

CD CHANGER

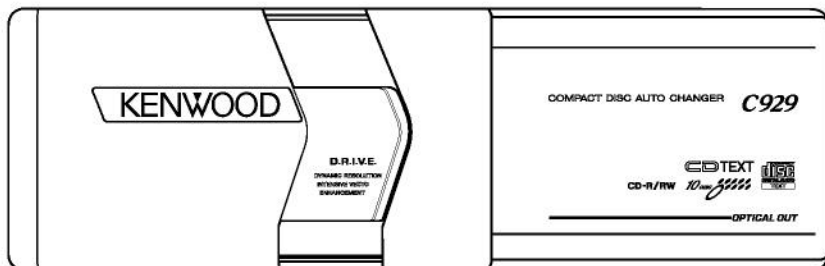
C929

SERVICE MANUAL

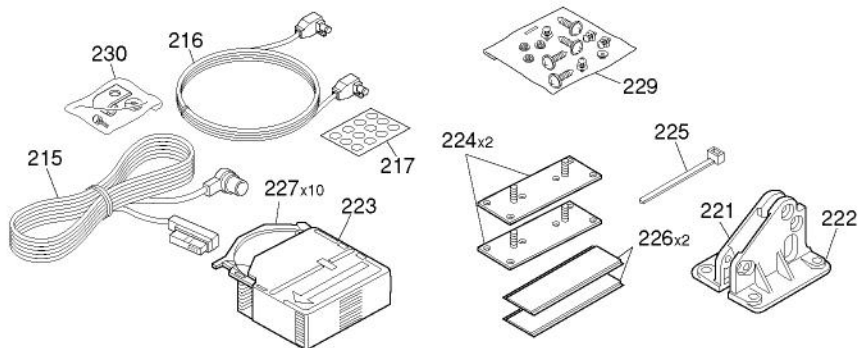
KENWOOD

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B51-7796-00 (K) 3095

Refer to the service manual "KDC-C710" (B51-7104-00) for MECHANISM OPERATION DESCRIPTION.



The following reference numbers with accessory parts are the same reference numbers used on EXPLODED VIEW and PARTS LIST.



SPECIFICATIONS

CD	Laser Diode	GaAlAs ($\lambda=780\text{nm}$)
	Digital Filter (D/A)	8 Times Over Sampling
	D/A Converter	1 Bit
	Spindle Speed	200rpm-500rpm (CLV)
	Wow & Flutter	Below Mesurable Limit
	Frequency Response	5Hz-20KHz ($\pm 1\text{dB}$)
	Total Harmonic Distortion	0.005% (1KHz)
	S/N Ratio	110dB (1KHz)
	Dinamic Range	96dB
	Channel Separation	96dB
GENERAL	Operating Voltage (11V-16V allowable)	14.4V
	Current Consumption	0.8A
	Installation Size (Width)	250mm
	(Height)	80mm
	(Depth)	176mm
Weight	2.0Kg	

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

KENWOOD CORPORATION

14-6, Dogenzaka 1-chome, Shibuya-ku, Tokyo, 150-8501 Japan

KENWOOD SERVICE CORPORATION

P.O. Box 22745, 2201 East Dominguez Street,
Long Beach, CA90801-5745, U.S.A.

KENWOOD ELECTRONICS CANADA INC.

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

KENWOOD ELECTRONICS LATIN AMERICA S.A.

P.O. Box 55-2791 Pañilla, Plaza Credicorp Bank Panama,
Piso 9, Oficina 901, Calle 50, Panama, Republic of Panama

KENWOOD ELECTRONICS BRASIL LTDA.

Av. Moema, 170-17, Andar-Cobertura "B",
Ed. Maximum Service Center, 04077-020 Moema,
São Paulo-SP-Brasil

KENWOOD ELECTRONICS UK LIMITED

Kenwood House, Dwight Road, Watford,
Herts, WD1 8EB, United Kingdom

KENWOOD ELECTRONICS DEUTSCHLAND GMBH

Rembrücker Str. 15, 63150 Heusenstamm, Germany

KENWOOD ELECTRONICS FRANCE S.A.

13, Boulevard Ney, 75018 Paris, France

KENWOOD ELECTRONICS BELGIUM N.V.

Mechelsesteenweg 418, B-1930 Zaventem, Belgium

KENWOOD ELECTRONICS ITALIA S.p.A.

Via G. Sirtori 7/9, 20129 Milano, Italy

KENWOOD IBERICA S.A.

Bolivia, 239-08020 Barcelona, Spain

KENWOOD ELECTRONICS AUSTRALIA PTY. LTD.

(A.C.N. 001 499 074)
16 Giffnock Avenue, Centrecourt Estate, North Ryde,
N.S.W. 2113, Australia

KENWOOD ELECTRONICS (HONG KONG) LTD.

Unit 3712-3724, Level 37, Tower 1, Metroplaza,
223 Hing Fong Road, Kwai Fong, N.T., Hong Kong

KENWOOD ELECTRONICS GULF FZE

P.O.Box 61318, Jebel Ali, Dubai, U.A.E.

KENWOOD ELECTRONICS (THAILAND) CO., LTD.

2019 New Pechburi Road, Bangkapi, Huaykwang,
Bangkok, 10320 Thailand

KENWOOD ELECTRONICS SINGAPORE PTE LTD.

1 Genting Lane, #07-00, Kenwood Building, Singapore 349544

KENWOOD ELECTRONICS (MALAYSIA) SDN BHD

#4.01 Level 4, Wisma Academy Lot 4A, Jalan 19/1,
46300 Petaling Jaya, Selangor Darul Ehsan, Malaysia

COMPONENT DESCRIPTION

CD PLAYER UNIT (X32-4970-00)

