

CD AUTO CHANGER PLAYER

KDC-CMP21V

SERVICE MANUAL

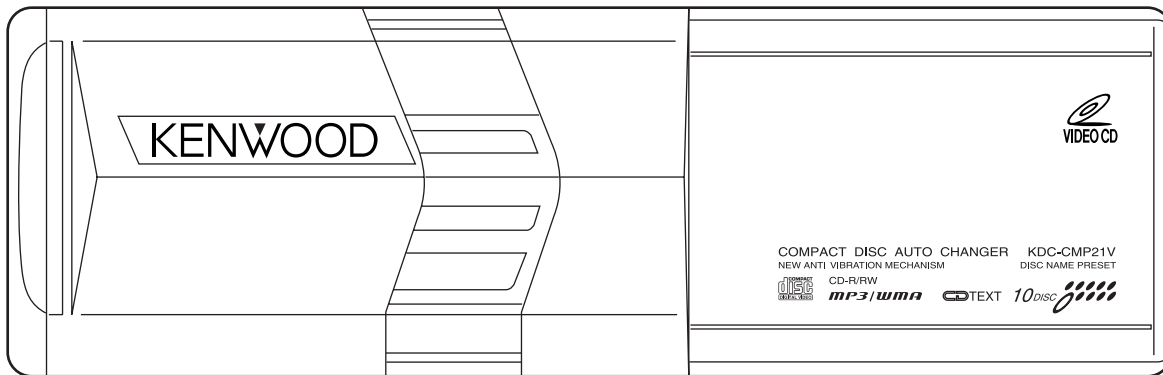
KENWOOD

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B53-0163-00 (N) 428

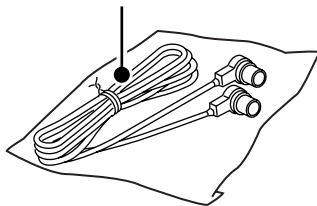
The MECHANISM OPERATION is the same as model KDC-C660.
Please refer to the service manual of model KDC-C660 (B51-7105-00).

Service jig	Parts No.
For initial position setting	W05-0635-00

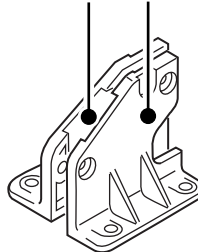
When transporting this model, always attach CAUTION CARD and STEPPED SCREW (for transportation).



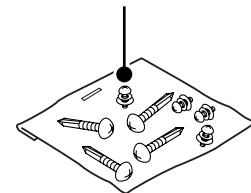
Cord with plug
(E30-4291-05)
(E30-4711-05)
(E30-6358-05)



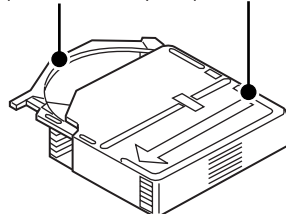
Bracket (L) (J19-5018-03) Bracket (R) (J19-5019-03)



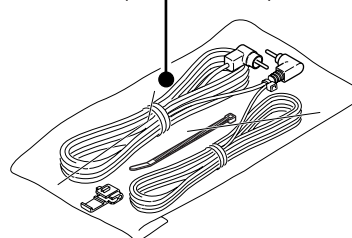
Screw set
(N99-1645-15)



Tray (J99-0614-01) Holder assy (J19-5146-02)

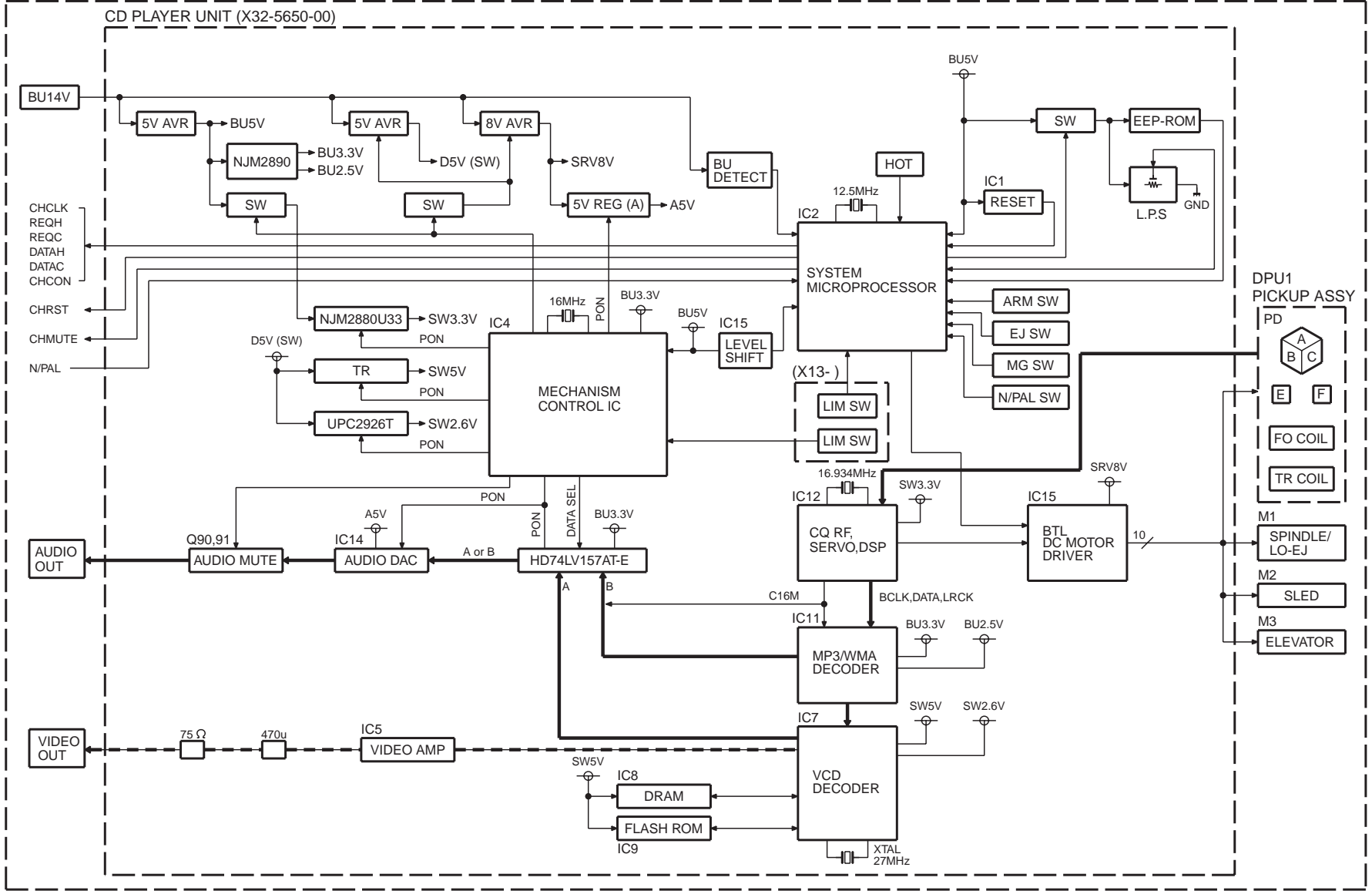


Cord with pinjack
(E30-6351-05)



MECHANISM ASSY (X92-4950-00)

CD PLAYER UNIT (X32-5650-00)



BLOCK DIAGRAM

COMPONENTS DESCRIPTION

● CD PLAYER UNIT (X32-5650-00)

Ref. No.	Application / Function	Operation / Condition / Compatibility
IC1	Reset IC	System microprocessor reset control IC
IC2	System microprocessor	Communication to head unit and control for mechanism control IC
IC3	EEPROM	LPS data backup memory (for MD position)
IC4	Mechanism control IC	Control for Mechanism assy, servo IC and MP3/WMA decoder
IC5	Video amp	Video amp for composite video signal
IC6	AVR	2.6V (for IC7 VCC)
IC7	Video decoder	Video CD decoder IC
IC8	DRAM	For playback video data
IC9	Flash ROM	Program memory for VCD decode
IC10	Selector	Select for VCD line or MP3/WMA data line
IC11	Decoder	MP3/WMA decoder IC
IC12	CD servo IC	RF amplifier built in digital servo and data processor IC
IC13	AVR	5.0V (for audio and IC14 VDD)
IC14	Audio DAC	Audio DA converter
IC15	Motor driver	Focusing coil, tracking coil, spindle motor and sled motor driver
IC16	AVR	5.0V (for IC7 VDD)
IC17	AVR	3.3V, 2.5V (for BU), IC4, IC11 VDD
IC18	AVR	3.3v (for IC12 VDD)
Q1,2	SW	AVR 8V control SW
Q3,6	SW	AVR 6.2V control SW
Q5	Driver	AVR 5V driver
Q7	SW	Select for 8V and 7V voltage
Q8	Driver	AVR 6.2V driver
Q11	Driver	AVR 8V driver
Q12	BU det	Backup line voltage detector
Q20	Parking det	Parking SW detector
Q21	Reset SW	Reset control SW (for system microprocessor)
Q22	SW	Changer muting control
Q23	SW	Changer control SW
Q24	SW	AVR 5V control SW
Q25,26	Level shift	Voltage level shift (5.0V→3.3V, 3.3V→5.0V)
Q27,28	Audio muting SW	Q27 (for Lch), Q28 (for Rch)
Q40	SW	System reset for IC4
Q52	SW	System reset for IC7
Q70	Selector SW	Selector IC control SW
Q71	VC SW	Control for Q73
Q72	LD SW	Control for APC
Q73	VC SW	Eccentric disc SW (for sub beam F)
Q90~93	Audio muting SW	Q90,93 (Rch), Q91,92 (Lch)
Q100	Vref selector	Select for internal Vref or external Vref

KDC-CMP21V

MICROCOMPUTER'S TERMINAL DESCRIPTION

● SYSTEM MICROPROCESSOR : 784214AGC-204 (X32: IC2)

Pin No.	Pin Name	I/O	Description / Processing Operation
1	PON	O	Power control output terminal (L : AVR power ON)
2	NC	O	NC (open)
3	/MSTOP	O	Mechanism stop signal output terminal (L : Mechanism stop, H : NORMAL)
4	PARK SW	I	Parking SW detect input terminal (H : Monitor ON, L : Monitor OFF)
5	NTSC/PAL	I	NTSC/PAL select terminal (H : PAL, L : NTSC)
6	RST	O	Servo IC reset signal output terminal (L : Reset)
7	/MUTEIN L	I	Lch muting signal input terminal (L : Muting ON)
8	/MUTEIN R	I	Rch muting signal input terminal (L : Muting ON)
9	VDD	-	BU5V (for ADC)
10	X2	-	X'tal 12.5MHz
11	X1	-	X'tal 12.5MHz
12	VSS	-	GND
13,14	XT2,XT1	-	NC
15	/RESET	I	Reset signal input terminal (L : Reset)
16	NC	-	NC
17	MGSW	I	Magazine in SW input terminal (H : Magazine pack in)
18	EJSW	I	Eject SW input terminal (H : Eject SW ON)
19	COMMSW	I	Select for OLD or NEW 5L line system control
20	NC	-	NC
21	CH-CON	I	Changer control for Head unit (H : System ON)
22	BUDET	I	Backup line voltage detect input terminal (H : Momentary power down)
23	AVDD	-	VDD for A/D converter (BU5V)
24	AVREF0	I	Vref for A/D converter (Sys 5V)
25	HOT	I	Rise in temperature detect input terminal (Detect level : 4V (90°C))
26	LPS	I	Mechanical deck position detect input terminal
27	LOESW	I	Loading in SW input terminal (L : Loading complete)
28	NC	-	NC
29	TOFF	I	Tracking OFF mode detect terminal (H : Tracking OFF)
30	SRVSEL	I	Servo active mode terminal (No mechanism movement, H : Servo active mode)
31	SLNSA	I	SLED non-sensitive area ON/OFF terminal (L : Seld non-sensitive ON)
32	ADJSEL	I	Servo automatic adjustment ON/OFF terminal (L : Servo adjustment ON)
33	AVSS	-	GND
34,35	NC	-	NC
36	AVREF1	I	Vref for A/D converter (BU 5V)
37~39	NC	-	NC
40	DATAH	I	Data input terminal (for Head unit)
41	DATAC	O	Data output terminal (for Changer unit)
42	HCLK	I/O	Communication clock (for Head unit)
43	REQC	O	Communication request to Head unit
44	CHMUTE	O	Audio muting signal to Head unit (L : Muting ON)
45	/MUTE L	O	Lch audio muting signal output terminal (L : Muting ON)

