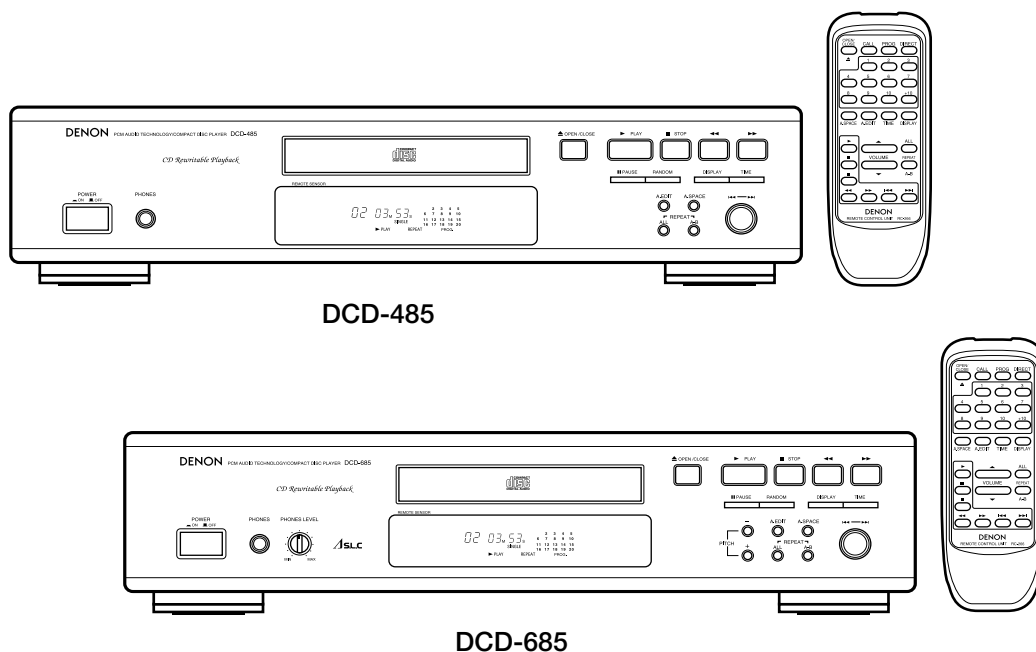


# DENON

Hi-Fi Component

## SERVICE MANUAL MODEL DCD-485/685

STEREO CD PLAYER



● Some illustration using in this service manual is slightly from the actual set.

### NIPPON COLUMBIA CO., LTD.

SAFETY PRECAUTIONS

SAFETY PRECAUTIONS

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

LEAKAGE CURRENT CHECK

Before reterning 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 miliamps, or if hte resistance from chassis to either side of the power cord is less than 460 kohms, the unit is detective.

SPECIFICATIONS

SPECIFICATIONS

|                           | DCD-485                                                                                                                                                         | DCD-685        |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| ■ AUDIO                   |                                                                                                                                                                 |                |
| Number of Channels:       | 2 channels                                                                                                                                                      | ←              |
| Frequency Responese:      | 2 to 20 kHz                                                                                                                                                     | ←              |
| Dynamic Range:            | 98 dB                                                                                                                                                           | 100 dB         |
| Signal to Noise ratio:    | 105 dB                                                                                                                                                          | 110 dB         |
| Harmonic distortion:      | 0.003 % (1 kHz)                                                                                                                                                 | ←              |
| Separation:               | 102 dB (1 kHz)                                                                                                                                                  | 103 dB (1 kHz) |
| Wow and Flutter:          | Below measurable limit:<br>(± 0.001 % W. peak)                                                                                                                  | ←              |
| Output Voltage:           | 0.2 to 2.0 V                                                                                                                                                    | ←              |
| ■ DISCS                   | Compact Disc format                                                                                                                                             | ←              |
| ■ GENERAL CHARACTERISTICS |                                                                                                                                                                 |                |
| Power Supply:             | AC 230 V, 50 Hz                                                                                                                                                 | ←              |
| Power consumption:        | 11 W                                                                                                                                                            | 12 W           |
| Dimensions:               | 434 (W) x 100 (H) x 285 (D) mm                                                                                                                                  | ←              |
| Mass:                     | 3.4 kg                                                                                                                                                          | 3.6 kg         |
| ■ FUNCTIONS AND DISPLAY   |                                                                                                                                                                 |                |
| Functions:                | Automatic searchi, programmed playback, repeat playback, manual search, auto space, time mode, auto edit, dimmer, random playback, pitch control (DCD-685 only) |                |
| Display:                  | Track number, time, music calendar and engaged modes                                                                                                            |                |
| Others:                   | Headphones jack                                                                                                                                                 |                |
| ■ REMOTE CONTROL UNIT     | RC-266                                                                                                                                                          |                |
| Remote Control System:    | Infrared pulse system                                                                                                                                           |                |
| Power Supply:             | 3V DC; two R6P (standard size AA) dry cell batteries                                                                                                            |                |
| External Dimensions:      | 54.5 (W) x 140 (H) x 24.8 (D) mm                                                                                                                                |                |
| Mass:                     | 85 g including batteries                                                                                                                                        |                |

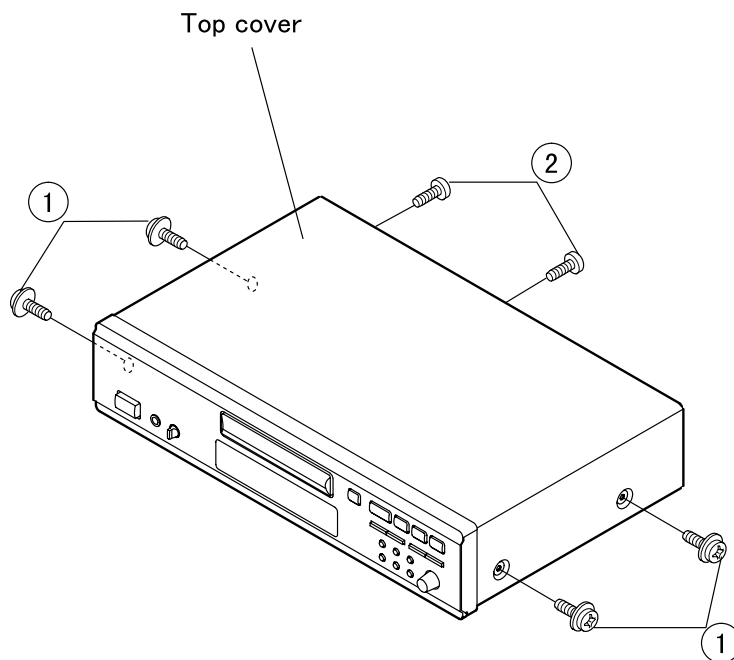
\* Specifications and design are subject to change without notice for purpose of improvement.

## DISASSEMBLY

(Follow the procedure below in reverse order when reassembling)

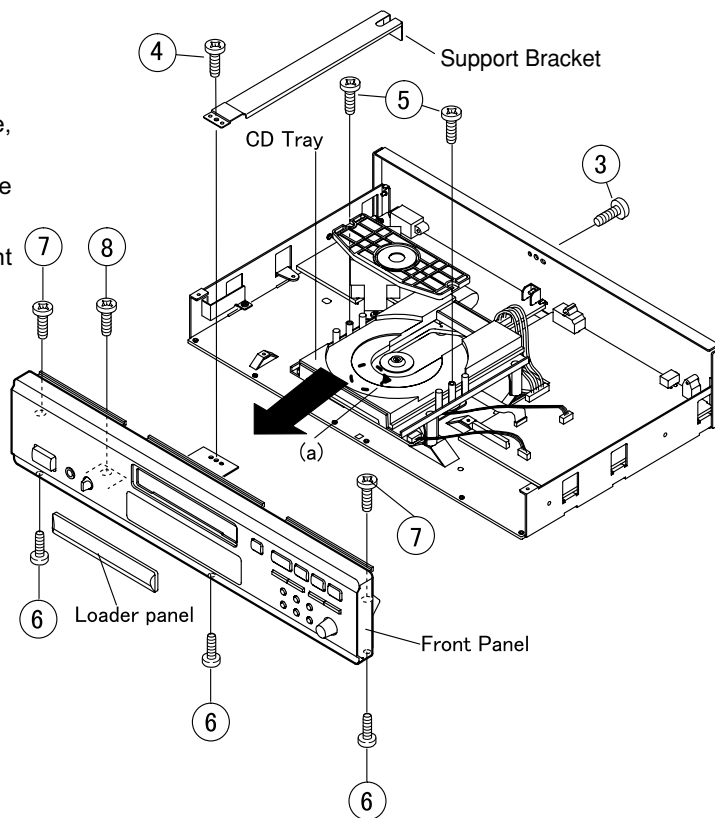
### 1. Top Cover

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.



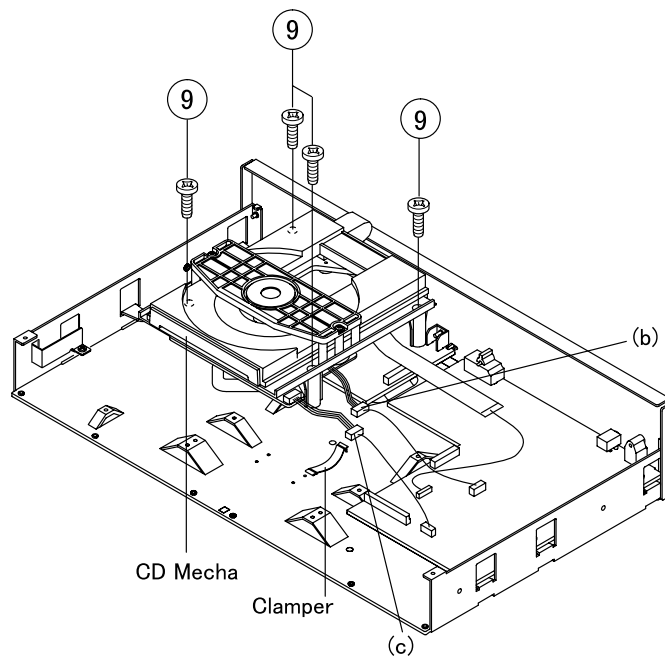
### 2. Front Panel

1. Remove 1 screw ③ on the Rear Panel and 1 screw ④ fixing Support Bracket (b).  
(only DCD-485)
2. Take off the Mecha Cover after removing 2 screws ⑤.  
Open the Tray by turning the Gear (a) clockwise, then detach the Loader Panel.
3. Remove 3 screws ⑥ on the bottom edge of the Front Panel.
4. Remove 2 screws ⑦, at L/R ends of the Front Panel and 1 screw ⑧ fixing Phone P.W.B.



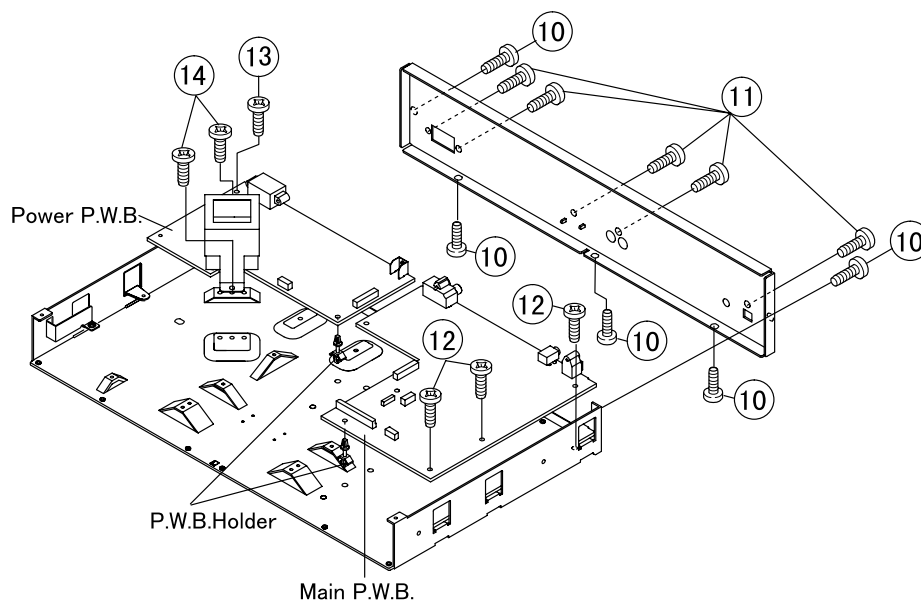
### 3. CD Mecha. Unit

1. Remove 4 screws ⑨ 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 ⑩, 5 screws ⑪ on the Rear Panel and detach it.
2. Remove 3 screws ⑫ fixing the Main P.W.B.
3. Unfasten 1 P.W.B. Holder to detach the Main P.W.B.
4. Remove 1 screw ⑬ and 2 screw ⑭ fixing the Power P.W.B.
5. Unfasten 1 P.W.B. Holder to detach the Power P.W.B.

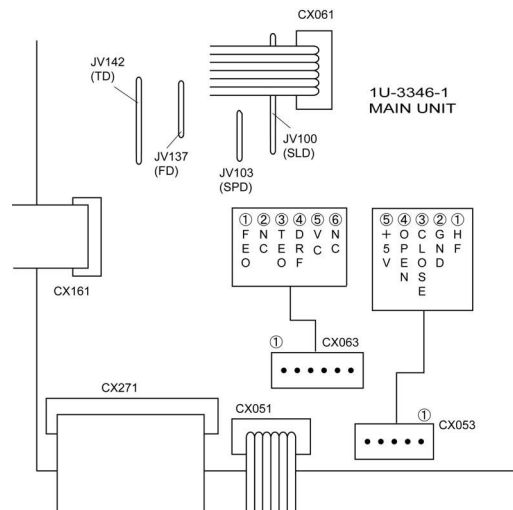


## CD TEST MODE

- Setting of the test mode

How to start the test mode: Turn on the power in the condition that CLOSE (Pin No.③) and OPEN (Pin No.④) of CX053 are being shorted. ( “01” is indicated on the DISPLAY)

To exit from the test mode, turn off the power. (Refer to Fig. 1 “Test Point Layout”)



**Fig. 1 “Test Point” Layout**

\* Laser light of the pickup is always emitted regardless of DISC loading in the test mode.

You may lose your eyesight if you look into the laser directly.

So be careful enough when operating in the test mode.

- Used DISC: A-BEX TCD784

- Explanation of each button

\* Use only the buttons described below for operations while in the test mode, and don't push any other buttons.

| Names of buttons                 | Operation                                                                                                                                                                 |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OPEN / CLOSE                     | * Loads or unloads DISC                                                                                                                                                   |
| PLAY                             | * Emits laser light<br>* Repeats search operation (No DISC condition: While it's pressed)<br>* Actuates focus servo (In case of DISC loaded)<br>* Actuates tracking servo |
| STOP                             | * Stops operation                                                                                                                                                         |
| PAUSE                            | * Performs auto adjustment                                                                                                                                                |
| MANUAL SEARCH<br>FORWARD/REVERSE | * Moves pickup                                                                                                                                                            |

- How to check the test mode

- ( 1 ) DISC discrimination, adjustment

- \* Insert DISC, and press the PAUSE button.
- \* “06 Adj” is displayed, and discrimination of DISC size 8 cm/12 cm, discrimination of DISC reflectance (CD, CD-R/CD-RW), adjustment of focus, tracking offset, and EF balance will be performed. (Adjusted values are not displayed: Refer to Fig. 2, 3)

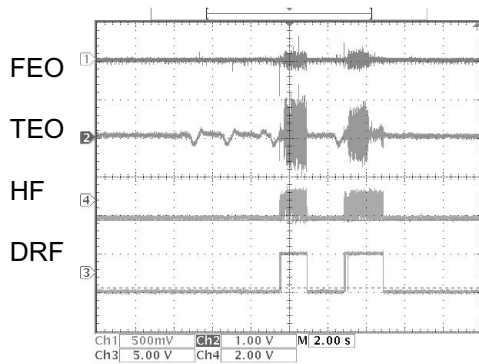


Fig. 2 DISC discrimination, adjustment  
(Case of CD-RW)

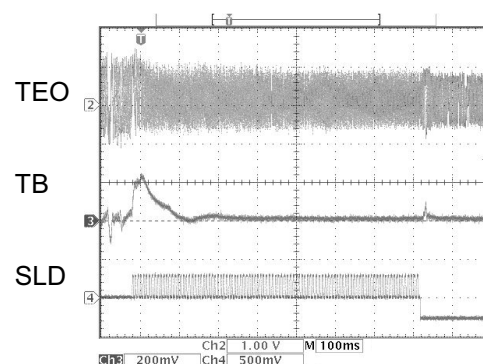


Fig. 3  
Adjustment of EF balance

- \* After completing the discrimination and adjustment, it becomes stop condition.
- \* Once discrimination of DISC has been carried out in the “06 Adj” mode, discrimination of size and reflectance is no longer made, and only adjustment will be performed.

- ( 2 ) Checking of servo state

- \* Press the PLAY button after performing above (1) “DISC discrimination, adjustment”.
- \* “02 L on” is displayed, and the laser will start to light. (The pickup may vibrate with a rattling noise if DISC has been loaded, but this is not abnormal.)
- \* Press the PLAY button again.
- \* “03 F on” is displayed. DISC starts turning, and focus servo will be actuated. (Refer to Fig. 4, 5)

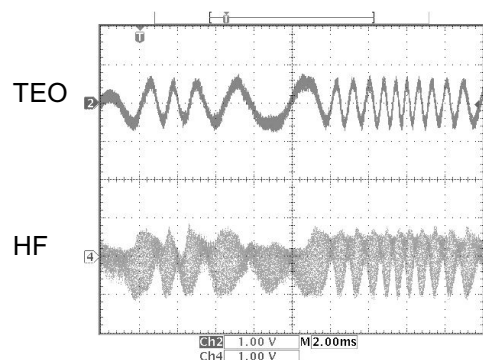
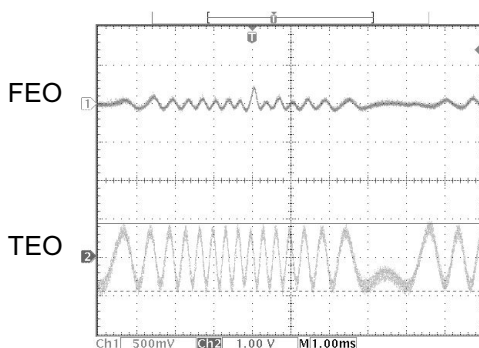


Fig. 4 In “03 F on”

Fig. 5 In “03 F on”

- \* Press the PLAY button again.
- \* “04 t on” is displayed. Tracking, CLV, and slide servo will be actuated.
- \* Monitor HF signal using the test terminals, HF of CX053 (Pin No. ① ) and VC of CX063 (Pin No. ⑤ : 2.5V ref. signal). Check that the signal's amplitude is  $1.5V \pm 0.3V_{p-p}$ . (Refer to Fig. 6)

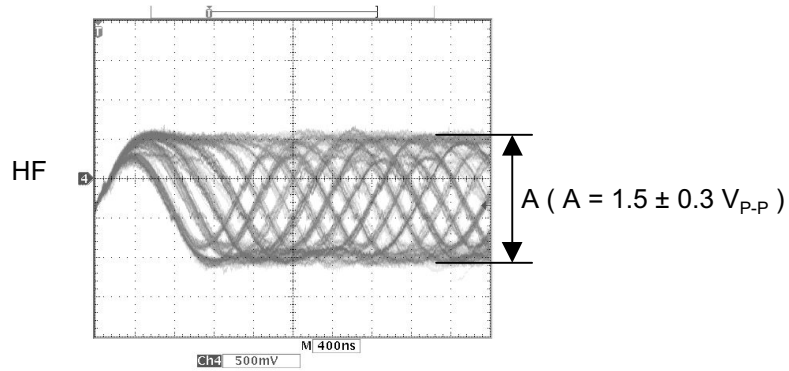
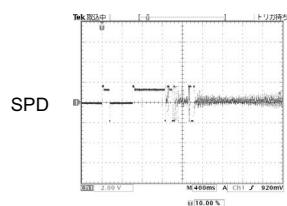
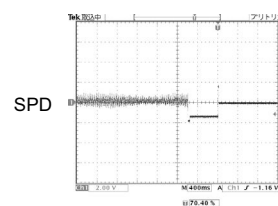


Fig. 6 In “04 t on”

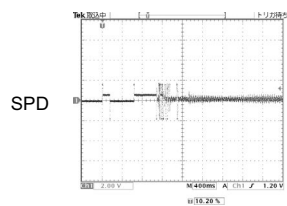
## Wave-forms of each point



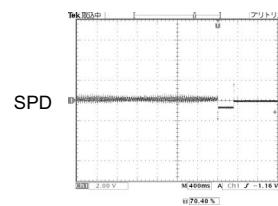
When 12 cm DISC  
start



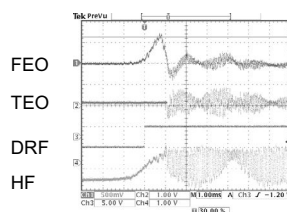
When 12 cm DISC  
stop



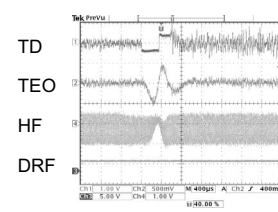
When 8 cm DISC  
start



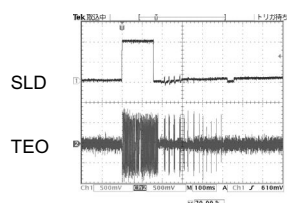
When 8 cm DISC  
stop



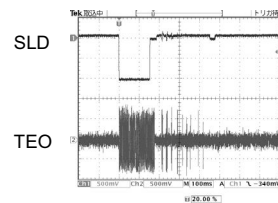
When focus servo  
on



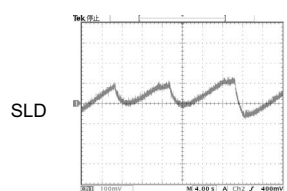
During PAUSE



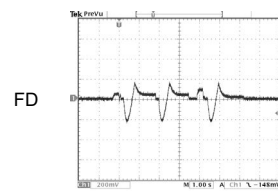
Track search  
(when forward)



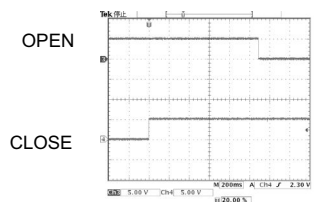
Track search  
(when reverse)



