Satellite 1400/1405 Series

General Specifications

 1400-S151
 1400-S152

 PS140U-027XF7
 PS140U-027XF3

 1405-S151
 1405-S152

 PS140U-027XFX
 PS140U-027XFJ

Processor: Intel Celeron 1.20GHz; Integrated co-processor; 256KB Level 2 cache integrated on die; 133MHz front side bus clock

speed

Memory: 256MB SDRAM, expandable to 1024MB; Expansion memory: SODIMM expansion memory

128/256/512Mbit PC133 SDRAM, 3.3V

Data/Address Bus Width: 64-bit/32-bit; BIOS ROM: 4Mbit, CMOS Flash EPROM, Ali M1535 Chipset

Drive(s): HDD: 30.0GB supports PIO Mode 4

FDD: 3.5" 1.44MB DVD-ROM/CDRW

Graphics/Video: 14.1" TFT active -matrix display; internal display supports up to 16M colors at 1024 x 768; Trident CyberALADDIN-T

graphics controller; 16MB external UMA video memory; 3D graphics accelerator, AGP bus support; 2D graphics

accelerator, BitBLT hardware, hardware cursor, Direct Draw support

Audio: AK4543 Codec Chip; Ali M1535 Sound Chip, 16-bit stereo; Built-in stereo speakers; Direct 3D sound; Direct Sound

(supported by driver) and DirectMusic; Full duplex and MIDI (play back) support; Sound Volume Control Dial;

headphone and microphone ports

Communication: Integrated V.90/56K modem, Data and fax support; Integrated 10/100 Ethernet LAN

Expansion: 2 expansion memory slots; 2PC card slots support 2 Type II or 1 Type III PC cards; 32-bit CardBus ready

Ports: RGB (monitor); ECP Parallel printer; 3 USB; RJ-45 LAN; RJ-11 modem; Infrared; TV-Out (NTSC/PAL output; RCA

jack)

Keyboard: 85 keys with 12 function keys, TouchPad pointing device

Battery: 9 cell, rechargeable, removable Li-lon, approximately 3H battery life

Weight: 7.4 lbs

Dimensions: (L)12.8" x (W)11.2" x (H)1.7"

Software: MS Windows XP Pro pre-installed (1400-S151/1405-S152); MS Windows XP Home pre-installed (1405-S151/1400-

S152); MS Internet Explorer, Online documentation, Adobe Acrobat Reader, Intuit Quicken Basic 2001, Norton Antivirus 2002, AOL (3-month offer), Toshiba custom utilities, Toshiba great software offer; Lotus SmartSuite

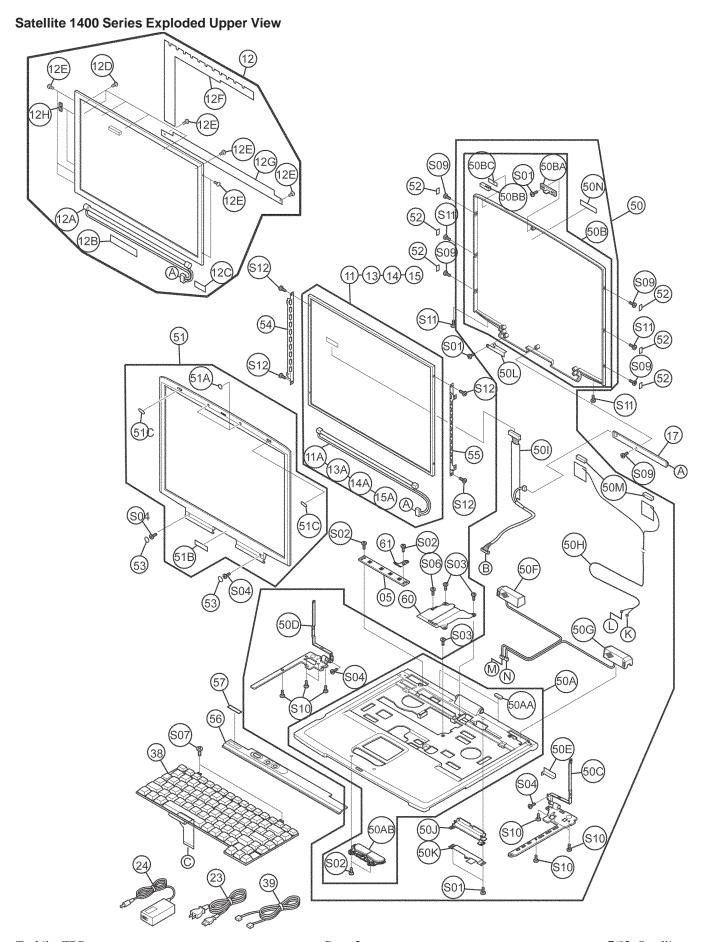
Millennium Edition (1405 Series only)

Security: Slot for computer lock; Main battery pack (sliding lock); HDD and memory (by screw only), Built-in Modem/LAN

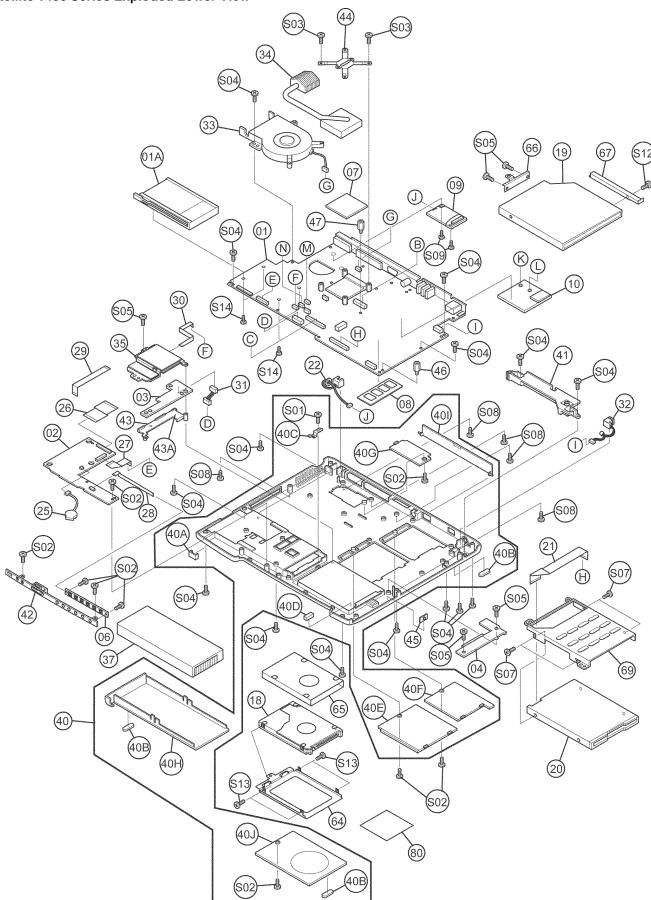
(screw only), User Power-On password, Setup Security, HDD password, Keyboard lock (by hotkey), Screen Blank (by

hotkey), Screen Saver (by software)

