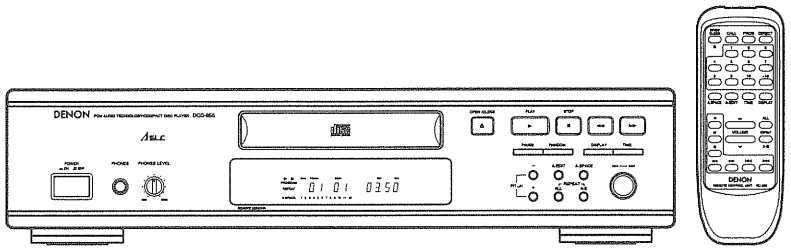
DENON

Hi-Fi Component

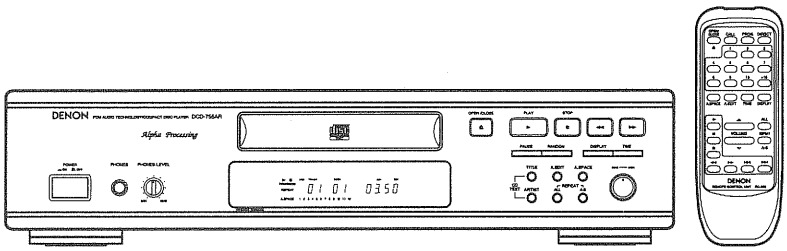
SERVICE MANUAL

MODEL DCD-655/755

STEREO CD PLAYER



DCD-655



DCD-755

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● **Some illustrations using in this service manual are slightly different from the actual set.**

NIPPON COLUMBIA CO., LTD.

SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

SPECIFICATIONS

	DCD-655	DCD-755AR
AUDIO		
Number of Channels:	2 channels	
Frequency Response:	2~20,000 Hz	
Dynamic Range:	98 dB	100 dB
Signal-to-noise Ratio:	107 dB	110 dB
Harmonic Distortion:	0.003 % (1 kHz)	0.0025 % (1 kHz)
Separation:	100 dB (1 kHz)	103 dB (1 kHz)
Wow and Flutter:	Below measurable limit: (±0.001 % W. peak)	
Output Voltage:	0.2~2.0 V	

DISCS Compact Disc format

GENERAL CHARACTERISTICS

Power Supply:	AC 230 V, 50/60 Hz
Power Consumption:	10 W
Dimensions:	434 (W) x 100 (H) x 285 (D) mm
Weight:	4 kg

FUNCTIONS AND DISPLAY

Functions:	Automatic search, programmed playback, repeat playback, manual search, auto space, time mode, auto edit and dimmer, random, playback, PITCH control (DCD-655 only)
Display:	Track number, time, music calender and engaged modes, CD TEXT information (DCD-755AR only)
Others:	Headphones jack

REMOTE CONTROL UNIT RC-266

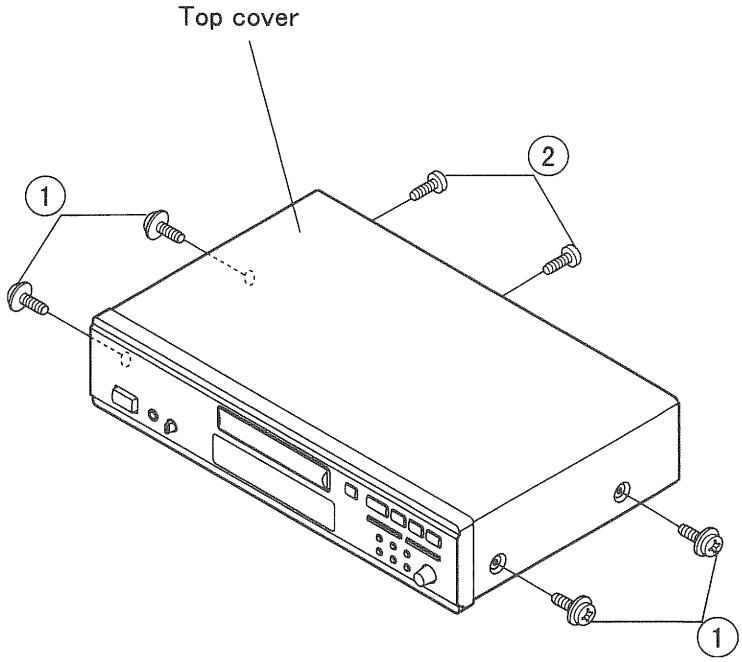
Remote Control System:	Infrared pulse system
Power supply:	3 V DC; two R6P (standard size AA) dry cell batteries
External Dimensions:	54.5 (W) x 140 (H) x 24.8 (D) mm
Weight:	85 g including batteries

DISASSEMBLY

(Follow the procedure below in reverse order when reassembling)

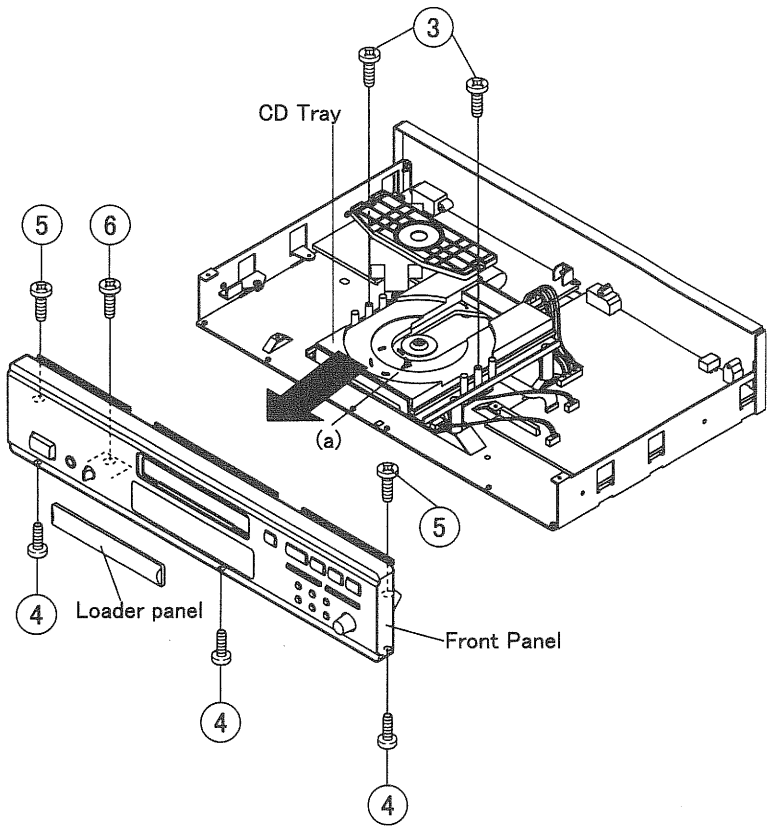
1. Top Cover

1. Remove 4 screws ① on both sides.
2. Remove 2 screws ② on the Rear Panel.
3. Detach the Top Cover as shown in the fig.



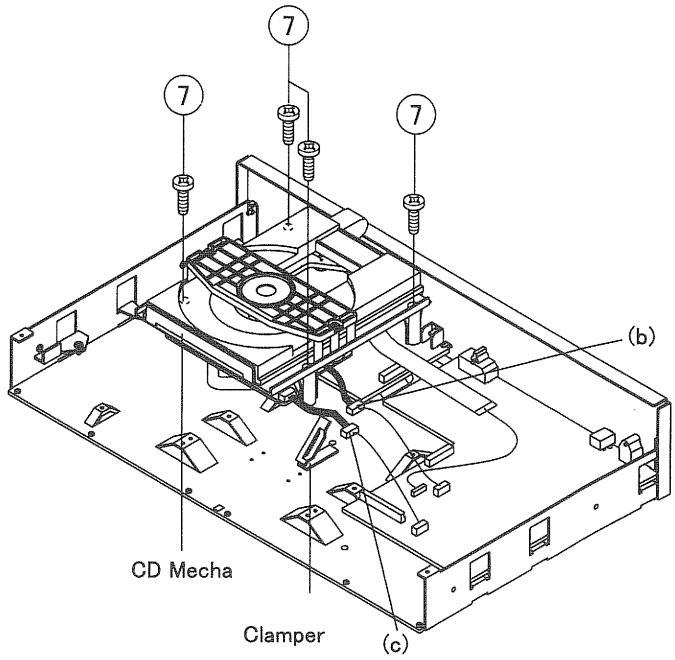
2. Front Panel

1. Take off the Mecha Cover after removing 2 screws ③.
   Open the Tray by turning the Gear (a) clockwise, then detach the Loader Panel.
2. Remove 3 screws ④ on the bottom edge of the Front Panel.
3. Remove 2 screws ⑤, at L/R ends of the Front Panel and 1 screw ⑥ fixing Phone P.W.B.



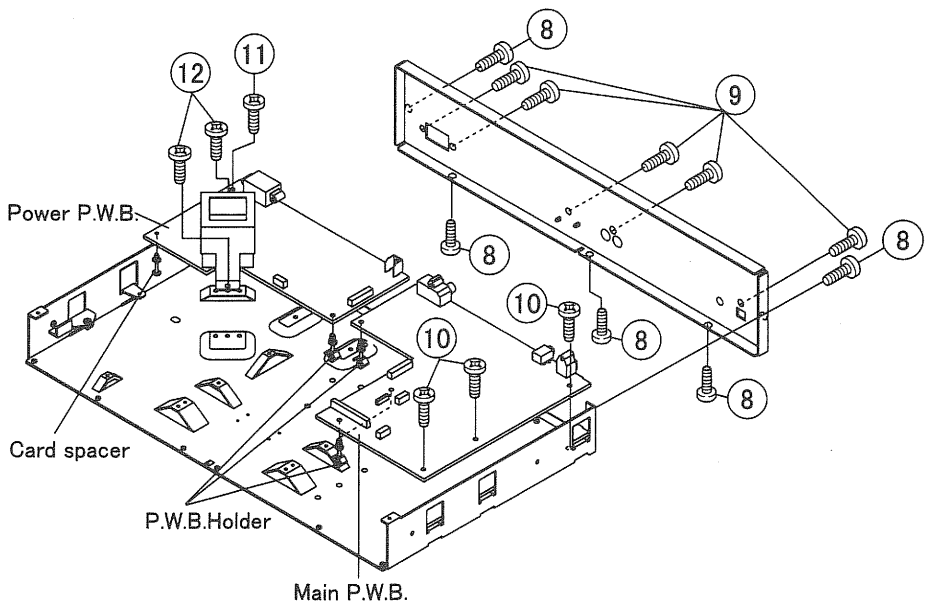
3. CD Mecha. Unit

1. Remove 4 screws ⑦ fixing the CD Mecha.
2. Unplug Connectors (b), (c) and FFC from each socket.
3. Release the FFC from the Clamper.

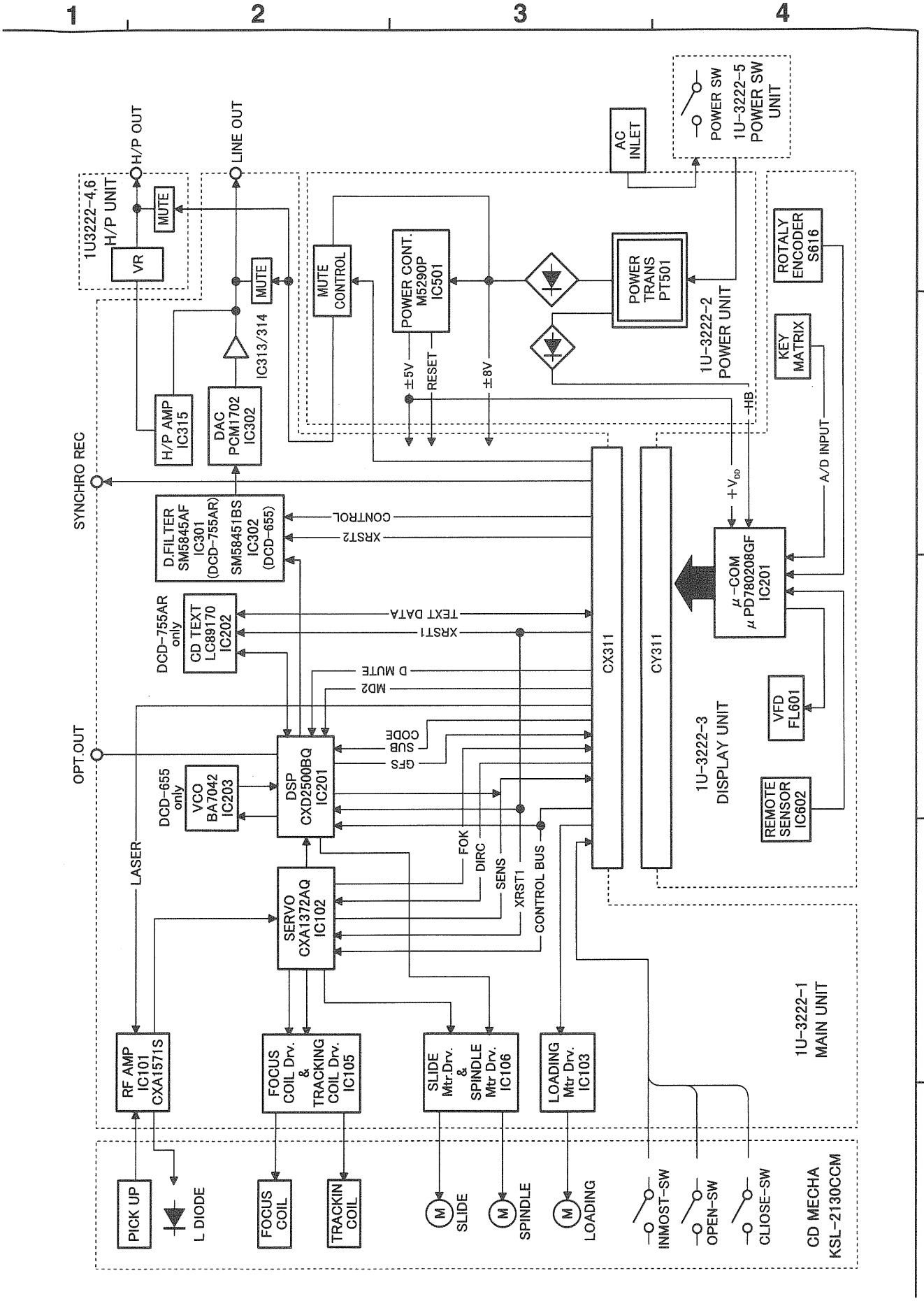


4. Main P.W.B.

1. Remove 5 screws ⑧, 5 screws ⑨ on the Rear Panel and detach it.
2. Remove 3 screws ⑩ fixing the Main P.W.B.
3. Unfasten 3 P.W.B. Holders to detach the Main P.W.B.
4. Remove 1 screw ⑪ and 2 screw ⑫ fixing the Power P.W.B.
5. Unfasten 1 P.W.B. Holder and card spacer to detach the Power P.W.B.

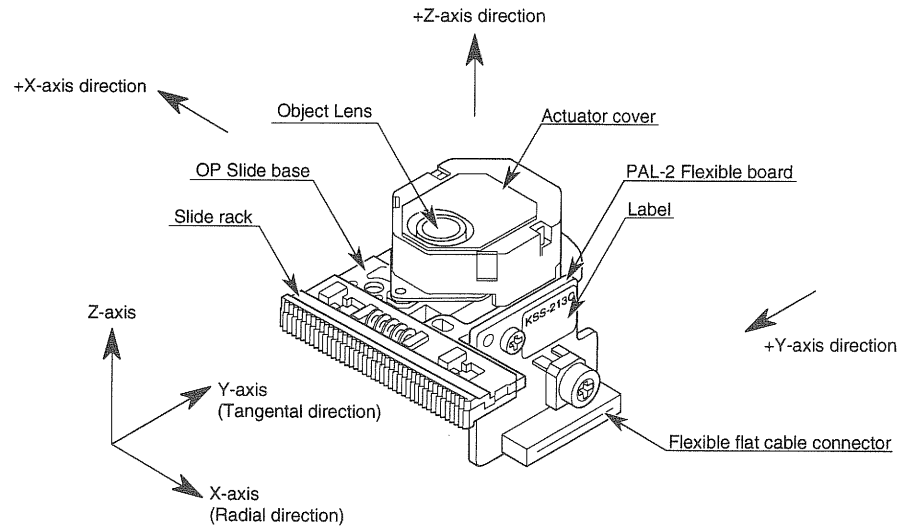


BLOCK DIAGRAM

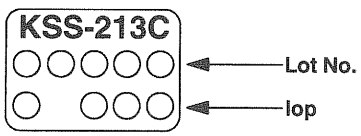


NOTE FOR HANDLING OF LASER PICK-UP

• Description of the Components



• Label



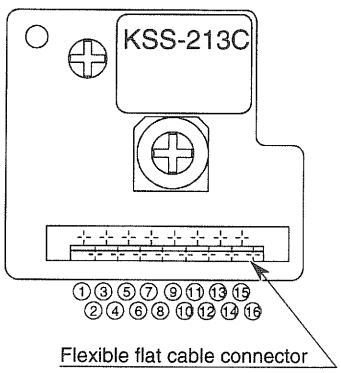
year
(last figure)
day month quality control No.
Lot No. ○○ ○ ○ ○

Oct. Nov. and Dec. are expressed by alphabetical letters of X, Y and Z.

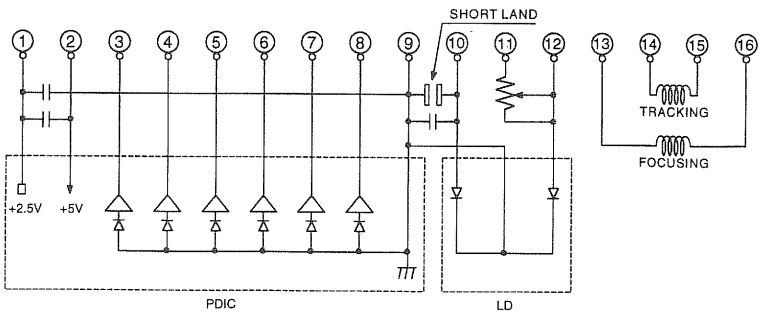
10 1 10^{-1}
Iop No. ○ ○ ○ ○
quality control LD drive current

The expressed unit is by mA, with omission of the decimal point as for example, 56.5mA will be expressed as 565, but the head of English letter means the control in the manufacturning plant.

• Pin Connector



Pin No.	Description	IN/OUT	Pin No.	Description	IN/OUT
①	PD IC Vc	IN	⑨	LD PDIC GND	IN
②	Vcc	IN	⑩	LD LD	IN
③	E	OUT	⑪	VR	IN
④	D	OUT	⑫	PD	OUT
⑤	A	OUT	⑬	FCS (+)	IN
⑥	B	OUT	⑭	TRK (+)	IN
⑦	C	OUT	⑮	TRK (–)	IN
⑧	F	OUT	⑯	FCS (–)	IN



• **CAUTION:** The soldered connecting portion must be bridged when removing CX161.

• Caution for Handling the Laser Pick-up

The laser pick-up KSS-213C is assembled and precisely adjusted using a sophisticated manufacturing process in our plant. Do not disassemble or attempt to readjust it. Please observe the following instructions carefully in handling the pick-up.

1. Handle with Care

(1) Storage
Do not store the pick-up in dusty, high-temperatured or high-humidity environments.
(2) Please take care for preventing from shock by falling down or careless handling.

2. Laser Diode (LD)

(1) Protect your eyes
The laser beam may damage the human eye, since the intensity of the focused spot may reach 7×10^3 W/cm^2 even if the intensity at the objective lens is 400μW maximum. As the light beam spreads after focused through the objective lens, it does not effect you in the place as far as more than 30 cms. However, do not look at the laser light beam either through the objective lens directly nor another lens or a mirror.

(2) Poison of As
Since the LD chip contains As (Arsenic), as GaAs + GaAlAs, as known as the poison, although the poison is relatively weak, in comparing with others, e.g. As_2O_3, $AsCl_3$ etc., and the amount is small, avoid putting the chip in acid or an alkali solution, heating it over 200 °C or putting it into your mouth.

(3) Avoid surge current or electrostatic discharge
The LD may be damaged or deteriorated by its own strong light if a large current is supplied to it, even if only a short pulse.
Make sure that there is no surge current in the LD driving circuit by switches or else. Be careful to handle pick-up as it may be damaged in a moment by human electrostatic discharge. The pins of the LD are short-circuited by solder for protection during shipment.
For safety handling of an LD, grounding the human body, measuring equipments and jig is strongly recommended. And still it is further desirable to make use of mat on the platform and floor for handling the LD.
To open the short-circuit, remove the soldering quickly with a soldering iron whose metal part is grounded.
The temperature of the soldering iron should be less than 320°C (30W).

3. Actuator

(1) The performance of the actuator may be affected if magnetic material is located nearby, since the actuator has a strong magnetic circuit. Do not permit dust to enter through the clearance of the cover.

(2) Cleaning the lens
It may change the specifications by attaching dust or ash on the objective lens. Clean the lens with a cleaning paper dampened with, not pressing lens with so much strength by the cleaning paper.

4. Metal Bearing

As the metal bearing of Cu-compound sintered alloy is impregnated with FROIL946P, never fail to supply the bushing with the same lubricant at the time of replacing the pick-up.

