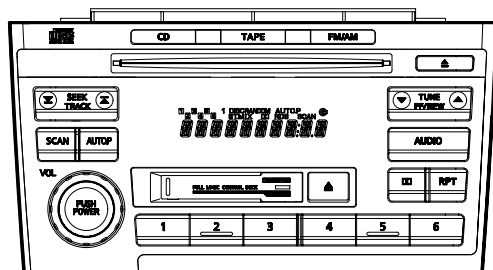


Service Manual



NISSAN Automobile Genuine
AM/FM Radio Cassette Stereo
CD Deck

Model **PN-2431D-A**
(Genuine No. 28188 5Y700)
(ID No. CN090)

Model **PN-2431D-B**
(Genuine No. 28188 5Y701)
(ID No. CN120)

■ SPECIFICATIONS

Radio section

Tuning system: PLL frequency synthesizer system
Receive range: AM 530kHz to 1,710kHz
FM 87.9MHz 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)
Separation: FM 22 + 5/ - 7dB(1kHz)

Auto tuning stop sensitivity:
AM 41 $\pm$ 6dB μ (600kHz)
39 $\pm$ 6dB μ (1000/1400kHz)
FM 32 $\pm$ 6dB 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)
45dB/55dB (DOLBY B NR ON)
Metal tape (70 μ s)
47dB/57dB (DOLBY B NR ON)
FF/REW time: Less than 110sec. (C-60)

CD section

Disc: 12cm, 8cm Disc
Separation: More than 50dB
S/N ratio: More than 74dB

TEL section

Output level: 2.0V $\pm$ 3dB (1kHz, 100mV input)

General

Load impedance: 4 Ω
Power output: 40W $\times$ 4
Power supply voltage: DC13.2V (10.8V to 15.6V)
Negative ground
Back-up consumption: Less than 0.5mA
Dimensions (mm): 180(W) $\times$ 106.4(H) $\times$ 156.6(D)
Weight: Approx. 2.5kg

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-2431D-A/PN-2431D-B

Main unit - - - - - 1

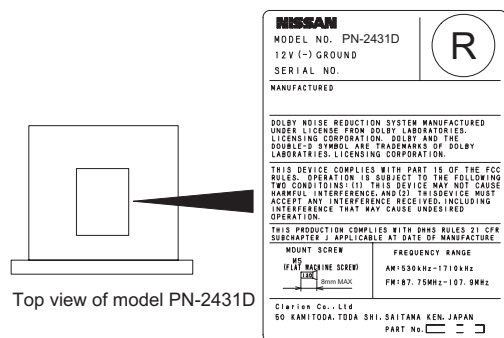
■ NOTE

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 re-modeling 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.

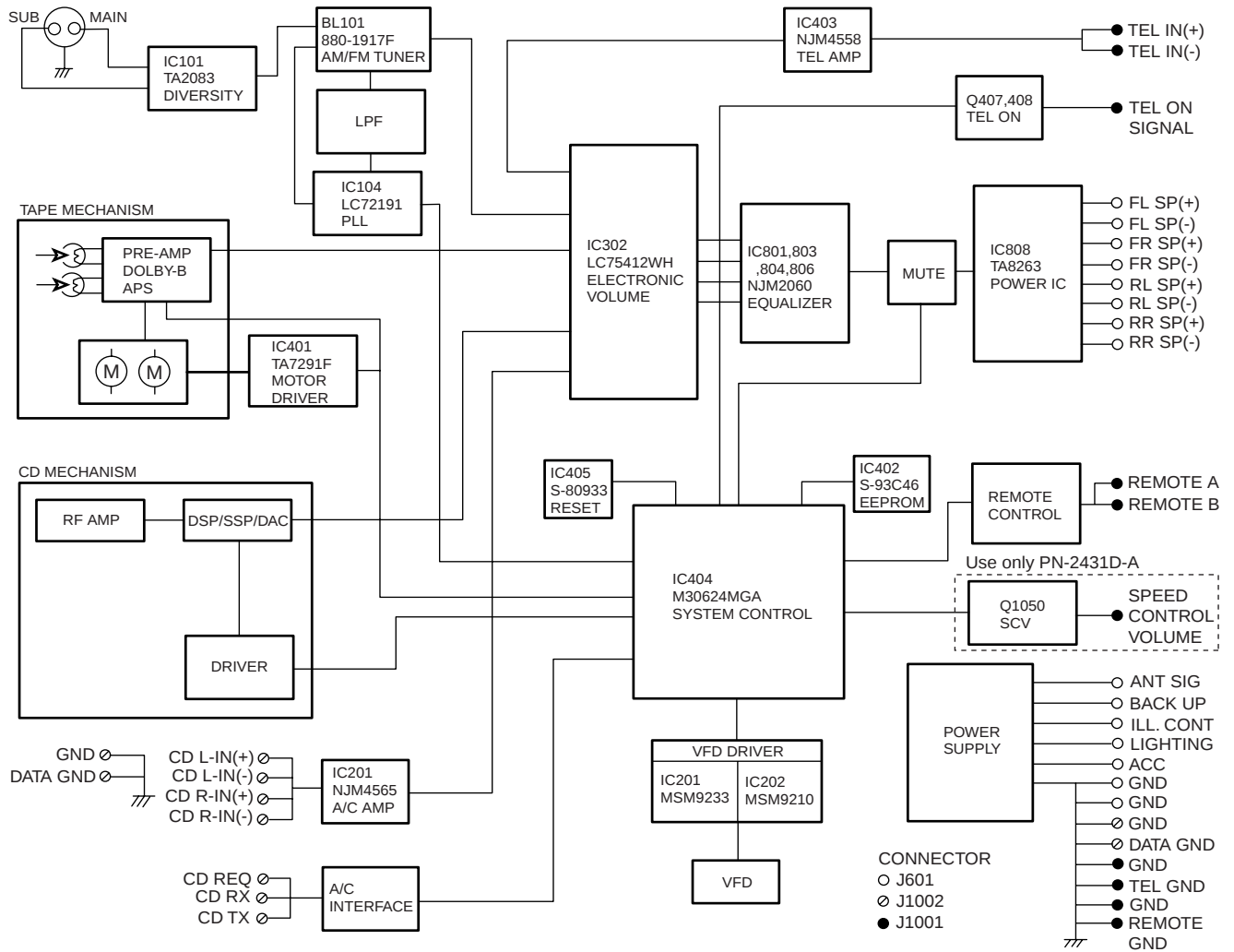
9-2. Actuator

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

Item	Procedure	Measuring instrument
FM Diversity	1. Input the 98.1MHz/15dB μ (1kHz,30%MOD)signal. 2. Connect a digital tester to TP101 and adjust VR101 so that the reading of digital tester is $0.6V \pm 0.2V$.	SSG Digital tester
FM noise convergence	1. Input the 98.1MHz/55dB μ (1kHz,30%MOD)signal.(VOL1.4V=0dB) 2. Adjust the outputs to $-22 \pm 1dB$ by VR102 when the SG output is set $-20dB \mu$.	SSG Milli-volt meter
Dolby level	1. Insert a Dolby level test tape(400Hz,200nWb/m).(Dolby SW:off) 2. Adjust VR1(L)/VR2(R) so that an output of TP-L(L)/TP-R(R) is $300mV \pm 1dB$.	Dolby level tape Milli-volt meter
Tape speed	1. Playback a Wow & flutter test tape(kHz, $-10VU$)and connect the frequency counter to TP-L(L)/TP-R(L). 2. Adjust speed VR of the motor to obtain an output of TP-L(L)/TP-R(R) is 3000Hz to 3090Hz.	Wow & flutter tape frequency counter

■ EXPLANATION OF IC

052-3161-11 M30624MGA-E11GP Main System Controller

1. Terminal Description

pin 1: DISP CLK OUT : O : The clock pulse output to the display driver.

pin 2: DISP DATA : I/O : The serial data output to the LCD driver, or the serial data input/output for the VFD driver.

pin 3: DISP INT/DI : IN : The serial data input from the LCD driver, or the interrupt signal input from the VFD driver.

pin 4: ILL PULSE : IN : ILL-pulse input.

pin 5: TIME BASE : IN : Time base signal input.

pin 6: BYTE : IN : The data length selection(8bit/16bit_).

pin 7: CN VSS : IN : Inputting "L" at single mode operation.

pin 8: TEST_ : IN : Test enable signal input.

pin 9: ILL ON : IN : "H"= Illumination ON.

pin 10: RESET : IN : Reset signal input.

pin 11: X OUT : O : Crystal connection.

pin 12: GND : - : Ground.

pin 13: X IN : IN : Crystal connection.

pin 14: VDD : - : Positive supply voltage.

pin 15: NU : - : Not in use.

pin 16: B/U DET : IN : Backup voltage ON signal input.

pin 17: ACC ON : IN : ACC ON signal input.

pin 18: TEL : IN : The telephone interrupt pulse input.

pin 19: SB SYNC : IN : Sub code sync.

pin 20: AMP ON : O : Audio power amplifier ON signal output.

pin 21: SYS ON : O : System-ON signal output.

pin 22: DSP ON : O : The ON signal for the VFD filament or the back light of LCD.

pin 23: AF MUTE : O : Audio mute signal output.

pin 24: BEEP : O : Beep out.

pin 25: NAVI MUTE : O : Mute signal output to suppress the noise signal at Navigation sound interrupting.

pin 26: 6 CD REQ : IN : The request signal input.

pin 27: 6 CD RX : IN : The signal input of NDS.

pin 28: 6 CD TX/ON : O : The signal output of NDS, or the CD ON signal output.

pin 29: NDS TX : O : NDS TX

pin 30: NDS RX : IN : NDS RX

pin 31: FLASH CLK : O : The flash clock output.

pin 32: NAVI ON : O : Navigation ON signal output.

pin 33: ES TX : O : ES TX.

pin 34: ES RX : IN : ES RX.

pin 35: NDS CNT : O : The selection signal output for the external CD automatic changer.

pin 36: NDS REQ 2 : IN : Request signal input from NDS.

pin 37: NDS REQ 1 : IN : Request signal input from NDS.

pin 38: SOURCE CHG : O : The selection signal output for the external CD automatic changer.

pin 39: FLASH EPM : O : FLASH EPM.

pin 40: VOL/EEP DO : O : The serial data output to the electric volume or the EEP ROM.

pin 41: VOL/EEP CL : O : The clock pulse output to the electric volume or the EEP ROM.

pin 42: VOL CE : O : Chip enable signal output to the volume IC.

pin 43: EEP CE : O : The chip enable signal output to the EEP ROM.

pin 44: FLASH CE : O : FLASH CE.

pin 45: EEP DI : IN : The serial data input from EEP ROM.

pin 46: AUX REQ : O : AUX request signal output.

pin 47: AUX ON : IN : AUX ON flag input.

pin 48: COMB ON : O : COMB ON flag output.

pin 49: BUC 0 : I/O : CD IC Data input / output.

pin 50: BUC 1 : I/O : CD IC Data input / output.

pin 51: BUC 2 : I/O : CD IC Data input / output.

pin 52: BUC 3 : I/O : CD IC Data input / output.

