



# **Maintenance and Service Guide**

HP Compaq Tablet PC TC1100

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This guide is a troubleshooting reference used for maintaining and servicing the tablet PC. It provides comprehensive information on identifying tablet PC features, components, and spare parts, troubleshooting tablet PC problems, and performing tablet PC disassembly procedures.

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Maintenance and Service Guide  
HP Compaq Tablet PC TC1100  
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## Product Description

Depending on model, the HP Compaq Tablet PC TC1100 offers a 1.0-GHz Intel® Pentium® M or 800-MHz Ultra Low Voltage Mobile Intel Celeron® processor with 512-KB cache, a 10.4-inch color TFT XGA display, up to 2 GB of 333-MHz DDR SDRAM, and NVIDIA GeForce4 420 Go 4X AGP graphics with 32 MB of video DDR SDRAM.

The primary pointing device on the tablet PC is the tablet PC pen. Handwriting recognition software is available in Microsoft® Windows® XP Tablet PC Edition, the operating system installed on the tablet PC.



*HP Compaq Tablet PC TC1100*

The optional keyboard is 95 percent the size of a full-size notebook keyboard and provides 101 data entry keys, cursor control keys, and a pointing stick device.

The optional HP Tablet PC Docking Station (not shown) provides access to a MultiBay and a variety of connectors.



*HP Compaq Tablet PC TC1100 with Optional Keyboard*

# 1.1 Models

Tablet PC models are shown in Tables 1-1 through 1-47.

**Table 1-1**  
**HP Compaq Tablet PC TC1100**  
**Naming Conventions**

Key										
CTC1100	QP	100	X0	30	N	Ci	25	T	XXXXXX-XXX	
1	2	3	4	5	6	7	8	9	10	
Key	Description	Options								
1	Brand/Series designator	C = Compaq					TC1100 = Tablet PC			
2	Processor type	QP = Intel 1.0-GHz Pentium-M QC = Intel 800-MHz Celeron								
3	Processor speed	100 = 1.0 GHz 800 = 800 MHz								
4	Display type/size/resolution	X = XGA (1024 × 768)						0 = 10.4-inch		
5	Hard drive size	30 = 30 GB 40 = 40 GB 60 = 60 GB								
6	Optical drive designator	N = no optical drive								
7	Integrated communication	Ci = combination modem/NIC/wireless LAN (Intel) Cm = combination modem/NIC/wireless LAN CN = combination modem/NIC								

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**Table 1-1**  
**HP Compaq Tablet PC TC1100**  
**Naming Conventions (*Continued*)**

8	RAM	25 = 256 MB 51 = 512 MB 76 = 768 MB 10 = 1 GB
9	Operating system	T = Microsoft Windows XP Pro Tablet PC Edition
10	SKU	

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**Table 1-2**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah lithium ion (Li-Ion) battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	51	T	
Asia Pacific			DQ871A#UUF			Korea			DQ871A#AB1
Australia			DQ871A#ABG			Latin America			DQ990A#ABM
Belgium			DQ871A#UUG			Norway			DQ871A#ABN
Brazil			DQ871A#AC4			Russia			DQ871A#ACB
China			DQ871A#AB2			Spain			DQ871A#ABE
Denmark			DQ871A#ABY			Sweden/Finland			DQ871A#AK8
Europe International			DQ871A#ABB			Switzerland			DQ871A#B12
France			DQ871A#ABF			Taiwan			DQ871A#AB0
French Canada			DQ871A#ABC			United Kingdom			DQ871A#ABU
Germany			DQ871A#ABD			United States			DQ871A#ABA
Italy			DQ871A#ABZ						
Japan			DQ871A#ABJ						
Japan (English)			DQ871A#ACF						

**Table 1-3  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC
- 40 GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	CN	51	T	
Asia Pacific					DQ872A#UUF	Korea			DQ872A#AB1
Australia					DQ872A#ABG	Latin America			DQ872A#ABM
Belgium					DQ872A#UUG	Norway			DQ872A#ABN
China					DQ872A#AB2	Spain			DQ872A#ABE
Denmark					DQ872A#ABY	Sweden/Finland			DQ872A#AK8
Europe International					DQ872A#ABB	Switzerland			DQ872A#B12
France					DQ872A#ABF	Taiwan			DQ872A#AB0
French Canada					DQ872A#ABC	United Kingdom			DQ872A#ABU
Germany					DQ872A#ABD	United States			DQ872A#ABA
Italy					DQ872A#ABZ				
Japan					DQ872A#ABJ				
Japan (English)					DQ872A#ACF				

**Table 1-4**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 800-MHz (Celeron) processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 30-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QC	800	x0	30	N	Ci	25	T	
Asia Pacific					DQ873A#UUF	Korea			DQ872A#AB1
Australia					DQ873A#ABG	Latin America			DQ873A#ABM
Belgium					DQ873A#UUG	Norway			DQ872A#ABN
Brazil					DQ873A#AC4	Russia			DQ873A#ACB
China					DQ873A#AB2	Spain			DQ872A#ABE
Denmark					DQ873A#ABY	Sweden/Finland			DQ872A#AK8
Europe International					DQ873A#ABB	Switzerland			DQ872A#B12
France					DQ873A#ABF	Taiwan			DQ872A#AB0
French Canada					DQ873A#ABC	United Kingdom			DQ872A#ABU
Germany					DQ873A#ABD	United States			DQ872A#ABA
Italy					DQ873A#ABZ				
Japan					DQ872A#ABJ				
Japan (English)					DQ872A#ACF				

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**Table 1-5**  
**HP Compaq Tablet PC TC1100 Models**

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**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 800-MHz (Celeron) processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN
- 60-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

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<b>CTC1100</b>	<b>QC</b>	<b>800</b>	<b>X0</b>	<b>60</b>	<b>N</b>	<b>Cm</b>	<b>51</b>	<b>T</b>	
Japan			DQ989A#ABJ			Japan (English)			DQ989A#ACF

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**Table 1-6**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

<b>CTC1100</b>	<b>QP</b>	<b>100</b>	<b>X0</b>	<b>40</b>	<b>N</b>	<b>Ci</b>	<b>51</b>	<b>T</b>	
Asia Pacific									DQ872A#AB1
Australia									DQ873A#ABM
Belgium									DQ872A#ABN
Brazil									DQ872A#ABE
China									DQ872A#AK8
Denmark									DQ872A#B12
Europe International									DQ872A#AB0
France									DQ872A#ABU
French Canada									DQ872A#ABA
Germany									
Italy									
Japan									
Japan (English)									

**Table 1-7  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Cm	51	T	
Asia Pacific			PF292AA#UUF			Japan (English)			PF292AA#ACF
Australia			PF292AA#ABG			Korea			PF292AA#AB1
Belgium			PF292AA#UUG			Latin America			PF292AA#ABM
Brazil			PF292AA#AC4			Norway			PF292AA#ABN
China			PF292AA#AB2			Russia			PF292AA#ACB
Denmark			PF292AA#ABY			Spain			PF292AA#ABE
Europe International			PF292AA#ABB			Sweden/Finland			PF292AA#AK8
France			PF292AA#ABF			Switzerland			PF292AA#B12
French Canada			PF292AA#ABC			Taiwan			PF292AA#AB0
Germany			PF292AA#ABD			United Kingdom			PF292AA#ABU
Italy			PF292AA#ABZ			United States			PF292AA#ABA
Japan			PF292AA#ABJ						

**Table 1-8  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 80-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

<b>CTC1100</b>	<b>QP</b>	<b>100</b>	<b>X0</b>	<b>80</b>	<b>N</b>	<b>Ci</b>	<b>51</b>	<b>T</b>	
Brazil			PD370L#AC4						

**Table 1-9  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

<b>CTC1100</b>	<b>QP</b>	<b>100</b>	<b>X0</b>	<b>40</b>	<b>N</b>	<b>Ci</b>	<b>25</b>	<b>T</b>	
China			PE757PA#AB2						

**Table 1-10  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 30-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	30	N	Ci	25	T	
Asia Pacific			PE788PS#UUF						

**Table 1-11  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 30-GB hard drive
- DVD/CD-RW Combo Drive
- USB MultiBay Cradle
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	30	Y	Ci	25	T	
Asia Pacific			PE739PA#UUF						

**Table 1-12**  
**HP Compaq Tablet PC TC1100 Models**

The following HP Compaq Tablet PC TC1100 models feature:

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40 GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	25	T		
United States					PD540UC#ABA					

**Table 1-13**  
**HP Compaq Tablet PC TC1100 Models**

The following HP Compaq Tablet PC TC1100 models feature:

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	25	T		
Taiwan					PC966PS#AB0					

**Table 1-14  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	51	T	
United States			PC955US#ABA						

**Table 1-15  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 30-GB hard drive
- 8X DVD-ROM drive
- USB MultiBay cradle
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	30	Y	Ci	25	T	
Taiwan			PC962PS#AB0						

**Table 1-16**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- 24X DVD/CD-RW combo drive
- USB MultiBay cradle
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

<b>CTC1100</b>	<b>QP</b>	<b>100</b>	<b>X0</b>	<b>40</b>	<b>Y</b>	<b>Ci</b>	<b>51</b>	<b>t</b>	
Asia Pacific			PB719PA#UUF						

**Table 1-17**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 80-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

<b>CTC1100</b>	<b>QP</b>	<b>100</b>	<b>X0</b>	<b>80</b>	<b>N</b>	<b>Ci</b>	<b>51</b>	<b>T</b>	
United States			PC317US#ABA						

**Table 1-18  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 60-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	60	N	Ci	51	T	
United States			PC318US#ABA						

**Table 1-19  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 60-GB hard drive
- 24X DVD/CD-RW combo drive
- USB MultiBay cradle
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	60	Y	Ci	51	T	
United States			PC316US#ABA						

**Table 1-20**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	25	T	
Asia Pacific			PB486PS#UUF						

**Table 1-21**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 60-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	60	N	Ci	51	T	
Japan (English)			PA605PA#ACF						

**Table 1-22  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 768-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 60-GB hard drive
- 8X DVD-ROM drive
- Tablet dock
- USB mouse
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	60	Y	Ci	76	T	
Japan			PA604PA#ABJ						

**Table 1-23  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	51	T	
United States			DZ937US#ABA						

**Table 1-24**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 768-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 60-GB hard drive
- 8X DVD-ROM drive
- Tablet dock
- USB mouse
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	60	Y	Ci	76	T	
Japan			DY861PA#ABJ						

**Table 1-25**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 1-GB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	10	T	
China			DX381P#AB2						

**Table 1-26  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	25	T	
Asia Pacific			DX993PC#UUF						

**Table 1-27  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 60-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	60	N	Ci	51	T	
Asia Pacific			DX382P#UUF						

**Table 1-28**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	51	T	
United States			DX867S#ABA						

**Table 1-29**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 30-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	30	N	Ci	25	T	
Asia Pacific			DU707P#UUF						

**Table 1-30  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	25	T	
Asia Pacific			DL757AV#UUF						

**Table 1-31  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 30-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	30	N	Ci	25	T	
Asia Pacific			DN521PS#UUF						

**Table 1-32**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	25	T		
Asia Pacific					DV467P#UUF					

**Table 1-33**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	51	T		
Asia Pacific					DU705P#UUF					

**Table 1-34  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 30-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	30	N	Ci	25	T	
Japan			DU694P#ABJ						

**Table 1-35  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	25	T	
Taiwan			DU689P#AB0			Asia Pacific		DU686P#UUF	

**Table 1-36**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	25	T	
Asia Pacific			DU685P#UUF						

**Table 1-37**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0 GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 30-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	30	N	Ci	25	T	
Australia			DU684P#ABG						

**Table 1-38  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 60-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	60	N	Ci	51	T	
Taiwan			DU683P#AB0						

**Table 1-39  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	25	T	
China			DU682P#AB2						

**Table 1-40**  
**HP Compaq Tablet PC TC1100 Models**

The following HP Compaq Tablet PC TC1100 models feature:

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 30-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

CTC1100	QP	100	X0	30	N	Ci	25	T		
Asia Pacific					DU679P#UUF					

**Table 1-41**  
**HP Compaq Tablet PC TC1100 Models**

The following HP Compaq Tablet PC TC1100 models feature:

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	25	T		
Asia Pacific					DU678P#UUF					

**Table 1-42  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 60-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

<b>CTC1100</b>	<b>QP</b>	<b>100</b>	<b>X0</b>	<b>60</b>	<b>N</b>	<b>Ci</b>	<b>51</b>	<b>T</b>	
Japan			DU677P#ABJ			Japan			DU676P#ABJ

**Table 1-43  
HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 256-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 30-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

<b>CTC1100</b>	<b>QP</b>	<b>100</b>	<b>X0</b>	<b>30</b>	<b>N</b>	<b>Ci</b>	<b>25</b>	<b>T</b>	
Latin America			DT482A#ABM			United States			DT482A#ABA

**Table 1-44**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 40-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	40	N	Ci	51	T	
Latin America			DT481A#ABM			United States			DT481A#ABA

**Table 1-45**  
**HP Compaq Tablet PC TC1100 Models**

**The following HP Compaq Tablet PC TC1100 models feature:**

- Intel 1.0-GHz Pentium-M processor
- 512-MB RAM
- Combination modem/NIC/wireless LAN (Intel)
- 60-GB hard drive
- Digital pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li-Ion battery pack
- 32-MB of discrete video memory
- 3-year warranty on parts and labor

CTC1100	QP	100	X0	60	N	Ci	51	T	
Australia			DQ990A#ABG			United States			DQ990A#ABA

**Table 1-46  
HP Compaq Tablet PC TC1100 Models**

The following configure-to-order HP Compaq Tablet PC TC1100 models feature:

- Pen and pointing stick keyboard
- 6-cell, 3.6-Ah Li ion battery pack
- 32-MB of discrete video memory
- 1-year warranty on parts and labor

<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>60</b>	<b>0</b>	<b>8</b>	<b>76</b>	<b>T</b>	
United States			470046-345						
<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>60</b>	<b>0</b>	<b>8</b>	<b>38</b>	<b>T</b>	
United States			470046-344						
<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>60</b>	<b>0</b>	<b>8</b>	<b>25</b>	<b>T</b>	
United States			470046-343						
<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>60</b>	<b>0</b>	<b>C</b>	<b>76</b>	<b>T</b>	
United States			470046-352						
<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>60</b>	<b>0</b>	<b>C</b>	<b>38</b>	<b>T</b>	
United States			470046-350						
<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>60</b>	<b>0</b>	<b>C</b>	<b>25</b>	<b>T</b>	
United States			470046-349						

**Table 1-46**  
**HP Compaq Tablet PC TC1100 Models (Continued)**

<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>30</b>	<b>0</b>	<b>8</b>	<b>76</b>	<b>T</b>	
United States			470046-342						
<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>30</b>	<b>0</b>	<b>8</b>	<b>38</b>	<b>T</b>	
United States			470046-341						
<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>30</b>	<b>0</b>	<b>8</b>	<b>25</b>	<b>T</b>	
United States			470046-340						
<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>30</b>	<b>0</b>	<b>C</b>	<b>76</b>	<b>T</b>	
United States			470046-348						
<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>30</b>	<b>0</b>	<b>C</b>	<b>38</b>	<b>T</b>	
United States			470046-347						
<b>CTC1100</b>	<b>T</b>	<b>100</b>	<b>X0</b>	<b>30</b>	<b>0</b>	<b>C</b>	<b>25</b>	<b>T</b>	
United States			470046-346						

## 1.2 Features

- 1.0-GHz Intel Pentium M or 800-MHz Ultra Low Voltage Mobile Intel Celeron processor with 512-KB integrated cache, depending on model
- NVIDIA GeForce4 420 Go 4X AGP graphics controller with 32-MB SDRAM
- 1.0-GB, 768-MB, 512-MB, or 256-MB high-performance DDR SDRAM, expandable to 2 GB, depending on model
- Microsoft Windows XP Tablet PC Edition
- 10.4-inch XGA (1024 × 768) TFT display with over 16.7 million colors
- Keyboard with pointing stick device
- Integrated communication—one of the following:
  - Type III Mini PCI 56Kbps, v.90/v.92 modem, wireless LAN 802.11b, and 10/100 network interface card (NIC)
  - Type III Mini PCI 56Kbps, v.90/v.92 modem and 10/100 network interface card (NIC)
- Integrated Bluetooth® on select models only
- One Type III PC Card slot with support for both 32-bit (CardBus) and 16-bit PC Cards
- One Secured Digital (SD) Memory Card slot
- External 65 W AC adapter with power cord
- Six-cell, 11.1 V, 3.6-Ah Li-Ion battery pack
- 80-, 60-, 40-, or 30-GB high-capacity hard drive, varying by tablet PC model
- Support for the following drives through the MultiBay (with optional External MultiBay or Docking Station):
  - 1.44-MB diskette drive
  - 24X Max CD-ROM drive
  - 8X Max CD-RW drive

- 8X Max DVD-ROM drive
- 8X Max DVD/CD-RW Combo Drive
- 80-, 60-, 40-, or 30-GB hard drive
- Support for the following connectors on the tablet PC:
  - RJ-45 network
  - RJ-11 modem
  - Universal Serial Bus
  - External monitor
  - AC power
  - Stereo line out/headphone
  - Mono microphone
  - External MultiBay
  - Keyboard
  - Docking Station
- Support for the following connectors on the optional Docking Station:
  - External MultiBay
  - RJ-45 network
  - USB
  - External monitor
  - AC power
  - Stereo line out/headphone

## 1.3 Clearing a Password

If the tablet PC you are servicing has an unknown password, follow these steps to clear the password. These steps also clear CMOS:

1. Remove the battery pack and Mini PCI communications memory module slot cover. Refer to [Section 5.3, “Preparing the Tablet PC for Disassembly,”](#) for more information.
2. Remove the RTC battery (refer to [Section 5.4, “Real Time Clock Battery”](#)).
3. Wait approximately 5 minutes.
4. Replace the RTC battery and reassemble the tablet PC. Do *not* reinsert the battery pack at this time.
5. Connect AC power to the tablet PC.
6. Turn on the tablet PC.

All passwords and all CMOS settings have been cleared.

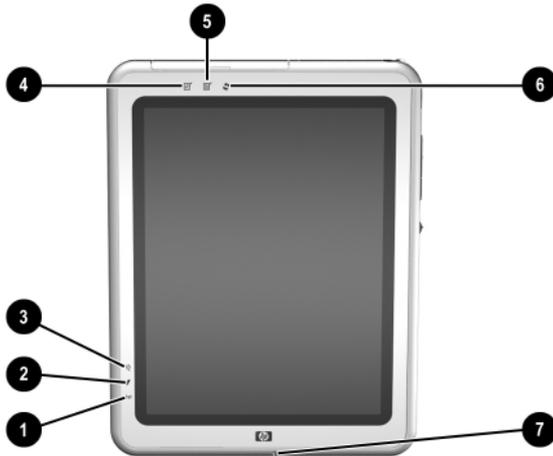
## 1.4 Power Management

The tablet PC comes with power management features that extend battery operating time and conserve power. The tablet PC supports the following power management features:

- Suspend
- Hibernation
- User customization of settings
- Hotkeys for setting level of performance
- Smart battery that provides an accurate battery power gauge
- Battery calibration
- Lid switch Suspend/Resume
- Power/Suspend button
- Advanced Configuration and Power Management (ACP) compliance

## 1.5 Tablet PC External Components

The external components on the front of the tablet PC are shown in the following illustration and described in Table 1-47.



*Front Components*

---

**Table 1-47**  
**Front Components**

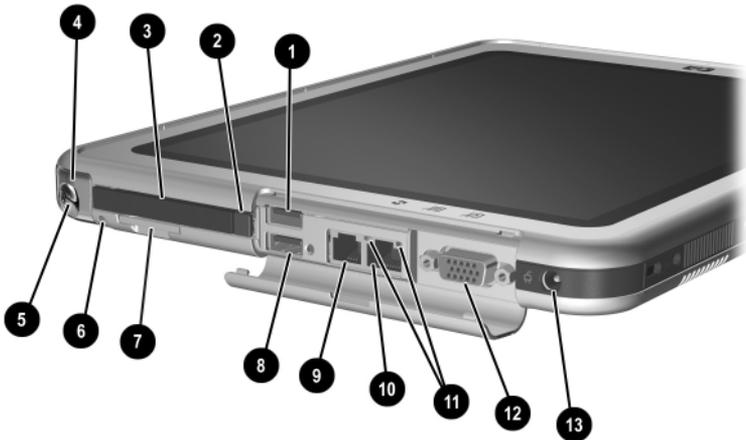
Item	Component	Function
1	Wireless light	Off: No wireless device is active. On: Wireless functionality is enabled. Flashing: Wireless functionality is enabled, but is not connected to a network or is not properly configured.
2	Battery light	On: A battery pack is charging. Flashing: A battery pack that is the only available power source has reached a low-battery condition.

---

**Table 1-47**  
**Front Components (Continued)**

Item	Component	Function
3	AC adapter light	On: AC power is being supplied through the AC adapter.
4	Journal launch button	When Windows is running, opens and closes the Microsoft Journal application, which supports handwriting.
5	Tablet PC Input Panel launch button	<p>When Windows is running, opens the Microsoft Tablet PC Input Panel application, which includes a handwriting pad and an on-screen keyboard. While using the on-screen keyboard:</p> <ul style="list-style-type: none"> <li>■ To enter the <b>ctrl+alt+delete</b> command, press the button on the tablet PC with the pen tip or a small object such as the end of a paper clip.</li> <li>■ To switch the top row of keys between number keys and function keys, tap <b>Func</b> on the on-screen keyboard.</li> </ul>
6	Rotate button	Switches the image between landscape and portrait orientation.
7	Microphone	Inputs monaural sound.

The tablet PC top components are shown in the following illustration and described in Table 1-48.



*Top Components*

---

**Table 1-48**  
**Top Components**

Item	Component	Function
1	USB port	Connects an optional USB 2.0- or 1.1-compliant device.
2	PC Card eject button	Ejects an optional PC Card from the PC Card slot.
3	PC Card slot	Supports an optional Type I or Type II 32-bit (CardBus) or 16-bit PC Card.
4	Pen holder (shown with pen 5 inserted)	Secures the pen to the tablet PC.
5	Pen	Interacts with the tablet PC whenever the tip is within 0.5 inch of or contacts the screen.

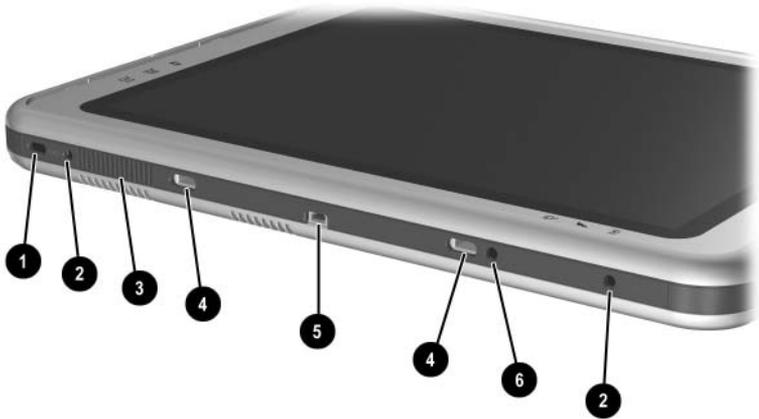
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**Table 1-48  
Top Components (Continued)**

<b>Item</b>	<b>Component</b>	<b>Function</b>
6	Tablet PC tether eyelet	Used with the tether eyelet on the pen, enables you to tether the pen to the tablet PC.
7	SD Card slot	Supports an optional SD Card.
8	External MultiBay connector	Connects and provides power for an optional USB 1.1 or USB 2.0 device.
9	RJ-11 telephone jack	Connects a modem cable.
10	RJ-45 network jack	Connects an Ethernet network cable.
11	LAN connection lights (2)	Both lights off: The tablet PC is not connected to a LAN. Both lights on: The tablet PC is connected to a LAN with a 100-Mbps link. Green light on and yellow light off: The tablet PC is connected to a LAN with a 10-Mbps link. Green light flashing: Information is being transmitted through the LAN.
12	External monitor port	Connects an optional external monitor or projector.
13	AC power connector	Connects an AC adapter cable, Aircraft Power Adapter, or Automobile Power Charger/Adapter.

\*If an optional External MultiBay is connected to the USB port, the External MultiBay must also be connected to external power. If an External MultiBay is connected to the External MultiBay connector, it is not necessary to connect the External MultiBay to external power.

The tablet PC left-side components are shown in the following illustration and described in Table 1-49.



*Left-Side Components*

---

**Table 1-49**  
**Left-Side Components**

Item	Component	Function
1	Security cable slot	Attaches an optional security cable to the tablet PC.  △ Security solutions are designed to act as deterrents. These deterrents may not prevent a product from being mishandled or stolen.
2	Screen protector slots (2)	Secure the optional screen protector when it is attached to the tablet PC.

---

**Table 1-49**  
**Left-Side Components (Continued)**

Item	Component	Function
3	Air vent	<p>Allows airflow to cool internal components.</p> <p> This tablet PC is designed to run demanding applications at full power. As a result of increased power consumption, it is normal for the tablet PC to feel warm or hot when used continuously. To avoid potential discomfort or burns, do not block the air vents or use the tablet PC on your lap for extended periods. The tablet PC complies with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC-60950).</p>
4	Universal alignment slots (2)	Secure the portfolio, the optional screen protector, or an optional attachment, such as a tablet PC keyboard, to the tablet PC.
5	Keyboard connector	Connects an optional tablet PC keyboard to the tablet PC.
6	Alignment key slot	Accepts an alignment key to safeguard attachment procedures. For example, matching the alignment key on an optional tablet PC keyboard to the alignment key slot helps you correctly orient the tablet PC to the keyboard as you connect them.

The tablet PC right-side components are shown in the following illustration and described in Table 1-50.



*Right-Side Components*

---

**Table 1-50**  
**Right-Side Components**

Item	Component	Function
1	Jog dial	Functions like the <b>enter</b> and the up and down arrow keys on a standard keyboard. <ul style="list-style-type: none"><li>■ Press inward to enter a command.</li><li>■ Rotate upward to scroll upward.</li><li>■ Rotate downward to scroll downward.</li></ul>
2	<b>esc</b> button	While the tablet PC is <ul style="list-style-type: none"><li>■ Starting up and a flashing pointer is displayed on the screen, opens the Setup utility.</li><li>■ In Windows, functions like <b>esc</b> on a standard keyboard.</li></ul>

---

**Table 1-50**  
**Right-Side Components (*Continued*)**

Item	Component	Function
3	Windows security button	When pressed with the pen tip or a small object such as the end of a paper clip while: <ul style="list-style-type: none"> <li>■ Windows is open, enters the <b>ctrl+alt+delete</b> command.</li> <li>■ The Setup utility is open, enters the reset command.</li> </ul>
4	<b>tab</b> button	When Windows is running, functions like <b>tab</b> on a standard keyboard.
5	Q menu button	When Windows is running, opens or closes the Q Menu.
6	E-mail launch button	When Windows is running: <ul style="list-style-type: none"> <li>■ Until your Internet or network service is set up, opens the operating system Internet connection wizard.</li> <li>■ After your Internet or network service is set up, opens your default e-mail application.</li> </ul>
7	Power switch	When the tablet PC is: <ul style="list-style-type: none"> <li>■ Off, press to turn on the tablet PC.</li> <li>■ On, briefly press to initiate Standby.</li> <li>■ In Standby, briefly press to resume from Standby.</li> <li>■ In Hibernation, briefly press to resume from Hibernation.</li> </ul> If the system has stopped responding and Windows shutdown procedures cannot be used, slide and hold for 4 seconds to turn off the tablet PC.
8	Power/Standby light	On: tablet PC is on. Flashing: tablet PC is in Standby. Off: tablet PC is off or in Hibernation.

