

COMPACT DISC PLAYER CDC-655/CDC-901 CDC-555/CDC-501

SERVICE MANUAL

IMPORTANT NOTICE

This manual has been provided for the use of authorized YAMAHA Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically YAMAHA Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components, and failure of the product to perform as specified. For these reasons, we advise all YAMAHA product owners that any service required should be performed by an authorized YAMAHA Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of YAMAHA are continually striving to improve YAMAHA products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

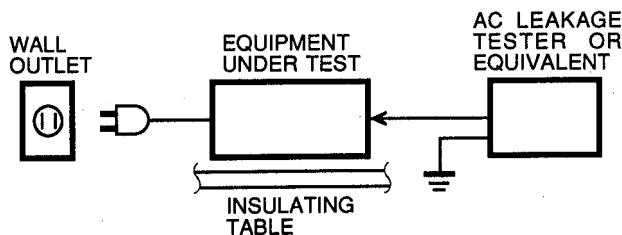
IMPORTANT: Turn the unit OFF during disassembly and part replacement. Recheck all work before you apply power to the unit.

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■ TO SERVICE PERSONNEL

1. Critical Components Information.
Components having special characteristics are marked and must be replaced with parts having specifications equal to those originally installed.
2. Leakage Current Measurement (For 120V Models Only).
When service has been completed, it is imperative to verify that all exposed conductive surfaces are properly insulated from supply circuits.
 - Meter impedance should be equivalent to 1500 ohm shunted by 0.15 μ F.
 - Leakage current must not exceed 0.5mA.
 - Be sure to test for leakage with the AC plug in both polarities.



CAUTION: USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

THE COMPACT DISC PLAYER SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE PERSONNEL.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs a laser. Therefore, be sure to carefully follow the instructions below when servicing .

1. Laser Diode Properties
 - Material : GaAlAs
 - Wavelength : 780 nm
 - Emission Duration : Continuous
 - Laser Output : max. 44.6 μ W*
 2. When checking the laser diode emission, keep your eyes more than 30 cm away from the objective lens.
- * This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.

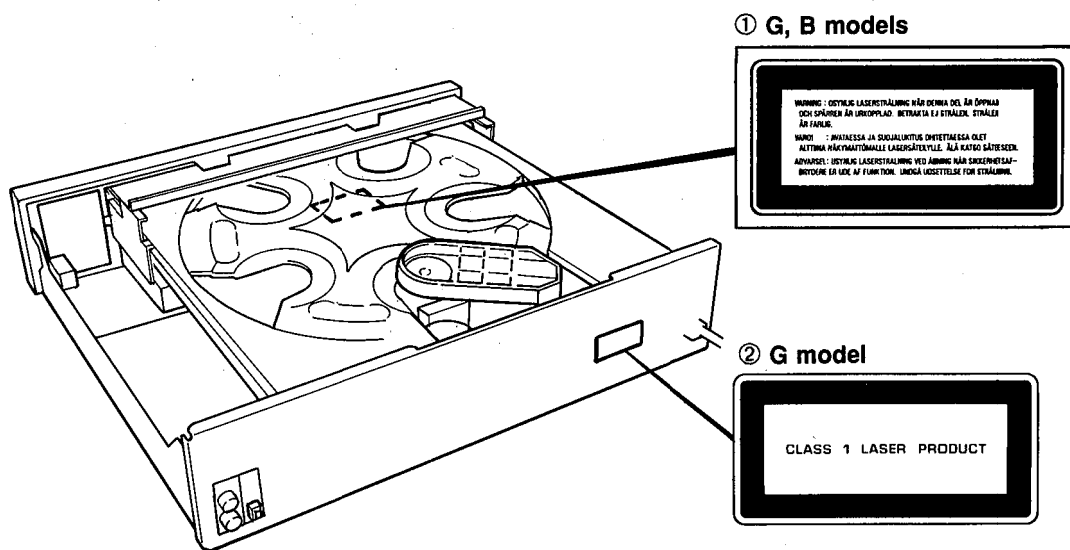
WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and/or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.



English

- ① THIS LABEL (SEE POSITION SHOWN IN THE ILLUSTRATION) INFORMS THE USER THAT THE APPARATUS CONTAINS A LASER COMPONENT.
- ② THIS LABEL (SEE POSITION SHOWN IN THE ILLUSTRATION) WARNS THAT ANY FURTHER PROCEDURE WILL BRING THE USER INTO EXPOSURE WITH THE LASER BEAM.

CAUTION : USE OF CONTROLS, ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN, MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

Swedish

- ① DENNA MÄRKNING (SE FIGUR) UPPLYSER OM ATT DET I APPARATEN INGÅR EN LASERKOMPONENT AV TYP KLASS 1.
- ② VARNINGSMÄRKNING (SE FIGUR) FÖR STRÅLNING. INGREPP I APPARATEN BÖR ENDAST FÖRETAGAS AV FACKMAN MED KÄNNEDOM OM LASER. APPARATEN INNEHÅLLER EN LASERKOMPONENT SOM AVGER STRÅLNING ÖVERSTIGANDE GRÄNSEN FÖR LASERKLASS 1.

VARNING : OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD : BETRakta EJ STRÅLEN.

Danish

- ① DETTE MÆRKAT ER ANBRAGT SOM VIST I ILLUSTRATIONEN FOR AT ADVARE BRUGEREN OM AT APPARATET INDEHOLDER EN LASERKOMPONENT.
- ② DETTE MÆRKAT OM LASEREN ER ANBRAGT PÅ APPARATET SOM EN OPLYSNING OM AT APPARATET INDEHOLDER ET LASERKOMPONENT.

ADVARSEL : INDGREG BØR KUN FORETAGES AF EN FAGMAND DA DER ER RISIKO FOR RADIOAKTIV STRÅLING.

ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING.
UNDGÅ UDSÆTTELSE FOR STRÅLING.

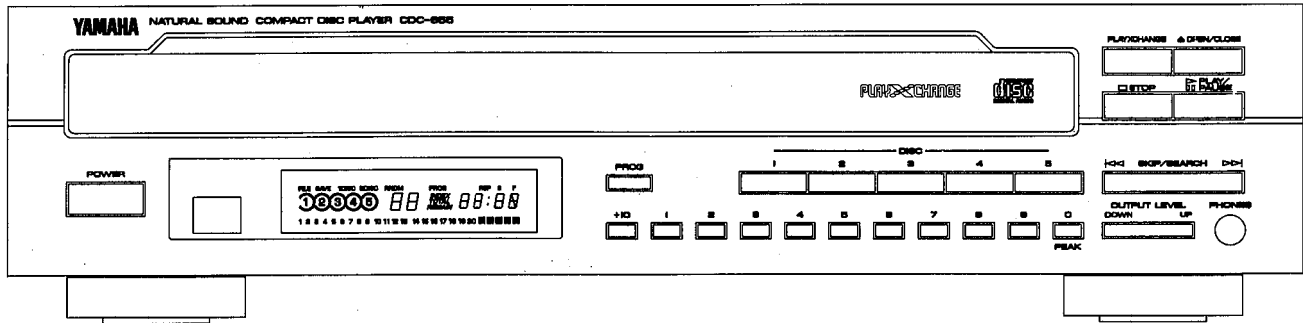
Finnish

VARO!
AVATTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

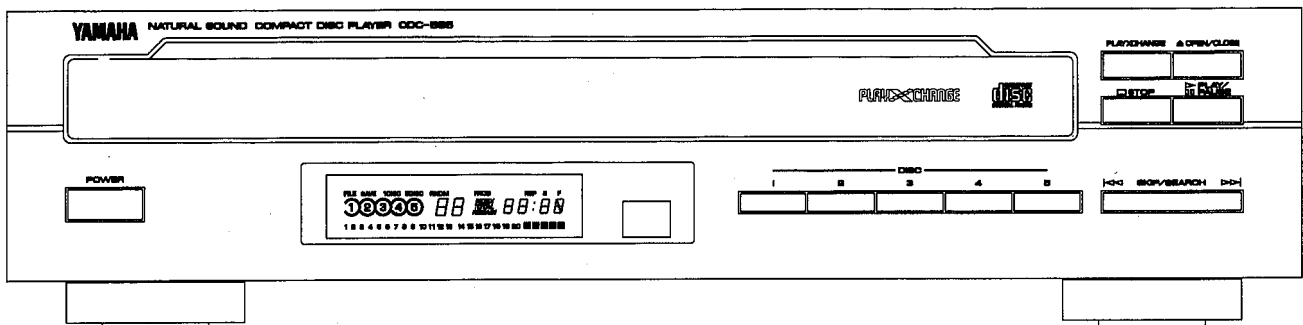
CDC-655/CDC-901
CDC-555/CDC-501

FRONT PANELS

● CDC-655/CDC-901

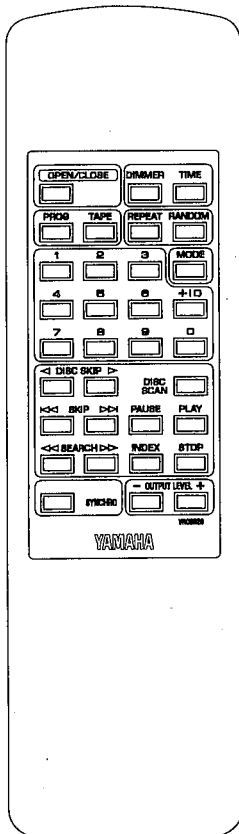


● CDC-555/CDC-501

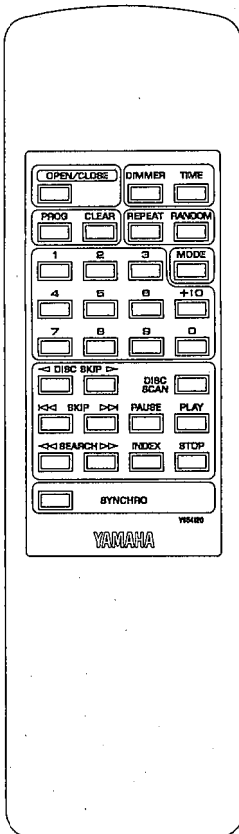


REMOTE CONTROL TRANSMITTER

● CDC-655/CDC-901



● CDC-555/CDC-501



CAUTION FOR TRANSPORTING THIS UNIT

When transporting this unit, first remove all discs from the disc tray and close the tray by pressing the **OPEN/CLOSE** button, and then switch off the power after you confirm that the display has turned as follows.

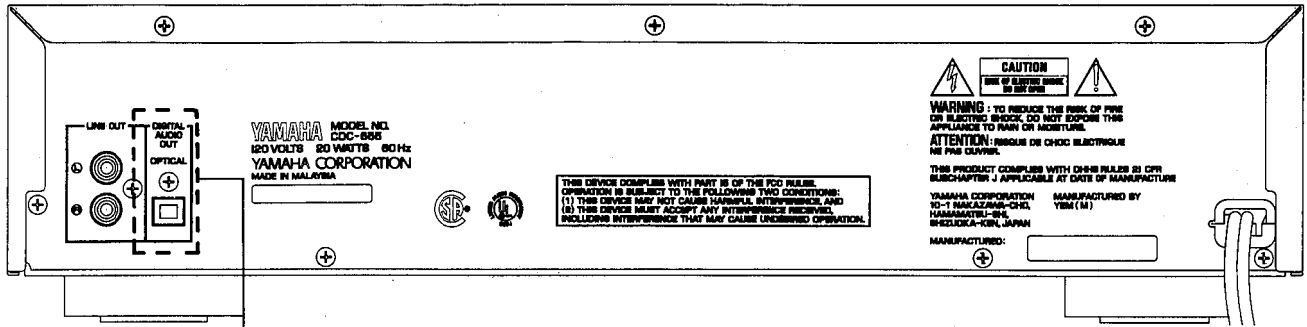


Never switch off the power if the display does not turn as above, otherwise the unit will get out of order during transport because the internal mechanism is not locked.

CDC-655/CDC-901
CDC-555/CDC-501

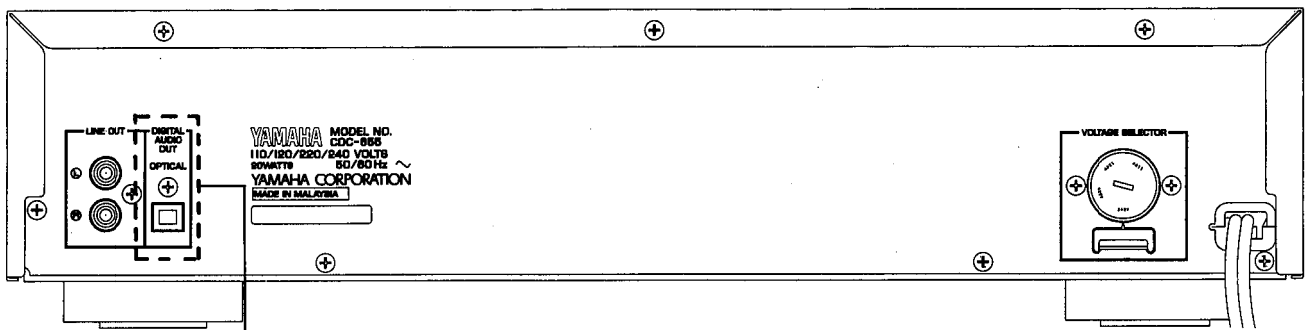
REAR PANELS

U, C models



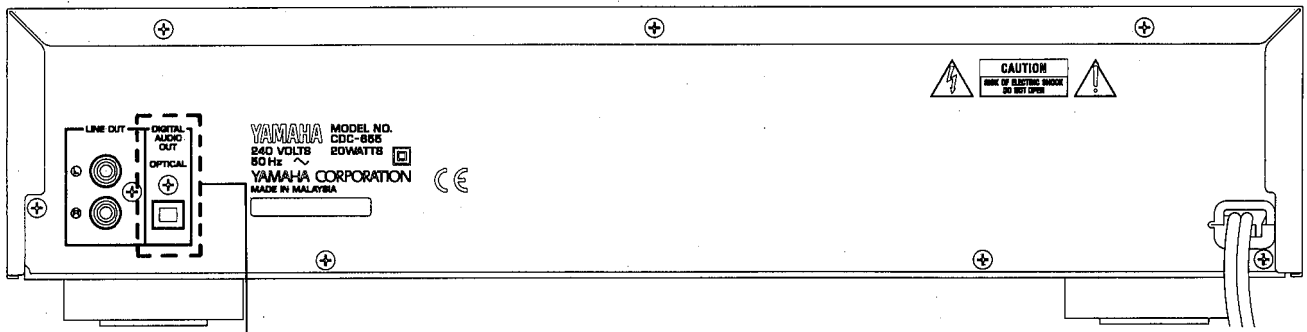
CDC-655/CDC-901 ONLY

R model



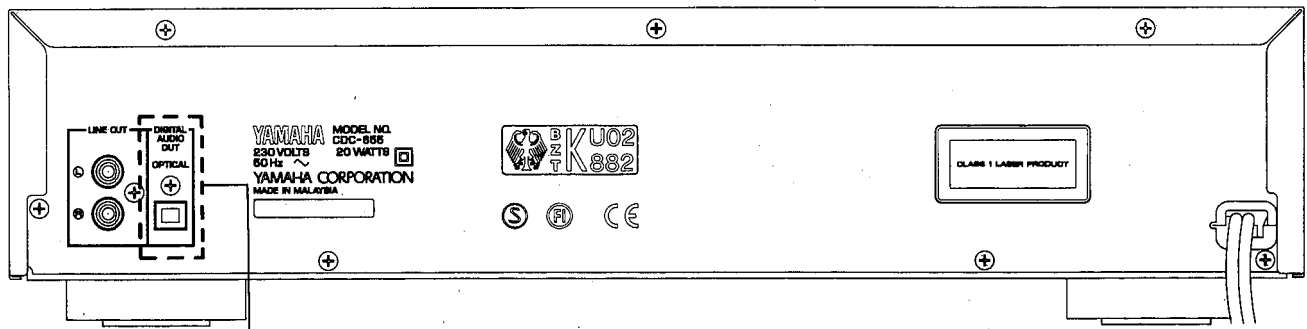
CDC-655 ONLY

A, B models



CDC-655 ONLY

G model



CDC-655 ONLY

CDC-655/CDC-901
CDC-555/CDC-501

■ CDC-655/CDC-901 SPECIFICATIONS

■ AUDIO SECTION

Frequency Response	2Hz~20kHz±0.5dB
Harmonic Distortion+Noise	Less than 0.003%, (1kHz)
S/N Ratio	106dB
Dynamic Range	96dB
Wow & Flutter	Unmeasurable
Output Voltage	2.0V
Headphone Output(1kHz -20dB)	200mV/150Ω

■ GENERAL

Power Requirements	
U, C models	120V AC 60Hz
A model	240V AC 50Hz
R model	110/120/220/240V AC 50/60Hz
Power Consumption	20W
Dimensions (W x H x D)	435 x 106 x 388 mm (17-1/8" x 4-3/16" x 15-1/4")
Weight	5.6kg (12 lbs 5 oz)
Accessories	Pin plug cord Remote control transmitter Dry-cell: x2 (Size "AA", R06)

* Specifications subject to change without notice.

U.....USA model	B.....British model
C.....Canadian model	G.....European model
A.....Australian model	R.....General model

■ CDC-555/CDC-501 SPECIFICATIONS

■ AUDIO SECTION

Frequency Response	2Hz~20kHz±0.5dB
Harmonic Distortion+Noise	Less than 0.004%, (1kHz)
S/N Ratio	102dB
Dynamic Range	95dB
Wow & Flutter	Unmeasurable
Output Voltage	2.0V
Headphone Output(1kHz -20dB)	200mV/150Ω

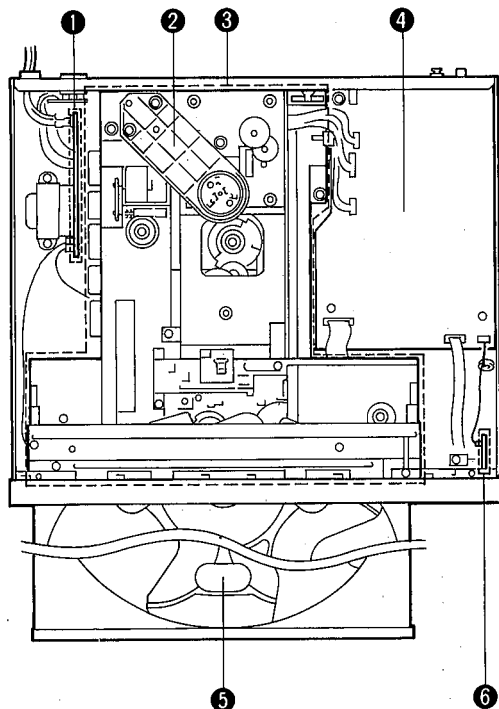
■ GENERAL

Power Requirements	
U, C models	120V AC 60Hz
A model	240V AC 50Hz
R model	110/120/220/240V AC 50/60Hz
Power Consumption	20W
Dimensions (W x H x D)	435 x 106 x 388 mm (17-1/8" x 3-3/16" x 15-1/4")
Weight	5.4kg (11 lbs 14 oz)
Accessories	Pin plug cord Remote control transmitter Dry-cell: x2 (Size "AA", R06)

* Specifications subject to change without notice.

U.....USA model	B.....British model
C.....Canadian model	G.....European model
A.....Australian model	R.....General model

■ INTERNAL VIEW



- ① P. C. B. MAIN (2)
- ② CLAMP ASS'Y
- ③ CM-100 UNIT
- ④ P. C. B. MAIN (1)
- ⑤ TRAY ASS'Y
- ⑥ P. C. B. MAIN (8)...CDC-655/CDC-901 ONLY

DISASSEMBLY PROCEDURES (Remove parts in the order as numbered.)

1. Removal of Top Cover

- a. Remove 4 screws (①) and also 3 screws (②) as shown in Fig. 1.

2. Removal of Clamp Ass'y

- a. Remove 2 screws (③) as shown in Fig. 1.

3. Removal of Front Panel Unit

- a. Remove 5 screws (④) and also 1 or 2 screws (⑤) as shown in Fig. 1.
- b. Remove connectors from the P. C. B. Main.
- c. Take off the Front Panel Unit slowly as shown in Fig. 1.

4. Removal of Tray Ass'y

- a. Remove 1 screw (⑥) as shown in Fig. 1.
- b. Turn Gear/L02 as shown in Fig. 2 counter clockwise gradually till immediately before the tray starts to move and stop it there.

CAUTION : Gear/L02, if turned counter clockwise continuously, will mesh with the gear of the tray and the tray will come out. When removing the tray, use care so that Gear/L02 will not mesh with the gear of the tray.

- c. Pull out the Tray Ass'y.

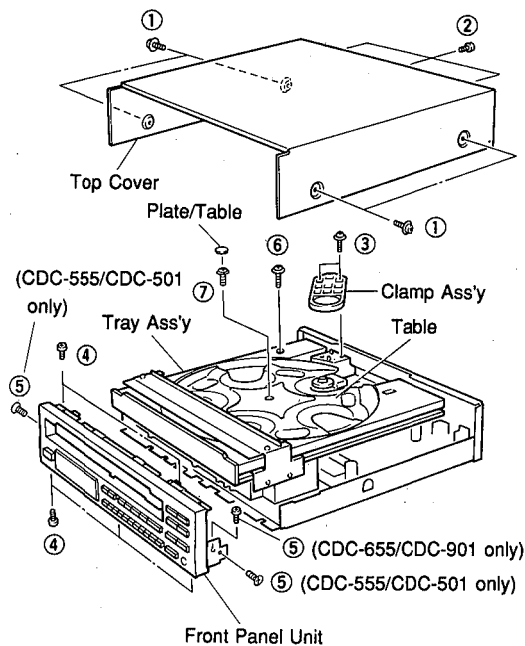


Fig. 1

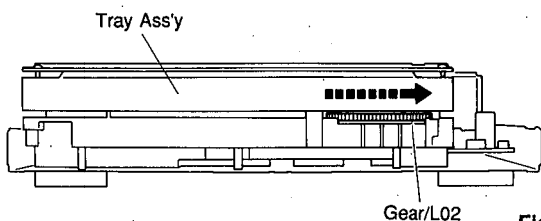


Fig. 2

5. Removal of Table

- a. Remove the Plate/Table as shown in Fig. 1.
- b. Remove 1 screw (⑦) and then take off the Table as shown in Fig. 1.

● Precaution for installation of the Tray Ass'y.
On Tray Ass'y setting.
Check the Direction of marking "▲" on gear according to this drawing.

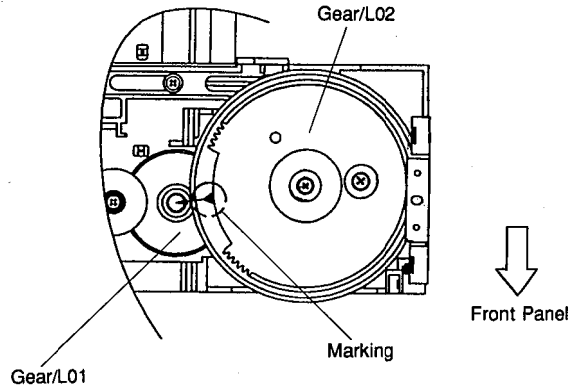


Fig. A

IMPORTANT : Installation of Table.

Install the table according to the following procedure.

- 1) Slide the Lever/RT so that the Gear/RT1 becomes free. (Fig.B-1)
- 2) With the "▲" mark on the Gear/RT1 aligned with the same mark on the Tray, lock it with the Lever/RT. (Fig.B-1)
- 3) Install the Table by aligning it to the thick line on "▲" mark. (Fig.B-2)

*Check that the Table is locked after installation.

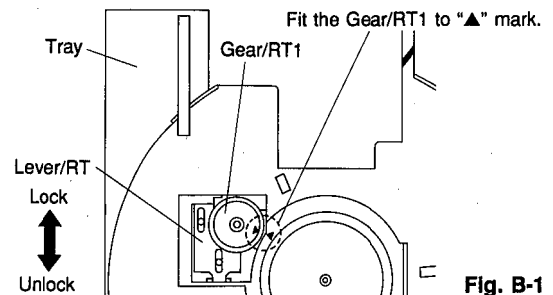


Fig. B-1

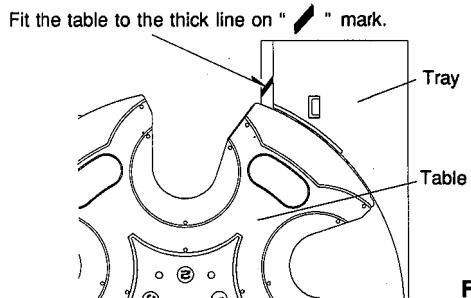
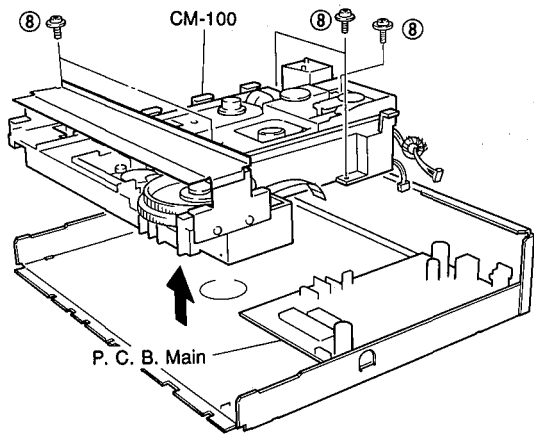


Fig. B-2

6. Removal of CM-100 Unit

- a. Remove 5 screws (⑧) as shown in Fig. 3.
- b. Remove 6 connectors from the P. C. B. Main. (CB1~3, CB201, 202, CB301)
- c. Take the CM-100 Unit out slowly as shown in Fig. 3.



* The P. C. B. MAIN can be removed in this state.

Fig. 3

7. Removal of Pick-up Head

- a. Remove 1 screw (⑨) and then remove the PU Unit Ass'y as shown Fig. 4.

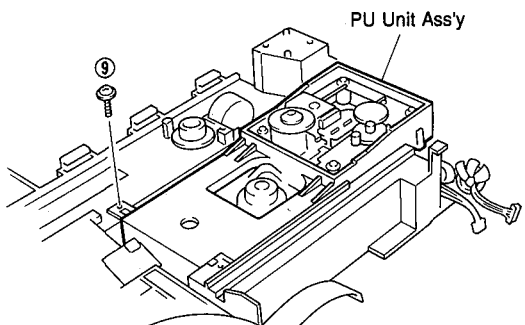


Fig. 4

- b. Pull out 4 Pins (⑩) and then remove the PU Mechanism Unit as shown in Fig. 5.

* The Pick-up Head can be replaced without removing the PU Mechanism Unit.