5. Handling

Please handle the laser pick-up with holding the slide base. (resin molded part).
When either a part of human body or some other things may happen to touch directly with the circuit part of P.W.Board, it may cause deterioration, take careful attention in handling this base.

6. Deterioration

As KSS-213C comprises built-in RF Amp and APC circuit, resists stronger against external electrostatic damages than the former typed pickup. However, there is possibility of pickup deterioration in the following cases.
(1) Low HF level, or with great numbers of jitters.
(2) Tracking offset (EF Balance) is out of order (Refer to "Confirmation Method of Adjustment"for confirmation (1) and (2)).

ADJUSTMENT AND CONFIRMATION

Microcomputer built in the unit, comprises service program to facilitate servo sdjustment by pushing operation button.

1. Start Service Program

(1) Turn power switch OFF.
(2) Shortcircuit Pins ③ (SWCL) and ④ (SWOP) of the connector (TP102) on P.W.B.(Main Unit)
(Caution) Do not touch other Pins.
(3) Turn power switch ON.
(Service program starts, and displays track number 0 1.)

(Caution)
· When service program started, normal operation of buttons will be defeated.

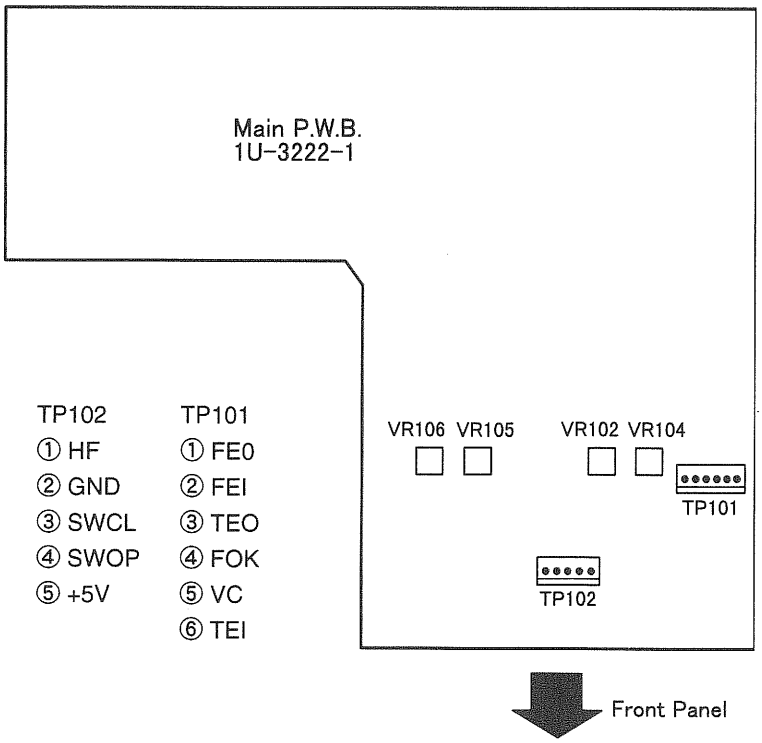
2. Service Program Function

Button	Function	Description
⏏ OPEN/CLOSE	Opens or closes the disc holder.	• Open or close when disc is stopped. • Operate other keys after open or close.
■ STOP	Stops system function.	• Displays track number 0 1. • Press when adjustment completed or do it again.
▶ PLAY	Starts focus servo and disc turns.	• Push when adjust tracking offset. • When started, displays track number 0 2.
◀◀	Starts focus servo, tracking servo, slide servo, spindle servo.	• Push when adjusting focus offset, focus gain and tracking gain. • When started, displays track number 0 3.
Other button	No normal operation.	• Do not operate buttons other than above. • If misoperated, immediately turn power switch OFF.

Note: Do not use remote control during service program operation.

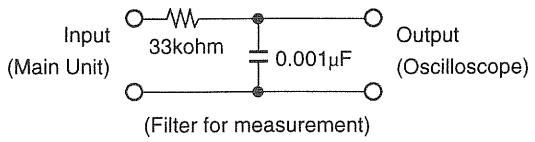
3. Adjustment Points

(1) Location



(2) Necessary equipment for adjustment

1. Dual-trace oscilloscope
2. Referense disc: A-BEX TCD784
   : "W.A.MOZART" CO-74176
3. Oscillator (10Hz~10kHz, 0~3Vp-p)
4. Frequency counter (readable no less than 5 kHz)
5. Filter for measurement

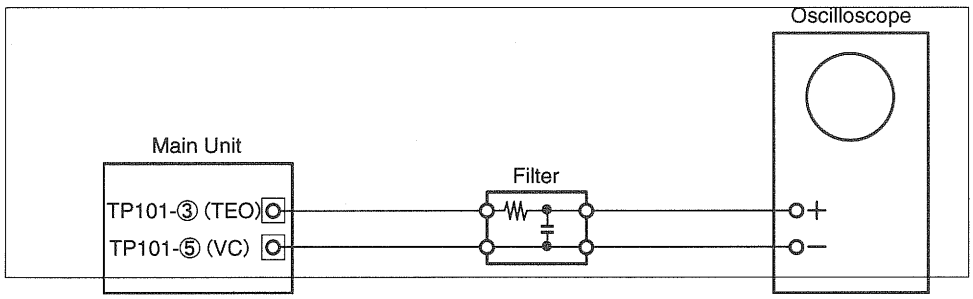


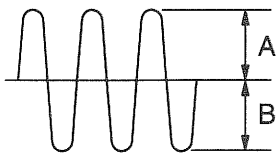
(3) Preset

1. Start service program.	
2. Preset VR102, 104, 105, and 106 as per right figure.	VR102 (F-GAIN) 12 o'clock VR104 (T-GAIN) 12 o'clock VR105 (F-OFFSET) 12 o'clock VR106 (T-OFFSET) 12 o'clock
3. Step.	1. Tracking offset (VR106) 2. Tracking gain (VR104) 3. Focus gain (VR102) 4. Focus offset (VR105) 5. HF level (check)

(4) Tracking Offset (E/F Balance)

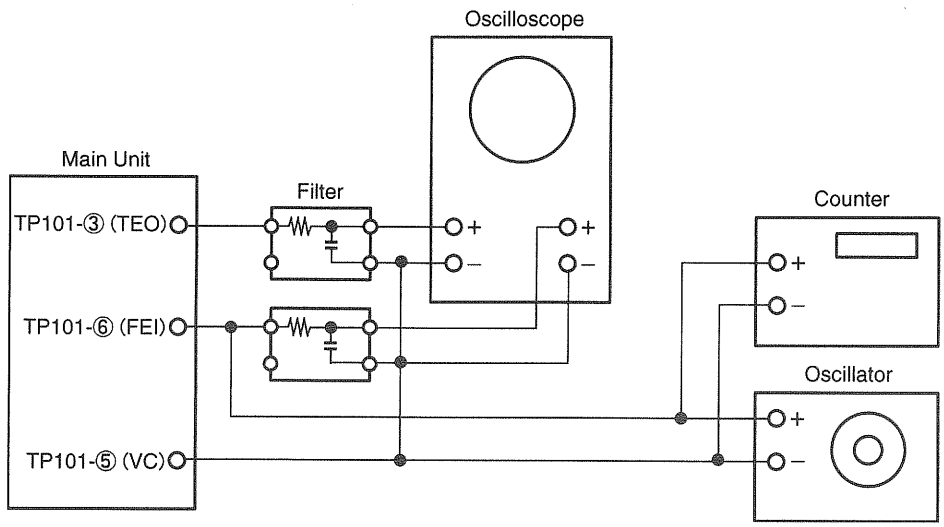
Connection



Oscilloscope (DC Range)		Check	Step
V	H	(Oscilloscope)	1. Push ▲OPEN/CLOSE and load the reference disc.
0.1V/div	1~2ms/div		2. Push ▲OPEN/CLOSE and close disc holder.
		$\frac{A-B}{A+B} \times 100\% < 20\%$	3. Push ▶PLAY/PAUSE to turn the disc. (Displays track number 02.)
			4. Short (+)(-) of oscilloscope and check the base line.
			5. Adjust VR106 so that upper and lower amplitude of the waveform is symmetric against 0V.

(5) Tracking Gain

Connection

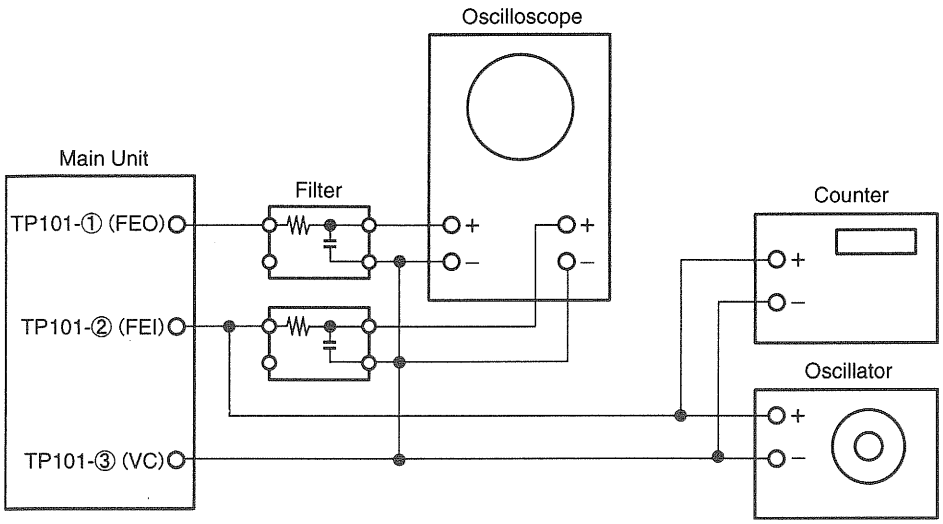


• Caution: Connect oscillator after ◀◀ M. SEARCH REV. pushed and servo function started.

Oscillator	Counter	Oscilloscope V	Oscilloscope H	Adjust	Check	Step
		V	H	(Volume)	(Oscilloscope)	
"TCD784" ● 3.5kHz ● 0.8Vp-p	3.5kHz	●DC range ●X–Y mode		VR104	Y axis X axis Phase 90°	1. Push after ◀◀ M. SEARCH REV. (Displays track number 03) 2. Connect oscillator. 3. Set oscillator as per left column. 4. Switch oscilloscope input to X-Y mode. 5. Adjust VR104 [T-GAIN] to symmetrize Lissajous figures to X-Y axes.
"W.A.MOZART" ● 3.3kHz ● 0.8Vp-p	3.3kHz				Waveform not right Y axis X axis	

(6) Focus Gain

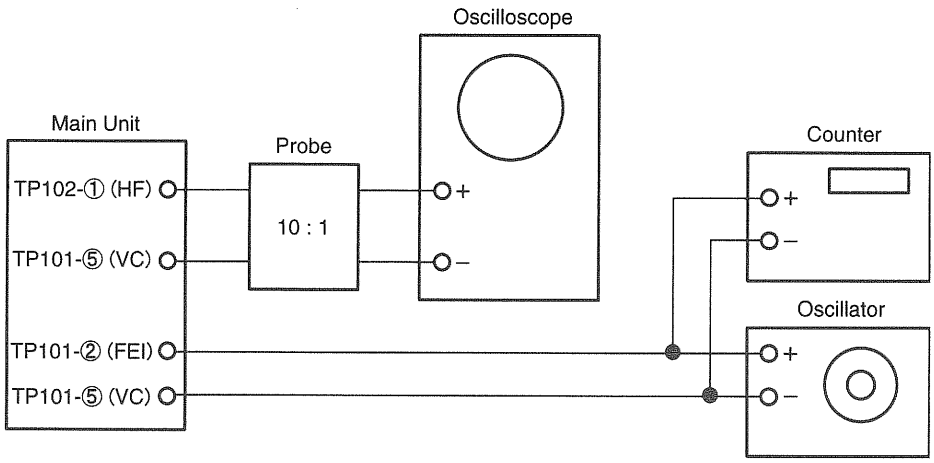
Connection

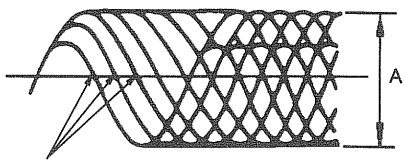
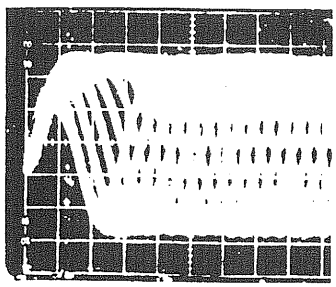


Oscillator	Counter	Oscilloscope V	Oscilloscope H	Adjust	Check	Step
				(Volume)	(Oscilloscope)	1. Push ◀◀M. SEARCH REV. (Display track number 03)
" TCD784 " ● 1.2kHz ● 2Vp-p	1.2kHz	●DC range ●X-Y mode		VR102	Y axis X axis Phase 90°	2. Connect oscillator. 3. Set oscillator as per left column. 4. Switch oscilloscope input to X-Y mode. 5. Adjust VR102 [F-GAIN] to symmetrize Lissajous figures to X-Y axes.
" W.A.MOZART " ● 1.1kHz ● 2Vp-p	1.1kHz				Waveform not right Y axis X axis	

(7) Focus Offset

Connection



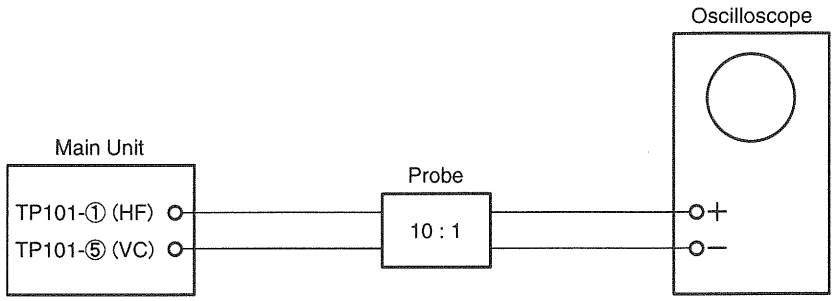
Oscillator	Counter	Oscilloscope		Adjust	Check
		V	H	(Volume)	Oscilloscope
		50mV/div or 20mV/div	0.2µs/div or 0.5µs/div	VR105	 Adjust to become the wave form most thin.
" TCD784 " • 1.2kHz • 2Vp-p	1.2kHz	• Set input mode to ALTERNATE or CHOPPER.			
" W.A.MOZART " • 1.1kHz • 2Vp-p	1.1kHz				 Eye pattern

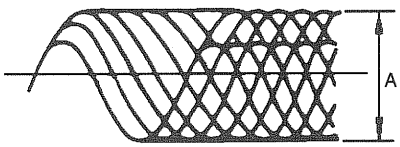
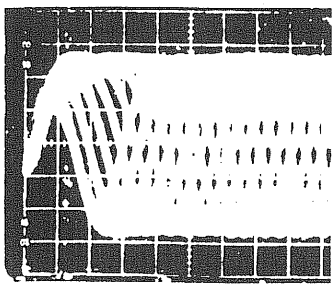
Step

1. Push ◄◄M. SEARCH REV. to turn the disc. (Displays track number 03.)
2. Adjust VR105 [Fo. offset] so that the Eye pattern's jitter becomes minimum.

(8) HF Level Check

Connection

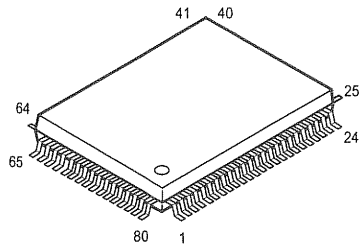


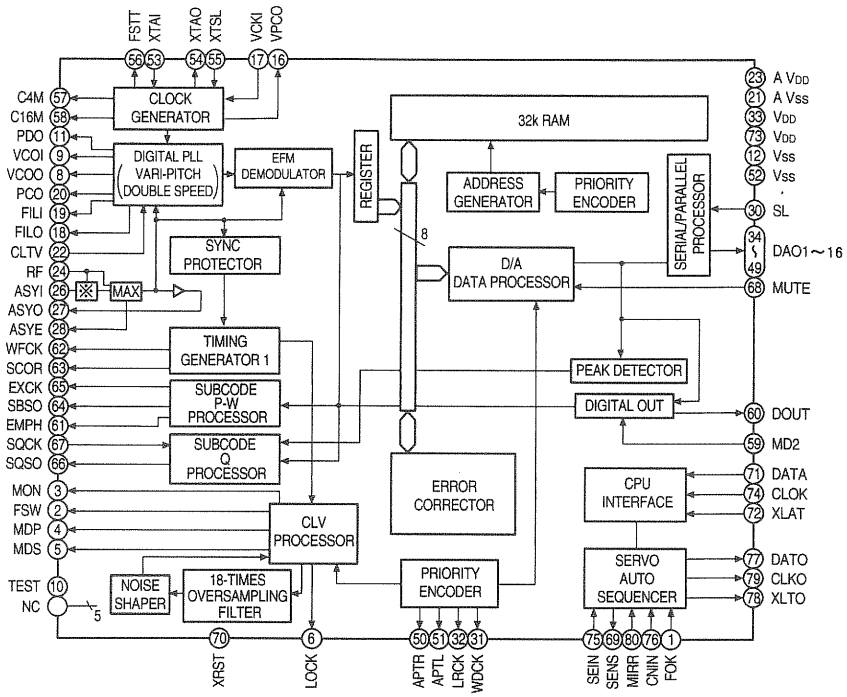
Oscilloscope		Check	Step
V	H	(Oscilloscope)	1. Push ◀◀M. SEARCH REV. (Display track number 03)
50mV/div or 20mV/div	0.2µs/div or 0.5µs/div	 A=1.20±0.3Vp-p	2. Check HF level of oscilloscope.
• Set input mode to ALTERNATE or CHOPPER.			3. Confirm that the waveform is in good shape. (◇pattern in center must be able to discriminate clearly.)

SEMICONDUCTORS

● IC's

CXD2500BQ (IC201)



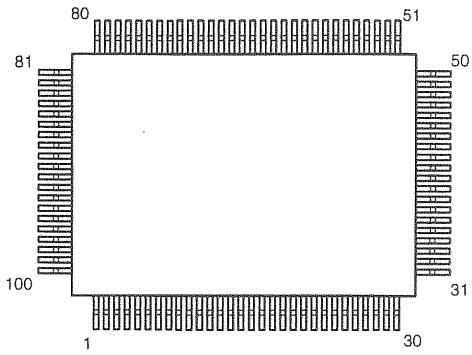


CXD2500BQ Terminal Function

Pin No.	Symbol	I/O	Function
1	FOK	I	Input terminal for OK focussing. Use for Servo-autosequencer.
2	FSW	O	Output to shift output filter for spindle motor.
3	MON	O	ON/OFF control output for spindle motor.
4	MDP	O	Servo control for spindle motor.
5	MDS	O	Servo control for spindle motor.
6	LOCK	O	Sampling GFS by 460 Hz and if it is "H", outputs "H"; if it is continuously "L" 8 times, outputs "L".
7	NC	–	
8	VCOO	O	Oscillation circuit output for analog EFM PLL.
9	VCOI	I	Oscillation circuit input for analog EFM PLL, fLOCK=8.6436MHz
10	TEST	I	TEST terminal. Normally GND.
11	PDO	O	Charge pump output for analog EFM PLL.
12	Vss		GND.
13	NC	–	
14	NC	–	
15	NC	–	
16	VPCO	O	Charge pump output for variable pitch PLL.
17	VCKI	I	Clock input from external VCO for variable pitch.fc center=16.9344MHz.
18	FILO	O	Filter output for master PLL.(slave=digital PLL)
19	FILI	I	Filter input for master PLL.
20	PCO	O	Charge pump output for master PLL.
21	AVss		Analog GND.
22	CLTV	I	VCO control voltage input for master.
23	AVDD		Analog power supply (+5V)
24	RF	I	EFM signal input.
25	BIAS	I	Asymmetry circuit constant current input.