The tablet PC rear components are shown in the following illustration and described in Table 1-51.



*Rear Components*

---

**Table 1-51**  
**Rear Components**

Item	Component	Function
1	Docking alignment slots (2)	Secure the tablet PC to an optional Tablet PC Docking Station.
2	Speakers (2)	Produce stereo sound.
3	Audio line-out jack	Connects optional stereo headphones or powered stereo speakers.
4	Headset jack	Connects an optional headset, such as a mobile telephone headset with a microphone and a monaural ear piece.
5	Optional stereo microphone jack	Connects an optional stereo microphone.

---



**Table 1-52**  
**Bottom Components (*Continued*)**

<b>Item</b>	<b>Component</b>	<b>Function</b>
3	Product identification label	Contains the serial number of the tablet PC and a code describing the original configuration of the tablet PC. You will need the serial number if you call the Customer Care.
4	Docking connector	Connects the tablet PC to an optional Docking Station.
5	Air vent	<p>Allows airflow to cool internal components.</p> <p> This tablet PC is designed to run demanding applications at full power. As a result of increased power consumption, it is normal for the tablet PC to feel warm or hot when used continuously. To avoid potential discomfort or burns, do not block the air vents or use the tablet PC on your lap for extended periods. The tablet PC complies with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC-60950).</p>
6	Attachment release latch	Releases an attachment, such as the portfolio, an optional screen protector, or an optional tablet PC keyboard, from the universal attachment slots on the tablet PC.

**Table 1-52**  
**Bottom Components (*Continued*)**

<b>Item</b>	<b>Component</b>	<b>Function</b>
7	Hard drive retention screw	Secures the hard drive bay cover to the tablet PC.
8	Hard drive bay	Holds the system hard drive.
9	Hard drive security screws (2)	Secure the hard drive in the hard drive bay.
10	Pad feet (2)	Stabilize the tablet PC when it is placed as a free-standing tablet on a flat surface.
11	Battery bay	Holds the battery pack.
12	Battery retention screw	Secures the battery pack to the tablet PC.
13	Battery quick check lights (3)	On: Each light represents a percentage of a full charge. For example, when all three lights are on, the battery pack is fully charged. Flashing: When one light is flashing, less than 10% of a full charge remains in the battery pack.
14	Battery quick check button	Activates the battery quick check lights, which display how much of a full charge remains in the battery pack.
15	Battery pack release latch	Releases the battery pack from the battery bay.

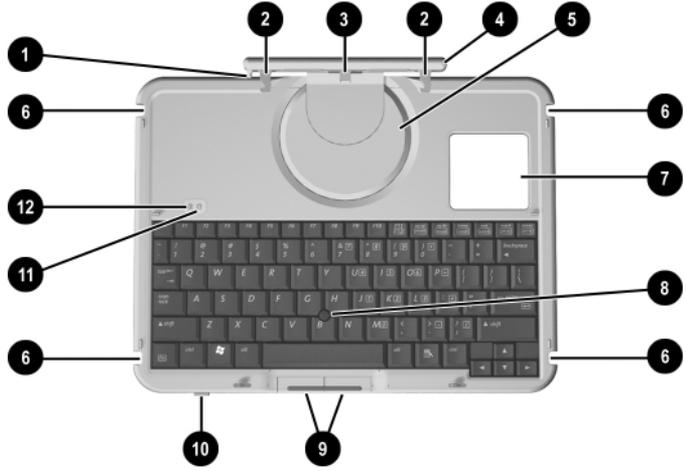
**Table 1-52**  
**Bottom Components (Continued)**

<b>Item</b>	<b>Component</b>	<b>Function</b>
16	Memory module and Mini PCI compartment cover retention screws	Secure the memory and Mini PCI compartment cover to the tablet PC.
17	Memory module and Mini PCI compartment	Contains one memory slot for a PC133-compliant memory module. Also holds an optional Mini PCI board, such as a modem board or a combination modem and wireless board.   To prevent an unresponsive system and the display of a warning message, install only a Mini PCI device authorized for use by the governmental agency that regulates wireless devices in your country. If you install a device and then receive a warning message, remove the device to restore tablet PC functionality, and then contact Customer Care.

---

## 1.6 Keyboard Components

The keyboard top components are shown in the following illustration and described in Table 1-53.



*Keyboard Top Components*

**Table 1-53  
Keyboard Top Components**

Item	Component	Function
1	Alignment key	Ensures that the tablet PC is attached to the keyboard in the correct orientation.
2	Keyboard hooks (2)	Secure the tablet PC to the keyboard.
3	Keyboard connector	Connects the keyboard to the keyboard connector on the tablet PC.
4	Tilt adjustment	Tilts the tablet PC forward or backward while it is connected to the keyboard.

---

**Table 1-53**  
**Keyboard Top Components (Continued)**

<b>Item</b>	<b>Component</b>	<b>Function</b>
5	Rotation disk	Rotates the tablet PC clockwise or counterclockwise while it is connected to the keyboard.
6	Docking alignment notches (4)	Help guide the tablet PC and keyboard into an optional tablet PC Docking Station.
7	Docking connector pass-through	Enables the optional Docking Station to be connected to the tablet PC while the keyboard is attached to the tablet PC.
8	Pointing stick	Moves the cursor and selects and activates items on the screen.
9	Pointing stick buttons (2)	Function like the left and right buttons on any external mouse.
10	Keyboard latch	Locks the keyboard to and releases the keyboard from the tablet PC.
11	Caps lock light	When this light is on, the caps lock is on.
12	Num lock light	When this light is on, the numeric keypad is active.

---

The special keys on the keyboard are shown in the following illustration and described in Table 1-54.



*Keyboard Special Keys*

**Table 1-54**  
**Keyboard Special Keys**

Item	Component	Function
1	Function keys	Perform system and application tasks. For example, in the Windows operating system and many applications, pressing <b>F1</b> opens a Help file. To enter an <b>F11</b> function, press <b>F11/F12</b> . To enter an <b>F12</b> function, press <b>Fn+F11/F12</b> .
2	<b>Fn</b> key	Combines with other keys to perform system tasks. For example, pressing <b>Fn+num lk</b> turns on the keypad.

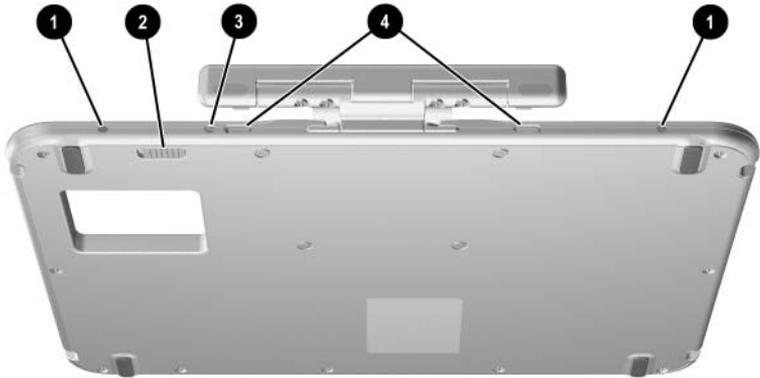
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**Table 1-54**  
**Keyboard Special Keys (*Continued*)**

<b>Item</b>	<b>Component</b>	<b>Function</b>
3	Keypad keys	Used like an external numeric keypad.
4	Windows logo key	Displays the Microsoft Windows Start Menu.
5	Windows applications key	Displays a shortcut menu for items beneath the pointer.

---

The components on the rear and bottom of the optional keyboard are shown in the following illustration and described in Table 1-55.



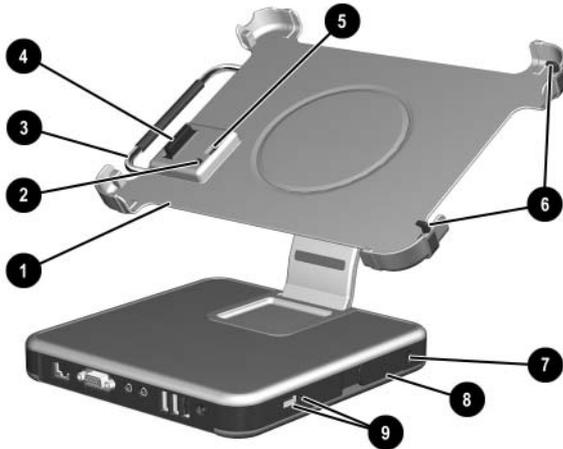
*Keyboard Rear and Bottom Components*

**Table 1-55  
Keyboard Rear and Bottom Components**

<b>Item</b>	<b>Component</b>	<b>Function</b>
1	Screen protector slots	Attach the screen protector to the keyboard.
2	Attachment release switch	Releases an attachment, such as the portfolio or optional screen protector, from the keyboard.
3	Universal alignment slots	Secure the portfolio or optional screen protector to the keyboard.
4	Alignment key slots	Accept alignment keys to ensure proper orientation.

## 1.7 HP Tablet PC Docking Station Components

The upper and right-side components on the optional HP Tablet PC Docking Station are shown in the following illustration and described in Table 1-56.



*Docking Station Upper and Right-Side Components*

**Table 1-56**  
**Docking Station Upper and**  
**Right-Side Components**

Item	Component	Function
1	Docking stand	Holds the tablet PC when it is docked.
2	Docking eject pin	Disconnects the tablet PC and docking stand docking connectors when the release handle is pulled.
3	Release handle	Ejects the tablet PC from the docking stand.

**Table 1-56**  
**Docking Station Upper and**  
**Right-Side Components (*Continued*)**

Item	Component	Function
4	Docking connector	Connects to the tablet PC.
5	Docking restraint latch	Secures the tablet PC to the docking stand.
6	Docking alignment brackets (2)	Fit into the tablet PC docking alignment slots to align the tablet PC in the docking stand.
7	Security cable slot	Attaches an optional security cable to the tablet PC.   The purpose of security solutions is to act as a deterrent. These solutions do not prevent the product from being mishandled or stolen.
8	MultiBay release lever	Ejects a MultiBay device from the bay.
9	External MultiBay connector	Connects optional USB devices.

The front and left-side components on the optional Docking Station are shown in the following illustration and described in Table 1-57.



*Docking Station Front and Left-Side Components*

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**Table 1-57**  
**Docking Station Front and Left-Side Components**

Item	Component	Function
1	Pivot arm	Tilts the docking stand forward and backward to enable different viewing angles and different docking modes.
2	MultiBay	Supports a diskette drive, CD-ROM or CD-RW drive, DVD-ROM drive, DVD/CD-RW Combo Drive, or second hard drive.
3	RJ-45 network jack	Connects a network cable.
4	External monitor port	Connects an optional external monitor or overhead projector.

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**Table 1-57**  
**Docking Station Front and Left-Side Components (*Continued*)**

<b>Item</b>	<b>Component</b>	<b>Function</b>
5	Audio line-in jack	Connects the stereo audio function of optional audio devices such as CD players.
6	Audio line-out jack	Connects optional stereo headphones or powered stereo speakers and connects the audio function of an audio/video device such as a television or VCR.
7	USB ports (3)	Connect optional USB devices.
8	AC power connector	Connects an AC adapter cable, Aircraft Power Adapter, or Automobile Power Charger/Adapter.

---

## 1.8 Design Overview

This section presents a design overview of key parts and features of the tablet PC. Refer to [Chapter 3, "Illustrated Parts Catalog,"](#) to identify replacement parts, and [Chapter 5, "Removal and Replacement Procedures,"](#) for disassembly steps.

The system board provides the following device connections:

- Memory module
- Hard drive
- Display
- Optional keyboard and pointing stick
- Audio
- Intel Pentium-M or Celeron processor
- Fan
- PC Card
- Secure Digital (SD) Memory card (not SDIO)
- External MultiBay
- Modem or modem/NIC



**CAUTION:** To properly ventilate the tablet PC, allow at least a 7.6-cm (3-inch) clearance around the sides of the tablet PC.

---

The tablet PC uses an electric fan for ventilation. The fan is controlled by a temperature sensor and is designed to come on automatically when high temperature conditions exist. These conditions are affected by high external temperatures, system power consumption, power management, battery conservation configurations, battery fast charging, and software applications. Exhaust air is displaced through the ventilation grill located on the left side of the tablet PC.

# 2

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## Troubleshooting



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**WARNING:** Only authorized technicians trained by HP should repair this equipment. All troubleshooting and repair procedures are detailed to allow only subassembly/module level repair. Because of the complexity of the individual boards and subassemblies, do not attempt to make repairs at the component level or to make modifications to any printed wiring board. Improper repairs can create a safety hazard. Any indication of component replacement or printed wiring board modification may void any warranty or exchange allowances.

---

## 2.1 Setup and Diagnostics Utilities

### Selecting Setup or HP Diagnostics

The tablet PC features 2 HP system management utilities:

- **Setup**—A system information and customization utility that can be used even when your operating system is not working or will not load. This utility includes settings that are not available in Windows.
- **HP Diagnostics**—A system information and diagnostic utility that is used within your Windows operating system. Use this utility whenever possible to
  - ❑ Display system information.
  - ❑ Test system components.
  - ❑ Troubleshoot a device configuration problem in Windows Tablet PC Edition.



It is not necessary to configure a device connected to a USB port on the tablet PC or to an optional Docking Station.

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### Using Setup

Information and settings in Setup are accessed from the File, Security, or Advanced menus:

1. Turn on or restart the tablet PC. Press **F10** while the F10 = ROM Based Setup message displays in the lower-left corner of the screen.
  - ❑ To change the language, press **F2**.
  - ❑ To view navigation information, press **F1**.
  - ❑ To return to the Setup menu, press **esc**.
2. Select the File, Security, or Advanced menu.

3. To close Setup and restart the tablet PC:
  - ❑ Select File > Save Changes, and Exit and press **enter**.
  - or -
  - ❑ Select File > Ignore Changes, and Exit and press **enter**.
4. When you are prompted to confirm your action, press **F10**.

## Selecting from the File Menu

**Table 2-1**  
**File Menu**

Select	To Do This
System Information	<ul style="list-style-type: none"> <li>■ View identification information about the tablet PC, a Docking Station, and any battery packs in the system.</li> <li>■ View specification information about the processor, memory and cache size, and system ROM.</li> </ul>
Save to Floppy	Save system configuration settings to a diskette.
Restore from Floppy	Restore system configuration settings from a diskette.
Restore Defaults	Replace configuration settings in Setup with factory default settings. Identification information is retained.
Ignore Changes and Exit	Cancel changes entered during the current session, and then exit and restart the tablet PC.
Save Changes and Exit	Save changes entered during the current session, and then exit and restart the tablet PC.

## Selecting from the Security Menu

**Table 2-2**  
**Security Menu**

Select	To Do This
Setup Password	Enter, change, or delete a setup password. (The setup password is called an administrator password in HP Computer Security, a program accessed from the Windows Control Panel.)
Power-on Password	Enter, change, or delete a power-on password.
DriveLock Passwords	<p>Enable/disable DriveLock; change a DriveLock User or Master password.</p> <p> DriveLock Settings are accessible only when you enter Setup by turning on (not restarting) the tablet PC.</p>
Password Options	<p>Enable/disable:</p> <ul style="list-style-type: none"> <li>■ QuickLock</li> <li>■ QuickLock on Suspend</li> <li>■ QuickBlank</li> </ul> <p> To enable QuickLock on Suspend or QuickBlank, you must first enable QuickLock.</p> <p> Password options can be selected only when a power-on password has been set.</p>

**Table 2-2**  
**Security Menu (*Continued*)**

<b>Select</b>	<b>To Do This</b>
Device Security	<p>Enable/disable:</p> <ul style="list-style-type: none"> <li>■ Ports or diskette drives*</li> <li>■ Diskette write*</li> <li>■ CD-ROM or diskette startup</li> </ul> <p> Settings for a DVD-ROM can be entered in the CD-ROM field.</p>
System IDs	<p>Enter identification numbers for the tablet PC, a Docking Station, and all battery packs in the system.</p>
<p>*Not applicable to SuperDisk LS-120 drives.</p>	

## Selecting from the Advanced Menu

**Table 2-3**  
**Advanced Menu**

Select	To Do This
Language (or press <b>F2</b> )	Change the Setup language.
Boot Options	<p>Enable/disable:</p> <ul style="list-style-type: none"> <li>■ QuickBoot, which starts the tablet PC more quickly by eliminating some startup tests. If you suspect a memory failure and want to test memory automatically during startup, disable QuickBoot.</li> <li>■ MultiBoot, which sets a startup sequence that can include most bootable devices and media in the system.</li> </ul>
Device Options	<ul style="list-style-type: none"> <li>■ Enable/disable the embedded numeric keypad at startup.</li> <li>■ Enable/disable multiple standard pointing devices at startup. To set the tablet PC to support only a single, usually nonstandard, pointing device at startup, select Disable.</li> <li>■ Enable/disable USB legacy support for a USB keyboard. When USB legacy support is enabled, the keyboard works even when a Windows operating system is not loaded.</li> <li>■ Set an optional external monitor or overhead projector connected to a video card in a Docking Station as the primary device. When the tablet PC display is set as secondary, the tablet PC must be shut down before undocking from a Docking Station.</li> </ul>

**Table 2-3**  
**Advanced Menu (*Continued*)**

Select	To Do This
Device Options ( <i>continued</i> )	<ul style="list-style-type: none"> <li>■ Change the parallel port mode from EPP (Enhanced Parallel Port [default]) to standard, bidirectional, EPP or ECP (Enhanced Capabilities Port).</li> <li>■ Set video-out mode to NTSC (default), PAL, NTSC-J, or PAL-M.*</li> <li>■ Enable/disable all settings in the SpeedStep window. When Disable is selected, the tablet PC runs in Battery Optimized mode.</li> <li>■ Specify how the tablet PC recognizes multiple identical Docking Stations that are identically equipped. Select Disable to recognize the Docking Stations as a single Docking Station; select Enable to recognize the Docking Stations individually, by serial number.</li> <li>■ Enable/disable the reporting of the processor serial number by the processor to the software.</li> </ul>
HDD Self-Test Options	Run a quick comprehensive self-test on hard drives in the system that support the test features.

\*Video modes vary even within regions. However, NTSC is common in North America; PAL, in Europe, Africa, and the Middle East; NTSC-J, in Japan; and PAL-M, in Brazil. Other South and Central American regions may use NTSC, PAL, or PAL-M.

## 2.2 Using HP Diagnostics for Windows

When you access HP Diagnostics for Windows, a scan of all system components is displayed on the screen before the HP Diagnostics window opens.

You can display more or less information from anywhere within HP Diagnostics for Windows by selecting **Level** on the menu bar.

HP Diagnostics for Windows is designed to test HP components. If third-party components are tested, the results may be inconclusive.

### Obtaining, Saving or Printing Configuration Information

1. Access HP Diagnostics by selecting **Start > Control Panel > Diagnostics for Windows**.
2. Select **Categories**, and then select a category from the drop-down list.
  - To save the information, select **File > Save As**.
  - To print the information, select **File > Print**.
3. To close HP Diagnostics for Windows, select **File > Exit**.

## Obtaining, Saving or Printing Diagnostic Test Information

1. Access HP Diagnostics by selecting **Start > Control Panel > Diagnostics for Windows**.
2. Select the **Test** tab.
3. In the scroll box, select the category or device you want to test.
4. Select a test type:
  - Quick Test**—Runs a quick, general test on each device in a selected category.
  - Complete Test**—Performs maximum testing on each device in a selected category.
  - Custom Test**—Performs maximum testing on a selected device.
    - ◆ To run all tests for your selected device, select **Check All**.
    - ◆ To run only the tests you select, select **Uncheck All**, and then select the check box for each test you want to run.
5. Select a test mode:
  - Interactive Mode**—Provides maximum control over the testing process. You determine whether the test was passed or failed. You might be prompted to insert or remove devices.
  - Unattended Mode**—Does not display prompts. If errors are found, they are displayed when testing is complete.

6. Select **Begin Testing**.
7. Select a tab to view a test report:
  - ❑ **Status tab**—Summarizes the tests run, passed, and failed during the current testing session.
  - ❑ **Log tab**—Lists tests run on the system, the number of times each test has run, the number of errors found on each test, and the total run time of each test.
  - ❑ **Error tab**—Lists all errors found in the tablet PC, along with their error codes.
8. Select a tab to save the report:
  - ❑ **Log tab**—Select **Log tab Save**.
  - ❑ **Error tab**—Select **Error tab Save**.
9. Select a tab to print the report:

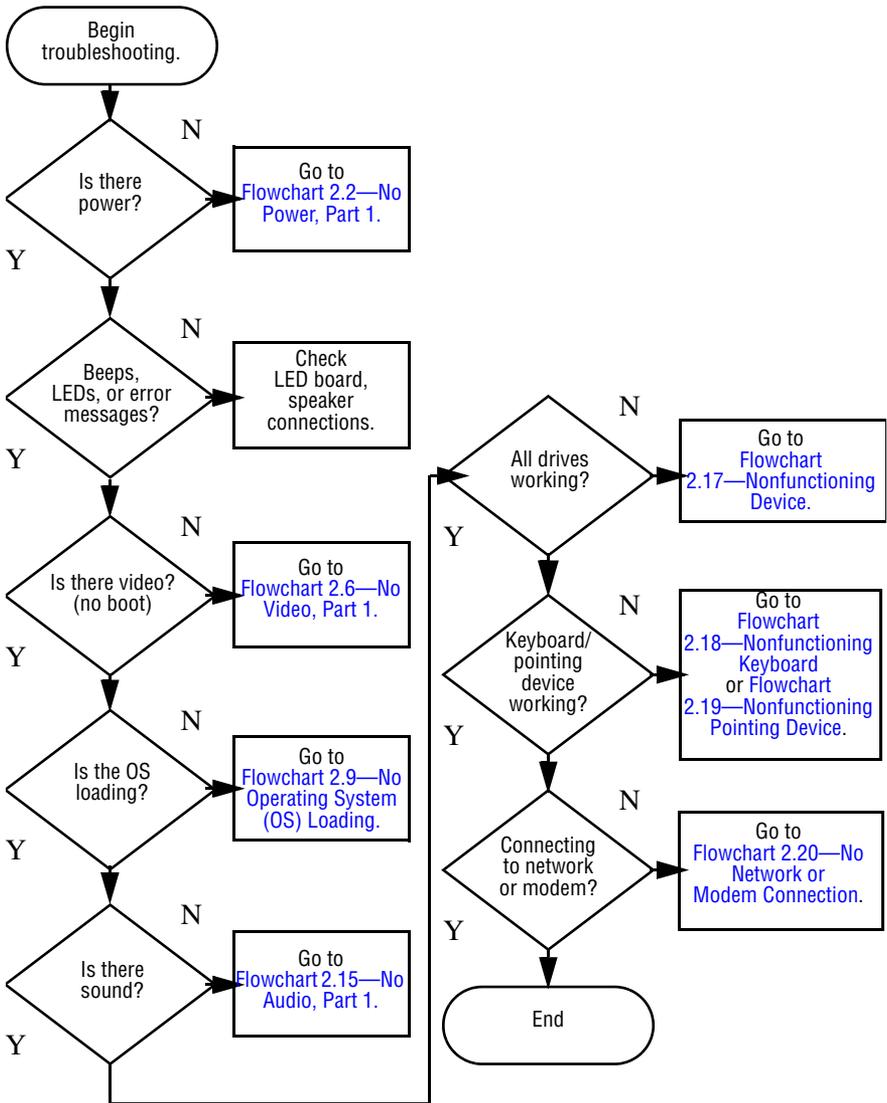
**Log tab**—Select **File > Save As**, and then print the file from your folder.

# Troubleshooting Flowcharts

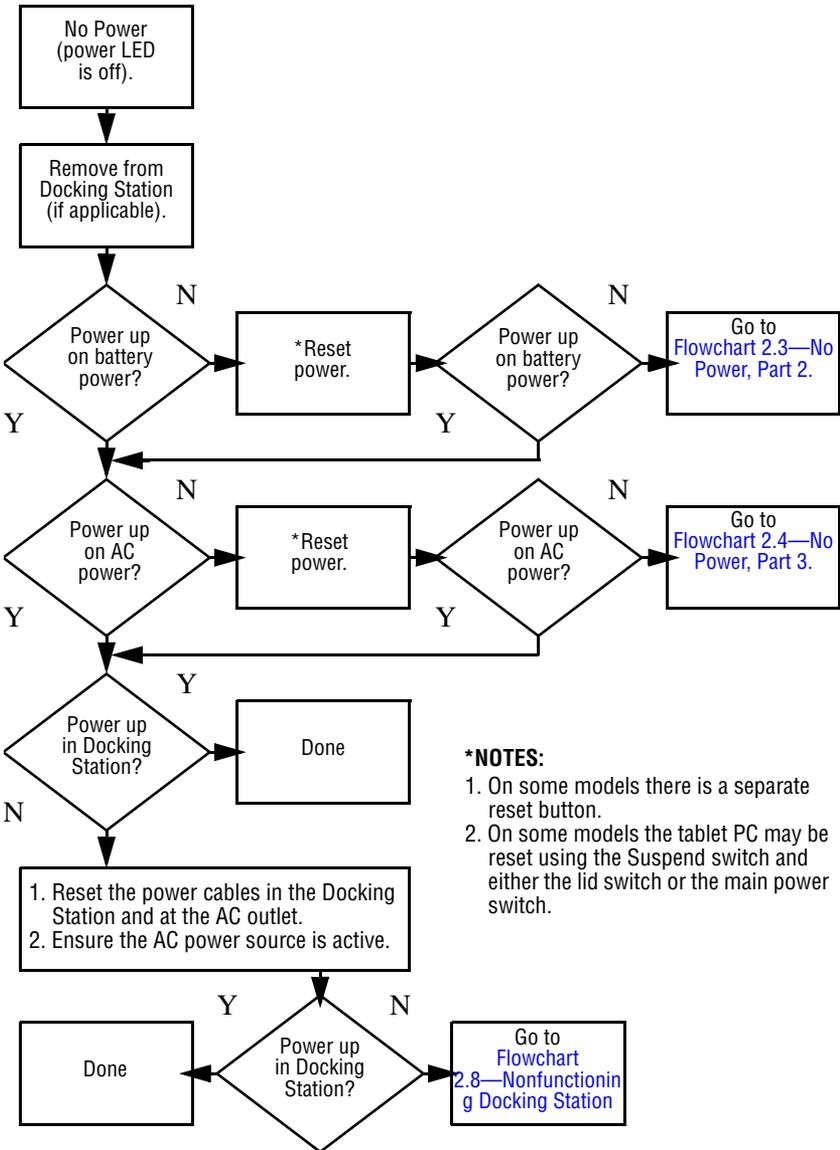
**Table 2-4**  
**Troubleshooting Flowcharts Overview**

<b>Flowchart</b>	<b>Description</b>
2.1	"Flowchart 2.1—Initial Troubleshooting."
2.2	"Flowchart 2.2—No Power, Part 1."
2.3	"Flowchart 2.3—No Power, Part 2."
2.4	"Flowchart 2.4—No Power, Part 3."
2.5	"Flowchart 2.5—No Power, Part 4."
2.6	"Flowchart 2.6—No Video, Part 1."
2.7	"Flowchart 2.7—No Video, Part 2."
2.8	"Flowchart 2.8—Nonfunctioning Docking Station (if applicable)."
2.9	"Flowchart 2.9—No Operating System (OS) Loading."
2.10	"Flowchart 2.10—No OS Loading from Hard Drive, Part 1."
2.11	"Flowchart 2.11—No OS Loading from Hard Drive, Part 2."
2.12	"Flowchart 2.12—No OS Loading from Hard Drive, Part 3."
2.13	"Flowchart 2.13—No OS Loading from Diskette Drive."
2.14	"Flowchart 2.14—No OS Loading from CD-ROM or DVD-ROM Drive."
2.15	"Flowchart 2.15—No Audio, Part 1."
2.16	"Flowchart 2.16—No Audio, Part 2."
2.17	"Flowchart 2.17—Nonfunctioning Device."
2.18	"Flowchart 2.18—Nonfunctioning Keyboard."
2.19	"Flowchart 2.19—Nonfunctioning Pointing Device."
2.20	"Flowchart 2.20—No Network or Modem Connection."