Warranty: 1 year parts, labor, and battery



Satellite 1400 Series Exploded Lower View



Ref. #	Code	Part #	Description	PIR	Comments
	C1Y2	PS140U-027XF3 PS140U-027XF3B PS140U-027XF7	1400-S152/30 (027XF3) 1400-S152 (027XF3B) B-STK 1400-S151/30 (027XF7)		\$1400-\$152/30, WXP Home, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (W'less Ready) \$1400-\$152/30, WXP Home, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (W'less Ready), Remf \$1400-\$151/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (W'less Ready)
		PS140U-027XF7B PS140U-027XF7W	1400-S151 (027XF7B) B-STK 1400-S151/30 (027XF7W)		S1400-S151/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (Wless Ready), Remf S1400-S151/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (Office XP SB), (Wless Ready)
	C1Y2	PS140U-027XF7WB	1400-S151 (027XF7WB)B-STK		S1400-S151/30, WXP Pro,1.20GHz Cel,256MB,CD-RW/DVD,14 TFT,Modem/LAN,(Office XP SB),(Wiless Ready),Remf
		PS140U-027XF7X PS140U-027XF7XB	1400-S151/30 (027XF7X) 1400-S151 (027XF7X)B-STK		\$1400-\$151/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RWIDVD, 14 TFT, ModernLAN, (Office XP Pro), (Wless Ready) \$1400-\$151/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RWIDVD, 14 TFT, ModernLAN, (Office XP Pro), (Wless Ready), Remf
	C1Y2	PS140U-027XFJ	1405-S152/30 (027XFJ)		S1405-S152/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (Wiless Ready)
		PS140U-027XFJB PS140U-027XFX	1405-S152 (027XFJB) B-STK 1405-S151/30 (027XFX)		S1405-S152/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (Wless Ready), Remf S1405-S151/30, WXP Home, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (Wless Ready)
	C1Y2	PS140U-027XFXB	1405-S151 (027XFXB) B-STK	(S1405-S151/30, WXP Home, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (Wless Ready), Remf
		PS140U-027XFNNC PS140U-027XFPNC	1405-S151/30 (027XFNNC) 1400-S151/30 (027XFPNC)		S1405-S151/30, WXP Home, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (Wless Ready), Sp S1400-S151/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, (Wless Ready), Sp
		PS140U-027W57	1400-S151W/30 (027W57)		S1400-S151W/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, Wi-Fi LAN
		PS140U-027W57B PS140U-027W5701	1400-S151W (027W57B)B-STK 1400-S151W/30 (027W5701)		S1400-S151W/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, Wi-Fi LAN, Remf S1400-S151W/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, Wi-Fi LAN, (NFS)
OP01		PS140U-027W5702	1400-S151W/30 (027W5702)		S1400-S151W/30, WXP Pro, 1.20GHz Cel, 256MB, CD-RW/DVD, 14 TFT, Modem/LAN, Wi-Fi LAN, (NFS)
OP01 OP01-A		KTT-SO133/128 KTT-SO133/256	MEM MODULE, 128MB MEM MODULE, 256MB		Kingston 128MB PC133 SDRAM Memory Module Kingston 256MB PC133 SDRAM Memory Module
OP02 OP02A		PA3083U-1ACA P000337890	UNIV AC ADAPTER AC ADAPTER		Input:100V-240V, 1.2A-0.6A, 50-60Hz, Output:15VDC, 5A, 75 watt,(U,C,Z) Input: 100V-240V, 1.2A-0.6A, 50-60Hz, Output: 15VDC, 5A (UA2042P02)
OP02B		P000327770	AC CORD SET		(U, C, Z)
OP03 OP03A		PA3107U-1BRS P000324210	BATTERY PACK BATTERY PACK	CEH	Lithium-lon 10.8VDC, 4500mAh, with Recycle Label, (U,E) Lithium-lon 10.8VDC, 4500mAh, with Recycle Label, XM2033P02, (U,E)
OP03A-1	C1Y4	P000337840	BATTERY PACK	CEH	Lithium-Ion 10.8VDC, 4500mAh, with Recycle Label, XM2040P02 (U E,Z)
OP03A-2 OP04		P000350480 PA2488U	BATTERY PACK BATT CHARGER (MAIN)	CEH	Lithium-lon 10.8VDC, 4500mAh, with Recycle Label (U,E,Z) For Main Battery Pack
OP05	C1Y2	PA3212U-1MPC	WIRELESS LAN CARD KIT		•
OP05A S01		P000339520 P000300290	WIRELESS LAN CARD T SCREW, M2.5X6		Agere Systems MPCI3A-20/R, ZA2314P04
S02 S03		P000318000 P000207940	TG SCREW, M2.5X4BN SCREW, M2X6		Black, Flat-Head (low profile) screw
S04		P000317990	TG SCREW, M2.5X6BN		
S05 S06		P000274010 P000290500	T GRIP SCREW, M2X50 GRIP SCREW, M2.5X16		Black Grip Screw
S07	C1Y4	P000227770	SCREW, M2.5X2.6BN		Black, Flat-Head (low profile) screw
S08 S09		P000322980 P000273730	GRIP SCREW, M2.5X25BI T GRIP SCREW, M2X4Z		Zinc (gold) flat-head (low profile head) screws
S10 S11		P000239510 P000315550	GRIP SCREW, M2.5X5Z TG SCREW, M2.5X2.8B		
S12		P000273850	T GRIP SCREW, M2X30		Silver, Flat-Head (low profile) screw
S13 S14		P000339380 P000261770	THIN SCREW, M3X4Z GRIP SCREW, M2X12Z		Silver, Flat-Head (low profile) screw
1	C1Y2	P000348950	PCB ASSY FRTSA2		System Board, without CPU, without memory, A5A000255010
1A 2		P000323270 P000348960	CARDBUS CONNCTOR PCB ASSY FRTSD1		PC Card Connector, G36220279179 Sound Board, A5A000233030
3 4	C1Y2	P000347340	PCB ASSY FRTBA1 PCB ASSY FRTHD1		Battery (Battery Terrminal) Board, G70C00004210
5		P000347350 P000347360	PCB ASSY FRTPW1		HDD Connector Board (contains W-LAN switch), G70C00005210 Power Switch Board, G70C00006210
6 7		P000347370 P000348650	PCB ASSY FRTCW1 IC RH80530NZ009		CD Switch Board, G70C00007210 Intel 1.20GHz Cel, apply grease to CPU before mounting Cooling Mod
8-A	C1Y5	P000328480	256MB SO DIMM		Approved makes = Toshiba; SME - Samsung, ELP - Elpida; HYS - Hyundia
9 10		P000322090 P000339520	MDC MODEM WIRELESS LAN CARD		Modem Daughter Card, Askey Computer 1456VQL4 (INT), ZA2300P06 Agere Systems MPCI3A-20/R, ZA2314P04
11	C1Y4	P000332290	COLOR LCD MODULE		Chimei N141X6-02, 14.1 XGA TFT, VF2093P01
11A 12		P000334580 P000309120	FL TUBE SET COLOR LCD MODULE		Samsung LTN141X7-L06, 14.1XGA TFT, VF2048P01
12A 12B	C1Y2	P000310980 P000310990	FL TUBE AL TAPE		
12C		P000310990 P000311000	WIRE TAPE		
12D 12E		P000311010 P000311020	SCREW, M2X1.7 SCREW, M2X2.5		
12F	C1Y2	P000311030	PCB COVER		
12G 12H		P000311040 P000311050	LAMP COVER CLIP		
13	C1Y2	P000316700	COLOR LCD MODULE		LG Philips LP141X7-C1TO,14.1 XGA TFT, VF2062P01"
13A 14	C1Y4	P000318970 P000309110	FL LAMP KIT COLOR LCD MODULE		Toshiba LTM14C433, 14.1 XGA TFT, VF2047P01"
14A 15		P000311060 P000338370	FL TUBE SET COLOR LCD MODULE		Toshiba LTM14C501, 14.1 XGA TFT, VF2096P01"
10	0112	1 000000070	COLOI I LOD WIODOLE		10011100 ETIVITO001, IT.I AUA II I, VI 20001 01

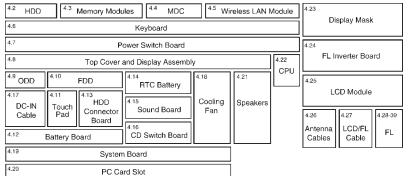
Satellite 1400 Series Part Numbers, (cont.)

