



Technical Manual

CD PLAYER RCD-1070

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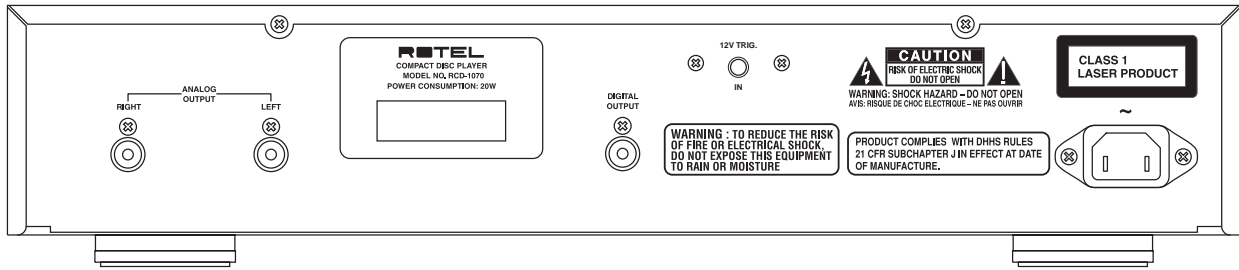
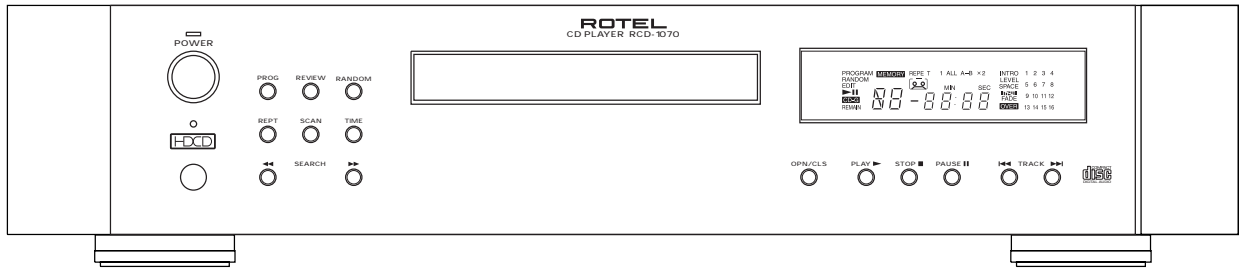
Specifications

Total Harmonic Distortion + Noise	0.0045% @ 1kHz
Intermodulation Distortion	0.0045% @ 1kHz
Frequency Response (± 0.5 dB)	20-20,000 Hz
Channel Balance	± 0.5 dB
Phase Linearity	± 0.5 degree
Channel Separation	> 98 dB @ 1kHz
Signal to Noise Ratio	> 100dB
Dynamic Range	> 96 dB
Digital to Analog Converters	18 bit equivalent, multi-level Delta-Sigma DAC with 8x oversampling digital filter and HDCD
Speed Accuracy, Wow & Flutter	Quartz Crystal Precision
Output Impedance	100 Ohms
Digital Output	0.5 Volt, Peak to Peak
Load Impedance	75 Ohms
Power Requirements	
USA Version	AC 115V, 60 Hz
European Version	AC 230V, 50 Hz
Power Consumption	20 Watts
Dimensions (W, H, D)	17 x 3 ¹¹ / ₁₆ x 13 ¹ / ₄ inches 432 x 93 x 337 mm
Front Panel Height (for rack mount)	3 ⁵ / ₃₂ inches, 80 mm
Weight (net)	5.8 kg, 12.8 lb.

