vibration.
8		Hard disk bay	Houses the computer's hard disk (secured by a screw).
9		Memory slot	Slot for adding memory (DRAM).
10		Cooling fan	Helps keep the computer cool. Note: Don't cover or obstruct the opening of the fan.
11		Personal identification slot	Insert a business card or similar-sized identification card to personalize your computer.

Indicators

The computer has seven easy-to-read status icons below the display screen.

The status LCD displays icons that show the status of the computer and its components.

Icon	Function	Description
🅰	Caps lock	Lights when Caps Lock is activated.
🔢	Num lock	Lights when Num Lock is activated.
🛢	Media Activity	Lights when the disc or AcerMedia is activated.
☼	Power	Lights green when the power is on and orange when the computer is in standby mode.
🔋	Battery	Lights orange when the battery is charging.

Lock Keys

The keyboard has three lock keys which you can toggle on and off.
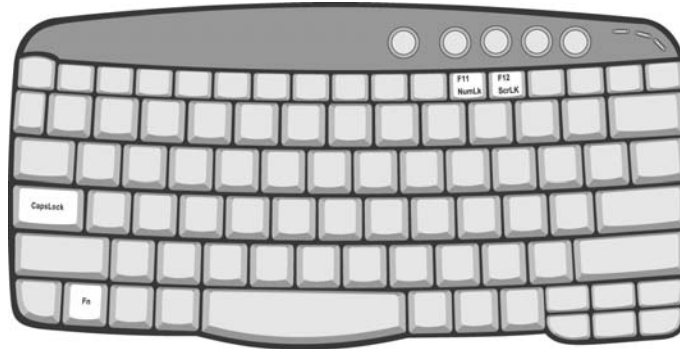
Lock Key	Description
Caps Lock	When Caps Lock is on, all alphabetic characters typed are in uppercase.
Num lock (Fn-F11)	When Num Lock is on, the embedded keypad is in numeric mode. The keys function as a calculator (complete with the arithmetic operators +, -, *, and /). Use this mode when you need to do a lot of numeric data entry. A better solution would be to connect an external keypad.
Scroll lock (Fn-F12)	When Scroll Lock is on, the screen moves one line up or down when you press ⬆ and ⬇ respectively. Scroll Lock does not work with some applications.

Embedded Numeric Keypad

The embedded numeric keypad functions like a desktop numeric keypad. It is indicated by small characters located on the upper right corner of the keycaps. To simplify the keyboard legend, cursor-control key symbols are not printed on the keys.
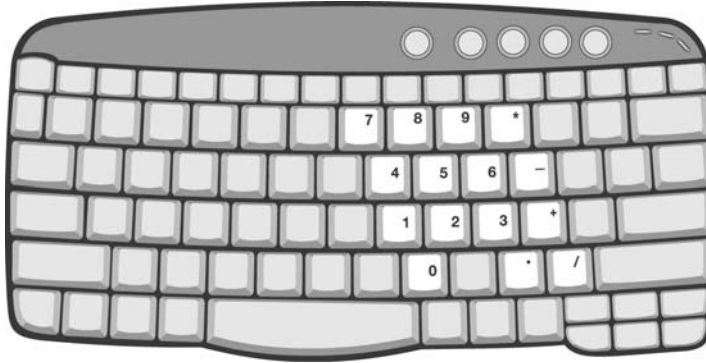
Desired Access	Num Lock On	Num Lock Off
Number keys on embedded keypad	Type numbers in a normal manner.	
Cursor-control keys on embedded keypad	Hold SHIFT while using cursor-control keys.	Hold Fn while using cursor-control keys.
Main keyboard keys	Hold Fn while typing letters on embedded keypad.	Type the letters in a normal manner.

Windows Keys

The keyboard has two keys that perform Windows-specific functions.

Key	Icon	Description
Windows logo key		Start button. Combinations with this key perform special functions. Below are a few examples: + Tab (Activates next taskbar button) + E (Explores My Computer) + F (Finds Document) + M (Minimizes All) SHIFT + Windows logo key + M (Undoes Minimize All) + R (Displays the Run... dialog box)
Application key		Opens a context menu (same as a right-click).

Hot Keys

The computer uses hotkey or key combinations to access most of the computer's controls like sreen brightness, volume output.

To activate hot keys, press and hold the **Fn** key before pressing the other key in the hot key combination.
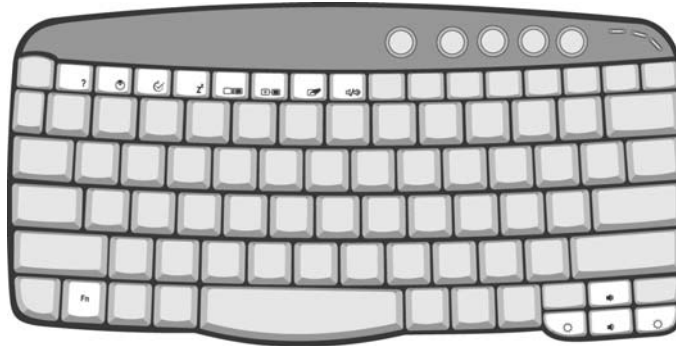
Hot Key	Icon	Function	Description
Fn-F1	?	Hot key help	Displays help on hot keys.
Fn-F2		System Property	Displays the System Property.
Fn-F3		Power Options	Display the Power Options Properties used by the computer (function available if supported by operating system).
Fn-F4	Z^z	Sleep	Puts the computer in Sleep mode.
Fn-F5		Display toggle	Switches display output between the display screen, external monitor (if connected) and both the display screen and external monitor.
Fn-F6		Screen blank	Turns the display screen backlight off to save power. Press any key to return.
Fn-F7		Touchpad toggle	Turns the internal touchpad on and off.
Fn-F8		Speaker toggle	Turns the speakers on and off.
Fn-↑		Volume up	Increases the speaker volume.

Hot Key	Icon	Function	Description
Fn-↓	🔊	Volume down	Decreases the speaker volume.
Fn-→	☼	Brightness up	Increases the screen brightness.
Fn-←	☀	Brightness down	Decreases the screen brightness

The Euro Symbol

If your keyboard layout is set to United States-International or United Kingdom or if you have a keyboard with a European layout, you can type the Euro symbol on your keyboard.

NOTE: For US keyboard users: The keyboard layout is set when you first set up Windows. For the Euro symbol to work, the keyboard layout has to be set to United States-International.

To verify the keyboard type in Windows 2000, follow the steps below:

1. Click on **Start, Settings, Control Panel**.

2. Double-click on **Keyboard**.

3. Click on the **Language** tab.

4. Verify that keyboard layout used for En English (United States)" is set to United States-International. If not, select and click on **Properties**; then select **United States-International** and click on **OK**.

5. Click on **OK**.

To verify the keyboard type in Windows XP, follow the steps below:

1. Click on **Start**, **Control Panel**.

2. Double-click on **Regional and Language Options**.

3. Click on the **Language** tab and click on **Details**.

4. Verify that the keyboard layout used for "En English (United States)" is set to United States-International. If not, select and click on **ADD**; then select **United States-International** and click on **OK**.

5. Click on **OK**.

To type the Euro symbol:

1. Locate the Euro symbol on your keyboard.

2. Open a text editor or word processor.

3. Hold **Alt Gr** and press the Euro symbol.

NOTE: Some fonts and software do not support the Euro symbol. Please refer to www.microsoft.com/typography/faq/faq12.htm for more information.

Launch Keys

Located at the top of keyboard are five buttons. The left-most button is power button. To the right of the pwoer button are four launch keys. They are designated as the mail button, the web browser button and two programmable buttons (P1 and P2).

Launch Key	Default application
Email	Email application
Web browser	Internet browser application
P1	User-programmable
P2	User-programmable

Touchpad

The built-in touchpad is a pointing device that senses movement on its surface. This means the cursor responds as you move your finger on the surface of the touchpad. The central location on the palmrest provides optimal comfort and support.

NOTE: If you are using an external USB mouse, you can press **Fn-F7** to disable the touchpad.

Touchpad Basics

The following teaches you how to use the touchpad:

❑ Move your finger across the touchpad to move the cursor.

❑ Press the left (1) and right (3) buttons located on the edge of the touchpad to do selection and execution functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the touchpad produces similar results.

❑ Use the 4-way scroll (2) button (top/bottom/left/and right) to scroll.

Function	Left Button	Right Button	Scroll Button	Tap
Execute	Click twice quickly			Tap twice (at the same speed as double-clicking the mouse button)
Select	Click once			Tap once
Drag	Click and hold, then use finger to drag the cursor on the touchpad			Tap twice (at the same speed as double-clicking a mouse button) then hold finger to the touchpad on the second tap to drag the cursor
Access context menu		Click once		

Function	Left Button	Right Button	Scroll Button	Tap
Scroll			Click and hold the button in the desired direction (up/down/left/right)	

NOTE: Keep your fingers dry and clean when using the touchpad. Also keep the touchpad dry and clean. The touchpad is sensitive to finger movements. Hence, the lighter the touch, the better the response. Tapping too hard will not increase the touchpad's responsiveness.

Hardware Specifications and Configurations

Processor

Item	Specification
CPU type	Intel Pentium M processor at 1.4~1.7GHz
	Intel Pentium M processor at 1.5~2.0GHz
Core logic	Intel 855GME+ICH4
CPU package	/μ -FCPGA package
CPU core voltage	core voltage subjects to various CPU type

BIOS

Item	Specification
BIOS vendor	Phneoix
BIOS Version	3A01
BIOS ROM type	Flash ROM
BIOS ROM size	512KB
BIOS package	PLCC32-Lead
Supported protocols	ACPI 1.0b, PC Card 95, SM BIOS 2.3, IEEE1284-ECP/EPP, PCI 2.2, PnP 1.0a, DMI 2.0, PS/2 keyboard and mouse, USB 2.0, VGA BIOS, CD-ROM bootable, IEEE 1394
BIOS password control	Set by setup manual

Second Level Cache

Item	Specification
Cache controller	Built-in CPU
Cache size	1MB for Intel Pentium M processor at 1.4~1.7GHz (Banias)
	2MB for Intel Pentium M processor at 1.5~2.0GHz (Dothan)
1st level cache control	Always enabled
2st level cache control	Always enabled
Cache scheme control	Fixed in write-back

System Memory

Item	Specification
Memory controller	Intel 855GME built-in
Memory size	0MB (no on-board memory)
DIMM socket number	2 sockets
Supports memory size per socket	1024MB
Supports maximum memory size	2G (by two 1024MB SO-DIMM module)
Supports DIMM type	DDR Synchronous DRAM
Supports DIMM Speed	333 MHz/266 MHz
Supports DIMM voltage	2.5V and 1.25V
Supports DIMM package	200-pin soDIMM, 1.27" height (Max)
Memory module combinations	You can install memory modules in any combinations as long as they match the above specifications.

Memory Combinations

Slot 1	Slot 2	Total Memory
0MB	128MB	128MB
0MB	256MB	256MB
0MB	512MB	512MB
0MB	1024MB	1024MB
128MB	128MB	256MB
128MB	256MB	384MB
128MB	512MB	640MB
128MB	1024MB	1152MB
256MB	128MB	384MB
256MB	256MB	512MB
256MB	512MB	768MB
256MB	1024MB	1280MB
512MB	128MB	640MB
512MB	256MB	768MB
512MB	512MB	1024MB
512MB	1024MB	1536MB
1024MB	0MB	1024MB
1024MB	128MB	1125MB
1024MB	256MB	1280MB
1024MB	512MB	1536MB
1024MB	1024MB	2048MB

NOTE: Above table lists some system memory configurations. You may combine DIMMs with various capacities to form other combinations. On above table, the configuration of slot 1 and slot 2 could be reversed.

LAN Interface

Item	Specification
Chipset	BroadCom BCM5705M
Supports LAN protocol	10/100 Mbps
LAN connector type	RJ45
LAN connector location	Rear panel

IR Interface

Item	Specification
Part name	VISHAY TFDU6102
Package	8-pin SMT type
Performance	4Mbit/s
Compliant	IrDA 1.1

Modem Interface

Item	Specification
Data modem data baud rate (bps)	56K
Supports modem protocol	V.90/V.92
Modem connector type	RJ11
Modem connector location	Rear panel

Bluetooth-MODEM Interface

Item	Specification
Chipset	CSR BC02 (Blue-tooth)/Agere Scorpio I (MODEM)
Data throughput	200k bps (Blue-tooth)/56K bps (MODEM)
Protocol	Blue-tooth 1.1
Interface	USB 1.1+MDC
Connector type	RJ11 (MODEM)

Wireless Module 802.11b (optional device)

Item	Specification
Chipset	Intel
Data throughput	11M bps
Protocol	802.11b
Interface	Mini-PCI type II

Wireless Module 802.11a/b (optional device)

Item	Specification
Chipset	Intel
Data throughput	11M~54M bps
Protocol	802.11 a+b
Interface	Mini-PCI type II

Wireless Module 802.11b/g (optional device)

Item	Specification
Chipset	Intel
Data throughput	11M~54M bps
Protocol	802.11 b+g
Interface	Mini-PCI type II

Four-in-One Card Reader

Item	Specification
Chipset	OZ711M3
Protocol	SMC, MS, MMC, and SD

Hard Disk Drive Interface

Item	Specification				
Vendor & Model Name	HGST 30G MORAGA IC25N030ATM R04	HGST 40G MORAGA IC25N040ATM R04	HGST 60G MORAGA IC25N060ATM R04	Toshiba 40G PLUTO MK4025GAS	Toshiba 60G Neptune MK6021GAS
Capacity (MB)	30000	40000	60000	40000	60000
Bytes per sector	512	512	512	512	512
Data heads	2	2	3	2	4
Drive Format					

Hard Disk Drive Interface

Item	Specification				
Disks	1	2	2	1	2
Spindle speed (RPM)	4200 RPM	4200 RPM	4200 RPM	4200 RPM	4200 RPM
Performance Specifications					
Buffer size	2048KB	2048KB	8192KB	8192KB	2048KB
Interface	ATA/ATAPI-6	ATA/ATAPI-6	ATA/ATAPI-6	ATA-6	ATA-5
Max. media transfer rate (disk-buffer, Mbytes/s)	350	350	350	342	317
Data transfer rate (host~buffer, Mbytes/s)	100 MB/Sec. Ultra DMA mode-5	100 MB/Sec. Ultra DMA mode-5	100 MB/Sec. Ultra DMA mode-5	100 MB/Sec. Ultra DMA mode-5	100 MB/Sec. Ultra DMA mode-5
DC Power Requirements					
Voltage tolerance	5V(DC) +/- 5%	5V(DC) +/- 5%	5V(DC) +/- 5%	5V(DC) +/- 5%	5V(DC) +/- 5%