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Description / Processing Operation
46	/MUTE R	O	Rch audio muting signal output terminal (L : Muting ON)
47~71	NC	-	NC
72	VSS	-	VSS
73~75	NC	-	NC
76	ELVADJ	I	Mechanism deck position adjustment mode select terminal (L : Adjustment mode)
77~80	NC	-	NC
81	VDD	-	VDD (BU 5V)
82	NC	-	NC
83	REQH		Communication request from Head unit
84	SP/LO+	O	Spindle/Loading motor control terminal
85	SP/LO-	O	Spindle/Loading motor control terminal
86	ELV+	O	Elevator motor control terminal
87	ELV-	O	Elevator motor control terminal
88,89	NC	-	NC
90,91	TEST1,TEST2	I	Test mode terminal
92	8V/7V	O	Mechanism driver IC control terminal
93	EPPWR	I	EEPROM writing mode control terminal (H : Writing, L : NORMAL)
94	TEST/VPP	I	Flash ROM program mode control terminal
95	DATA	I/O	Serial data communication to mechanism control IC
96	/CLK	I/O	Serial clock communication to mechanism control IC
97	SDA	I/O	EEPROM data I/O terminal
98	SCL	O	EEPROM clock output terminal
99	NC	-	NC
100	ARMSW	I	ARM SW detector (H : Arm SW ON)

● MECHANISM CONTROL IC : 91CW12AFG-5DN4 (X32 : IC4)

Pin No.	Pin Name	I/O	Description / Processing Operation
1	VREFL	I	Reference V input terminal (for ADC)
2	AVSS	-	GND (for ADC)
3	AVCC	-	BU3.3V (for ADC)
4	NC	O	NC (open)
5	$\overline{20RST}$	O	Reset control terminal (for decoder, L : RESET, H : NORMAL)
6	20ACK	I	Acknowledge signal input terminal (for decoder)
7	20STBY	O	Stand-by control terminal (for decoder, H : STAND BY, L : NORMAL)
8,9	NC	O	NC (open)
10	20INT	I	Interrupt signal input terminal (for decoder)
11	FOGUP	I	Focus gain interrupt input terminal (H : Fo gain UP, L : NORMAL)
12	LZM	I	0bit MUTE detect (Lch) (L : MUTE OFF, H : MUTE ON)
13	RZM	I	0bit MUTE detect (Rch) (L : MUTE OFF, H : MUTE ON)
14,15	NC	O	NC
16	$\overline{20CS}$	O	Chip select signal output terminal (for decoder)
17	$\overline{20LP}$	O	Latch pules signal output terminal (for decoder)

KDC-CMP21V

MICROCOMPUTER'S TERMINAL DESCRIPTION

Pin No.	Pin Name	I/O	Description / Processing Operation
18	20TXD0	I/O	Serial data signal output terminal (for decoder)
19	20RXD0	I	Serial data signal input terminal (for decoder)
20	20SCLK0	O	Serial data clock output terminal (for decoder)
21	DSPTXD1	O	Serial data signal output terminal (for DSP)
22	DSPRXD1	I	Serial data signal input terminal (for DSP)
23	DSPSCLK1	O	Serial data clock output terminal (for DSP)
24	AM0	I	Select for ROM mode (H : NORMAL, L : External ROM mode)
25	DVCC	-	BU3.3V
26	X2	O	X'tal 16MHz
27	DVSS	-	GND
28	X1	I	X'tal 16MHz
29	AM1	I	Fixed H
30	$\overline{\text{RESET}}$	I	Reset input terminal (L : RESET, H : NORMAL)
31~34	NC	O	NC
35	$\overline{\text{DSPSTB}}$	O	Data strobe signal output terminal (for DSP)
36	DSPA0	O	Command, parameter select signal (for DSP) (H : Parameter, L : Command)
37	$\overline{\text{DSPRST}}$	O	Reset control output terminal (for DSP)
38	DSPINT	I	Interrupt signal input terminal (for DSP) (H : Interrupt)
39	/DAC RESET	O	Reset signal output terminal (for DSP) (L : RESET, H : NORMAL)
40	SEARCH	O	Search condition output terminal (H : Search, L : NORMAL)
41	LOE/LIM_SW	I	SLT SW detect input terminal (H : Inside)
42~45	NC	O	NC
46	PONE5	O	+5V power supply control (for video) (H : POWER ON)
47	PONE2.5	O	+2.5V power supply control (for video) (H : POWER ON)
48~60	NC	O	NC
61	/DAC PD	O	DAC RESET (L : RESET, H : NORMAL)
62	DVSS	-	GND
63	$\overline{\text{NMI}}$	I	Request for non maskable interrupt signal input terminal
64	DVCC	-	+VCC
65	DAC MUTE	O	DAC MUTE control terminal (H : MUTE, L : MUTE OFF)
66	DAC PON	O	Audio power supply (for DXM6550) (H : Power ON)
67	PONA5	O	+5V Audio power supply (for DXM6550) (H : Power ON)
68	$\overline{\text{ESRST}}$	O	Reset signal output terminal (for ES3890) (L : RESET, H : NORMAL)
69	VMUTE	O	VIDEO MUTE control terminal (H : MUTE, L : MUTE OFF)
70	NC	O	NC
71	SELINT	O	Video/Audio select output terminal (H : NORMAL, L : Interrupt)
72	ASEL0	O	Audio signal output select terminal 0 (00 : STEREO, 01 : Lch)
73	ASEL1	O	Audio signal output select terminal 0 (10 : Rch, 11 : Not function)
74	$\overline{\text{NT/PAL}}$	O	NTSC/PAL selector (L : NTSC, H : PAL)
75	DATASEL	O	20F/ES3890 output select (H : 20F, L : ES3890)
76,77	NC	O	NC
78	NC (BOOT)	I	Flash memory writing terminal (L : Writing, H : NORMAL)

MICROCOMPUTER'S TERMINAL DESCRIPTION

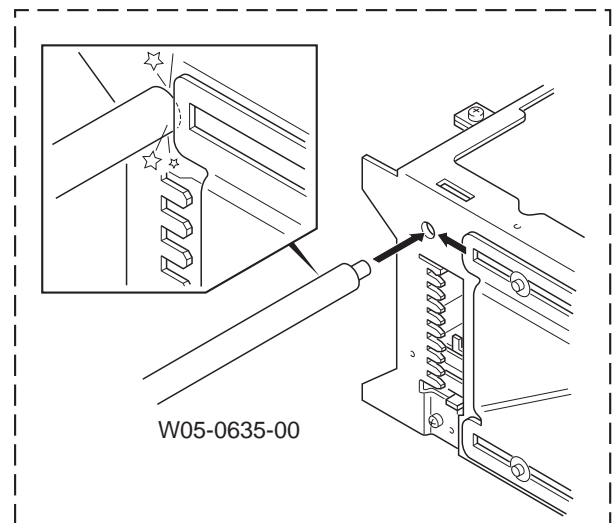
Pin No.	Pin Name	I/O	Description / Processing Operation
79,80	NC	O	NC
81	POND3.3	O	D3.3V POWER ON control terminal (H : POWER ON)
82	MUTEL	O	Audio muting control terminal (Lch)
83	MUTER	O	Audio muting control terminal (Rch)
84	SDA	I/O	I2C data (for system microprocessor)
85	SCL	I/O	I2C clock(for system microprocessor)
86	MSTOP	I	Interrupt for stand-by condition (L : STOP, H : NORMAL)
87	NC	O	NC
88	DMUTE	O	Driver muting (L : MUTE ON, H : MUTE OFF)
89	DVCC	-	VDD
90	NC	O	NC
91	DVSS	-	GND
92~94	NC	I	NC
95	VCDSEL	I	Video CD operation control terminal
96	ASEL	I	Audio output polarity control terminal (H : Reversal output, L : Normal output)
97	CHSEL	I	Destination input terminal (H : Changer, L : Normal)
98	SEL0	I	Destination input terminal (L,L : DXM-6540, L,H : DXM6550)
99	SEL1	I	Destination input terminal (H,H : DXM6560)
100	VREFH	I	Reference voltage input terminal (for ADC : BU3.3V)

ADJUSTMENT

● L.P.S. initial position adjustment procedure

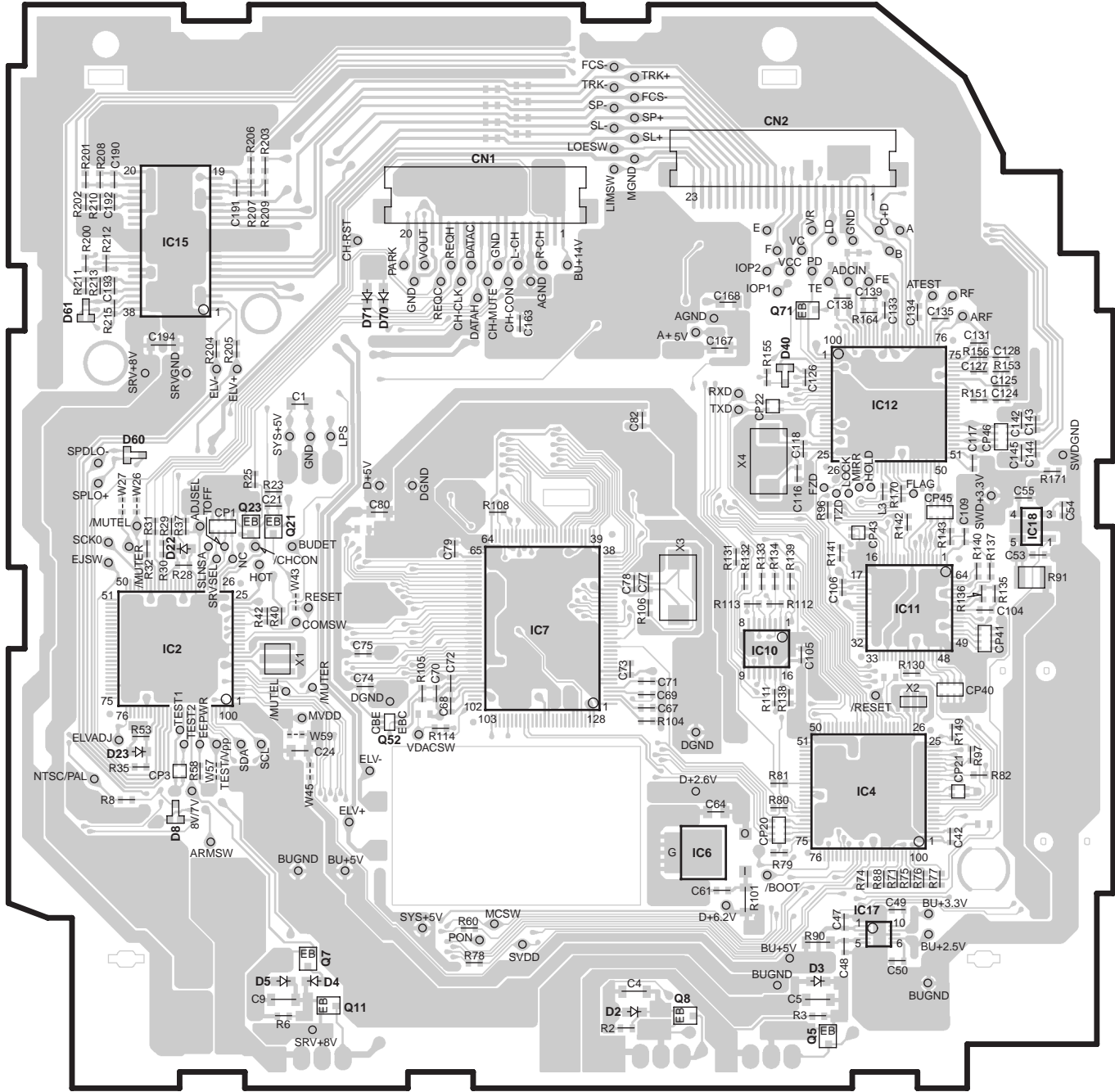
1. Connect the changer to the HEAD UNIT (H/U).
2. While holding the magazine eject button of the changer, press the reset button of the H/U.
3. After about 3 seconds, release the magazine eject button.
4. Press the SRC button of the H/U to enter the CD-CH mode, and the H/U's display section indicates "E-88".
5. Move the mechanism deck to around the 1st stage by pressing the DISC- or DISC+ button.
6. Insert the adjustment tool (W05-0635-00) into the tool hole on the changer mechanism.
7. Then press the DISC+ button to move the mechanism deck until the mechanism's slider hits the adjustment tool.
8. When the motor locks (stops), press the REPEAT key of the H/U.