pin 53: BUC CLOCK : O : CD IC clock pulse output.

pin 54: CCE : O : Chip enable signal output to CD IC.

pin 55: CD RESET : O : Reset signal output to the CD IC.

pin 56: S STOP : IN : In side limit signal input.

pin 57: CHU SW : IN : CD disc chucking signal input.

pin 58: TR A : IN : The signal input from the CD mechanism.

pin 59: TR B : IN : The signal input from the CD mechanism.

pin 60: VDD : - : Positive supply voltage.

pin 61: LD CNT : I/O : The loading control.

pin 62: GND : - : Ground.

pin 63: PLL CE : O : Chip enable signal output to the PLL IC.

pin 64: PLL CLK : O : Clock pulse output to the PLL IC.

pin 65: PLL DO : O : Serial data output to the PLL IC.

pin 66: PLL DI : IN : Serial data input from the PLL IC.

pin 67: ST/TWEET : I/O : Outputs "L" at AM 900kHz receiving. Inputs "L" at FM stereo receiving.

pin 68: NDS/IMB : O : "H"= NDS, "L"= IMB.

pin 69: MECH MUTE : O : Mechanism Mute signal output.

pin 70: RDS DATA : IN : RDS serial data input.

pin 71: RDS CLK : IN : Clock pulse input from RDS decoder.

pin 72: SPEED PULSE : IN : The speed pulse input.

pin 73: TAPE IN : IN : Tape loading start signal input.

pin 74: MODE BIT 1 : IN : Mode switch signal input from the mechanism.

pin 75: MODE BIT 2 : IN : Mode switch signal input from the mechanism.

pin 76: MODE BIT 3 : IN : Mode switch signal input from the mechanism.

pin 77: REEL PULSE : IN : Reel pulse input.

pin 78: APC SENSE : O : Sensitivity selection signal output to the APC circuit. "H"= play.

pin 79: APC DET : IN : APC detection signal input.

pin 80: PWR MTR 1 : O : Power motor control signal output.

pin 81: PWR MTR 2 : O : Power motor control signal output.

pin 82: MAIN MTR : O : The main motor control signal output.

pin 83: DOLBY : O : DOLBY ON signal output.

pin 84: FWD / REV_ : O : "H"= Forward, "L"= Reverse.

pin 85: VOL1/LD MUTE : IN : The volume pulse input, or the LD MUTE input.

pin 86: VOL2/CD CON : IN : The volume pulse input, or the short check flag input for the cable to CD.

pin 87: 6 CD LOAD : IN : The load signal input.

pin 88: TAPE EJECT : IN : The tape eject signal input.

pin 89: EJECT : IN : Eject key input.

pin 90: Tel/Radio : O : The input selection signal output for the electric volume.

pin 91: ILL DC : IN : The brightness of illumination control signal input.

pin 92: REMOCON A : IN : The input terminal of the internal ADC for the handle remote controller.

pin 93: REMOCON B : IN : The input terminal of the internal ADC for the handle remote controller.

pin 94: A VSS : - : Analog ground.

pin 95: S METER : IN : The input terminal of Internal A/D converter to detect the Voltage of FM S meter.

pin 96: Vref : - : Reference voltage

pin 97: A VCC : - : Positive supply voltage for the internal analog section.

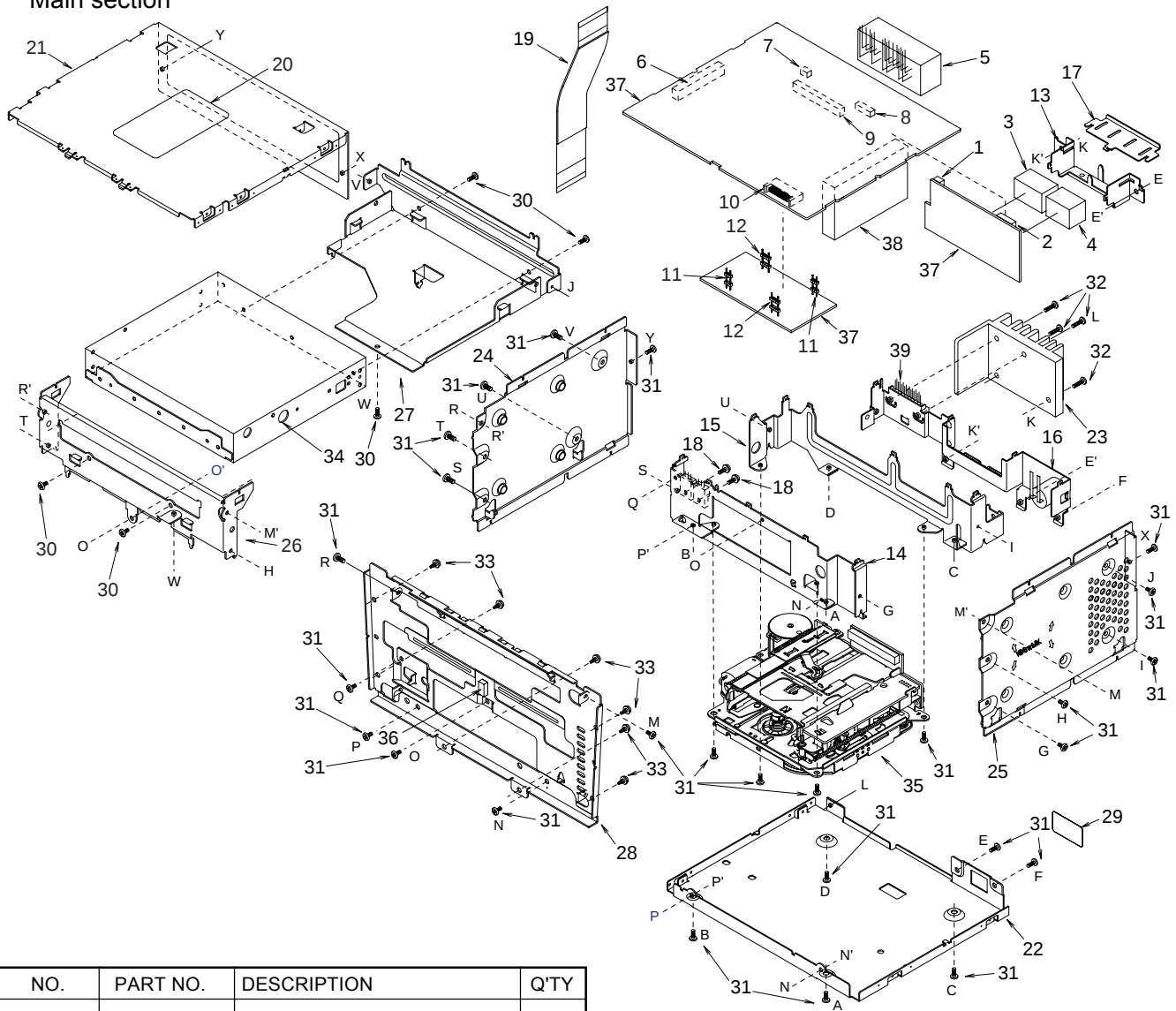
pin 98: POWER SW : IN : Power Key input(alternative).

pin 99: DISP CE2/RST : O : The chip enable signal-2 output to the VFD driver, or the reset signal output to the LCD driver.

pin100: DISP CE1/CE : O : The chip enable signal-1 output to the VFD driver, or the chip enable signal output to the LCD driver.

■ EXPLODED VIEW • PARTS LIST

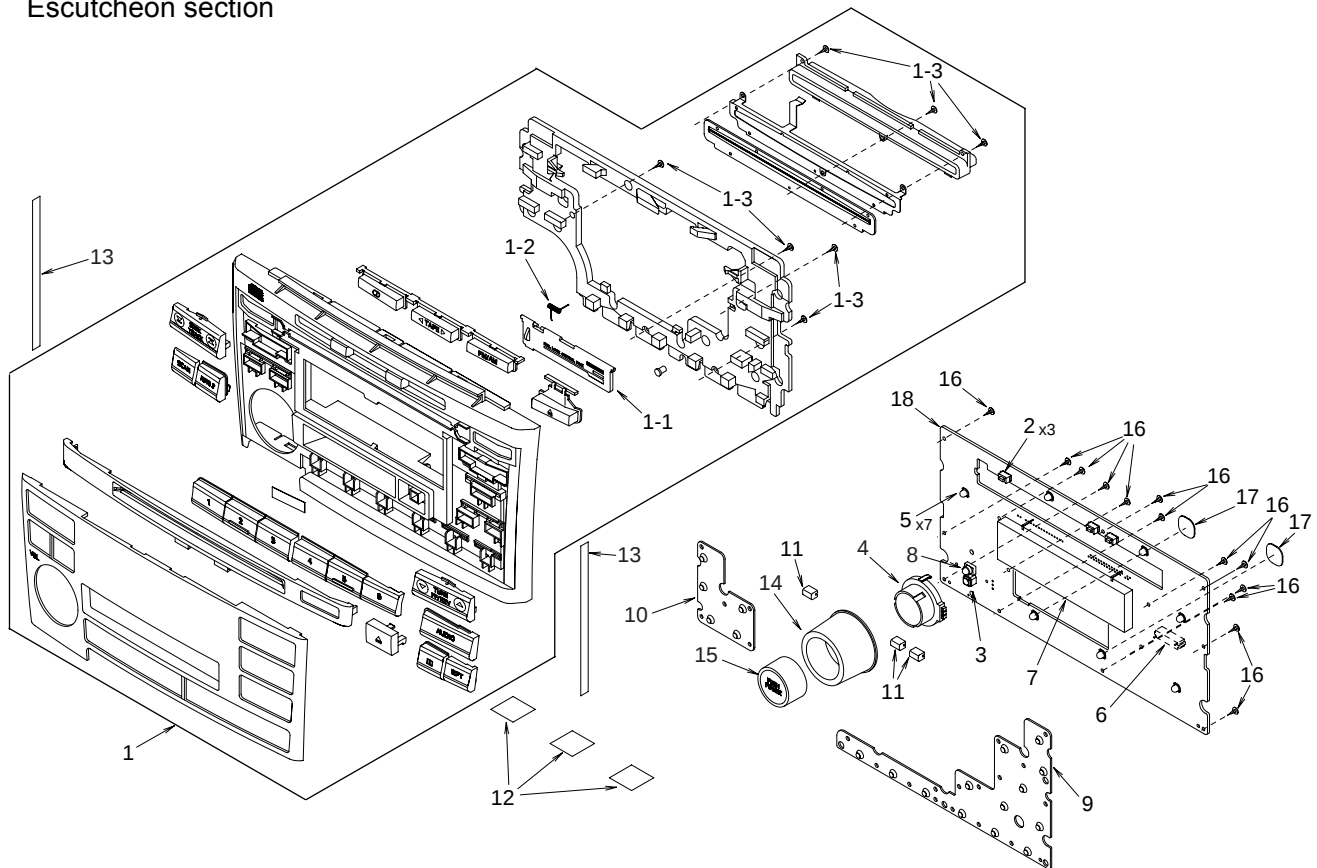
Main section



NO.	PART NO.	DESCRIPTION	Q'TY
1	074-0898-06	OUTLET SOCKET(6P)	1
2	074-0898-18	OUTLET SOCKET(18P)	1
3	074-1013-30	OUTLET SOCKET(A-12MW)	1
4	074-1087-12	OUTLET SOCKET(A-16)	1
5	074-1141-00	OUTLET SOCKET(NS10+6)	1
6	074-1192-26	OUTLET SOCKET(26P)	1
7	076-0368-06	PLUG(6P)	1
8	076-0368-18	PLUG(18P)	1
9	076-0509-20	PLUG(20P)	1
10	076-0648-16	PLUG(16P)	1
11	076-0655-03	PLUG(3P)	2
12	076-0655-04	PLUG(4P)	2
13	331-2025-10	CONNECTOR HOLDER	1
14	331-3236-00	MECHANISM BRKT	1
15	331-3237-00	MECHANISM BRKT	1
16	331-3238-10	REAR PLATE	1
17	331-3257-01	CONNECTOR HOLDER	1
18	716-1494-00	IT SCREW	2
19	039-2026-00	FLEXIBLE PWB (WITHOUT COMPONENT)	1
20	286-8153-48	SETPLATE	1
21	310-1740-00	UPPER CASE	1

