SHARP SERVICE MANUAL

No. S9162CDBK100W

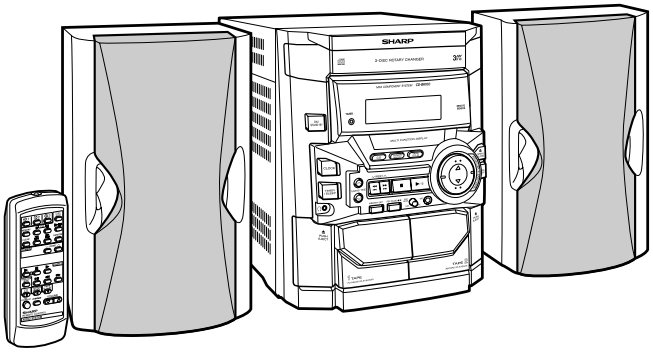

Illustration: CD-BK100W

MINI COMPONENT SYSTEM

MODEL CD-BK100W

CD-BK100W Mini Component System consisting of CD-BK100W (main unit) and CP-BK100 (speaker system).

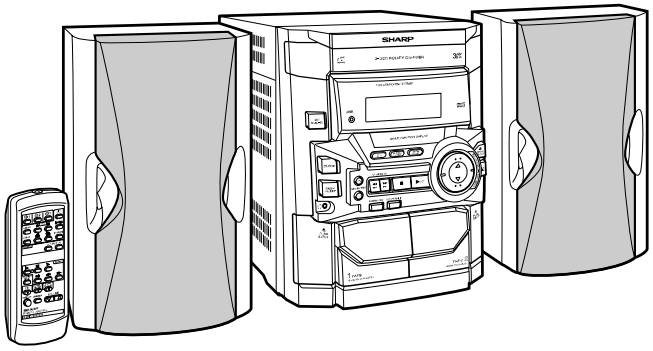

Illustration: CD-BP90W

MINI COMPONENT SYSTEM

MODEL CD-BP90W

CD-BP90W Mini Component System consisting of CD-BP90W (main unit) and CP-BP90 (speaker system).

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

COMPACT disc DIGITAL AUDIO

3 DISC

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SHARP CORPORATION

SAFETY PRECAUTION FOR SERVICE MANUAL

WARNINGS

THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1. THEREFORE IT IS IMPORTANT THAT THE FOLLOWING PRECAUTIONS ARE OBSERVED DURING SERVICING TO PROTECT YOUR EYES AGAINST EXPOSURE TO THE LASER BEAM.

1-WHEN THE CABINET IS REMOVED, THE POWER IS TURNED ON WITHOUT A COMPACT DISC IN POSITION AND THE PICKUP IS ON THE OUTER EDGE THE LASER WILL LIGHT FOR SEVERAL SECONDS TO DETECT A DISC. DO NOT LOOK INTO THE PICKUP LENS.

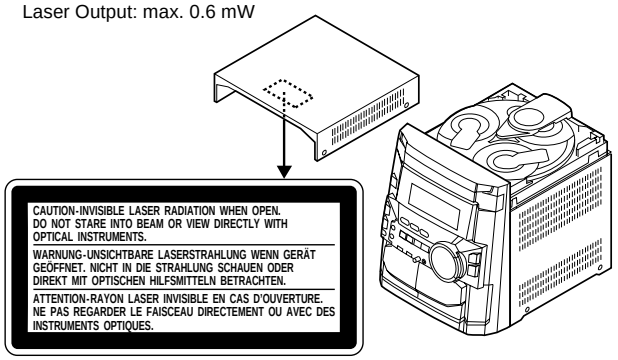
2-THE LASER POWER OUTPUT OF THE PICKUP UNIT AND REPLACEMENT SERVICE PARTS ARE ALL FACTORY PRESET BEFORE SHIPMENT.
DO NOT ATTEMPT TO READJUST THE LASER PICKUP UNIT DURING REPLACEMENT OR SERVICING.

3-UNDER NO CIRCUMSTANCES STARE INTO THE PICKUP LENS AT ANY TIME.

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

For CD-BK100W

Laser Diode Properties
Material: GaAlAs
Wavelength: 780 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW



For CD-BP90W

Laser Diode Properties
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Emission Duration: continuous
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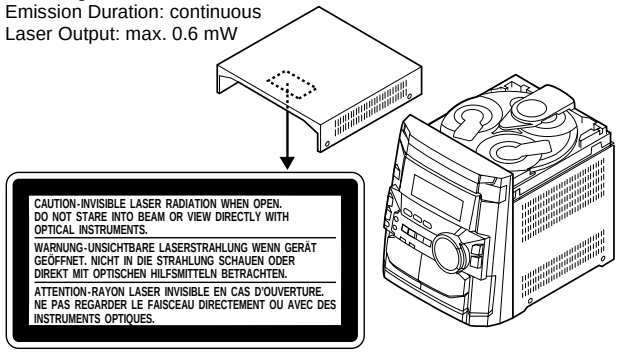
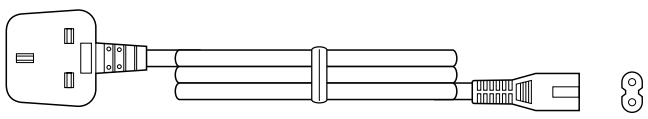


VOLTAGE SELECTION (CD-BK100W ONLY)

Before operating the unit on mains, check the preset voltage. If the voltage is different from your local voltage, adjust the voltage as follows.
Turn the selector with a screwdriver until the appropriate voltage number appears in the window (110 V, 127 V, 220 V or 230 V-240 V AC).

AC POWER SUPPLY CORD AND AC PLUG ADAPTOR

QACCB0012AW00



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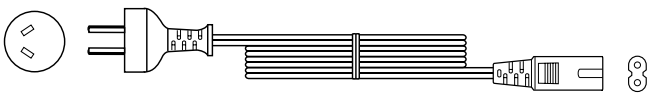

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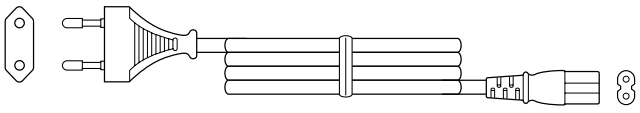
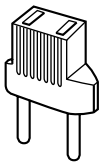


QPLGA0004AWZZ

QPLGA0003AWZZ



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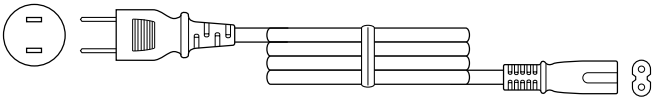


FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

For CD-BK100W

■ General

Power source	AC 110/127/220/230 - 240 V, 50/60 Hz
Power consumption	37 W
Dimensions	Width: 270 mm (10-5/8") Height: 300 mm (11-4/5") Depth: 344 mm (13-1/2")
Weight	5.2 kg (11.5 lbs.)

■ Amplifier

Output power	MPO: 32 W (16 W + 16 W) (10 % T.H.D.) RMS: 20 W (10 W + 10 W) (10 % T.H.D.)
Output terminals	Speakers: 8 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)

■ CD player

Type	3-disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

■ Tuner

Frequency range	FM: 88 - 108 MHz AM: 531 - 1,602 kHz

■ Cassette deck

Frequency response	50 - 14,000 Hz (Normal tape)
Signal/noise ratio	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter	0.3 % (WRMS)

For CP-BK100

Type	10 cm (4") full-range speaker
Maximum input power	20 W
Rated input power	10 W
Impedance	8 ohms
Dimensions	Width: 200 mm (7-9/10") Height: 300 mm (11-4/5") Depth: 165 mm (6-1/2")
Weight	2.1 kg (4.6 lbs.)/each

For CD-BP90W

■ General

Power source	AC 220 - 240 V, 50/60 Hz
Power consumption	29 W
Dimensions	Width: 270 mm (10-5/8") Height: 300 mm (11-4/5") Depth: 344 mm (13-1/2")
Weight	5.0 kg (11.0 lbs.)

■ Amplifier

Output power	MPO: 16 W (8 W + 8 W) (10 % T.H.D.) RMS: 10 W (5 W + 5 W) (10 % T.H.D.)
Output terminals	Speakers: 3 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)

■ CD player

Type	3-disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

■ Tuner

Frequency range	FM: 88 - 108 MHz AM: 531 - 1,602 kHz

■ Cassette deck

Frequency response	50 - 14,000 Hz (Normal tape)
Signal/noise ratio	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter	0.3 % (WRMS)

For CP-BP90

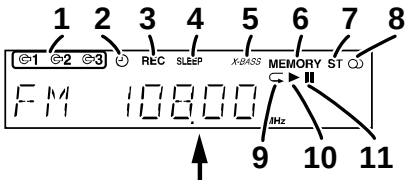
Type	10 cm (4") full-range speaker
Maximum input power	10 W
Rated input power	5 W
Impedance	3 ohms
Dimensions	Width: 200 mm (7-9/10") Height: 300 mm (11-4/5") Depth: 165 mm (6-1/2")
Weight	2.1 kg (4.6 lbs.)/each

Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

■ Display

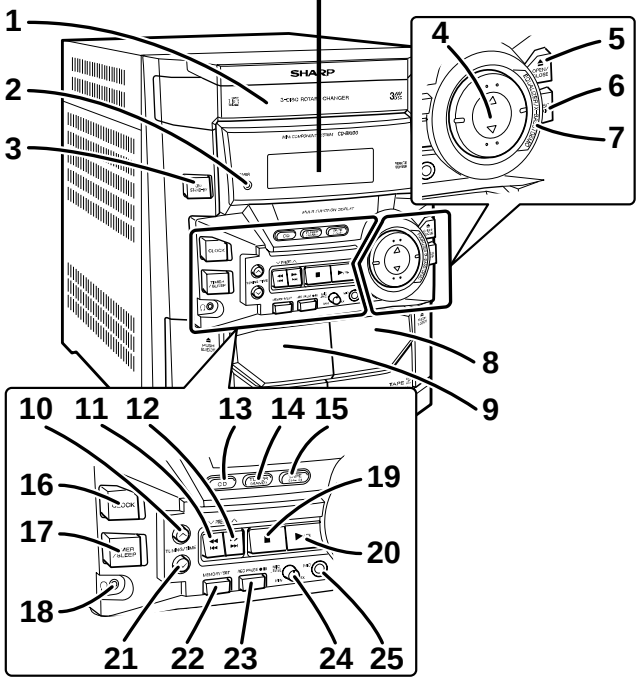
CD-BK100W/CD-BP90W



1. Disc Number Indicators
2. Timer Indicator
3. Tape 2 Record Indicator
4. Sleep Indicator
5. Extra Bass Indicator
6. CD or Tuner Memory Indicator
7. FM Stereo Mode Indicator
8. FM Stereo Receiving Indicator
9. CD Repeat Play Indicator
10. CD or Tape Play Indicator
11. CD Pause Indicator

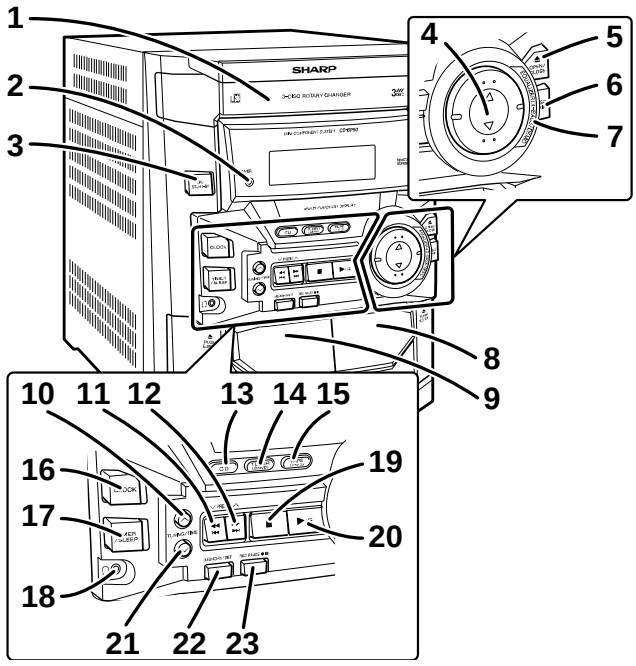
■ Front panel

For CD-BK100W



1. Disc Tray
2. Timer Set Indicator
3. On/Stand-by Button
4. Volume Up and Down Buttons
5. Disc Tray Open/Close Button
6. Disc Skip Button
7. Equaliser Mode Select/Extra Bass/Demo Mode Button
8. Tape 2 Cassette Compartment
9. Tape 1 Cassette Compartment
10. Tuning and Time Up Button
11. CD Track Down or Fast Reverse, Tape 2 Rewind, Tuner Preset Down Button
12. CD Track Up or Fast Forward, Tape 2 Fast Forward, Tuner Preset Up Button
13. CD Button
14. Tuner (Band) Button
15. Tape (1 ↔ 2) Button
16. Clock Button
17. Timer/Sleep Button
18. Headphone Socket
19. CD or Tape Stop Button
20. CD Play or Repeat, Tape 1 Play or Tape 2 Play Button
21. Tuning and Time Down Button
22. Memory/Set Button
23. Tape 2 Record Pause Button
24. Microphone Level Control
25. Microphone Socket

For CD-BP90W



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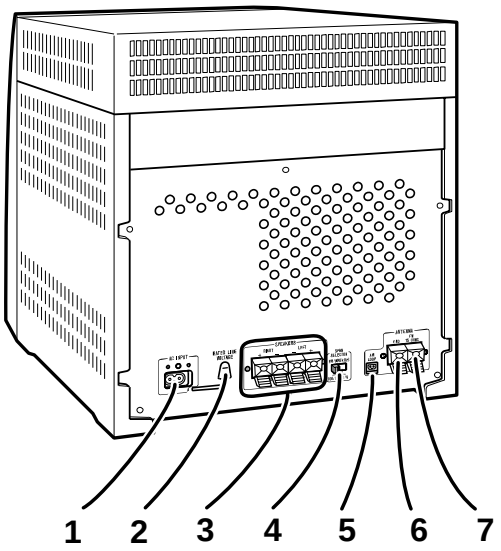
12. CD Track Up or Fast Forward, Tape 2 Fast Forward, Tuner Preset Up Button
13. CD Button
14. Tuner (Band) Button
15. Tape (1 ↔ 2) Button
16. Clock Button
17. Timer/Sleep Button
18. Headphone Socket
19. CD or Tape Stop Button
20. CD Play or Repeat, Tape 1 Play or Tape 2 Play Button
21. Tuning and Time Down Button
22. Memory/Set Button
23. Tape 2 Record Pause Button

■ Rear panel

For CD-BK100W

1. AC Power Input Socket
2. AC Voltage Selector
3. Speaker Terminals
4. Span Selector Switch
5. AM Loop Aerial Socket
6. FM Aerial Earth Terminal
7. FM 75 Ohms Aerial Terminal



For CD-BP90W

1. AC Power Input Socket
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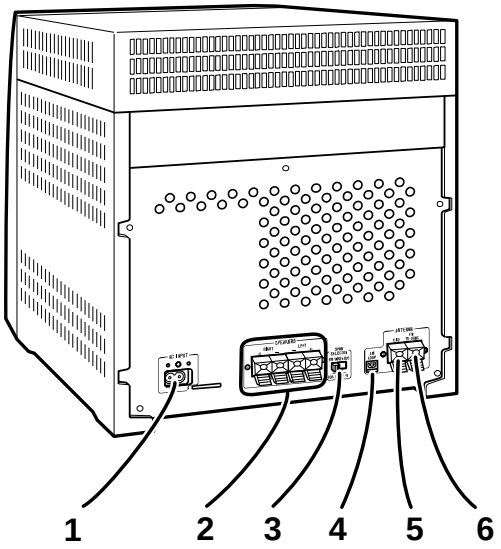
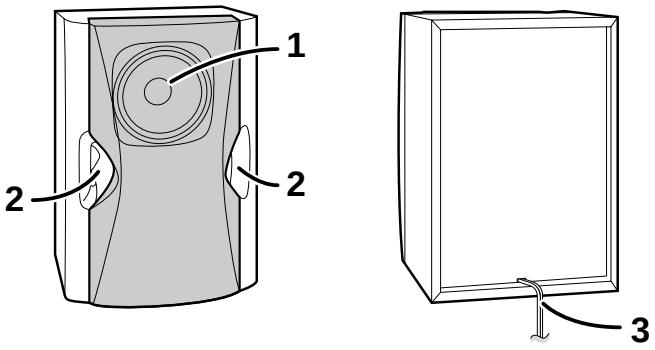


■ Speaker system

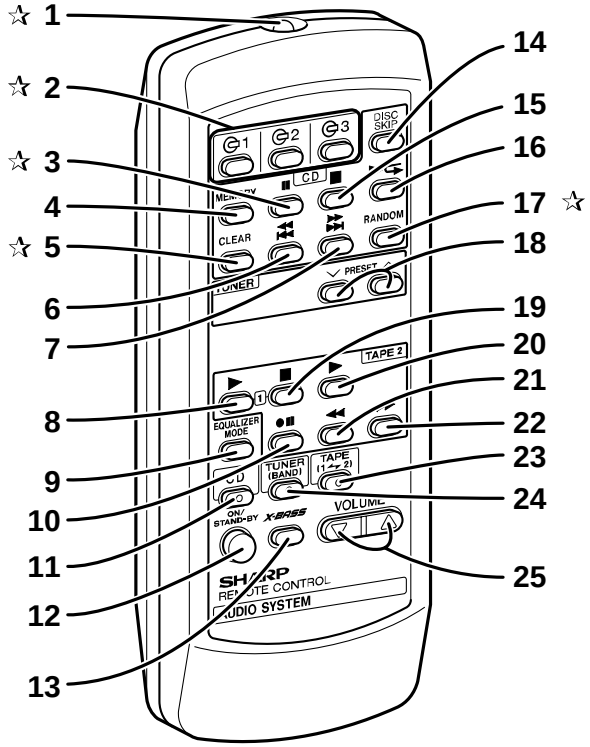
CP-BK100/CP-BP90

1. Full-Range Speaker
2. Bass Reflex Duct
3. Speaker Wire



■ Remote control

CD-BK100W/CD-BP90W



1. **Remote Control Transmitter**
2. **Disc Number Select Buttons**
3. **CD Pause Button**
4. CD Memory Button
5. **CD Clear Button**
6. CD Track Down or Fast Reverse Button
7. CD Track Up or Fast Forward Button
8. Tape 1 Play Button
9. Equaliser Mode Select Button
10. Tape 2 Record Pause Button
11. CD Button
12. On/Stand-by Button
13. Extra Bass Button
14. Disc Skip Button
15. CD Stop Button
16. CD Play or Repeat Button
17. **CD Random Button**
18. Tuner Preset Up and Down Buttons
19. Tape 1 or Tape 2 Stop Button
20. Tape 2 Play Button
21. Tape 2 Rewind Button
22. Tape 2 Fast Forward Button
23. Tape (1 ↔ 2) Button
24. Tuner (Band) Button
25. Volume Up and Down Buttons

Buttons with "☆" mark in the illustration can be operated on the remote control only.
Other buttons can be operated both on the main unit and the remote control.

OPERATION MANUAL

System Connections (For CD-BK100W)

■ Setting the AC voltage selector

Check the setting of the AC voltage selector located on the rear panel before plugging the unit into an AC socket. If necessary, adjust the selector to correspond to the AC power voltage used in your area.

Turn the selector with a screwdriver until the appropriate voltage number appears in the window (110 V, 127 V, 220 V or 230 V - 240 V AC).

■ Connecting the AC power lead

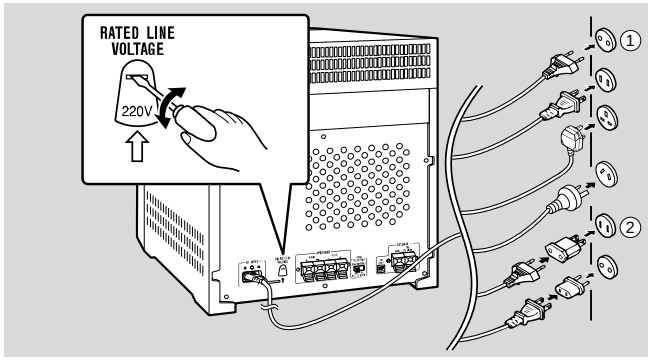
After making all connections, connect the AC power lead to the unit and then into the wall socket. If you plug in the unit first, it will enter the demonstration mode.