When the REPEAT key is pressed, the mechanism moves automatically to the 1st stage and the initial position adjustment completes. (The data is written in the EEPROM at this time.)



KDC-CMP21V PC BOARD (COMPONENT SIDE VIEW)

CD PLAYER UNIT X32-5650-00 (J74-1644-11)



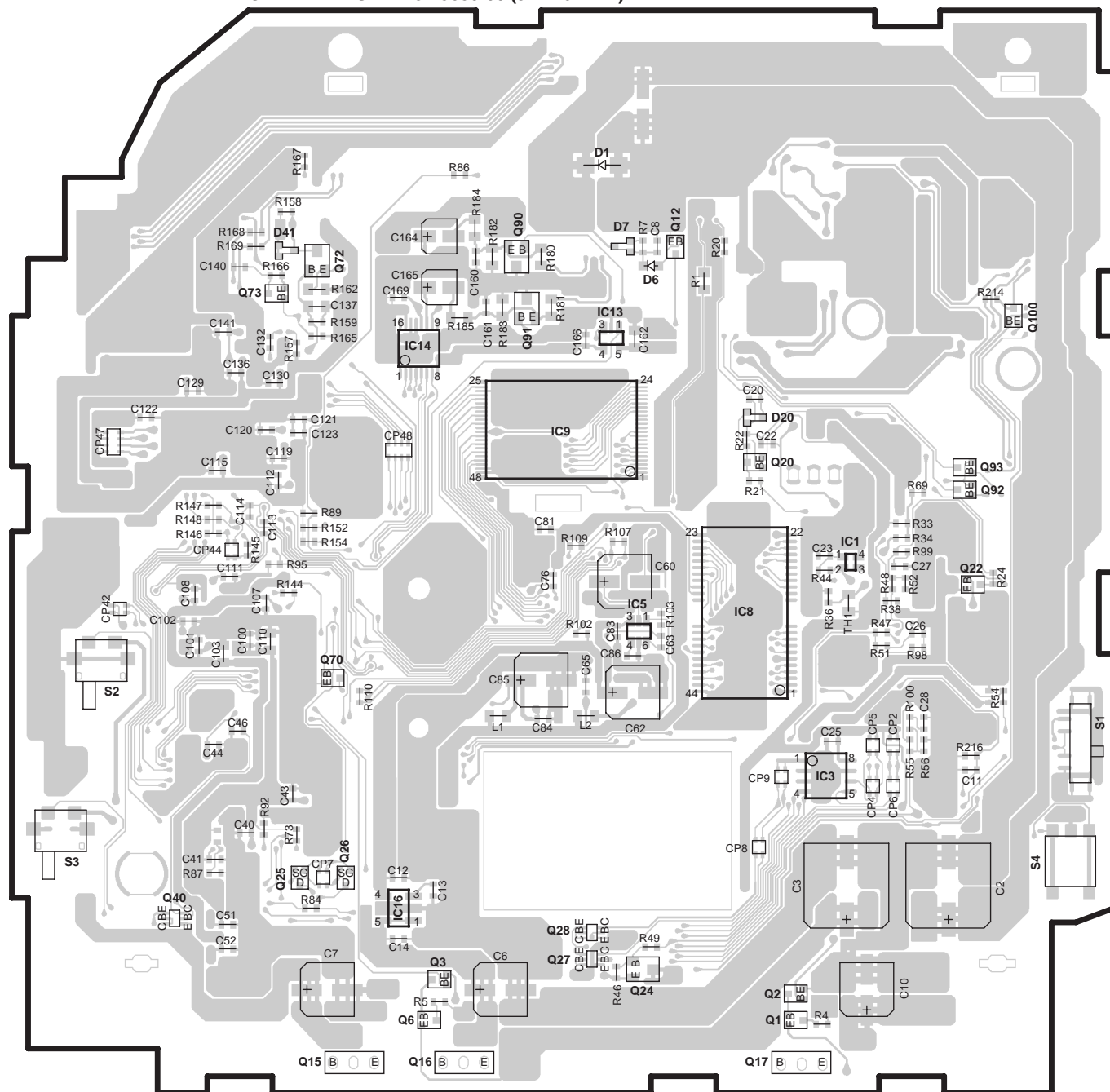
X32-5650-00

Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC2	4B	IC12	3E	Q8	5D
IC4	5D	IC15	2B	Q11	5B
IC6	5D	IC17	5D	Q21	3B
IC7	4C	IC18	3E	Q23	3B
IC10	4D	Q5	6D	Q52	4B
IC11	4E	Q7	5B	Q71	3D

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (FOIL SIDE VIEW)

CD PLAYER UNIT X32-5650-00 (J74-1644-11)



X32-5650-00

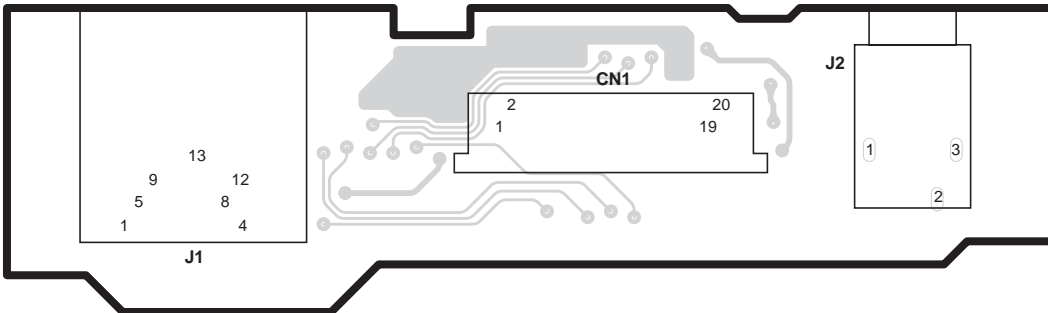
Ref. No.	Address	Ref. No.	Address	Ref. No.	Address	Ref. No.	Address
IC1	4I	Q1	5I	Q25	5G	Q90	2H
IC3	4I	Q2	5I	Q26	5G	Q91	3H
IC5	4H	Q3	5G	Q27	5H	Q92	3J
IC8	4I	Q6	5G	Q28	5H	Q93	3J
IC9	3H	Q12	2H	Q40	5F	Q100	3J
IC13	3H	Q20	3I	Q70	4G		
IC14	3G	Q22	4J	Q72	2G		
IC16	5G	Q24	5H	Q73	3G		

Refer to the schematic diagram for the values of resistors and capacitors.

KDC-CMP21V

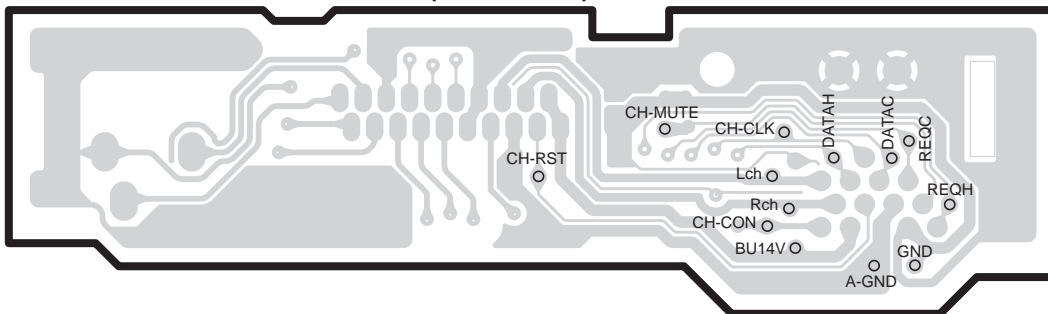
PC BOARD
(COMPONENT SIDE VIEW)

SUB CIRCUIT UNIT B X16-2800-00 (J74-1643-12)



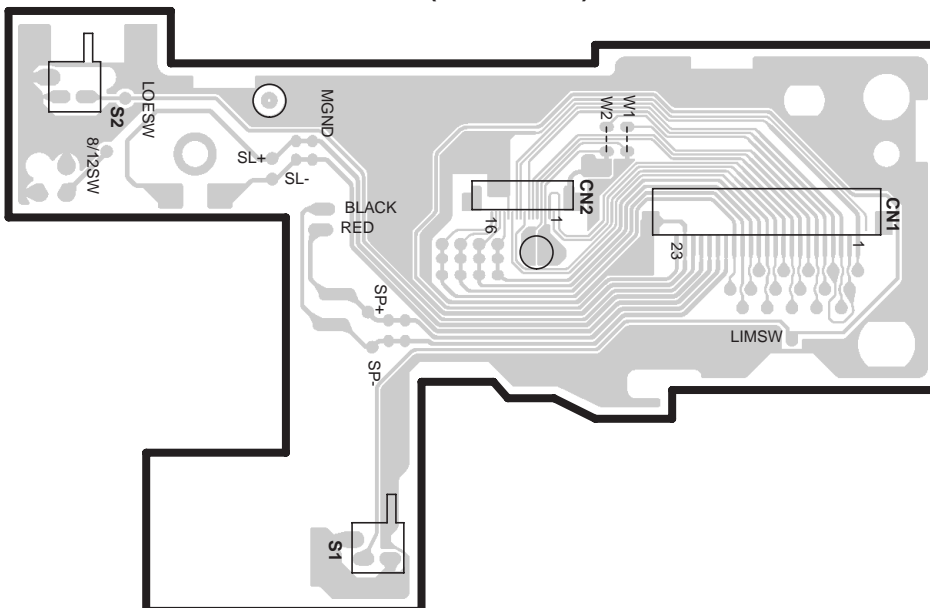
(FOIL SIDE VIEW)

SUB CIRCUIT UNIT B X16-2800-00 (J74-1643-12)



(COMPONENT SIDE VIEW)

SUB CIRCUIT UNIT A X16-1010-00 (J74-1153-01)



Refer to the schematic diagram for the values of resistors and capacitors.