Ref.#	Code	Part #	Description	PIR	Comments
15A 16		P000338550 P000348970	FL TUBE SET COLOR LCD MODULE		Sharp LQ141X1LH83, 14.1 XGA TFT, VF2065P02"
16A	C1Y2	P000350800	FL TUBE		Sharp Eq. (1) (12) (3) (1) (1) (4) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1
16B 16C		P000261140 P000350810	SCREW, M2X2 COVER S		
16D		P000316210	AL TAPE		
16E		P000350820	TAPE		
17 18-A		P000347420 P000341840	FL INVERTER HDD UNIT (30GB)		Toshiba, MK30KEF, HDD2169B
18-A-1	C1Y4	P000341850	HDD UNIT (30GB)		I IBM IC25N030ATC\$04 (ATD04T), P/N: 07N8326, 07N9318, G8BC00004210
18-A-2 19-A		P000343820 P000349540	HDD UNIT (30GB) CD-RW/DVD-ROM	CEH	I Hitachi DK23DA-30F, G8BC00006210 Toshiba SD-R2102-OAHB, G8CC00009210
19-A-1	C1Y2	P000347430	CD-RW/DVD-ROM	CEH	Panasonic (KME - Kyushu Matsushita Electric) UJDA720, ZA2431P02
20 20-1		P000347440 P000349920	FDD UNIT FDD UNIT	CEH	Teac FD05HG-7778, G8AC00002210, requires P000347760 Samsung SFD-321S/TB1 G8AC00007110, requires P000347760
20-A	C1Y2	P000347450	FDD UNIT	OLI	Mitsumi D353F3X/R-3220, G8AC00003110, requires P000349670
21 21-A		P000347760	1.0MM PITCH FFC	CDA	FDD Cable for Teac or Samsung FDD FDD Cable for Mitsumi FDD
21-A 22		P000349670 P000347460	1.0MM PITCH FFC RJ11 HARNESS	CDA	T FDD Cable for Millsuffil FDD
23		P000220300	MODULAR CABLE		Modem Cable
24 25		P000322640 P000331520	AC ADAPTER RTC BATTERY		Input:100V-240V 1.5A-0.85A, 50-60HZ; Output: 15V 4A, PA3092U—1ACA Lithium Ion, 3.6V, 15mAh
26	C1Y2	P000347480	0.5MM PITCH FFC		Cable between Sound Board and System Board
27 28		P000347490 P000347500	0.5MM PITCH FFC 0.5MM PITCH FFC		Cable between Sound Board and System Board Cable between Sound Board and CD Switch Board
29	C1Y4	P000347510	0.5MM PITCH FFC		
30 31		P000347520 P000347530	0.5MM PITCH FFC BATTERY HARNESS		Cable between Touch Pad and System Board Cable between Battery Board and System Board
32		P000347540	DC JACK HARNESS		DC-In Cable
33 34		P000347550 P000347560	DC FAN FIN		Cooling Fan Module, apply grease to CPU before installing Cooling Mod.
35		P000347500 P000348990	TOUCH PAD		Heatsink unit, apply grease to chip before installing
36		(RESERVED)	DATTEDY DACK		Lithium Ion 10 0V/DC 4500mAh with Dogwold Lohal VM0040D00 (LLE 7)
37 37-1		P000337840 P000350480	BATTERY PACK BATTERY PACK	CEH	Lithium-lon 10.8VDC, 4500mAh, with Recycle Label, XM2040P02 (U E,Z) I Lithium-lon 10.8VDC, 4500mAh, with Recycle Label (U,E,Z)
38		P000347580	KEYBOARD UNIT		Minebea WLJ-5508W, G83C0000E210, (Ú)
38-A 39		UE2024P36KB-SP P000327770	KEYBOARD UNIT, SP AC CORD SET		For Latin America, Alps Electric KFRMBA059A, UE2024P36 (U, C, Z)
40	C1Y2	P000347590	BASE ASSY		For units with letter C stamped on Base in battery compartment area
40-A 40-B		P000348470 P000349710	BASE ASSY BASE ASSY		For units with letter D stamped on Base in battery compartment area For units with letter P stamped on Base in battery compartment area
40A	C1Y2	P000347970	FIR COVER		For units with letter C stamped on Base in battery compartment area
40A-A 40A-B		P000348530 P000349770	FIR COVER FIR COVER		For units with letter D stamped on Base in battery compartment area For units with letter P stamped on Base in battery compartment area
40B	C1Y3	P000347980	BOTTOM CUSHION		,
40C 40D		P000347990 P000222130	HDD BRACKET GUM CUSHION		
40E	C1Y4	P000348000	MEMORY COVER ASSY		For units with letter C stamped on Base in battery compartment area
40E-A 40E-B		P000348540 P000349780	MEMORY COVER ASSY MEMORY COVER ASSY		For units with letter D stamped on Base in battery compartment area For units with letter P stamped on Base in battery compartment area
40F	C1Y2	P000348010	MINI PCI COVER		For units with letter C stamped on Base in battery compartment area
40F-A 40F-B		P000348550 P000349790	MINI PCI COVER MINI PCI COVER		For units with letter D stamped on Base in battery compartment area For units with letter P stamped on Base in battery compartment area
40G	C1Y2	P000348020	MDC COVER		Modem Slot Cover, For units with letter C stamped on Base
40G-A 40G-B		P000348560 P000349800	MDC COVER MDC COVER		Modem Slot Cover, For units with letter D stamped on Base Modem Slot Cover, For units with letter P stamped on Base
40H	C1Y2	P000348030	BATT COVER ASSY		For units with letter C stamped on Base in battery compartment area
40H-A 40H-B		P000348570 P000349810	BATT COVER ASSY BATT COVER ASSY		For units with letter D stamped on Base in battery compartment area For units with letter P stamped on Base in battery compartment area
401	C1Y2	P000348040	REAR CONN. COVER		For units with letter C stamped on Base in battery compartment area
40I-A 40I-B		P000348580 P000349820	REAR CONN. COVER REAR CONN. COVER		For units with letter D stamped on Base in battery compartment area For units with letter P stamped on Base in battery compartment area
40J	C1Y5	P000348050	HDD COVER ASSY		For units with letter C stamped on Base in battery compartment area
40J-A 40J-B		P000348590 P000349830	HDD COVER ASSY HDD COVER ASSY		For units with letter D stamped on Base in battery compartment area
41		P000349630 P000347600	CONN. HOLDER ASSY		For units with letter P stamped on Base in battery compartment area Plastic Brace
42	C1Y2	P000347610	FRONT COVER ASSY		For units with letter C stamped on Base in battery compartment area
42-A 42-B		P000348480 P000349720	FRONT COVER ASSY FRONT COVER ASSY		For units with letter D stamped on Base in battery compartment area For units with letter P stamped on Base in battery compartment area
43	C1Y4	P000347620	BATT CONN. COVER		, , , , , , , , , , , , , , , , , , , ,
43A	0113	P000343570	SPRING, BATT SAFETY		

Satellite 1400 Series Part Numbers, (cont.)