During PLAY



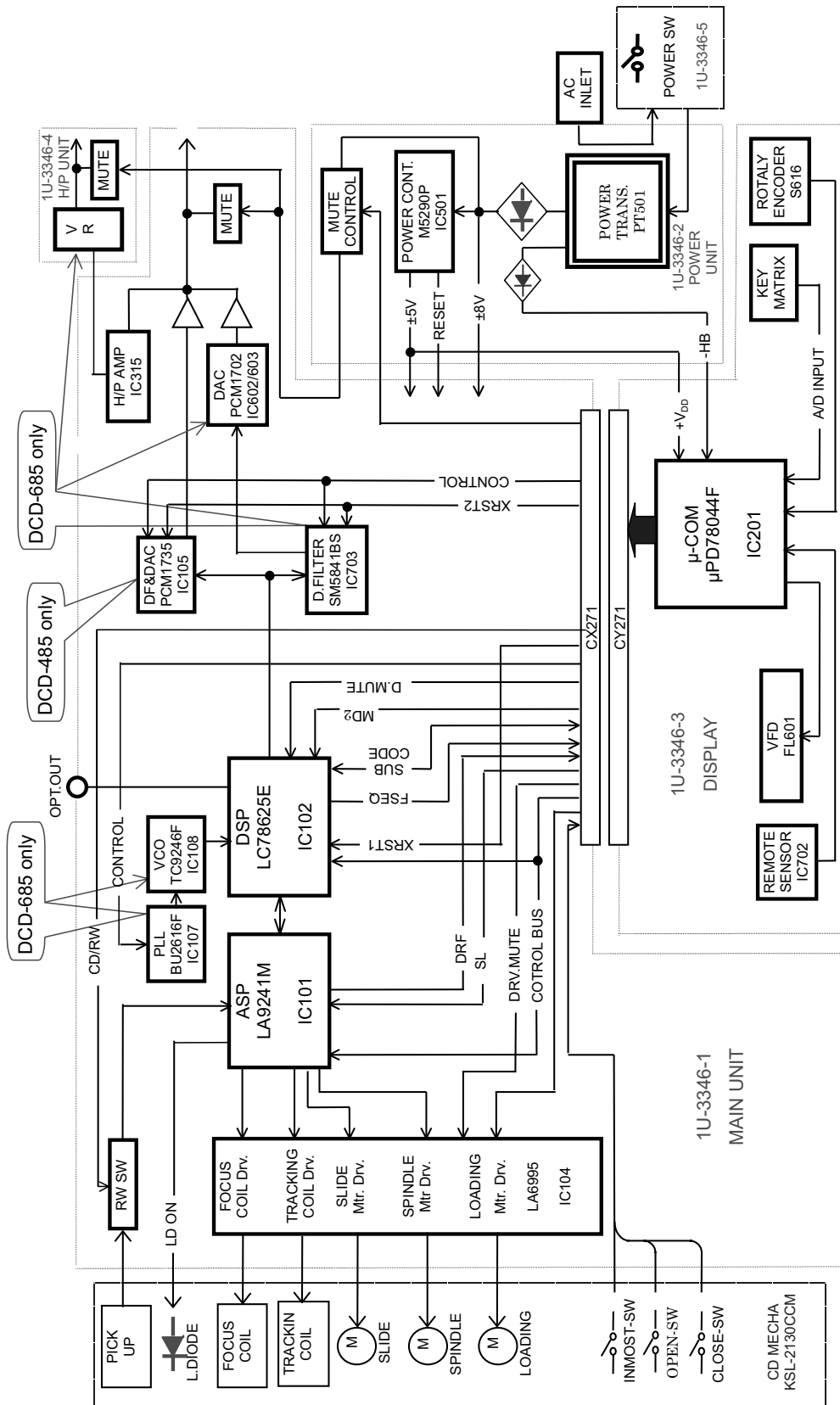
Focus search  
(no DISC)



When the tray  
OPEN

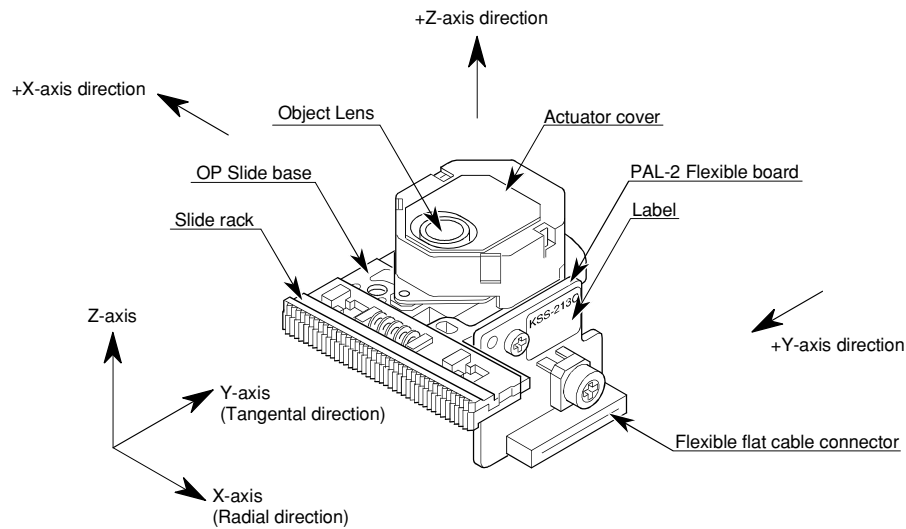


## BLOCK DIAGRAM

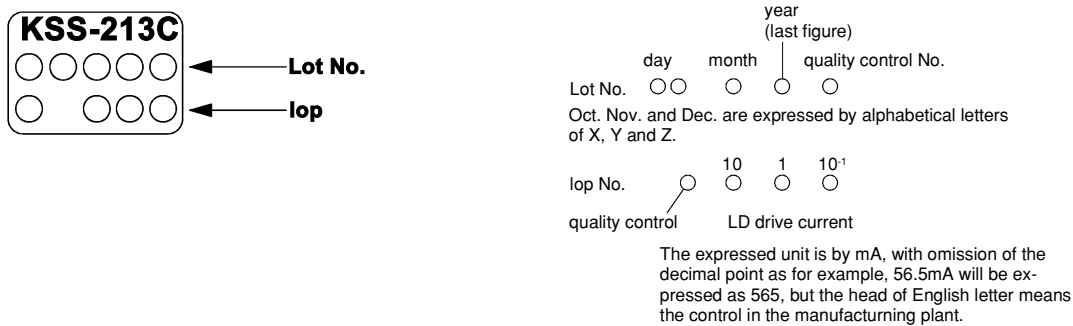


# NOTE FOR HANDLING OF LASER PICK-UP

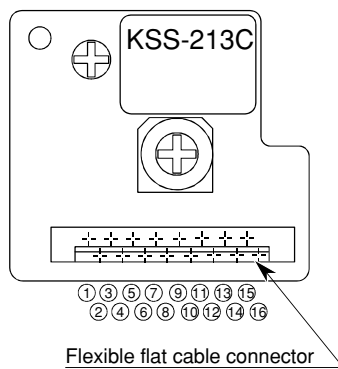
## • Description of the Components



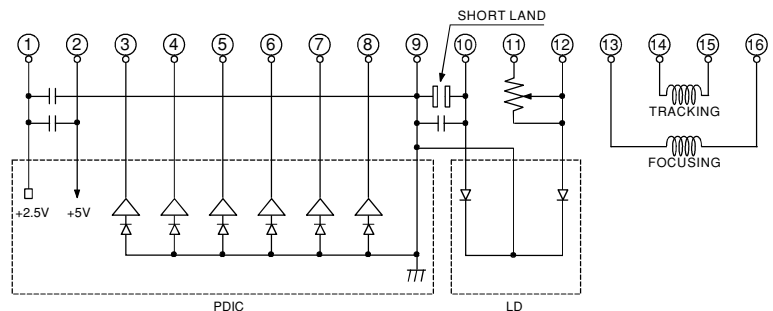
## • Label



## • Pin Connector



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



• **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-temperated 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  $7 \times 10^3$  W/cm<sup>2</sup> 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<sub>2</sub>O<sub>3</sub>, AsCl<sub>3</sub> 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

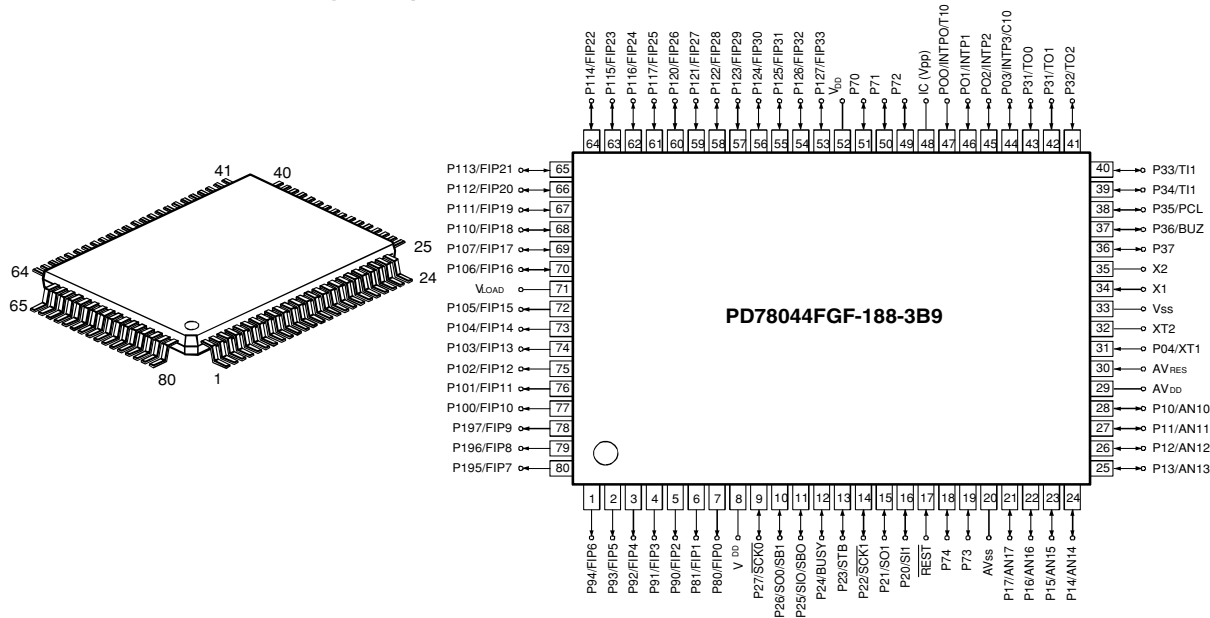
As KSS-213C comprises built-in RF Amp and APC circuit, resists stronger against external electrostatic damages than the former typed pickup. However, there is possibility of pickup deterioration in the following cases.

- (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)).

# SEMICONDUCTORS

## ● IC's

### μPD78044FGF-188-3B9 (IC601)



### μPD78044FGF-188-3B9 Terminal Function

| Pin No. | Terminal    | Port                          | I/O | Typ | Rst | Ini | Act | Ext   | Function                                                        |
|---------|-------------|-------------------------------|-----|-----|-----|-----|-----|-------|-----------------------------------------------------------------|
| 1       | P94/FIP6    | NC                            | O   | C   | Hz  | —   | —   | —     | Not used (Open)                                                 |
| 2       | P93/FIP5    | 6G                            | O   | C   | Hz  | L   | H   | P. D  | VFD grid 6G (EMPHASIS, PLAY, PAUSE, REPEAT)                     |
| 3       | P92/FIP4    | 5G                            | O   | C   | Hz  | L   | H   | P. D  | VFD grid 5G (11~20, A-B, PROG, ●)                               |
| 4       | P91/FIP3    | 4G                            | O   | C   | Hz  | L   | H   | P. D  | VFD grid 4G (1~10)                                              |
| 5       | P90/FIP2    | 3G                            | O   | C   | Hz  | L   | H   | P. D  | VFD grid 3G (Seconds Digit, S, SINGLE)                          |
| 6       | P81/FIP1    | 2G                            | O   | C   | Hz  | L   | H   | P. D  | VFD grid 2G (Minutes Digit, M, TOTAL)                           |
| 7       | P80/FIP0    | 1G                            | O   | C   | Hz  | L   | H   | P. D  | VFD grid 1G (Track No., A.SPACE)                                |
| 8       | VDD         | VDD                           | —   | —   | —   | —   | —   | —     | Positive power (Connect to +5V)                                 |
| 9       | P27/SCK0    | MCK                           | O   | B   | Hz  | H   | ↑   | P. UP | SM5841/PCM1735/BU2616 mode control clock output                 |
| 10      | P26/S00/SB1 | MDT                           | O   | B   | Hz  | —   | —   | P. UP | SM5841/PCM1735/BU2616 mode control data output                  |
| 11      | P25/SI0/SB0 | NC                            | I   | B   | Hz  | —   | —   | P. DG | Not used (Connect to GND)                                       |
| 12      | P24/BUSY    | NC                            | I   | B   | Hz  | —   | —   | P. DG | Not used (Connect to GND)                                       |
| 13      | P23/STB     | MLE                           | O   | B   | Hz  | —   | ↑   | P. UP | SM5841/PCM1735 mode control latch output                        |
| 14      | P22/SCK1    | CQCK                          | O   | B   | Hz  | —   | ↑   | —     | DSP, ASP Command clock & SUBQ readout clock output              |
| 15      | P21/SO1     | COIN                          | O   | B   | Hz  | —   | —   | —     | DSP, ASP Command data output                                    |
| 16      | P20/SI1     | SUBQ                          | I   | B   | Hz  | —   | —   | —     | DSP sub-code Q data input                                       |
| 17      | RESET       | RESET                         | I   | —   | —   | —   | L   | —     | Reset signal input                                              |
| 18      | P74         | NC                            | I   | B   | Hz  | —   | —   | P. DG | Not used (Connect to GND)                                       |
| 19      | P73         | XTAL                          | O   | B   | Hz  | H   | L   | P. UP | TC9246XTAL MODE change Lo:ON (Pitch 0), Hi:OFF (Variable pitch) |
| 20      | AVss        | AVss                          | —   | —   | —   | —   | —   | —     | GND for A/D converter                                           |
| 21      | P17/ANI7    | DSP X $\overline{\text{RST}}$ | O   | B   | Hz  | L   | L   | P. DG | DSP reset signal output                                         |
| 22      | P16/ANI6    | DF X $\overline{\text{RST}}$  | O   | B   | Hz  | L   | L   | P. DG | Digital filter reset signal output                              |
| 23      | P15/ANI5    | JOG B                         | I   | B   | Hz  | —   | —   | P. UP | Rotally encoder JOG B input                                     |
| 24      | P14/ANI4    | JOG A                         | I   | B   | Hz  | —   | —   | P. UP | Rotally encoder JOG A input                                     |
| 25      | P13/ANI3    | AD3                           | I   | B   | Hz  | —   | A   | P. UP | Key data input 3 (A/D)                                          |
| 26      | P12/ANI2    | AD2                           | I   | B   | Hz  | —   | A   | P. UP | Key data input 2 (A/D)                                          |
| 27      | P11/ANI1    | AD1                           | I   | B   | Hz  | —   | A   | P. UP | Key data input 1 (A/D)                                          |
| 28      | P10/ANI0    | AD0                           | I   | B   | Hz  | —   | A   | P. UP | Key data input 0 (A/D)                                          |
| 29      | AVDD        | AVDD                          | —   | —   | —   | —   | —   | —     | A/D converter analog power (Connect to +5V)                     |
| 30      | AVREF       | AVREF                         | I   | —   | —   | —   | —   | —     | A/D converter Ref. V input (Connect to +5V)                     |

| Pin No. | Terminal      | Port     | I/O | Typ | Rst | Ini | Act | Ext   | Function                                      |
|---------|---------------|----------|-----|-----|-----|-----|-----|-------|-----------------------------------------------|
| 31      | P04/XT1       | NC       | I   | A   | –   | –   | –   | P. DG | Not used (Connect to GND)                     |
| 32      | XT2           | NC       | –   | –   | –   | –   | –   | –     | Not used (Open)                               |
| 33      | Vss           | GND      | –   | –   | –   | –   | –   | –     | GND                                           |
| 34      | X1            | X1       | I   | A   | –   | –   | –   | –     | Main system clock input                       |
| 35      | X2            | X2       | –   | –   | –   | –   | –   | –     | Main system clock input                       |
| 36      | P37           | MCS      | O   | B   | Hz  | H   | L   | P. DG | PCM1735 chip select output                    |
| 37      | P36/BUZ       | MCE      | O   | B   | Hz  | L   | L   | –     | BU2616 chip enable output                     |
| 38      | P35/PCL       | RWC      | O   | B   | Hz  | L   | L   | –     | DSP read / write control output               |
| 39      | P34/TI2       | SL+      | O   | B   | Hz  | L   | H   | –     | ASP sled drive signal output                  |
| 40      | P33/TI1       | SL-      | O   | B   | Hz  | L   | H   | –     | ASP sled drive signal output                  |
| 41      | P32/T02       | NC       | I   | B   | Hz  | –   | –   | P. DG | Not used (Connect to GND)                     |
| 42      | P31/T01       | CD/RW    | O   | B   | Hz  | H   | L   | P. DG | CD / RW Gain change output                    |
| 43      | P30/T00       | SEARCH   | O   | B   | Hz  | L   | H   | P. DG | Servo control output at search                |
| 44      | P03/INTP3/CI0 | REMOCON  | I   | B   | Hz  | –   | ↑   | –     | Remote control signal input                   |
| 45      | P02/INTP2     | WRQ      | I   | B   | Hz  | L   | H   | –     | DSP SUBQ output standby input                 |
| 46      | P01/INTP1     | DRF      | I   | B   | Hz  | L   | H   | –     | ASP DEFECT RF level detect input              |
| 47      | P00/INTP0/TI0 | NC       | I   | A   | Hz  | –   | –   | P. UP | Not used (Connect to GND)                     |
| 48      | IC            | IC       | –   | –   | –   | –   | –   | –     | Connect to GND                                |
| 49      | P72           | FSEQ     | I   | B   | Hz  | L   | H   | –     | DSP sync signal detect input                  |
| 50      | P71           | A.MUTE   | O   | B   | Hz  | H   | H   | P. UP | Analog mute output OFF: Lo, ON: Hi            |
| 51      | P70           | DRV.MUTE | O   | B   | Hz  | H   | –   | P. UP | MOTOR DRIVER MUTE control output Hi:Output ON |
| 52      | VDD           | VDD      | –   | –   | –   | –   | –   | –     | Positive power (Connect to +5V)               |
| 53      | P127/FIP33    | OPSW     | I   | C   | Hz  | –   | L   | P. UP | Loader open position detect switch input      |
| 54      | P126/FIP32    | CLSW     | I   | C   | Hz  | –   | L   | P. UP | Loader close position detect switch input     |
| 55      | P125/FIP31    | INSW     | I   | C   | Hz  | –   | L   | P. UP | Pickup inner position detect switch input     |
| 56      | P124/FIP30    | OPEN     | O   | C   | Hz  | L   | H   | P. DG | Loader open drive LA6559 signal output        |
| 57      | P123/FIP29    | CLOSE    | O   | C   | Hz  | L   | H   | P. DG | Loader close drive LA6559 signal output       |
| 58      | P122/FIP28    | MODEL    | I   | C   | Hz  | –   | –   | –     | Model distinction input Lo:455, Hi:555        |
| 59      | P121/FIP27    | NC       | I   | C   | Hz  | –   | –   | P. DG | Not used (Open)                               |
| 60      | P120/FIP26    | NC       | I   | C   | Hz  | –   | –   | P. DG | Not used (Open)                               |
| 61      | P117/FIP25    | P1       | O   | C   | Hz  | L   | H   | P. D  | VFD segment P1 (1a, 1, 11, EMPHASIS)          |
| 62      | P116/FIP24    | P2       | O   | C   | Hz  | L   | H   | P. D  | VFD segment P2 (1b, 2, 12, PLAY)              |
| 63      | P115/FIP23    | P3       | O   | C   | Hz  | L   | H   | P. D  | VFD segment P3 (1c, 3, 13, PAUSE)             |
| 64      | P114/FIP22    | P4       | O   | C   | Hz  | L   | H   | P. D  | VFD segment P4 (1d, 4, 14, REPEAT)            |
| 65      | P113/FIP21    | P5       | O   | C   | Hz  | L   | H   | P. D  | VFD segment P5 (1e, 5, 15)                    |
| 66      | P112/FIP20    | P6       | O   | C   | Hz  | L   | H   | P. D  | VFD segment P6 (1f, 6, 16)                    |
| 67      | P111/FIP19    | P7       | O   | C   | Hz  | L   | H   | P. D  | VFD segment P7 (1g, 7, 17)                    |
| 68      | P110/FIP18    | P8       | O   | C   | Hz  | L   | H   | P. D  | VFD segment P8 (2a, 8, 18)                    |
| 69      | P107/FIP17    | P9       | O   | C   | Hz  | L   | H   | P. D  | VFD segment P9 (2b, 9, 19)                    |
| 70      | P106/FIP16    | P10      | O   | C   | Hz  | L   | H   | P. D  | VFD segment P10 (2c, 10, 20)                  |
| 71      | VLOAD         | -HB      | I   | C   | –   | –   | –   | –     | Power for FL display (-HB)                    |
| 72      | P105/FIP15    | P11      | O   | C   | Hz  | L   | H   | P. D  | VFD segment P11 (2d, A-B)                     |
| 73      | P104/FIP14    | P12      | O   | C   | Hz  | L   | H   | P. D  | VFD segment P12 (2e, PROG)                    |
| 74      | P103/FIP13    | P13      | O   | C   | Hz  | L   | H   | P. D  | VFD segment P13 (2f, ●)                       |
| 75      | P102/FIP12    | P14      | O   | C   | Hz  | L   | H   | P. D  | VFD segment P14 (2g)                          |
| 76      | P101/FIP11    | P15      | O   | C   | Hz  | L   | H   | P. D  | VFD segment P15 (A.SPACE, TOTAL, SINGLE)      |
| 77      | P100/FIP10    | P16      | O   | C   | Hz  | L   | H   | P. D  | VFD segment P16 (M, S)                        |
| 78      | P97/FIP9      | NC       | O   | C   | Hz  | –   | –   | –     | Open (Not used)                               |
| 79      | P96/FIP8      | NC       | O   | C   | Hz  | –   | –   | –     | Open (Not used)                               |
| 80      | P95/FIP7      | NC       | O   | C   | Hz  | –   | –   | –     | Open (Not used)                               |

Type A: Standard input port

B: Standard in/output port

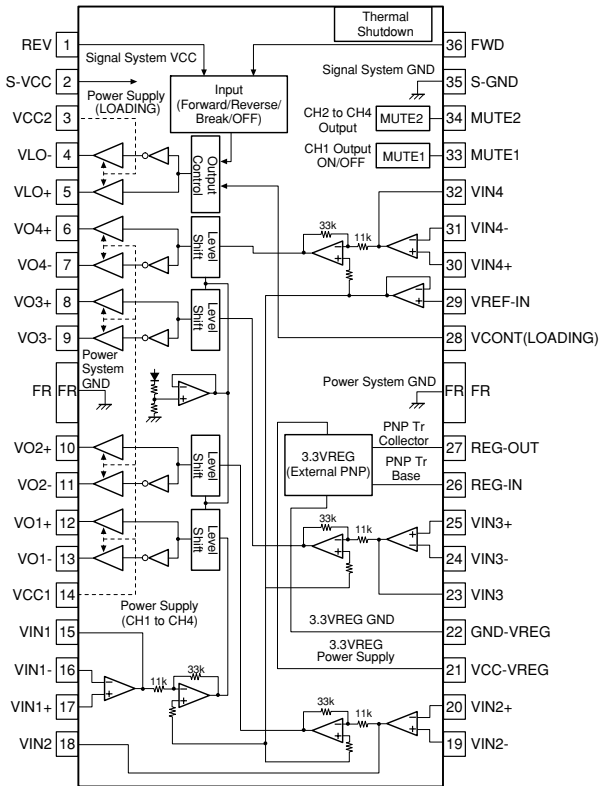
C: Hi-voltage proof in/output port

D: P-ch open drain hi-voltage proof

Note) P.D: Pull-down to VDISP

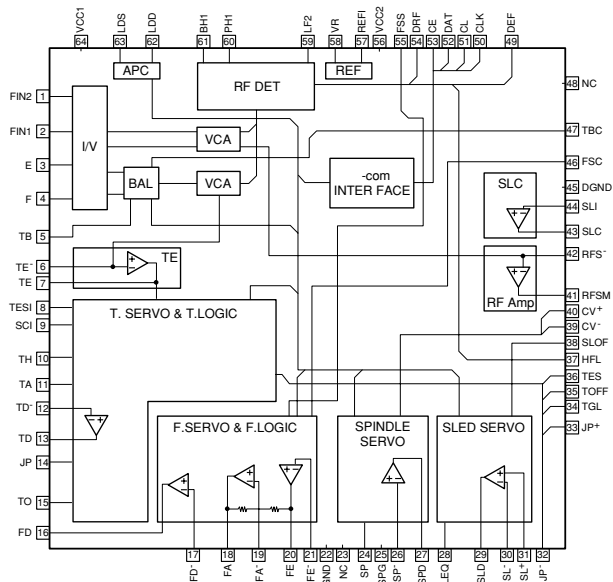
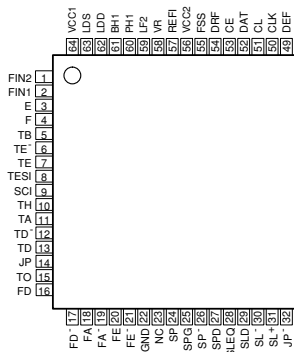
P.DG: Pull-down to GND