Combo Drive Interface

Item	Specification	
Vendor & model name	DVD/CDRW KME UJDA750 (24x24x8x24x) DVD/CDRW QSI SBW-242C (24x24x8x24x)	
Performance Specification	With CD Diskette	With DVD Diskette
Transfer rate (KB/sec)	Sustained: Max 3.6Mbytes/sec	Sustained: Max 10.8Mbytes/sec
Buffer Memory	2MB	
Interface	Enhanced IDE(ATAPI) compatible	
Applicable disc format	DVD: DVD-ROM, (DVD-5, DVD-9, DVD-10, DVD-18),DVD-R (read, single border), DVD-RW, DVD-RAM (2.6GB, 4.7GB) CD: CD-DA, CD-ROM, CD-ROM XA, CD-R, CD-RW Photo (Multisession) Video CD, CD-Extra, (CD+), CD-test	
Loading mechanism	Load: Manual Release: (a) Electrical Release (Release Button) (b) Release by ATAPI command (c) Emergency Release	
Power Requirement		
Input Voltage	5 V +/- 5 % (Operating)	

DVD-Dual Interface

Item	Specification	
Vendor & model name	DVD Dual HLDS GWA-4040N	
Performance Specification	With CD Diskette	With DVD Diskette
Transfer rate (KB/sec)	Sustained: Max 3.6Mbytes/sec	Sustained: Max 10.8Mbytes/sec
Buffer Memory	2MB	
Interface	Enhanced IDE(ATAPI) compatible	

DVD-Dual Interface

Item	Specification
Applicable disc format	Support disc formats 1. Reads data in each CD-ROM, CD-ROM XA, CD-1, Video CD, CD-Extra and CD-Text 2. Reads data in Photo CD (single and Multi-session) 3. Reads standard CD-DA 4. Reads and writes CD-R discs 5. Reads and writes CD-RW discs 6. Reads and writes in each dVD+R/RW (Ver. 1.1) 7. Reads data in each DVD-ROM and DVD-R (Ver. 2.0 for Authoring) 8. Reads and writes in each DVD-R (Ver. 2.0 for general), DVD-RW and DVD+R/RW (Ver1.1)
Loading mechanism	Load: Manual Release: (a) Electrical Release (Release Button) 　　　　　　(b) Release by ATAPI command 　　　　　　(c) Emergency Release
Power Requirement	
Input Voltage	5 V +/- 5 % (Operating)

Audio Interface

Item	Specification
Audio Controller	RealTek ALC202
Audio onboard or optional	Built-in
Mono or Stereo	Stereo
Resolution	20 bit stereo Digital to analog converter 18 bit stereo Analog to Ditial converter
Compatibility	AC97
Mixed sound source	Line-in, CD
Voice channel	8/16-bit, mono/stereo
Sampling rate	44,1 KHz (48K byte for AC97 interface)
Internal microphone	Yes
Internal speaker / Quantity	Yes/2

Audio Jack

Item	Specification
Number of audio jack	3
Rated input	1W
Connector type	Headphone out, microphone in and line-in

Video Interface

Item	Specification
Chipset	Intel 855GME built-in for TravelMate 6000 series ATI Mobility RADEON 9700 for TravelMate 8000 series
Interface	AGP 4X
Supports ZV (Zoomed Video) port	No

Video Memory

Item	Specification
Chipset	ATI Mobility RADEON 9700 for TravelMate 8000 series
Memory size	64MB/128MB
Interface	DDR

USB Port

Item	Specification
Chipset	ICH4M
USB Compliancy Level	2.0
OHCI	USB 2.0
Number of USB port	4
Location	Left side
Serial port function control	Enable/Disable by BIOS Setup

IEEE 1394 Port

Item	Specification
Chipset	TI 43AB21
InterfaceUSB Compliancy Level	IEEE 1394 1.0
Number of IEEE 1394 port	1
Location	Left side
Connector type	IEEE 1394

PCMCIA Port

Item	Specification
PCMCIA controller	OZ7111M3
Supports card type	Type-II
Number of slots	One type-II
Access location	Right panel
Supports ZV (Zoomed Video) port	No ZV support
Supports 32 bit CardBus	Yes

Smart Card Reader

Item	Specification
Chipset	PCMCIA chip built-in
Number of slot	1
Location	Left side

System Board Major Chips

Item	Controller
Core logic	Intel 855GME+ICH4

System Board Major Chips

Item	Controller
VGA	ATI Mobility RADEON 9700 for TravelMate 8000 series Intel 855GME built-in for TravelMate 6000 series
LAN	BroadCom BCM5705
IEEE 1394	TI 43AB21
USB 2.0	CY7C65640
Super I/O controller	NS 87391
MODEM	Agre Scorpio II
Blue tooth	CSR B002
Wireless 802.11 b	Intel
Wireless 802.11 a+b	Intel
Wireless 802.11 b+g	Intel
PCMCIA	OZ711M3
Smart card reader	PCMCIA chip built-in
Audio	RealTek ALC202
Four-in-one card reader	OZ711M3

Keyboard

Item	Specification
Keyboard controller	NS 87591
Keyboard vendor & model name	Darfon
Total number of keypads	84-/85-/86-key
Windows logo key	Yes
Internal & external keyboard work simultaneously	No **Note: Internal and external keyboard can not work simultaneously by software specification.**

Battery

Item	Specification
Vendor & model name	Sanyo Panasonic
Battery Type	Li-ion
Pack capacity	4400 Ah
Number of battery cell	8
Package configuration	4 cells in series, 2 series in parallel
Normal voltage	14.4V
Charge voltage	16.4+-0.2v

LCD

Item	Specification		
Vendor & model name	QDI QD141X1LH12	IDT N15P0P2-L04(200nit)	Hanstar HSD150PK14-A (180nit)
Mechanical Specifications			
LCD display area (diagonal, inch)	14.1	15.0	15.0
Displaye area	285.7(H)x214.3(V)mm	304.5(H)x228.375(V)mm	304.5(H)x228.375(V)mm

LCD

Item	Specification		
Pixel pitch	Not show	0.215(H)x0.2175(V)mm	0.215(H)x0.2175(V)mm
Pixel arrange	Not show	RGB vertical stripe	RGB vertical stripe
Display technology	TFT	TFT	TFT
Resolution	XGA (1024x768)	SXGA+ (1400x1050)	SXGA+ (1400x1050)
Supports colors	262K(6bit)	262K(6bit)	262K(6bit)
Optical Specification			
Brightness control	keyboard hotkey	keyboard hotkey	keyboard hotkey
Contrast ratio	300	250	250
Brightness (Cd/M^2)	150	200(center) 180(5 point average)	180
Response time	Not show	45	35
Contrast control	No	No	No
Electrical Specification			
Supply voltage for LCD display (V)	3.3	3.3	3.3

LCD Inverter

Item	Specification
Vendor & model name	QCI: 34KT1IV0001
Brightness conditions	Vadj=3.3V
Input voltage (V)	14.4
Input current (mA)	410 (max)
Output voltage (V, rms)	1400 (no load)
Output current (mA, rms)	5.6~5.4
Output voltage frequency (k Hz)	55~58K Hz

AC Adaptor

Item	Specification
Model number	
Input rating	90VAC to 264VAC, 47Hz to 63Hz
Maximum input AC current	3.16A
Inrush current	50A@115VAC 100A@230VAC
Efficiency	83% min. @115VAC input full load

System Power Management

ACPI mode	Power Management
Mech. Off (G3)	All devices in the system are turned off completely.
Soft Off (G2/S5)	OS initiated shutdown. All devices in the system are turned off completely.
Working (G0/S0)	Individual devices such as the CPU and hard disk may be power managed in this state.

System Power Management

ACPI mode	Power Management
Suspend to RAM (S3)	CPU set power down VGA Suspend PCMCIA Suspend Audio Power Down Hard Disk Power Down CD-ROM Power Down Super I/O Low Power mode
Save to Disk (S4)	Also called Hibernate state. System saves all system states and data onto the disk prior to power off the whole system.

System Utilities

BIOS Setup Utility

The BIOS Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/Output System).

Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run Setup. Please also refer to Chapter 4 Troubleshooting when problem arises.

To activate the BIOS Utility, press ⌨F2 during POST (when "Press <F2> to enter Setup" message is prompted on the bottom of screen).

Press ⌨F2 to enter setup. Press <F12> during POST to enter multi-boot menu. In this menu, user can change boot device without entering BIOS SETUP Utility.

PhoenixBIOS Setup Utility					
Information	Main	Advanced	Security	Boot	Exit

CPU Type	Intel® Pentium® 4
CPU Speed	1600 MHz
IDE1 Model Name:	IC25B060ATMR04-0-(PM)
IDE1 Serial Number:	TOSHIBA MK3018GAP-(PM)
IDE2 Model Name:	Slimtype DVD-ROM LSD-081-(SM)
IDE2 Serial Number:	
ATAPI Device:	UJDA740 DVD/CDRW
System BIOS Version:	3A05
VGA BIOS Version:	Montara-GME 3197
KBC Version:	PQ1A21
Serial Number:	xxxxxxxxxxxxxxxxxxxx
Asset Tag Number:	N/A
Product Name:	TravelMate 6000 Displays TravelMate 8000 for
Manufacturer Name:	Acer TravelMate 8000 series
UUID:	00000000-0000-0000-0000-00000000

F1 Help	↑↓ Select Item	F5/F6 Change Values	F9	Setup defaults
Esc Exit	←→ Select Menu	Enter Select ▶ Sub-Menu	F10	Save and Exit

Navigating the BIOS Utility

There are six menu options: Info., Main, System Devices, Security, Boot, and Exit.

Follow these instructions:

- ❏ To choose a menu, use the cursor left/right keys (⬅ ➡).
- ❏ To choose a parameter, use the cursor up/down keys (⬆ ⬇).
- ❏ To change the value of a parameter, press F5 or F6 .
- ❏ A plus sign (+) indicates the item has sub-items. Press ENTER to expand this item.
- ❏ Press ESC while you are in any of the menu options to go to the Exit menu.
- ❏ In any menu, you can load default settings by pressing F9 . You can also press F10 to save any changes made and exit the BIOS Setup Utility.

NOTE: You can change the value of a parameter if it is enclosed in square brackets. Navigation keys for a particular menu are shown on the bottom of the screen. Help for parameters are found in the Item Specific Help part of the screen. Read this carefully when making changes to parameter values.

This menu provides you the information of the system.

Information

Parameter	Description
IDE1 Model Name	This field displays the model name of HDD installed on Primary IDE master. The system can automatically detect the hard disc model name. If there is no hard disc drive or unknown type, this field would display "None".
IDE1 Serial Number	This field shows the serial number of HDD installed on Primary IDE master. If no hard disc drive or other devices are installed, this field would display a blank line.
IDE2 Model Name	This field displays the model name of HDD installed on Secondary IDE master. The system can automatically detect the hard disc model name. If there is no hard disc drive or unknown type, this field would display "None".
Serial Number	This field shows the serial number of HDD installed on Secondary IDE master. If no hard disc drive or other devices are installed, this field would display a blank line.
UUID	This will be visible only when there is an internal LAN device present.

Main

The Main screen displays a summary of your computer hardware information, and also includes basic setup parameters. It allows the user to specify standard IBM PC AT system parameters.

```
┌─────────────────────────────────────────────────────────────────┐
│                      PhoenixBIOS Setup Utility                    │
├───────────┬──────┬───────────┬──────────┬──────────┬─────────────┤
│Information │ Main │  Advanced │ Security │   Boot   │    Exit     │
├───────────┴──────┴───────────┴──────────┴──────────┴─────────────┤
│                                          Item specific Help       │
│  System Time:            [00:12:45]                               │
│  System Date:            [02/24/2004]    <Tab>, <Shift-Tab>, or <Enter> │
│                                          selects field.           │
│                                                                   │
│  System Memory:          640 KB          Show System Memory Size  │
│  Extended Memory:        254 MB          Show Extended Memory Size │
│  VGA Memory:             [16 MB]         Video Memory Size         │
│                                          (VGA Memory is 128MB for  │
│  Quiet Boot:             [Enabled]       TravelMate 8000 series)   │
│  Power on display:       [Auto ]                                  │
│  LCD Auto Dim:           [Enabled]                                │
│  Network Boot:           [Enabled]                                │
│  F12 Boot Menu:          [Disabled]                               │
│                                                                   │
├───────────────────────────────────────────────────────────────── │
│ F1   Help    ↑↓ Select Item   F5/F6 Change Values   F9  Setup defaults │
│ Esc  Exit    ←→ Select Menu   Enter Select ▶ Sub-Menu  F10  Save and Exit │
└───────────────────────────────────────────────────────────────────┘
```

NOTE: The screen above is for reference only. Actual values may differ.

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Format/Option
System Time	Sets the system time.	Format: HH:MM:SS (hour:minute:second) System Time
System Date	Sets the system date.	Format MM/DD/YYYY (month/day/year) System Date
System Memory	This field reports the memory size of the system. Memory size is fixed to 640MB	
Extended Memory	This field reports the memory size of the extended memory in the system. Extended Memory size=Total memory size-2MB	
Video Memory	Shows the VGA memory size. The default value is set to 16MB	Option:**16**/32MB **Note:** VGA memory size for TravelMate 8000 series 128MB
Quiet Boot	Determines if Customer Logo will be displayed or not; shows Summary Screen is disabled or enabled. Enabled: Customer Logo is displayed, and Summary Screen is disabled. Disabled: Customer Logo is not displayed, and Summary Screen is enabled.	Option: **Enabled** or Disabled
Power on display	Auto: During power process, the system will detect if any display device is connected on external video port. If any external display device is connected, the power on display will be in CRT (or projector) only mode. Otherwise it will be in LCD only mode. Both: Simultaneously enable both the integrated LCD screen and the system's external video port (for an external CRT or projector).	Option: **Auto** or Both
LCD Auto Dim	Determines if the system will automatically dim the LCD brightness in order to save power when AC is not present.	Option: **Enabled** or Disabled

NOTE: The sub-items under each device will not be shown if the device control is set to disable or auto. This is because the user is not allowed to control the settings in these cases.

Advanced

The Advanced menu screen contains parameters involving your hardware devices. It also provides advanced settings of the system.

```
                          PhoenixBIOS Setup Utility

     Information      Main       Advanced      Security       Boot          Exit

                                                        Item specific Help

     Serial Port:                   [Auto]

     Parallel Port:                 [Auto]              Configure Infrared Port
                                                        using options:
        Mode:                       [ECP]

        Interrupt                   [IRQ 7]             [Disabled]
     Internal Touchpad              [Enabled]              No configuration


     Infrared Port (FIR)            [Disabled]          [Enabled]
                                                           User configuration


                                                        [Auto]
                                                           BIOS or OS chooses
                                                              configuration

                                                        (OS Controlled)
                                                           Displayed when
                                                           controlled by OS

     F1    Help      ↑↓ Select Item    F5/F6 Change Values    F9   Setup defaults

     Esc   Exit      ←→ Select Menu    Enter Select ▶ Sub-Menu  F10   Save and Exit
```

The table below describes the parameters in the screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Options
Parallel Port	Enables, disables or auto detects the parallel port.	**Enabled**/Disabled/Auto
Mode	Sets the operation mode of the parallel port.	**ECP**, EPP, Normal or Bi-directional
Base I/O address	Sets the I/O address of the parallel port. This parameter is enabled only if Mode is set to ECP or Bi-directional. This parameter is enabled only if Mode is set to ECP.	**378h**/278h/3BCH
Interrupt	Sets the interrupt request of the parallel port.	**IRQ7**/IRQ5
DMA channel	Sets a DMA channel for the printer to operate in ECP mode. This parameter is enabled only if Mode is set to ECP.	**DMA3**/DMA1
Internal Touchpad	Determines whether or not to disable the internal pointing device as the PS/2 mouse is connected.	**Both** or Auto
Infrared Port (FIR)	Enables, disables or auto detects the infrared port.	**Disabled**/EnabledDisabled/Auto

Security

The Security screen contains parameters that help safeguard and protect your computer from unauthorized use.