Pin No.	Symbol	I/O	Function
26	ASYI	I	Asymmetry comparate voltage input.
27	ASYO	O	EFM full swing output. (L:Vss, H:V_{DD})
28	ASYE	I	L:Asymmetry circuit OFF, H: Asymmetry circuit ON.
29	NC	–	
30	PSSL	I	Audio data output mode shifting input. L: Serial output,H: Parallel output.
31	WDCK	O	D/A Interface for 48-bit slot. Word-clock f=2 Fs.
32	LRCK	O	D/A Interface for 48-bit slot. LR-clock f=2 Fs.
33	V_{DD}		Power supply (+5V)
34	DA16	O	At PSSL=1 for DA16 (MBS) output; PSSL=0 for serial data of 48-bit slot. (2s'COMP, MSB first).
35	DA15	O	At PSSL=1 for DA15 output; PSSL=0 for bit clock of 48-bit slot.
36	DA14	O	At PSSL=1 for DA14 output; PSSL=0 for serial data of 64-bit slot. (2s'COMP, MSB first).
37	DA13	O	At PSSL=1 for DA13 output; PSSL=0 for bit clock of 64-bit slot.
38	DA12	O	At PSSL=1 for DA12 output; PSSL=0 for LR clock of 64-bit slot.
39	DA11	O	At PSSL=1 for DA11 output; PSSL=0 for GTOP output.
40	DA10	O	At PSSL=1 for DA10 output; PSSL=0 for XUGF output.
41	DA9	O	At PSSL=1 for DA9 output; PSSL=0 for XPLCK output.
42	DA8	O	At PSSL=1 for DA8 output; PSSL=0 for GFS output.
43	DA7	O	At PSSL=1 for DA7 output; PSSL=0 for RFCK output.
44	DA6	O	At PSSL=1 for DA6 output; PSSL=0 for C2P0 output.
45	DA5	O	At PSSL=1 for DA5 output; PSSL=0 for XRAOF output.
46	DA4	O	At PSSL=1 for DA4 output; PSSL=0 for MNT3 output.
47	DA3	O	At PSSL=1 for DA3 output; PSSL=0 for MNT2 output.
48	DA2	O	At PSSL=1 for DA2 output; PSSL=0 for MNT1 output.
49	DA1	O	At PSSL=1 for DA1 output; PSSL=0 for MNT0 output.
50	APTR	O	Control output for aperture compensation. In H for R-ch.
51	APTL	O	Control output for aperture compensation. In H for L-ch.
52	Vss		GND
53	XTAI	I	X'tal oscillation circuit input of 16.9344MHz or 33.8688MHz.
54	XTAO	O	X'tal oscillation circuit output of 16.9344MHz.
55	XTSL	I	Selection input terminal of X'tal. "L" for 16.9344MHz; H for 33.8688MHz.
56	FSTT	O	2/3 Dividing output of 53 and 54 terminal, no charge by variable pitch.
57	C4M	O	4.2336MHz output. When variable pitched changes simultaneously.
58	C16M	O	16.9344MHz output. When variable pitched changes simultaneously.
59	MD2	I	Digital-out ON/OFF control. ON at H; OFF at L.
60	DOUT	O	Digital-out output terminal.
61	EMPH	O	When emphasized playback disk, output H; otherwise outputs L.
62	WFCK	O	WFCK (Write Flame Clock) output.
63	SCOR	O	Outputs H when detecting sub code sync S0 or S1.
64	SBSO	O	Serial output of Sub P~W.
65	EXCK	I	Clock input for SBSO read-out.
66	SQSO	O	Sub Q 80-bit and PCM peak level data 16-bit output.
67	SQCK	I	Clock input for SQSO read-out.
68	MUTE	I	H; Mute, L; Release.
69	SENS	–	SENS output. Outputs to CPU.
70	XRST	I	System reset input. Reset at L.
71	DATA	I	Input of serial data from CPU.
72	XLAT	I	Input of latch from CPU. Latches serial data at falling.
73	V_{DD}		Power supply (+5V).
74	CLOK	I	Serial data transfer clock input from CPU.
75	SEIN	I	SENS input from SSP.
76	CNIN	I	Count signal input of track jump number.
77	DATO	O	Serial data output to SSP.
78	XLTO	O	Serial data latch output to SSP. Latches at falling.
79	CLKO	O	Serial data transfer clock output to SSP.
80	MIRR	I	Mirror signal input. Use for track jump over 16 tracks by autosequencer.

μPD780208GF-049-3BA (IC601)



μPD780208 Terminal Function

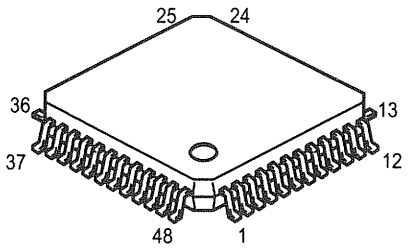
Pin No.	Name	Symbol	I/O	Typ	Rst	INI	ACT		Function
1	VDD	VDD	—	—	—	—	—	—	Positive power (connect to +5V)
2	P37	CLK	O	B	HZ	H	↑	—	Data clock output for servo LSI (CXA1372A, CXD2500BQ)
3	P36/BUZ	DATA	O	B	HZ	H	—	—	Data output for servo LSI (CXA1372A, CXD2500BQ)
4	P35/PCL	XLT	O	B	HZ	H	↑	—	Data latch output for servo LSI (CXA1372A, CXD2500BQ)
5	P34/TI2	LASER	O	B	HZ	H	L	P. UP	Laser diode ON/OFF control output H: ON, L: OFF
6	P33/TI1	SENS	O	B	HZ	—	—	—	SENS signal (CXA1372A, CXD2500BQ) detect input
7	P32/TO2	ML	O	B	HZ	H	↑	—	SM5841/SM5845 mode control latch output
8	P31/TO1	MC	O	B	HZ	H	↑	—	SM5841/SM5845 mode control clock output
9	P30/TO0	MD	O	B	HZ	H	—	—	SM5841/SM5845 mode control data output
10	RESET	RESET	I	—	—	—	L	—	System reset signal input
11	X2	X2	—	—	—	—	—	—	X'tal connection for main clock osc.
12	X1	X1	—	—	—	—	—	—	X'tal connection for main clock osc.
13	IC	IC	—	—	—	—	—	—	Connect to GND
14	XT2	NC	—	—	—	—	—	—	Not used (open)
15	P04/XT1	NC	I	A	—	—	—	P. DG	Not used (connect to GND)
16	VDD	VDD	—	—	—	—	—	—	Positive power (connect to +5V)
17	P27/SCK0	SQCK	O	B	HZ	H	↑	—	Serial clock signal output for sub-code read (CXD2500BQ)
18	P26/SO0/SB1	NC	I	B	HZ	—	—	P. DG	Not used (connect to GND)
19	P25/SI0/SB0	SUBQ	I	B	HZ	—	—	—	Sub-code input data (CXD2500BQ) signal
20	P24/BUSY	RXD	I	B	HZ	H	L	P. UP	Sync REC comm. input
21	P23/STB	TXD	O	B	HZ	H	L	P. DG	Sync REC comm. output
22	P22/SCK1	SCLK	O	B	HZ	—	—	—	Shift clock output for LC89170M
23	P21/SO1	NC	I	B	HZ	—	—	P. DG	Not used (connect to GND)
24	P20/SI1	SRDT	I	B	HZ	—	—	—	LC89170M data input
25	AVss	AVss	—	—	—	—	—	—	GND for A/D converter
26	P17/ANI7	XRST1	O	B	HZ	L	L	P. DG	Peripheral LSI reset signal output 1
27	P16/ANI6	XRST2	O	B	HZ	L	L	P. DG	Peripheral LSI reset signal output 2
28	P15/ANI5	JOG B	I	B	HZ	—	—	P. UP	ROTARY ENCODER B input
29	P14/ANI4	JOG A	I	B	HZ	—	—	P. UP	ROTARY ENCODER A input
30	P13/ANI3	AD3	I	B	HZ	—	A	P. UP	For key data input 3 (A/D) P.W.B. check mode
31	P12/ANI2	AD2	I	B	HZ	—	A	P. UP	For key data input 2 (A/D) P.W.B. check mode
32	P11/ANI1	AD1	I	B	HZ	—	A	P. UP	For key data input 1 (A/D)
33	P10/ANI0	AD0	I	B	HZ	—	A	P. UP	For key data input 0 (A/D)
34	AVDD	AVDD	—	—	—	—	—	—	A/D converter analog power (connect to +5V)
35	AVREF	AVREF	—	—	—	—	—	—	A/D converter ref. voltage input (connect to +5V)
36	P03/INTP3/CI0	REMOTE	I	B	HZ	H	↓	P. UP	Remote control input
37	P02/INTP2	DQSY	I	B	HZ	H	—	—	LC89170M read out enable input
38	P01/INTP1	SCOR	I	B	HZ	—	H	—	Sub-code sync signal (CXD2500BQ) input
39	P00/INTP0/TI0	NC	I	B	HZ	—	—	P. UP	Not used (connect to +5V)
40	Vss	GND	—	—	—	—	—	—	GND
41	P74	NC	I	B	HZ	—	—	P. DG	Not used (connect to GND)
42	P73	MD2	O	B	HZ	H	—	P. UP	DIGITAL OUT (CXD2500BQ) ON/OFF output, L: OFF
43	P72	D. MUTE	O	B	HZ	H	H	P. UP	Digital mute (CXD2500BQ) output H: ON, L: OFF
44	P71	A. MUTE	O	B	HZ	H	H	P. UP	Analog mute output H: ON, L: OFF
45	P70	DIRC	O	B	HZ	H	—	P. UP	Servo control (CXA1372Q) output at track jump
46	VDD	VDD	—	—	—	—	—	—	Positive power (connect to +5V)
47	P127/FIP52	FOK	I	C	HZ	—	H	—	Focus OK signal (CXA1372Q) input
48	P126/FIP51	OPSW	I	C	HZ	—	L	P. UP	Loader OPEN position detect switch input
49	P125/FIP50	CLSW	I	C	HZ	—	L	P. UP	Loader CLOSE position detect switch input
50	P124/FIP49	INSW	I	C	HZ	—	L	P. UP	Pickup inner circle position detect switch input

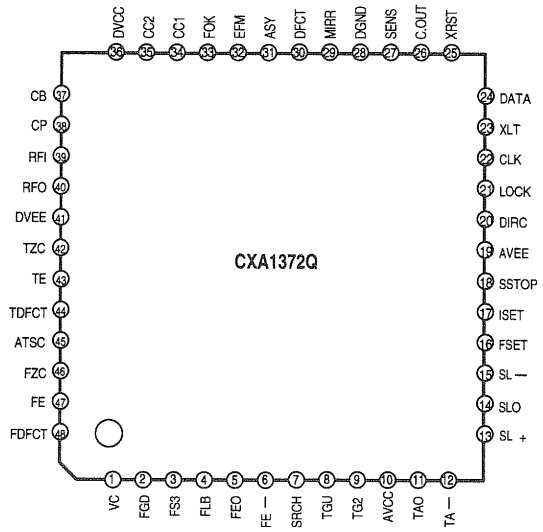
Pin No.	Name	Symbol	I/O	Tye	Rst	INI	ACT		Function
51	P123/FIP48	GFS	I	C	HZ	—	—	—	GFS (CXD2500BQ) signal input
52	P122/FIP47	OPEN	O	C	HZ	H	L	P.DG	Loader OPEN drive signal output
53	P121/FIP46	CLOSE	O	C	HZ	H	L	P. DG	Loader CLOSE drive signal output
54	P120/FIP45	655/755	I	C	HZ	—	—	—	Model discriminating input H: DCD755AR, L: DCD655
55	P117/FIP44	NC	I	C	HZ	—	—	—	Not used (connect to GND)
56	P116/FIP43	NC	I	C	HZ	—	—	—	Not used (connect to GND)
57	P115/FIP42	NC	I	C	HZ	—	—	—	Not used (connect to GND)
58	P114/FIP41	NC	I	C	HZ	—	—	—	Not used (connect to GND)
59	P113/FIP40	NC	I	C	HZ	—	—	—	Not used (connect to GND)
60	P112/FIP39	NC	I	C	HZ	—	—	—	Not used (connect to GND)
61	P111/FIP38	NC	I	C	HZ	—	—	—	Not used (connect to GND)
62	P110/FIP37	NC	I	C	HZ	—	—	—	Not used (connect to GND)
63	P107/FIP36	NC	I	C	HZ	—	—	—	Not used (connect to GND)
64	P106/FIP35	S21	O	D	HZ	L	H	P. D	VFD segment S21
65	P105/FIP34	S20	O	D	HZ	L	H	P. D	VFD segment S20
66	P104/FIP33	S19	O	D	HZ	L	H	P. D	VFD segment S19
67	P103/FIP32	S18	O	D	HZ	L	H	P. D	VFD segment S18
68	P102/FIP31	S17	O	D	HZ	L	H	P. D	VFD segment S17
69	P101/FIP30	S16	O	D	HZ	L	H	P. D	VFD segment S16
70	P100/FIP29	S15	O	D	HZ	L	H	P. D	VFD segment S15
71	P97/FIP28	S14	O	D	HZ	L	H	P. D	VFD segment S14
72	P96/FIP27	S13	O	D	HZ	L	H	P. D	VFD segment S13
73	P95/FIP26	S12	O	D	HZ	L	H	P. D	VFD segment S12
74	P94/FIP25	S11	O	D	HZ	L	H	P. D	VFD segment S11
75	P93/FIP24	S10	O	D	HZ	L	H	P. D	VFD segment S10
76	P92/FIP23	S9	O	D	HZ	L	H	P. D	VFD segment S9
77	P91/FIP22	S8	O	D	HZ	L	H	P. D	VFD segment S8
78	P90/FIP21	S7	O	D	HZ	L	H	P. D	VFD segment S7
79	VLOAD	-HB	—	—	—	—	—	—	Power for FL tube (-HB)
80	P87/FIP20	S6	O	D	HZ	L	H	P. D	VFD segment S6
81	P86/FIP19	S5	O	D	HZ	L	H	P. D	VFD segment S5
82	P85/FIP18	S4	O	D	HZ	L	H	P. D	VFD segment S4
83	P84/FIP17	S3	O	D	HZ	L	H	P. D	VFD segment S3
84	P83/FIP16	S2	O	D	HZ	L	H	P. D	VFD segment S2
85	P82/FIP15	S1	O	D	HZ	L	H	P. D	VFD segment S1
86	P81/FIP14	G1	O	D	HZ	L	H	P. D	VFD grid G1
87	P80/FIP13	G2	O	D	HZ	L	H	P. D	VFD grid G2
88	FIP12	G3	O	D	HZ	L	H	P. DG	VFD grid G3
89	FIP11	G4	O	D	HZ	L	H	P. D	VFD grid G4
90	FIP10	G5	O	D	HZ	L	H	P. D	VFD grid G5
91	FIP9	G6	O	D	HZ	L	H	P. D	VFD grid G6
92	FIP8	G7	O	D	HZ	L	H	P. D	VFD grid G7
93	FIP7	G8	O	D	HZ	L	H	P. D	VFD grid G8
94	FIP6	G9	O	D	HZ	L	H	P. D	VFD grid G9
95	FIP5	G10	O	D	HZ	L	H	P. D	VFD grid G10
96	FIP4	G11	O	D	HZ	L	H	P. D	VFD grid G11
97	FIP3	G12	O	D	HZ	L	H	P. D	VFD grid G12
98	FIP2	G13	O	D	HZ	L	H	P. D	VFD grid G13
99	FIP1	G14	O	D	HZ	L	H	P. D	VFD grid G14
100	FIP0	G15	O	D	HZ	L	H	P. D	VFD grid G15

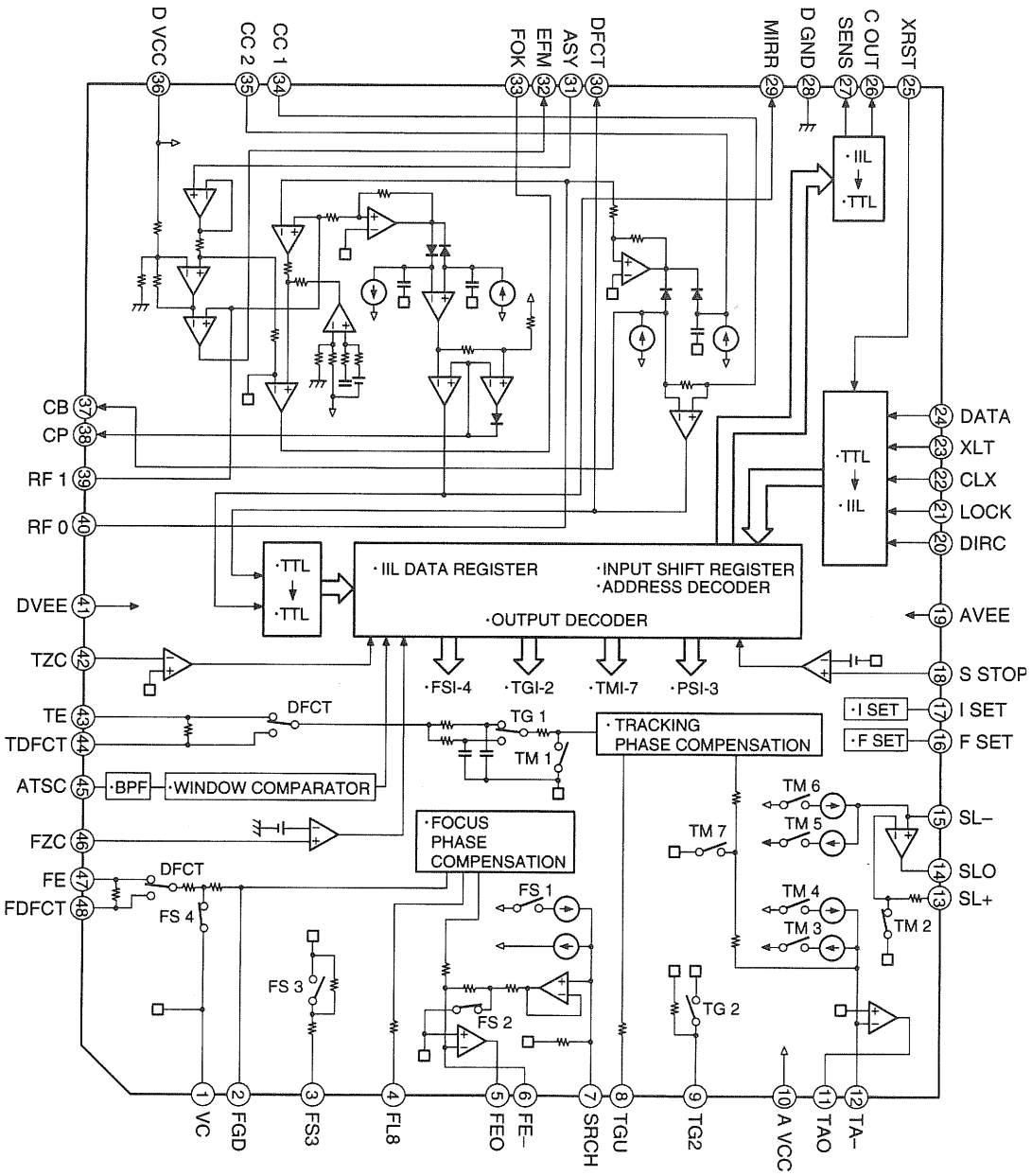
Note) Type A: Standard input port
B: Standard input/output port
C: Hi-voltage withstand input/output port
D: P-ch open drain Hi-voltage withstand

. P.D: Pull down to VDISP
. P.DG: Pull down to GND

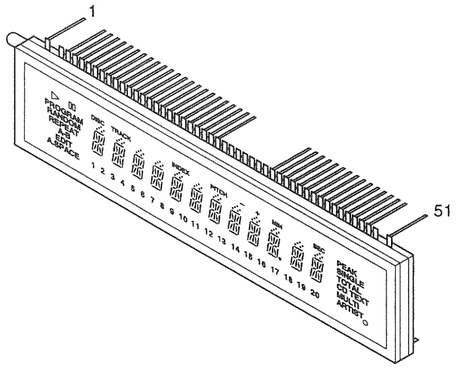
CXA1372Q (IC102)







● FL DISPLAY TUBE CM1888M (FL701)
(Part No.:3938043000)



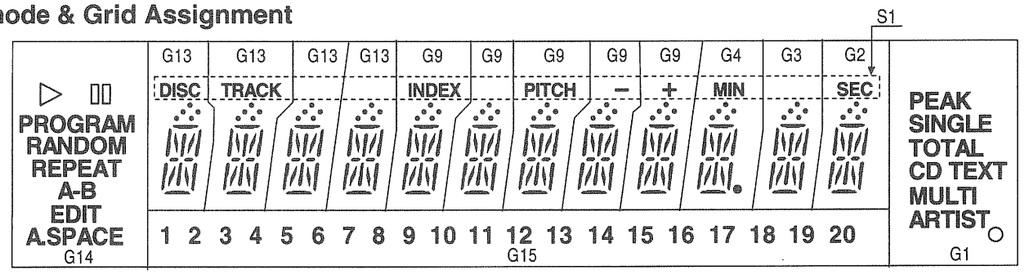
Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Assignment	NL (FT)	F1	NP	NP	S21	S20	S19	S18	S17	S16	S15	S14	S13	S12	S11	S10	S9	S8	S7	S6	S5	S4	S3	S2	S1	NL

Pin No.	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	50
Assignment	NL	NL	NL	NL	NL	NL	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G15	NL	NP	F2	NL (FT)

NOTE)F1,F2: Filament G1~G15: Grid S1~S21: Anode NP: No Pin NL: No Lead

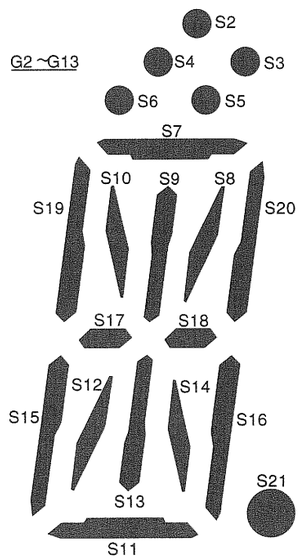
Anode & Grid Assignment



Anode Connction

	G1	GA	GB	G4	G14	G15
S1	PEAK	S1		MIN	▷	20
S2	SINGLE	S2	S2	S2	▯▯	19
S3	TOTAL	S3	S3	S3	PROGRAM	18
S4	CD	S4	S4	S4	RANDOM	17
S5	TEXT	S5	S5	S5	REPEAT	16
S6	MULTI	S6	S6	S6	A–	15
S7	ARTIST	S7	S7	S7	B	14
S8	○	S8	S8	S8	EDIT	13
S9		S9	S9	S9	A.SPACE	12
S10		S10	S10	S10		11
S11		S11	S11	S11		1
S12		S12	S12	S12		2
S13		S13	S13	S13		3
S14		S14	S14	S14		4
S15		S15	S15	S15		5
S16		S16	S16	S16		6
S17		S17	S17	S17		7
S18		S18	S18	S18		8
S19		S19	S19	S19		9
S20		S20	S20	S20		10
S21				○		

