

Service Manual

Notebook Computer

CF-27

Simplified

TOUGHBOOK

Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

Model No. CF-27 1 2 359ZL

1: CPU type

L: for Intel® Mobile Pentium® III Processor 500 MHz

2: LCD type

B: for 12.1" TFT Color

3: HDD type

A: for 10 GB

WARNING


This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®





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Replacement Parts List Comparison Table

Note: Important Safety Notice

Components identified by  mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

CF-27LBA59ZL

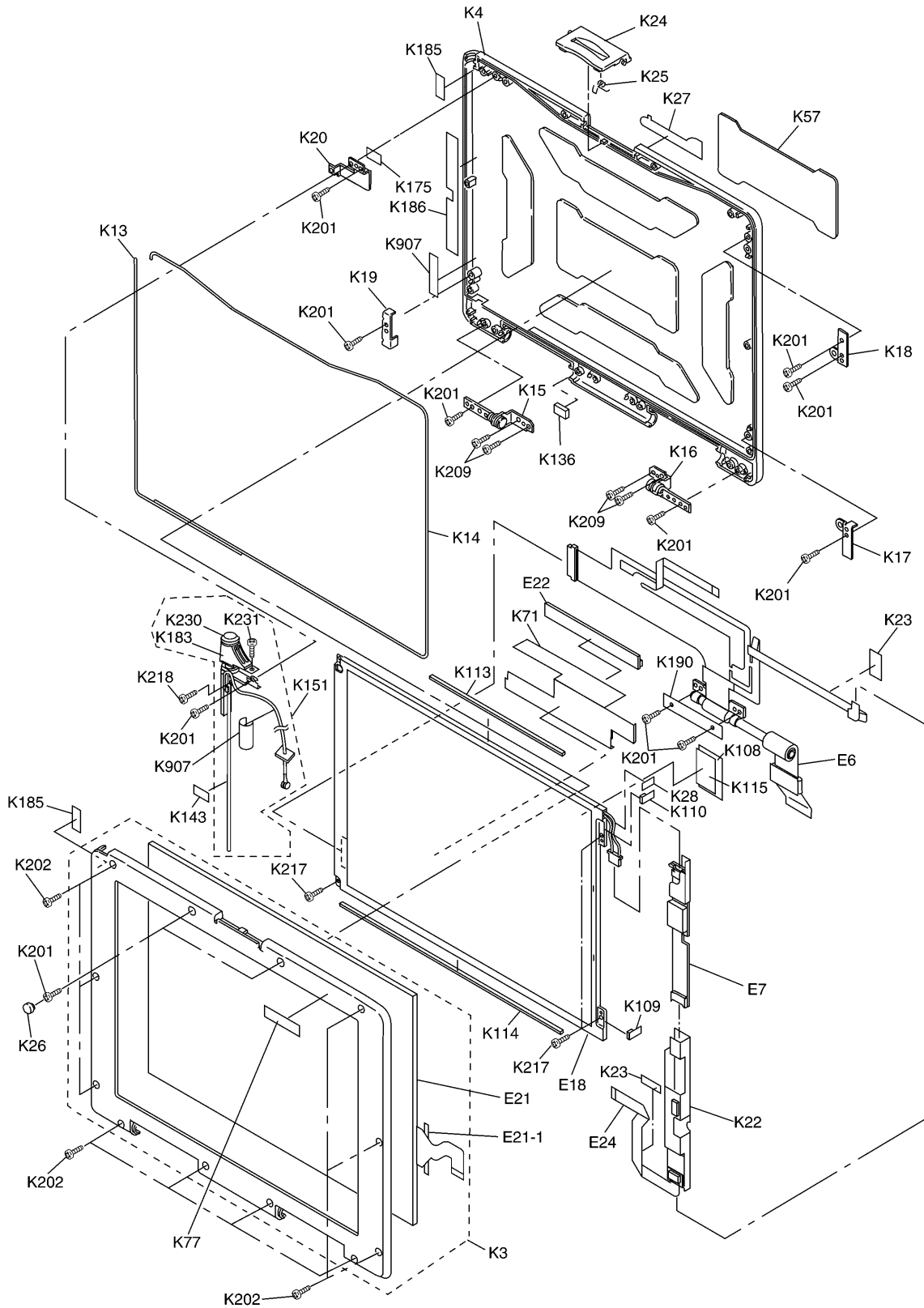
REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY
	CF-27LBEKQCM	CF-27LBA59ZL		
Main Block Unit				
E1 	DL3U11102BAA	DL3U11102DAA	PCB, MAIN RTL	1
E13	N3CABPD00002	N3CABND00008	HDD	1
E15 	DFWV44K0066	-----	ASS'Y, FDD	1->0
E15-1	DFJG065ZA-T	-----	FDD	1->0
E15-2	DFJE9077ZA	-----	FPC	1->0
E15-3	DL3U30956AAA	-----	PCB, FDD CONNECTOR RTL	1->0
E15-4	DFWV84F0075	-----	ASS'Y, CABINET, FDD	1->0
E15-5	DFMD7339ZA	-----	CHASSIS, FDD	1->0
E15-6	DFMD7340ZA	-----	CLAMP, FDD	2->0
E15-7	DFMD7445YA	-----	CLAMP, FDD CONNECTOR PCB	1->0
E15-8	DFMC0407ZA	-----	CONDUCTIVE CUSHION, FDD	2->0
E15-9	XTB2+6GFZ	-----	SCREW	1->0
E15-10	XTB26+8GFZ	-----	SCREW	4->0
E15-11	DFHE5076YA	-----	SCREW	4->0