Ref.#	Code	Part #	Description	PIR	Comments
44		P000347630	CPU HOLDER		For write with letter Cotomand on Book in hetters commented and
45 45-A		P000347640 P000348490	W'LESS LAN SW. KNOB W'LESS LAN SW. KNOB		For units with letter C stamped on Base in battery compartment area For units with letter D stamped on Base in battery compartment area
45-B		P000349730	W'LESS LAN SW. KNOB		For units with letter P stamped on Base in battery compartment area
46	C1Y2	P000283510	CPU STUD		M2.5X6 Stud Screw
47		P000309450	HEXA STUD		M2.5X14 Stud Screw
48-49	C1Y3	(RESERVED)	COVED ACCV		For write with letter C stemand on Book in hottom, commontored and
50 50-A		P000349010 P000349090	COVER ASSY COVER ASSY		For units with letter C stamped on Base in battery compartment area For units with letter D stamped on Base in battery compartment area
50-B		P000350000	COVER ASSY		For units with letter P stamped on Base in battery compartment area
50A	C1Y2	P000349030	COVER SUB ASSY		For units with letter C stamped on Base in battery compartment area
50A-A		P000349110	COVER SUB ASSY		For units with letter D stamped on Base in battery compartment area
50A-B 50AA		P000350010 P000347790	COVER SUB ASSY LCD CUSHION		For units with letter P stamped on Base in battery compartment area
50AA 50AB		P000347790 P000349040	TOUCH PAD BUTTON		For units with letter C stamped on Base in battery compartment area
50AB-A		P000349120	TOUCH PAD BUTTON		For units with letter D stamped on Base in battery compartment area
50AB-B		P000350020	TOUCH PAD BUTTON		For units with letter P stamped on Base in battery compartment area
50B		P000349050	LCD COVER ASSY		For units with letter C stamped on Base in battery compartment area
50B-A 50B-B		P000349130 P000349860	LCD COVER ASSY LCD COVER ASSY		For units with letter D stamped on Base in battery compartment area For units with letter P stamped on Base in battery compartment area
50B-B		P000347820	LCD LATCH HOOK		For units with letter C stamped on Base in battery compartment area
50BA-A		P000348630	LCD LATCH HOOK		For units with letter D stamped on Base in battery compartment area
50BA-B		P000349870	LCD LATCH HOOK		For units with letter P stamped on Base in battery compartment area
50BB		P000347830	SENSOR SW. MAGNET		
50BC 50C		P000347840 P000349060	D STICK TAPE BRAKE HINGE, RIGHT		
50D		P000349070	BRAKE HINGE, LEFT		
50E	C1Y6	P000347870	BH UPPER INSULATOR		Brake Hinge Upper Insulator
50F		P000347880	SPEAKER, LEFT		
50G 50H		P000347890 P000347900	SPEAKER, RIGHT ANTENNA CABLE		Wireless LAN Antenna
50I		P000350190	LCD HARNESS		LCD/FL Cable
50J	C1Y2	P000347920	CABLE HOLDER		For units with letter C stamped on Base in battery compartment area
50J-A		P000348640	CABLE HOLDER		For units with letter D stamped on Base in battery compartment area
50J-B 50K		P000349880 P000347930	CABLE HOLDER CABLE EARTH PLATE		For units with letter P stamped on Base in battery compartment area
50L		P000347940	HARNESS HOLDER		
50M		P000347950	CUSHION TAPE		
50N		P000347960	TOSHIBA BADGE		for Display Cover
51 51-A		P000349020 P000349100	LCD MASK ASSY LCD MASK ASSY		For units with letter C stamped on Base in battery compartment area For units with letter D stamped on Base in battery compartment area
51-B		P000349750	LCD MASK ASSY		For units with letter P stamped on Base in battery compartment area
51A		P000312850	LCD CUSHION		
51B 51C		P000322780 P000322790	TOSHIBA BADGE		For Display Mask
52		P000322790 P000347670	LCD GUM CUSHION SCREW SEAL		
53		P000333940	LCD MASK SEAL		
54		P000349960	LCD SUPPORT 14, L.		
55 56		P000349970 P000347690	LCD SUPPORT 14, R. KEYBD HOLDER ASSY		Keyboard Brace, For units with letter C stamped on Base
56-A		P000347690 P000348520	KEYBD HOLDER ASSY		Keyboard Brace, For units with letter D stamped on Base
56-B		P000349760	KEYBD HOLDER ASSY		Keyboard Brace, For units with letter P stamped on Base
57		P000347700	PRODUCT BADGE		
58-59 60		(RESERVED) P000347710	SUPPORT PLATE		Metal Plate
61		P000347710	KEYBD HOLDER PLATE		motal Fiato
62-63		(RESERVED)			
64		P000347730	HDD HOLDER ASSY		HDD Bracket
65 66		P000316400 P000347740	HDD INSULATOR ODD REAR BRACKET		Optical Disk Drive Rear Bracket
67		P000347740 P000347750	ODD SIDE BRACKET		Optical Disk Drive Real Bracket
68	C1Y3	(RESERVED)			
69	C1Y2	P000347770	FDD BRACKET ASSY		
70 71		(RESERVED) P000316910	CHINA LABEL		
72		P000310910	LITHUANIA LABEL		
73	C1Y4	P000320520	CARD LABEL		
74-79		(RESERVED)	EVE MIODODUONE		Outline banking and and in all models
210 215		597890 TOSH4	EXT. MICROPHONE BAG ACCESSORY		Custom hardware - not used in all models Carrying Case
210	0110	100114	DAG MODESSON I		Carrying Case

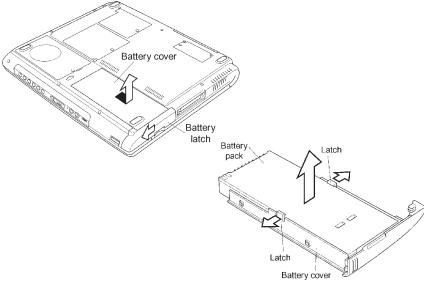
The information offered in this section is an overview of the Maintenance Manual, Chapter 4, Replacement Procedures. If you have any questions or concerns regarding the proper procedure please refer to the Maintenance Manual through the Toshiba Service and Support Website before you proceed.



This section explains how to remove Field Replaceable Units (FRUs). It may not be necessary to remove all the FRÚs in order to replace one.

The chart is a guide to which FRUs need to be removed in order to remove others. The section numbers on the chart refer to the sections in the Maintenance Manual, Chapter 4.