Notes:

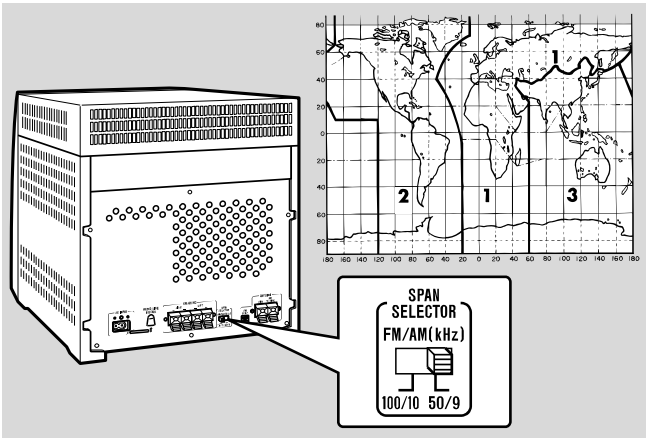
- Unplug the AC power lead from the AC socket if the unit will not be in use for a prolonged period of time.
- **Never use a power lead other than the one supplied. Use of a power lead other than the one supplied may cause an electric shock or fire.**

AC Plug Adaptor

In areas (or countries) where an AC socket as shown in illustration ② is used, connect the unit using the AC plug adaptor supplied with the unit, as illustrated. The AC plug adaptor is not included in areas where the AC wall socket and AC power plug can be directly connected (see illustration ①).



■ Setting the FM/AM Span Selector



The International Telecommunication Union (ITU) has established that member countries should maintain either a 100 kHz or a 50 kHz interval between broadcasting frequencies of FM stations and 10 kHz or 9 kHz for AM station. The illustration shows the 50/9 kHz zones (regions 1 and 3), and the 100/10 kHz zone (region 2).
Before using the unit, set the SPAN SELECTOR switch (on the rear panel) to the interval (span) of your area.

To change the tuning zone:

1 Press the ON/STAND-BY button to enter the stand-by mode.
2 Set the SPAN SELECTOR switch (on the rear panel) as follows.
   - For 50 kHz FM interval (9 kHz in AM) → 50/9
   - For 100 kHz FM interval (10 kHz in AM) → 100/10
3 Whilst pressing down the ►/⏍ button and the EQUALIZER/X-BASS/DEMO button, press the ON/STAND-BY button until "CLEAR AL" appears.

Caution:

This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

System Connections (For CD-BP90W)

■ Connecting the AC power lead

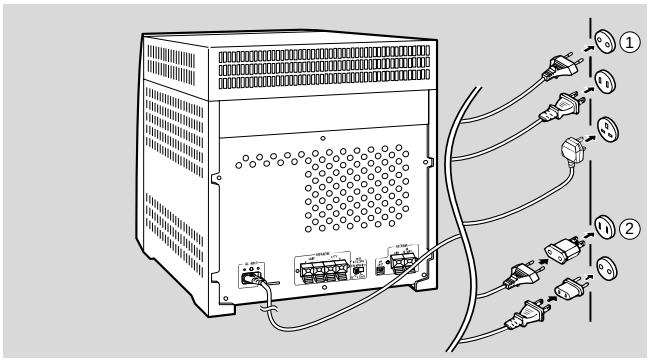
After making all connections, connect the AC power lead to the unit and then into the wall socket. If you plug in the unit first, it will enter the demonstration mode.

Notes:

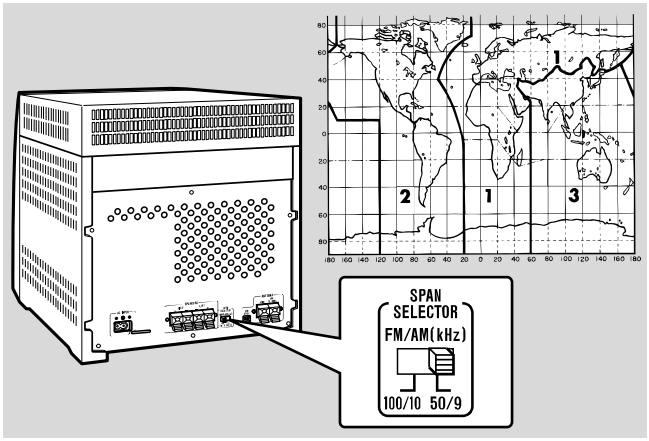
- Unplug the AC power lead from the AC socket if the unit will not be in use for a prolonged period of time.
- **Never use a power lead other than the one supplied. Use of a power lead other than the one supplied may cause an electric shock or fire.**

AC Plug Adaptor

In areas (or countries) where an AC socket as shown in illustration ② is used, connect the unit using the AC plug adaptor supplied with the unit, as illustrated. The AC plug adaptor is not included in areas where the AC wall socket and AC power plug can be directly connected (see illustration ①).



■ Setting the FM/AM Span Selector



The International Telecommunication Union (ITU) has established that member countries should maintain either a 100 kHz or a 50 kHz interval between broadcasting frequencies of FM stations and 10 kHz or 9 kHz for AM station. The illustration shows the 50/9 kHz zones (regions 1 and 3), and the 100/10 kHz zone (region 2).
Before using the unit, set the SPAN SELECTOR switch (on the rear panel) to the interval (span) of your area.

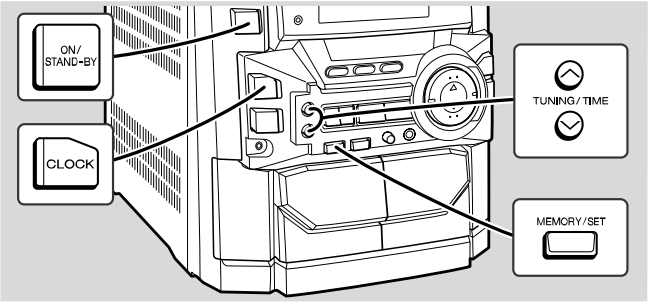
To change the tuning zone:

1 Press the ON/STAND-BY button to enter the stand-by mode.
2 Set the SPAN SELECTOR switch (on the rear panel) as follows.
   - For 50 kHz FM interval (9 kHz in AM) → 50/9
   - For 100 kHz FM interval (10 kHz in AM) → 100/10
3 Whilst pressing down the ►/⏍ button and the EQUALIZER/X-BASS/DEMO button, press the ON/STAND-BY button until "CLEAR AL" appears.

Caution:

This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

Setting the Clock (For CD-BK100W)

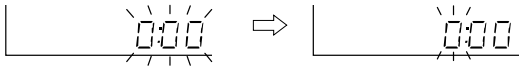


In this example, the clock is set for the 24-hour (0:00) display.

1 **Press the ON/STAND-BY button to turn the power on.**

2 **Press the CLOCK button and within 5 seconds, press the MEMORY/SET button.**

3 **Press the TUNING/TIME (∨ or ∧) button to select 24-hour or 12-hour display and then press the MEMORY/SET button.**



"0:00" → The 24-hour display will appear.
(0:00 - 23:59)
"AM 12:00" → The 12-hour display will appear.
(AM 12:00 - PM 11:59)
"AM 0:00" → The 12-hour display will appear.
(AM 0:00 - PM 11:59)

Note that this can only be set when the unit is first installed or it has been reset. [Refer to "Clearing all the memory (reset)".]

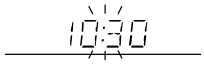
4 **Press the TUNING/TIME (∨ or ∧) button to adjust the hour and then press the MEMORY/SET button.**

- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 hour. Hold it down to advance continuously.
- When the 12-hour display is selected, "AM" will change automatically to "PM".

5 **Press the TUNING/TIME (∨ or ∧) button to adjust the minutes and then press the MEMORY/SET button.**

- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 minute. Hold it down to change the time in 5-minute intervals.
- The hour will not advance even if minutes advance from "59" to "00".
- The clock begins counting from "0" seconds. (Seconds are not displayed.) The time display will disappear after a few seconds.

To confirm the time display:
Press the CLOCK button.
The time display will appear for about 5 seconds.

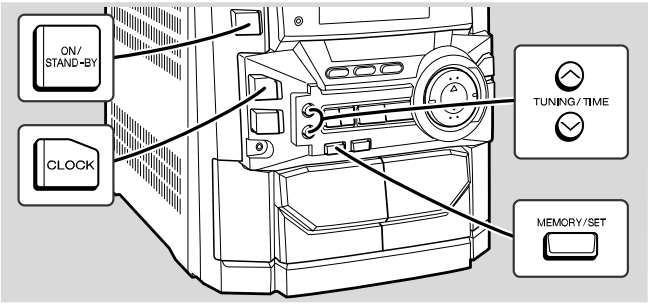


Note:
The "CLOCK" or time will flash at the push of the CLOCK button when the AC power supply is restored after a power failure or unplugging the unit.
Readjust the clock as follows.

To readjust the clock:
Perform "Setting the Clock" from the beginning. If the time display is flashing, step 3 (for selecting the 24-hour or 12-hour display) will be skipped.

To change the 24-hour or 12-hour display:
1 Clear all the programmed contents. [Refer to "Clearing all the memory (reset)".]
2 Perform "Setting the Clock" from the beginning.

Setting the Clock (For CD-BP90W)



In this example, the clock is set for the 24-hour (0:00) display.

1 **Press the ON/STAND-BY button to turn the power on.**

2 **Press the CLOCK button and within 5 seconds, press the MEMORY/SET button.**

3 **Press the TUNING/TIME (∨ or ∧) button to select 24-hour or 12-hour display and then press the MEMORY/SET button.**

"0:00" → The 24-hour display will appear.
(0:00 - 23:59)
"AM 12:00" → The 12-hour display will appear.
(AM 12:00 - PM 11:59)
"AM 0:00" → The 12-hour display will appear.
(AM 0:00 - PM 11:59)

Note that this can only be set when the unit is first installed or it has been reset. [Refer to "Clearing all the memory (reset)".]

4 **Press the TUNING/TIME (∨ or ∧) button to adjust the hour and then press the MEMORY/SET button.**

- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 hour. Hold it down to advance continuously.
- When the 12-hour display is selected, "AM" will change automatically to "PM".

5 **Press the TUNING/TIME (∨ or ∧) button to adjust the minutes and then press the MEMORY/SET button.**

- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 minute. Hold it down to change the time in 5-minute intervals.
- The hour will not advance even if minutes advance from "59" to "00".
- The clock begins counting from "0" seconds. (Seconds are not displayed.) The time display will disappear after a few seconds.

To confirm the time display:
Press the CLOCK button.
The time display will appear for about 5 seconds.

Note:
The "CLOCK" or time will flash at the push of the CLOCK button when the AC power supply is restored after a power failure or unplugging the unit.
Readjust the clock as follows.

To readjust the clock:
Perform "Setting the Clock" from the beginning. If the time display is flashing, step 3 (for selecting the 24-hour or 12-hour display) will be skipped.

To change the 24-hour or 12-hour display:
1 Clear all the programmed contents. [Refer to "Clearing all the memory (reset)".]
2 Perform "Setting the Clock" from the beginning.

Troubleshooting

■ If trouble occurs

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:

1 Set the unit to the stand-by mode and turn the power on again.
2 If the unit is not restored in the previous operation, unplug and plug in the unit, and then turn the power on.

Note:

If neither operation above restores the unit, clear all the memory by resetting it.

■ Clearing all the memory (reset)

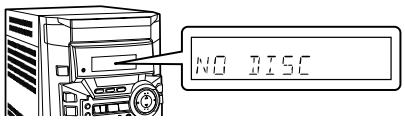
1 Press the ON/STAND-BY button to enter the power stand-by mode.
2 Whilst pressing down the ►/⥱ button and the EQUALIZER/X-BASS/DEMO button, press the ON/STAND-BY button until "CLEAR AL" appears.

Caution:

This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

■ Before transporting the unit

1 Press the ON/STAND-BY button to turn the power on.
2 Press the CD button.
3 Press the ⏏ OPEN/CLOSE button to open the disc tray.
Remove all CDs from the unit.
4 Press the ⏏ OPEN/CLOSE button to close the disc tray.
Make sure that "NO DISC" is displayed.
5 Press the ON/STAND-BY button to enter the stand-by mode, and then unplug the AC power lead from the AC socket.



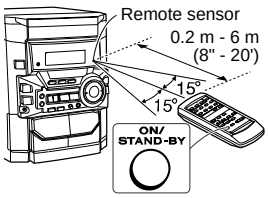
Remote Control (For CD-BK100W)

■ Test of the remote control

Face the remote control directly to the remote sensor on the unit.

The remote control can be used within the range shown:

Press the ON/STAND-BY button. Does the power turn on? Now, you can enjoy the music.



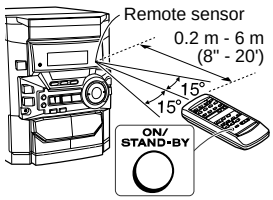
Remote Control (For CD-BP90W)

■ Test of the remote control

Face the remote control directly to the remote sensor on the unit.

The remote control can be used within the range shown:

Press the ON/STAND-BY button. Does the power turn on? Now, you can enjoy the music.



DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

CD-BK100W/CD-BP90W

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw ..... (A1) x4	10-1
2	Side Panel (Left/Right)	1. Screw ..... (B1) x8	10-1
3	CD Tray Cover/ CD Player Unit	1. Turn on the power supply, open the disc tray, take out the CD tray cover, and close. (Note 1) 2. Hook ..... (C1) x3 3. Screw ..... (C2) x1 4. Hook ..... (C3) x2 5. Socket ..... (C4) x2	10-2
4	Rear Panel	1. Screw ..... (D1) x6	10-2
5	Front Panel	1. Flat Cable ..... (E1) x1 2. Socket ..... (E2) x4 (For CD-BK100W) 2. Socket ..... (E2) x3 (For CD-BP90W) 3. Tip ..... (E3) x1 4. Screw ..... (E4) x3 5. Hook ..... (E5) x2	11-3
6	Main PWB	1. Socket ..... (F1) x2 2. Screw ..... (F2) x7	11-3
7	Mic PWB (CD-BK100W Only)	1. Screw ..... (G1) x1 2. Bracket ..... (G2) x1	11-4
8	Display PWB	1. Screw ..... (H1) x11 2. Flat Wire ..... (H2) x1	11-4
9	Headphones PWB	1. Screw ..... (J1) x1 2. Bracket ..... (J2) x1	11-4
10	Tape Mechanism	1. Open the cassette holder. 2. Screw..... (K1) x6	11-4
11	Turntable	1. Hook ..... (L1) x2 2. Cover ..... (L2) x1	11-5
12	Disc Tray	1. Turn fully the lock lever in the arrow direction. 2. While holding the lock lever,rotate the cam gear until the cam gear rib engages with the clamp lever. 3. Push the slide chassis backward to engage the claw with the groove and remove it in the direction of the arrow.. (M1) x6	11-1 11-2 11-6
13	CD Servo PWB (Note 2)	1. Screw ..... (N1) x1 2. Socket ..... (N2) x4 3. Hook ..... (N3) x2	12-1
14	CD Mechanism	1. Hook ..... (P1) x2 2. Hook ..... (P2) x3	12-2

Note 1: How to open the changer manually. (Fig. 11-1)

1. In this state, turn fully the lock lever in the arrow direction through the hole on the loading chassis bottom.
2. While holding the lock lever, rotate the cam gear anticlockwise until the cam gear rib engages with the clamp lever. (Fig. 11-2)
3. After that, push forward the slide chassis.

Note 2:

1. After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of the connector so as to protect the optical pickup from electro-static damage.

Note 3:

1. Be careful not to break the claw of the CD mechanism.
2. When fining back the cam gear assembly, let it lock by front movement.

