

TEAC



SERVICE MANUAL

CD-P1850

COMPACT DISC PLAYER

COMPACT
disc
DIGITAL AUDIO

For Europe

1 SPECIFICATIONS

CONTENTS

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NOTES

- PC boards shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. They must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
- Parts of [] mark can be used only with the version designated.
[E]:EUROPE [UK]:U. K.

CD PLAYER

Pickup:

3-beam, semiconductor laser

D/A Converter:

1 bit DAC

Digital filter:

8-times oversampling

Frequency Response:

20 Hz ~ 20 kHz \pm 1.5dB

Total Harmonic Distortion:

< 0.02 % (1 kHz)

Signal-to-Noise Ratio (S/N):

>85 dB (1 kHz)

Channel Separation:

>80 dB (1 kHz)

Output:

Analog; 2.0 Vrms (RCA)

Digital; TOS OPTICAL

Wow and Flutter:

Below measurable limit

GENERAL

Power Requirements:

230 VAC, 50Hz (UK/Europe Model)

240 VAC, 50Hz (Australia Model)

Power Consumption:

12 Watts (AC)

Dimensions (W x H x D):

435 x 104 x 290mm

(17-1/8" x 4-1/8" x 11-7/16")

Net Weight:

3.6 kg

Standard Accessories:

Wireless Remote Control Unit (RC-682)

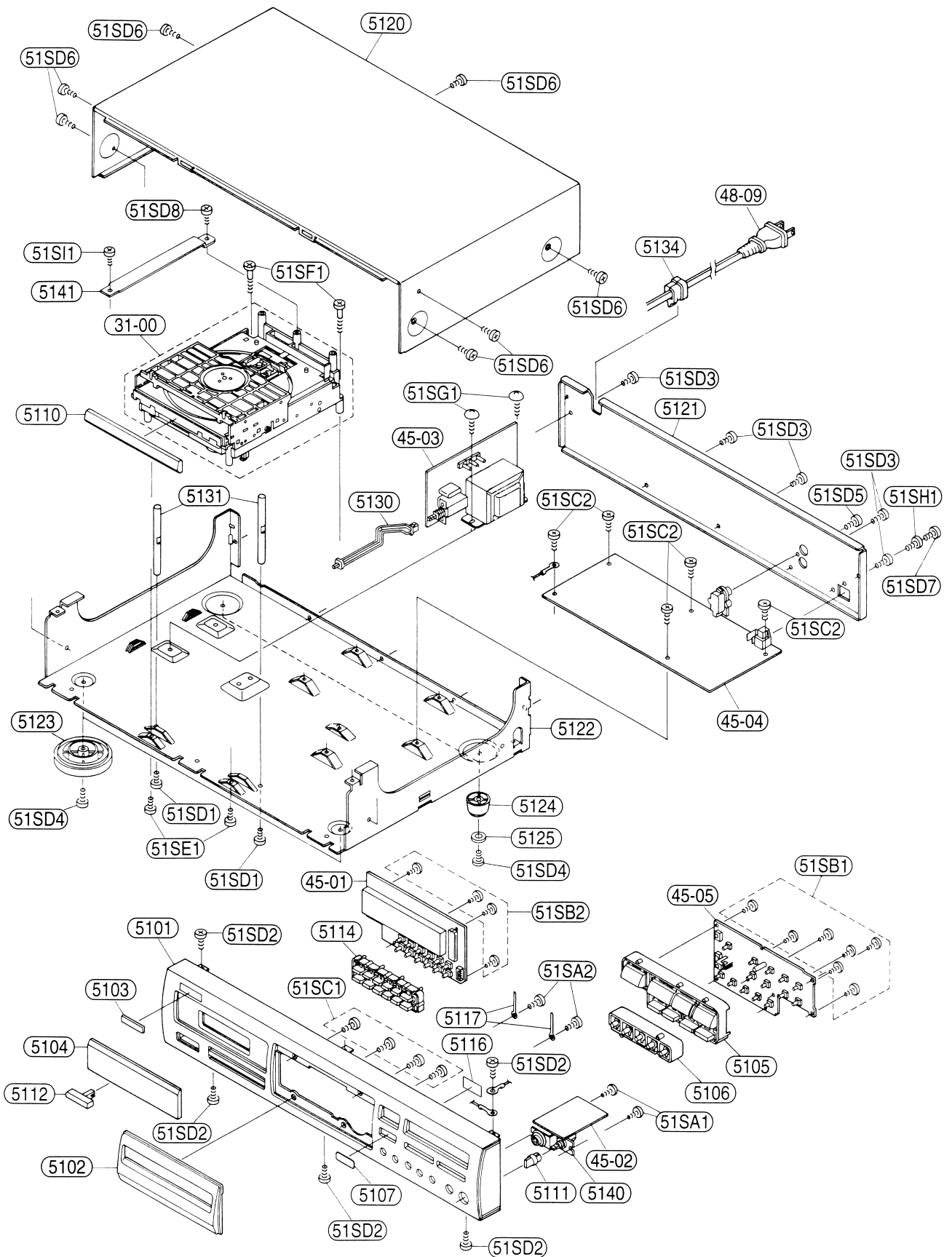
RCA pin-plug cord

Battery (SUM-3, "AA", "R6" type) x 2

- Design and specifications are subject to change without notice.