NO.	PART NO.	DESCRIPTION	Q'TY
22	311-1834-00	LOWER CASE	1
23	313-1828-01	HEAT SINK	1
24	331-3260-00	SIDE PLATE(LH)	1
25	331-3261-00	SIDE PLATE(RH)	1
26	331-3262-01	MECH BRKT(CD FR)	1
27	331-3263-00	MECH BRKT(CD RR)	1
28	331-3264-02	ES-PLATE	1
29	347-6623-00	SPACER	1
30	714-2603-81	MACHINE SCREW(M2.6 × 3)	5
31	714-2605-81	MACHINE SCREW(M2.6 × 5)	26
32	714-2612-81	MACHINE SCREW(M2.6 × 12)	4
33	716-1553-00	P-TIGHT SCREW	6
34	929-0220-81	CD MECHANISM	1
35	930-0794-80	TAPE MECHANISM	1
36	345-4220-10	SPACER	1
37	039-2004-02	MAIN PWB (WITHOUT COMPONENT)	1
38	880-1917F	TUNER(AM/FM)	1
39	051-2039-00	IC(TA8263BH)	1

Escutcheon section



Note)Some parts depend on each model.The model name is specified in the description.

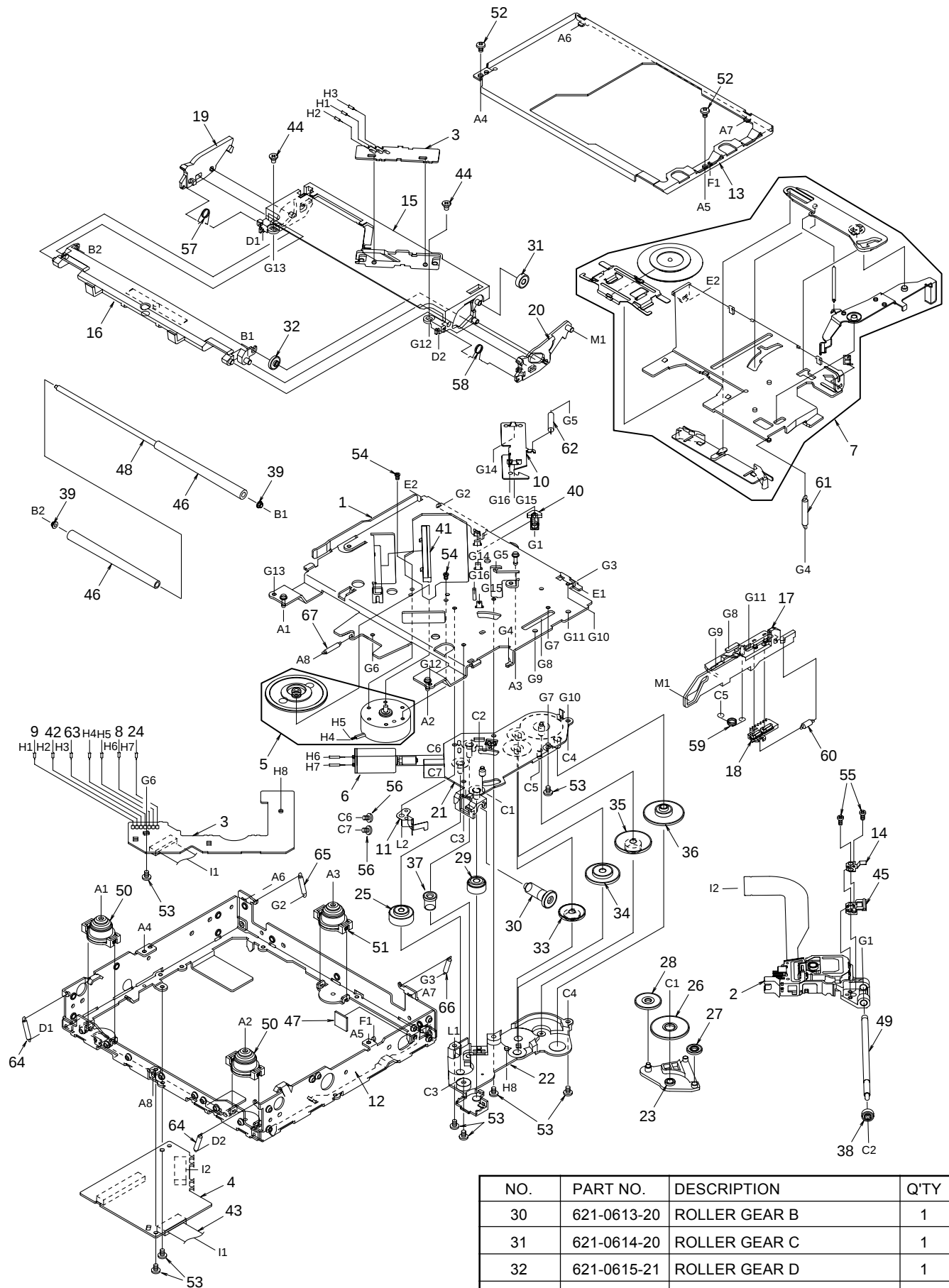
NO.	PART NO.	DESCRIPTION	Q'TY
1	940-7976-04 940-7976-14	ESCUTCHEON ASSY(2431D-A) ESCUTCHEON ASSY(2431D-B)	1
1-1	320-0588-18 320-0588-47	DUSTPROOF COVER(2431D-A) DUSTPROOF COVER(2431D-B)	1
1-2	750-2626-00	SPRING	1
1-3	716-0872-00	PAD SCREW	7
2	013-6305-50	TACT SWITCH	3
3	013-6201-50	TACT SWITCH	1
4	013-8003-00	ROTARY SWITCH	1
5	017-0458-00	PILOTLAMP(14V40mA)	7
6	074-1279-16	OUTLET SOCKET(16P)	1
7	379-4038-24	INDICATOR(VFD)	1
8	017-0433-52	PILOTLAMP(14V40mA)	1

NO.	PART NO.	DESCRIPTION	Q'TY
9	345-8660-00	RUBBER SWITCH(RIGHT)	1
10	345-8661-00	RUBBER SWITCH(LEFT)	1
11	345-8662-00	RUBBER SPACER	3
12	347-5961-02	SILENCER	3
13	347-6396-00	INSULATOR	2
14	380-5528-00	KNOB(VOL)	1
15	382-6273-00	BUTTON(POWER)	1
16	716-0872-00	PAD SCREW	13
17	353-0359-00	SHADE	2
18	039-2005-03	SWITCH PWB (WITHOUT COMPONENT)	1

CD mechanism section 929-0220-81

NO.	PART NO.	DESCRIPTION	Q'TY
1	966-0595-24	DRIVE PLATE ASSY	1
2	969-0060-30	PICK UP UNIT	1
3	039-1944-21	LED PWB (WITHOUT COMPONENT)	1
4	039-1945-20	CD PWB (WITHOUT COMPONENT)	1
5	SMA-182-100	MOTOR ASSY(SPINDLE)	1
6	SMA-183-100	MOTOR ASSY(SLED)	1
7	HBS-516-100	CLAMPER SUB ASSY	1
8	803-4906-60	VINYL COAT WIRE(ORG)	1
9	816-2566-50	LEAD WIRE(YEL)	1
10	620-1025-21	ID-LOCK PLATE	1
11	620-1026-21	SPRING PLATE	1
12	620-1027-24	LOWER CHASSIS	1

NO.	PART NO.	DESCRIPTION	Q'TY
13	620-1028-21	UPPER CHASSIS	1
14	620-1029-21	SH-SPRING	1
15	621-0598-25	UPPER GUIDE	1
16	621-0599-25	ROLLER GUIDE	1
17	621-0600-25	SHIFT LEVER	1
18	621-0601-21	RACK	1
19	621-0602-22	LOCK ARM L	1
20	621-0603-23	LOCK ARM R	1
21	621-0604-21	GEAR BASE	1
22	621-0605-21	GEAR COVER	1
23	621-0606-21	IDLE CASE	1
24	805-4906-60	VINYL COAT WIRE(GRN)	1
25	621-0608-21	SECOND GEAR	1



NO.	PART NO.	DESCRIPTION	Q'TY
26	621-0609-20	BASE GEAR	1
27	621-0610-20	IDLE GEAR A	1
28	621-0611-20	IDLE GEAR B	1
29	621-0612-21	ROLLER GEAR A	1

NO.	PART NO.	DESCRIPTION	Q'TY
30	621-0613-20	ROLLER GEAR B	1
31	621-0614-20	ROLLER GEAR C	1
32	621-0615-21	ROLLER GEAR D	1
33	621-0616-20	POWER GEAR A	1
34	621-0617-20	POWER GEAR B	1
35	621-0618-20	POWER GEAR C	1
36	621-0619-20	POWER GEAR D	1
37	621-0620-20	THREAD GEAR A	1
38	621-0621-20	THREAD GEAR B	1

NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
39	621-0622-21	ROLLER SLEEVE	2	54	716-1733-00	SCREW	2
40	621-0623-21	LS-HOLDER	1	55	716-3469-00	SPECIAL SCREW	2
41	621-0624-21	GUIDE RAIL	1	56	716-3446-00	SCREW	2
42	816-2566-52	LEAD WIRE(PUR)	1	57	750-3465-21	ROLLER SPRING L	1
43	816-2542-01	FLAT WIRE(10P)	1	58	750-3466-20	ROLLER SPRING R	1
44	716-3473-00	SCREW	2	59	750-3467-21	SHIFT SPRING	1
45	621-0628-21	SH-BASE	1	60	750-3468-20	RACK SPRING	1
46	621-0629-20	LOADING ROLLER	2	61	750-3469-20	CLAMPER SPRING	1
47	345-8704-20	CUSHION RUBBER	1	62	750-3470-20	ID-LOCK SPRING	1
48	622-1571-21	ROLLER SHAFT	1	63	816-2566-51	LEAD WIRE(BLU)	1
49	624-0018-01	LEAD SCREW	1	64	750-3472-21	DR-SPRING F	2
50	629-0081-20	DAMPER F	2	65	750-3473-20	DR-SPRING RA	1
51	629-0082-20	DAMPER R	1	66	750-3474-20	DR-SPRING RB	1
52	714-2003-81	MACHINE SCREW	2	67	750-3475-21	DR-SPRING C	1
53	716-1507-00	SCREW	8				