REF. No.	FUNCTION	OPERATION
IC1	RF ERROR AMPLIFIER / SERVO DIGITAL SIGNAL PROCESSOR	RE amplifier, Focus/Tracking error amplifier, APC circuit, Reference amplifier, Defect RFOK mirror circuit, EFM comparator, Vibration detector, Digital servo data processor, Digital loop filter, B times over sampling filter, D/A converter.
IC2	VOLTAGE FOLLOWER	Audio reference voltage supply.
IC3	ACTIVE FILTER	2nd low pass filter.
IC4	AVR	Audio 5V power supply.
IC5	MOTOR DRIVER	Focus tracking actuator, Sled/Spindle MD deck up/down motor driver.
IC7	SYSTEM μ -COM	Servo control / Mechanism control / Multiple purposes interface.
ICB	MEMORY	Mechanism up/down position offset servo initial data memory.
IC9	μ -COM RESET.	Resets u-com.
IC10	DRIVER	DAC.
IC11	TEXT DATA MEMORY	Memorises data from text decoder through u-com.
IC14	IE-BUS DRIVER	Bus driver.
Q1	LASER CONTROLLER	"ON" when IC13's APC goes on.
Q4	Q1 DRIVER	0 bit mute goes on when "H" level signal is putout from LZ port of IC6.
Q5	Q2 DRIVER	0 bit mute goes on when "H" level signal is putout from RZ port of IC6.
Q6,7	AUDIO MUTE	Mute goes on when "L" level signal output from A. MUTE port of IC7.
Q8	Q1&2 DRIVER	Mute goes on when "L" level signal is output from A. MUTE Port of IC7.
Q9	CD SYSTEM 5V POWER SUPPLY	Transistor with regulator inside the IC12.
Q10	P.ON SW	SW5V turns on when "L" level signal is output from P.ON port of IC7.
Q11	RESET SW	Resets u-com by "H" level reset control signal from the head unit.
Q12	CLOCK ON/OFF	Clock goes off when "H" level signal is output from XOFF port of IC7.
Q13	SYSTEM-ON SW	Works during the ACC and power on.
Q14	CH-MUTE SW	Audio mute output level goes on when "H" level signal is output from AUDIO port of IC7.
Q15	SW +B AVR	
Q16	Q15 DRIVER	Drives Q15.
Q17	AVR BV SW	Switches AVR BV power supply.
Q1B	Q11 DRIVER	Drives Q11.
Q19	AVR 7V/BV SW	"H" (7V) : Usual play mode. "L" (BV) : Elevator up/down.
Q20	B.U. VOLTAGE DOWN DETECTION SW	
Q21	B.U. +5V AVR	
Q22	Q21 DRIVER	Drives Q21.
Q23	Q24 DRIVER	Audio turns on when "H" level signal is output from AUDIO port of IC7.
Q24	RELAY SW	
Q25	Q1 (on X16-) DRIVER	Digital-out turns on when "H" level signal is output from DGCON port of IC7.
Q31	MOTOR DRIVER REFERENCE VOLTAGE SW	
Q32	SUB BEAM F SIGNAL TIME CONSTANT SW	"H" when time constant takes effect.

SUB-CIRCUIT UNIT (X16-1030-00)

REF. No.	FUNCTION	OPERATION
Q1	D-OUT (TRANSISTOR VCC SW)	
Q2	D-OUT (TRANSMITTER DRIVER)	

MICROCOMPUTER'S TERMINAL DESCRIPTION

(X32-) IC7 : μ -COM

PORT No.	PORT NAME	I/O	FUNCTION	OPERATING CONDITION
1	-	-	-	
2	TSTB	O	Text data strove.	
3	T-BANK	I	Tracking filter bank SW signal.	"H" : Bank 1 (Gain-up mode).
4	F-OK	I	Focus-on signal.	"H" : Focus on.
5	XTALEN	O	DAC servo IC oscillation stop control.	"H" : Oscillation stop.
6	RESET	O	Servo IC reset.	"L" : Reset.
7	SAC	O	Servo IC communication address setting.	
8	SSTB	O	Servo IC communication strove.	
9	VDD	-	VDD	
10	X2	-	Main clock 2.	
11	X1	I	Main clock 1.	
12	VSS	-	GND.	
13	-	-	-	
14	XT1	-	Sub clock 1.	
15	RESET	I	Reset.	
16	FO-GUP	I	Focus gain-up SW.	"H" : Focus gain up.
17	MG-SW	I	Magazine SW.	"H" : Magazine inserted.
18	EJ-SW	I	Eject SW.	"H" : Switch on.
19	B-REQ-H	I	Communication request signal.	
20	PACK	I	Text data - Pack synchronization signal.	
21	SYS-ON	I	Changer control from head unit.	"L" : System on.
22	BU-DET	I	Back-up momentary power-down detection.	"H" : Momentary power down.
23	AVDD	-	VDD.	
24	A VREF 0	I	Inner A/D converter reference voltage.	
25	HOT	I	Temperature-up detection.	Detects over 4V, releases the detection when the voltage goes to be under 4V.
26	LPS	I	Mechanism deck height detection.	
27	LO-E-SW	I	Loading end SW.	"L" : Loading ends.
28	LIM-SW	I	Limit switch.	"L" : Laser pick-up being most inside detection.
29	T-OFF	I	Tracking-off mode.	"H" : Tracking off.
30	ADJ-SEL	I	Servo automatic adjustment on/off.	"H" : Automatic adjustment off.
31	TEST1	I	For mechanism endurance test.	
32	TEST2	I	For mechanism endurance test.	
33	AVSS	-	GND.	
34	AUDIO	O	Audio relay control out.	"H" : Changer source.
35	A-MUTE	O	Audio mute.	"L" : Mute on.
36	A VREF 1	-	Inner A/D converter reference voltage.	
37	S-DI	I	Servo IC communication serial data.	
38	S-DO	O	Servo IC communication serial data.	
39	S-CK	O	Servo IC communication serial clock.	
40	B-DIC	I	Bus serial.	
41	B-DCOM	O	Bus serial.	
42	B-CLK	O	Bus serial clock.	
43	B-C/D	O	Bus command data SW.	
44	CH-MUTE	O	Audio mute to head unit.	"L" : Mute on.
45	TSI	I	Text data.	
46	TSO	O	Text data.	
47	TSCR	O	Text clock.	
48	A0	O	Address setting to S-RAM.	
49	A1	O	Address setting to S-RAM.	
50	A2	O	Address setting to S-RAM.	
51	A3	O	Address setting to S-RAM.	
52	A4	O	Address setting to S-RAM.	

MICROCOMPUTER'S TERMINAL DESCRIPTION

(X32-) IC7 : μ -COM

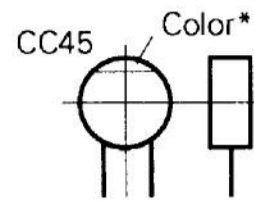
PORT No.	PORT NAME	I/O	FUNCTION	OPERATING CONDITION
53	A5	O	Address setting to S-RAM.	
54	A6	O	Address setting to S-RAM.	
55	A7	O	Address setting to S-RAM.	
56	D0	I/O	Data from and to S-RAM.	
57	D1	I/O	Data from and to S-RAM.	
58	D2	I/O	Data from and to S-RAM.	
59	D3	I/O	Data from and to S-RAM.	
60	D4	I/O	Data from and to S-RAM.	
61	D5	I/O	Data from and to S-RAM.	
62	D6	I/O	Data from and to S-RAM.	
63	D7	I/O	Data from and to S-RAM.	
64	A8	O	Address setting to S-RAM.	
65	A9	O	Address setting to S-RAM.	
66	A10	O	Address setting to S-RAM.	
67	A11	O	Address setting to S-RAM.	
68	A12	O	Address setting to S-RAM.	
69	A13	O	Address setting to S-RAM.	
70	A14	O	Address setting to S-RAM.	
71	A15	O	Address setting to S-RAM.	
72	VSS	-	GND.	
73	A16	O	Enable control to S-RAM.	
74	A17	O	Enable control to S-RAM.	
75	DG-CON	O	Digital-out control.	"H" : Digital out.
76	ELV-ADJ	I	Mechanism deck height adjustment mode.	"L" : Adjustment mode.
77	RD	O	Reading control to S-RAM.	
78	WR	O	Reading control to S-RAM.	
79	WAIT	I	WAIT insertion from S-RAM during accessing.	
80	-	-	-	
81	VDD	-	VDD.	
82	PU-SEL	I	Laser pick-up type discrimination.	"H" : Made by KENWOOD. "L" : Made by others.
83	PU-OK	I	Laser pick-up type discrimination.	"H" : The laser pick-up is OK.
84	SP/LO +	O	Spindle/Loading control.	
85	SP/LO -	O	Spindle/Loading control.	
86	ELV+	O	Mechanism up/down control.	
87	ELV-	O	Mechanism up/down control.	
88	SRV-SEL	I	Servo operating mode.	"H" : Servo mode.
89	SEARCH	O	Search play SW.	"L" : Searching.
90	SLNSA	O	Sled non-felt area on/off.	"L" : Sled non-felt area on.
91	EEP-WR	O	EEP-ROM writing mode.	"H" : EEP-ROM writing mode.
92	7V/8V	O	Mechanism driving IC power supply control.	
93	NO-SW	I	Bus number SW.	"H" : CH1. "L" : CH2.
94	TEST/VPP	-	Flash ROM program mode.	
95	B-CS	O	Bus chip selector.	
96	B-RST	O	Bus reset.	
97	SDA	I/O	EEP-ROM data.	
98	SCL	O	EEP-ROM clock.	
99	P-ON	O	P-ON.	"L" : AVR power on.
100	ARM-SW	I	Arm SW.	"H" : Arm SW on.