E15-12	DFGL0018ZC-3	-----	DECORATION, LED	1->0
E15-13	DFGX0179XA-0	-----	FDD BACK PANEL	1->0
E15-14	DFHR4050ZA	-----	TUBE, LED	1->0
E15-15	DFHR5440YA	-----	GUIDE, FDD CONNECTOR	1->0
E15-16	DFHR7490ZB	-----	SHEET, FDD	1->0
E15-17	DFHR8297B	-----	DAMPER, FDD	2->0
E19	DFSX1A87VATR	DFSX1A96WATG	KEYBOARD	1
E26	DL3U11073BAB	DL3U11079CAA	PCB, MODEM	1
E27	DL3U21073BAB	DL3U21079CAA	PCB, RJ11	1
E35	DFWP0098ZA	DFWP0098YA	PCB, WIRELESS	1
E36	DFWP0129ZB	N5HZZ0000006	WIRELESS MODULE	1
E37	DFJS402ZA	-----	SOCKET	1->0
E38	DFJE9106ZA	-----	FPC	1->0
E39-2	DFMD7637YA	-----	RJ11 FIXING METAL	1->0
E101	-----	DFJS405ZA	SOCKET	0->1
E102	-----	DLUP1087A01C	SIM FPC	0->1
Accessories				
A1 	DFQX2810ZC	* OPERATING INSTRUCTION MANUAL		1
A2(M) 	DFJA0047ZAKK	* AC CABLE		1
A100	-----	DFJS535ZA	MODEM CABLE	0->1
A101	-----	DFHR9039ZA-0	STYLUS PEN	0->1
Mechanical Parts				
K2	DFKF8125VD-0	DFKF8125RA-0	ASS'Y CABINET, BOTTOM	1
K2-15	-----	DFWV84F0074	ASS'Y, COVER, FDD (MP)	0->1
K2-42	DFHR7787ZA	-----	RUBBER	2->0
K2-50	DFKE9041ZA-0	-----	ASS'Y, COVER, FDD (MP)	1->0
K2-50-1	DFKE0429XA-0	-----	COVER, FDD (MP)	1->0
K2-50-2	DFHE5025YA	-----	SCREW	2->0
K2-50-3	DFHR7783ZA	-----	RUBBER	1->0
K2-50-4	DFHR7808ZA	-----	RUBBER	1->0
K2-50-5	DFMD2129ZA	-----	MP COVER METAL	1->0
K2-50-6	DFHG1138ZA	-----	CUSHION, FDD (MP)	1->0