2 EXPLODED VIEWS AND PARTS LIST

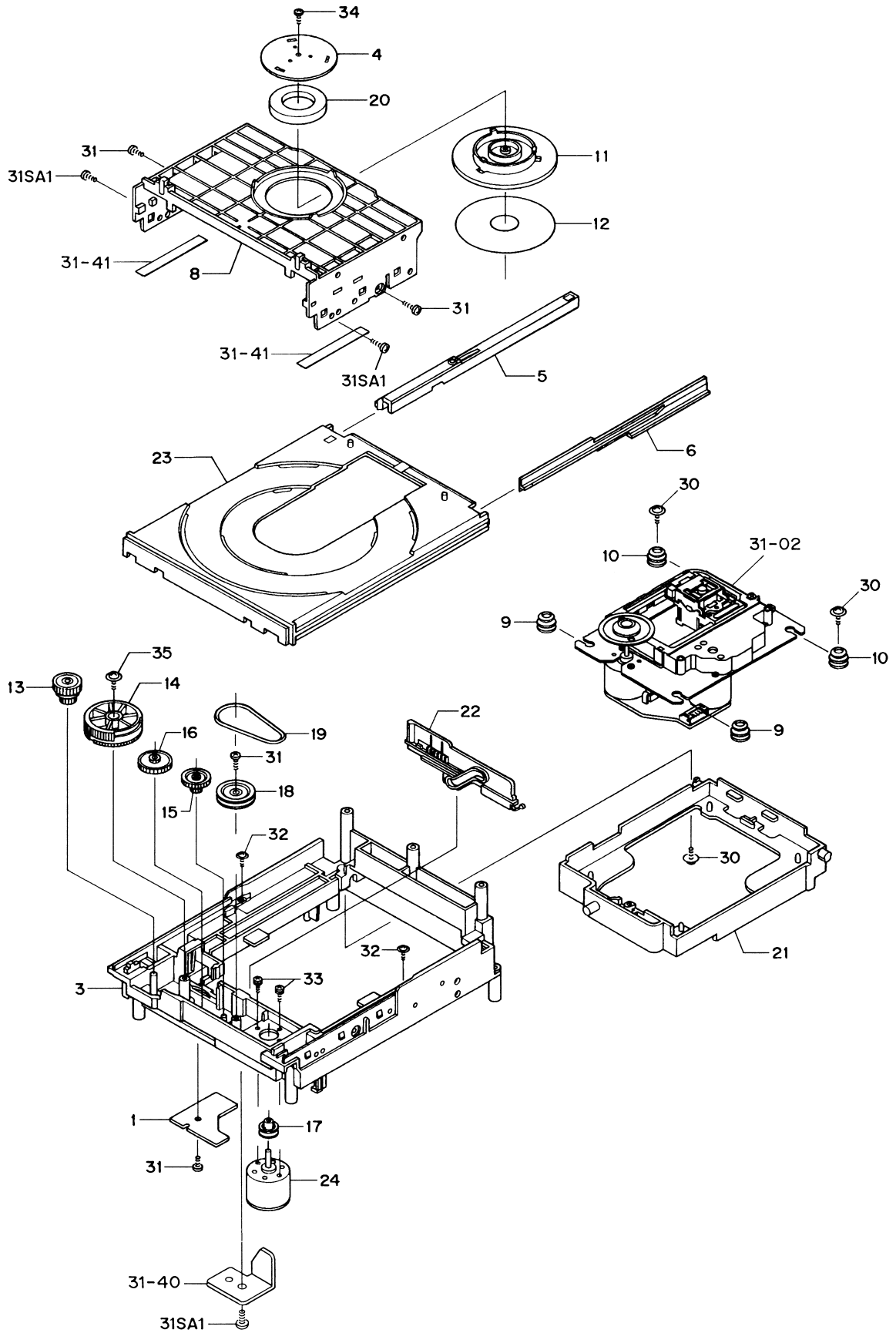
EXPLODED VIEW-1



EXPLODED VIEW-1

| REF. NO. | PARTS NO. | DESCRIPTION | REMARKS |
|----------|--------------|---------------------------|---------|
| 31-00 | 9A09092400 | MECHA, CD93F8NDT | |
| 45-01 | 9A08891700 | PCB ASSY, DISPLAY | |
| 45-02 | 9A07273210 | PCB ASSY, H. P. | |
| 45-03 | 9A08891810 | PCB ASSY, POWER 230V [UK] | |
| | 9A08891820 | PCB ASSY, POWER 230V [E] | |
| 45-04 | 9A08891900 | PCB ASSY, MAIN | |
| 45-05 | 9A08892200 | PCB ASSY, KEYSW | |
| 48-09 | △ 9A07258200 | POWER CORD [UK] | |
| | △ 9A09196200 | POWER CORD [E] | |
| 5101 | 9A08892300 | ESCUTCHEON | |
| 5102 | 9A07273900 | PANEL, TRAY | |
| 5103 | 9A06844100 | BADGE | |
| 5104 | 9A07077500 | WINDOW | |
| 5105 | 9A07149000 | BUTTON, PLAY | |
| 5106 | 9A07077900 | BUTTON, FUNCTION | |
| 5107 | 9A07079200 | FILTER, IR | |
| 5110 | 9A07149200 | DECORATION, TRAY | |
| 5111 | 9A07077700 | KNOB, ROTARY | |
| 5112 | 9A07077800 | KNOB, PUSH | |
| 5114 | 9A07274000 | BUTTON, 12KEY | |
| 5116 | 9A07079800 | SHEET, IR | |
| 5117 | 9A07079000 | LUG | |
| 5120 | 9A07077000 | COVER, TOP | |
| 5121 | 9A08892400 | PANEL, REAR | |
| 5122 | 9A07078400 | CHASSIS | |
| 5123 | 9A06842900 | ASSY, LEG | |
| 5124 | 9A07078300 | LEG | |
| 5125 | 9A07080000 | FELT | |
| 5130 | 9A07078800 | JOINT | |
| 5131 | 9A07078900 | POST | |
| 5134 | △ 9A06846200 | BUSHING, NIFCO 2271 | |
| 5140 | 9A07078500 | BRACKET-E, JACK | |
| 5141 | 9A07078700 | BRACKET-M, TOP | |
| 51SA1 | 9A06855600 | SCREW, S-TPG BIN 2.6X6 | |
| 51SA2 | 9A06855600 | SCREW, S-TPG BIN 2.6X6 | |
| 51SB1 | 9A00768400 | SCREW, S-TPG BRZ M2.6X8 | |
| 51SB2 | 9A00768400 | SCREW, S-TPG BRZ M2.6X8 | |
| 51SC1 | 9A01589800 | SCREW, S-TPG BIN M3X6 | |
| 51SC2 | 9A01589800 | SCREW, S-TPG BIN M3X6 | |
| 51SD1 | 9A01041200 | SCREW, S-TPG BIN M3X8 | |
| 51SD2 | 9A01041200 | SCREW, S-TPG BIN M3X8 | |
| 51SD3 | 9A01041200 | SCREW, S-TPG BIN M3X8 | |
| 51SD4 | 9A01041200 | SCREW, S-TPG BIN M3X8 | |
| 51SD5 | 9A01041200 | SCREW, S-TPG BIN M3X8 | |
| 51SD6 | 9A01041200 | SCREW, S-TPG BIN M3X8 | |
| 51SD7 | 9A01041200 | SCREW, S-TPG BIN M3X8 | |
| 51SD8 | 9A01041200 | SCREW, S-TPG BIN M3X8 | |
| 51SE1 | 9A07086400 | SCREW, S-TPG BIN 3X14 | |
| 51SF1 | 9A07086500 | SCREW, S-TPG BIN 3X25 | |
| 51SG1 | 9A06856000 | SCREW, S-TPG TR S4X6 | |
| 51SH1 | 9A07276200 | SCREW, BIN+SW M3X6 | |
| 51S11 | 9A06855700 | SCREW, S-TPG BIN 3X4 | |