NOTE) GA: G2, G5~G7, G9, G12, G13 GB: G3, G6, G8, G10, G11



PRINTED WIRING BOARD

1 2 3 4 5 6 7 8

A B C D E

1U-3222 CD BOARD ASS'Y

1U-3222-2
POWER UNIT

1U-3222-1
MAIN UNIT

1U-3222-4
H/P UNIT (1)

1U-3222-7
H/P UNIT (3)

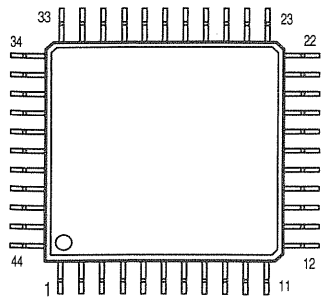
1U-3222-5
POWER SW. UNIT

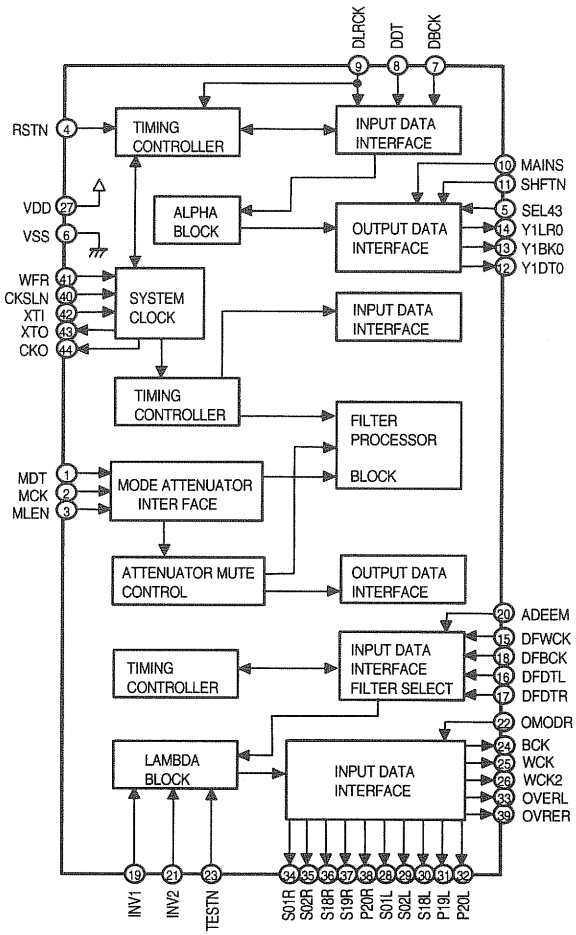
1U-3222-3
DISPLAY UNIT

CXA1372Q Terminal Function

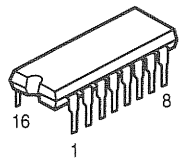
Pin No	Symbol	I/O	Function
1	Vc	I	Mid-point voltage input terminal.
2	FGD	I	In case of reducing higher range gain of focus servo, connect a capacitor between this terminal and terminal number (9).
3	FS3	I	Shifts higher range gain of focus servo by FS3 ON/OFF.
4	FLB	I	Terminal for external time constant to increase lower range of focus servo.
5	FEO	O	Focus drive output.
6	FE–	I	Reserve input terminal for focus amplifier.
7	SRCH	I	Terminal for external time constant to make focus search waveform.
8	TGU	I	Terminal for external time constant to shift higher range gain of tracking.
9	TG2	I	Terminal for external time constant to shift higher range gain of tracking.
10	AVcc	–	Power supply (+5V).
11	TAO	O	Tracking drive output.
12	TA–	I	Reserve input terminal for tracking amplifier.
13	SL+	I	Non-reverse input terminal for sled amplifier.
14	SLO	O	Sled drive output.
15	SL–	I	Reverse input terminal for sled amplifier.
16	FSET	I	Terminal to compensate peak in focus/tracking phase.
17	ISET	I	Delivers a current to set the height of focus search, track jump, and sled kick.
18	SSTOP	I	Terminal for limit switch ON/OFF to detect disc innermost circle.
19	AVEE	–	GND.
20	DIRC	I	Terminal is used at the time of 1 track jump. A 47 kohm pull up resistor is included.
21	LOCK	I	Reckless drive protection circuit of sled; activates at "L". A 47 kohm pull up resistor is included.
22	CLK	I	Serial data transfer clock input from CPU.
23	XLT	I	Latch input from CPU.
24	DATA	I	Serial data input from CPU.
25	XRST	I	Reset input terminal. Resets at "L".
26	C.OUT	O	Terminal to output signal for track number count.
27	SENS	O	Terminal to output FZC, AS, TZC, SSTOP by command from CPU.
28	DGND	–	GND.
29	MIRR	O	Output terminal for MIRR comparator.
30	DFCT	O	Output terminal for DEFECT comparator.
31	ASY	I	Input terminal for auto-symmetric control.
32	EFM	O	Output terminal for EFM comparator.
33	FOK	O	Output terminal for focus OK (FOK) comparator.
34	CC1	O	DEFECT bottom hold output terminal.
35	CC2	I	Input terminal to input DEFECT bottom hold output by capacitance combination.
36	DVcc	–	Power supply (+5V).
37	CB	I	Capacitor connecting terminal for DEFECT bottom hold.
38	CP	I	MIRR hold capacitor connecting terminal. A non-reverse input terminal for MIRR comparator.
39	RFI	I	Input terminal to input RF summing amplifier output by capacitance combination.
40	RFO	O	Output terminal for RF summing amplifier. Check point for eye pattern.
41	DVEE	–	GND.
42	TZC	I	Tracking zero-cross comparator input terminal.
43	TE	I	Tracking error signal input terminal.
44	TDFCT	I	Capacitor connecting terminal for time constant at the time of defect.
45	ATSC	I	Input terminal of ATSC detecting window comparator.
46	FZC	I	Input terminal of focus zero-cross comparator.
47	FE	I	Focus error signal input terminal.
48	FDFCT	I	Capacitor connecting terminal for time constant at the time of defect.

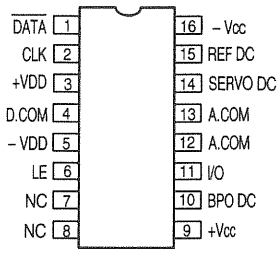
SM5845-AF (IC301)



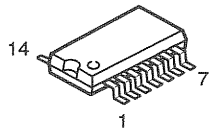


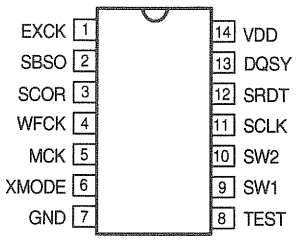
PCM1702P (IC311,312)

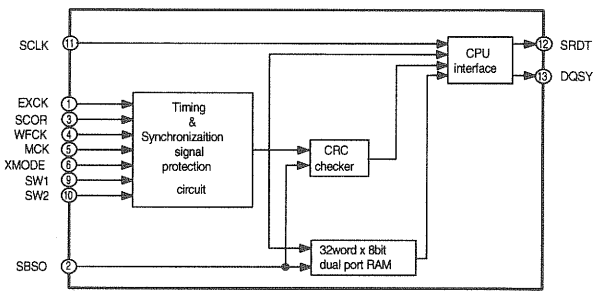




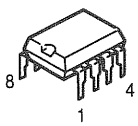
LC89170M (IC202)

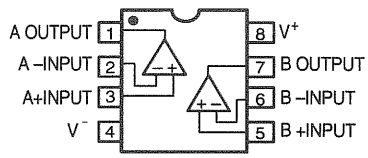




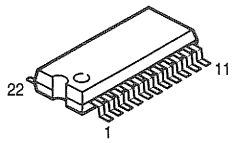


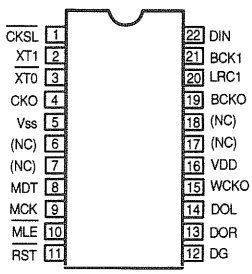
BA15218 (IC103,105,106)
µPC4570C (IC313~315)



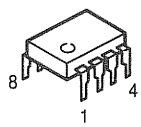


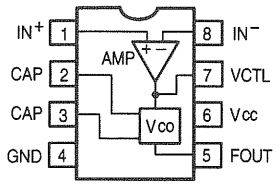
SM5841BS (IC302) DCD-655 Model only



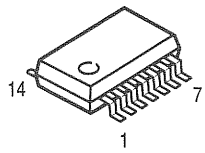


BA7042 (20MHz)(IC203)

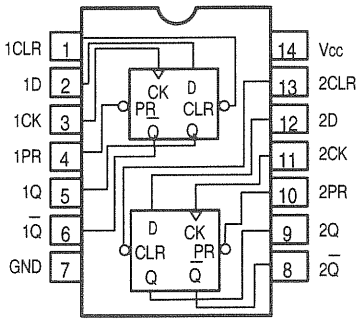




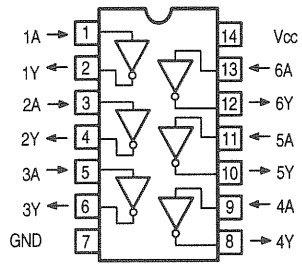
HD74HC74FP (IC303)
TC74HCU04AF (IC204)



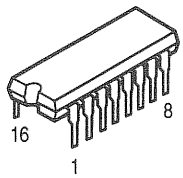
HD74HC74FP(IC303)

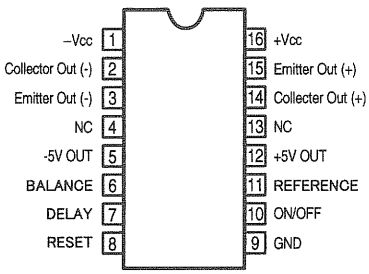


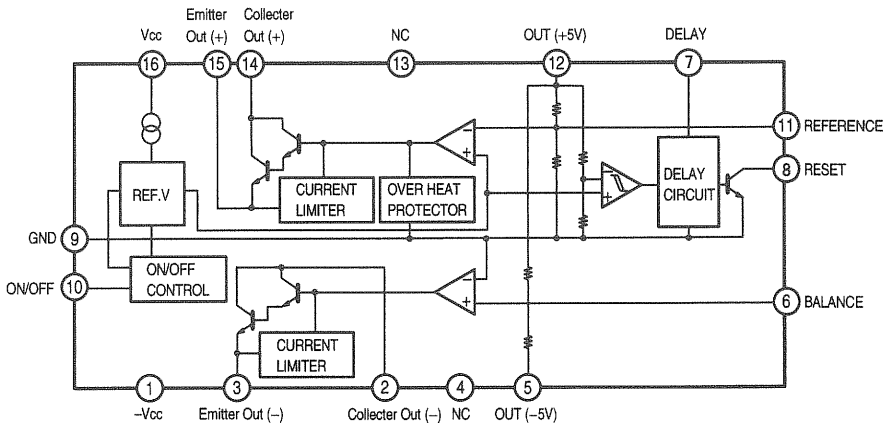
TC74HCU04AF(IC204)



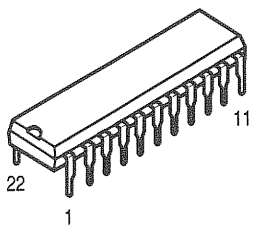
M5290FP (IC501)

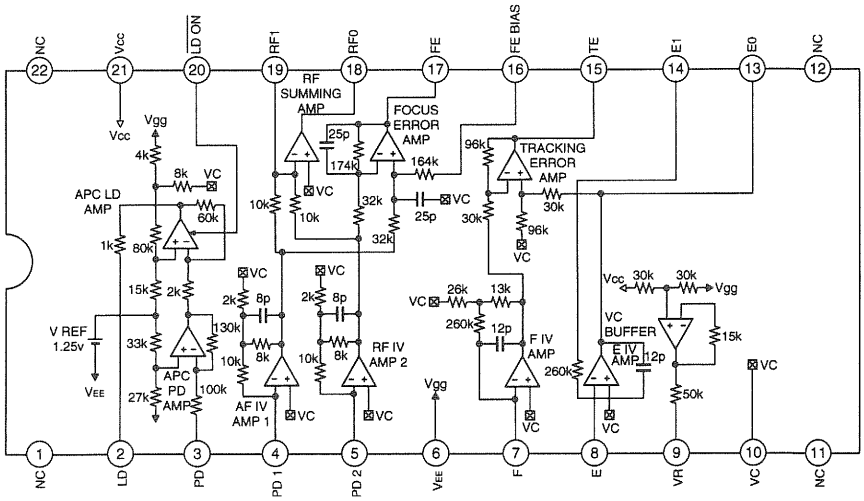






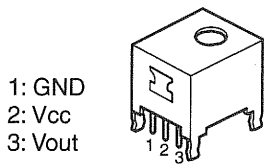
CXA1571S (IC101)





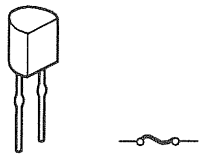
● IR SENSOR

CRV1M332 (IC602)



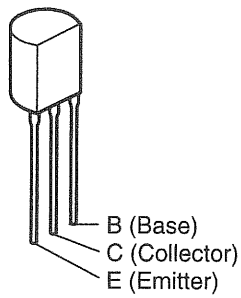
● IC PROTECTOR

ICP-N15 (IC502,503)

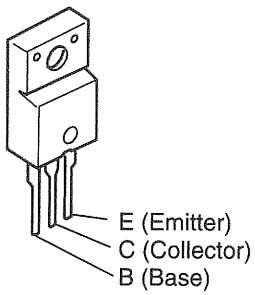


● TRANSISTORS

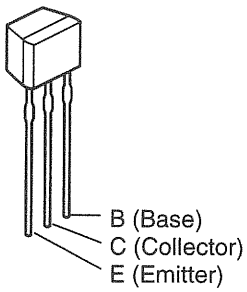
2SB562 (C)
2SD468 (C)



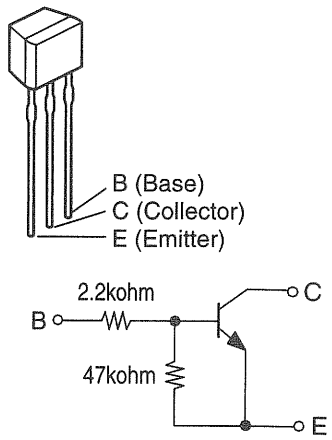
2SB1185 (E/F)
2SD1762 (E/F)



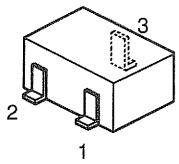
2SA933S (S)
2SD2144S



RN2205

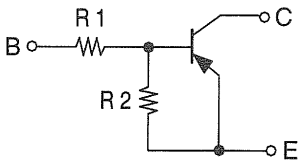


DTA124XKA ┐
DTA144EK ┘ **PNP TYPE**
DTC114EK **NPN TYPE**



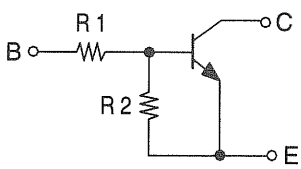
1: E/GND
2: B/INPUT
3: C/OUTPUT

PNP TYPE



	R1	R2
DTA124XKA	22kohm	47kohm
DTA144EK	47kohm	47kohm

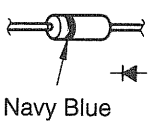
NPN TYPE



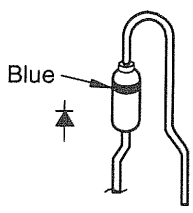
	R1	R2
DTC114EK	10kohm	10kohm

● DIODES

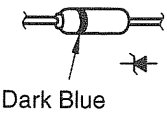
1SS270A



1SR35-200A

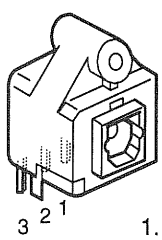


MTZJ6.8C
MTZJ9.1A
MTZJ39A



● OPTICAL TERMINAL

TOTX178 (JK201)



1. GND
2. Vcc
3. Input

NOTE FOR PARTS LIST

- Part indicated with the mark "⊙" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "H" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:

Parts marked with this symbol ⚠ ▒▒ have critical characteristics.

Use ONLY replacement parts recommended by the manufacturer.

● Resistors

Ex.: RN 14K 2E 182 G FR

Type / Shape and performance / Power / Resistance / Allowable error / Others

RD : Carbon RC : Composition RS : Metal oxide film RW : Winding RN : Metal film RK : Metal mixture	2B : 1/8W 2E : 1/4W 2H : 1/2W 3A : 1W 3D : 2W 3F : 3W 3H : 5W	F : ±1% G : ±2% J : ±5% K : ±10% M : ±20%	P : Pulse-resistant type NL : Low noise type NB : Non-burning type FR : Fuse-resistor F : Lead wire forming

*** Resistance**

1 8 2 ⇒ 1800 ohm = 1.8 kohm
- 2: Indicates number of zeros after effective number.
- 1 8: 2-digit effective number.

• Units: ohm

1 R 2 ⇒ 1.2 ohm
- 2: 1-digit effective number.
- 1 R: 2-digit effective number, decimal point indicated by R.

• Units: ohm

● Capacitors

Ex.: CE 04W 1H 2R2 M BP

Type / Shape and performance / Dielectric strength / Capacity / Allowable error / Others

CE : Aluminum foil electrolytic CA : Aluminum solid electrolytic CS : Tantalum electrolytic CQ : Film CK : Ceramic CC : Ceramic CP : Oil CM : Mica CF : Metallized CH : Metallized	0J : 6.3V 1A : 10V 1C : 16V 1E : 25V 1V : 35V 1H : 50V 2A : 100V 2B : 125V 2C : 160V 2D : 200V 2E : 250V 2H : 500V 2J : 630V	F : ±1% G : ±2% J : ±5% K : ±10% M : ±20% Z : +80% −20% P : +100% −0% C : ±0.25pF D : ±0.5pF = : Others	HS : High stability type BP : Non-polar type HR : Ripple-resistant type DL : For change and discharge HF : For assuring high frequency U : UL part C : CSA part W : UL-CSA type F : Lead wire forming

*** Capacity (electrolyte only)**

2 2 2 ⇒ 2200μF
- 2: Indicates number of zeros after effective number.
- 2 2: 2-digit effective number.

• Units: μF.

2 R 2 ⇒ 2.2μF
- 2: 1-digit effective number.
- 2 R: 2-digit effective number, decimal point indicated by R.

• Units: μF.

*** Capacity (except electrolyte)**

2 2 2 ⇒ 2200pF=0.0022μF
- 2 (More than 2): Indicates number of zeros after effective number.
- 2 2: 2-digit effective number.

• Units: μF.

2 2 1 ⇒ 220pF
- 1 (0 or 1): Indicates number of zeros after effective number.
- 2 2: 2-digit effective number.

• Units: pF.

• When the dielectric strength is indicated in AC, "AC" is included after the dieelectric strength value.