PhoenixBIOS Setup Utility					
Information	Main	Advanced	**Security**	Boot	Exit

		Item specific Help
Supervisor Password Is	Clear	
User Password Is	Clear	Supervisor Password
Primary HardDisk Security	Clear	controls access of the
HDD Master ID	Xxxxxxxx	whole setup utility. It can
		be used to boot up when
Set Supervisor Password	[Enter]	Password on boot
		enabled.
Set User Password	[Enter]	
Set Supervisor Password	[Enter]	
Password on Boot:	[Disabled]	

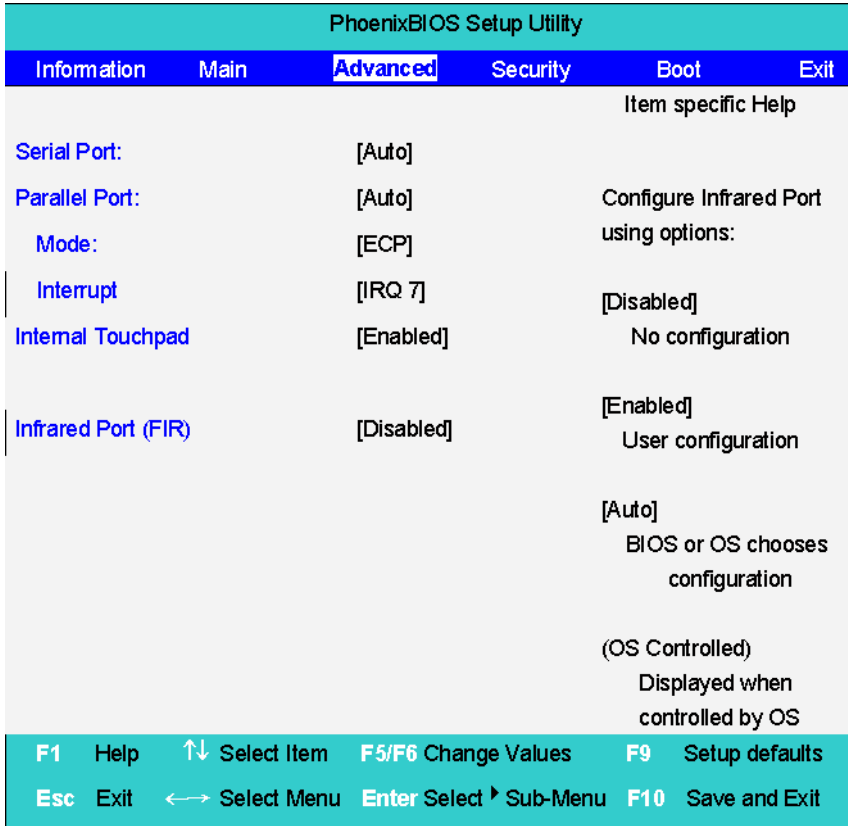| F1	Help	↑↓ Select Item	F5/F6 Change Values	F9	Setup defaults
Esc	Exit	←→ Select Menu	Enter Select ▶ Sub-Menu	F10	Save and Exit

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Option
Supervisor Password is	Shows the setting of the supervisor password.	**Clear** or Set
User Password is	Shows the setting of the uer password.	**Clear** or Set
Primary Harddisk Security	This feature is available to user when Supervisor password is set. Password can be written on HDD only when Supervisor password or user password is set and password on HDD is set to enabled. Supervisor Password is written to HDD only when Supervisor password is being set. User password is written to HDD when both passwords are set. When both Supervisor and user password are present, both passwords can unlock the HDD.	
Password on Boot	Defines whether a password is required or not while the events defined in this group happened. The following sub-options are all requires the Supervisor password for changes and should be grayed out if the user password was used to enter setup.	**Disabled** or Enabled

NOTE: When you are prompted to enter a password, you have three tries before the system halts. Don't forget your password. If you forget your password, you may have to return your notebook computer to your dealer to reset it.

Setting a Password

Follow these steps as you set the user or the supervisor password:

1. Use the ↑ and↓ keys to highlight the Set Supervisor Password parameter and press the ENTER key. The Set Supervisor Password box appears:

```
          Set Supervisor Password

 Enter New Password        [                ]

 Confirm New Password     [                ]
```

2. Type a password in the "Enter New Password" field. The password length can not exceeds 8 alphanumeric characters (A-Z, a-z, 0-9, not case sensitive). Retype the password in the "Confirm New Password" field.

IMPORTANT: Be very careful when typing your password because the characters do not appear on the screen.

3. Press ENTER .
    After setting the password, the computer sets the User Password parameter to "Set".
4. If desired, you can opt to enable the Password on boot parameter.

5. When you are done, press F10 to save the changes and exit the BIOS Setup Utility.

Removing a Password

Follow these steps:

1. Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the ENTER key. The Set Password box appears:

```
            Set Supervisor Password

Enter current password      [                    ]

Enter New Password          [                    ]

Confirm New Password        [                    ]
```

2. Type the current password in the Enter Current Password field and press [ENTER].

3. Press [ENTER] twice **without** typing anything in the Enter New Password and Confirm New Password fields. The computer then sets the Supervisor Password parameter to "Clear".

4. When you have changed the settings, press [F10] to save the changes and exit the BIOS Setup Utility.

Changing a Password

1. Use the [↑] and [↓] keys to highlight the Set Supervisor Password parameter and press the [ENTER] key. The Set Password box appears:

```
            Set Supervisor Password

Enter current password      [                    ]

Enter New Password          [                    ]

Confirm New Password        [                    ]
```

2. Type the current password in the Enter Current Password field and press [ENTER].

3. Type a password in the Enter New Password field. Retype the password in the Confirm New Password field.

4. Press [ENTER]. After setting the password, the computer sets the User Password parameter to "Set".

5. If desired, you can enable the Password on boot parameter.

6. When you are done, press [F10] to save the changes and exit the BIOS Setup Utility.

If the verification is OK, the screen will display as following.

```
            Setup Notice

     Changes have been saved.

          [ continue]
```

The password setting is complete after the user presses [F10].

If the current password entered does not match the actual current password, the screen will show you the Setup Warning.

```
                  Setup Warning

                  Invalid password

                  Re-enter Password

                   [ continue]
```

If the new password and confirm new password strings do not match, the screen will display the following message.

```
                  Setup Warning

              Password do not match

               Re-enter Password
```

Boot

This menu allows the user to decide the order of boot devices to load the operating system. Bootable devices includes the distette drive in module bay, the onboard hard disk drive and the CD-ROM in module bay.

PhoenixBIOS Setup Utility					
Information	Main	Advanced	Security	Boot	Exit

Item specific Help

+Hard Drive

  CD-ROM/DVD Drive

  Removable Drive

  Boot to LAN

Use <↑> or <↓> to select a device, then press <F6> to move it up the list, or <F5> down the list. Press <ESC> to escape the menu.

F1	Help	↑↓ Select Item	F5/F6 Change Values	F9	Setup defaults
Esc	Exit	←→ Select Menu	Enter Select ▸ Sub-Menu	F10	Save and Exit

Exit

The Exit screen contains parameters that help safeguard and protect your computer from unauthorized use.

```
                        PhoenixBIOS Setup Utility

   Information      Main       Advanced     Security      Boot       Exit
                                                    Item specific Help

      Exit Saving Changes                    Exit System Setup and save your
                                             changes to CMOS
      Exit Discarding Changes

      Load Setup Defaults

      Discard Changes

      Save Changes













   F1   Help       ↑↓ Select Item    F5/F6 Change Values    F9   Setup defaults
   Esc   Exit      ←   Select Menu   Enter Select ▶ Sub-Menu  F10  Save and Exit
```
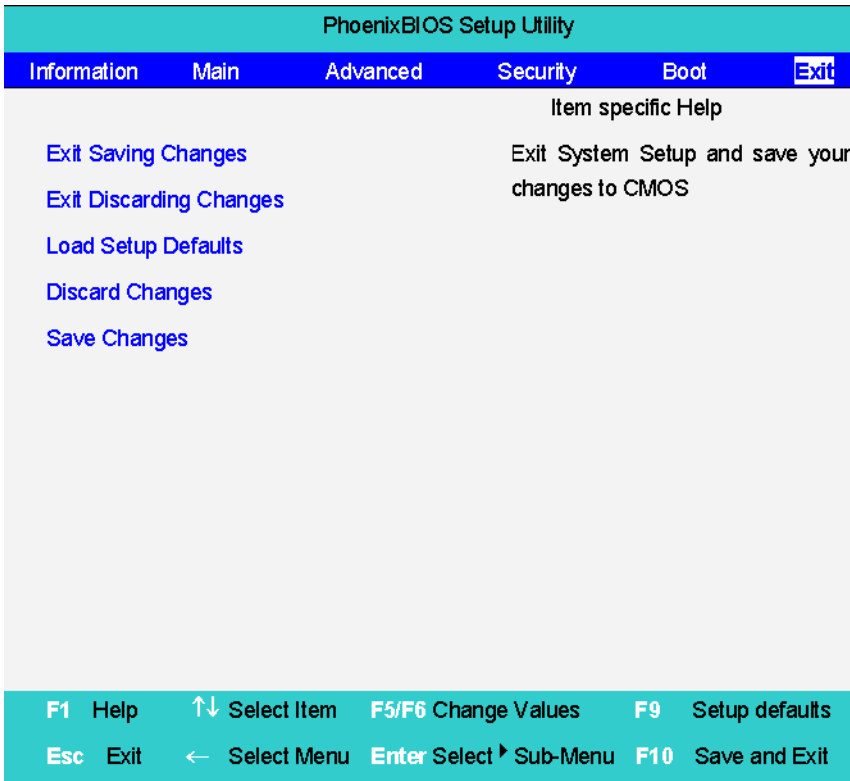
The table below describes the parameters in this screen.

Parameter	Description
Exit Saving Changes	Exit System Setup and save your changes to CMOS.
Exit Discarding Changes	Exit utility without saving setup data to CMOS.
Load Setup Default	Load default values for all SETUP item.
Discard Changes	Load previous values from CMOS for all SETUP items.
Save Changes	Save Setup Data to CMOS.

BIOS Flash Utility

The BIOS flash memory update is required for the following conditions:

- ❏ New versions of system programs
- ❏ New features or options
- ❏ Restore a BIOS when it becomes corrupted.

Use the Phlash utility to update the system BIOS flash ROM.

NOTE: If you do not have a crisis recovery diskette at hand, then you should create a **Crisis Recovery Diskette** before you use the Phlash utility.

NOTE: Do not install memory-related drivers (XMS, EMS, DPMI) when you use the Phlash.

NOTE: Please use the AC adaptor power supply when you run the Phlash utility. If the battery pack does not contain enough power to finish BIOS flash, you may not boot the system because the BIOS is not completely loaded.

Fellow the steps below to run the Phlash.

1. Prepare a bootable diskette.
2. Copy the Phlash utilities to the bootable diskette.
3. Then boot the system from the bootable diskette. The Phlash utility has auto-execution function.

Machine Disassembly and Replacement

This chapter contains step-by-step procedures on how to disassemble the notebook computer for maintenance and troubleshooting.

To disassemble the computer, you need the following tools:

❑ Wrist grounding strap and conductive mat for preventing electrostatic discharge

❑ Small Philips screw driver

❑ Philips screw driver

❑ Flat head screwdriver

❑ Plastic flat head screw driver

❑ Hex screw driver

❑ Tweezers

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components. When you remove the stripe cover, please be careful not to scrape the cover.

General Information

Before You Begin

Before proceeding with the disassembly procedure, make sure that you do the following:
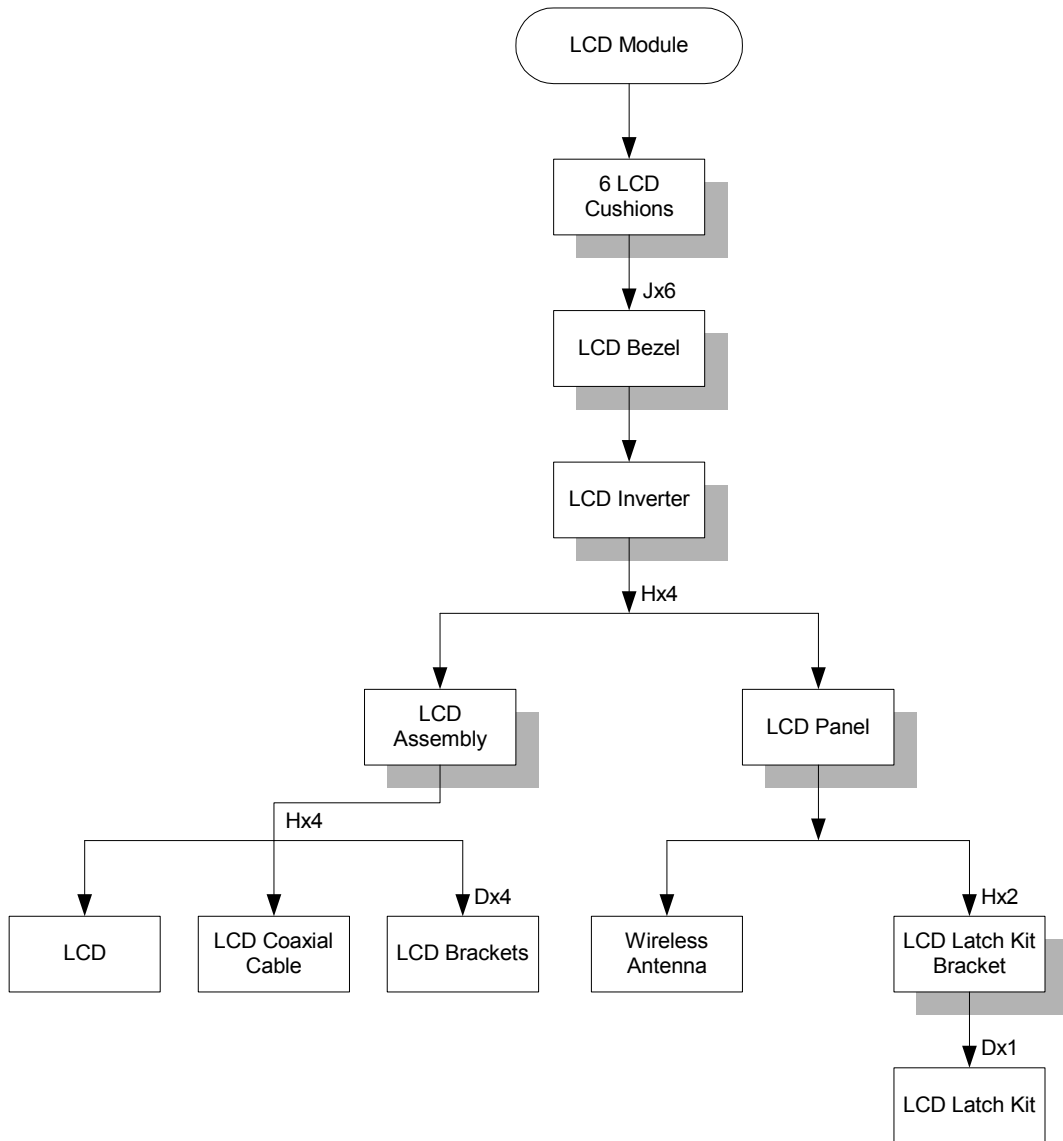
1. Turn off the power to the system and all peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.
3. Remove the battery pack.