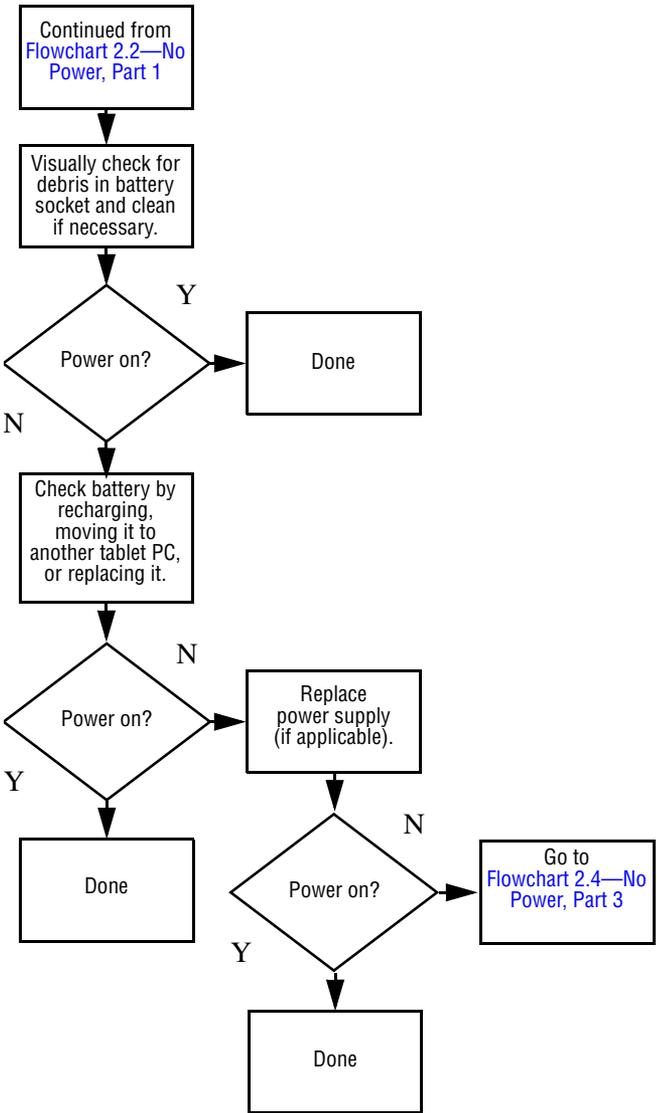
## Flowchart 2.1 – Initial Troubleshooting



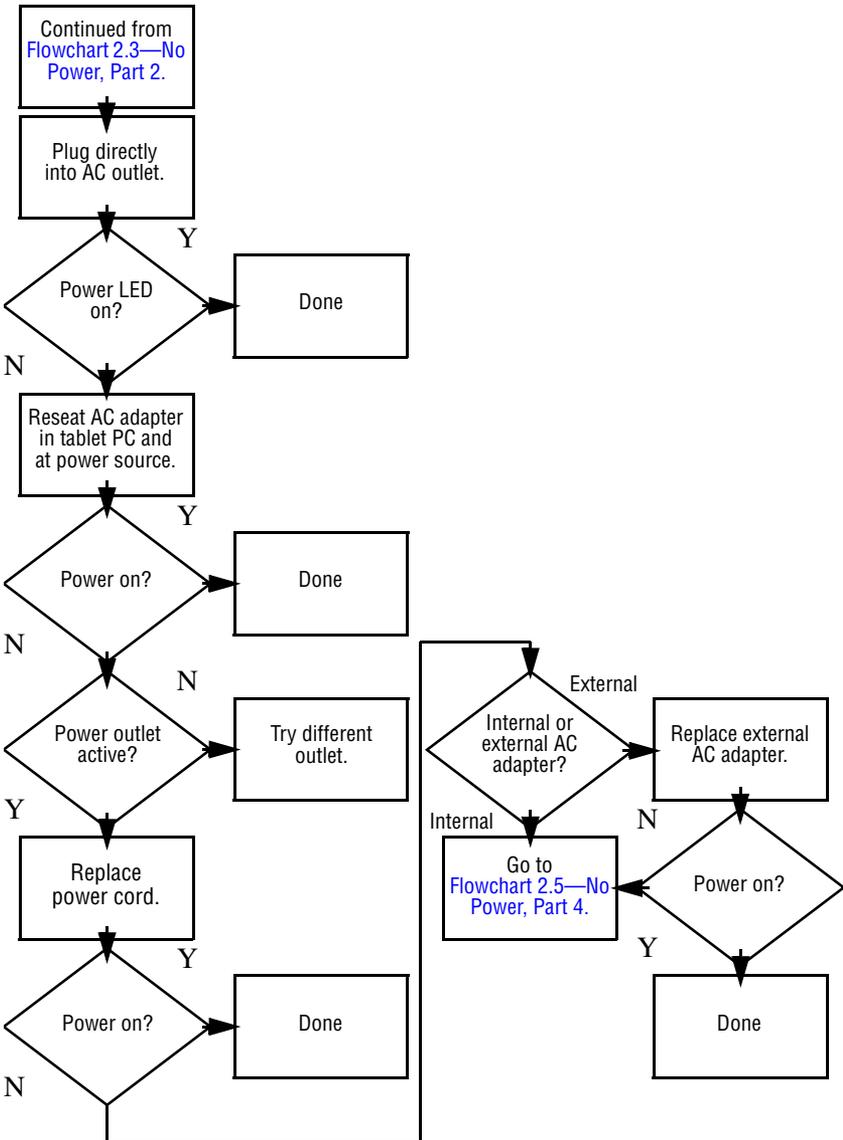
## Flowchart 2.2—No Power, Part 1



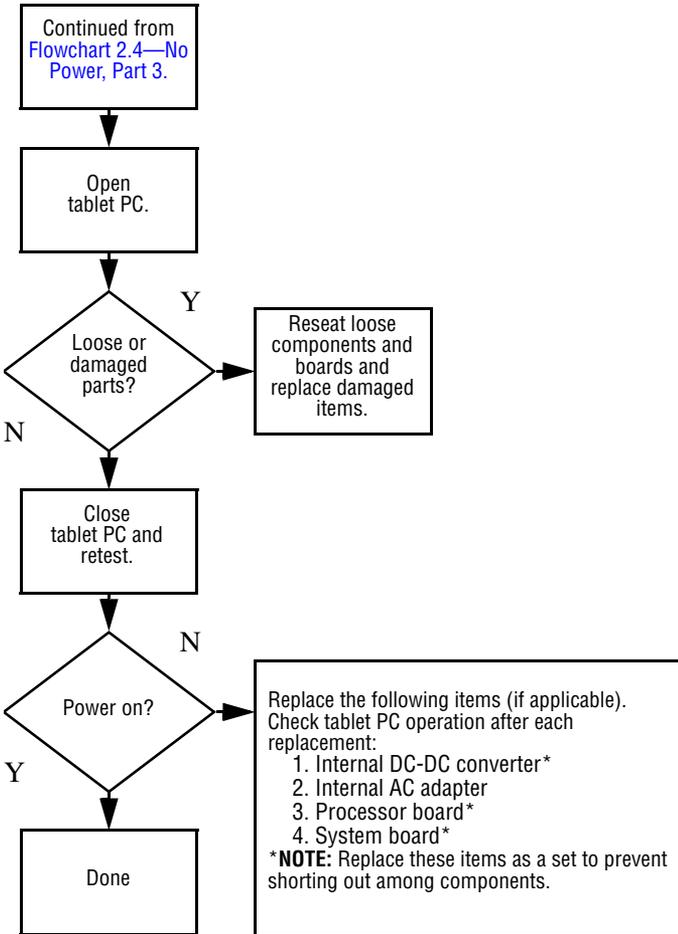
## Flowchart 2.3—No Power, Part 2



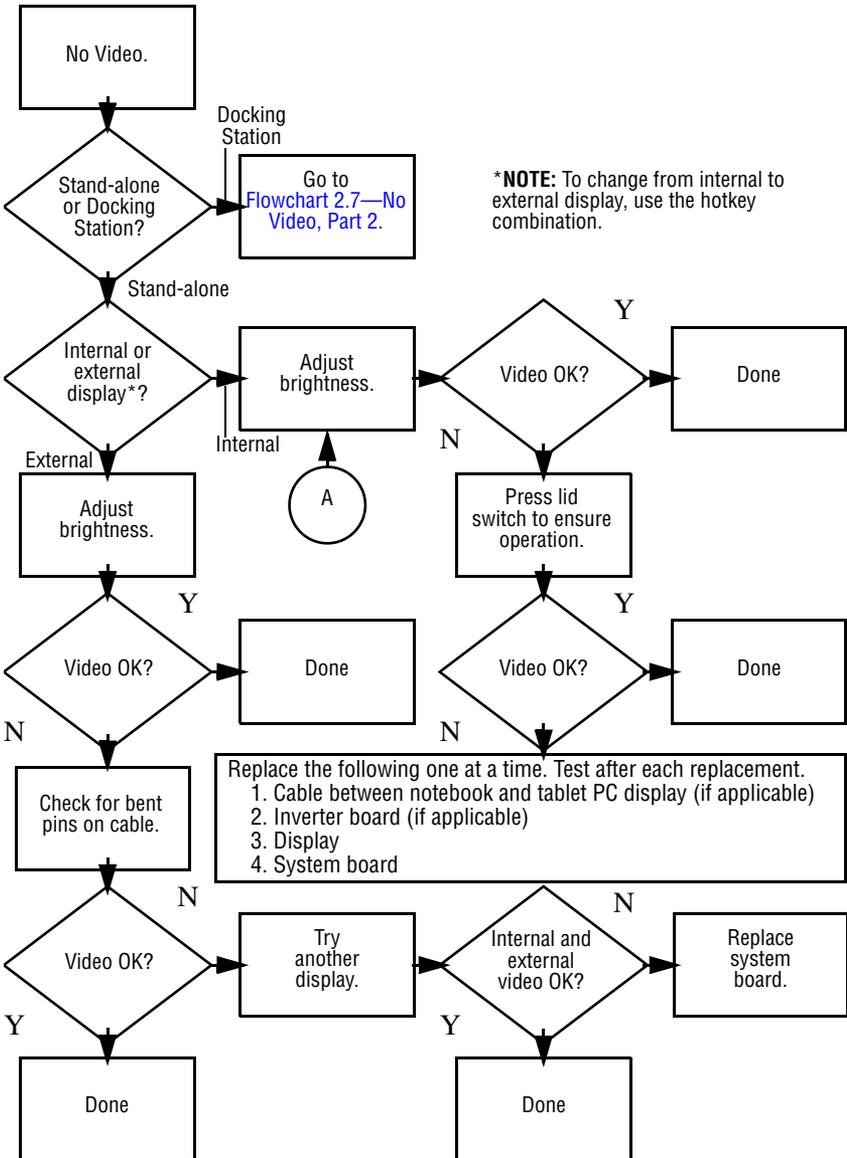
## Flowchart 2.4—No Power, Part 3



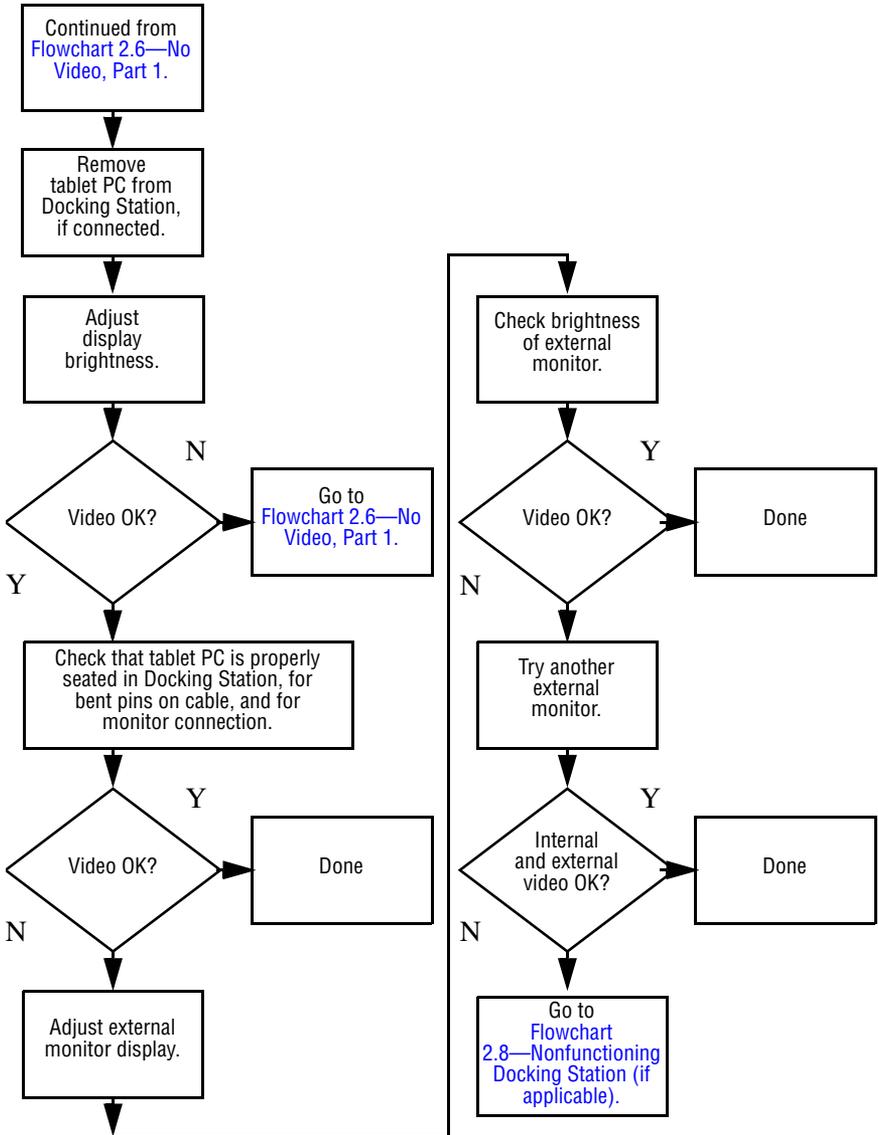
## Flowchart 2.5—No Power, Part 4



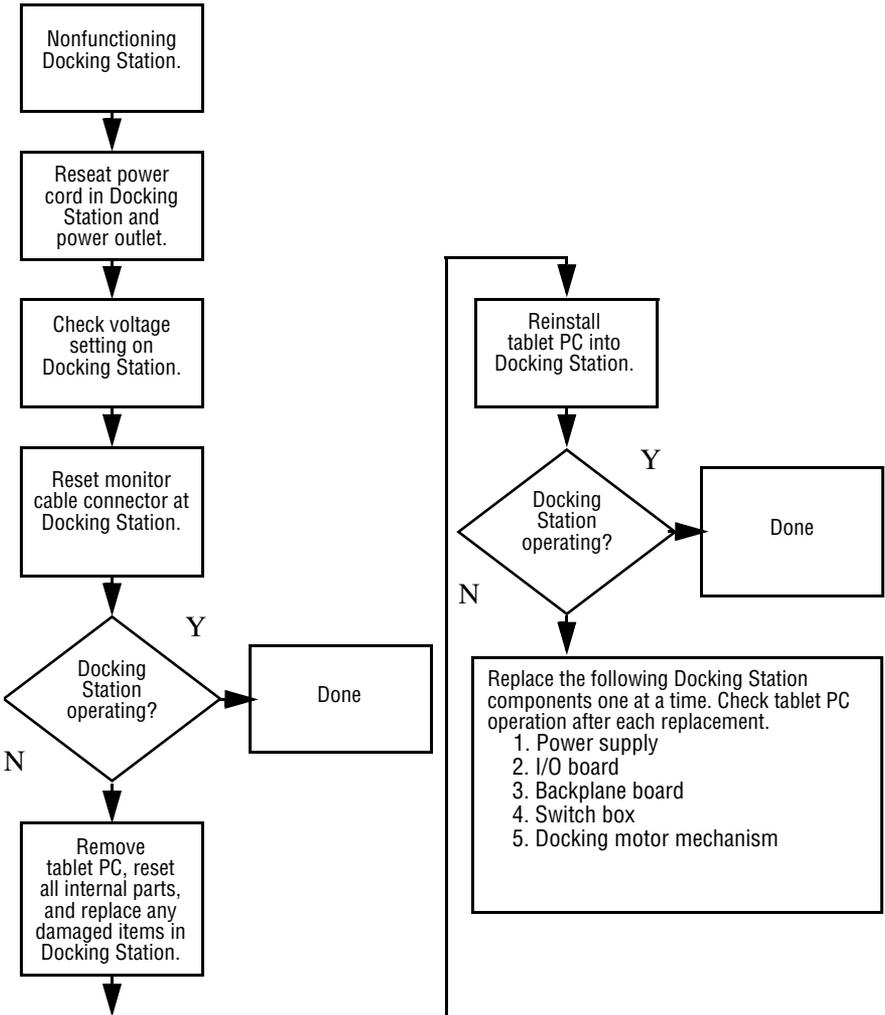
## Flowchart 2.6—No Video, Part 1



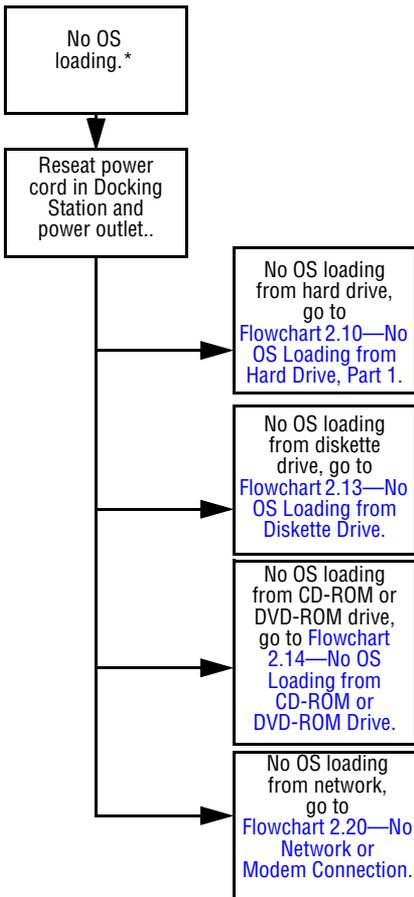
## Flowchart 2.7—No Video, Part 2



## Flowchart 2.8—Nonfunctioning Docking Station (if applicable)

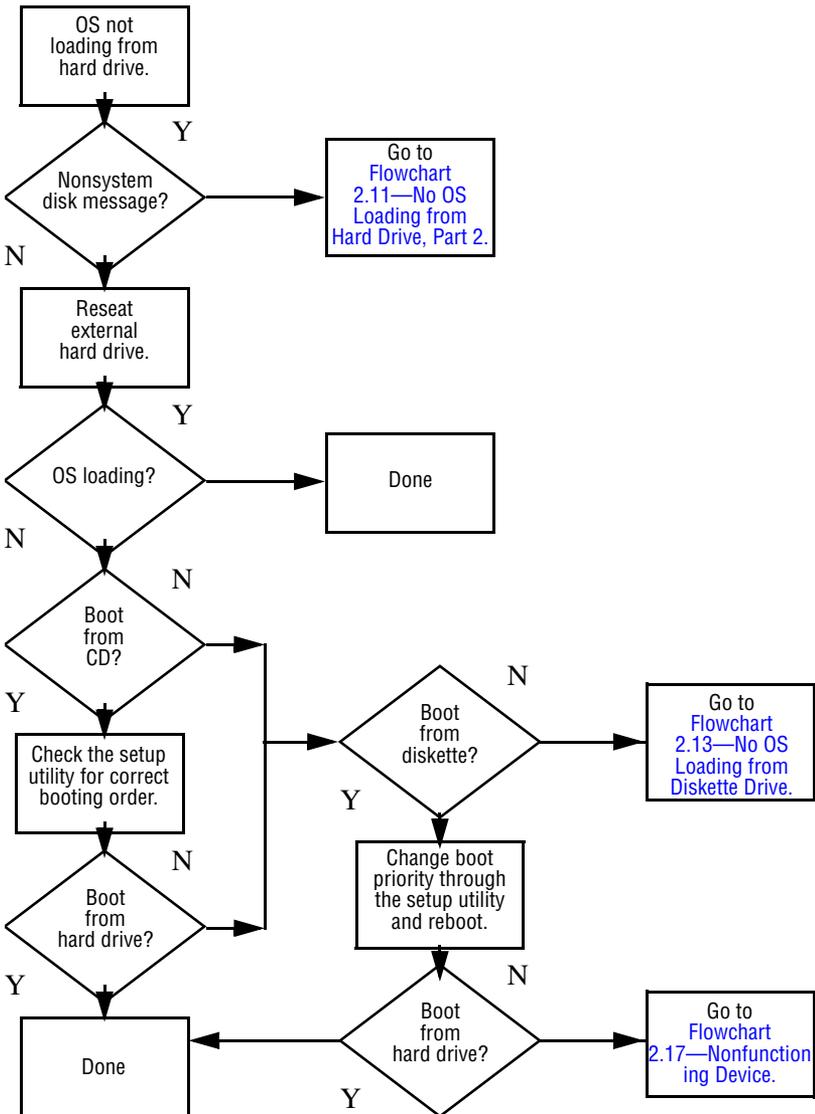


## Flowchart 2.9—No Operating System (OS) Loading

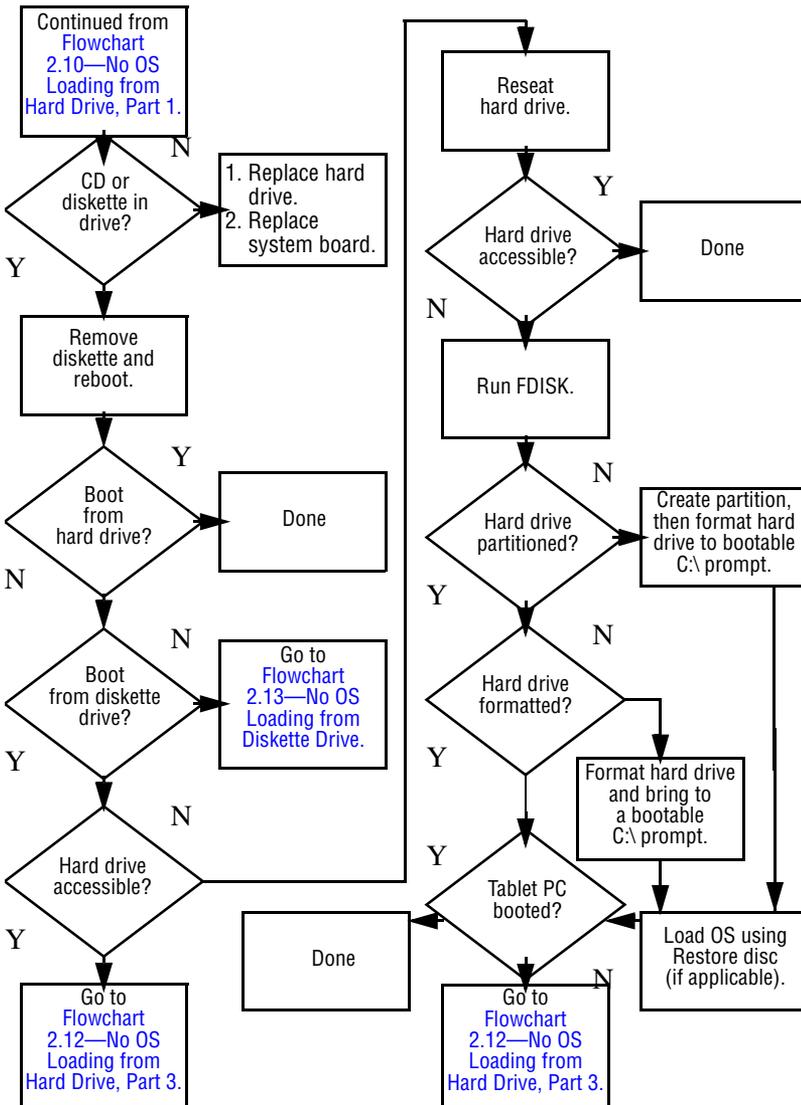


**\*NOTE:** Before beginning troubleshooting, always check cable connections, cable ends, and drives for bent or damaged pins.

