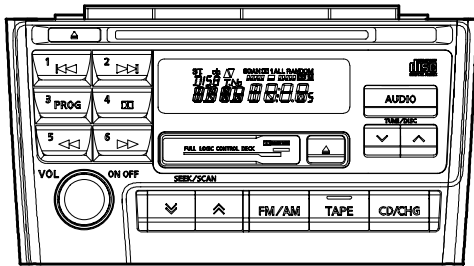


Service Manual



NISSAN Automobile Genuine
AM/FM Radio Cassette
Stereo CD Deck

Model **PN-2280D-A**
(Genuine No.28188 2Y900)
(ID No.CN628)

Model **PN-2280D-B**
(Genuine No.28188 2Y900)
(ID No.CN628)
(Available from Serial No.15271)

SPECIFICATIONS

Radio section

Tuning system: PLL Frequency synthesizer system
Receive range: AM 530kHz to 1,710kHz
FM 87.75MHz to 107.9MHz

Intermediate frequency:
AM 450kHz
FM 10.7MHz

Quieting sensitivity: AM Less than 37dB μ
(at 20dB S/N)
FM Less than 15dB μ
(at 30dB S/N, Main)

Separation: FM More than 20dB

Auto tuning stop sensitivity:
AM 39 ± 6 dB μ (at 1000k, 1400kHz)
FM 32 ± 6 dB μ

Tape section

Reproducing system:
4 track, 2 program
2 channel stereo system

Wow and flutter: Less than 0.15% (W.R.M.S)

Separation: More than 35dB

Cross talk: More than 45dB

S/N ratio: Normal tape (120 μ s)
47dB/55dB (DOLBY B NR ON)
Metal tape (70 μ s)
49dB/57dB (DOLBY B NR ON)

FF/REW time: 110sec. (C-60)

CD section

Disc: 12cm, 8cm Disc
Frequency response:
17Hz to 20kHz (0.5W output)

Separation: More than 50dB

S/N ratio: More than 74dB

AUX section

Gain: FRONT/REAR 18 ± 3 dB
(AUX input 1kHz, 245mV, Vol. max)

General

Load impedance: 4 Ω /ch
Power output: 30W \times 4
Power supply voltage:
DC 13.2V (10.8V to 15.6V)
Negative ground

Back-up consumption:
Less than 3mA

Dimensions (mm): 180(W) \times 108(H) \times 160(D)
Weight: 3.0kg

Dolby noise reduction manufactured under license from
Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol are trademarks of
Dolby Laboratories Licensing Corporation.
Specifications and design are subject to change without
notice for further improvement.

COMPONENTS

PN-2280D-A/PN-2280D-B

Main unit - - - - - 1

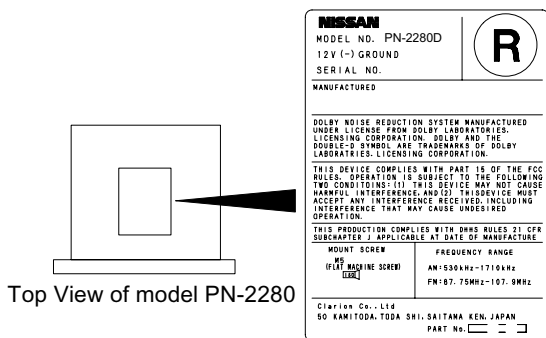
NOTE

We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.

CAUTIONS

Use of controls, adjustment, or performance of procedures other than those specified herein, may result in hazardous radiation exposure.

The compact disc player should not be adjusted or repaired by anyone except properly qualified service personnel.



To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

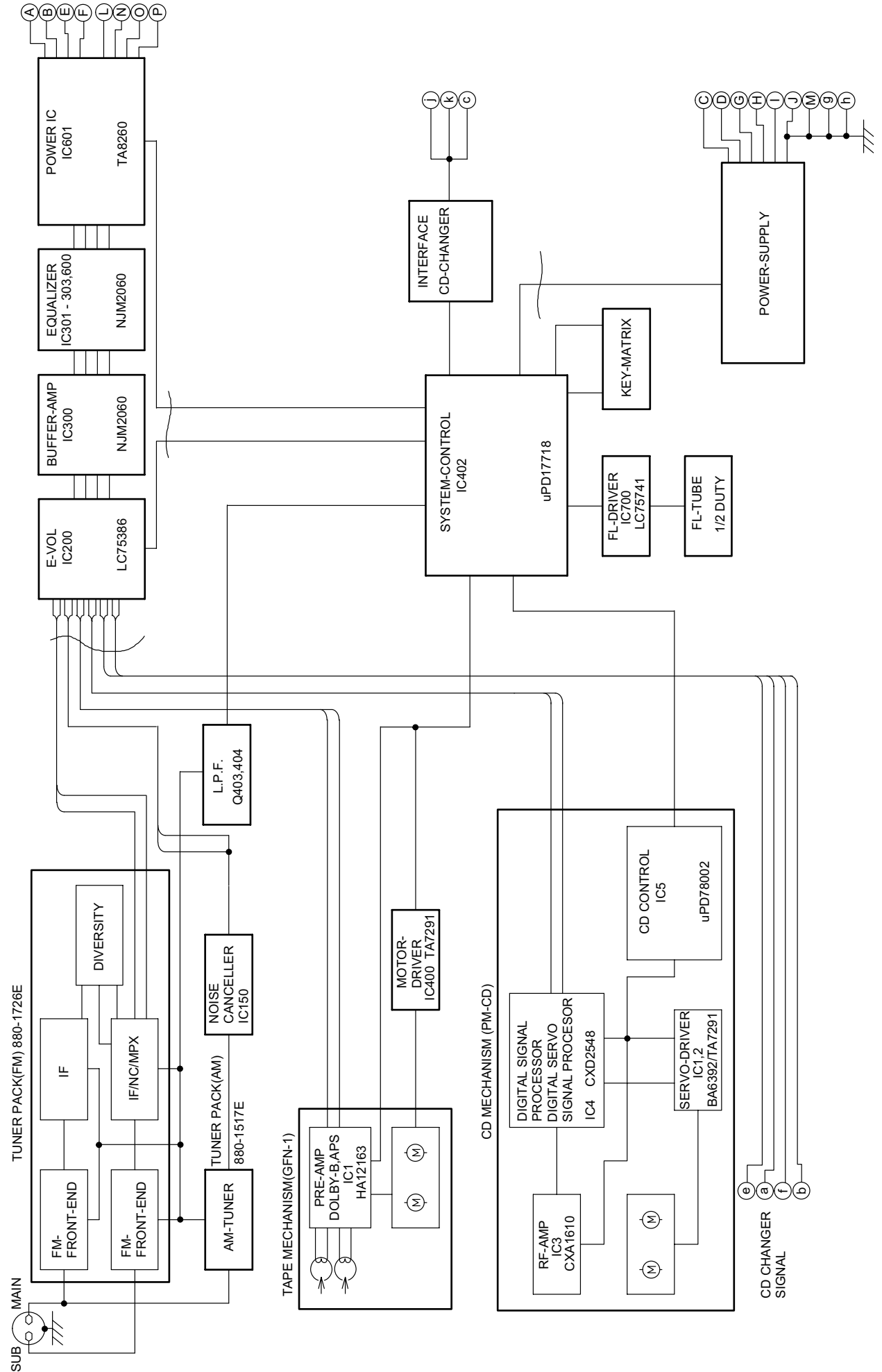
1. Use specified parts.
The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.
The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.
2. Place the parts and wiring back in their original positions after replacement or re-wiring.
For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.
If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.
3. Check for safety after repair.
Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary

problems around the repaired spots.

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

4. Caution in removal and making wiring connection to the parts for the automobile.
Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
5. Cautions regarding chips.
Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.
6. Cautions in handling flexible PWB
Before working with a soldering iron, make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly (more than three times) to the same patterns. Also take care not to apply the tip with force.
7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.
8. Cautions in checking that the optical pickup lights up.
The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.
9. Cautions in handling the optical pickup
The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.
 - 9-1. Laser diode
The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.
 - 9-2. Actuator
The actuator has a powerful magnetic circuit. If a magnetic material is put close to it, its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.
 - 9-3. Cleaning the lens
Dust on the optical lens affects performance. To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

BLOCK DIAGRAM



ADJUSTMENT

Switch of diversity

How to fix the MAIN channel.

While holding the buttons of CH1 and CH3, turn on the power switch.

How to fix the SUB channel.

While holding the buttons of CH4 and CH6, turn on the power switch.

To release the MAIN or SUB channel, turn off the power switch.

Item	Procedure	Measuring instrument
FM noise convergence	<p>MAIN channel</p> <ol style="list-style-type: none"> 1. Fix the MAIN channel. 2. Input the 98.1MHz/55dB μ (1kHz 30%MOD) signal. (VOL 1.4V=0dB) 3. Adjust the outputs to $-18 \pm 1\text{dB}$ ($-14 \pm 1\text{dB}$) by VR101 when the SG output is set -20dB μ. <p>SUB channel</p> <ol style="list-style-type: none"> 1. Follow the same adjustment steps as MAIN above.(by VR100) 	SSG AC volt meter
FM SD	<ol style="list-style-type: none"> 1. Input a 98.1MHz/31dB μ (1kHz 30%MOD) signal. 2. Connect OSC to TP100(SD), and adjust VR102 so that the reading of OSC is 0V to 6V. 	SSG Oscilloscope
Dolby level	<ol style="list-style-type: none"> 1. Insert a Dolby level test tape(400Hz,200nWb/m). 2. Adjust VR1(L)/VR2(R) so that an output of TP401(L)/TP400(R) is $300\text{mV} \pm 1\text{dB}$. (Dolby sw:off) 	Dolby level tape Milli-volt meter

EXPLANATION OF IC

μ PD17718GC-528-3B9 052-1147-30 Tuner / Tape / CD Auto changer / CD Controller

1.Outward Form : 80 pins QFP

2.Terminal Description

pin 1 : ACC IN : IN : Acc-ON-signal input. Negative logic.
pin 2 : CD EJ : IN : CD-eject-signal input. Negative logic.
pin 3 : TAPE EJ : IN : Tape-eject-signal input. Negative logic.
pin 4 : VOL 1 : IN : Main volume control signal input.
pin 5 : VOL 2 : IN : Main volume control signal input.
pin 6 : FL DO : O : Serial data output to VFD-driver.
pin 7 : FL CL : O : Serial data clock output to VFD-driver.
pin 8 : FL CE : O : Chip-enable signal output to VFD-driver.
pin 9 : KS 0 : O : Key scan signal output. Ref. Table 3.
pin 10 : KS 1 : O : Key scan signal output. Ref. Table 3.
pin 11 : KS 2 : O : Key scan signal output. Ref. Table 3.
pin 12 : KS 3 : O : Key scan signal output. Ref. Table 3.
pin 13 : KS 4 : O : Key scan signal output. Ref. Table 3.
pin 14 : KS 5 : O : Key scan signal output. Ref. Table 3.
pin 15 : POWER SW : IN : Power Key input(alternative). Negative logic.
pin 16 : KR 4 : IN : Key scan signal input. Ref. Table 3.
pin 17 : FL ON : O : Filament-ON signal output to VFD-driver.
pin 18 : SYS ON : O : System-ON signal output. (Hi-Z)
pin 19 : FM ON : O : FM-ON signal output. (Hi-Z)
pin 20 : AM ON : O : AM-ON signal output. (Hi-Z)
pin 21 : GND : - : Ground.
pin 22 : KR 3 : IN : Key scan signal input. Ref. Table 3.
pin 23 : KR 2 : IN : Key scan signal input. Ref. Table 3.
pin 24 : KR 1 : IN : Key scan signal input. Ref. Table 3.
pin 25 : KR 0 : IN : Key scan signal input. Ref. Table 3.
pin 26 : ILL DC : IN : VFD-brightness control signal input.
pin 27 : REEL PULS : IN : Reel pulse input.
pin 28 : AM IF : IN : AM-IF counter input.
pin 29 : FM IF : IN : FM-IF counter input.
pin 30 : VCC : - : Positive voltage input.
pin 31 : FM OSC : IN : FM VCO (Local Oscillation) input.
pin 32 : AM OSC : IN : AM VCO (Local Oscillation) input.
pin 33 : GND : - : Ground.
pin 34 : N.C. : O : Not in use.
pin 35 : EO : O : Error out terminal.
pin 36 : GND : - : Ground.
pin 37 : RE MUTE : O : IF-output control. Output "H" in SEEK.
pin 38 : DX/LO : O : "L" = (AM SEEK) & (ILL ON)
"H" = (FM) & (Sub fixed)
pin 39 : TWEET : O : In AM mode, Output "L" in receiving 900kHz.
In FM mode, Output "H" in Main-fixed mode.
pin 40 : BEEP : O : Beep out.