NOTE: TravelMate 6000/ TravelMate 8000 series product uses mylar or tape to fasten the FFC/FPC/ connectors/cable, you may need to tear the tape or mylar before you disconnect different FFC/FPC/ connectors.,

Disassembly Procedure Flowchart

The flowchart on the succeeding page gives you a graphic representation on the entire disassembly sequence and instructs you on the components that need to be removed during servicing. For example, if you want to remove the system board, you must first remove the keyboard, then disassemble the inside assembly frame in that order.

```
                              ┌──────────────┐
                              │    Start     │
                              └──────┬───────┘
                                     │
                              ┌──────┴───────┐
                              │   Battery    │
                              └──────┬───────┘
     ┌──────────┬──────────────────┼──────────────────┬──────────────┐
   Hx2        Hx2                  Ox4                Hx2
┌────────┐ ┌──────────┐       ┌────────────┐    ┌──────────┐   ┌────────────┐
│HDD Door│ │Dimm Door │       │Middle Cover│    │ PCI Door │   │ ODD Module │
└───┬────┘ └────┬─────┘       └─────┬──────┘    └────┬─────┘   └─────┬──────┘
    │           │          Hx2      │      Hx3        │               │
┌───┴────┐ ┌────┴─────┐     Mx3  ┌──┴───┐            │               │
│  HDD   │ │  Memory  │   ┌──────┐ │   ┌──────────┐ ┌───────────┐   │
│ Module │ │          │   │Keyboard│   │Function  │ │Wireless   │   │
└────────┘ └──────────┘   └──────┘ │   │Key Board │ │LAN Card   │   │
                           Sx4  ┌──┴───┐└──────────┘ └────┬──────┘   │
                           ┌────────────┐                 │          │
                           │ LCD Module │           Cx4   │   Fx2    │
                           └─────┬──────┘       ┌──────────┴────┬─────────┐
                           ┌─────┴──────┐   ┌──────────┐ ┌──────────┐ ┌──────┐
                           │ Main Unit  │   │ODD Bracket││ODD Board │ │ ODD  │
                           │ Assembly   │   └──────────┘ └──────────┘ └──────┘
                           └─────┬──────┘
                           ┌─────┴──────┐
                           │ Front Bezel│
                           └─────┬──────┘
                              Sx19
                              Hx2
                              Ux3
```

```
                          ┌─────────────────┐
                          │   LCD Module    │
                          └────────┬────────┘
                                   │
                          ┌────────▼────────┐
                          │     6 LCD       │
                          │    Cushions     │
                          └────────┬────────┘
                                   │ Jx6
                          ┌────────▼────────┐
                          │    LCD Bezel    │
                          └────────┬────────┘
                                   │
                          ┌────────▼────────┐
                          │   LCD Inverter  │
                          └────────┬────────┘
                                   │ Hx4
                ┌──────────────────┴──────────────────┐
       ┌────────▼────────┐                    ┌────────▼────────┐
       │      LCD        │                    │    LCD Panel    │
       │    Assembly     │                    │                 │
       └────────┬────────┘                    └────────┬────────┘
            Hx4 │                                       │
     ┌──────────┼──────────┐             ┌──────────────┼──────────┐
┌────▼───┐ ┌────▼────┐ ┌────▼────┐ Dx4  ┌─▼────────┐      ┌────────▼──┐ Hx2
│  LCD   │ │LCD Coax.│ │LCD      │      │ Wireless │      │LCD Latch  │
│        │ │ Cable   │ │Brackets │      │ Antenna  │      │Kit Bracket│
└────────┘ └─────────┘ └─────────┘      └──────────┘      └────────┬──┘
                                                                   │ Dx1
                                                          ┌────────▼──┐
                                                          │LCD Latch  │
                                                          │   Kit     │
                                                          └───────────┘
```

Screw List

Item	Description
A	NUT-I/O
B	SCREW M1.6X4.0-I-NI-NYLOK
C	SCREW M2.0X2.5-I-NI-NYLOK
D	SCREW M2.0X3.0-I-NI-NYLOK
E	SCREW M2.0X3.5-I-NI-NYLOK
F	SCREW M2.0X5-I-NI-NYLOK
G	SCREW M2.5X3-I-NI-NYLOK
H	SCREW M2.5X4.0-B-NI-NYLOK
I	SCREW M2.5X4-I-NYLOK
J	SCREW M2.5X5.0-I-NI-NYLOK
K	SCREW M2.5X5.5-P-NI-NYLOK

Item	Description
L	SCREW M2.5X0.45+7I-NYLOK
M	SCREW M1.7X3.5-I-BZN
N	SCREW M2X3-I-BNI-NYLOK
O	SCREW M2.0X5.0-I-BNI-NYLOK
P	SCREW M2.0X6.0-I-NI-NYLOK
Q	SCREW M2.5X2-I-NI-NYLOK
R	SCREW M2.5X4-I-BNI
S	SCREW M2.5X7
T	SCREW M3.0X3.5
U	SCREW M2.5X5 (BLACK)

Removing the Battery Pack

1. Release the battery lock.

2. Slide the battery latch then remove the battery.

Removing the Optical Module/HDD Module/Wireless Lan Card and LCD module

Removing the Optical Module

1. Slide the optical disk drive latch.

2. Remove the ODD module.

Removing the HDD Module

1. Remove the two screws holding the HDD cover.

2. Remove the HDD cover.

3. Remove the HDD module.

Removing the Wireless LAN Card

1. Remove the screw that secures the PCI door then remove the PCI door.

2. Disconnect the right and the left wireless antenna.

3. Pop out the wireless LAN card then remove it.

Removing the LCD Module

1. Remove the four screws that secures the middle cover; two one each side.

2. Detach middle cover with the assistance of a plastic flat head screw driver.

3. Disconnect the LCD cable then take out the cable from the upper case.
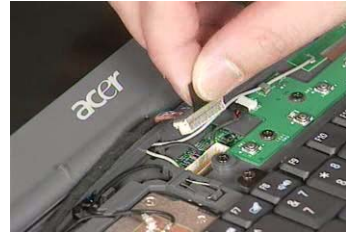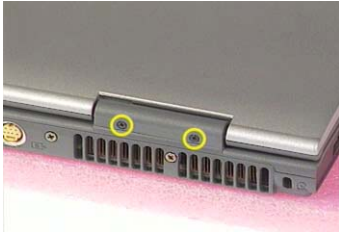
4. Disconnect the left wireless LAN antenna line. Then take out the antenna from the upper case with a tweezers.

5. Unscrew the four screws holding the LCD hinges; two on each side.

6. Then remove the entire LCD module.
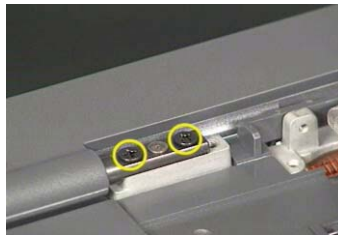
Disassembling the Main Unit

Remove the function key board and the keyboard

1. Take the wireless antenna out of the hook on the function key board.
2. Disconnect function key board connector
3. Unscrew the three screws holding the function key board.

4. Remove the three screws that secure the keyboard.
5. Turn over the unit and remove the two screws as the picture shows.
6. Turn over the keyboard. Disconnect the keyboard FFC then remove the keyboard.

Separate the main unit into the logic upper and the logic lower assembly

1. Remove the three screws on the rear panel.
2. Unscrew the 19 screws on the bottom panel.
3. Detach the front bezel from the main unit.
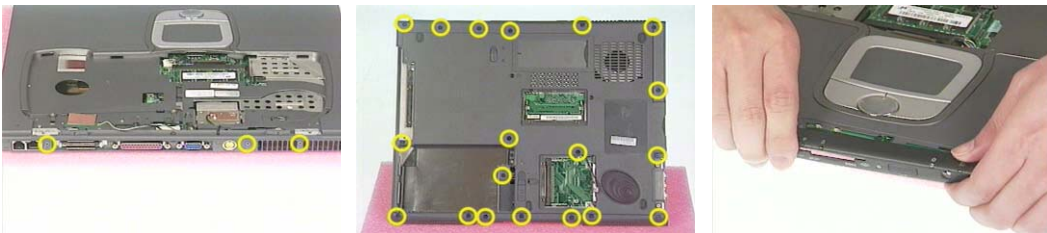
4. Remove the two screws. Then take the right and the left antenna off the main unit.
5. Disconnect the touchpad cable.
6. Pull out the right and the left wireless LAN antenna, then detach the logic upper assembly from the logic lower assembly.

Disassembling the logic upper assembly

1. Take out the touchpad cable from the small hook on touchpad holder.

2. Remove the four screws holding the touchpad shielding and the touchpad board.
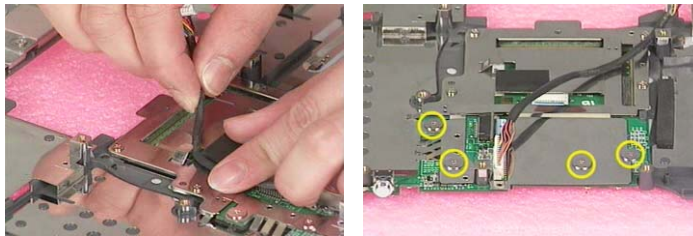
3. Disconnect the touchpad FFC from the touchpad board.

4. Remove the touchpad board.

5. Remove the wireless and bluetooth button off the touchpad board.

6. Remove the four screws that fasten the touchpad holder.

7. Remove the touchpad off the logic upper assembly.

8. Disconnect touchpad FFC.

## Disassembling the logic lower assembly

1. In order to take out the main board from the upper case, first remove the four screws that fasten the top cover shielding.

2. Remove the three screws holding the 4-in-1 card reader, then remove it.
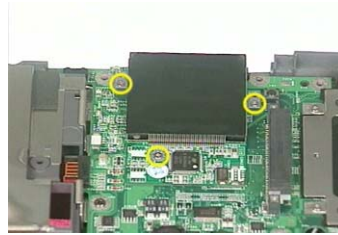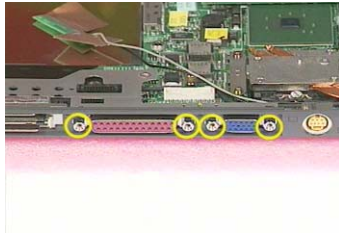
3. Unscrew the four screws that secure the thermal module.

4. Disconnect the fan connector then remove the thermal module.
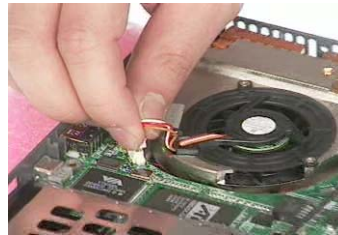
5. Remove one screw that secures the main board as picture shows.

6. Remove another screw that fastens the main board.

7. Take out the bluetooth antenna.
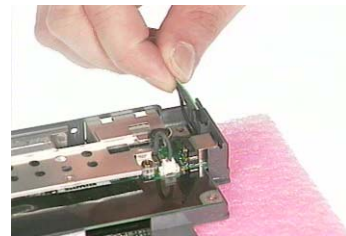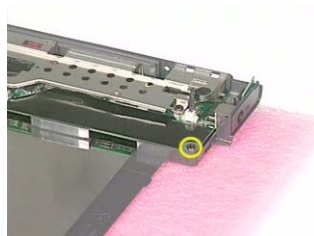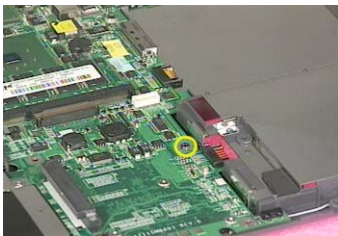
8. Disconnect the speaker set cable.

9. To remove the main board from the lower case assembly, first press the PCMCIA card button.

10. Then take the main board off the lower case assembly.
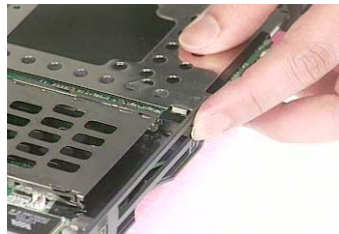
11. Unscrew the two screws that fasten the HDD bracket.

12. Remove one screw holding the top cover shielding.

13. Disconnect the microphone cable. Then remove the top cover shielding.
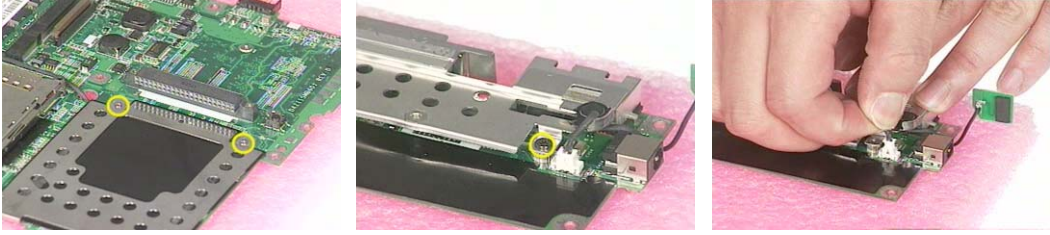
14. Turn the CPU lock counter clock-wise with a flat head screw driver. Then remove the CPU.