1

2

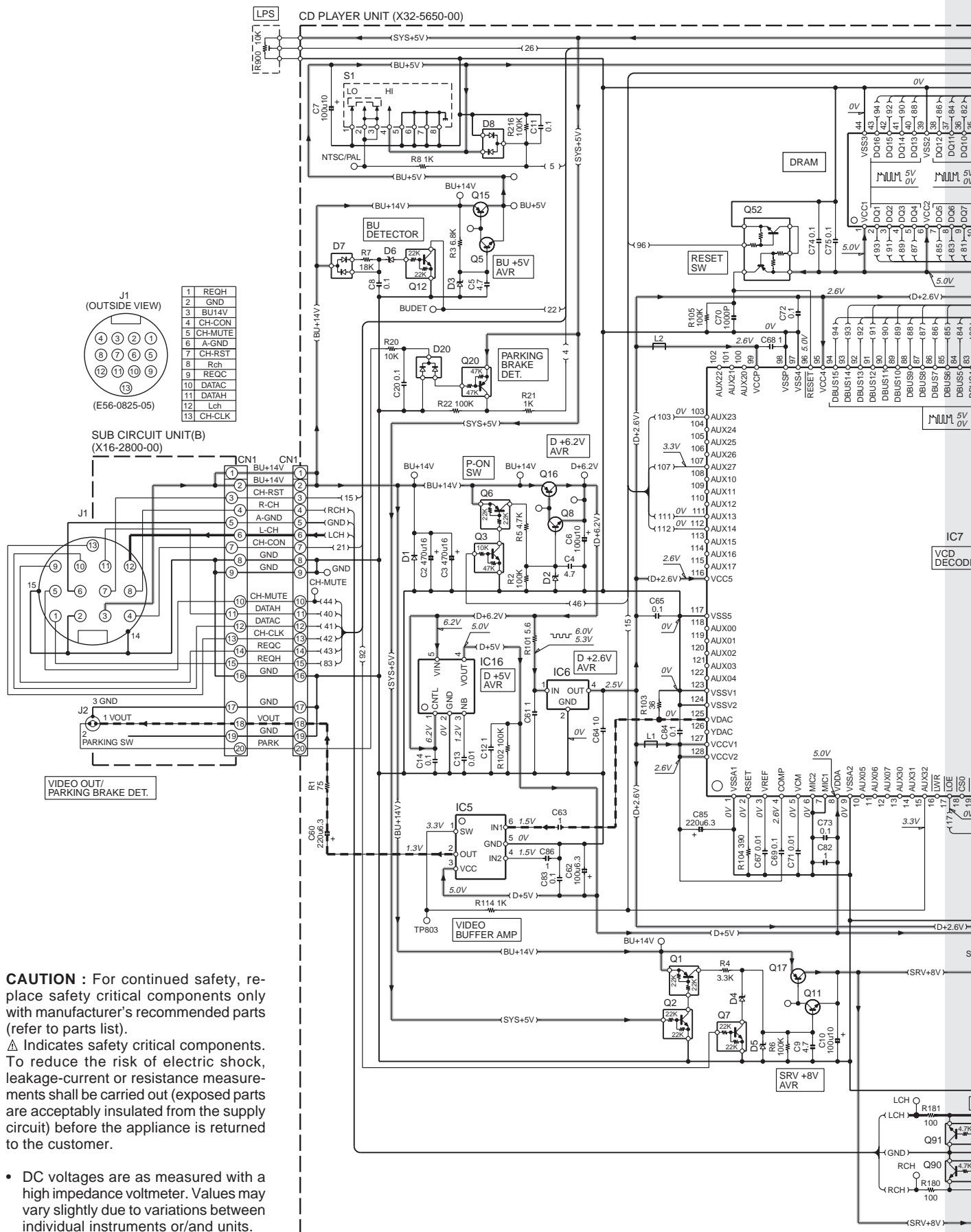
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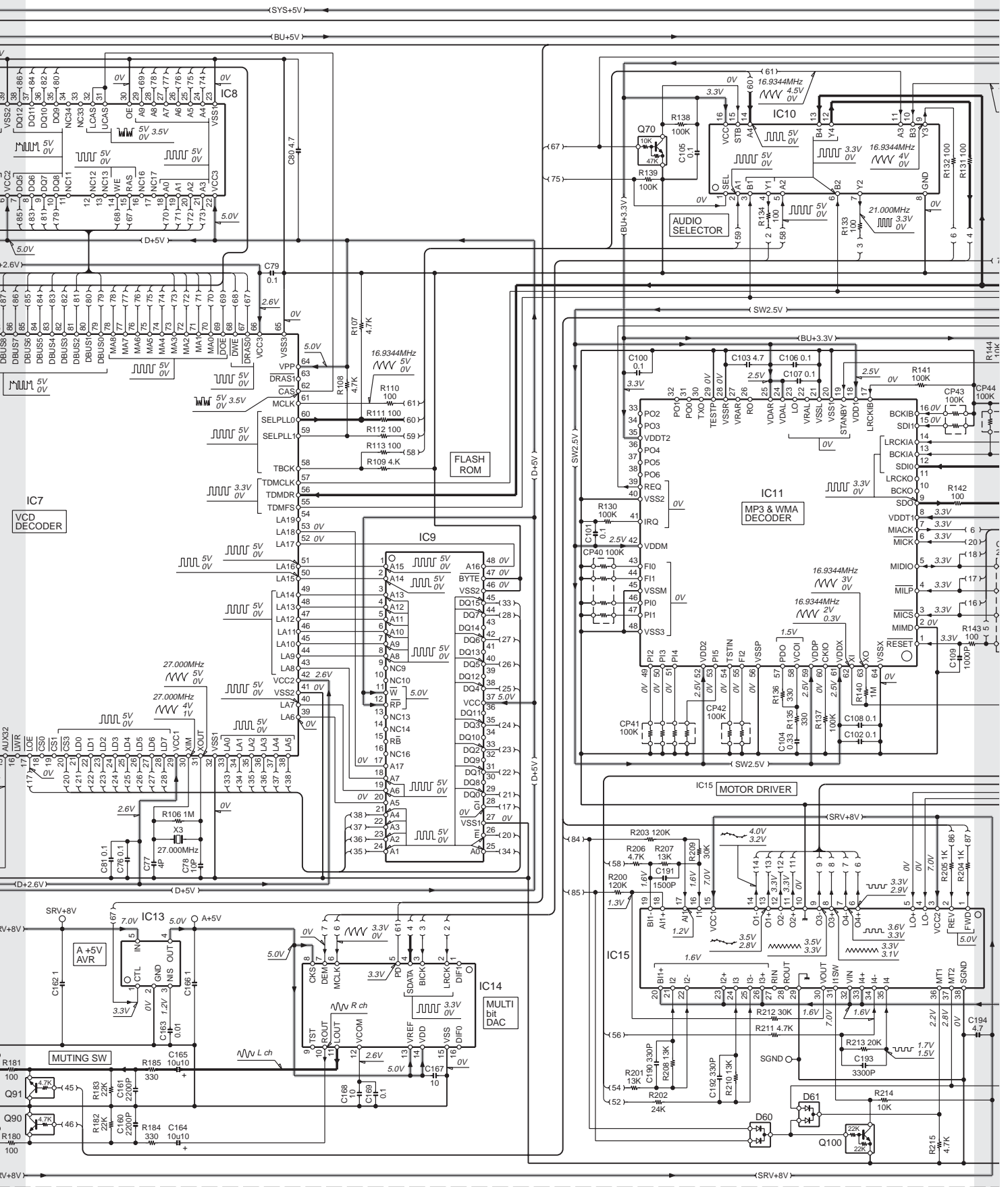


CAUTION : For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

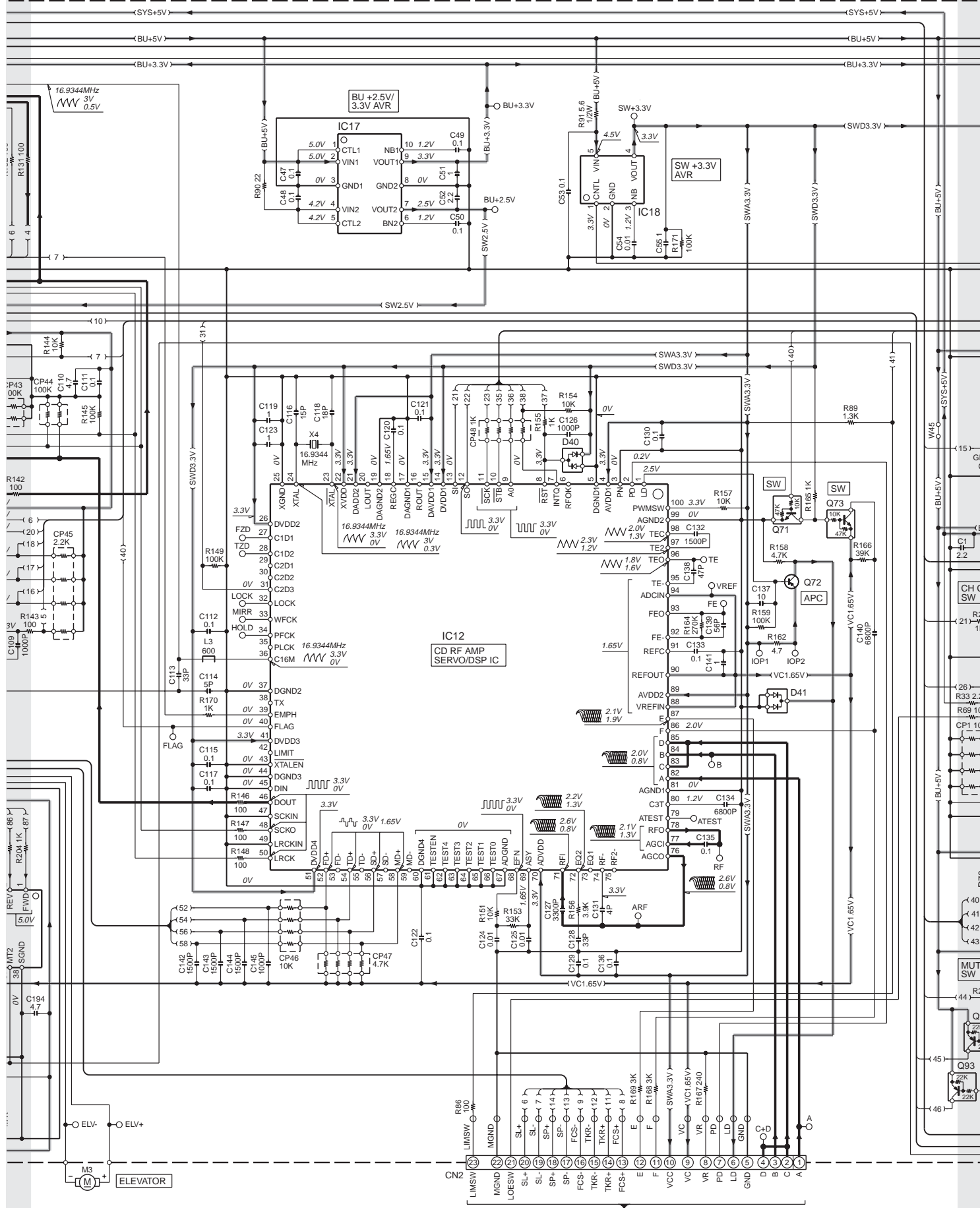
△ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