## LA6559 (IC101)

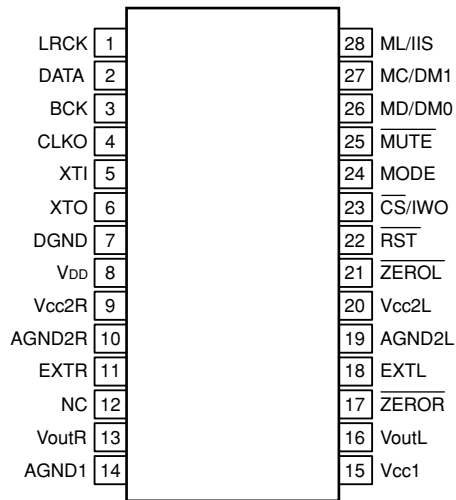


| Pin No. | Name     | Function                                                                               |
|---------|----------|----------------------------------------------------------------------------------------|
| 1       | REV      | 5CH output change terminal, logic input of loading block                               |
| 2       | S-Vcc    | signal system power supply (BTL-AMP:CH1~4)                                             |
| 3       | Vcc2     | Power supply for loading block                                                         |
| 4       | VL0-     | Loading output (-)                                                                     |
| 5       | VL0+     | Loading output (+)                                                                     |
| 6       | VO4+     | Output terminal (+) for channel 4                                                      |
| 7       | VO4-     | Output terminal (-) for channel 4                                                      |
| 8       | VO3+     | Output terminal (+) for channel 3                                                      |
| 9       | VO3-     | Output terminal (-) for channel 3                                                      |
| 10      | VO2+     | Output terminal (+) for channel 2                                                      |
| 11      | VO2-     | Output terminal (-) for channel 2                                                      |
| 12      | VO1+     | Output terminal (+) for channel 1                                                      |
| 13      | VO1-     | Output terminal (-) for channel 1                                                      |
| 14      | Vcc1     | CH1・CH4(BTL-AMP) output stage power supply                                             |
| 15      | VIN1     | Input terminal for channel 1                                                           |
| 16      | VIN1-    | OP-AMP input AMP-A input terminal (-)                                                  |
| 17      | VIN1+    | OP-AMP input AMP-A input terminal (+)                                                  |
| 18      | VIN2     | Input terminal for channel 2, input AMP output                                         |
| 19      | VIN2-    | Input terminal (-) for channel 2                                                       |
| 20      | VIN2+    | Input terminal (+) for channel 2                                                       |
| 21      | Vcc-VREG | 3.3VREG power supply                                                                   |
| 22      | GND-VREG | 3.3VREG GND                                                                            |
| 23      | VIN3     | Input terminal for channel 3, input AMP output                                         |
| 24      | VIN3-    | Input terminal (-) for channel 3                                                       |
| 25      | VIN3+    | Input terminal (+) for channel 3                                                       |
| 26      | REG-IN   | PNP transistor base connected                                                          |
| 27      | REG-OUT  | 3.3V power output to which the PNP transistor collector connected                      |
| 28      | VCONT    | Loading output voltage set terminal                                                    |
| 29      | VREF-IN  | Reference voltage applied terminal                                                     |
| 30      | VIN4+    | Input terminal (+) for channel 4                                                       |
| 31      | VIN4-    | Input terminal (-) for channel 4                                                       |
| 32      | VIN4     | Input terminal for channel 4, input AMP output                                         |
| 33      | MUTE1    | Output ON/OFF for channel 1 (BTL AMP)                                                  |
| 34      | MUTE2    | Output ON/OFF for channel 2 to 4 (BTL AMP)                                             |
| 35      | S-GND    | Signal system GND                                                                      |
| 36      | FWD      | Output change terminal (FWD) for loading output (VLO+/-), logic input of loading block |

## LA9241M (IC103)



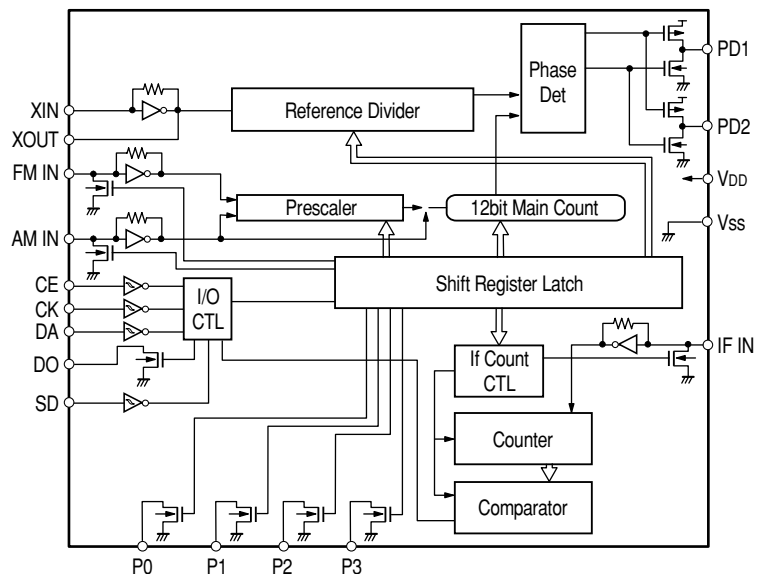
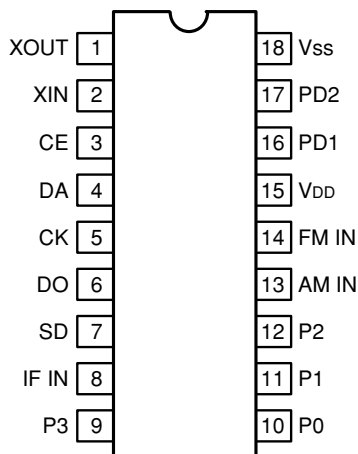
# **PCM1735E** (for DCD-485 : IC301)



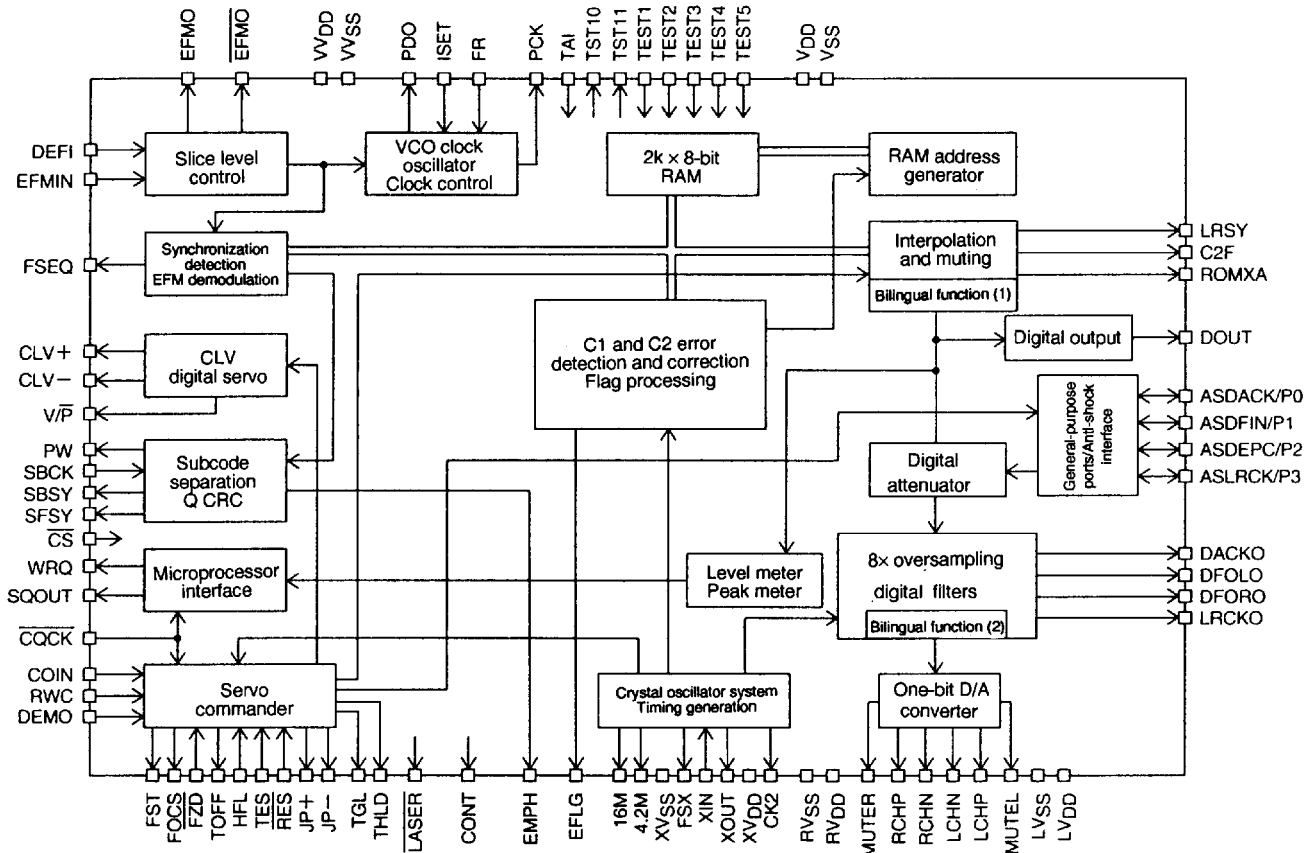
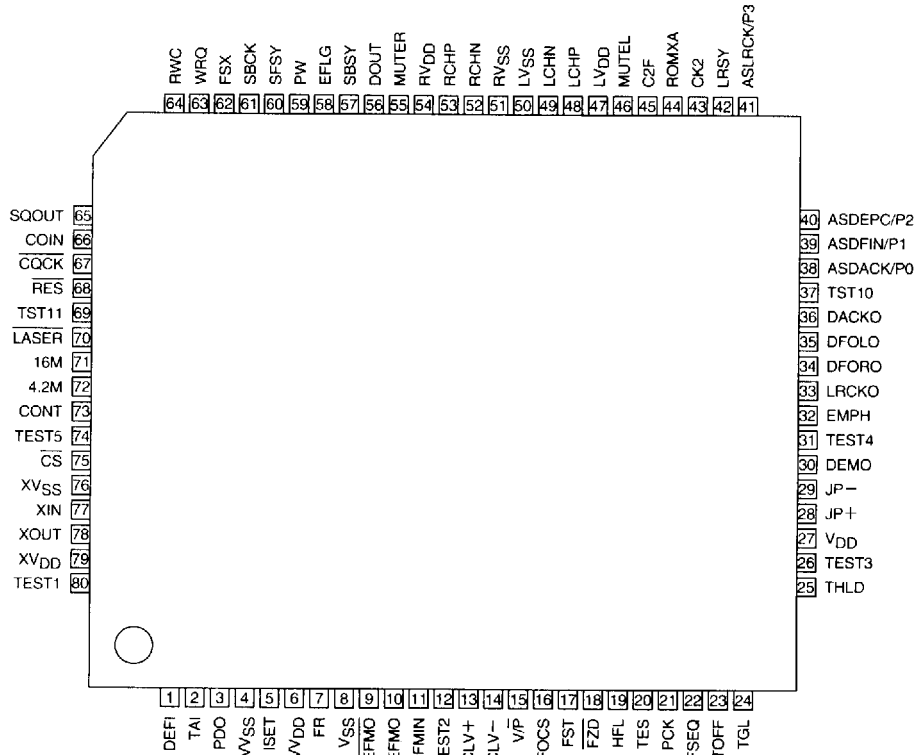
## **PCM1735E Terminal Function**

| Pin No. | Name            | I/O | Function                                            |
|---------|-----------------|-----|-----------------------------------------------------|
| 1       | LRCK            | I   | LRCK clock input (fs)                               |
| 2       | DATA            | I   | Data input                                          |
| 3       | BCK             | I   | Bit clock input for data                            |
| 4       | CLKO            | O   | System clock, buffer output                         |
| 5       | XTI             | I   | X'tal oscillator connect or ext. clock input        |
| 6       | XTO             | O   | X'tal oscillator connect                            |
| 7       | DGND            | –   | Digital GND                                         |
| 8       | V <sub>DD</sub> | –   | Digital power supply +5V                            |
| 9       | Vcc2R           | –   | Analog power supply +5V                             |
| 10      | AGND2R          | –   | Analog GND                                          |
| 11      | EXTR            | O   | Rch analog out amp, common                          |
| 12      | NC              | –   | NC                                                  |
| 13      | VoutR           | O   | Rch analog V-out                                    |
| 14      | AGND1           | –   | Analog GND                                          |
| 15      | Vcc1            | –   | Analog power supply +5V                             |
| 16      | VoutL           | O   | Lch analog V-out                                    |
| 17      | ZEROR           | O   | Rch zero-data flag (open drain)                     |
| 18      | EXTL            | O   | Lch analog out amp, common                          |
| 19      | AGND2L          | –   | Analog GND                                          |
| 20      | Vcc2L           | –   | Analog power supply +5V                             |
| 21      | ZEROL           | O   | Lch zero-data flag (open drain)                     |
| 22      | RST             | I   | Reset, L:DF and $\Delta$ - $\Sigma$ modulator reset |
| 23      | CS/IWO          | I   | Chip select/Input format select                     |
| 24      | MODE            | I   | Mode control select (H: Soft, L: Hard)              |
| 25      | MUTE            | I   | Mute control                                        |
| 26      | MD/DM0          | I   | Mode cont. data/De-emphasis select 1                |
| 27      | MC/DM1          | I   | Mode cont. BCK/De-emphasis select 2                 |
| 28      | ML/IIS          | I   | Mode cont. latch/Input format select                |

# **BU2616F (E2) (for DCD-685 : IC102)**

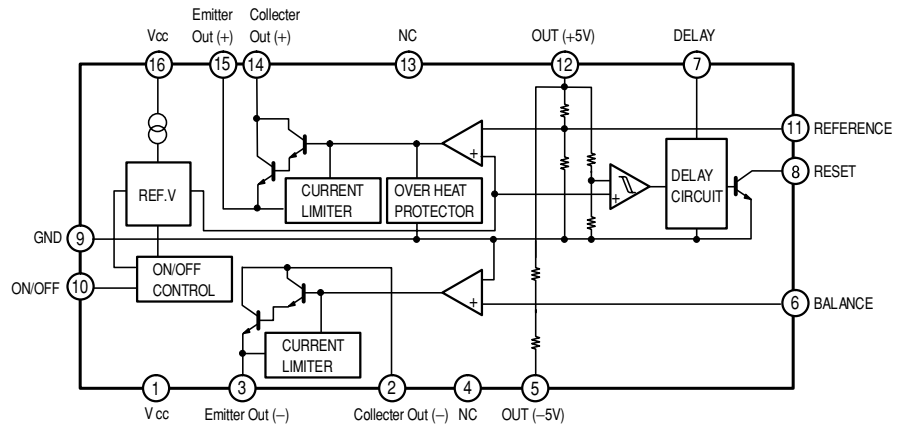
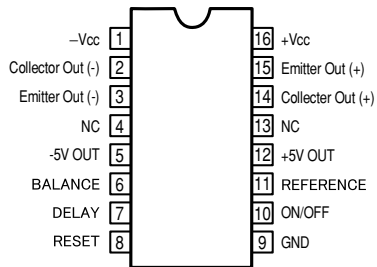


# LC78625E (IC106)

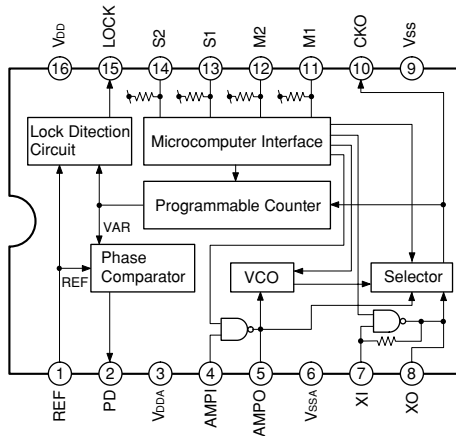




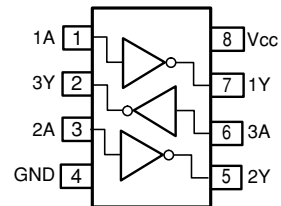
## M5290FP (IC502)



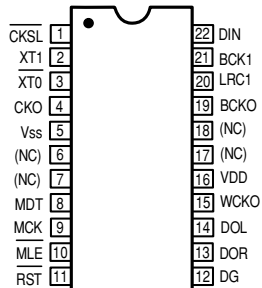
## TC9246F (for DCD-685 : IC104)



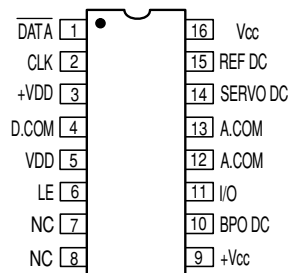
## TC7WU04F (IC107)



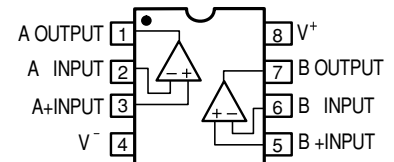
## SM5841BS (for DCD-685 : IC304)



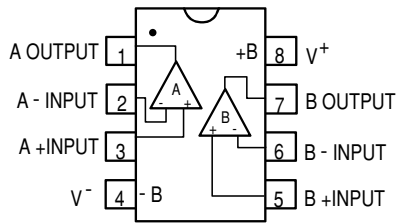
## PCM1702P (for DCD-685 : IC321,322)



## μPC4570C (IC325)

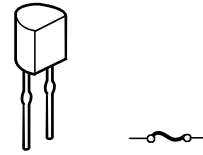


**BA15218F (for DCD-485 : IC303)**  
**(for DCD-685 : IC323, 324)**



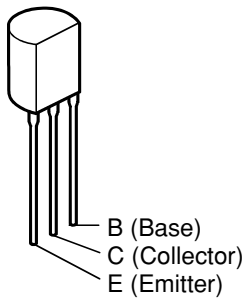
## ● IC PROTECTOR

**ICP-N20 (IC503)**

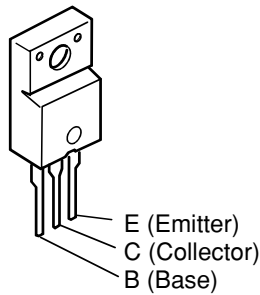


## ● TRANSISTORS

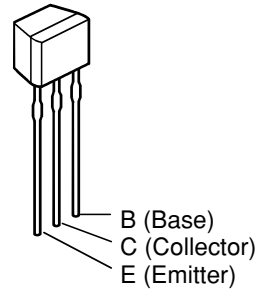
**2SB562 (C)**



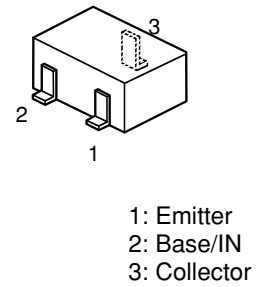
**2SB1185 (E/F)**  
**2SD1762 (E/F)**



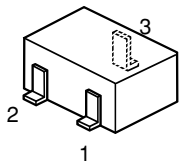
**2SD2144S**



**2SA1037K (S/R)**  
**2SC3326 (for DCD-485)**

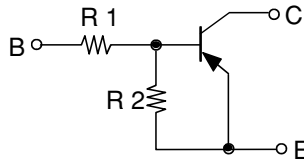


**DTA124XKA**  
**DTA144EK** } **PNP TYPE**  
**DTC114EK**  
**DTC144EK** } **NPN TYPE**  
**DTC144TK**



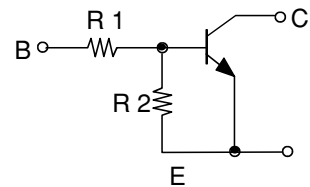
1: E/GND  
 2: B/INPUT  
 3: C/OUTPUT

### PNP TYPE



|           | R1     | R2     |
|-----------|--------|--------|
| DTA124XKA | 22kohm | 47kohm |
| DTA144EK  | 47kohm | 47kohm |

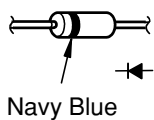
### NPN TYPE



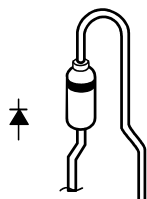
|          | R1     | R2     |
|----------|--------|--------|
| DTC114EK | 10kohm | 10kohm |
| DTC144EK | 47kohm | 47kohm |
| DTC144TK | 47kohm | OPEN   |

## ● DIODES

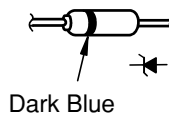
**1SS270A**



**1SR35-400A**

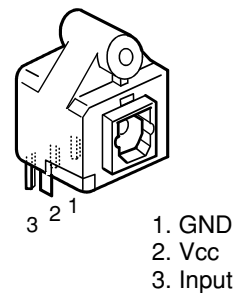


**MTZJ24A**  
**MTZJ6.8A**  
**HZS2B-1 (for DCD-685)**

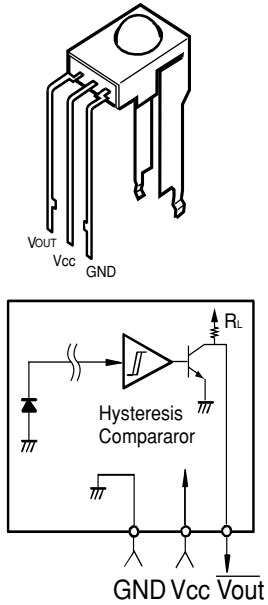


## ● OPTICAL TERMINAL

**TOTX179 (JK201)**



● Remote Control Sensor  
GP1U271X (IC601)

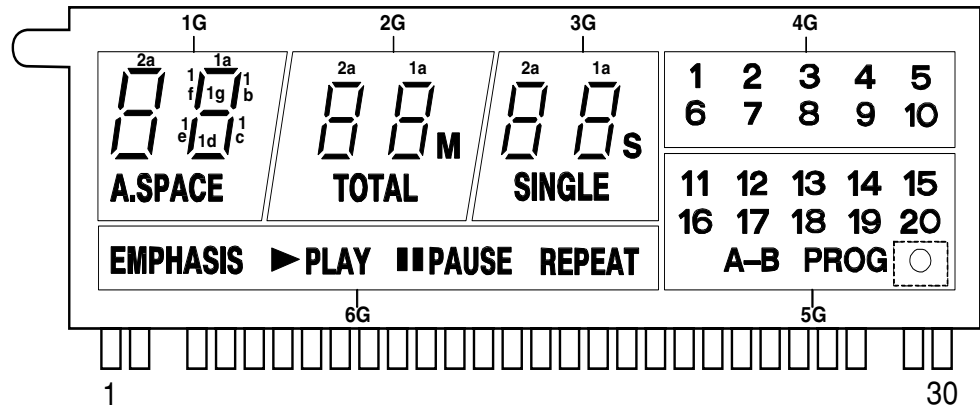


● FL DISPLAY 6-ST-33GK

(Part No. : 393 8021 006)