15. Pop out the memory then remove it.

16. Unscrew the two screws that secure the modem/bluetooth combo card. Remove the modem/bluetooth combo card then disconnect the connector.
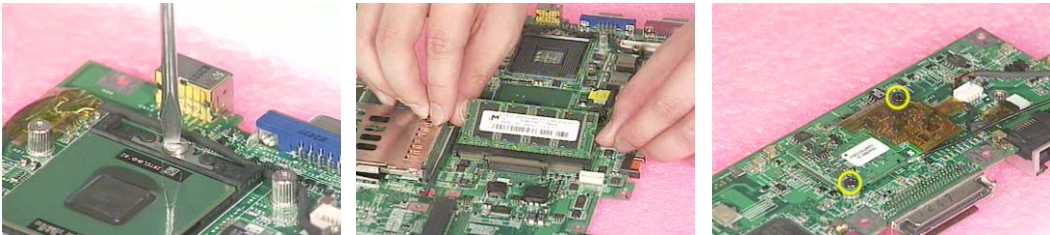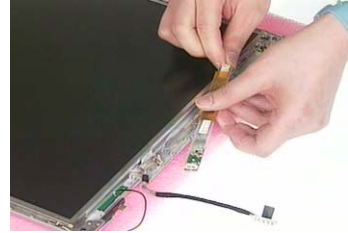

17. Disconnect the bluetooth antenna and the modem cable.

18. Disconnect the smart card reader FPC.

**19.** Unscrew the two screws holding the smart card reader then remove it.

Disassembling the LCD Module

1. Remove the six screw pad and the six screws.

2. Detach the LCD bezel carefully.

3. Disconnect LCD inverter.

4. Remove the two screws holding the LCD to LCD panel.

5. Then remove the LCD.

6. Remove the four screws that fasten the right and the left LCD brackets. Then remove the right and the left LCD brackets.
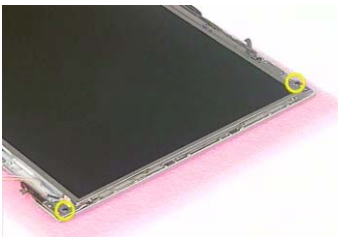
7. Tear off the electric conductive tape that fastens the LCD coaxial cable.

8. Tear off another electric conductive tape that fastens the LCD coaxial cable.

9. Disconnect the LCD coaxial cable.

.

10. Detach the wireless antenna from the LCD panel.

11. Remove the two screws holding the LCD latch kit.

12. Remove the LCD latch kit bracket.
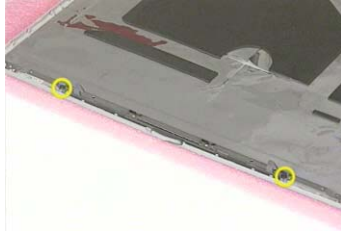
13. Unhook the spring.

14. Remove the screw that fastens the LCD latch kit.

15. Then remove the LCD latch kit.

Disassembling the External Modules

Disassembling the HDD Module

1. Remove the four screws holding the HDD bracket; two on each side.
2. Take out the HDD from the HDD bracket.
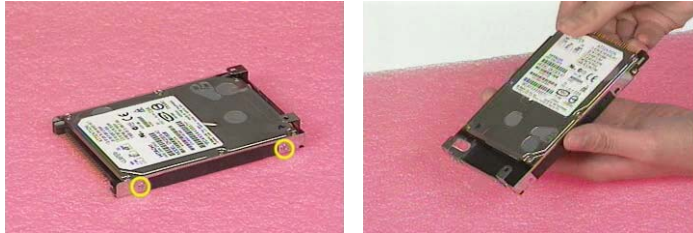
Disassembling the Optical Drive Module

1. Remove the two screws holding the ODD bracket.
2. Remove another screw as the picture shows.
3. Then remove the last two screws on the back side of the ODD module.
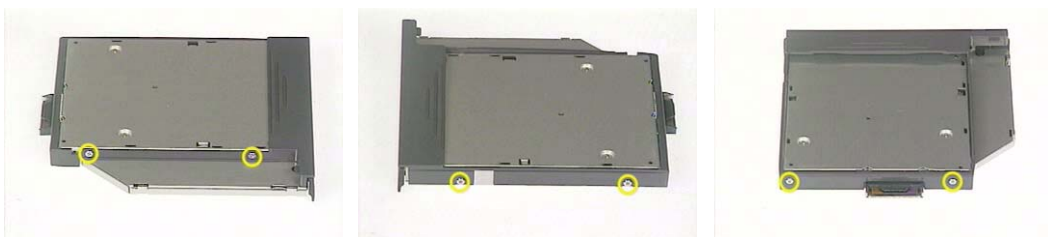
4. Slide the ODD from the ODD bracket.
5. Then remove the optical bracket.
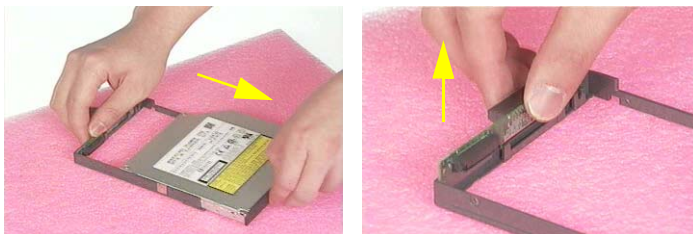
6. In order to open the ODD, use an uncurved pin to press the emergency eject hole.
7. Remove the three screws that fasten the ODD door.
8. Then detach the ODD door.

Troubleshooting

Use the following procedure as a guide for computer problems.

NOTE: The diagnostic tests are intended to test this model. Non-Acer products, prototype cards, or modified options can give false errors and invalid system responses.

1. Duplicate symptom and obtain the failing symptoms in as much detail as possible.

2. Distinguish symptom. Verify the symptoms by attempting to re-create the failure by running the diagnostic test or by repeating the same operation.

3. Disassemble and assemble the unit without any power sources.

4. If any problem occurs, you can perform visual inspection before you fellow this chapter's instructions. You can check the following:

    power cords are properly connected and secured;

    there are no obvious shorts or opens;

    there are no obviously burned or heated components;

    all components appear normal.

5. Use the following table with the verified symptom to determine which page to go to.

Symptoms (Verified)	Go To
Power failure. (The power indicator does not go on or stay on.)	"Power System Check" on page 63.
POST does not complete. No beep or error codes are indicated.	"Power-On Self-Test (POST) Error Message" on page 65 "Undetermined Problems" on page 77
POST detects an error and displayed messages on screen.	"Error Message List" on page 66
Other symptoms (i.e. LCD display problems or others).	"Power-On Self-Test (POST) Error Message" on page 65
Symptoms cannot be re-created (intermittent problems).	Use the customer-reported symptoms and go to "Power-On Self-Test (POST) Error Message" on page 65 "Intermittent Problems" on page 76 "Undetermined Problems" on page 77

System Check Procedures

External Diskette Drive Check

If an error occurs with the internal diskette drive, reconnect the diskette connector on the system board.

If the error still remains:

1. Reconnect the external diskette drive/DVD-ROM module.

2. Replace the external diskette drive/CD-ROM module.

3. Replace the main board.

External CD-ROM Drive Check

Do the following to isolate the problem to a controller, drive, or CD-ROM. Make sure that the CD-ROM does not have any label attached to it. The label can cause damage to the drive or can cause the drive to fail.

Do the following to select the test device:

1. Boot from the diagnostics diskette and start the diagnostics program.

2. See if CD-ROM Test is passed when the program runs to CD-ROM Test.

3. Follow the instructions in the message window.

If an error occurs, reconnect the connector on the System board. If the error still remains:

1. Reconnect the external diskette drive/CD-ROM module.

2. Replace the external diskette drive/CD-ROM module.

3. Replace the main board.

Keyboard or Auxiliary Input Device Check

Remove the external keyboard if the internal keyboard is to be tested.

If the internal keyboard does not work or an unexpected character appears, make sure that the flexible cable extending from the keyboard is correctly seated in the connector on the system board.

If the keyboard cable connection is correct, run the Keyboard Test.

If the tests detect a keyboard problem, do the following one at a time to correct the problem. Do not replace a non-defective FRU:

1. Reconnect the keyboard cables.

2. Replace the keyboard.

3. Replace the main board.

The following auxiliary input devices are supported by this computer:

- ❑   Numeric keypad

- ❑   External keyboard

If any of these devices do not work, reconnect the cable connector and repeat the failing operation.

Memory check

Memory errors might stop system operations, show error messages on the screen, or hang the system.

1. Boot from the diagnostics diskette and start the doagmpstotics program (please refer to main board.

2. Go to the diagnostic memory in the test items.

3. Press F2 in the test items.

4. Follow the instructions in the message window.

NOTE: Make sure that the DIMM is fully installed into the connector. A loose connection can cause an error.

Power System Check

To verify the symptom of the problem, power on the computer using each of the following power sources:

1. Remove the battery pack.

2. Connect the power adapter and check that power is supplied.

3. Disconnect the power adapter and install the charged battery pack; then check that power is supplied by the battery pack.

If you suspect a power problem, see the appropriate power supply check in the following list:

❑   "Check the Battery Pack" on page 64

Check the Battery Pack

To check the battery pack, do the following:

From Software:

1. Check out the Power Management in control Panel

2. In Power Meter, confirm that if the parameters shown in the screen for Current Power Source and Total Battery Power Remaining are correct.

3. Repeat the steps 1 and 2, for both battery and adapter.

4. This helps you identify first the problem is on recharging or discharging.

From Hardware:

1. Power off the computer.

2. Remove the battery pack and measure the voltage between battery terminals 1(+) and 6(ground). See the following figure

3. If the voltage is still less than 7.5 Vdc after recharging, replace the battery.

To check the battery charge operation, use a discharged battery pack or a battery pack that has less than 50% of the total power remaining when installed in the computer.

If the battery status indicator does not light up, remove the battery pack and let it return to room temperature. Re-install the battery pack.

If the charge indicator still does not light up, replace the battery pack. If the charge indicator still does not light up, replace the DC/DC charger board.

Touchpad check

If the touchpad doesn't work, do the following actions one at a time to correct the problem. Do not replace a non-defective FRU:

1. After rebooting, run Tracking Pad PS2 Mode Driver. For example, run Syn touch driver.

2. Run utility with the PS/2 mouse function and check if the mouse is working.

3. If the the PS/2 mouse does not work, then check if the main board to switch board FPC is connected O.K.

4. If the main board to switch board FPC is connected well, then check if the FCC on touch pad PCB connects properly.

5. If the FFC on touch pad PCB connects properly, then check if LS851 JP1 Pin6=5V are pulese. If yes, then replace switch board. If no, then go to next step.

6. Replace touch pad PCB.

7. If the touch pad still does not work, then replace FPC on Track Pad PCB.

After you use the touchpad, the pointer drifts on the screen for a short time. This self-acting pointer movement can occur when a slight, steady pressure is applied to the touchpad pointer. This symptom is not a hardware problem. No service actions are necessary if the pointer movement stops in a short period of time.

Power-On Self-Test (POST) Error Message

The POST error message index lists the error message and their possible causes. The most likely cause is listed first.

NOTE: Perform the FRU replacement or actions in the sequence shown in FRU/Action column, if the FRU replacement does not solve the problem, put the original part back in the computer. Do not replace a non-defective FRU.

This index can also help you determine the next possible FRU to be replaced when servicing a computer.

If the symptom is not listed, see "Undetermined Problems" on page 77.

The following lists the error messages that the BIOS displays on the screen and the error symptoms classified by function.

NOTE: Most of the error messages occur during POST. Some of them display information about a hardware device, e.g., the amount of memory installed. Others may indicate a problem with a device, such as the way it has been configured.

NOTE: If the system fails after you make changes in the BIOS Setup Utility menus, reset the computer, enter Setup and install Setup defaults or correct the error.

Index of Error Messages

Error Message List

Error Messages	FRU/Action in Sequence
Struck Key	See "Keyboard or Auxiliary Input Device Check" on page 62
System CMOS checksum bad - Default configuration used	RTC battery Run BIOS Setup Utility to reconfigure system, then reboot system.
Real time clock error	RTC battery Run BIOS Setup Utility to reconfigure system time, then reboot system. Main board
Previous boot incomplete - Default configuration used	"Load Default Settings" in BIOS Setup Utility. RTC battery Main baord
Invalid System Configuration Data	"Load Default Settings" in BIOS Setup Utility. Main board
Operating system not found	Enter Setup and see if fixed disk and drive A are properly identified. Dikette drive Hard disk drive Main board

Error Message List

No beep Error Messages	FRU/Action in Sequence
Power-on indicator turns off and LCD is blank.	Power source (battery pack and power adapter.) See "Power System Check" on page 63
	Ensure every connector is connected tightly and correctly.
	Reconnect the DIMM.
	Main board.
Power-on indicator turns on and LCD is blank.	Power source (battery pack and power adapter.) See "Power System Check" on page 63
	Reconnect the LCD connector
	Hard disk drive
	LCD cable
	LCD inverter
	LCD
	Main board
Power-on indicator turns on and LCD is blank. But you can see POST on an external CRT.	Reconnect the LCD connectors.
	LCD cable
	LCD inverter
	LCD
	Main board
Power-on indicator turns on and a blinking cursor shown on LCD during POST.	Ensure every connector is connected tightly and correctly.
	Main board

Phoenix BIOS Beep Codes

Code	Beeps	POST Routine Description
02h		Verify Real Mode
03h		Disable Non-Maskable Interrupt (NMI)
04h		Get CPU type
06h		Initialize system hardware
08h		Initialize chipset with initial POST values
09h		Set IN POST flag
0Ah		Initialize CPU registers
0Bh		Enable CPU cache
0Ch		Initialize caches to initial POST values
0Eh		Initialize I/O component
0Fh		Initialize the local bus IDE
10h		Initialize Power Management
11h		Load alternate registers with initial POST values
12h		Restore CPU control word during warm boot
13h		Initialize PCI Bus Mastering devices
14h		Initialize keyboard controller
16h	1-2-2-3	BIOS ROM checksum
17h		Initialize cache before memory autosize
18h		8254 timer initialization
1Ah		8237 DMA controller initialization
1Ch		Reset Programmable Interrupt Controller
20h	1-3-1-1	Test DRAM refresh
22h	1-3-1-3	Test 8742 Keyboard Controller
24h		Set ES segment register to 4 GB
26h		Enable A20 line
28h		Autosize DRAM
29h		Initialize POST Memory Manager
2Ah		Clear 215 KB base RAM
2Ch	1-3-4-1	RAM failure on address line xxxx
2Eh	1-3-4-3	RAM failure on data bits xxxx of low byte of memory bus
2Fh		Enable cache before system BIOS shadow
30h	1-4-1-1	RAM failure on data bits xxxx of high byte of memory bus
32h		Test CPU bus-clock frequency
33h		Initialize Phoenix Dispatch Manager
36h		Warm start shut down
38h		Shadow system BIOS ROM
3Ah		Autosize cache
3Ch		Advanced configuration of chipset registers
3Dh		Load alternate registers with CMOS values
42h		Initialize interrupt vectors
45h		POST device initialization
46h	2-1-2-3	Check ROM copyright notice

Code	Beeps	POST Routine Description
48h		Check video configuration against CMOS
49h		Initialize PCI bus and devices
4Ah		Initialize all video adapters in system
4Bh		QuietBoot start (optional)
4Ch		Shadow video BIOS ROM
4Eh		Display BIOS copyright notice
50h		Display CPU type and speed
51h		Initialize EISA board
52h		Test keyboard
54h		Set key click if enabled
58h	2-2-3-1	Test for unexpected interrupts
59h		Initialize POST display service
5Ah		Display prompt "Press F2 to enter SETUP"
5Bh		Disable CPU cache
5Ch		Test RAM between 512 and 640 KB
60h		Test extended memory
62h		Test extended memory address lines
64h		Jump to User Patch1
66h		Configure advanced cache registers
67h		Initialize Multi Processor APIC
68h		Enable external and CPU caches
69h		Setup System Management Mode (SMM) area
6Ah		Display external L2 cache size
6Bh		Load custom defaults (optional)
6Ch		Display shadow-area message
6Eh		Display possible high address for UMB recovery
70h		Display error messages
72h		Check for configuration errors
76h		Check for keyboard errors
7Ch		Set up hardware interrupt vectors
7Eh		Initialize coprocessor if present
80h		Disable onboard Super I/O ports and IRQs
81h		Late POST device initialization
82h		Detect and install external RS232 ports
83h		Configure non-MCD IDE controllers
84h		Detect and install external parallel ports
85h		Initialize PC-compatible PnP ISA devices
86h		Re-initialize onboard I/O ports
87h		Configure Motherboard Configurable Devices (optional)
88h		Initialize BIOS Area
89h		Enable Non-Maskable Interrupts (NMIs)
8Ah		Initialize Extended BIOS Data Area
8Bh		Test and initialize PS/2 mouse
8Ch		Initialize floppy controller