PARTS LIST OF P.W.B. UNIT

1U-3222 CD BOARD ASS'Y (DCD-655 Model), 1U-3222A CD BOARD ASS'Y (DCD-755 Model)

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC101	262 2261 005	IC CXA1571S	
IC102	262 1342 006	IC CXA1372Q (48P QFP)	
IC103	263 0615 902	IC BA15218F-DXE2	
IC105,106	263 0615 902	IC BA15218F-DXE2	
IC201	262 1819 005	IC CXD2500BQ	
IC202	262 2684 909	IC LC89170M-TLM	DCD-755 Model only
IC203	263 0910 018	BA7042(20MHz)	DCD-655 Model only
IC204	262 1205 907	IC TC74HCU04AF	
IC301	262 1869 000	IC SM5845AF	DCD-755 Model only
IC302	262 1765 900	IC SM5841BS	DCD-655 Model only
IC303	262 1665 903	IC HD74HC74FP	DCD-755 Model only
IC311,312	262 1837 032	IC PCM1702P-L	
IC313-315	262 0864 006	IC UPC4570C	
IC501	263 0693 005	IC M5290P	
IC502,503	268 0073 905	IC ICP-N15	
IC601	262 2683 201	IC UPD780208GF-049-3BA	
IC602	499 2024 006	IC CRV1M332	
TR104	271 0183 914	Trasistor 2SA933 (S)	
TR109	274 0036 905	Trasistor 2SD468(C)	
TR110	272 0025 907	Trasistor 2SB562(C)	
TR111	274 0036 905	Trasistor 2SD468(C)	
TR112	272 0025 907	Trasistor 2SB562(C)	
TR113	274 0036 905	Trasistor 2SD468(C)	
TR114	272 0025 907	Trasistor 2SB562(C)	
TR115	274 0036 905	Trasistor 2SD468(C)	
TR116	272 0025 907	Trasistor 2SB562(C)	
TR117	274 0036 905	Trasistor 2SD468(C)	
TR118	272 0025 907	Trasistor 2SB562(C)	
TR201-203	269 0082 902	Trasistor DTC114EK	
TR301	269 0089 905	Trasistor RN2205	DCD-755 Model only
TR303,304	274 0160 907	Trasistor 2SD2144S	
TR501	274 0120 002	Trasistor 2SD1762(E/F)	
TR502	272 0083 004	Trasistor 2SB1185(E/F)	
TR503	272 0025 907	Trasistor 2SB562(C)TF	
TR511	269 0156 906	Trasistor DTA124XKA	
TR512	269 0082 902	Trasistor DTC114EK	
TR513	269 0055 900	Trasistor DTA144EK	
TR514	269 0082 902	Trasistor DTC114EK	
TR701,702	274 0160 907	Trasistor 2SD2144S	
D101	276 0432 903	Diode 1SS270A	
D201,202	276 0633 906	Diode MTZJ6.8C	
D301,302	276 0432 903	Diode 1SS270A	DCD-755 Model only
D501-504	276 0553 905	Diode 1SR35-200A	
D507	276 0645 981	Diode MTZJ39A	
D508,509	276 0553 905	Diode 1SR35-200A	
D512	276 0644 937	Diode MTZJ9.1A	
D513	276 0432 903	Diode 1SS270A	
D514,515	276 0553 905	Diode 1SR35-200A	
D701	276 0633 906	Diode MTZJ6.8C	
RESISTORS GROUP			
R101	247 0009 972	Carbon chip 9.1 kohm 1/10W	RM73B--912J
R102	244 2043 937	Metal oxide 10 ohm 1W	RS14B3A100JNBS(S)
R103,104	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R105	247 0010 945	Carbon chip 18 kohm 1/10W	RM73B--183J
R106	247 0009 943	Carbon chip 6.8 kohm 1/10W	RM73B--682J
R107	247 0009 901	Carbon chip 4.7 kohm 1/10W	RM73B--472J
R108	247 0010 961	Carbon chip 22 kohm 1/10W	RM73B--223J
R109	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R110	247 0012 998	Carbon chip 200 kohm 1/10W	RM73B--204J
R111	247 0011 928	Carbon chip 39 kohm 1/10W	RM73B--393J
R112	247 0011 960	Carbon chip 56 kohm 1/10W	RM73B--563J
R113	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R114	247 0009 956	Carbon chip 7.5 kohm 1/10W	RM73B--752J
R115	247 0014 925	Carbon chip 680 kohm 1/10W	RM73B--684J
R116	247 0013 913	Carbon chip 240 kohm 1/10W	RM73B--244J
R117	247 0007 945	Carbon chip 1 kohm 1/10W	RM73B--102J
R118	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R119	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R120	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R123	247 0011 931	Carbon chip 43 kohm 1/10W	RM73B--433J
R124-127	247 0011 944	Carbon chip 47 kohm 1/10W	RM73B--473J
R128	247 0011 931	Carbon chip 43 kohm 1/10W	RM73B--433J
R129	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R130,131	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R132	247 0013 968	Carbon chip 390 kohm 1/10W	RM73B--394J
R133	247 0012 969	Carbon chip 150 kohm 1/10W	RM73B--154J
R134,135	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R136	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R137	247 0012 914	Carbon Chip 91 kohm 1/10W	RM73B--913J
R138	247 0011 944	Carbon chip 47 kohm 1/10W	RM73B--473J
R139	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R140	247 0011 986	Carbon chip 68 kohm 1/10W	RM73B--683J
R141	247 0009 972	Carbon chip 9.1 kohm 1/10W	RM73B--912J
R144,145	247 0012 943	Carbon chip 120 kohm 1/10W	RM73B--124J
R146	247 0003 949	Carbon chip 22 ohm 1/10W	RM73B--220J
R147	247 0010 945	Carbon chip 18 kohm 1/10W	RM73B--183J
R148	247 0011 999	Carbon chip 75 kohm 1/10W	RM73B--753J
R149	244 2051 945	Metal oxide 1 ohm 1W	RS14B3A010JNBS(S)
R150	247 0011 999	Carbon chip 75 kohm 1/10W	RM73B--753J
R151	247 0010 945	Carbon chip 18 kohm 1/10W	RM73B--183J
R152	247 0008 999	Carbon chip 4.3 kohm 1/10W	RM73B--432J

Ref. No.	Part No.	Part Name	Remarks
R153	247 0011 944	Carbon chip 47 kohm 1/10W	RM73B--473J
R154	247 0009 956	Carbon chip 7.5 kohm 1/10W	RM73B--752J
R157	247 0003 949	Carbon chip 22 ohm 1/10W	RM73B--220J
R158	247 0005 989	Carbon chip 220 ohm 1/10W	RM73B--221J
R159	247 0012 956	Carbon chip 130 kohm 1/10W	RM73B--134J
R164,165	247 0009 901	Carbon chip 4.7 kohm 1/10W	RM73B--472J
R166	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R167	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R169,170	247 0011 944	Carbon chip 47 kohm 1/10W	RM73B--473J
R171	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R173	247 0005 989	Carbon chip 220 ohm 1/10W	RM73B--221J
R174,175	247 0011 944	Carbon chip 47 kohm 1/10W	RM73B--473J
R176,177	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R179,180	247 0005 989	Carbon chip 220 ohm 1/10W	RM73B--221J
R181,182	247 0011 944	Carbon chip 47 kohm 1/10W	RM73B--473J
R183	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R185	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R187,188	247 0005 989	Carbon chip 220 ohm 1/10W	RM73B--221J
R189	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R191	247 0012 969	Carbon chip 150 kohm 1/10W	RM73B--154J
R192	247 0005 989	Carbon chip 220 ohm 1/10W	RM73B--221J
R197	247 0012 930	Carbon chip 110 kohm 1/10W	RM73B--114J
R201-203	247 0003 981	Carbon chip 33 ohm 1/10W	RM73B--330J
R204	247 0018 905	Carbon chip 0 ohm 1/10W	RM73B--0R0K
			DCD-655 Model only
R205,206	247 0009 901	Carbon chip 4.7 kohm 1/10W	RM73B--472J
			DCD-655 Model only
R207	247 0007 903	Carbon chip 680 ohm 1/10W	RM73B--681J
			DCD-655 Model only
R208	247 0018 905	Carbon chip 0 ohm 1/10W	RM73B--0R0K
			DCD-655 Model only
R209	247 0014 967	Carbon chip 1 Mohm 1/10W	RM73B--105J
			DCD-655 Model only
R210	247 0007 945	Carbon chip 1 kohm 1/10W	RM73B--102J
R211	247 0018 905	Carbon chip 0 ohm 1/10W	RM73B--0R0K
			DCD-755 Model only
R212-219	247 0003 981	Carbon chip 33 ohm 1/10W	RM73B--330J
			DCD-755 Model only
R220,221	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R222	247 0010 961	Carbon chip 22 kohm 1/10W	RM73B--223J
R223	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
			DCD-755 Model only
R224,225	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R227	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103JT
			DCD-655 Model only
R229	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103JT
			DCD-655 Model only
R232	247 0006 962	Carbon chip 470 ohm 1/10W	RM73B--471J
R237	247 0018 905	Carbon chip 0 ohm 1/10W	RM73B--0R0K
R240	247 0008 960	Carbon chip 3.3 kohm 1/10W	RM73B--332J
R241	247 0009 943	Carbon chip 6.8 kohm 1/10W	RM73B--682J

Ref. No.	Part No.	Part Name	Remarks
R242	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R301-304	247 0003 981	Carbon chip 33 ohm 1/10W	RM73B--330J
			DCD-655 Model only
R305	247 0008 944	Carbon chip 2.7 kohm 1/10W	RM73B--272J
			DCD-755 Model only
R306	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
			DCD-755 Model only
R307-310	247 0003 981	Carbon chip 33 ohm 1/10W	RM73B--330J
			DCD-755 Model only
R313,314	241 2375 981	Carbon film 22 ohm 1/4W(NB)	RD14B2E220JNBS
R355,356	247 0007 945	Carbon chip 1 kohm 1/10W	RM73B--102J
R501,502	247 0009 901	Carbon chip 4.7 kohm 1/10W	RM73B--472J
R503	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R504	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R505,506	241 2377 947	Carbon film 100 ohm 1/4W(NB)	RD14B2E101JNBS
R507	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R508	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R512	247 0012 998	Carbon chip 200 kohm 1/10W	RM73B--204J
R513	241 2379 987	Carbon film 1 kohm 1/4W(NB)	RD14B2E102JNBS
R514	241 2377 934	Carbon film 91 ohm 1/4W(NB)	RD14B2E910JNBS
R515	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R601,602	247 0005 947	Carbon chip 150 ohm 1/10W	RM73B--151J
R603,604	247 0005 963	Carbon chip 180 ohm 1/10W	RM73B--181J
R605,606	247 0006 904	Carbon chip 270 ohm 1/10W	RM73B--271J
R607,608	247 0006 946	Carbon chip 390 ohm 1/10W	RM73B--391J
R609,610	247 0007 903	Carbon chip 680 ohm 1/10W	RM73B--681J
R611,612	247 0007 974	Carbon chip 1.3 kohm 1/10W	RM73B--132J
R613	247 0008 986	Carbon chip 3.9 kohm 1/10W	RM73B--392J
R615,616	247 0007 945	Carbon chip 1 kohm 1/10W	RM73B--102J
R619,620	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R621,622	247 0005 905	Carbon chip 100 ohm 1/10W	RM73B--101J
R623-658	247 0012 927	Carbon chip 100 kohm 1/10W	RM73B--104J
R659	247 0009 985	Carbon chip 10 kohm 1/10W	RM73B--103J
R660	247 0014 967	Carbon chip 1 Mohm 1/10W	RM73B--105J
R661,662	247 0007 945	Carbon chip 1 kohm 1/10W	RM73B--102J
R703,704	247 0007 945	Carbon chip 1 kohm 1/10W	RM73B--102J
VR102	211 6093 954	Semi fixed resistor 22 kohm	V06PB223
VR104	211 6093 954	Semi fixed resistor 22 kohm	V06PB223
VR105	211 6093 967	Semi fixed resistor 47 kohm	V06PB473
VR106	211 6093 954	Semi fixed resistor 22 kohm	V06PB223
VR701	211 0903 008	Variable resistor 2 kohm	V1420Q15FC202

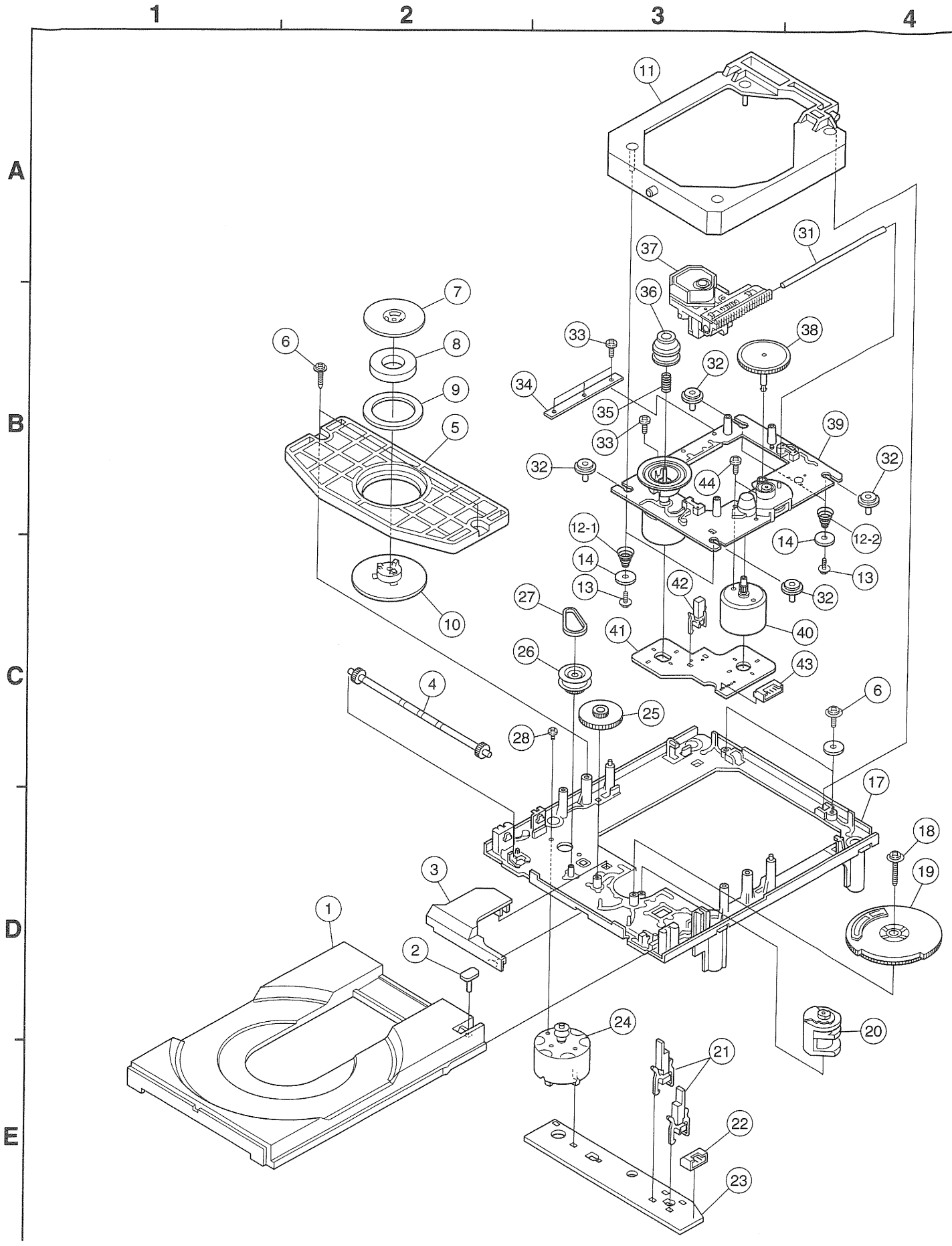
Ref. No.	Part No.	Part Name	Remarks
CAPACITORS GROUP			
C101	254 4538 942	Electrolytic 100 µF/16V	CE04W1C101M SMG/RE3
C102	254 4524 969	Electrolytic 3.3 µF/50V	CE04W1H3R3M SMG/RE3
C103	257 0001 951	Ceramic chip 3.0 pF/50V	CC73SL1H3R0C
C104	257 0002 989	Ceramic chip 18 pF/50V	CC73SL1H180J
C105	254 4538 942	Electrolytic 100 µF/16V	CE04W1C101M SMG/RE3
C106	257 0009 940	Ceramic chip 3300 pF/50V	CK73B1H332K
C107	257 0010 955	Ceramic chip 0.027 µF/25V	CK73B1E273K
C108	257 0009 924	Ceramic chip 2200 pF/50V	CK73B1H222K
C109-112	256 1058 971	Metalized 0.1 µF/50V	CF93A1H104J (JL)
C113	254 4337 910	Electrolytic 6.8 µF/50V	CE04W1H6R8M (SME)
C114	256 1059 912	Metalized 0.22 µF/50V	CF93A1H224J (JL)
C116	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C117	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C118,119	257 0008 983	Ceramic chip 1000 pF/50V	CK73B1H102K
C121	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C122,123	254 4524 914	Electrolytic 0.22 µF/50V	CE04W1HR22M SMG/RE3
C124	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C125	257 0011 967	Ceramic chip 0.033 µF/25V	CK73B1E333K
C126	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C127	257 0009 940	Ceramic chip 3300 pF/50V	CK73B1H332K
C128	257 0009 937	Ceramic chip 2700 pF/50V	CK73B1H272K
C129	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C130	257 0008 954	Ceramic chip 560 µF/50V	CK73B1H561K
C131	257 0009 979	Ceramic chip 5600 pF/50V	CK73B1H562K
C132	257 0004 932	Ceramic chip 75 pF/50V	CC73SL1H750J
C133	257 0002 921	Ceramic chip 10 pF/50V	CC73SL1H100D
C134	256 1058 971	Metalized 0.1 µF/50V	CF93A1H104J (JL)
C135	254 3055 918	Electrolytic 10 µF/35V	CE04D1V100MBP
C136	257 0004 961	Ceramic chip 100 pF/50V	CC73SL1H101J
C137,138	254 4538 926	Electrolytic 33 µF/16V	CE04W1C330M SMG/RE3
C140	257 0004 932	Ceramic chip 75 pF/50V	CC73SL1H750J
C141	257 0009 940	Ceramic chip 3300 pF/50V	CK73B1H332K
C142	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C145	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C164	257 0002 963	Ceramic chip 15 pF/50V	CC73SL1H150J
C166	257 0002 963	Ceramic chip 15 pF/50V	CC73SL1H150J
C168	257 0004 932	Ceramic chip 75 pF/50V	CC73SL1H750J
C170,171	254 4538 939	Electrolytic 47 µF/16V	CE04W1C470M SMG/RE3
C173	254 4538 939	Electrolytic 47 µF/16V	CE04W1C470M SMG/RE3
C174	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C176,177	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C201	254 4524 969	Electrolytic 3.3 µF/50V	CE04W1H3R3M SMG/RE3 DCD-655 Model only
C202	254 4538 900	Electrolytic 10 µF/16V	CE04W1C100M SMG/RE3 DCD-655 Model only
C203	257 0010 984	Ceramic chip 0.47 µF/50V	CK73B1H473K DCD-655 Model only
C204	257 0002 992	Ceramic chip 20 pF/50V	CC73SL1H200J DCD-655 Model only
C205	257 0008 983	Ceramic chip 1000 pF/50V	CK73B1H102K DCD-655 Model only

Ref. No.	Part No.	Part Name	Remarks
C206	257 0002 921	Ceramic chip 10 pF/50V	CC73SL1H100D DCD-655 Model only
C207	254 4538 900	Electrolytic 10 µF/16V	CE04W1C100M SMG/RE3 DCD-755 Model only
C208	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K DCD-755 Model only
C209	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C210	257 0010 984	Ceramic chip 0.047 µF/25V	CK73B1H473K
C211	257 0009 908	Ceramic chip 1500 pF/50V	CK73B1H152K
C212	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C213	257 0011 996	Ceramic chip 0.1µF/25V	CK73B1E104K
C214	254 4538 955	Electrolytic 220 µF/16V	CE04W1C221M SMG/RE3
C215	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C216,217	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C218	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C219	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K DCD-655 Model only
C220	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C221	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C222	257 0008 983	Ceramic chip 1000 pF/50V	CK73B1H102K
C223,224	257 0002 921	Ceramic chip 10 pF/50V	CC73SL1H100D
C225	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C270	257 0008 983	Ceramic chip 1000 pF/50V	CK73B1H102K
C280	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C284	254 4524 943	Electrolytic 1 µF/50V	CE04W1H010M SMG/RE3
C285	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C286	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C291	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C301	254 4524 943	Electrolytic 1 µF/50V	CE04W1H010M SMG/RE3 DCD-755 Model only
C302	254 4538 900	Electrolytic 10 µF/16V	CE04W1C100M SMG/RE3 DCD-655 Model only
C303	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K DCD-655 Model only
C305	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K DCD-755 Model only
C306	254 4538 900	Electrolytic 10 µF/16V	CE04W1C100M SMG/RE3 DCD-755 Model only
C309	257 0009 908	Ceramic chip 1500 pF/50V	CK73B1H152K DCD-755 Model only
C310	257 0003 988	Ceramic chip 47 pF/50V	CC73SL1H470J DCD-755 Model only
C311	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K DCD-755 Model only
C312-314	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C315-318	254 4538 939	Electrolytic 47 µF/16V	CE04W1C470M SMG/RE3
C319-322	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C323,324	254 4538 939	Electrolytic 47 µF/16V	CE04W1C470M SMG/RE3
C325,326	254 4538 913	Electrolytic 22 µF/16V	CE04W1C220M SMG/RE3
C327,328	254 4538 942	Electrolytic 100 µF/16V	CE04W1C101M SMG/RE3
C329-332	254 4538 939	Electrolytic 47 µF/16V	CE04W1C470M SMG/RE3
C333,334	255 4235 921	Polypropylene film 270 pF/100V	CQ93P2A271J(NH)