pin 41 : ILL PULSE : IN : ILL-pulse input.
pin 42 : TEL ON : IN : Tel-on signal input. Negative logic.
pin 43 : DOLBY : O : "H" = DOLBY on.
pin 44 : T/R : O : "H" = Mechanism mute on.
pin 45 : F/R : O : "H" = forward (Tape).
"L" = reverse (Tape).
pin 46 : MS : IN : Music sensing signal input. "H" = non-recorded.
pin 47 : TAPE IN : IN : Tape loading start signal input.
pin 48 : BIT 3 : IN : Mechanism mode switch signal input. Ref. Table 1.
pin 49 : BIT 2 : IN : Mechanism mode switch signal input. Ref. Table 1.
pin 50 : BIT 1 : IN : Mechanism mode switch signal input. Ref. Table 1.
pin 51 : MSGV : O : Music sensing amplifier sensitivity control signal output. "H" = play, "L" = FF/Rew.
pin 52 : M-MOTOR : O : "H" = Main motor on.
pin 53 : P2 : O : Power motor control. Ref. Table 2.
pin 54 : P1 : O : Power motor control. Ref. Table 2.
pin 55 : VOL STB2 : O : STB2 output for electric volume IC TC9412F.
pin 56 : VOL STB1 : O : STB1 output for electric volume IC LC75386.
pin 57 : VOL CLK : O : Serial data clock output for electric volume IC.
pin 58 : VOL DATA : O : Serial data output for electric volume IC.
pin 59 : AF MUTE : O : Audio frequency mute signal output. Negative logic.
pin 60 : AMP ON : O : "H" = Power amplifier on.
pin 61 : R VOL DW : IN : Remote control volume input.
pin 62 : R VOL UP : IN : Remote control volume input.
pin 63 : MODE C : O : Remote control mode indicator output.
pin 64 : MODE B : O : Remote control mode indicator output.
pin 65 : MODE A : O : Remote control mode indicator output.
pin 66 : CD RESET : O : Reset signal output to CD mechanism controller. Negative logic.
pin 67 : CD SRQ : IN : C-BUS service request signal input. "L" = CD mechanism controller request.
pin 68 : NDS REQ : IN : Request input from NDS-A/C.
pin 69 : NDS TXD : O : TX output to NDS-A/C.
pin 70 : NDS RXD : IN : RX input from NDS-A/C.
pin 71 : CD SCK : O : C-BUS clock output.
pin 72 : CD SI : IN : C-BUS serial data input.
pin 73 : CD SO : O : C-BUS serial data output.
pin 74 : REG : - : Connects a capacitor to reduce voltage regulator ripple.
pin 75 : GND : - : Ground.
pin 76 : XOUT : O : Connects a crystal.

pin 77 : XIN : IN : Connects a crystal.
pin 78 : CE : IN : Chip enable signal input.
pin 79 : VDD : - : Power supply terminal.
pin 80 : RESET : IN : Reset signal input. Negative logic.

Table 1. Mechanism mode switch

Mechanism mode	Bit1	Bit2	Bit3
Eject	H	H	H
Loading	H	H	L
Stop	L	H	L
Fwd-FF (Rev-Rew)	L	L	H
Fwd-Rew (Rev-FF)	H	L	L
Fwd-Play	H	L	H
Rev-Play	L	H	H

Table 2. Power motor control

Mechanism mode	P1	P2
Loading, Head advance	H	L
Eject, Head retreat	L	H
Keeping a state	H	H
Stop	L	L

3.Key Matrix

Table 3. Key Matrix table

	KR 0 pin25	KR 1 pin24	KR 2 pin23	KR 3 pin22	KR 4 pin16
KS 0 pin9	FM/ AM	Tape	Seek up/ Scan up	Seek down/ Scan down	
KS 1 pin10	M1 APS Rew	M2 APS-FF	M3 Prog		
KS 2 pin11	M4 DOLBY	M5 REW	M6 FF	CD/ CHG	
KS 3 pin12	Sound	Tune up/ Disc up/ Sound up	Tune down/ Disc down/ Sound down		
KS 4 pin13	Mode (Tr SW)	Seek up/ APS up (Tr SW)	Seek down/ APS down (Tr SW)	ILL on (Tr SW)	ST on (Tr SW)
KS 5 pin14	BAND 0 Ref.Table4 (Di SW)	BAND 1 Ref.Table4 (Di SW)	BAND 2 Ref.Table4 (Di SW)	Clock on/off on=1 (Di SW)	2SP=1 4SP=0 (Di SW)

Table 4. Diode switch

Diode switch	BAND 0	BAND 1	BAND 2
Normal volume	0	1	0
BOSE6V volume	0	0	1

0 = open , 1 = shorted with diode

μ PD78002BGC-650-AB8 052-5018-03 PMCD Controller

1. Outward Form : 64pins, QFP

2. Terminal Description

pin 1 : SRQ : O : C-BUS service request signal output. Negative logic.
pin 2 : CHU-SW : IN : CD disc chucking signal input. Negative logic.
pin 3 : N.C. : O : Not in use.
pin 4 : N.C. : O : Not in use.
pin 5 : N.C. : O : Not in use.
pin 6 : B : IN : Photo sensor input to detect CD disc status.
pin 7 : A : IN : Photo sensor input to detect CD disc status.
pin 8 : C : IN : Photo sensor input to detect CD disc status.
pin 9 : VSS : - : Ground.
pin 10 : MCCW : O : Loading motor control output. Ref. Table 1.
pin 11 : MCW : O : Loading motor control output. Ref. Table 1.
pin 12 : N.C. : O : Not in use.
pin 13 : N.C. : O : Not in use.
pin 14 : N.C. : O : Not in use.
pin 15 : N.C. : O : Not in use.
pin 16 : N.C. : O : Not in use.
pin 17 : N.C. : O : Not in use.
pin 18 : N.C. : O : Not in use.
pin 19 : N.C. : O : Not in use.
pin 20 : ACDT : IN : Not in use.
pin 21 : XRST : O : Reset signal output to CXD2548. Negative logic.
pin 22 : CLOCK : O : Clock signal output to CXD2548. Negative logic.

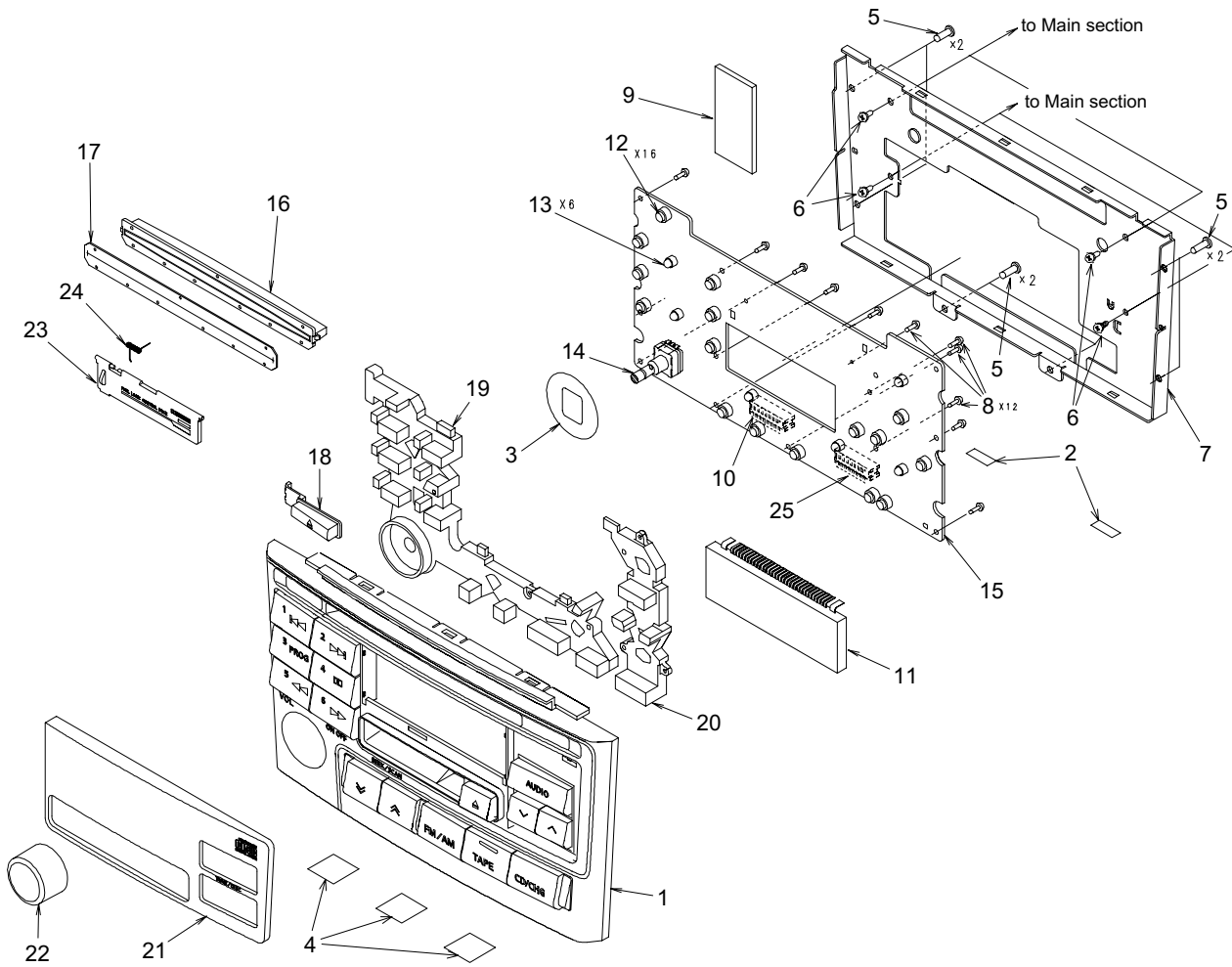
pin 23 : XLAT : O : Latch signal output to CXD2548. Negative logic.
pin 24 : VSS : - : Ground.
pin 25 : DATA : O : Serial data output to CXD2548.
pin 26 : SCLK : O : Serial clock output to read data from CDIC. Negative logic.
pin 27 : N.C. : O : Not in use.
pin 28 : SENS : IN : CD status signal detect. Negative logic.
pin 29 : SQSO : IN : Serial data input to read out SUB-Q-data from CXD2548. Negative logic.
pin 30 : N.C. : O : Not in use.
pin 31 : SQCK : O : Clock signal output to read SUB-Q-data from CXD2548. Negative logic.
pin 32 : SYSM : O : Mute signal output. Negative logic.
pin 33 : N.C. : O : Not in use.
pin 34 : N.C. : O : Not in use.
pin 35 : RST : IN : Reset signal input. Negative logic.
pin 36 : SCOR : IN : Sub code synchronization.
pin 37 : ACC-CNT : IN : C-BUS ACC CNT input terminal. If "L" is input during disc rotation (Play,FF,FB,Search), it enters into power saving mode after disc rotation stops. If "L" is input in Loading or Ejecting, it enters into power saving mode after completion of motion.
pin 38 : N.C. : O : Not in use.
pin 39 : N.C. : O : Not in use.
pin 40 : VDD : - : Power supply voltage.
pin 41 : X2 : O : Connect ceramic resonator.
pin 42 : X1 : IN : Connect ceramic resonator.
pin 43 : IC0 : - : Connected to ground.
pin 44 : XT2 : O : Not in use.
pin 45 : XT 1/P04 : - : Connected to ground.
pin 46 : IC1 : - : Connected to ground.
pin 47 : N.C. : O : Not in use.
pin 48 : SYS-1 : O : Output terminal to control system power 1. Control terminal to switch between power for loading motor driver IC and that for CD driver IC (+8V). Outputs "H" when ACC-CNT input terminal is "H" while this micro computer is regular motion. Outputs "L" when ACC-CNT input terminal is "L" while this micro computer is in power saving mode. Power ON in "H" .Power OFF in "L" .
pin 49 : SYS-2 : O : Output terminal to control system power 2. Control terminal to switch power to CDIC (+5V). Turns this terminal to "H" in CD PLAY. Other than that, "L" . Power ON in "H" . Power OFF in "L" .
pin 50 : N.C. : O : Not in use.
pin 51 : N.C. : O : Not in use.
pin 52 : N.C. : O : Not in use.
pin 53 : N.C. : O : Not in use.
pin 54 : N.C. : O : Not in use.
pin 55 : IC2 : - : Connected to ground.
pin 56 : IC3 : - : Connected to ground.
pin 57 : K-0 : I/O : Key input in test mode. Function as output terminal in C-BUS communication mode.
pin 58 : K-1 : I/O : Key input in test mode. Function as output terminal in C-BUS communication mode.
pin 59 : K-2 : I/O : Key input in test mode. Function as output terminal in C-BUS communication mode.
pin 60 : K-3 : I/O : Key input in test mode. Function as output terminal in C-BUS communication mode.
pin 61 : K-4 : IN : Terminal to detect Test mode starting. Checks the terminal logic during hard reset and ACC ON (during ACC-CNT = "H") just after start of program. Outputs "H" in C-BUS communication mode. Outputs "L" in Test mode.
pin 62 : SI : IN : C-BUS serial data input.
pin 63 : SO : O : C-BUS serial data output.
pin 64 : SCK : IN : C-BUS serial data clock input.