Code	Beeps	POST Routine Description
8Fh		Determine number of ATA drives (optional)
90h		Initialize hard-disk controllers
91h		Initialize local-bus hard-disk controllers
92h		Jump to UserPatch2
93h		Build MPTABLE for multi-processor boards
95h		Install CD ROM for boot
96h		Clear huge ES segment register
97h		Fixup Multi Processor table
98h	1-2	Search for option ROMs. One long, two short beeps on checksum failure.
99h		Check for SMART drive (optional)
9Ah		Shadow option ROMs
9Ch		Set up Power Management
9Dh		Initialize security engine (optional)
9Eh		Enable hardware interrupts
9Fh		Determine number of ATA and SCSI drives
A0h		Set time of day
A2h		Check key lock
A4h		Initialize Typematic rate
A8h		Erase F2 prompt
AAh		Scan for F2 key stroke
ACh		Enter SETUP
AEh		Clear Boot flag
B0h		Check for errors
B2h		POST done- prepare to boot operating system
B4h	1	One short beep before boot
B5h		Terminate QuietBoot (optional)
B6h		Check password (optional)
B9h		Prepare Boot
BAh		Initialize DMI parameters
BBh		Initialize PnP Option ROMs
BCh		Clear parity checkers
BDh		Display MultiBoot menu
BEh		Clear screen (optional)
BFh		Check virus and backup reminders
C0h		Try to boot with INT 19
C1h		Initialize POST Error Manager (PEM)
C2h		Initialize error logging
C3h		Initialize error display function
C4h		Initialize system error handler
C5h		PnPnd dual CMOS (optional)
C6h		Initialize notebook docking (optional)
C7h		Initialize notebook docking late
C8h		Force check (optional)
C9h		Extended checksum (optional)
D2h		Unknown interrupt

Code	Beeps	POST Routine Description
E0h		Initialize the chipset
E1h		Initialize the bridge
E2h		Initialize the CPU
E3h		Initialize the system timer
E4h		Initialize system I/O
E5h		Check force recovery boot
E6h		Checksum BIOS ROM
E7h		Go to BIOS
E8h		Set Huge Segment
E9h		Initialize Multi Processor
EAh		Initialize OEM special code
EBh		Initialize PIC and DMA
ECh		Initialize Memory type
EDh		Initialize Memory size
EEh		Shadow Boot Block
EFh		System memory test
F0h		Initialize interrupt vectors
F1h		Initialize Run Time Clock
F2h		Initialize video
F3h		Initialize System Management Mode
F4h	1	Output one beep before boot
F5h		Boot to Mini DOS
F6h		Clear Huge Segment
F7h		Boot to Full DOS

Index of Symptom-to-FRU Error Message

LCD-Related Symptoms

Symptom / Error	Action in Sequence
LCD backlight doesn't work	First, plug a monitor to CRT port. Next, enter BIOS utility to running "Load Default Settings" then reboot the system.
	Reconnect the LCD connectors.
	Keyboard (if the brightness function key doesn't work).
	LCD cable
	LCD inverter
	LCD
	Main board
LCD is too dark LCD brightness cannot be adjusted	Enter BIOS Utility to execute "Load Setup Default Settings", then reboot system.
	Reconnect the LCD connectors.
	Keyboard (if the brightness function key doesn't work).
	LCD cable
	LCD inverter
	LCD
	Main board
Unreadable LCD screen Missing pels in characters Abnormal screen Wrong color displayed LCD has extra horizontal or vertical lines displayed.	Reconnect the LCD cable
	LCD cable
	LCD
	Main board

Indicator-Related Symptoms

Symptom / Error	Action in Sequence
Indicator incorrectly remains off or on, but system runs correctly	Main board
HDD/CD-ROM active indicators cannot work	HDD/CD-ROM drive
	Device driver
	Main board

Power-Related Symptoms

Symptom / Error	Action in Sequence
Power shuts down during operation	Power source (battery pack and power adapter). See "Power System Check" on page 63.
	Battery pack
	AC adapter
	See if the thermal module is overheat (Heat sink or fan).
	Main board
The system cannot power-on.	Power source (battery pack and power adapter). See "Power System Check" on page 63.
	Battery pack
	Power adapter
	CPU
	Main board
The system cannot power-off.	In Windows XP operating system, hold and press the power switch for more than 4 seconds. If the system can power off, then the main board is OK. Verify OS in the HDD.
	Main board

Power-Related Symptoms

Symptom / Error	Action in Sequence
Battery can't be charged or discharged	See "Check the Battery Pack" on page 64. Battery pack Main board
System hang during POST	ODD/HDD/FDD/RAM module Main board

PCMCIA-Related Symptoms

Symptom / Error	Action in Sequence
System cannot detect the PC Card (PCMCIA)	PCMCIA slot assembly Main board
PCMCIA slot pin is damaged.	PCMCIA slot assembly
PC Card cannot be inserted or ejected	Check if the PCMCIA slot is blocked Main board

Memory-Related Symptoms

Symptom / Error	Action in Sequence
Memory count (size) appears different from actual size.	Enter BIOS Setup Utility to execute "Load Default Settings" then reboot system. RAM module Main board Check BIOS revision
System can power on, but you hear two long beeps: "B--, B--" and the LCD is blank.	Reinsert DIMM DIMM Main board

Speaker-Related Symptoms

Symptom / Error	Action in Sequence
In Windows, multimedia programs, no sound comes from the computer.	OS volume control Audio driver Speaker Main board
Internal speakers make noise or emit no sound.	Speaker Main board
Microphone cannot work	Audio driver Volume control in Windows XP Main board

Power Management-Related Symptoms

Symptom / Error	Action in Sequence
The system will not enter hibernation mode	Power option in Windows XP Hard disk drive Main board
The system doesn't enter standby mode after closing the lid of the portable computer.	Driver of Power Option Properties Lid close switch in upper case Main board

Power Management-Related Symptoms

Symptom / Error	Action in Sequence
The system doesn't resume from hibernation/ standby mode.	Connect AC adapter then check if the system resumes from Standby/Hibernation mode. Check if the battery is low. Hard disk drive Main board
The system doesn't resume from standby mode after opening the lid of the portable computer.	LCD cover switch Main board
Battery fuel gauge in Windows doesn't go higher than 90%.	Refresh battery (continue use battery until power off, then charge battery). Battery pack Main board
System hangs intermittently.	Reconnect hard disk/CD-ROM drives. Main board

Peripheral-Related Symptoms

Symptom / Error	Action in Sequence
System configuration does not match the installed devices.	Enter BIOS Setup Utility to execute "Load Setup defaults", then reboot system. Reconnect hard disk/CD-ROM drives/FDD or other peripherals. Main board
External display does not work correctly.	Press Fn+F5, LCD/CRT/Both display switching Keyboard Main board
USB does not work correctly	Main board
Print problems.	Enter BIOS Setup Utility to execute "Load Default Settings" then reboot the system. Run printer self-test. Printer driver Printer cable Printer Main board
Parallel port device problems	Enter BIOS Setup Utility to execute "Load Default Settings" then reboot the system. Device driver Device cable Device Main board

Keyboard/Touchpad-Related Symptoms

Symptom / Error	Action in Sequence
Keyboard (one or more keys) does not work.	Reconnect the keyboard cable. Keyboard Main board
Touchpad does not work.	Reconnect touchpad cable. Touchpad board Main board

Modem/LAN-Related Symptoms

Symptom / Error	Action in Sequence
Internal modem does not work correctly.	Phone cable Driver Reconnect the Internal modem cable to the main board tightly. Main board
Internal LAN does not work correctly	Lan cable Driver Main board

NOTE: If you cannot find a symptom or an error in this list and the problem remains, see "Undetermined Problems" on page 77.

Intermittent Problems

Intermittent system hang problems can be caused by a variety of reasons that have nothing to do with a hardware defect, such as: cosmic radiation, electrostatic discharge, or software errors. FRU replacement should be considered only when a recurring problem exists.

When analyzing an intermittent problem, do the following:

1. Run the diagnostic test for the system board in loop mode at least 10 times.

2. If no error is detected, do not replace any FRU.

3. If any error is detected, replace the FRU. Rerun the test to verify that there are no more errors.

Undetermined Problems

The diagnostic problems does not identify which adapter or device failed, which installed devices are incorrect, whether a short circuit is suspected, or whether the system is inoperative.

Follow these procedures to isolate the failing FRU (do not isolate non-defective FRU).

NOTE: Verify that all attached devices are supported by the computer.

NOTE: Verify that the power supply being used at the time of the failure is operating correctly. (See "Power System Check" on page 63):

1. Power-off the computer.

2. Visually check them for damage. If any problems are found, replace the FRU.

3. Remove or disconnect all of the following devices:

   ❏ Non-Acer devices

   ❏ Printer, mouse, and other external devices

   ❏ Battery pack

   ❏ Hard disk drive

   ❏ DIMM

   ❏ PC Cards

4. Power-on the computer.

5. Determine if the problem has changed.

6. If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.

7. If the problem remains, replace the following FRU one at a time. Do not replace a non-defective FRU:

   ❏ System board

   ❏ LCD assembly

Jumper and Connector Locations

Top View

1	S-Video	13	HDD connector
2	CRT	14	Keyboard connector
3	DVI Connector	15	Touchpad board connector
4	Docking	16	IR
5	RJ45	17	Main battery connector
6	RJ11	18	Second battery connector
7	Power jack	19	Swap bay connector
8	CPU socket	20	DDR Dimm 0

9	Fan connector	21	LCD cable connector
10	USB connector	22	LED board connector
11	1394 connector	23	Internal microphone connector
12	PCMCIA		

Bottom View

1	Modem Cable Connector	6	RTC battery connector
2	MDC connector	7	Line-in connector
3	DDR Dimm 1	8	Microphone-in connector
4	Smart card connector	9	Headphone out connector
5	Mini PCI connector		

Clear BIOS Password

If you need to clear BIOS password, please have G3 a short-circuit.

FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of TravelMate 6000 and TravelMate 8000 series products. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.

NOTE: Exploded diagram is not ready as service guide released. We will update the service guide to CSD website, please download the exploded diagram from the website if you need the file.

Exploded Diagram

ITEM	P/N	Q'ty	NOTE
A	WM2S0401L60	26	
B	WM29025IC11	4	
C	WS29038I493	4	
D	WM09050IC12	2	
E	WS29060I064	4	
F	WS25029IF05	3	
G	WM2S030IC17	1	
H	WM2S0501L64	6	
I	WS25010ICF5	4	
J	WS29030ICP5	4	
K	WM2S0701Z97	19	
L	WS29050IL10	4	
M	WM09025IC16	4	
N	WS25029IF05	4	
O	WS38035I354	4	

TravelMate 6000 FRU List

Picture	No.	Partname And Description	Part Number
Adapter			
	NS	ADAPTER 65W -- TBD	TBD
		ADAPTER 65W -- TBD	TBD
Battery			
	NS	BATTERY SANYO LI-ION 8CELL 4400mAH SI-QT83	BT.T2303.001
		BATTERY SIMPLO LI-ION 8CELL (BATTERY PACK ZG14S2P, 4400mAH)	BT.T2905.001
		BATTERY SANYO LI-ION 6CELL (MODEL NAME:3UF103450P-2-QC-20,3600 Mah)	BT.T2303.002
Boards			
		MODEM CARD , AMBIT T60M283.15	54.A10V7.001

TravelMate 6000 FRU List

Picture	No.	Partname And Description	Part Number
		MODEM /BLUETOOTH COMBO BOARD AMBIT T60M665.00	54.T23V7.002
		WIRELESS LAN BOARD (802.11b+g) INTEL	54.T25V7.003
	NS	LAUNCH BOARD	55.T41V7.001
	NS	TOUCH PAD BOARD W/CABLE	55.T41V7.002
		SWITCH BOARD	55.T41V7.003
Cables			
		TOUCHPAD CABLE	50.T23V7.001
		COVER SWITCH CABLE	50.T23V7.003
		MODEM CABLE	50.T23V7.002
		POWER CORD US (3 pin)	27.A03V7.001
		POWER CORD PRC (3 Pin)	27.A03V7.003
		ZI1S POWER CORD SPARE PART-KOERA	27.T23V7.006
		ET2S POWER CORD S/P-EU	27.A03V7.002
		ET2S POWER CORD S/P-UK	27.A03V7.004
		ET2S POWER CORD S/P-ITALIAN	27.A03V7.005
		ET2S POWER CORD SPARE PART-SWISS	27.A03V7.007
		ET2S POWER CORD S/P-AU	27.A03V7.008
		ET2S POWER CORD S/P-DANISH	27.A03V7.006
Case/Cover/Bracket Assembly			

TravelMate 6000 FRU List

Picture	No.	Partname And Description	Part Number
		MIDDLE COVER W/ NAME PLATE TM6000	42.T41V7.001
		DIMM DOOR W/SCREW	42.T23V7.002
		WIRELESS BOARD COVER	42.T23V7.011
		FRONT BEZEL FOR 4 IN 1 MODEL	42.T23V7.003
		UPPER CASE ASSY W/ TOUCHPAD	60.T41V7.001
		LOWER CASE ASSY W/SPEAKER	60.T41V7.002
		I/O BRACKET W/MICROPHONE	6K.T41V7.001
		TOUCH PAD SHIELDING FOR TOUCH PAD BOARD	33.T23V7.001
		TOUCHPAD BOARD BUTTON	33.T41V7.001
		LOWER CASE W/O SPEAKER	60.T23V7.001
		UPPER CASE W/TOUCHPAD HOLDER	60.T23V7.002
		I/O BRACKET W/MICROPHONE	6K.T23V7.001
Communication Module			
		WIRELESS LAN ANTENNA - BASE	50.T41V7.001