EXPLODED VIEW-2

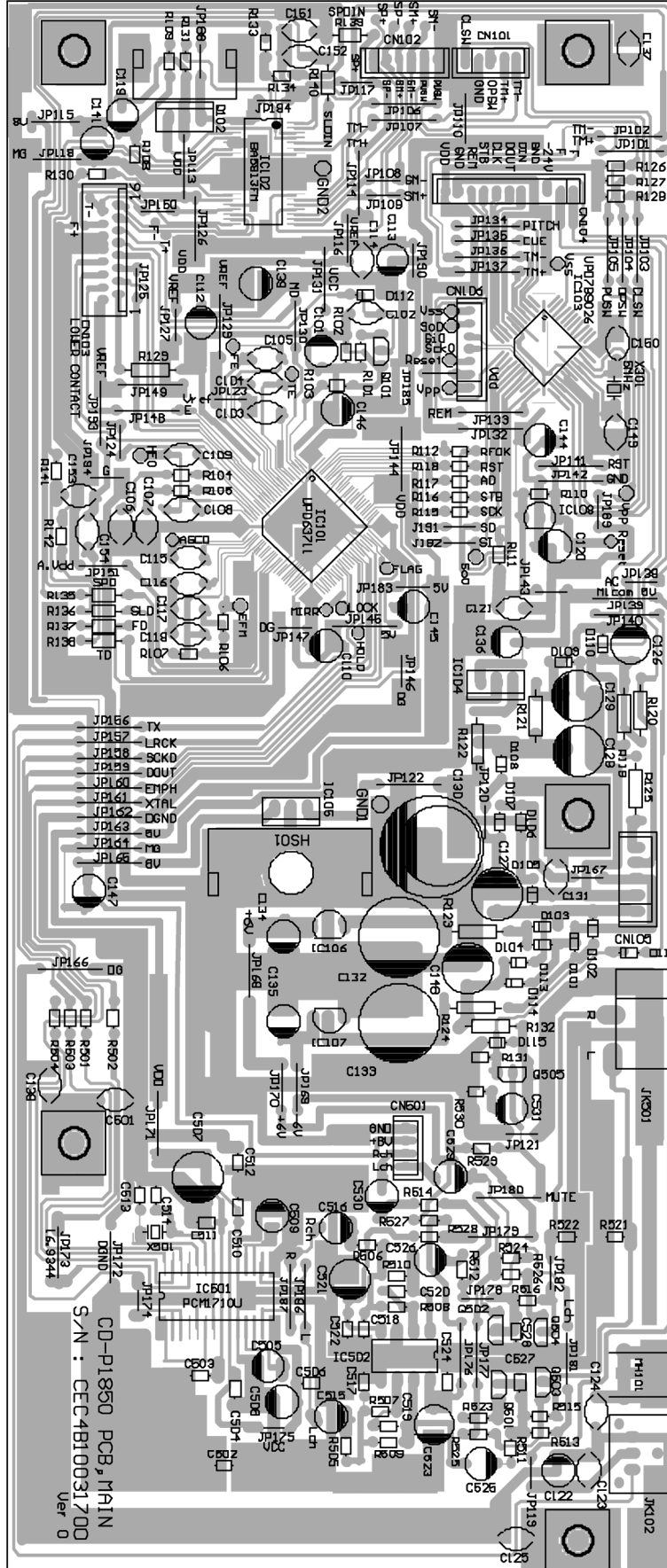


EXPLODED VIEW-2 (CD93F8NDT)