Anode Connection

|     | 1G             | 2G           | 3G            | 4G        | 5G          | 6G              |
|-----|----------------|--------------|---------------|-----------|-------------|-----------------|
| P1  | 1a             | 1a           | 1a            | <b>1</b>  | <b>11</b>   | <b>EMPHASIS</b> |
| P2  | 1b             | 1b           | 1b            | <b>2</b>  | <b>12</b>   | <b>▶PLAY</b>    |
| P3  | 1c             | 1c           | 1c            | <b>3</b>  | <b>13</b>   | <b>■PAUSE</b>   |
| P4  | 1d             | 1d           | 1d            | <b>4</b>  | <b>14</b>   | <b>REPEAT</b>   |
| P5  | 1e             | 1e           | 1e            | <b>5</b>  | <b>15</b>   | -               |
| P6  | 1f             | 1f           | 1f            | <b>6</b>  | <b>16</b>   | -               |
| P7  | 1g             | 1g           | 1g            | <b>7</b>  | <b>17</b>   | -               |
| P8  | 2a             | 2a           | 2a            | <b>8</b>  | <b>18</b>   | -               |
| P9  | 2b             | 2b           | 2b            | <b>9</b>  | <b>19</b>   | -               |
| P10 | 2c             | 2c           | 2c            | <b>10</b> | <b>20</b>   | -               |
| P11 | 2d             | 2d           | 2d            | -         | <b>A-B</b>  | -               |
| P12 | 2e             | 2e           | 2e            | -         | <b>PROG</b> | -               |
| P13 | 2f             | 2f           | 2f            | -         | ○           | -               |
| P14 | 2g             | 2g           | 2g            | -         | -           | -               |
| P15 | <b>A.SPACE</b> | <b>TOTAL</b> | <b>SINGLE</b> | -         | -           | -               |
| P16 | -              | <b>M</b>     | <b>S</b>      | -         | -           | -               |



Pin Connection

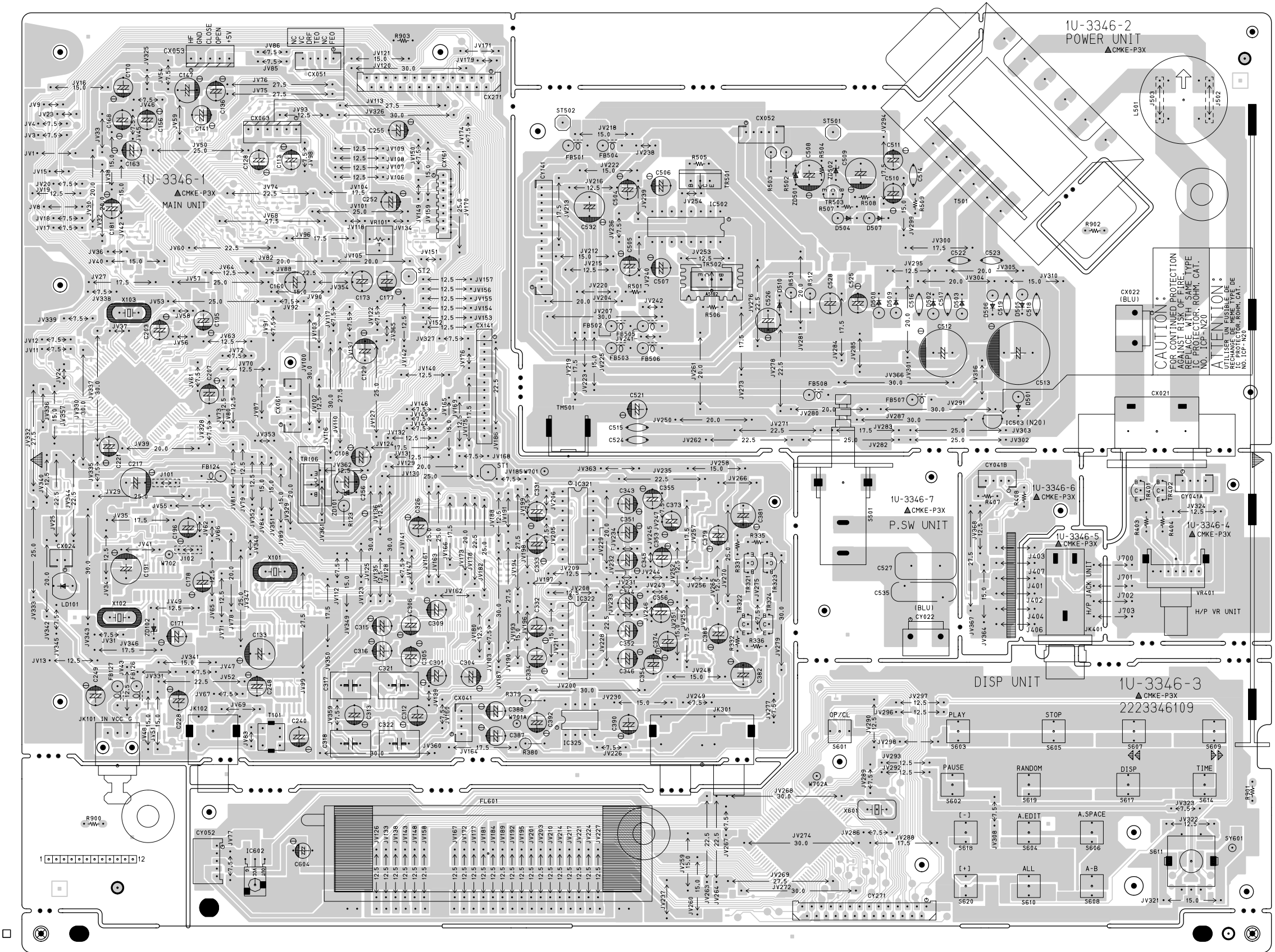
|            |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |
|------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| Pin No.    | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12  | 13  | 14  | 15  |
| Connection | F1 | F1 | NP | 1G | 2G | 3G | 4G | 5G | 6G | NX | NX | P16 | P15 | P14 | P13 |

|            |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |
|------------|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|
| Pin No.    | 16  | 17  | 18  | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| Connection | P12 | P11 | P10 | P9 | P8 | P7 | P6 | P5 | P4 | P3 | P2 | P1 | NP | F2 | F2 |

- Note:** 1) F1, F2- - - - Filament  
2) NP- - - - No pin  
3) P1~P16- - - Anode  
4) 1G~6G- - - Grid  
5) NX- - - - No extend pin  
6) Field of vision is a minimum of 29° from the upper side, 30° from the lower side.

PRINTED WIRING BOARD  
CD BOARD ASS'Y



COMPONENT SIDE



# 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 "★" is not illustrated in the exploded view.
- Not including Carbon Film  $\pm 5\%$ , 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           | 2B : 1/8W | F : $\pm 1\%$  | P : Pulse-resistant type |
| RC : Composition      | 2E : 1/4W | G : $\pm 2\%$  | NL : Low noise type      |
| RS : Metal oxide film | 2H : 1/2W | J : $\pm 5\%$  | NB : Non-burning type    |
| RW : Winding          | 3A : 1W   | K : $\pm 10\%$ | FR : Fuse-resistor       |
| RN : Metal film       | 3D : 2W   | M : $\pm 20\%$ | F : Lead wire forming    |
| RK : Metal mixture    | 3F : 3W   |                |                          |
|                       | 3H : 5W   |                |                          |

### \* Resistance

$\overset{1}{\text{---}} \overset{8}{\text{---}} \overset{2}{\text{---}} \Rightarrow 1800 \text{ ohm} = 1.8 \text{ kohm}$   
Indicates number of zeros after effective number.  
2-digit effective number.

• Units: ohm

$\overset{1}{\text{---}} \overset{R}{\text{---}} \overset{2}{\text{---}} \Rightarrow 1.2 \text{ ohm}$   
1-digit effective number.  
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  | 0J : 6.3V | F : $\pm 1\%$           | HS : High stability type         |
| CA : Aluminum solid electrolytic | 1A : 10V  | G : $\pm 2\%$           | BP : Non-polar type              |
| CS : Tantalum electrolytic       | 1C : 16V  | J : $\pm 5\%$           | HR : Ripple-resistant type       |
| CQ : Film                        | 1E : 25V  | K : $\pm 10\%$          | DL : For change and discharge    |
| CK : Ceramic                     | 1V : 35V  | M : $\pm 20\%$          | HF : For assuring high frequency |
| CC : Ceramic                     | 1H : 50V  | Z : +80%                | U : UL part                      |
| CP : Oil                         | 2A : 100V | -20%                    | C : CSA part                     |
| CM : Mica                        | 2B : 125V | P : $\pm 100\%$         | W : UL-CSA type                  |
| CF : Metallized                  | 2C : 160V | -0%                     | F : Lead wire forming            |
| CH : Metallized                  | 2D : 200V | C : $\pm 0.25\text{pF}$ |                                  |
|                                  | 2E : 250V | D : $\pm 0.5\text{pF}$  |                                  |
|                                  | 2H : 500V | = : Others              |                                  |
|                                  | 2J : 630V |                         |                                  |

### \* Capacity (electrolyte only)

$\overset{2}{\text{---}} \overset{2}{\text{---}} \overset{2}{\text{---}} \Rightarrow 2200\mu\text{F}$   
Indicates number of zeros after effective number.  
2-digit effective number.

• Units:  $\mu\text{F}$ .

$\overset{2}{\text{---}} \overset{R}{\text{---}} \overset{2}{\text{---}} \Rightarrow 2.2\mu\text{F}$   
1-digit effective number.  
2-digit effective number, decimal point indicated by R.

• Units:  $\mu\text{F}$ .

### \* Capacity (except electrolyte)

$\overset{2}{\text{---}} \overset{2}{\text{---}} \overset{2}{\text{---}} \Rightarrow 2200\text{pF} = 0.0022\mu\text{F}$   
(More than 2) — Indicates number of zeros after effective number.  
2-digit effective number.

• Units:  $\mu\text{F}$ .

$\overset{2}{\text{---}} \overset{2}{\text{---}} \overset{1}{\text{---}} \Rightarrow 220\text{pF}$   
(0 or 1) — Indicates number of zeros after effective number.  
2-digit effective number.

• Units: pF.

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

# PARTS LIST OF P.W.B. UNIT ASS'Y

1U-3346 (DCD-485Model) / 1U-3346A (DCD-685Model)

## CD BOAD ASS'Y

| Ref. No.                    | Part No.     | Part Name                     | Remarks             |
|-----------------------------|--------------|-------------------------------|---------------------|
| <b>SEMICONDUCTORS GROUP</b> |              |                               |                     |
| IC101                       | 263 1091 907 | IC LA6559                     |                     |
| IC102                       | 262 2789 901 | IC BU2616F(E2)                | DCD-685 model only  |
| IC103                       | 263 1090 005 | IC LA9241M                    |                     |
| IC104                       | 262 1883 905 | IC TC9246F-TP1                | DCD-685 model only  |
| IC106                       | 262 2903 004 | IC LC78625E                   |                     |
| IC107                       | 262 1953 903 | IC TC7WU04F                   |                     |
| IC301                       | 262 2846 909 | IC PCM1735E                   | DCD-485 model only  |
| IC303                       | 263 0615 902 | IC BA15218F-DXE2              | DCD-485 model only  |
| IC304                       | 262 1765 900 | IC SM5841BS                   | DCD-685 model only  |
| IC321,322                   | 262 1837 032 | IC PCM1702P-L                 | DCD-685 model only  |
| IC323,324                   | 263 0615 902 | IC BA15218F-DXE2              | DCD-685 model only  |
| IC325                       | 262 0864 006 | IC UPC4570C                   |                     |
| IC502                       | 263 0693 005 | IC M5290P                     |                     |
| IC503                       | 268 0074 904 | IC ICP-N20T                   |                     |
| IC601                       | 262 2904 003 | IC UPD78044FGF-188-3B9        |                     |
| IC602                       | 499 0303 004 | IC GP1UM271XK                 |                     |
| TR101-104                   | 269 0054 901 | Transistor DTC144EKT96        |                     |
| TR105                       | 271 0238 908 | Transistor 2SA1037KT96(S/R)   |                     |
| TR106                       | 274 0120 002 | Transistor 2SD1762(E/F)       |                     |
| TR108,109                   | 269 0085 909 | Transistor DTC144TKT96        |                     |
| TR323,324                   | 274 0160 907 | Transistor 2SD2144STPU        |                     |
| TR401,402                   | 274 0160 907 | Transistor 2SD2144STPU        | DCD-685 model only  |
| TR403,404                   | 273 0348 904 | Transistor 2SC3326 A/B (TAPE) | DCD-485 model only  |
| TR501                       | 274 0120 002 | Transistor 2SD1762(E/F)       |                     |
| TR502                       | 272 0083 004 | Transistor 2SB1185(E/F)       |                     |
| TR503                       | 272 0025 907 | Transistor 2SB562(C)TF        |                     |
| TR504                       | 269 0055 900 | Transistor DTA144EKT96        |                     |
| TR505                       | 269 0082 902 | Transistor DTC114EKT96        |                     |
| TR506                       | 269 0156 906 | Transistor DTA124XKA-T146     |                     |
| TR507                       | 269 0082 902 | Transistor DTC114EKT96        |                     |
| D502-509                    | 276 0704 903 | Diode 1SR35-400A(T93X)        |                     |
| D510                        | 276 0432 903 | Diode 1SS270A TE (TAPE)       |                     |
| ZD101                       | 276 0644 908 | Zener diode MTZJ6.8A T77      |                     |
| ZD102                       | 276 0450 901 | Zener diode HZS2B-1TD         | DCD-685 model only  |
| ZD501                       | 276 0644 908 | Zener diode MTZJ6.8A T77      |                     |
| ZD502                       | 276 0645 936 | Zener diode MTZJ24A T77       |                     |
| <b>RESISTORS GROUP</b>      |              |                               |                     |
| R101                        | 247 2010 969 | Carbon chip 22 kohm 1/10W     | RM73B--223JT        |
| R102-105                    | 247 2009 941 | Carbon chip 6.8 kohm 1/10W    | RM73B--682JT        |
| R106                        | 247 2010 969 | Carbon chip 22 kohm 1/10W     | RM73B--223JT        |
| R107                        | 247 2018 903 | Carbon chip 0 ohm 1/10W       | RM73B--0R0KT        |
| R108-110                    | 247 2004 920 | Carbon chip 47 ohm 1/10W      | RM73B--470JT        |
| R111                        | 247 2010 969 | Carbon chip 22 kohm 1/10W     | RM73B--223JT        |
| R112                        | 247 2004 920 | Carbon chip 47 ohm 1/10W      | RM73B--470JT        |
| R113                        | 247 2012 925 | Carbon chip 100 kohm 1/10W    | RM73B--104JT        |
| R114                        | 247 2010 956 | Carbon chip 20 kohm 1/10W     | RM73B--203JT        |
| R115                        | 247 2009 909 | Carbon chip 4.7 kohm 1/10W    | RM73B--472JT (1608) |

| Ref. No. | Part No.     | Part Name                  | Remarks                                                  |
|----------|--------------|----------------------------|----------------------------------------------------------|
| R116     | 247 2008 926 | Carbon chip 2.2 kohm 1/10W | RM73B--222JT                                             |
| R117     | 247 2004 920 | Carbon chip 47 ohm 1/10W   | RM73B--470JT                                             |
| R118     | 247 2011 984 | Carbon chip 68 kohm 1/10W  | RM73B--683JT                                             |
| R119     | 247 2010 914 | Carbon chip 13 kohm 1/10W  | RM73B--133JT                                             |
| R120     | 247 2010 956 | Carbon chip 20 kohm 1/10W  | RM73B--203JT                                             |
| R121     | 247 2009 909 | Carbon chip 4.7 kohm 1/10W | RM73B--472JT (1608)                                      |
| R122     | 247 2009 983 | Carbon chip 10 kohm 1/10W  | RM73B--103JT                                             |
| R123     | 244 2050 920 | Metal oxide 120 ohm 1W(NB) | RS14B3A121JNBST(S)                                       |
| R124,125 | 247 2009 983 | Carbon chip 10 kohm 1/10W  | RM73B--103JT                                             |
| R126-128 | 247 2018 903 | Carbon chip 0 ohm 1/106W   | DCD-685 model only<br>RM73B--0R0KT<br>DCD-685 model only |
| R129     | 247 2010 927 | Carbon chip 15 kohm 1/10W  | RM73B--153JT                                             |
| R130     | 247 2006 986 | Carbon chip 560 ohm 1/10W  | RM73B--561JT                                             |
| R131     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT<br>DCD-685 model only                       |
| R132     | 247 2010 927 | Carbon chip 15 kohm 1/10W  | RM73B--153JT                                             |
| R133     | 247 2006 999 | Carbon chip 620 ohm 1/10W  | RM73B--621JT                                             |
| R134     | 247 2010 969 | Carbon chip 22 kohm 1/10W  | RM73B--223JT                                             |
| R135     | 247 2011 900 | Carbon chip 33 kohm 1/10W  | RM73B--333JT                                             |
| R136-138 | 247 2010 969 | Carbon chip 22 kohm 1/10W  | RM73B--223JT                                             |
| R139     | 247 2013 908 | Carbon chip 220 kohm 1/10W | RM73B--224JT                                             |
| R140     | 247 2009 983 | Carbon chip 10 kohm 1/10W  | RM73B--103JT                                             |
| R141,142 | 247 2010 969 | Carbon chip 22 kohm 1/10W  | RM73B--223JT                                             |
| R143     | 247 2006 986 | Carbon chip 560 ohm 1/10W  | RM73B--561JT                                             |
| R144     | 247 2012 909 | Carbon chip 82 kohm 1/10W  | RM73B--823JT                                             |
| R145     | 247 2011 900 | Carbon chip 33 kohm 1/10W  | RM73B--333JT                                             |
| R146,147 | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT                                             |
| R148     | 247 2011 926 | Carbon chip 39 kohm 1/10W  | RM73B--393JT                                             |
| R150     | 247 2007 985 | Carbon chip 1.5 kohm 1/10W | RM73B--152JT                                             |
| R151     | 247 2010 927 | Carbon chip 15 kohm 1/10W  | RM73B--153JT                                             |
| R152     | 247 2010 972 | Carbon chip 24 kohm 1/10W  | RM73B--243JT                                             |
| R153     | 247 2010 927 | Carbon chip 15 kohm 1/10W  | RM73B--153JT                                             |
| R154     | 247 2011 942 | Carbon chip 47 kohm 1/10W  | RM73B--473JT                                             |
| R155     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT<br>DCD-685 model only                       |
| R156     | 247 2009 967 | Carbon chip 8.2 kohm 1/10W | RM73B--822JT                                             |
| R158     | 247 2009 967 | Carbon chip 8.2 kohm 1/10W | RM73B--822JT                                             |
| R159     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT                                             |
| R160     | 247 2011 926 | Carbon chip 39 kohm 1/10W  | RM73B--393JT                                             |
| R161     | 247 2010 901 | Carbon chip 12 kohm 1/10W  | RM73B--123JT                                             |
| R162     | 247 2010 927 | Carbon chip 15 kohm 1/10W  | RM73B--153JT                                             |
| R163     | 247 2009 925 | Carbon chip 5.6 kohm 1/10W | RM73B--562JT<br>DCD-685 model only                       |
| R164     | 247 2002 964 | Carbon chip 10 ohm 1/10W   | RM73B--100JT                                             |
| R165     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT                                             |
| R166     | 247 2011 942 | Carbon chip 47 kohm 1/10W  | RM73B--473JT                                             |
| R167     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT                                             |
| R168     | 247 2009 941 | Carbon chip 6.8 kohm 1/10W | RM73B--682JT                                             |
| R169     | 247 2011 900 | Carbon chip 33 kohm 1/10W  | RM73B--333JT                                             |
| R170     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT<br>DCD-685 model only                       |
| R171,172 | 247 2009 983 | Carbon chip 10 kohm 1/10W  | RM73B--103JT<br>DCD-685 model only                       |
| R173     | 247 2008 926 | Carbon chip 2.2 kohm 1/10W | RM73B--222JT                                             |
| R174     | 247 2010 985 | Carbon chip 27 kohm 1/10W  | RM73B--273JT                                             |
| R175     | 247 2012 912 | Carbon chip 91 kohm 1/10W  | RM73B--913JT<br>DCD-685 model only                       |
| R176     | 247 2010 998 | Carbon chip 30 kohm 1/10W  | RM73B--303JT                                             |
| R177     | 247 2006 931 | Carbon chip 360 ohm 1/10W  | RM73B--361JT                                             |
| R178     | 247 2011 913 | Carbon chip 36 kohm 1/10W  | RM73B--363JT                                             |
| R179     | 247 2012 954 | Carbon chip 130 kohm 1/10W | RM73B--134JT                                             |
| R180,181 | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT                                             |

| Ref. No. | Part No.     | Part Name                  | Remarks                            |
|----------|--------------|----------------------------|------------------------------------|
| R182     | 247 2005 903 | Carbon chip 100 ohm 1/10W  | RM73B--101JT<br>DCD-685 model only |
| R183     | 247 2011 942 | Carbon chip 47 kohm 1/10W  | RM73B--473JT                       |
| R184-186 | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT                       |
| R187     | 247 2013 937 | Carbon chip 300 kohm 1/10W | RM73B--304JT<br>DCD-685 model only |
| R188     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT<br>DCD-685 model only |
| R189     | 247 2011 926 | Carbon chip 39 kohm 1/10W  | RM73B--393JT                       |
| R190     | 247 2008 968 | Carbon chip 3.3 kohm 1/10W | RM73B--332JT                       |
| R191     | 247 2012 983 | Carbon chip 180 kohm 1/10W | RM73B--184JT<br>DCD-685 model only |
| R192     | 247 2008 939 | Carbon chip 2.4 kohm 1/10W | RM73B--242JT<br>DCD-685 model only |
| R193     | 247 2009 912 | Carbon chip 5.1 kohm 1/10W | RM73B--512JT<br>DCD-685 model only |
| R194     | 247 2009 909 | Carbon chip 4.7 kohm 1/10W | RM73B--472JT (1608)                |
| R195     | 247 2012 925 | Carbon chip 100 kohm 1/10W | RM73B--104JT                       |
| R196,197 | 247 2013 924 | Carbon chip 270 kohm 1/10W | RM73B--274JT                       |
| R198     | 247 2011 955 | Carbon chip 51 kohm 1/10W  | RM73B--513JT                       |
| R200     | 247 2009 983 | Carbon chip 10 kohm 1/10W  | RM73B--103JT                       |
| R201     | 247 2011 900 | Carbon chip 33 kohm 1/10W  | RM73B--333JT                       |
| R202     | 247 2010 969 | Carbon chip 22 kohm 1/10W  | RM73B--223JT                       |
| R204     | 247 2009 983 | Carbon chip 10 kohm 1/10W  | RM73B--103JT                       |
| R205     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT<br>DCD-685 model only |
| R206     | 247 2004 920 | Carbon chip 47 ohm 1/10W   | RM73B--470JT<br>DCD-685 model only |
| R207     | 247 2015 906 | Carbon chip 1.5 Mohm 1/10W | RM73B--155KT                       |
| R209     | 247 2006 902 | Carbon chip 330 ohm 1/10W  | RM73B--331JT (1608)                |
| R210     | 247 2011 900 | Carbon chip 33 kohm 1/10W  | RM73B--333JT                       |
| R211     | 247 2007 901 | Carbon chip 680 ohm 1/10W  | RM73B--681JT                       |
| R212     | 247 2011 900 | Carbon chip 33 kohm 1/10W  | RM73B--333JT                       |
| R213     | 247 2007 969 | Carbon chip 1.2 kohm 1/10W | RM73B--122JT                       |
| R214-217 | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT<br>DCD-685 model only |
| R218     | 247 2007 943 | Carbon chip 1 kohm 1/10W   | RM73B--102JT<br>DCD-685 model only |
| R220     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT<br>DCD-685 model only |
| R222     | 247 2003 947 | Carbon chip 22 ohm 1/10W   | RM73B--220JT<br>DCD-685 model only |
| R223,224 | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT<br>DCD-685 model only |
| R225,226 | 247 2003 947 | Carbon chip 22 ohm 1/10W   | RM73B--220JT                       |
| R227     | 247 2005 903 | Carbon chip 100 ohm 1/10W  | RM73B--101JT<br>DCD-485 model only |
| R227     | 247 2006 902 | Carbon chip 330 ohm 1/10W  | RM73B--331JT<br>DCD-685 model only |
| R228-230 | 247 2003 947 | Carbon chip 22 ohm 1/10W   | RM73B--220JT                       |
| R231     | 247 2011 942 | Carbon chip 47 kohm 1/10W  | RM73B--473JT                       |
| R232     | 247 2006 960 | Carbon chip 470 ohm 1/10W  | RM73B--471JT                       |
| R233     | 247 2004 920 | Carbon chip 47 ohm 1/10W   | RM73B--470JT                       |
| R234-237 | 247 2009 967 | Carbon chip 8.2 kohm 1/10W | RM73B--822JT                       |
| R238     | 247 2005 903 | Carbon chip 100 ohm 1/10W  | RM73B--101JT                       |
| R240     | 247 2011 942 | Carbon chip 47 kohm 1/10W  | RM73B--473JT                       |
| R246-248 | 247 2009 983 | Carbon chip 10 kohm 1/10W  | RM73B--103JT                       |
| R250     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT                       |
| R251     | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT<br>DCD-685 model only |
| R252     | 247 2009 983 | Carbon chip 10 kohm 1/10W  | RM73B--103JT                       |
| R303,304 | 247 2011 942 | Carbon chip 47 kohm 1/10W  | RM73B--473JT<br>DCD-485 model only |
| R305,306 | 247 2008 971 | Carbon chip 3.6 kohm 1/10W | RM73B--362JT<br>DCD-485 model only |