THE ROTEL CO., LTD
 SHINSEN-BLD. 4F 10-10 SHINSEN-CHO, SHIBUYA-KU,
 TOKYO 150-0045, JAPAN

Serial. NO. Beginning

Appearance



Parts List 1/3

SYMBOL	PARTS NO.	DESCRIPTION
016 X-1327A01-07 PCB ASSY		
K201	013 C-4522B00	PJ SHIELD PLATE
K701,702	013 C-4523A00T	PJ SHIELD PLATE
M5,M13	017 4TR-2792#3	HEAT SINKER BOARD
M4	017 C-4490A02	HEAT SINKER BOARD
U901,U961,U981	019 TO-220	INSULATOR SHEET
L001	021 TRL-356	LINE CHOKE COIL
L202	021 TRL-377A	DIGITAL OUTPUT COIL
L651,661,662	021 TRL-392	MICRO INDUCTOR 33UH
L101,151,152,201,401,601,631	021 TRL-395	MICRO INDUCTOR 4.7UH
X401	023 CSA10.0MHZ	CERAMIC RESONATOR
X631	023 HC49U-002	CRYSTAL 16.9344MHZ
U251	031 BA6392FP	INTEGRATED CIRCUIT
U101	031 CXA1821M	INTEGRATED CIRCUIT
U151	031 CXD2545Q	INTEGRATED CIRCUIT
U401	031 CXP82440A-1	INTEGRATED CIRCUIT CXP82440A-179Q
U511	031 LB1641	INTEGRATED CIRCUIT
U981	031 NJM7815FA	INTEGRATED CIRCUIT
U982	031 NJM7915FA	INTEGRATED CIRCUIT
U701,702	031 OPA2604AP	INTEGRATED CIRCUIT
U451	031 PC817B	INTEGRATED CIRCUIT
U601	031 PCM1732U	INTEGRATED CIRCUIT
U351	031 SBX3010-52B	INTEGRATED CIRCUIT
U901,931,961	031 SI3050J	INTEGRATED CIRCUIT
U201,631	031 TC74HCU04AP	INTEGRATED CIRCUIT
T731	032 TA1016-FG	TRANSISTOR 2SA1016
T451,901,902	032 TA608-FG	TRANSISTOR 2SA608
T101	032 TB764-EF	TRANSISTOR 2SB764
T452,601,903,921-924	032 TC536-FG	TRANSISTOR 2SC536
D901,903,904,921,922,951-954	034 T1N4003-TB	DIODE
D401,402,451,452,731	034 T1N4148-86	DIODE
D905	034 TRD20JST1	ZENER DIODE
D511	034 TRD4.7JST1	ZENER DIODE
D351,923	034 TRD6.2JST1	ZENER DIODE
O351	035 6BT209GK	FL TUBE
F001	036 5ST250VT1A	FUSE
C717,718	041 16BGF100M	ELECTROLYTIC CAPACITOR BGF 16V100uF
C631	041 20SG22M+F	ELECTROLYTIC CAPACITOR OS-CON 20V22uF
C741-744,981,982	041 25BGF100M	ELECTROLYTIC CAPACITOR BGF 25V100uF
C651,661,662	041 25BGF47M	ELECTROLYTIC CAPACITOR BGF 25V47uF
C665-668	041 50BGF10M	ELECTROLYTIC CAPACITOR BGF 50V10uF
C955,956	041 ALC20S1051CD	ELECTROLYTIC CAPACITOR BHC 35V4700uF
C601,963,965	041 TEEUFC1E221B	ELECTROLYTIC CAPACITOR FC 25V220uF
C251	041 TVX1C102	ELECTROLYTIC CAPACITOR VX 16V1000uF
C101,107,151,164,908,932	041 TVX1E101	ELECTROLYTIC CAPACITOR VX 25V100uF
C105,106,201,203,511	041 TVX1E470	ELECTROLYTIC CAPACITOR VX 25V47uF
C352,404,409	041 UTES1A101-FB	ELECTROLYTIC CAPACITOR 10V100uF
C402,924	041 UTES1E101-FB	ELECTROLYTIC CAPACITOR 25V100uF
C451,923,931,969	041 UTES1H010-FB	ELECTROLYTIC CAPACITOR 50V1uF
C910,911	041 UTES1H100-FB	ELECTROLYTIC CAPACITOR 50V10uF
C405,452	041 UTES1H2R2-FB	ELECTROLYTIC CAPACITOR 50V2.2uF
C906	041 UTES1V101-FB	ELECTROLYTIC CAPACITOR 35V100uF
C907	041 VX1C332	ELECTROLYTIC CAPACITOR VX 16V3300uF
C901,903,905,921,922,951-954	043 TC500V103	CERAMIC CAPACITOR 500V0.01uF
C161	043 TC50V101	CERAMIC CAPACITOR 50V100PF
C102,152,165,169,170,171	043 TC50V103	CERAMIC CAPACITOR 50V0.01uF
C202,206,252,351,401,403	043 TC50V103	CERAMIC CAPACITOR 50V0.01uF
C408,509,909,941	043 TC50V103	CERAMIC CAPACITOR 50V0.01uF
C155,158	043 TC50V471	CERAMIC CAPACITOR 50V470PF
C109	043 TC50VCH150	CERAMIC CAPACITOR CH 50V15PF
C633,634	043 TC50VCH220	CERAMIC CAPACITOR CH 50V22PF