PARTS LIST OF CHASSIS AND CABINET

Ref. No.	Part No.	Part Name	Remarks	Q'ty
1	1U-3222A	CD Board ass'y	DCD-755 model only	1s
1-1	1U-3222A-1	Main P.W.B unit		
1-2	1U-3222A-2	Power P.W.B unit		
1-3	1U-3222A-3	Display P.W.B unit		
1-4	1U-3222A-4	H/P P.W.B unit		
1-5	1U-3222A-5	Power switch P.W.B unit		
1	1U-3222	CD Board ass'y	DCD-655 model only	1s
1-1	1U-3222C-1	Main P.W.B unit		
1-2	1U-3222C-2	Power P.W.B unit		
1-3	1U-3222C-3	Display P.W.B unit		
1-4	1U-3222C-4	H/P P.W.B unit		
1-5	1U-3222C-5	Power switch P.W.B unit		
2	411 1386 305	Chassis		1
3	105 1318 216	Back panel	DCD-755 model only	1
	105 1318 203	Back panel	DCD-655 model only	1
4	104 0260 100	Foot ass'y		4
⚠ 5	233 6298 005	Power trans		1
6	412 4468 003	Semko bracket		1
7	415 9016 035	P.C.B Holder		1
7	415 9016 035	P.C.B Holder		3
8	412 2814 015	Card spacer (L=14)		1
9	337 0064 003	CD Mecha		1
10	204 0536 008	6P PH-PH Connector cord		1
11	203 8299 056	5P KR-KR Connector cord		1
12	009 0159 013	16P FFC Cable		1
13	144 2673 023	Front panel	DCD-755 Black model only	1
	144 2673 036	Front panel	DCD-755 Gold model only	1
	144 2673 007	Front panel	DCD-655 Black model only	1
	144 2673 010	Front panel	DCD-655 Gold model only	1
14	143 1066 104	Window		1
15	146 2141 205	Inner panel	DCD-755 model only	1
	146 2141 205	Inner panel	DCD-655 model only	1
16	113 1849 032	Function knob	Black model only	1
	113 1849 045	Function knob	Gold model only	1
17	113 1850 018	Tact knob (6P)	Black model only	1
	113 1850 005	Tact knob (6P)	Gold model only	1
18	009 0011 009	31P FFC		1
19	203 8363 034	5P PH-PH Connector cord		1
20	203 6514 005	4P PH-PH Shield cord		1
21	412 2814 031	Card spacer (L=4)		1
22	203 5132 051	3P VH-VH Connector cord		1
23	461 0501 005	Rubber sheet		3
24	102 0604 003	Top cover	Black model only	1
	102 0604 016	Top cover	Gold model only	1
25	112 0779 045	KNOB (Maru)	Black model only	1
	112 0779 003	KNOB (Maru)	Gold model only	1
26	112 0811 013	KNOB (Fuji)	Black model only	1
	112 0811 000	KNOB (Fuji)	Gold model only	1
27	113 9213 000	Power knob (P) ass'y	Black model only	1
	113 9213 084	Power knob (P) ass'y	Gold model only	1
28	146 2100 039	Loader panel	DCD-755 Black model only	1
	146 2100 042	Loader panel	DCD-755 Gold model only	1
	146 2100 039	Loader panel	DCD-655 Black model only	1
	146 2100 013	Loader panel	DCD-655 Gold model only	1
29	477 0308 009	Hole plug		1
30	412 4562 006	Bottom plate		1
31	461 1044 008	Bottom spacer		1
32	415 0832 001	PVC sheet		1
33	477 0210 003	Push rivet		2
	513 2358 007	E2 Laser caution		1
	445 0068 009	Flat cable clamp		1
SCREWS				
101	473 7002 034	Screw 3X6 CBTS (S)-B		22
102	473 7004 016	Screw 4X6 CBTS (S)-Z		2
103	473 7508 017	Screw 3X10 CBTS (P)-B		11
104	473 8044 004	Special screw		1
105	473 7002 018	Screw 3X8 CBTS (S)-Z		4
106	477 0263 005	3P Swelling screw	Black model only	4
106	477 0263 018	3P Swelling screw	Gold model only	4
107	477 0064 107	Fixing screw		5
PACKING & ACCESSORIES				
201	513 1642 002	Serial No sheet		1
202	505 0131 050	Cabinet cover		1
203	503 9223 028	Cushion	Europe model	2
204	503 1173 011	Cushion	U.K. model	2
205	501 2048 026	Carton case	DCD-755 Europe mode	1
206	501 2048 013	Carton case	DCD-655 U.K. model	1
207	501 2048 000	Carton case	DCD-655 Europe mode	
208	513 1389 006	Control card base		1
209	513 1349 004	Thermal carbon film		1
210	505 9125 009	Poly cover		1
211	515 0671 724	Service station list		1
212	203 2310 009	2P Pin cord		1
213	399 0360 006	Remote control	RC-266	1
214	206 2108 003	AC Connector with plug	Europe model	1
215	206 2113 001	AC Connector with plug	U.K. model	1
216	511 3482 002	Inst manual		1
217	513 9111 001	Color label (Gold)	Gold model only	2

EXPLODED VIEW OF CD MECHANISM UNIT



PARTS LIST OF CD MECHANISM UNIT

Ref. No.	Part No.	Part Name	Remarks	Q'ty
1	S26 4629 001	Tray (C)		1
2		This part (No.2)doesn't belong to the tray. Take it down from old tray and use again when changing the tray.		
3	S26 2554 401	Gear cover(S)		1
4	S26 2553 501	Tray gear(S)		1
5	S26 2554 601	Chucking plate		1
6	S26 2629 401	Screw 2.6 x 7 +PTPWH		4
7	S26 2553 701	Chucking yoke		1
8	S14 5249 321	Magnet		1
9	S26 2554 102	Damper		1
10	S26 4629 101	Chucking pulley		1
11	S26 4628 801	Sub chassis Ass'y		1
12-1	S26 2723 601	Coil spring(front)		2
12-2	S26 2723 501	Coil spring(back)		2
13	–	Screw 2.6 x 10 +P	No slit type2	4
14	S26 4628 901	Washer 2130		4
17	S26 2555 206	Outsert main chassis(S)		1
18	S33 1950 151	Screw 2.6 x 16 +PTPWH		1
19	S26 2554 701	Drive gear(S)		1
20	S26 2554 504	Contorol cam(S)		1
21	S16 9266 711	Leaf switch		2
22	S15 6472 111	5P connector		1
23	S16 4052 311	Loading P.W.B		1
24	SX2 6251 171	Loading motor Ass'Y		1
25	S26 2553 402	Middle gear		1
26	S26 2553 602	Loading pulley		1
27	S36 5338 700	LM belt		1
28	S26 2527 901	Screw 2.6 x 2.5 +B		1
31	S26 2690 801	Sled shaft		1
32	S26 2723 401	Insulator		4
33	S26 4138 601	Tapping screw 2 x 5		4
34	S26 2562 501	Plate		1
35	S26 2519 101	Coil spring		1
36	S26 2547 701	Center ring		1
37	S88 4848 305	Laser pick up	KSS-213C	1
38	S26 2518 802	Gear(A)		1
39	SX2 6259 841	Motor chassis Ass'y		1
40	SX2 6257 691	Motor gear Ass'y		1
41	S16 3967 812	Motor P.W.B.		1
42	S15 7208 511	Leaf switch		1
43	S15 6472 211	6P connector		1
44	S76 2125 515	Screw 2 x 3 +P		1

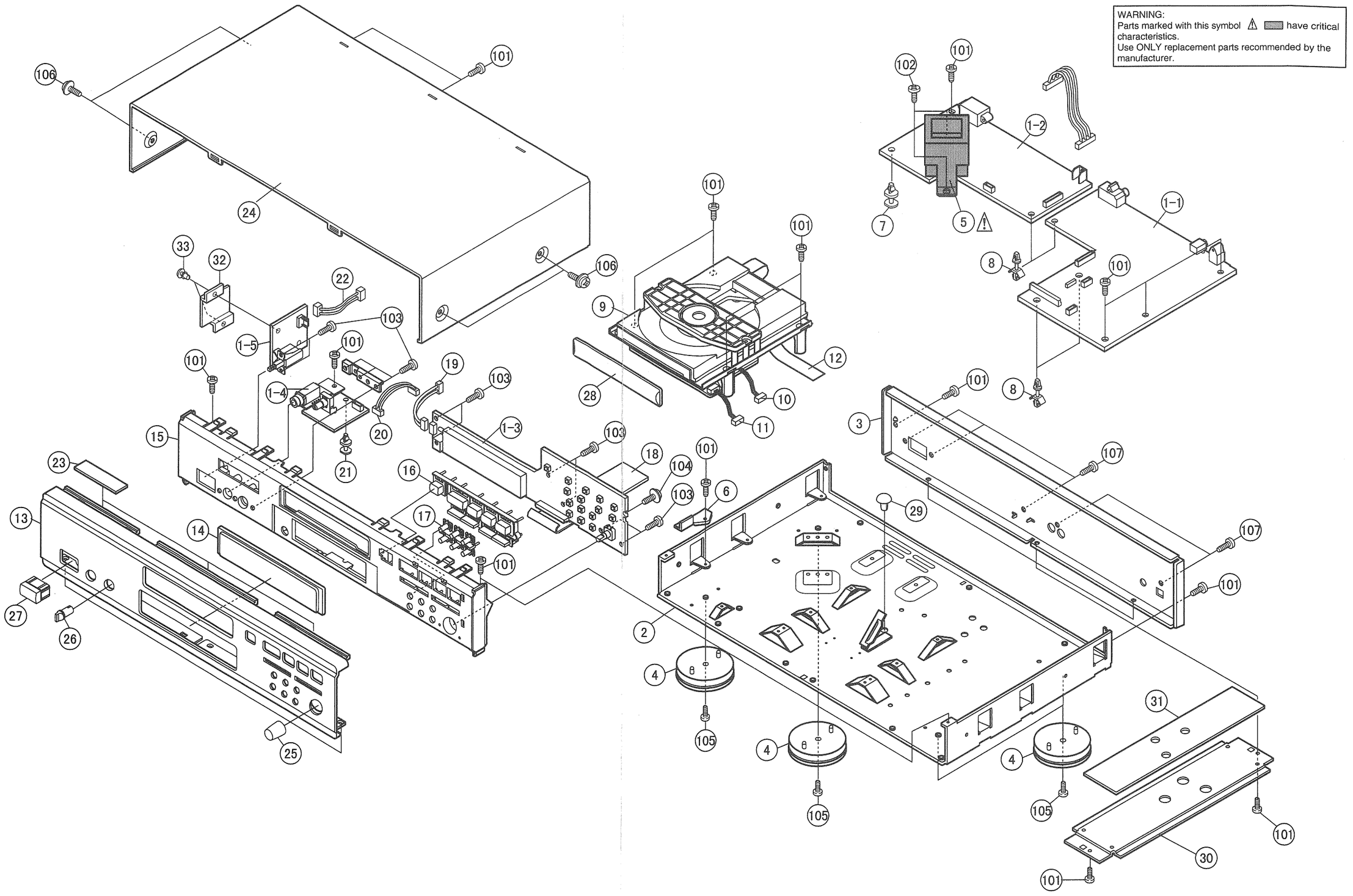
MEMO :

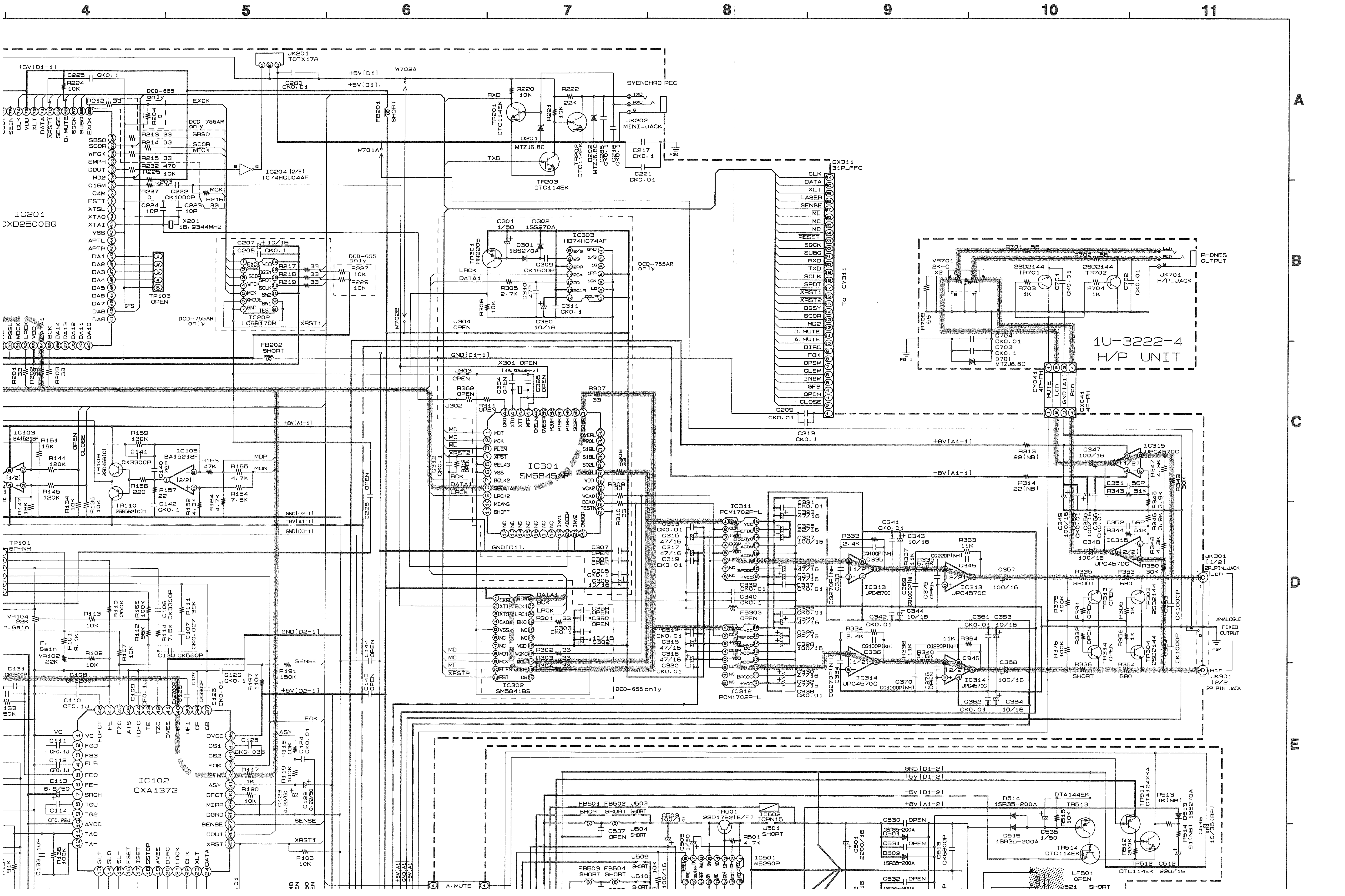
Ref. No.	Part No.	Part Name	Remarks
C335,336	255 4235 918	Polypropylene film 100 pF/100V	CQ93P2A101J(NH)
C337-339	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C340	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C341,342	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C343,344	254 4538 900	Electrolytic 10 µF/16V	CE04W1C100M SMG/RE3
C345,346	255 4237 974	Polypropylene film 220 pF/100V	CQ93P2A221J
C347-350	254 4538 942	Electrolytic 100 µF/16V	CE04W1C101M SMG/RE3
C351,352	257 0004 903	Ceramic chip 56 pF/50V	CC73SL1H560J
C353,354	257 0008 983	Ceramic chip 1000 pF/50V	CK73B1H102K
C357,358	254 4538 942	Electrolytic 100 µF/16V	CE04W1C101M SMG/RE3
C361,362	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C363,364	254 4538 900	Electrolytic 10 µF/16V	CE04W1C100M SMG/RE3
C365,366	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C369,370	255 4232 937	Polypropylene film 1000 pF/100V	CQ93P2A102J(NH)
C380	254 4538 900	Electrolytic 10 µF/16V	CE04W1C100M SMG/RE3
			DCD-755 Model only
C501	254 4539 718	Electrolytic 2200 µF/16V	CE04W1C222M SMG/RE3
C502	254 4472 707	Electrolytic 4700 µF/16V	CE04W1C472M (SMG)
C503,504	254 4538 942	Electrolytic 100 µF/16V	CE04W1C101M SMG/RE3
C505	254 4524 943	Electrolytic 1 µF/50V	CE04W1H010M SMG/RE3
C507	254 4396 906	Electrolytic 100 µF/63V	CE04W1J101M(SMG)
C508	254 4525 926	Electrolytic 100 µF/50V	CE04W1H101M SMG/RE3
C509,510	254 4525 900	Electrolytic 33 µF/50V	CE04W1H330M SMG/RE3
C511	254 4524 969	Electrolytic 3.3 µF/50V	CE04W1H3R3M SMG/RE3
C512	254 4538 955	Electrolytic 220 µF/16V	CE04W1C221M SMG/RE3
C513,514	253 9030 950	Ceramic 6800 pF/25V	CK45=1E682K
C516	253 1181 904	Ceramic 0.01 µF/50V	CK45F1H103Z
C517	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C519	253 1181 904	Ceramic 0.01 µF/50V	CK45F1H103Z
C535	254 4524 943	Electrolytic 1 µF/50V	CE04W1H010M SMG/RE3
C536	254 3055 918	Electrolytic 10 µF/35V	CE04D1V100MBP
C540	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C541	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C604,605	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C606	254 4193 905	Electrolytic 10 µF/16V	CE04W1C100M(SRA)
C607	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C609	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C610	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C611	254 4193 905	Electrolytic 10 µF/16V	CE04W1C100M(SRA)
C701-703	257 0010 900	Ceramic chip 0.01 µF/50V	CK73B1H103K
C704	257 0011 996	Ceramic chip 0.1 µF/25V	CK73B1E104K
C801	253 8014 702	Ceramic 0.01 µF/400V(AC)	CK45F2GAC103MC

Ref. No.	Part No.	Part Name	Remarks	Q'ty
OTHER PARTS				
CX021	203 2349 009	2P Inlet		1
CX022	205 0581 085	2P VH Connector base		1
CX041	205 0343 045	4P Connector base (KR-PH)		1
CX051	205 0343 058	5P Connector base (KR-PH)		1
CX052	205 0355 059	5P KR Connector base (L)		1
CX061	205 0343 061	6P Connector base (KR-PH)		1
CX141	204 6504 005	14P PH-SAN Connector base		1
CX161	205 0892 033	16P FFC Base	(P=1)	1
CX311	205 0736 021	31P FFC Base		1
CY022	205 0581 085	2P VH Connector base		1
CY041	205 0343 045	4P Connector base (KR-PH)		1
CY052	205 0343 058	5P Connector base (KR-PH)		1
CY141	205 0375 042	14P Connector base (KR-PH)		1
CY311	205 0736 021	31P FFC Base		1
FL601	393 8043 000	VFD (CM1888M)		1
JK201	269 0170 005	Optical connector TOTX178		1
JK202	204 8416 007	Mini jack		1
JK301	204 8537 009	2P Pin jack (GNB) D		1
JK701	204 8264 071	Headhone jack (Gold)		1
S601-615	212 5604 910	Tact switch		15
S616	212 0426 009	Rotary encoder		1
S801	212 1030 009	Power switch (TV-5)		1
ST301	205 0452 017	Style pin		1
ST303	205 0452 017	Style pin		1
ST501	205 0452 017	Style pin		1
ST502	205 0452 017	Style pin		1
TM501	412 9483 009	Earth plate		1
TP102	205 0190 052	5P NH Connector base		1
TP101	205 0190 065	6P NH Connector base		1
X201	399 0112 005	Crystal 16.9344 MHz		1
X601	399 0111 909	Ceramic resonator CST4.23MGW040		1
	461 1031 037	Spacer	between FL601 and PCB	2
W701A-B	203 0386 093	1P SIN Connector ass'y		1
W702A-B	203 0644 010	1P SIN Cord		1

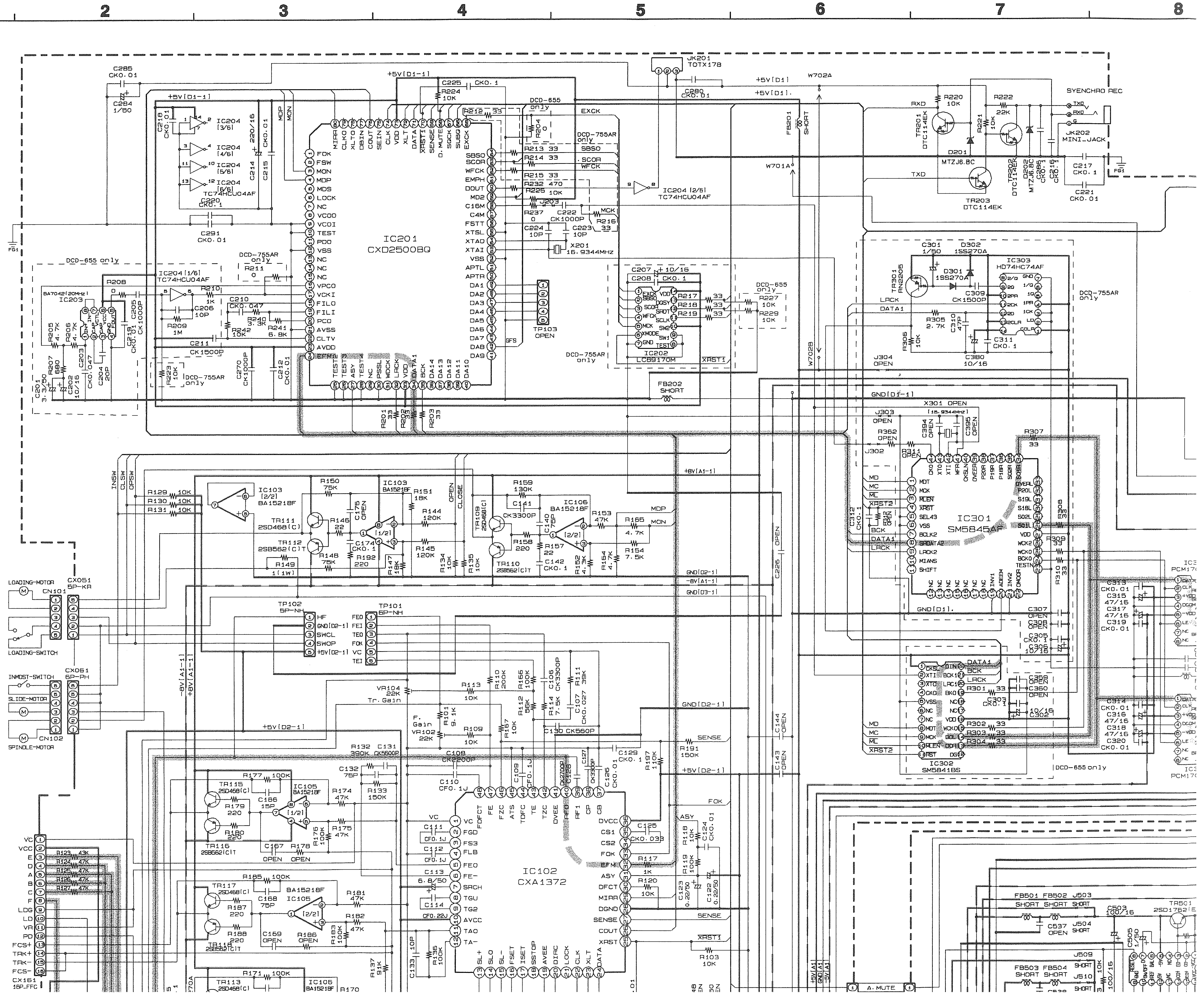
EXPLODED VIEW OF CHASSIS AND CABINET

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.