K2-50-7	DFKE0523ZA	-----	DOOR, FDD (MP) COVER	1->0
K2-50-8	DFHR7807ZB	-----	RUBBER	1->0
K4	DFWV80C0421	DFWV80C0445	ASS'Y LCD REAR CABINET	1
K29	DFHR7800YA	-----	PACKING A, HDD	1->0
K31	DFHR7801YA	-----	PACKING B, HDD	1->0
K35	DFHR7802YA	-----	PACKING A, BATTERY	1->0
K42	DFHR7803YA	-----	PACKING B, BATTERY	1->0
K45	DFHE0378ZA	-----	GASKET	1->0
K49	DFHE0379ZA	-----	CONDUCTIVE SHEET, ANTENNA	1->0
K55	△ DFGT0789YA	DFGT0687YA	RATING LABEL (A)	1
K57	DFGB0082ZA-0	DFGB0079ZA-0	LOGO BADGE	1
K136	-----	DFHG795ZA	SHEET, ANTENNA CABLE	0->1
K151	DL3MA0144CAB	DL3MA0144AAB	ASS'Y ANTENNA UNIT	1
K154	-----	DFHE0295ZA	K/B - FFC CONTROL SHEET	0->1
K155	-----	DFHE0394ZA	GASKET (A)	0->1
K166	DFMX0779ZA	-----	INSULATION SHEET	1->0
K169	DFHR1059YA	-----	SHEET	1->0
K187	DFHR7871ZA	-----	SPACER, HDD AIR HOLE	1->0
K230	N1AAB1000002	N1AAB1000001	ELEMENT, ANTENNA	1
K300	DFHE0474ZA	-----	CONDUCTIVE CLOTH	1->0
K902	-----	DFMC0537ZC	GASKET (B)	0->1
K903	-----	DFMC0685ZA	CONDUCTIVE CLOTH, LCD	0->1
K904	-----	DFMC0743ZA	WAVE ABSORBER	0->1
K905	-----	DFMX0903ZA	TAPE	0->1
K906	-----	DFHR3325ZA	CUSHION SHEET	0->1
K907	-----	DFHE0533ZA	GASKET	0->2
K908	-----	DFQT9697YA	WIRELESS CE LABEL	0->1
K910	-----	DFMD7648ZA	GSM ANGLE	0->1
K911	-----	DFMC0591ZA	ELECTRIC WAVE ABSORPTION SHEET	0->1
K912	-----	DFMX0773ZA	FPC FRICTION TAPE	0->1
K913	-----	DFMX0784ZA	MODEM MODULE SHEET	0->2
K914	-----	DFHE0354ZA	CONDUCTIVE CLOTH	0->1