CD-BK100W/CD-BP90W

Illustration: CD-BK100W

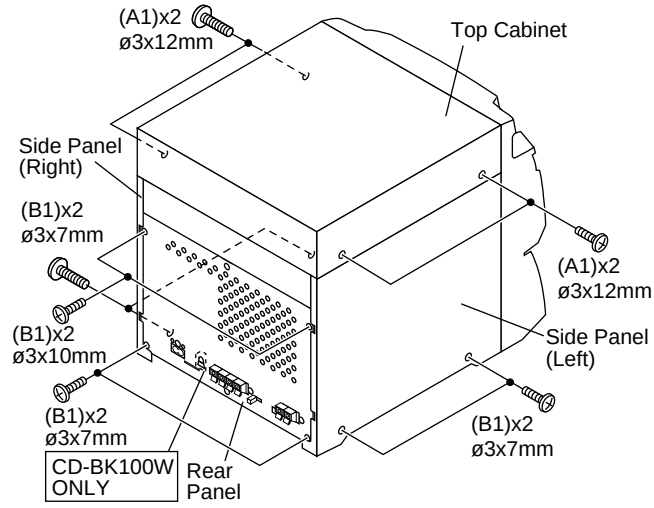


Figure 10-1

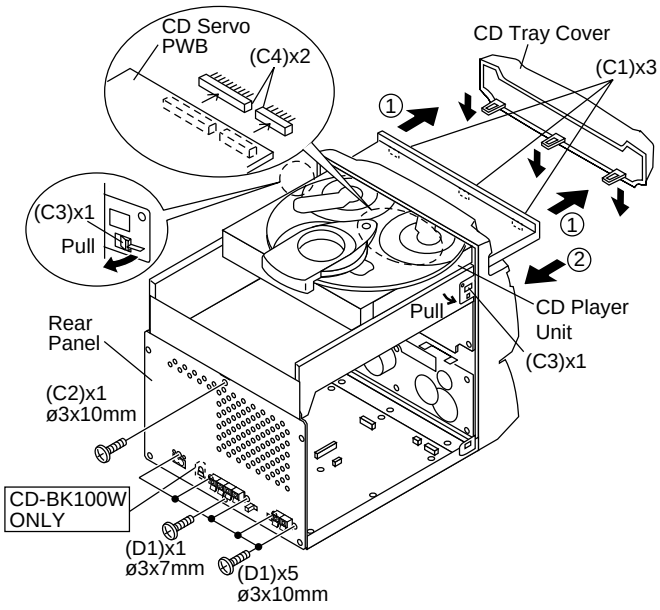


Figure 10-2

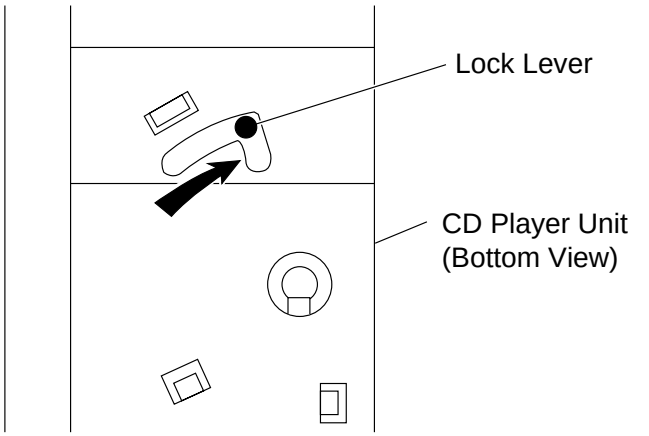


Figure 11-1

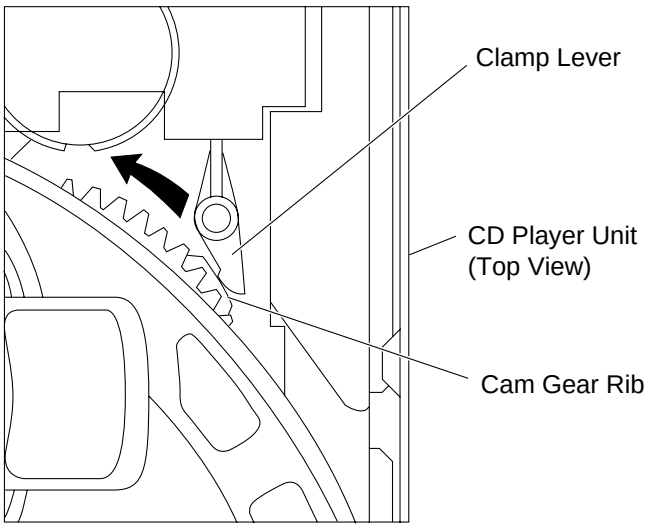


Figure 11-2

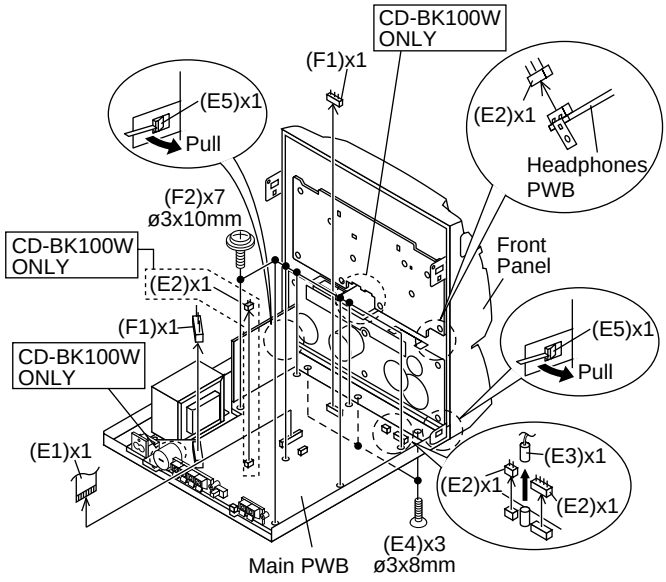


Figure 11-3

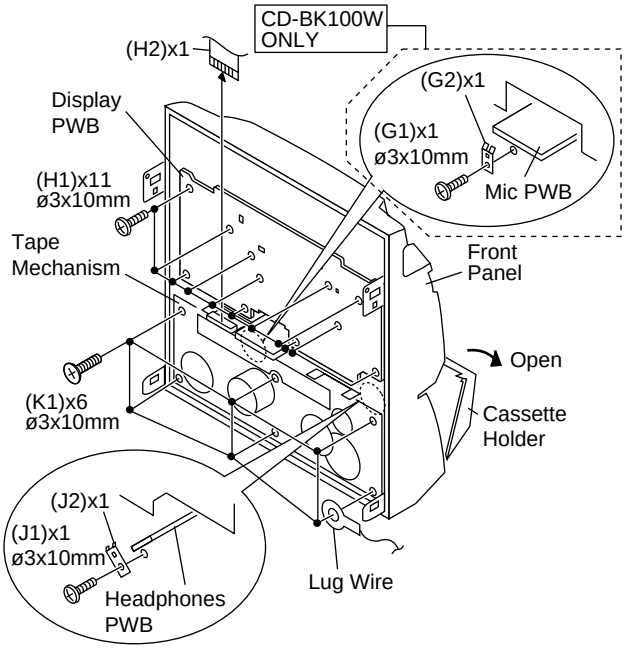


Figure 11-4

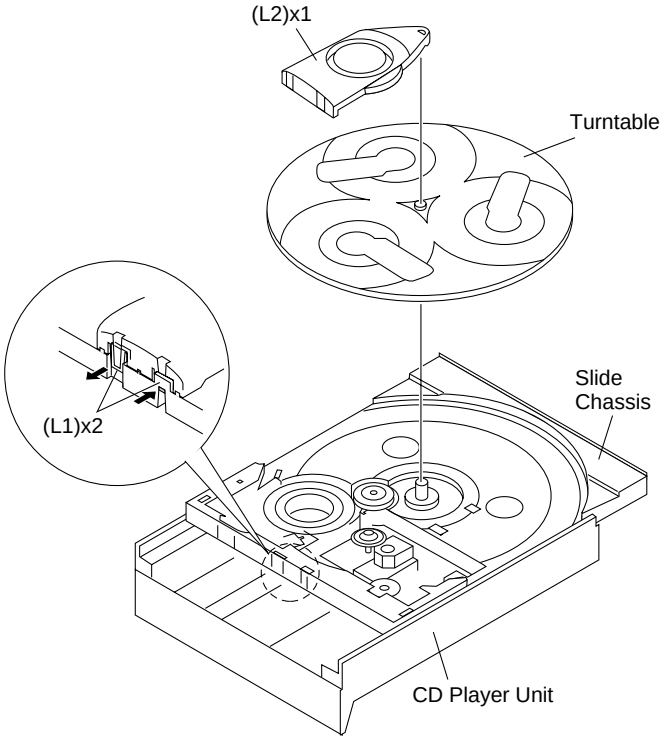


Figure 11-5

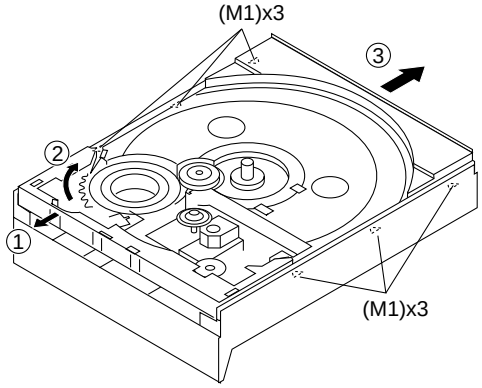


Figure 11-6

CD-BK100W/CD-BP90W

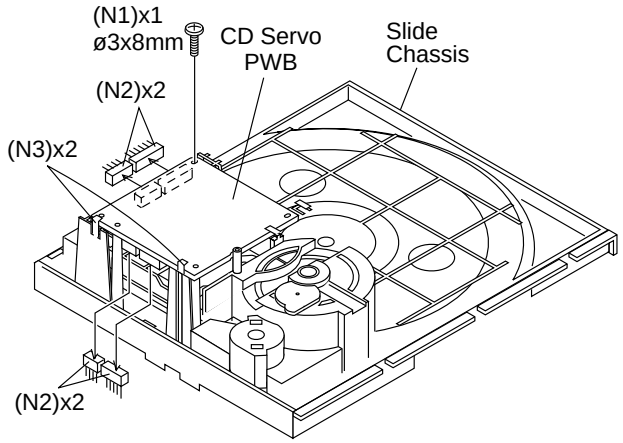


Figure 12-1

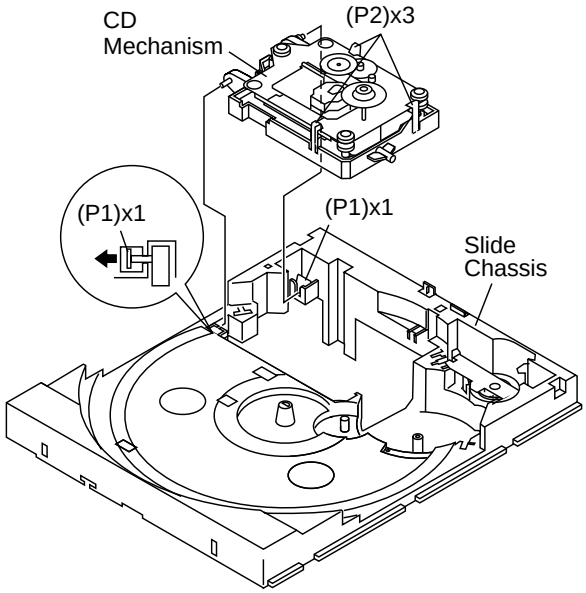


Figure 12-2

CP-BK100/CP-BP90

These speakers CP-BK100/CP-BP90 are available in assemblies only and may not be disaseembled.

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1 to 5 and 10 of the disassembly method to remove the tape mechanism. (See page 10.)

How to remove the record/playback and erase heads (TAPE 2) (See Fig. 13-1)

1. When you remove the screws (A1) x 2 pcs., the recording/playback head and three-dimensional head of the erasing head can be removed.

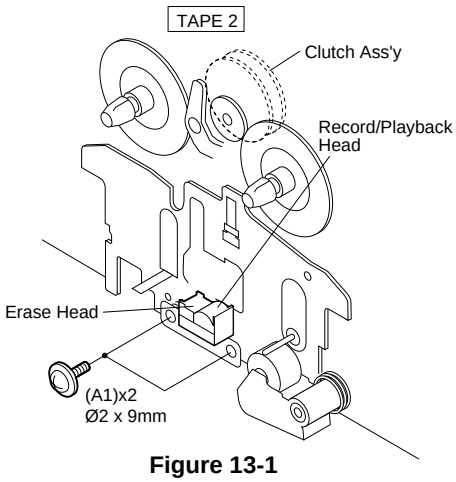


Figure 13-1

How to remove the playback head (TAPE 1) (See Fig. 13-2)

1. When you remove the screws (B1) x 2 pcs., the playback head.

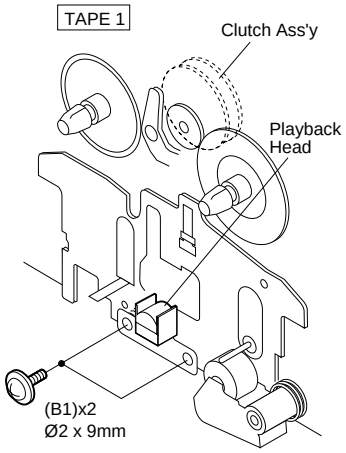


Figure 13-2

How to remove the pinch roller (TAPE 1/2) (See Fig. 13-3)

1. Carefully bend the pinch roller pawl in the direction of the arrow **<A>**, and remove the pinch roller (C1) x 1 pc., in the direction of the arrow **<B>**.

Note:

When installing the pinch roller, pay attention to the spring mounting position.

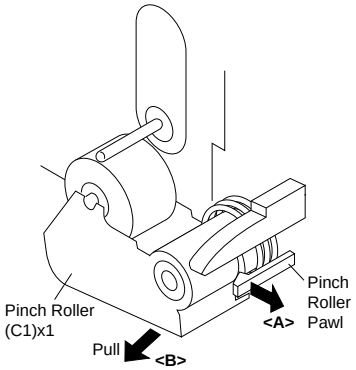


Figure 13-3

How to remove the belt (TAPE 2) (See Fig. 13-4)

1. Remove the main belt (D1) x 1 pc., from the motor side.
2. Remove the FF/REW belt (D2) x 1 pc.

How to remove the belt (TAPE 1) (See Fig. 13-4)

1. Remove the main belt (E1) x 1 pc., from the motor side.
2. Remove the FF/REW belt (E2) x 1 pc.

How to remove the motor (See Fig. 13-5)

1. Remove the screws (F1) x 2 pcs., to remove the motor.

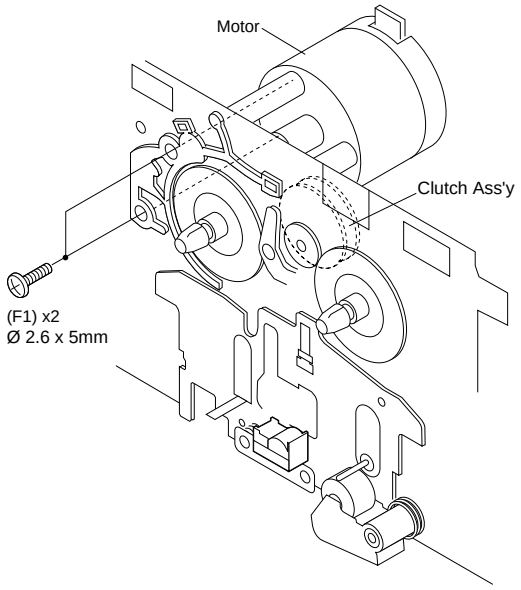


Figure 13-5

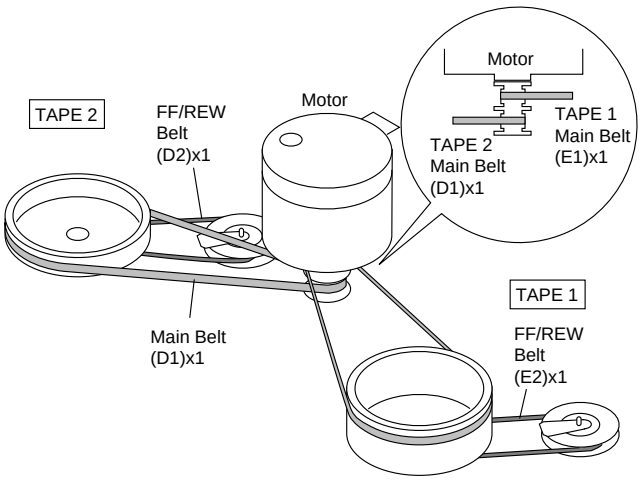


Figure 13-4

CD MECHANISM SECTION

Perform steps 1, 2, 3, 11,12, 13 and 14 of the disassembly method to remove the CD mechanism. (See page 10.)

How to remove the loading motor (See Fig. 14-1)

1. Bend the hooks (A1) x 5 pcs., to remove the loading motor.
2. Remove the drive belt (A2) x 1pc.

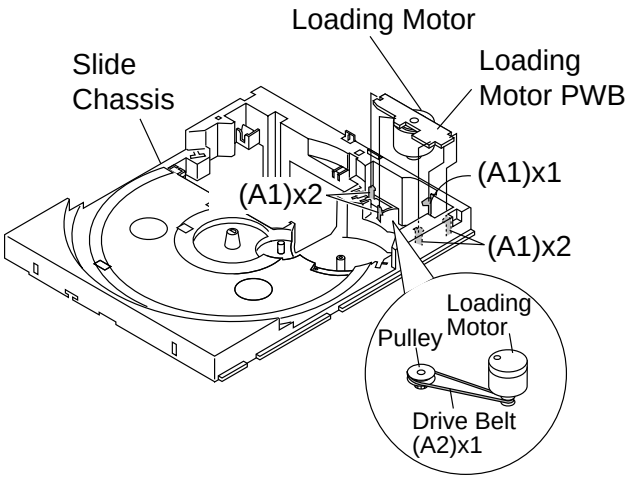


Figure 14-1

How to remove the pickup (See Fig. 14-2)

1. Remove the stop washer (B1) x 1 pc., to remove the gear (B2) x 1 pc.
2. Remove the screws (B3) x 2 pcs., to remove the shaft (B4) x 1 pc.
3. Remove the pickup.

Note

After removing the connector for the optical pickup from the connector wrap the conductive aluminium foil around the front end of connector so as to protect the optical pickup from electrostatic damage.

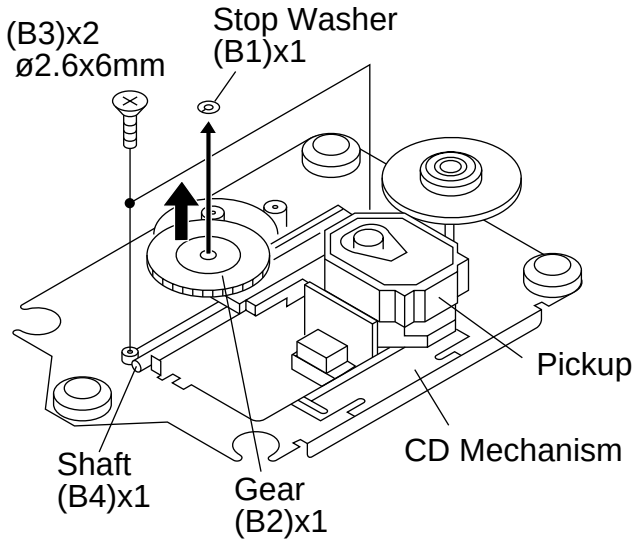


Figure 14-2

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: TW-2111	Tape 1: Over 80 g Tape 2: Over 80 g

• Torque Check

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: TW-2111	30 to 80 g.cm	30 to 80 g.cm
Fast forward: TW-2231	—	70 to 180 g.cm
Rewind: TW-2231	—	70 to 180 g.cm

• Tape Speed

	Test Tape	Adjusting Point	Specified Value	Instrument Connection
Normal speed	MTT-111	Variable Resistor in motor.	3,000 ± 30 Hz	Speaker Terminal (Load resistance: 6 ohms)

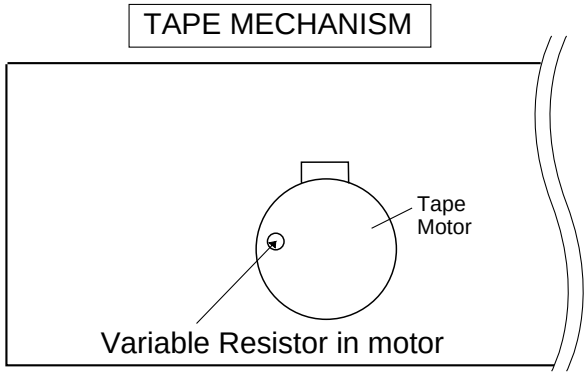


Figure 14-3

TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

- **AM IF/RF**

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
AM IF	450 kHz	1,602 kHz	T351	*1
AM Band Coverage	—	531 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	(fL): T303	*1

*1. Input: Antenna Output: TP302
*2. Input: Antenna Output: TP301

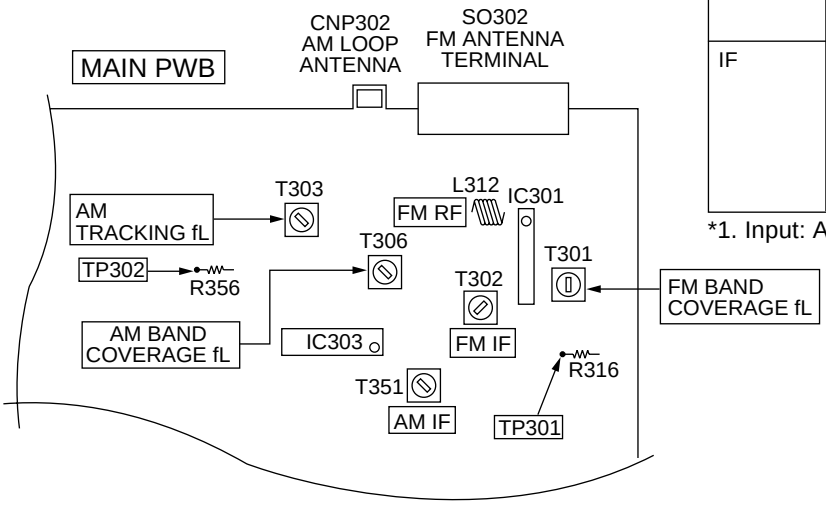


Figure 15-1 ADJUSTMENT POINTS

CD SECTION

- **Adjustment**

Since this CD system incorporates the following automatic adjustment functions, readjustment is not needed when replacing the pickup. Therefore, different PWBs and pickups can be combined freely.

Each time a disc is changed, these adjustments are performed automatically. Therefore, playback of each disc can be performed under optimum conditions.