Table 1

	Loading	Eject	Brake	Stop
MCW	H	L	H	L
MCCW	L	H	H	L

EXPLODED VIEW · PARTS LIST

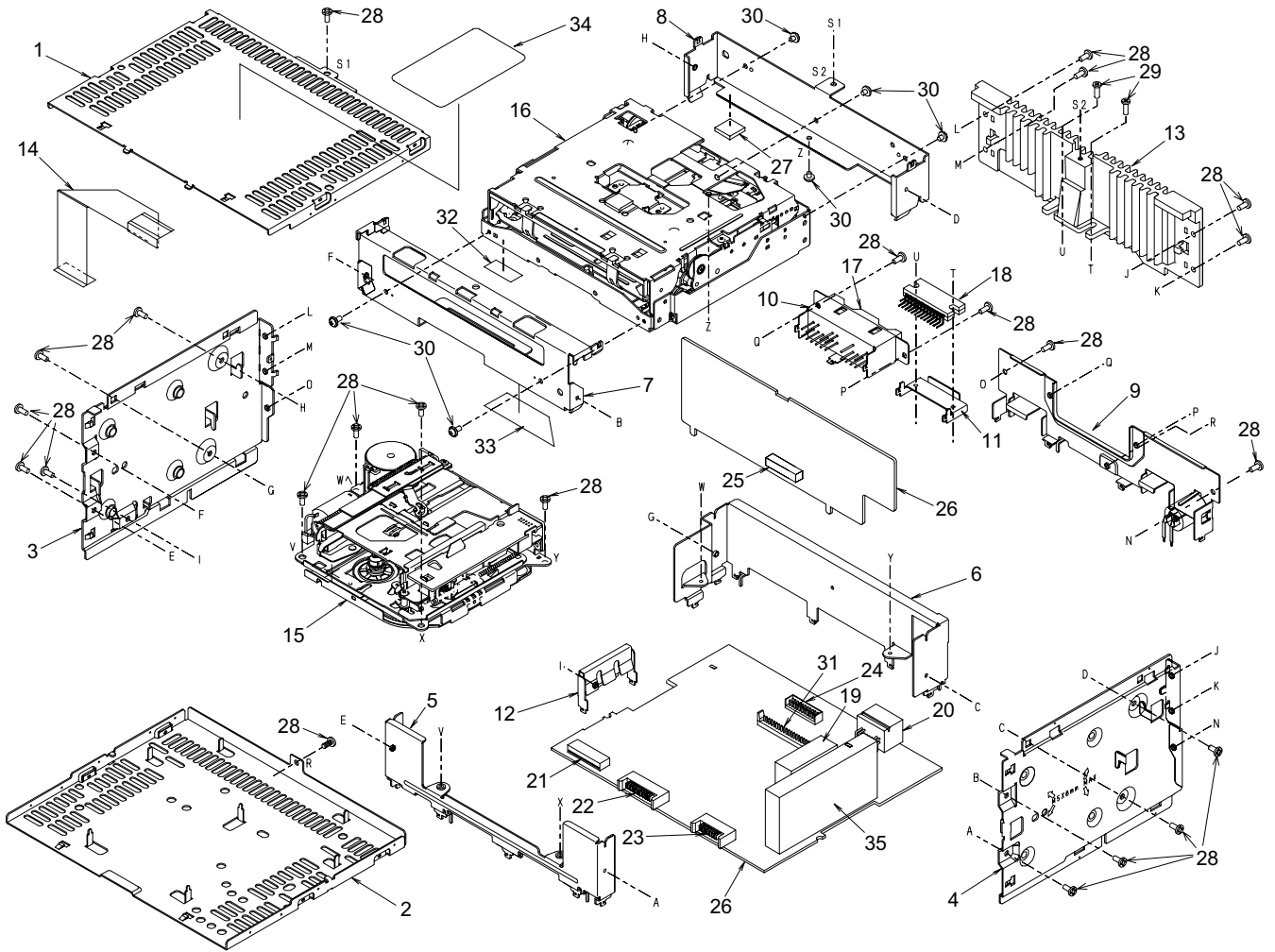
Escutcheon section



NO.	PART NO.	DESCRIPTION	Q'TY
1	940-7866-00	ESCUTCHEON-ASSY	1
2	347-6075-00	SPACER	2
3	347-5985-00	COLOR PAPER	1
4	347-5961-02	SILENCER	3
5	716-1553-00	P-TIGHT SCREW(3 × 8)	6
6	714-2606-81	MACHINE SCREW(M2.6 × 6)	4
7	331-2624-00	ESCUTCHEON PLATE	1
8	716-0778-00	WAVE SCREW(2 × 6)	12
9	345-8090-00	CUSHION RUBBER	1
10	074-1151-16	OUTLET SOCKET(16P)	1
11	379-4023-20	INDICATOR	1
12	013-6200-60	TACT SWITCH	16
13	017-0420-28	PILOT LAMP(14V40mA)	6

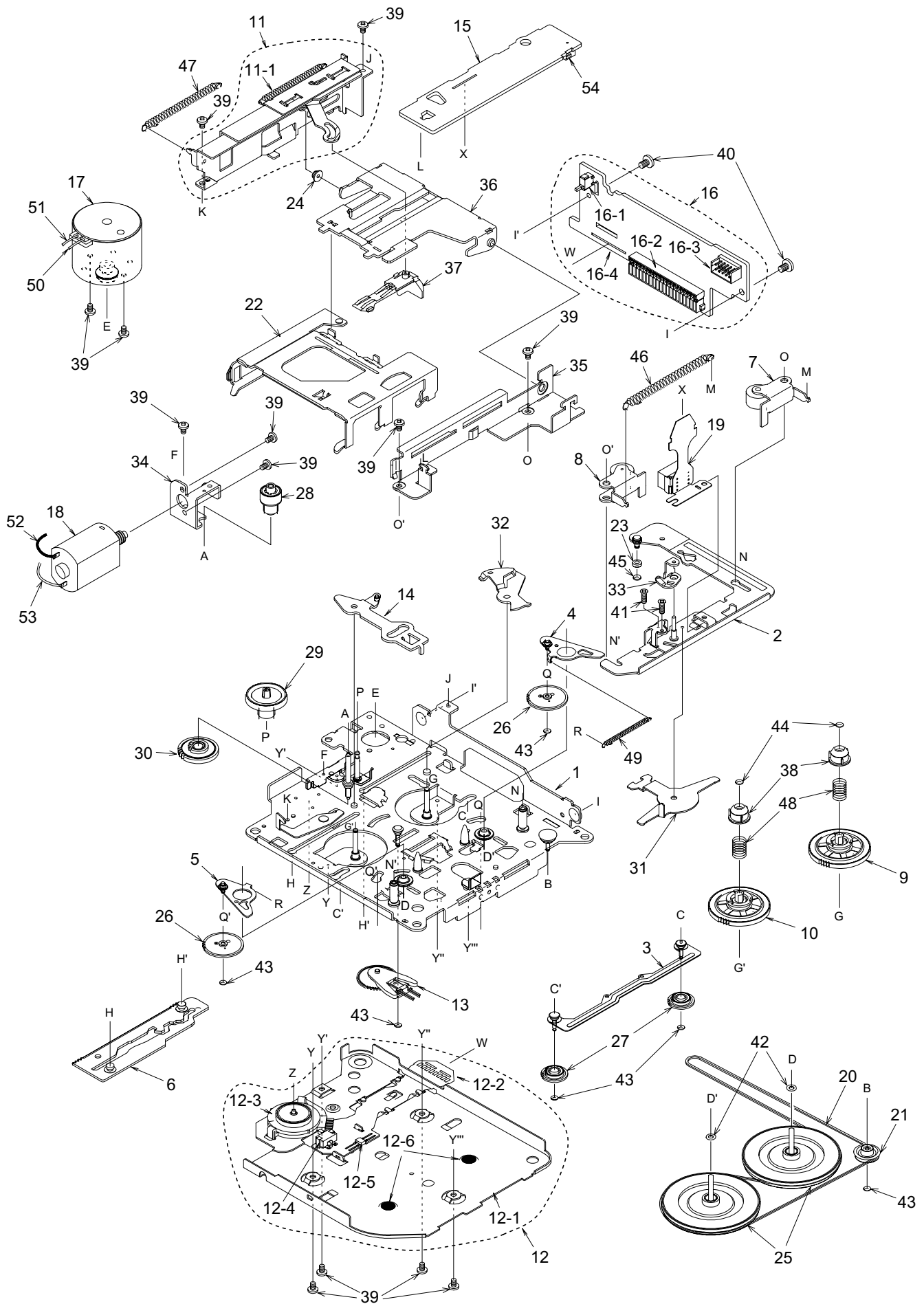
NO.	PART NO.	DESCRIPTION	Q'TY
14	016-0010-08	VARIABLE RESISTOR	1
15	039-1457-00	DISPLAY PWB (WITHOUT COMPONENT)	1
16	335-5989-00	DISC GUIDE	1
17	346-0112-00	LEATHER SHEET	1
18	382-5346-00	BUTTON	1
19	335-5975-00	ILLUMI-PLATE L	1
20	335-5976-00	ILLUMI-PLATE R	1
21	373-0904-01	DIAL COVER	1
22	380-5434-00	KNOB	1
23	320-0529-84	DUSTPROOF COVER	1
24	750-2626-00	SPRING	1
25	074-1151-12	OUTLET SOCKET(12P)	1

Main section



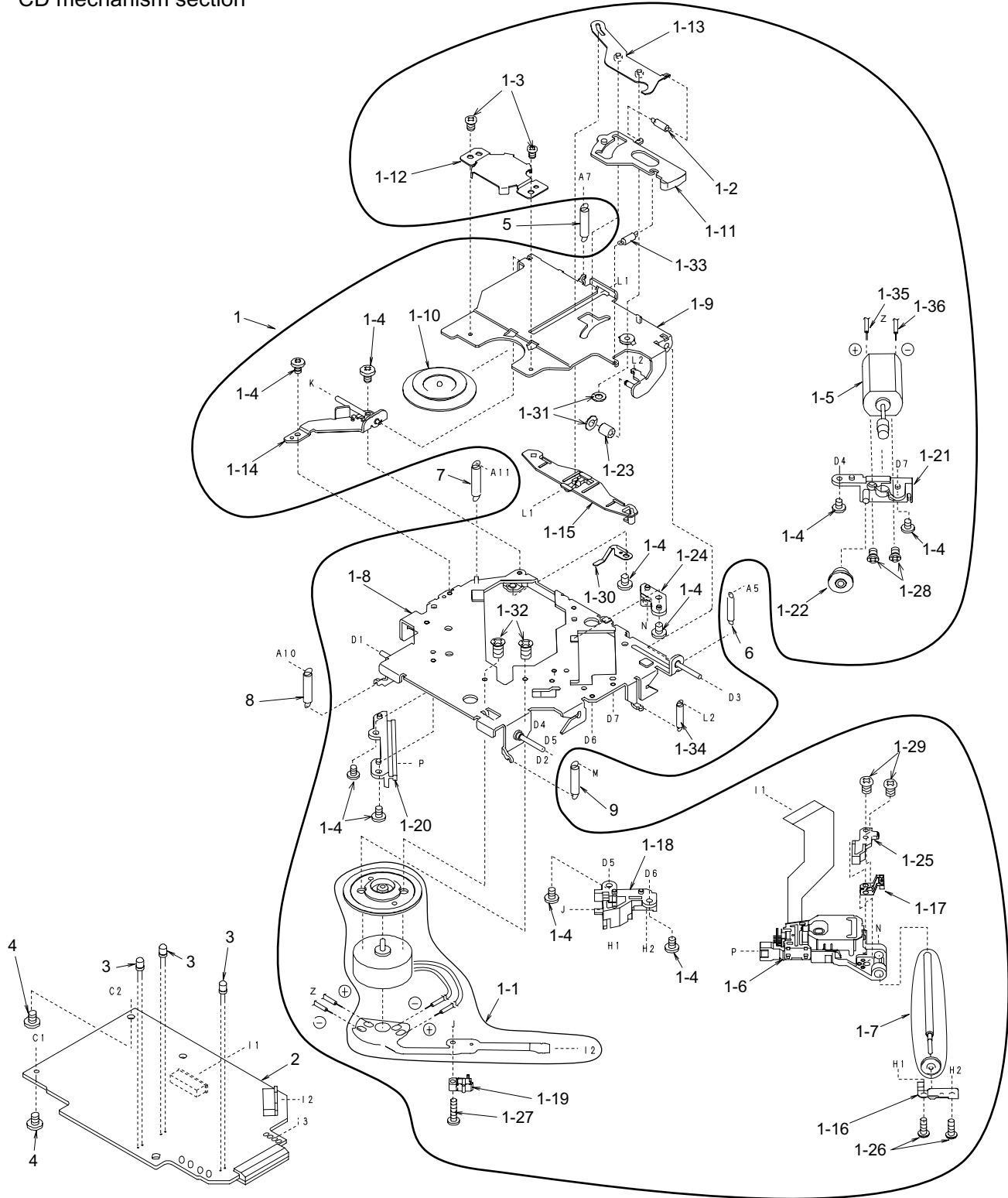
NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	310-1639-00	UPPER CASE	1	19	880-1517E	TUNER PACK(AM)	1
2	311-1726-00	LOWER CASE	1	20	074-1013-00	OUTLET SOCKET(12P)	1
3	305-0263-10	SIDE PLATE(LH)	1	21	074-1186-18	OUTLET SOCKET(18P)	1
4	305-0264-10	SIDE PLATE(RH)	1	22	076-0540-16	PLUG(16P)	1
5	309-0697-00	FRONT PLATE	1	23	076-0540-12	PLUG(12P)	1
6	331-2275-01	MECH-BRKT	1	24	076-0368-20	PLUG(20P)	1
7	331-2281-01	MECH BRKT(F)	1	25	074-0898-20	OUTLET SOCKET(20P)	1
8	331-2282-00	MECH BRKT(R)	1	26	039-1459-10	MAIN PWB (WITHOUT COMPONENT)	1
9	331-2270-20	ANT HOLDER	1	27	345-4138-00	SPACER	1
10	331-2271-00	OUTLET HOLDER	1	28	714-2606-81	MACHINE SCREW(M2.6 x 6)	23
11	331-2301-00	IC HOLDER	1	29	714-2612-81	MACHINE SCREW(M2.6 x 12)	2
12	331-2272-00	TR HOLDER	1	30	714-2303-81	MACHINE SCREW(M2.3 x 3)	6
13	313-1712-00	HEAT SINK	1	31	076-0461-20	PLUG(20P)	1
14	816-2447-00	FLAT CABLE	1	32	347-2022-02	SHADE	1
15	930-0790-02	TAPE-MECHANISM	1	33	347-5679-02	DOUBLE FACE	1
16	929-0068-02	CD-MECHANISM	1	34	286-8153-25	SETPLATE	1
17	074-1185-00	OUTLET SOCKET	1	35	880-1726E	TUNER PACK(FM)	1
18	051-2023-01	IC(TA8260AH)	1				