Electrical Replacement Parts List

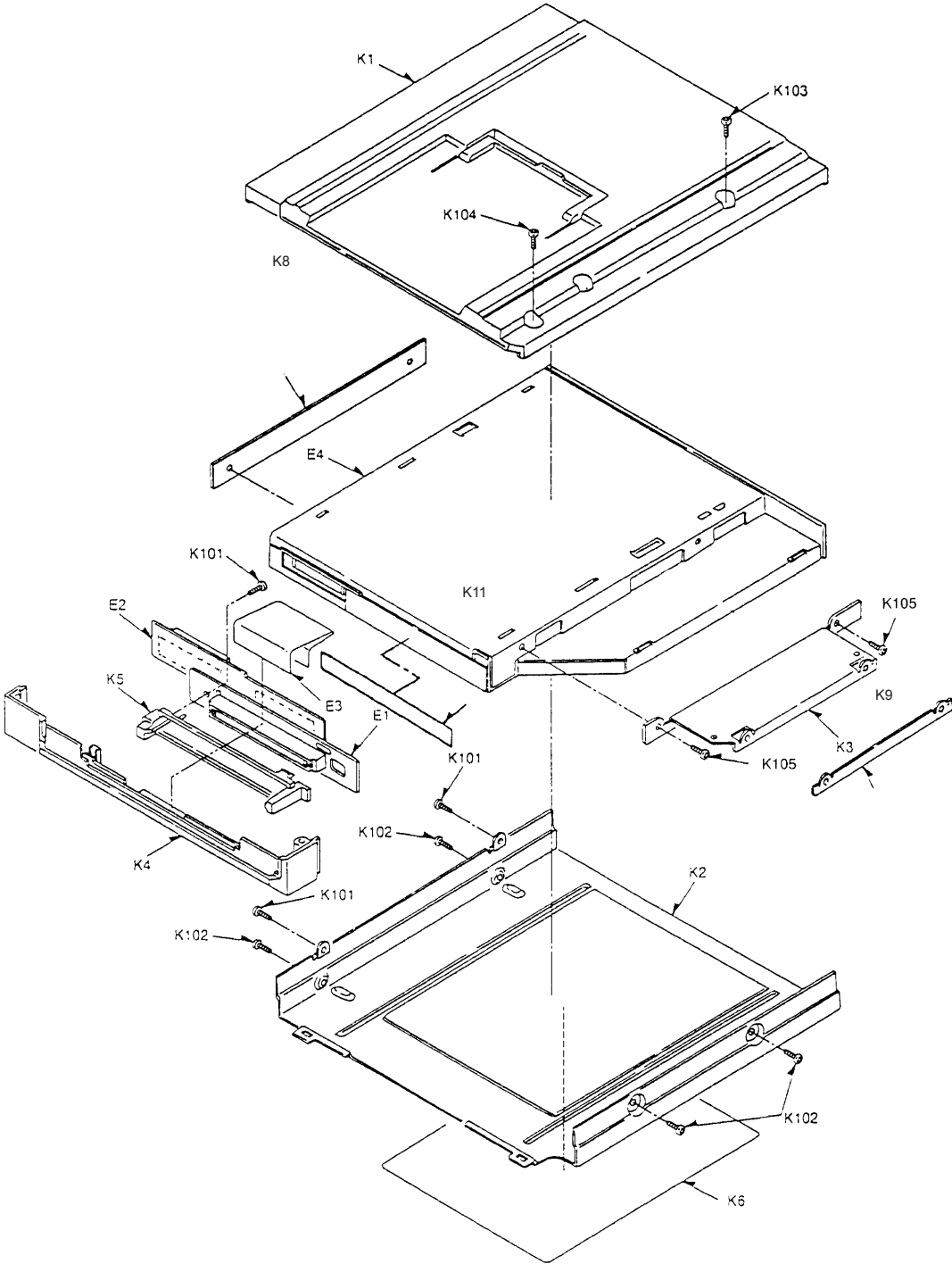
REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY	
	CF-27LBKQCM	CF-27LBA59ZL			
Main PCB					
C 352 353	ECUV1H150JCV		CAPACITOR, (ADDITION)	1->3	
IC 80 81 82 83	C3ABQG000025		IC, SDRAM, (DELETION)	8->4	
FDD Connector PCB					
C 760	ECUV1C104ZFV	-----	CAPACITOR, (DELETION)	1->0	
CN 760	DFJS250YA100	-----	CONNECTOR, (DELETION)	1->0	
CN 761	DFJS013ZA026	-----	CONNECTOR, (DELETION)	1->0	
IC 760	DA7S04UT85L0	-----	IC, INVERTER GATE	1->0	
RJ11 PCB					
CN 11	DFJP238ZA002	-----	CONNECTOR	1->0	
CN 5	-----	DFJP238ZA002	CONNECTOR	0->1	
CN 10	DFJP02C75YAJ	-----	CONNECTOR	1->0	
CN 6	-----	DFJP02C75YAJ	CONNECTOR	0->1	
CD-ROM DRIVE CF-VCD271W					
REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY	
	CF-27LBKQCM	CF-27LBAG9ZL			
Main Block Unit					
E1	-----	DL3U10991AAA	PCB, CONNECTOR (A)	RTL	0->1
E2	-----	DL3U20991AAA	PCB, CONNECTOR (B)	RTL	0->1