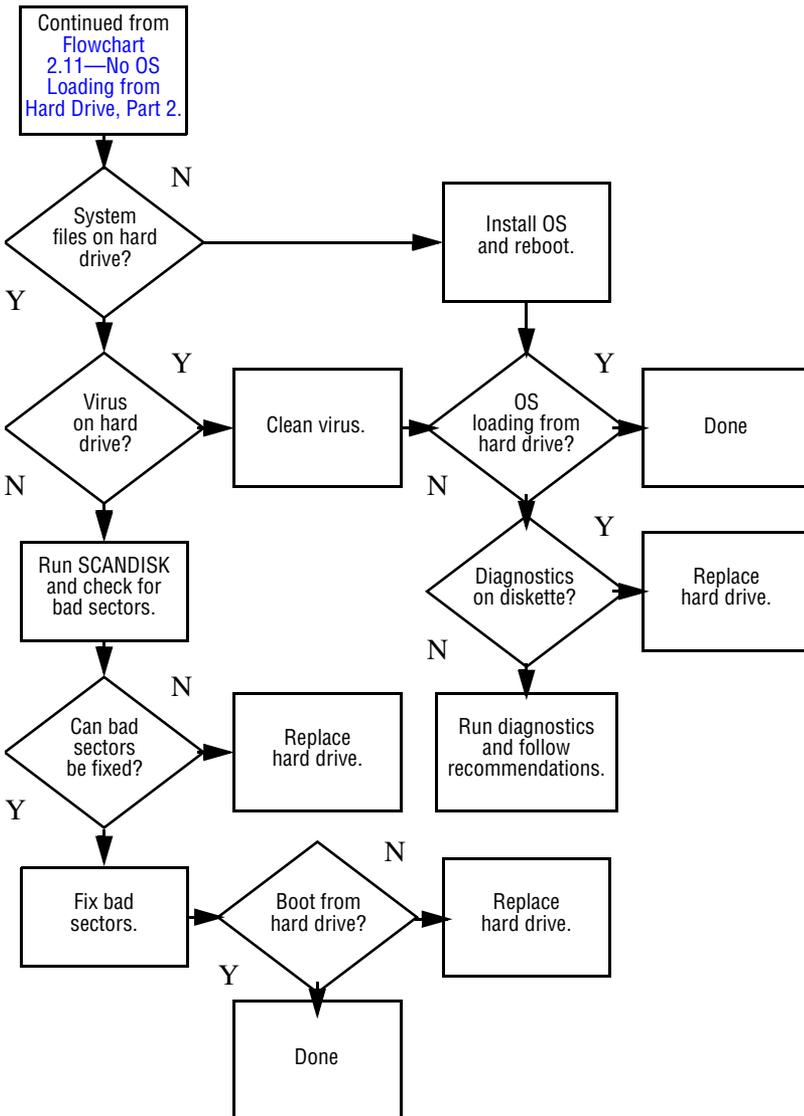
## Flowchart 2.10—No OS Loading from Hard Drive, Part 1



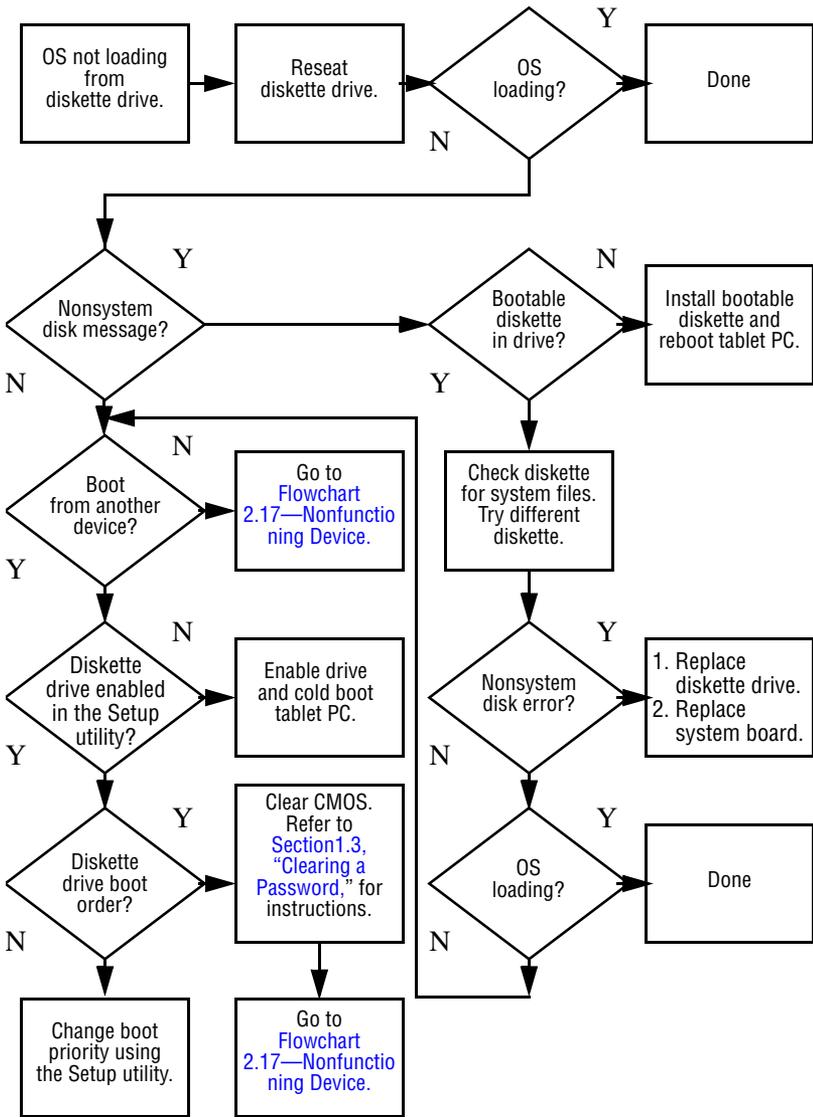
## Flowchart 2.11 – No OS Loading from Hard Drive, Part 2



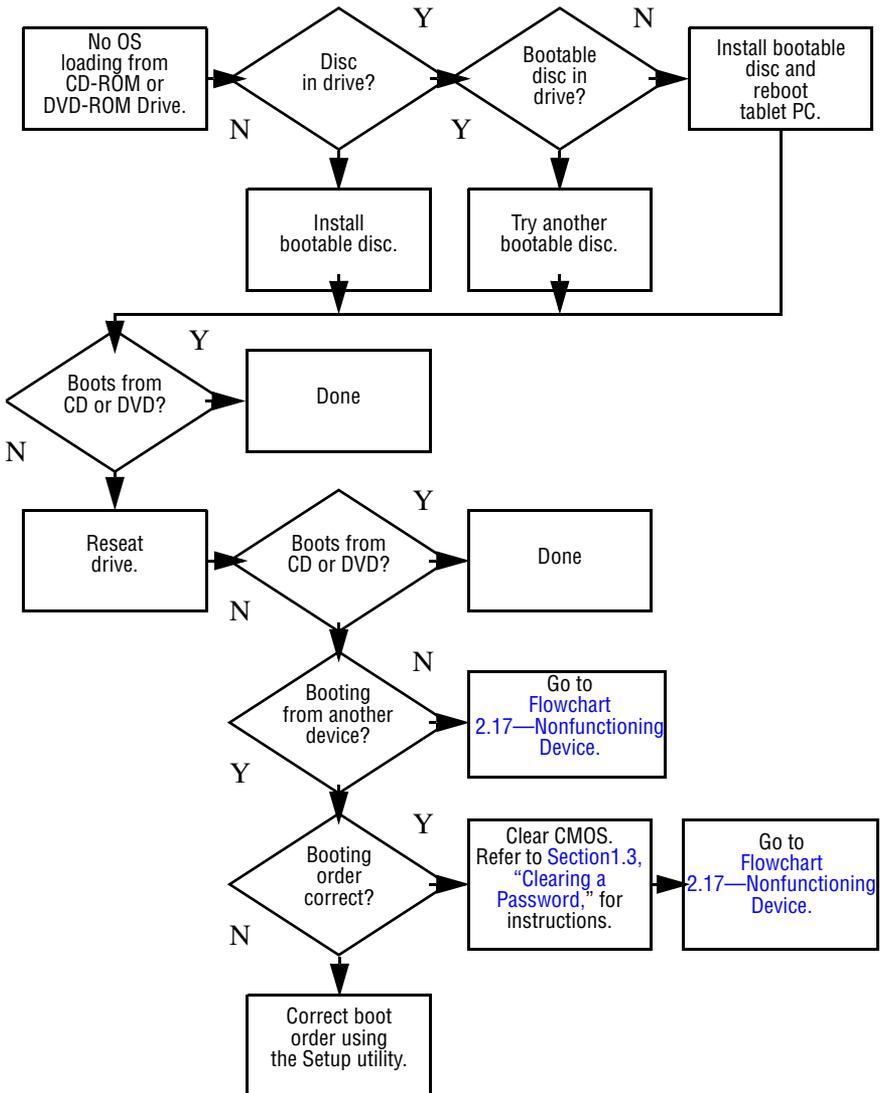
## Flowchart 2.12—No OS Loading from Hard Drive, Part 3



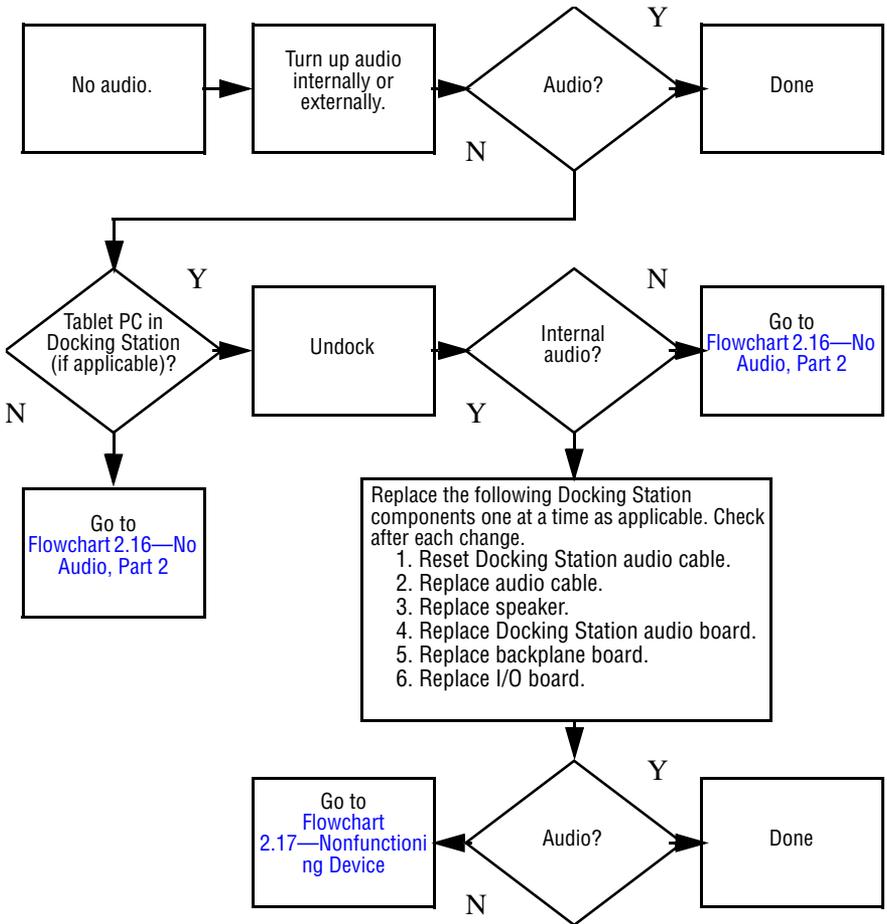
## Flowchart 2.13—No OS Loading from Diskette Drive



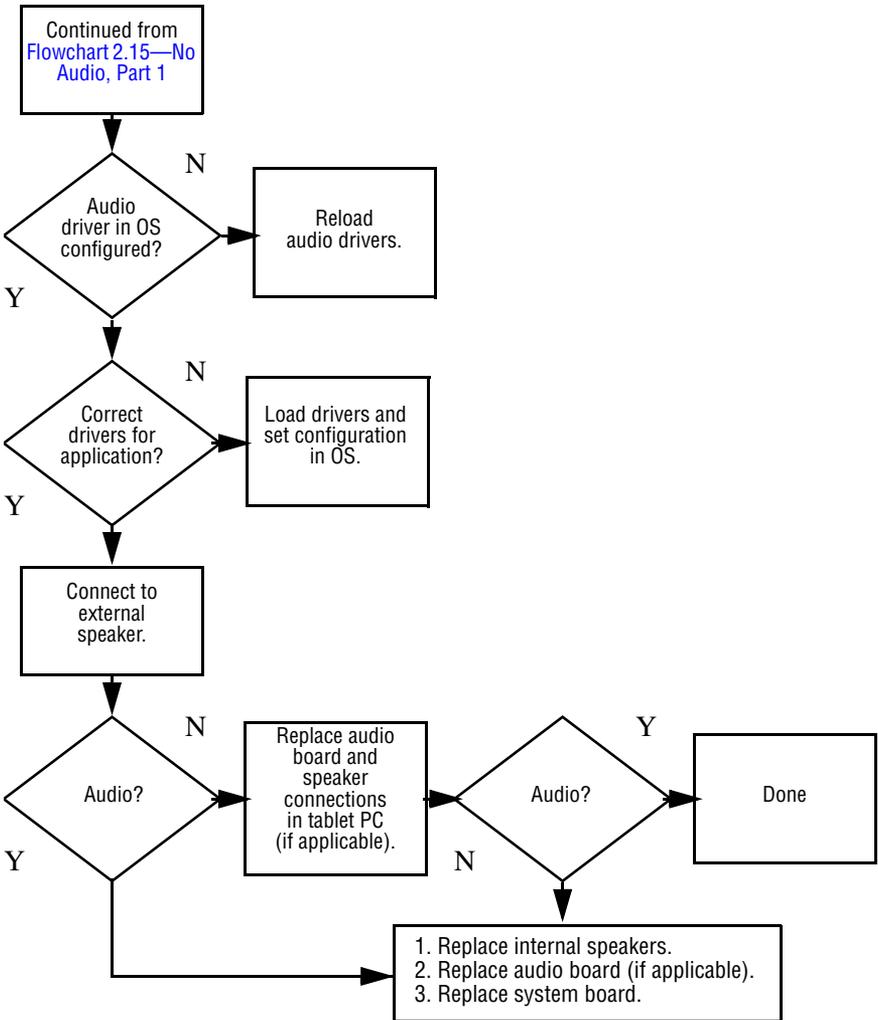
## Flowchart 2.14—No OS Loading from CD-ROM or DVD-ROM Drive



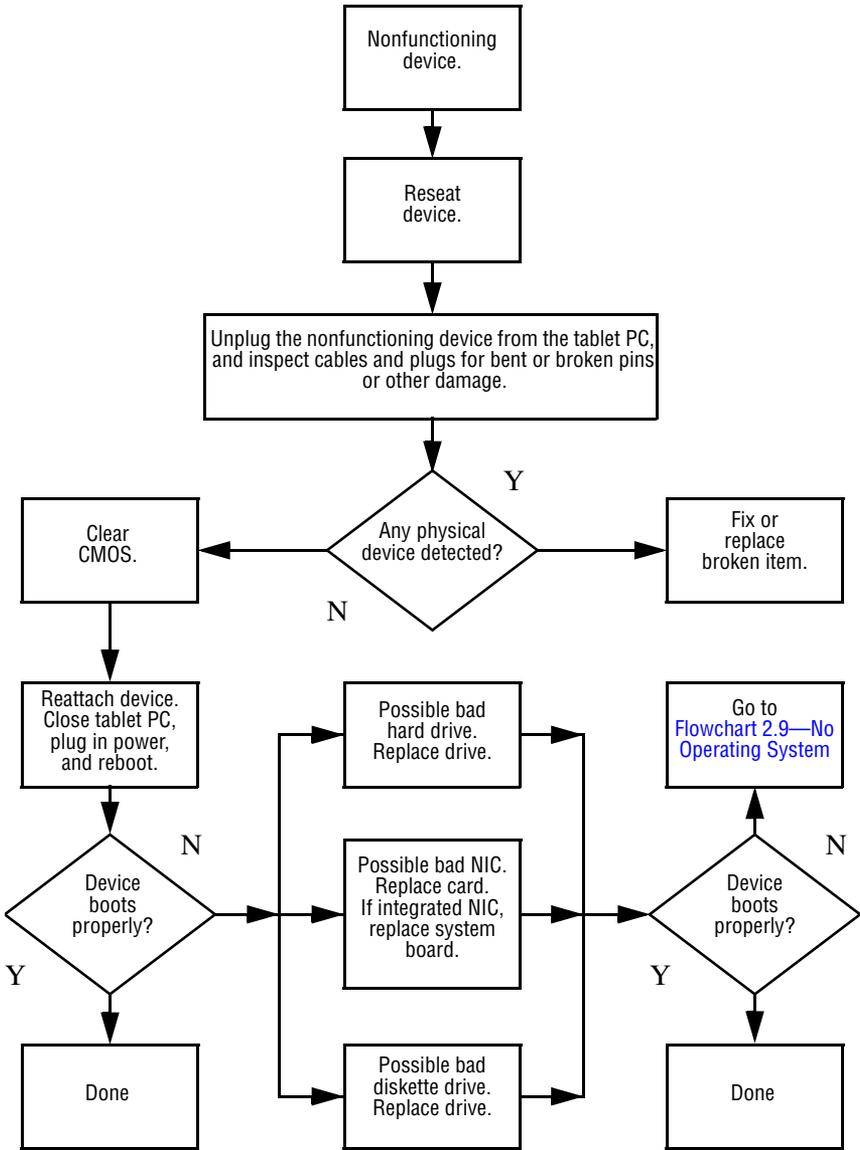
## Flowchart 2.15—No Audio, Part 1



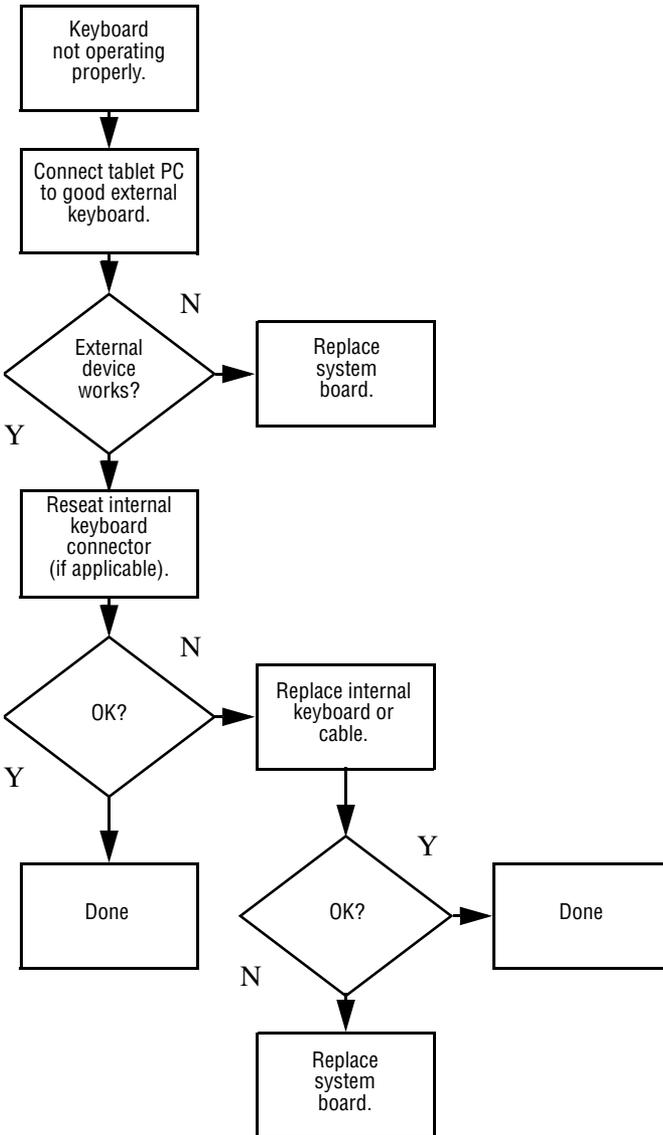
## Flowchart 2.16—No Audio, Part 2



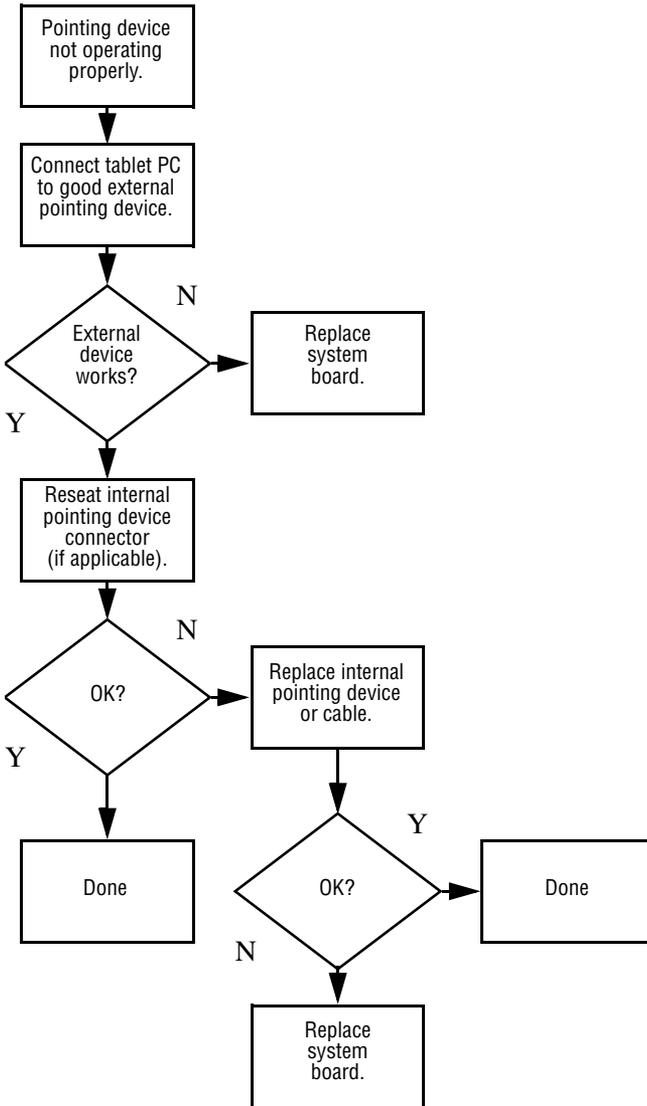
## Flowchart 2.17—Nonfunctioning Device



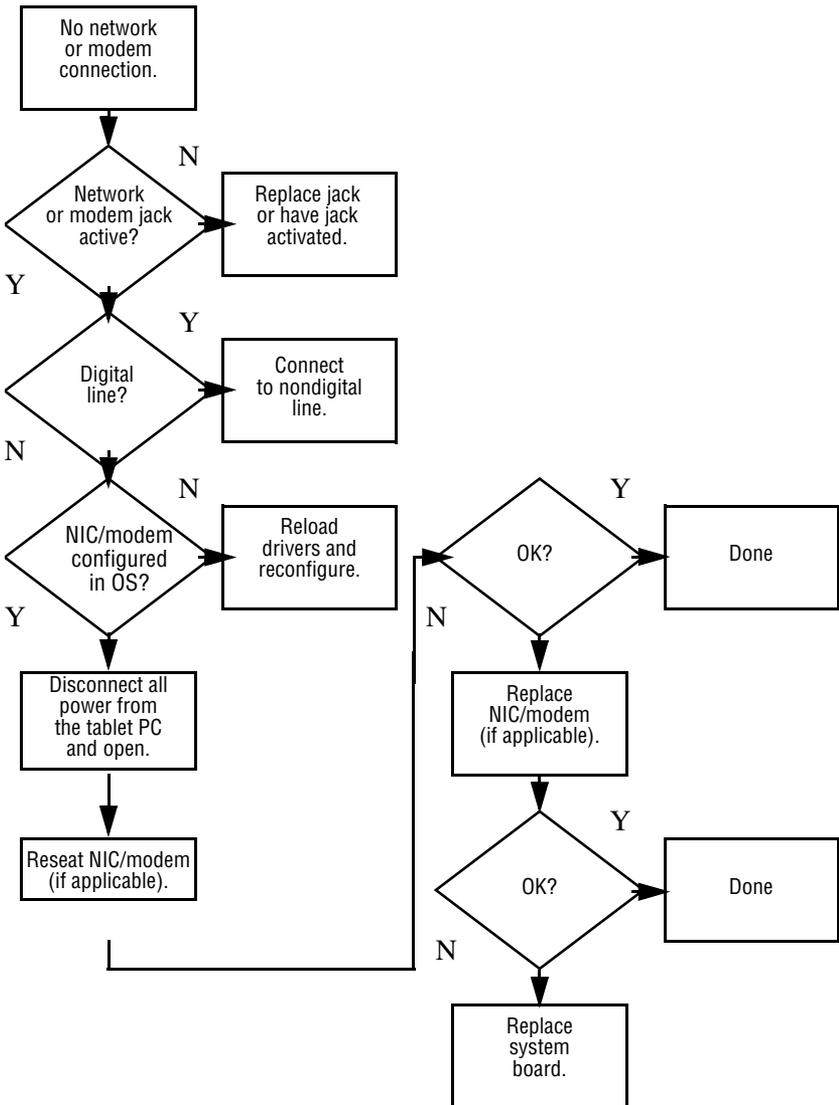
## Flowchart 2.18—Nonfunctioning Keyboard



## Flowchart 2.19—Nonfunctioning Pointing Device



## Flowchart 2.20—No Network or Modem Connection



# 3

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## Illustrated Parts Catalog

This chapter provides an illustrated parts breakdown and a reference for spare part numbers and option part numbers.

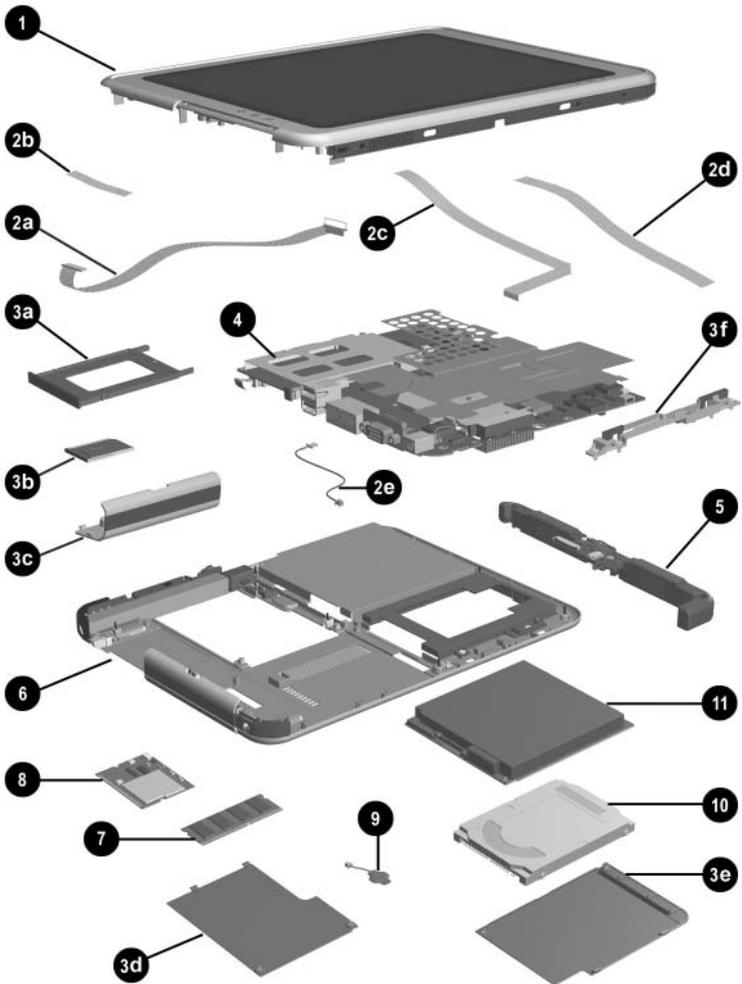
### 3.1 Serial Number Location

When ordering parts or requesting information, provide the tablet PC serial number and model number located on the bottom of the tablet PC.