| Ref. No.           | Part No.     | Part Name                    | Remarks                            |
|--------------------|--------------|------------------------------|------------------------------------|
| R307,308           | 247 2011 942 | Carbon chip 47 kohm 1/10W    | RM73B--473JT<br>DCD-485 model only |
| R309,310           | 247 2008 971 | Carbon chip 3.6 kohm 1/10W   | RM73B--362JT<br>DCD-485 model only |
| R311-314           | 247 2009 983 | Carbon chip 10 kohm 1/10W    | RM73B--103JT<br>DCD-485 model only |
| R315-318           | 247 2003 947 | Carbon chip 22 ohm 1/10W     | RM73B--220JT<br>DCD-685 model only |
| R321,322           | 247 2008 939 | Carbon chip 2.4 kohm 1/10W   | RM73B--242JT<br>DCD-685 model only |
| R323,324           | 247 2009 996 | Carbon chip 11 kohm 1/10W    | RM73B--113JT<br>DCD-685 model only |
| R325,326           | 247 2009 925 | Carbon chip 5.6 kohm 1/10W   | RM73B--562JT<br>DCD-685 model only |
| R327,328           | 247 2009 996 | Carbon chip 11 kohm 1/10W    | RM73B--113JT<br>DCD-685 model only |
| R329,330           | 247 2010 998 | Carbon chip 30 kohm 1/10W    | RM73B--303JT                       |
| R339,340           | 247 2007 943 | Carbon chip 1 kohm 1/10W     | RM73B--102JT                       |
| R371,372           | 247 2010 998 | Carbon chip 30 kohm 1/10W    | RM73B--303JT                       |
| R373,374           | 247 2008 997 | Carbon chip 4.3 kohm 1/10W   | RM73B--432JT                       |
| R375,376           | 247 2008 984 | Carbon chip 3.9 kohm 1/10W   | RM73B--392JT                       |
| R377,378           | 247 2010 927 | Carbon chip 15 kohm 1/10W    | RM73B--153JT                       |
| R379,380           | 241 2377 934 | Carbon film 91 ohm 1/4W(NB)  | RD14B2E910JNBST                    |
| R401,402           | 247 2018 903 | Carbon chip 0 ohm 1/10W      | RM73B--0R0KT<br>DCD-685 model only |
| R405,406           | 247 2008 942 | Carbon chip 2.7 kohm 1/10W   | RM73B--272JT<br>DCD-685 model only |
| R409,410           | 247 2007 943 | Carbon chip 1 kohm 1/10W     | RM73B--102JT<br>DCD-485 model only |
| R411               | 247 2018 903 | Carbon chip 0 ohm 1/10W      | RM73B--0R0KT                       |
| R502,503           | 241 2377 947 | Carbon film 100 ohm 1/4W(NB) | RD14B2E101JNBST                    |
| R510               | 247 2009 983 | Carbon chip 10 kohm 1/10W    | RM73B--103JT                       |
| R511               | 247 2012 996 | Carbon chip 200 kohm 1/10W   | RM73B--204JT                       |
| R512               | 244 2051 974 | Metal oxide 1 kohm 1W(NB)    |                                    |
| RS14B3A102JNBST(S) |              |                              |                                    |
| R513               | 241 2377 934 | Carbon film 91 ohm 1/4W(NB)  | RD14B2E910JNBST                    |
| R601,602           | 247 2009 983 | Carbon chip 10 kohm 1/10W    | RM73B--103JT                       |
| R603-608           | 247 2012 925 | Carbon chip 100 kohm 1/10W   | RM73B--104JT                       |
| R609,610           | 247 2007 943 | Carbon chip 1 kohm 1/10W     | RM73B--102JT                       |
| R611-616           | 247 2012 925 | Carbon chip 100 kohm 1/10W   | RM73B--104JT                       |
| R617               | 247 2014 965 | Carbon chip 1 Mohm 1/10W     | RM73B--105JT                       |
| R618-623           | 247 2012 925 | Carbon chip 100 kohm 1/10W   | RM73B--104JT                       |
| R624               | 247 2018 903 | Carbon chip 0 ohm 1/10W      | RM73B--0R0KT<br>DCD-485 model only |
| R625               | 247 2009 983 | Carbon chip 10 kohm 1/10W    | RM73B--103JT<br>DCD-685 model only |
| R626               | 247 2009 912 | Carbon chip 5.1 kohm 1/10W   | RM73B--512JT                       |
| R627,628           | 247 2009 983 | Carbon chip 10 kohm 1/10W    | RM73B--103JT                       |
| R629               | 247 2009 912 | Carbon chip 5.1 kohm 1/10W   | RM73B--512JT                       |
| R630-633           | 247 2012 925 | Carbon chip 100 kohm 1/10W   | RM73B--104JT                       |
| R634,635           | 247 2009 983 | Carbon chip 10 kohm 1/10W    | RM73B--103JT                       |
| R636,637           | 247 2007 943 | Carbon chip 1 kohm 1/10W     | RM73B--102JT                       |
| R638,639           | 247 2005 945 | Carbon chip 150 ohm 1/10W    | RM73B--151JT                       |
| R640               | 247 2009 983 | Carbon chip 10 kohm 1/10W    | RM73B--103JT                       |
| R641,642           | 247 2005 961 | Carbon chip 180 ohm 1/10W    | RM73B--181JT                       |
| R643,644           | 247 2006 915 | Carbon chip 270 ohm 1/10W    | RM73B--271JT                       |
| R645,646           | 247 2006 944 | Carbon chip 390 ohm 1/10W    | RM73B--391JT                       |
| R647,648           | 247 2009 983 | Carbon chip 10 kohm 1/10W    | RM73B--103JT                       |
| R649,650           | 247 2007 901 | Carbon chip 680 ohm 1/10W    | RM73B--681JT                       |
| R651               | 247 2007 972 | Carbon chip 1.3 kohm 1/10W   | RM73B--132JT                       |
| R652               | 247 2007 972 | Carbon chip 1.3 kohm 1/10W   | RM73B--132JT<br>DCD-685 model only |
| R653,654           | 247 2009 983 | Carbon chip 10 kohm 1/10W    | RM73B--103JT                       |
| R655               | 247 2008 984 | Carbon chip 3.9 kohm 1/10W   | RM73B--392JT                       |



| Ref. No.                | Part No.     | Part Name                  | Remarks                                    |
|-------------------------|--------------|----------------------------|--------------------------------------------|
| R656                    | 247 2008 984 | Carbon chip 3.9 kohm 1/10W | RM73B--392JT<br>DCD-685 model only         |
| R657                    | 247 2018 903 | Carbon chip 0 ohm 1/10W    | RM73B--0R0KT                               |
| VR401                   | 211 0903 008 | Variable resistor 2 kohm   | V1420Q15FC202<br>DCD-685 model only        |
| <b>CAPACITORS GROUP</b> |              |                            |                                            |
| C101-107                | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C108                    | 254 4538 942 | Electrolytic 100uF/16V     | CE04W1C101MT SMG/RE3                       |
| C109                    | 257 0516 925 | Ceramic chip 0.033uF/25V   | CK73B1E333KT                               |
| C110                    | 257 0507 976 | Ceramic chip 330pF/50V     | CC73CH1H331JT                              |
| C111,112                | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C113                    | 254 4524 927 | Electrolytic 0.33uF/50V    | CE04W1HR33MT SMG/RE3                       |
| C114                    | 257 0501 927 | Ceramic chip 0.015uF/50V   | CK73B1H153KT                               |
| C115                    | 257 0501 901 | Ceramic chip 0.01uF/50V    | CK73B1H103KT (1608)                        |
| C116                    | 257 0517 908 | Ceramic chip 0.047uF/16V   | CK73B1C473KT                               |
| C117,118                | 257 0504 982 | Ceramic chip 47pF/50V      | CC73CH1H470JT<br>DCD-685 model only        |
| C119                    | 257 0509 929 | Ceramic chip 1000pF/50V    | CK73B1H102KT                               |
| C120                    | 257 0506 993 | Ceramic chip 150pF/50V     | CC73CH1H151JT                              |
| C121                    | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C122                    | 257 0517 908 | Ceramic chip 0.047uF/16V   | CK73B1C473KT                               |
| C123                    | 257 0501 901 | Ceramic chip 0.01uF/50V    | CK73B1H103KT (1608)                        |
| C124,125                | 257 0517 908 | Ceramic chip 0.047uF/16V   | CK73B1C473KT                               |
| C127                    | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C130                    | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C131                    | 257 0501 901 | Ceramic chip 0.01uF/50V    | CK73B1H103KT (1608)<br>DCD-685 model only  |
| C132                    | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT<br>DCD-685 model only         |
| C133                    | 254 4538 968 | Electrolytic 330uF/16V     | CE04W1C331MT SMG/RE3<br>DCD-685 model only |
| C136                    | 254 4524 969 | Electrolytic 3.3uF/50V     | CE04W1H3R3MT SMG/RE3                       |
| C137,138                | 257 0501 901 | Ceramic chip 0.01uF/50V    | CK73B1H103KT (1608)                        |
| C139                    | 257 0509 929 | Ceramic chip 1000pF/50V    | CK73B1H102KT                               |
| C140                    | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C141                    | 254 4538 939 | Electrolytic 47uF/16V      | CE04W1C470MT SMG/RE3                       |
| C142                    | 257 0509 929 | Ceramic chip 1000pF/50V    | CK73B1H102KT                               |
| C143                    | 257 0507 992 | Ceramic chip 390pF/50V     | CC73CH1H391JT<br>DCD-685 model only        |
| C144                    | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C145                    | 257 0507 934 | Ceramic chip 220pF/50V     | CC73CH1H221JT                              |
| C146                    | 257 0509 929 | Ceramic chip 1000pF/50V    | CK73B1H102KT                               |
| C147                    | 254 4538 955 | Electrolytic 220uF/16V     | CE04W1C221MT SMG/RE3                       |
| C148                    | 257 0514 901 | Ceramic chip 0.33uF/16V    | CK73F1C334ZT                               |
| C149                    | 257 0501 901 | Ceramic chip 0.01uF/50V    | CK73B1H103KT (1608)                        |
| C150                    | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT<br>DCD-685 model only         |
| C151,152                | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT                               |
| C153                    | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C154                    | 257 0517 908 | Ceramic chip 0.047uF/16V   | CK73B1C473KT                               |
| C155                    | 257 0501 901 | Ceramic chip 0.01uF/50V    | CK73B1H103KT (1608)                        |
| C156                    | 254 4538 942 | Electrolytic 100uF/16V     | CE04W1C101MT SMG/RE3                       |
| C157                    | 257 0501 901 | Ceramic chip 0.01uF/50V    | CK73B1H103KT (1608)                        |
| C158                    | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C159                    | 257 0510 918 | Ceramic chip 3300pF/50V    | CK73B1H332KT                               |
| C160                    | 254 3056 917 | Electrolytic 1uF/50V       | CE04D1H010MBPT (SME)                       |
| C162                    | 257 0506 951 | Ceramic chip 100pF/50V     | CC73CH1H101JT<br>DCD-685 model only        |
| C163                    | 254 4538 900 | Electrolytic 10uF/16V      | CE04W1C100MT SMG/RE3                       |
| C164                    | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C165                    | 257 0506 951 | Ceramic chip 100pF/50V     | CC73CH1H101JT                              |
| C166,167                | 257 0512 903 | Ceramic chip 0.1uF/25V     | CK73F1E104ZT                               |
| C168                    | 254 4538 942 | Electrolytic 100uF/16V     | CE04W1C101MT SMG/RE3                       |

| Ref. No. | Part No.     | Part Name                | Remarks                                    |
|----------|--------------|--------------------------|--------------------------------------------|
| C170     | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3                       |
| C171     | 254 4278 901 | Electrolytic 0.68uF/50V  | CE04W1HR68MT (SME)<br>DCD-685 model only   |
| C173     | 254 3056 917 | Electrolytic 1uF/50V     | CE04D1H010MBPT (SME)                       |
| C174     | 257 0510 918 | Ceramic chip 3300pF/50V  | CK73B1H332KT                               |
| C175,176 | 247 2018 903 | Carbon chip 0 ohm 1/16W  | RM73B--0R0KT                               |
| C177     | 254 4538 939 | Electrolytic 47uF/16V    | CE04W1C470MT SMG/RE3                       |
| C178     | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3<br>DCD-685 model only |
| C179     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT<br>DCD-685 model only         |
| C180     | 247 2018 903 | Carbon chip 0 ohm 1/16W  | RM73B--0R0KT<br>DCD-685 model only         |
| C181     | 254 4538 900 | Electrolytic 10uF/16V    | CE04W1C100MT SMG/RE3                       |
| C182     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT<br>DCD-685 model only         |
| C184     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C185     | 247 2018 903 | Carbon chip 0 ohm 1/16W  | RM73B--0R0KT<br>DCD-685 model only         |
| C186     | 257 0509 929 | Ceramic chip 1000pF/50V  | CK73B1H102KT                               |
| C189     | 257 0503 941 | Ceramic chip 12pF/50V    | CC73CH1H120JT                              |
| C190     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)<br>DCD-685 model only  |
| C191     | 254 4538 968 | Electrolytic 330uF/16V   | CE04W1C331MT SMG/RE3<br>DCD-685 model only |
| C192     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT<br>DCD-685 model only         |
| C194     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C195     | 254 4524 972 | Electrolytic 4.7uF/50V   | CE04W1H4R7MT SMG/RE3                       |
| C196     | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3<br>DCD-685 model only |
| C197     | 257 0509 929 | Ceramic chip 1000pF/50V  | CK73B1H102KT<br>DCD-685 model only         |
| C198     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)<br>DCD-685 model only  |
| C199     | 257 0517 908 | Ceramic chip 0.047uF/16V | CK73B1C473KT                               |
| C201,202 | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C203     | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3                       |
| C204     | 257 0506 951 | Ceramic chip 100pF/50V   | CC73CH1H101JT                              |
| C207     | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3                       |
| C208,209 | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C211     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C212     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C213     | 257 0509 929 | Ceramic chip 1000pF/50V  | CK73B1H102KT                               |
| C214,215 | 257 0503 941 | Ceramic chip 12pF/50V    | CC73CH1H120JT<br>DCD-485 model only        |
| C216     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT<br>DCD-685 model only         |
| C217     | 254 4538 968 | Electrolytic 330uF/16V   | CE04W1C331MT SMG/RE3<br>DCD-685 model only |
| C218     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)<br>DCD-685 model only  |
| C219     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C220     | 257 0511 917 | Ceramic chip 0.022uF/50V | CK73F1H223ZT                               |
| C221     | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3                       |
| C222     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C223,224 | 257 0507 989 | Ceramic chip 360pF/50V   | CC73CH1H361JT                              |
| C225     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C226     | 257 0509 929 | Ceramic chip 1000pF/50V  | CK73B1H102KT                               |
| C227     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C228     | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3                       |
| C229     | 257 0504 940 | Ceramic chip 33pF/50V    | CC73CH1H330JT                              |
| C230,231 | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C232     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C233     | 247 2018 903 | Carbon chip 0 ohm 1/16W  | RM73B--0R0KT<br>DCD-685 model only         |
| C234     | 257 0506 951 | Ceramic chip 100pF/50V   | CC73CH1H101JT                              |

| Ref. No. | Part No.     | Part Name               | Remarks                                    |
|----------|--------------|-------------------------|--------------------------------------------|
| C236-239 | 257 0506 951 | Ceramic chip 100pF/50V  | CC73CH1H101JT                              |
| C249     | 254 4538 942 | Electrolytic 100uF/16V  | CE04W1C101MT SMG/RE3                       |
| C252     | 254 4538 942 | Electrolytic 100uF/16V  | CE04W1C101MT SMG/RE3                       |
| C253,254 | 257 0501 901 | Ceramic chip 0.01uF/50V | CK73B1H103KT (1608)                        |
| C255     | 254 4538 942 | Electrolytic 100uF/16V  | CE04W1C101MT SMG/RE3                       |
| C256     | 254 4538 955 | Electrolytic 220uF/16V  | CE04W1C221MT SMG/RE3                       |
| C257     | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT                               |
| C258     | 257 0507 934 | Ceramic chip 220pF/50V  | CC73CH1H221JT                              |
| C301     | 254 4538 939 | Electrolytic 47uF/16V   | CE04W1C470MT SMG/RE3<br>DCD-485 model only |
| C302,303 | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT<br>DCD-485 model only         |
| C304     | 254 4538 942 | Electrolytic 100uF/16V  | CE04W1C101MT SMG/RE3<br>DCD-485 model only |
| C305,306 | 254 4538 900 | Electrolytic 10uF/16V   | CE04W1C100MT SMG/RE3<br>DCD-485 model only |
| C307,308 | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT<br>DCD-485 model only         |
| C309     | 254 4538 939 | Electrolytic 47uF/16V   | CE04W1C470MT SMG/RE3<br>DCD-485 model only |
| C310,311 | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT<br>DCD-485 model only         |
| C312,313 | 254 4538 900 | Electrolytic 10uF/16V   | CE04W1C100MT SMG/RE3<br>DCD-485 model only |
| C314     | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT<br>DCD-485 model only         |
| C315,316 | 254 4524 956 | Electrolytic 2.2uF/50V  | CE04W1H2R2MT SMG/RE3<br>DCD-485 model only |
| C317,318 | 255 4232 937 | Mylar film 1000pF/100V  | CQ93P2A102JT(NH)<br>DCD-485 model only     |
| C321,322 | 255 4232 908 | Mylar film 820pF/100V   | CQ93P2A821JT(NH)<br>DCD-485 model only     |
| C325     | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT<br>DCD-685 model only         |
| C326     | 254 4538 939 | Electrolytic 47uF/16V   | CE04W1C470MT SMG/RE3<br>DCD-685 model only |
| C327-330 | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT<br>DCD-685 model only         |
| C331-334 | 254 4538 939 | Electrolytic 47uF/16V   | CE04W1C470MT SMG/RE3<br>DCD-685 model only |
| C335-340 | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT<br>DCD-685 model only         |
| C341,342 | 257 0501 901 | Ceramic chip 0.01uF/50V | CK73B1H103KT (1608)<br>DCD-685 model only  |
| C343,344 | 254 4538 913 | Electrolytic 22uF/16V   | CE04W1C220MT SMG/RE3<br>DCD-685 model only |
| C345,346 | 254 4538 939 | Electrolytic 47uF/16V   | CE04W1C470MT SMG/RE3<br>DCD-685 model only |
| C347-350 | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT<br>DCD-685 model only         |
| C351,352 | 254 4538 942 | Electrolytic 100uF/16V  | CE04W1C101MT SMG/RE3<br>DCD-685 model only |
| C353-356 | 254 4538 939 | Electrolytic 47uF/16V   | CE04W1C470MT SMG/RE3<br>DCD-685 model only |
| C357-362 | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT<br>DCD-685 model only         |
| C363,364 | 257 0507 950 | Ceramic chip 270pF/50V  | CC73CH1H271JT<br>DCD-685 model only        |
| C365,366 | 257 0506 951 | Ceramic chip 100pF/50V  | CC73CH1H101JT<br>DCD-685 model only        |
| C367,368 | 257 0509 929 | Ceramic chip 1000pF/50V | CK73B1H102KT<br>DCD-685 model only         |
| C371,372 | 257 0512 903 | Ceramic chip 0.1uF/25V  | CK73F1E104ZT<br>DCD-685 model only         |
| C373,374 | 254 4538 900 | Electrolytic 10uF/16V   | CE04W1C100MT SMG/RE3<br>DCD-685 model only |

| Ref. No. | Part No.     | Part Name                | Remarks                                    |
|----------|--------------|--------------------------|--------------------------------------------|
| C375,376 | 257 0507 934 | Ceramic chip 220pF/50V   | CC73CH1H221JT<br>DCD-685 model only        |
| C377,378 | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT<br>DCD-685 model only         |
| C379,380 | 254 4538 900 | Electrolytic 10uF/16V    | CE04W1C100MT SMG/RE3<br>DCD-685 model only |
| C381,382 | 254 4538 939 | Electrolytic 47uF/16V    | CE04W1C470MT SMG/RE3                       |
| C383,384 | 257 0509 929 | Ceramic chip 1000pF/50V  | CK73B1H102KT                               |
| C385,386 | 257 0505 907 | Ceramic chip 56pF/50V    | CC73CH1H560JT                              |
| C387,388 | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3                       |
| C389     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C390     | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3                       |
| C391     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C392     | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3                       |
| C393     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT<br>DCD-685 model only         |
| C394     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT<br>DCD-485 model only         |
| C395,396 | 257 0506 951 | Ceramic chip 100pF/50V   | CC73CH1H101JT                              |
| C397     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C398     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C401,402 | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C403     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C404-406 | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C407     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C408     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C409     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C410     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C411     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C412     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C413     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C504,505 | 254 4538 942 | Electrolytic 100uF/16V   | CE04W1C101MT SMG/RE3                       |
| C506     | 254 4524 943 | Electrolytic 1uF/50V     | CE04W1H010MT SMG/RE3                       |
| C507     | 254 4524 969 | Electrolytic 3.3uF/50V   | CE04W1H3R3MT SMG/RE3                       |
| C508,509 | 254 4525 926 | Electrolytic 100uF/50V   | CE04W1H101MT SMG/RE3                       |
| C510,511 | 254 4525 900 | Electrolytic 33uF/50V    | CE04W1H330MT SMG/RE3                       |
| C512     | 254 4403 721 | Electrolytic 2200uF/25V  | CE04W1E222MC (SMG)                         |
| C513     | 254 4403 734 | Electrolytic 4700uF/25V  | CE04W1E472MC (SMG)                         |
| C515     | 253 1146 907 | Ceramic 0.01uF/50V       | CK45F1H103ZT                               |
| C520     | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C522,523 | 253 9030 950 | Ceramic 6800pF/25V       | CK45=1E682KT                               |
| C524     | 253 1146 907 | Ceramic 0.01uF/50V       | CK45F1H103ZT                               |
| C525     | 254 4524 943 | Electrolytic 1uF/50V     | CE04W1H010MT SMG/RE3                       |
| C526     | 254 4538 955 | Electrolytic 220uF/16V   | CE04W1C221MT SMG/RE3                       |
| C527     | 253 8022 707 | Ceramic 0.01 uF/250V(AC) | CK45F2EAC103MC                             |
| C529-531 | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C532     | 254 4541 955 | Electrolytic 220uF/25V   | CE04W1E221MT SMG/RE3                       |
| C533,534 | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C536     | 254 4524 943 | Electrolytic 1uF/50V     | CE04W1H010MT SMG/RE3                       |
| C601-603 | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C605     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C606,607 | 257 0506 951 | Ceramic chip 100pF/50V   | CC73CH1H101JT                              |
| C608     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C610     | 257 0506 951 | Ceramic chip 100pF/50V   | CC73CH1H101JT                              |
| C611,612 | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C613,614 | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C615,616 | 257 0501 901 | Ceramic chip 0.01uF/50V  | CK73B1H103KT (1608)                        |
| C617     | 257 0512 903 | Ceramic chip 0.1uF/25V   | CK73F1E104ZT                               |
| C618     | 257 0506 951 | Ceramic chip 100pF/50V   | CC73CH1H101JT                              |