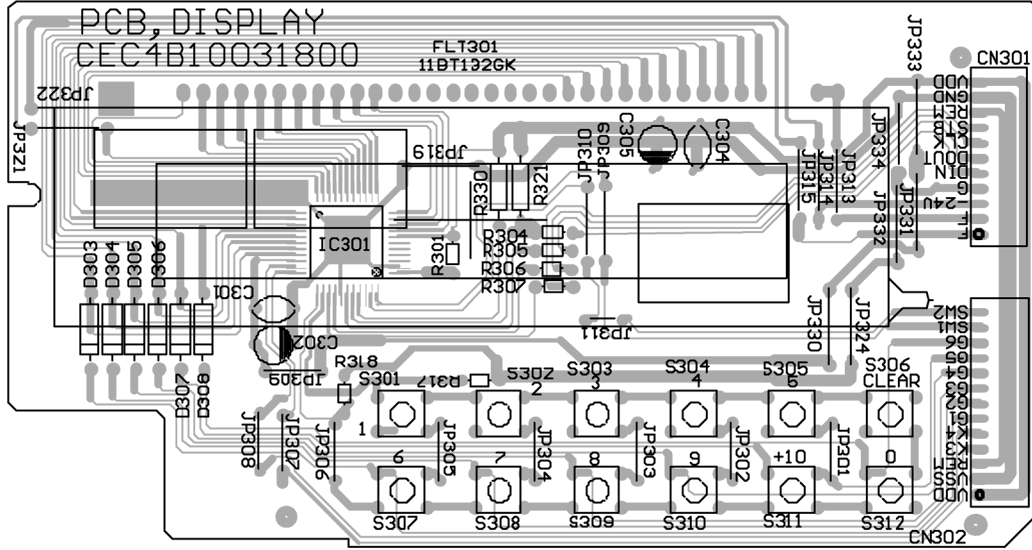
| REF. NO. | PARTS NO. | DESCRIPTION | REMARKS |
|----------|------------|--------------------------|---------|
| 1 | 9A07071300 | SWITCH PCB ASSY | |
| 3 | 9A07072300 | CHASSIS, FRAME | |
| 4 | 9A07071400 | PLATE, MAGNET | |
| 5 | 9A07071500 | LEFT RAIL ASSY | |
| 6 | 9A07071600 | RAIL, RIGHT | |
| 8 | 9A07071800 | SUPPORT, MAGNET | |
| 9 | 9A08438700 | CUSHION, RUBBER | |
| 10 | 9A08438800 | CUSHION, RUBBER | |
| 11 | 9A07072100 | HOLDER, MAGNET | |
| 12 | 9A07072200 | SHEET | |
| 13 | 9A07072400 | GEAR, LOADING | |
| 14 | 9A07072500 | GEAR, LIFTER | |
| 15 | 9A07072600 | GEAR, IDLER A | |
| 16 | 9A07072700 | GEAR, IDLER B | |
| 17 | 9A07072800 | PULLEY, MOTOR | |
| 18 | 9A07072900 | PULLEY, GEAR | |
| 19 | 9A07073000 | BELT, SQUARE | |
| 20 | 9A02677600 | MAGNET, DISC CLAMP | |
| 21 | 9A08438600 | LIFTER, MECHA | |
| 22 | 9A07073200 | SLIDE, LIFTER | |
| 23 | 9A07073300 | TABLE, LOADING | |
| 24 | 9A03303300 | MOTOR, 3.0V | |
| 30 | 5760707700 | SCREW, B-TITE SEMS M3X10 | |
| 31 | 9A07073500 | SCREW, S-TPG BIN 2.6X8 | |
| 31-02 | 9A09093000 | DRIVE MECHA, DA11T3CN | |
| 31-40 | 9A07070800 | BRACKET | |
| 31-41 | 9A07070900 | SHEET, MECHA | |
| 31SA1 | 9A07071100 | SCREW, S-TPG BIN 3X8 | |
| 32 | 9A07073600 | SCREW, S-TPG PAN+FLG 2X6 | |
| 33 | 9A07073700 | SCREW, PAN+SW 1.7X3.5 | |
| 34 | 9A07073800 | SPECIAL SCREW | |
| 35 | 9A07073400 | SCREW, S-TPG BRZ+FLG 3X8 | |