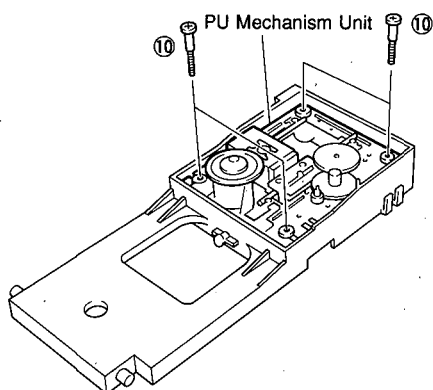


Fig. 5

● Operation Check Procedure

- ① Disassembly
 - 1) Remove the top cover.
 - 2) Remove the Clamp Ass'y.
 - 3) Remove the stabilizer from the clasper.

Turn the Plate clockwise by 30° while holding the Stabilizer, and the Plate will come off. Remove the Stabilizer from the Clasper.
- ② Clamp the disc by using the stabilizer.
- ③ Set to the TEST mode and check for any faulty conditions.

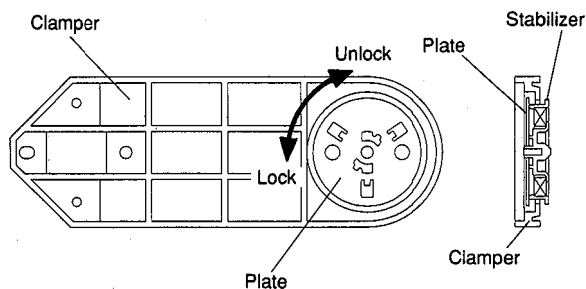


Fig. C

- c. Pull out the Gear/Power as shown in Fig. 6.
- d. Remove 4 screws (⑪) and then remove the Pick-up Head as shown in Fig. 6.

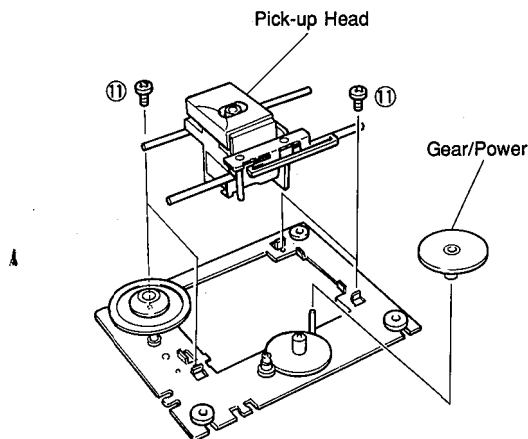


Fig. 6

- Check that the disc table height is as specified below.

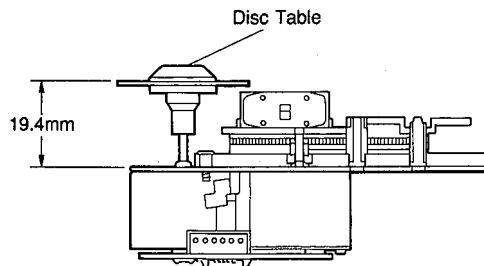
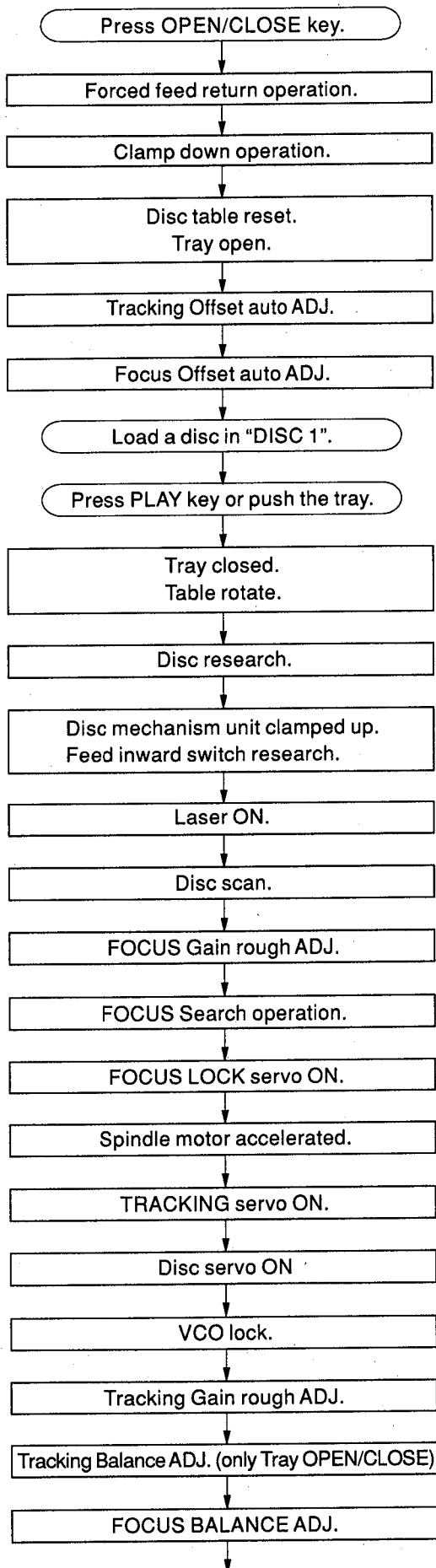


Fig. D

■ STANDARD OPERATION CHART




"OPEN" appears in the TIME indicator.

"TRV" signal is output until detection of LIMIT switch.

Proceeds to next step after detection of CLAMP switch. (SW501)

Stop after detection of LOADING switch. (SW502)

"DISC"  flash.

Proceeds to next step after detection of LOADING switch. (SW502)
DISC "1" is turned to DM clamp position.

"DISC"  from flashing to lighting.

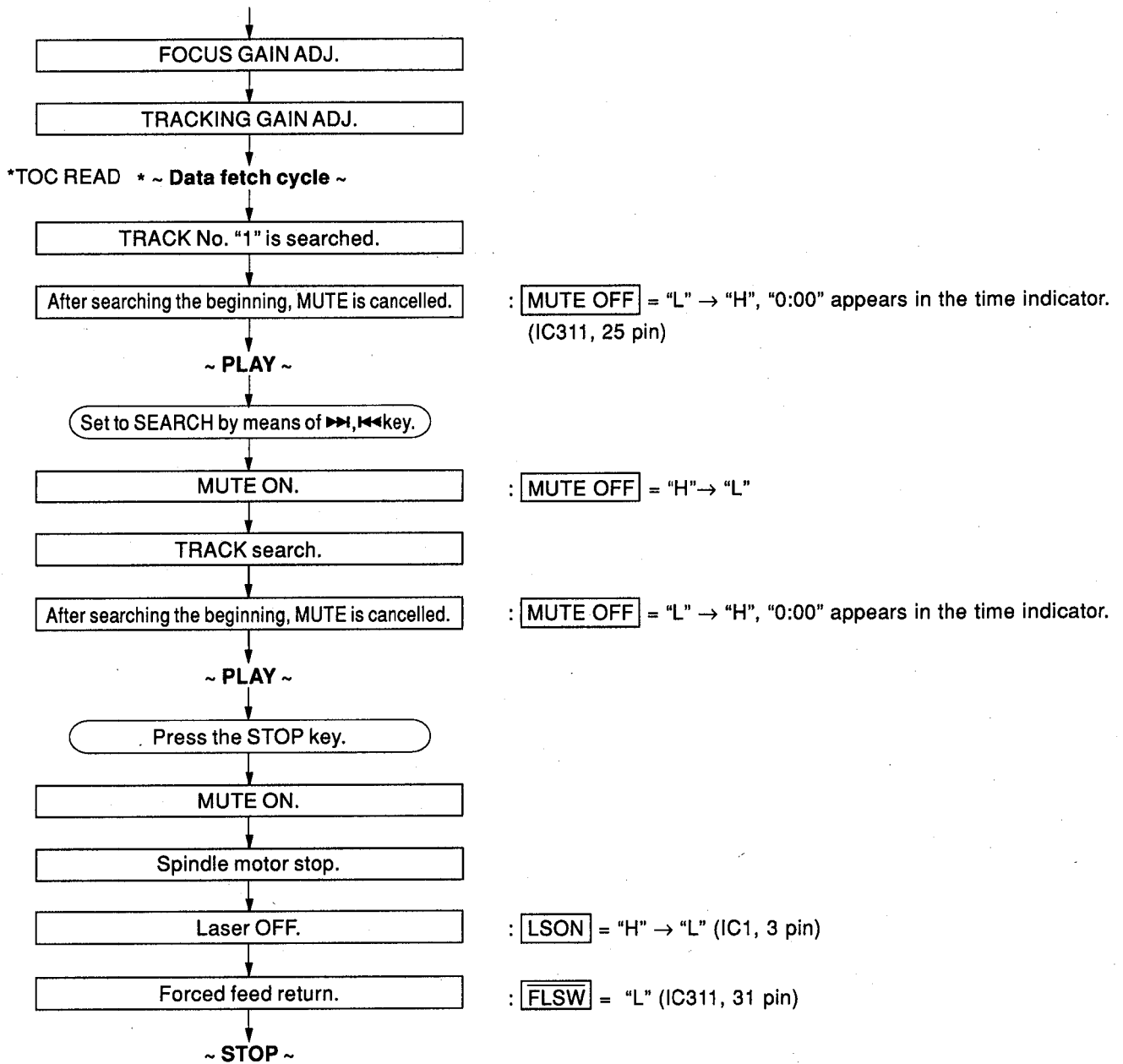
Proceeds to next step after detection of CLAMP switch (SW501)
if FLSW = L (IC311, 31 pin) Proceed to next step.

LSON = "H" (IC1, 3 pin)

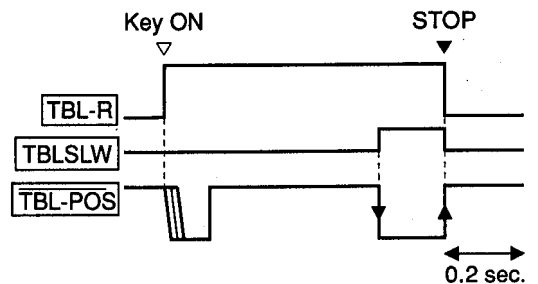
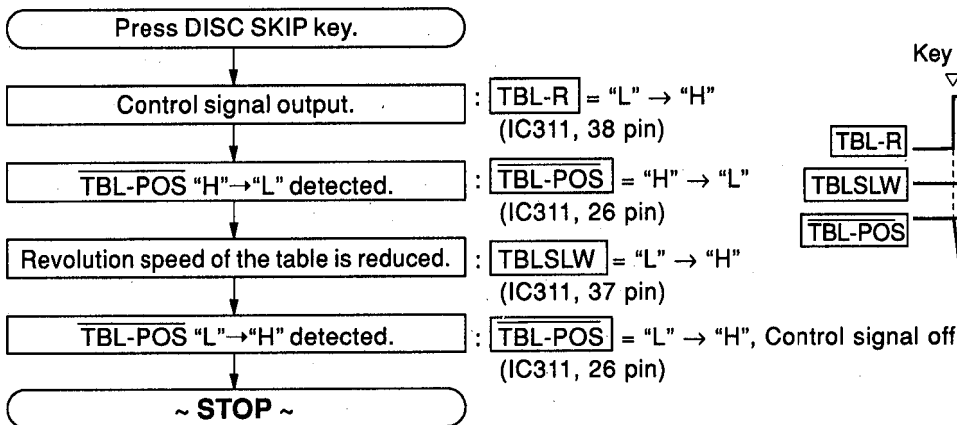
$\overline{\text{FLOCK}}$ = "H" → "L" (IC311, 21 pin)

$\overline{\text{TLOCK}}$ = "H" → "L" (IC311, 22 pin)

CRC = "H" (IC3, 67 pin)



● Tray Operation



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■ TEST MODE

● Starting TEST mode

Test mode is brought about when the power is turned on while the "PLAY/PAUSE" and "STOP" keys on the panel are simultaneously pressed and held.

When the test mode is brought about, all the displays light up for about 1 second.

NOTE : To fully operate all test modes the remote control must be used.

● Function List of Panel keys

Note) "traverse servo" means the same as "feed servo"

PANEL KEY	FUNCTION
OPEN/CLOSE	Tray open/close.
PLAYXCHANGE	Rotating the mode of coefficients. (Coefficient mode→Coefficient setting→Product mode) Pressing twice will set to the product mode.
PLAY/PAUSE	Plays if focus servo is effective. TRON, MUTE OFF.
STOP	All stop. (Focus, spindle, feed, laser, tray, etc.) Initializes FL display.
◀◀SKIP	Backward traverse move. (If inner SW turns on, traverse is stopped.) (Coefficient set up mode : upper digit down.)
▶▶SKIP	Forward traverse move. (Coefficient set up mode : upper digit up.)
DISC 1	Returns to product mode. (Tray and table inoperative.)
DISC 2	Adjustment mode 1 (TR-offset, FO-offset, FO-rough gain adjustment)
DISC 3	Adjustment mode 2 (TR-balance, TR-rough gain adjustment)
DISC 4	Adjustment mode 3 (FO-fine gain, TR-fine gain, FO-balance adjustment)
DISC 5	Measurement the rotating time of the turn table. (Slow speed)
PROG	Decelerates or stops spindle.
OUTPUT LEVEL DOWN	Output level down. (Coefficient set up mode : address down.)
OUTPUT LEVEL UP	Output level up. (Coefficient set up mode : address up.)
+10	—
1	Returns to product mode. (tray and table inoperative.)
2	Adjustment mode 1 (TR-offset, FO-offset, FO-rough gain adjustment)
3	Adjustment mode 2 (TR-balance, TR-rough gain adjustment)
4	Adjustment mode 3 (FO-fine gain, TR-fine gain, FO-balance adjustment)
5	Turn table turns counterclockwise. (Slow speed)
6	Turn table turns clockwise. (Slow speed)
7	Turn table turns counterclockwise. (Fast speed)
8	Turn table turns clockwise. (Fast speed)
9	10 TRACK KICK-continuously
0	10 TRACK KICK-continuously

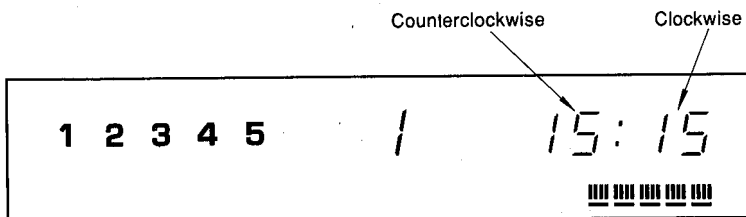
CDC-655/
CDC-901
ONLY

● Function List of Remote Control Transmitter

CUSTOM CODE = (79)x

CODE	KEY	FUNCTION
00	MODE	Traverse servo off
01	OPEN/CLOSE	Tray open/close
02	PLAY	PLAY (FOON, TRON, TVON (FEON), SPON)
04	◀◀SKIP	Backward traverse move. (If inner SW turns on, traverse is stopped.) (Coefficient set up mode : upper digit down)
05	◀◀SEARCH	Clamp down. (Coefficient set up mode : lower digit down)
06	▶▶SEARCH	Clamp up. (Coefficient set up mode : lower digit up)
07	▶▶SKIP	Forward traverse move. (Coefficient set up mode : upper digit up)
08	REPEAT	FOON, TROF (Enter focus search if focus servo is off.)
0A	TIME	Checks FL display. (888888→All lamps→goes out.)
0B	INDEX	FOON, TROF, TVOF (FEOF) (Enter focus search if focus servo is off.)
0C	PROG	Rotates or accelerates spindle.
0D	CLEAR	Decelerates spindle. CDC-555/CDC-501 ONLY
10	0	Forward 150 TRACK KICK continuously
11	1	Returns to product mode. (Tray and Table inoperative.)
12	2	Adjustment mode 1 (TR-offset, FO-off set, FO-rough gain adjustment)
13	3	Adjustment mode 2 (TR-balance, TR-rough gain adjustment)
14	4	Adjustment mode 3 (FO-fine gain, TR-fine gain, FO-balance adjustment)
15	5	Backward 1 TRACK KICK continuously
16	6	Forward 1 TRACK KICK continuously
17	7	Backward 30 TRACK KICK continuously
18	8	Forward 30 TRACK KICK continuously
19	9	Backward 150 TRACK KICK continuously
1A	+10	Enter coefficient set up mode.
1B	RANDOM	SPON (Spindle servo on.)
1C	OUTPUT LEVEL -	Output level down. (Coefficient set up mode : address down)
1D	OUTPUT LEVEL +	Output level up. (Coefficient set up mode : address up)
		} CDC-655/CDC-901 ONLY
1E	DIMMER	Checks FL display. (888888→All lamps→goes out.)
4F	DISC SKIP▶	DISC SKIP + (Clockwise)
50	DISC SKIP◀	DISC SKIP - (Counterclockwise)
53	DISC SCAN	Measurement the rotating time of the turn table (Fast speed)
55	PAUSE	FOON, TROF, TVOF (FEOF) (Enter focus search if focus servo is off.)
56	STOP	All stop. (Focus, spindle, traverse, laser, tray, etc.)
57	TAPE	Spindle free (off) CDC-655/CDC-901 ONLY
58	SYNCHRO	Backward traverse move

Note : Display at time measurement.



The time display shows the time for 1 rotation of the turn table.
The unit of time is 0.1 second (rotate fast) or 1 second (rotate slow).

■ ERROR MESSAGE

When stopped by any cause, press "STOP" of the remote control while pressing and holding the "STOP" on the panel key. The operation mode turns to the mode allowing the display of messages.
(The error messages are cleared with the power off.)

● Error Messages List

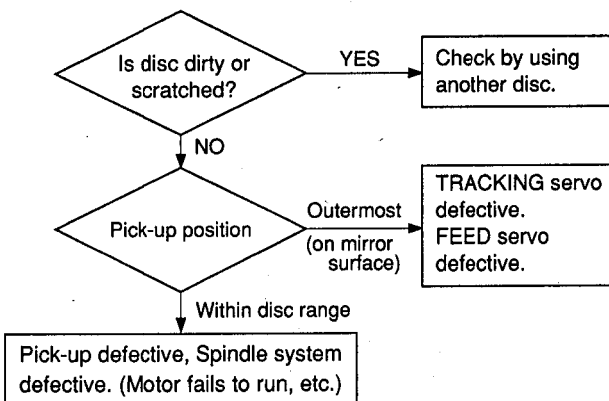
ERROR MESSAGE	DESCRIPTION
E - X 0	Data cannot be read after finishing search.
E - X 1	Data cannot be read during PLAY (x = 0), PAUSE (x = 4) or SCAN (x = 3).
E - 7 1	At the start, tracking servo is not effective.
E - 7 2	At the start, spindle servo PLL is not effective.
E - 7 3	At the start, data can never read.
E - X 4	Close switch does not work with tray closed.
E - X 5	Open switch does not work with tray open.
E - X 6	Table does not turn.
E - X 7	Traverse (Feed) inner circumference switch does not work.
E - X 8	Recovery action fails after focus drop.
E - X 9	Clamp down switch does not work with clamp down.
E - X A	Clamp up switch does not work with clamp up.
E r r	MN66271 does not give response of SENSE, with resetting by the unit's microcomputer.

* Meaning of each state ("X") :

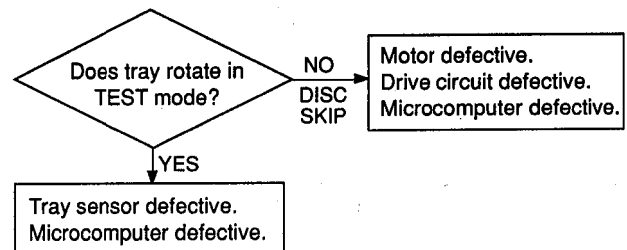
- (X = 0)PLAY
- (X = 2)SCAN
- (X = 3)PAUSE
- (X = 4)PEAK SEARCH
- (X = 5)SEARCH
- (X = 6)DISC SCAN
- (X = 7)START
- (X = 8)STOP
- (X = 9)DISC SEARCH
- (X = -)EJECT
- (X = C)NO DISC

1) Error Code Troubleshooting

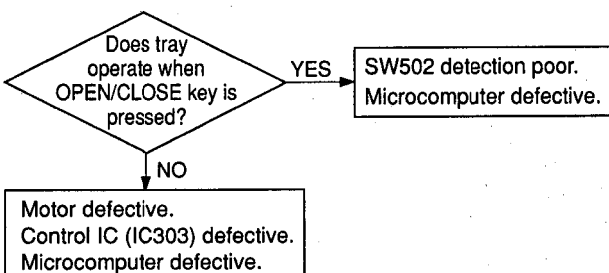
Error codes **X0**, **X1**, **73**Data cannot be read.



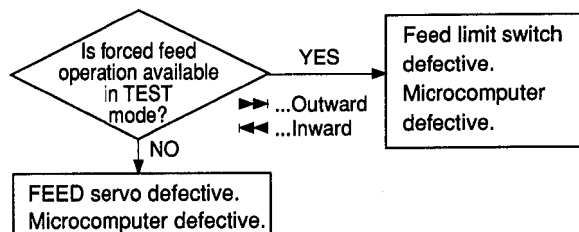
Error code **X6**Poor table rotation.



Error codes **X4**, **X5**Poor tray loading operation.

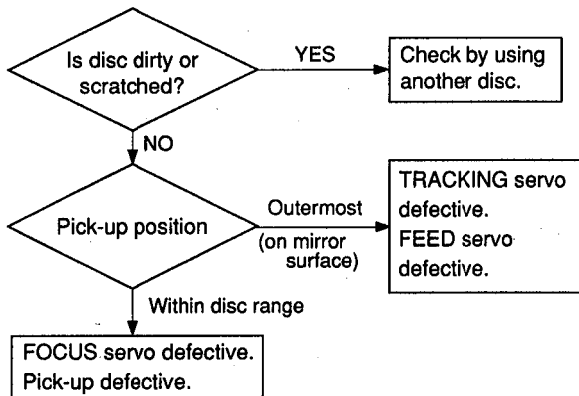


Error code **X7**FEED operation defective. (Limit switch fails)

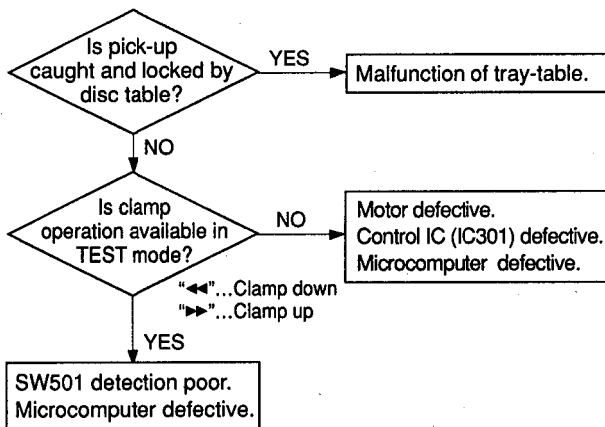


CDC-655/CDC-901
CDC-555/CDC-501

Error code **X8** Focus drops.

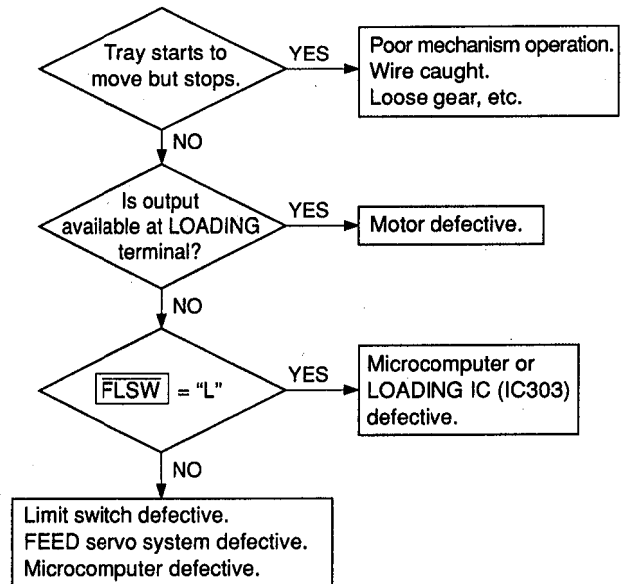


Error code **X9**, **XA** Poor clamp operation.

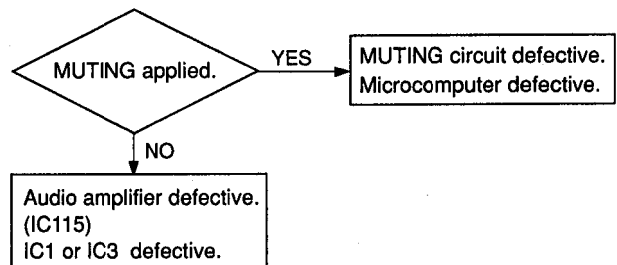


2) Troubleshooting from System Malfunctions.

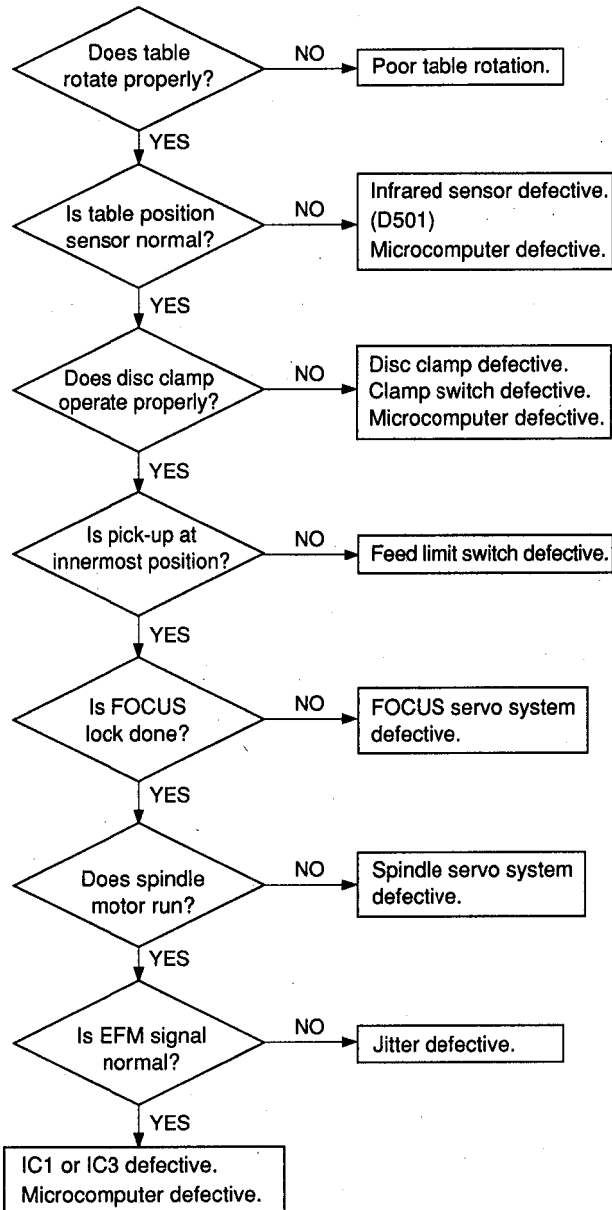
a) Tray fails to come out/go in.