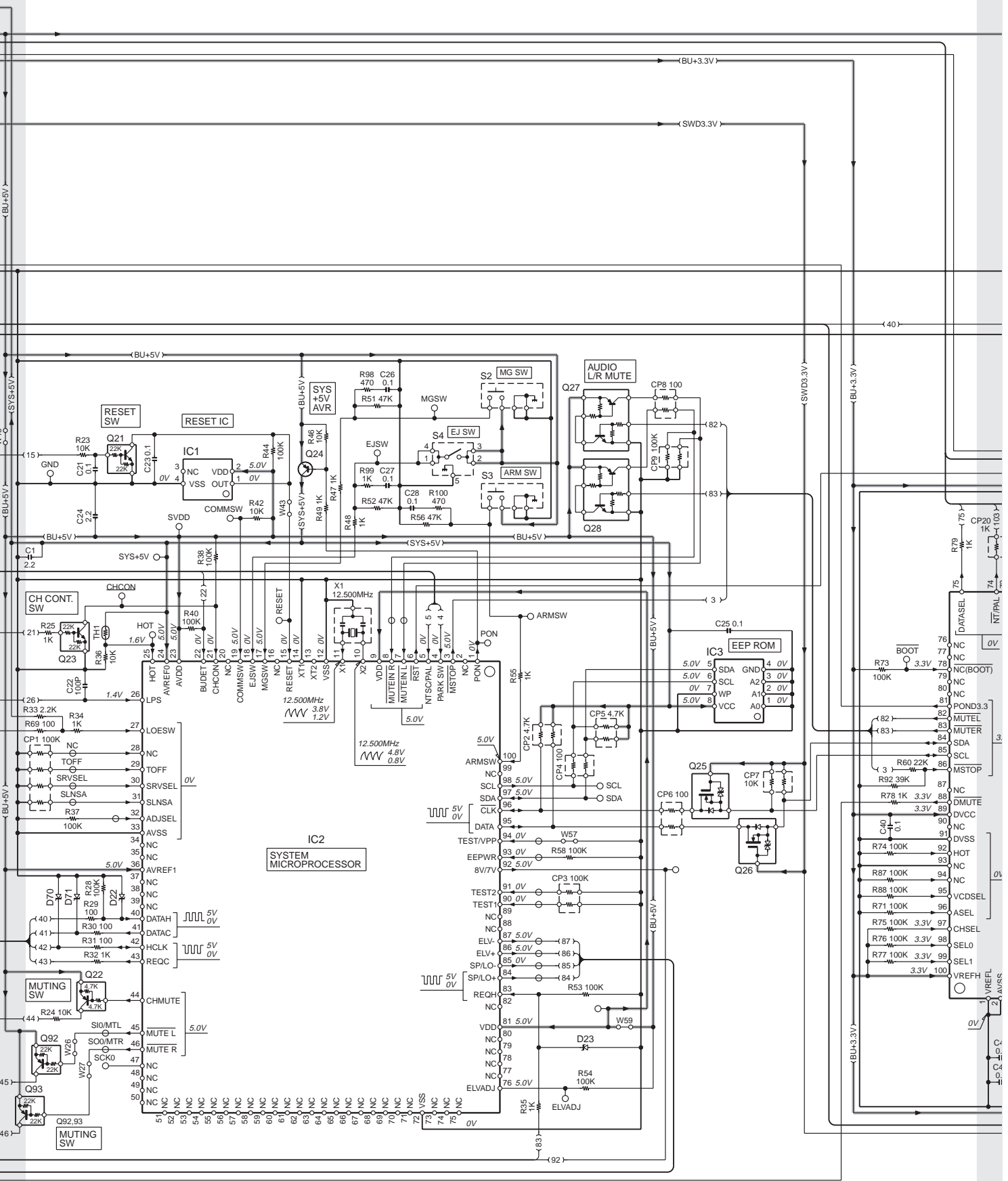
KDC-CMP21V



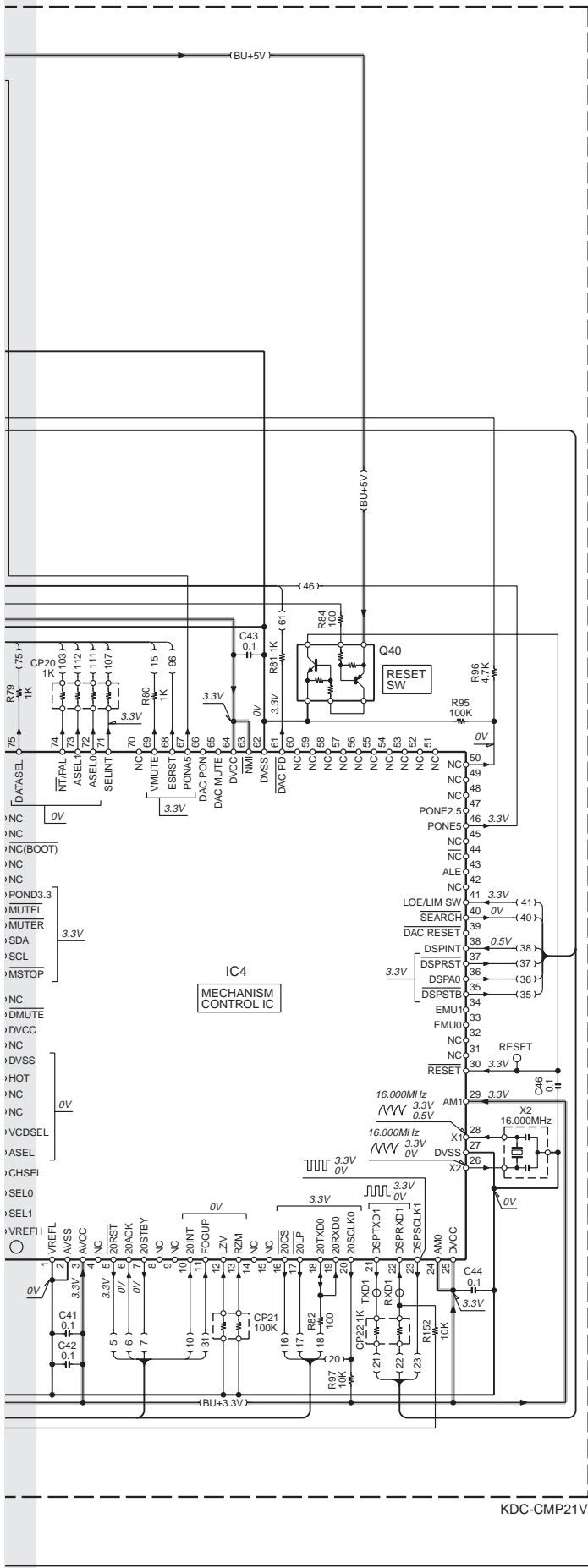
KDC-CMP21V



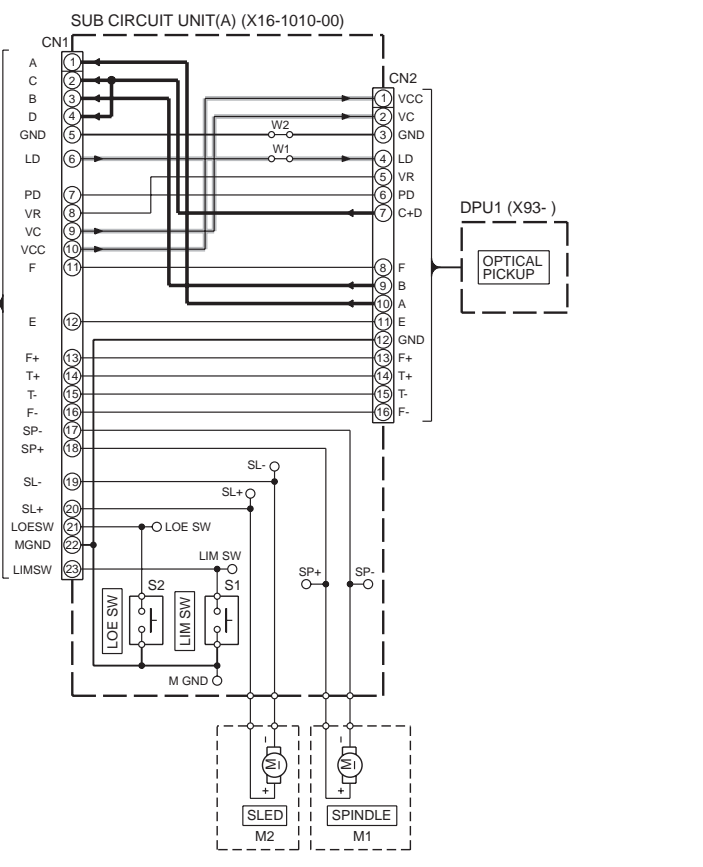
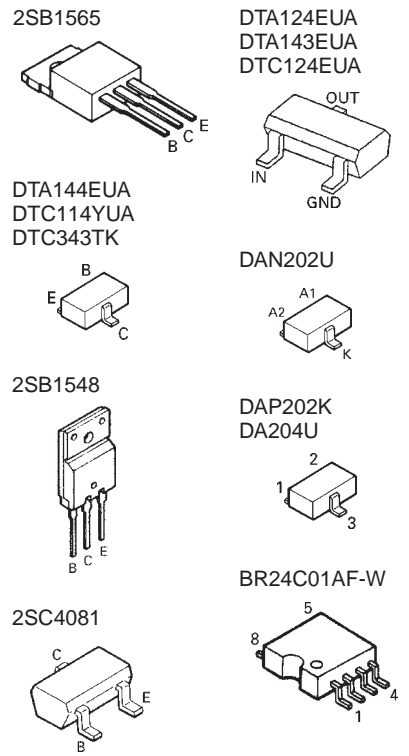
KDC-CMP21V