Always start by removing the battery pack, next, optional items such as the optional PC card and optional memory module, then follow the line on the chart to determine which FRU you must remove next in order to repair the one you think is causing the computer to operate improperly.

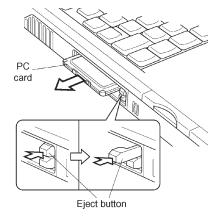


To remove the battery, follow the steps below.

CAUTION: When handling battery packs, be careful not to short circuit the terminals. Also do not drop, hit or otherwise apply impact; do not scratch or break the casing.

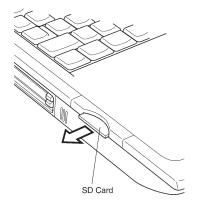
- Turn the computer upside down.
- Slide the battery latch to the left to release it, then pull the battery cover slightly forward and lift it out.
- Lay the battery cover upside down. Push the latches to the outside and lift out the battery pack.

NOTE: For environmental reasons, do not throw away a spent battery pack. Please follow local ordinances or regulations for its disposal.



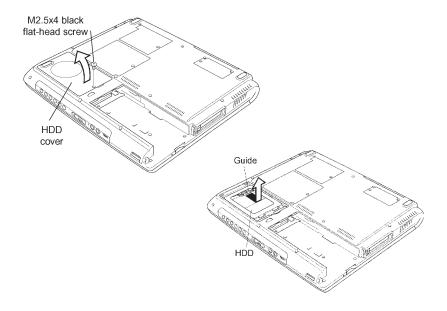
To remove an optional PC card, follow the steps below.

- Turn the computer right side up
- Press the eject button for the PC card 2. you want to remove, it will extend slightly.
 Press the button again.
- 3.
- Grasp the PC card and remove it.



To remove an optional SD card, follow the steps below.

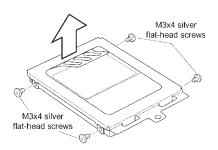
- Turn the computer right side up. Push the SD card in and release it to pop 2. the card out slightly.
 Grasp the SD card and remove it.
- 3.

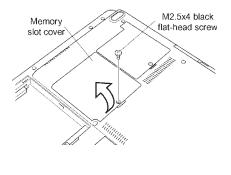


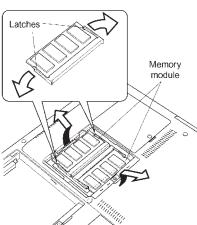
To remove the HDD, follow the steps below.

- Turn the computer upside down. Remove **one M2.5x4 black flat-head** 2. **screw** securing the HDD cover. Lift off the **HDD cover**.
- 3.
- Pull the guide to remove the HDD. Be careful not to damage the connector.
- Place the HDD pack on a flat surface and remove four M2x4 silver flat-head
- Remove the HDD bracket.

CAUTION: Do not apply pressure to the top or bottom of the HDD.







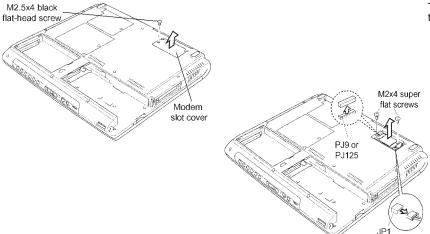
To remove a memory module, follow the steps below.

- Turn the computer upside down. Remove one M2.5x4 black flat-head
- 2. screw.
- 3.
- Lift off the memory slot cover.
 Gently press out on two latches. One end of the memory module will pop up.
 Grasp the memory module and remove 4.
- 5.

CAUTION: Do not try to remove a memory module with the computer turned on. You can damage the computer and the memory.

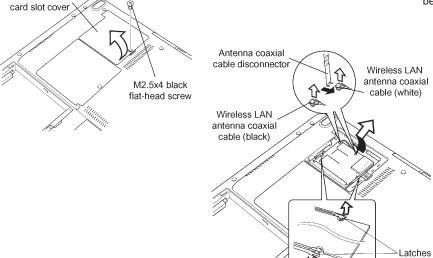
Do not touch the connectors on the memory module(s) or on the computer. Debris on the connectors may cause memory access problems.

Wireless I AN



To remove the modem daughter card (MDC), follow the steps below.

- Turn the computer upside down.
- Remove one M2.5x4 black flat-head screw.
- 3. Lift off the modem slot cover.
- Remove two M2x4 super flat screws 4.
- securing the MDC.
 Carefully lift up the MDC to disconnect it from **PJ9** (S1400) or **PJ125** (S2400) on the system board. 5.
- Carefully disconnect the **modem cable** from **JP1** on the MDC. 6.



To remove the wireless LAN card, follow the steps

- Remove one M2.5x4 black flat-head
 - Lift off the Wireless LAN card slot cover.
- Disconnect the Wireless LAN antenna cables (black and white) from the Wireless LAN card using an antenna coaxial cable disconnector.
- Push the Wireless LAN card lock latches outward to release the card. It will pop up to about a 45 degree angle.
- Pull out the Wireless LAN card. Be careful not to damage the connector.

To install the wireless LAN card (an option in some models), follow the steps below.

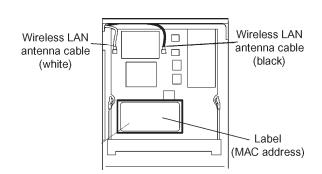
CAUTION: Be sure to turn the computer off before removing the card. Otherwise, the computer or the card may be damaged.

- Insert the Wireless LAN card into the 1. connector at an angle of 45 degrees. Gently push the Wireless LAN card down
- until **latches** on both sides engage to hold it in place.
- Connect the Wireless LAN antenna (black and white) cables to the connectors on the card.

CAUTION: Be sure the cables lie inside the guide. Be careful not to damage or pinch the cables when you seat the card.

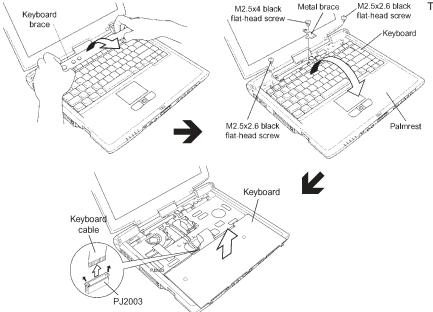
- Seat the Wireless LAN card slot cover.
- 5. Secure the cover with one M2.5x4 black flat-head screw.

CAUTION: There are two MAC address barcode labels in the package with the card. Apply one labelo next to the Wireless LAN socket and one on the box the computer was shipped in. Remove old labels before applying the new ones. The computer may have MAC address barcod labels both wired and Wireless LANs. Be sure to replace the correct label.



M2.5x4 black

flat-head screw



Power switch

M2.5x6 black flat-head

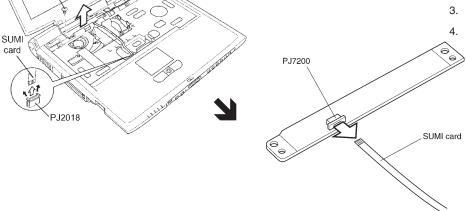
To remove the keyboard, follow the steps below.

Open the display panel.

- Insert the fingernails of both hands into notches in the keyboard brace and the computer, and pry up to release the brace at twelve points. Remove the brace.
- Remove one M2.5x4 black flat-head 3. screw securing the metal brace.
- Remove two M2.5x2.6 black flat-head 4. screws
- Rotate the keyboard out and lay it on top 5. of the palmrest.
- 6. Disconnect the keyboard cable from PJ2003 on the system board and remove the keyboard.