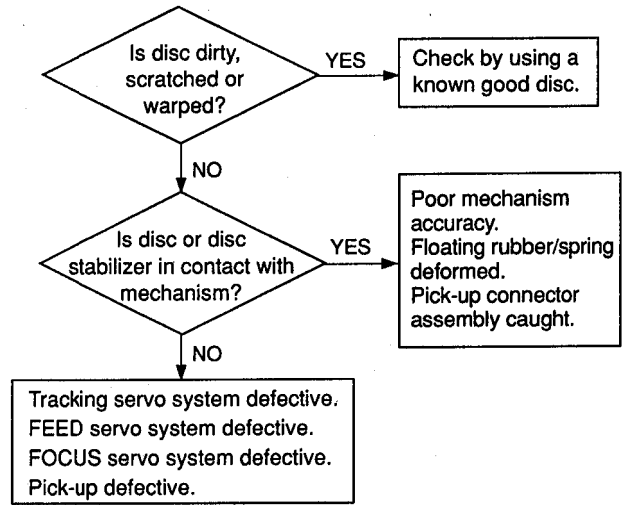
b) No sound generated, Sound cut during play. (but time display advanced properly)



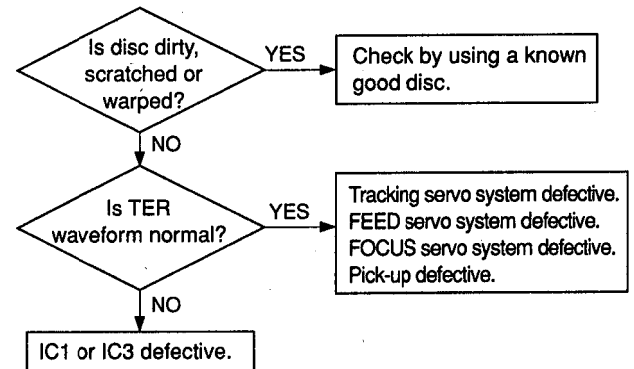
**c) Operates as if no disc loaded.
(although loaded)**



**d) Sound skips.
(Time display fails to advance properly)**



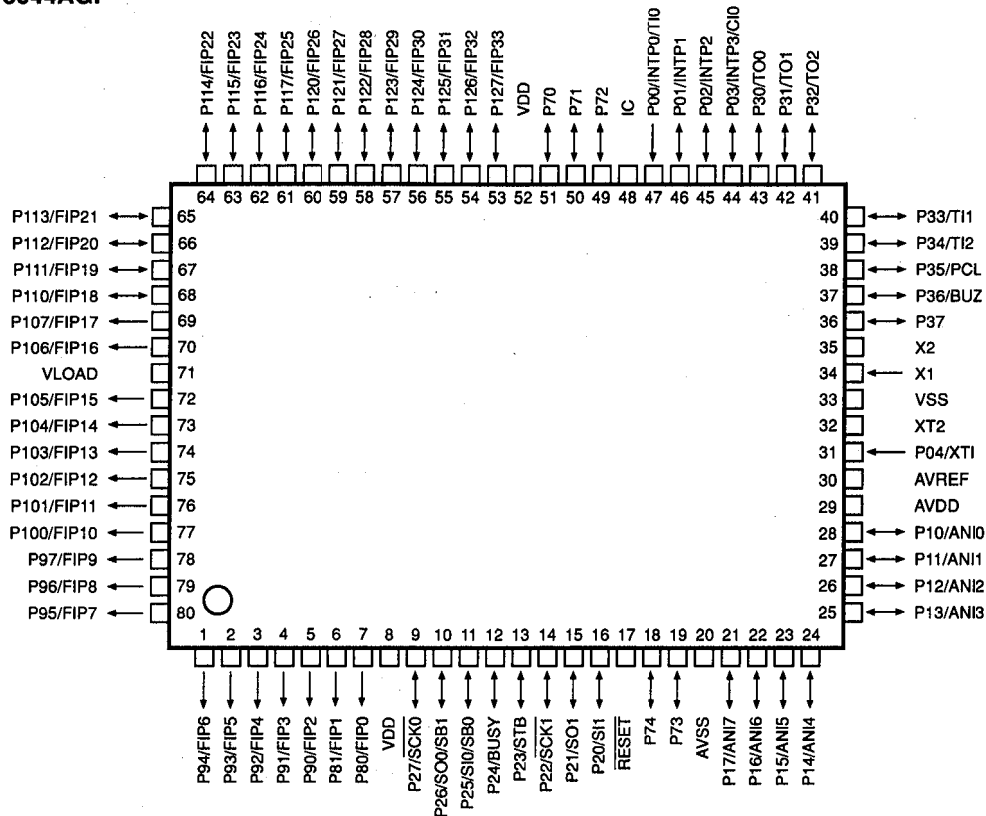
**e) No search provided.
(Sound skipped after search)**



IC DATA

IC311 : μPD78044AGF

8bit μ-COM



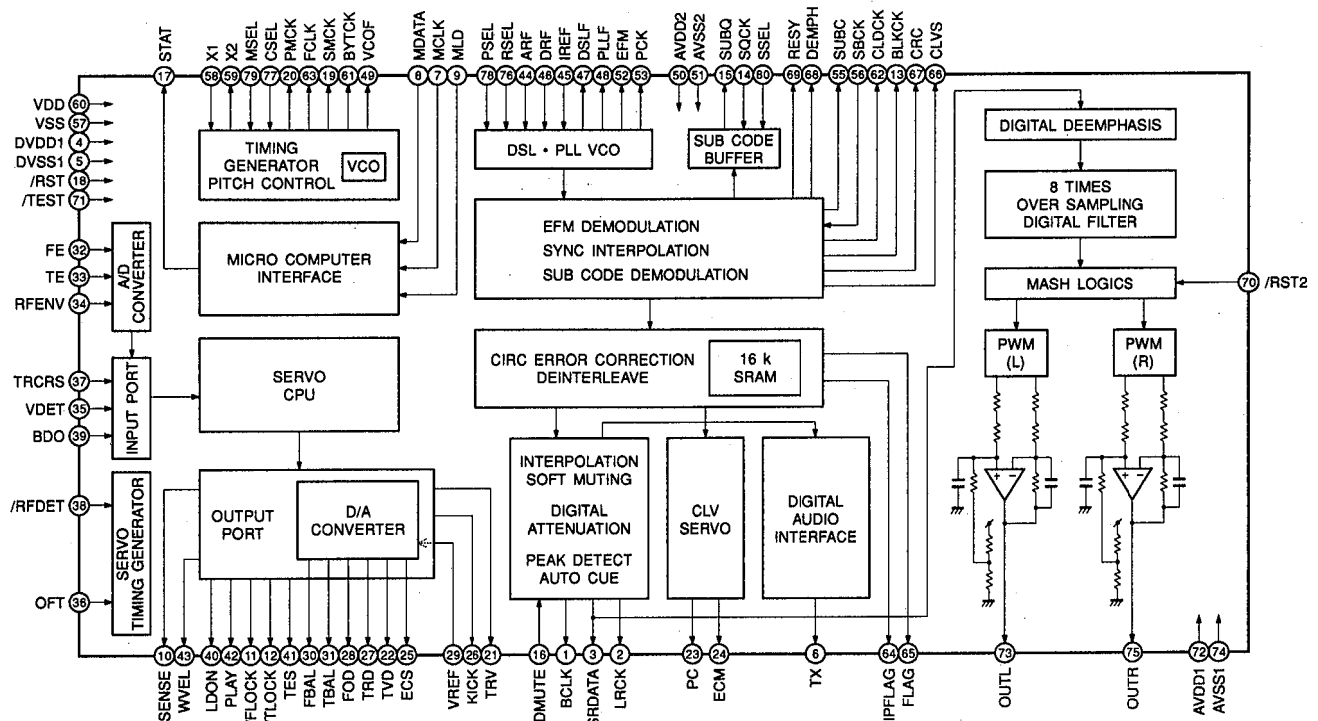
No.	Port	Name	I/O	Function
1	P94/FIP6	7G	O	Fluorescent character display tube grid drive signal
2	P93/FIP5	6G	O	
3	P92/FIP4	5G	O	
4	P91/FIP3	4G	O	
5	P90/FIP2	3G	O	
6	P81/FIP1	2G	O	
7	P80/FIP0	1G	O	
8	VDD	+5		+5V
9	P27/SCKO	SQCK	O	Sub-code serial data output to MN66271
10	P26/SO0/SB1	STAT	I	STAT signal input from MN66271
11	P25/SI0/SB0	SUBQ	I	Sub-code serial data input from MN66271
12	P24/BUSY	SENSE	I	SENSE signal input from MN66271
13	P23/STB	MLD	O	Read signal output for transmitting command from MN66271 (After command transmission, L pulse at Load Timing)
14	P22/SCK1	MCLK	O	Serial clock output to MN66271
15	P21/SO1	MDATA	O	Serial data output to MN66271
16	P20/SI1	SI	I	N.C.
17	RESET	RES	I	Reset input
18	P74	SDA	I/O	Serial clock signal with X24C01
19	P73	SCL	O	Serial data signal with X24C01
20	AVSS	GND		GND
21	P17/ANI7	FLOCK	I	FOCUS lock signal input from MN66271 (LOCK at L)
22	P16/ANI6	TLOCK	I	Tracking lock signal input from MN66271 (LOCK at H)
23	P15/ANI5	DMUTE	O	Digital mute signal output (H at MUTE)
24	P14/ANI4	MNRST	O	Reset signal output (L at RESET)
25	P13/ANI3	MUTE	O	Analog mute signal output (L at MUTE)
26	P12/ANI2	TBLPOS	I	Sensor to detect table position
27	P11/ANI1	CLSW	I	Closed state of tray sensing switch input (Closed state at L)

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No.	Port	Name	I/O	Function
28	P10/ANI0	OPSW	I	Open state of tray sensing switch input (Open state at L)
29	AVDD	+5V		+5V
30	AVREF	GND		GND
31	P04/XT1	FLSW	I	Feed origin switch input (Feed origin at L)
32	XT2	—		N.C.
33	VSS	GND		GND
34	X1	X1	I	Crystal oscillator oscillation terminal (4.19MHz)
35	X2	X2		
36	P37	FEED OFF	O	Feed servo control
37	P36/BUZ	TBLSLOW	O	Table rotate slow
38	P35/PCL	TBL-R	O	Table rotate R (clockwise)
39	P34/TI2	TBL-L	O	Table rotate L (counterclockwise)
40	P33/TI1	CLUP	O	Clamp up signal
41	P32/TO2	CLDOWN	O	Clamp down signal
42	P31/TO1	OPEN	O	Tray open signal
43	P30/TO0	CLOSE	O	Tray close signal
44	PO3/INTP3/CI0	UPSW	I	PU unit up limit switch, ON at L
45	P02/INTP2	DOWNSW	I	PU unit down limit switch, ON at L
46	P01/INTP1	BLKCK	I	Synchronous clock input for Q-code RCV from MN66271 (Fine pulse at RCV, normally L)
47	P00/INTP0/TI0	REM	I	Input from remote control beam receiving unit
48	IC	GND		GND
49	P72	—		Unused (+5)
50	P71	—		Unused (+5)
51	P70	FCSGAIN	O	Focus control
52	VDD	+5V		+5V
53	PI27/FIP33	—		N.C.
54	PI26/FIP32	—		N.C.
55	PI25/FIP31		I	Model selection (655 at H, 555 at L)
56	PI24/FIP30	K4	I	Key matrix input
57	PI23/FIP29	K3	I	
58	PI22/FIP28	K2	I	
59	PI21/FIP27	K1	I	
60	PI20/FIP26	K0	I	
61	PI17/FIP25	—		N.C.
62	PI16/FIP24	—		N.C.
63	PI15/FIP23	P14	O	Fluorescent character display tube anode drive signal
64	PI14/FIP22	P13	O	Fluorescent character display tube anode drive signal & key scan digit
65	PI13/FIP21	P12	O	
66	PI12/FIP20	P11	O	
67	PI11/FIP19	P10	O	
68	PI10/FIP18	P9	O	
69	PI07/FIP17	P8	O	Fluorescent character display tube anode drive signal
70	PI06/FIP16	P7	O	
71	VLOAD	-20V		-20V
72	PI05/FIP15	P6	O	Fluorescent character display tube anode drive signal
73	PI04/FIP14	P5	O	
74	PI03/FIP13	P4	O	
75	PI02/FIP12	P3	O	
76	PI01/FIP11	P2	O	
77	PI00/FIP10	P1	O	
78	P97/FIP9	—		N.C.
79	P96/FIP8	9G	O	Fluorescent character display tube grid drive signal
80	P95/FIP7	8G	O	

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IC3 : MN66271RA
Signal Processor & Controller



Pin No.	Name	I/O	Function
1	BCLK	O	Bit clock output for SR DATA (NC)
2	LRCK	O	L/R identification signal output (NC)
3	SRDATA	O	Serial data output (NC)
4	DVDD1	I	Power supply for digital circuit (+5)
5	DVSS1	I	GND for digital circuit
6	TX	O	Digital, audio, interface output signal
7	MCLK	I	Microprocessor command clock signal input (data latched at leading edge)
8	MDATA	I	Microprocessor command data input
9	MLD	I	Microprocessor command load signal input L : LOAD
10	SENSE	O	Sense signal output
11	FLOCK	O	Focus servo drawing signal (L : when drawn)
12	TLOCK	O	Tracking servo drawing signal (L : when drawn)
13	BLKCK	O	Sub code block clock signal
14	SQCK	I	Clock input for sub-code Q register
15	SUBQ	O	Sub-code Q code output
16	DMUTE	I	Muting input H : MUTE
17	STAT	O	Status signal
18	RST	I	Reset input L : RESET
19	SMCK	O	8.4672MHz clock signal output when MSEL = H 4.2336MHz clock signal output when MSEL = L (NC)
20	PMCK	O	88.2KHz clock signal output (NC)
21	TRV	O	Traverse (Feed) forced feed output
22	TVD	O	Traverse (Feed) drive output
23	PC	O	Spindle motor ON signal L : ON (NC)
24	ECM	O	Spindle motor drive signal (forced mode output) 3-State
25	ECS	O	Spindle motor drive signal (servo error signal output)

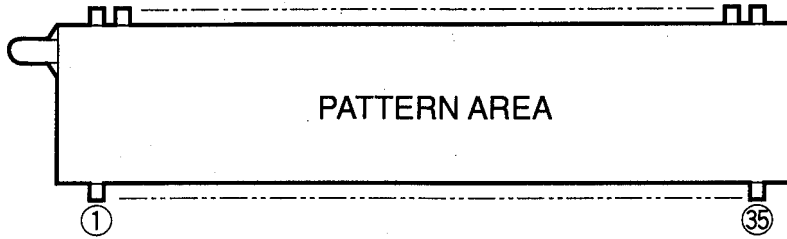
CDC-655/CDC-901
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Pin No.	Name	I/O	Function
26	KICK	O	Kick pulse output
27	TRD	O	Tracking drive output
28	FOD	O	Focus drive output
29	VREF	I	Reference voltage for DA output block
30	FBAL	O	Focus balance adjustment output
31	TBAL	O	Tracking balance adjustment output
32	FE	I	Focus error signal input (analog input)
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF envelope signal input (analog input)
35	VDET	I	Oscillation detect signal input (H : DETECT)
36	OFT	I	Off track signal input (H : OFF TRACK)
37	TRCRS	I	Track cross signal input
38	RFDET	I	RF detect signal input (L : DETECT)
39	BDO	I	Drop out signal input (H : DROP OUT)
40	LDON	O	Laser ON signal output (H : ON)
41	TES	O	Tracking error shunt signal output (H : SHUNT)
42	PLAY	O	Play signal output (H : PLAY) (NC)
43	WVEL	O	Double speed status signal output (NC)
44	ARF	I	RF signal input
45	IREF	I	Reference current input terminal
46	DRF	I	Bias terminal for DSL (NC)
47	DSLFL	I/O	Loop filter terminal for DSL
48	PLLFL	I/O	Loop filter terminal for PLL
49	VCOFL	I/O	Loop filter terminal for VCO (NC)
50	AVDD2	I	Power supply for analog circuit (for DSL, PLL, OA output blocks) (+5)
51	AVSS2	I	GND for analog circuit (for DSL, PLL, DA output blocks) (GND)
52	EFM	O	EFM signal output (NC)
53	PCK	O	PLL extract clock output (f PCK = 4.321MHz) (NC)
54	PDO	O	EFM signal to PCK signal phase comparison signal output (NC)
55	SUBC	O	Sub-code serial output data output (NC)
56	SBCK	I	Clock input for sub-code serial output (GND)
57	VSS	I	GND for oscillation circuit
58	X1	I	Crystal oscillation circuit input terminal (f = 16.9344MHz)
59	X2	O	Crystal oscillation circuit output terminal (f = 16.9344MHz)
60	VDD	I	Power supply for oscillation circuit (+5)
61	BYTCK	O	Byte clock output (NC)
62	CLDCK	O	Sub-code frame clock signal output (f CLDCK = 7.35kHz) (NC)
63	FCLK	O	Crystal frame clock output (f FCLK = 7.35kHz) (NC)
64	IPFLAG	O	Interpolation flag output H : INTERPOLATION (NC)
65	FLAG	O	Flag output (NC)
66	CLVS	O	Spindle servo phase synchronous status signal out H : CLV L : ROUGH SERVO (NC)
67	CRC	O	Sub-code CRC check result output H : OK , L : NG (NC)
68	DEMPH	O	Deemphasis detect signal output H : ON (NC)
69	RESY	O	Re-synchronous signal output of frame synchronization H : SYNCHRONOUS L : ASYNCHRONOUS (NC)
70	RST2	I	Reset terminal for stop after MASH circuit (L : RESET) (+5)
71	TEST	I	Test terminal (Normal : H) (+5)
72	AVDD1	I	Power supply for analog circuit (for audio output section (used for both L and R channels))
73	OUTL	O	L channel output
74	AVSS1	I	GND for analog circuit (for audio output section (used for both L and R channels))
75	OUTR	O	R channel output
76	RSEL	I	RF signal polarity specifying terminal RSEL = H when Bright level is at "H" RSEL = L when Bright level is at "L" (+5)
77	CSEL	I	Crystal oscillation frequency specifying terminal (Normal : L) (GND)
78	PSEL	I	Test terminal (Normal : L) (GND)
79	MSEL	I	SMCK terminal Output frequency switch terminal H : SMCK = 8.4672MHz , L : SMCK = 4.2336MHz (GND)
80	SSEL	I	SUBQ terminal Output mode switch terminal H : Q code buffer use mode (+5)

CDC-655/CDC-901
CDC-555/CDC-501

■ DISPLAY DATA (VS415000)

● V601/V401 : 9-ST-14GK

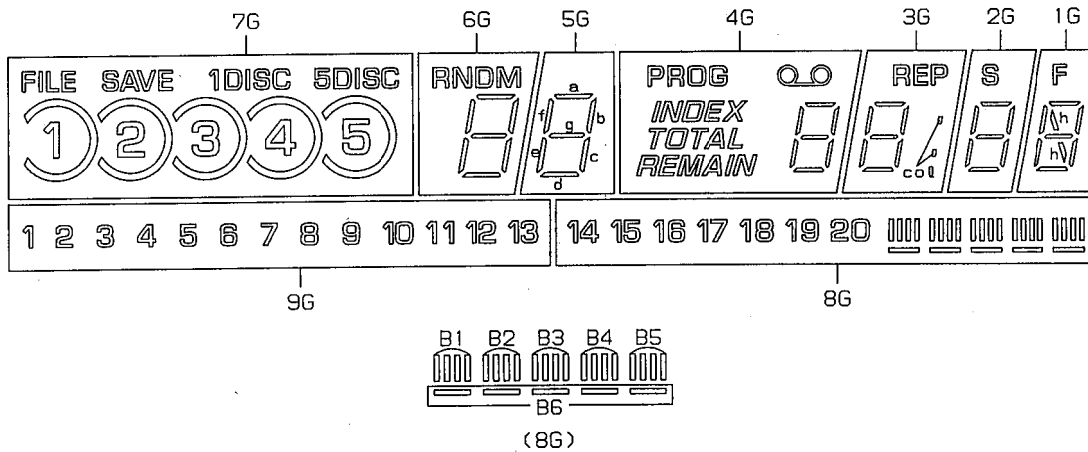


• PIN CONNECTION

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
CONNECTION	F1	F1	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	NX
PIN NO.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
CONNECTION	NX	NX	NX	NX	NX	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	F2	F2	

NOTE 1) F1, F2.....Filament
 2) NP No pin
 3) NX No extend pin
 4) P1~P14 ... Datum Line
 5) 1G~9G Grid

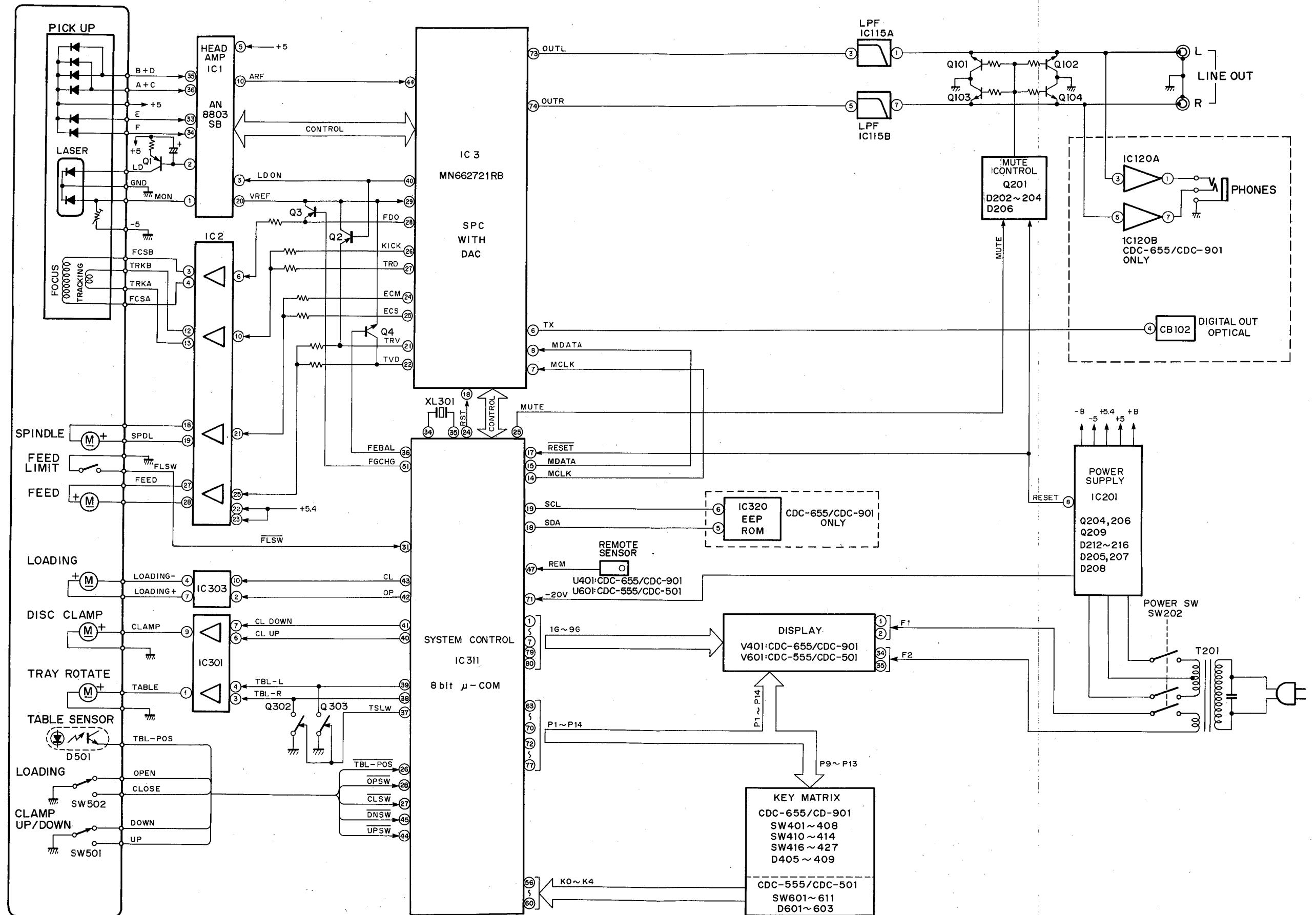
• GRID ASSIGNMENT



• ANODE CONNECTION

	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	1	14	(5)	d	d	d	d	d	d
P2	2	15	5	e	e	e	e	e	e
P3	3	16	(4)	c	c	c	c	c	c
P4	4	17	4	g	g	g	g	g	g
P5	5	18	(3)	f	f	f	f	f	f
P6	6	19	3	b	b	b	b	b	b
P7	7	20	(2)	a	a	a	a	a	a
P8	8	B6	2	—	—	—	col	—	h
P9	9	B1	(1)	RNDM	—	00	REP	S	F
P10	10	B2	1	—	—	REMAIN	—	—	—
P11	11	B3	5DISC	—	—	TOTAL	—	—	—
P12	12	B4	1DISC	—	—	INDEX	—	—	—
P13	13	B5	SAVE	—	—	PROG	—	—	—
P14	—	—	FILE	—	—	—	—	—	—