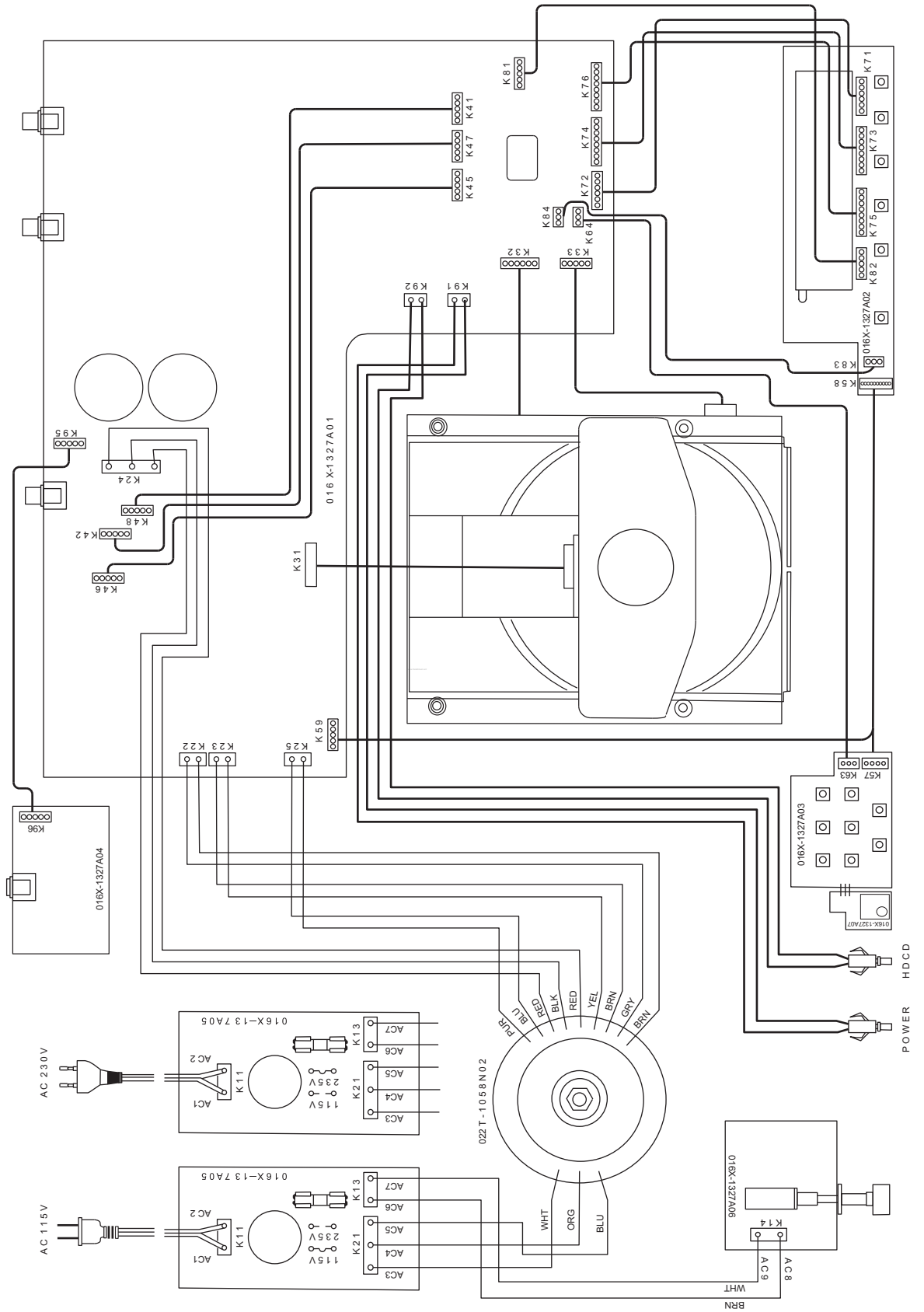
Parts List 2/3

SYMBOL	PARTS NO.	DESCRIPTION
C254,258	043 TC50VCH270	CERAMIC CAPACITOR CH 50V27PF
C406,407	043 TC50VCH330	CERAMIC CAPACITOR CH 50V33PF
C205,207	043 TC50VCH470	CERAMIC CAPACITOR CH 50V47PF
C731,732	044 100UPZ103J	POLYPROPYLENE FILM CAPACITOR
C001	044 DE1307E472M	SPARK KILLER
C701,702	044 FSC160V101H	STYROL CAPACITOR 100P
C707,708,713,714	044 PP400V1000PF	POLYPROPYLENE FILM CAPACITOR
C711,712	044 PP630V560PF	POLYPROPYLENE FILM CAPACITOR
C108	044 TBF014D0102J	M.P CAPACITOR 63V1000PF
C163	044 TBF014D0103J	M.P CAPACITOR 63V0.01uF
C103,104,153,154,156,257,513	044 TBF014D0104J	M.P CAPACITOR 63V0.1uF
C159,255	044 TBF014D0152J	M.P CAPACITOR 63V1500PF
C157	044 TBF014D0472J	M.P CAPACITOR 63V4700PF
C160,204	044 TBF014D0473J	M.P CAPACITOR 63V0.047uF
C253	044 TBF014D0682J	M.P CAPACITOR 63V6800PF
C167,168	044 TBF074D0105J	M.P CAPACITOR 63V1uF
C256	044 TBF074D0334J	M.P CAPACITOR 63V0.33uF
C162	044 TBF074D0474J	M.P CAPACITOR 63V0.47uF
C602,632,652,663,664	046 T50V473K	ML CERAMIC CAPACITOR 50V0.047uF
C959,960,967,987,988	046 T50V473K	ML CERAMIC CAPACITOR 50V0.047uF
R601,902	053 CR14-102J-A	CARBON RESISTOR 1K 1/4W
R904,922,923,927	053 CR14-103J-A	CARBON RESISTOR 10K 1/4W
R452,454,455,603,925	053 CR14-104J-A	CARBON RESISTOR 100K 1/4W
R907	053 CR14-105J-A	CARBON RESISTOR 1M 1/4W
R451,453,732,906,921,928	053 CR14-223J-A	CARBON RESISTOR 22K 1/4W
R908	053 CR14-224J-A	CARBON RESISTOR 220K 1/4W
R602,905	053 CR14-473J-A	CARBON RESISTOR 47K 1/4W
R924,926	053 CR14-563J-A	CARBON RESISTOR 56K 1/4W
R403-409,411,413-417	053 CR16-103J-A	CARBON RESISTOR 10K 1/8W