Items adjusted automatically

(1) Offset adjustment (The offset voltage between the head amplifier output and the VREF reference voltage is compensated inside the IC.)
  * Focus offset adjustment
  * Tracking offset adjustment

(2) Tracking balance adjustment (waveform drawing Fig.15-2 EFBL)

(3) Gain adjustment (The gain is compensated inside the IC so that the loop gain at the gain crossover frequency will be 0 dB.)
  * Focus gain adjustment
  * Tracking gain adjustment

- **FM RF**

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Point	Instrument Connection
FM Band Coverage	—	87.50 MHz	T301(fL): 1.3 V ± 0.1 V	*1
FM RF	98.00 MHz (10-30 dB)	98.00 MHz	L312	*2

*1. Input: Antenna Output: TP301
*2. Input: Antenna Output: Speaker terminal

- **FM IF**

Signal generator: 10.7 MHz, FM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Point	Instrument Connection
IF	10.7 MHz	98 MHz	T302 (Turn the core of transformer T302 fully counter-clock wise)	*1

*1. Input: Antenna Output: TP301

CD ERROR CODE DESCRIPTION

Error	State Code
	[Servo System Error]
0001	Cannot detect Pickup-in SW
0002	DSP access error
	[Error during close operation]
0101	Open/Close SW not functioning (Low → High)
0103	Open/Close SW not functioning (High → Low)
	[Error during open operation]
0201	Open/Close SW not functioning (Low → High)
0203	Open/Close SW not functioning (High → Low)
	[Error during skip operation]
0302	Pickup-in SW is not detected
0306	During Disc 1 search, Open/Close SW or Clamp SW or Disc SW do not change to low.
0307	Clamp SW not function (Low → High)
0308	Clamp SW not function (High → Low)

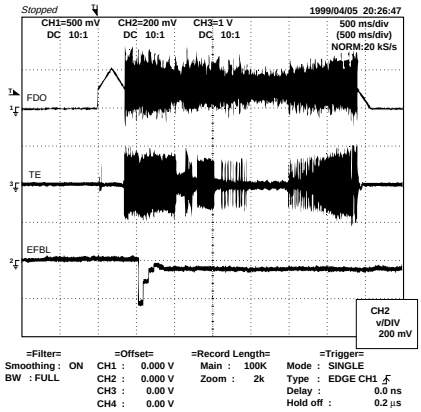


Figure 15-2

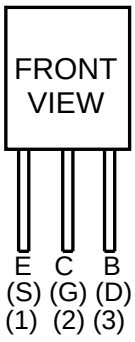
NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     ( ) indicates AM
     indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.
     ( ) indicates the record state.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with “ ⚠ ” (⊏ ═ ═ ═ ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

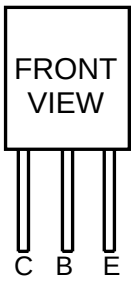
REF. NO	DESCRIPTION	POSITION
SW1	OPEN/CLOSE	ON—OFF
SW2	CLAMP	ON—OFF
SW3	DISC NUMBER	ON—OFF
SW4	PICKUP IN	ON—OFF
SW601	SPAN SELECTOR	50/9 Hz—100/10 Hz
SW701	ON/STAND-BY	ON—OFF
SW702	CLOCK	ON—OFF
SW703	TIMER/SLEEP	ON—OFF
SW709	DISC SKIP	ON—OFF
SW710	OPEN/CLOSE	ON—OFF
SW711	EQ./X-BASS/DEMO	ON—OFF
SW712	VOLUME UP	ON—OFF
SW713	VOLUME DOWN	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW714	CD	ON—OFF
SW715	TAPE	ON—OFF
SW716	TUNING/TIME DOWN	ON—OFF
SW717	MEMORY/SET	ON—OFF
SW718	REWIND	ON—OFF
SW719	FAST FORWARD	ON—OFF
SW720	PLAY/REPEAT	ON—OFF
SW721	STOP	ON—OFF
SW723	REC/PAUSE	ON—OFF
SW724	TUNING/TIME UP	ON—OFF
SW725	TUNER (BAND)	ON—OFF
SW801	VOLTAGE SELECTOR (CD-BK100W ONLY)	110 V—127 V—220 V—230-240 V

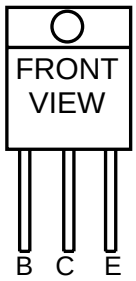
TYPES OF TRANSISTOR AND LED



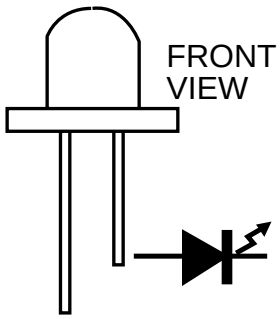
2SC1845 F
2SC3331 S
KRC102 M
KRC104 M
KRC107 M
KTA1266 GR
KTA1271 Y
KTA1273 Y
KTC3194 Y
KTC3203 Y



9014 C



KTC2026



4204SRT7

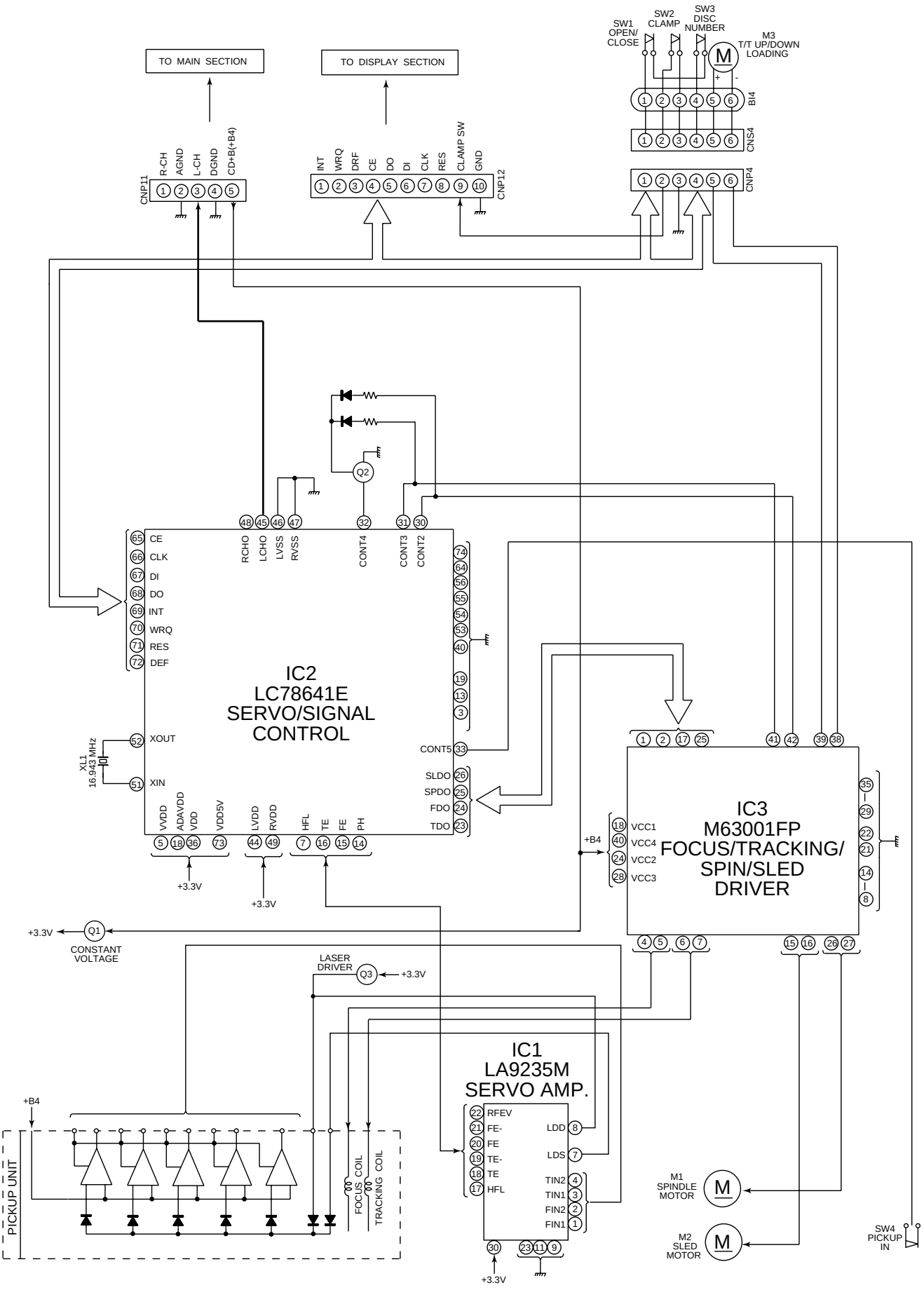


Figure 17 BLOCK DIAGRAM (1/3)

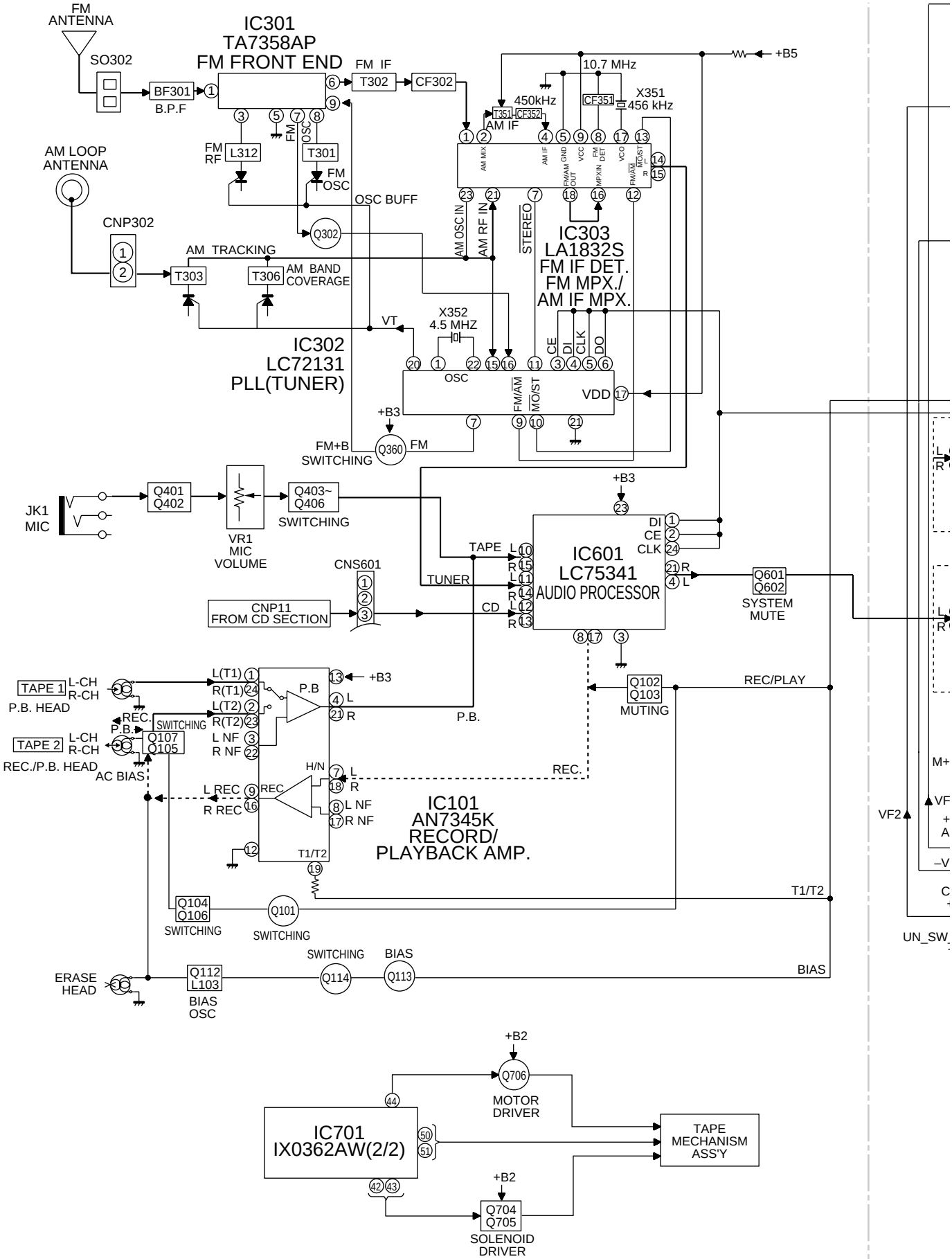


Figure 18 BLOCK DIAGRAM (2/3)

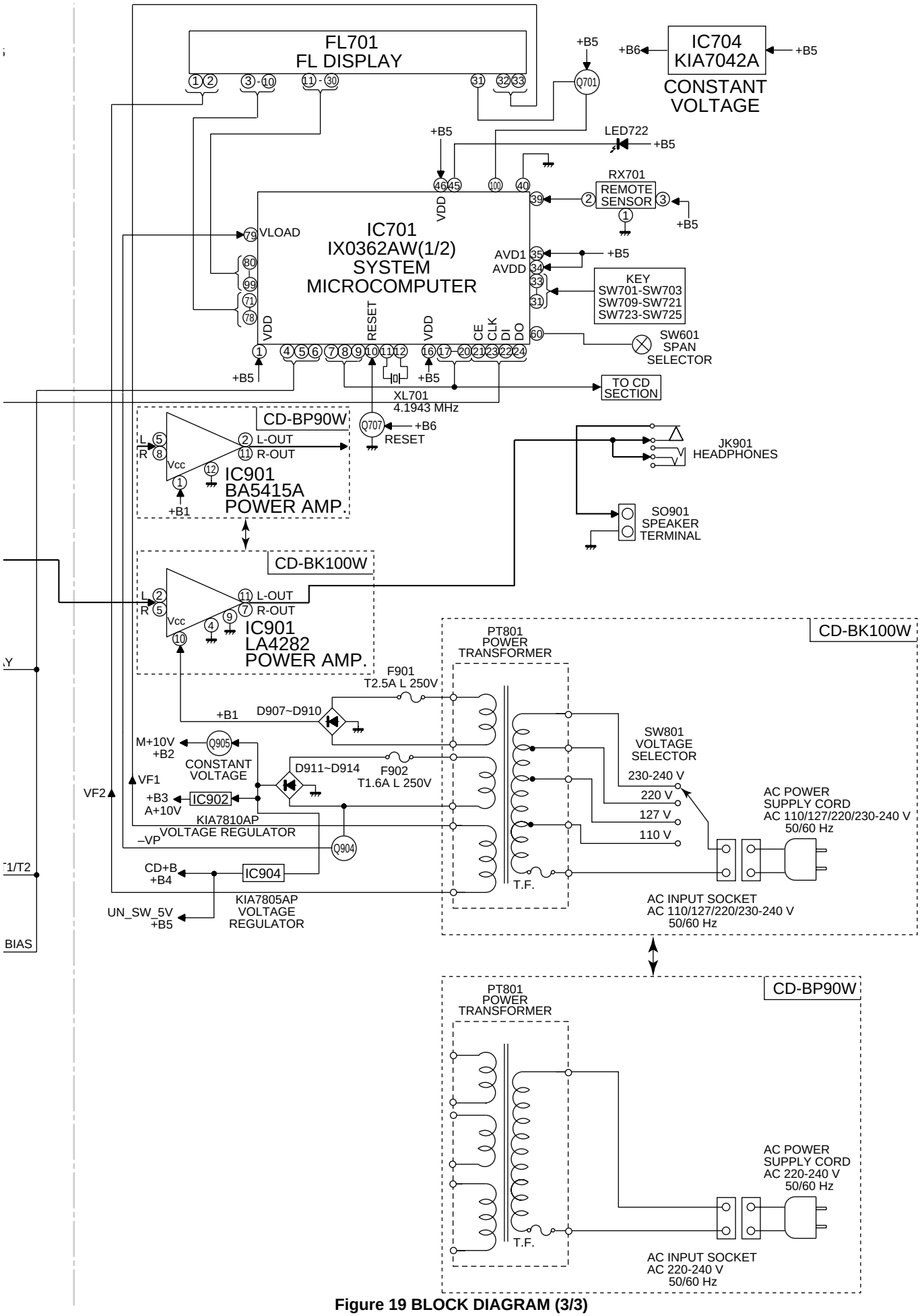
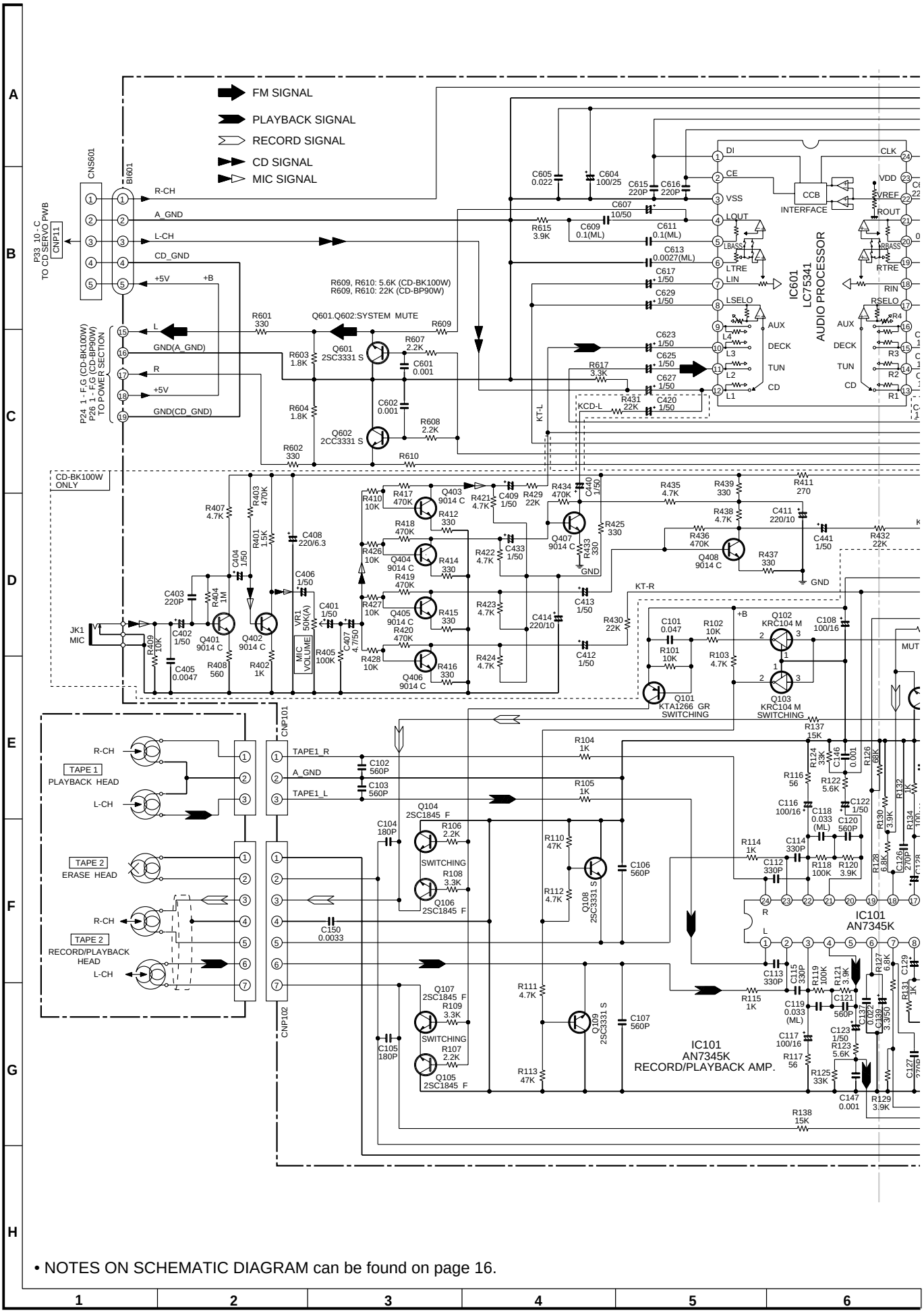


Figure 19 BLOCK DIAGRAM (3/3)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 16.