PARTS DESCRIPTIONS

CAPACITORS

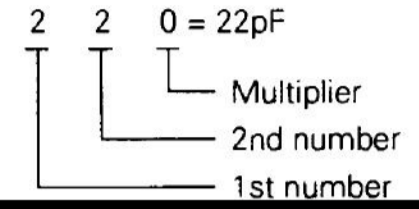
CC	45	TH	1H	220	J
1	2	3	4	5	6

1 = Type ... ceramic, electrolytic, etc.	4 = Voltage rating
2 = Shape ... round, square, ect.	5 = Value
3 = Temp. coefficient	6 = Tolerance



• Capacitor value

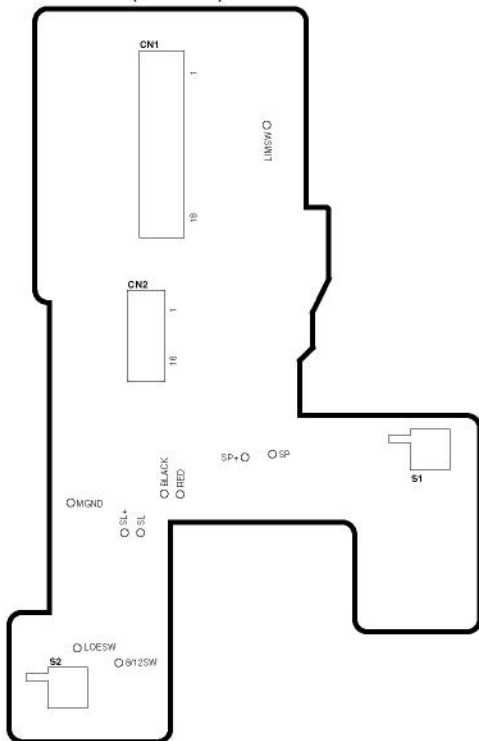
010 = 1pF
 100 = 10pF
 101 = 100pF
 102 = 1000pF = 0.001μF



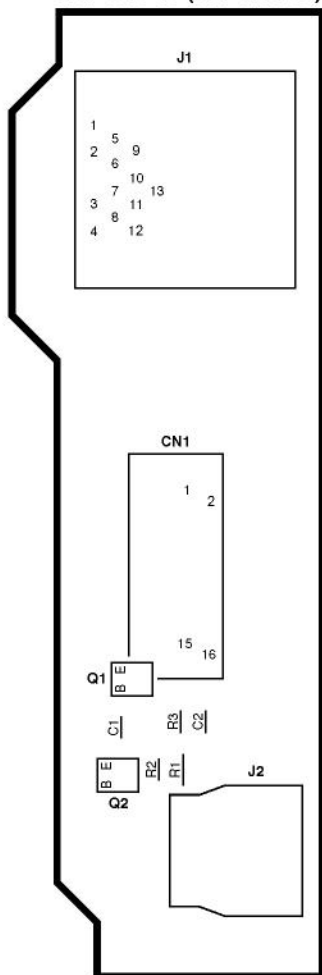
PC BOARD (Component side view)

SUB-CIRCUIT UNIT

X13-9850-00 (J74-0987-01)



SUB-CIRCUIT UNIT X16-1030-00 (J74-0630-12)

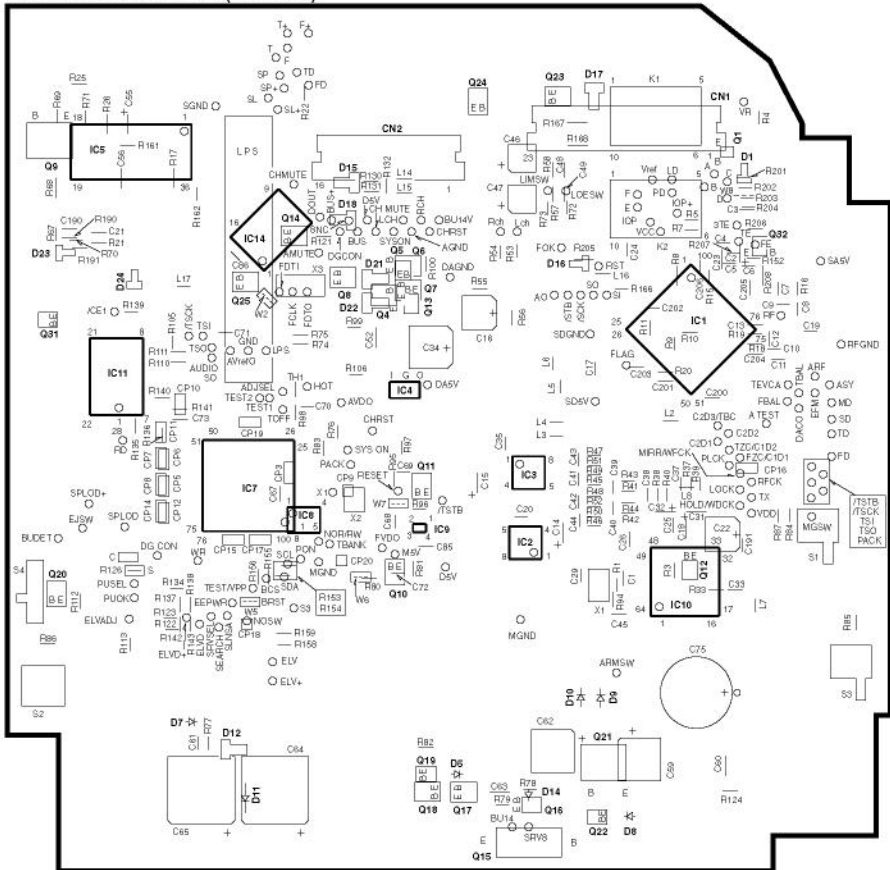


(X16-)

Ref.No.	Address
Q1	5D
Q2	5D

PC BOARD (Component side view)