■ BLOCK DIAGRAM



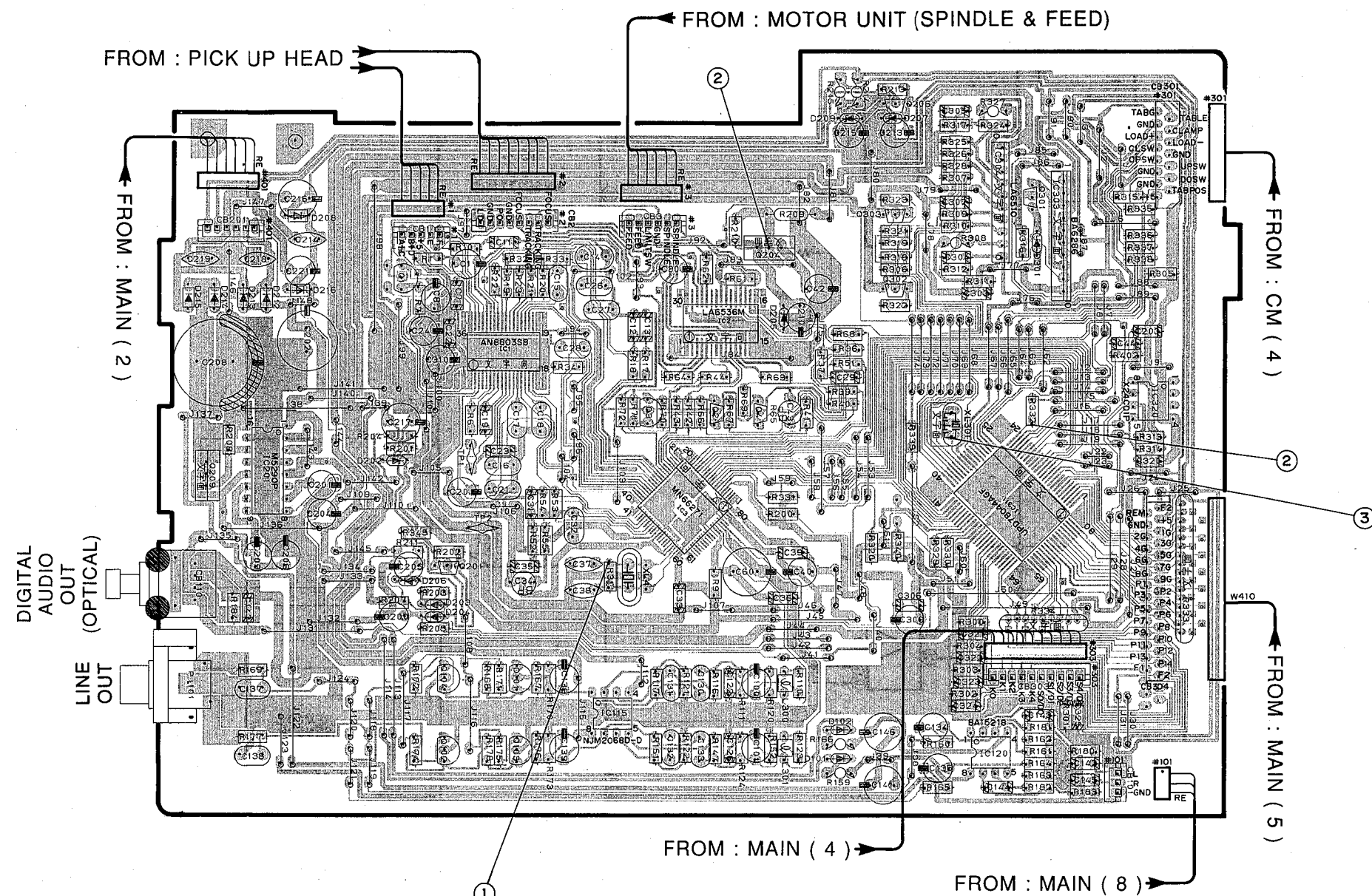
■ CDC-655/CDC-901 PRINTED CIRCUIT BOARD (Foil side)

● Semiconductor Location

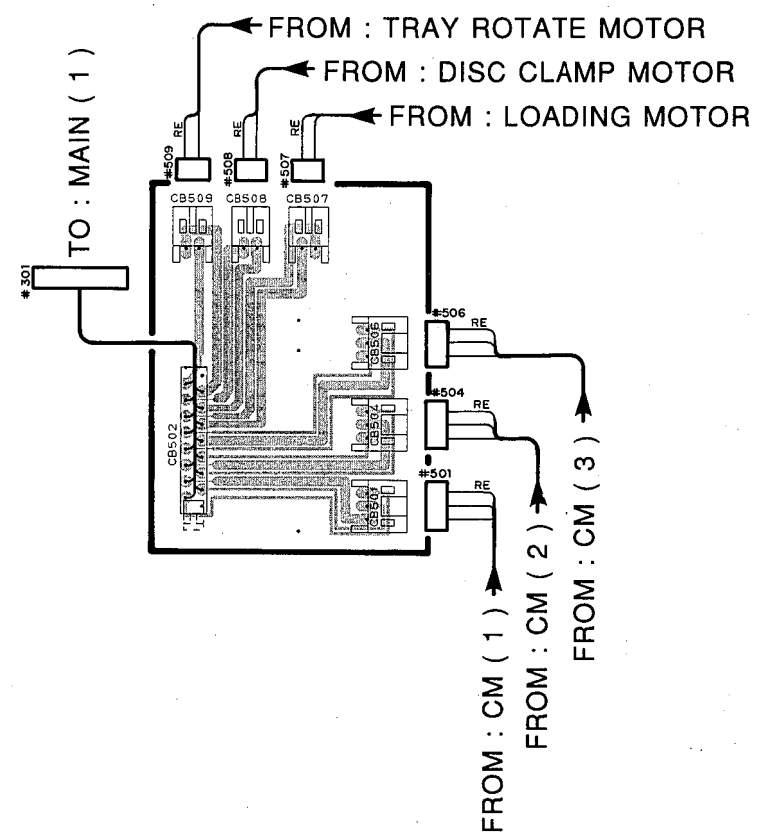
Ref No.	Location	Ref No.	Location
IC1	E3	Q1	E2
IC2	F2	Q2	F3
IC3	F3	Q3	F3
IC115	F4	Q4	F3
IC120	G4	Q101	E4
IC201	E3	Q102	E4
IC303	G2	Q103	E4
IC304	G2	Q104	E4
IC311	G3	Q201	E3
IC320	H3	Q204	F2
		Q206	G2
		Q209	D3
		Q301	G2
		Q302	G2
		Q303	G2

① to ③ : TEST POINT WAVEFORMS (See page 27)

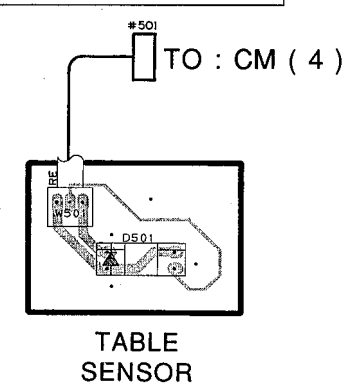
P.C.B. MAIN (1)



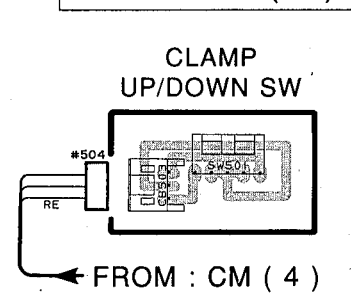
P.C.B. CM (4)



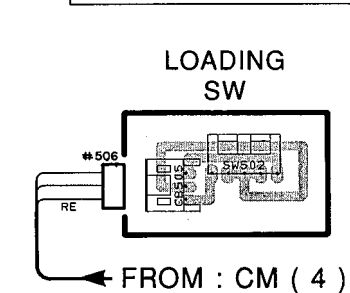
P.C.B. CM (1)



P.C.B. CM (2)



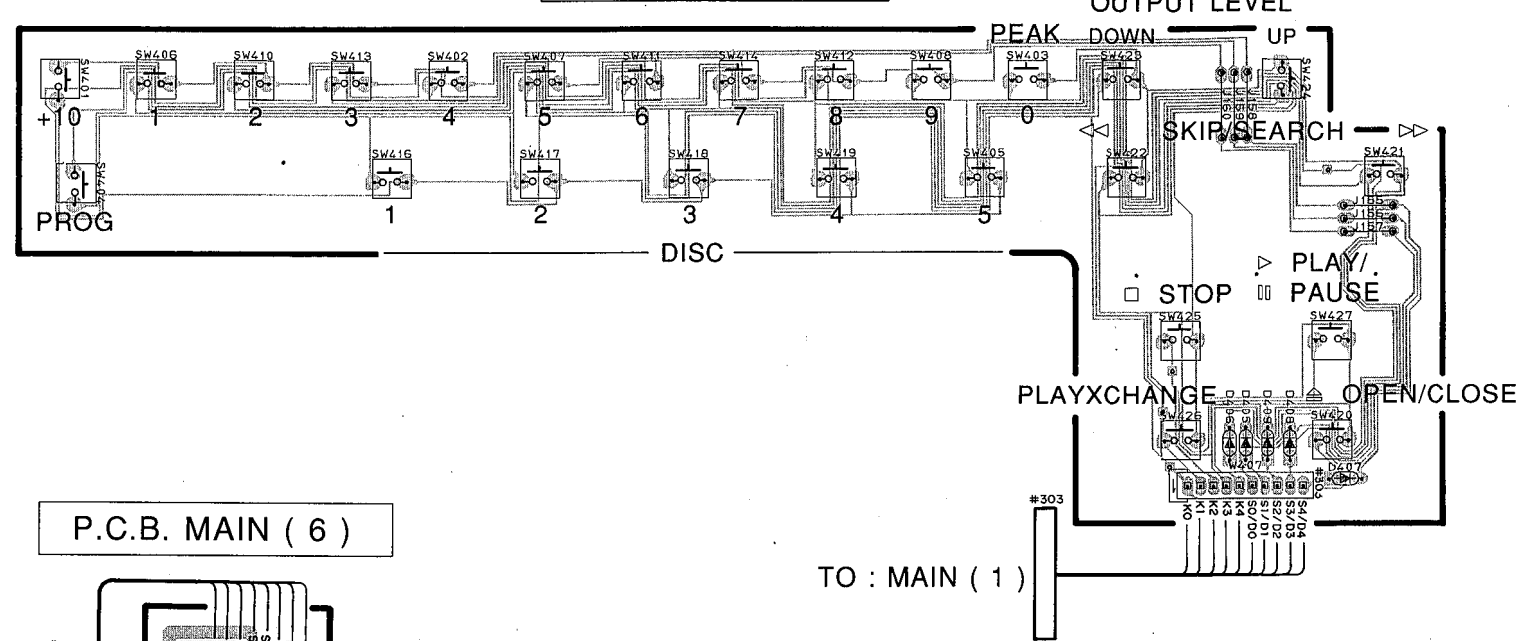
P.C.B. CM (3)



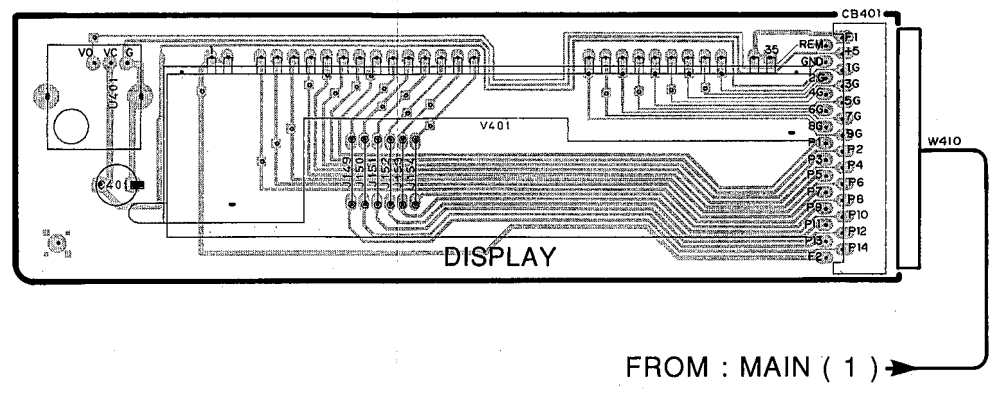
■ CDC-655/CDC-901 PRINTED CIRCUIT BOARD (Foil side)

1
2
3
4
5
6

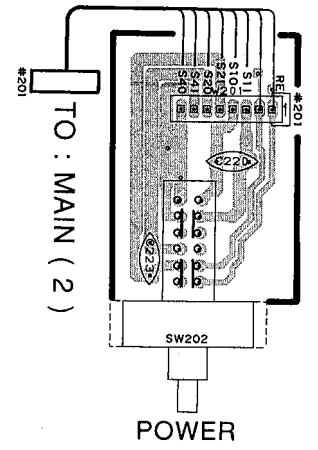
P.C.B. MAIN (4)



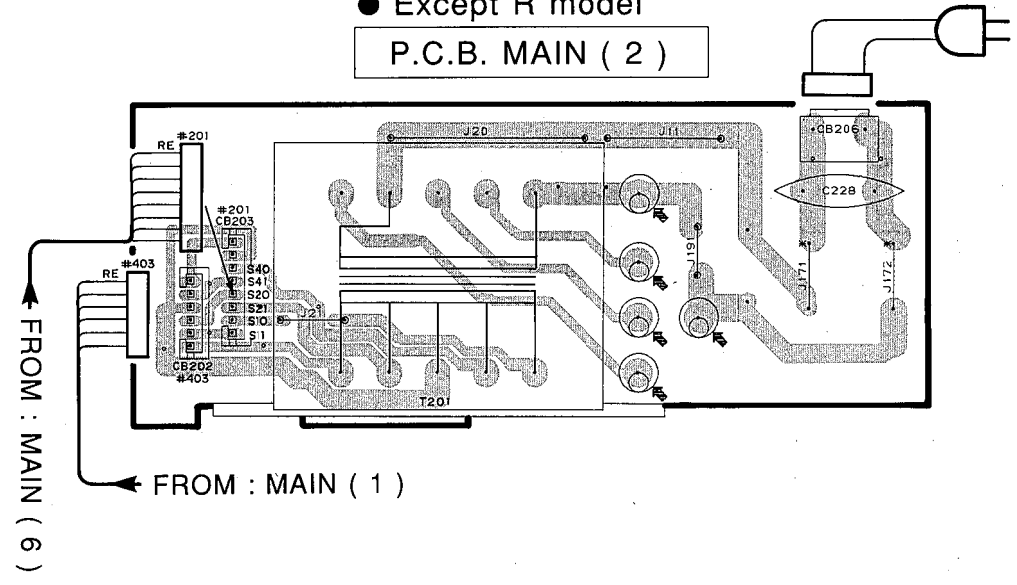
P.C.B. MAIN (5)



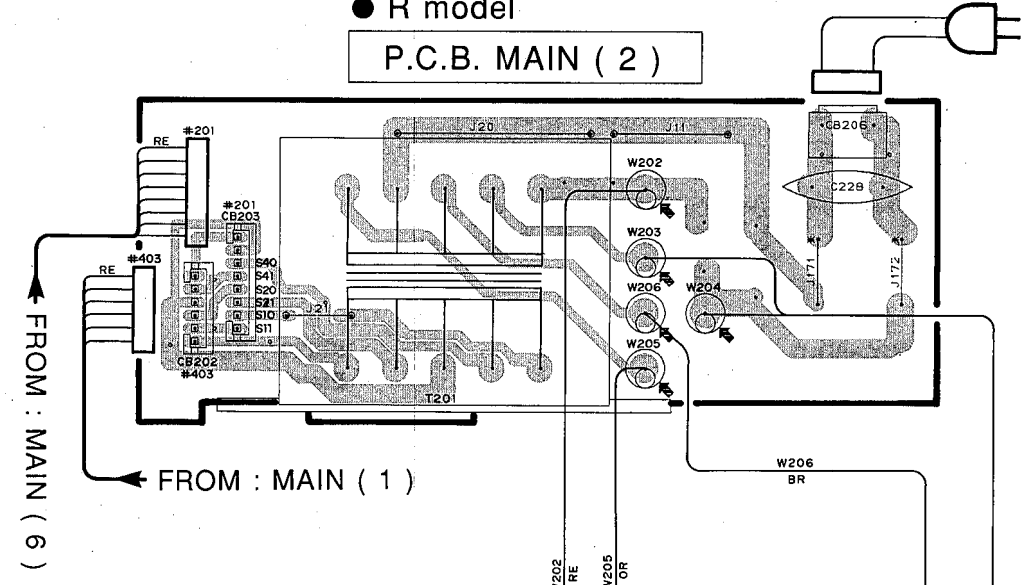
P.C.B. MAIN (6)



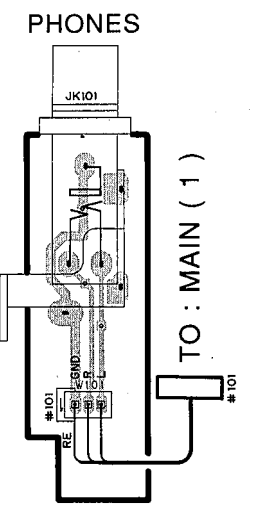
● Except R model
P.C.B. MAIN (2)



● R model
P.C.B. MAIN (2)

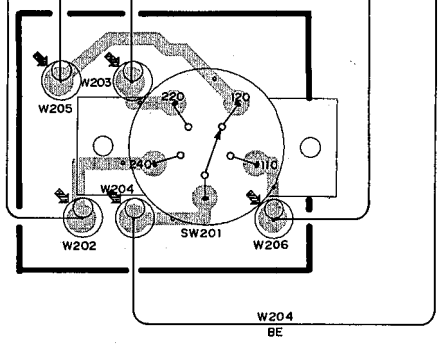


P.C.B. MAIN (8)



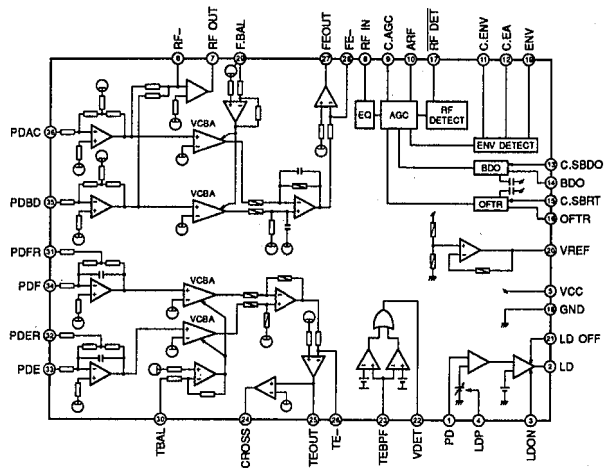
P.C.B. MAIN (7)

VOLTAGE SELECTOR

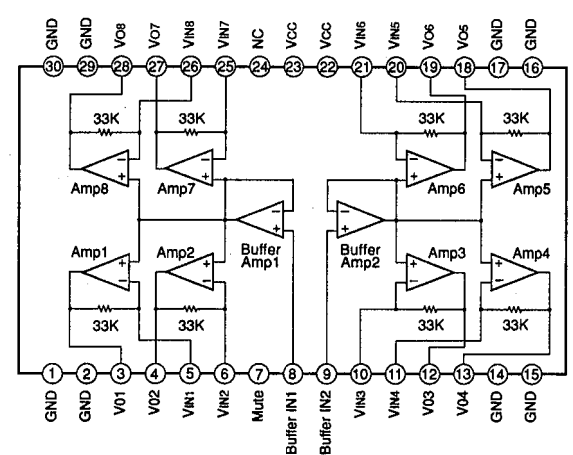


■ IC BLOCK

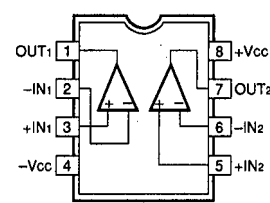
IC1 : AN8803SB
Digital Servo Head Amp



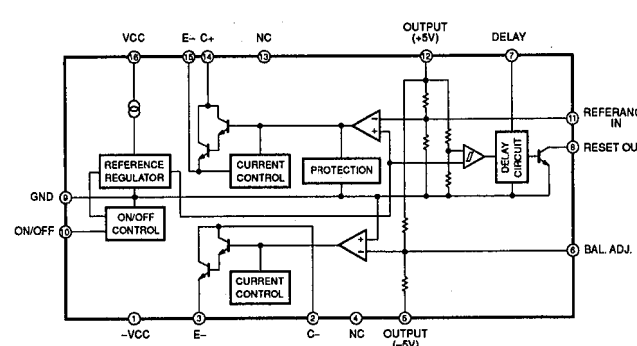
IC2 : LA6536M
4-Channel BTL Driver



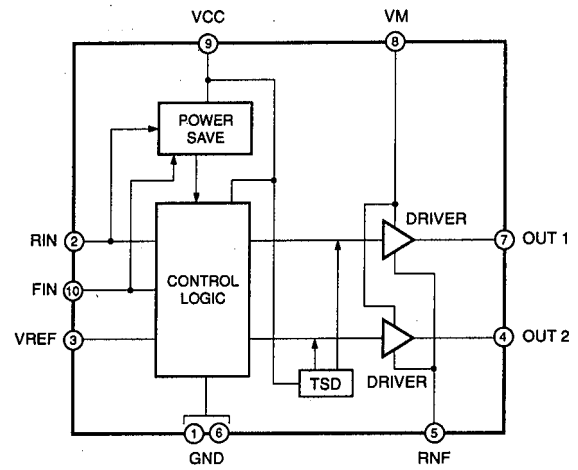
IC115 : NJM2068D-D
IC120 : BA15218
Dual Op-Amp



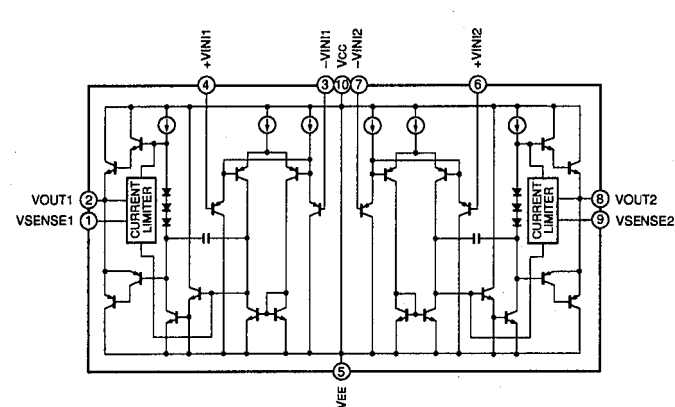
IC201 : M5290P
Constant-Voltage Tracking Supply with Reset



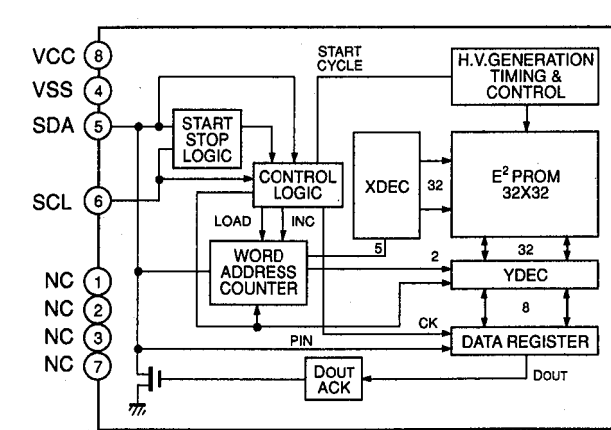
IC303 : BA6286
Motor Driver



IC304 : LA6510
Dual Power Operational Amp



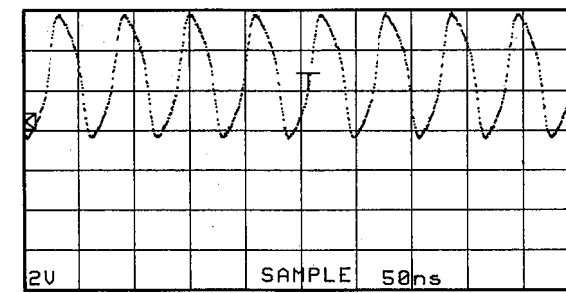
IC320 : X24C01P
Electrically Erasable PROM



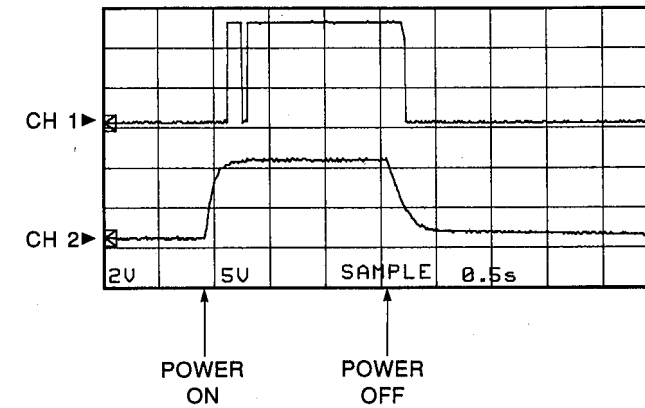
- Other ICs
- IC311 : μ PD78044AGF → See page 15
 - IC3 : MN66271RA → See page 17

■ TEST POINT WAVEFORMS

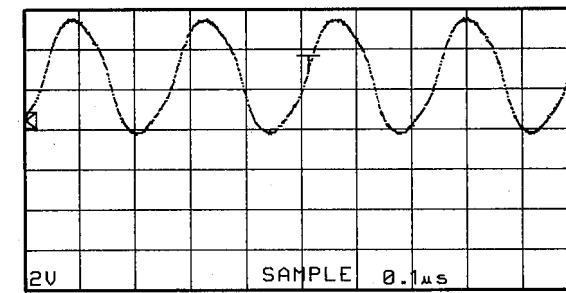
Point ① (Pin 58 of IC3)
V : 2V/div H : 50nsec/div
DC range 1 : 1 probe



Point ②
CH 1 : Pin 24 of IC311
CH 2 : Emitter of Q204
V : 2V/div (CH 1)
V : 5V/div (CH 2)
H : 0.5sec/div
DC range 1 : 1 probe



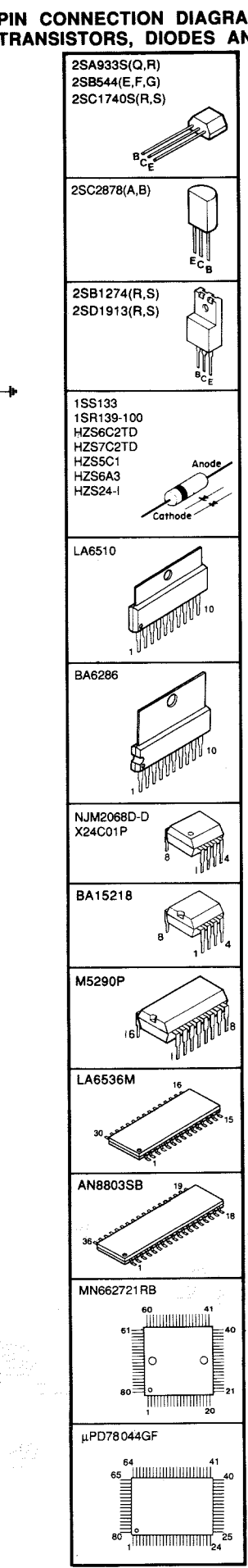
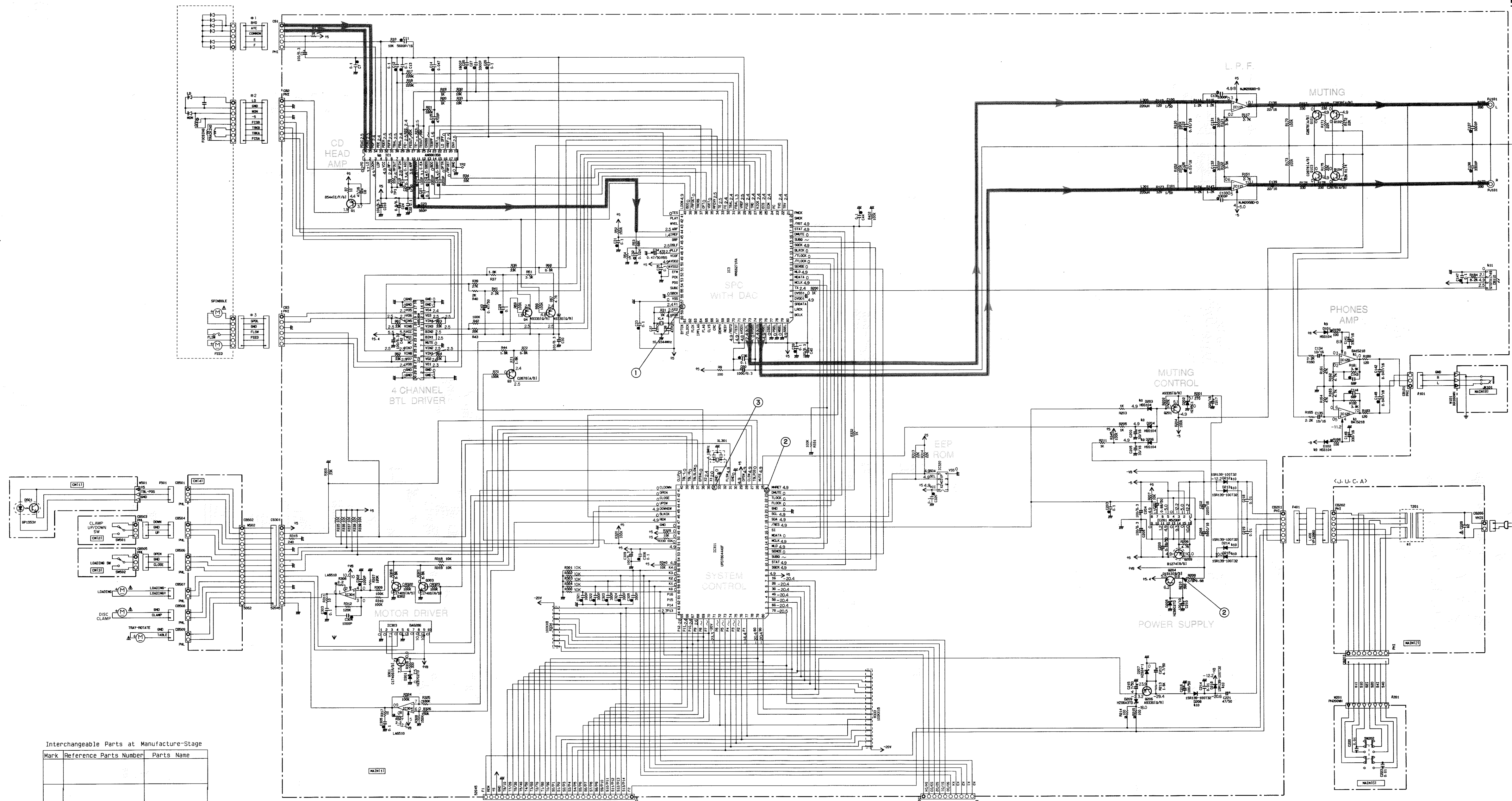
Point ③ (Pin 34 of IC311)
V : 2V/div H : 0.1 μ sec/div
DC range 1 : 1 probe



■ CDC-655/CDC-901 SCHEMATIC DIAGRAM

① to ③ : TEST POINT WAVEFORMS (See page 27)

PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.