Figure 20 SCHEMATIC DIAGRAM (1/12)

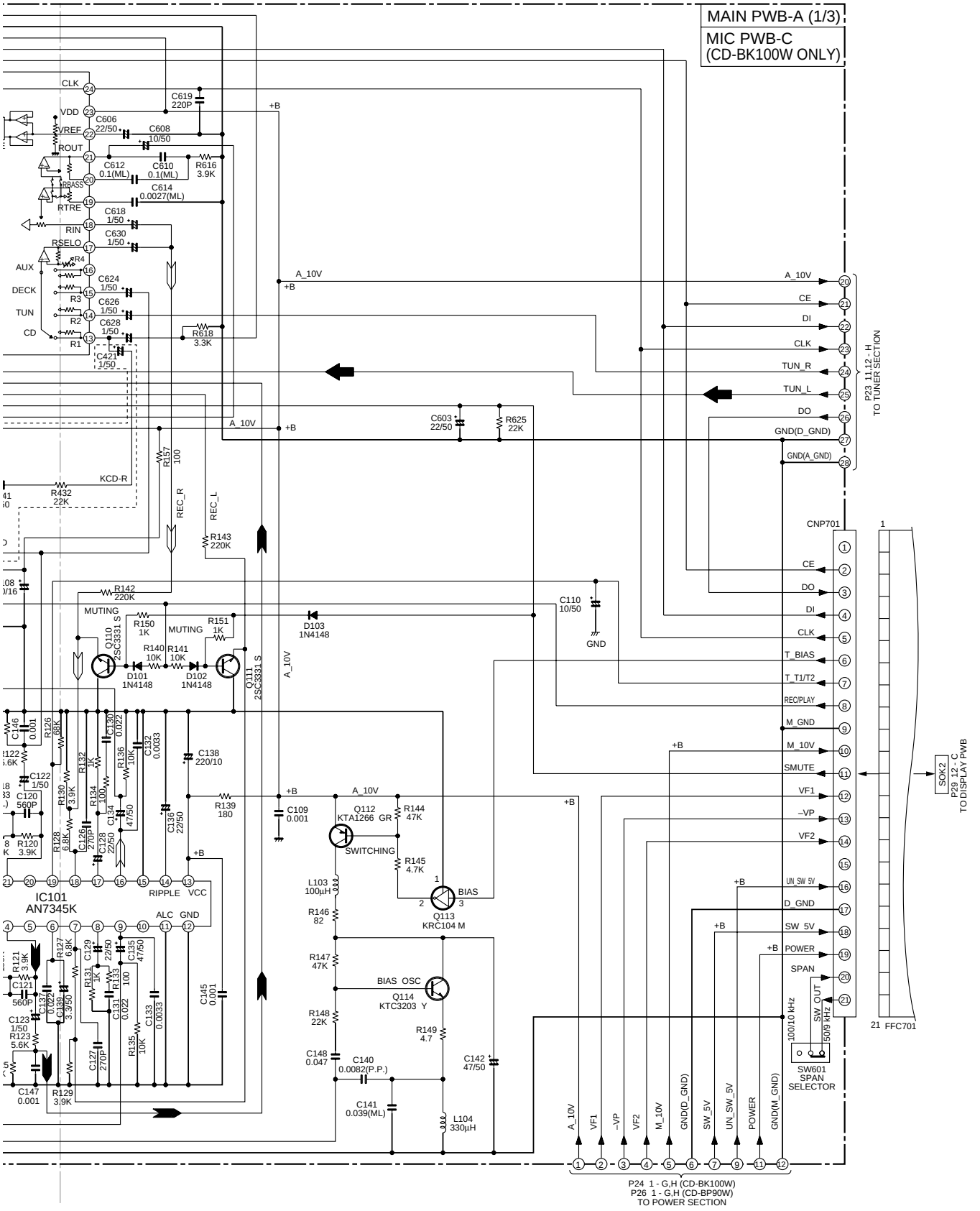
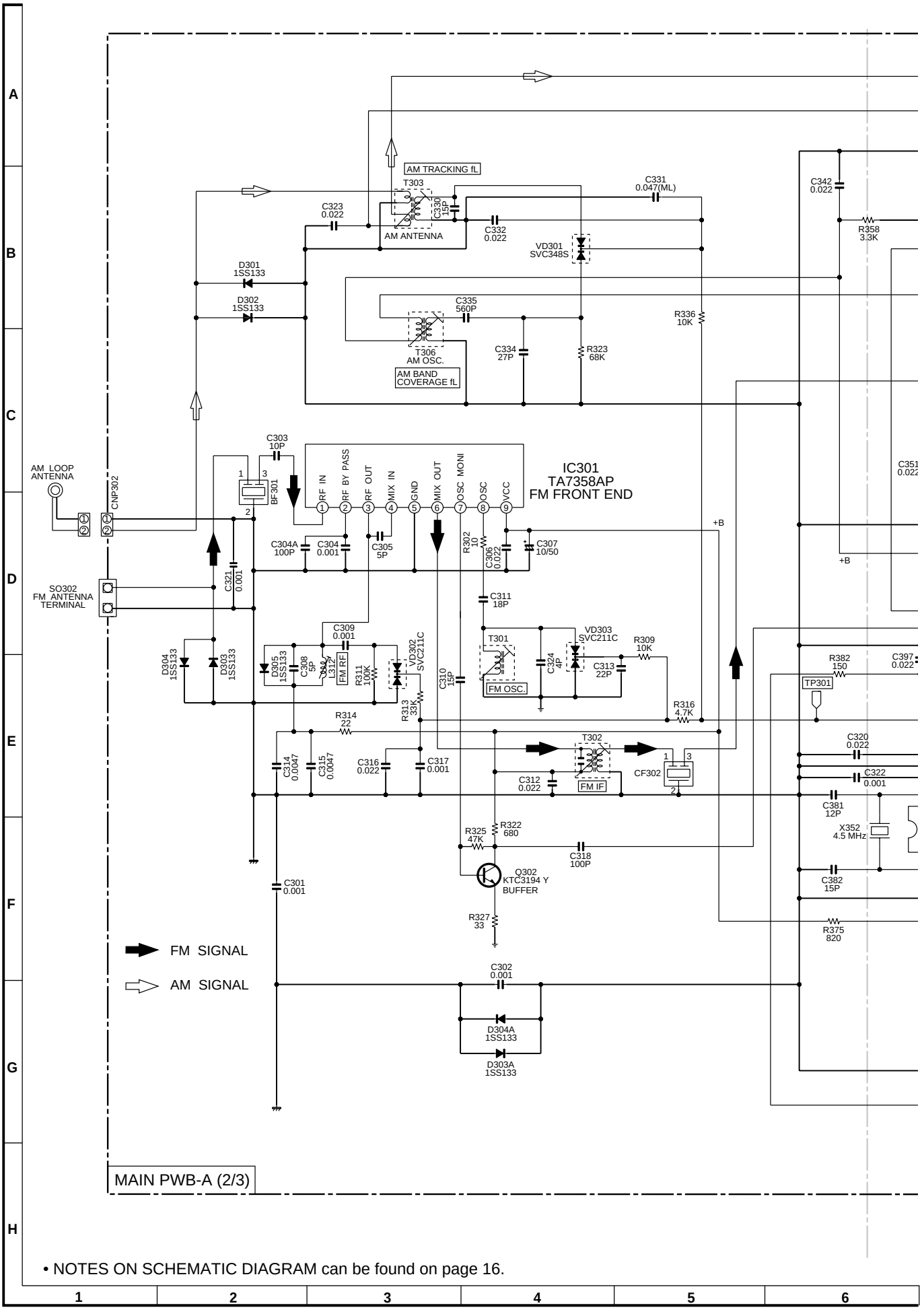
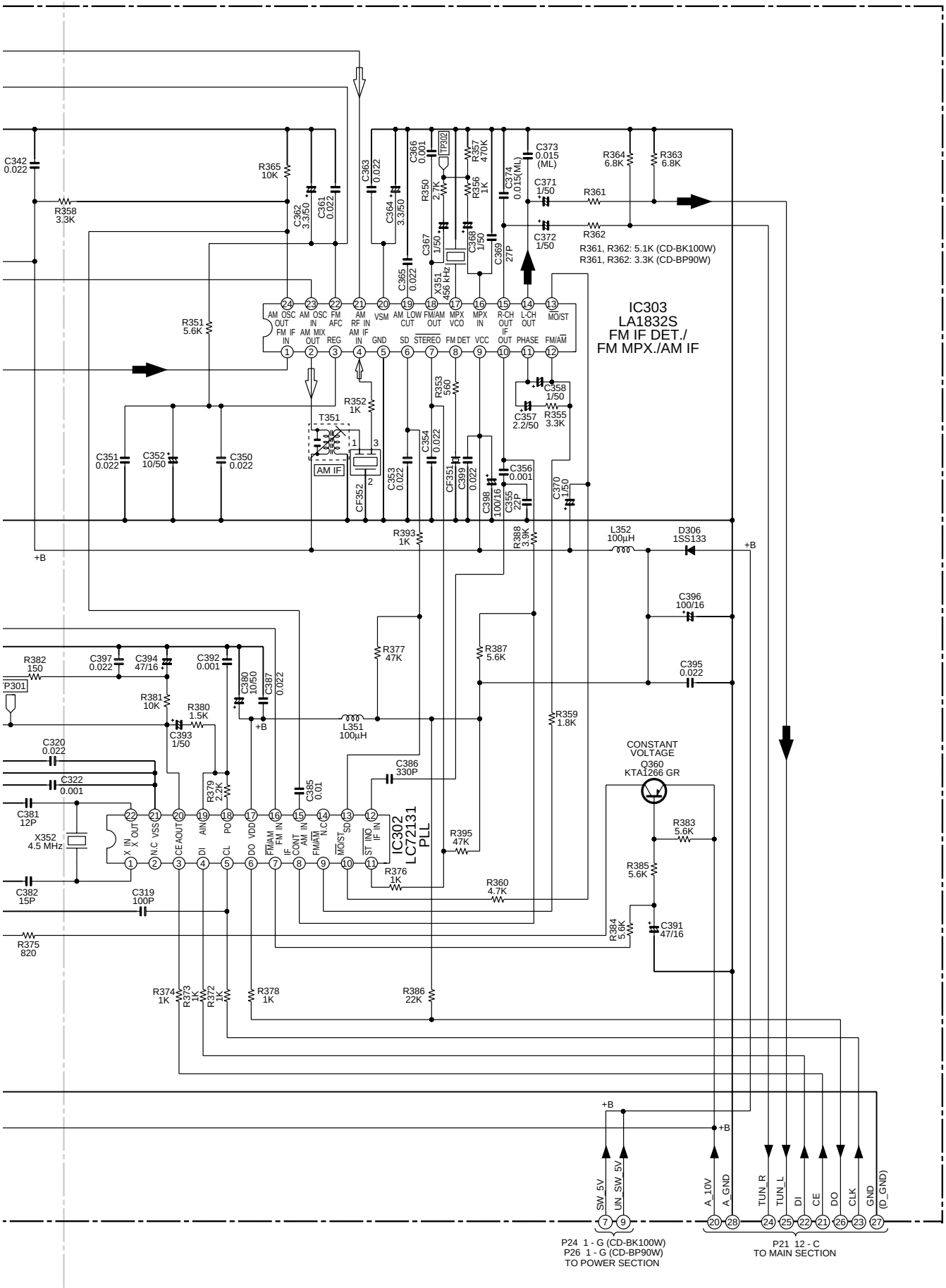


Figure 21 SCHEMATIC DIAGRAM (2/12)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 16.

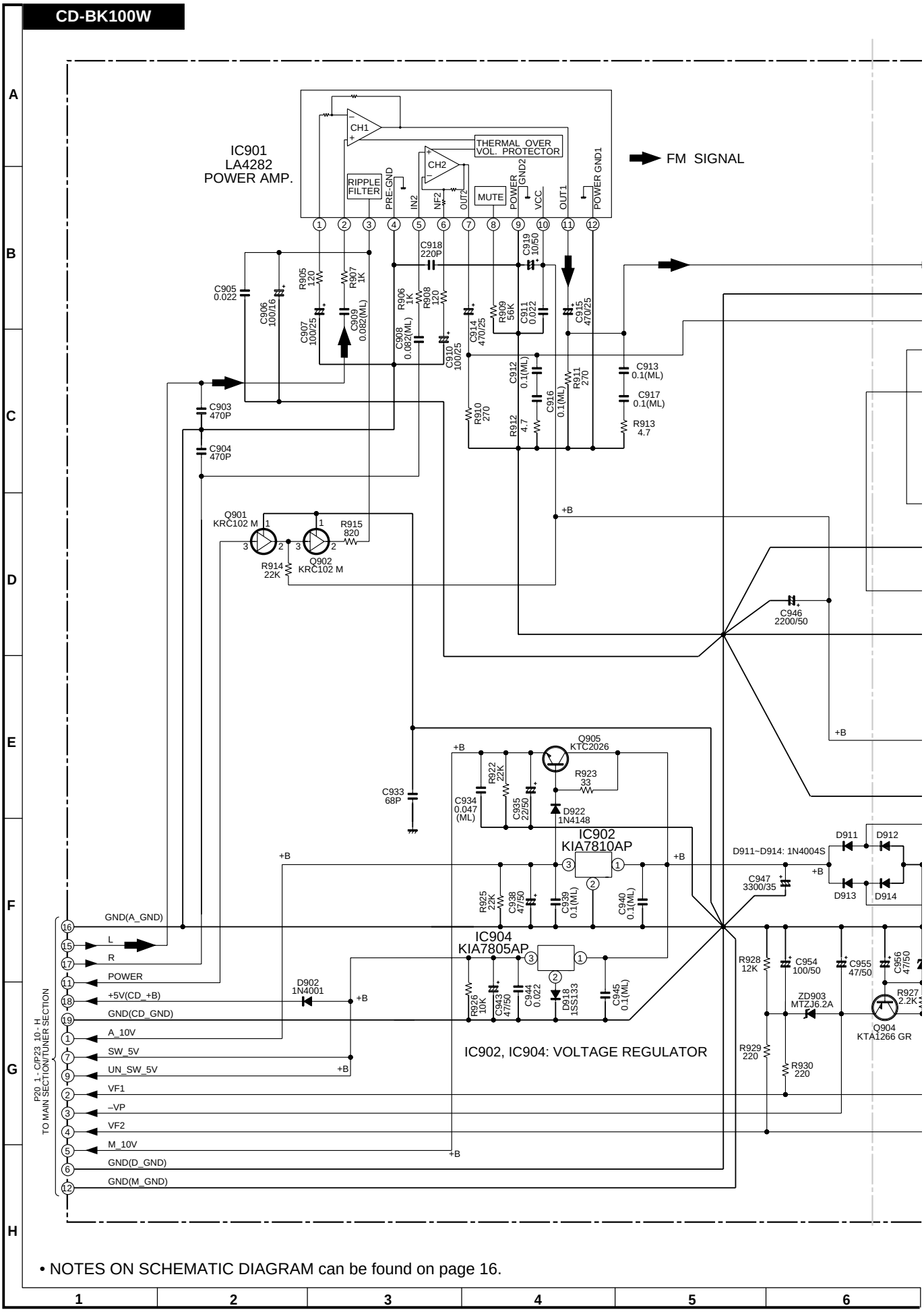
Figure 22 SCHEMATIC DIAGRAM (3/12)



7	8	9	10	11	12

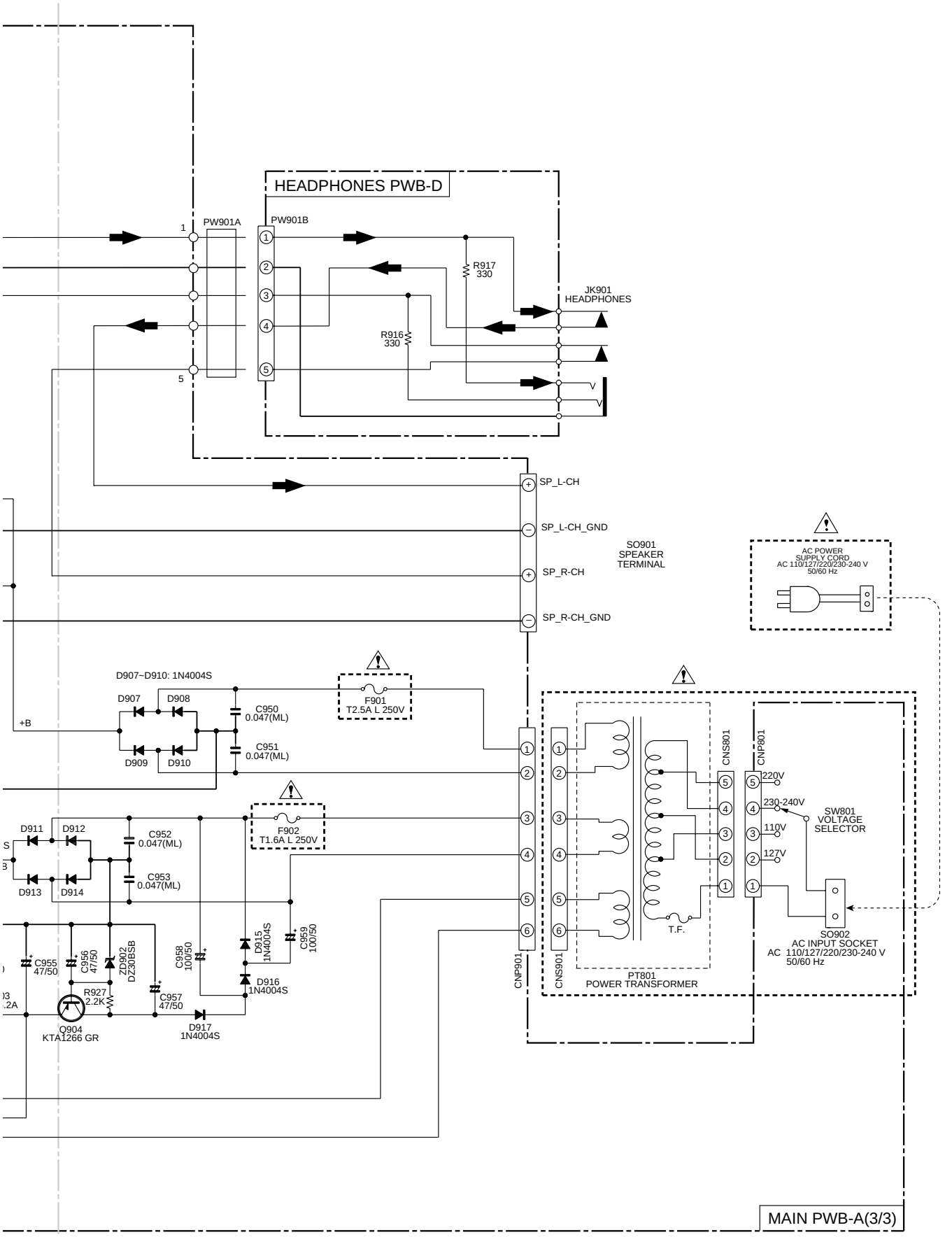
Figure 23 SCHEMATIC DIAGRAM (4/12)

CD-BK100W



• NOTES ON SCHEMATIC DIAGRAM can be found on page 16.