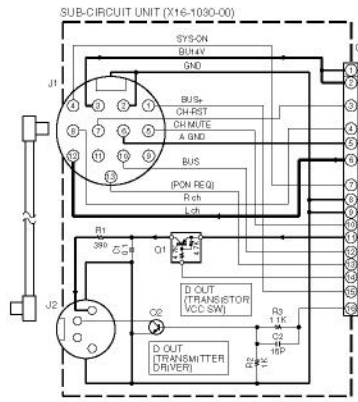
CD PLAYER UNIT X32-4970-00 (J74-1133-11)



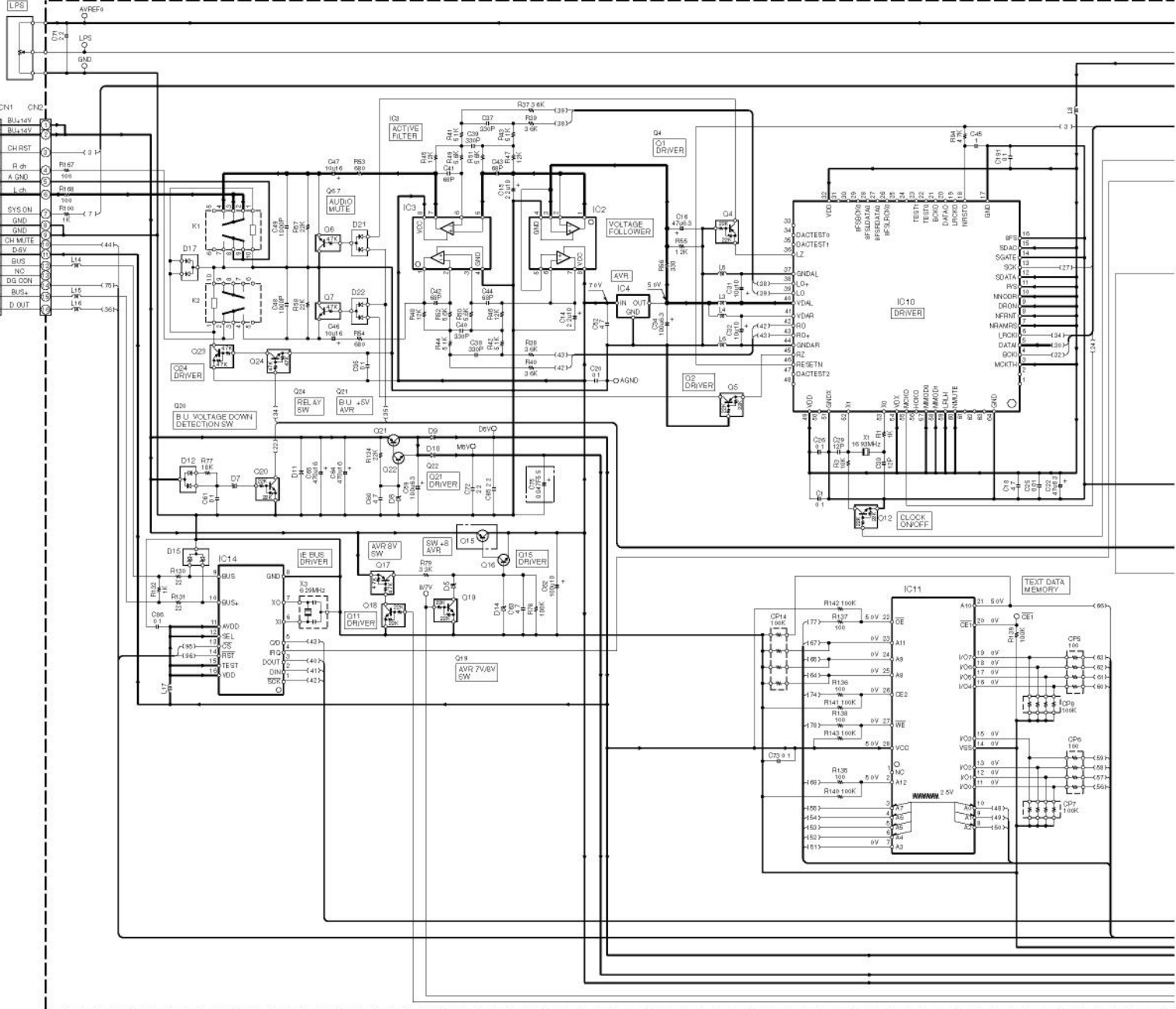
(X32-)

Ref.No.	IC1	IC2	IC3	IC4	IC5	IC7	IC8	IC9	IC10	IC11	IC14	Q1	Q4	Q5	Q6	Q7	Q8	Q9
Address	3I	4H	4H	3H	2F	4G	4G	4H	4I	3F	3G	2I	3H	3H	3H	3H	3G	2F
Ref.No.	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q31	Q32
Address	4H	4H	4I	3H	3G	6H	5H	5H	5H	5H	4F	5I	5I	2H	2H	3G	3F	3I

CD PLAYER UNIT (X32-4970-00)



- J1 (E56 0825 05)
- 11 BUS+
 - 12 GND
 - 13 BU+14
 - 14 SYS ON
 - 15 CH MUTE
 - 16 A GND
 - 17 CH RST
 - 18 R ch
 - 19 (GND)
 - 20 BUS-
 - 21 BU+14
 - 22 L ch
 - 23 (PCK REQ)
- O1 DT145SR
O2 25C3437



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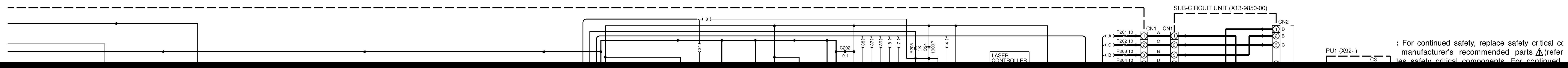
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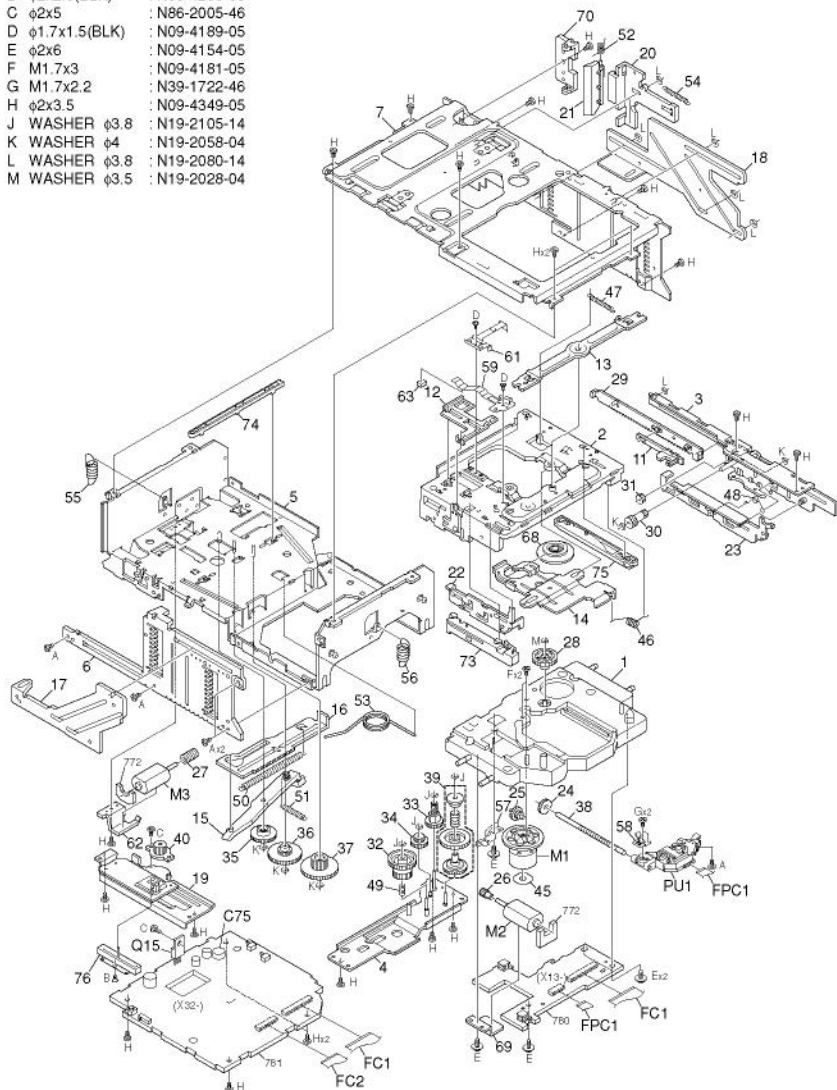
Y