Tape mechanism section



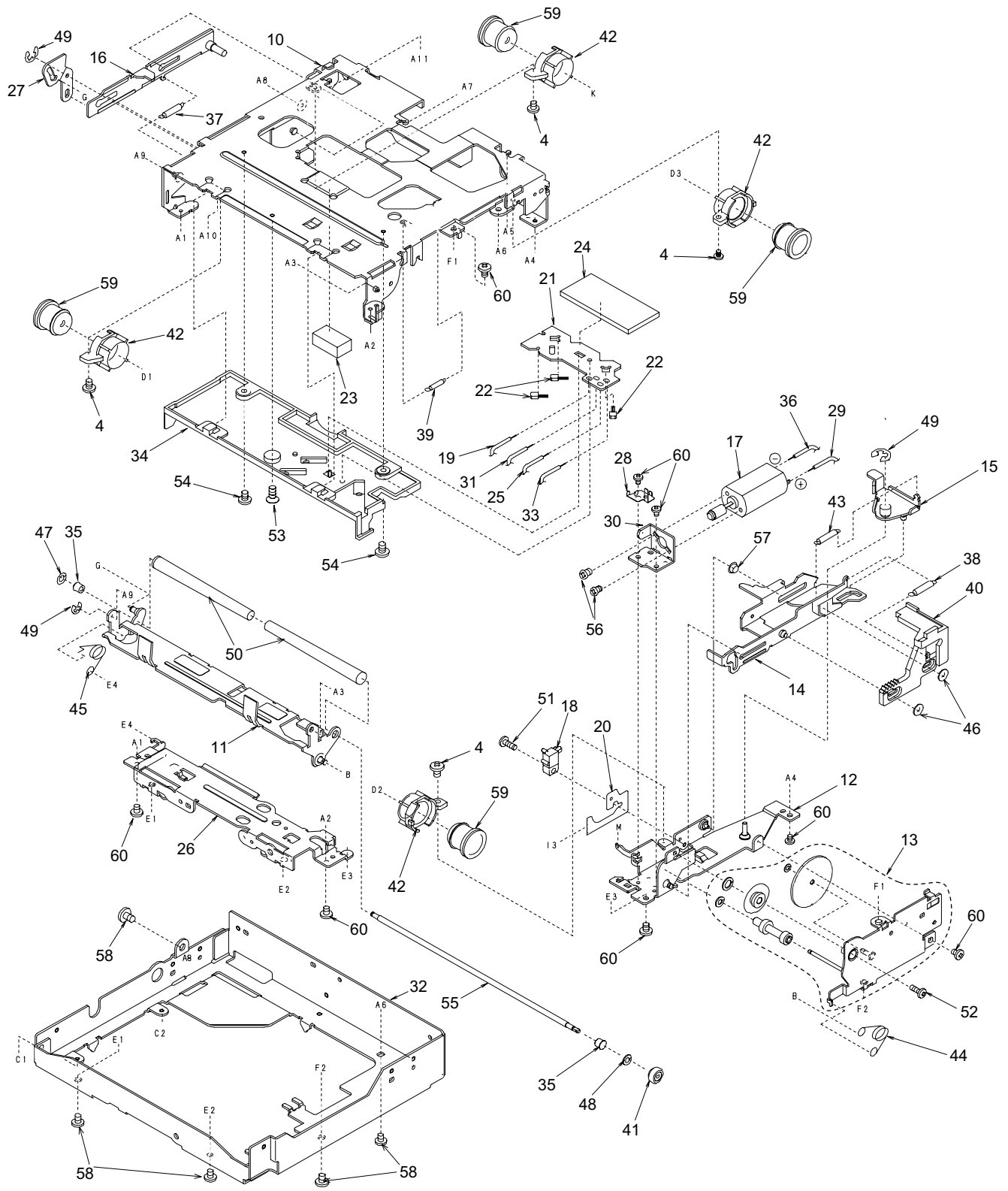
NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	960-4294-14	DECK PLATE ASSY	1	22	606-0101-08	PACK GUIDE	1
2	960-4261-05	HEAD PLATE ASSY	1	23	610-0342-01	HEAD-P-ROLLER	1
3	960-4262-03	FF/REW-P-ASSY	1	24	610-0343-00	GUIDE-A-ROLLER	1
4	960-4263-03	IDLER-P-ASSY L	1	25	611-0091-02	FLYWHEEL	2
5	960-4264-03	IDLER-P-ASSY R	1	26	613-0662-00	IDLER GEAR	2
6	960-4266-05	MODE PLATE ASSY	1	27	613-0286-02	FF/REW GEAR	2
7	960-4269-05	ROLLER ASSY F	1	28	613-0288-01	HELICAL GEAR	1
8	960-4270-05	ROLLER ASSY R	1	29	613-0289-01	GEAR A	1
9	960-4348-03	REEL ASSY F	1	30	613-0337-00	POWER GEAR	1
10	960-4349-03	REEL ASSY R	1	31	630-2597-01	CHANGE LINK	1
11	960-4298-09	EJECT SUB ASSY	1	32	630-2598-05	EJECT LINK	1
11-1	750-2948-01	SWITCH PLATE SPRING	1	33	630-2600-01	ADJUST LINK	1
12	960-4338-07	BOTTOM SUB ASSY	1	34	630-2601-02	MOTOR PLATE	1
12-1	960-4295-02	BOTTOM-P-ASSY	1	35	630-2626-05	PWB FRAME	1
12-2	099-9926-01	BOTTOM PWB (WITHOUT COMPONENT)	1	36	630-2605-02	GUIDE ARM	1
12-3	013-3951-11	SWITCH(MODE)	1	37	631-1992-02	PACK STOPPER	1
12-4	013-3953-01	SWITCH(METAL)	1	38	631-1993-01	SLIDE BUSH	2
12-5	051-1776-00	IC	1	39	716-0484-00	SCREW(M2 x 2.5)	13
12-6	746-0767-00	WASHER	2	40	716-1676-00	PWB SCREW(M2.6 x 6)	2
13	960-4282-06	DETECT SUB ASSY	1	41	716-0833-10	SCREW(M2 x 5.6)	2
14	960-4301-02	PLAY LINK ASSY	1	42	746-0624-00	WASHER	2
15	039-1436-00	SIDE PWB (WITHOUT COMPONENT)	1	43	746-0724-00	WASHER	6
16	990-0713-00	REAR PWB ASSY (WITH COMPONENT)	1	44	746-0761-00	WASHER	2
16-1	013-3906-00	SWITCH(TAPE IN)	1	45	746-0762-00	WASHER	1
16-2	074-1104-20	OUTLET SOCKET(20P)	1	46	750-2946-02	PINCH SPRING	1
16-3	076-0368-10	PLUG(10P)	1	47	750-2947-03	EJECT-P-SPRING	1
16-4	039-0489-00	REAR PWB	1	48	750-2949-00	SLIDE SPRING	2
17	SMA-130-100	MAIN MOTOR ASSY	1	49	750-3017-02	IDLER-P-SPRING	1
18	SMA-131-100	POWER MOTOR ASSY	1	50	800-4910-60	WIRE(BLK)	1
19	011-0307-34	HEAD	1	51	802-4911-60	WIRE(RED)	1
20	602-0118-00	BELT	1	52	806-4914-60	WIRE(BLU)	1
21	604-0046-00	TENSION PULLEY	1	53	809-4914-60	WIRE(WHT)	1
				54	074-0898-10	OUTLET SOCKET(10P)	1

CD mechanism section



NO.	PART NO.	DESCRIPTION	Q'TY
1	968-0067-02	DRIVE UNIT ASSY	1
1-1	SMA-151-100	MOTOR ASSY(SPINDEL)	1
1-2	750-3098-00	L-LINK SPRING	1
1-3	716-1468-00	SCREW(M2 x 2.5)	2
1-4	716-2003-81	SCREW(M2 x 3)	10
1-5	SMA-146-100	MOTOR ASSY(SLED)	1
1-6	969-0050-03	PICK UP UNIT	1
1-7	HBS-432-100	LS-GEAR ASSY	1
1-8	966-0447-22	DR-PLATE-ASSY	1
1-9	966-0449-22	CLAMP-LINK-ASSY	1

NO.	PART NO.	DESCRIPTION	Q'TY
1-10	621-0205-02	CLAMPER RING	1
1-11	621-0251-03	LOCK LINK	1
1-12	620-0198-03	CLAMPER PLATE	1
1-13	966-0314-21	STOP LINK-ASSY	1
1-14	966-0448-21	SIDE PLATE-ASSY	1
1-15	621-0252-03	DISC STOPPER	1
1-16	620-0491-03	SPRING PLATE	1
1-17	966-0454-00	SCREW H-RACK-ASSY	1
1-18	621-0358-02	LS-HOLDER-F	1
1-19	013-7100-00	SWITCH(LIMIT)	1



NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1-20	621-0357-03	PICK UP GUIDE	1	1-30	620-0690-01	RATTLE PLATE	1
1-21	621-0253-02	MOTOR HOLDER	1	1-31	746-0761-00	WASHER	2
1-22	621-0255-02	SECOND GEAR	1	1-32	716-1733-00	SCREW(M1.7×2.3)	2
1-23	622-1073-02	CLAMPER ROLLER	1	1-33	750-3099-00	ES-SPRING	1
1-24	621-0359-02	LS-HOLDER-R	1	1-34	750-3097-03	CLAMPER SPRING	1
1-25	621-0375-00	SH-BASE	1	1-35	816-2373-00	LEAD WIRE(WHT)	1
1-26	716-0675-00	SCREW(M2×5.5)	2	1-36	816-2372-00	LEAD WIRE(BLU)	1
1-27	716-1555-00	WAVE SCREW(2×8)	1	2	039-1101-02	CD PWB ASSY (WITH COMPONENT)	1
1-28	732-2004-11	SEMS SCREW(M2×4)	2	3	001-0563-00	LED	3
1-29	739-1735-17	PRECISION SCREW (M1.7×3.5)	2	4	716-1670-00	SCREW(M2×4)	6

NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
5	750-3202-00	CENTER SPRING-B	1	33	800-4910-60	VINYL-COAT-WIRE(BLK)	1
6	750-3096-01	DR-SPRING R	1	34	621-0402-01	U-DISC GUIDE-F	1
7	750-3164-00	DR-SPRING LR	1	35	621-0243-02	ROLLER SLEEVE	2
8	750-3188-00	DR-SPRING F-B	1	36	800-4904-60	VINYL-COAT-WIRE(BLK)	1
9	750-3201-00	DR-SPRING F-R	1	37	750-3189-00	SIDE-L-SPRING	1
10	966-0308-23	CHASSIS-ASSY	1	38	750-3098-00	L-LINK SPRING	1
11	966-0309-22	L-DISC-G-ASSY	1	39	750-3094-00	S-ARM SPRING	1
12	966-0310-21	SHIFT-P-CH-ASSY	1	40	621-0248-07	RACK GEAR	1
13	HBS-430-100	GEAR PLATE ASSY	1	41	621-0249-02	ROLLER GEAR	1
14	966-0312-21	SHIFT-PLATE-ASSY	1	42	621-0250-01	DAMPER HOLDER	4
15	966-0358-21	DRIVE-L-PLATE-ASSY	1	43	750-3092-03	SHIFT SPRING	1
16	966-0359-21	SIDE-L-PLATE-ASSY	1	44	750-3091-03	LOADING-SPRING-R	1
17	SMA-147-100	MOTOR ASSY(LOADING)	1	45	750-3090-02	LOADING-SPRING-L	1
18	013-3879-01	CHUCKING SWITCH	1	46	746-0877-02	WASHER	2
19	804-4910-60	VINYL-COAT-WIRE(YEL)	1	47	746-0762-00	WASHER	1
20	039-0586-01	CHUCKING SWITCH PWB (WITHOUT COMPONENT)	1	48	746-0712-03	WASHER	1
21	039-0588-01	SENSOR PWB (WITHOUT COMPONENT)	1	49	743-1500-10	E-RING	3
22	060-0252-01	PHOTO-TR	3	50	621-0258-03	LOADING ROLLER	2
23	345-7513-01	CLAMPER SHEET	1	51	716-1742-00	SCREW(M2 x 5)	1
24	345-7514-00	SENSOR PWB SHEET	1	52	716-1704-00	SCREW(M2 x 7)	1
25	802-4910-60	VINYL-COAT-WIRE(RED)	1	53	716-1677-00	SCREW(M2 x 5)	1
26	620-0485-20	FRONT PLATE	1	54	716-1507-00	SCREW(M2 x 3)	2
27	620-0488-20	S-L-LINK PLATE	1	55	622-1072-05	ROLLER SHAFT	1
28	620-0489-02	MOTOR PLATE	1	56	716-1468-00	SCREW(M2 x 2.5)	2
29	802-4904-60	VINYL-COAT-WIRE(RED)	1	57	622-1219-01	SHIFT ROLLER	1
30	620-0492-20	MOTOR BRACKET	1	58	714-2603-81	SCREW(M2.6 x 3)	5
31	801-4910-60	VINYL-COAT-WIRE(BRN)	1	59	629-0058-00	DAMPER-VA	4
32	620-0697-02	CD-MECH-BRKT	1	60	714-2003-81	SCREW(M2 x 3)	8

ELECTRICAL PARTS LIST

Note) Several different parts of the same reference number are alternative parts.
One of those parts is used in the set.
Some parts depend on each model. The model name is specified in the description.