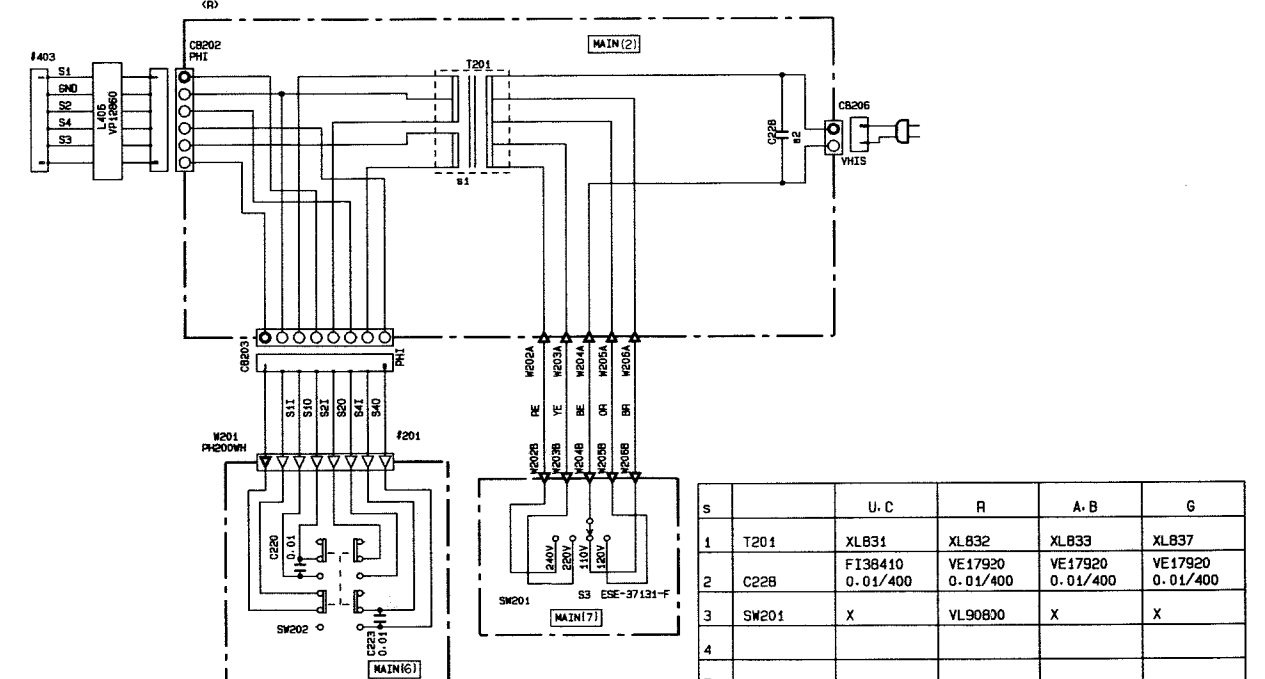


Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
K8	IC1	AN8803SB AN8806SB
K9	D101-102-203-204-206-405-409	HSS104 1SS133 1SS178
K10	D208- D212-216	1SS139-10073E 1H5A T41
K11	CB110	TOTX174 TOTX176

REMARKS	PARIS NAME
NO MARK ELECTROLYTIC CAPACITOR	⊗
NO MARK TANTALUM CAPACITOR	⊙
NO MARK CERAMIC CAPACITOR	⊕
NO MARK CERAMIC CAPACITOR	⊖
POLYSTYRENE FILM CAPACITOR	○
POLYESTER FILM CAPACITOR	⊗
MICA CAPACITOR	◇
POLYPROPYLENE FILM CAPACITOR	○
SEMICONDUCTIVE CERAMIC CAPACITOR	⊕

REMARKS	PARIS NAME
NO MARK CARBON FILM RESISTOR (P-5)	△
NO MARK CARBON FILM RESISTOR (P-10)	◊
METAL OXIDE FILM RESISTOR	□
METAL FILM RESISTOR	◇
METAL FLAKE RESISTOR	⊕
FILM THICK CARBON FILM RESISTOR	⊖
CEMENT MOLDED RESISTOR	⊙
SILM VARIABLE RESISTOR	⊗
CHIP RESISTOR	⊕

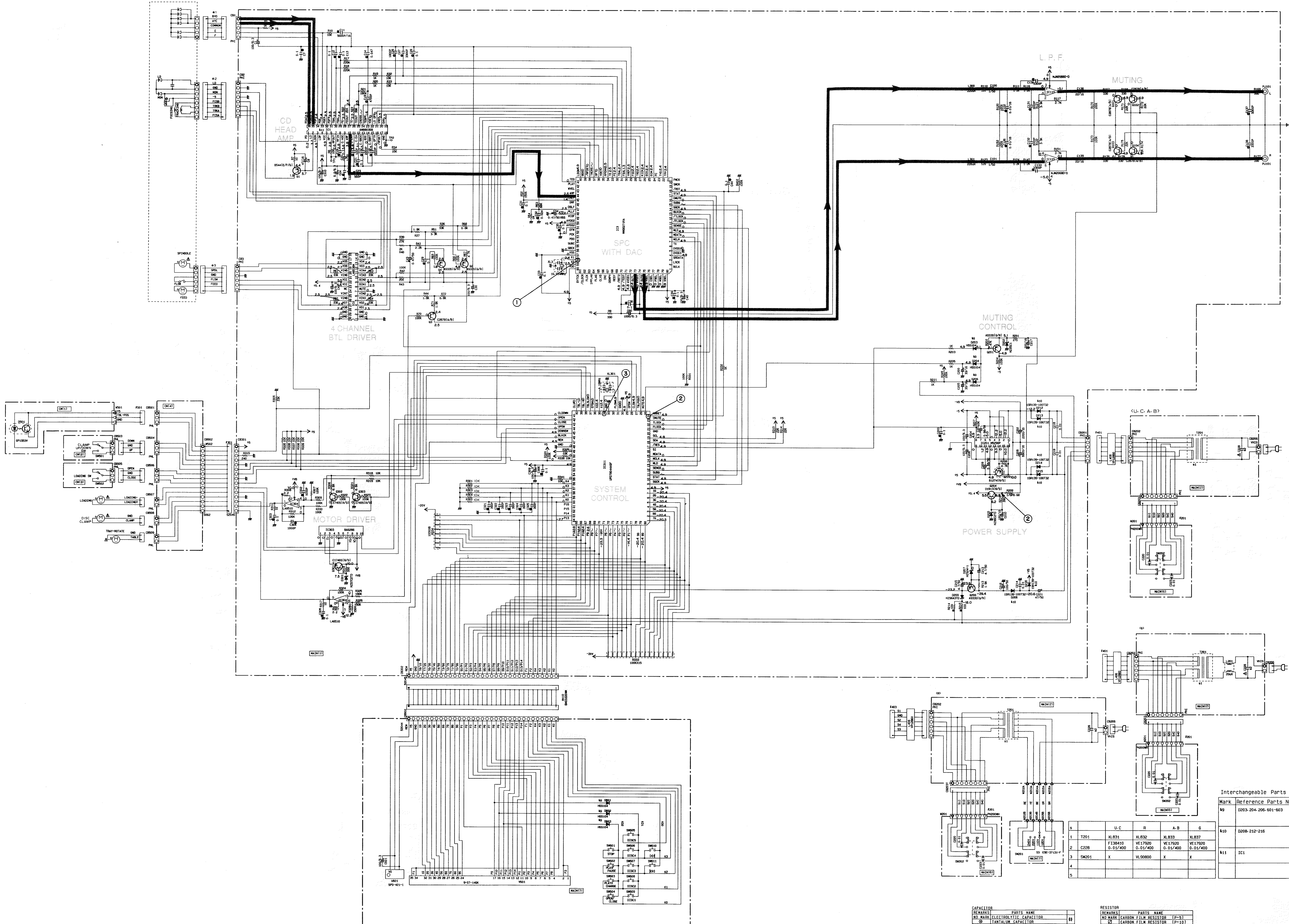


	U.C.	R	A-B	G	
1	T201	XL831	XL832	XL833	XL837
2	C208	F138410	VE17920	VE17920	VE17920
		0.01/400	0.15/400	0.15/400	0.15/400
3	SK201	X	VL90800	X	Z
4					
5					

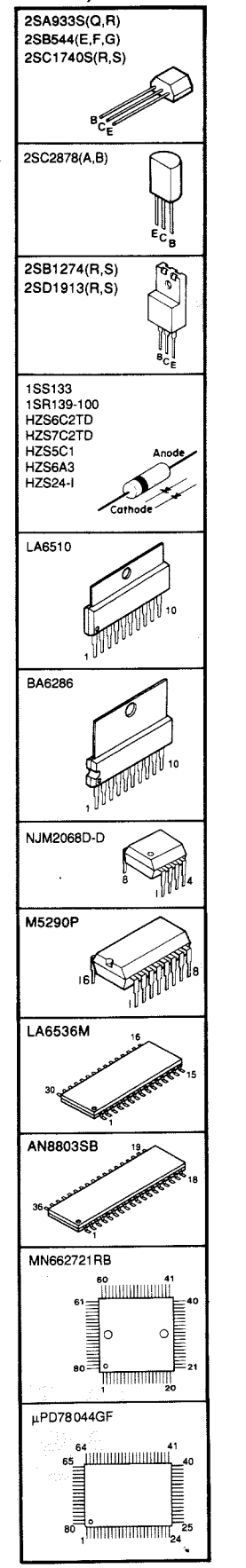
All voltage are measured with a 10MQ/V DC electric volt meter.
 Components having special characteristics are marked with a triangle and must be replaced with parts having specifications equal to those originally installed.
 Schematic diagram is subject to change without notice.

■ CDC-555/CDC-501 SCHEMATIC DIAGRAM

① to ③ : TEST POINT WAVEFORMS (See page 27)



PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.



Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name
49	D203-204-206-601-603	H55104 1S5133 1S5176
110	D208-212-216	1SR139-100T32 11C34 1A1
111	IC1	AN8803SB AN8806SB

CAPACITOR		RESISTOR	
REMARKS	PARTS NAME	REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR	NO MARK	CARBON FILM RESISTOR (P=5)
○	TANTALUM CAPACITOR	○	CARBON FILM RESISTOR (P=10)
NO MARK	CERAMIC CAPACITOR	△	METAL FILM RESISTOR
○	CERAMIC DISK CAPACITOR	△	METAL OXIDE FILM RESISTOR
○	POLYESTER FILM CAPACITOR	△	METAL PLATE RESISTOR
○	POLYSTYRENE FILM CAPACITOR	△	FIVE PROOF CARBON FILM RESISTOR
○	MICA CAPACITOR	△	CERMET MOLDED RESISTOR
○	POLYPROPYLENE FILM CAPACITOR	△	SEMI VARIABLE RESISTOR
●	SEMICONDUCTIVE CERAMIC CAPACITOR	■	ICMP RESISTOR

* All voltage are measured with a 10MΩ/V DC electric volt meter.
 * Components having special characteristics are marked △ and must be replaced with parts having specifications equal to those originally installed.
 * Schematic diagram is subject to change without notice.

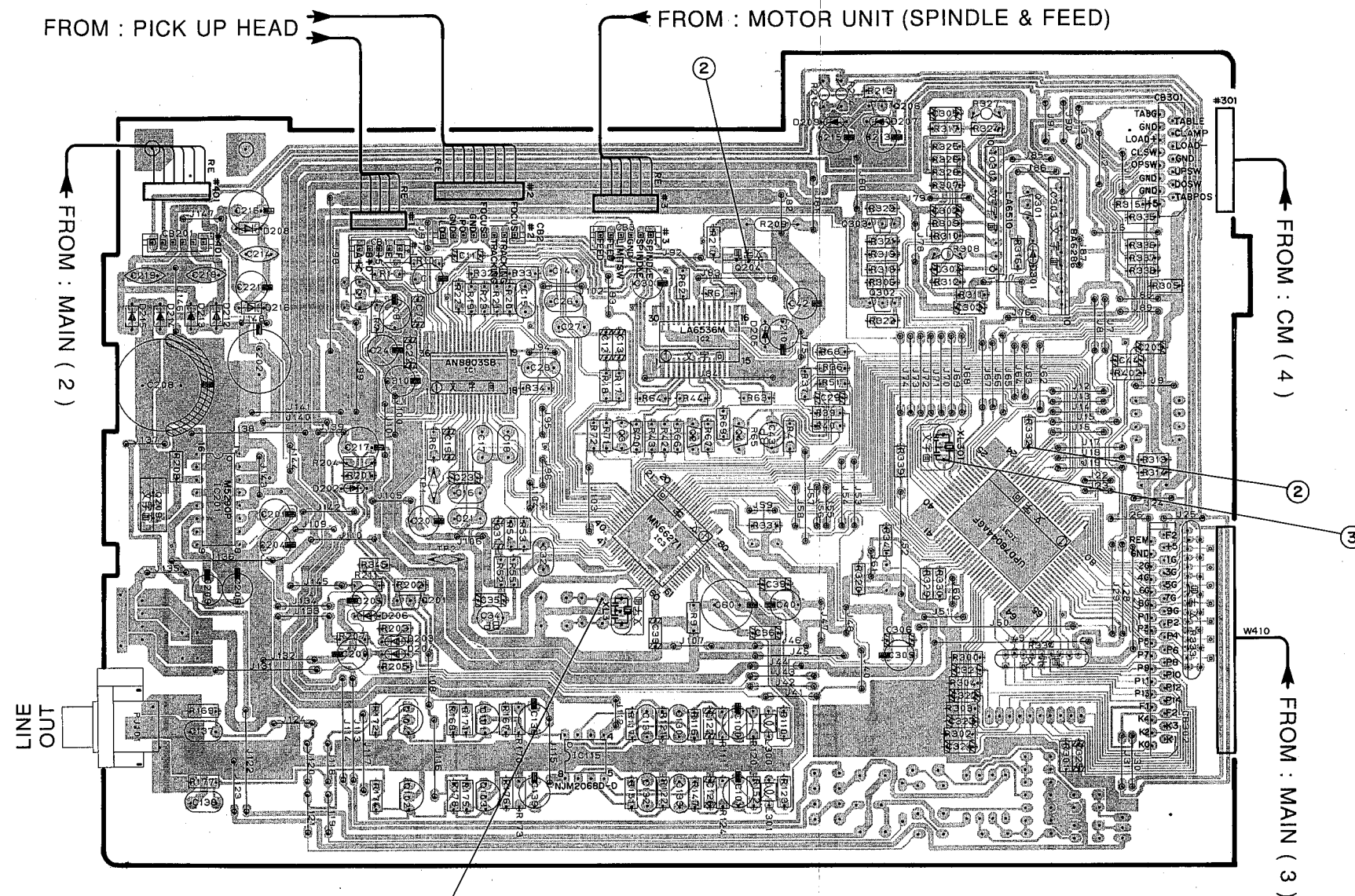
■ CDC-555/CDC-501 PRINTED CIRCUIT BOARD (Foil side)

● Semiconductor Location

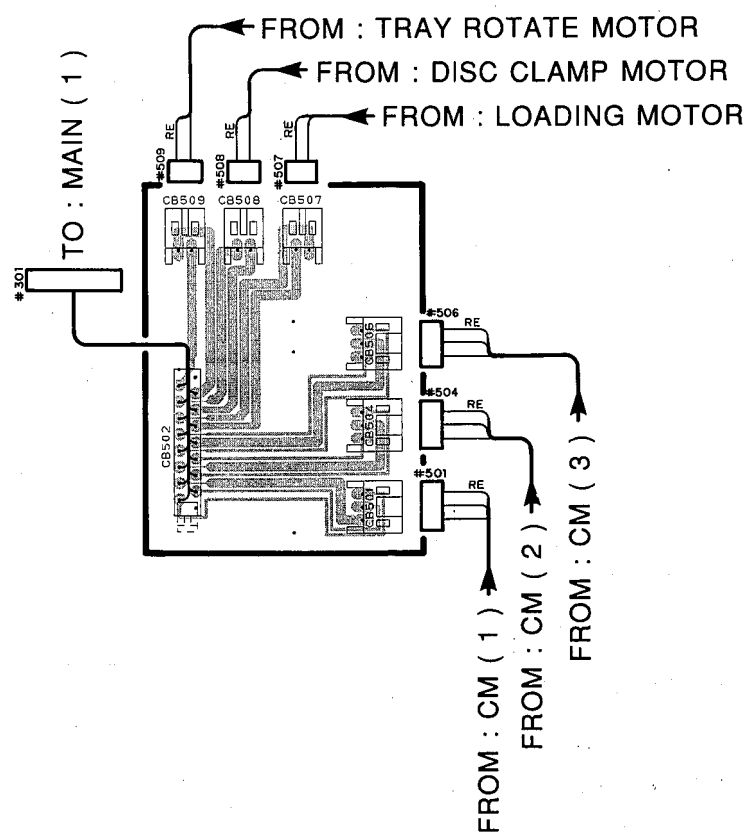
Ref No.	Location	Ref No.	Location
IC1	E3	Q1	E2
IC2	F3	Q2	F3
IC3	F3	Q3	F3
IC115	E4	Q4	F3
IC201	D3	Q101	E4
IC303	G2	Q102	E4
IC304	G2	Q103	E4
IC311	G3	Q104	E4
		Q201	E3
		Q204	F2
		Q206	F2
		Q209	D3
		Q301	G2
		Q302	F2
		Q303	F2

① to ③ : TEST POINT WAVEFORMS (See page 27)

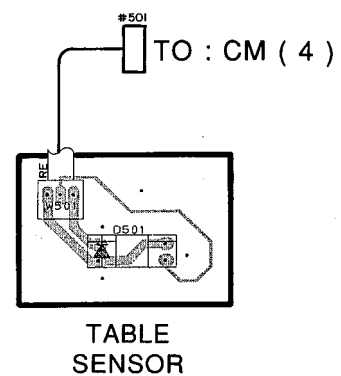
P.C.B. MAIN (1)



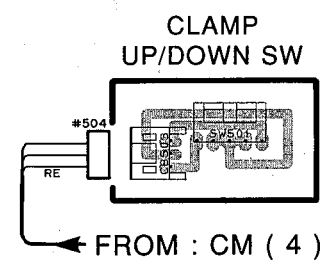
P.C.B. CM (4)



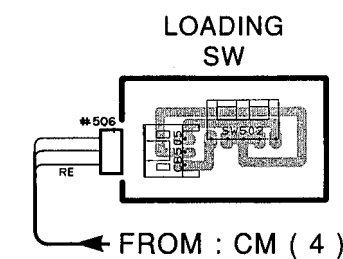
P.C.B. CM (1)



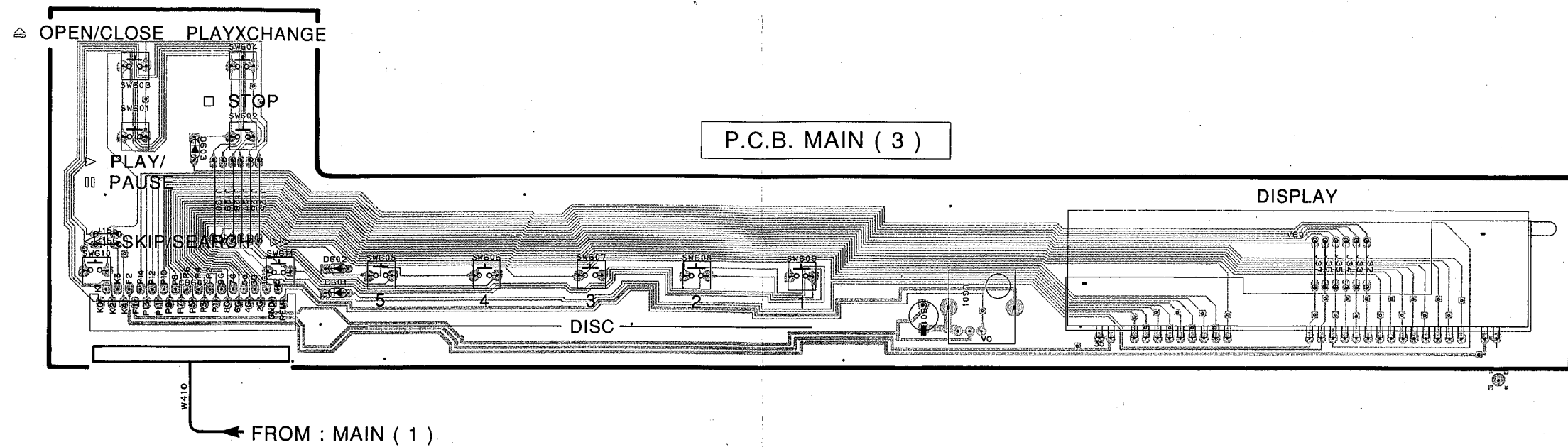
P.C.B. CM (2)



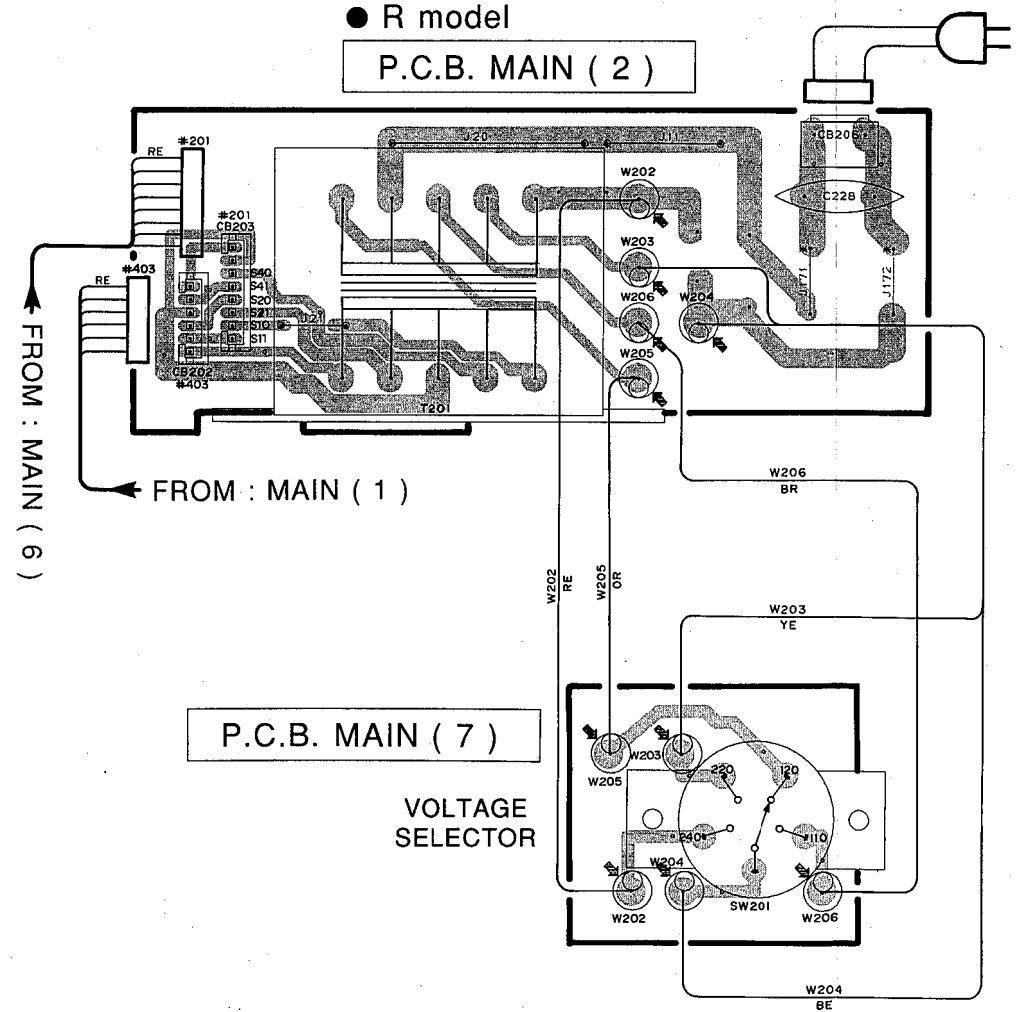
P.C.B. CM (3)