*Serial Number Location*

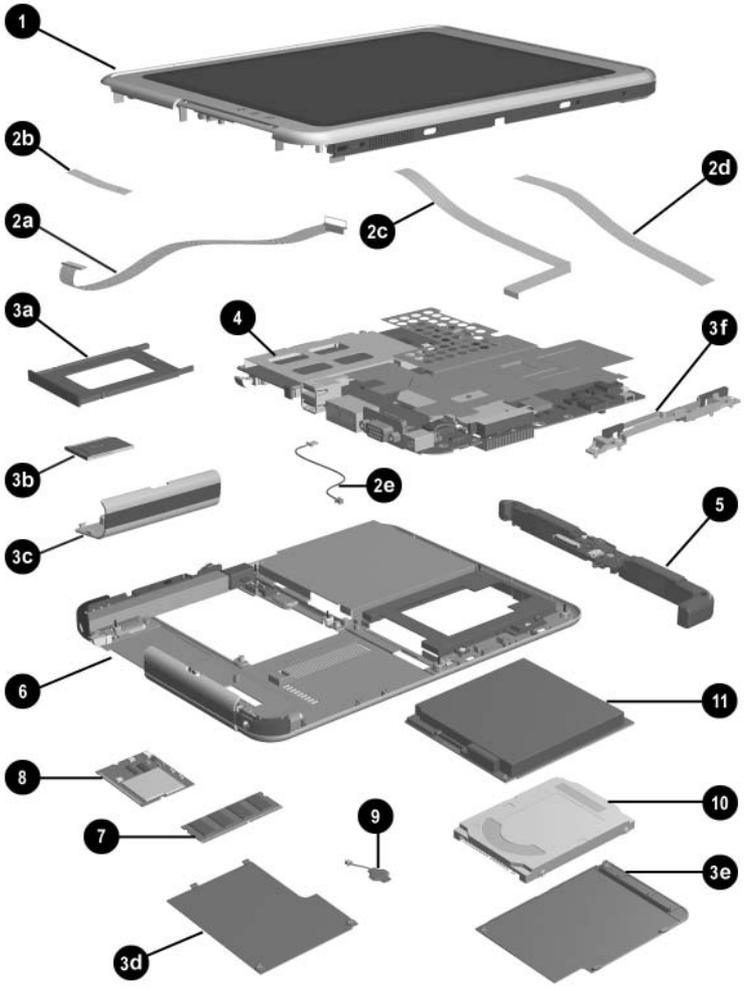
## 3.2 HP Compaq Tablet PC System Major Components



HP Compaq Tablet PC Major Components

**Table 3-1  
Spare Parts: Tablet PC System Major Components**

<b>Item</b>	<b>Description</b>	<b>Spare Part Number</b>
<b>1</b>	<b>Display components</b>	
	Display panel assembly	348348-001
	Display bezel with inverter	348336-001
	Inverter	348358-001
	Bridge battery	348328-001
	Digitizer	348337-001
	Antenna	348357-001
	<b>Miscellaneous Cable Kit, includes:</b>	348335-001
2a	Audio cable	
2b	Inverter cable	
2c	Digitizer cable	
2d	Display panel cable	
2e	Modem cable	
	<b>Miscellaneous Plastics/Hardware Kit, includes:</b>	348350-001
3a	PC Card slot space saver	
3b	SD Card slot space saver	
3c	Connector cover	
3d	Mini PCI communications/memory module compartment cover	
3e	Hard drive cover	
3f	Keyboard release assembly	
<b>4</b>	<b>System board (includes fan and heat sink)</b>	
	Mobile Intel Celeron, 800-MHz	348331-001
	Intel Pentium M, 1.0-GHz	348332-001
	<b>Fan (not illustrated separately)</b>	348342-001
	<b>Heat sink (not illustrated separately)</b>	348354-001

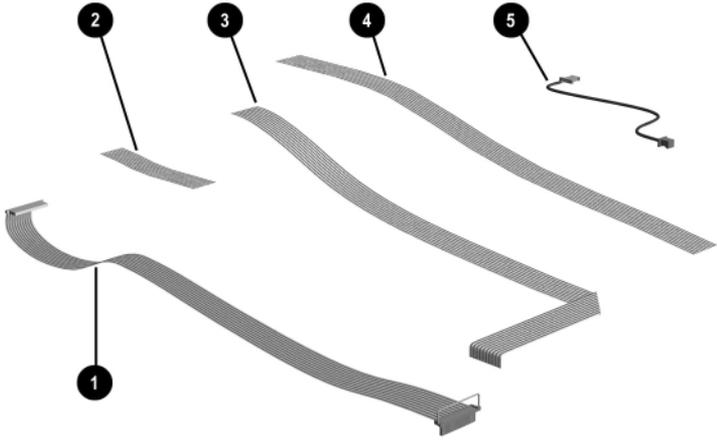


Tablet PC Major Components

**Table 3-1**  
**Spare Parts: HP Tablet PC System**  
**Major Components (Continued)**

Item	Description	Spare Part Number
5	<b>Switch board</b>	348330-001
6	<b>Base enclosure</b> (includes battery shield, hard drive bracket, LED board assembly, connector cover, keyboard release mechanism, and shields) <b>Speaker assembly</b> (includes audio board)	348327-001 348352-001
7	<b>Memory module</b> (DDR, 256 MB) DDR, 256 MB DDR, 512 MB DDR, 1024 MB	348345-001 348346-001 348334-001
8	<b>Wireless local area network (LAN) board</b> (Mini PCI, Type III) 802.11b (MOW) 802.11b (ROW) 802.11a/b/g 802.11a/b/g (Japan)	348997-001 348996-001 349985-001 349985-291
9	<b>Real time clock (RTC) battery</b>	348329-001
10	<b>Hard drives</b> 30-GB 40-GB 60-GB 80-GB	348339-001 348340-001 348341-001 366786-001
11	<b>Battery pack, Li-Ion</b> <b>Wireless antenna</b> (not illustrated)	348333-001 348357-001

### 3.3 Miscellaneous Cable Kit Components



*Miscellaneous Cable Kit Components*

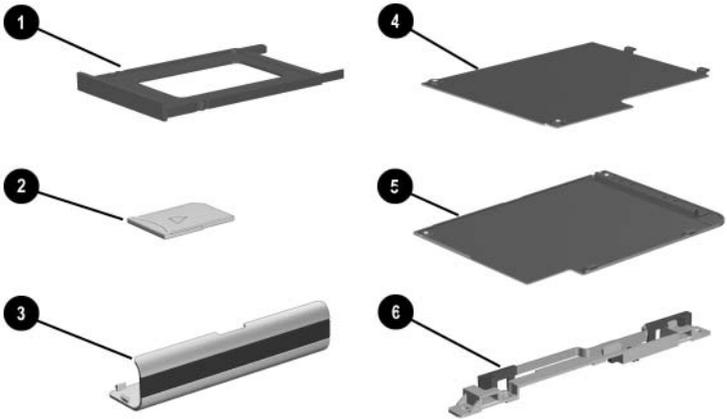
---

**Table 3-2  
Miscellaneous Cable Kit Components**

**Spare Part Number 348335-001**

<b>Item</b>	<b>Description</b>
1	Audio cable
2	Inverter cable
3	Digitizer cable
4	Display panel cable
5	Modem cable

### 3.4 Miscellaneous Plastics/Hardware Kit Components



*Miscellaneous Plastics/Hardware Kit Contents*

**Table 3-3  
Miscellaneous Plastics/Hardware Kit Components**

**Spare Part Number 348350-001**

Item	Description
1	PC Card slot space saver
2	SD Card slot space saver
3	Connector cover
4	Memory module/Mini PCI communications compartment cover
5	Hard drive cover
6	Keyboard release assembly

## **3.5 Keyboard**



*Tablet PC Keyboard*

**Table 3-4**

**Tablet PC Keyboard  
Spare Part Number Information**

<b>Description</b>		<b>Spare Part Number</b>	
Tablet PC TC1100 Keyboards			
ADP	348325-371	Korea	348325-AD1
Australia	348325-011	Latin America	348325-161
Denmark	348325-081	Norway	348325-091
European	348325-021	People's Republic of China	348325-AA1
European A4	348325-A41	Spain	348325-071
France	348325-051	Sweden/Finland	348325-B21
French Canada	348325-DB1	Switzerland	348325-111
German	348325-041	Taiwan	348325-AB1
Italy	348325-061	United Kingdom	348325-031
Japan	348325-291	United States	348325-001
Japan (English)	348325-391		

## 3.6 Optional HP Tablet PC Docking Station



*Optional HP Tablet PC Docking Station*

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**Table 3-5**

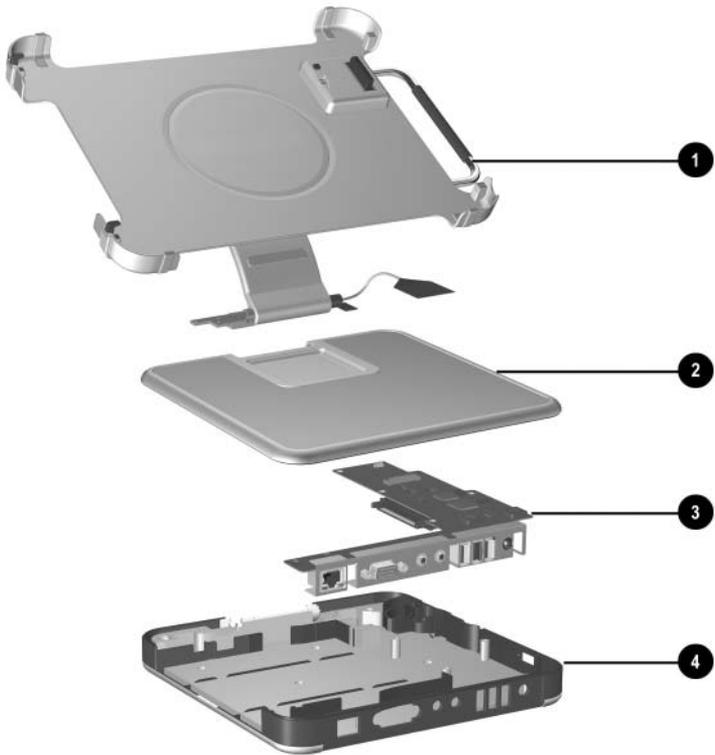
**Optional HP Tablet PC Docking Station  
Spare Part Number Information**

---

<b>Description</b>	<b>Spare Part Number</b>
HP Tablet PC Docking Station	348338-001

---

### 3.7 HP Tablet PC Docking Station Components



*HP Tablet PC Docking Station Components*

---

**Table 3-6**

**HP Tablet PC Docking Station Components  
Spare Part Number Information**

---

<b>Item</b>	<b>Description</b>	<b>Spare Part Number</b>
1	Docking stand and pivot arm	349090-001
2	Top case	349091-001
3	Board assembly	349093-001
4	Bottom case	349092-001

---

## 3.8 Miscellaneous

Table 3-7

**Spare Parts: Miscellaneous (not illustrated)**

Description			Spare Part Number
AC power cord, 3-wire			
Australia	198723-011	Sweden	198723-101
Europe International	198723-B31	Switzerland	198723-BG1
Italy	198723-061	Taiwan	198723-AB1
Japan	198723-291	United Kingdom	198723-031
Korea	198723-AD1	United States	198723-001
People's Republic of China	198723-AA1		
AC adapter, 65 W			285288-001
Pen (uses a 1.5 VDC, AAAA battery)			
Eraser			344503-001
No eraser			344418-001
Pen tips			348355-001
Pen receptacle			348356-001
<b>Tablet PC Miscellaneous Screw Kit</b> (includes the following screws; refer to <a href="#">Appendix C, "Screw Listing."</a> for more information on screw specifications and usage.)			348351-001
■ Phillips M2.0 × 4.0			
■ Phillips M2.0 × 5.0			
■ Phillips M2.0 × 3.5			
■ Torx M2.5 × 7.0			

---

# Removal and Replacement Preliminaries

This chapter provides essential information for proper and safe removal and replacement service.

## 4.1 Tools Required

You need the following tools to complete the removal and replacement procedures:

- Magnetic screwdriver
- Torx T8 screwdriver
- Phillips P0 screwdriver
- Tool kit (includes connector removal tool, loopback plugs, and case utility tool)

## 4.2 Service Considerations

The following sections include some of the considerations that you should keep in mind during disassembly and assembly procedures.



---

As you remove each subassembly from the tablet PC, place the subassembly (and all accompanying screws) away from the work area to prevent damage.

---

## Plastic Parts

Using excessive force during disassembly and reassembly can damage plastic parts. Use care when handling the plastic parts. Apply pressure only at the points designated in the maintenance instructions.

## Cables and Connectors



**CAUTION:** When servicing the tablet PC, ensure that cables are placed in their proper locations during the reassembly process. Improper cable placement can damage the tablet PC.

---

Cables must be handled with extreme care to avoid damage. Apply only the tension required to unseat or seat the cables during removal and insertion. Handle cables by the connector whenever possible. In all cases, avoid bending, twisting, or tearing cables. Ensure that cables are routed in such a way that they cannot be caught or snagged by parts being removed or replaced. Handle flex cables with extreme care; these cables tear easily.

## 4.3 Preventing Damage to Removable Drives

Removable drives are fragile components that must be handled with care. To prevent damage to the tablet PC, damage to a removable drive, or loss of information, observe the following precautions:

- Before removing or inserting a hard drive, shut down the tablet PC. If you are unsure whether the tablet PC is off or in Hibernation, turn on the tablet PC, and then shut it down.
- Before removing a diskette drive or optical drive, ensure that a diskette or disc is not in the drive. Ensure that the optical drive tray is closed.

- Before handling a drive, ensure that you are discharged of static electricity. While handling a drive, avoid touching the connector.
- Handle drives on surfaces that have at least one inch of shock-proof foam.
- Avoid dropping drives from any height onto any surface.
- After removing a hard drive, optical drive, or diskette drive, place it in a static-proof bag.
- Avoid exposing a hard drive to products that have magnetic fields, such as monitors or speakers.
- Avoid exposing a drive to temperature extremes or liquids.
- If a drive must be mailed, place the drive in a bubble pack mailer or other suitable form of protective packaging and label the package “Fragile: Handle With Care.”

## **4.4 Preventing Electrostatic Damage**

Many electronic components are sensitive to electrostatic discharge (ESD). Circuitry design and structure determine the degree of sensitivity. Networks built into many integrated circuits provide some protection, but in many cases the discharge contains enough power to alter device parameters or melt silicon junctions.

A sudden discharge of static electricity from a finger or other conductor can destroy static-sensitive devices or microcircuitry. Often, the spark is neither felt nor heard, but damage occurs.

An electronic device exposed to electrostatic discharge may not be affected at all and can work perfectly throughout a normal cycle. Or the device might function normally for a while, but because it has been degraded internally, it can fail prematurely.

## 4.5 Packaging and Transporting Equipment

Use the following grounding precautions when packaging and transporting equipment:

- To avoid hand contact, transport products in static-safe containers, such as tubes, bags, or boxes.
- Protect all electrostatic-sensitive parts and assemblies with conductive or approved containers or packaging.
- Keep electrostatic-sensitive parts in their containers until the parts arrive at static-free workstations.
- Place items on a grounded surface before removing items from their containers.
- Always be properly grounded when touching a sensitive component or assembly.
- Store reusable electrostatic-sensitive parts from assemblies in protective packaging or nonconductive foam.
- Use transporters and conveyors made of antistatic belts and roller bushings. Ensure that mechanized equipment used for moving materials is wired to ground and that proper materials are selected to avoid static charging. When grounding is not possible, use an ionizer to dissipate electric charges.

## 4.6 Workstation Precautions

Use the following grounding precautions at workstations:

- Cover the workstation with approved static-dissipative material (see [Table 4-2, “Static-Shielding Materials”](#)).
- Use a wrist strap connected to a properly grounded work surface, and use properly grounded tools and equipment.
- Use conductive field service tools, such as cutters, screwdrivers, and vacuums.

- When using fixtures that must directly contact dissipative surfaces, only use fixtures made of static-safe materials.
- Keep the work area free of nonconductive materials, such as ordinary plastic assembly aids and Styrofoam.
- Handle electrostatic-sensitive components, parts, and assemblies by the case or PCM laminate. Handle these items only at static-free workstations.
- Avoid contact with pins, leads, or circuitry.
- Turn off power and input signals before inserting or removing connectors or test equipment.

## 4.7 Grounding Equipment and Methods

Grounding equipment must include either a wrist strap or a foot strap at a grounded workstation.

- When seated, wear a wrist strap connected to a grounded system. Wrist straps are flexible straps with a minimum of one megohm  $\pm 10\%$  resistance in the ground cords. To provide proper ground, wear a strap snugly against the skin at all times. On grounded mats with banana-plug connectors, connect a wrist strap with alligator clips.
- When standing, use foot straps and a grounded floor mat. Foot straps (heel, toe, or boot straps) can be used at standing workstations and are compatible with most types of shoes or boots. On conductive floors or dissipative floor mats, use foot straps on both feet with a minimum of one megohm resistance between the operator and ground. To be effective, the conductive strips must be worn in contact with the skin.

Other grounding equipment recommended for use in preventing electrostatic damage includes:

- Antistatic tape
- Antistatic smocks, aprons, and sleeve protectors
- Conductive bins and other assembly or soldering aids
- Nonconductive foam
- Conductive tabletop workstations with ground cords of one megohm resistance
- Static-dissipative tables or floor mats with hard ties to the ground
- Field service kits
- Static awareness labels
- Material-handling packages
- Nonconductive plastic bags, tubes, or boxes
- Metal tote boxes
- Electrostatic voltage levels and protective materials

Table 4-1 shows how humidity affects the electrostatic voltage levels generated by different activities.

**Table 4-1**  
**Typical Electrostatic Voltage Levels**

Event	Relative Humidity		
	10%	40%	55%
Walking across carpet	35,000 V	15,000 V	7,500 V
Walking across vinyl floor	12,000 V	5,000 V	3,000 V
Motions of bench worker	6,000 V	800 V	400 V
Removing DIPS from plastic tube	2,000 V	700 V	400 V
Removing DIPS from vinyl tray	11,500 V	4,000 V	2,000 V
Removing DIPS from Styrofoam	14,500 V	5,000 V	3,500 V
Removing bubble pack from PCB	26,500 V	20,000 V	7,000 V
Packing PCBs in foam-lined box	21,000 V	11,000 V	5,000 V



A product can be degraded by as little as 700 V.

Table 4-2 lists the shielding protection provided by antistatic bags and floor mats.

**Table 4-2**  
**Static-Shielding Materials**

Material	Use	Voltage Protection Level
Antistatic plastic	Bags	1,500 V
Carbon-loaded plastic	Floor mats	7,500 V
Metallized laminate	Floor mats	5,000 V

# 5

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## Removal and Replacement Procedures

This chapter provides removal and replacement procedures.

Torx T8 and Phillips P0 screws are removed during the disassembly of the tablet PC and the Docking Station. There are 38 screws, in 4 different sizes, that must be removed, replaced, and loosened when servicing the tablet PC. There are 20 screws, in 4 different sizes, that must be removed and replaced when servicing the Docking Station. Make special note of each screw size and location during removal and replacement.

Refer to [Appendix C, “Screw Listing,”](#) for detailed information on screw sizes, locations, and usage.

## 5.1 Serial Number

Report the tablet PC serial number to HP when requesting information or ordering spare parts. The serial number is located on the bottom of the tablet PC.



*Serial Number Location*

## 5.2 Disassembly Sequence Chart

Use the chart below to determine the section number to be referenced when removing tablet PC components.

**Table 5-1**  
**Disassembly Sequence Chart**

Section	Description	Number of screws removed
5.3	Preparing the tablet PC for disassembly	
	SD Card and PC Card	0
	Digitizer pen	0
	Battery pack	1
	Memory module and PCI device	2
5.4	Real time clock (RTC) battery	0
5.5	Hard drive	2
5.6	Display panel assembly	8
	Bridge battery	0
	Digitizer	6
5.7	System board	8
	Bluetooth module	0
	Main memory	0
	Modem board	0
5.8	Fan and heat sink	3
5.9	Docking Station	17

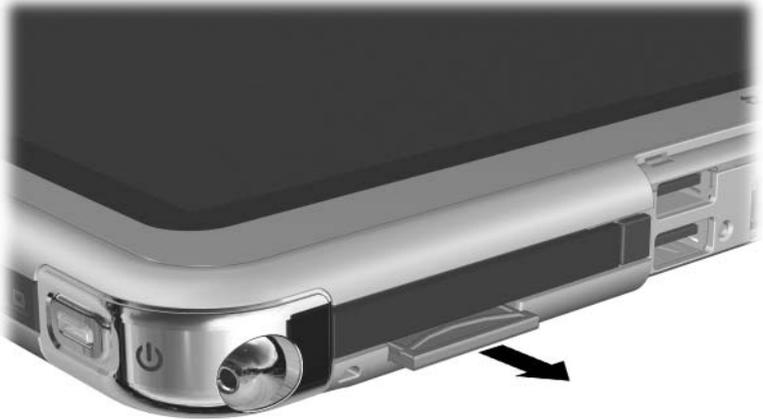
## **5.3 Preparing the Tablet PC for Disassembly**

Perform the following steps before disassembling the tablet PC.

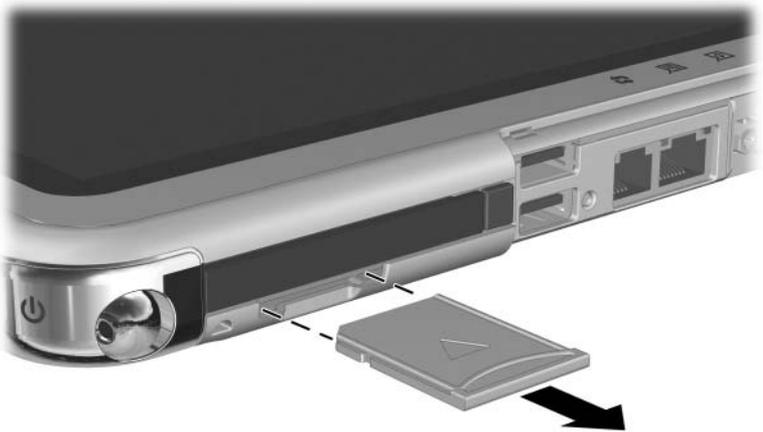
### **Before You Begin**

1. Save your work, exit all applications, and shut down the tablet PC. If you are unsure whether the tablet PC is off or in Hibernation, turn the tablet PC on and then shut it down through the operating system.
2. Disconnect all external devices connected to the tablet PC.
3. Disconnect the power cord.
4. Position the tablet PC so that the SD Card and PC Card slots are toward you.

5. Remove the SD Card and PC Card slot devices (if any) by following these steps:
  - a. Press the SD Card to release it from the base enclosure. (The card is ejected from the slot.)



*Releasing the SD Card*



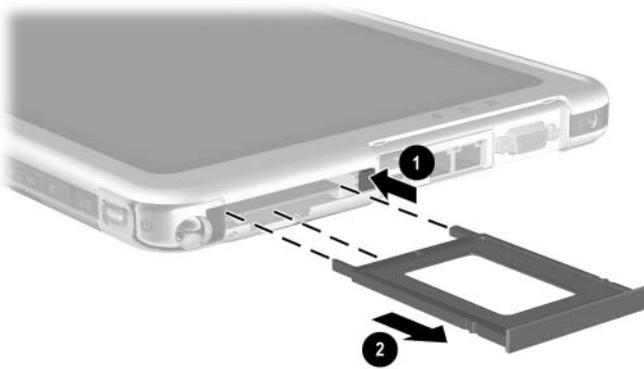
*Ejecting the SD Card*

- b. Press the PC Card release button ❶ to release the button from the base enclosure. Press the button a second time to eject the contents of the PC Card slot.
- c. Remove the PC Card slot device ❷ from the card slot.



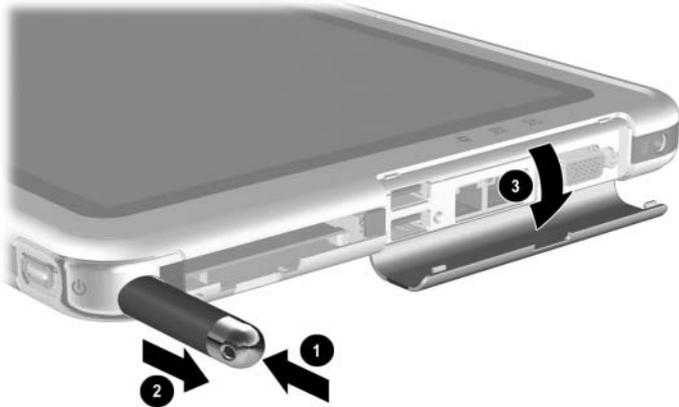
The PC Card slot space saver and SD Card slot space saver are included in the Miscellaneous Plastics/Hardware Kit, spare part number 348350-001.

---



### *Removing the PC Card Device*

6. Release the pen from the holder by pressing the end ❶.  
Remove the pen from the holder ❷.
7. Open the connector cover by pulling out and down on the notch ❸.



*Removing the Pen and Opening the Connector Cover*

---

## Battery Pack

### Spare Part Number Information

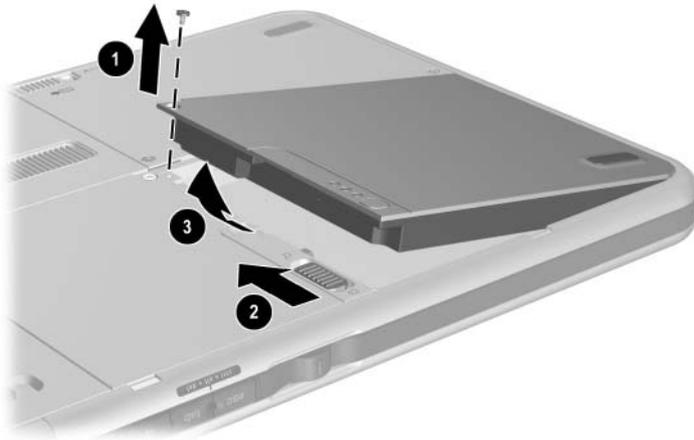
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Battery pack, Li-Ion

348333-001

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8. Remove the battery pack by following these steps:
  - a. Turn the tablet PC upside down, with the power switch and jog dial toward you.
  - b. Remove the optional PM2.0 × 3.0 retention screw ❶ that secures the battery pack to the tablet PC.
  - c. Slide the battery release latch ❷ toward the back of the tablet PC to release the battery pack.
  - d. Use the notch in the battery pack to lift the left side of the battery pack up and swing it to the right ❸.
  - e. Remove the battery pack.



*Removing the Battery Pack*

Reverse the preceding procedures to install the battery pack.