Main PWB section(B1)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
BL100	880-1726E	FM TUNER	C162	168-4712-05	470pF	C210	042-0562-17	16V10 μ F
BL150	880-1517E	AM TUNER	C163	168-2732-05	16V 0.027 μ F	C211	042-0562-17	16V10 μ F
C102	178-1045-79	0.1 μ F	C164	168-4712-05	470pF	C212	042-0562-17	16V10 μ F
C103	043-0277-01	0.022 μ F	C165	166-5601-00	56pF CH	C213	042-0562-17	16V10 μ F
C105	178-3932-78	0.039 μ F	C166	166-4701-00	47pF CH	C214	042-0562-36	50V1 μ F
C106	178-3932-78	0.039 μ F	C167	168-4722-05	4700pF	C215	042-0562-36	50V1 μ F
C108	183-4763-32	16V47 μ F	C168	168-1032-05	0.01 μ F	C217	178-1242-78	0.12 μ F
C109	178-1045-79	0.1 μ F	C169	178-4732-78	0.047 μ F	C218	178-1242-78	0.12 μ F
C111	178-4742-78	0.47 μ F	C170	168-1032-05	0.01 μ F	C220	168-1532-05	0.015 μ F
C112	178-4742-78	0.47 μ F	C171	168-2232-05	0.022 μ F	C221	168-1532-05	0.015 μ F
C120	178-1022-78	1000pF	C172	183-4753-52	35V4.7 μ F	C222	168-3312-05	330pF
C121	176-1011-00	100pF CH	C173	183-4753-52	35V4.7 μ F	C223	168-3312-05	330pF
C122	176-1011-00	100pF CH	C174	178-6832-78	0.068 μ F	C224	042-0562-17	16V10 μ F
C130	166-1011-00	100pF CH	C175	178-1032-78	0.01 μ F	C225	042-0562-17	16V10 μ F
C150	176-1007-00	10pF CH	C177	178-1042-78	0.1 μ F	C226	178-3332-78	0.033 μ F
C152	042-0427-02	16V33 μ F	C180	183-4763-32	16V47 μ F	C250	168-1022-05	1000pF
C153	178-1045-79	0.1 μ F	C200	042-0505-04	10V33 μ F	C251	168-1022-05	1000pF
C154	168-1022-05	1000pF	C202	178-1842-78	0.18 μ F	C252	168-1022-05	1000pF
C155	168-2232-05	0.022 μ F	C203	042-0562-36	50V1 μ F	C253	168-2232-05	0.022 μ F
C156	178-1242-78	0.12 μ F	C204	042-0562-36	50V1 μ F	C255	042-0562-17	16V10 μ F
C157	166-5601-00	56pF CH	C205	042-0562-36	50V1 μ F	C256	042-0562-17	16V10 μ F
C158	183-1063-32	16V10 μ F	C206	042-0562-36	50V1 μ F	C257	042-0562-17	16V10 μ F
C159	178-5632-78	0.056 μ F	C207	178-1842-78	0.18 μ F	C258	042-0562-17	16V10 μ F
C160	042-0504-06	16V3.3 μ F	C208	042-0562-36	50V1 μ F	C300	042-0562-17	16V10 μ F
C161	178-8232-78	0.082 μ F	C209	042-0562-36	50V1 μ F	C301	042-0562-17	16V10 μ F

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C302	042-0562-17	16V10 μ F	C470	168-1022-05	1000pF	D406	001-0356-00	1SS184
C303	042-0562-17	16V10 μ F	C473	178-2242-78	0.22 μ F	D407	001-0377-69	MA4180M
C305	168-4712-05	470pF	C474	178-2242-78	0.22 μ F	D408	001-0377-10	MA4030L
C306	168-4712-05	470pF	C475	178-4742-78	0.47 μ F	D409	001-0516-00	MA111
C308	166-2201-00	22pF CH	C500	172-1041-11	0.1 μ F	D411	001-0516-00	MA111
C309	166-2201-00	22pF CH	C501	042-0571-00	16V2200 μ F	D415	001-0516-00	MA111
C312	168-3322-05	3300pF	C502	183-4753-52	35V4.7 μ F	D416	001-0330-00	1SS119
C313	168-3322-05	3300pF	C503	042-0571-00	16V2200 μ F	D417	001-0516-00	MA111
C314	166-2201-00	22pF CH	C505	168-2222-05	2200pF	D418	001-0516-00	MA111
C315	166-2201-00	22pF CH	C506	168-2222-05	2200pF	D419	001-0516-00	MA111
C320	178-2242-78	0.22 μ F	C507	168-2222-05	2200pF	D420	001-0516-00	MA111
C321	178-2242-78	0.22 μ F	C508	168-2222-05	2200pF	D421	001-0516-00	MA111
C322	043-0309-91	10V 0.82 μ F	C510	168-2222-05	2200pF	D422	001-0516-00	MA111
C323	043-0309-91	10V 0.82 μ F	C511	168-2222-05	2200pF	D423	001-0516-00	MA111
C324	043-0309-02	10V 0.68 μ F	C512	168-2222-05	2200pF	D424	001-0516-00	MA111
C325	043-0309-02	10V 0.68 μ F	C513	168-2222-05	2200pF	D500	001-0503-31	HZS6 A2L
C326	178-2742-78	0.27 μ F	C514	168-2222-05	2200pF	D503	001-0330-00	1SS119
C327	178-2742-78	0.27 μ F	C516	183-1053-62	50V1 μ F	D504	001-2015-00	RL253
C328	178-1832-78	0.018 μ F	C517	183-1063-32	16V10 μ F	D505	001-0626-00	1A2
C329	043-0309-02	10V 0.68 μ F	C518	172-1041-11	0.1 μ F	D507	001-0377-34	MA4062L
C330	043-0309-02	10V 0.68 μ F	C520	042-0548-03	16V100 μ F	D509	001-0626-00	1A2
C331	178-1832-78	0.018 μ F	C521	042-0548-03	16V100 μ F	D600	001-2606-90	M1FS4
C332	178-3332-78	0.033 μ F	C600	178-6832-78	0.068 μ F	D601	001-2606-90	M1FS4
C333	178-6832-78	0.068 μ F	C601	178-6832-78	0.068 μ F	D602	001-2606-90	M1FS4
C334	178-6832-78	0.068 μ F	C602	178-6832-78	0.068 μ F	D603	001-2606-90	M1FS4
C335	178-3332-78	0.033 μ F	C603	178-6832-78	0.068 μ F	D900	001-0516-00	MA111
C336	178-1242-78	0.12 μ F	C604	168-1032-05	0.01 μ F	IC150	051-4200-90	TA2051FN
C337	178-1842-78	0.18 μ F	C605	178-6832-78	0.068 μ F	IC200	051-5012-00	LC75386
C338	178-1842-78	0.18 μ F	C606	178-6832-78	0.068 μ F	IC300	051-3019-90	NJM2060V
C339	178-1242-78	0.12 μ F	C607	168-2232-05	0.022 μ F	IC301	051-3019-90	NJM2060V
C340	178-6832-78	0.068 μ F	C608	168-1032-05	0.01 μ F	IC302	051-3019-90	NJM2060V
C341	178-3332-78	0.033 μ F	C609	178-6832-78	0.068 μ F	IC303	051-3019-90	NJM2060V
C342	178-3332-78	0.033 μ F	C610	178-6832-78	0.068 μ F	IC400	051-1014-10	TA7291S
C343	178-6832-78	0.068 μ F	C612	172-2241-11	0.22 μ F	IC402	052-1147-30	UPC17718GC-528-3B9
C350	168-2232-05	0.022 μ F	C613	172-2241-11	0.22 μ F	IC404	051-3020-90	NJM4565V
		(PN-2280D-B ONLY)	C614	172-2241-11	0.22 μ F	IC600	051-3019-90	NJM2060V
C351	168-2232-05	0.022 μ F	C615	172-2241-11	0.22 μ F	IC601	051-2023-01	TA8260AH
		(PN-2280D-B ONLY)	C617	042-0505-03	16V2.2 μ F	J250	074-1013-00	12P
C352	168-2232-05	0.022 μ F	C619	183-1053-62	50V1 μ F	J400	074-1186-18	18P
		(PN-2280D-B ONLY)	C900	176-1511-00	150pF CH	J500	074-0898-20	20P
C400	178-1045-79	0.1 μ F	C903	166-2201-00	22pF CH	J501	074-1185-00	16P
C401	178-1045-79	0.1 μ F	C904	166-2201-00	22pF CH	L100	010-2230-76	22 μ H
C402	178-1045-79	0.1 μ F	C905	166-2201-00	22pF CH	L101	010-2230-76	22 μ H
C403	178-1045-79	0.1 μ F	C906	166-2201-00	22pF CH	L102	010-2230-64	2.2 μ H
C405	043-0277-01	0.022 μ F	C907	166-2201-00	22pF CH	L150	010-2003-04	COIL
C406	183-1063-32	16V10 μ F	C908	166-2201-00	22pF CH	L151	010-2230-76	22 μ H
C407	042-0458-00	50V1 μ F	C909	166-2201-00	22pF CH	L152	010-6004-40	2.2mH J
C408	168-1022-05	1000pF	C910	166-2201-00	22pF CH	L400	010-2230-76	22 μ H
C409	178-1045-79	0.1 μ F	C911	166-2201-00	22pF CH	L401	010-2230-76	22 μ H
C410	183-4763-32	16V47 μ F	C912	166-2201-00	22pF CH	P400	076-0461-20	20P
C411	178-1045-79	0.1 μ F	C913	166-2201-00	22pF CH	P401	076-0368-20	20P
C412	178-1045-79	0.1 μ F	C914	166-2201-00	22pF CH	P402	076-0540-12	12P
C413	166-1201-00	12pF CH	C915	166-2201-00	22pF CH	P403	076-0540-16	16P
C414	182-1073-32	16V100 μ F	C916	166-2201-00	22pF CH	Q100	125-2005-01	UN2211
C416	166-1201-00	12pF CH	C917	166-2201-00	22pF CH	Q101	100-1298-00	2SA1298
C418	178-1045-79	0.1 μ F	C918	166-2201-00	22pF CH	Q102	125-2005-01	UN2211
C421	183-1073-22	10V100 μ F	C919	166-2201-00	22pF CH	Q103	125-9003-02	IMD3
C424	166-1011-00	100pF CH	C920	176-2201-00	22pF CH	Q104	100-1298-00	2SA1298
C425	166-1011-00	100pF CH	C921	176-2201-00	22pF CH	Q105	125-2005-01	UN2211
C426	166-1011-00	100pF CH	C922	176-2201-00	22pF CH	Q251	125-9006-00	IMX1
C427	166-3301-00	33pF CH	C923	176-2201-00	22pF CH	Q252	103-0601-00	2SD601A
C429	178-1045-79	0.1 μ F	CCT400	050-0122-00	10k \times 4 J	Q253	125-2005-01	UN2211
C431	183-4763-12	6.3V47 μ F	CCT403	050-0122-03	1k \times 4	Q254	125-0001-01	UN2111
C432	178-1045-79	0.1 μ F	CCT404	050-0122-03	1k \times 4	Q400	103-2012-00	2SD2012
C436	042-0562-20	16V47 μ F	CCT405	050-0122-03	1k \times 4	Q402	125-9003-02	IMD3
C439	042-0562-20	16V47 μ F	CCT406	050-0122-03	1k \times 4	Q403	102-2458-51	2SC2458Y.GR.BL
C451	183-4753-52	35V4.7 μ F	CCT407	050-0122-03	1k \times 4	Q404	102-2458-51	2SC2458Y.GR.BL
C456	183-4753-52	35V4.7 μ F	CCT408	050-0122-03	1k \times 4	Q405	100-1428-00	2SA1428
C460	042-0548-02	10V220 μ F	D250	001-0589-00	1SS145	Q406	125-2004-06	RN1406
C461	183-1073-22	10V100 μ F	D251	001-0589-00	1SS145	Q407	103-2012-00	2SD2012
C462	168-1022-05	1000pF	D252	001-0421-38	MTZJ36	Q412	103-1858-00	2SD1858
C464	166-1011-00	100pF CH	D253	001-0377-44	MA4082M	Q415	125-9003-02	IMD3
C465	178-1045-79	0.1 μ F	D401	001-0516-00	MA111	Q416	103-2012-00	2SD2012
C467	166-1011-00	100pF CH	D402	001-0503-45	HZS9B1L	Q417	125-0006-00	UN2110
C468	166-1011-00	100pF CH	D404	001-0377-38	MA4068M			
			D405	001-0400-48	HZS9.1JB3			