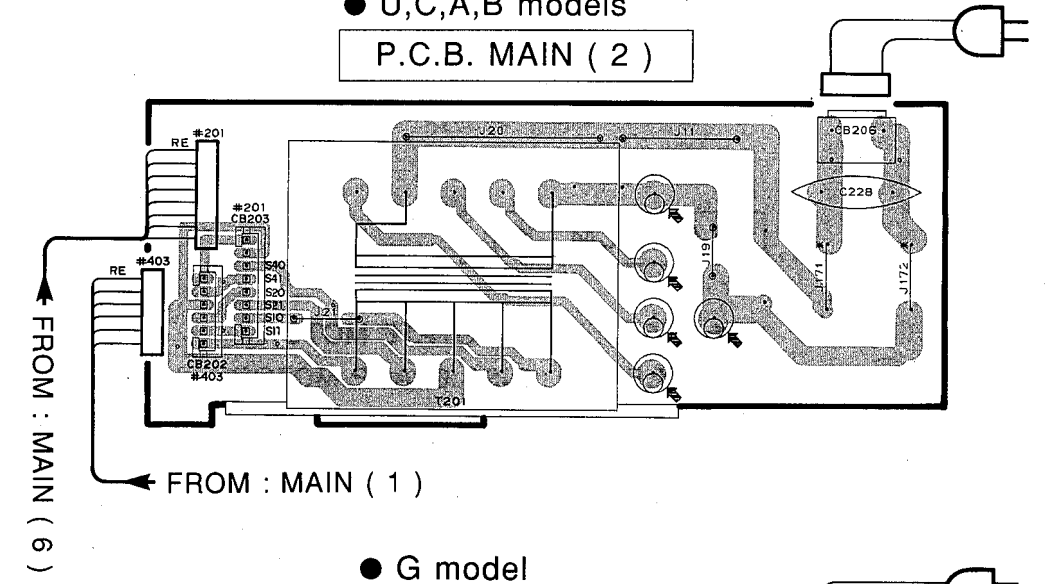
■ CDC-555/CDC-501 PRINTED CIRCUIT BOARD (Foil side)



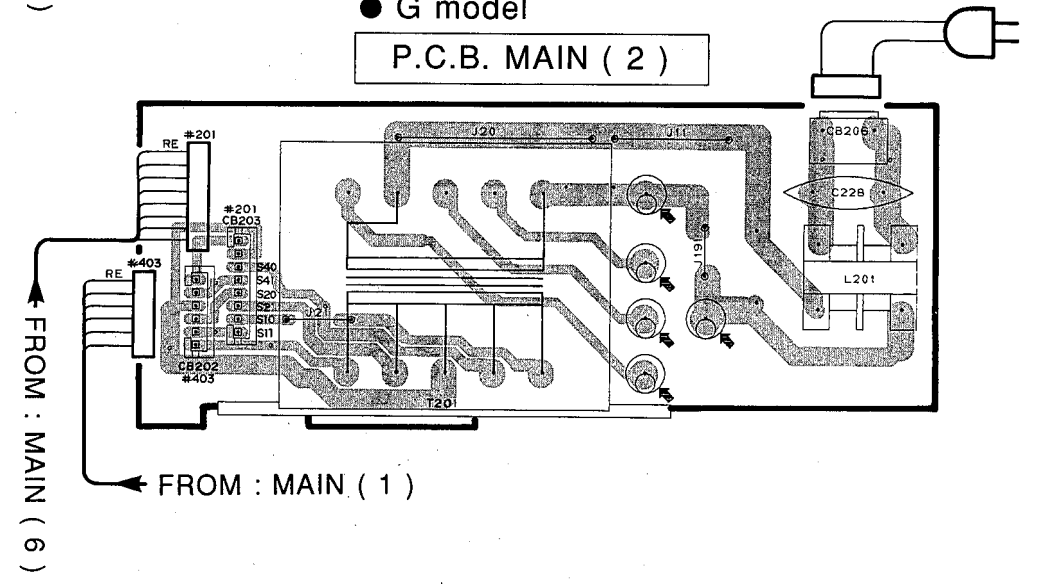
● R model
P.C.B. MAIN (2)



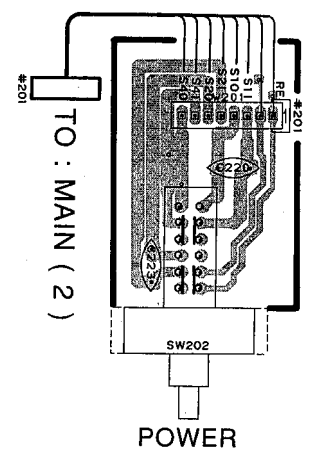
● U,C,A,B models
P.C.B. MAIN (2)



● G model
P.C.B. MAIN (2)



P.C.B. MAIN (6)



P.C.B. MAIN (7)

VOLTAGE SELECTOR

PARTS LIST

ELECTRICAL PARTS

WARNING

- Components having special characteristics are marked \triangle and must be replaced with parts having specifications equal to those originally installed.
- Carbon resistors (1/6W or 1/4W) are not included in the ELECTRICAL PARTS List. For the parts No. of the carbon resistors, refer to last page.

ABBREVIATIONS IN THIS LIST ARE AS FOLLOWS :

C.A.EL.CHP	: CHIP ALUMI. ELECTROLYTIC CAP	L.EMIT	: LIGHT EMITTING MODULE
C.CE	: CERAMIC CAP	LED.DSPLY	: LED DISPLAY
C.CE.ARRAY	: CERAMIC CAP ARRAY	LED.INFRD	: LED, INFRARED
C.CE.CHP	: CHIP CERAMIC CAP	MODUL.RF	: MODULATOR, RF
C.CE.ML	: MULTILAYER CERAMIC CAP	PHOT.CPL	: PHOTO COUPLER
C.CE.M.CHP	: CHIP MULTILAYER CERAMIC CAP	PHOT.INTR	: PHOTO INTERRUPTER
C.CE.SAFTY	: RECOGNIZED CERAMIC CAP	PHOT.RFLCT	: PHOTO REFLECTOR
C.CE.TUBLR	: CERAMIC TUBULAR CAP	PIN.TEST	: PIN, TEST POINT
C.CE.SMI	: SEMI CONDUCTIVE CERAMIC CAP	PLST.RIVET	: PLASTIC RIVET
C.EL	: ELECTROLYTIC CAP	R.ARRAY	: RESISTOR ARRAY
C.MICA	: MICA CAP	R.CAR	: CARBON RESISTOR
C.ML.FLM	: MULTILAYER FILM CAP	R.CAR.CHP	: CHIP RESISTOR
C.MP	: METALLIZED PAPER CAP	R.CAR.FP	: FLAME PROOF CARBON RESISTOR
C.MYLAR	: MYLAR FILM CAP	R.FUS	: FUSABLE RESISTOR
C.MYLAR.ML	: MULTILAYER MYLAR FILM CAP	R.MTL.CHP	: CHIP METAL FILM RESISTOR
C.PAPER	: PAPER CAPACITOR	R.MTL.FLM	: METAL FILM RESISTOR
C.PLS	: POLYSTYRENE FILM CAP	R.MTL.OXD	: METAL OXIDE FILM RESISTOR
C.POL	: POLYESTER FILM CAP	R.MTL.PLAT	: METAL PLATE RESISTOR
C.POLY	: POLYETHYLENE FILM CAP	RSNR.CE	: CERAMIC RESONATOR
C.PP	: POLYPROPYLENE FILM CAP	RSNR.CRYS	: CRYSTAL RESONATOR
C.TNTL	: TANTALUM CAP	R.TW.CEM	: TWIN CEMENT FIXED RESISTOR
C.TNTL.CHP	: CHIP TANTALUM CAP	R.WW	: WIRE WOUND RESISTOR
C.TRIM	: TRIMMER CAP	SCR.BND.HD	: BIND HEAD B-TITE SCREW
CN	: CONNECTOR	SCR.BW.HD	: BW HEAD TAPPING SCREW
CN.BS.PIN	: CONNECTOR, BASE PIN	SCR.CUP	: CUP TITE SCREW
CN.CANNON	: CONNECTOR, CANNON	SCR.TERM	: SCREW TERMINAL
CN.DIN	: CONNECTOR, DIN	SCR.TR	: SCREW, TRANSISTOR
CN.FLAT	: CONNECTOR, FLAT CABLE	SUPRT.PCB	: SUPPORT, P.C.B.
CN.POST	: CONNECTOR, BASE POST	SURG.PRTCT	: SURGE PROTECTOR
COIL.MX.AM	: COIL, AM MIX	SW.TACT	: TACT SWITCH
COIL.AT.FM	: COIL, FM ANTENNA	SW.LEAF	: LEAF SWITCH
COIL.DT.FM	: COIL, FM DETECT	SW.LEVER	: LEVER SWITCH
COIL.MX.FM	: COIL, FM MIX	SW.MICRO	: MICRO SWITCH
COIL.OUTPT	: OUTPUT COIL	SW.PUSH	: PUSH SWITCH
DIOD.ARRAY	: DIODE ARRAY	SW.RT.ENC	: ROTARY ENCODER
DIODE.BRG	: DIODE BRIDGE	SW.RT.MTR	: ROTARY SWITCH WITH MOTOR
DIODE.CHP	: CHIP DIODE	SW.RT	: ROTARY SWITCH
DIODE.VAR	: VARACTOR DIODE	SW.SLIDE	: SLIDE SWITCH
DIOD.Z.CHP	: CHIP ZENER DIODE	TERM.SP	: SPEAKER TERMINAL
DIODE.ZENR	: ZENER DIODE	TERM.WRAP	: WRAPPING TERMINAL
DSCR.CE	: CERAMIC DISCRIMINATOR	THRMST.CHP	: CHIP THERMISTOR
FER.BEAD	: FERRITE BEADS	TR.CHP	: CHIP TRANSISTOR
FER.CORE	: FERRITE CORE	TR.DGT	: DIGITAL TRANSISTOR
FET.CHP	: CHIP FET	TR.DGT.CHP	: CHIP DIGITAL TRANSISTOR
FL.DSPLY	: FLUORESCENT DISPLAY	TRANS	: TRANSFORMER
FLTR.CE	: CERAMIC FILTER	TRANS.PULS	: PULSE TRANSFORMER
FLTR.COMB	: COMB FILTER MODULE	TRANS.PWR	: POWER TRANSFORMER ASS'Y
FLTR.LC.RF	: LC FILTER, EMI	TUNER.AM	: TUNER PACK, AM
GND.MTL	: GROUND PLATE	TUNER.FM	: TUNER PACK, FM
GND.TERM	: GROUND TERMINAL	TUNER.PK	: FRONT-END TUNER PACK
HOLDER.FUS	: FUSE HOLDER	VR	: ROTARY POTENTIOMETER
IC.PRTCT	: IC PROTECTOR	VR.MTR	: POTENTIOMETER WITH MOTOR
JUMPER.CN	: JUMPER CONNECTOR	VR.SW	: POTENTIOMETER WITH ROTARY SW
JUMPER.TST	: JUMPER, TEST POINT	VR.SLIDE	: SLIDE POTENTIOMETER
L.DTCT	: LIGHT DETECTING MODULE	VR.TRIM	: TRIMMER POTENTIOMETER

Note) Those parts marked with "#" are not included in the P.C.B. ass'y.

CDC-655/CDC-901 P.C.B. MAIN

Schm Ref.	PART NO.	Description		
*	VS781800	P. C. B.	MAIN(UC)	
*	VS781900	P. C. B.	MAIN(R)	
*	VS782000	P. C. B.	MAIN(AB)	
*	VS782100	P. C. B.	MAIN(G)	
	CB1	VD004800	CN. BS. PIN	5P
	CB2	VD005100	CN. BS. PIN	8P
	CB3	VD004900	CN. BS. PIN	6P
	CB101	VD004600	CN. BS. PIN	3P
	CB110	VG067200	L. EMIT	TOTX174
	CB201	VD004900	CN. BS. PIN	6P
	CB202	VD004900	CN. BS. PIN	6P
	CB203	VD005100	CN. BS. PIN	8P
	CB206	VG879900	CN. BS. PIN	2P
	CB301	VM859600	CN. BS. PIN	15P
	CB303	VB390600	CN. BS. PIN	10P
	CB304	VN773600	CN. BS. PIN	28P
*	CB401	VQ045700	CN. BS. PIN	28P
	C1	VF760000	C. EL	100uF 10V
	C7	VH053100	C. CE. TUBLR	0.1uF 50V
	C8	VJ837200	C. EL	47uF 16V
	C11	VG279800	C. CE. TUBLR	5600pF 16V
	C12	VH053100	C. CE. TUBLR	0.1uF 50V
	C13	VH053100	C. CE. TUBLR	0.1uF 50V
	C14	UA654470	C. MYLAR	0.047uF 50V
	C15	UA653470	C. MYLAR	4700pF 50V
	C16	UA652100	C. MYLAR	100pF 50V
	C17	UA653220	C. MYLAR	2200pF 50V
	C18	UA653220	C. MYLAR	2200pF 50V
	C19	VH053100	C. CE. TUBLR	0.1uF 50V
	C20	VJ839100	C. EL	1uF 50V
	C21	UA655100	C. MYLAR	0.1uF 50V
	C22	VH053100	C. CE. TUBLR	0.1uF 50V
	C23	VG278800	C. CE. TUBLR	560pF 50V
	C24	VR498100	C. EL	6.8uF 6.3V
	C26	UA653180	C. MYLAR	1800pF 50V
	C27	UA653330	C. MYLAR	3300pF 50V
	C28	UA655100	C. MYLAR	0.1uF 50V
	C29	VH053100	C. CE. TUBLR	0.1uF 50V
	C30	VF760000	C. EL	100uF 10V
	C31	VH053100	C. CE. TUBLR	0.1uF 50V
	C32	UA654240	C. MYLAR	0.024uF 50V
	C33	VH053100	C. CE. TUBLR	0.1uF 50V
*	C34	UK665470	C. EL	0.47uF 50V
	C35	VH053100	C. CE. TUBLR	0.1uF 50V
	C36	VH053100	C. CE. TUBLR	0.1uF 50V
	C37	VA761400	C. CE	47pF 50V
	C38	VA761400	C. CE	47pF 50V
	C39	VH053100	C. CE. TUBLR	0.1uF 50V
	C40	VF760000	C. EL	100uF 10V
	C42	VF760000	C. EL	100uF 10V
*	C43	UK665470	C. EL	0.47uF 50V
	C44	VH053100	C. CE. TUBLR	0.1uF 50V
	C60	VF637900	C. EL	1000uF 10V

* New Parts

Schm Ref.	PART NO.	Description		
	C100	VJ839100	C. EL	1uF 50V
	C101	VJ839100	C. EL	1uF 50V
	C122	VF467300	C. CE. TUBLR	0.01uF 16V
	C126	VF467300	C. CE. TUBLR	0.01uF 16V
	C130	UA653330	C. MYLAR	3300pF 50V
	C131	UA653300	C. MYLAR	3000pF 50V
	C132	UA653300	C. MYLAR	3000pF 50V
	C133	UA653330	C. MYLAR	3300pF 50V
	C134	VJ836900	C. EL	10uF 16V
	C135	VJ836900	C. EL	10uF 16V
	C136	UM407220	C. EL	22uF 25V
	C137	UA653330	C. MYLAR	3300pF 50V
	C138	UA653330	C. MYLAR	3300pF 50V
	C139	UM407220	C. EL	22uF 25V
	C141	UJ638330	C. EL	330uF 16V
	C142	VJ599000	C. CE. TUBLR	0.047uF 16V
	C143	VG277700	C. CE. TUBLR	68pF 50V
	C144	VG277700	C. CE. TUBLR	68pF 50V
	C145	VJ599000	C. CE. TUBLR	0.047uF 16V
	C146	UJ638330	C. EL	330uF 16V
	C147	VH053100	C. CE. TUBLR	0.1uF 50V
	C200	UM397330	C. EL	33uF 16V
	C201	UJ865680	C. EL	0.68uF 50V
	C202	VF904800	C. EL	2200uF 16V
	C203	VH053100	C. CE. TUBLR	0.1uF 50V
	C204	VF760000	C. EL	100uF 10V
	C205	UM397330	C. EL	33uF 16V
	C206	VF760000	C. EL	100uF 10V
	C208	VH507200	C. EL	6800uF 16V
	C209	UJ865680	C. EL	0.68uF 50V
	C210	VF760000	C. EL	100uF 10V
	C213	UM416470	C. EL	4.7uF 50V
	C214	FG214100	C. CE	0.01uF 50V
	C215	UM416470	C. EL	4.7uF 50V
	C216	UJ668100	C. EL	100uF 50V
	C217	UJ648220	C. EL	220uF 25V
	C218	FG214100	C. CE	0.01uF 50V
	C219	FG214100	C. CE	0.01uF 50V
	C220	FG214100	C. CE	0.01uF 50V
	C221	UJ667470	C. EL	47uF 50V
	C223	FG214100	C. CE	0.01uF 50V
	C228	F1384100	C. CE. SAFTY	0.01uF 400V(UC)
	C228	VE179200	C. CE. SAFTY	0.01uF 400V(RABG)
	C302	VF467000	C. CE. TUBLR	1000pF 50V
	C303	VH053100	C. CE. TUBLR	0.1uF 50V
	C304	VF467000	C. CE. TUBLR	1000pF 50V
	C305	VH053100	C. CE. TUBLR	0.1uF 50V
	C306	VH053100	C. CE. TUBLR	0.1uF 50V
	C309	VF760000	C. EL	100uF 10V
	C310	VF760000	C. EL	100uF 10V
	C320	VH053100	C. CE. TUBLR	0.1uF 50V
	C321	VG278700	C. CE. TUBLR	390pF 50V
	C322	VG278700	C. CE. TUBLR	390pF 50V

△
△

* New Parts

CDC-655/CDC-901
CDC-555/CDC-501

CDC-655/CDC-901 P.C.B. MAIN

Schm Ref.	PART NO.	Description
C323	VG278700	C. CE. TUBLR 390pF 50V
C324	VG278700	C. CE. TUBLR 390pF 50V
C325	VG278700	C. CE. TUBLR 390pF 50V
C401	VF760000	C. EL 100uF 10V
D101	VD631600	DIODE 1SS133, 176, HSS104
D102	VD631600	DIODE 1SS133, 176, HSS104
* D202	VP642400	DIODE. ZENR HZS5C1 5.0V
D203	VD631600	DIODE 1SS133, 176, HSS104
D204	VD631600	DIODE 1SS133, 176, HSS104
D205	VM974500	DIODE. ZENR HZS6C2TD 6.0V
D206	VD631600	DIODE 1SS133, 176, HSS104
* D207	VS858600	DIODE. ZENR HZS24-1 24V
D208	VH770800	DIODE 1SR139-100
* D209	VP642500	DIODE. ZENR HZS6A3 6.0V
D212	VH770800	DIODE 1SR139-100
D213	VH770800	DIODE 1SR139-100
D214	VH770800	DIODE 1SR139-100
D215	VH770800	DIODE 1SR139-100
D216	VH770800	DIODE 1SR139-100
* D301	VM974800	DIODE. ZENR HZS7C2TD 7.0V
D405	VD631600	DIODE 1SS133, 176, HSS104
D406	VD631600	DIODE 1SS133, 176, HSS104
D407	VD631600	DIODE 1SS133, 176, HSS104
D408	VD631600	DIODE 1SS133, 176, HSS104
D409	VD631600	DIODE 1SS133, 176, HSS104
IC1	XM571A00	IC AN8803SB
* IC2	XN105A00	IC LA6536M
IC3	XM572A00	IC MN66271
IC115	XA987001	IC NJM2068D-D
IC120	Xi249A00	IC BA15218
IC201	XD201A00	IC M5290P
* IC303	XQ135A00	IC BA6286
IC304	XF947A00	IC LA6510
IC311	XP519A00	IC uPD78044AGF
IC320	Xi668A00	IC X24C01P
* JK101	VS899700	JACK. PHONE JY-6317-02-030
L300	Vi546100	COIL 220uH
L301	Vi546100	COIL 220uH
PJ101	VJ898400	JACK. PIN 2P
Q1	iB054430	TR 2SB544 D, E, F, G
Q2	iA093320	TR 2SA933S Q, R
Q3	iC287820	TR 2SC2878 A, B
Q4	iA093320	TR 2SA933S Q, R
Q101	iC287820	TR 2SC2878 A, B
Q102	iC287820	TR 2SC2878 A, B
Q103	iC287820	TR 2SC2878 A, B
Q104	iC287820	TR 2SC2878 A, B
Q201	iA093320	TR 2SA933S Q, R
Q204	VS883400	TR 2SD2394 E, F
Q206	iA093320	TR 2SA933S Q, R
Q209	VS883300	TR 2SB1565 E, F
Q301	iC174020	TR 2SC1740S R, S
Q302	iC174020	TR 2SC1740S R, S

* New Parts

Schm Ref.	PART NO.	Description
Q303	iC174020	TR 2SC1740S R, S
R159	HV455100	R. CAR. FP 100Ω 1/4W
R166	HV455100	R. CAR. FP 100Ω 1/4W
R209	Vi868300	R. FUS 0.68Ω 1/6W
R214	HV455100	R. CAR. FP 100Ω 1/4W
R215	HV455100	R. CAR. FP 100Ω 1/4W
R308	HV453220	R. CAR. FP 2.2Ω 1/4W
R327	HV453220	R. CAR. FP 2.2Ω 1/4W
* R333	VT042000	R. ARRAY 100KΩ x15
R334	VF824300	R. ARRAY 100KΩ x8
△ SW201	VL908000	VOLT. SELCT ESE-370 (R)
△ SW202	Vi272700	SW. PUSH
SW401	VG392900	SW. TACT SKHVAA
SW402	VG392900	SW. TACT SKHVAA
SW403	VG392900	SW. TACT SKHVAA
SW404	VG392900	SW. TACT SKHVAA
SW405	VG392900	SW. TACT SKHVAA
SW406	VG392900	SW. TACT SKHVAA
SW407	VG392900	SW. TACT SKHVAA
SW408	VG392900	SW. TACT SKHVAA
SW410	VG392900	SW. TACT SKHVAA
SW411	VG392900	SW. TACT SKHVAA
SW412	VG392900	SW. TACT SKHVAA
SW413	VG392900	SW. TACT SKHVAA
SW414	VG392900	SW. TACT SKHVAA
SW416	VG392900	SW. TACT SKHVAA
SW417	VG392900	SW. TACT SKHVAA
SW418	VG392900	SW. TACT SKHVAA
SW419	VG392900	SW. TACT SKHVAA
SW420	VG392900	SW. TACT SKHVAA
SW421	VG392900	SW. TACT SKHVAA
SW422	VG392900	SW. TACT SKHVAA
SW423	VG392900	SW. TACT SKHVAA
SW424	VG392900	SW. TACT SKHVAA
SW425	VG392900	SW. TACT SKHVAA
SW426	VG392900	SW. TACT SKHVAA
SW427	VG392900	SW. TACT SKHVAA
△* T201	XL831A00	TRANS. PWR (UC)
△* T201	XL832A00	TRANS. PWR (R)
△* T201	XL833A00	TRANS. PWR (AB)
△* T201	XL837A00	TRANS. PWR (G)
TP1	VL448600	JUMPER. TST
TP2	VL448600	JUMPER. TST
U401	VK498900	L. DTCT S-100
* V401	VS415000	FL. DSPLY 9-ST-14GK
* W407	VT111800	CN. ASSY 10x 250MM DA-KR
XL4	VJ719800	RSNR. CRYST 16.9344MHz
XL301	VJ677200	RSNR. CE 4.19MHz
	VB966900	CN IMSA-6024
	VA119100	HEAT. SINK
* VS257700		PLATE. GND
* VQ713000		SUPRT FL
* VQ948800		SHEET FL

* New Parts

CDC-655/CDC-901
CDC-555/CDC-501

CDC-655/CDC-901 P.C.B. CM

Schm Ref.	PART NO.	Description	
*	VS778600	P. C. B.	CM
CB501	VB858200	CN. BS. PIN	3P
CB502	VM689400	CN	15P
CB503	VB858200	CN. BS. PIN	3P
CB504	VB858200	CN. BS. PIN	3P
CB505	VB858200	CN. BS. PIN	3P
CB506	VB858200	CN. BS. PIN	3P
CB507	VB858100	CN. BS. PIN	2P
CB508	VB858100	CN. BS. PIN	2P
CB509	VB858100	CN. BS. PIN	2P
D501	VS743900	PHOT. INTR	GP1S53V
SW501	Vi294000	SW. LEVER	SSCF21
SW502	Vi294000	SW. LEVER	SSCF21
* W502	VT033200	CN. FLAT	15P 120mm

* New Parts

CDC-655/CDC-901
CDC-555/CDC-501

CDC-555/CDC-501 P.C.B. MAIN

CDC-555/CDC-501 P.C.B. MAIN & CM

Schm Ref.	PART NO.	Description
* VS778200	P. C. B.	MAIN(UC)
* VS778300	P. C. B.	MAIN(R)
* VS778400	P. C. B.	MAIN(AB)
* VS778500	P. C. B.	MAIN(G)
CB1	VD004800	CN. BS. PIN 5P
CB2	VD005100	CN. BS. PIN 8P
CB3	VD004900	CN. BS. PIN 6P
CB201	VD004900	CN. BS. PIN 6P
CB202	VD004900	CN. BS. PIN 6P
CB203	VD005100	CN. BS. PIN 8P
CB206	VG879900	CN. BS. PIN 2P
CB301	VM859600	CN. BS. PIN 15P
* CB302	VQ048200	CN. BS. PIN 33P
* CB602	VQ046200	CN. BS. PIN 33P
C1	VF760000	C. EL 100uF 10V
C7	VH053100	C. CE. TUBLR 0.1uF 50V
C8	VJ837200	C. EL 47uF 16V
C11	VG279800	C. CE. TUBLR 5600pF 16V
C12	VH053100	C. CE. TUBLR 0.1uF 50V
C13	VH053100	C. CE. TUBLR 0.1uF 50V
C14	UA654470	C. MYLAR 0.047uF 50V
C15	UA653470	C. MYLAR 4700pF 50V
C16	UA652100	C. MYLAR 100pF 50V
C17	UA653220	C. MYLAR 2200pF 50V
C18	UA653220	C. MYLAR 2200pF 50V
C19	VH053100	C. CE. TUBLR 0.1uF 50V
C20	VJ839100	C. EL 1uF 50V
C21	UA655100	C. MYLAR 0.1uF 50V
C22	VH053100	C. CE. TUBLR 0.1uF 50V
C23	VG278800	C. CE. TUBLR 560pF 50V
C24	VR498100	C. EL 6.8uF 6.3V
C26	UA653180	C. MYLAR 1800pF 50V
C27	UA653330	C. MYLAR 3300pF 50V
C28	UA655100	C. MYLAR 0.1uF 50V
C29	VH053100	C. CE. TUBLR 0.1uF 50V
C30	VF760000	C. EL 100uF 10V
C31	VH053100	C. CE. TUBLR 0.1uF 50V
C32	UA654240	C. MYLAR 0.024uF 50V
C33	VH053100	C. CE. TUBLR 0.1uF 50V
* C34	UK665470	C. EL 0.47uF 50V
C35	VH053100	C. CE. TUBLR 0.1uF 50V
C36	VH053100	C. CE. TUBLR 0.1uF 50V
C39	VH053100	C. CE. TUBLR 0.1uF 50V
C40	VF760000	C. EL 100uF 10V
C42	VF760000	C. EL 100uF 10V
* C43	UK665470	C. EL 0.47uF 50V
C44	VH053100	C. CE. TUBLR 0.1uF 50V
C60	VF637900	C. EL 1000uF 10V
C100	VJ839100	C. EL 1uF 50V
C101	VJ839100	C. EL 1uF 50V
C122	VF467300	C. CE. TUBLR 0.01uF 16V
C126	VF467300	C. CE. TUBLR 0.01uF 16V
C130	UA653330	C. MYLAR 3300pF 50V