TravelMate 6000 FRU List

Picture	No.	Partname And Description	Part Number
		WIRELESS LAN ANTENNA - LCD	50.T41V7.002
		BLUETOOTH ANTENNA	50.T23V7.004
CPU			
	NS	INTEL PENTIUM 4-M (NORTHWOOD) 1.8GHZ/ 512K/400FSB/1.3V/478PIN/ C-1 STEPPING	01.P4MNW.1G8
		INTEL PENTIUM 4-M (NORTHWOOD) 1.9GHZ/ 512K/400FSB/1.3V/478PIN/ C-1 STEPPING	01.P4MNW.1G9
		INTEL PENTIUM 4-M (NORTHWOOD) 2.0GHZ/ 512K/400FSB/1.3V/478PIN/ C-1 STEPPING	01.P4MNW.2G0
		INTEL PENTIUM 4-M (NORTHWOOD) 2.2GHZ/ 512K/400FSB/1.3V/478PIN/ C-1 STEPPING	01.NORTH.22B
		INTEL PENTIUM 4-M (NORTHWOOD) 2.2GHZ/ 512K/400FSB/1.3V/478PIN/ C-1 STEPPING	01.P4MNW.2G4
HDD/ Hard Disk Drive			
	NS	HDD 20GB/2.5 IN./4200RPM/TOSHIBA TITAN MK2018GAP	KH.25204.001
		HDD 30GB/2.5 IN./4200RPM/HITACHI EUCALYPTUS DK23EA/30	KH.33005.002
		HDD 30GB/2.5 IN./4200RPM/FUJITSU HORNET 16L MHS2030AT	KH.03006.001
		HDD 30GB/2.5 IN./4200RPM/TOSHIBA NEPTUNE MK3021GAS	KH.33004.001
		HDD 40GB/2.5 IN./4200RPM/HITACHI EUCALYPTUS DK23EA-40	KH.34005.002
		HDD COVER	42.T23V7.010
		HDD CASE	33.T23V7.004
Keyboard			
	NS	KEYBOARD DARFON US INTERNATIONAL	KB.T4107.001
		KEYBOARD DARFON CHINESE	KB.T4107.002
		KEYBOARD DARFON SPANISH	KB.T4107.003
		KEYBOARD DARFON THAI	KB.T4107.004
		KEYBOARD DARFON BRAZILIAN PROTUGESE	KB.T4107.005
		KEYBOARD DARFON UK	KB.T4107.007
		KEYBOARD DARFON GERMAN	KB.T4107.008

TravelMate 6000 FRU List

Picture	No.	Partname And Description	Part Number
		KEYBOARD DARFON ITALIAN	KB.T4107.009
		KEYBOARD DARFON FRENCH	KB.T4107.010
		KEYBOARD DARFON SWISS/G	KB.T4107.011
		KEYBOARD DARFON PORTUGUESE	KB.T4107.012
		KEYBOARD DARFON ARABIC	KB.T4107.013
		KEYBOARD DARFON BELGIUM	KB.T4107.014
		KEYBOARD DARFON SWEDEN	KB.T4107.015
		KEYBOARD DARFON CZECH	KB.T4107.016
		KEYBOARD DARFON HUNGAIAN	KB.T4107.017
		KEYBOARD DARFON NORWAY	KB.T4107.018
		KEYBOARD DARFON DANISH	KB.T4107.019
		KEYBOARD DARFON TURKISH	KB.T4107.020
		KEYBOARD DARFON CANADIAN FRENCH	KB.T4107.021
		KEYBOARD DARFON GREEK	KB.T4107.023
		KEYBOARD DARFON RUSSIAN	KB.T4107.024
LCD			
		LCD MODULE 14.1" TFT XGA QDI QD141X1LH12	TBD
		LCD MODULE 15" TFT SXGA+ AU B150PG01	TBD
		LCD MODULE 15 IN. SXGA+ HANNSTAR HSD150PK14-A	TBD
		LCD MODULE 15 IN. SXGA CPT CLAA150PB01	TBD
		LCD MODULE 15 IN. SXGA+ SAMSUNG LTN150P4-L03 (150nit)	TBD
		LCD 14.1 IN. TFT XGA QDI QD14.11XLH12	TBD
		LCD 15 IN. TFT SXGA+ AU B150PG01 (spwg-B)	TBD
		LCD 15 IN. TFT SXGA+ HANNSTAR HSD150PK14-A	TBD
		LCD 15 IN. SXGA CPT CLAA150PB01	TBD
		LCD 15 IN. TFT SXGA+ SAMSUNG LTN150P4-L03 (150nit)	TBD
		LCD INVERTER W/MAYLAR (SUMIDA-IV12129/T)	19.T23V7.011

TravelMate 6000 FRU List

Picture	No.	Partname And Description	Part Number
		LCD BRACKET 14.1" RIGHT W/HINGE	33.T23V7.005
		LCD BRACKET 15" RIGHT W/HINGE	33.T23V7.007
		LCD BRACKET 14.1" LEFT W/HINGE	33.T23V7.006
		LCD BRACKET 14.1" LEFT W/HINGE	33.T23V7.008
		LCD PANEL WITH LOGO 14.1 IN	60.T41V7.003
		LCD PANEL WITH LOGO 15.0 IN	60.T41V7.004
		LCD BEZEL 14.1 IN	60.T23V7.004
		LCD BEZEL 15 IN. W/RUBBER	60.T29V7.004
		LCD COAXIAL CABLE 14.1" FOR QDI	50.T23V7.011
		LCD COAXIAL CABLE FOR 15 IN. SXGA	50.T41V7.003
		LCD COAXIAL CABLE FOR 15 IN. SXGA	50.T41V7.004
Main Board			
	251-The System	MAINBOARD W/SMART CARD READER,PCMCI SLOT,W/O CPU MEMORY	LB.T4106.001
	NS	PCMCIA SLOT	22.T41V7.001
Memory			
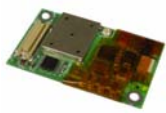
TravelMate 6000 FRU List

Picture	No.	Partname And Description	Part Number
	NS	MEMORY SO-DIMM DDR266/128MB / INFINEON HYS64D16000GDL-7-B	KN.12802.004
		MEMORY SO-DIMM DDR266/256MB/0.14U / INFINEON HYS64D32020 GDL-7-B	KN.25602.001
		MEMORY SO-DIMM DDR266/256MB/0.15U / MICRON MT8VDDT3264HDG-265C3	KN.25604.004
		MEMORY SO-DIMM DDR266/256MB/0.14U / NANYA NT256D64SH8B0GM-75B	KN.25603.004
		MEMORY SO-DIMM DDR266/256MB/ ELPIDA W30256A6EP1652A	KN.25609.001
		MEMORY SO-DIMM DDR266/512MB/0.14U / INFINEON HYS64D64020GBDL-7-B	KN.51202.003
		MEMORY SO-DIMM DDR266/512MB/ MICRON MT16VDDS6464HG-265B4	KN.51204.002
Optical Drive			
		DVD-RW COMBO MODULE 24X KME UJDA750	TBD
		DVD-RW COMBO MODULE 24X QSI SBW-242C	TBD
		DVD DUAL MODULE 4X PIONEER DVR-K12RA	TBD
		DVD DUAL MODULE 4X QSI SDW-042	TBD
		DVD-RW COMBO DRIVE 24X KME UJDA750	TBD
		DVD-RW COMBO DRIVE 24X QSI SBW-242C	TBD
		DVD DUAL DRIVE 4X PIONEER DVR-K12RA	TBD
		DVD DUAL DRIVE 4X QSI SDW-042	TBD
		DVD-RW COMBO BEZEL FOR MKE	42.T23V7.009
		DVD/CDRW COMBO BEZEL FOR QSI	42.T23V7.008
		DVD SUPER MULTI BEZEL FOR HLDS	TBD
		DVD SUPER MULTI BEZEL FOR KME	TBD
		OPTICAL DEVICE HOLDER	33.T23V7.003
	NS	OPTICAL DEVICE BOARD	55.T41V7.004
Pointing Device			

TravelMate 6000 FRU List

Picture	No.	Partname And Description	Part Number
		TOUCHPAD	56.T23V7.001
Speaker			
		SPEAKER SET	6K.T23V7.002
Heatsink			
		THERMAL MODULE W/FAN	6K.T41V7.005
Reader			
		SMART CARD READER	60.T23V7.007
		4 IN 1 READER	6K.T41V7.002
Screws			
		SCREW M2.5X4-I-NYLOK	86.T23V7.009
		SCREW M2.0X3.5-I-NI-NYLOK	86.T23V7.005
		SCREW M2X3-I-BNI-NYLOK	86.T23V7.014
		SCREW M2.0X5-I-NI-NYLOK	86.T23V7.006
		SCREW M2.0X6.0-I-NI-NYLOK	86.T23V7.017
		SCREW M2.5X2-I-NI-NYLOK	86.T23V7.018
		SCREW M2.5X3-I-NI-NYLOK	86.A03V7.010
		SCREW, MM25050IL64	86.A03V7.003
		SCREW M2.5*7.0 FOR NEW ANTENNA	86.T25V7.021
		SCREW I2*3M-NIHY (M2L3)	86.T25V7.008
		SCREW M2.5X0.45+7I-NYLOK	86.T23V7.012
		SCREW M2.0X5.0-I-BNI-NYLOK	86.T23V7.015
		SCREW M2.0X2.5-I-NI-NYLOK	86.A03V7.007
		SCREW I3*3.5M-NIH(M3L3.5)	86.A03V7.011

TravelMate 8000 FRU List

Picture	No.	Partname And Description	Part Number
Adapter			
	NS	ADAPTER 65W -- TBD	TBD
		ADAPTER 65W -- TBD	TBD
Battery			
	NS	BATTERY SANYO LI-ION 8CELL 4400mAH SI-QT83	BT.T2303.001
		BATTERY SIMPLO LI-ION 8CELL (BATTERY PACK ZG14S2P, 4400mAH)	BT.T2905.001
		BATTERY SANYO LI-ION 6CELL (MODEL NAME:3UF103450P-2-QC-20,3600 Mah)	BT.T2303.002
Boards			
		MODEM CARD , AMBIT T60M283.15	54.A10V7.001
		MODEM /BLUETOOTH COMBO BOARD AMBIT T60M665.00	54.T23V7.002
		WIRELESS LAN BOARD (802.11b+g) INTEL	54.T25V7.003
	NS	LAUNCH BOARD	55.T41V7.001
	NS	TOUCH PAD BOARD W/CABLE	55.T41V7.002
		SWITCH BOARD	55.T41V7.003
Cables			
		TOUCHPAD CABLE	50.T23V7.001

TravelMate 8000 FRU List

Picture	No.	Partname And Description	Part Number
		COVER SWITCH CABLE	50.T23V7.003
		MODEM CABLE	50.T23V7.002
		POWER CORD US (3 pin)	27.A03V7.001
		POWER CORD PRC (3 Pin)	27.A03V7.003
		ZI1S POWER CORD SPARE PART-KOERA	27.T23V7.006
		ET2S POWER CORD S/P-EU	27.A03V7.002
		ET2S POWER CORD S/P-UK	27.A03V7.004
		ET2S POWER CORD S/P-ITALIAN	27.A03V7.005
		ET2S POWER CORD SPARE PART-SWISS	27.A03V7.007
		ET2S POWER CORD S/P-AU	27.A03V7.008
		ET2S POWER CORD S/P-DANISH	27.A03V7.006
Case/Cover/Bracket Assembly			
		MIDDLE COVER W/ NAME PLATE TM6000	42.T41V7.001
		DIMM DOOR W/SCREW	42.T23V7.002
		WIRELESS BOARD COVER	42.T23V7.011
		FRONT BEZEL FOR 4 IN 1 MODEL	42.T23V7.003
		UPPER CASE ASSY W/ TOUCHPAD	60.T41V7.001
		LOWER CASE ASSY W/SPEAKER	60.T41V7.002
		I/O BRACKET W/MICROPHONE	6K.T41V7.001
		TOUCH PAD SHIELDING FOR TOUCH PAD BOARD	33.T23V7.001
		TOUCHPAD BOARD BUTTON	33.T41V7.001

TravelMate 8000 FRU List

Picture	No.	Partname And Description	Part Number
		LOWER CASE W/O SPEAKER	60.T23V7.001
		UPPER CASE W/TOUCHPAD HOLDER	60.T23V7.002
		I/O BRACKET W/MICROPHONE	6K.T41V7.007
Communication Module			
		WIRELESS LAN ANTENNA - BASE	50.T41V7.001
		WIRELESS LAN ANTENNA - LCD	50.T41V7.002
		BLUETOOTH ANTENNA	50.T23V7.004
CPU			
	NS	INTEL PENTIUM 4-M (NORTHWOOD) 1.8GHZ/ 512K/400FSB/1.3V/478PIN/ C-1 STEPPING	01.P4MNW.1G8
		INTEL PENTIUM 4-M (NORTHWOOD) 1.9GHZ/ 512K/400FSB/1.3V/478PIN/ C-1 STEPPING	01.P4MNW.1G9
		INTEL PENTIUM 4-M (NORTHWOOD) 2.0GHZ/ 512K/400FSB/1.3V/478PIN/ C-1 STEPPING	01.P4MNW.2G0
		INTEL PENTIUM 4-M (NORTHWOOD) 2.2GHZ/ 512K/400FSB/1.3V/478PIN/ C-1 STEPPING	01.NORTH.22B
		INTEL PENTIUM 4-M (NORTHWOOD) 2.2GHZ/ 512K/400FSB/1.3V/478PIN/ C-1 STEPPING	01.P4MNW.2G4
HDD/ Hard Disk Drive			
	NS	HDD 20GB/2.5 IN./4200RPM/TOSHIBA TITAN MK2018GAP	KH.25204.001
		HDD 30GB/2.5 IN./4200RPM/HITACHI EUCALYPTUS DK23EA/30	KH.33005.002
		HDD 30GB/2.5 IN./4200RPM/FUJITSU HORNET 16L MHS2030AT	KH.03006.001
		HDD 30GB/2.5 IN./4200RPM/TOSHIBA NEPTUNE MK3021GAS	KH.33004.001
		HDD 40GB/2.5 IN./4200RPM/HITACHI EUCALYPTUS DK23EA-40	KH.34005.002
		HDD COVER	42.T23V7.010

TravelMate 8000 FRU List
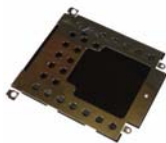
Picture	No.	Partname And Description	Part Number
		HDD CASE	33.T23V7.004
Keyboard			
	NS	KEYBOARD DARFON US INTERNATIONAL	KB.T4107.001
		KEYBOARD DARFON CHINESE	KB.T4107.002
		KEYBOARD DARFON SPANISH	KB.T4107.003
		KEYBOARD DARFON THAI	KB.T4107.004
		KEYBOARD DARFON BRAZILIAN PROTUGESE	KB.T4107.005
		KEYBOARD DARFON UK	KB.T4107.007
		KEYBOARD DARFON GERMAN	KB.T4107.008
		KEYBOARD DARFON ITALIAN	KB.T4107.009
		KEYBOARD DARFON FRENCH	KB.T4107.010
		KEYBOARD DARFON SWISS/G	KB.T4107.011
		KEYBOARD DARFON PORTUGUESE	KB.T4107.012
		KEYBOARD DARFON ARABIC	KB.T4107.013
		KEYBOARD DARFON BELGIUM	KB.T4107.014
		KEYBOARD DARFON SWEDEN	KB.T4107.015
		KEYBOARD DARFON CZECH	KB.T4107.016
		KEYBOARD DARFON HUNGAIAN	KB.T4107.017
		KEYBOARD DARFON NORWAY	KB.T4107.018
		KEYBOARD DARFON DANISH	KB.T4107.019
		KEYBOARD DARFON TURKISH	KB.T4107.020
		KEYBOARD DARFON CANADIAN FRENCH	KB.T4107.021
		KEYBOARD DARFON GREEK	KB.T4107.023
		KEYBOARD DARFON RUSSIAN	KB.T4107.024
LCD			
		LCD MODULE 15 IN. SXGA CPT CLAA150PB01	TBD
		LCD MODULE 15 IN. SXGA+ IDT N15P0P2-L04(200nit)	TBD
		LCD MODULE 15 IN. SXGA+ LG LP150E06-B3 (200nit)	TBD