E3	-----	DFJE50N035BH	FPC	0->1
E4	-----	N3DAA1A00002	DRIVE, CD-ROM	0->1
Mechanical Parts				
K1	-----	DFGX0206WA-0	CABINET , TOP	0->1
K2	-----	DFMD7446YA	CHASSIS	0->1
K3	-----	DFMD3064YA	CLAMP , CD-ROM DRIVE	0->1
K4	-----	DFGX0207ZA-0	CABINET , BACK PANEL	0->1
K5	-----	DFHR5440ZA	GUIDE , CONNECTOR PCB (A)	0->1
K8	-----	DFHR7614ZA	SPACER (1)	0->1
K9	-----	DFHR7615ZA	SPACER (2)	0->1
K11	-----	DFMX0501YA	CN INSULATION SHEET	0->1
K101	-----	XTB2+6GFZ	SCREW	0->3
K102	-----	DFHE5067YA	SCREW	0->4
K103	-----	XYN26+J6FZ	SCREW	0->1
K104	-----	XTB26+8GFZ	SCREW	0->1
K105	-----	DXQT2+D25FNM	SCREW	0->2
K106	-----	DFHR7848YA	BUTTON COVER	0->1
CONNECTOR (A) PCB				
CN101	-----	DFJS250YA100	CONNECTOR, EXPANSION BUS	0->1
CN102	-----	DFJS120ZA050	CONNECTOR, CONNECTOR (B) PCB	0->2
CONNECTOR (B) PCB				
C202	-----	ECUV1C104ZFV	CAPACITOR, 16V, 0.1 μ F	0->1
CN201	-----	DFJS315XA050	CONNECTOR, DRIVE	0->1
CN202	-----	DFJS120ZA050	CONNECTOR, CONNECTOR (A) PCB	0->1
Note: About parts which written "*" above, please order to Computer Products Europe (CPE) written below. Matsushita Electric (U.K.) Ltd. Computer Products Europe (CPE) TEL : +44-1222-736060 FAX : +44-1222-735500				



CF-27LBA59ZL

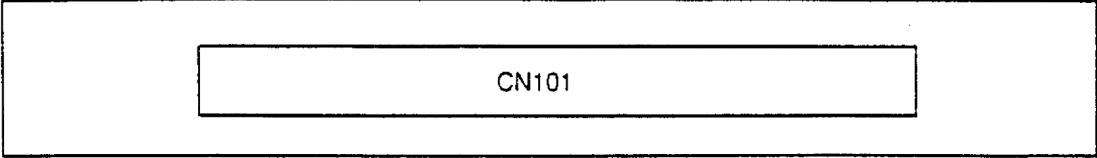
Exploded View



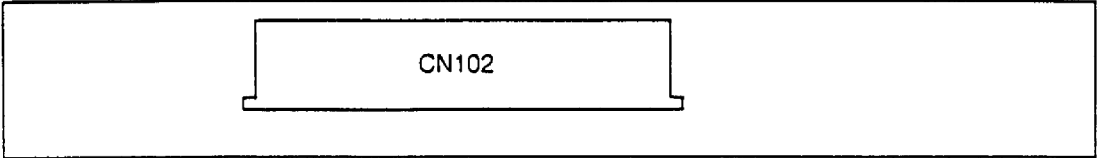
Printed Circuit Board

Connector (A) PCB

<Top View>



<Bottom View>



Connector (B) PCB

<Bottom View>