* New Parts

Schm Ref.	PART NO.	Description
C131	UA653300	C. MYLAR 3000pF 50V
C132	UA653300	C. MYLAR 3000pF 50V
C133	UA653330	C. MYLAR 3300pF 50V
C136	UM407220	C. EL 22uF 25V
C137	UA653330	C. MYLAR 3300pF 50V
C138	UA653330	C. MYLAR 3300pF 50V
C139	UM407220	C. EL 22uF 25V
C200	UM397330	C. EL 33uF 16V
C201	UJ865680	C. EL 0.68uF 50V
C202	VF904800	C. EL 2200uF 16V
C203	VH053100	C. CE. TUBLR 0.1uF 50V
C204	VF760000	C. EL 100uF 10V
C205	UM397330	C. EL 33uF 16V
C206	VF760000	C. EL 100uF 10V
C208	VH507200	C. EL 6800uF 16V
C209	UJ865680	C. EL 0.68uF 50V
C210	VF760000	C. EL 100uF 10V
C213	UM416470	C. EL 4.7uF 50V
C214	FG214100	C. CE 0.01uF 50V
C215	UM416470	C. EL 4.7uF 50V
C216	UJ668100	C. EL 100uF 50V
C217	UJ648220	C. EL 220uF 25V
C218	FG214100	C. CE 0.01uF 50V
C219	FG214100	C. CE 0.01uF 50V
C220	FG214100	C. CE 0.01uF 50V
C221	UJ667470	C. EL 47uF 50V
C223	FG214100	C. CE 0.01uF 50V
△ C228	Fi384100	C. CE. SAFTY 0.01uF 400V(UC)
△ C228	VE179200	C. CE. SAFTY 0.01uF 400V(RABG)
C302	VF467000	C. CE. TUBLR 1000pF 50V
C303	VH053100	C. CE. TUBLR 0.1uF 50V
C304	VF467000	C. CE. TUBLR 1000pF 50V
C305	VH053100	C. CE. TUBLR 0.1uF 50V
C306	VH053100	C. CE. TUBLR 0.1uF 50V
C309	VF760000	C. EL 100uF 10V
C310	VF760000	C. EL 100uF 10V
C321	VG278700	C. CE. TUBLR 390pF 50V
C322	VG278700	C. CE. TUBLR 390pF 50V
C323	VG278700	C. CE. TUBLR 390pF 50V
C324	VG278700	C. CE. TUBLR 390pF 50V
C325	VG278700	C. CE. TUBLR 390pF 50V
* C601	VF760000	C. EL 100uF 10V
* D202	VP642400	DIODE. ZENR HZS5C1 5.0V
D203	VD631600	DIODE 1SS133, 176, HSS104
D204	VD631600	DIODE 1SS133, 176, HSS104
D205	VM974500	DIODE. ZENR HZS6C2TD 6.0V
D206	VD631600	DIODE 1SS133, 176, HSS104
* D207	VS858600	DIODE. ZENR HZS24-1 24V
* D208	VH770800	DIODE 1SR139-100
* D209	VP642500	DIODE. ZENR HZS6A3 6.0V
D212	VH770800	DIODE 1SR139-100
D213	VH770800	DIODE 1SR139-100
D214	VH770800	DIODE 1SR139-100

* New Parts

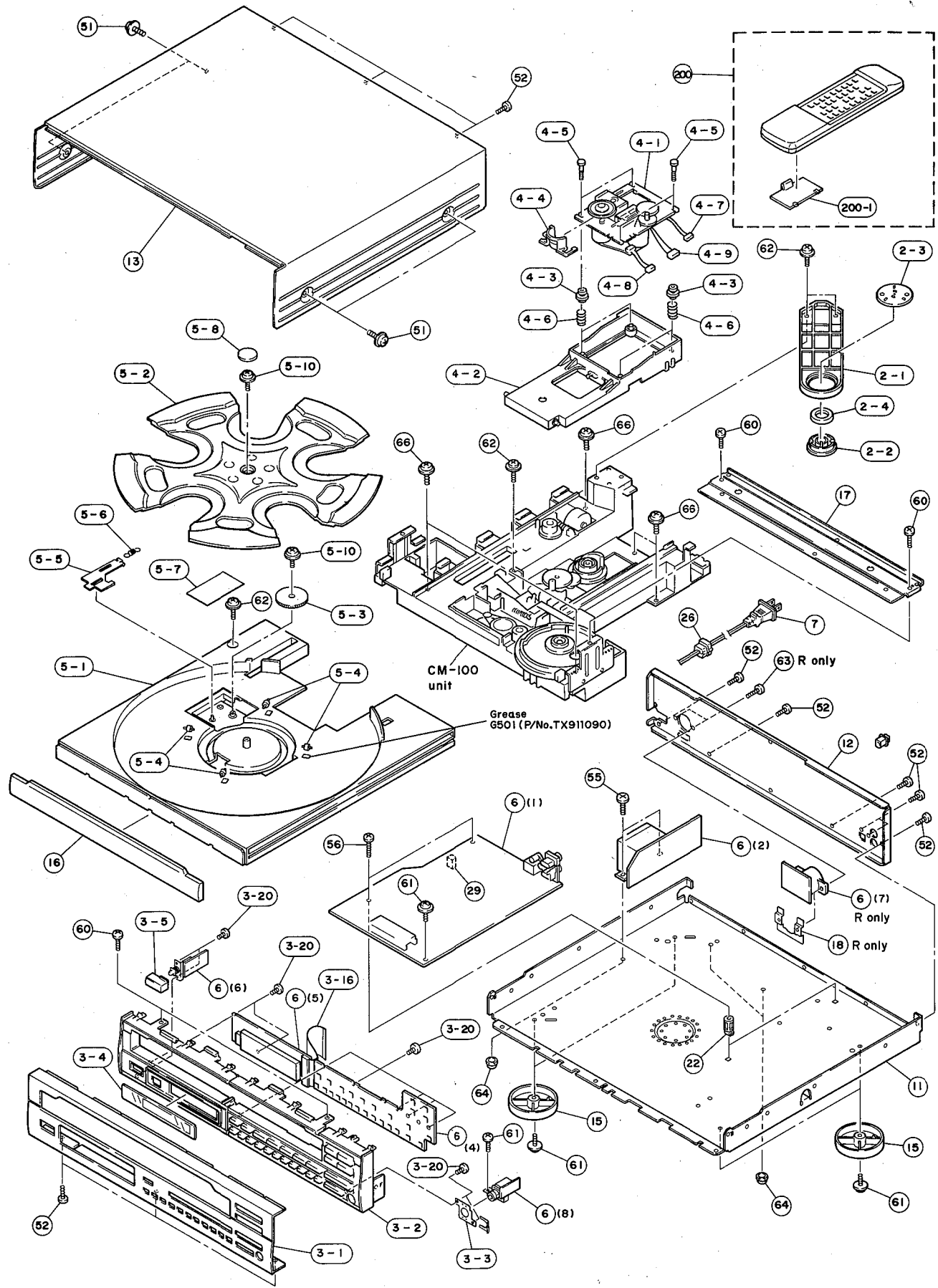
Schm Ref.	PART NO.	Description
D215	VH770800	DIODE 1SR139-100
D216	VH770800	DIODE 1SR139-100
D301	VM974800	DIODE. ZENR HZS7C2TD 7.0V
D601	VD631600	DIODE 1SS133, 176, HSS104
D602	VD631600	DIODE 1SS133, 176, HSS104
D603	VD631600	DIODE 1SS133, 176, HSS104
IC1	XM571A00	IC AN8803SB
* IC2	XN105A00	IC LA6536M
IC3	XM572A00	IC MN66271
IC115	XA987001	IC NJM2068D-D
IC201	XD201A00	IC M5290P
* IC303	XQ135A00	IC BA6286
IC304	XF947A00	IC LA6510
IC311	XP519A00	IC uPD78044AGF
△ L201	VH227500	FLTR 20uH(G)
L300	Vi546100	COIL 220uH
L301	Vi546100	COIL 220uH
PJ101	VJ898400	JACK. PIN 2P
Q1	iB054430	TR 2SB544 D, E, F, G
Q2	iA093320	TR 2SA933S Q, R
Q3	iC287820	TR 2SC2878 A, B
Q4	iA093320	TR 2SA933S Q, R
Q101	iC287820	TR 2SC2878 A, B
Q102	iC287820	TR 2SC2878 A, B
Q103	iC287820	TR 2SC2878 A, B
Q104	iC287820	TR 2SC2878 A, B
Q201	iA093320	TR 2SA933S Q, R
Q204	VS883400	TR 2SD2394 E, F
Q206	iA093320	TR 2SA933S Q, R
Q209	VS883300	TR 2SB1565 E, F
Q301	iC174020	TR 2SC1740S R, S
Q302	iC174020	TR 2SC1740S R, S
Q303	iC174020	TR 2SC1740S R, S
R209	Vi868300	R. FUS 0.68Ω 1/6W
R214	HV455100	R. CAR. FP 100Ω 1/4W
R215	HV455100	R. CAR. FP 100Ω 1/4W
R308	HV453220	R. CAR. FP 2.2Ω 1/4W
R327	HV453220	R. CAR. FP 2.2Ω 1/4W
* R333	VT042000	R. ARRAY 100KΩ x15
R334	VF824300	R. ARRAY 100KΩ x8
△ SW201	VL908000	VOLT. SELCT ESE-370(R)
△ SW202	Vi272700	SW. PUSH
SW601	VG392900	SW. TACT SKHVAA
SW602	VG392900	SW. TACT SKHVAA
SW603	VG392900	SW. TACT SKHVAA
SW604	VG392900	SW. TACT SKHVAA
SW605	VG392900	SW. TACT SKHVAA
SW606	VG392900	SW. TACT SKHVAA
SW607	VG392900	SW. TACT SKHVAA
SW608	VG392900	SW. TACT SKHVAA
SW609	VG392900	SW. TACT SKHVAA
SW610	VG392900	SW. TACT SKHVAA
SW611	VG392900	SW. TACT SKHVAA

* New Parts

Schm Ref.	PART NO.	Description
△ * T201	XL831A00	TRANS. PWR (UC)
△ * T201	XL832A00	TRANS. PWR (R)
△ * T201	XL833A00	TRANS. PWR (AB)
△ * T201	XL837A00	TRANS. PWR (G)
TP1	VL448600	JUMPER. TST
TP2	VL448600	JUMPER. TST
U601	VK498900	L. DTCT S-100
* V601	VS415000	FL. DSPLY 9-ST-14GK
XL3	VR197300	RSNR. CE 16.93MHz
XL301	VJ677200	RSNR. CE 4.19MHz
	VB966900	CN IMSA-6024
	VA119100	HEAT. SINK
* VQ713000		SUPRT FL
* VQ948800		SHEET FL
* VS778600	P. C. B.	CM
CB501	VB858200	CN. BS. PIN 3P
CB502	VM689400	CN 15P
CB503	VB858200	CN. BS. PIN 3P
CB504	VB858200	CN. BS. PIN 3P
CB505	VB858200	CN. BS. PIN 3P
CB506	VB858200	CN. BS. PIN 3P
CB507	VB858100	CN. BS. PIN 2P
CB508	VB858100	CN. BS. PIN 2P
CB509	VB858100	CN. BS. PIN 2P
D501	VS743900	PHOT. INTR GP1S53V
SW501	Vi294000	SW. LEVER SSCF21
SW502	Vi294000	SW. LEVER SSCF21
* W502	VT033200	CN. FLAT 15P 120mm

* New Parts

1 ■ CDC-655/CDC-901 EXPLODED VIEW



■ MECHANICAL PARTS (CDC-655/CDC-901)

Ref. No.	PART NO.	Description	Remarks	Markets
* 2-1	VS037800	CLAMPER		
2-2	VL782500	STABILIZER		
2-3	VS500400	PLATE	STABILIZER DH29.6x18x3.6FMS	
* 2-4	VQ930900	MAGNET		
* 3-1	VS253800	FRONT PANEL		CDC-655 BL
* 3-1	VS254000	FRONT PANEL		CDC-655 TI
* 3-1	VS254100	FRONT PANEL		CDC-901
* 3-2	VS308800	SUB PANEL		BL
* 3-2	VS308900	SUB PANEL		TI
* 3-3	VS257400	PLATE, HP		
* 3-4	VS259100	WINDOW PANEL		
3-5	VQ780000	BUTTON		BL
3-5	VQ780100	BUTTON		TI
* 3-16	VT033300	CONNECTOR, FLAT CABLE	28P 370mm	
3-20	EP630290	BIND HEAD P-TITE SCREW	3x6 FCRM3-BL	
4-1	VM444300	PU MECHA. UNIT	CD90V1YA	
* 4-2	VS037600	HOLDER		
* 4-3	VQ775600	DAMPER, BUSH		
4-4	VP660500	BARRIER	PU	
4-5	VS037700	SCREW, 2		
4-6	VQ386500	SPRING		
4-7	VS841500	CONNECTOR ASS'Y	5P 170mm	
4-8	VS841600	CONNECTOR ASS'Y	6P 180mm	
4-9	VT033500	CONNECTOR ASS'Y	8P 200mm	
* 5-1	VS034000	TRAY	B	
* 5-2	VS034400	TABLE	B	
* 5-3	VS036000	GEAR, RT1		
* 5-4	VS037300	ROLLER		
* 5-5	VS037200	LEVER, RT		
* 5-6	VS036900	SPRING, RT		
* 5-7	VS037900	SHEET, TRAY	B	
* 5-8	VS051900	PLATE, TABLE	B	
5-10	VA775100	BW HEAD P-TITE SCREW	3x8-10 FCRM3-BL	
* 6	VS781800	P. C. B. ASS'Y	MAIN	(UC)
* 6	VS781900	P. C. B. ASS'Y	MAIN	(R)
* 6	VS782000	P. C. B. ASS'Y	MAIN	(AB)
* 6	VS782100	P. C. B. ASS'Y	MAIN	(G)
△ * 7	VQ508500	POWER CORD ASS'Y		(R)
△ * 7	VQ508600	POWER CORD ASS'Y		(A)
△ * 7	VS168300	POWER CORD ASS'Y		(UC)
△ * 7	VS168400	POWER CORD ASS'Y		(G)
△ * 7	VS680700	POWER CORD ASS'Y		(B)
* 11	VS254200	CHASSIS, MAIN		
* 12	VS255000	REAR PANEL	CDC-655	(UC)
* 12	VS255100	REAR PANEL	CDC-655	(R)
* 12	VS255200	REAR PANEL	CDC-655	(A)
* 12	VS255400	REAR PANEL	CDC-655	(G)
* 12	VS255500	REAR PANEL	CDC-901	(UC)
* 13	VS254400	TOP COVER	BL	
* 13	VS254500	TOP COVER	TI	
15	VQ780300	LEG	D60xH16	CDC-655
15	VQ982800	LEG	D60xH16	CDC-901
* 16	VS258800	LID 755		BL

* New Parts

Ref. No.	PART NO.	Description	Remarks	Markets
* 16	VS258900	LID 755	TI	
* 17	VS256900	FRAME, PANEL		
* 18	VS257300	PLATE, R		(R)
22	Vi048500	SUPPORT, P.C.B.		
26	VN158600	CORD STOPPER	No. 2104	
* 29	VQ366100	DAMPER, PCB		
51	EX601150	BW HEAD S-TITE SCREW	4x8-10 FNM3-BL	TI
51	EL300470	BW HEAD S-TITE SCREW	4x8-10 FCRM3-BL	BL
52	EN301010	BIND HEAD BONDING TAP. SCREW	3x8 FCRM3-BL	
55	EK396010	BIND HEAD S-TITE SCREW	4x8 FCRM3-BL	
56	EP630640	BIND HEAD P-TITE SCREW	3x20 FCRM3-BL	
60	Ei330086	BIND HEAD B-TITE SCREW	3x8 FCRM3-BL	
61	EK930010	BW HEAD TAPPING SCREW	3x8-8 FCRM3-BL	
* 62	EX602620	BW HEAD P-TITE SCREW	3x12-10 ZMC2-Y	
63	EP630280	BIND HEAD B-TITE SCREW	3x10 FCRM3-BL	(R)
64	EX601580	HEXAGONAL BLIND NUT	4mm FCRM3-BL	
66	EX602630	BW HEAD S-TITE SCREW	4x10 FCRM3-BL	
		ACCESSORIES		
* 200	VR039200	REMOTE CONTROL TRANSMITTER	(79)	
200-1	CX675150	LID	54x32.9BLALPS	
	VN159900	PIN-PLUG CORD	2P 1.0m	
*	VS381600	PIN PLUG CORD	1.0m	
		BATTERY, MANGANESE	SUM-3, AA, R06	

* New Parts

CDC-655/CDC-901
CDC-555/CDC-501

A

B

C

D

E

CDC-655/CDC-901/CDC-555/CDC-501

■ CDC-555/CDC-501 EXPLODED VIEW

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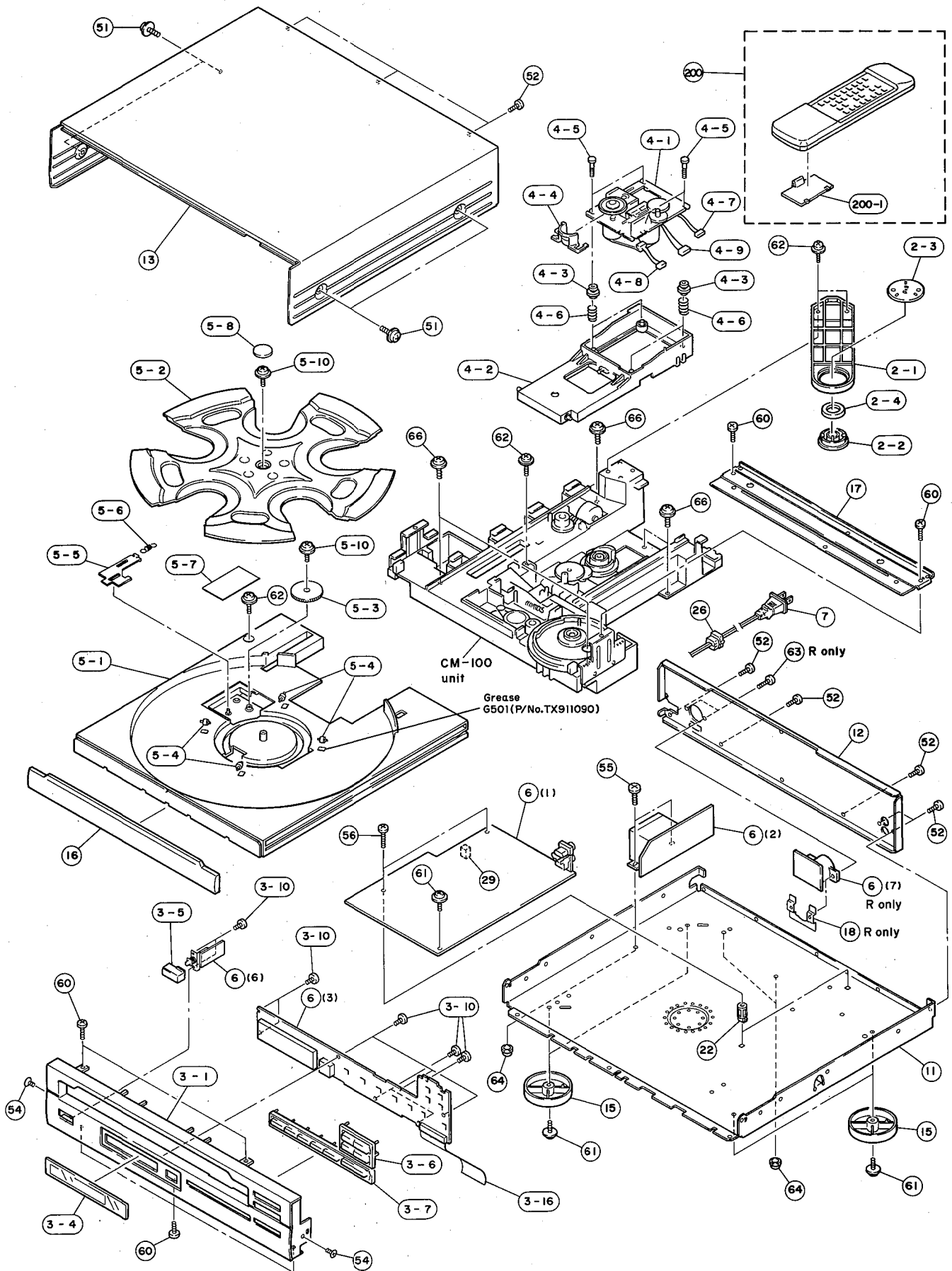
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MECHANICAL PARTS (CDC-555/CDC-501)

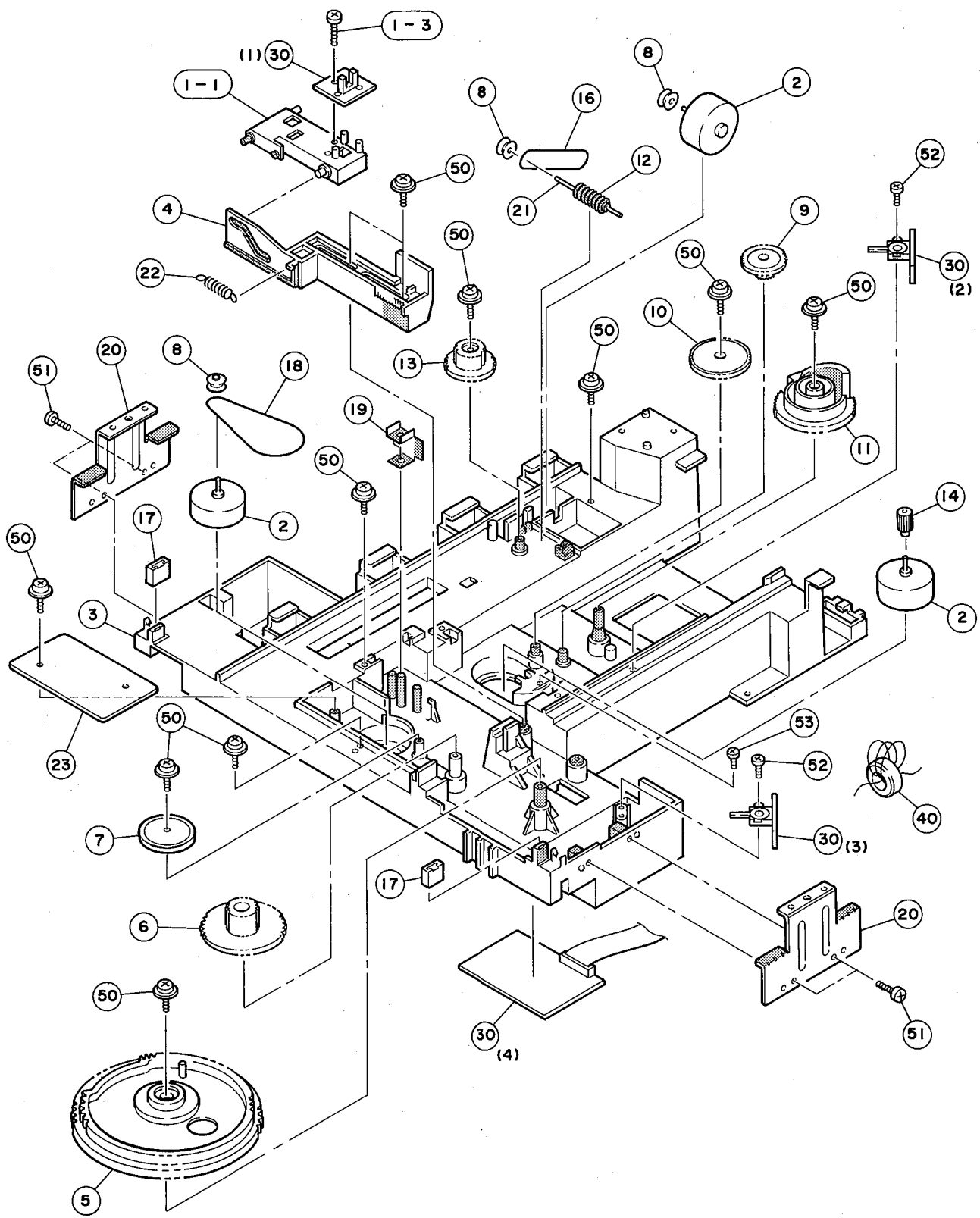
Ref. No.	PART NO.	Description	Remarks	Markets
* 2-1	VS037800	CLAMPER		
2-2	VL782500	STABILIZER		
* 2-3	VS500400	PLATE	STABILIZER	
* 2-4	VQ930900	MAGNET	DH29.6x18x3.6FMS	
* 3-1	VS257900	FRONT PANEL		CDC-555
* 3-1	VS258100	FRONT PANEL		CDC-501
* 3-4	VS259100	WINDOW PANEL		
* 3-5	VQ780000	BUTTON		
* 3-6	VS258400	BUTTON, PLAY		
* 3-7	VS258600	BUTTON, DISC		
* 3-16	VT033400	CONNECTOR, FLAT CABLE	33P 220mm	
3-20	EP630290	BIND HEAD P-TITE SCREW	3x6 FCRM3-BL	
4-1	VM444300	PU MECHA. UNIT	CD90V1YA	
* 4-2	VS037600	HOLDER		
* 4-3	VQ775600	DAMPER, BUSH		
4-4	VP660500	BARRIER	PU	
* 4-5	VS037700	SCREW, 2		
* 4-6	VQ386500	SPRING		
* 4-7	VS841500	CONNECTOR ASS'Y	5P 170mm	
* 4-8	VS841600	CONNECTOR ASS'Y	6P 180mm	
* 4-9	VT033500	CONNECTOR ASS'Y	8P 200mm	
* 5-1	VS034000	TRAY	B	
* 5-2	VS034400	TABLE	B	
* 5-3	VS036000	GEAR, RT1		
* 5-4	VS037300	ROLLER		
* 5-5	VS037200	LEVER, RT		
* 5-6	VS036900	SPRING, RT		
* 5-7	VS037900	SHEET, TRAY	B	
* 5-8	VS051900	PLATE, TABLE	B	
5-10	VA775100	BW HEAD P-TITE SCREW	3x8-10 FCRM3-BL	
* 6	VS778200	P.C.B. ASS'Y	MAIN	(UC)
* 6	VS778300	P.C.B. ASS'Y	MAIN	(R)
* 6	VS778400	P.C.B. ASS'Y	MAIN	(AB)
* 6	VS778500	P.C.B. ASS'Y	MAIN	(G)
△* 7	VQ508500	POWER CORD ASS'Y		(R)
△* 7	VQ508600	POWER CORD ASS'Y		(A)
△* 7	VS168300	POWER CORD ASS'Y		(UC)
△* 7	VS168400	POWER CORD ASS'Y		(G)
△ 7	VS680700	POWER CORD ASS'Y		(B)
* 11	VS254200	CHASSIS, MAIN		
* 12	VS255600	REAR PANEL		CDC-555 (UC)
* 12	VS255700	REAR PANEL		CDC-555 (R)
* 12	VS255800	REAR PANEL		CDC-555 (AB)
* 12	VS256000	REAR PANEL		CDC-555 (G)
* 12	VS256200	REAR PANEL		CDC-501 (UC)
* 13	VS254400	TOP COVER		
15	VQ780300	LEG	D60xH16	CDC-555
15	VQ982800	LEG	D60xH16	CDC-501
* 16	VS258800	LID 755		
* 17	VT018900	FRAME 555		
* 18	VS257300	PLATE, R		(R)
22	Vi048500	SUPPORT, P.C.B.		
26	VN158600	CORD STOPPER	No. 2104	