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
Q419	125-0006-00	UN2110	R314	119-4721-10	1/16W 4.7k	R446	119-2231-10	1/16W 22k
Q423	125-2005-01	UN2211	R315	119-4721-10	1/16W 4.7k	R452	111-1011-91	1/4WS 100
Q424	125-2005-01	UN2211	R318	119-1631-10	1/16W 16k	R458	119-4731-10	1/16W 47k
Q426	125-2005-01	UN2211	R319	119-1631-10	1/16W 16k	R460	119-4731-10	1/16W 47k
Q500	103-1858-00	2SD1858	R320	119-4721-10	1/16W 4.7k	R461	119-4731-10	1/16W 47k
Q501	125-9003-02	IMD3	R321	119-4721-10	1/16W 4.7k	R470	119-1041-10	1/16W 100k
Q502	100-1048-00	2SA1048	R322	119-1031-10	1/16W 10k	R472	119-4721-10	1/16W 4.7k
Q503	125-2005-01	UN2211	R323	119-1031-10	1/16W 10k	R473	119-4721-10	1/16W 4.7k
Q504	103-0601-00	2SD601A	R324	119-2221-10	1/16W 2.2k	R474	119-4721-10	1/16W 4.7k
Q505	103-1858-00	2SD1858	R325	119-2221-10	1/16W 2.2k	R475	119-4731-10	1/16W 47k
Q511	125-2005-01	UN2211	R326	119-2221-10	1/16W 2.2k	R476	119-4731-10	1/16W 47k
Q512	101-0709-00	2SB709A-Q.R.S	R327	119-2221-10	1/16W 2.2k	R479	119-4731-10	1/16W 47k
Q513	100-1359-00	2SA1359	R332	117-7521-10	1/10W 7.5k	R480	119-4731-10	1/16W 47k
R106	119-2221-10	1/16W 2.2k	R333	117-7521-10	1/10W 7.5k	R487	111-1001-91	1/4WS 10
R109	119-1041-10	1/16W 100k	R336	117-5611-10	1/10W 560	R488	111-1001-91	1/4WS 10
R110	119-4731-10	1/16W 47k	R337	117-5611-10	1/10W 560	R489	111-1001-91	1/4WS 10
R113	119-2221-10	1/16W 2.2k	R338	117-4731-10	1/10W 47k	R490	111-1001-91	1/4WS 10
R114	119-2221-10	1/16W 2.2k	R339	117-4731-10	1/10W 47k	R491	119-4741-10	1/16W 470k
R115	119-1031-10	1/16W 10k	R340	117-4731-10	1/10W 47k	R492	119-1031-10	1/16W 10k
R116	119-1031-10	1/16W 10k	R341	117-4731-10	1/10W 47k	R493	119-1031-10	1/16W 10k
R117	119-2221-10	1/16W 2.2k	R342	117-5611-10	1/10W 560	R494	119-1031-10	1/16W 10k
R119	119-1521-10	1/16W 1.5k	R343	117-5611-10	1/10W 560	R495	119-1031-10	1/16W 10k
R151	119-1031-10	1/16W 10k	R346	117-5121-10	1/10W 5.1k	R499	119-1021-10	1/16W 1k
R152	119-1031-10	1/16W 10k	R347	117-5121-10	1/10W 5.1k	R500	111-1011-91	1/4WS 100
R153	119-1011-10	1/16W 100	R348	117-2021-10	1/10W 2k	R502	119-4721-10	1/16W 4.7k
R154	119-1031-10	1/16W 10k	R349	117-9111-10	1/10W 910	R503	117-0000-00	1/10W 0 JW
R155	119-1211-10	1/16W 120	R350	117-9111-10	1/10W 910	R505	119-3321-10	1/16W 3.3k
R156	119-1231-10	1/16W 12k	R351	117-2021-10	1/10W 2k	R506	119-1031-10	1/16W 10k
R158	119-6821-15	1/16W 6.8k	R352	117-1511-10	1/10W 150	R508	117-1031-10	1/10W 10k
R159	119-5631-10	1/16W 56k	R353	117-1511-10	1/10W 150	R509	111-1531-91	1/4WS 15k
R160	119-3331-10	1/16W 33k	R354	117-1511-10	1/10W 150	R518	119-4721-10	1/16W 4.7k
R161	119-1021-10	1/16W 1k	R355	117-1511-10	1/10W 150	R519	111-1221-91	1/4WS 1.2k
R162	119-2221-10	1/16W 2.2k	R356	117-1541-10	1/10W 150k	R521	111-4791-91	1/4WS 4.7
R200	117-0000-00	1/10W 0 JW	R357	117-1541-10	1/10W 150k	R522	111-4791-91	1/4WS 4.7
		(PN-2280D-A ONLY)	R358	117-1541-10	1/10W 150k	R525	111-1531-91	1/4WS 15k
R200	117-1211-10	1/10W 120	R359	117-1541-10	1/10W 150k	R526	114-2291-11	1W 2.2
		(PN-2280D-B ONLY)	R360	117-1541-10	1/10W 150k	R529	117-5611-10	1/10W 560
R204	119-4721-10	1/16W 4.7k	R361	117-1541-10	1/10W 150k	R530	119-1031-10	1/16W 10k
R205	119-4721-10	1/16W 4.7k	R362	117-1541-10	1/10W 150k	R601	117-5131-10	1/10W 51k
R210	119-4741-10	1/16W 470k	R363	117-1541-10	1/10W 150k	R602	117-5131-10	1/10W 51k
R211	119-4731-10	1/16W 47k	R364	117-1511-10	1/10W 150	R603	117-7521-10	1/10W 7.5k
R250	119-5621-10	1/16W 5.6k	R365	117-1511-10	1/10W 150	R604	117-7521-10	1/10W 7.5k
R251	119-5621-10	1/16W 5.6k	R366	117-1511-10	1/10W 150	R605	119-1231-10	1/16W 12k
R252	119-5631-10	1/16W 56k	R367	117-1511-10	1/10W 150	R606	117-1031-10	1/10W 10k
R253	119-5631-10	1/16W 56k	R368	117-2021-10	1/10W 2k	R607	117-1031-10	1/10W 10k
R254	119-1031-10	1/16W 10k	R369	117-3621-10	1/10W 3.6k	R608	117-5131-10	1/10W 51k
R255	119-1031-10	1/16W 10k	R370	117-3621-10	1/10W 3.6k	R609	117-5131-10	1/10W 51k
R256	119-5631-10	1/16W 56k	R371	117-2021-10	1/10W 2k	R610	117-5131-10	1/10W 51k
R257	119-1031-10	1/16W 10k	R400	119-1031-10	1/16W 10k	R611	117-5131-10	1/10W 51k
R258	119-1021-10	1/16W 1k	R401	119-1031-10	1/16W 10k	R612	117-1031-10	1/10W 10k
R259	119-4731-10	1/16W 47k	R402	111-3311-91	1/4WS 330	R613	117-1031-10	1/10W 10k
R260	119-2231-10	1/16W 22k	R403	119-2221-10	1/16W 2.2k	R615	117-7521-10	1/10W 7.5k
R261	119-4731-10	1/16W 47k	R404	119-2721-10	1/16W 2.7k	R616	117-7521-10	1/10W 7.5k
R262	032-0106-66	1/10W 100 ± 0.5%	R405	111-1221-91	1/4WS 1.2k	R618	117-5131-10	1/10W 51k
R263	032-0106-66	1/10W 100 ± 0.5%	R406	111-1221-91	1/4WS 1.2k	R619	117-5131-10	1/10W 51k
R264	032-0106-66	1/10W 100 ± 0.5%	R407	119-4721-10	1/16W 4.7k	R625	119-1031-10	1/16W 10k
R265	032-0106-66	1/10W 100 ± 0.5%	R408	119-2221-10	1/16W 2.2k	R626	117-1031-10	1/10W 10k
R266	032-0106-66	1/10W 100 ± 0.5%	R409	119-1031-10	1/16W 10k	R627	117-1031-10	1/10W 10k
R267	032-0106-66	1/10W 100 ± 0.5%	R411	117-2221-10	1/10W 2.2k	R628	117-1031-10	1/10W 10k
R268	032-0106-55	1/10W 4.7 ± 0.5%	R412	119-1041-10	1/16W 100k	R629	117-1031-10	1/10W 10k
R269	032-0106-55	1/10W 4.7 ± 0.5%	R417	119-4721-10	1/16W 4.7k	R630	117-1031-10	1/10W 10k
R270	032-0106-55	1/10W 4.7 ± 0.5%	R423	119-4731-10	1/16W 47k	R631	117-1031-10	1/10W 10k
R271	032-0106-55	1/10W 4.7 ± 0.5%	R424	119-4731-10	1/16W 47k	R632	117-1031-10	1/10W 10k
R300	119-1531-10	1/16W 15k	R425	119-4731-10	1/16W 47k	R633	117-1031-10	1/10W 10k
R301	119-1531-10	1/16W 15k	R426	119-4731-10	1/16W 47k	R700	119-1021-10	1/16W 1k
R302	119-1331-10	1/16W 13k	R427	119-4731-10	1/16W 47k	R702	119-1021-10	1/16W 1k
R303	119-1331-10	1/16W 13k	R431	111-3311-91	1/4WS 330	R703	119-1021-10	1/16W 1k
R304	119-3331-10	1/16W 33k	R432	119-1041-10	1/16W 100k	R704	119-1021-10	1/16W 1k
R305	119-3331-10	1/16W 33k	R436	117-1021-10	1/10W 1k	R705	119-2231-10	1/16W 22k
R306	119-3331-10	1/16W 33k	R437	119-4731-10	1/16W 47k	SUP100	060-0122-20	DSP-141N-S00B
R307	119-3331-10	1/16W 33k	R438	119-4721-10	1/16W 4.7k	T500	009-0658-02	0.7mH
R309	119-1031-10	1/16W 10k	R439	119-4721-10	1/16W 4.7k	VR100	012-5203-57	22k
R310	119-1031-10	1/16W 10k	R440	119-1031-10	1/16W 10k	VR101	012-5203-56	10k
R312	119-1031-10	1/16W 10k	R441	119-4731-10	1/16W 47k	VR102	012-5203-56	10k
R313	119-1031-10	1/16W 10k	R442	119-1031-10	1/16W 10k	X400	061-3501-90	4.5MHz

Display PWB section(B2)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C700	043-0206-61	0.1 μ F F	PL703	017-0420-28	14V40mA(WHITE)	S707	013-6200-60	SKPLAA
C701	043-0206-63	0.022 μ F F	PL704	017-0420-28	14V40mA(WHITE)	S708	013-6200-60	SKPLAA
C702	043-0206-63	0.022 μ F F	PL705	017-0420-28	14V40mA(WHITE)	S709	013-6200-60	SKPLAA
C703	043-0206-28	47pF SL	R700	111-4741-91	1/4WS 470k	S710	013-6200-60	SKPLAA
FL700	379-4023-20	VFD	R701	111-1031-91	1/4WS 10k	S711	013-6200-60	SKPLAA
IC700	051-6011-10	LC75741G	S700	013-6200-60	SKPLAA	S712	013-6200-60	SKPLAA
J700	074-1151-12	12P	S701	013-6200-60	SKPLAA	S713	013-6200-60	SKPLAA
J701	074-1151-16	16P	S702	013-6200-60	SKPLAA	S714	013-6200-60	SKPLAA
L700	010-2230-76	22 μ H	S703	013-6200-60	SKPLAA	S716	013-6200-60	SKPLAA
PL700	017-0420-28	14V40mA(WHITE)	S704	013-6200-60	SKPLAA	VR700	016-0010-08	
PL701	017-0420-28	14V40mA(WHITE)	S705	013-6200-60	SKPLAA			
PL702	017-0420-28	14V40mA(WHITE)	S706	013-6200-60	SKPLAA			