3 PC BOARDS AND PARTS LIST

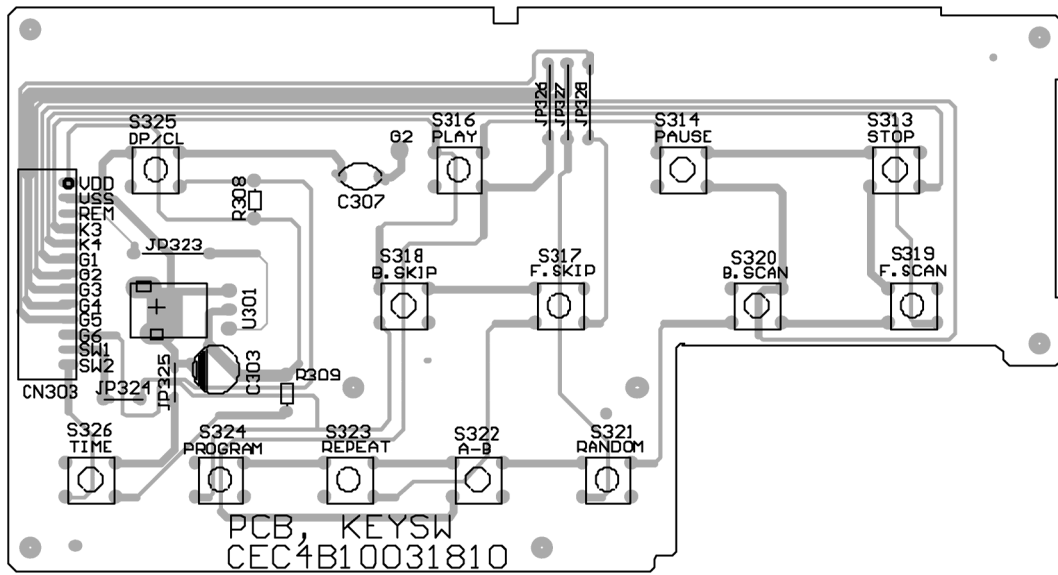
MAIN PCB



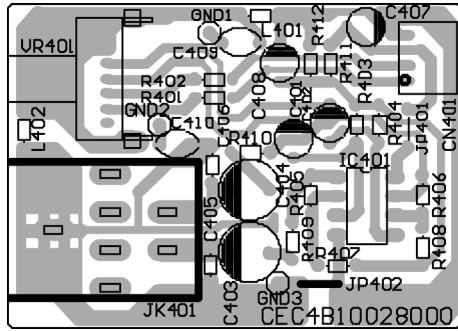
DISPLAY PCB



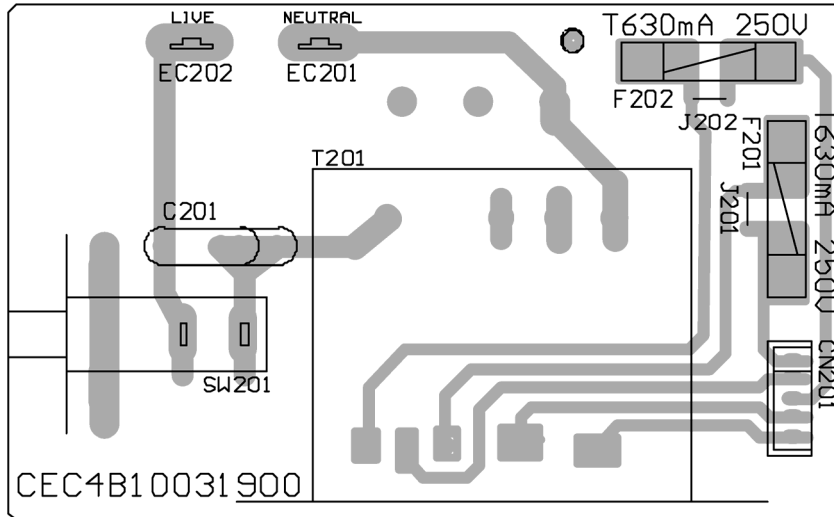
KEYSW PCB



HP PCB



POWER PCB



MAIN PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|------------|--------------|-----------------------------|
| | 9A08891900 | PCB ASSY, MAIN |
| | 9A08894300 | PCB, MAIN |
| C130 | △ 9A08899400 | C, ELECT 4700U/25V M |
| CN101 | 9A08899700 | PLUG, 5P PH V |
| CN102 | 9A08899800 | PLUG, 6P PH V |
| CN103 | 9A08899500 | PLUG, 16P 1.0 FFC |
| CN104 | 9A08900000 | PLUG, 11P PH V |
| CN105 | 9A08900100 | PLUG, 5P XH V |
| CN106 | 9A08899900 | PLUG, 7P PH V |
| CN501 | 9A08899600 | PLUG, 4P PH V |
| D101-D108 | △ 9A08895400 | DIODE, 1A3-I |
| D109 | 9A08895300 | ZENER DIODE, GZB30B |
| D110 | 9A06853900 | ZENER DIODE, MTZJ5. 1B-T-77 |
| D111, D112 | 9A08895500 | DIODE, 1SS133-T-77 |
| D113, D114 | 9A08895400 | DIODE, 1A3-I |
| D115 | 9A06853900 | ZENER DIODE, MTZJ5. 1B-T-77 |
| IC101 | 9A08894400 | IC, UPD63711GC-8EU |
| IC102 | 9A08894500 | IC, BA5813FM |
| IC103 | 9A08900400 | IC, UPD78F9026AGB-8ES |
| IC104 | △ 9A06854500 | IC, NJM7805FA |
| IC105 | △ 9A06854600 | IC, NJM7808FA |
| IC105 | 9A07152400 | HEAT SINK |
| IC106 | △ 9A08894700 | IC, NJM78L06A |
| IC107 | △ 9A08894800 | IC, NJM79L06A |
| IC108 | 9A08894900 | IC, PST600D |
| IC501 | 9A07273100 | IC, PCM1710U |
| IC502 | 9A06979600 | IC, NJM2068D |
| JK102 | 9A07275000 | CONVERTOR, GP1F32T |
| JK501 | 9A06859100 | JACK, 2P, RCA |
| MH101 | 9A08900200 | TERMINAL, GND |
| Q101 | 9A08895000 | TR, 2SA933AS-TP |
| Q102 | 9A08895100 | TR, 2SB1375 |
| Q102 | 9A08900300 | HEAT SINK |
| Q501-Q504 | 9A06857000 | TR, 2SD1936-T-AC |
| Q505 | 9A08895200 | TR, DTA124ES |
| R122-R124 | △ 9A08897600 | R, FUSIBLE 4.7 JA 1/4W |
| X301 | 9A08900500 | RESONATOR, CERAMIC 5.00MHZ |
| X501 | 9A02264500 | CRYSTAL, 16.9344MHZ |

DISPLAY PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|------------|--------------------|
| | 9A08891700 | PCB ASSY, DISPLAY |
| | 9A08892900 | PCB, DISPLAY |
| | 9A07079700 | PAD, FL |
| CN301 | 9A08893600 | PLUG, 11P PH H |
| CN302 | 9A08893700 | PLUG, 13P PH H |
| D303-D308 | 9A06853400 | DIODE, 1SS133-T-77 |
| FL301 | 9A07086600 | FLT, 11-BT-132GK |
| IC301 | 9A08893500 | IC, UPD16312 |
| S301-S312 | 9A08467800 | SWITCH, TACT |

KEYSW PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|------------|------------|-----------------|
| | 9A08892200 | PCB ASSY, KEYSW |
| | 9A08900600 | PCB, KEYSW |
| CN303 | 9A08893700 | PLUG, 13P PH H |
| SW313, 314 | 9A08467800 | SWITCH, TACT |
| SW316-326 | 9A08467800 | SWITCH, TACT |
| U301 | 9A06847600 | IC, GP1U281X |

H.P. PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|----------|------------|-----------------|
| | 9A07273210 | PCB ASSY, H. P. |
| | 9A07080500 | PCB, H. P. |
| IC401 | 9A07085500 | IC, NJM4560D |
| JK401 | 9A07081200 | JACK, H. P. |
| VR401 | 9A07082700 | VR, ROTARY 50K |