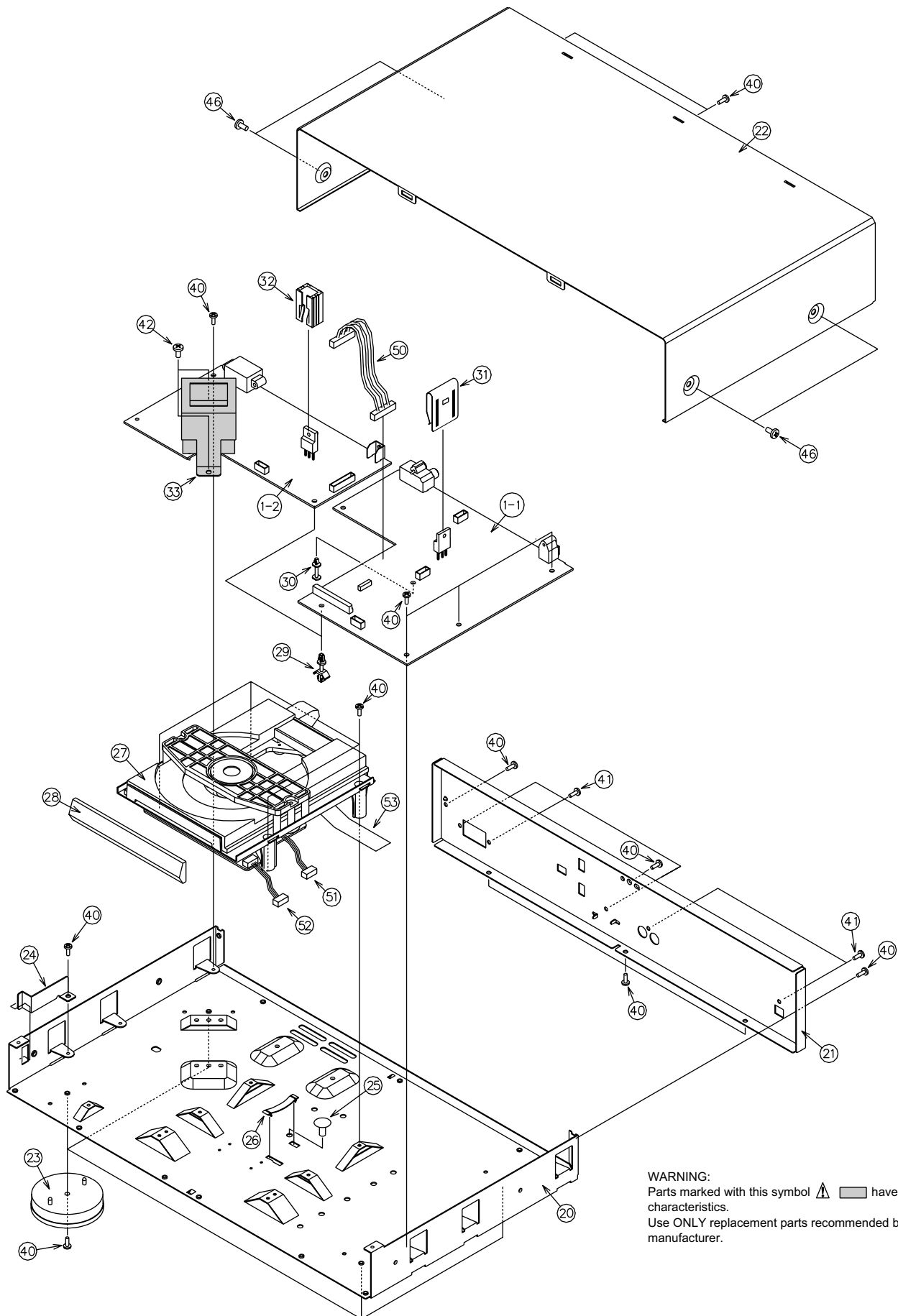
| Ref. No.                 | Part No.     | Part Name                  | Remarks            | Q'ty | Ref. No.  | Part No.     | Part Name                | Remarks              | Q'ty |
|--------------------------|--------------|----------------------------|--------------------|------|-----------|--------------|--------------------------|----------------------|------|
| <b>OTHER PARTS GROUP</b> |              |                            |                    |      | ST1,2     | 205 0452 017 | Style pin                |                      | 2    |
| CX21                     | 203 2349 009 | 2P inlet                   |                    | 1    | ST501,502 | 205 0452 017 | Style pin                |                      | 2    |
| CX22                     | 205 0581 001 | 2P VH connector base       |                    | 1    | TM501     | 412 9483 009 | Earth plate              |                      | 1    |
| CX41                     | 205 0343 045 | 4P connector base (KR-PH)  |                    | 1    | W701      | 203 0539 031 | 1P SIN cord Ass'y        |                      | 1    |
| CX51,52                  | 205 0343 058 | 5P connector base (KR-PH)  |                    | 2    | X101      | 399 0743 005 | Crystal 8.4672 MHz       | DCD-685 model only   | 1    |
| CX53                     | 205 0190 052 | 5P NH connector base       |                    | 1    | X103      | 399 0742 006 | Crystal 16.9344 MHz      | DCD-485 model only   | 1    |
| CX61                     | 205 0343 061 | 6P connector base (KR-PH)  |                    | 1    | X601      | 399 0755 909 | Ceramic resonator4.23MHz | CSTS0423MG06-T2      | 1    |
| CX63                     | 205 0190 065 | 6P NH connector base       |                    | 1    |           | 461 0862 045 | FL spacer (T=5)          | under FL601          | 2    |
| CX141                    | 204 6504 005 | 14P PH-SAN connector cord  |                    | 1    |           | 412 4809 002 | IC Heat spreader         |                      | 1    |
| CX161                    | 205 0892 033 | 16P FFC base (P=1)         |                    | 1    |           | 417 0579 001 | HEAT SINK                | assembled with TR502 | 1    |
| CX271                    | 205 0880 016 | 27P FFC connector base     |                    | 1    |           |              |                          |                      |      |
| CY22                     | 205 0581 001 | 2P VH connector base       |                    | 1    |           |              |                          |                      |      |
| CY41                     | 205 0343 045 | 4P connector base (KR-PH)  |                    | 1    |           |              |                          |                      |      |
| CY52                     | 205 0355 059 | 5P KR connector base (L)   |                    | 1    |           |              |                          |                      |      |
| CY141                    | 205 0375 042 | 14P connector base (KR-PH) |                    | 1    |           |              |                          |                      |      |
| CY271                    | 205 0880 016 | 27P FFC connector base     |                    | 1    |           |              |                          |                      |      |
| FB101                    | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT       | 1    |           |              |                          |                      |      |
| FB102                    | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT       | 2    |           |              |                          |                      |      |
|                          |              |                            | DCD-685 model only |      |           |              |                          |                      |      |
| FB103,104                | 235 0129 901 | Chip emifil                |                    | 2    |           |              |                          |                      |      |
| FB105                    | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT       | 1    |           |              |                          |                      |      |
|                          |              |                            | DCD-685 model only |      |           |              |                          |                      |      |
| FB107,108                | 235 0129 901 | Chip emifil                |                    | 2    |           |              |                          |                      |      |
| FB109                    | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT       | 1    |           |              |                          |                      |      |
| FB110                    | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT       | 2    |           |              |                          |                      |      |
|                          |              |                            | DCD-685 model only |      |           |              |                          |                      |      |
| FB112-115                | 235 0129 901 | Chip emifil                |                    | 4    |           |              |                          |                      |      |
| FB116                    | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT       | 1    |           |              |                          |                      |      |
|                          |              |                            | DCD-685 model only |      |           |              |                          |                      |      |
| FB118                    | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT       | 1    |           |              |                          |                      |      |
|                          |              |                            | DCD-685 model only |      |           |              |                          |                      |      |
| FB119,120                | 235 0129 901 | Chip emifil                |                    | 2    |           |              |                          |                      |      |
| FB121                    | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT       | 1    |           |              |                          |                      |      |
|                          |              |                            | DCD-685 model only |      |           |              |                          |                      |      |
| FB123                    | 247 2018 903 | Carbon chip 0 ohm 1/16W    | RM73B--0R0KT       | 1    |           |              |                          |                      |      |
|                          |              |                            | DCD-685 model only |      |           |              |                          |                      |      |
| FB125                    | 235 0129 901 | Chip emifil                |                    | 1    |           |              |                          |                      |      |
| FB126,127                | 235 0049 900 | Beads inductor             |                    | 2    |           |              |                          |                      |      |
| FL601                    | 393 8021 006 | VFD                        |                    | 1    |           |              |                          |                      |      |
| JK101                    | 269 0188 000 | TOTX178                    |                    | 1    |           |              |                          |                      |      |
| JK301                    | 204 8537 009 | 2P pin jack (GNB) D        |                    | 1    |           |              |                          |                      |      |
| JK401                    | 204 8264 071 | Headphone jack (gold)      |                    | 1    |           |              |                          |                      |      |
| L501                     | 239 8019 002 | Line filter coil           | DCD-485 model only | 1    |           |              |                          |                      |      |
| △S501                    | 212 1030 009 | Power switch (TV-5)        |                    | 1    |           |              |                          |                      |      |
| S601-610                 | 212 5604 910 | Tact switch                |                    | 10   |           |              |                          |                      |      |
| S611                     | 212 0410 002 | Rotary encoder-jog         |                    | 1    |           |              |                          |                      |      |
| S614                     | 212 5604 910 | Tact switch                |                    | 1    |           |              |                          |                      |      |
| S617                     | 212 5604 910 | Tact switch                |                    | 1    |           |              |                          |                      |      |
| S618-620                 | 212 5604 910 | Tact switch                | DCD-685 model only | 4    |           |              |                          |                      |      |
| S619                     | 212 5604 910 | Tact switch                | DCD-485 model only | 1    |           |              |                          |                      |      |

## PARTS LIST OF EXPLODED VIEW

| Ref.No. | Part No.     | Part Name            | Remarks              | Q'ty | Ref.No.       | Part No.     | Part Name          | Remarks            | Q'ty |
|---------|--------------|----------------------|----------------------|------|---------------|--------------|--------------------|--------------------|------|
| 1       | 1U-3346      | CD board ass'y       | DCD-485 model only   | 1    | <b>SCREWS</b> |              |                    |                    |      |
| 1       | 1U-3346A     | CD board ass'y       | DCD-685 model only   | 1    |               |              |                    |                    |      |
| 1-1     |              | Servo & D/A unit     |                      |      | 40            | 473 7002 021 | 3X8 CBTS (S)-B     | DCD-485 model only | 22   |
| 1-2     |              | Power unit           |                      |      |               |              |                    | DCD-685 model only | 20   |
| 1-3     |              | Display unit         |                      |      | 41            | 477 0064 107 | Fixing screw       |                    | 5    |
| 1-4     |              | H/P jack unit        |                      |      | 42            | 473 7004 016 | 4X6 CBTS (S)-Z     |                    | 2    |
| 1-5     |              | Power sw unit        |                      |      | 43            | 473 7508 017 | 3X10 CBTS (P)-B    | DCD-485 model only | 11   |
| 2-1     | 146 2232 208 | Front panel          | DCD-485 model only   | 1    |               |              |                    | DCD-685 model only | 7    |
| 2-2     | -            | H/P PWB holder       | DCD-485 model only   | 1    | 44            | 473 8044 017 | Special screw      | DCD-485 model only | 2    |
| 2       | 144 2758 003 | Front panel          | DCD-685 model only   | 1    |               |              |                    | DCD-685 model only | 1    |
| 2       | 144 2758 016 | Front panel          | Gold model only(685) | 1    | 45            | 473 8007 025 | 3X8 cup screw      |                    | 3    |
| 3       | 143 1114 001 | Window               | DCD-485 model only   | 1    | 46            | 477 0263 005 | 3P. swelling screw |                    | 4    |
| 3       | 143 1066 117 | Window               | DCD-685 model only   | 1    | 46            | 477 0263 018 | 3P. swelling screw | Gold model only    | 4    |
| 4-1     | 146 2141 409 | Inner panel          | DCD-685 model only   | 1    | 47            | 473 7002 034 | 3X6 CBTS (S)-B     |                    | 3    |
| 4-1     | 146 2141 412 | Inner panel          | Gold model only(685) | 1    |               |              |                    |                    |      |
| 4-2     | -            | H/P PWB holder       | DCD-685 model only   | 1    |               |              |                    |                    |      |
| 5       | 113 1849 029 | Function knob        |                      | 1    |               |              |                    |                    |      |
| 5       | 113 1849 074 | Function knob        | Gold model only(685) | 1    |               |              |                    |                    |      |
| 6       | 113 1904 003 | Tact knob(4P)        | DCD-485 model only   | 1    |               |              |                    |                    |      |
| 7       | 113 1850 005 | Tact knob (6P)       | Gold model only(685) | 1    |               |              |                    |                    |      |
| 7       | 113 1850 018 | Tact knob (6P)       | DCD-685 model only   | 1    |               |              |                    |                    |      |
| 8       | 412 2814 044 | Card spacer (L=6)    | DCD-685 model only   | 1    |               |              |                    |                    |      |
| 9       | 412 4782 006 | Support bracket(F)   | DCD-485 model only   | 1    |               |              |                    |                    |      |
| 10      | 412 4783 005 | Support bracket(B)   | DCD-485 model only   | 1    |               |              |                    |                    |      |
| 11      | 113 9213 000 | P• knob (P) ass'y    |                      | 1    |               |              |                    |                    |      |
| 11      | 113 9213 084 | P• knob (P) ass'y    | Gold model only(685) | 1    |               |              |                    |                    |      |
| 12      | 112 0851 002 | Knob (Maru)          |                      | 1    |               |              |                    |                    |      |
| 12      | 112 0851 015 | Knob (Maru)          | Gold model only(685) | 1    |               |              |                    |                    |      |
| 13      | 112 0811 013 | Knob (Fuji)          | DCD-685 model only   | 1    |               |              |                    |                    |      |
| 13      | 112 0811 000 | Knob (Fuji)          | Gold model only(685) | 1    |               |              |                    |                    |      |
| 15      | 461 0501 005 | Rubber sheet         | DCD-685 model only   | 3    |               |              |                    |                    |      |
| 20      | 411 1386 509 | Chassis              |                      | 1    |               |              |                    |                    |      |
| 21      | 105 1318 245 | Back panel           | DCD-485 model only   | 1    |               |              |                    |                    |      |
| 21      | 105 1318 258 | Back panel           | DCD-685 model only   | 1    |               |              |                    |                    |      |
| 22      | 102 0604 003 | Top cover            |                      | 1    |               |              |                    |                    |      |
| 22      | 102 0604 016 | Top cover            | Gold model only(685) | 1    |               |              |                    |                    |      |
| 23      | 104 0260 100 | Foot ass'y           |                      | 4    |               |              |                    |                    |      |
| 24      | 412 4784 004 | Semko bracket        |                      | 1    |               |              |                    |                    |      |
| 25      | 477 0308 009 | Hole plug            |                      | 1    |               |              |                    |                    |      |
| 26      | 445 0124 008 | Flat cable clamp     |                      | 1    |               |              |                    |                    |      |
| 27      | 337 0064 003 | CD mech(KSL-2130CCM) |                      | 1    |               |              |                    |                    |      |
| 28      | 146 2233 100 | Loader panel         |                      | 1    |               |              |                    |                    |      |
| 28      | 146 2233 113 | Loader panel         | Gold model only(685) | 1    |               |              |                    |                    |      |
| 29      | 415 9016 035 | P.C.B holder         |                      | 2    |               |              |                    |                    |      |
| 30      | 412 2814 015 | Card spacer (L=14)   |                      | 1    |               |              |                    |                    |      |
| 31      | 417 0613 006 | Heat sink(PH-0125-M) | AS101                | 1    |               |              |                    |                    |      |
| 32      | 417 0579 001 | Heat sink            | AS102                | 1    |               |              |                    |                    |      |
| △ 33    | 233 6369 002 | Power trans(E2/EK)   |                      | 1    |               |              |                    |                    |      |
| 50      | 204 6504 005 | 14P PH-SAN con cord  | CX141                | 1    |               |              |                    |                    |      |
| 51      | 204 0536 011 | 6P PH-PH con.cord    |                      | 1    |               |              |                    |                    |      |
| 52      | 203 8299 056 | 5P KR-KR con cord    |                      | 1    |               |              |                    |                    |      |
| 53      | 009 0159 013 | 16P FFC cable        |                      | 1    |               |              |                    |                    |      |
| 54      | 009 0133 039 | 27P FFC              |                      | 1    |               |              |                    |                    |      |
| 55      | 203 6514 018 | 4P PH-PH shield cord |                      | 1    |               |              |                    |                    |      |
| 56      | 203 5132 051 | 3P VH-VH conn.cord   |                      | 1    |               |              |                    |                    |      |
| 57      | 203 8363 034 | 5P PH-PH conn cord   |                      | 1    |               |              |                    |                    |      |
| ★       | 513 2358 007 | E2 laser caution     |                      | 1    |               |              |                    |                    |      |
| ★       | 513 1642 002 | No. sheet            |                      | 1    |               |              |                    |                    |      |

## DCD-485 FRONT PANEL SUB ASS'Y



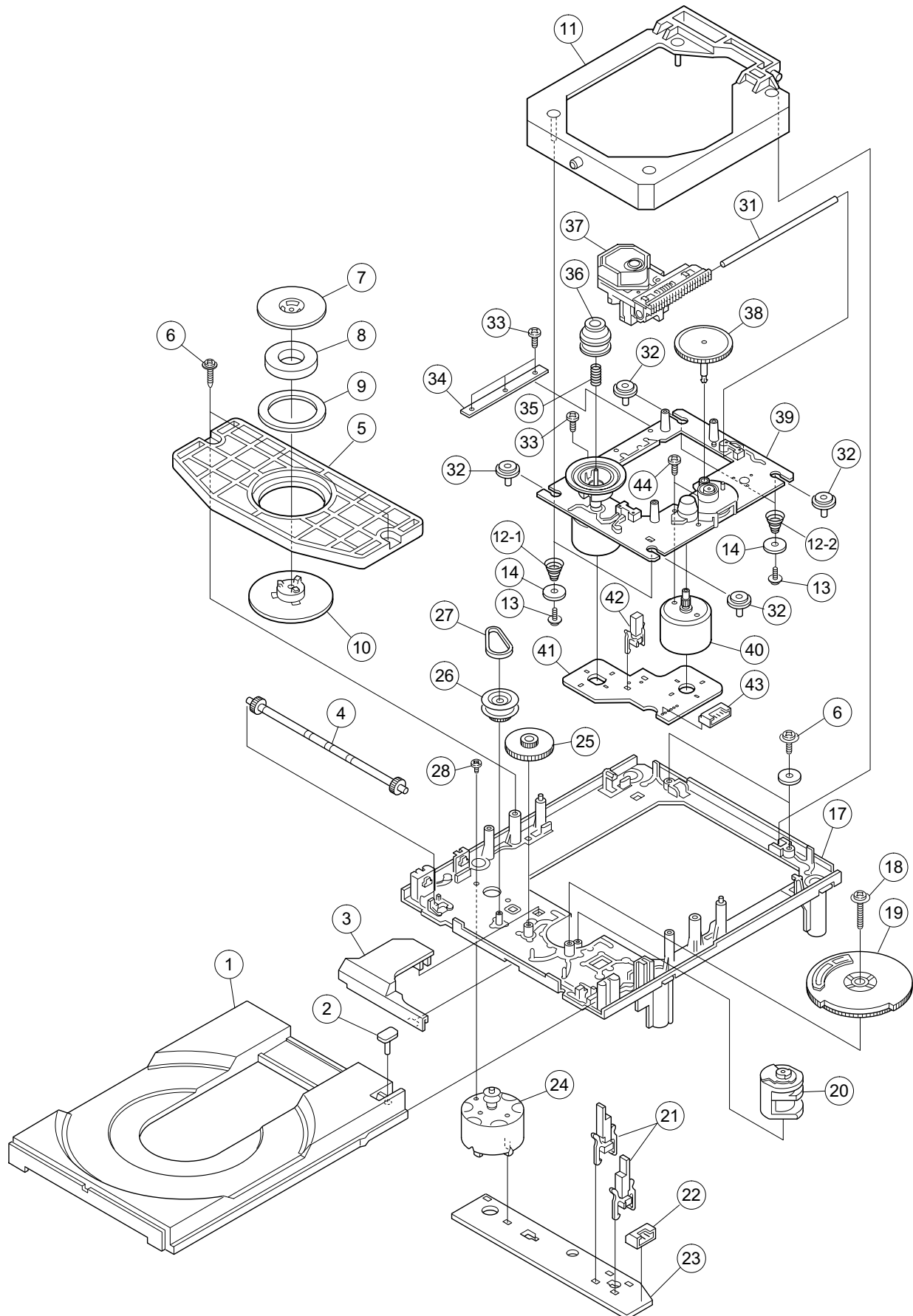


**WARNING:**  
 Parts marked with this symbol  have critical characteristics.  
 Use **ONLY** replacement parts recommended by the manufacturer.