To remove the power switch board, follow the steps below.

- Disconnect the SUMI card from PJ2018.
- 2. Remove one M2.5x4 black flat-head
- Remove the power switch board and turn it over.
- Disconnect the SUMI card from PJ7200.



M2.5x25 black flat-head screws

To remove the top cover with display assembly, follow the steps below.

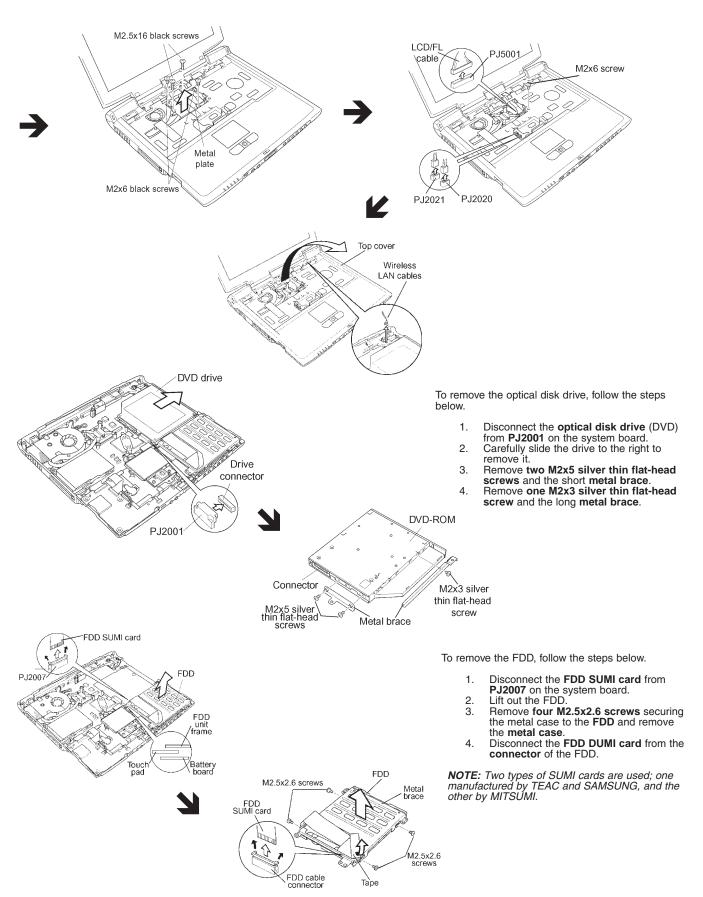
- Turn the computer upside down and remove the following nineteen screws:

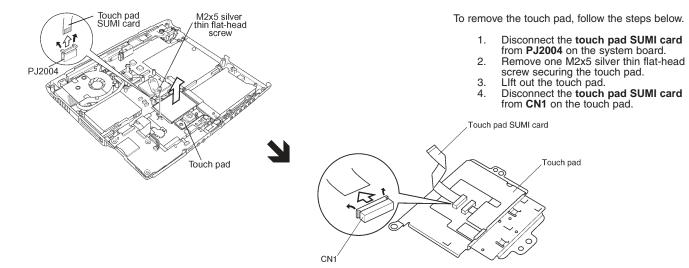
 • Thirteen M2.5x6 black flat-head
 - Six M2.5x5 black flat-head
- Turn the computer right side up and open the display panel.
- Remove two M2.5x6 black screws and two M2.5x16 black screws.
- Remove the metal plate.
 Disconnect the LCD/DL cable from PJ5001 and the speaker cables from PJ2020 and PJ2021 on the system board.
- Remove one M2x6 screw securing the top cover.
- Remove the top cover with display assembly starting from the front. Be careful not to damage the wireless LAN antenna coaxial cables.

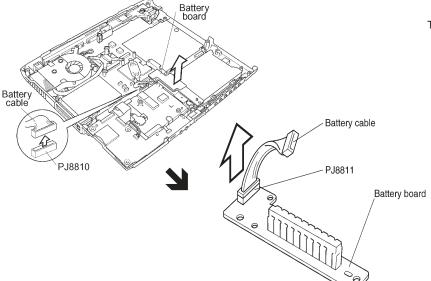


M2.5x6 black

flat-head screws







To remove the battery board, follow the steps below.

- Disconnect the battery cable from PJ8810.
- Lift out the **battery board**.
 Disconnect the battery cable from **PJ8811** on the battery board, if necessary.

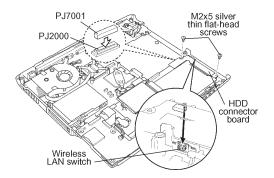
NOTE: On installation, be sure to route the battery cable under the battery board to avoid pinching the battery cable with the plastic cover.

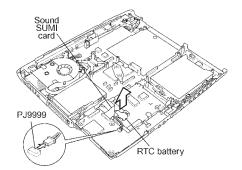
To remove the HDD connector board, follow the steps below. Remove two M2x5 silver thin flat-head screws securing the HDD connector

Carefully lift up the HDD connector board to disconnect it from PJ2000 on the system board.

Lift out the HDD connector board.

PJ7001





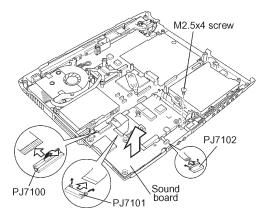
To install the HDD connector board, follow the steps

- Seat the HDD connector board and carefully connect it to PJ2000 on the system board.
- Secure the HDD connector board with two M2x5 silver thin flat-head screws.
- Lift out the HDD connector board.

CAUTION: Be careful not to damage or pinch the FDD SUMI card when you seat the HDD connector board. Be sure the wireless LAN switch is in the correct position.

To remove the RTC battery, follow the steps below.

- Disconnect the RTC battery cable from PJ9999 on the sound board. Lift out the RTC battery.

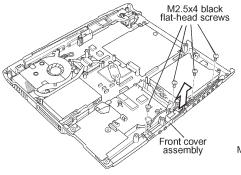


To remove the sound board, follow the steps below.

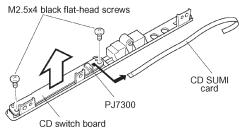
- Disconnect the sound SUMI card from PJ7100 and PJ7101 on the sound board.
- Disconnect the CD switch board SUMI card from PJ7102 on the sound board.
- Remove one M2.5x4 screw securing the sound board.
- Lift up the sound board.