TravelMate 8000 FRU List

Picture	No.	Partname And Description	Part Number
		LCD 15 IN. SXGA CPT CLAA150PB01	TBD
		LCD 15 IN. SXGA+ IDT N150P2-L04	LK.1500D.003
		LCD 15 IN. SXGA+ LG LP150E06-B3 (200nit)	TBD
		LCD INVERTER W/MAYLAR (SUMIDA-IV12129/T)	19.T23V7.011
		LCD BRACKET 14.1" RIGHT W/HINGE	33.T23V7.005
		LCD BRACKET 15" RIGHT W/HINGE	33.T23V7.007
		LCD BRACKET 14.1" LEFT W/HINGE	33.T23V7.006
		LCD BRACKET 14.1" LEFT W/HINGE	33.T23V7.008
		LCD PANEL WITH LOGO 14.1 IN	60.T41V7.003
		LCD PANEL WITH LOGO 15.0 IN	60.T41V7.004
		LCD BEZEL 14.1 IN	60.T23V7.004
		LCD BEZEL 15 IN. W/RUBBER	60.T29V7.004
		LCD COAXIAL CABLE 14.1" FOR QDI	50.T23V7.011
		LCD COAXIAL CABLE FOR 15 IN. SXGA	50.T41V7.003
		LCD COAXIAL CABLE FOR 15 IN. SXGA	50.T41V7.004
Main Board			

TravelMate 8000 FRU List

Picture	No.	Partname And Description	Part Number
	251-The System	MAINBOARD W/SMART CARD READER,PCMCI SLOT,W/O CPU MEMORY	LB.T4106.001
	NS	PCMCIA SLOT	22.T41V7.001
Memory			
	NS	MEMORY SO-DIMM DDR266/128MB / INFINEON HYS64D16000GDL-7-B	KN.12802.004
		MEMORY SO-DIMM DDR266/256MB/0.14U / INFINEON HYS64D32020 GDL-7-B	KN.25602.001
		MEMORY SO-DIMM DDR266/256MB/0.15U / MICRON MT8VDDT3264HDG-265C3	KN.25604.004
		MEMORY SO-DIMM DDR266/256MB/0.14U / NANYA NT256D64SH8B0GM-75B	KN.25603.004
		MEMORY SO-DIMM DDR266/256MB/ ELPIDA W30256A6EP1652A	KN.25609.001
		MEMORY SO-DIMM DDR266/512MB/0.14U / INFINEON HYS64D64020GBDL-7-B	KN.51202.003
		MEMORY SO-DIMM DDR266/512MB/ MICRON MT16VDDS6464HG-265B4	KN.51204.002
Optical Drive			
		DVD-RW COMBO MODULE 24X KME UJDA750	TBD
		DVD-RW COMBO MODULE 24X QSI SBW-242C	TBD
		DVD SUPER MULTI MODULE HLDS GWA-4080N	TBD
		DVD SUPER MULTI KME UJ-820B	TBD
		DVD-RW COMBO DRIVE 24X KME UJDA750	TBD
		DVD-RW COMBO DRIVE 24X QSI SBW-242C	TBD
		DVD SUPER MULTI DRIVE HLDS GWA-4080N	TBD
		DVD SUPER MULTI DRIVE KME UJ-820B	TBD
		DVD-RW COMBO BEZEL FOR MKE	42.T23V7.009
		DVD/CDRW COMBO BEZEL FOR QSI	42.T23V7.008
		DVD SUPER MULTI BEZEL FOR HLDS	TBD
		DVD SUPER MULTI BEZEL FOR KME	TBD
		OPTICAL DEVICE HOLDER	33.T23V7.003

TravelMate 8000 FRU List

Picture	No.	Partname And Description	Part Number
	NS	OPTICAL DEVICE BOARD	55.T41V7.004
Pointing Device			
		TOUCHPAD	56.T23V7.001
Speaker			
		SPEAKER SET	6K.T23V7.002
Heatsink			
		THERMAL MODULE W/FAN	6K.T41V7.005
Reader			
		SMART CARD READER	60.T23V7.007
		4 IN 1 READER	6K.T41V7.002
Screws			
		SCREW M2.5X4-I-NYLOK	86.T23V7.009
		SCREW M2.0X3.5-I-NI-NYLOK	86.T23V7.005
		SCREW M2X3-I-BNI-NYLOK	86.T23V7.014
		SCREW M2.0X5-I-NI-NYLOK	86.T23V7.006
		SCREW M2.0X6.0-I-NI-NYLOK	86.T23V7.017
		SCREW M2.5X2-I-NI-NYLOK	86.T23V7.018
		SCREW M2.5X3-I-NI-NYLOK	86.A03V7.010
		SCREW, MM25050IL64	86.A03V7.003

TravelMate 8000 FRU List

Picture	No.	Partname And Description	Part Number
		SCREW M2.5*7.0 FOR NEW ANTENNA	86.T25V7.021
		SCREW I2*3M-NIHY (M2L3)	86.T25V7.008
		SCREW M2.5X0.45+7I-NYLOK	86.T23V7.012
		SCREW M2.0X5.0-I-BNI-NYLOK	86.T23V7.015
		SCREW M2.0X2.5-I-NI-NYLOK	86.A03V7.007
		SCREW I3*3.5M-NIH(M3L3.5)	86.A03V7.011

Model Definition and Configuration

TravelMate 6000 Series

Model Number	CPU	LCD	Memory	HDD (GB)	ODD	Card Reader	Wireless LAN
6003LCi	PM 1.6GHz/1M	15.0" SXGA+	DDR333 2x256MB	40GB/ 60GB	24x Combo	4 in 1	802.11b/g
6003LMi	PM 1.6GHz/1M	15.0" SXGA+	DDR333 2x256MB	60GB	4x DVD-Dual	4 in 1	802.11b/g

TravelMate 8000 Series

Model Number	CPU	LCD	Memory	HDD (GB)	ODD	Card Reader	Wireless LAN	BT
8002LCi	PM 1.5GHz/1M	15.0" SXGA+	DDR333 2x256MB	60GB	24x Combo	4 in 1	802.11b/g	Y
8003LCi	PM 1.6GHz/1M	15.0" SXGA+	DDR333 1x256MB DDR333 2x256MB	60GB	24x Combo	4 in 1	802.11b/g	Y
8003LMi	PM 1.6GHz/1M	15.0" SXGA+	DDR333 2x256MB	60GB	4x DVD-SMulti	4 in 1	802.11b/g	Y

NOTE: BT refers to bluetooth

Test Compatible Components

This computer's compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested under Windows® XP Home environment.

Refer to the following lists for components, adapter cards, and peripherals which have passed these tests. Regarding configuration, combination and test procedures, please refer to the TravelMate 6000/TravelMate 8000 series Compatibility Test Report released by the Acer Mobile System Testing Department.

Microsoft® Windows® XP Pro Environment Test

Item	Specifications
CRT Port	**CRT Monitor:** Dell 2000FP Dell Trinitron 21" Philips Brilliance 109P 19" Silicon Graphics 21" ViewSonic GS773 ViewSonic GS790 **LCD Monitor:** LCD Acer AL722 LCD akia KX1 **Projector:** Acer 7755C Panasonic PT-L556EA Panasonic PT-L757U
Parallel Port	**Printer:** HP Laser Jet 2100 HP Desk Jet 840C HP Desk Jet 930C HP Laser Jet 5M **ZIP:** IOMega ZIP 100 (LPT Port) **Cable:** LL5 cable
1394 Port	**HDD:** IEEE 1394 (Fire Wire)/USB 1.1 Combo Hard Drive **CCD:** StealthFire tm **HUB:** Aten 1394 HUB/FH-600 **Cable:** 1394 four to four cable **MO:** Fujitsu Limited MDF3130EE
USB 2.0	**HUB:** Adaptec\4 Port (XHUB4) for Dell Highspeed\4 Port **HDD:** USB HDD: Easy Box USB HDD: LACIE for Dell **CD-ROM:** LACIE (16*10*40) for Dell Yamaha CD/RW-70 **DVD/CD-RW:** Pioneer DVR-104 Picoh MP5125A **Cable:** Mini-LinQ USB 2.0 File transfer cable **Printer:** HP3425 Printer

Item	Specifications
USB 2.0	**Handy Drive:** USB Drive 256MB USB Drive 128MB
USB Port	**USB Mouse:** Acer USB Mouse M012B0 Microsoft Wireless Optical USB Mouse \MIC:P-LPD1-02-0047 Microsoft Optical Mouse USB & PS/2 Compatible Microsoft Optical USB Mouse \ITE 78CJ Logitech Cordless TrackMan Wheel Mouse T-RA18 Logitech Wheel Mouse M-BD58 Logitech Wheel Mouse M-BE58 Logitech iFEEL Mouse M-UN58a TRAGUS Wheel Mouse **USB Keyboard:** Microsoft Internet Keyboard Pro SILITEK K/B SK-6000 NMB K/B ZIPPY USB K/B TK532 **USB KeyPad:** ZIPPY USB Keypad KW-610 **Wireless Keyboard & Mouse:** Acer Keyboard+Mouse+Receiver Logitech Keyboard Mouse+Receiver **USB Camera:** Petaex optixo 330 **USB CCD:** Intel YC72 Dlink DSC 350 USB CCD Dlink WebCam DSB-C300 Logitech QuickCam Home Creative WebCam **USB HDD:** HD 530 Tested to comply with FCC Standards **USB Printer:** HD DeskJet 930C HP DeskJet 840C **USB Multi-Function Office Machine:** HP 2110C **USB FDD:** Teac USB FDD Acer Y-E Data USB FDD MIC USB FDD YD-8U10 Logitec USB FDD **USB Handy Drive:** USB Drive 128MB Apacer HandyDrive 256MB **USB LAN:** Buffalo USB-10/100Methernet Billionton USB-10/100 FastEthernet USB-100B

Item	Specifications
USB Port	**USB Modem:** USB Communicator JATON K56/V.90 FAX/Modem **USB Zip:** IOMEGA USB ZIP 250 IOMEGA USB ZIP 100
	USB Scanner: HP ScanJet 5300c HP ScanJet 5200c **USB Speaker:** Philips USB Speaker dss330 Philips USb Speaker (Digital speaker system) USB HUB: PCI_USB HUB\UH-400 USB HUB NET \UH-124 **USB to Serial adapter:** USB to serial Adapter UB-75 **USB Gamepad:** Microsoft Sidewider Precision Pro Logitech WingMan FORMULA FORCE Logitech WingMan GAMEPAD EXTREME **USB Card Reader:** Pro Compact Flash Card Reader Iwill 6-in-1 Card Reader CARRY 6-in-1 card reader
GB LAN HUB	3COM SUPER STACK II \3C16611 24port
LAN Hub	Accton ChefaHub Power-3016P Accton CheetahSwitch Workgroup-3008A Cnet 8 port switch Netvin 5-port switch
S-Video	**TV:** Sony Trinitron 14"\PVM-14M4U Dell \2000FP
PC Cards	**Modem:** 3Com 56K Modem (3CXM756) Gold Card Glabal 56K+Fax Billionton 56K Modem (FM56C-BF) **16 bit LAN Card:** 3COM 10M CardBus LAN Card (3CCFE589ET) D-Link Fast Ethernet DFE-650 ACCTON EN2228 **32 bit LAN Card:** D-Link CardBus DFE-660 Xircom CreditCard Ethernet 10/100 (CE3B-100) Pci_ Fast Ethernet Card FNW-3602-TX Linksys EtherFast PC Card PCM100 **CardBus LAN Card:** 3COM 10/100 CardBus LAN Card (3CCFE575CT) Xircom CardBus Ethernet II 10/100 (CBE2-100) **SCSI:** Adaptec SlimSCSI APA-1460D Card Adaptec SlimSCSI 1480A CardBus UltraSCSI Card RATOC REX-CB80

Item	Specifications
PC Cards	**LAN+Modem card:** Xircom CreditCard Ethernet + Modem 56k (CEM56-100) **ATA Card:** PCMCIA IDE/ATAPI Controller(FLASH/32MB)
PC Cards	**Microdrive:** IBM 340MB Microdrive **Click:** IOMEGA Clik! PC CARD DRIVE **Zip Card:** IOMEGA USB ZIP 250 **1394 CardBus Card:** Compaq 1394 CardBus Card VST Fire Wire 1394 CardBus Card **Wireless LAN Card:** CISCO AIRONET 350 SERIES\AIR-PCM350 Wireless LAN Card \ WL-211F **Card Reader:** Apapter PCMCIA 4 in 1 SONY Memory Stick Card Reader \MSAC-PC2 PQI CF CARD Reader PNY PCMCIA 4 in 1 **MMC Card:** Apacer 32MB SanDisk 64MB PQI 64MB **MS Card:** Apacer 128MB Sony Memory Stick 128MB \MSA-128A **SD Card:** Toshiba 128MB Sundisk 128MB **SM Card:** Transcend 128MB SanDisk 128MB **CF Card:** SanDisk 128MB
Audio Jacks	**Speaker:** JS-100 Jazz 3D Speaker SANYO AMPUFIED Speaker System AIWA STEREO SANYO 3D Speaker/OTTO-301 EarPhone: AIWA HP-X121 Earphone PHILIPS Earphone Labtec Verse 504
Access Point	Intel Wlgw2011bak 802.11b Intel 802.11a Intel 802.11a+b SMC wireless Cable/DSL Broadband Router a+g

Online Support Information

This section describes online technical support services available to help you repair your Acer Systems.

If you are a distributor, dealer, ASP or TPM, please refer your technical queries to your local Acer branch office. Acer Branch Offices and Regional Business Units may access our website. However some information sources will require a user i.d. and password. These can be obtained directly from Acer CSD Taiwan.

Acer's Website offers you convenient and valuable support resources whenever you need them.

In the Technical Information section you can download information on all of Acer's Notebook, Desktop and Server models including:

❑ Service guides for all models

❑ User's manuals

❑ Training materials

❑ Bios updates

❑ Software utilities

❑ Spare parts lists

❑ TABs (Technical Announcement Bulletin)

For these purposes, we have included an Acrobat File to facilitate the problem-free downloading of our technical material.

 Also contained on this website are:

❑ Detailed information on Acer's International Traveler's Warranty (ITW)

❑ Returned material authorization procedures

❑ An overview of all the support services we offer, accompanied by a list of telephone, fax and email contacts for all your technical queries.

We are always looking for ways to optimize and improve our services, so if you have any suggestions or comments, please do not hesitate to communicate these to us.