## PARTS LIST OF CD MECHANISM UNIT

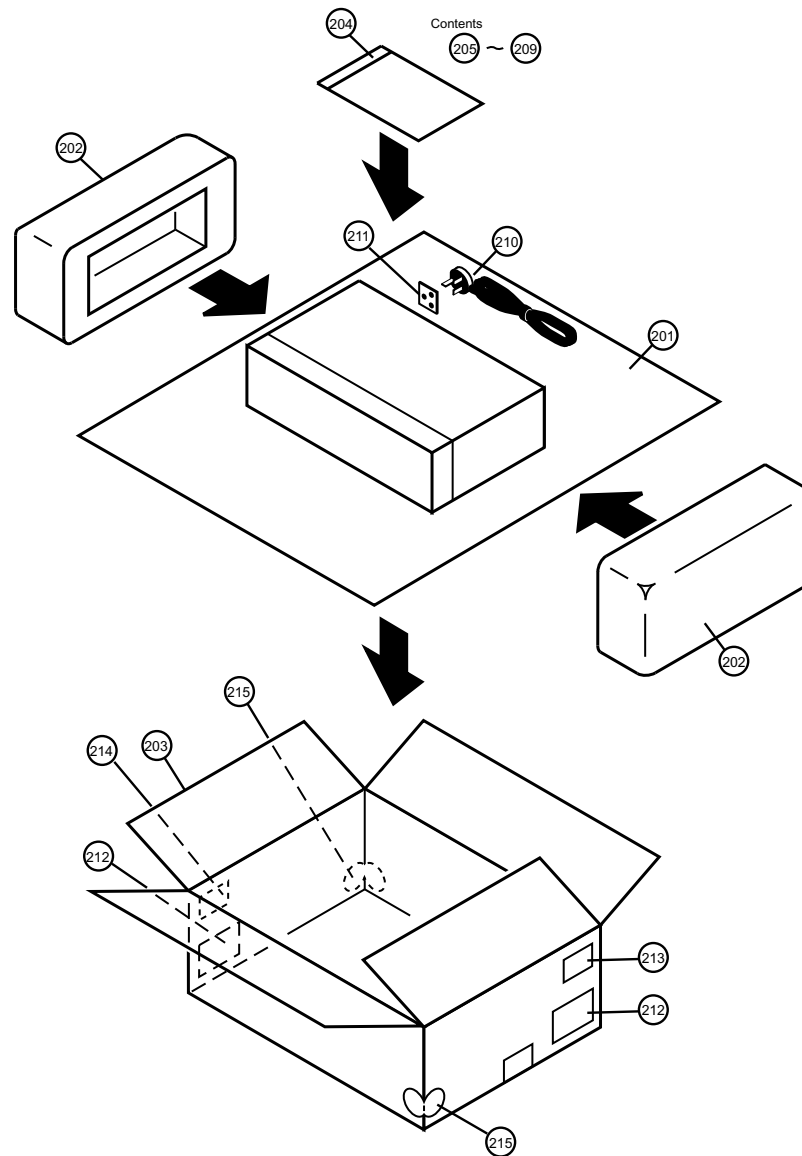
| Ref. No. | Part No.     | Part Name                                                                                                        | Remarks       | Qty |
|----------|--------------|------------------------------------------------------------------------------------------------------------------|---------------|-----|
| 1        | S26 4629 001 | Tray (C)                                                                                                         |               | 1   |
| 2        |              | This part (No.2) doesn't belong to the tray.<br>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   |

# EXPLODED VIEW OF CD MECHANISM UNIT KSL 2130 CCM





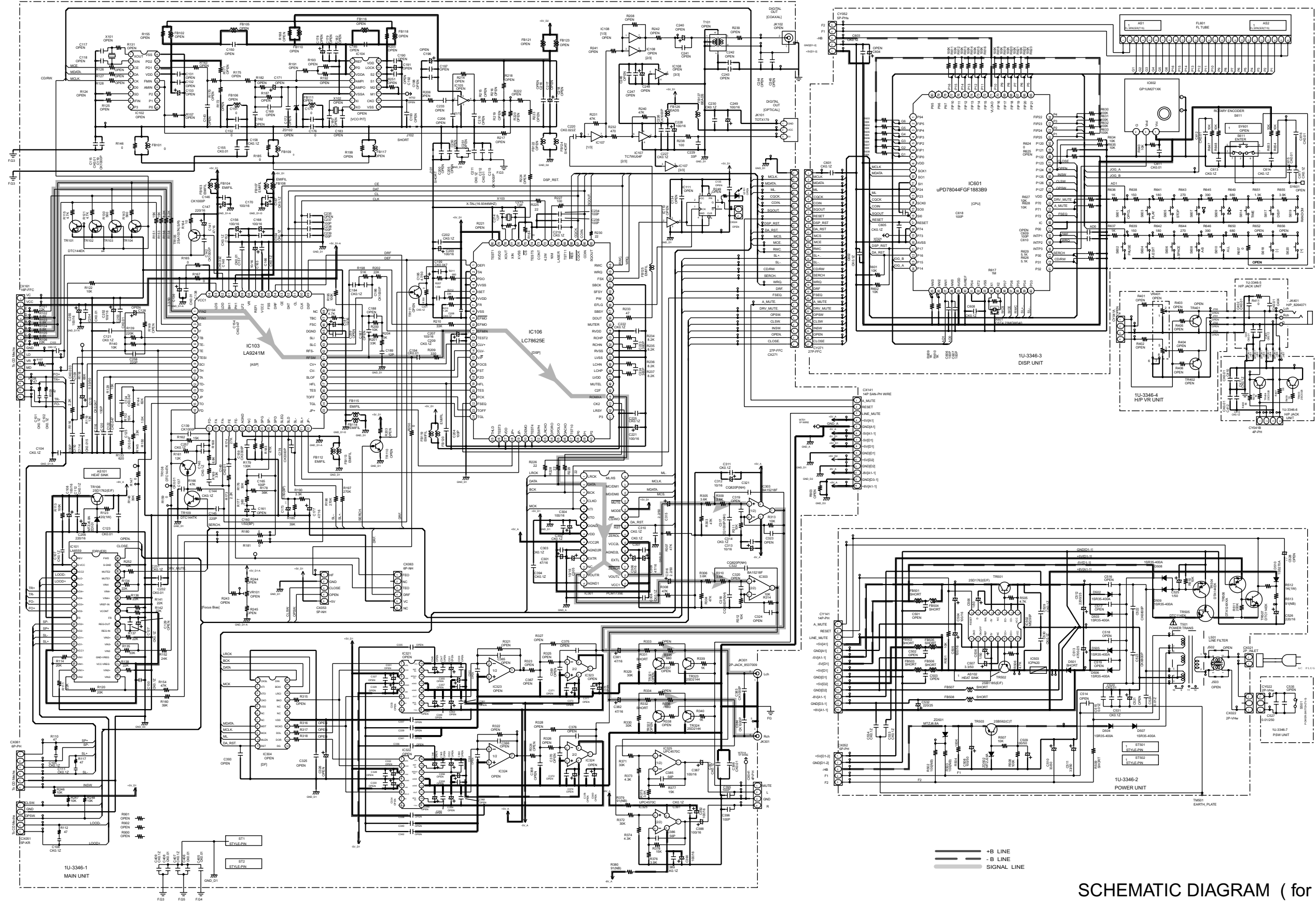
## PACKING VIEW



## PARTS LIST OF PACKING AND ACCESSORIES

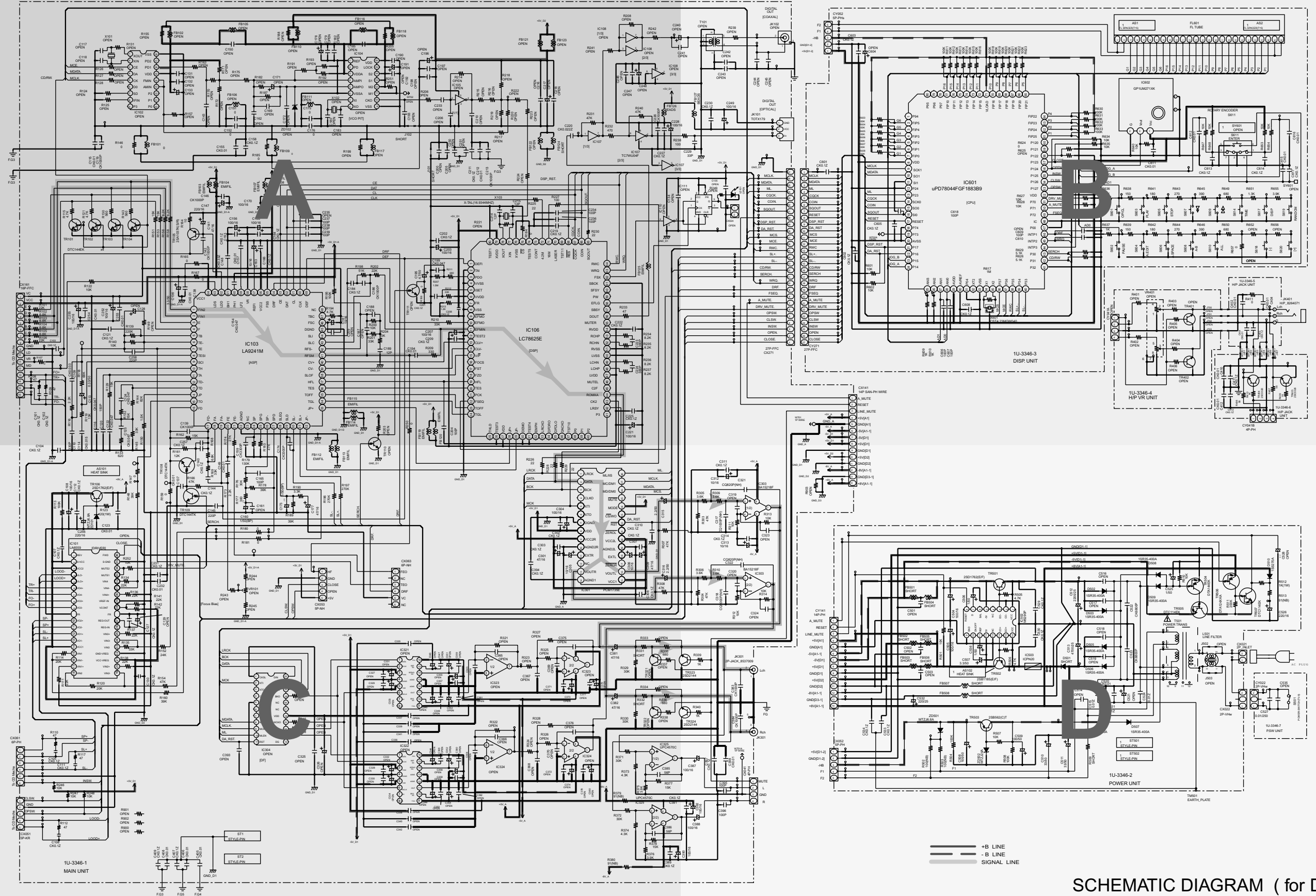
| Ref.No. | Part No.     | Part Name          | Remarks            | Q'ty |
|---------|--------------|--------------------|--------------------|------|
| 201     | 505 0131 050 | Cabinet cover      |                    | 1    |
| 202     | 503 1386 002 | Cushion            |                    | 2    |
| 203     | 501 2131 001 | Carton case        | DCD-485 model only | 1    |
| 203     | 501 2131 014 | Carton case        | DCD-685 model only | 1    |
| 204     | 505 9125 009 | Poly cover         |                    | 1    |
| 205     | 515 0867 101 | S.S.list(EX)       |                    | 1    |
| 206     | 203 2310 009 | 2P pin cord        |                    | 1    |
| 207     | 399 0360 006 | RC-266             |                    | 1    |
| 208     | 206 2108 003 | AC conn with plug  | Europe model only  | 1    |
| 209     | 511 3758 008 | Inst.manual        |                    | 1    |
| 210     | 206 2113 001 | AC cord w/con EK   | U.K. model only    | 1    |
| 211     | 509 9120 006 | Spacer carton      | U.K. model only    | 1    |
| 212     | -            | Cont. card         |                    | 1    |
| 213     | -            | Bar code label     |                    | 1    |
| 214     | -            | Bar code label     | U.K. model only    | 1    |
| 215     | 513 9111 001 | Color label (Gold) | Gold model only    | 2    |

SCHEMATIC DIAGRAM ( for DCD-485 )



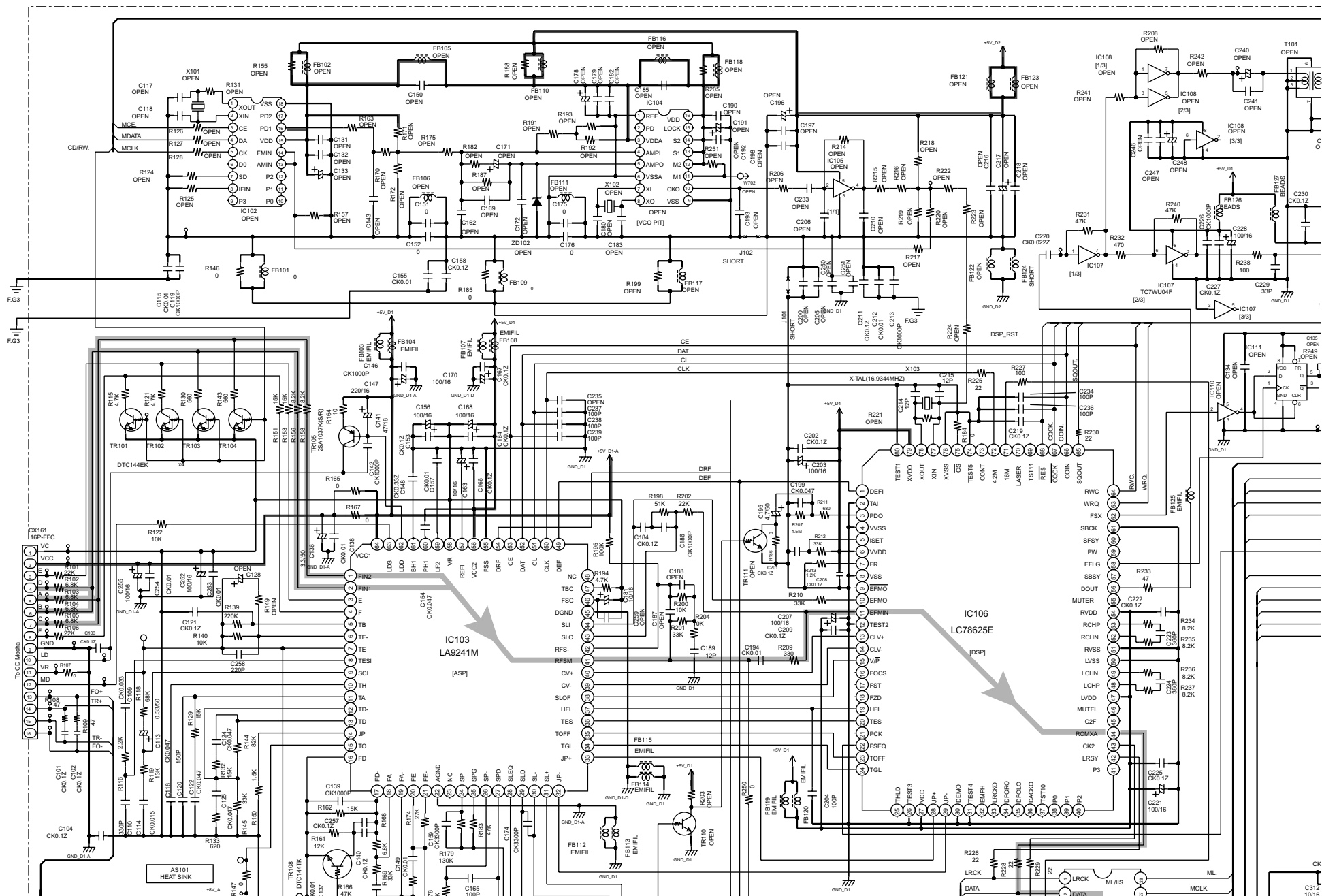
SCHEMATIC DIAGRAM ( for DCD-485 )  
1U-3346

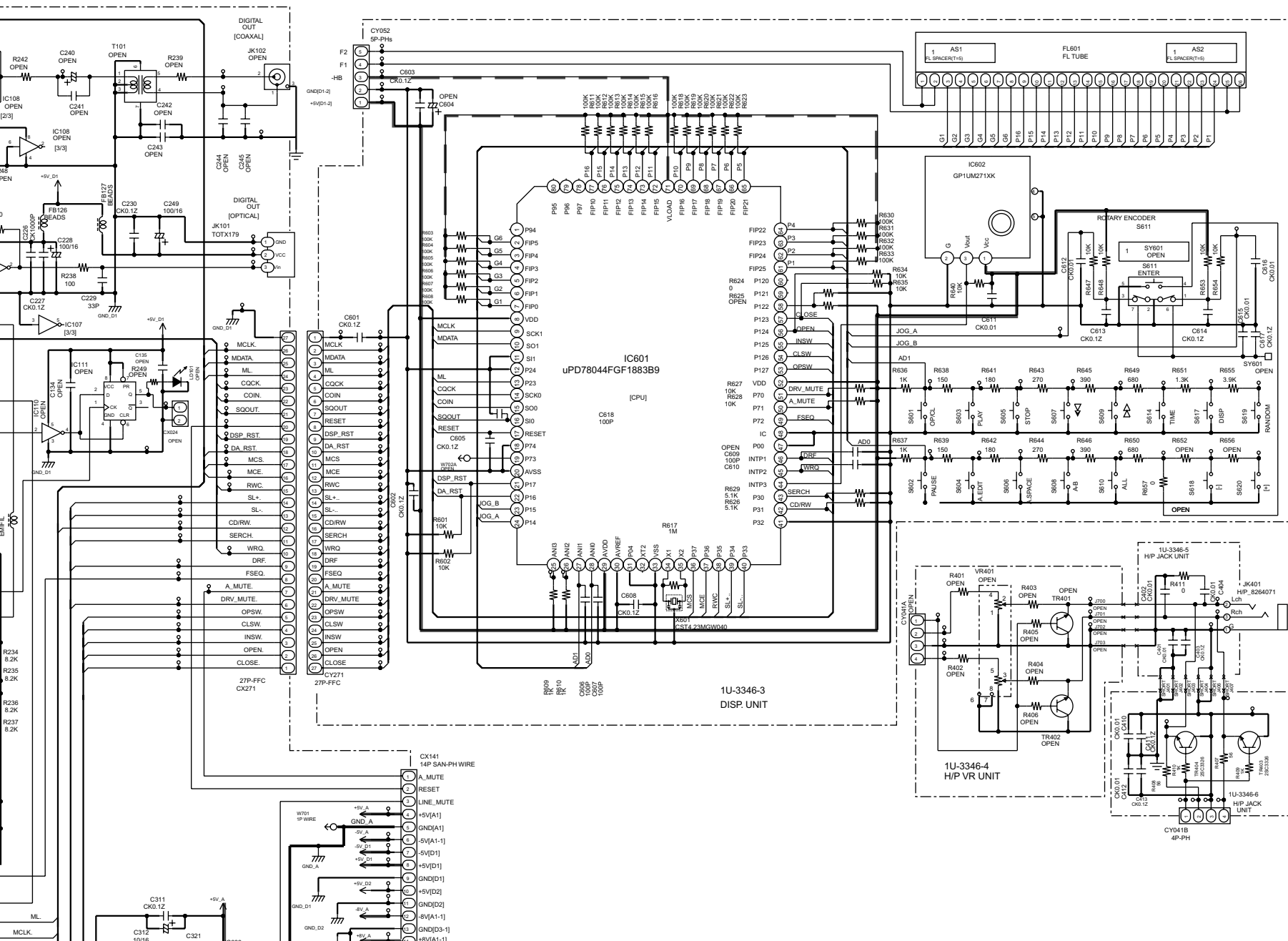
SCHEMATIC DIAGRAM ( for DCD-485 )

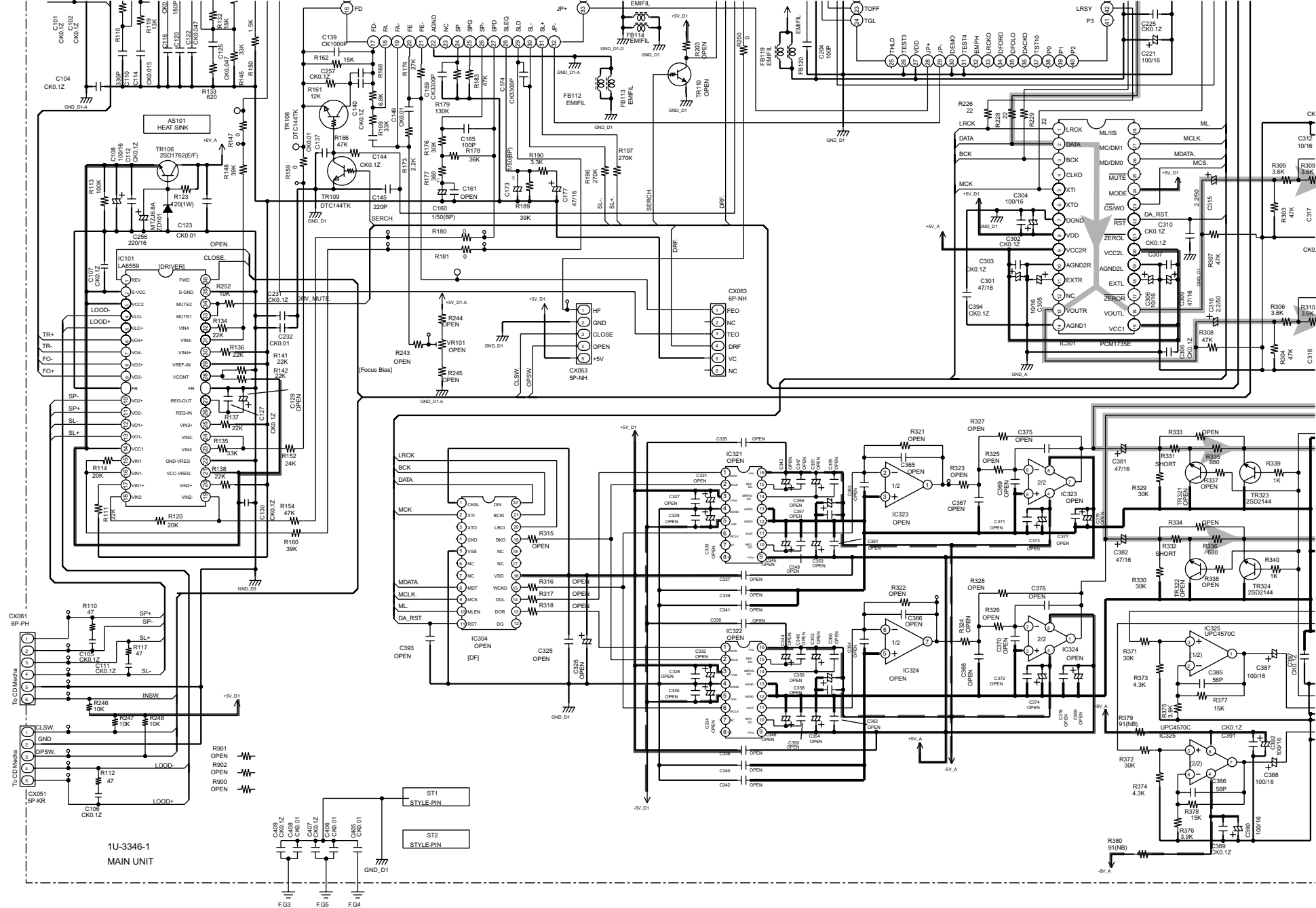


SCHEMATIC DIAGRAM ( for DCD-485 )  
1U-3346

# SCHEMATIC DIAGRAM ( for DCD-485 )







# **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:**

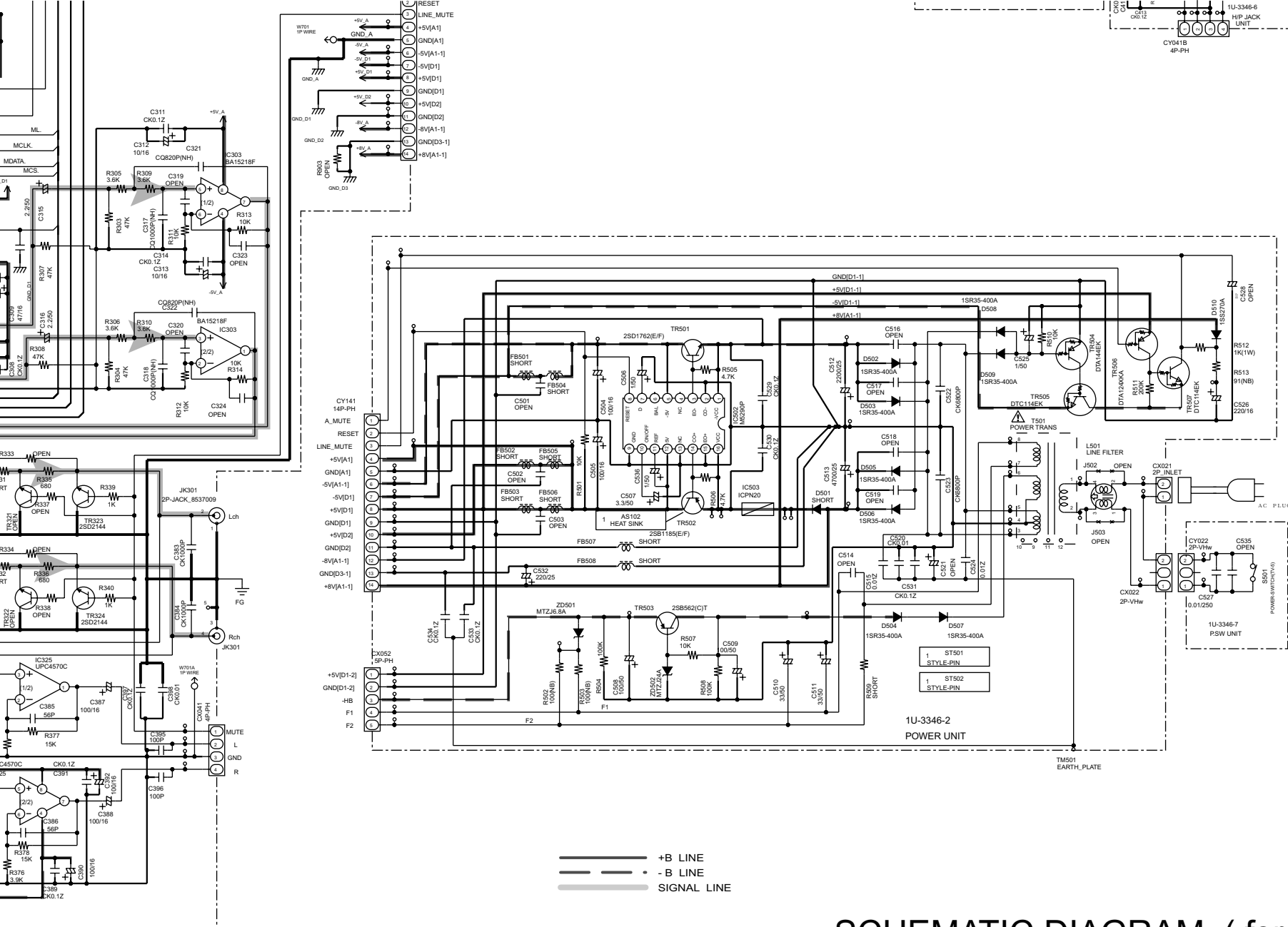
Parts marked with this symbol  have critical characteristics.  
 Use ONLY replacement parts recommended by the manufacture.