R402,410,412	053 CR16-104J-A	CARBON RESISTOR 100K 1/8W
R256	054 1WS2.2JF	METAL OXIDE FILM RESISTOR 1WS2.2R
R511	054 1WS4.7JF	METAL OXIDE FILM RESISTOR 1WS4.7R
R719,720	054 RC55Z1000F	METAL FILM RESISTOR 100R 1%
R703,704	054 RC55Z1003F	METAL FILM RESISTOR 100K 1%
R713,714	054 RC55Z1201F	METAL FILM RESISTOR 1.2K 1%
R707,708	054 RC55Z1202F	METAL FILM RESISTOR 12K 1%
R711,712	054 RC55Z1501F	METAL FILM RESISTOR 1.5K 1%
R715,716	054 RC55Z2701F	METAL FILM RESISTOR 2.7KK 1%
R705,706	054 RC55Z3301F	METAL FILM RESISTOR 3.3KK 1%
R701,702	054 RC55Z4700F	METAL FILM RESISTOR 470R 1%
R717,718	054 RC55Z5603F	METAL FILM RESISTOR 560K 1%
R423	054 SE8102J	THICK FILM NETWORK RESISTOR 1K
R424	054 SE8104J	THICK FILM NETWORK RESISTOR 100K
R152,168,169	054 TMF1000	METAL FILM RESISTOR 100R
R151,456	054 TMF1001	METAL FILM RESISTOR 1K
R110,158,164,301,303,901	054 TMF1002	METAL FILM RESISTOR 10K
R153,155,163	054 TMF1003	METAL FILM RESISTOR 100K
R162	054 TMF1004	METAL FILM RESISTOR 1M
R111	054 TMF10R0	METAL FILM RESISTOR 10R
R112	054 TMF12R0	METAL FILM RESISTOR 12R
R154,157	054 TMF1502	METAL FILM RESISTOR 15K
R105,106,252,254	054 TMF1503	METAL FILM RESISTOR 150K
R305,352,353,354	054 TMF1801	METAL FILM RESISTOR 1.8K
R108,109	054 TMF2202	METAL FILM RESISTOR 22K
R903	054 TMF2203	METAL FILM RESISTOR 220K
R302,304,306	054 TMF2702	METAL FILM RESISTOR 27K
R201	054 TMF3300	METAL FILM RESISTOR 330R
R159,160	054 TMF3301	METAL FILM RESISTOR 3.3K
R156	054 TMF3302	METAL FILM RESISTOR 33K
R307	054 TMF3901	METAL FILM RESISTOR 3.9K
R251	054 TMF3903	METAL FILM RESISTOR 390K