* New Parts

Ref. No.	PART NO.	Description	Remarks	Markets
* 29	VQ366100	DAMPER, PCB		
51	EL300470	BW HEAD S-TITE SCREW	4x8-10 FCRM3-BL	
52	EN301010	BIND HEAD BONDING TAP. SCREW	3x8 FCRM3-BL	
54	EO030066	FLAT HEAD SCREW	3x6 ZMC2-Y	
55	EK396010	BIND HEAD S-TITE SCREW	4x8 FCRM3-BL	
56	EP630640	BIND HEAD P-TITE SCREW	3x20 FCRM3-BL	
60	Ei330086	BIND HEAD B-TITE SCREW	3x8 FCRM3-BL	
61	EK930010	BW HEAD TAPPING SCREW	3x8-8 FCRM3-BL	
* 62	EX602620	BW HEAD P-TITE SCREW	3x12-10 ZMC2-Y	
63	EP630280	BIND HEAD B-TITE SCREW	3x10 FCRM3-BL	(R)
64	EX601580	HEXAGONAL BLIND NUT	4mm FCRM3-BL	
66	EX602630	BW HEAD S-TITE SCREW	4x10 FCRM3-BL	
ACCESSORIES				
* 200	VS541200	REMOTE CONTROL TRANSMITTER		(79)
200-1	CX675150	LID	54x32.9BLALPS	
	VN159900	PIN-PLUG CORD	2P 1.0m	
*	VS381600	PIN PLUG CORD	1.0m	
		BATTERY, MANGANESE	SUM-3, AA, R06	

* New Parts

1 ■ EXPLODED VIEW (CM-100 Unit)



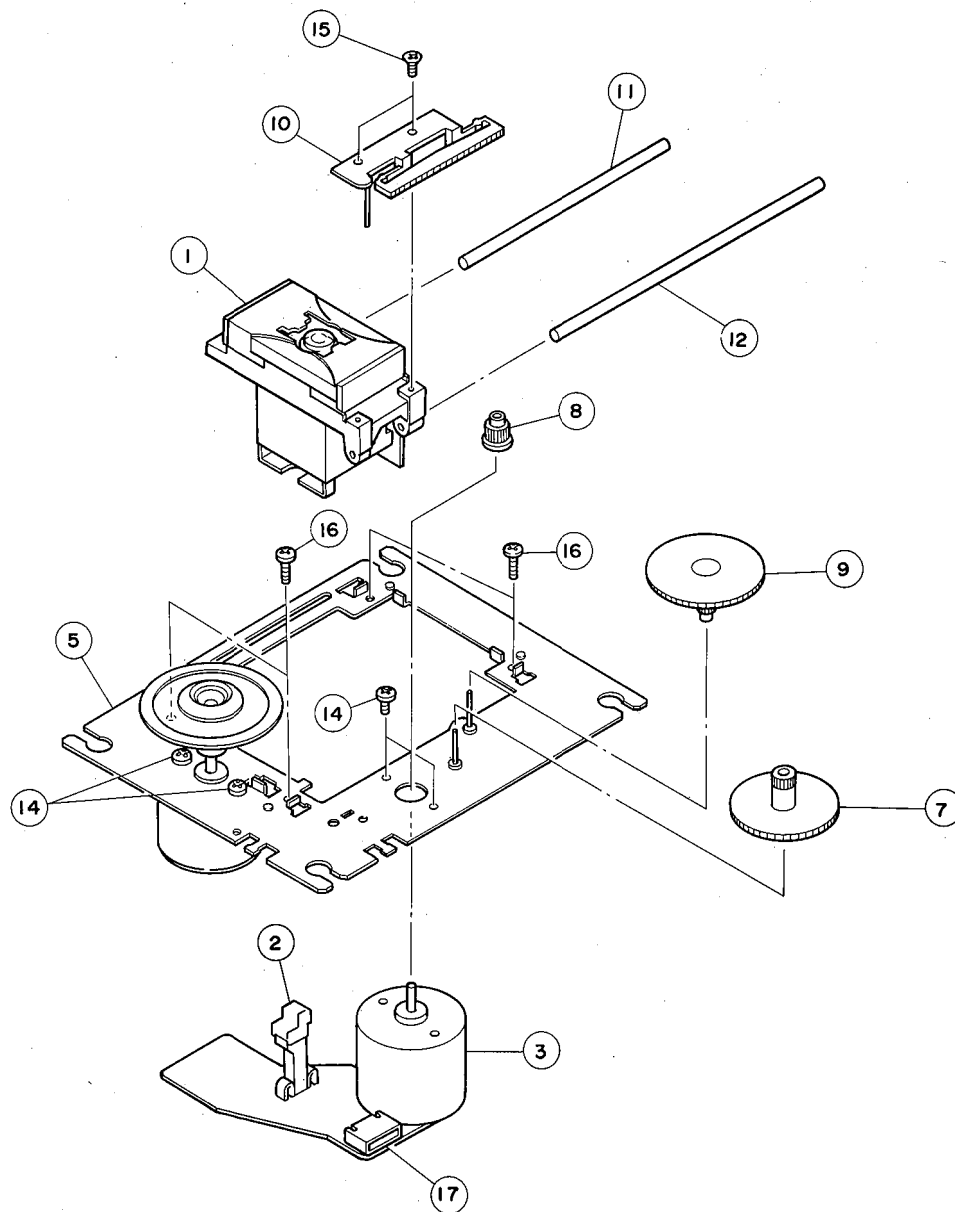
■ : Apply the grease
 G501 (P/No. TX911090)

1 ■ MECHANICAL PARTS (CM-100 Unit)

Ref. No.	PART NO.	Description	Remarks	Markets
* 1-1	VS036700	HOLDER, SENSOR		
1-3	EX601360	BIND HEAD P-TITE SCREW	3x10 FCRM3-BL	
2	VM444200	MOTOR	RF-500TB-14415	
* 3	VS033900	CHASSIS		
* 4	VS036400	SLIDE CAM		
* 5	VS035000	GEAR, LO2		
* 6	VS035300	GEAR, LO1		
* 7	VS036100	GEAR PULLEY		
* 8	VS036200	PULLEY		
* 9	VS035400	GEAR, CL2		
* 10	VS035500	GEAR, CL1		
* 11	VS036300	CAM, CL		
* 12	VS035700	GEAR		
* 13	VS035800	GEAR, WW		
* 14	VP627900	GEAR, CL		
* 16	VS036500	BELT, RT		
* 17	VQ775500	DAMPER, TRAY		
* 18	VQ776900	BELT	V	
* 19	VS037100	LEVER		
* 20	VS037400	SUPPORT, TRAY		
* 21	VS036600	SHAFT, 2		
* 22	VS036800	SPRING, CAM		
* 23	VT435400	SHEET	B	
* 30	VS778600	P.C.B. ASS'Y	CM	
40	VP128600	FERRITE CORE	FSOB160PB	
50	VA775100	BW HEAD P-TITE SCREW	3x8-10 FCRM3-BL	
51	EX601360	BIND HEAD P-TITE SCREW	3x10 FCRM3-BL	
52	VF617600	PAN HEAD P-TITE SCREW	2.6x8 FCRM3-BL	
53	ED326056	BIND HEAD SCREW	2.6x5 ZMC2-BL	

* New Parts

EXPLODED VIEW (PU Mecha. Unit)

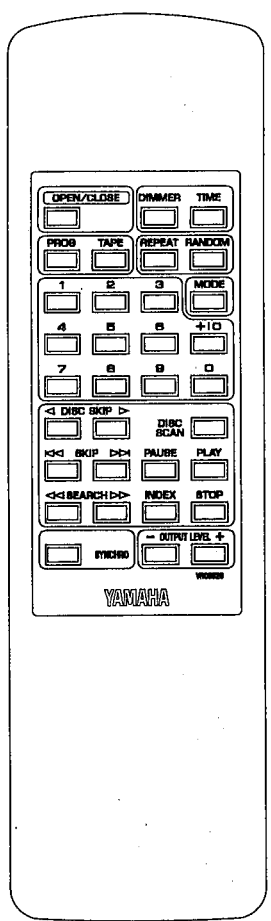
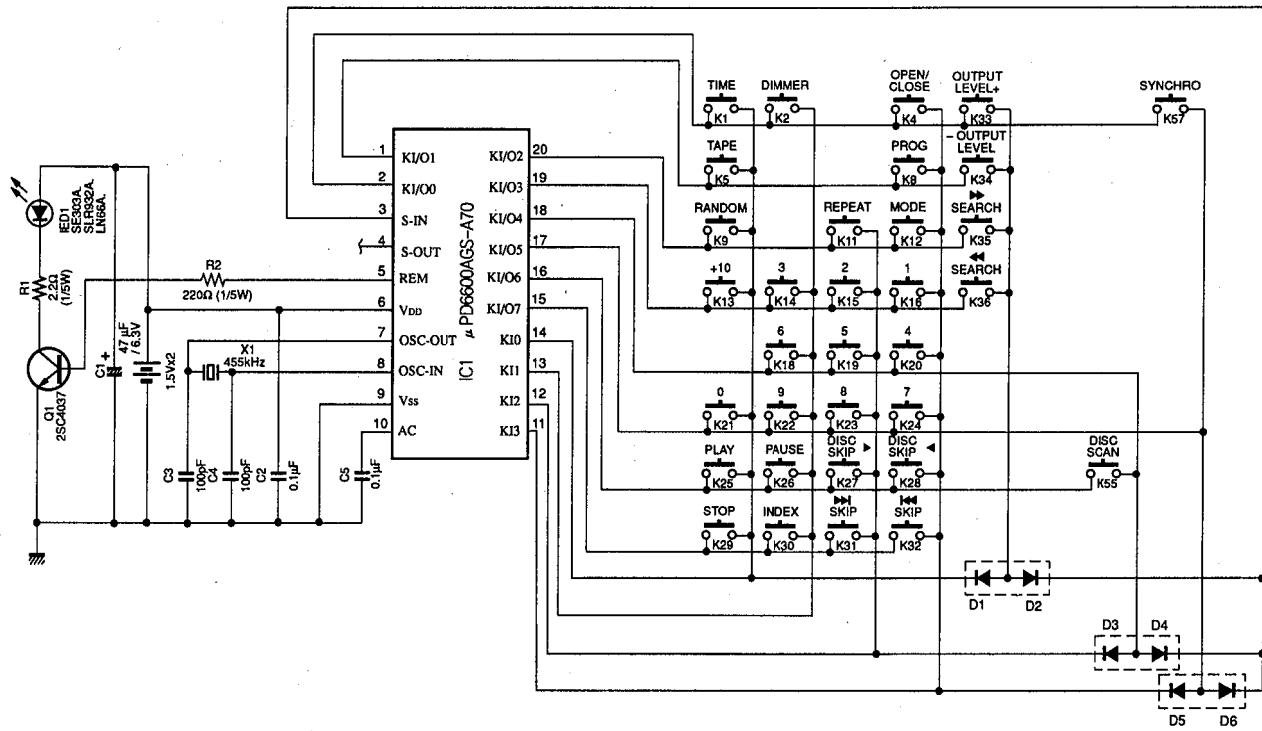


Ref. No.	PART NO.	Description	Remarks	Markets
	VM444300	PU MECHA. UNIT	CD90V1YA	
1	PX601520	PICK UP ASS'y	SF-91P	1EA0A41A03100
2	KX603540	LIMIT SWITCH		1EA4S13A00800
3	JX601050	MOTOR		1EA4M10A02100
5	NX611200	CHASSIS ASS'y		1EA0311A02900
7	CX618680	GEAR	MIDDLE	1EA2511A06300
8	CX618690	GEAR	MOTOR	1EA2511A06400
9	CX618700	GEAR	POWER	1EA2511A06500
10	AX615020	PLATE	RACK	1EA2731A01400
11	AX615030	GUIDE BAR		1EA2362A00400
12	AX615040	GUIDE BAR		1EA2362A00500
14	EX602300	PAN HEAD SCREW	1.7x2.5 ZMC2-Y	SE3PN172R5SE
15	EBO20056	FLAT HEAD SCREW	2x5 ZMC2-Y	SE1FN205ROSE
16	EX602310	SPECIAL SCREW		SFXEA01800
17	LX606800	CONNECTOR	6P	42369750000

* New Parts

CDC-655/CDC-901 REMOTE CONTROL TRANSMITTER

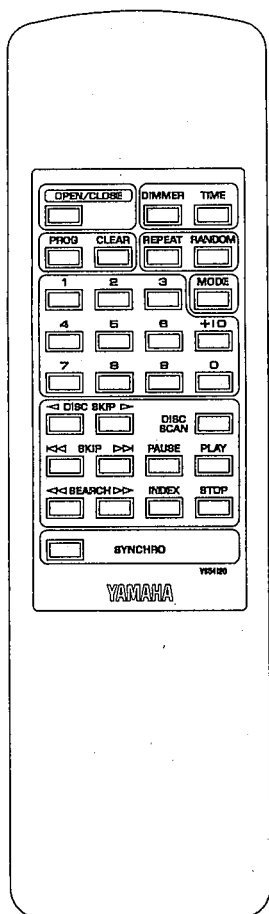
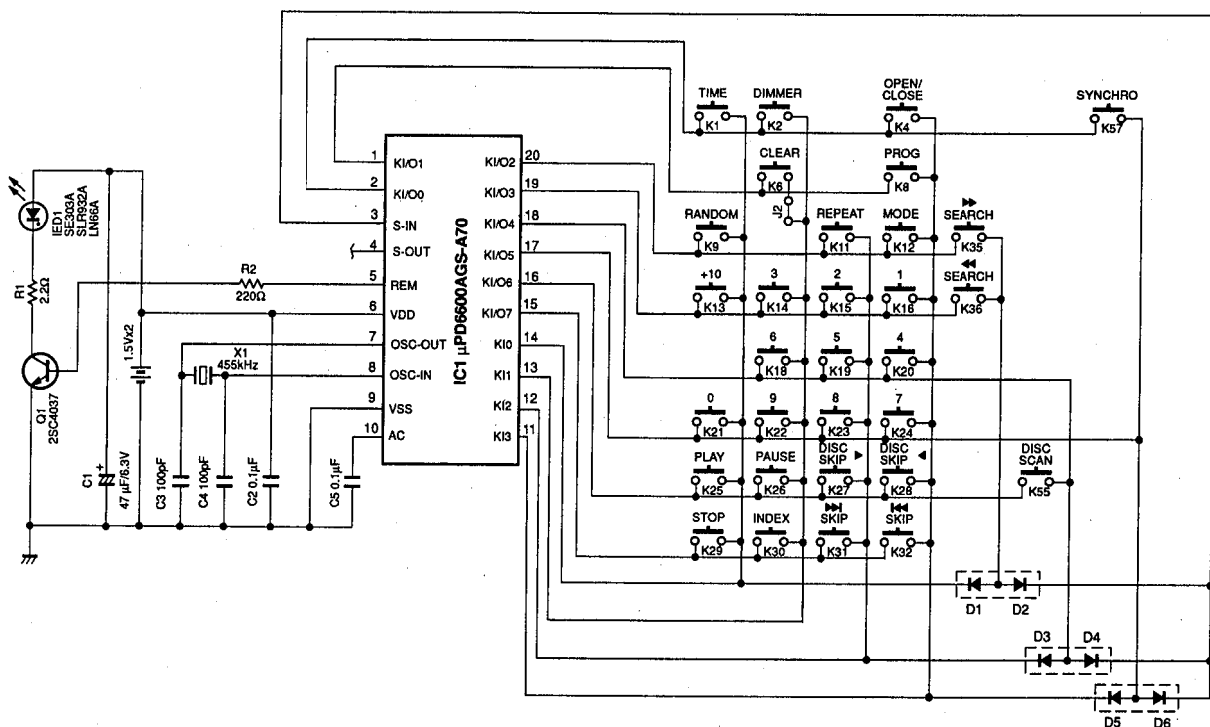
■ SCHEMATIC DIAGRAM



KEY No.	FUNCTION	CUSTOM CODE (HEX)	REVERSE CUSTOM CODE (HEX)	DATA CODE (HEX)	REMARKS D0 D7
K 1	TIME	79	86	0A	01010000
K 2	DIMMER	79	86	1E	01111000
K 4	OPEN/CLOSE	79	86	01	10000000
K 5	TAPE	79	86	57	11101010
K 8	PROG	79	86	0C	00110000
K 9	RANDOM	79	86	1B	11011000
K11	REPEAT	79	86	08	00010000
K12	MODE	79	86	00	00000000
K13	+10	79	86	1A	01011000
K14	3	79	86	13	11001000
K15	2	79	86	12	01001000
K16	1	79	86	11	10001000
K18	6	79	86	16	01101000
K19	5	79	86	15	10101000
K20	4	79	86	14	00101000
K21	0	79	86	10	00001000
K22	9	79	86	19	10011000
K23	8	79	86	18	00011000
K24	7	79	86	17	11101000
K25	PLAY	79	86	02	01000000
K26	PAUSE	79	86	55	10101010
K27	DISC SKIP ▶	79	86	4F	11110010
K28	◀ DISC SKIP	79	86	50	00001010
K29	STOP	79	86	56	01101010
K30	INDEX	79	86	0B	11010000
K31	SKIP ▶▶	79	86	07	11100000
K32	◀◀ SKIP	79	86	04	00100000
K33	OUTPUT LEVEL +	79	86	1D	10111000
K34	-OUTPUT LEVEL	79	86	1C	00111000
K35	SEARCH ▶▶	79	86	06	01100000
K36	◀◀ SEARCH	79	86	05	10100000
K55	DISC SCAN	79	86	53	11001010
K57	SYNCHRO	79	86	58	00011010

CDC-555/CDC-501 REMOTE CONTROL TRANSMITTER

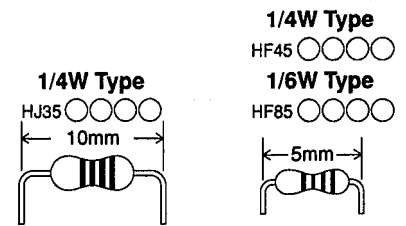
■ SCHEMATIC DIAGRAM



KEY No.	FUNCTION	CUSTOM CODE (HEX)	REVERSE CUSTOM CODE (HEX)	DATA CODE (HEX)	REMARKS	
					D0	D7
K1	TIME	79	86	0A	01010000	
K2	DIMMER	79	86	1E	01111000	
K4	OPEN/CLOSE	79	86	01	10000000	
K6	CLEAR	79	86	0D	10110000	
K8	PROG	79	86	0C	00110000	
K9	RANDOM	79	86	1B	11011000	
K11	REPEAT	79	86	08	00010000	
K12	MODE	79	86	00	00000000	
K13	+10	79	86	1A	01011000	
K14	3	79	86	13	11001000	
K15	2	79	86	12	01001000	
K16	1	79	86	11	10001000	
K18	6	79	86	16	01101000	
K19	5	79	86	15	10101000	
K20	4	79	86	14	00101000	
K21	0	79	86	10	00001000	
K22	9	79	86	19	10011000	
K23	8	79	86	18	00011000	
K24	7	79	86	17	11101000	
K25	PLAY	79	86	02	01000000	
K26	PAUSE	79	86	55	10101010	
K27	DISC SKIP ►	79	86	4F	11110010	
K28	◄ DISC SKIP	79	86	50	00001010	
K29	STOP	79	86	56	01101010	
K30	INDEX	79	86	0B	11010000	
K31	SKIP ►►	79	86	07	11100000	
K32	◄◄ SKIP	79	86	04	00100000	
K35	SEARCH ►►	79	86	06	01100000	
K36	◄◄ SEARCH	79	86	05	10100000	
K55	DISC SCAN	79	86	53	11001010	
K57	SYNCHRO	79	86	58	00011010	

Parts List for Carbon Resistors

Value	1/4W Type Part No.	1/6W Type Part No.	Value	1/4W Type Part No.	1/6W Type Part No.
1.0 Ω	HJ35 3100	HF85 3100	10 kΩ	HF45 7100	HF45 7100
1.8 Ω	HJ35 3180	*	11 kΩ	HF45 7110	HF45 7110
2.2 Ω	HJ35 3220	HF85 3220	12 kΩ	HJ35 7120	HF85 7120
3.3 Ω	HJ35 3330	HF85 3330	13 kΩ	HF45 7130	HF45 7130
4.7 Ω	HJ35 3470	HF85 3470	15 kΩ	HF45 7150	HF45 7150
5.6 Ω	HJ35 3560	HF85 3560	18 kΩ	HF45 7180	HF45 7180
10 Ω	HF45 4100	HF45 4100	22 kΩ	HF45 7220	HF45 7220
15 Ω	HJ35 4150	HF85 4150	24 kΩ	HF45 7240	HF45 7240
22 Ω	HF45 4220	HF45 4220	27 kΩ	HJ35 7270	HF85 7270
27 Ω	HJ35 4270	HF85 4270	30 kΩ	HF45 7300	HF45 7300
33 Ω	HF45 4330	HF45 4330	33 kΩ	HF45 7330	HF45 7330
39 Ω	HJ35 4470	HF85 4390	36 kΩ	HF45 7360	HF45 7360
47 Ω	HF45 4470	HF45 4470	39 kΩ	HF45 7390	HF45 7390
56 Ω	HF45 4560	HF45 4560	47 kΩ	HF45 7470	HF45 7470
68 Ω	HF45 4680	HF45 4680	51 kΩ	HF45 7510	HF45 7510
75 Ω	HF45 4750	HF45 4750	56 kΩ	HF45 7560	HF45 7560
82 Ω	HF45 4820	HF45 4820	62 kΩ	HF45 7620	HF45 7620
91 Ω	HF45 4910	HF45 4910	68 kΩ	HF45 7680	HF45 7680
100 Ω	HF45 5100	HF45 5100	82 kΩ	HF45 7820	HF45 7820
110 Ω	HJ35 5110	HF85 5110	91 kΩ	HF45 7910	HF45 7910
120 Ω	HF45 5120	HF45 5120	100 kΩ	HF45 8100	HF45 8100
150 Ω	HF45 5150	HF45 5150	110 kΩ	HF45 8110	HF45 8110
160 Ω	HJ35 5160	*	120 kΩ	HF45 8120	HF45 8120
180 Ω	HF45 5180	HF45 5180	150 kΩ	HF45 8150	HF45 8150
200 Ω	HF45 5200	HF45 5200	180 kΩ	HF45 8180	HF45 8180
220 Ω	HF45 5220	HF45 5220	220 kΩ	HJ35 8220	HF85 8220
270 Ω	HF45 5270	HF45 5270	270 kΩ	HF45 8270	HF45 8270
330 Ω	HF45 5330	HF45 5330	300 kΩ	HF45 8300	HF45 8300
390 Ω	HF45 5390	HF45 5390	330 kΩ	HF45 8330	HF45 8330
430 Ω	HF45 5430	HF45 5430	390 kΩ	HJ35 8390	HF85 8390
470 Ω	HF45 5470	HF45 5470	470 kΩ	HF45 8470	HF45 8470
510 Ω	HF45 5510	HF45 5510	560 kΩ	HJ35 8560	HF85 8560
560 Ω	HF45 5560	HF45 5560	680 kΩ	HJ35 8680	HF85 8680
680 Ω	HF45 5680	HF45 5680	820 kΩ	HJ35 8820	HF85 8820
820 Ω	HF45 5820	HF45 5820	1.0 MΩ	HF45 9100	HF45 9100
910 Ω	HF45 5910	HF45 5910	1.2 MΩ	HJ35 9120	*
1.0 kΩ	HF45 6100	HF45 6100	1.5 MΩ	HJ35 9150	HF85 9150
1.2 kΩ	HF45 6120	HF45 6120	1.8 MΩ	HJ35 9180	HF85 9180
1.5 kΩ	HF45 6150	HF45 6150	2.2 MΩ	HJ35 9220	HF85 9220
1.8 kΩ	HF45 6180	HF45 6180	3.3 MΩ	HJ35 9330	HF85 9330
2.0 kΩ	HJ35 6200	HF85 6200	3.9 MΩ	HJ35 9390	*
2.2 kΩ	HF45 6220	HF45 6220	4.7 MΩ	HJ35 9470	HF85 9470
2.4 kΩ	HJ35 6240	HF85 6240			
2.7 kΩ	HF45 6270	HF45 6270			
3.0 kΩ	HF45 6300	HF45 6300			
3.3 kΩ	HF45 6330	HF45 6330			
3.6 kΩ	HJ35 6360	HF85 6360			
3.9 kΩ	HF45 6390	HF45 6390			
4.7 kΩ	HF45 6470	HF45 6470			
5.1 kΩ	HF45 6510	HF45 6510			
5.6 kΩ	HF45 6560	HF45 6560			
6.8 kΩ	HF45 6680	HF45 6680			
8.2 kΩ	HF45 6820	HF45 6820			
9.1 kΩ	HF45 6910	HF45 6910			



CDC-655/CDC-901
CDC-555/CDC-501