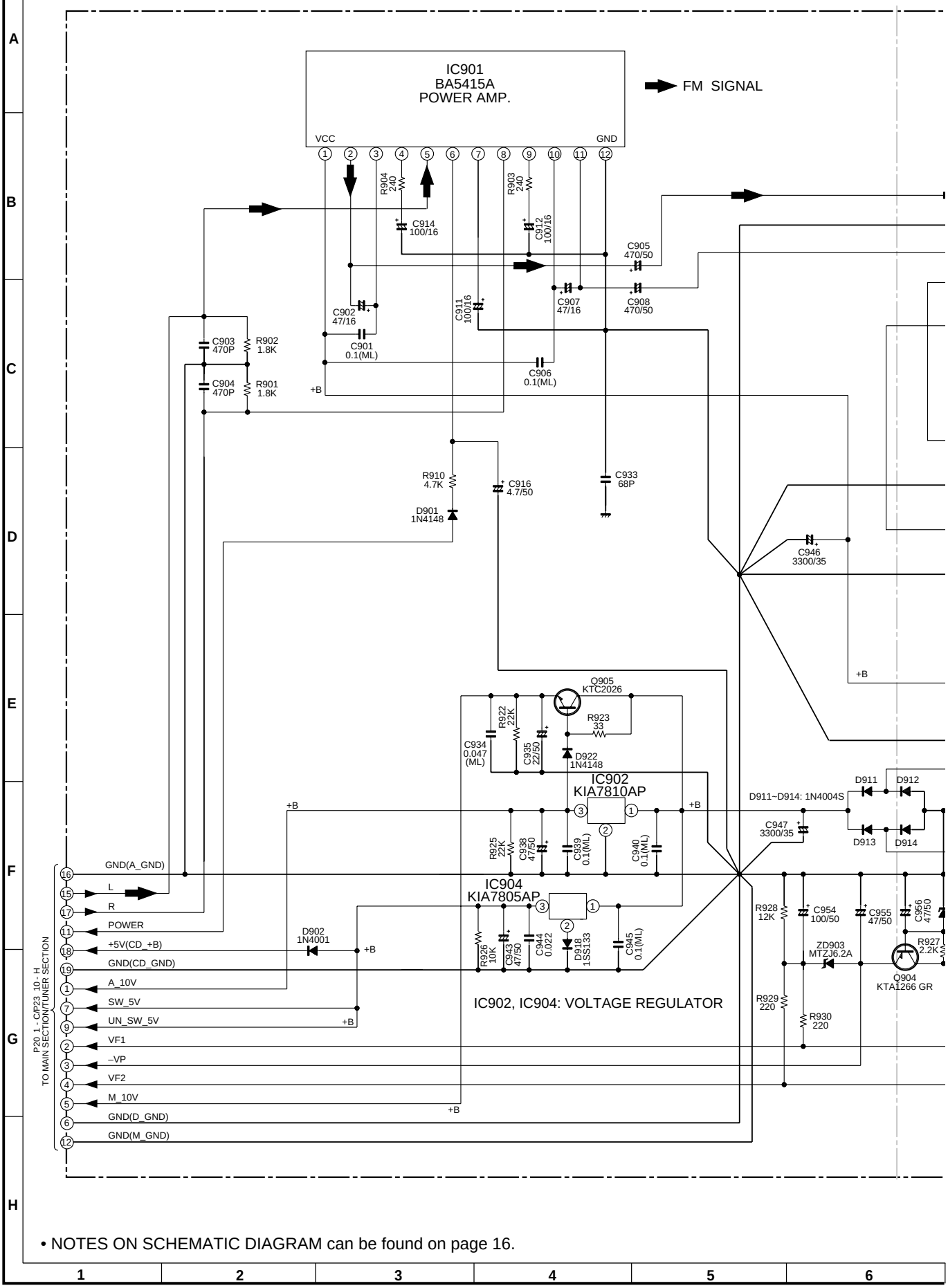
Figure 24 SCHEMATIC DIAGRAM (5/12)



7	8	9	10	11	12

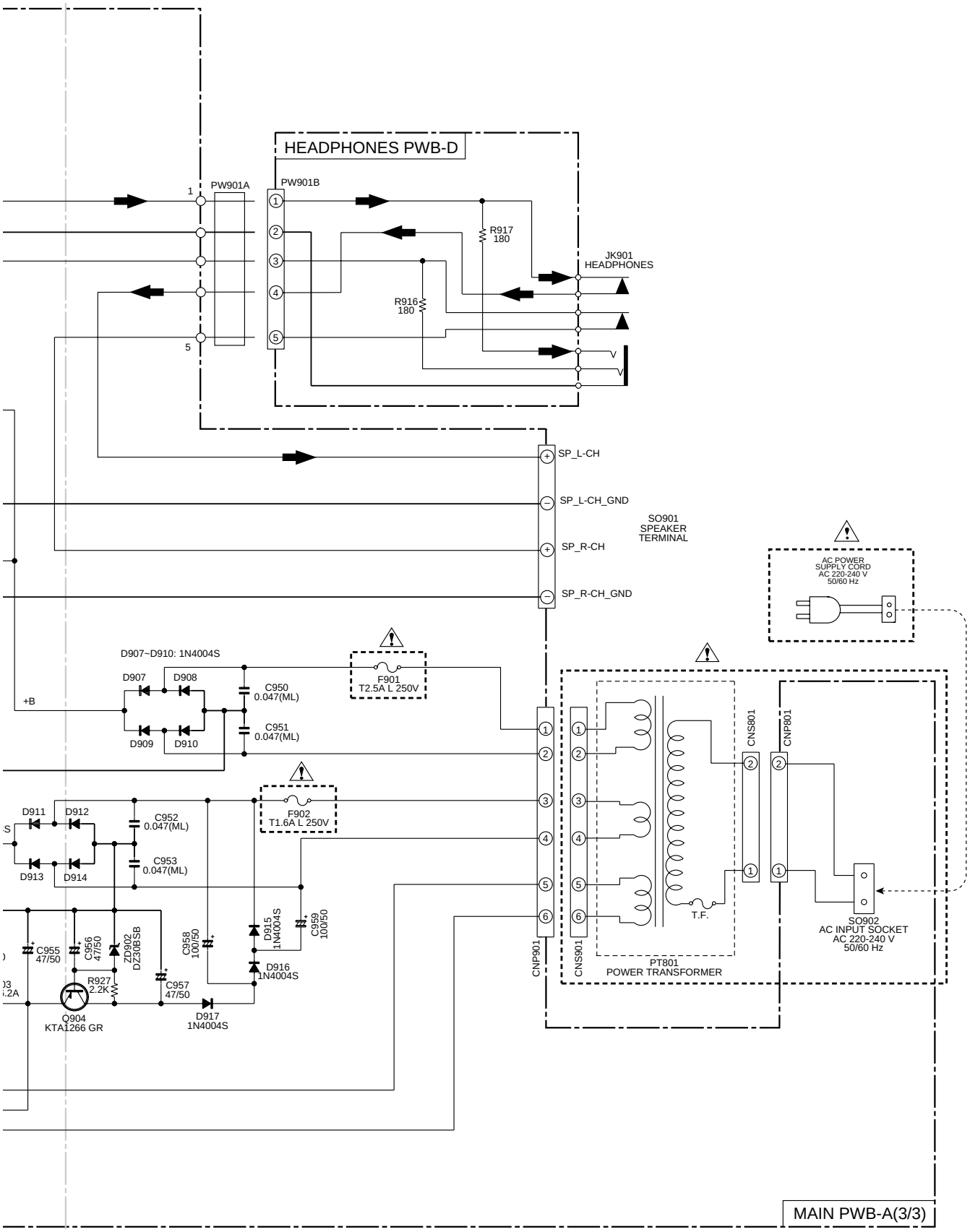
Figure 25 SCHEMATIC DIAGRAM (6/12)

CD-BP90W



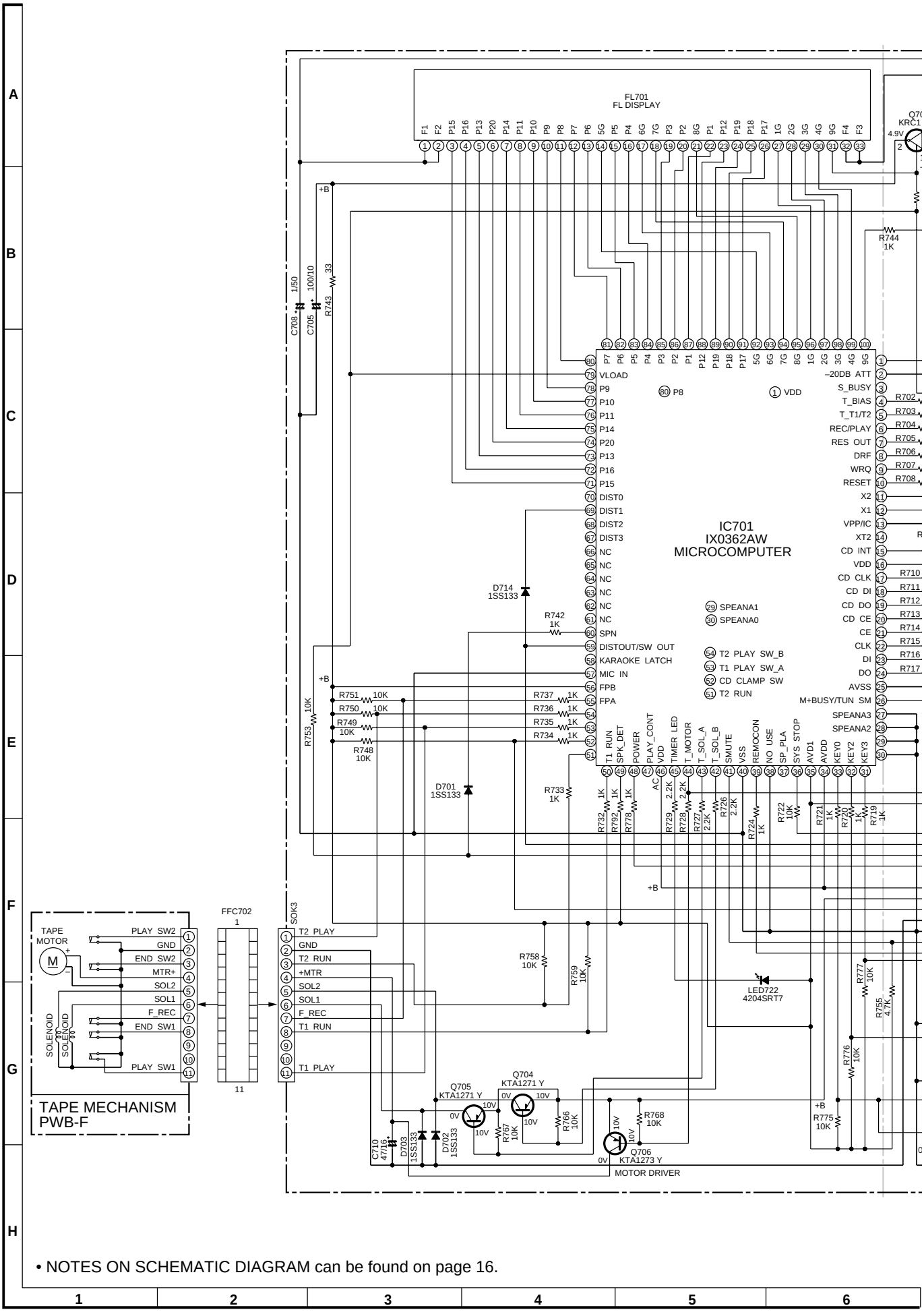
• NOTES ON SCHEMATIC DIAGRAM can be found on page 16.

Figure 26 SCHEMATIC DIAGRAM (7/12)



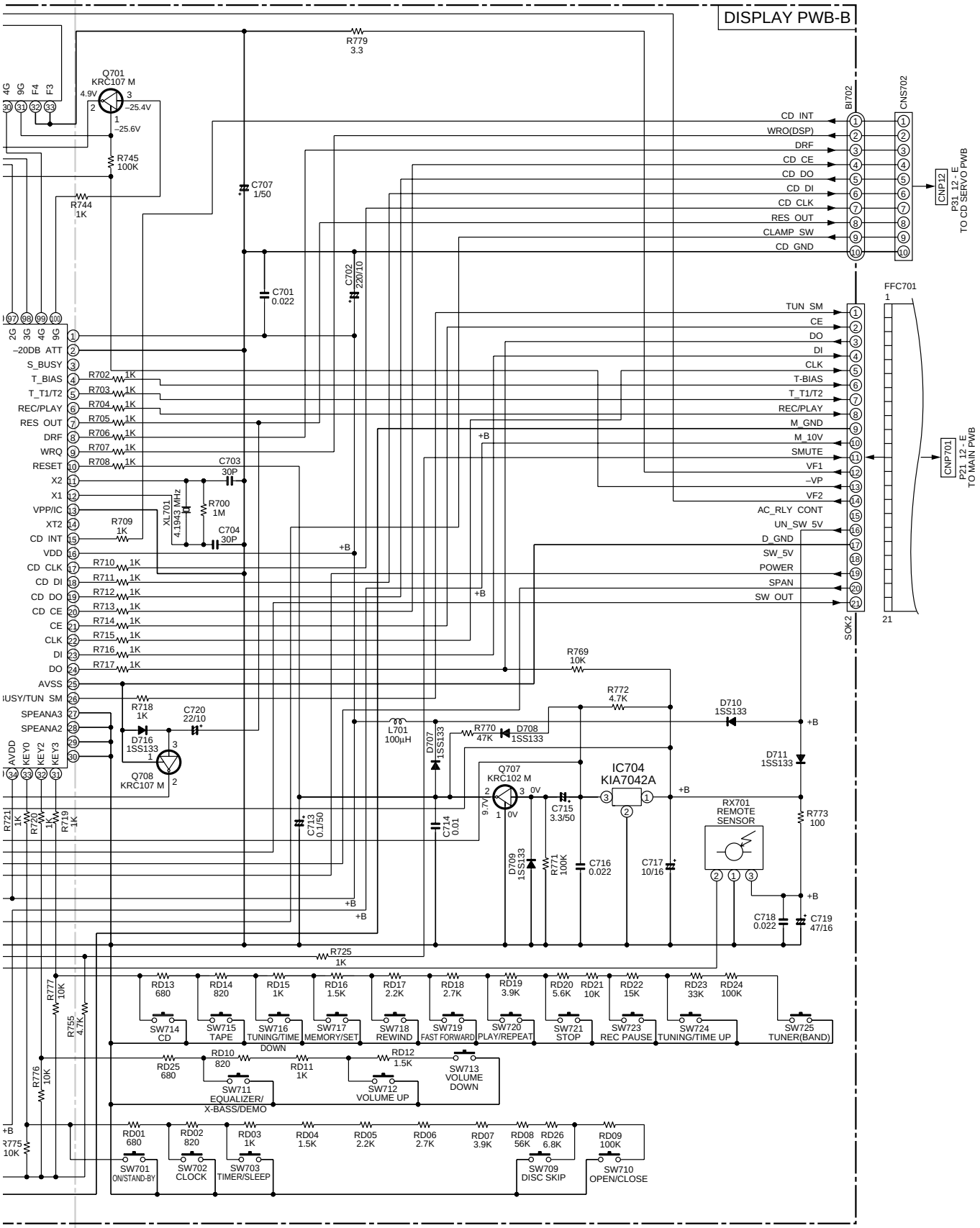
7	8	9	10	11	12

Figure 27 SCHEMATIC DIAGRAM (8/12)



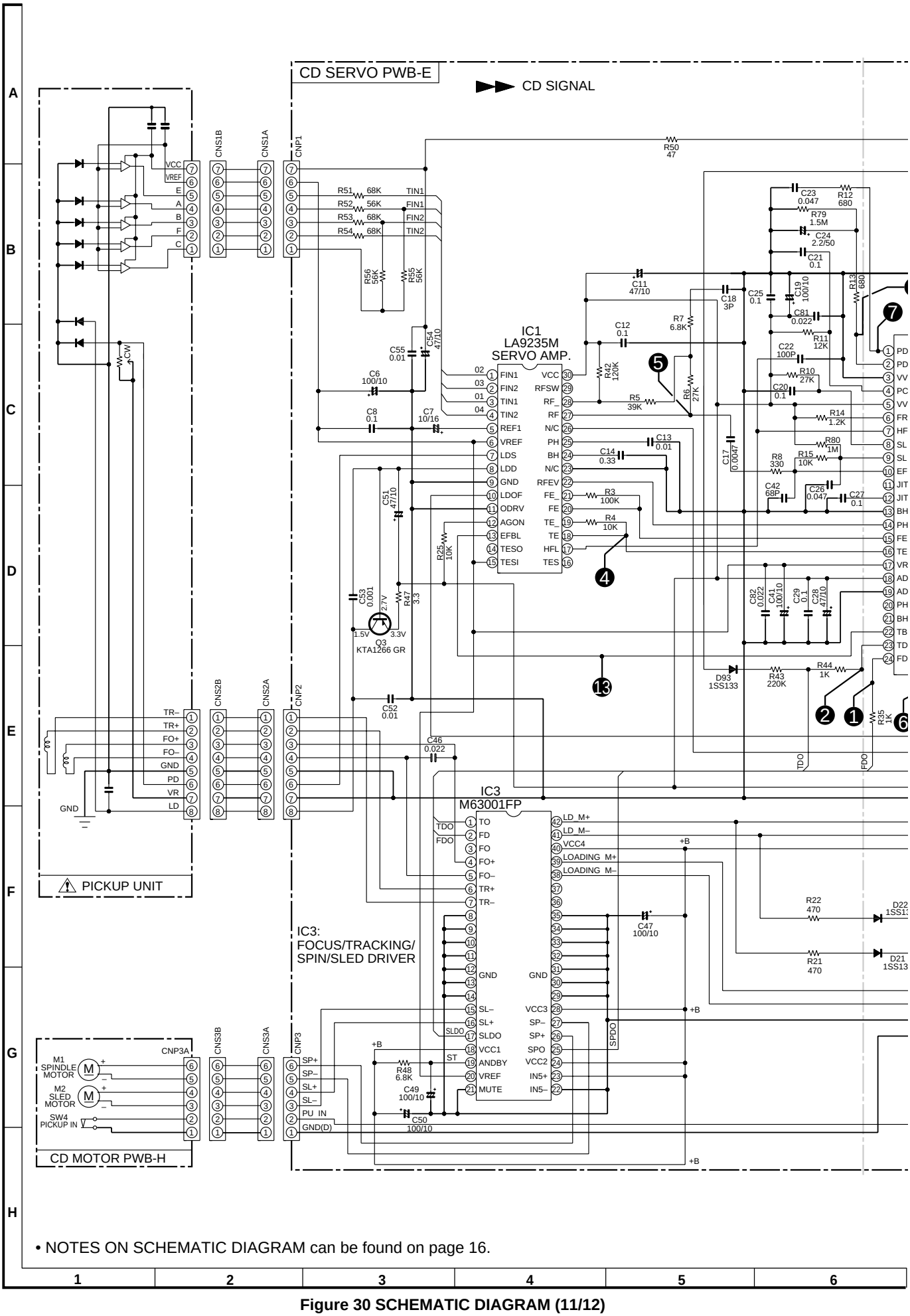
• NOTES ON SCHEMATIC DIAGRAM can be found on page 16.

Figure 28 SCHEMATIC DIAGRAM (9/12)



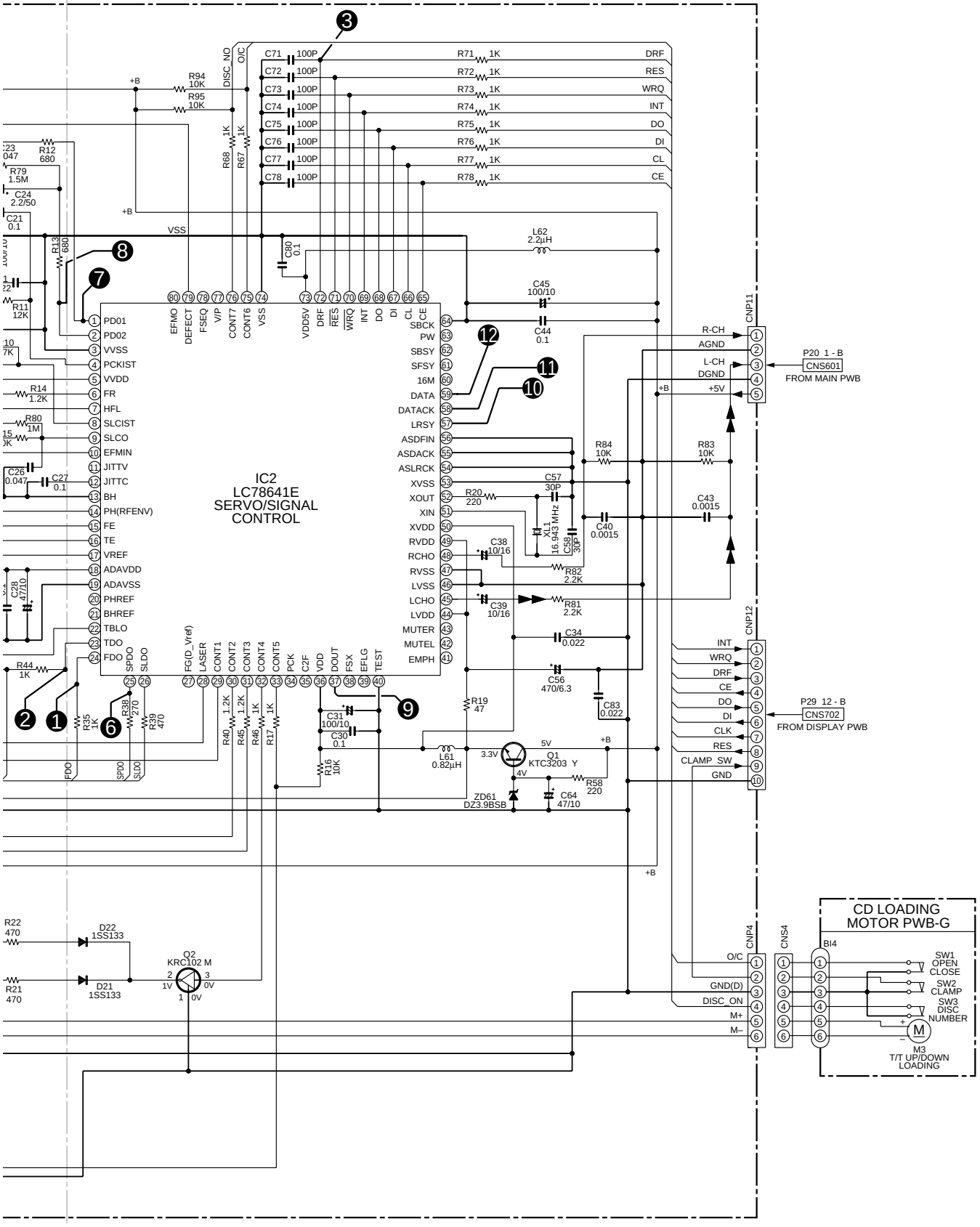
7	8	9	10	11	12

Figure 29 SCHEMATIC DIAGRAM (10/12)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 16.