KDC-CMP21V



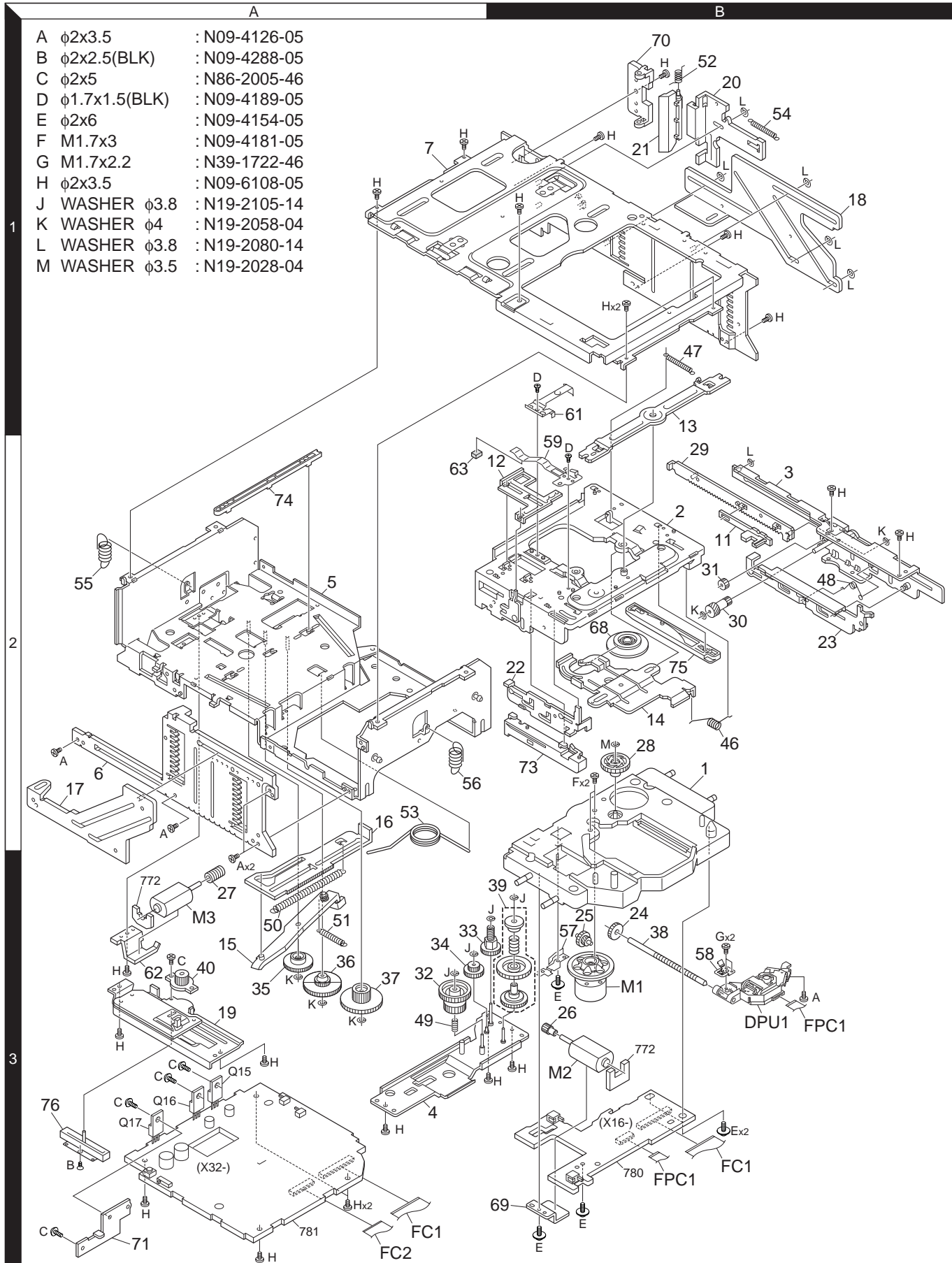
- IC1 : S-80830CNNB
 - IC2 : 784214AGC-204
 - IC3 : BR24C01AF-W
 - IC4 : 91CW12AFG-5DN4
 - IC5 : MM1508XNRE
 - IC6 : UPC2926T
 - IC7 : ES3890F
 - IC8 : MSM5118165FP60
 - IC9 : M29F400BB7N6
 - IC10 : HD74LV157AT-E
 - IC11 : TC94A20F-010
 - IC12 : UPD63712GC
 - IC13 : TAR6S50-F
 - IC14 : AK4351
 - IC15 : LA6576
 - IC16 : NJM2880U105
 - IC17 : NJM2890R3325
 - IC18 : NJM2880U33
-
- Q1,6,92,93 : DTA124EUA
 - Q2,7,12,21,23,100 : DTC124EUA
 - Q3,70,71,73 : DTC114YUA
 - Q5,8,11 : 2SC4081
 - Q15-17 : 2SB1565
 - Q20 : DTA144EUA
 - Q22 : DTA143EUA
 - Q24,72 : 2SB0970
 - Q25,26 : 2SK3018
 - Q27,28,52 : UMD9N
 - Q40 : UMD12N
 - Q90,91 : DTC343TK
-
- D1 : 1SR154-400
 - D2 : MA8068-M
 - D3,6,22,23,70,71 : MA8056-M
 - D4 : MA8075-M
 - D5 : MA8091-M
 - D7,8,40 : DA204U
 - D20,41,60,61 : DAN202U



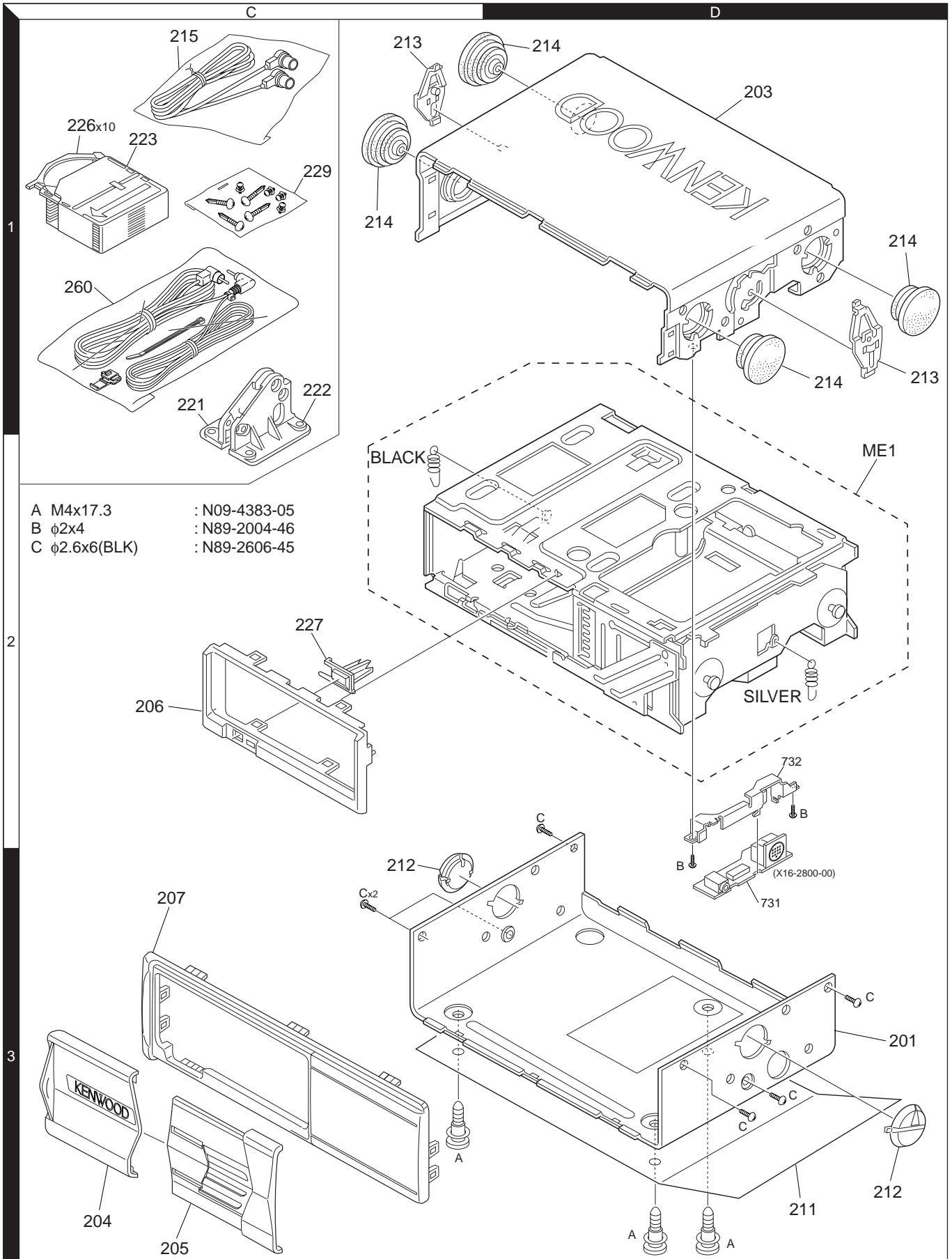
KDC-CMP21V

KDC-CMP21V

EXPLODED VIEW (MECHANISM)



EXPLODED VIEW (UNIT)



Parts with the exploded numbers larger than 700 are not supplied.

KDC-CMP21V

PARTS LIST

* New parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.

Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description	Destination
KDC-CMP21V					
201	3D	*	A10-5161-01	CHASSIS	
203	1D		A01-2726-11	METALLIC CABINET	
204	3C		A21-4082-02	DRESSING PANEL	
205	3C		A21-4083-02	DRESSING PANEL	
206	2C	*	A22-3042-02	SUB PANEL	
207	3C	*	A64-3339-01	PANEL	
-			B46-0100-50	WARRANTY CARD	
-			B58-1236-04	CAUTION CARD (CORD)	
-		*	B64-2791-00	INST.MANUAL (ENG,T-CHI,S-CHI)	
211	3D		B58-1275-04	CAUTION CARD (TRANCEPORT)	
212	3D		D10-4515-03	ARM	
213	1C		D10-4516-04	LEVER	
214	1C		D39-0242-05	DAMPER	
215	1C		E30-4291-05	CORD WITH PLUG (5M)	
215	1C		E30-4711-05	CORD WITH PLUG (5M)	
215	1C		E30-6358-05	CORD WITH PLUG (5M)	
260	1C	*	E30-6351-05	CORD WITH PINJACK (4M)	
-			H02-0827-03	INNER CARTON CASE	
-			H10-4729-02	POLYSTYRENE FOAMED FIXTURE	
-			H13-1706-04	CARTON BOARD	
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-			H25-1115-04	PROTECTION BAG	
-		*	H54-3125-14	ITEM CARTON CASE	
221	1C		J19-5018-03	BRACKET (L)	
222	1C		J19-5019-03	BRACKET (R)	
223	1C		J19-5146-02	HOLDER ASSY	
226	1C		J99-0614-01	TRAY	
227	2C		K24-4055-04	KNOB	
229	1C		N99-1645-15	SCREW SET	
A	3D		N09-4383-05	STEPPED SCREW	
B	2D		N89-2004-46	BINDING HEAD TAPTITE SCREW	
C	3D		N89-2606-45	BINDING HEAD TAPTITE SCREW	
ME1	2D		X92-4950-00	MECHANISM ASSY	
SUB CIRCUIT UNIT A (X16-1010-00)					
CN1			E40-9487-05	FLAT CABLE CONNECTOR (23PIN)	
CN2			E40-9536-05	FLAT CABLE CONNECTOR (16PIN)	
W1 ,2			R92-2053-05	CHIP R 0 J 1/8W	
S1 ,2			S74-0811-05	MICRO SWITCH	
SUB CIRCUIT UNIT B (X16-2800-00)					
CN1		*	E41-2145-05	FLAT CABLE CONNECTOR (20PIN)	
J1			E56-0825-05	CYLINDRICAL RECEPTACLE	
J2		*	E63-0899-05	PIN JACK	
CD PLAYER UNIT (X32-5650-00)					
C1			CK73FB1A225K	CHIP C 2.2UF K	
C2 ,3			C92-1388-05	ELECTRO 470UF 16WV	
C4 ,5			CK73EB1A475K	CHIP C 4.7UF K	
C6 ,7			C92-1392-05	ELECTRO 100UF 10WV	
C8			CK73GB1C104K	CHIP C 0.10UF K	