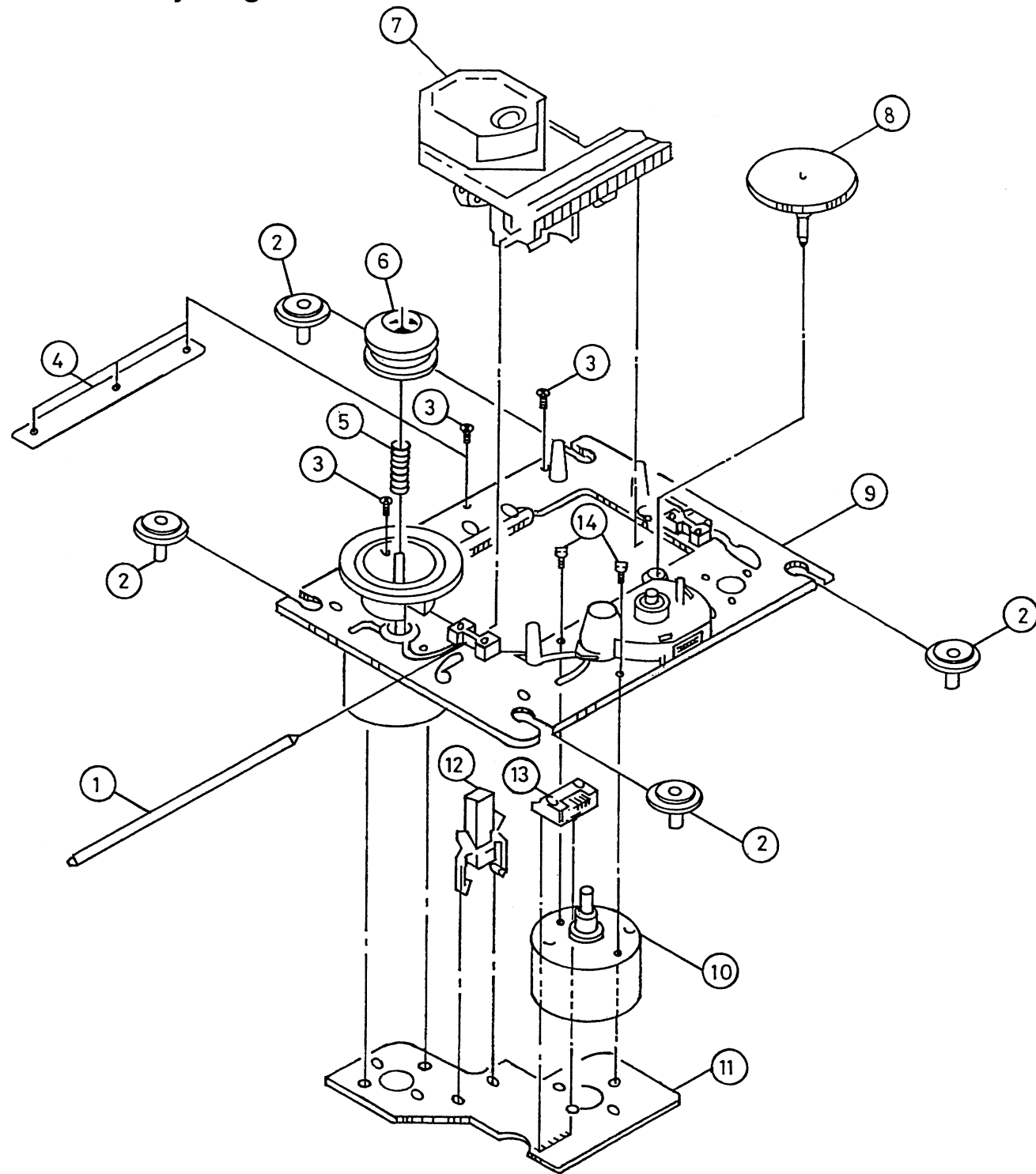
Parts List 3/3

SYMBOL	PARTS NO.	DESCRIPTION
R107,425	054 TMF4702	METAL FILM RESISTOR 47K
R255	054 TMF4R70	METAL FILM RESISTOR 4.7K
R351	054 TMF5601	METAL FILM RESISTOR 5.6K
R731	054 TMF8200	METAL FILM RESISTOR 820R
R631	054 TMFR4001M	METAL RESISTOR MFR4 1M
R633	054 TMFR4018R	METAL RESISTOR MFR4 18R
R202	054 TMFR4027R	METAL RESISTOR MFR4 27R
R635	054 TMFR4039R	METAL RESISTOR MFR4 39R
R203	054 TMFR4075R	METAL RESISTOR MFR4 75R
R161,165-167	054 TMFR4100R	METAL RESISTOR MFR4 100R
S001	061 C-4176A08	POWER SWITCH
S351-356	061 C-4679A03	KEY BOARD SWITCH
S301-308	061 C-4679A04	KEY BOARD SWITCH
S731	063 A24W-K	RELAY
K451	065 YKB21-5111A	HEAD PHONE JACK
K201	066 4TR-2487#4	1P PIN JACK (BLACK)
K702	066 4TR-2487#7	1P PIN JACK (RED)
K701	066 4TR-2487#8	1P PIN JACK (WHITE)
K31	068 16FMN-BTRK	FFC CONNECTOR 16P
K91,K92	068 B2B-EH	CONNECTOR WAFER
K64,K84	068 B3B-EH	CONNECTOR WAFER
K42,K46,K48,K59,K81,K96	068 B5B-EH	CONNECTOR WAFER
K33	068 B5B-PH-KS	CONNECTOR WAFER
K72	068 B6B-EH	CONNECTOR WAFER
K32	068 B6B-PH-KS	CONNECTOR WAFER
K74,K76	068 B8B-EH	CONNECTOR WAFER