POWER PCB ASSY

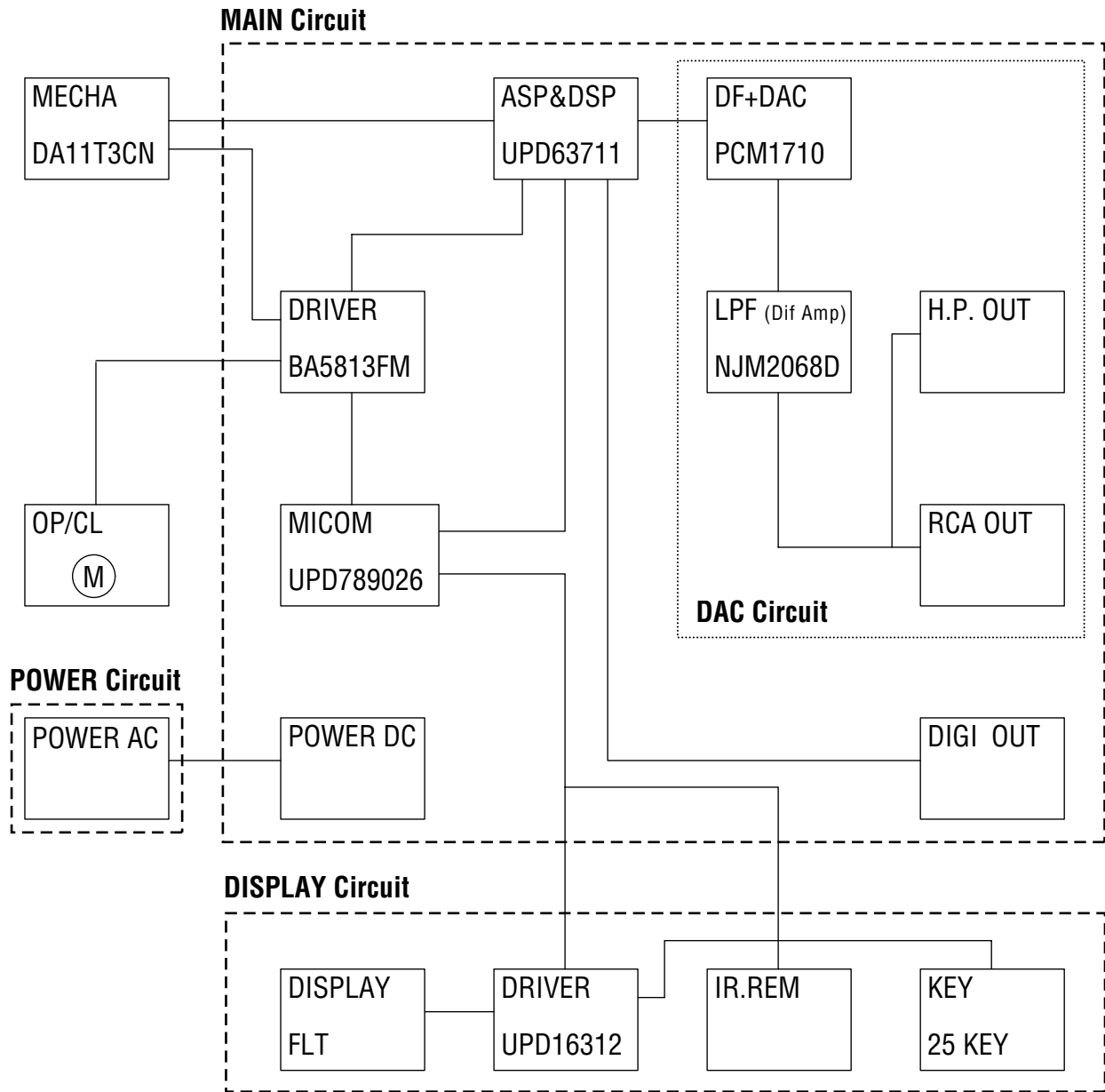
| REF. NO. | PARTS NO. | DESCRIPTION |
|----------|--------------|---------------------------|
| | 9A08891810 | PCB ASSY, POWER 230V [UK] |
| | 9A08891820 | PCB ASSY, POWER 230V [E] |
| | 9A08894000 | PCB, POWER |
| | △ 9A07258200 | POWER CORD [UK] |
| | △ 9A09196200 | POWER CORD [E] |
| | △ 9A09196100 | TRANSFORMER |
| | △ 9A09196300 | FUSE, 250V 630MA |
| EC201 | 5760663000 | EC TERMINAL, 1P |
| EC202 | 5760663000 | EC TERMINAL, 1P |
| F201 | 9A07088000 | FUSE HOLDER |
| F202 | 9A07088000 | FUSE HOLDER |
| SW201 | △ 9A07083100 | SWITCH, PUSH, POWER |