Ref. No.	Add	New	Parts No.	Description	Destination
C9			CK73EB1A475K	CHIP C 4.7UF K	
C10			C92-1392-05	ELECTRO 100UF 10WV	
C11			CK73GB1C104K	CHIP C 0.10UF K	
C12			CK73GB1A105K	CHIP C 1.0UF K	
C13			CK73GB1H103K	CHIP C 0.010UF K	
C14			CK73GB1C104K	CHIP C 0.10UF K	
C20 ,21			CK73GB1C104K	CHIP C 0.10UF K	
C22			CC73GCH1H101J	CHIP C 100PF J	
C23			CK73GB1C104K	CHIP C 0.10UF K	
C24			CK73FB1A225K	CHIP C 2.2UF K	
C25 -28			CK73GB1C104K	CHIP C 0.10UF K	
C40 -44			CK73GB1C104K	CHIP C 0.10UF K	
C46 -50			CK73GB1C104K	CHIP C 0.10UF K	
C51			CK73GB1A105K	CHIP C 1.0UF K	
C52			CK73GB0J225K	CHIP C 2.2UF K	
C53			CK73GB1C104K	CHIP C 0.10UF K	
C54			CK73GB1H103K	CHIP C 0.010UF K	
C55			CK73GB1A105K	CHIP C 1.0UF K	
C60			C92-1429-05	ELECTRO 220UF 6.3WV	
C61			CK73GB0J105K	CHIP C 1.0UF K	
C62			C92-0048-05	ELECTRO 100UF 6.3WV	
C63			CK73GB0J105K	CHIP C 1.0UF K	
C64			CK73FB0J106M	CHIP C 10UF M	
C65			CK73GB1C104K	CHIP C 0.10UF K	
C67			CK73GB1H103K	CHIP C 0.010UF K	
C68			CK73GB0J105K	CHIP C 1.0UF K	
C69			CK73GB1C104K	CHIP C 0.10UF K	
C70			CK73GB1H102K	CHIP C 1000PF K	
C71			CK73GB1H103K	CHIP C 0.010UF K	
C72 -76			CK73GB1C104K	CHIP C 0.10UF K	
C77			CC73GCH1H040C	CHIP C 4.0PF C	
C78			CC73GCH1H100D	CHIP C 10PF D	
C79			CK73GB1C104K	CHIP C 0.10UF K	
C80			CK73FB0J475K	CHIP C 4.7UF K	
C81			CK73GB1C104K	CHIP C 0.10UF K	
C82			CK73GB0J105K	CHIP C 1.0UF K	
C83 ,84			CK73GB1C104K	CHIP C 0.10UF K	
C85			C92-1429-05	ELECTRO 220UF 6.3WV	
C86			CK73GB0J105K	CHIP C 1.0UF K	
C100-102			CK73GB1C104K	CHIP C 0.10UF K	
C103			CK73FB0J475K	CHIP C 4.7UF K	
C104			CK73GB1A334K	CHIP C 0.33UF K	
C105-108			CK73GB1C104K	CHIP C 0.10UF K	
C109			CK73GB1H102K	CHIP C 1000PF K	
C110			CK73FB0J475K	CHIP C 4.7UF K	
C111,112			CK73GB1C104K	CHIP C 0.10UF K	
C113			CC73GCH1H330J	CHIP C 33PF J	
C114			CC73GCH1H050C	CHIP C 5.0PF C	
C115			CK73GB1C104K	CHIP C 0.10UF K	
C116			CC73GCH1H150J	CHIP C 15PF J	
C117			CK73GB1C104K	CHIP C 0.10UF K	
C118			CC73GCH1H180J	CHIP C 18PF J	
C119			CK73GB0J105K	CHIP C 1.0UF K	
C120-122			CK73GB1C104K	CHIP C 0.10UF K	
C123			CK73GB0J105K	CHIP C 1.0UF K	

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CD PLAYER UNIT (X32-5650-00)

Ref. No.	Add	New	Parts No.	Description	Destination	Ref. No.	Add	New	Parts No.	Description	Destination
C124,125			CK73GB1H103K	CHIP C 0.010UF K		CP47			RK74GB1J472J	CHIP-COM 4.7K J 1/16W	
C126			CK73GB1H102K	CHIP C 1000PF K		CP48			RK74GB1J102J	CHIP-COM 1.0K J 1/16W	
C127			CK73GB1H332K	CHIP C 3300PF K		R1			RK73FB2B750J	CHIP R 75 J 1/8W	
C128			CC73GCH1H330J	CHIP C 33PF J		R2			RK73GB2A104J	CHIP R 100K J 1/10W	
C129,130			CK73GB1C104K	CHIP C 0.10UF K		R3			RK73GB2A682J	CHIP R 6.8K J 1/10W	
C131			CC73GCH1H040C	CHIP C 4.0PF C		R4			RK73GB2A332J	CHIP R 3.3K J 1/10W	
C132			CK73GB1H152K	CHIP C 1500PF K		R5			RK73GB2A472J	CHIP R 4.7K J 1/10W	
C133			CK73GB1C104K	CHIP C 0.10UF K		R6			RK73GB2A104J	CHIP R 100K J 1/10W	
C134			CK73GB1H682K	CHIP C 6800PF K		R7			RK73GB2A183J	CHIP R 18K J 1/10W	
C135,136			CK73GB1C104K	CHIP C 0.10UF K		R8			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C137			CK73FB0J106M	CHIP C 10UF M		R20			RK73GB2A103J	CHIP R 10K J 1/10W	
C138			CC73GCH1H470J	CHIP C 47PF J		R21			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C139			CC73GCH1H560J	CHIP C 56PF J		R22			RK73GB2A104J	CHIP R 100K J 1/10W	
C140			CK73GB1H682K	CHIP C 6800PF K		R23, 24			RK73GB2A103J	CHIP R 10K J 1/10W	
C141			CK73GB0J105K	CHIP C 1.0UF K		R25			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C142-144			CK73GB1H152K	CHIP C 1500PF K		R28			RK73GB2A104J	CHIP R 100K J 1/10W	
C145			CK73GB1H102K	CHIP C 1000PF K		R29 -31			RK73GB2A101J	CHIP R 100 J 1/10W	
C160,161			CK73GB1H222K	CHIP C 2200PF K		R32			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C162			CK73FB1A105K	CHIP C 1.0UF K		R33			RK73GB2A222J	CHIP R 2.2K J 1/10W	
C163			CK73GB1H103K	CHIP C 0.010UF K		R34, 35			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C164,165			CE32AT1A100M	CHIP EL 10UF 10WV		R36			RK73GB2A103J	CHIP R 10K J 1/10W	
C166			CK73GB0J105K	CHIP C 1.0UF K		R37, 38			RK73GB2A104J	CHIP R 100K J 1/10W	
C167,168			CK73FB0J106M	CHIP C 10UF M		R40			RK73GB2A104J	CHIP R 100K J 1/10W	
C169			CK73GB1C104K	CHIP C 0.10UF K		R42			RK73GB2A103J	CHIP R 10K J 1/10W	
C190			CK73GB1H331K	CHIP C 330PF K		R44			RK73GB2A104J	CHIP R 100K J 1/10W	
C191			CK73GB1H152K	CHIP C 1500PF K		R46			RK73GB2A103J	CHIP R 10K J 1/10W	
C192			CK73GB1H331K	CHIP C 330PF K		R47 -49			RK73GB2A102J	CHIP R 1.0K J 1/10W	
C193			CK73GB1H332K	CHIP C 3300PF K		R51, 52			RK73GB2A473J	CHIP R 47K J 1/10W	
C194			CK73EB1A475K	CHIP C 4.7UF K		R53, 54			RK73GB2A104J	CHIP R 100K J 1/10W	
						R55			RK73GB2A102J	CHIP R 1.0K J 1/10W	
CN1			E40-9252-05	FLAT CABLE CONNECTOR (20PIN)		R56			RK73GB2A473J	CHIP R 47K J 1/10W	
CN2			E40-9338-05	FLAT CABLE CONNECTOR (23PIN)		R58			RK73GB2A104J	CHIP R 100K J 1/10W	
L1, 2			L92-0308-05	FERRITE CORE		R60			RK73GB2A223J	CHIP R 22K J 1/10W	
L3			L92-0386-05	CHIP FERRITE		R69			RK73GB2A101J	CHIP R 100 J 1/10W	
X1			L78-0568-05	RESONATOR (12.50MHZ)		R71			RK73GB2A104J	CHIP R 100K J 1/10W	
X2			L78-0896-05	RESONATOR (16.00MHZ)		R73 -77			RK73GB2A104J	CHIP R 100K J 1/10W	
X3			L77-2868-05	CRYSTAL RESONATOR (27MHZ)		R78 -81			RK73GB2A102J	CHIP R 1.0K J 1/10W	
X4			L77-2867-05	CRYSTAL RESONATOR (16.9344MHZ)		R82			RK73GB2A101J	CHIP R 100 J 1/10W	
CP1			RK74GB1J104J	CHIP-COM 100K J 1/16W		R84			RK73GB2A101J	CHIP R 100 J 1/10W	
CP2			RK74GA1J472J	CHIP-COM 4.7K J 1/16W		R86			RK73GB2A101J	CHIP R 100 J 1/10W	
CP3			RK74GA1J104J	CHIP-COM 100K J 1/16W		R87, 88			RK73GB2A104J	CHIP R 100K J 1/10W	
CP4			RK74GA1J101J	CHIP-COM 100 J 1/16W		R89			RK73GB2A132J	CHIP R 1.3K J 1/10W	
CP5			RK74GA1J472J	CHIP-COM 4.7K J 1/16W		R90			RK73EB2E220J	CHIP R 22 J 1/4W	
CP6			RK74GA1J101J	CHIP-COM 100 J 1/16W		R91			R92-3494-05	CHIP R 5.6 F 1/2W	
CP7			RK74GA1J103J	CHIP-COM 10K J 1/16W		R92			RK73GB2A393J	CHIP R 39K J 1/10W	
CP8			RK74GA1J101J	CHIP-COM 100 J 1/16W		R95			RK73GB2A104J	CHIP R 100K J 1/10W	
CP9			RK74GA1J104J	CHIP-COM 100K J 1/16W		R96			RK73GB2A472J	CHIP R 4.7K J 1/10W	
CP20			RK74GB1J102J	CHIP-COM 1.0K J 1/16W		R97			RK73GB2A103J	CHIP R 10K J 1/10W	
CP21			RK74GA1J104J	CHIP-COM 100K J 1/16W		R98			RK73GB2A471J	CHIP R 470 J 1/10W	
CP22			RK74GA1J102J	CHIP-COM 1.0K J 1/16W		R99			RK73GB2A102J	CHIP R 1.0K J 1/10W	
CP40,41			RK74GB1J104J	CHIP-COM 100K J 1/16W		R100			RK73GB2A471J	CHIP R 470 J 1/10W	
CP42-44			RK74GA1J104J	CHIP-COM 100K J 1/16W		R101			RK73EB2E5R6J	CHIP R 5.6 J 1/4W	
CP45			RK74GB1J222J	CHIP-COM 2.2K J 1/16W		R102			RK73GB2A104J	CHIP R 100K J 1/10W	
CP46			RK74GB1J103J	CHIP-COM 10K J 1/16W		R103			RK73GB2A360J	CHIP R 36 J 1/10W	
						R104			RK73GB2A391J	CHIP R 390 J 1/10W	