K22,K23,K25	068 C-3681#1	WRAPPING PIN TERMINAL 2P
K11,K13,K14	068 C-4422A01	WRAPPING PIN TERMINAL 2P
K21,K24	068 C-4422A02	WRAPPING PIN TERMINAL 3P
K58	068 CGP1709-0101	CONNECTOR WAFER
K63,K83	068 S3B-EH	CONNECTOR WAFER
K57	068 S4B-EH	CONNECTOR WAFER
K3	068 TD02SG	CONNECTOR WAFER 2P
K4	068 TD03SG	CONNECTOR WAFER 3P
F001	069 C-3417A	FUSE CLIP
M2,M3,M6,M7,M8,M9,M11	069 C-4484A00	EARTH LUG
OTHERS		
	505 FRCD-1070	FRONT PANEL ASSY
	011 TF3-01A00	H/S PANEL
	012 RV4-09A00	PUSH BUTTON 14F
	012 SK3-05A00	TACT BUTTON 8KEY
	012 TT3-09A00	TACT BUTTON 6KEY
	014 C-4550A03	UPPER COVER
	014 RZ3-05A01	PLASTIC DOOR (NO PRINT)
	014 RZ3-08A01	BOTTOM BOARD
	015 RP-389	REAR CHASSIS
	019 4TSH-19#2	PLASTIC FOOT 50F
	022 T-1060N01 *	POWER TRANSFORMER
	034 LTL1214A	LED(RED) 2F
	034 SEL1124R	LED(RED) 1x5
	069 C-4629A01 *	AC INLET
	072 C-4621A01 *	AC CORD SET for STD
	072 C-4622A01 *	AC CORD SET for AUSTRALIA
	072 C-4623A01 *	AC CORD SET for U.K.
	072 C-4624A01 *	AC CORD SET for CEE
	072 C-4738A01 *	PIN PLUG SHIELD CORD
	081 TV4-03A00	INSIDE CARTON
	081 Z-204	STYROL SIDE MOULDING
	092 RR-D94	REMOTE UNIT
	192 KSL-2130RLM	CD LOADER ASSY