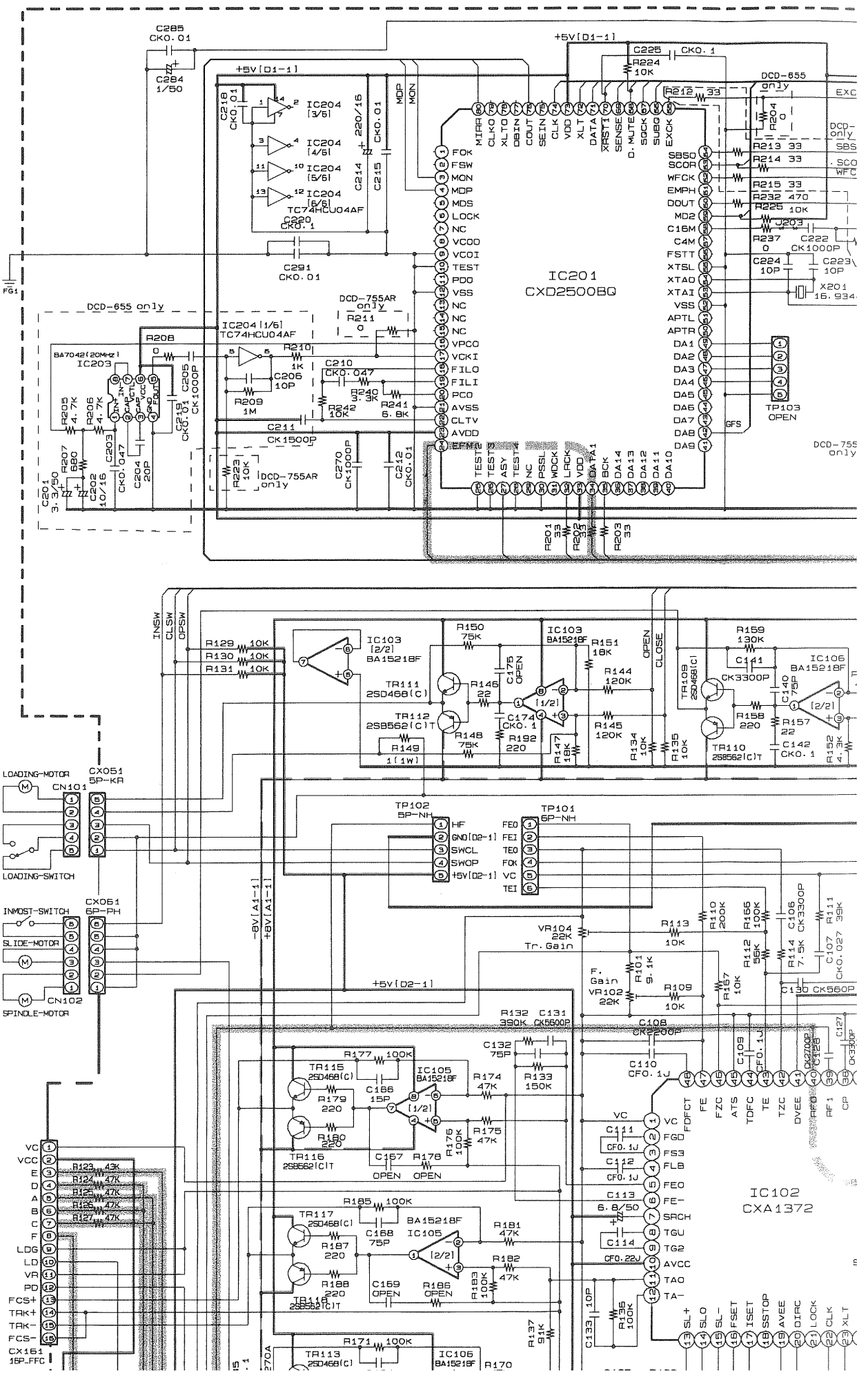

IC201
CXD2500BQ
IC301
SM5845AF
IC302
SM5841BS
IC303
HD74HC74AF
IC202
LC89170M
IC102
CXA1372
IC311
PCM1702P-L
IC312
PCM1702P-L
IC313
UPC4570C
IC314
UPC4570C
IC315
UPC4570C
IC204 (2/6)
TC74HCU04AF
IC501
M5290P
1U-3222-4
H/P UNIT
PHONES OUTPUT
JK701
H/P_JACK
SYENCHRO REC
JK202
MINI_JACK
JK201
TOTX178
CX311
31P_FFC
To CY311
JK301
2P_PIN_JACK
ANALOGUE
FIXED
OUTPUT
DCD-655 only
DCD-755AR only

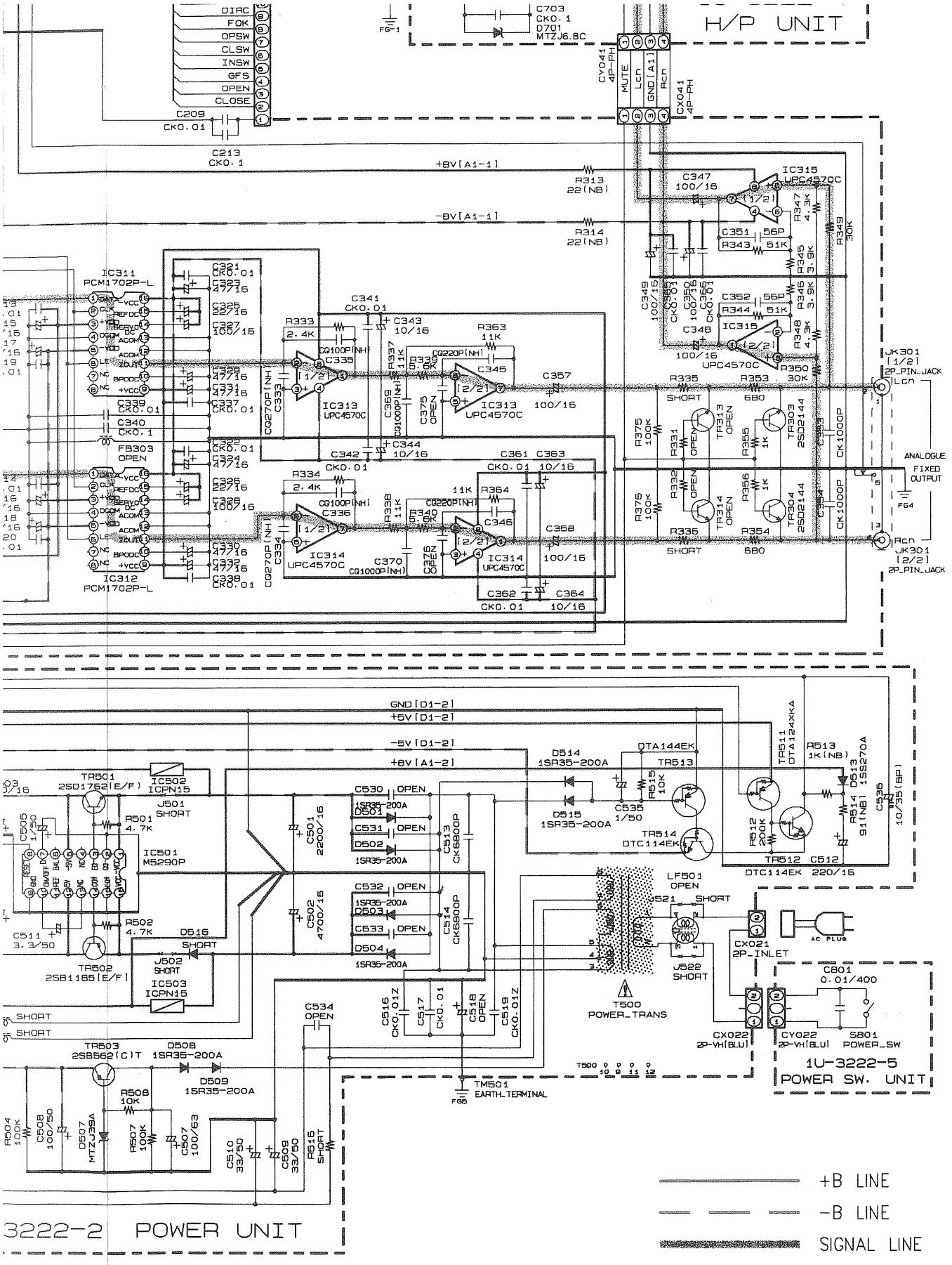
SCHEMATIC DIAGRAMS (1/2)



SCHEMATIC DIAGRAMS (1/2)

1 2 3 4





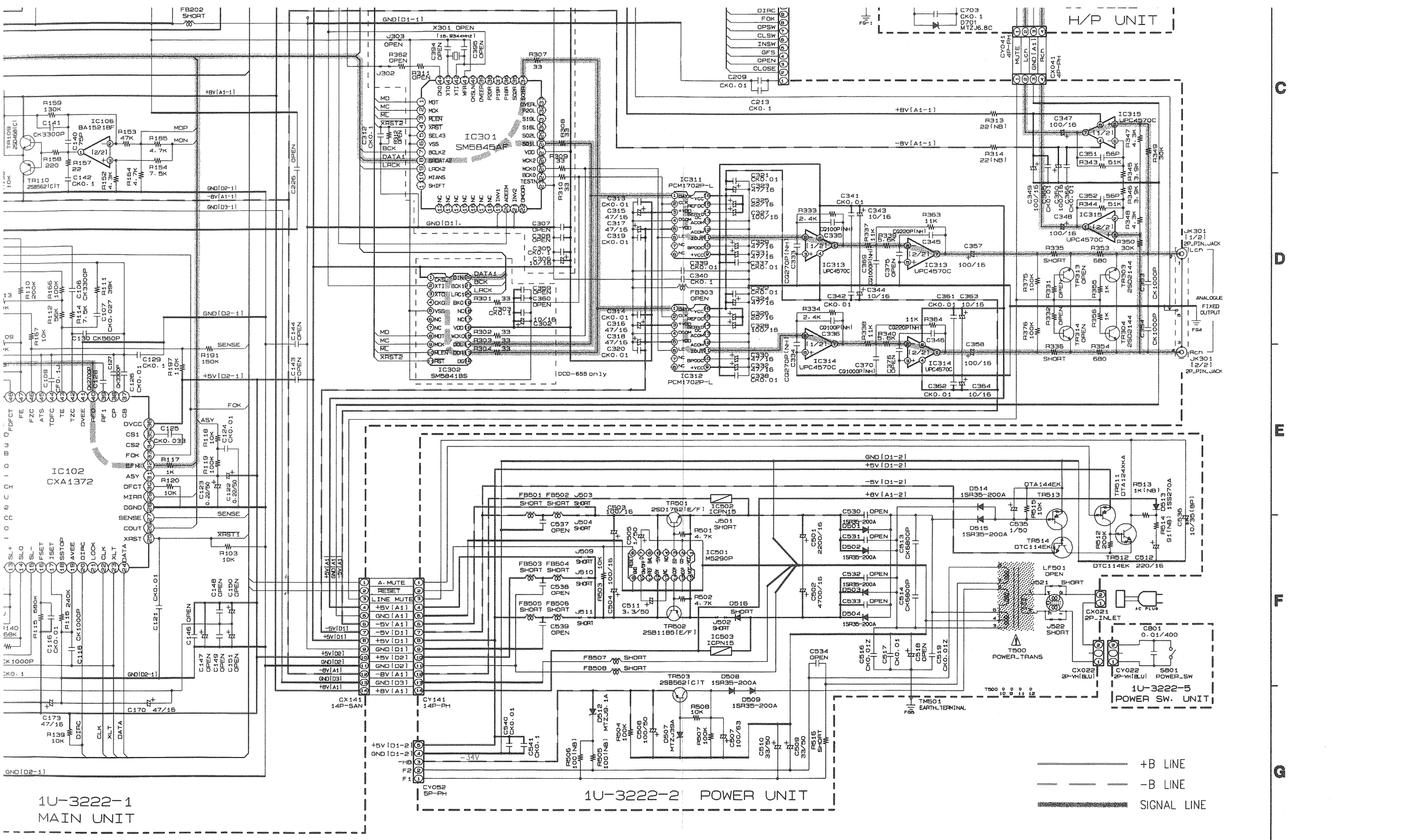
symbol ⚠ ▨ have critical characteristics.
parts recommended by the manufacturer.

nit to the customer, make sure you make either (1) a
or (2) a line to chassis resistance check. If the leakage
illiamps, or if the resistance from chassis to either side
ess than 460 kohms, the unit is detective.

t to the customer until the problem is located and

SCHEMATIC DIAGRAMS (1/2)

1U-3222-1 MAIN UNIT / 1U-3222-2 POWER UNIT
1U-3222-4 POWER SW. UNIT / 1U-3222-5 H/P UNIT



NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:

Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:

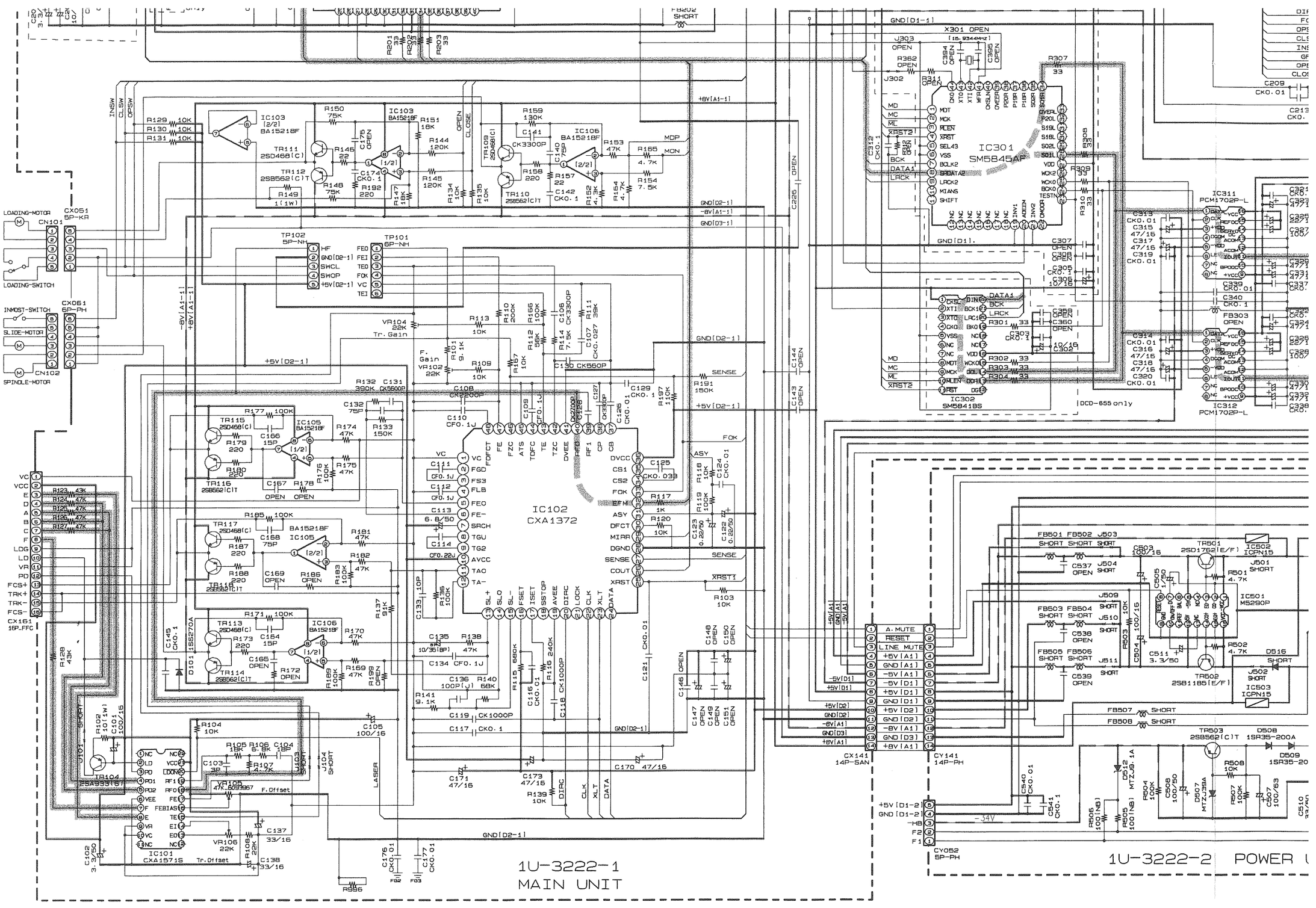
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is detective.

WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAMS (1/2)

1U-3222-1 MAIN UNIT / 1U-3222-2 POWER UNIT
1U-3222-4 POWER SW. UNIT / 1U-3222-5 H/P UNIT


IC102
CXA1372
IC101
CXA1571S
IC301
SM5845AF
IC302
SM5841BS
IC311
PCM1702P-L
IC312
PCM1702P-L
IC501
M5290P
IC502
ICPN15
IC503
ICPN15
1U-3222-1
MAIN UNIT
1U-3222-2
POWER
DCD-655 only
LOADING-MOTOR
LOADING-SWITCH
INMOST-SWITCH
SLIDE-MOTOR
SPINDLE-MOTOR
CX051
5P-KA
CX051
6P-PH
CX161
16P_FFC
CX141
14P-SAN
CY141
14P-PH
CY052
5P-PH
TP102
5P-NH
TP101
6P-NH
X301 OPEN
[16.9344MHz]
GND[D1-1]
+8V[A1-1]
-8V[A1-1]
GND[D2-1]
+5V[D2-1]
GND[D3-1]
GND[D1].
SENSE
FOK
XRST1
LASER
DIRC
CLK
XLT
DATA
NOTICE
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
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CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.
WARNING:
Parts marked with this symbol ⚠ have critical charac
Use ONLY replacement parts recommended by the manufc
CAUTION:
Before returning the unit to the customer, make sure you
leakage current check or (2) a line to chassis resistance
current exceeds 0.5 milliamps, or if the resistance from c
of the power cord is less than 460 kohms, the unit is de
WARNING:
DO NOT return the unit to the customer until the problem
corrected.