PU1 (X92-)
 : For continued safety, replace safety critical components with manufacturer's recommended parts (refer to the safety critical components list). For continued safety, replace safety critical components with manufacturer's recommended parts (refer to the safety critical components list). For continued safety, replace safety critical components with manufacturer's recommended parts (refer to the safety critical components list).

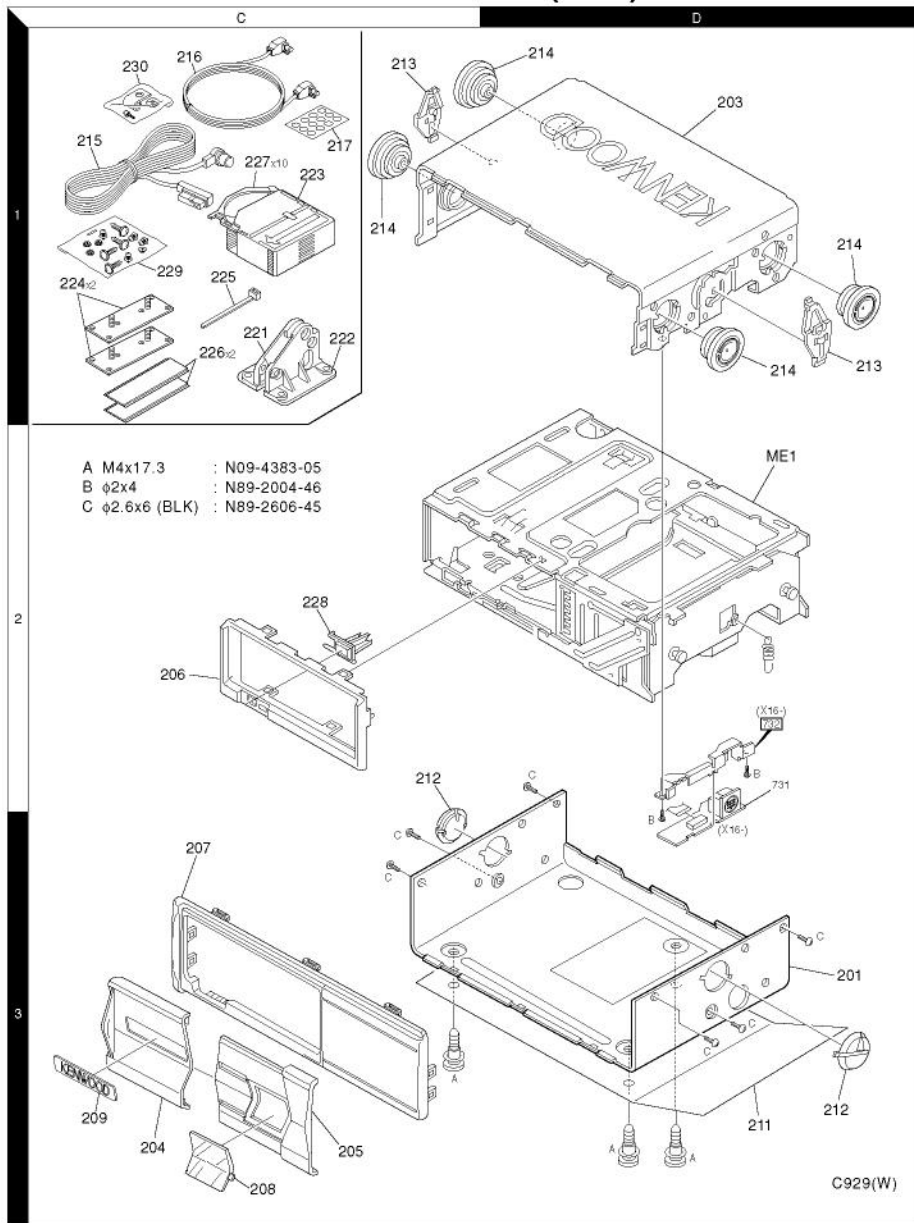
EXPLODED VIEW (MECHANISM)

A	φ2x3.5	:	N09-4126-05
B	φ2x2.5(BLK)	:	N09-4288-05
C	φ2x5	:	N86-2005-46
D	φ1.7x1.5(BLK)	:	N09-4189-05
E	φ2x6	:	N09-4154-05
F	M1.7x3	:	N09-4181-05
G	M1.7x2.2	:	N39-1722-46
H	φ2x3.5	:	N09-4349-05
J	WASHER φ3.8	:	N19-2105-14
K	WASHER φ4	:	N19-2058-04
L	WASHER φ3.8	:	N19-2080-14
M	WASHER φ3.5	:	N19-2028-04



C929(W) MECHA

EXPLODED VIEW (UNIT)