Wiring Diagram

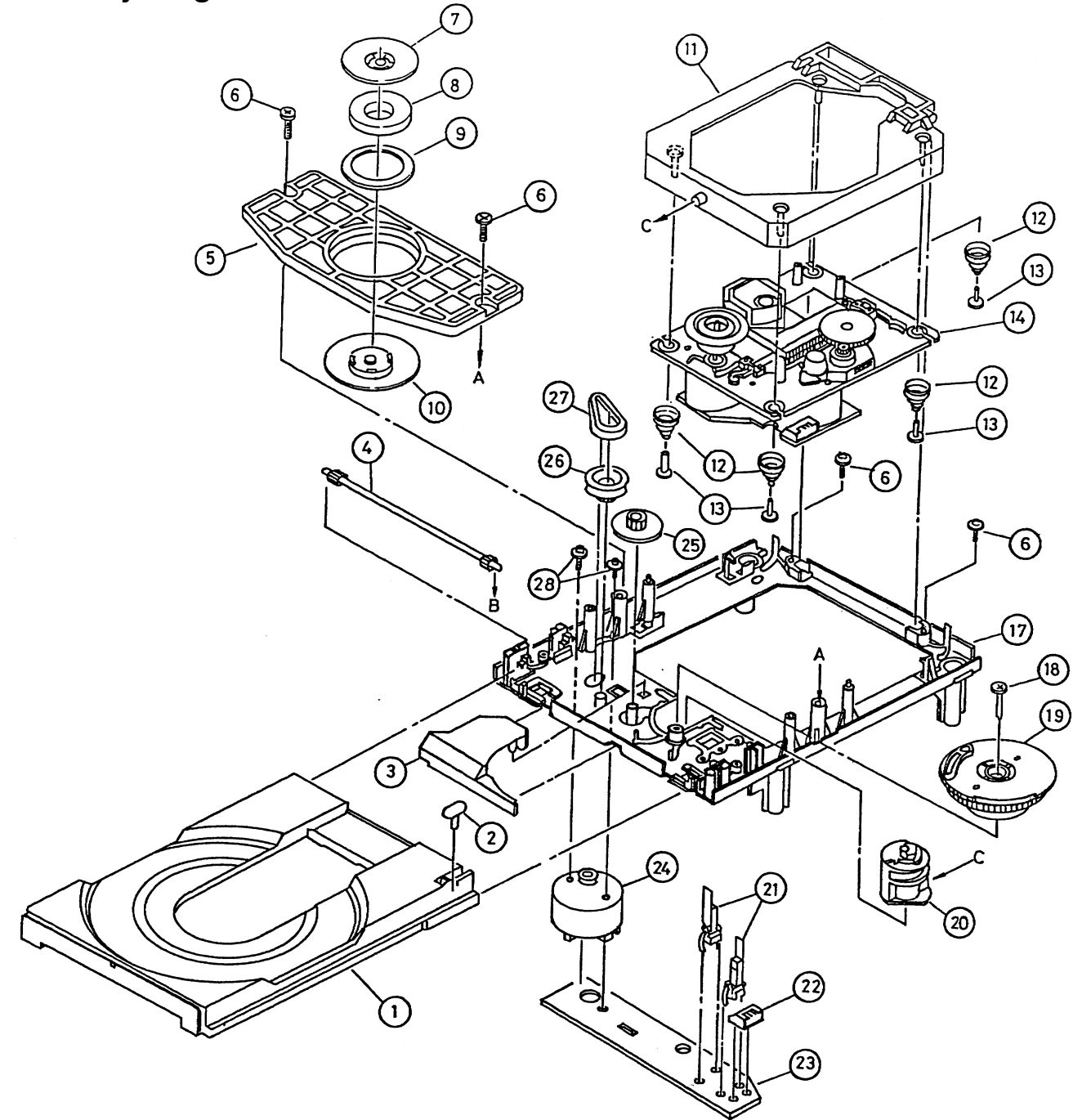


Disassembly Diagram-1



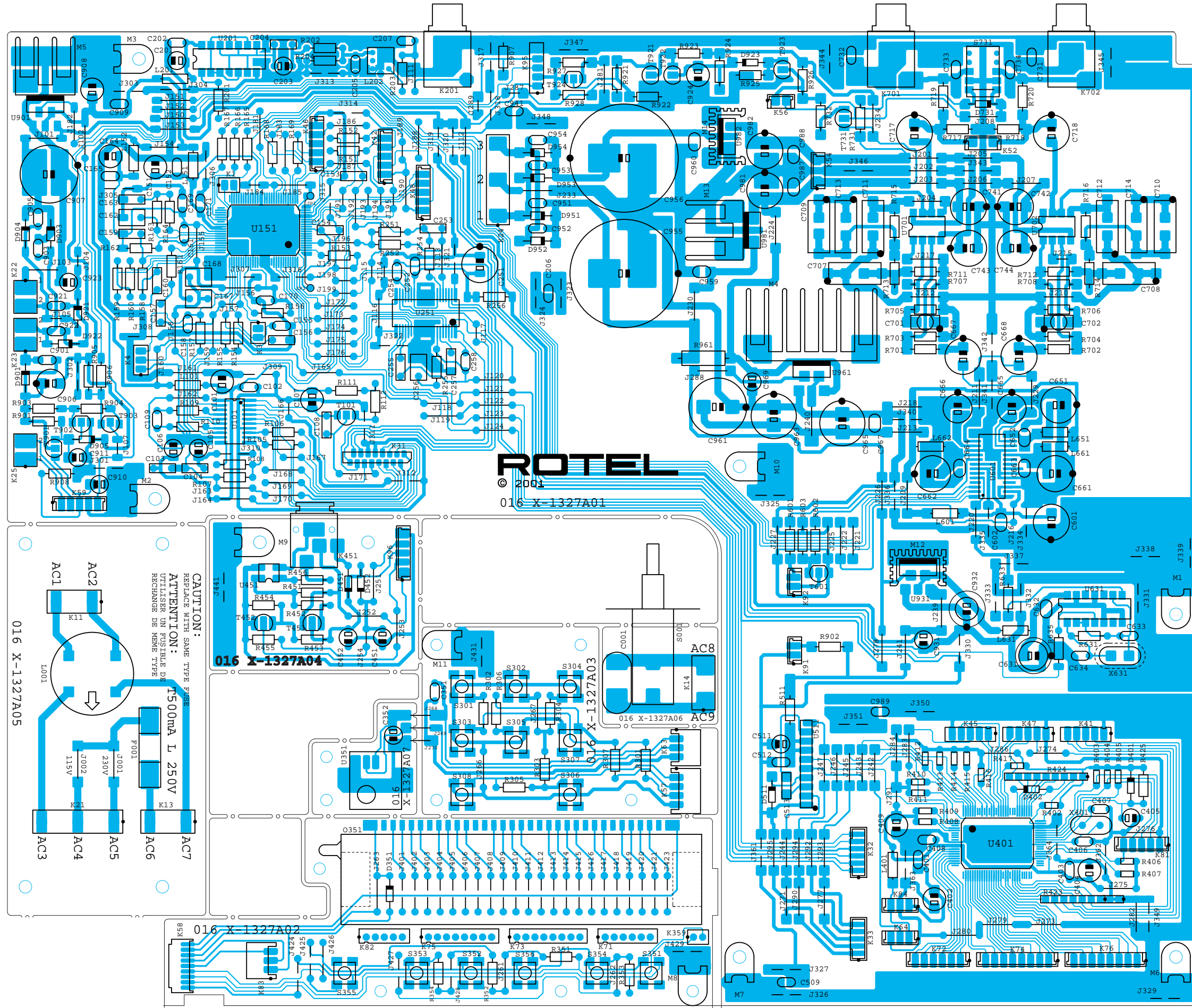
ITEM	DESCRIPTION	SPEC. NO.
1	CHAFT(S). SLED	2-625-464-(01)
2	INSULATOR(S)	2-625-538-(01)
3	SCREW(2X5). TAPPING(S)	2-641-386-(01)
4	REINFORCEMENT(S)	2-625-625-(01)
5	SPRING(S). COMPRESSION	2-626-465-(01)
6	RING(LO)(S). CENTER	2-626-477-(01)
7	PICK UP KSS 213C	
8	GEAR(A)(S)	2-626-462-(01)
9	CHASSIS ASS'Y(MB). TT	X-2625-133-(2)
10	GEARASS'Y(MB). MOTOR	X-2625-132-(1)
11	PC BOARD. MOTOR(6P)(S)	1-639-678-(13)
12	SWITCH LEAF	1-572-085-(12)
13	PIN. CONNECTOR 6P	1-564-722-(11)
14	SCREW+P 2X3	7-621-255-(15)

Disassembly Diagram-2



ITEM	DESCRIPTION	SPEC. NO.	ITEM	DESCRIPTION	SPEC. NO.
1	TRAY(S)	2-625-550-(03)	17	CHASSIS(S). OUTSERT MAIN	2-625-552-(06)