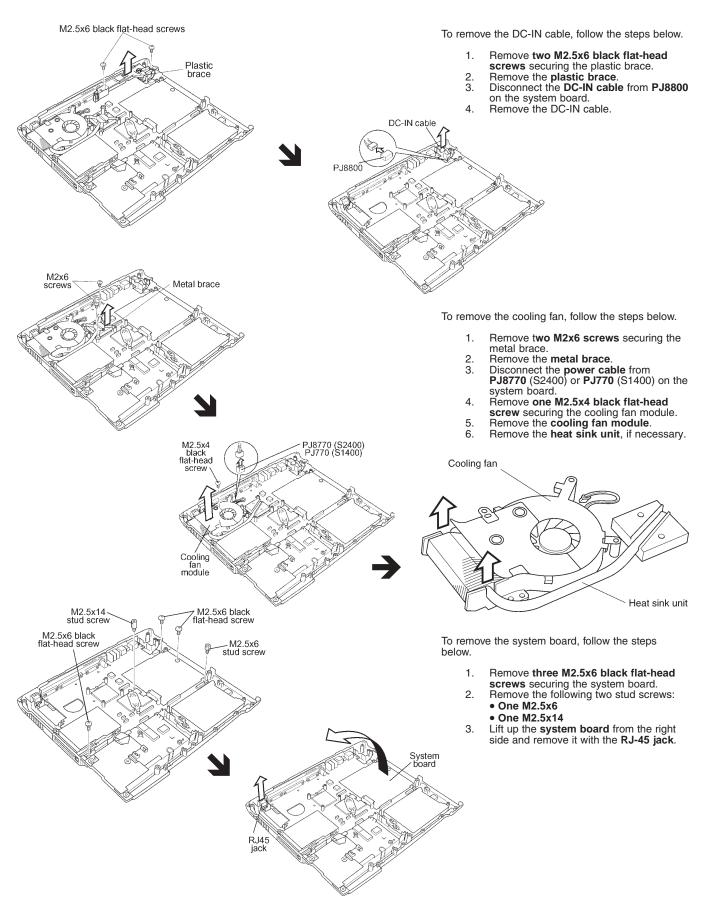
To remove the CD switch board, follow the steps below.

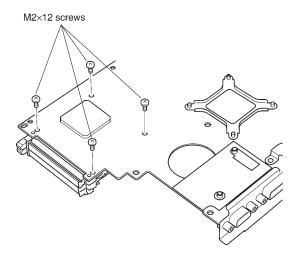
- Remove four M2.5x4 black flat-head screws securing the front cover assembly.
- Remove the front cover assembly.
 Remove the CD SUMI card from PJ7300 on the CD switch board.
 Remove two M2.5x4 black flat-head
- screws securing the CD switch board. Remove the CD switch board from the
- front cover assembly.

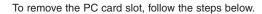




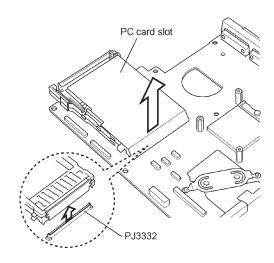


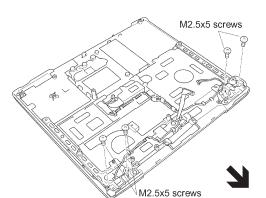






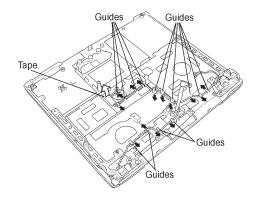
- Lay the system board right side up.
 Remove four M2x12 screws securing the PC card slot.
 Lay the system board right side up.
 Disconnect the PC card slot from PJ3332. 2.

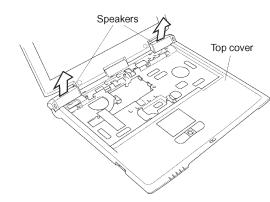


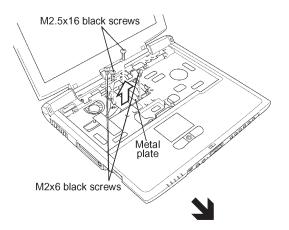


To remove the speakers, follow the steps below.

- Lay the top cover and display assembly upside down.
- Remove four M2.5x5 screws securing the speakers.
- Remove the tape securing the speaker cables.
- Free the speaker cables from their
- guides.
 Remove the speakers.



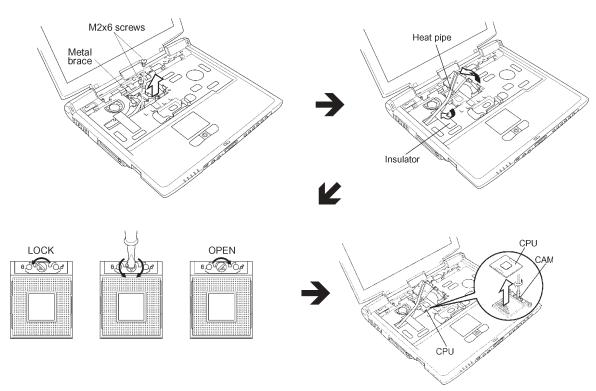




To remove the CPU, follow the steps below.

- Remove two M2.5x6 black screws and two M2.5x16 black screws securing the metal plate.
- Remove the metal plate.
 Remove two M2x6 screws securing the metal brace and lift if out.
- 4. Lift up the heat pipe and lay it on the insulator.
- Turn the cam to the unlock position with a flat-blade screwdriver to unlock the CPU.
- Lift up the CPU.

CAUTION: When you remove the CPU, wipe the grease off the bottom of the heat sink, the bottom of the cooling fan, and the top of the CPU.

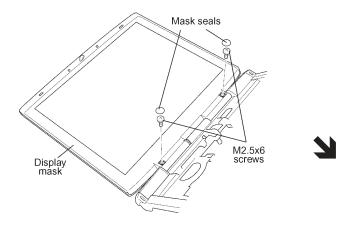




To install the CPU, follow the steps below.

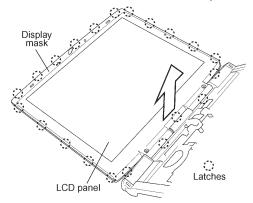
- Make sure the cam is in the open position.
- Seat the CPU in the CPU socket. Be sure the alignment is exact to avoid damaging pins on the CPU.
- Press the interposer gently with your fingers and turn the cam on the CPU socket to the lock position with a flatblade screwdriver to secure the CPU.
- Apply new grease on the CPU.
 Seat the **heat pipe** on the CPU. Be sure the alignment is exact to avoid damaging pins on the CPU.
 Secure the **metal brace** with **two M2x6**
- screws.
- Seat the metal plate and secure it with two M2.5x6 black screws and two M2.5x16 black screws.

CAUTION: When you install the CPU, apply new grease at the top of the chip. Be sure the bottom of the heat pipe covers the top of the CPU.



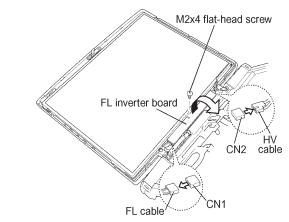
To remove the display mask, follow the steps below.

- Remove two mask seals at the bottom corners of the display assembly.
 Remove two M2.5x6 flat-head screws.
 Release twenty-one latches on the display mask as follows:
- - Five on the bottom
 - Five on each side
 - Six on the top



To remove the FL inverter board, follow the steps

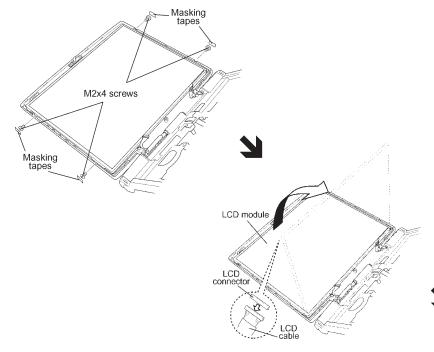
- Remove one M2x4 flat-head screw securing the FL inverter board.
- Rotate the FL inverter board out and disconnect the FL cable from CN1 on the FL inverter board.
- Disconnect the HV cable from CN2 on the FL inverter board.
- Remove the FL inverter board.