Tape mechanism section 930-0794-80

NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	960-4294-22	DECK PLATE ASSY	1	25	611-0091-03	FLYWHEEL	2
2	960-4261-20	HEAD PLATE ASSY	1	26	613-0662-00	IDLER GEAR	2
3	960-4262-04	FF/REW-P ASSY	1	27	613-0286-03	FF/REW GEAR	2
4	960-4263-03	IDLER-P-ASSY L	1	28	613-0288-01	HELICAL GEAR	1
5	960-4264-03	IDLER-P-ASSY R	1	29	613-0289-01	GEAR A	1
6	960-4266-20	MODE PLATE ASSY	1	30	613-0337-00	POWER GEAR	1
7	960-4269-05	ROLLER ASSY F	1	31	630-2597-01	CHANGE LINK	1
8	960-4270-05	ROLLER ASSY R	1	32	630-2598-05	EJECT LINK	1
9	960-4348-03	REEL ASSY F	1	33	630-2600-01	ADJUST LINK	1
10	960-4349-03	REEL ASSY R	1	34	630-2601-02	MOTOR PLATE	1
11	960-4389-20	EJECT SUB ASSY	1	35	630-2626-06	PWB FRAME	1
11-1	750-3020-01	SWITCH PLATE SPRING	1	36	630-2642-01	GUIDE ARM	1
12	960-4338-09	BOTTOM SUB ASSY	1	37	631-1992-02	PACK STOPPER	1
12-1	960-4295-02	BOTTOM P-ASSY	1	38	631-1993-01	SLIDE BUSH	2
12-2	099-9926-01	BOTTOM PWB (WITHOUT COMPONENT)	1	39	716-0484-00	SCREW(M2 × 2.5)	13
12-3	013-3951-32	SWITCH(MODE)	1	40	716-1676-00	PWB SCREW(M2.6 × 6)	2
12-4	013-3953-01	SWITCH(METAL)	1	41	716-0833-10	SCREW(M2 × 5.6)	2
12-5	051-1776-00	IC	1	42	746-0624-00	WASHER	2
12-6	746-0767-00	WASHER	2	43	746-0724-00	WASHER	6
13	960-4282-06	DETECT SUB ASSY	1	44	746-0761-00	WASHER	2
14	960-4301-02	PLAY LINK ASSY	1	45	746-0762-00	WASHER	1
15	039-1912-01	SIDE PWB (WITHOUT COMPONENT)	1	46	750-2946-02	PINCH SPRING	1
16	039-1913-00	REAR PWB (WITHOUT COMPONENT)	1	47	750-2947-04	EJECT P-SPRING	1
17	SMA-168-100	MAIN MOTOR ASSY	1	48	750-2949-00	SLIDE SPRING	2
18	SMA-169-100	POWER MOTOR ASSY	1	49	750-3017-02	IDLER P-SPRING	1
19	011-0328-01	HEAD	1	50	074-0898-10	OUTLET SOCKET(10P)	1
20	602-0118-00	BELT	1	51	802-4906-60	WIRE(RED)	1
21	604-0046-00	TENSION PULLEY	1	52	806-4914-60	WIRE(BLUE)	1
22	606-0093-06	PACK GUIDE	1	53	816-2349-00	WIRE(WHITE)	1
23	610-0342-01	HEAD P-ROLLER	1	54	013-3906-00	SWITCH(TAPE IN)	1
24	610-0343-00	GUIDE A-ROLLER	1	55	074-1012-20	OUTLET SOCKET(20P)	1
				56	076-0368-10	PLUG(10P)	1

■ ELECTRICAL PARTS LIST

Note) Several different parts of the same reference number are alternative parts.

Main PWB(B1) section

One of those parts is used in the set.

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
BL101	880-1917F	AM/FM	C331	042-0592-58	16V10 μ F	C813	168-3322-55	3300pF
C101	166-1511-50	150pF CH	C332	042-0592-58	16V10 μ F	C814	168-3322-55	3300pF
C102	166-2211-50	220pF CH	C333	168-3332-78	0.033 μ F	C817	166-2201-50	22pF CH
C103	166-2211-50	220pF CH	C401	168-1042-78	16V 0.1 μ F	C818	166-2201-50	22pF CH
C104	168-1032-55	0.01 μ F	C402	168-1042-78	16V 0.1 μ F	C819	166-2201-50	22pF CH
C105	168-6812-55	680pF	C403	168-1042-78	16V 0.1 μ F	C820	166-2201-50	22pF CH
C106	168-4732-78	0.047 μ F	C404	168-1042-78	16V 0.1 μ F	C837	168-1042-78	16V 0.1 μ F
C107	168-3332-78	0.033 μ F	C405	042-0505-82	16V10 μ F	C838	178-2242-78	0.22 μ F
C108	183-1053-69	50V1 μ F	C406	168-1042-78	16V 0.1 μ F	C839	178-2242-78	0.22 μ F
C109	168-3922-55	3900pF	C407	168-1042-78	16V 0.1 μ F	C840	168-1042-78	16V 0.1 μ F
C110	168-1032-55	0.01 μ F	C411	168-4722-55	4700pF	C841	178-1842-78	0.18 μ F
C111	168-1022-55	1000pF	C413	166-1011-50	100pF CH	C842	178-1842-78	0.18 μ F
C112	168-1032-55	0.01 μ F	C415	166-1011-50	100pF CH	C843	178-1842-78	0.18 μ F
C113	166-2201-50	22pF CH	C416	166-1011-50	100pF CH	C844	178-1842-78	0.18 μ F
C115	166-1007-50	10pF CH	C417	166-1011-50	100pF CH	C845	166-2201-50	22pF CH
C121	183-1073-29	10V100 μ F	C420	163-4763-15	6.3V47 μ F	C846	166-2201-50	22pF CH
C122	043-0277-51	0.022 μ F	C421	168-1042-78	16V 0.1 μ F	C847	166-2201-50	22pF CH
C124	168-1042-78	16V 0.1 μ F	C422	168-1022-55	1000pF	C848	166-2201-50	22pF CH
C125	183-1073-29	10V100 μ F	C423	168-1042-78	16V 0.1 μ F	C850	166-2201-50	22pF CH
C129	168-1042-78	16V 0.1 μ F	C424	168-1032-55	0.01 μ F	C851	166-2201-50	22pF CH
C130	183-1073-29	10V100 μ F	C425	163-4753-55	35V4.7 μ F	C854	168-6832-78	0.068 μ F
C132	178-1052-78	1 μ F	C426	163-4753-55	35V4.7 μ F	C855	168-6832-78	0.068 μ F
C133	168-1232-55	0.012 μ F	C427	168-1042-78	16V 0.1 μ F	C858	168-5622-55	5600pF
C134	042-0458-90	50V1 μ F	C428	166-1011-50	100pF CH	C859	168-5622-55	5600pF
C135	183-4763-39	16V47 μ F	C429	168-1042-78	16V 0.1 μ F	C861	042-0592-61	16V47 μ F
C136	043-0277-51	0.022 μ F	C430	168-3922-55	3900pF	C862	168-1042-78	16V 0.1 μ F
C138	168-1022-55	1000pF	C431	168-3922-55	3900pF	C863	042-0592-58	16V10 μ F
C140	183-4763-39	16V47 μ F	C440	168-1032-55	0.01 μ F	C864	163-2273-25	10V 220 μ F
C141	168-2232-55	0.022 μ F	C442	168-4712-55	470pF	C865	166-2201-50	22pF CH
C142	166-1011-50	100pF CH	C443	042-0403-55	16V33 μ F	C866	168-5622-55	5600pF
C143	166-1011-50	100pF CH	C504	163-1073-35	16V100 μ F	C867	168-1032-55	0.01 μ F
C144	166-1011-50	100pF CH	C505	168-1042-78	16V 0.1 μ F	C868	168-5632-78	16V 0.056 μ F
C145	166-1011-50	100pF CH	C506	163-1073-35	16V100 μ F	C869	168-5632-78	16V 0.056 μ F
C146	166-1801-50	18pF CH	C507	163-1073-35	16V100 μ F	C870	168-4732-78	0.047 μ F
C147	168-3932-78	0.039 μ F	C508	163-1073-35	16V100 μ F	C871	168-4732-78	0.047 μ F
C148	168-3932-78	0.039 μ F	C509	042-0423-94	10V 4.7 μ F	C872	168-1032-55	0.01 μ F
C149	178-1242-78	0.12 μ F	C510	168-1042-78	16V 0.1 μ F	C873	168-5632-78	16V 0.056 μ F
C150	178-1242-78	0.12 μ F	C511	042-0592-58	16V10 μ F	C874	168-4732-78	0.047 μ F
C151	166-1801-50	18pF CH	C512	163-1073-35	16V100 μ F	C875	166-2201-50	22pF CH
C152	168-4722-55	4700pF	C515	163-4763-35	16V47 μ F	C876	166-2201-50	22pF CH
C153	166-1201-50	12pF CH	C521	168-1042-78	16V 0.1 μ F	C877	168-1042-78	16V 0.1 μ F
C155	166-2201-50	22pF CH	C522	184-2273-38	16V220 μ F	C878	168-1042-78	16V 0.1 μ F
C156	166-2201-50	22pF CH	C523	178-2242-78	0.22 μ F	C879	166-2201-50	22pF CH
C208	166-5096-50	5pF CH	C551	042-0548-53	16V100 μ F	C880	166-2201-50	22pF CH
C209	166-5096-50	5pF CH	C552	168-1042-78	16V 0.1 μ F	C881	168-5632-78	16V 0.056 μ F
C210	166-2201-50	22pF CH	C553	042-0548-53	16V100 μ F	C882	168-4732-78	0.047 μ F
C211	166-2201-50	22pF CH	C554	183-1063-39	16V10 μ F	C883	042-0592-73	50V1 μ F
C212	166-5096-50	5pF CH	C555	168-2232-55	0.022 μ F	C884	172-2241-15	0.22 μ F
C213	166-5096-50	5pF CH	C601	168-2232-55	0.022 μ F	C885	172-2241-15	0.22 μ F
C301	178-4742-78	0.47 μ F	C602	168-2222-55	2200pF	C886	172-2241-15	0.22 μ F
C305	042-0416-59	10V33 μ F	C603	168-2222-55	2200pF	C887	172-2241-15	0.22 μ F
C307	042-0592-73	50V1 μ F	C604	168-2222-55	2200pF	C888	183-1063-39	16V10 μ F
C308	042-0592-73	50V1 μ F	C605	168-2222-55	2200pF	C889	168-1022-55	1000pF
C309	042-0592-73	50V1 μ F	C606	168-2222-55	2200pF	C890	183-1053-69	50V1 μ F
C310	042-0592-73	50V1 μ F	C607	168-2222-55	2200pF	C894	178-1052-78	1 μ F
C311	042-0592-73	50V1 μ F	C608	168-2222-55	2200pF	C895	178-1052-78	1 μ F
C312	042-0592-73	50V1 μ F	C609	168-2222-55	2200pF	C896	178-1052-78	1 μ F
C313	178-4742-78	0.47 μ F	C610	168-2222-55	2200pF	C897	178-1052-78	1 μ F
C314	178-4742-78	0.47 μ F	C611	172-1041-15	0.1 μ F	C898	163-4753-55	35V4.7 μ F
C315	168-1222-55	1200pF	C612	184-3383-32	16V3300 μ F	C899	163-4753-55	35V4.7 μ F
C316	042-0592-73	50V1 μ F	C613	183-1053-69	50V1 μ F	C1001	042-0562-67	16V10 μ F
C317	042-0592-73	50V1 μ F	C614	172-1041-15	0.1 μ F	C1002	042-0562-67	16V10 μ F
C318	168-1222-55	1200pF	C615	183-1063-39	16V10 μ F	C1003	042-0562-67	16V10 μ F
C323	178-1842-78	0.18 μ F	C801	042-0592-58	16V10 μ F	C1004	042-0562-67	16V10 μ F
C324	178-1842-78	0.18 μ F	C802	042-0592-58	16V10 μ F	C1006	168-1022-55	1000pF
C325	178-1842-78	0.18 μ F	C803	042-0592-58	16V10 μ F	C1007	168-2232-55	0.022 μ F
C326	178-1842-78	0.18 μ F	C804	042-0592-58	16V10 μ F	C1010	168-1022-55	1000pF
C327	168-8212-55	820pF	C809	166-2201-50	22pF CH	C1011	168-1022-55	1000pF
C328	168-8212-55	820pF	C810	166-2201-50	22pF CH	C1014	183-1063-39	16V10 μ F
C329	168-8212-55	820pF	C811	166-2201-50	22pF CH	C1015	183-1063-39	16V10 μ F
C330	168-8212-55	820pF	C812	166-2201-50	22pF CH	CCT401	050-0122-50	1/16W10k Ω $\times$ 4 J