# **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 card is less than 460 kohms, the unit is defective.

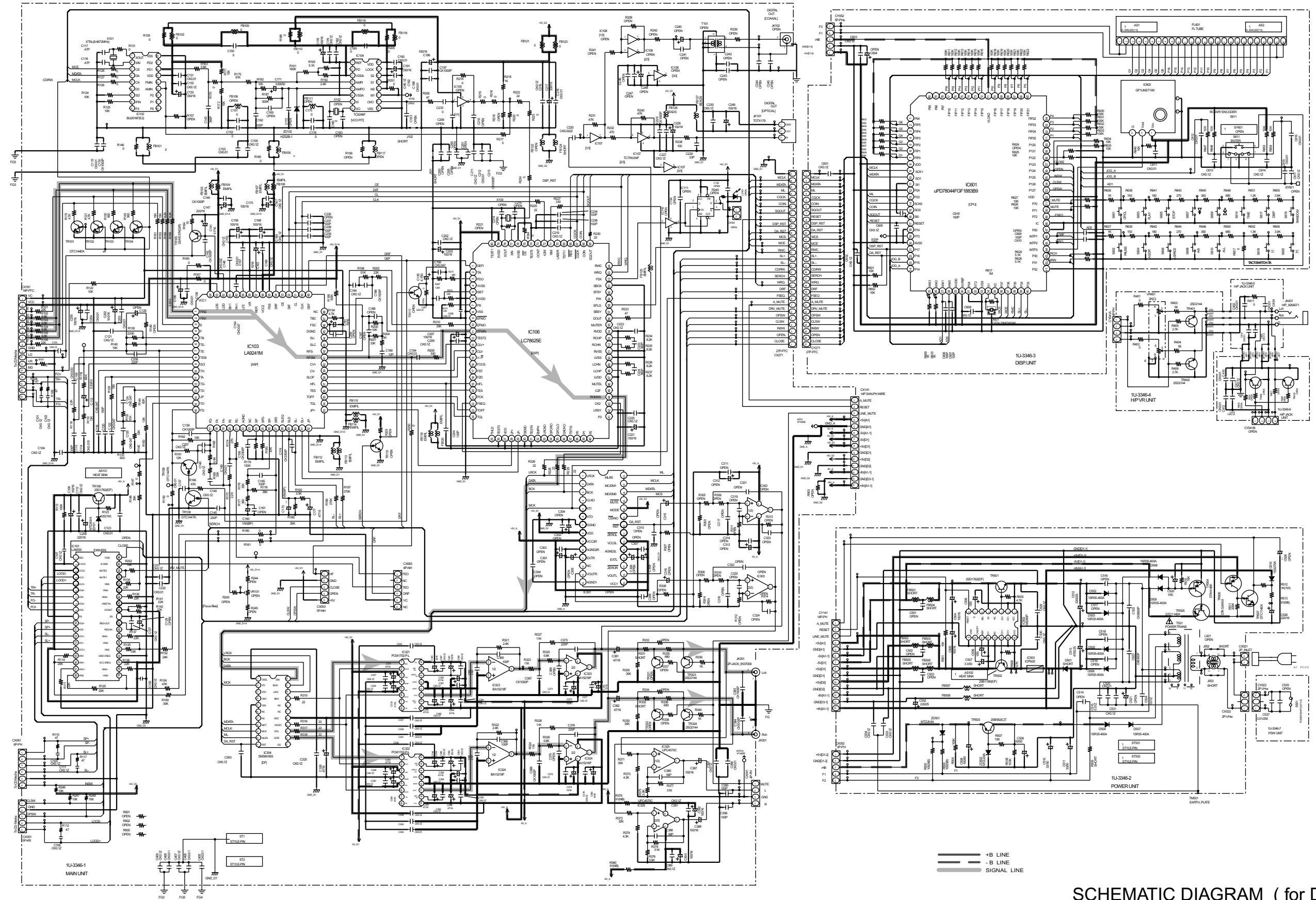
# **WARNING:**

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



SCHEMATIC DIAGRAM ( for DCD-485 )  
1U-3346

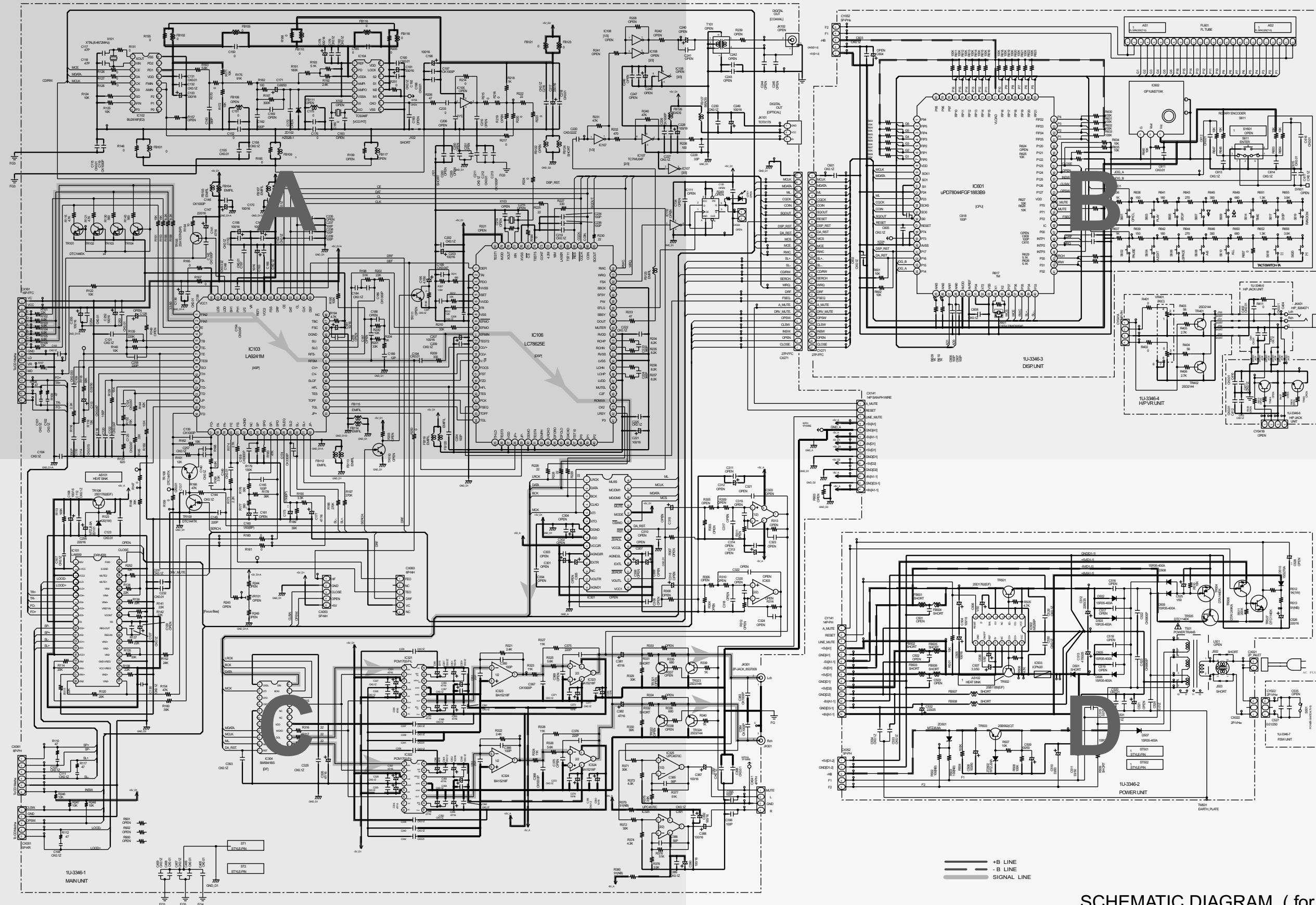
SCHEMATIC DIAGRAM ( for DCD-685 )



SCHEMATIC DIAGRAM ( for DCD-685 )  
1U-3346A



### SCHEMATIC DIAGRAM ( for DCD-685 )



**NOTICE**

ALL RESISTANCE VALUES IN OHM,  $\times 1,000$  OHM  $M=1,000,000$  OHM  
ALL CAPACITANCE VALUES IN MICRO FARAD  $\mu P=10^{-6}$  MICRO FARAD  
VOLTAGE AND CURRENT ARE MEASURED AT 50 HZ SIGNAL INPUT  
CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR  
NOTICE.

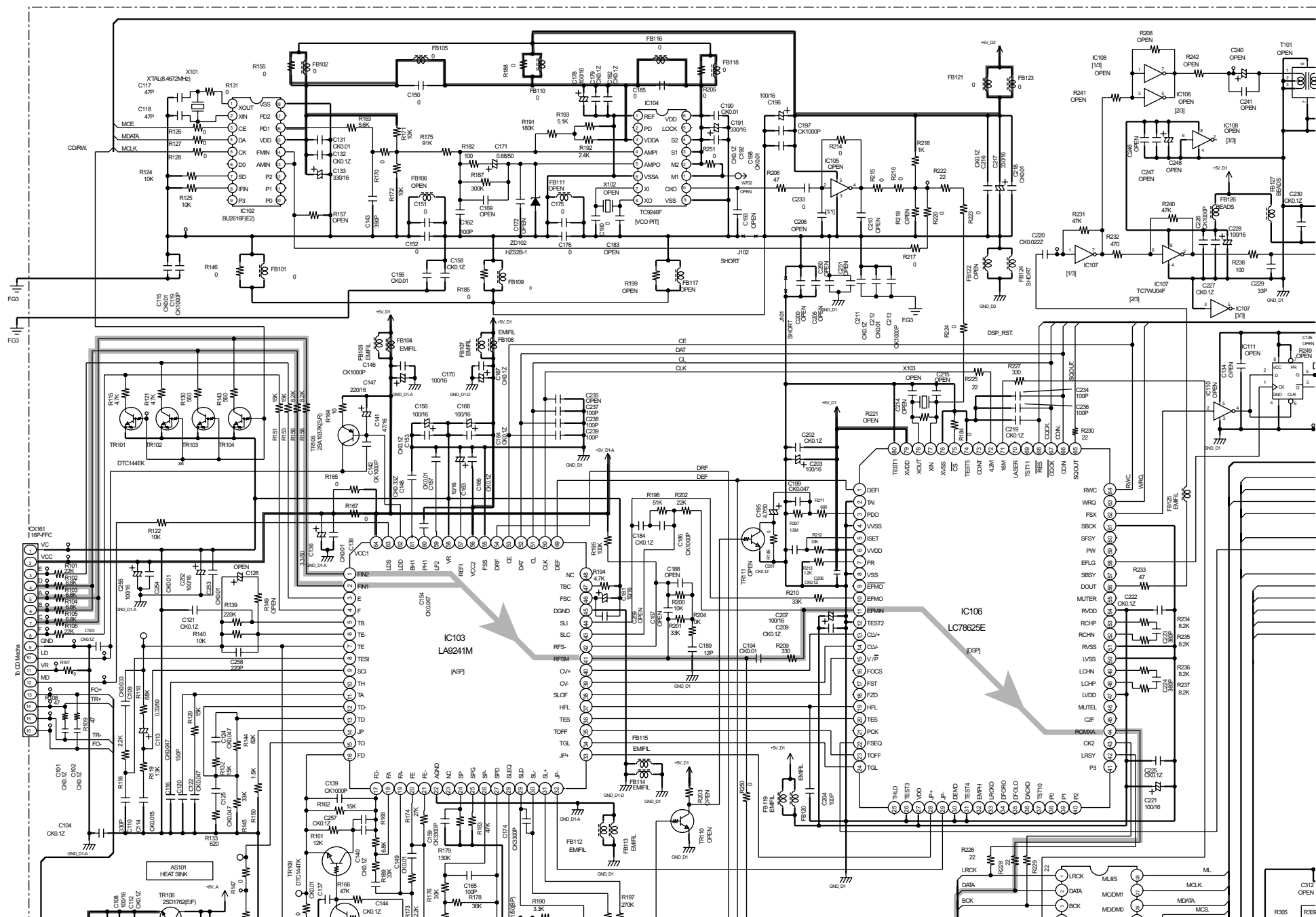
**WARNING:**  
Parts marked with this symbol  have critical characteristics.  
Only replacement parts recommended by the manufacturer.

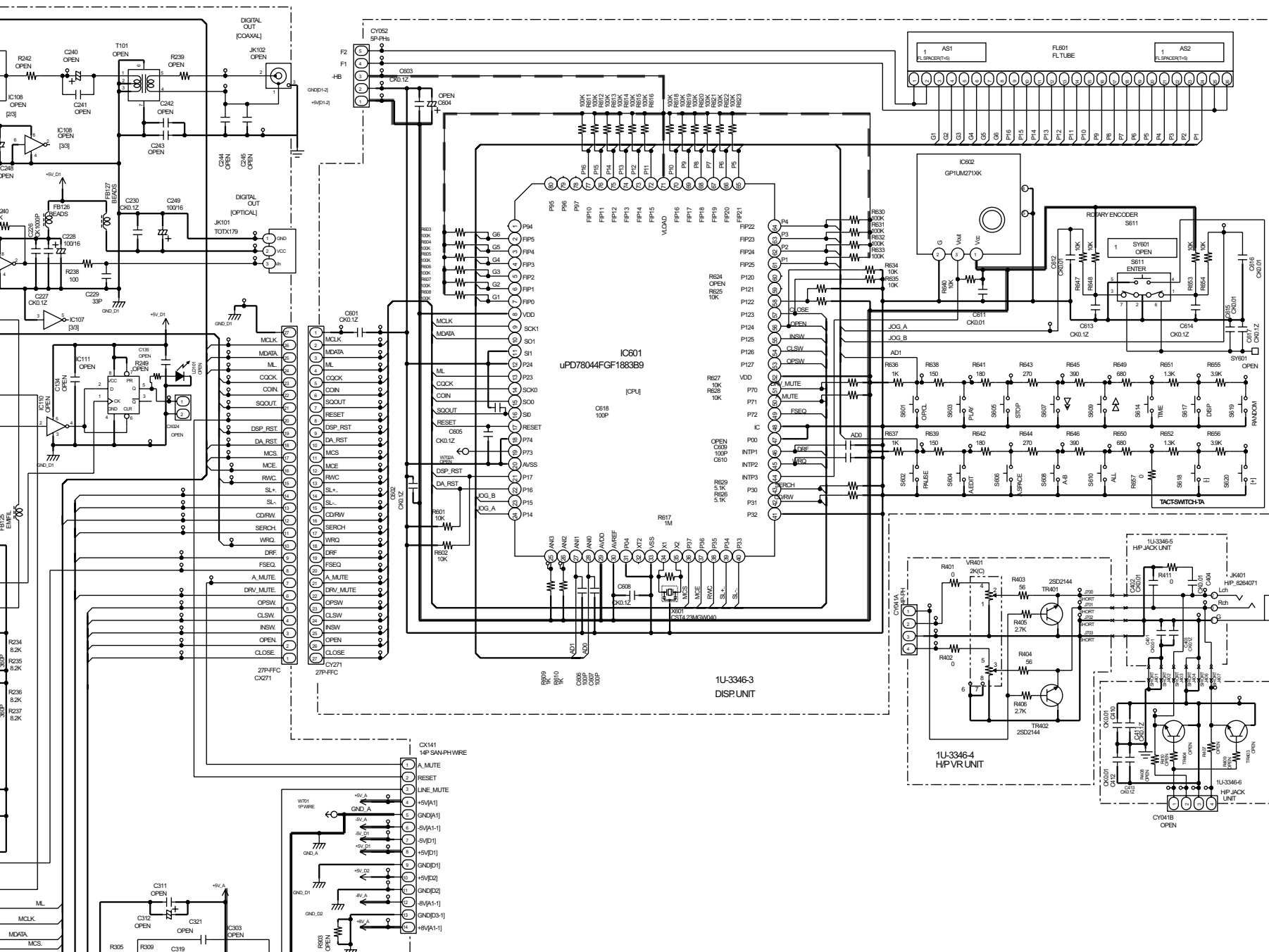
**CAUTION:**  
Before replacing the unit to the customer, make sure you make either (1) a leakage current check (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamperes, or if the resistance from chassis to other side of the power cable is less than 400 kohms, the unit is defective.

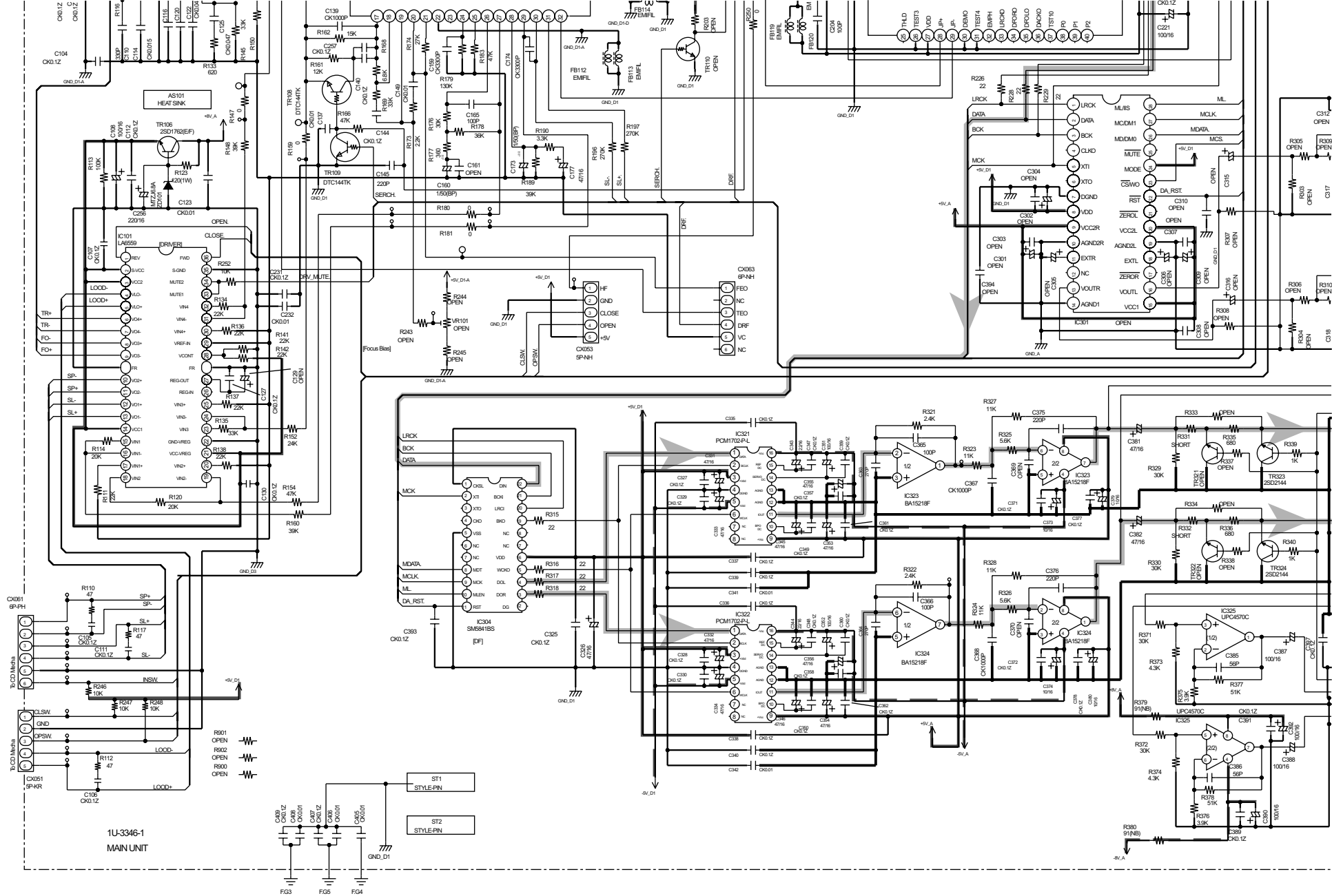
**WARNING:**  
DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAM ( for DCD-685 )  
1U-3346A

## SCHEMATIC DIAGRAM ( for DCD-685 )







**NOTICE**  
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM  
ALL CAPACITANCE VALUES IN MICRO FARAD. P=PICTO-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 defective.  
**WARNING:**  
DO NOT return the unit to the customer until the problem is located and corrected.