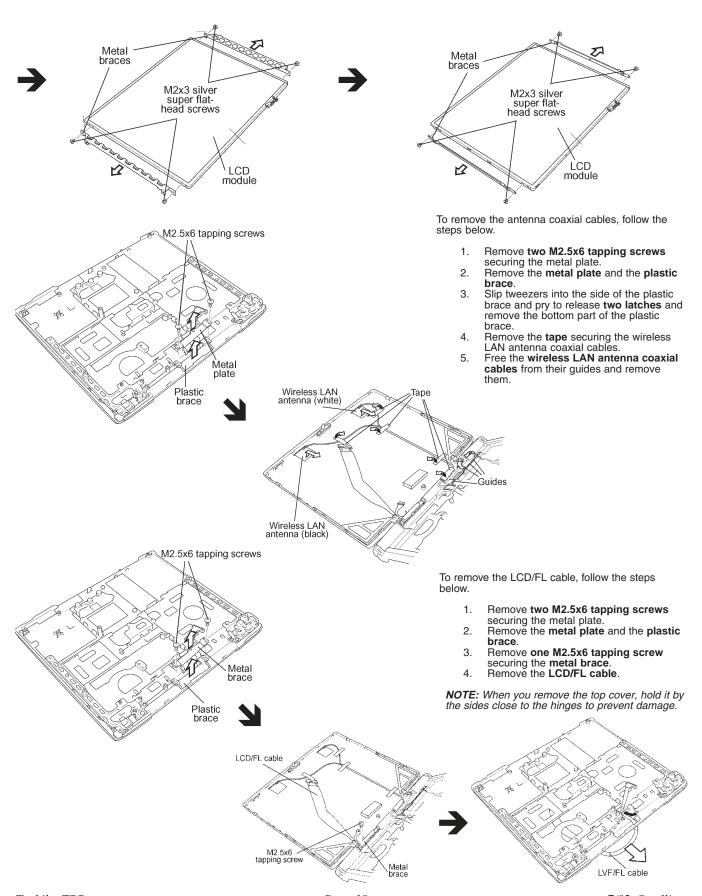


To remove the LCD module, follow the steps below.

- Remove four masking seals that cover the screws.
- Remove four M2x4 screws securing the 2. LCD module.
- Carefully rotate the top of the LCD module out to access the LCD/FL cable. Remove the tape securing the LCD/FL

- Cable.
 Disconnect the LCD/FL cable.
 Remove the LCD module.
 Remove four silver super flat-head M2x3 screws securing two metal braces.





Interrupt Assignments

Interrupt	Level	Assigned to:
_	NMI	RAM Parity Error, I/O Channel Error
	0	Timer
	1	Keyboard
	2	PIC 2 for level 8 to 15
1	3	COM 2/4*
	4	COM 1/3*
	5	LPT 2*, or Secondary IDE*
	6	FDC
	7	LPT 1/3*
	8	RTC
	9	Modem 2nd IRQ*
	10	Reserved
2	11	Reserved
	12	PS/2 Mouse
	13	Math co-processor
	14	Primary IDE*
	15 CD-ROM (ATAPI)*	

^{*} These I/O assignments are controlled by PnP OS or system setup as shown below:

IRQ level	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
IDE				0	0	0		0		0	0	0			•	0
CD-ROM (ATAPI)				0	0	0		0		0	0	0			0	•
Serial Port				•	•	0		0		0	0	0			0	0
Modem 2nd IRQ						0		0		•	0					0
FIR				0	0	0		0		0	0	0			0	0
Parallel Port						0		0		0	0	0			0	0
PCI Bus				0	0	0		0		0	0	0				

⊙: Default setting, O: Possible setting

System Memory Map

Address range	Space (Kbytes)	Use
'00000000' to '0009FFFF'	640	Conventional memory
'000A0000' to '000BFFFF'	128	Video RAM
'000C0000' to '000CFFFF'	64	VGA BIOS-ROM
'000D0000' to '000EFFFF'	128	Not used (PCI/ISA)
'00F0000' to '000FFFFF'	64	System BIOS ROM (Shadow RAM)
'00100000' to '03FDFFFF'	64,384	System working memory
'03FE0000' to '03FEFFFF'	64	ACPI
'03FF0000' to '03FFFFFF'	64	DMI
'04000000' to '0FFFFFF'	196,608 (MAX.)	Optional working memory
'0A)000000' to 'FFFDFFFF	·	Memory expansion in expansion port
'100A0000' to '100FFFFF'	384	System Management RAM and etc
'FFFF0000' to 'FFFFFFF'	1,024	BIOS-ROM (duplicated) and etc

Satellite 1400 Series Input/Output Port Assignments

Port Map

Port address	Device/function	Port address	Device/function
'000' to '01F'	82C37: DMA C #1	'2F8' to '2FF'	Serial Port* (COM 2)
'020' to '03F'	82C59: PIC #1	'300' to '30F'	Not used
'040' to '05F'	82C54: PIT	'310' to '32F'	Not used
'060' to '06F'	KBC / System Status	'330' to '337'	Not used
'070' to 07F'	RTC / NMI Mask Register	'338' to '36F'	Not used
'080' to '09F'	DMA Page Register	'370' to '375'	Not used
'0A0' to '0BF'	82C59: PIC #2	'376' to '377'	Secondary IDE
'0C0' to '0DF'	82C37: DMA C #2	'378' to 37F'	Parallel Port* (LPT1)
'0E0' to '0EF'	Special Register	'380' to '387'	Not used
'0F0' to '0FF'	Math Coprocessor	'388' to '38B'	Not used
'100' to '16F'	Not used	'38C' to '3AF'	Not used
'170' to '177'	Secondary IDE*	'3B0' to '3BB'	VGA
'178' to '1EF'	Not Used	'3BC' to '3BF'	Parallel Port* (LPT3)
'1F0' to '1F7'	Primary IDE*	'3C0' to '3DF'	VGA
'1F8' to '1FF'	Not used	'3E0' to '3E7'	PC Card Contoller
'200' to'207'	Not used	'3E8' to '3EF'	Serial Port* (COM3)
'208' to '21F'	Not used	'3F0' to '3F5'	FDC
'220' to '233'	Sound (SB Pro)	'3F6'	Primary IDE
'234' to '23F'	Not used	'3F7'	FDC / Primary IDE
'240' to '253'	Sound (SB Pro)	'3F8" to '3FF'	Serial Port (COM1)
'254' to '25F'	Not used	'400' to '47F"	Not used
'260' to '263'	Sound (SB Pro)	'480' to '49F'	DMA Hi-Page Register
'264' to '26F'	Not used	'4A0' to '52F'	Not used
'278' to '27F'	Parallel Port* (LPT2)	'530' to '537'	Sound (WSS)
'280' to '293'	Sound (SB Pro)	'540' to '547'	Sound (WSS)
'294' to '2E7'	Not used	'550' to '557'	Sound (WSS)
'2E8' to '2EF'	Serial Port (COM4)	'560' to '567'	Sound (WSS)
'2F0' to '2F7'	Not used		

^{*} These port addresses can be specified by System Setup.