CD mechanism/CD PWB section(B3)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C1	178-1032-78	0.01 μ F	C38	178-1042-78	0.1 μ F	R11	117-2201-10	1/10W 22
C2	178-1042-78	0.1 μ F	C39	182-1063-33	16V10 μ F	R12	117-1041-10	1/10W 100k
C3	178-1032-78	0.01 μ F	C40	178-1042-78	0.1 μ F	R13	117-3331-10	1/10W 33k
C4	182-4763-13	6.3V47 μ F	C41	182-1063-33	16V10 μ F	R14	117-3631-10	1/10W 36k
C5	178-1042-78	0.1 μ F	C42	182-1063-33	16V10 μ F	R15	117-1241-10	1/10W 120k
C6	182-4763-13	6.3V47 μ F	C43	182-1063-33	16V10 μ F	R16	117-3631-10	1/10W 36k
C7	178-1042-78	0.1 μ F	C44	182-1063-33	16V10 μ F	R17	117-1031-10	1/10W 10k
C8	176-1801-00	18pF CH	C45	182-1073-33	16V100 μ F	R18	117-1041-10	1/10W 100k
C9	176-2096-00	2pF CJ	C48	178-2225-79	2200pF	R19	117-1051-10	1/10W 1M
C10	182-1073-15	6.3V100 μ F	D1	001-0563-00	GL380	R20	117-1031-10	1/10W 10k
C12	178-1042-78	0.1 μ F	D2	001-0563-00	GL380	R21	117-3321-10	1/10W 3.3k
C13	178-1042-78	0.1 μ F	D3	001-0563-00	GL380	R22	117-6821-10	1/10W 6.8k
C14	178-1042-78	0.1 μ F	D5	001-0528-32	MA8056-M	R23	117-1051-10	1/10W 1M
C15	176-1007-00	10pF CH	IC1	051-1014-10	TA7291S	R24	117-1041-10	1/10W 100k
C16	178-2212-78	220pF	IC2	051-6015-05	BA6392FP	R25	117-4741-10	1/10W 470k
C17	178-1032-78	0.01 μ F	IC3	051-1971-00	CXA1610M	R26	117-1231-10	1/10W 12k
C18	178-1042-78	0.1 μ F	IC4	051-6318-00	CXD2548R	R27	117-1231-10	1/10W 12k
C19	178-2212-78	220pF	IC5	052-5018-03	μ PD78002BGC-650-AB8	R28	117-1231-10	1/10W 12k
C20	178-4745-79	0.47 μ F	J1	074-1143-06	6P	R29	117-4711-10	1/10W 470
C21	178-1032-78	0.01 μ F	J2	074-1138-17	17P	R30	117-1231-10	1/10W 12k
C22	178-2212-78	220pF	L1	010-2155-03	10 μ H	R31	117-1231-10	1/10W 12k
C23	178-1042-78	0.1 μ F	Q1	101-1237-50	2SB1237QR	R32	117-1231-10	1/10W 12k
C24	178-1522-78	1500pF	Q3	103-1754-64	2SD1754A-P,Q	R34	117-4731-10	1/10W 47k
C25	178-4732-78	0.047 μ F	Q4	125-0002-02	RN2402	R35	117-1041-10	1/10W 100k
C26	178-1042-78	0.1 μ F	Q5	125-2004-02	RN1402	R36	117-1041-10	1/10W 100k
C27	178-1042-78	0.1 μ F	R1	117-8231-10	1/10W 82k	R37	117-1041-10	1/10W 100k
C28	178-1042-78	0.1 μ F	R2	117-1031-10	1/10W 10k	R38	117-4741-10	1/10W 470k
C29	178-1042-78	0.1 μ F	R3	111-2711-91	1/4WS 270	R41	117-4741-10	1/10W 470k
C30	178-6812-78	680pF	R4	117-1031-10	1/10W 10k	R42	117-4741-10	1/10W 470k
C31	176-1511-00	150pF CH	R5	117-1231-10	1/10W 12k	R43	117-4741-10	1/10W 470k
C32	178-1042-78	0.1 μ F	R6	117-1031-10	1/10W 10k	R44	117-4741-10	1/10W 470k
C33	176-1007-00	10pF CH	R7	117-6821-10	1/10W 6.8k	R45	117-4731-10	1/10W 47k
C34	176-1007-00	10pF CH	R8	117-5631-10	1/10W 56k	R48	117-3911-10	1/10W 390
C35	178-6812-78	680pF	R9	117-2231-10	1/10W 22k	X1	061-1087-50	16.9344MHz
C36	176-1511-00	150pF CH	R10	117-1011-10	1/10W 100	X2	060-0322-00	4.0MHz
C37	178-1042-78	0.1 μ F						

Sensor PWB section(B4)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
Q101	060-0252-01	PT4850F	Q102	060-0252-01	PT4850F	Q103	060-0252-01	PT4850F

Chucking SW PWB section(B5)

REF No.	PART No.	DESCRIPTION
S2	013-3879-01	SPPB12

Limit SW PWB section(B6)

REF No.	PART No.	DESCRIPTION
S1	013-7100-00	SPPB11

Tape mechanism/Side PWB section(B7)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C1	178-5612-78	560pF	C5	172-1231-11	0.012 μ F	C9	183-1053-61	50V1 μ F
C2	178-5612-78	560pF	C6	172-1231-11	0.012 μ F	C10	178-5612-78	560pF
C3	178-5612-78	560pF	C7	172-4731-11	0.047 μ F	C11	178-5612-78	560pF
C4	178-5612-78	560pF	C8	172-4731-11	0.047 μ F	C12	178-1042-78	0.1 μ F

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C13	178-1042-78	0.1 μ F	R1	117-2731-10	1/10W 27k	R14	117-3331-10	1/10W 33k
C14	178-4722-78	4700pF	R2	117-2731-10	1/10W 27k	R15	117-1831-10	1/10W 18k
C15	183-2263-31	16V22 μ F	R3	117-2731-10	1/10W 27k	R16	117-1841-10	1/10W 180k
C16	178-1032-78	0.01 μ F	R4	117-2731-10	1/10W 27k	R17	117-4731-10	1/10W 47k
C17	183-1043-61	50V0.1 μ F	R5	117-1811-10	1/10W 180	R18	117-1241-10	1/10W 120k
C18	183-4753-51	35V4.7 μ F	R6	117-1811-10	1/10W 180	R19	117-2231-10	1/10W 22k
C20	176-2201-50	22pFCH	R7	117-3341-10	1/10W 330k	R20	117-2231-10	1/10W 22k
C21	176-2201-50	22pFCH	R8	117-3341-10	1/10W 330k	R21	117-2231-10	1/10W 22k
C22	176-2201-50	22pFCH	R9	117-1131-10	1/10W 11k	R22	117-1031-10	1/10W 10k
C23	176-2201-50	22pFCH	R10	117-1131-10	1/10W 11k	R23	117-2231-10	1/10W 22k
IC1	051-1777-00	HA12163	R11	117-1531-10	1/10W 15k	VR1	012-4431-06	10k
L1	010-2198-26	0.047 μ H	R12	117-1531-10	1/10W 15k	VR2	012-4431-06	10k
L2	010-2198-26	0.047 μ H	R13	032-0098-03	1/10W 18k \pm 2%			

Bottom PWB section(B8)

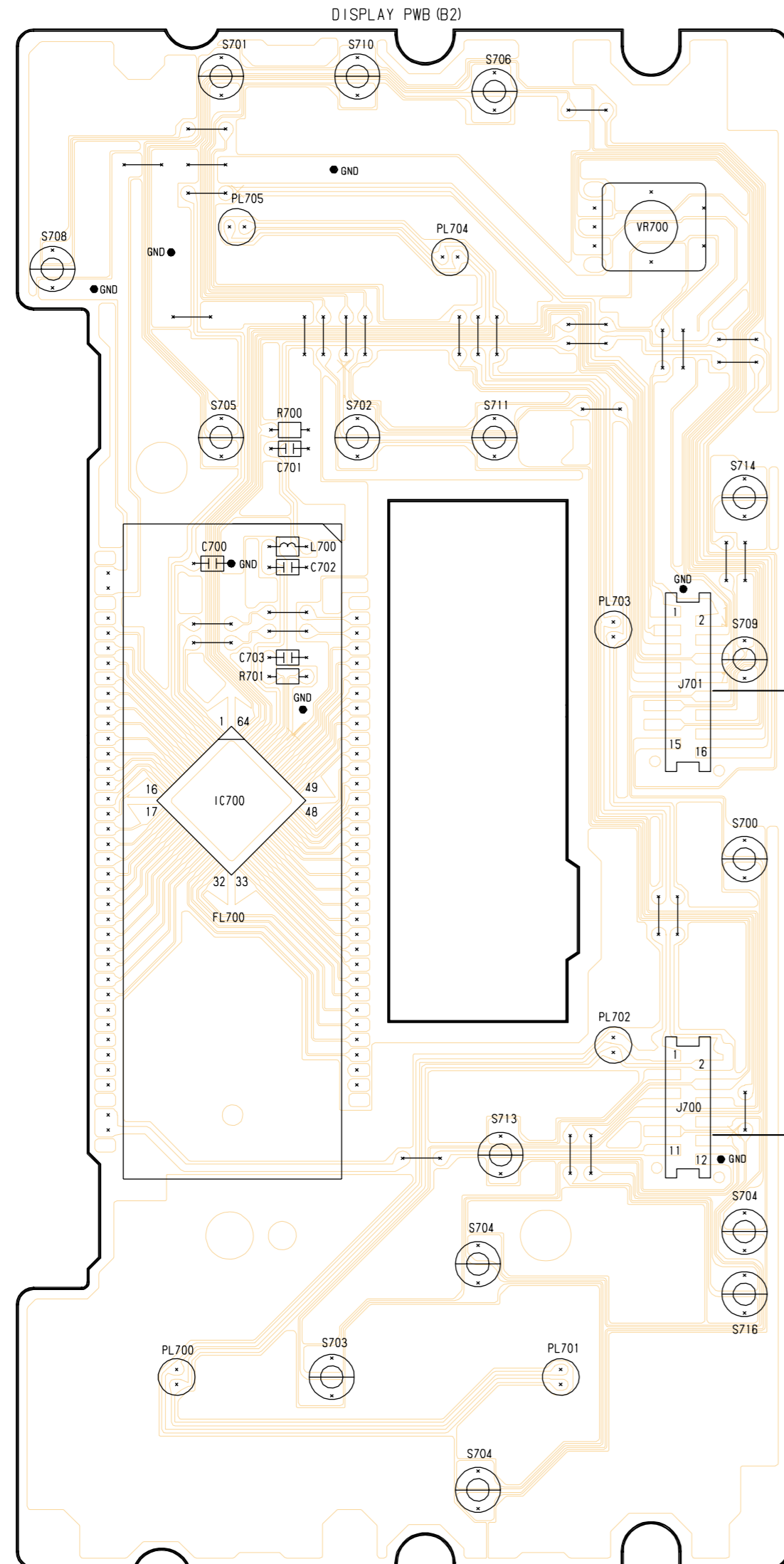
REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
IC2	051-1776-00	NJL5801K	SW1	013-3953-01	SPPB32	SW2	013-3951-11	

Rear PWB section(B9)