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CD PLAYER UNIT (X32-5650-00)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
R105			RK73GB2A104J	CHIP R 100K J 1/10W	
R106			RK73GB2A105J	CHIP R 1.0M J 1/10W	
R107-109			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R110-113			RK73GB2A101J	CHIP R 100 J 1/10W	
R114			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R130			RK73GB2A104J	CHIP R 100K J 1/10W	
R131-134			RK73GB2A101J	CHIP R 100 J 1/10W	
R135,136			RK73GB2A331J	CHIP R 330 J 1/10W	
R137-139			RK73GB2A104J	CHIP R 100K J 1/10W	
R140			RK73GB2A105J	CHIP R 1.0M J 1/10W	
R141			RK73GB2A104J	CHIP R 100K J 1/10W	
R142,143			RK73GB2A101J	CHIP R 100 J 1/10W	
R144			RK73GB2A103J	CHIP R 10K J 1/10W	
R145			RK73GB2A104J	CHIP R 100K J 1/10W	
R146-148			RK73GB2A101J	CHIP R 100 J 1/10W	
R149			RK73GB2A104J	CHIP R 100K J 1/10W	
R151,152			RK73GB2A103J	CHIP R 10K J 1/10W	
R153			RK73GB2A333J	CHIP R 33K J 1/10W	
R154			RK73GB2A103J	CHIP R 10K J 1/10W	
R155			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R156			RK73GB2A392J	CHIP R 3.9K J 1/10W	
R157			RK73GB2A103J	CHIP R 10K J 1/10W	
R158			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R159			RK73GB2A104J	CHIP R 100K J 1/10W	
R162			RK73FB2B4R7J	CHIP R 4.7 J 1/8W	
R164			RK73GB2A274J	CHIP R 270K J 1/10W	
R165			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R166			RK73GB2A393J	CHIP R 39K J 1/10W	
R167			RK73GB2A241J	CHIP R 240 J 1/10W	
R168,169			RK73GB2A302J	CHIP R 3.0K J 1/10W	
R170			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R171			RK73GB2A104J	CHIP R 100K J 1/10W	
R180,181			RK73FB2B101J	CHIP R 100 J 1/8W	
R182,183			RK73FB2B223J	CHIP R 22K J 1/8W	
R184,185			RK73FB2B331J	CHIP R 330 J 1/8W	
R200			RK73GB2A124J	CHIP R 120K J 1/10W	
R201			RK73GB2A133J	CHIP R 13K J 1/10W	
R202			RK73GB2A243J	CHIP R 24K J 1/10W	
R203			RK73GB2A124J	CHIP R 120K J 1/10W	
R204,205			RK73GB2A102J	CHIP R 1.0K J 1/10W	
R206			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R207,208			RK73GB2A133J	CHIP R 13K J 1/10W	
R209			RK73GB2A303J	CHIP R 30K J 1/10W	
R210			RK73GB2A133J	CHIP R 13K J 1/10W	
R211			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R212			RK73GB2A303J	CHIP R 30K J 1/10W	
R213			RK73GB2A203J	CHIP R 20K J 1/10W	
R214			RK73GB2A103J	CHIP R 10K J 1/10W	
R215			RK73GB2A472J	CHIP R 4.7K J 1/10W	
R216			RK73GB2A104J	CHIP R 100K J 1/10W	
W26 ,27			R92-1252-05	CHIP R 0 OHM J 1/16W	
W43			R92-1252-05	CHIP R 0 OHM J 1/16W	
W45			R92-1252-05	CHIP R 0 OHM J 1/16W	
W57			R92-1252-05	CHIP R 0 OHM J 1/16W	
W59			R92-1252-05	CHIP R 0 OHM J 1/16W	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
S1			S62-0863-05	SLIDE SWITCH	
S2 ,3			S68-0823-05	PUSH SWITCH	
S4			S70-0838-05	TACT SWITCH	
D1			1SR154-400	DIODE	
D2			MA8068-M	ZENER DIODE	
D3			MA8056-M	ZENER DIODE	
D4			MA8075-M	ZENER DIODE	
D5			MA8091-M	ZENER DIODE	
D6			MA8056-M	ZENER DIODE	
D7 ,8			DA204U	DIODE	
D20			DAN202U	DIODE	
D21			DAP202K	DIODE	
D22 ,23			MA8056-M	ZENER DIODE	
D40			DA204U	DIODE	
D41			DAN202U	DIODE	
D60 ,61			DAN202U	DIODE	
IC1			S-80830CNNB	MOS-IC	
IC2			784214AGC-204	MICROCONTROLLER IC	
IC3			BR24C01AF-W	ROM IC	
IC4		*	91CW12AFG-5DN4	MICROCONTROLLER IC	
IC5			MM1508XNRE	ANALOGUE IC	
IC6			UPC2926T	ANALOGUE IC	
IC7			ES3890F	MOS-IC	
IC8			MSM5118165FP60	DRAM IC	
IC9			M29F400BB70N6	ROM IC	
IC10			HD74LV157AT-E	MOS-IC	
IC11			TC94A20F-010	MOS-IC	
IC12			UPD63712GC	MOS-IC	
IC13			TAR5S50-F	ANALOGUE IC	
IC14			AK4351	MOS-IC	
IC15			LA6576	ANALOGUE IC	
IC16		*	NJM2880U105	ANALOGUE IC	
IC17			NJM2890R3325	ANALOGUE IC	
IC18			NJM2880U133	ANALOGUE IC	
IC18			NJM2880U33	ANALOGUE IC	
Q1			DTA124EUA	DIGITAL TRANSISTOR	
Q2			DTC124EUA	DIGITAL TRANSISTOR	
Q3			DTC114YUA	DIGITAL TRANSISTOR	
Q5			2SC4081	TRANSISTOR	
Q6			DTA124EUA	DIGITAL TRANSISTOR	
Q7			DTC124EUA	DIGITAL TRANSISTOR	
Q8			2SC4081	TRANSISTOR	
Q11			2SC4081	TRANSISTOR	
Q12			DTC124EUA	DIGITAL TRANSISTOR	
Q20			DTA144EUA	DIGITAL TRANSISTOR	
Q21			DTC124EUA	DIGITAL TRANSISTOR	
Q22			DTA143EUA	DIGITAL TRANSISTOR	
Q23			DTC124EUA	DIGITAL TRANSISTOR	
Q24			2SB0970	TRANSISTOR	
Q25 ,26			2SK3018	FET	
Q27 ,28			UMD9N	TRANSISTOR	
Q40			UMD12N	TRANSISTOR	
Q52			UMD9N	TRANSISTOR	
Q70 ,71			DTC114YUA	DIGITAL TRANSISTOR	

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CD PLAYER UNIT (X32-5650-00)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation	Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
Q72			2SB0970	TRANSISTOR		53	2A		G01-3043-04	TORSION COIL SPRING	
Q73			DTC114YUA	DIGITAL TRANSISTOR		54	1B		G01-3044-04	EXTENSION SPRING	
Q90 ,91			DTC343TK	DIGITAL TRANSISTOR		55	2A		G01-3045-04	EXTENSION SPRING (BLACK)	
Q92 ,93			DTA124EUA	DIGITAL TRANSISTOR		56	2A		G01-3046-04	EXTENSION SPRING (SILVER)	
Q100			DTC124EUA	DIGITAL TRANSISTOR		57	3B		G02-1374-04	FLAT SPRING	
TH1			NTH5G20B333K07	THERMISTOR		58	3B		G02-1375-03	FLAT SPRING	
MECHANISM ASSY (X92-4950-00)						59	2B		G02-1376-03	FLAT SPRING	
1	2B		A10-4745-13	CHASSIS ASSY		61	2B		G02-1378-14	FLAT SPRING	
2	2B		A10-4748-02	CHASSIS CALKING ASSY		62	3A		G02-1380-04	FLAT SPRING	
3	2B		A10-4751-03	CHASSIS CALKING ASSY		63	2A		G10-1045-14	FELT	
4	3A		A10-4754-04	CHASSIS CALKING ASSY		68	2B		J11-0637-03	CLAMPER	
5	2A	*	A10-4757-12	CHASSIS CALKING ASSY		69	3B		J21-9592-04	MOUNTING HARDWARE	
6	2A		A10-4759-02	CHASSIS		70	1B		J21-9595-03	MOUNTING HARDWARE	
7	1A		A10-4760-02	CHASSIS CALKING ASSY		71	3A	*	J22-0183-04	MOUNTING HARDWARE	
11	2B		D10-4546-03	ARM		73	2B		J90-0759-03	GUIDE	
12	2A		D10-4527-03	SLIDER		74	2A		J90-0992-03	RAIL	
13	2B		D10-4528-03	ARM		75	2B		J90-0990-03	GUIDE	
14	2B		D10-4529-03	LEVER		FPC1	3B		J84-0141-05	FLEXIBLE PRINTED WIRING BOARD	
15	3A		D10-4531-04	LEVER ASSY		A	2A		N09-4126-05	MACHINE SCREW (2X3.5)	
16	2A		D10-4533-03	LEVER		B	3A		N09-4288-05	TAPTITE SCREW (2X2.5)	
17	2A		D10-4534-04	SLIDER ASSY		C	3A		N86-2005-46	BINDING HEAD TAPTITE SCREW	
18	1B		D10-4536-13	SLIDER		D	2B		N09-4189-05	TAPTITE SCREW (1.7X1.5)	
19	3A		D10-4537-04	SLIDER ASSY		E	3B		N09-4154-05	TAPTITE SCREW	
20	1B		D10-4540-13	ARM		F	2B		N09-4181-05	MACHINE SCREW (M1.7X3)	
21	1B		D10-4547-03	LEVER		G	3B		N39-1722-46	PAN HEAD MACHINE SCREW	
22	2B		D12-0630-02	CAM		H	1A		N09-6108-05	MACHINE SCREW (M2*3.5TYPE3)	
23	2B		D12-0631-02	CAM		J	3A		N19-2105-14	FLAT WASHER	
24	3B		D13-2185-04	GEAR		K	3A		N19-2058-04	FLAT WASHER	
25	3B		D13-2186-04	GEAR		L	1B		N19-2080-14	FLAT WASHER	
26	3B		D13-2187-04	GEAR		M	2B		N19-2028-04	FLAT WASHER	
27	3A		D13-2188-04	WORM		76	3A		R33-0207-15	SLIDE TYPE VARIABLE RESISTOR	
28	2B		D13-2092-04	GEAR		M1	3B		T42-0797-04	MOTOR ASSY (SPINDLE)	
29	2B		D13-2093-04	GEAR ASSY		M2,3	3A		T42-1063-05	DC MOTOR (SLED, ELV.)	
30	2B		D13-2095-04	GEAR		Q15-17	3A		2SB1548(P)	TRANSISTOR	
31	2B		D13-2096-04	GEAR		Q15-17	3A		2SB1565(E,F)	TRANSISTOR	
32	3A		D13-2099-04	GEAR		DPU1	3B		X93-2010-00	OPTICAL PICKUP ASSY	
33	3A		D13-2100-04	GEAR							
34	3A		D13-2101-04	GEAR							
35	3A		D13-2102-04	GEAR							
36	3A		D13-2103-04	GEAR							
37	3A		D13-2104-04	GEAR							
38	3B		D19-0636-04	LEAD SCREW							
39	3A		D19-0637-04	CLUTCH ASSY							
40	3A		D39-0225-05	DAMPER							
FC1	3A		E39-0172-15	FLAT CABLE (23PIN)							
FC2	3A	*	E39-0654-05	FLAT CABLE (20PIN)							
46	2B		G01-3036-04	TORSION COIL SPRING							
47	1B		G01-3037-04	EXTENSION SPRING							
48	2B		G01-3038-04	TORSION COIL SPRING							
49	3A		G01-3039-04	COMPRESSION SPRING							
50	3A		G01-3040-04	EXTENSION SPRING							
51	3A		G01-3041-04	EXTENSION SPRING							
52	1B		G01-3042-04	TORSION COIL SPRING							

E : Europe K : North America M : Other Areas W : Without Europe

△ Indicates safety critical components.

KDC-CMP21V

SPECIFICATIONS

Disc section	
Laser Diode	GaAlAs ($\lambda=780\text{nm}$)
Digital Filter	8 Times Over Sampling
D/A Converter	1Bit
Spindle Speed	500rpm~200rpm (CLV)
Wow & Flutter	Below Measurable Limit
Frequency Response	5Hz~20kHz ($\pm 1\text{dB}$)
Total Harmonic Distortion	0.007% (1kHz)
S/N Ratio	95dB
Dynamic Range	95dB
Channel Separation	85dB

MP3 Decode	Compliant with MPEG-1/2 Audio Layer-3
WMA Decode	Compliant with Windows Media Audio
Video CD Format	Version 1.1
Video Output Color System	NTSC/PAL
Video Output Level	1.0Vp-p/75 Ω

General

Operating Voltage	14.4V (11V~16V)
Current Consumption	0.65A
Installation Size (W x H x D)	250 x 80 x 176 mm (9-13/16 x 3-1/8 x 6-13/16 inch)
Weight	2.0kg (4.4lbs)

KENWOOD follows a policy of continuous advancements in development.
For this reason specifications may be changed without notice.

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