Figure 30 SCHEMATIC DIAGRAM (11/12)



• The numbers ❶ to ⓭ are waveform numbers shown in page 41.

7	8	9	10	11	12

Figure 31 SCHEMATIC DIAGRAM (12/12)

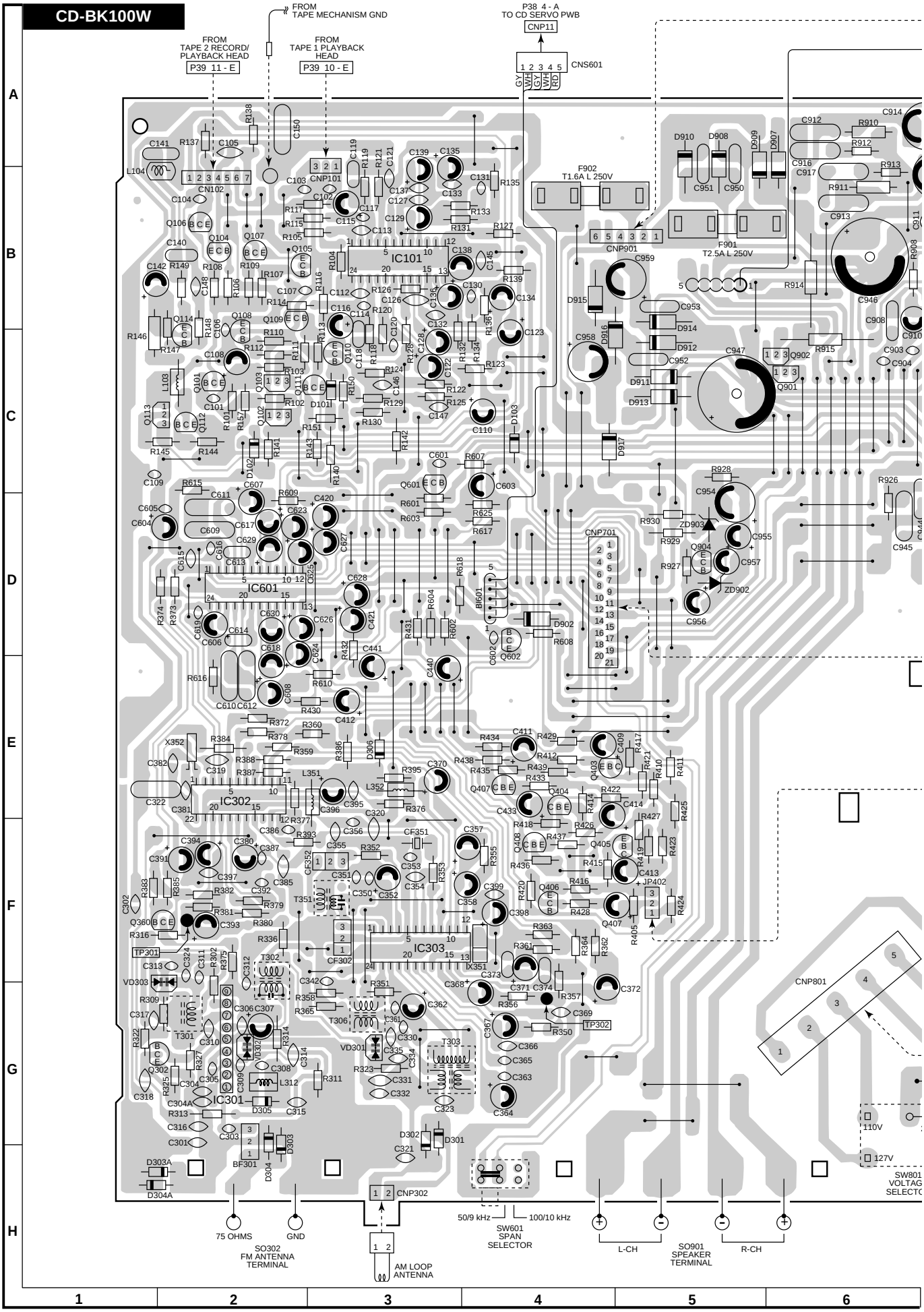
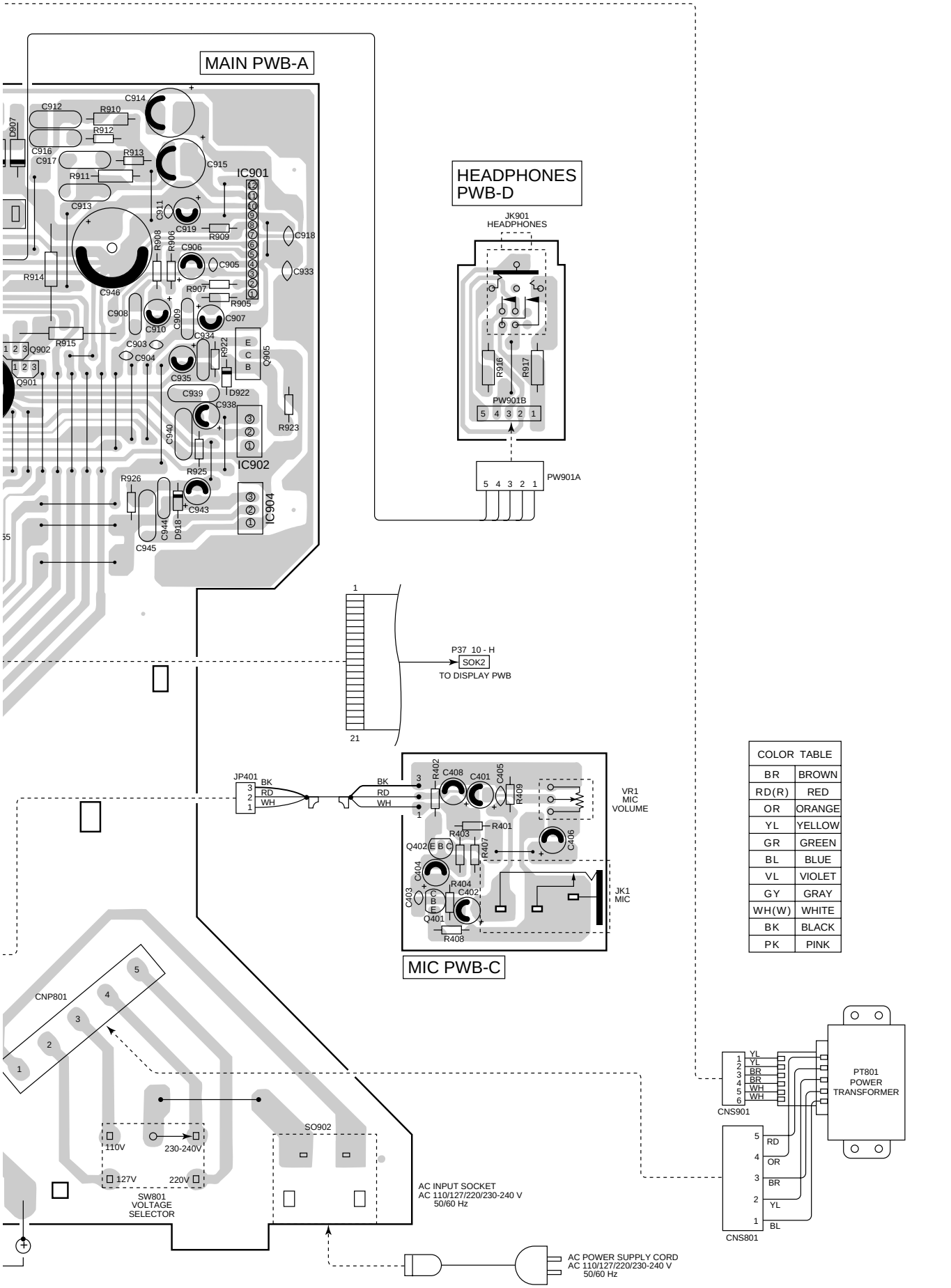


Figure 32 WIRING SIDE OF P.W.BOARD (1/8)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

7	8	9	10	11	12

Figure 33 WIRING SIDE OF P.W.BOARD (2/8)

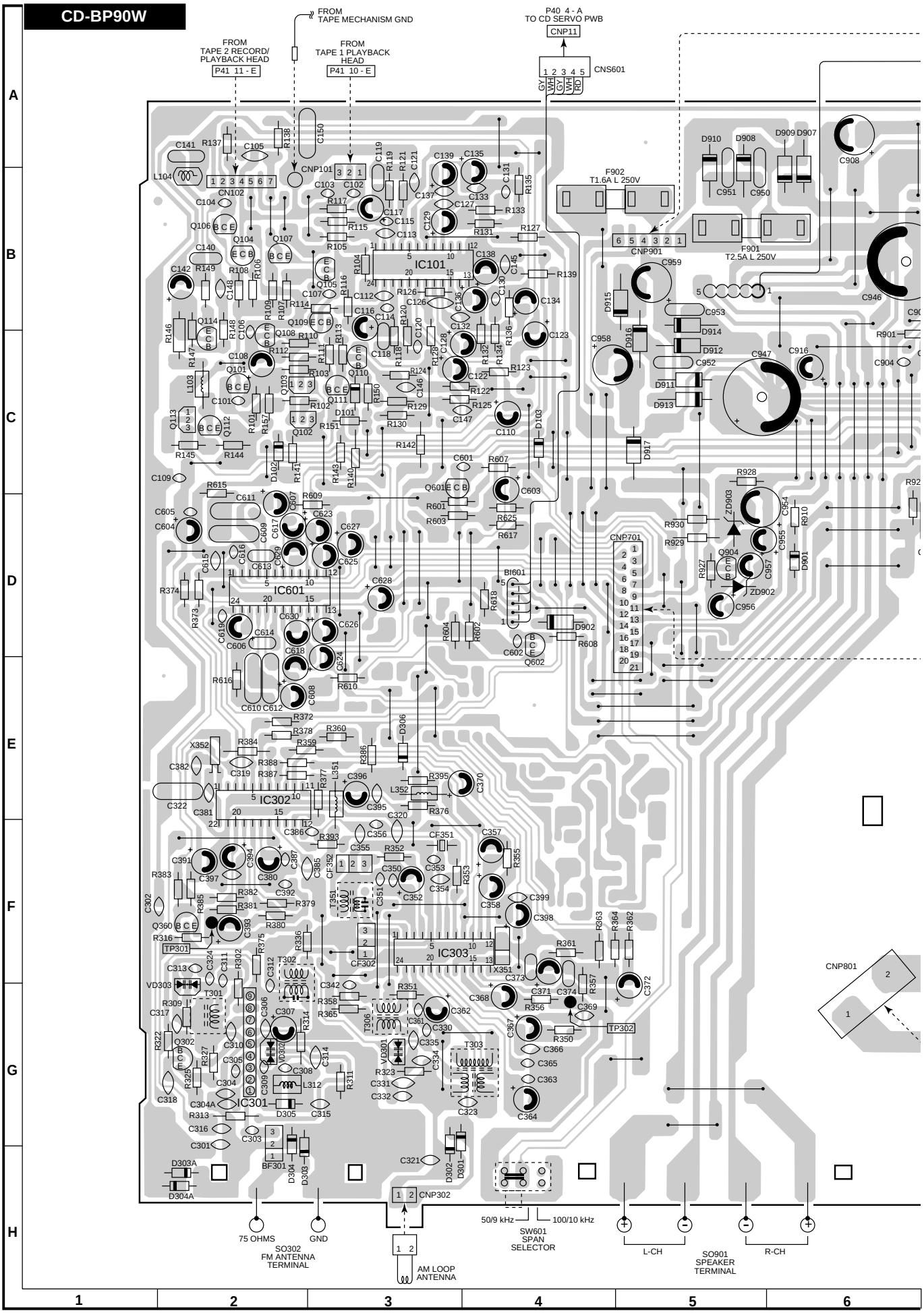
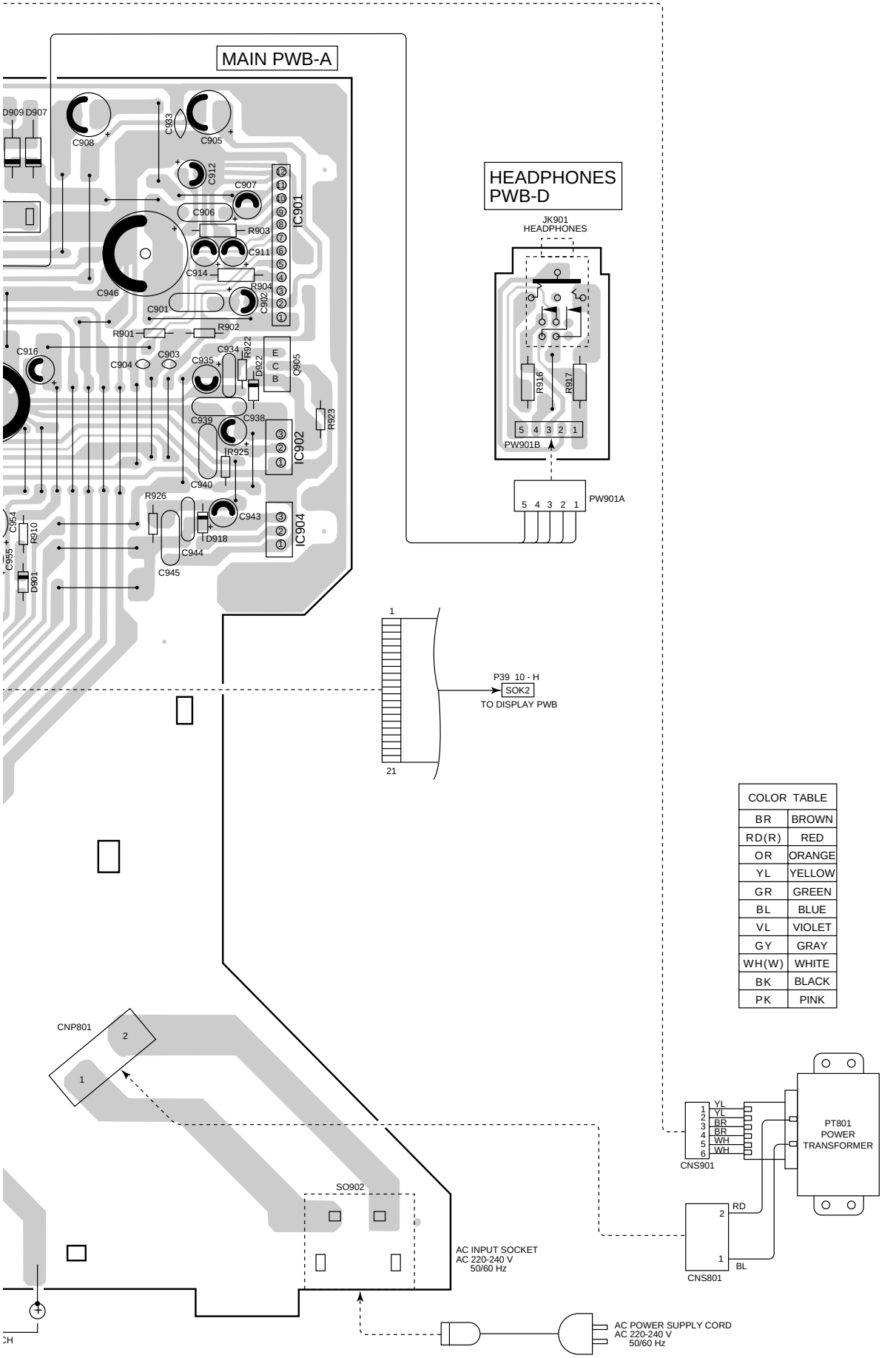


Figure 34 WIRING SIDE OF P.W.BOARD (3/8)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

7	8	9	10	11	12

Figure 35 WIRING SIDE OF P.W.BOARD (4/8)

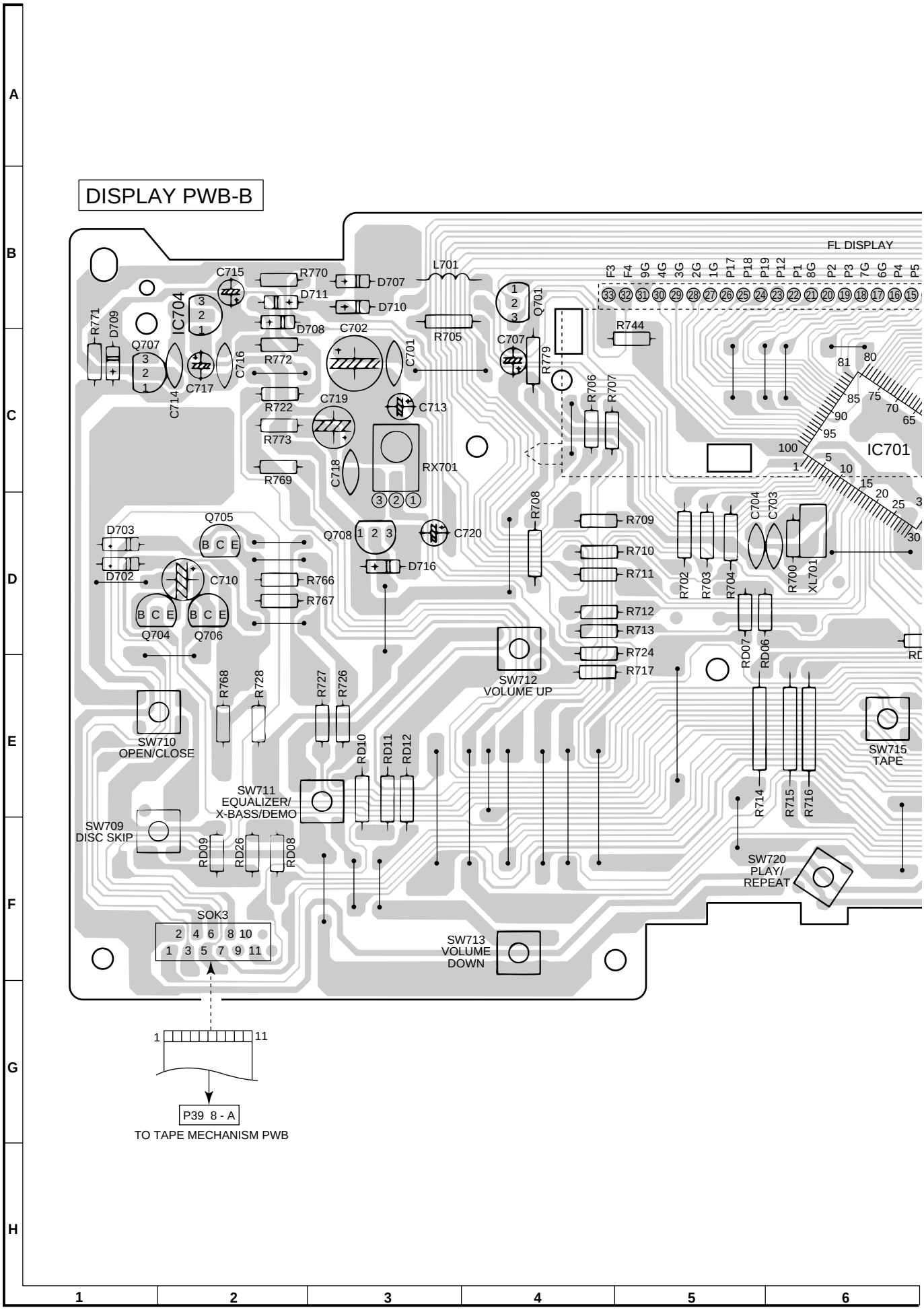
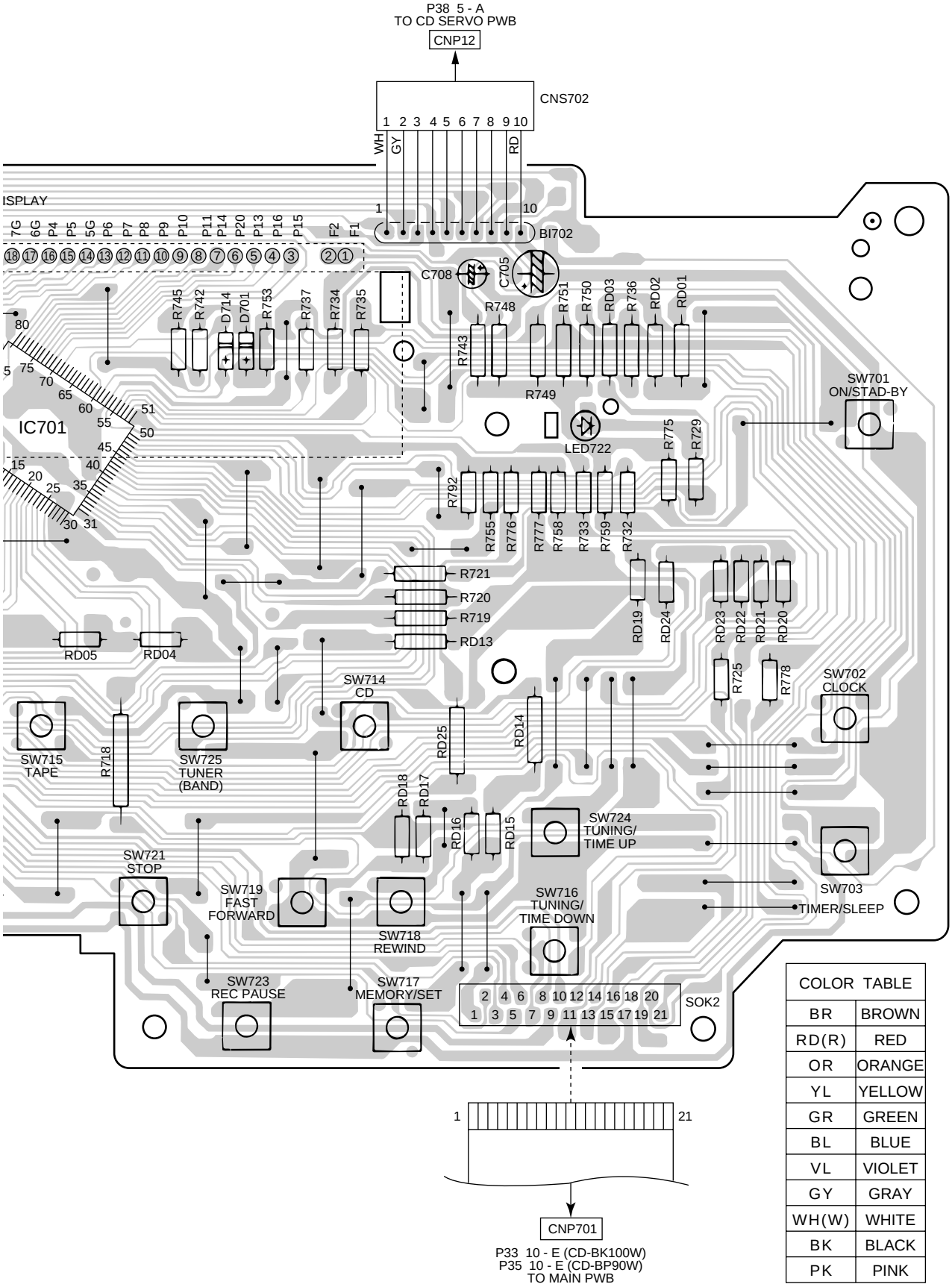