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
CCT402	050-0140-54	1/32W 1kΩ × 4J	P801	076-0655-04	4P	R128	119-2221-15	1/16W 2.2kΩ
CCT403	050-0140-54	1/32W 1kΩ × 4J	P802	076-0655-03	3P	R129	119-2221-15	1/16W 2.2kΩ
CCT404	050-0140-54	1/32W 1kΩ × 4J	P803	076-0655-03	3P	R130	119-1031-15	1/16W 10kΩ
CCT405	050-0140-54	1/32W 1kΩ × 4J	P804	076-0655-04	4P	R131	119-1031-15	1/16W 10kΩ
CCT406	050-0140-54	1/32W 1kΩ × 4J	P1001	074-0898-18	18P	R132	119-4721-15	1/16W 4.7kΩ
CCT407	050-0140-54	1/32W 1kΩ × 4J	P1002	074-0898-06	OUTLET	R133	119-1021-15	1/16W 1kΩ
CCT408	050-0140-54	1/32W 1kΩ × 4J			SOCKET(6P)	R134	119-2221-15	1/16W 2.2kΩ
CCT409	050-0140-54	1/32W 1kΩ × 4J	Q101	193-0601-00	2SD601A	R135	119-1021-15	1/16W 1kΩ
CCT411	050-0140-54	1/32W 1kΩ × 4J	Q102	193-0601-00	2SD601A	R136	119-1021-15	1/16W 1kΩ
CCT412	050-0140-54	1/32W 1kΩ × 4J	Q103	125-2005-91	UN2211	R137	116-1001-15	1/8W 10Ω
CCT413	050-0140-54	1/32W 1kΩ × 4J	Q104	125-2005-91	UN2211	R138	119-1031-15	1/16W 10kΩ
CCT414	050-0140-54	1/32W 1kΩ × 4J	Q105	192-2712-51	2SC2712G,L	R139	119-1031-15	1/16W 10kΩ
CCT415	050-0140-54	1/32W 1kΩ × 4J	Q106	125-2005-91	UN2211	R140	119-4721-15	1/16W 4.7kΩ
CCT416	050-0140-54	1/32W 1kΩ × 4J	Q107	192-2712-51	2SC2712G,L	R141	119-4731-15	1/16W 47kΩ
CCT417	050-0140-54	1/32W 1kΩ × 4J	Q108	125-2005-91	UN2211	R151	119-1021-15	1/16W 1kΩ
CCT418	050-0140-54	1/32W 1kΩ × 4J	Q109	190-1298-00	2SA1298	R208	032-0106-65	1/10W 100kΩ 0.5%
CCT419	050-0140-54	1/32W 1kΩ × 4J	Q110	125-2005-91	UN2211	R209	032-0106-65	1/10W 100kΩ 0.5%
CCT420	050-0140-54	1/32W 1kΩ × 4J	Q111	190-1298-00	2SA1298	R210	032-0106-65	1/10W 100kΩ 0.5%
D101	001-0368-90	1SV121	Q401	125-2004-96	RN1406	R211	032-0106-65	1/10W 100kΩ 0.5%
D102	001-0368-90	1SV121	Q402	190-1428-00	2SA1428	R212	032-0106-69	1/10W 39kΩ 0.5%
D402	001-0529-44	MA8082-M	Q406	125-2005-91	UN2211	R213	032-0106-69	1/10W 39kΩ 0.5%
D403	001-0516-90	MA111	Q407	125-2005-91	UN2211	R214	032-0106-69	1/10W 39kΩ 0.5%
D406	001-0535-90	MA729	Q408	125-0006-90	UN2110	R215	032-0106-69	1/10W 39kΩ 0.5%
D407	001-0516-90	MA111	Q410	125-2005-91	UN2211	R314	119-1821-15	1/16W 1.8kΩ
D502	001-0504-48	HZS9C2L	Q412	125-2005-91	UN2211	R315	119-1821-15	1/16W 1.8kΩ
D503	001-0626-91	1A2	Q502	193-2118-00	2SD2118	R316	119-3931-15	1/16W 39kΩ
D504	001-0626-91	1A2	Q503	193-1858-00	2SD1858	R317	119-3931-15	1/16W 39kΩ
D521	001-0347-16	MA4036LTA	Q504	125-9003-92	IMD3	R320	119-2731-15	1/16W 27kΩ
D522	001-0347-56	MA4120M	Q505	125-2005-91	UN2211	R321	119-2731-15	1/16W 27kΩ
D551	001-0504-31	HZS6 A2L	Q506	190-1048-00	2SA1048	R322	119-4721-15	1/16W 4.7kΩ
D552	001-0504-45	HZS9B1L	Q507	191-1205-60	2SB1205RST	R323	119-4721-15	1/16W 4.7kΩ
D602	001-0529-34	MA8062-L	Q521	103-2012-00	2SD2012	R324	119-4721-15	1/16W 4.7kΩ
D605	001-0626-91	1A2	Q522	125-9003-92	IMD3	R325	119-4721-15	1/16W 4.7kΩ
D606	001-0516-90	MA111	Q523	193-1858-00	2SD1858	R401	119-1031-15	1/16W 10kΩ
D607	001-2015-00	RL253	Q551	193-1664-00	2SD1664P,Q,R	R402	119-1031-15	1/16W 10kΩ
D608	001-0626-91	1A2	Q552	125-9003-92	IMD3	R403	116-1221-15	1/8W 1.2kΩ
D1002	001-0422-38	MTZJ36	Q553	103-2012-00	2SD2012	R404	116-1221-15	1/8W 1.2kΩ
D1003	001-0529-44	MA8082-M	Q554	125-9003-92	IMD3	R405	119-1031-15	1/16W 10kΩ
D1006	001-0589-91	1SS145	Q603	193-0601-00	2SD601A	R406	116-1001-15	1/8W 10Ω
D1007	001-0589-91	1SS145	Q607	125-2005-91	UN2211	R407	116-1001-15	1/8W 10Ω
D1050	001-0626-91	1A2(PN2431DA)	Q608	191-0709-00	2SB709A-Q.R.S	R408	116-1001-15	1/8W 10Ω
IC101	051-4603-90	TA2083FN	Q609	100-1359-00	2SA1359	R409	116-1001-15	1/8W 10Ω
IC104	051-6212-08	LC72191JM-TLM	Q804	125-4001-90	XN1504	R410	119-2221-15	1/16W 2.2kΩ
IC201	051-3020-90	NJM4565V	Q805	125-4001-90	XN1504	R411	119-1041-15	1/16W 100kΩ
IC302	051-5027-00	LC75412WH	Q806	125-0006-90	UN2110	R412	119-1041-15	1/16W 100kΩ
IC401	051-1014-08	TA7291F	Q807	125-0006-90	UN2110	R413	119-4731-15	1/16W 47kΩ
IC402	051-9400-48	S93C46AFJ	Q808	125-9003-92	IMD3	R414	119-4731-15	1/16W 47kΩ
IC403	051-3034-90	NJM4558V	Q1001	125-0001-91	UN2111	R416	119-4731-15	1/16W 47kΩ
IC404	052-3161-11	M30624MGA-E11GP	Q1003	193-0601-00	2SD601A	R417	119-1021-15	1/16W 1kΩ
IC405	051-5436-08	S-80933ANMP-DDX	Q1006	125-2005-91	UN2211	R419	119-4731-15	1/16W 47kΩ
IC501	051-1834-00	LM2936	Q1007	125-9006-90	IMX1	R420	119-4721-15	1/16W 4.7kΩ
IC601	051-5418-08	S-80827ANMP-EDQ	Q1050	125-2005-91	UN2211(PN2431DA)	R421	119-4731-15	1/16W 47kΩ
IC801	051-3019-90	NJM2060V	R101	119-4741-15	1/16W 470kΩ	R423	119-4731-15	1/16W 47kΩ
IC803	051-3019-90	NJM2060V	R102	119-1031-15	1/16W 10kΩ	R424	119-0000-05	1/16W 0Ω JW
IC804	051-3019-90	NJM2060V	R103	119-4741-15	1/16W 470kΩ	R426	119-2231-15	1/16W 22kΩ
IC805	051-3020-90	NJM4565V	R104	119-1021-15	1/16W 1kΩ	R427	119-3311-15	1/16W 330Ω
IC806	051-3019-90	NJM2060V	R105	119-1021-15	1/16W 1kΩ	R428	119-1021-15	1/16W 1kΩ
IC808	051-2039-00	TA8263BH	R106	119-8201-15	1/16W 82Ω	R430	119-3311-15	1/16W 330Ω
J401	076-0509-20	20P	R107	119-4741-15	1/16W 470kΩ	R431	119-4731-15	1/16W 47kΩ
J402	074-1192-26	26P	R108	119-1021-15	1/16W 1kΩ	R432	119-4731-15	1/16W 47kΩ
J403	076-0648-16	16P	R109	119-1031-15	1/16W 10kΩ	R433	119-4731-15	1/16W 47kΩ
J601	074-1141-00	NS10+6	R110	119-2231-15	1/16W 22kΩ	R437	117-0000-05	1/10W 0Ω JW
J1001	074-1087-12	OUTLET SOCKET	R111	119-1021-15	1/16W 1kΩ	R439	032-0092-99	1/10W 47kΩ 1%
J1002	074-1013-30	OUTLET SOCKET(A12MW)	R112	119-2221-15	1/16W 2.2kΩ	R440	119-4731-15	1/16W 47kΩ
L101	010-2046-41	560 μ F	R113	119-2221-15	1/16W 2.2kΩ	R441	119-1021-15	1/16W 1kΩ
L102	010-2198-65	0.1 μ H	R117	119-4721-15	1/16W 4.7kΩ	R443	119-2231-15	1/16W 22kΩ
L103	010-2198-53	5.6 μ H	R118	116-8211-15	1/8W 820Ω	R444	119-4731-15	1/16W 47kΩ
L104	010-2003-04	COIL	R119	119-1021-15	1/16W 1kΩ	R446	032-0092-99	1/10W 47kΩ 1%
L106	010-2230-76	22 μ H	R120	119-2221-15	1/16W 2.2kΩ	R447	119-4731-15	1/16W 47kΩ
L401	010-2199-78	22 μ H J	R121	119-4721-15	1/16W 4.7kΩ	R450	032-0140-84	1/16W 7.5kΩ ± 1%
L601	010-8021-00	COIL	R122	117-8201-15	1/10W 82Ω	R451	032-0140-84	1/16W 7.5kΩ ± 1%
P201	076-0368-18	18P	R124	119-3321-15	1/16W 3.3kΩ	R452	119-1031-15	1/16W 10kΩ
P202	076-0368-06	PLUG(6P)	R126	116-1001-15	1/8W 10Ω	R453	119-4731-15	1/16W 47kΩ
			R127	116-1001-15	1/8W 10Ω	R458	119-4731-15	1/16W 47kΩ