2			18	SCREW+P TP WH 2.D6X16	3-319-501-(51)
3	COVER(S). GEAR	2-625-544-(01)	19	GEAR(S). DRIVE	2-625-547-(03)
4	GEAR(S). TRAY	2-625-535-(01)	20	CAM(S). CONTROL	2-625-545-(04)
5	PLATE(S). CHUCKING	2-626-546-(01)	21	SWITCH. LEAF	1-572-086-(11)
6	SCREW+P TP WH 2.D6X7	2-625-537-(01)	22	PIN. CONNECTOR 5P	1-564-721-(11)
7	YOKE(S). CHUCKING	2-625-537-(01)	23	PC BOARD LOADING	1-640-523-(12)
8	MAGNET	1-452-483-(21)	24	MOTOR ASS'Y. LOADING	X-2625-117-(1)
9	DAMPER(S)	2-625-541-(02)	25	GEAR(S). MIDWAY	2-625-534-(02)
10	PULLEY(G). CHUCKING	2-625-548-(02)	26	PULLEY(S). LOADING	2-625-536-(02)
11	CHASSIS ASS'Y(G). SUB	X-2625-227-(2)	27	BELT. LM	3-653-387-(01)
12	SPRING(S)	2-825-539-(01)	28	SCREW+P 2.D6X2.D5	2-625-279-(01)
13	WASHER BASED SCREW	2-625-730-(01)			
14	DRIVE UNIT KSM-213CCM				

PCB Assembly



Schematic Diagram