PARTS LIST

* New Parts

Parts without Part No. are not supplied

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

Teile ohne Parts No. werden nicht geliefert

(X16-1030-00)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
C929					
201	3D	*	A10-4869-01	CHASSIS	
203	1D	*	A01-2760-11	METALLIC CABINET	
204	3C	*	A21-4112-02	DRESSING PANEL (L)	
205	3C	*	A21-4113-02	DRESSING PANEL (R)	
206	2C	*	A22-2899-02	SUB PANEL	
207	3C	*	A64-2380-01	PANEL	
208	3C	*	B10-4059-04	FRONT GLASS	
209	3C	*	B43-1286-04	KENWOOD BADGE	
211	3D	*	B68-1275-04	CAUTION CARD (TRANS. SCREW)	
			B46-0100-50	WARRANTY CARD	
			B46-0182-14	ID CARD	
			B69-1236-04	CAUTION CARD (CONNECTION CABLE)	
		*	B69-1367-04	CAUTION CARD (SCREW FOR HOLDER)	
		*	B64-1936-00	INST. MANUAL (ENG. FRE. SPA. POR)	
		*	B64-1937-00	INST. MANUAL (GER. DUT. JTA)	
		*	B64-1938-00	INST. MANUAL (CHI. KOR)	
212	3D		D10-4515-03	ARM	
213	1C		D10-4516-04	LEVER	
214	1C		D39-0242-05	DAMPER	
215	1C		E30-4591-05	CORD WITH CONNECTOR	
216	1C	*	E30-4961-05	CORD WITH CONNECTOR (WITH CAP)	
217	1C		F19-1303-04	BLIND PLATE	
			H02-0827-03	INNER CARTON CASE (CD/MAGAZINE)	
			H10-4729-02	POLYSTYRENE FOAMED FIXTURE	
		*	H12-2669-04	PACKING FIXTURE	
			H13-1706-04	CARTON BOARD	
			H25-0337-04	PROTECTION BAG (180X300X0.03)	
			H25-1115-04	PROTECTION BAG	
		*	H54-2152-04	ITEM CARTON CASE	
221	1C		J19-5018-03	BRACKET (L)	
222	1C		J19-5019-03	BRACKET (R)	
223	1C		J19-5074-02	HOLDER ASSY	
224	1C		J21-9586-04	MOUNTING HARDWARE ASSY	
225	1C		J61-0074-05	WIRE BAND	
226	1C		J69-0506-04	ADHESIVE TAPE	
227	1C		J69-0512-01	TRAY	
228	2C		K24-3829-04	KNOB (EJECT)	
229	1C		N69-1628-15	SCREW SET (12-SCREW)	
230	1C	*	N69-1706-05	SCREW SET (3-PIECE)	
A	3D		N09-4389-05	STEPPED SCREW	
B	2D		N69-2004-46	BINDING HEAD TAPITTE SCREW	
C	3D		N69-2606-46	BINDING HEAD TAPITTE SCREW	
ME1	2D	*	X32-4023-00	MECHANISM ASSY	
SUB-CIRCUIT UNIT (X13-9850-00)					
CN1			E40-9487-05	FLAT CABLE CONNECTOR	
CN2			E40-9536-05	FLAT CABLE CONNECTOR	
S1.2			S74-0811-05	MICRO SWITCH	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
SUB-CIRCUIT UNIT (X16-1030-00)					
C1			CK73GB1C104K	CHIP C 0.10UF K	
C2			CC73GC0H1H560J	CHIP C 15PF J	
CN1			E40-9555-05	FLAT CABLE CONNECTOR	
J1			E58-0825-05	CYLINDRICAL RECEPTACLE	
J2			E68-0817-05	CYLINDRICAL RECEPTACLE	
R1			RK73EB2B391J	CHIP R 390 J 1/8W	
R2			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R3			RK73GB1J112J	CHIP R 1.1K J 1/16W	
Q1			DTA143EK	DIGITAL TRANSISTOR	
Q2			2SC3437	TRANSISTOR	
CD PLAYER UNIT (X32-4970-00)					
C1			CK73GB1C104K	CHIP C 0.10UF K	
C2			C92-0628-05	CHIP-TAN 10UF 10WV	
C3			CK73GB1H682K	CHIP C 6800PF K	
C4			CK73GB1H152K	CHIP C 1500PF K	
C5			CC73GC0H1H560J	CHIP C 56PF J	
C6			CC73GC0H1H151J	CHIP C 150PF J	
C7			CC73GC0H1H040C	CHIP C 4.0PF C	
C8			CC73GC0H1H180J	CHIP C 18PF J	
C9			CK73GB1A224K	CHIP C 0.22UF K	
C10			CK73GB1H222K	CHIP C 2200PF K	
C11			CK73GB1H682K	CHIP C 6800PF K	
C12, 13			CK73GB1H103K	CHIP C 0.010UF K	
C14, 15			D92-0514-05	CHIP-TAN 2.2UF 10WV	
C16			D92-1369-05	ELECTRO 47UF 6.3WV	
C17			CK73FB1A225K	CHIP C 2.2UF K	
C18			CK73EB1A475K	CHIP C 4.7UF K	
C19			CK73FB1A225K	CHIP C 2.2UF K	
C20			CK73GB1C104K	CHIP C 0.10UF K	
C21			CK73GB1H681K	CHIP C 6800PF K	
C22			D92-1369-05	ELECTRO 47UF 6.3WV	
C23			CK73EB1A475K	CHIP C 4.7UF K	
C24			CK73GB1H102K	CHIP C 1000PF K	
C25			CK73GB1H103K	CHIP C 0.010UF K	
C26			CK73GB1C104K	CHIP C 0.10UF K	
C29, 30			CC73GC0H1H120J	CHIP C 12PF J	
C31, 32			D92-0628-05	CHIP-TAN 10UF 10WV	
C33			CK73GB1H222K	CHIP C 2200PF K	
C34			D92-1369-05	ELECTRO 100UF 6.3WV	
C35			CK73GB1C104K	CHIP C 0.10UF K	
C37-40			CK73GB1H331K	CHIP C 330PF K	
C41-44			CC73GC0H1H680J	CHIP C 68PF J	
C45			CK73GB0J105K	CHIP C 1.0UF K	
C46, 47			D92-1369-05	ELECTRO 100UF 16WV	
C48, 49			CK73GB1H102K	CHIP C 1000PF K	
C52			CK73EB1A475K	CHIP C 4.7UF K	
C55			D92-0628-05	CHIP-TAN 10UF 10WV	
C56			CK73EB1A475K	CHIP C 4.7UF K	
C59			D92-1369-05	ELECTRO 100UF 6.3WV	
C50			CK73EB1A475K	CHIP C 4.7UF K	
C61			CK73GB1C104K	CHIP C 0.10UF K	

E Europe K North America M Other Areas

▲ indicates safety critical components

PARTS LIST

* New Parts

Parts without Part No. are not supplied

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

Teile ohne Parts No. werden nicht geliefert

(X32-4970-00)