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
R459	119-4731-15	1/16W 47kΩ	R801	119-3331-15	1/16W 33kΩ	R890	119-1031-15	1/16W 10kΩ
R460	119-1041-15	1/16W 100kΩ	R802	119-3331-15	1/16W 33kΩ	R891	119-7521-15	1/16W 7.5kΩ
R461	119-1031-15	1/16W 10kΩ	R803	119-3331-15	1/16W 33kΩ	R892	119-7521-15	1/16W 7.5kΩ
R462	119-1031-15	1/16W 10kΩ	R804	119-3331-15	1/16W 33kΩ	R894	119-5131-15	1/16W 51kΩ
R463	119-4731-15	1/16W 47kΩ	R805	119-2231-15	1/16W 22kΩ	R895	119-5131-15	1/16W 51kΩ
R464	119-1041-15	1/16W 100kΩ	R806	119-2231-15	1/16W 22kΩ	R896	119-1031-15	1/16W 10kΩ
R465	119-4721-15	1/16W 4.7kΩ	R807	119-2031-15	1/16W 20kΩ	R897	119-1031-15	1/16W 10kΩ
R466	119-6821-15	1/16W 6.8kΩ	R808	119-2031-15	1/16W 20kΩ	R898	119-1031-15	1/16W 10kΩ
R467	119-4721-15	1/16W 4.7kΩ	R813	119-1031-15	1/16W 10kΩ	R899	119-1031-15	1/16W 10kΩ
R468	119-4721-15	1/16W 4.7kΩ	R814	119-1031-15	1/16W 10kΩ	R900	119-1831-15	1/16W 18kΩ
R469	119-4731-15	1/16W 47kΩ	R815	119-4721-15	1/16W 4.7kΩ	R901	119-1831-15	1/16W 18kΩ
R470	119-1031-15	1/16W 10kΩ	R816	119-4721-15	1/16W 4.7kΩ	R902	119-1831-15	1/16W 18kΩ
R471	119-4731-15	1/16W 47kΩ	R817	119-1231-15	1/16W 12kΩ	R903	119-1831-15	1/16W 18kΩ
R473	119-4731-15	1/16W 47kΩ	R818	119-1231-15	1/16W 12kΩ	R904	119-1031-15	1/16W 10kΩ
R476	119-1021-15	1/16W 1kΩ	R821	119-4721-15	1/16W 4.7kΩ	R905	119-1021-15	1/16W 1kΩ
R477	119-1031-15	1/16W 10kΩ	R822	119-4721-15	1/16W 4.7kΩ	R906	119-1021-15	1/16W 1kΩ
R478	119-1031-15	1/16W 10kΩ	R823	119-1031-15	1/16W 10kΩ	R912	119-0000-05	1/16W 0Ω JW
R479	119-1021-15	1/16W 1kΩ	R824	119-1031-15	1/16W 10kΩ	R913	119-4721-15	1/16W 4.7kΩ
R480	119-0000-05	1/16W 0Ω JW	R825	119-2221-15	1/16W 2.2kΩ	R914	119-4721-15	1/16W 4.7kΩ
R483	119-0000-05	1/16W 0Ω JW	R828	119-2221-15	1/16W 2.2kΩ	R915	119-4721-15	1/16W 4.7kΩ
R484	119-0000-05	1/16W 0Ω JW	R829	119-2221-15	1/16W 2.2kΩ	R916	119-4721-15	1/16W 4.7kΩ
R485	119-1231-15	1/16W 12kΩ	R832	119-2221-15	1/16W 2.2kΩ	R919	119-1021-15	1/16W 1kΩ
R486	119-1021-15	1/16W 1kΩ	R849	119-3621-15	1/16W 3.6kΩ	R920	119-1021-15	1/16W 1kΩ
R488	119-1021-15	1/16W 1kΩ	R850	119-2421-15	1/16W 2.4kΩ	R921	119-1031-15	1/16W 10kΩ
R490	119-1031-15	1/16W 10kΩ	R851	119-2421-15	1/16W 2.4kΩ	R922	119-1031-15	1/16W 10kΩ
R492	119-4731-15	1/16W 47kΩ	R852	119-3621-15	1/16W 3.6kΩ	R923	119-4721-15	1/16W 4.7kΩ
R493	119-4731-15	1/16W 47kΩ	R853	119-1511-15	1/16W 150Ω	R924	119-4721-15	1/16W 4.7kΩ
R494	119-4731-15	1/16W 47kΩ	R854	119-1511-15	1/16W 150Ω	R1002	119-3011-15	1/16W 300Ω
R502	116-3911-15	1/8W 390Ω	R855	119-1511-15	1/16W 150Ω	R1003	119-3011-15	1/16W 300Ω
R503	119-1031-15	1/16W 10kΩ	R856	119-1511-15	1/16W 150Ω	R1004	119-1031-15	1/16W 10kΩ
R504	116-1011-15	1/8W 100Ω	R857	119-1541-15	1/16W 150kΩ	R1005	119-5631-15	1/16W 56kΩ
R505	119-4721-15	1/16W 4.7kΩ	R858	119-1541-15	1/16W 150kΩ	R1006	119-1021-15	1/16W 1kΩ
R506	119-1021-15	1/16W 1kΩ	R859	119-1541-15	1/16W 150kΩ	R1010	119-2231-15	1/16W 22kΩ
R507	119-1031-15	1/16W 10kΩ	R860	119-1541-15	1/16W 150kΩ	R1015	119-4731-15	1/16W 47kΩ
R508	116-7501-15	1/8W 75Ω	R862	119-1541-15	1/16W 150kΩ	R1016	119-1031-15	1/16W 10kΩ
R509	116-2201-15	1/8W 22Ω	R863	119-1541-15	1/16W 150kΩ	R1017	119-1031-15	1/16W 10kΩ
R510	116-2201-15	1/8W 22Ω	R866	119-1511-15	1/16W 150Ω	R1018	119-5631-15	1/16W 56kΩ
R521	111-8211-98	1/4W 820Ω	R867	119-1511-15	1/16W 150Ω	R1019	119-5631-15	1/16W 56kΩ
R522	119-4711-15	1/16W 470Ω	R870	119-8221-15	1/16W 8.2kΩ	R1020	119-5621-15	1/16W 5.6kΩ
R551	119-2211-15	1/16W 220Ω	R871	119-8221-15	1/16W 8.2kΩ	R1021	119-5621-15	1/16W 5.6kΩ
R552	111-3311-98	1/4W 330Ω	R873	119-4731-15	1/16W 47kΩ	R1023	119-3011-15	1/16W 300Ω
R553	119-1041-15	1/16W 100kΩ	R874	119-4731-15	1/16W 47kΩ	R1024	119-0000-05	1/16W 0Ω JW
R554	119-1041-15	1/16W 100kΩ	R875	119-1231-15	1/16W 12kΩ	R1025	119-0000-05	1/16W 0Ω JW
R601	119-4731-15	1/16W 47kΩ	R876	119-5131-15	1/16W 51kΩ	R1026	119-4731-15	1/16W 47kΩ
R602	119-2731-15	1/16W 27kΩ	R877	119-5131-15	1/16W 51kΩ	R1050	119-1031-15	1/16W 10kΩ
R605	119-1031-15	1/16W 10kΩ	R878	119-3931-15	1/16W 39kΩ	R1051	119-2231-15	1/16W 22kΩ
R606	119-5611-15	1/16W 560Ω	R879	119-7521-15	1/16W 7.5kΩ			(PN2431DA)
R611	116-1221-15	1/8W 1.2kΩ	R880	119-7521-15	1/16W 7.5kΩ	R1052	119-3321-15	1/16W 3.3kΩ
R612	119-4721-15	1/16W 4.7kΩ	R881	119-1031-15	1/16W 10kΩ			(PN2431DA)
R613	116-1221-15	1/8W 1.2kΩ	R882	119-1031-15	1/16W 10kΩ	SUP101	060-0122-91	DSP-141N-S00B
R614	111-5691-98	1/4W 5.6Ω	R883	119-5131-15	1/16W 51kΩ	SUP102	060-0122-91	DSP-141N-S00B
R615	111-5691-98	1/4W 5.6Ω	R884	119-5131-15	1/16W 51kΩ	VR101	012-5203-63	470kΩ
R616	116-1531-15	1/8W 15kΩ	R887	119-5131-15	1/16W 51kΩ	VR102	012-5203-56	10kΩ
R617	114-2291-18	1W 2.2Ω	R888	119-5131-15	1/16W 51kΩ	X102	061-1066-80	7.2MHz
R618	119-0000-05	1/16W 0Ω JW	R889	119-1031-15	1/16W 10kΩ	X401	060-1505-50	10MHz