---

## Mini PCI Communications Board

### Spare Part Number Information

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Wireless local area network (LAN) card	348997-001 (802.11b MOW)
	348996-001 (802.11b ROW)
	349985-001 (802.11 a/b/g)

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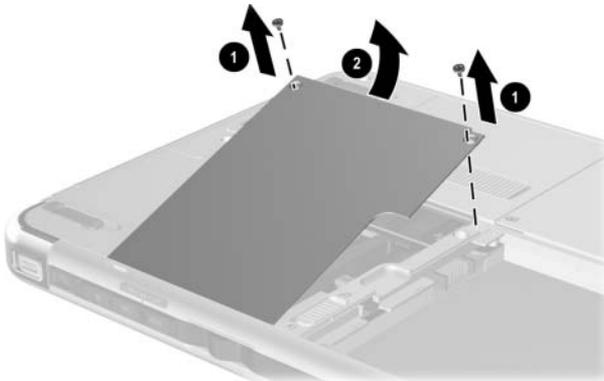
9. Remove the Mini PCI communications board by following these steps:
  - a. Remove the 2 PM2.0 × 3.0 screws ❶ that secure the Mini PCI communications/memory module slot cover to the tablet PC.
  - b. Lift the back edge of the Mini PCI communications/memory module slot cover up and swing it toward you ❷.
  - c. Remove the Mini PCI communications/memory module slot cover.



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The Mini PCI communications/memory module slot cover is included in the Miscellaneous Plastics/Hardware Kit, spare part number 310678-001.

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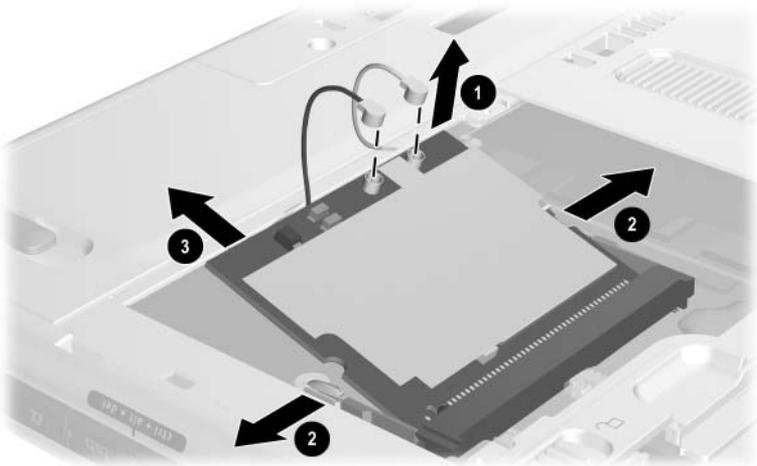


*Removing the Memory Module/Mini PCI Communications  
Compartment Cover*

- d. Disconnect the 2 antenna cables ❶ from the Mini PCI communications board.
- e. Spread the retaining tabs ❷ securing the Mini PCI communications board to the system board.

The edge of the Mini PCI communications board opposite the connector rises at a 45-degree angle.

- f. Pull the Mini PCI communications board away from the connector at a 45-degree angle ❸.



### *Removing the Mini PCI Communications Board*

Reverse the preceding procedures to install the Mini PCI communications board.

---

## Memory Module

### Spare Part Number Information

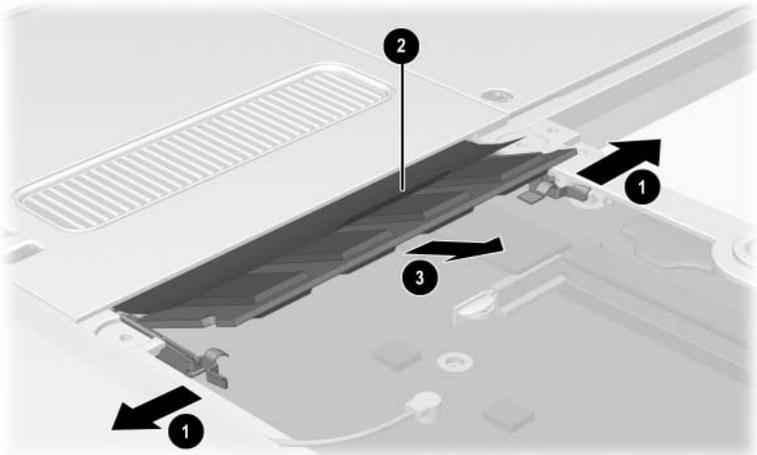
---

256-MB DDR memory module

348345-001

---

10. Remove the memory module by following these steps:
  - a. Remove the Mini PCI communications/memory module slot cover.
  - b. Spread the retaining tabs ❶ securing the memory module ❷ to the system board. The end of the memory module opposite the connector rises at a 45-degree angle.
  - c. Pull the memory module away from the connector at a 45-degree angle ❸.



*Removing the Memory Module*

Reverse the preceding procedures to install the memory module.

## 5.4 Real Time Clock Battery

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### Real Time Clock (RTC) Battery Spare Part Number Information

---

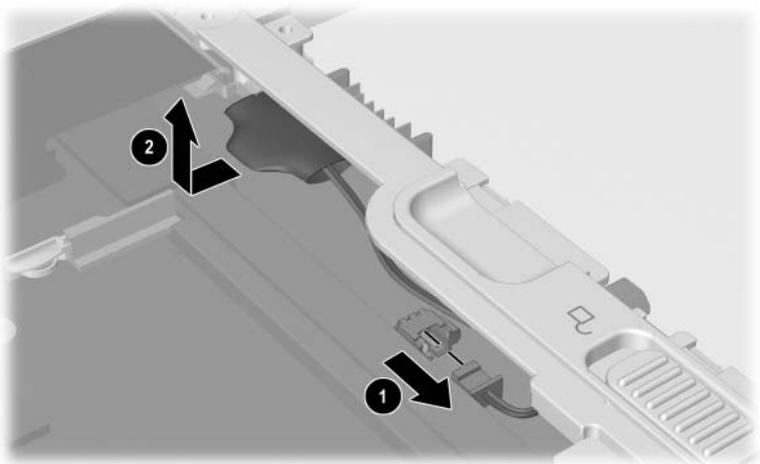
Disk cell RTC battery

348329-001

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Perform the following steps to remove the RTC battery:

1. Prepare the tablet PC for disassembly (see [Section 5.3, “Preparing the Tablet PC for Disassembly”](#)).
2. Turn the tablet PC upside down, with the power switch and jog dial toward you.
3. Disconnect the RTC battery cable from the system board ❶.
4. Remove the RTC battery from the tablet PC ❷.



*Removing the RTC Battery*

Reverse the preceding procedures to install the RTC battery.

## 5.5 Hard Drive

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### Hard Drive

#### Spare Part Number Information

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80-GB	366786-001
60-GB	348341-001
40-GB	348340-001
30-GB	348339-001

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Remove the hard drive by following these steps:

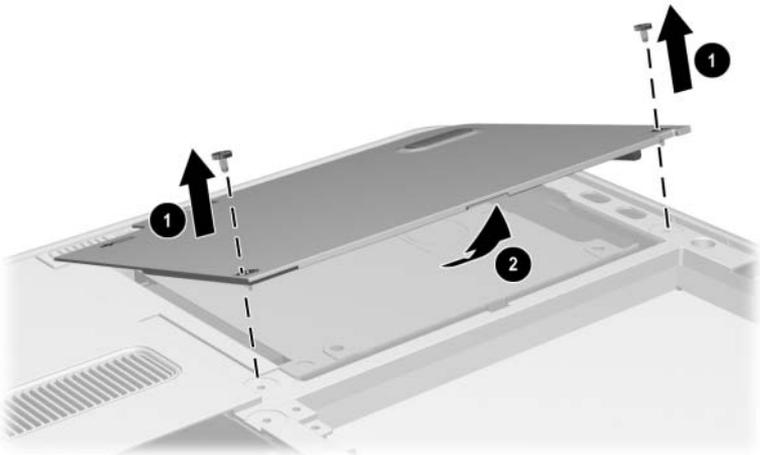
1. Prepare the tablet PC for disassembly (see [“Preparing the Tablet PC for Disassembly,”](#)).
2. Turn the tablet PC upside down with the power switch and jog dial toward you.

3. Remove the 2 PM2.0 × 3.0 screws ❶ that secure the hard drive cover to the tablet PC.
4. Lift the front edge of the cover up and swing the cover back ❷.
5. Remove the hard drive cover.



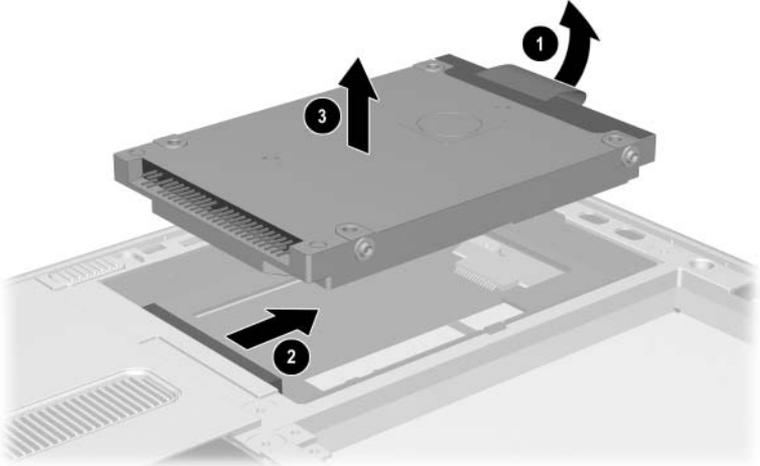
The hard drive cover is included in the Miscellaneous Plastics/Hardware Kit, spare part number 348350-001.

---



*Removing the Hard Drive Cover*

6. Use the tab **1** on the right side of the hard drive to slide the drive to the right **2** and disconnect it from the system board.
7. Remove the hard drive from the tablet PC **3**.



### *Removing the Hard Drive*

Reverse the preceding procedures to install the hard drive.

## 5.6 Display Panel Assembly

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### Display Panel Assembly Components Spare Part Number Information

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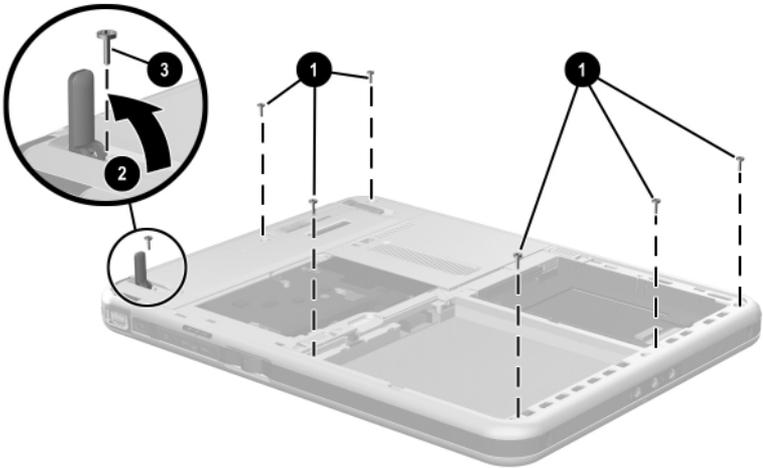
Display panel assembly	348348-001 and 349349-001
Display bezel with inverter	348336-001
Bridge battery	348328-001
Digitizer	348337-001

---

To remove and disassemble the display panel assembly:

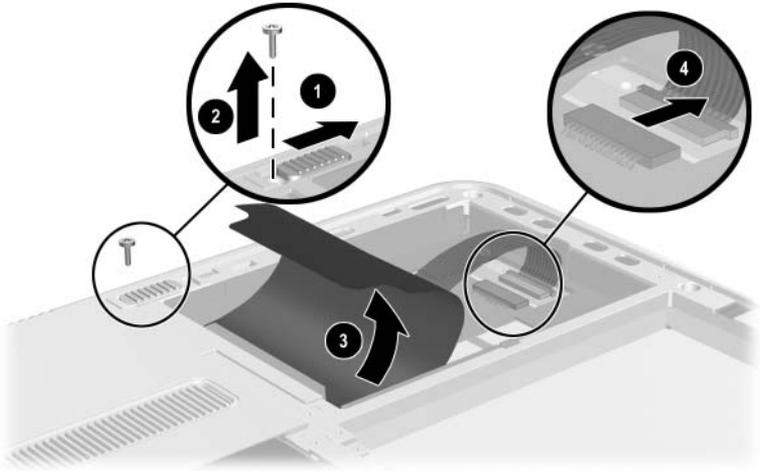
1. Prepare the tablet PC for disassembly (see [Section 5.3, “Preparing the Tablet PC for Disassembly”](#)).
2. Remove RTC battery (see [Section 5.4, “Real Time Clock Battery”](#)).
3. Remove the hard drive (see [Section 5.5, “Hard Drive”](#)).
4. Turn the tablet PC upside down with the power switch and jog dial toward you.

5. Remove the 6 TM2.5 × 7.0 screws ❶ that secure the display panel assembly to the tablet PC.
6. Open the bottom tilt foot ❷ and remove the TM2.5 × 7.0 screw ❸ that secures the display panel assembly to the tablet PC.



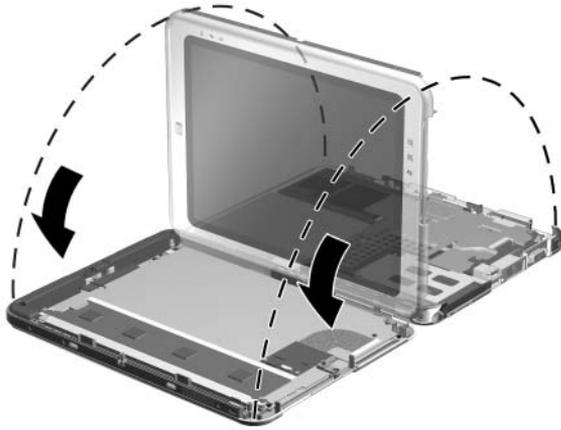
*Removing the Display Panel Assembly Screws*

7. Slide and hold the keyboard release latch **1** to the right.
8. Remove the TM2.5 × 7.0 screw **2** that secures the display panel assembly to the tablet PC.
9. Lift the edge of the insulator nearest the edge of the tablet **3**.
10. Disconnect the digitizer cable **4** in the hard drive bay.



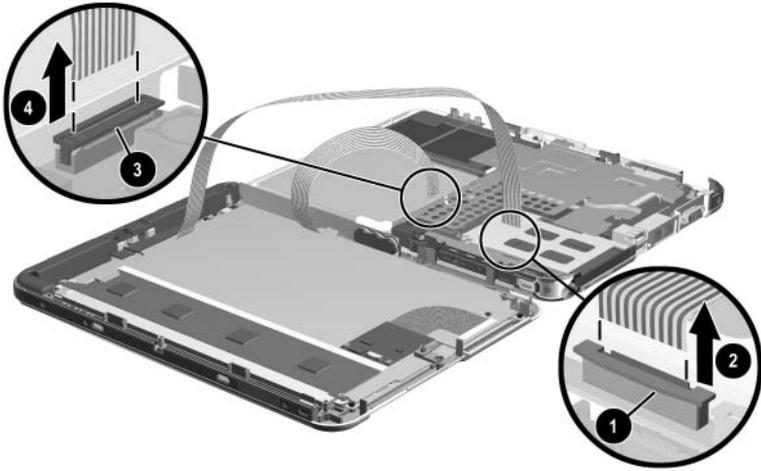
*Removing the Display Panel Assembly Screw and Disconnecting the Digitizer Cable*

11. Separate the panel from the base enclosure along the edge farthest from you. Swing the panel toward you until it is resting on the table.



*Separating the Panel and Base Enclosure*

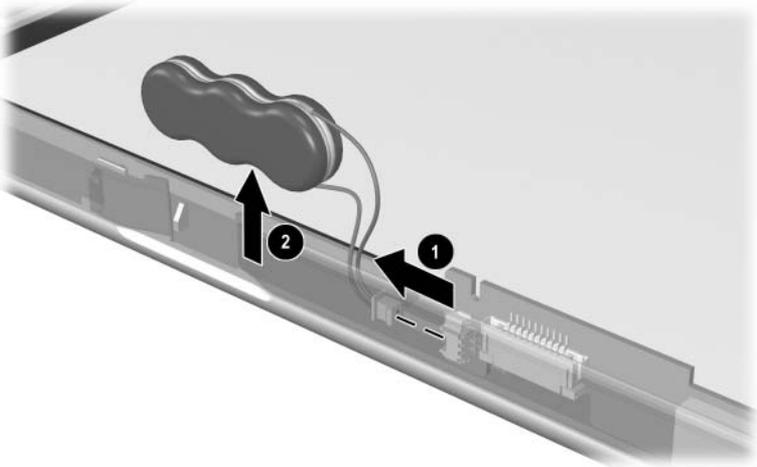
12. Release the ZIF connector **1** to which the audio cable is attached and disconnect the cable **2**.
13. Release the ZIF connector **3** to which the inverter cable is attached and disconnect the cable **4**.
14. Separate the panel and the base enclosure.



*Disconnecting the Audio and Inverter Cables*

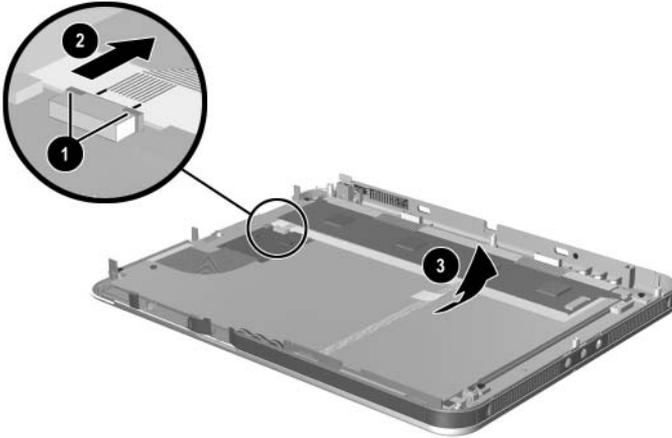
Reverse the preceding procedures to reassemble and install the display panel assembly.

15. Remove the bridge battery by following these steps:
  - a. Disconnect the bridge battery cable ❶ from the panel inverter board.
  - b. Remove the bridge battery ❷ from the panel bezel.



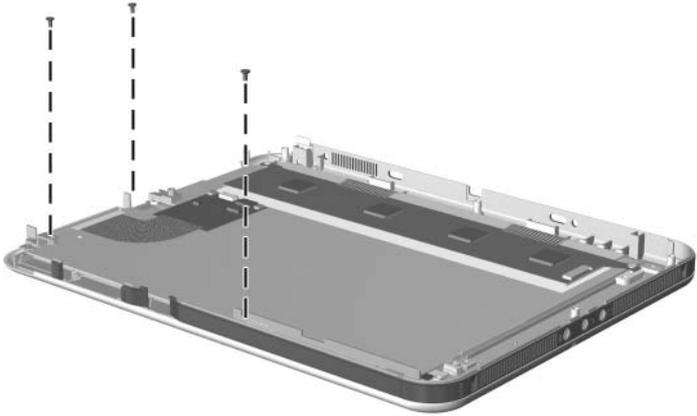
*Removing the Bridge Battery*

16. Remove the digitizer by following these steps:
  - a. Release the ZIF connector **1** to which the digitizer cable is attached and disconnect the cable from the system board **2**.
  - b. Swing the 2 flex cables **3** to the right.



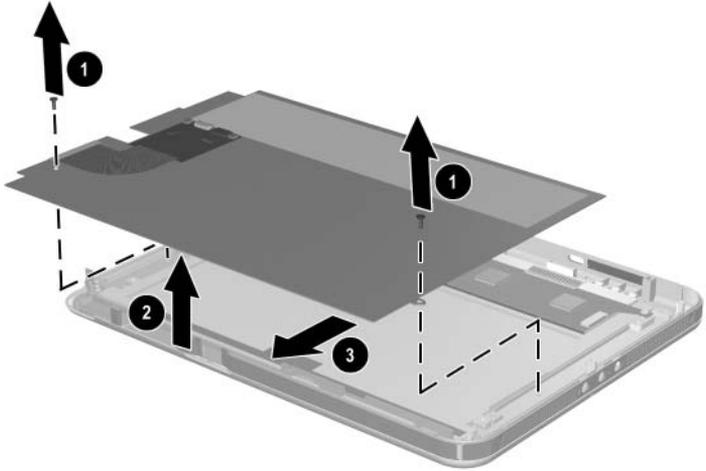
*Disconnecting the Digitizer Cable.*

- c. Remove the 2 PM 2.0 x 4.5 screws on the left side and the screw at the front of the digitizer panel that secure the bracket to the panel assembly.



*Removing the Bracket Screws*

- d. Remove the 2 PM2.0 × 4.5 screws ❶ that secure the digitizer to the display panel assembly.
- e. Lift the front edge of the digitizer ❷ and slide it out ❸ of the display panel.



*Removing the Digitizer*

## 5.7 System Board

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### System Board Spare Part Number Information

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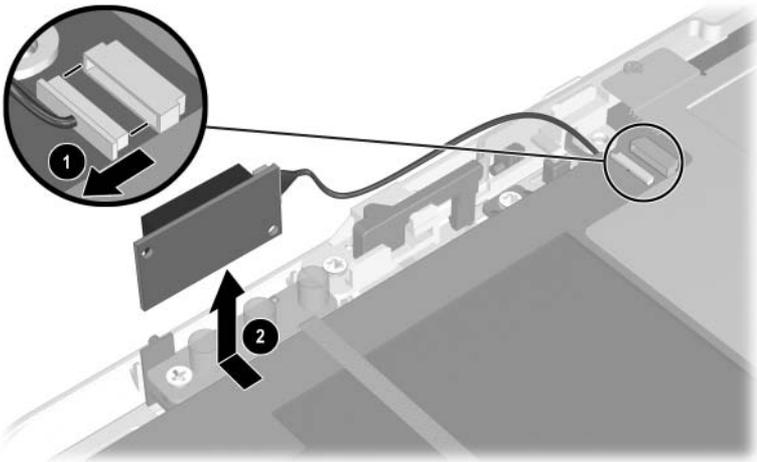
System board with fan and heat sink (includes 256-MB memory)	348331-001 and 348332-001
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Perform the following steps to remove the system board:

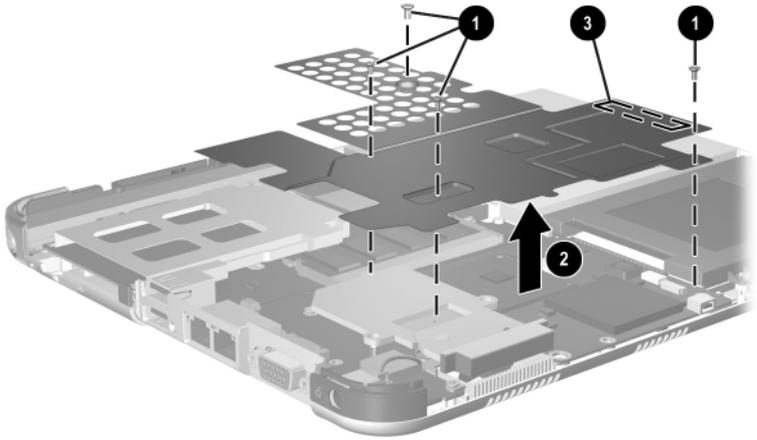
1. Prepare the tablet PC for disassembly (see [Section 5.3, “Preparing the Tablet PC for Disassembly”](#)).
2. Remove the hard drive (see [Section 5.5, “Hard Drive”](#)).
3. Remove the RTC battery (see [Section 5.4, “Real Time Clock Battery”](#)).
4. Remove the display panel assembly (see [Section 5.6, “Display Panel Assembly”](#)).

5. Remove the Bluetooth module by following these steps:
  - a. Position the tablet PC base enclosure so that the heat sink grille is toward you.
  - b. Disconnect the Bluetooth module connector from the system board ❶.
  - c. Slide the Bluetooth module ❷ away from you and lift it away from the base enclosure.



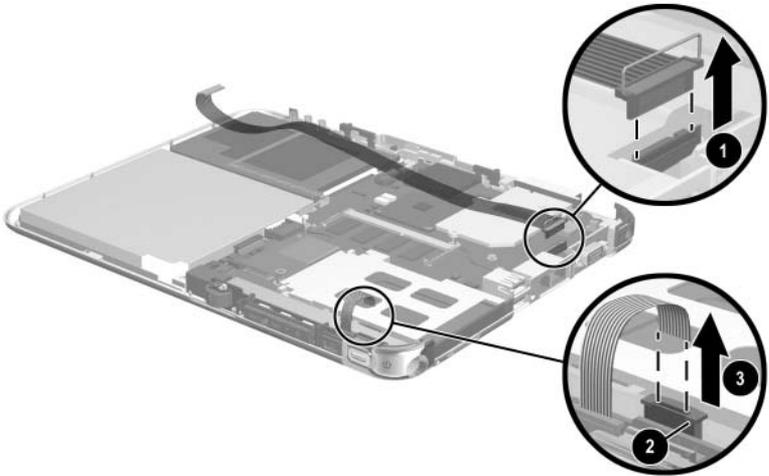
*Removing the Bluetooth Wireless Module*

6. Remove the 4 screws **1** that secure the shield and system board to the base enclosure.
7. Lift the shield from the system board **2**.
8. Separate the adhesive **3** from the system board.



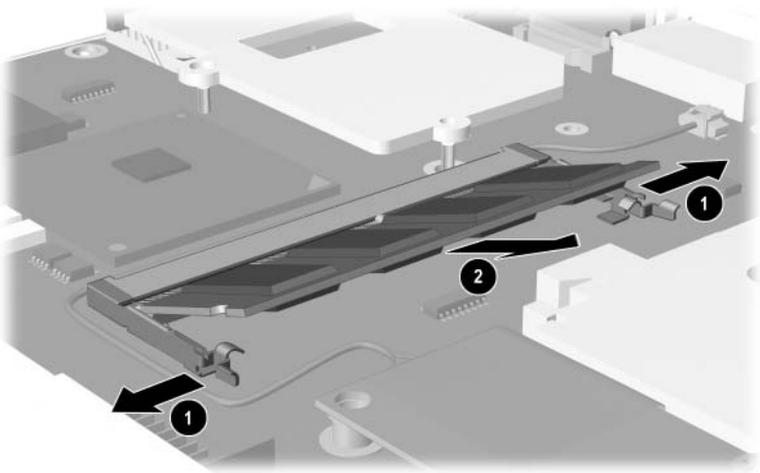
*Removing the System Board Shield*

9. Release the ZIF connector **1** to which the audio cable is attached and disconnect the cable from the system board.
10. Release the ZIF connector **2** to which the button board cable is attached and disconnect the cable **3** from the system board.