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
C62			C92-1392-05	ELECTRO 100UF 10WV		R41-44			RK73GB1J512J	CHIP R 51K J 1/16W	
C63			CK73EB1A475K	CHIP C 47UF K		R45-48			RK73GB1J123J	CHIP R 12K J 1/16W	
C64-65			C92-1388-05	ELECTRO 470UF 16WV		R49-52			RK73GB1J562J	CHIP R 56K J 1/16W	
C67-69			CK73GB1C104K	CHIP C 0.10UF K		R53-54			RK73GB1J681J	CHIP R 68K J 1/16W	
C70			CC73GCH1H101J	CHIP C 100PF J		R55			RK73GB1J122J	CHIP R 12K J 1/16W	
C71-72			CK73FB1A225K	CHIP C 22UF K		R56			RK73GB1J331J	CHIP R 33K J 1/16W	
C73			CK73GB1C104K	CHIP C 0.10UF K		R57-58			RK73GB1J123J	CHIP R 12K J 1/16W	
C85			CK73FB1A225K	CHIP C 22UF K		R67			RK73GB1J124J	CHIP R 120K J 1/16W	
C86			CK73GB1C104K	CHIP C 0.10UF K		R68			RK73EB2B124J	CHIP R 120K J 1/8W	
C190			CK73GB1H681K	CHIP C 680PF K		R69-70			RK73GB1J303J	CHIP R 30K J 1/16W	
C191			CK73GB1C104K	CHIP C 0.10UF K		R71			RK73GB1J812J	CHIP R 91K J 1/16W	
C200-206			CK73GB1C104K	CHIP C 0.10UF K		R72-73			RK73GB1J101J	CHIP R 10K J 1/16W	
DN1			E40-9336-05	FLAT CABLE CONNECTOR		R74-75			RK73GB1J223J	CHIP R 22K J 1/16W	
DN2			E40-9404-05	FLAT CABLE CONNECTOR		R76			RK73GB1J104J	CHIP R 100K J 1/16W	
						R77			RK73GB1J183J	CHIP R 18K J 1/16W	
L2			L92-0322-05	CHIP FERRITE		R78			RK73GB1J104J	CHIP R 100K J 1/16W	
L3-8			L92-0314-05	CHIP FERRITE		R79			RK73GB1J323J	CHIP R 32K J 1/16W	
L14, 15			L92-0319-05	CHIP FERRITE		R80			RK73GB1J102J	CHIP R 10K J 1/16W	
L16, 17			L92-0314-05	CHIP FERRITE		R81			RK73GB1J103J	CHIP R 10K J 1/16W	
X1			L77-2081-05	CRYSTAL RESONATOR		R82-84			RK73GB1J102J	CHIP R 10K J 1/16W	
X2			L78-0568-05	RESONATOR		R85-87			RK73GB1J104J	CHIP R 100K J 1/16W	
X3			L78-0576-05	RESONATOR (6.29MHZ)		R94			RK73GB1J472J	CHIP R 47K J 1/16W	
CP3			R90-0720-05	MULTI-COMP 100K X4		R95-96			RK73GB1J104J	CHIP R 100K J 1/16W	
CP5-6			R90-1014-05	MULTI-COMP 100 X4		R97-98			RK73GB1J103J	CHIP R 10K J 1/16W	
CP7-8			R90-0720-05	MULTI-COMP 100K X4		R99			RK73GB1J104J	CHIP R 100K J 1/16W	
CP9			R90-0725-05	MULTI-COMP 1K X2		R100			RK73GB1J102J	CHIP R 10K J 1/16W	
CP10-12			R90-1014-05	MULTI-COMP 100 X4		R105,106			RK73GB1J102J	CHIP R 10K J 1/16W	
CP14,15			R90-0720-05	MULTI-COMP 100K X4		R110-113			RK73GB1J104J	CHIP R 100K J 1/16W	
CP16			R90-0724-05	MULTI-COMP 1K X4		R121-123			RK73GB1J102J	CHIP R 10K J 1/16W	
CP17			R90-0720-05	MULTI-COMP 100K X4		R124			RK73GB1J223J	CHIP R 22K J 1/16W	
CP18			R90-0725-05	MULTI-COMP 1K X2		R126			RK73GB1J104J	CHIP R 100K J 1/16W	
CP19			R90-1014-05	MULTI-COMP 100 X4		R130,131			RK73GB1J220J	CHIP R 22 J 1/16W	
CP20			R90-0737-05	MULTI-COMP 100K X2		R132			RK73GB1J102J	CHIP R 10K J 1/16W	
R1			RK73GB1J102J	CHIP R 10K J 1/16W		R134			RK73GB1J104J	CHIP R 100K J 1/16W	
R3			RK73GB1J103J	CHIP R 10K J 1/16W		R135-138			RK73GB1J101J	CHIP R 100 J 1/16W	
R4			RK73GB1J391J	CHIP R 39K J 1/16W		R139-143			RK73GB1J104J	CHIP R 100K J 1/16W	
R5			RK73GB1J302J	CHIP R 30K J 1/16W		R152			RK73GB1J184J	CHIP R 180K J 1/16W	
R7			RK73GB1J302J	CHIP R 30K J 1/16W		R153,154			RK73GB1J472J	CHIP R 47K J 1/16W	
R8			RK73EB2B100J	CHIP R 10 J 1/8W		R155,156			RK73GB1J101J	CHIP R 100 J 1/16W	
R9			RK73GB1J102J	CHIP R 10K J 1/16W		R158,159			RK73GB1J223J	CHIP R 22K J 1/16W	
R10			RK73GB1J104J	CHIP R 100K J 1/16W		R161			RK73GB1J183J	CHIP R 18K J 1/16W	
R11			RK73GB1J101J	CHIP R 100 J 1/16W		R162			RK73GB1J472J	CHIP R 47K J 1/16W	
R15			RK73GB1J104J	CHIP R 100K J 1/16W		R166			RK73GB1J104J	CHIP R 100K J 1/16W	
R16			RK73GB1J562J	CHIP R 56K J 1/16W		R167,168			RK73EB2B101J	CHIP R 100 J 1/8W	
R17			RK73EB2B103J	CHIP R 10K J 1/8W		R190,191			RK73GB1J123J	CHIP R 12K J 1/16W	
R18			RK73GB1J103J	CHIP R 10K J 1/16W		R201-204			RK73GB1J100J	CHIP R 10 J 1/16W	
R19			RK73GB1J333J	CHIP R 33K J 1/16W		R205			RK73EB2B102J	CHIP R 10K J 1/8W	
R20			RK73GB1J104J	CHIP R 100K J 1/16W		R206			RK73GB1J363J	CHIP R 36K J 1/16W	
R21			RK73GB1J123J	CHIP R 12K J 1/16W		R207			RK73GB1J684J	CHIP R 680K J 1/16W	
R22			RK73GB1J682J	CHIP R 68K J 1/16W		R208			RK73EB2B101J	CHIP R 100 J 1/8W	
R25			RK73GB1J113J	CHIP R 11K J 1/16W		W2			R92-1252-05	CHIP R 0 OHM	
R26			RK73EB2B123J	CHIP R 12K J 1/8W		W5-7			R92-1252-05	CHIP R 0 OHM	
R33			RK73GB1J102J	CHIP R 10K J 1/16W		W8			R92-2053-05	CHIP R 0 OHM J 1/8W	
R37-40			RK73GB1J362J	CHIP R 36K J 1/16W		K1-2			S78-0308-05	MAGNETIC RELAY	

E Europe K North America M Other Areas

▲ indicates safety critical components

PARTS LIST

* New Parts

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Teile ohne Parts No. werden nicht geliefert

(X92-4020-00)