Switch PWB(B2) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C251	166-2701-50	27pF CH	C269	166-1011-50	100pF CH	Q251	125-0002-91	RN2401
C252	166-1011-50	100pF CH	C270	166-1011-50	100pF CH	Q252	125-0002-91	RN2401
C253	166-2201-50	22pF CH	C271	166-1011-50	100pF CH	Q253	125-0002-91	RN2401
C256	168-1042-78	16V 0.1 μ F	C272	166-1011-50	100pF CH	R251	119-1031-15	1/16W 10kΩ
C257	168-2222-55	2200pF	IC201	051-6061-00	MSM9223GS-BK	R252	119-1031-15	1/16W 10kΩ
C258	168-2222-55	2200pF	IC202	051-6054-00	MSM9210	R253	119-1031-15	1/16W 10kΩ
C259	166-2201-50	22pF CH	J251	074-1279-16	16P	R254	119-1031-15	1/16W 10kΩ
C260	166-2201-50	22pF CH	LCD201	379-4038-24	VFD	R255	119-6221-15	1/16W 6.2kΩ
C261	168-2222-55	2200pF	PL251	017-0433-52	14V40mA	R256	119-4731-15	1/16W 47kΩ
C262	168-2222-55	2200pF	PL252	017-0458-00	14V40mA	R258	119-4731-15	1/16W 47kΩ
C263	166-1011-50	100pF CH	PL253	017-0458-00	14V40mA	R261	119-1021-15	1/16W 1kΩ
C264	166-1011-50	100pF CH	PL254	017-0458-00	14V40mA	R262	119-1021-15	1/16W 1kΩ
C265	166-1011-50	100pF CH	PL255	017-0458-00	14V40mA	R265	119-1021-15	1/16W 1kΩ
C266	166-1011-50	100pF CH	PL256	017-0458-00	14V40mA	R266	119-1021-15	1/16W 1kΩ
C267	166-1011-50	100pF CH	PL257	017-0458-00	14V40mA	R267	119-1021-15	1/16W 1kΩ
C268	166-1011-50	100pF CH	PL258	017-0458-00	14V40mA	R268	119-1021-15	1/16W 1kΩ

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
R269	119-1021-15	1/16W 1kΩ	S258	013-6305-50	SKQMAH	S273	013-8003-00	ROTARY SW
S254	013-6305-50	SKQMAH	S262	013-6305-50	SKQMAH	S274	013-6201-50	SKPMAA

CD PWB(B3) section:CD mechanism

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C101	168-1042-78	0.1 μ F	C207	043-0533-50	0.047 μ F	R109	033-1031-15	1/16W 10kΩ
C102	045-4701-50	47pF	C208	046-6822-58	6800pF	R110	033-1051-15	1/16W 1MΩ
C103	046-4722-58	4700pF	C209	168-1042-78	0.1 μ F	R111	033-3321-15	1/16W 3.3kΩ
C104	168-1042-78	0.1 μ F	C210	043-0533-50	0.047 μ F	R114	033-2211-15	1/16W 220Ω
C105	046-1532-78	0.015 μ F	C211	168-1042-78	0.1 μ F	R115	033-2211-15	1/16W 220Ω
C106	046-1032-78	0.01 μ F	C212	168-1042-78	0.1 μ F	R116	033-1031-15	1/16W 10kΩ
C107	046-1032-78	0.01 μ F	C213	045-5096-50	5pF	R117	033-1021-15	1/16W 1kΩ
C108	046-4722-58	4700pF	C214	045-5601-50	56pF	R131	033-4711-15	1/16W 470Ω
C109	046-1522-58	1500pF	C215	043-0533-50	0.047 μ F	R132	033-2211-15	1/16W 220Ω
C110	046-3332-78	0.033 μ F	C216	178-1052-78	1 μ F	R201	117-2201-15	1/10W 22Ω
C111	168-1042-78	0.1 μ F	C217	045-1011-50	100pF	R202	117-2201-15	1/10W 22Ω
C112	046-3332-78	0.033 μ F	C301	163-1073-35	16V100 μ F	R203	033-1041-15	1/16W 100kΩ
C113	168-1042-78	0.1 μ F	C302	168-1042-78	0.1 μ F	R204	033-1041-15	1/16W 100kΩ
C114	168-1042-78	0.1 μ F	C303	043-0533-50	0.047 μ F	R205	033-1041-15	1/16W 100kΩ
C115	046-4712-58	470pF	D201	001-0516-90	MA111	R206	033-1041-15	1/16W 100kΩ
C116	046-4712-58	470pF	IC101	051-6376-00	TC94A14FA	R207	033-1041-15	1/16W 100kΩ
C117	043-0533-50	0.047 μ F	IC102	051-3279-90	BA033LBSG	R208	033-8231-15	1/16W 82kΩ
C118	043-0533-50	0.047 μ F	IC201	051-5710-90	TA2157F	R209	033-6811-15	1/16W 680Ω
C119	045-2701-50	27pF	IC301	051-6049-08	BA5983FP-E2	R210	033-6831-15	1/16W 68kΩ
C120	045-1801-50	18pF	J101	074-1228-76	26P	R211	033-1831-15	1/16W 18kΩ
C121	163-1063-35	16V10 μ F	J201	074-1138-65	15P	R212	033-2721-15	1/16W 2.7kΩ
C122	178-1052-78	1 μ F	J301	074-1138-60	10P	R213	033-1011-15	1/16W 100Ω
C123	046-1032-78	0.01 μ F	L101	010-2285-57	BLM21B102SPT	R214	033-1021-15	1/16W 1kΩ
C124	163-1073-05	4V100 μ F	L102	010-2285-57	BLM21B102SPT	R215	033-1031-15	1/16W 10kΩ
C125	168-1042-78	0.1 μ F	L103	010-2285-57	BLM21B102SPT	R217	033-1041-15	1/16W 100kΩ
C126	168-1042-78	0.1 μ F	L104	010-2285-57	BLM21B102SPT	R218	033-2211-15	1/16W 220Ω
C129	178-1052-78	1 μ F	L105	010-2285-57	BLM21B102SPT	R301	117-6811-15	1/16W 680Ω
C201	163-3363-05	4V33 μ F	L401	010-3050-93	10 μ H	R304	033-3921-15	1/16W 3.9kΩ
C202	168-1042-78	0.1 μ F	Q201	131-1188-50	2SB1188	R305	033-3921-15	1/16W 3.9kΩ
C203	178-1052-78	1 μ F	R102	033-5621-15	1/16W 5.6kΩ	R306	033-1041-15	1/16W 100kΩ
C204	163-1073-05	4V100 μ F	R104	033-4731-15	1/16W 47kΩ	R307	033-2211-15	1/16W 220Ω
C205	163-3363-05	4V33 μ F	R105	033-1041-15	1/16W 100kΩ	X102	060-1528-90	16.934M
C206	168-1042-78	0.1 μ F	R108	033-1531-15	1/16W 15kΩ			

LED PWB(B4) section:CD mechanism

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
D1	001-7058-90	AN1105W-RR	Q1	060-4015-90	PS1192H	S2	013-7413-50	LIMIT
D2	001-7058-90	AN1105W-RR	Q2	060-4015-90	PS1192H			
J1	074-1138-60	10P	S1	013-7414-50	CHUCKING			

Side PWB(B5) section:Tape mechanism

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C1	168-5612-05	560pF	C16	168-1032-05	0.01 μ F	R8	119-3341-10	1/16W 330kΩ
C2	168-5612-05	560pF	C17	178-4745-79	0.47 μ F	R9	119-1131-15	1/16W 11kΩ
C3	168-5612-05	560pF	C18	168-1042-78	0.1 μ F	R10	119-1131-15	1/16W 11kΩ
C4	168-5612-05	560pF	C19	163-2263-30	16V22 μ F	R11	119-1531-10	1/16W 15kΩ
C5	178-1055-79	1 μ F	IC1	051-5204-00	HA12216F	R12	119-1531-10	1/16W 15kΩ
C6	168-1232-05	0.012 μ F	J1	074-0898-10	10P	R13	032-0140-80	1/16W 18kΩ ± 1%
C7	168-1232-05	0.012 μ F	L1	010-2198-26	0.047 μ H	R14	119-1531-10	1/16W 15kΩ
C8	168-4732-78	0.047 μ F	L2	010-2198-26	0.047 μ H	R15	119-1031-10	1/16W 10kΩ
C9	168-4732-78	0.047 μ F	R1	119-2731-10	1/16W 27kΩ	R16	119-3921-10	1/16W 3.9kΩ
C10	168-5612-05	560pF	R2	119-2731-10	1/16W 27kΩ	R17	119-1241-10	1/16W 120kΩ
C11	168-5612-05	560pF	R3	119-2731-10	1/16W 27kΩ	R18	119-2231-10	1/16W 22kΩ
C12	168-1042-78	0.1 μ F	R4	119-2731-10	1/16W 27kΩ	VR1	012-6014-56	10kΩ
C13	168-1042-78	0.1 μ F	R5	119-1811-10	1/16W 180Ω	VR2	012-6014-56	10kΩ
C14	168-1032-05	0.01 μ F	R6	119-1811-10	1/16W 180Ω			
C15	163-4753-50	35V4.7 μ F	R7	119-3341-10	1/16W 330kΩ			

Bottom PWB(B6) section:Tape mechanism

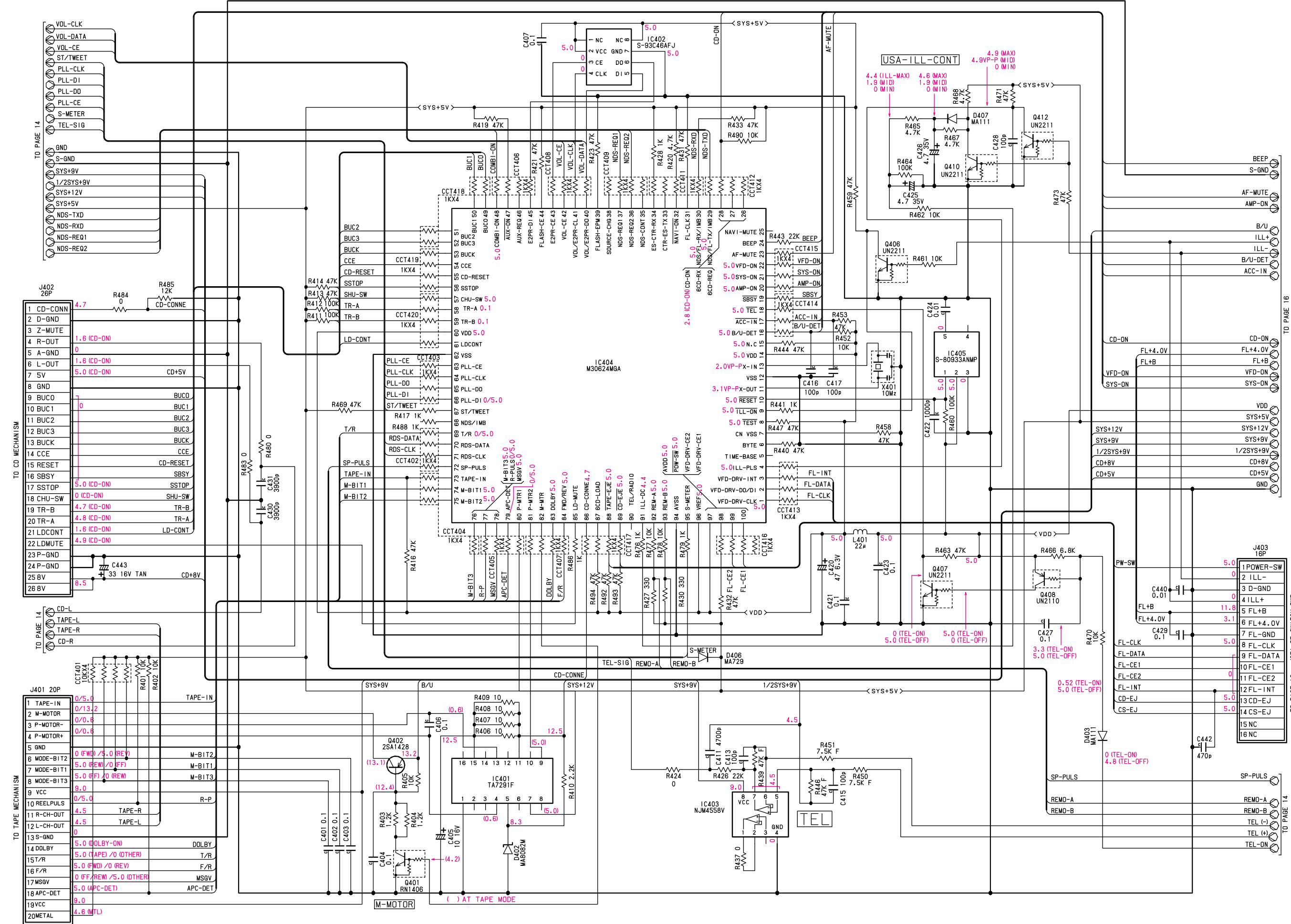
REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
IC2	051-1776-00	NJL5801K	SW1	013-3953-01	SPPB32	SW2	013-3951-32	MODE SWITCH