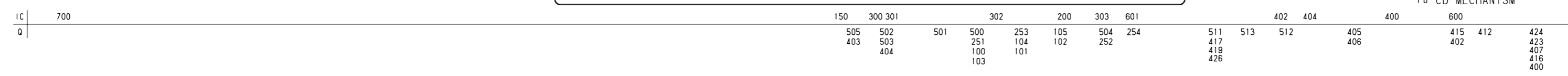
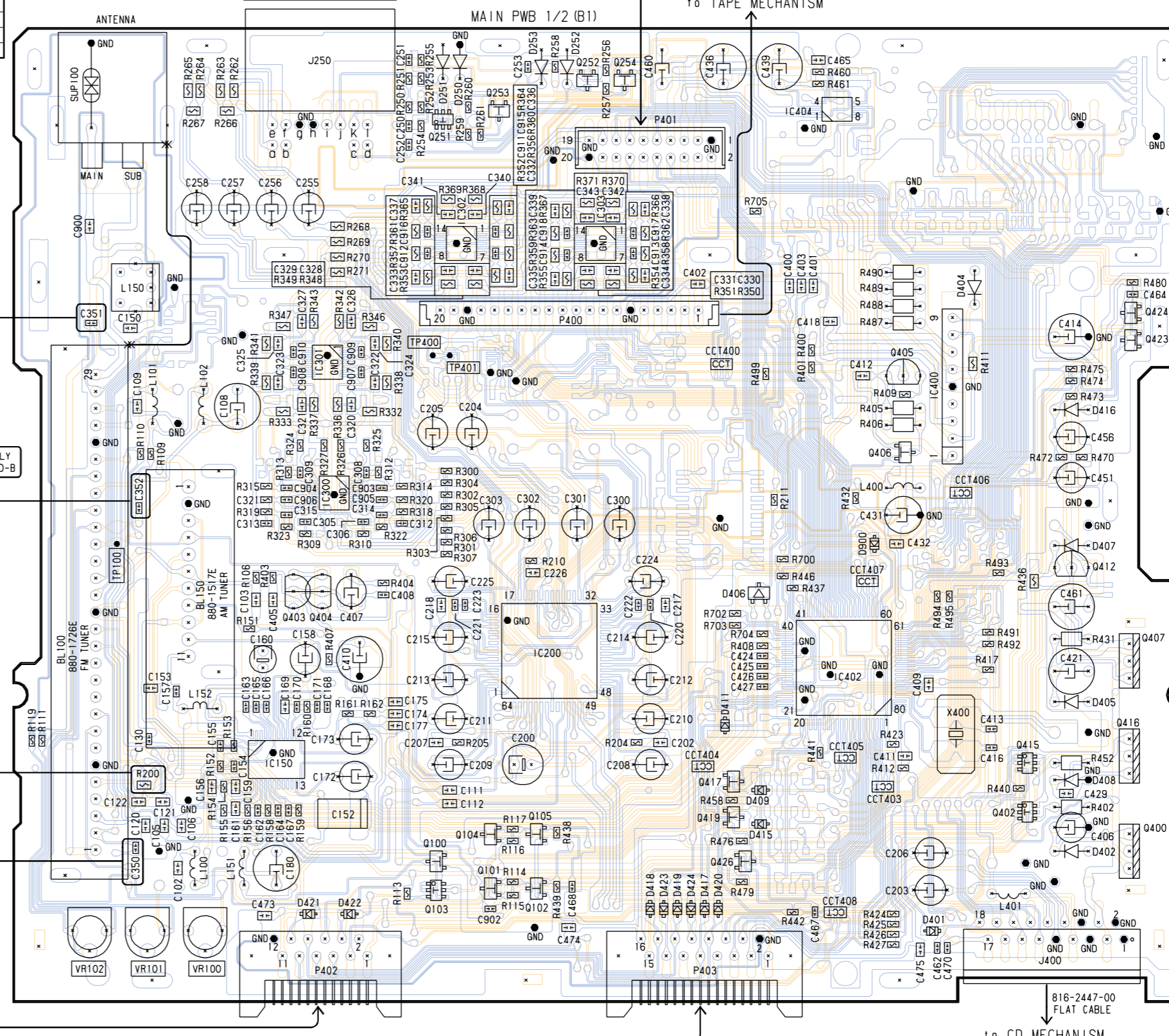
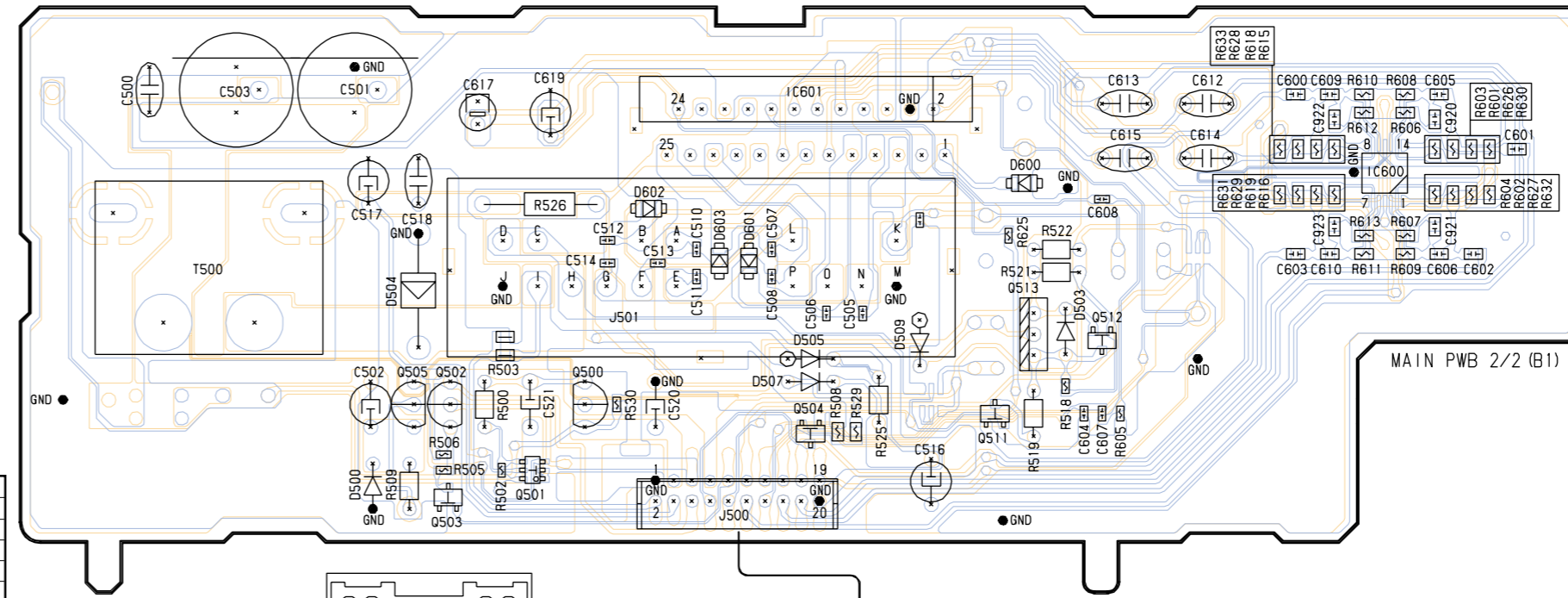
REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
P5	076-0368-10	10P	R24	111-5611-91	1/4WS 560	SW3	013-3906-00	SPPB51
P6	074-1104-20	20P						

PRINTED WIRING BOARD
Main PWB / Display PWB section

No.	Description	No.	Description
A	FRONT SP Lch (+)	I	ILLUMI CONTROL
B	FRONT SP Rch (+)	J	EARTH
C	LIGHTING SWITCH	K	NC
D	ACC	L	REAR SP Rch (+)
E	FRONT SP Lch (-)	M	EARTH
F	FRONT SP Rch (-)	N	REAR SP Lch (-)
G	ANT. SIGNAL	O	REAR SP Lch (+)
H	BACK UP	P	REAR SP Rch (-)

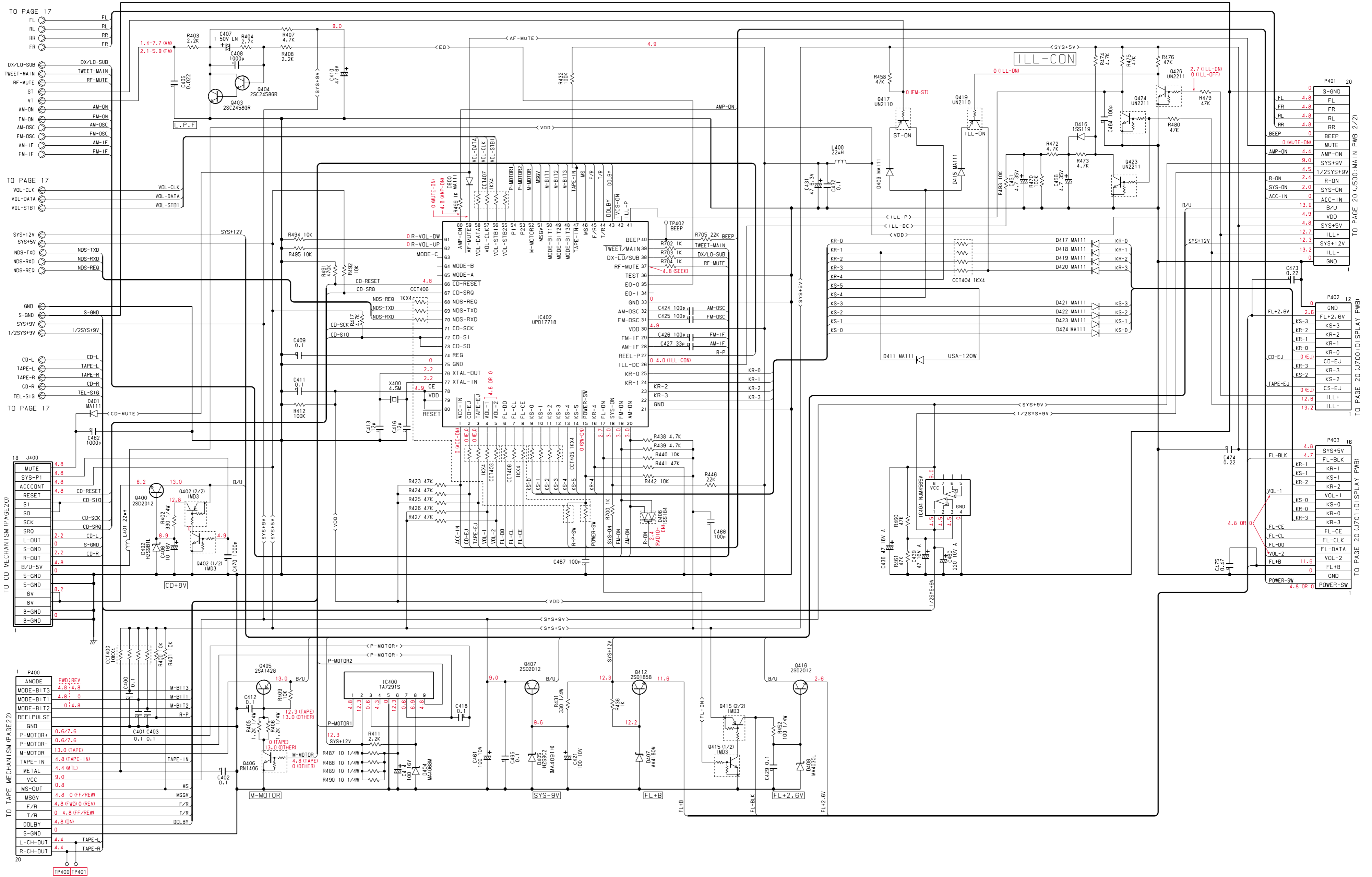


No.	Description
a	CD Lch INPUT (+)
b	CD Rch INPUT (+)
c	TX(COMBI CD)
d	NC
e	CD Lch INPUT (-)
f	CD Rch INPUT (-)
g	EARTH
h	DATA EARTH
i	NC
j	REQ(CD COMBI)
k	RX(CD COMBI)
l	NC



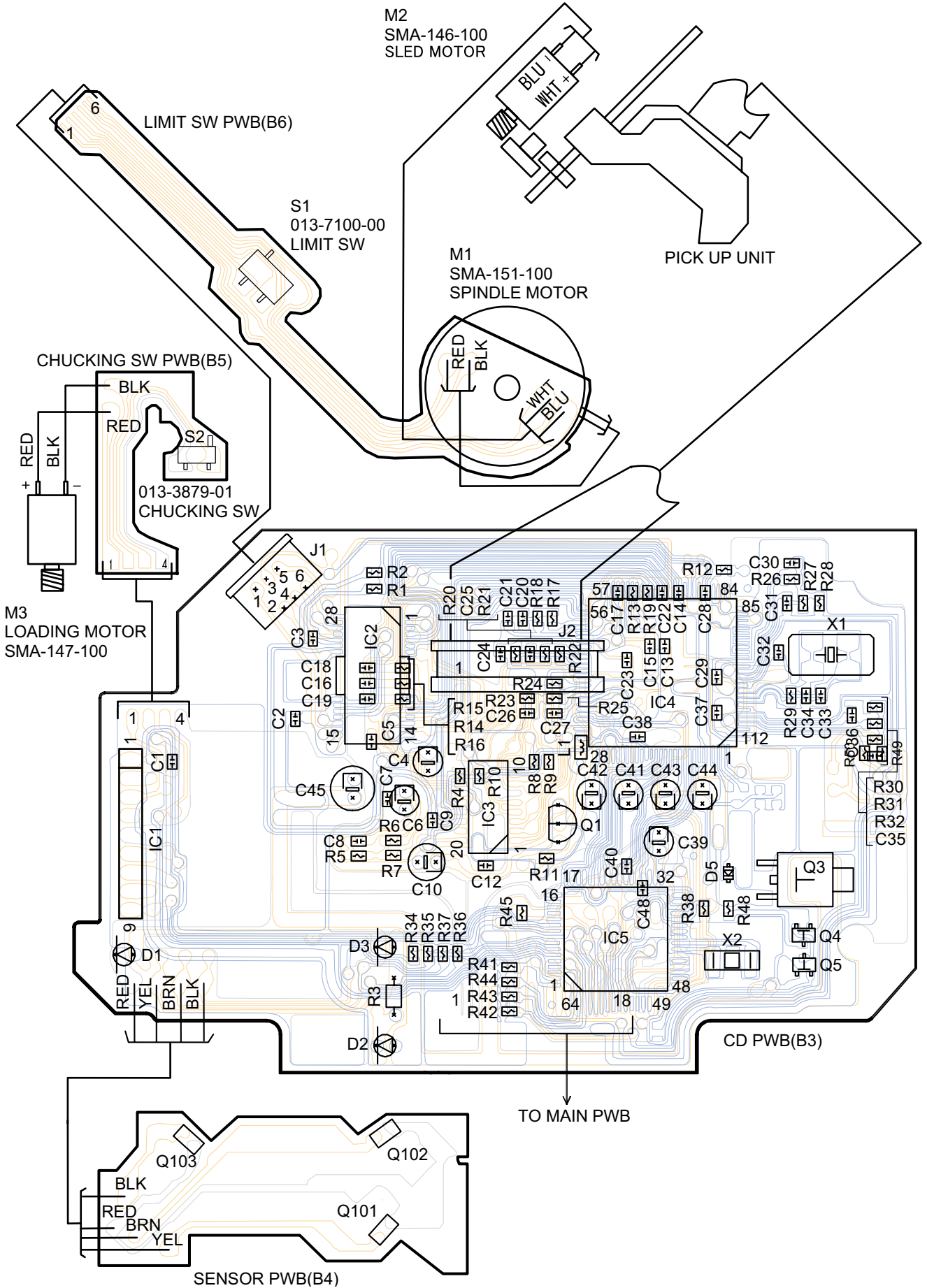
PN-2280D

CIRCUIT DIAGRAM
Main PWB 2/3 (B1) section



PRINTED WIRING BOARD

CD mechanism section



CIRCUIT DIAGRAM • PRINTED WIRING BOARD

Tape mechanism section