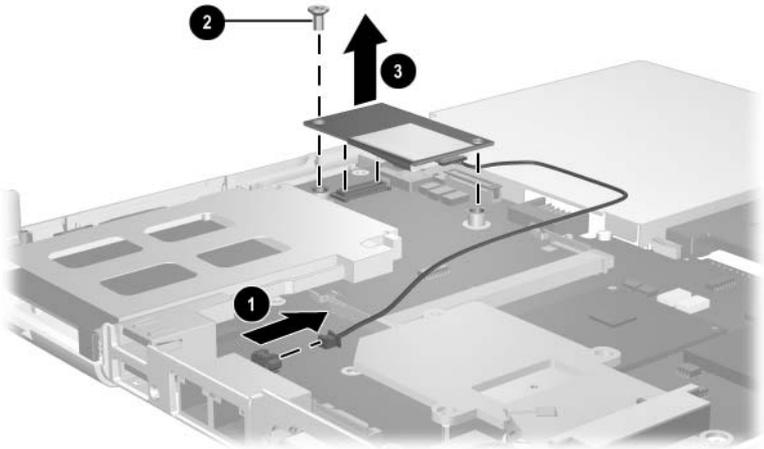
*Disconnecting the Audio and Button Board ZIF Connectors*

11. Remove the system main memory by following these steps:
  - a. Spread the retaining tabs **1** securing the main memory board to the system board.  
The end of the memory board opposite the connector rises at a 45-degree angle.
  - b. Pull the memory module away from the connector at a 45-degree angle **2**.



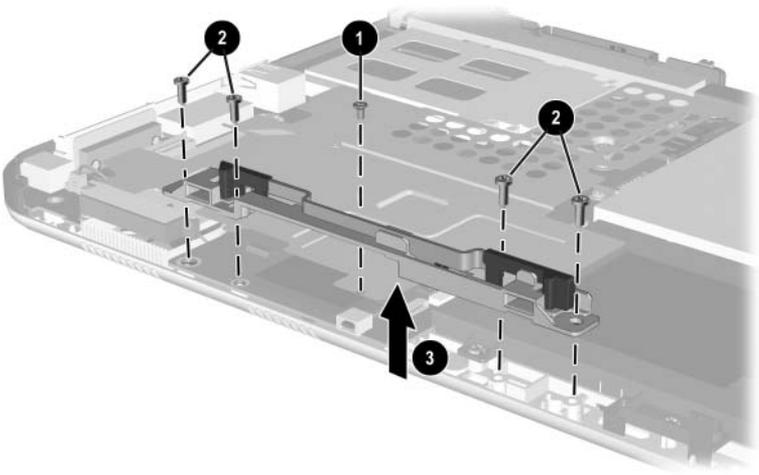
*Removing the Main Memory Module*

12. Remove the modem board by following these steps:
  - a. Disconnect the modem module connector from the system board ❶.
  - b. Remove the PM2.0 × 4.5 screw ❷ that secures the modem board to the system board.
  - c. Lift the modem and cable assembly from the base enclosure ❸.



*Removing the Modem Board*

13. Remove the TM2.5 × 4.5 screw ❶ that secures the keyboard release assembly to the base enclosure.
14. Remove the 4 TM2.5 × 5.5 screws ❷ that secure the keyboard release assembly to the base enclosure.
15. Lift the keyboard release assembly straight up ❸ and remove it from the base enclosure.

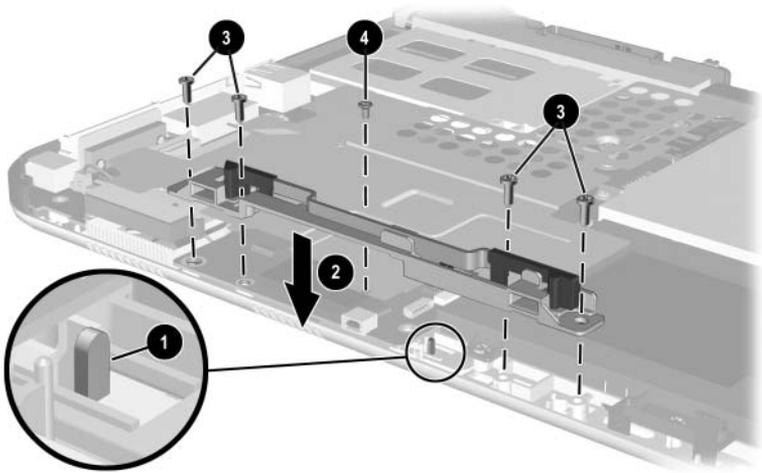


*Removing the Keyboard Release Assembly*



When installing the keyboard release assembly, make sure the actuator tab **1** in the base enclosure is in the leftmost position. After this tab is positioned properly, install the keyboard release assembly **2** and screws **3** **4**.

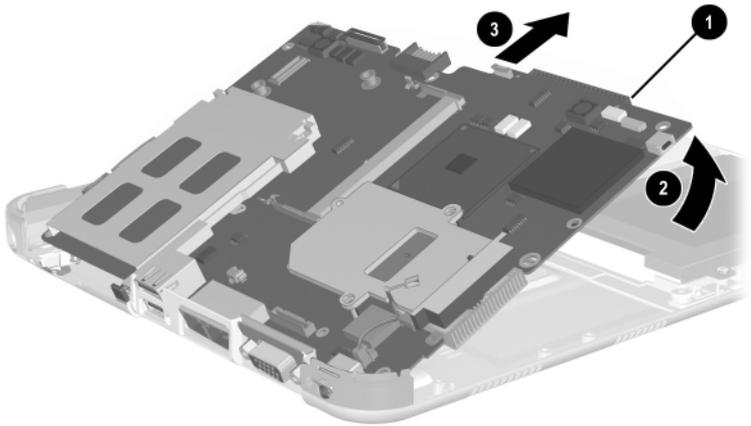
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*Installing the Keyboard Release Assembly*

16. Position the base enclosure so the heat sink grille is to your right.
17. Remove the 5 PM2.0 × 4.5 screws that secure the system board to the base enclosure.

18. Use the heat sink grill ❶ to lift the right edge of the system board ❷ until it rests at a 45-degree angle.
19. Slide the system board away from the base enclosure at an angle ❸ to remove it.



### *Removing the System Board*

Reverse the preceding procedures to install the system board.

## 5.8 Fan and Heat Sink

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### Fan and Heat Sink

#### Spare Part Number Information

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Fan and Heat Sink

348354-001

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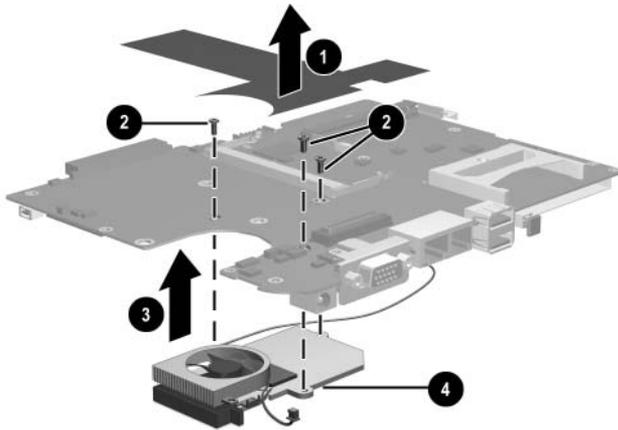
The fan and heat sink are included with the system board. A fan and heat sink can also be ordered separately using spare part number 310665-001.

---

Perform the following steps to remove the fan and heat sink:

1. Prepare the tablet PC for disassembly (see [Section 5.3, “Preparing the Tablet PC for Disassembly”](#)).
2. Remove the display panel assembly (see [Section 5.6, “Display Panel Assembly”](#)).
3. Remove the system board (see [Section 5.7, “System Board”](#)).

4. Remove the Mylar system board shield ❶.
5. Disconnect the fan cable from the system board.
6. Remove the 3 PM2.0 × 4.5 screws ❷ that secure the fan and heat sink to the system board.
7. Lift the system board ❸ straight up. The fan and heat sink ❹ will remain resting on the work surface.



### *Removing the Fan and Heat Sink*

Reverse the preceding procedures to install the EMI shield, fan, and heat sink.

## 5.9 Optional HP Tablet PC Docking Station

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### Optional HP Tablet PC Docking Station Components Spare Part Number Information

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Optional HP Tablet PC Docking Station	348338-001
Docking stand and pivot arm	349090-001
Top case	349091-001
Board assembly	349093-001
Bottom case	349092-001

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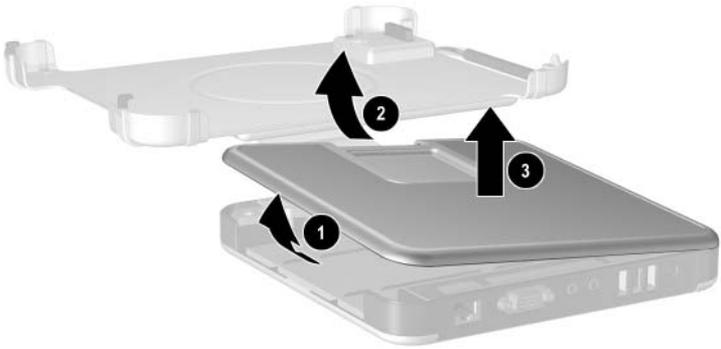
Perform the following steps to disassemble the Docking Station:

1. Position the Docking Station upside down, resting on the docking stand, with the bottom case toward you.
2. Remove the 4 TM2.5 × 6.0 screws that secure the top case to the bottom case.



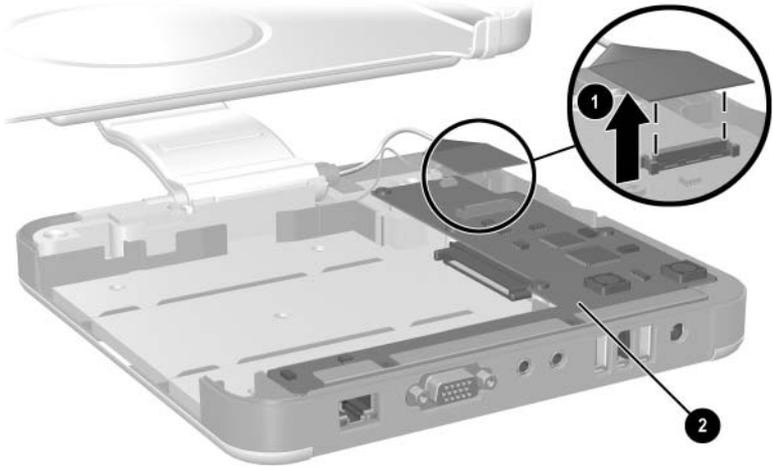
*Removing the Top Case Screws*

3. Position the Docking Station right side up with the rear toward you and the docking stand swung all the way back.
4. Lift the left edge of the top case **1** until the rear edge of the case **2** disengages from the bottom case.
5. Remove the top case **3**.



*Removing the Top Case*

6. Disconnect the docking stand cable ❶ from the board assembly ❷.



*Disconnecting the Docking Stand Cable*



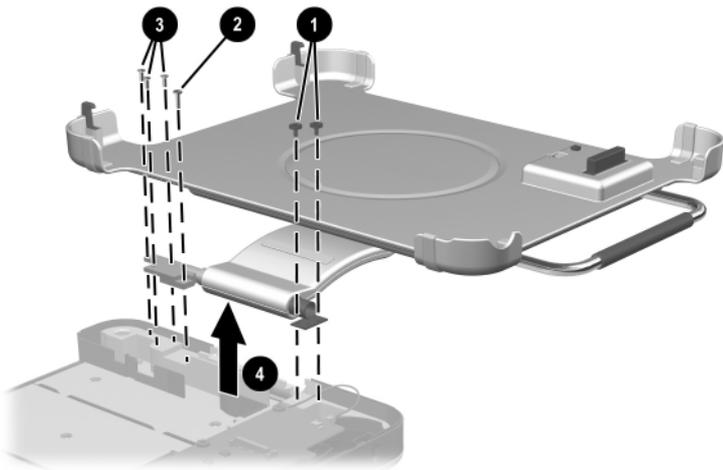
Make sure the docking stand and pivot arm are supported before removing the following screws. The docking stand and pivot arm can fall if not supported.

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7. Remove the following screws:

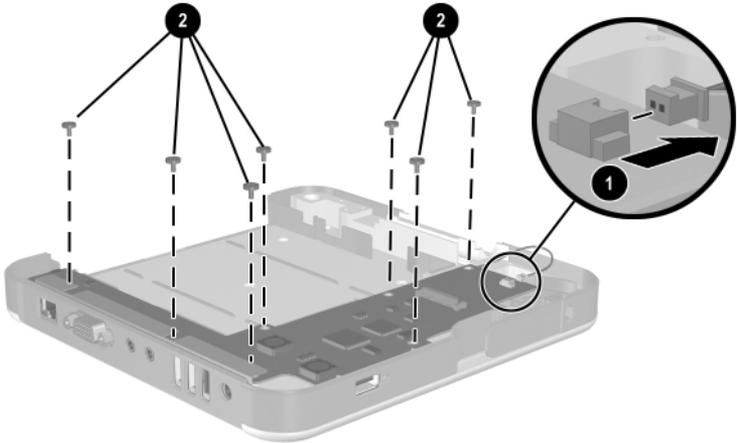
- ❑ 3 PM2.5 × 7.0 screws ❶ that secure the cable bracket to the bottom case.
- ❑ 1 PM2.5 × 11.0 screw ❷ that secures the pivot arm hinge to the bottom case.
- ❑ 3 PM2.5 × 7.0 screws ❸ that secure the pivot arm hinge to the bottom case.

8. Remove the docking stand and pivot arm ❹.



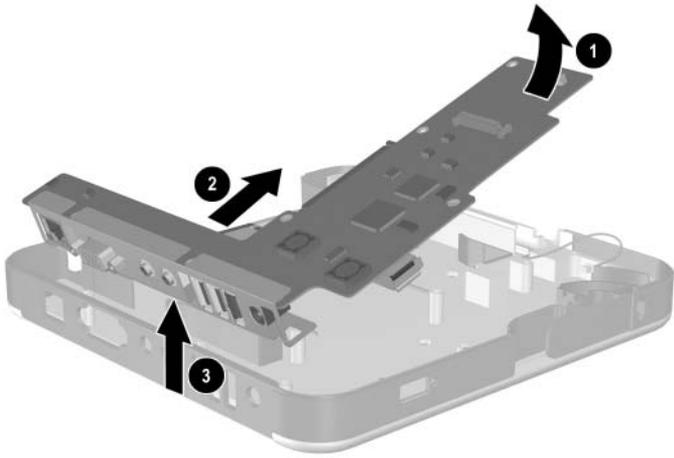
*Removing the Docking Stand and Pivot Arm*

9. Disconnect the switch cable ❶ from the board assembly.
10. Remove the 7 PM2.5 × 4.0 screws ❷ that secure the board assembly to the bottom case.



*Removing the Board Assembly Screws*

11. Lift the front edge of the board assembly ❶ until it rests at an angle.
12. Slide the board assembly toward you ❷ until the rear connectors clear the bottom case.
13. Lift the board assembly straight up ❸ to remove it from the bottom case.



### *Removing the Board Assembly*

Reverse the preceding procedures to assemble the Docking Station.

# 6

## Specifications

This chapter provides physical and performance specifications.

**Table 6-1**

**Tablet PC**

**Dimensions**

Height	27.4 cm	10.8 in
Width	21.6 cm	8.5 in
Depth	2.0 cm	0.8 in

**Weight** (varies by configuration)

Tablet PC only	1.4 kg	3.1 lb
Tablet PC with keyboard	1.8 kg	4.0 lb

**Stand-alone power requirements**

Nominal operating voltage	14.8 VDC
Maximum operating power	40.0 W
Peak operating power	38.0 W

**Temperature**

Operating (not writing optical drive)	0°C to 35°C	32°F to 95°F
Operating (writing optical drive)	5°C to 35°C	41°F to 95°F
Nonoperating	-20°C to 60°C	-4°F to 140°F

---

**Table 6-1**  
**Tablet PC (Continued)**

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**Relative humidity** (noncondensing)

Operating	10% to 95%
Nonoperating	5% to 90%, 38.7°C (101.6°F) maximum wet bulb temperature

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**Altitude** (unpressurized)

Operating (14.7 to 10.1 psia)	-15 to 3,048 m	-50 to 10,000 ft
Nonoperating (14.7 to 4.4 psia)	-15 to 12,192 m	-50 to 40,000 ft

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**Shock**

Operating	10 g, 11 ms, half-sine
Nonoperating	60 g, 11 ms, half-sine

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Applicable product safety standards specify thermal limits for plastic surfaces. The tablet PC operates well within this range of temperatures.

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**Table 6-2**  
**10.4-inch XGA, TFT Display**

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**Dimensions**

Height	23.6 cm	9.29 in
Width	17.3 cm	6.81 in
Diagonal	26.4 cm	10.4 in

---

**Number of colors** Up to 16.8 million

---

**Contrast ratio** 150:1

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**Brightness** 140 nits typical

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**Pixel resolution**

Pitch	0.264 × 0.264 mm
Format	1024 × 768
Configuration	RGB vertical stripe

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**Backlight** Edge lit

---

**Character display** 80 × 25

---

**Total power consumption** 3.75 W

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**Table 6-3**  
**Hard Drives**

	<b>80-GB</b>	<b>60-GB</b>
<b>User capacity per drive*</b>	80.0 GB	60.0 GB
<b>Drive height</b>	9.5 mm	9.5 mm
<b>Drive width</b>	70 mm	70 mm
<b>Interface type</b>	ATA-6	ATA-5
<b>Seek times</b> (typical read, including setting)		
Single track	3 ms	3 ms
Average	13 ms	13 ms
Full stroke	24 ms	24 ms
<b>Logical blocks<sup>†</sup></b>	156,301,488	117,210,240
<b>Disk rotational speed</b>	5,400 rpm	4,200 rpm
<b>Transfer rate</b>		
Interface max (MB/s) <sup>‡</sup>	100	66.6

\*1 GB=1,073,741,824 bytes.

<sup>†</sup>System capability may differ.

<sup>‡</sup>Actual drive specifications may differ slightly.

Certain restrictions and exclusions apply. Consult Customer Care for details.

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**Table 6-3**  
**Hard Drives (Continued)**

	<b>40 GB</b>	<b>30 GB</b>
<b>User capacity per drive*</b>	40.0 GB	30.0 GB
<b>Drive height</b>	9.5 mm	9.5 mm
<b>Drive width</b>	70 mm	70 mm
<b>Interface type</b>	ATA-5	ATA-5
<b>Seek times</b> (typical read, including setting)		
Single track	3 ms	3 ms
Average	13 ms	13 ms
Full stroke	24 ms	24 ms
<b>Logical blocks<sup>‡</sup></b>	78,140,160	58,605,120
<b>Disk rotational speed</b>	4,200 rpm	4,200 rpm
<b>Transfer rate</b>		
Interface max (MB/s) <sup>†</sup>	100	100

\*1 GB=1,073,741,824 bytes.

<sup>†</sup>System capability may differ.

<sup>‡</sup>Actual drive specifications may differ slightly.

Certain restrictions and exclusions apply. Consult Customer Care for details.

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**Table 6-4**  
**Diskette Drive**  
**(For Use Only in the Docking Station or External MultiBay)**

<b>Diskette size</b>	88.9 mm (3.5 in)
<b>Light</b>	On system
<b>Height</b>	12.7 mm (0.5 in)
<b>Bytes per sector</b>	512
<b>Sectors per track</b>	
High density	18 (1.44 MB)
Low density	9
<b>Tracks per side</b>	
High density	80
Low density	80
<b>Read/write heads</b>	2
<b>Average seek times</b>	
Track-to-track (high/low)	3 to 6 ms
Average (high/low)	95 to 174 ms
Settling time	15 ms
Latency average	100 ms

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**Table 6-5**  
**CD-ROM Drive**

**(For Use Only in the Docking Station or External MultiBay)**

<b>Applicable disc</b>	CD-ROM (Mode 1, 2, and 3) CD-XA ready (Mode 2, Form 1 and 2) CD-I ready (Mode 2, Form 1 and 2) CD-R (read only) CD Plus Photo CD (single/multisession) CD-Extra Video CD CD-WO (fixed packets only) CD-Bridge	
<b>Center hole diameter</b>	1.5 cm	0.59 in
<b>Disc diameter</b>		
Standard disc	12 cm	4.72 in
Mini disc	8 cm	3.15 in
<b>Disc thickness</b>	1.2 mm	0.047 in
<b>Track pitch</b>	1.6 $\mu$ m	
<b>Access time</b>		
Random	< 150 ms	
Full stroke	< 300 ms	
<b>Cache buffer</b>	128 KB	
<b>Data transfer rate</b>		
Sustained, 16X	150 KB/s at 1X	
Variable	1,500 to 3,600 KB/s (10X to 24X)	
Normal PIO Mode 4 (single burst)	16.66 KB/s	
<b>Startup time</b>	< 8 seconds	
<b>Stop time</b>	< 4 seconds	

**Table 6-6**  
**DVD-ROM Drive**

**(For Use Only in the Docking Station or External MultiBay)**

<b>Applicable disc</b>	DVD-5, DVD-9, DVD-10 CD-ROM (Mode 1 and 2) CD Digital Audio CD-XA ready (Mode 2, Form 1 and 2) CD-I ready (Mode 2, Form 1 and 2) CD-R (read only) CD Plus Photo CD (single/multisession) CD-Bridge	
<b>Center hole diameter</b>	1.5 cm	0.59 in
<b>Disc diameter</b>		
Standard disc	12 cm	4.72 in
Mini disc	8 cm	3.15 in
<b>Disc thickness</b>	1.2 mm	0.047 in
<b>Track pitch</b>	0.74 $\mu$ m	
<b>Access time</b>		
Random	< 150 ms	
Full stroke	< 225 ms	
<b>Audio output level</b>	Line-out, 0.7 Vrms	
<b>Cache buffer</b>	512 KB	
<b>Data transfer rate</b>		
Max 24X CD	3,600 KB/s (150 KB/s at 1X CD rate)	
Max 8X DVD	10,800 KB/s (1352 KB/s at 1X DVD rate)	
Normal IO Mode 4 (single burst)	16.6 MB/s	
<b>Startup time</b>	< 12 seconds	
<b>Stop time</b>	< 3 seconds	

**Table 6-7****DVD/CD-RW Combo Drive****(For Use Only in the Docking Station or External MultiBay)**

<b>Applicable disc</b>	DVD-5, DVD-9, DVD-10 CD-ROM (Mode 1 and 2) CD Digital Audio CD-XA ready (Mode 2, Form 1 and 2) CD-I ready (Mode 2, Form 1 and 2) CD-R (read only) CD Plus Photo CD (single/multisession) CD-Bridge	
<b>Center hole diameter</b>	1.5 cm	0.59 in
<b>Disk diameter</b>		
Standard disc	12 cm	4.72 in
Mini disc	8 cm	3.15 in
<b>Disk thickness</b>	1.2 cm	0.047 in
<b>Track pitch</b>	0.74 $\mu$ m	
<b>Access time</b>		
Random	< 150 ms	
Full stroke	< 225 ms	
<b>Audio output level</b>	Line-out, 0.7 Vrms	
<b>Cache buffer</b>	128 KB	
<b>Data transfer rate</b>		
Sustained, 16X	150 KB/s	
Sustained, 4X CD-RW	5,520 KB/s	
Normal PIO Mode 4 (single burst)	16.6 MB/s	
<b>Startup time</b>	< 15 seconds	
<b>Stop time</b>	< 6 seconds	

**Table 6-8**  
**External AC Adapter**

<b>Weight</b>	0.28 kg	0.62 lb
<b>Power supply (input)</b>		
Operating voltage	90 to 260 VAC RMS	
Operating current	1.7 A RMS	
Operating frequency range	47 to 63 Hz AC	
Maximum transient	4/50 kV	

**Table 6-9**  
**6-cell, Li-Ion Battery Pack**

<b>Weight</b>	0.30 kg	0.65 lb
<b>Energy</b>		
Voltage	11.1 V	
Amp-hour capacity	3.6 Ah	
Watt-hour capacity	40.0 Wh	
<b>Temperature</b>		
Operating: charging	0°C to 40°C	32°F to 104°F
Operating: discharging	-10°C to 50°C	14°F to 122°F
Nonoperating	-20°C to 60°C	-4°F to 140°F
<b>Battery recharge time</b>		
System off or in Standby	2.5 hours	
System on (varies depending on system power consumption)	3 to 6 hours	

**Table 6-10**  
**System DMA**

<b>Hardware DMA</b>	<b>System Function</b>
DMA0	Available for audio
DMA1	Entertainment audio (default; alternate=DMA0, DMA3, none)
DMA2	Diskette drive
DMA3	ECP parallel port LPT1 (default; alternate=DMA0, none)
DMA4	DMA controller cascading (not available)
DMA5	Available for PC Card
DMA6	Not assigned
DMA7	Not assigned

 PC Card controller can use DMA 1, 2, or 5.

**Table 6-11**  
**System Interrupts**

<b>Hardware IRQ</b>	<b>System Function</b>
IRQ0	System timer
IRQ1	Keyboard controller
IRQ2	Cascaded
IRQ3	COM2
IRQ4	COM1
IRQ5	Audio (default)*
IRQ6	Diskette drive
IRQ7	Parallel port
IRQ8	Real time clock (RTC)
IRQ9	Infrared
IRQ10	System use
IRQ11	System use
IRQ12	Internal point stick or external mouse
IRQ13	Coprocessor (not available to any peripheral)
IRQ14	IDE interface (hard drive and optical drive)
IRQ15	System use



PC Cards may assert IRQ3, IRQ4, IRQ5, IRQ7, IRQ9, IRQ10, IRQ11, or IRQ15. Either the infrared or the serial port may assert IRQ3 or IRQ4.

\*Default configuration; audio possible configurations are IRQ5, IRQ7, IRQ9, IRQ10, or none.