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
S1			S66-0823-05	PUSH SWITCH	
S2			S70-0838-05	TACT SWITCH	
S3			S66-0823-05	PUSH SWITCH	
S4			S62-0863-05	SLIDE SWITCH	
D1			DAP202U	DIODE	
D5			MA8075-M	ZENER DIODE	
D7			MA8056-M	ZENER DIODE	
D8			MA8062-M	ZENER DIODE	
D9 , 10			M1F60	DIODE	
D11			1SR154-400	DIODE	
D12			DA204K	DIODE	
D14			MA8091-M	ZENER DIODE	
D15			RD6 ZZ	ZENER DIODE	
D16			DAP202U	DIODE	
D17 , 18			DAP202K	DIODE	
D21 , 22			DAN202K	DIODE	
D23 , 24			DAN202U	DIODE	
IC1			LPD63711AGC	MOS-IC	
IC2			NUM4580MD	ANALOGUE IC	
IC3			NUM532MD	IC(OP AMP)	
IC4			KIA78L05F	ANALOGUE IC	
IC5			LA6576	ANALOGUE IC	
IC7			LPD784214GCG92	MI-ODM IC	
IC8			BR24C02F-W	MEMORY IC	
IC8			CAT24WD02J	MEMORY IC	
IC8			M24C02WMN6T	MEMORY IC	
IC8			S-24C02BFJA	MEMORY IC	
IC9			S-80830ANNP	MOS-IC	
IC10			KKZ05F	CUSTOM IC	
IC11			LC3564BT-70	MEMORY IC	
IC14			LPD72042BGT	MOS-IC	
Q1			MCH6101	TRANSISTOR	
Q4			DTA124EK	DIGITAL TRANSISTOR	
Q5			DTA124EUA	DIGITAL TRANSISTOR	
D6 , 7			DTC343TK	DIGITAL TRANSISTOR	
D8			DTA124EK	DIGITAL TRANSISTOR	
Q9			2SB1202	TRANSISTOR	
Q10			2SB1295	TRANSISTOR	
Q11			DTC124EK	DIGITAL TRANSISTOR	
D12 , 13			DTC124EUA	DIGITAL TRANSISTOR	
Q14			DTA143EK	DIGITAL TRANSISTOR	
Q16			2SC4081	TRANSISTOR	
Q17			DTA143EK	DIGITAL TRANSISTOR	
Q18			DTC124EK	DIGITAL TRANSISTOR	
Q19			DTC124EUA	DIGITAL TRANSISTOR	
Q20			DTC124EK	DIGITAL TRANSISTOR	
Q21			2SB1202	TRANSISTOR	
Q22			2SC4081	TRANSISTOR	
Q23			DTA143EK	DIGITAL TRANSISTOR	
Q24			DTC144EK	DIGITAL TRANSISTOR	
Q25			DTC124EK	DIGITAL TRANSISTOR	
Q31			DTC124EUA	DIGITAL TRANSISTOR	
Q32			DTC1147YU	DIGITAL TRANSISTOR	
TH1			NTH5G20G339K03	THERMISTOR	

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
MECHANISM ASSY (X92-4020-00)					
1			A10-4745-03	CHASSIS ASSY	
2	2B		A10-4748-02	CHASSIS CALKING ASSY	
3	2B		A10-4751-03	CHASSIS CALKING ASSY	
4	3A		A10-4754-04	CHASSIS CALKING ASSY	
5	2A		A10-4757-02	CHASSIS CALKING ASSY	
6	2A		A10-4759-02	CHASSIS	
7	1A		A10-4760-02	CHASSIS CALKING ASSY	
C75	3A		C90-2945-05	ELECTRO 0.047F 55WV	
11	2B		D10-4293-03	ARM	
12	2A		D10-4527-03	SLIDER	
13	2B		D10-4528-03	ARM	
14	2B		D10-4529-03	LEVER	
15	3A		D10-4531-04	LEVER ASSY	
16	2A		D10-4533-03	LEVER	
17	2A		D10-4534-04	SLIDER ASSY	
18	1B		D10-4536-13	SLIDER	
19	3A		D10-4537-04	SLIDER ASSY	
20	1B		D10-4540-13	ARM	
21	1B		D10-4547-03	LEVER	
22	2B		D12-0630-02	CAM	
23	2B		D12-0631-02	CAM	
24	3B		D13-2186-04	GEAR	
25	3B		D13-2186-04	GEAR	
26	3B		D13-2187-04	GEAR	
27	3A		D13-2188-04	WORM	
28	2B		D13-2092-04	GEAR	
29	2B		D13-2093-04	GEAR ASSY	
30	2B		D13-2095-04	GEAR	
31	2B		D13-2096-04	GEAR	
32	3A		D13-2099-04	GEAR	
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 (23P)	
FC2	3A		E39-0173-15	FLAT CABLE (16P)	
45	3B		F09-1645-04	SHEET	
46	2B		G01-3036-04	TORSION COIL SPRING	
47	1B		G01-3037-04	EXTENSION COIL SPRING	
48	2B		G01-3038-04	TORSION COIL SPRING	
49	3A		G01-3039-04	COMPRESSION COIL SPRING	
50	3A		G01-3040-04	EXTENSION COIL SPRING	
51	3A		G01-3041-04	EXTENSION COIL SPRING	
52	1B		G01-3042-04	TORSION COIL SPRING	
53	2A		G01-3043-04	TORSION COIL SPRING	
54	1B		G01-3044-04	EXTENSION COIL SPRING	
55	2A		G01-3045-04	EXTENSION COIL SPRING (BLACK)	

E Europe K North America M Other Areas

▲ Indicates safety critical components

PARTS LIST

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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
56	2A		G01-3046-04	EXTENSION COIL SPRING (SILVER)							
57	3B		G02-1374-04	FLAT SPRING							
58	3B		G02-1375-03	FLAT SPRING							
59	2B		G02-1376-03	FLAT SPRING							
61	2B		G02-1378-04	FLAT SPRING							
62	3A		G02-1380-04	FLAT SPRING							
63	2A		G10-1045-14	FELT							
66	2B		J11-0637-03	CLAMPER							
69	3B		J21-9592-04	MOUNTING HARDWARE							
70	1B		J21-9595-03	MOUNTING HARDWARE							
73	2B		J90-0759-03	GUIDE							
74	2A		J90-0760-03	RAIL							
75	2B		J90-0777-23	GUIDE							
FPC1	3B		J84-0099-05	RIGID PRINTED WIRING BOARD							
A	2A		N09-4126-05	MACHINE SCREW (2X3 5)							
B	3A		N09-4288-05	TAPTITE SCREW (2X2 5)							
C	3A		N86-2005-46	BINDING HEAD TAPTITE SCREW							
D	2B		N09-4189-05	TAPTITE SCREW (1 7X1 5)							
E	3B		N09-4154-05	TAPTITE SCREW (2X6)							
F	2B		N09-4181-05	MACHINE SCREW (M1 7X3)							
G	3B		N39-1722-46	PAN HEAD MACHINE SCREW							
H	1A		N09-4349-05	TAPTITE SCREW (2X3 5)							
J	3A		N19-2105-14	FLAT WASHER (1 55X3 8X0 35)							
K	3A		N19-2058-04	FLAT WASHER (1 6X4X0 25)							
L	1B		N19-2080-14	FLAT WASHER (1 55X3 8X0 3)							
M	2B		N19-2028-04	FLAT WASHER (1 6X3 5X0 25)							
78	3A		R33-0207-05	SLIDE TYPE VARIABLE RESISTOR							
M1	3B		T42-0797-04	MOTOR ASSY							
M2_3	3A		T42-0788-05	DC MOTOR							
PU1	3B		T25-0216-05	OPTICAL PICKUP HEAD							
Q15	3A		28B1566(E,F)	TRANSISTOR							

E Europe K North America M Other Areas

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