4 INCLUDED ACCESSORIES

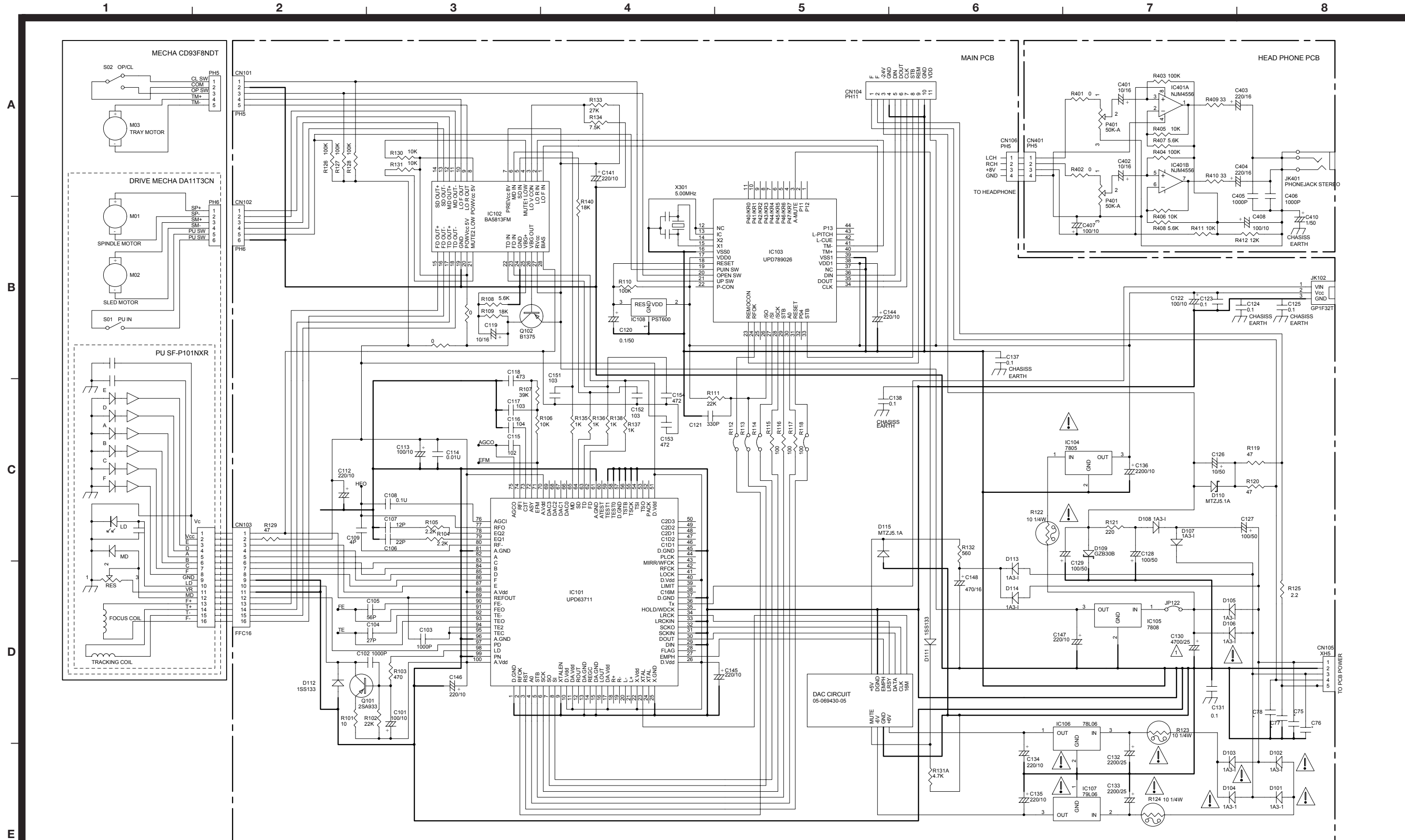
INCLUDED ACCESSORIES

| REF. NO. | PARTS NO. | DESCRIPTION | REMARKS |
|----------|------------|----------------------------|---------|
| | 9A08751800 | OWNER'S MNL, MULTI [E, UK] | |
| | 9A08468900 | REMOCON | |
| | 9A07089700 | BATTERY | |
| | 9A06849900 | PLUG, CORD, RCA | |

5 BLOCK DIAGRAM



TEAC SCHEMATIC DIAGRAM CD-P1850 MAIN PCB, HEADPHONE PCB, MECHA



NOTES:
 1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
 2. Capacitor values are in microfarads (μ=picofarads).
 3. △Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

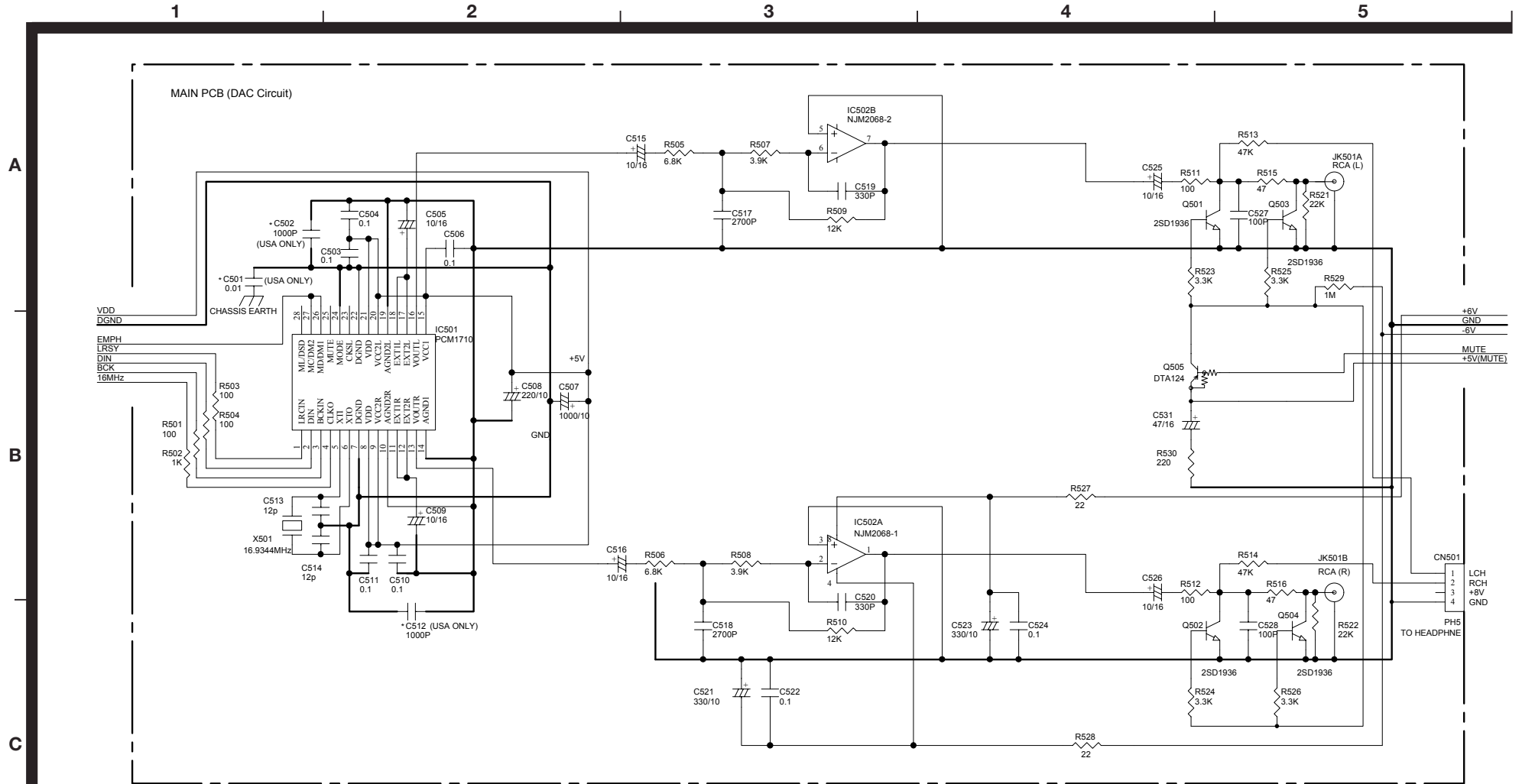
注意
 1. 抵抗の単位はΩ (k=kΩ, M=MΩ) です。
 2. コンデンサの単位はμF (p=pF) です。
 3. △マークのある部品は安全規格重要部品です。交換するときは必ずティラック指定の部品を使用してください。