**Table 6-12**  
**System I/O Addresses**

<b>I/O Address (hex)</b>	<b>System Function (shipping configuration)</b>
000 - 00F	DMA controller no. 1
010 - 01F	Unused
020 - 021	Interrupt controller no. 1
022 - 024	Opti chipset configuration registers
025 - 03F	Unused
02E - 02F	87334 "Super I/O" configuration for CPU
040 - 05F	Counter/timer registers
044 - 05F	Unused
060	Keyboard controller
061	Port B
062 - 063	Unused
064	Keyboard controller
065 - 06F	Unused
070 - 071	NMI enable/real time clock
072 - 07F	Unused
080 - 08F	DMA page registers
090 - 091	Unused
092	Port A
093 - 09F	Unused
0A0 - 0A1	Interrupt controller no. 2

**Table 6-12**  
**System I/O Addresses (Continued)**

<b>I/O Address (hex)</b>	<b>System Function (shipping configuration)</b>
0A2 - 0BF	Unused
0C0 - 0DF	DMA controller no. 2
0E0 - 0EF	Unused
0F0 - 0F1	Coprocessor busy clear/reset
0F2 - 0FF	Unused
100 - 16F	Unused
170 - 177	Secondary fixed disk controller
178 - 1EF	Unused
1F0 - 1F7	Primary fixed disk controller
1F8 - 200	Unused
201	Joystick (decoded in ESS1688)
202 - 21F	Unused
220 - 22F	Entertainment audio
230 - 26D	Unused
26E - 26	Unused
278 - 27F	Unused
280 - 2AB	Unused
2A0 - 2A7	Unused
2A8 - 2E7	Unused
2E8 - 2EF	Reserved serial port

**Table 6-12**  
**System I/O Addresses (Continued)**

<b>I/O Address (hex)</b>	<b>System Function (shipping configuration)</b>
2F0 - 2F7	Unused
2F8 - 2FF	Infrared port
300 - 31F	Unused
320 - 36F	Unused
370 - 377	Secondary diskette drive controller
378 - 37F	Parallel port (LPT1/default)
380 - 387	Unused
388 - 38B	FM synthesizer—OPL3
38C - 3AF	Unused
3B0 - 3BB	VGA
3BC - 3BF	Reserved (parallel port/no EPP support)
3C0 - 3DF	VGA
3E0 - 3E1	PC Card controller in CPU
3E2 - 3E3	Unused
3E8 - 3EF	Internal modem
3F0 - 3F7	“A” diskette controller
3F8 - 3FF	Serial port (COM1/default)
CF8 - CFB	PCI configuration index register (PCIDIVO-1)
CFC - CFF	PCI configuration data register (PCIDIVO-1)

**Table 6-13**  
**System Memory Map**

<b>Size</b>	<b>Memory Address</b>	<b>System Function</b>
640 KB	00000000-0009FFFF	Base memory
128 KB	000A0000-000BFFFF	Video memory
48 KB	000C0000-000CBFFF	Video BIOS
160 KB	000C8000-000E7FFF	Unused
64 KB	000E8000-000FFFFFFF	System BIOS
15 MB	00100000-00FFFFFFF	Extended memory
58 MB	01000000-047FFFFFFF	Super extended memory
58 MB	04800000-07FFFFFFF	Unused
2 MB	08000000-080FFFFFFF	Video memory (direct access)
4 GB	08200000-FFFEFFFFFF	Unused
64 KB	FFFF0000-FFFFFFFF	System BIOS

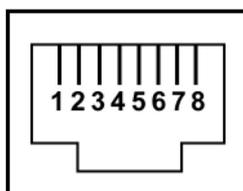
# A

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## Connector Pin Assignments

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**Table A-1**  
**RJ-45 Network Interface**



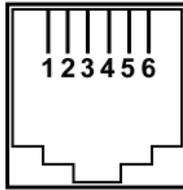
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<b>Pin</b>	<b>Signal</b>	<b>Pin</b>	<b>Signal</b>
1	Transmit +	5	Unused
2	Transmit –	6	Receive –
3	Receive +	7	Unused
4	Unused	8	Unused

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**Table A-2**  
**RJ-11 Modem**

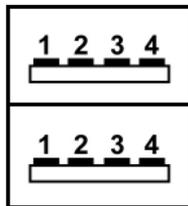


Pin	Signal	Pin	Signal
1	Unused	4	Unused
2	Tip	5	Unused
3	Ring	6	Unused

---

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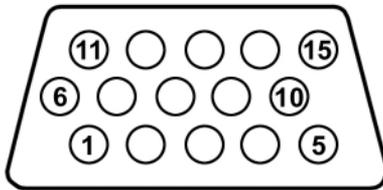
**Table A-3**  
**Universal Serial Bus**



Pin	Signal	Pin	Signal
1	+5 VDC	3	Data +
2	Data -	4	Ground

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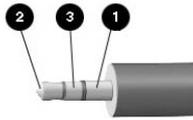
**Table A-4**  
**External Monitor**



<b>Pin</b>	<b>Signal</b>	<b>Pin</b>	<b>Signal</b>
1	Red analog	9	+5 VDC
2	Green analog	10	Ground
3	Blue analog	11	Monitor detect
4	Not connected	12	DDC 2B data
5	Ground	13	Horizontal sync
6	Ground analog	14	Vertical sync
7	Ground analog	15	DDC 2B clock
8	Ground analog		

---

**Table A-5**  
**Stereo Speaker/Headphone**



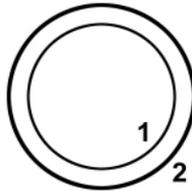
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Pin	Signal	Pin	Signal
1	Ground	3	Left audio signal
2	Right audio signal		

---

---

**Table A-6**  
**Microphone**



---

Pin	Signal	Pin	Signal
1	Audio in	2	Ground

---

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## Power Cord Set Requirements

The wide range input feature of the tablet PC permits it to operate from any line voltage from 100 to 120 or 220 to 240 V AC.

The power cord set received with the tablet PC meets the requirements for use in the country where the equipment is purchased.

Power cord sets for use in other countries must meet the requirements of the country where the tablet PC is used. For more information on power cord set requirements, contact a service partner.

### General Requirements

The following requirements apply to all countries:

- The length of the power cord set must be at least 1.5 meters (5.00 feet) a maximum of 2.0 meters (6.50 feet).
- All power cord sets must be approved by an acceptable accredited agency responsible for evaluation in the country where the power cord set will be used.
- The power cord set must have a minimum current capacity of 10 amps and a nominal voltage rating of 125 or 250 volts AC, as required by each country's power system.
- The appliance coupler must meet the mechanical configuration of an EN 60 320/IEC 320 Standard Sheet C13 connector for mating with the appliance inlet on the back of the tablet PC.

# Country-Specific Requirements

---

## 3-Conductor Power Cord Set Requirements

Country	Accredited Agency	Applicable Note Number
Australia	EANSW	1
Austria	OVE	1
Belgium	CEBC	1
Canada	CSA	2
Denmark	DEMKO	1
Finland	FIMKO	1
France	UTE	1
Germany	VDE	1
Italy	IMQ	1
Japan	METI	3
The Netherlands	KEMA	1
Norway	NEMKO	1

### Notes

1. The flexible cord must be <HAR> Type HO5VV-F, 3-conductor, 1.0 mm<sup>2</sup> conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country where it will be used.
  2. The flexible cord must be Type SPT-3 or equivalent, No. 18 AWG, 3-conductor. The wall plug must be a two-pole grounding type with a NEMA 5-15P (15 A, 125 V) or NEMA 6-15P (15 A, 250 V) configuration.
  3. The appliance coupler, flexible cord, and wall plug must bear a “T” mark and registration number in accordance with the Japanese Dentori Law. The flexible cord must be Type VCT or VCTF, 3-conductor, 1.00 mm<sup>2</sup> conductor size. The wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (7 A, 125 V) configuration.
-

---

### 3-Conductor Power Cord Set Requirements (*Continued*)

Country	Accredited Agency	Applicable Note Number
Sweden	SEMKO	1
Switzerland	SEV	1
United Kingdom	BSI	1
United States	UL	2

**Notes**

1. The flexible cord must be <HAR> Type HO5VV-F, 3-conductor, 1.0 mm<sup>2</sup> conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country where it will be used.
  2. The flexible cord must be Type SPT-3 or equivalent, No. 18 AWG, 3-conductor. The wall plug must be a two-pole grounding type with a NEMA 5-15P (15 A, 125 V) or NEMA 6-15P (15 A, 250 V) configuration.
  3. The appliance coupler, flexible cord, and wall plug must bear a “T” mark and registration number in accordance with the Japanese Dentori Law. The flexible cord must be Type VCT or VCTF, 3-conductor, 1.00 mm<sup>2</sup> conductor size. The wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (7 A, 125 V) configuration.
-

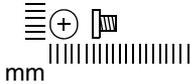
# C

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## **Screw Listing**

This appendix provides specification and reference information for the screws used in the tablet PC and the Docking Station. All screws listed in this appendix are available for the tablet PC in the Miscellaneous Screw Kit, spare part number 310674-001.

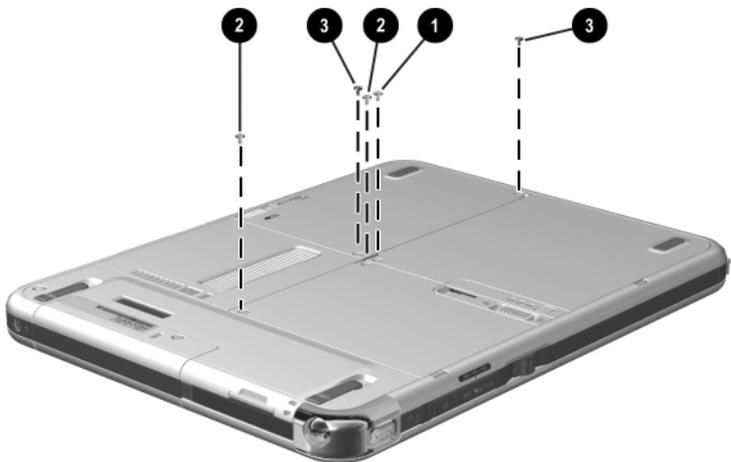
**Table C-1**  
**Phillips M2.0 × 4.0 Screw**



	Color	Qty.	Length	Thread	Head Width
	Silver	9	4.0 mm	2.0 mm	3.8 mm

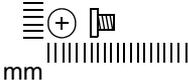
**Where used:**

- ❶ 1 screw that secures the battery pack to the tablet PC (documented in [Section 5.3](#))
- ❷ 2 screws that secure the Mini PCI communications/memory module compartment cover to the tablet PC (documented in [Section 5.3](#))
- ❸ 2 screws that secure the hard drive cover to the tablet PC (documented in [Section 5.5](#))



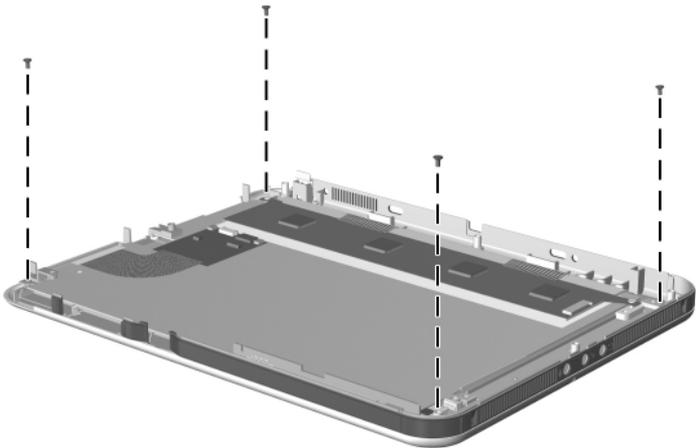
*Phillips M2.0 × 4.0 Screw Locations*

**Table C-1**  
**Phillips M2.0 × 4.0 Screw (Continued)**

	Color	Qty.	Length	Thread	Head Width
	Silver	9	4.0 mm	2.0 mm	3.8 mm

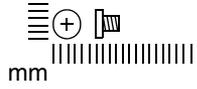
**Where used:**

4 screws that secure the display panel to the display bezel  
 (documented in [Section 5.6](#))



*Phillips M2.0 × 4.0 Screw Locations*

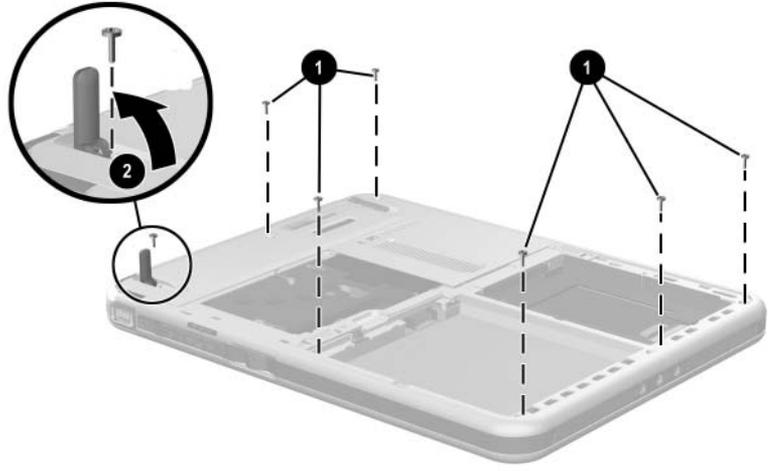
**Table C-2**  
**Phillips M2.5 × 8.4 Screw**



	Color	Qty.	Length	Thread	Head Width
	Silver	8	8.4 mm	2.5 mm	4.4 mm

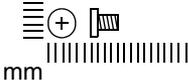
**Where used:**

- ❶ 7 screws that secure the display panel assembly to the tablet PC (documented in [Section 5.6](#))
- ❷ 1 screw that secures the connector cover and display panel assembly to the tablet PC (documented in [Section 5.6](#))



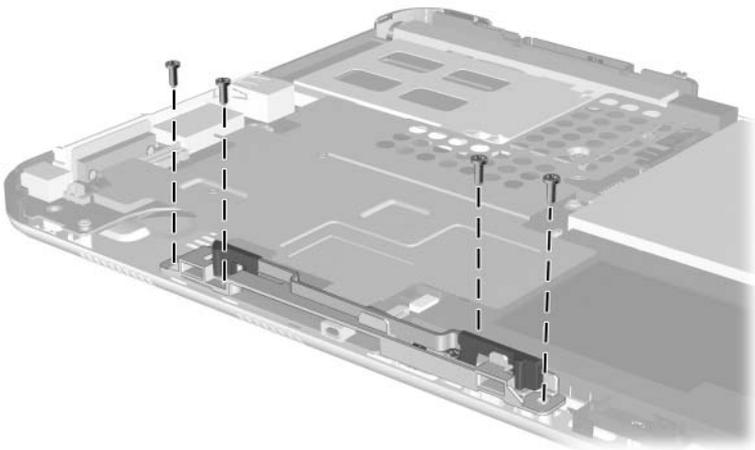
*Torx M2.5 × 7.0 Screw Locations*

**Table C-3**  
**Phillips M2.5 × 6.5 Screw**

	Color	Qty.	Length	Thread	Head Width
mm	Silver	4	6.5 mm	2.5 mm	4.3 mm

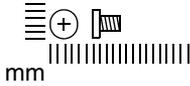
**Where used:**

4 screws that secure the keyboard release assembly to the base enclosure (documented in [Section 5.7](#))



*Phillips M2.5 × 6.5 Screw Location*

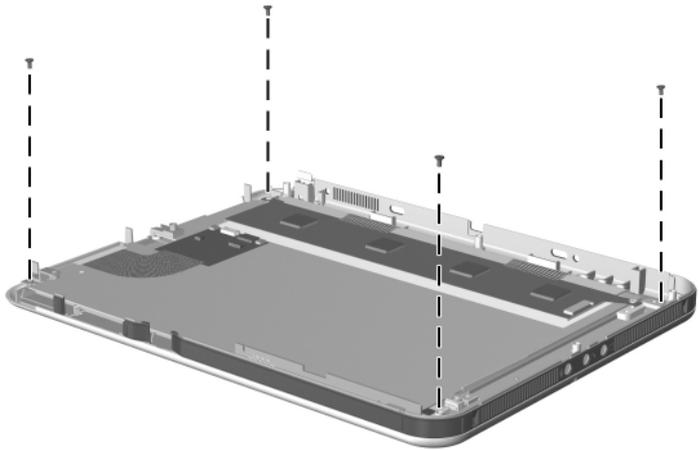
**Table C-4**  
**Phillips M2.0 × 3.0 Screw**



	<b>Color</b>	<b>Qty.</b>	<b>Length</b>	<b>Thread</b>	<b>Head Width</b>
	Silver	4	3.0 mm	2.0 mm	3.8 mm

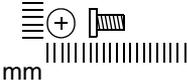
**Where used:**

4 screws that secure the display panel to the display bezel  
(documented in [Section 5.6](#))



*Phillips M2.0 × 3.0 Screw Locations*

**Table C-5**  
**Torx M2.5 × 7.4 Screw**

	Color	Qty.	Length	Thread	Head Width
	Silver	4	7.4 mm	2.5 mm	4.4 mm

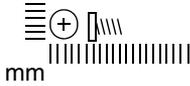
**Where used:**

4 screws that secure the docking station top case to the bottom case (documented in [Section 5.9](#))



*Phillips M2.0 × 4.5 Screw Locations*

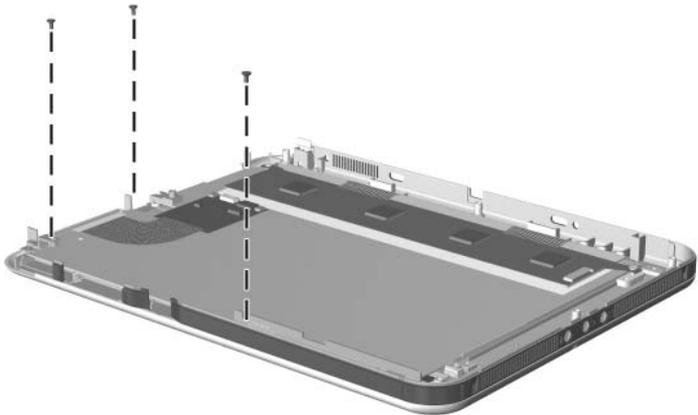
**Table C-6**  
**Phillips M2.0 × 4.0 Screw**



	<b>Color</b>	<b>Qty.</b>	<b>Length</b>	<b>Thread</b>	<b>Head Width</b>
	Yellow	3	2.0 mm	4.0 mm	3.8 mm

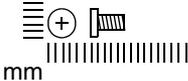
**Where used:**

3 screws that secure the display panel bracket to the display panel assembly (documented in [Section 5.6](#))



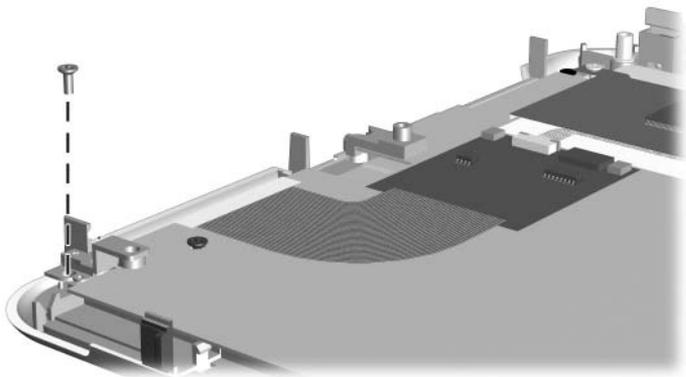
*Phillips M2.0 × 4.0 Screw Locations*

**Table C-7**  
**Phillips M2.0 × 5.5 Screw**

	Color	Qty.	Length	Thread	Head Width
mm	Yellow	1	5.5 mm	2.0 mm	3.8 mm

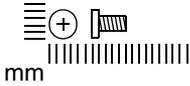
**Where used:**

1 screw that secures the display panel bracket to the display panel assembly (documented in [Section 5.6](#))



*Phillips M2.0 × 5.5 Screw Locations*

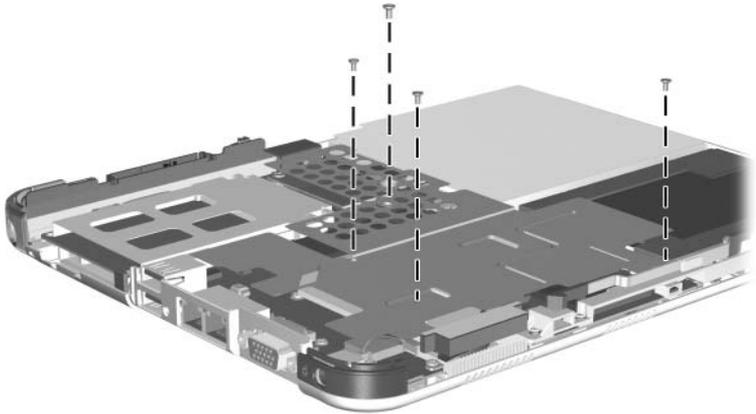
**Table C-8**  
**Phillips M2.5 × 4.9 Screw**



	Color	Qty.	Length	Thread	Head Width
mm	Yellow	4	4.9 mm	2.5 mm	3.8 mm

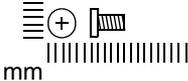
**Where used:**

4 screws that secure the system board to the base enclosure  
 (documented in [Section 5.7](#))



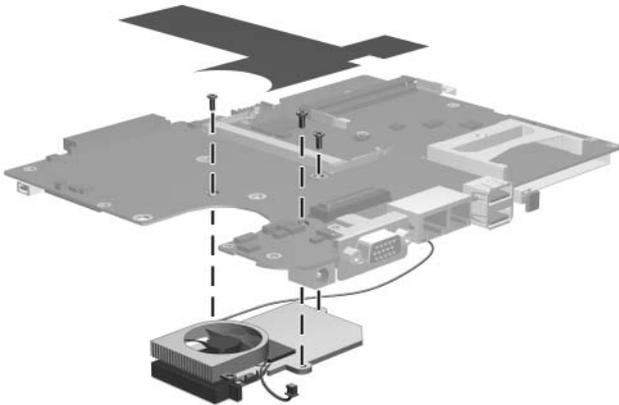
*Phillips M2.0 × 4.9 Screw Locations*

**Table C-9**  
**Phillips M2.0 × 5.5 Screw**

	Color	Qty.	Length	Thread	Head Width
	Yellow	3	5.5 mm	2.0 mm	3.8 mm

**Where used:**

3 screws that secure the fan and heat sink to the system board (documented in [Section 5.7](#))



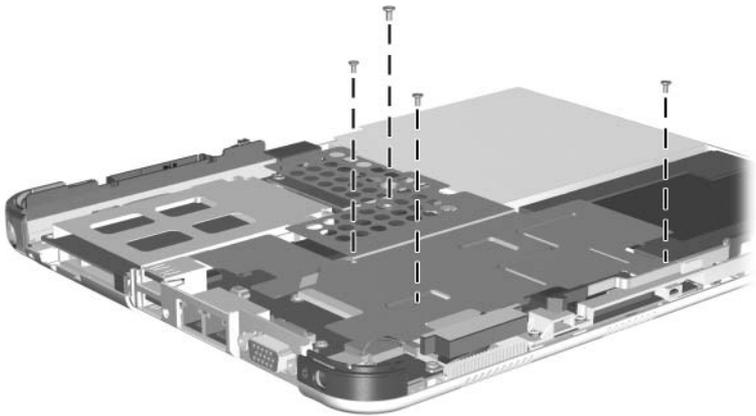
*Phillips M2.0 × 5.5 Screw Locations*

**Table C-10**  
**Phillips M2.0 × 3.5 Screw**

 mm	Color	Qty.	Length	Thread	Head Width
	Yellow	4	3.5 mm	2.0 mm	3.8 mm

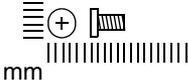
**Where used:**

4 screws that secure the EMI shield to the base enclosure  
 (documented in [Section 5.7](#))



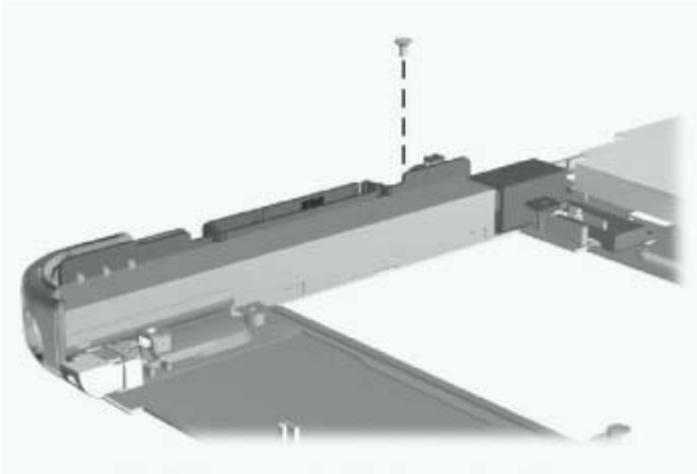
*Phillips M2.0 × 3.5 Screw Locations*

**Table C-11**  
**Phillips M2.0 × 4.0 Screw**

	Color	Qty.	Length	Thread	Head Width
	Silver	1	4.0 mm	2.0 mm	3.8 mm

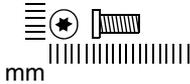
**Where used:**

1 screw that secures the switch board to the base enclosure (documented in [Section 5.9](#))



*Phillips M2.0 × 4.0 Screw Location*

**Table C-12**  
**Torx M2.5 × 8.0 Screw**

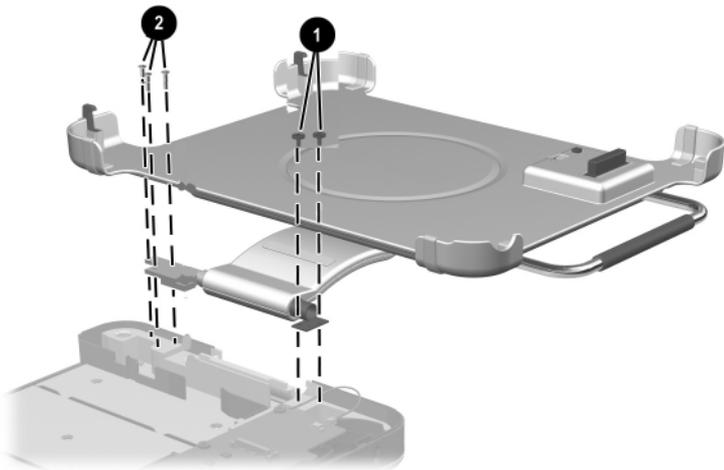


	Color	Qty.	Length	Thread	Head Width
	Silver	5	8.0 mm	2.5 mm	4.3 mm

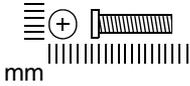
**Where used:**

- ❶ 2 screws that secure the Docking Station pivot arm and cable bracket to the bottom case (documented in [Section 5.9](#))
- ❷ 3 screws that secure the Docking Station pivot arm hinge to the bottom case (documented in [Section 5.9](#))

*Torx M2.5 × 8.0 Screw Locations*



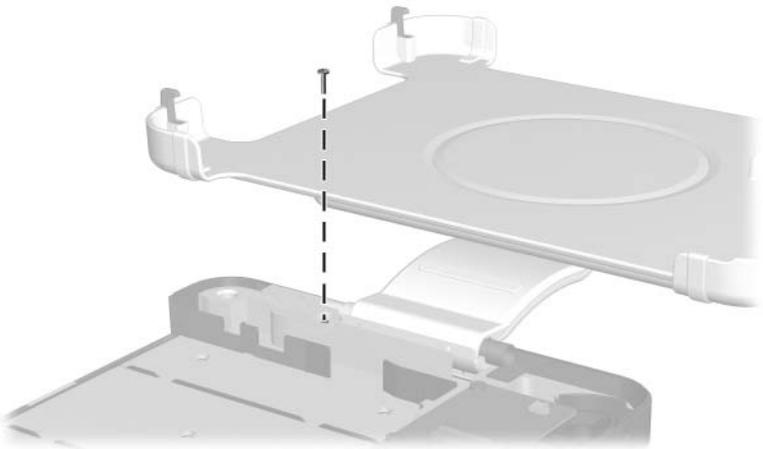
**Table C-13**  
**Phillips M2.5 × 11.0 Screw**



	Color	Qty.	Length	Thread	Head Width
	Silver	1	12.0 mm	2.0 mm	4.3 mm

**Where used:**

1 screw that secures the Docking Station pivot arm hinge to the bottom case (documented in [Section 5.9](#))



*Phillips M2.5 × 12.0 Screw Location*

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