FL601 VFD[CM1888M]

IC601
UPD780208GF-049-3BA

AD1
ADO
JOGA
JOGB
REMOTE
GND[D1-3]
+5V[D1-3]

R601 150 S601 OP/CL
R603 180 S603 PLAY
R605 270 S605 STOP
R607 390 S607 ◁◁
R609 680 S609 ▷▷
R611 1.3K S611 TIME
R613 3.9K S613 DISP.
S615 RANDOM
R615 1K C601 OPEN

R602 150 S602 PAUSE
R604 180 S604 A.EDIT
R606 270 S606 A.SPACE
R608 390 S608 A-B
R610 680 S610 ALL
R612 1.3K S612 [TITLE]
S614 [ART]
DCD-655
DCD-755AR
R616 1K C602 OPEN

R623 R624 R625 R626 R627 R628 R629 R630 R631 R632 R633 R634 R635 R636 R637 R638 R639 R640 R641 R642 100K

R643 100K S6 VLOAD
R644 100K S7
R645 100K S8
R646 100K S9
R647 100K S10
R648 100K S11
R649 100K S12
R650 100K S13
R651 100K S14
R652 100K S15
R653 100K S16
R654 100K S17
R655 100K S18
R656 100K S19
R657 100K S20
R658 100K S21

VDD CLK. DATA. XLT. LASER. SENSE. MC. MC. MD. RESET. X2 X1 IC[VPP] XT2 P04 VDD SQCK. P26 SUBQ. RXD. TXD. SCLK. P21 SRDT. AVSS

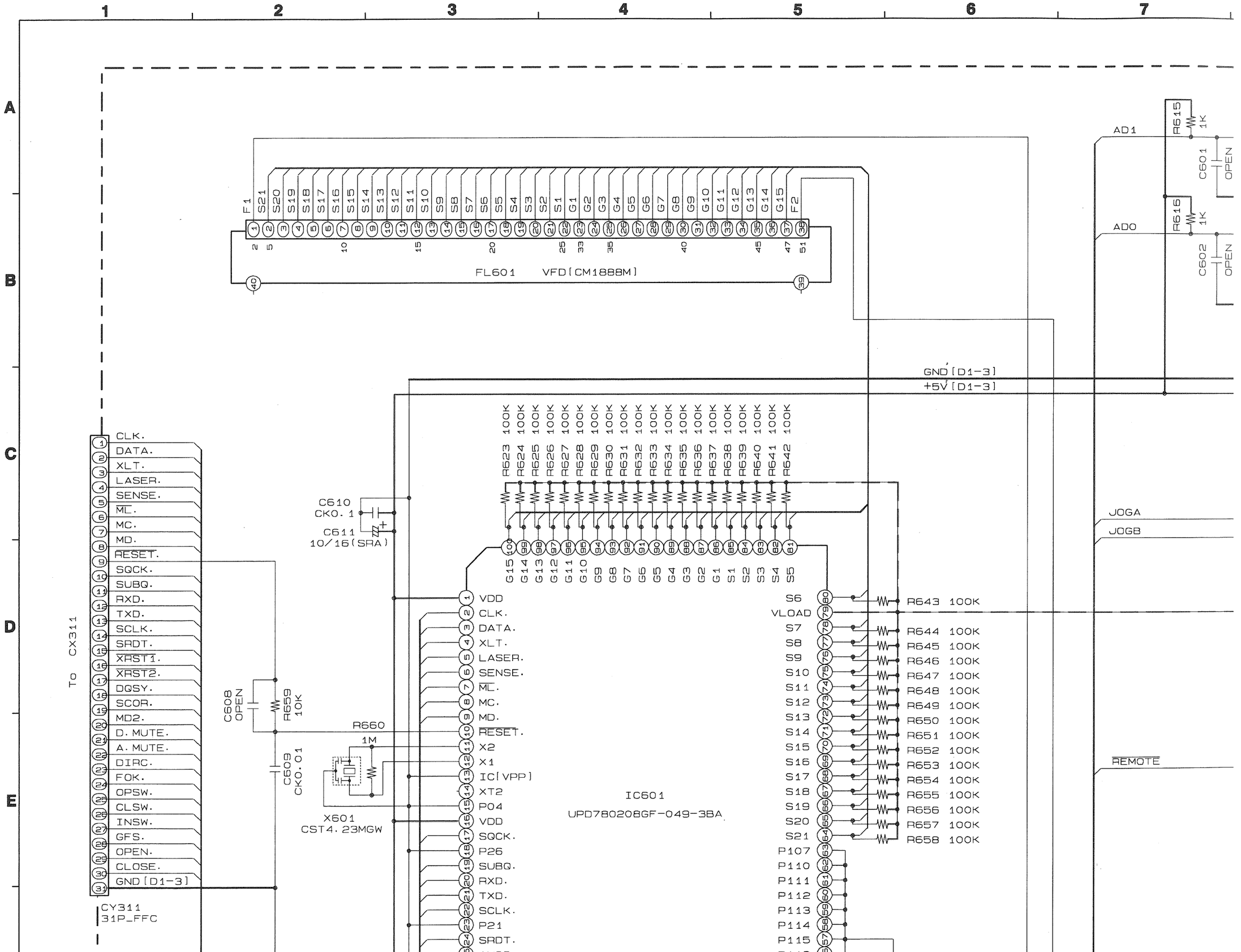
P107 P110 P111 P112 P113 P114 P115 P116

R619 10K R620 10K
R621 100 R622 100
C604 CK0.01 C605 CK0.01
S616 ROTARY_ENCODER
D601 OPEN C612 OPEN D602 OPEN C613 OPEN
W701 OPEN

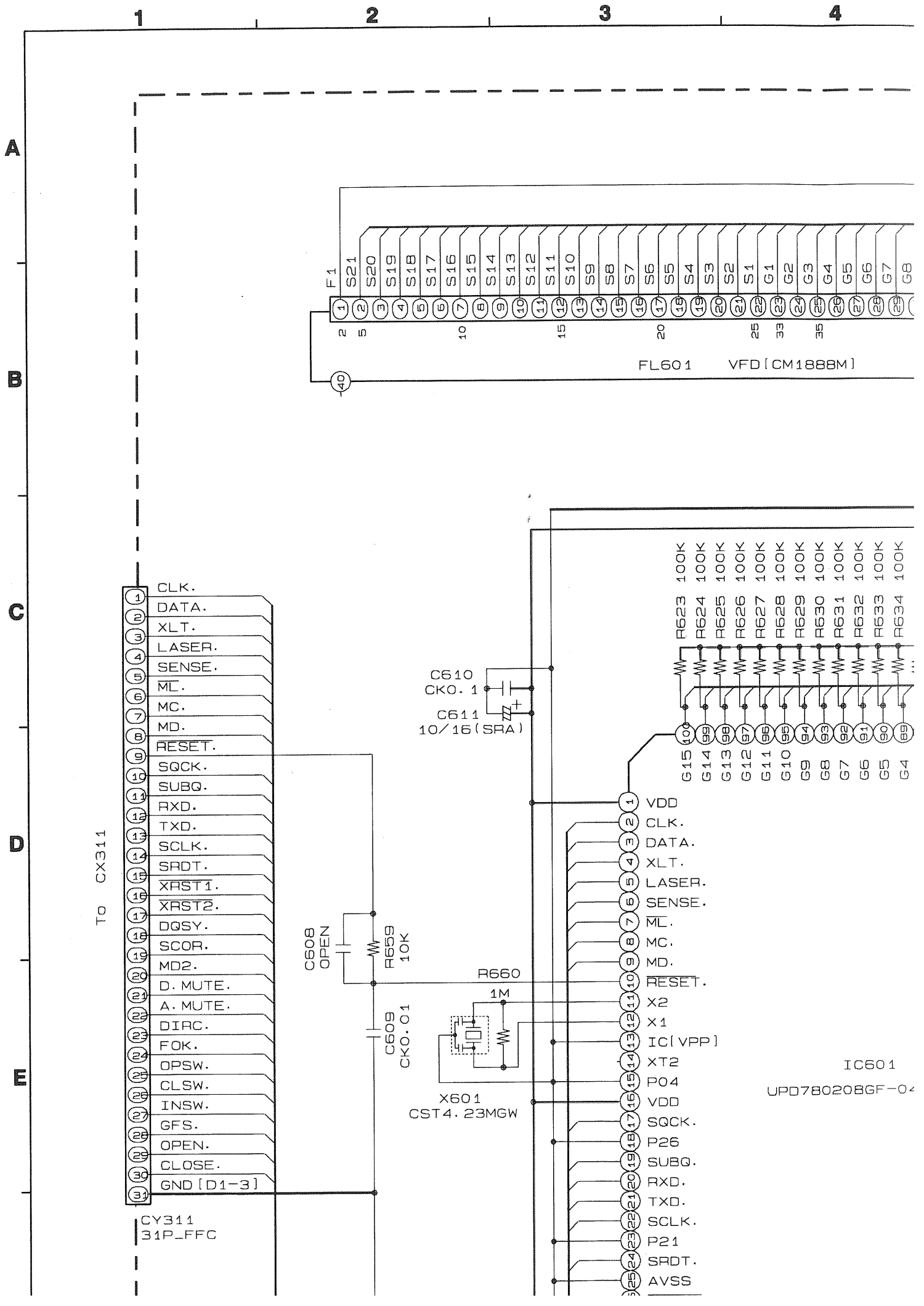
IC602
CAV1M332
VOUT VDD GND
C607 CK0.1
C606 10/16[SRA
C615 OPEN C616 OPEN
W703 OPEN

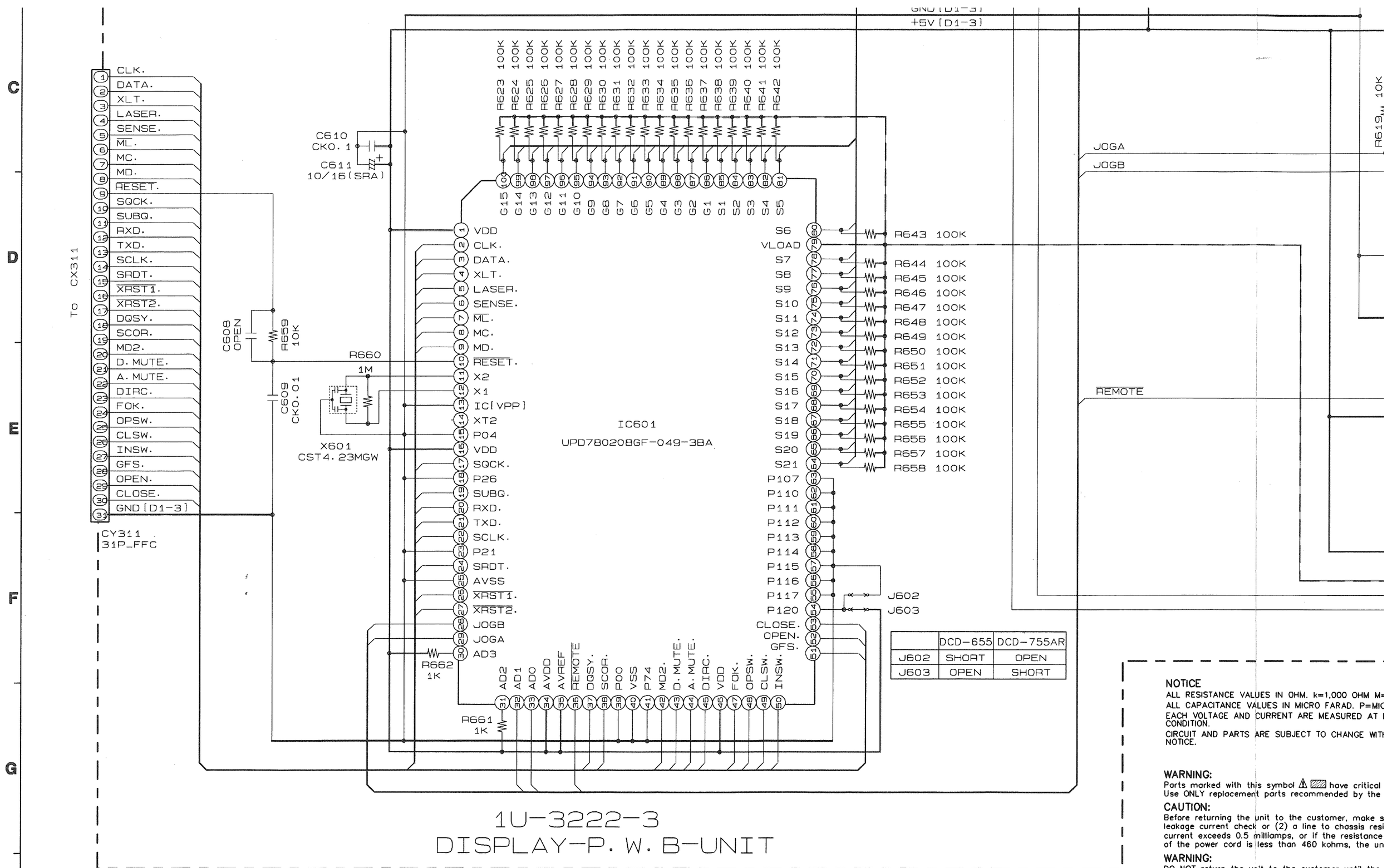
+5V[D1-3]
GND[D1-3]
-34V -HB

SCHEMATIC DIAGRAMS (2/2)



SCHEMATIC DIAGRAMS (2/2)





	DCD-655	DCD-755AR
J602	SHORT	OPEN
J603	OPEN	SHORT

1U-3222-3

DISPLAY-P. W. B-UNIT

NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=

ALL CAPACITANCE VALUES IN MICRO FARAD. P=MIC

EACH VOLTAGE AND CURRENT ARE MEASURED AT I CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITH NOTICE.

WARNING:

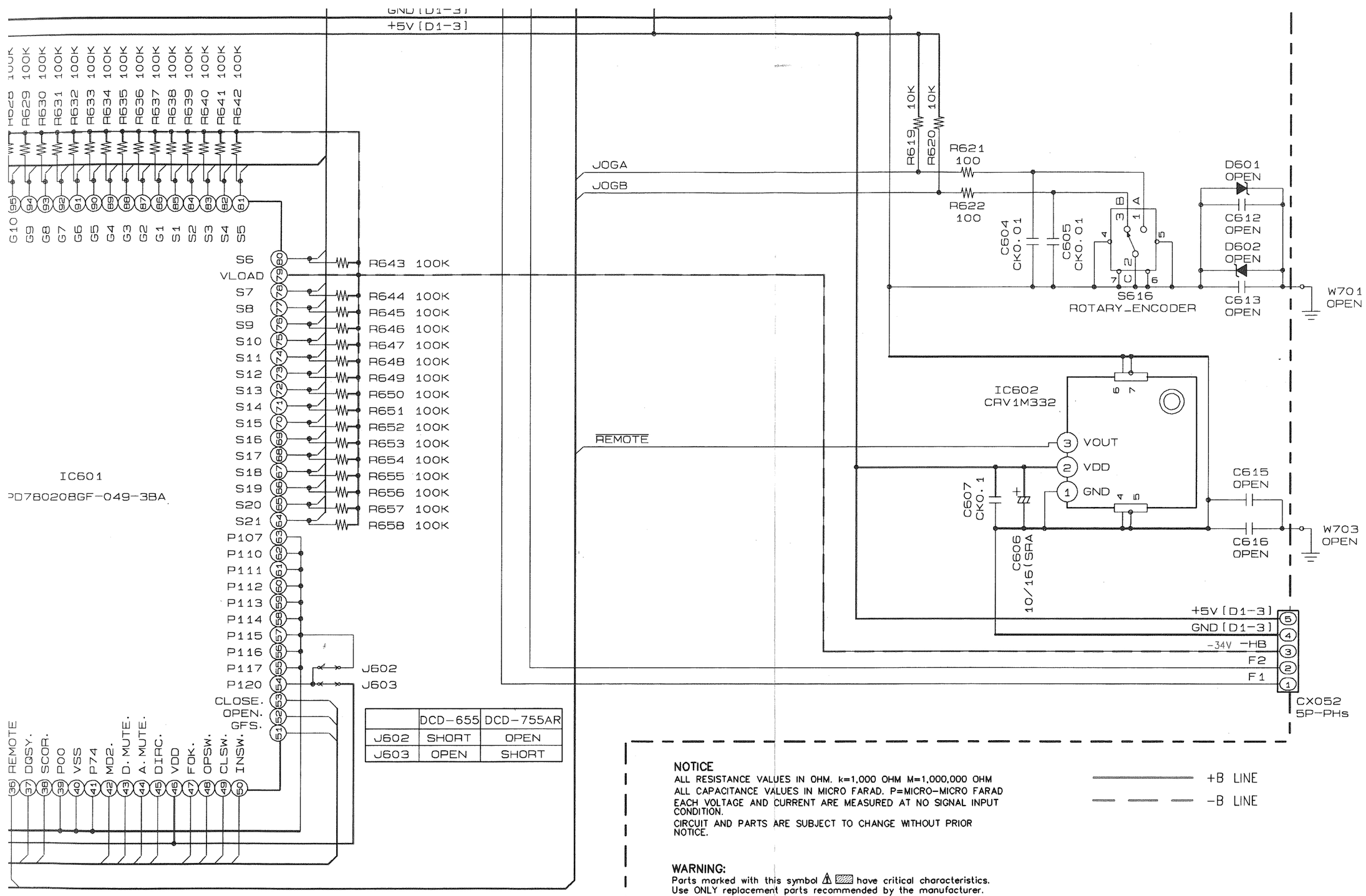
Parts marked with this symbol ⚠ ▨ have critical Use ONLY replacement parts recommended by the

CAUTION:

Before returning the unit to the customer, make s leakage current check or (2) a line to chassis resi current exceeds 0.5 milliamps, or if the resistance of the power cord is less than 460 kohms, the un

WARNING:

DO NOT return the unit to the customer until the corrected.



	DCD-655	DCD-755AR
J602	SHORT	OPEN
J603	OPEN	SHORT

222-3
-P. W. B-UNIT

NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

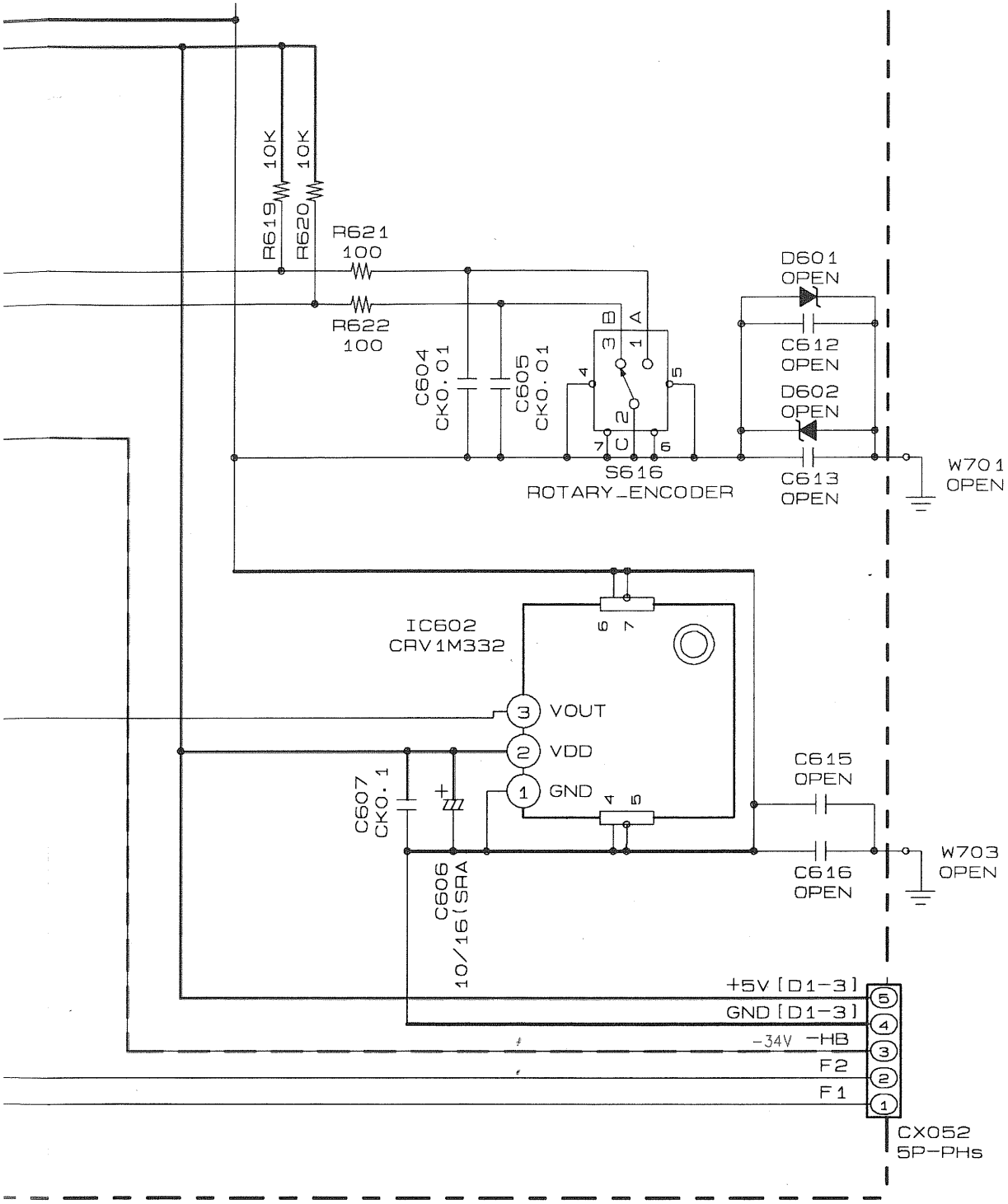
+B LINE
-B LINE

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is detective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAMS (2/2)
1U-3222-3 DISPLAY UNIT



E VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
CE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
AND CURRENT ARE MEASURED AT NO SIGNAL INPUT

ARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR

+B LINE

-B LINE

ith this symbol ⚠ ▨ have critical characteristics.
cement parts recommended by the manufacturer.

the unit to the customer, make sure you make either (1) a check or (2) a line to chassis resistance check. If the leakage 0.5 milliamps, or if the resistance from chassis to either side ord is less than 460 kohms, the unit is detective.

the unit to the customer until the problem is located and

SCHEMATIC DIAGRAMS (2/2)
1U-3222-3 DISPLAY UNIT