CD-P1850

COMPACT DISC PLAYER

1st Issue; March 2001

TEAC SCHEMATIC DIAGRAM CD-P1850 MAIN PCB (DAC Circuit)



NOTES:

1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
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注意

1. 抵抗の単位は Ω (k=k Ω , M=M Ω)です。
2. コンデンサの単位は μF (p=pF)です。
3. Δ マークのある部品は安全規格重要部品です。交換するときは必ずティアック指定の部品を使用してください。

CD-P1850

COMPACT DISC PLAYER

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TEAC SCHEMATIC DIAGRAM CD-P1850 DISPLAY PCB, KEY SW PCB

1

2

3

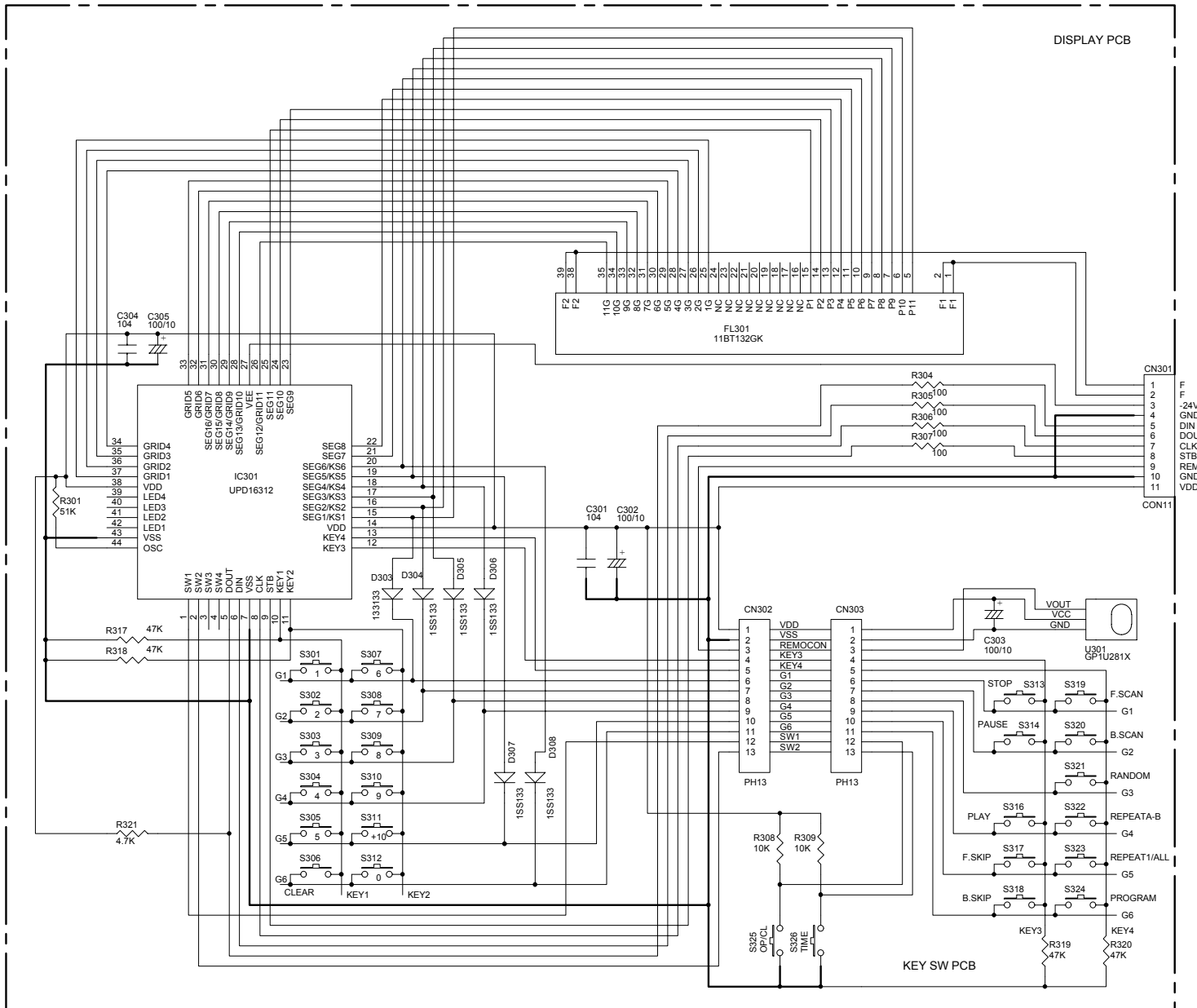
4

5

A

B

C



NOTES:

1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
2. Capacitor values are in microfarads (p=picofarads).
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CD-P1850

COMPACT DISC PLAYER

1st Issue; March 2001

TEAC SCHEMATIC DIAGRAM CD-P1850 POWER PCB

1

2

3

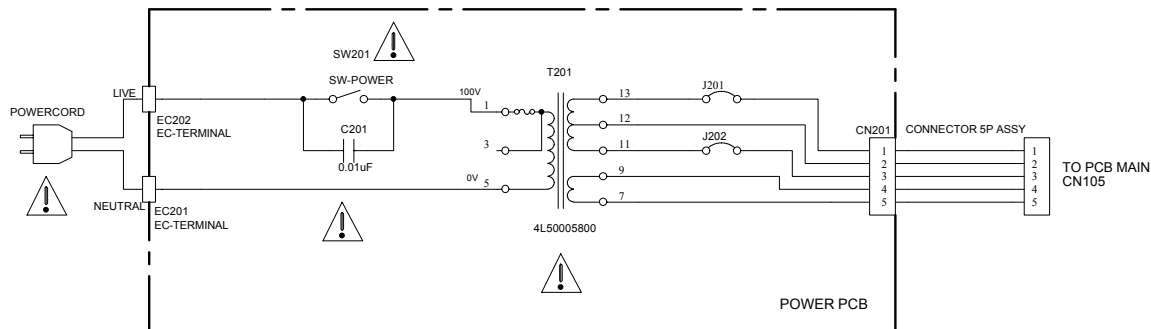
4

5

A

B

C



NOTES:

1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
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COMPACT DISC PLAYER

1st Issue; March 2001