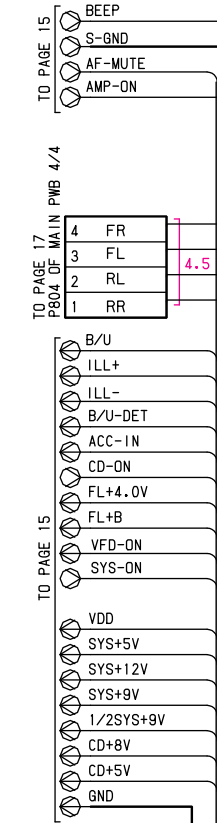
Rear PWB(B7) section:Tape mechanism

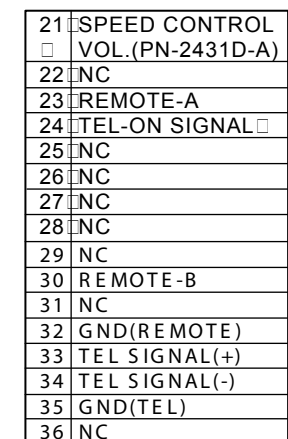
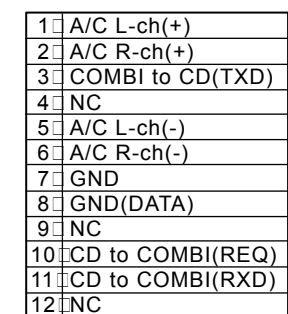
REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
P1	076-0368-10	10P	R19	111-5611-91	1/4WS 560Ω
J2	074-1012-20	20P	S1	013-3906-00	SPPB51

Main PWB(B1) section 1/4









Main PWB(B1) section



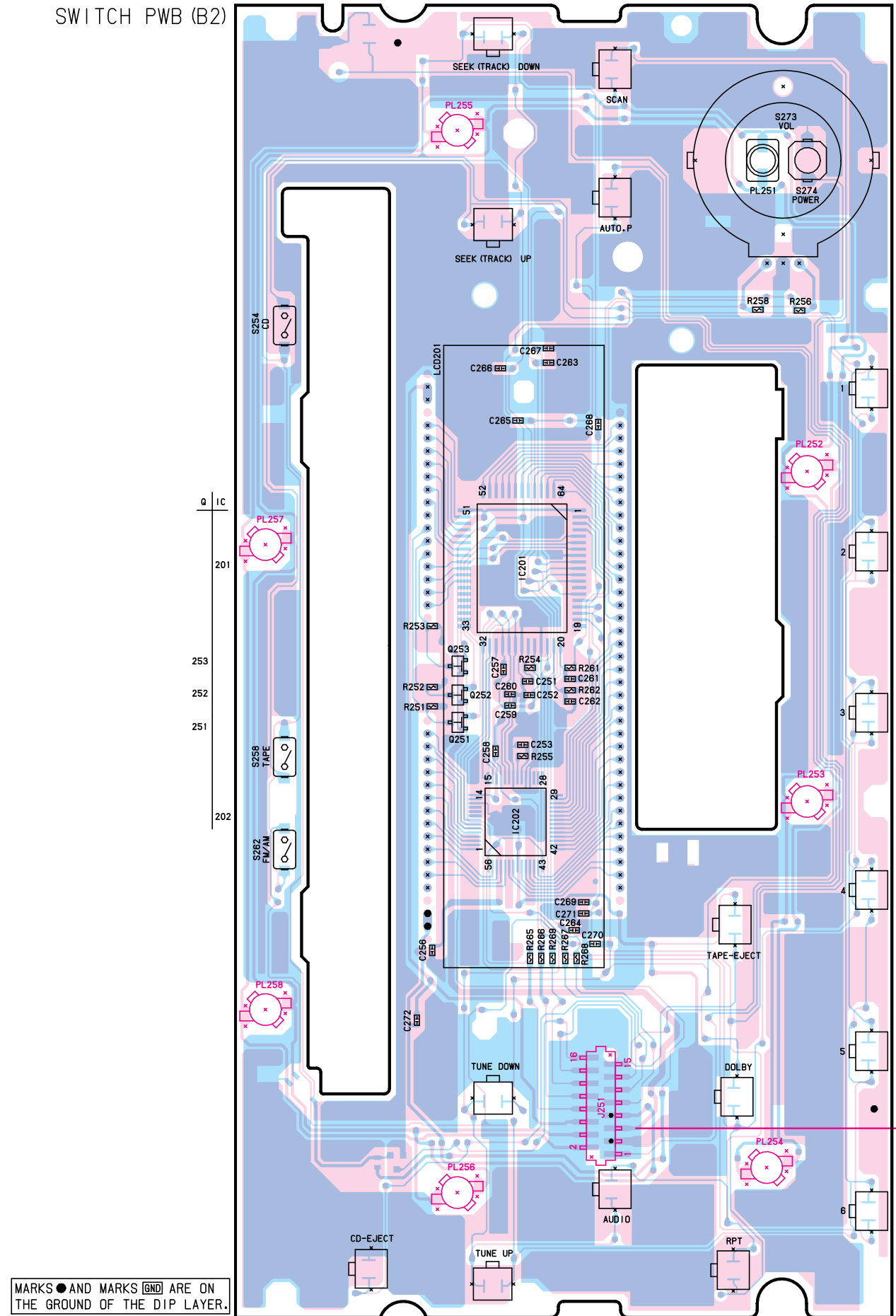
Switch PWB(B2) section



■ PRINTED WIRING BOARD

Switch PWB(B2) section

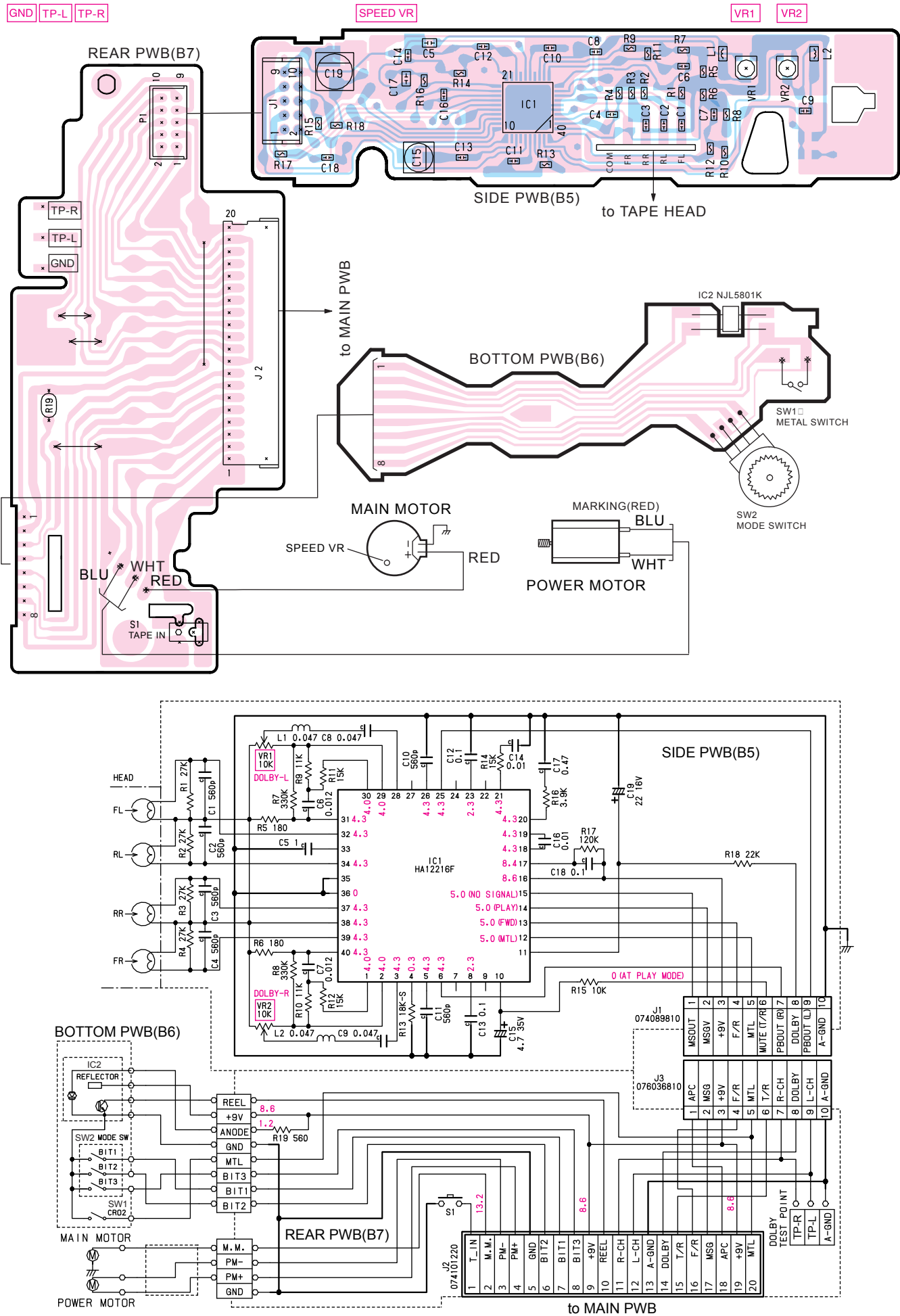
SWITCH PWB (B2)



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■ PRINTED WIRING BOARD / CIRCUIT DIAGRAM

Tape mechanism section:Side PWB(B5)/Bottom PWB(B6)/Rear PWB(B7)



CD PWB(B3)/LED PWB(B4) section



CD PWB(B3)/LED PWB(B4) section