Figure 36 WIRING SIDE OF P.W.BOARD (5/8)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

7	8	9	10	11	12

Figure 37 WIRING SIDE OF P.W.BOARD (6/8)

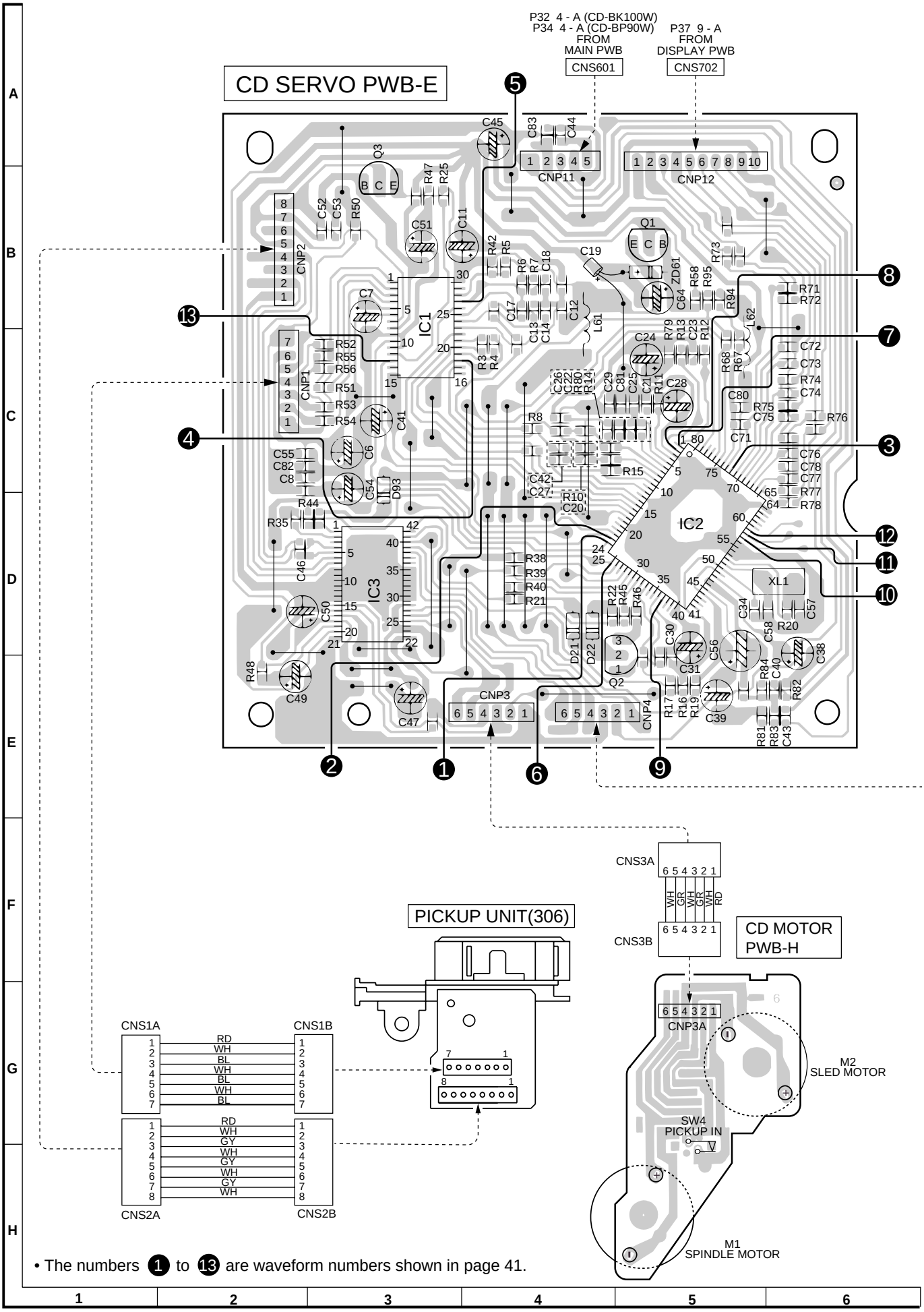
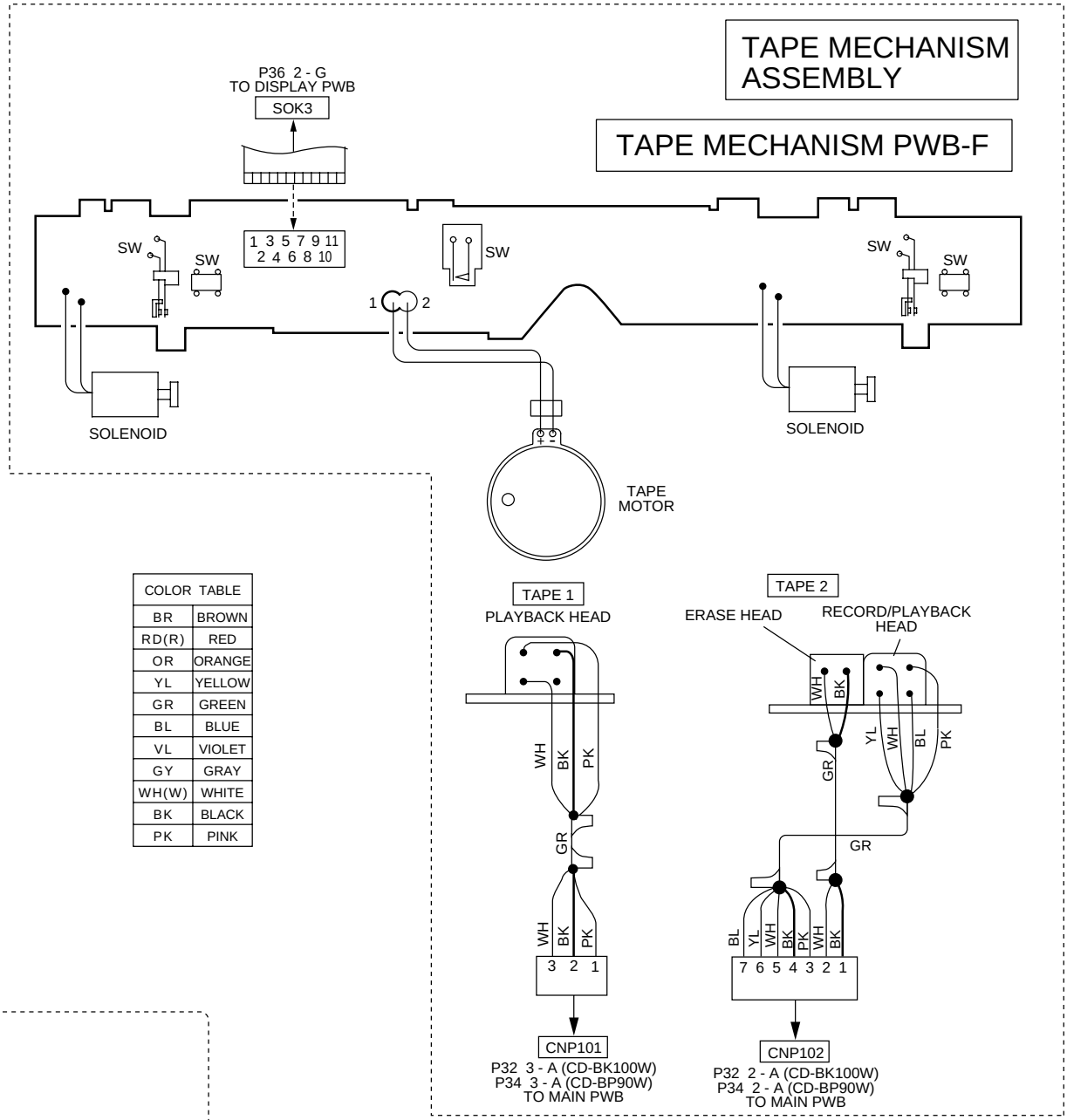
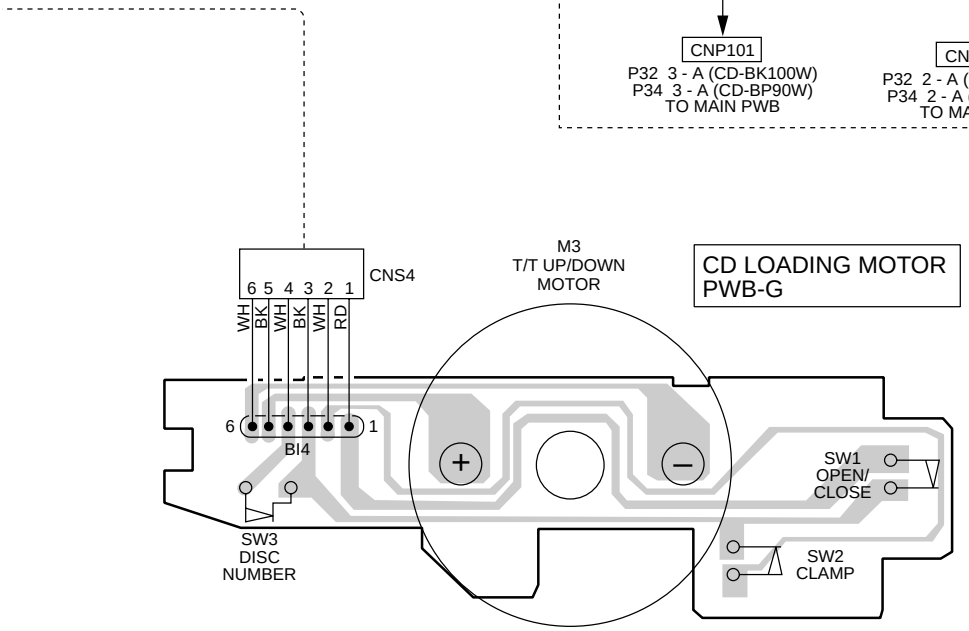


Figure 38 WIRING SIDE OF P.W.BOARD (7/8)





7	8	9	10	11	12

Figure 39 WIRING SIDE OF P.W.BOARD (8/8)

VOLTAGE

IC1	
PIN NO.	VOLTAGE
1	1.6 V
2	1.6 V
3	1.6 V
4	1.6 V
5	1.6 V
6	1.6 V
7	0 V
8	2.6 V
9	0 V
10	0 V
11	0 V
12	3.3 V
13	1.6 V
14	1.6 V
15	1.6 V
16	0 V
17	0 V
18	1.6 V
19	1.6 V
20	1.6 V
21	1.6 V
22	1.6 V
23	0 V
24	1.6 V
25	0 V
26	0 V
27	0 V
28	1.6 V
29	1.6 V
30	3.3 V

IC301	
PIN NO.	VOLTAGE
1	0.8 V (0V)
2	1.5 V (0V)
3	3.6 V (0.4V)
4	1.5 V (0V)
5	0 V (0V)
6	3.6 V (0.4V)
7	2.8 V (0.2V)
8	3.5 V (0.3V)
9	3.6 V (0.3V)

IC303	
PIN NO.	VOLTAGE
1	2.12 V
2	4.78 V
3	2.12 V
4	2.11 V
5	0 V
6	4.65 V
7	4.65 V
8	3.02 V
9	4.78 V
10	4.08 V
11	1.63 V
12	1.13 V
13	2.08 V
14	1.31 V
15	1.29 V
16	2.07 V
17	0 V
18	1.43 V
19	1.99 V
20	1.44 V
21	2.08 V
22	2.08 V
23	4.48 V
24	3.35 V

IC2			
PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0.7 V	41	0 V
2	0 V	42	3.3 V
3	0 V	43	3.3 V
4	0 V	44	3.0 V
5	3.3 V	45	1.5 V
6	2.4 V	46	0 V
7	0 V	47	0 V
8	0 V	48	1.5 V
9	1.6 V	49	3.0 V
10	0 V	50	3.3 V
11	4.7 V	51	1.8 V
12	1.7 V	52	3.0 V
13	0 V	53	0 V
14	1.6 V	54	0 V
15	1.6 V	55	0 V
16	1.6 V	56	0 V
17	1.6 V	57	1.7 V
18	3.3 V	58	3.3 V
19	0 V	59	0 V
20	1.6 V	60	3.0 V
21	1.6 V	61	1.6 V
22	1.6 V	62	2.4 V
23	1.6 V	63	0 V
24	1.6 V	64	0 V
25	1.6 V	65	0 V
26	1.6 V	66	0 V
27	1.6 V	67	0 V
28	0 V	68	4.8 V
29	0 V	69	4.9 V
30	2.1 V	70	4.9 V
31	2.1 V	71	4.6 V
32	0 V	72	0 V
33	3.3 V	73	4.9 V
34	3.5 V	74	0 V
35	3.3 V	75	0 V
36	3.3 V	76	0 V
37	3.3 V	77	3.2 V
38	1.6 V	78	0 V
39	1.6 V	79	0 V
40	0 V	80	3.4 V

IC101	
PIN NO.	VOLTAGE
1	0 V
2	0 V
3	0.55 V
4	2.16 V
5	0 V
6	1.25 V
7	0 V
8	0.58 V
9	3.17 V
10	3.55 V
11	0 V
12	0 V
13	4.72 V
14	4.37 V
15	0 V
16	3.67 V
17	0.38 V
18	0 V
19	0 V
20	0 V
21	2.16 V
22	0.55 V
23	0 V
24	0 V

IC601	
PIN NO.	VOLTAGE
1	0 V
2	0 V
3	0 V
4	4.96 V
5	4.96 V
6	4.96 V
7	4.96 V
8	4.89 V
9	4.78 V
10	4.78 V
11	4.78 V
12	4.78 V
13	4.78 V
14	4.78 V
15	4.78 V
16	4.78 V
17	5.1 V
18	5.5 V
19	5.0 V
20	4.66 V
21	5.03 V
22	4.97 V
23	10.0 V
24	0 V

IC3	
PIN NO.	VOLTAGE
1	1.6 V
2	1.6 V
3	1.8 V
4	2.1 V
5	2.1 V
6	2.1 V
7	2.1 V
8	0 V
9	0 V
10	0 V
11	0 V
12	0 V
13	0 V
14	0 V
15	2.1 V
16	2.1 V
17	1.6 V
18	4.9 V
19	3.5 V
20	1.6 V
21	0 V
22	0 V
23	4.9 V
24	4.9 V
25	1.6 V
26	2.1 V
27	2.1 V
28	1.9 V
29	0 V
30	0 V
31	0 V
32	0 V
33	0 V
34	0 V
35	0 V
36	4.2 V
37	0 V
38	2.1 V
39	2.1 V
40	4.9 V
41	2.1 V
42	2.1 V

IC302	
PIN NO.	VOLTAGE
1	2.15 V
2	0 V
3	0 V
4	0 V
5	0 V
6	4.83 V
7	9.87 V
8	4.4 V
9	0 V
10	0 V
11	4.64 V
12	2.27 V
13	4.66 V
14	0 V
15	2.13 V
16	0 V
17	4.86 V
18	0.73 V
19	0.73 V
20	6.3 V
21	0 V
22	2.33 V

IC701			
PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	4.86 V	51	0 V
2	0 V	52	0 V
3	4.85 V	53	4.97 V
4	0 V	54	4.97 V
5	4.78 V	55	4.97 V
6	4.82 V	56	4.97 V
7	4.84 V	57	0 V
8	0 V	58	0 V
9	4.91 V	59	–29.7 V
10	4.72 V	60	–29.5 V
11	2.34 V	61	–29.5 V
12	2.31 V	62	–29.5 V
13	0 V	63	–29.5 V
14	0 V	64	–29.5 V
15	4.91 V	65	–29.5 V
16	4.88 V	66	–29.5 V
17	4.88 V	67	–29.5 V
18	0 V	68	–29.5 V
19	4.91 V	69	–29.5 V
20	0 V	70	–29.5 V
21	0 V	71	–26.4 V
22	0 V	72	–20.2 V
23	0 V	73	–26.4 V
24	4.95 V	74	–29.5 V
25	0 V	75	–20.2 V
26	0.37 V	76	–20.2 V
27	0 V	77	–29.5 V
28	0 V	78	–26.4 V
29	0 V	79	–29.5 V
30	0 V	80	–29.5 V
31	4.97 V	81	–20.2 V
32	4.97 V	82	–17.3 V
33	4.97 V	83	–29.5 V
34	4.87 V	84	–29.5 V
35	4.98 V	85	–29.5 V
36	4.97 V	86	–29.5 V
37	0 V	87	–26.4 V
38	0 V	88	–20.2 V
39	4.83 V	89	–23.3 V
40	0 V	90	–29.5 V
41	1.94 V	91	–29.5 V
42	13.76 V	92	–26.4 V
43	13.76 V	93	–26.4 V
44	13.76 V	94	–26.4 V
45	3.55 V	95	–26.4 V
46	4.85 V	96	–26.4 V
47	4.85 V	97	–26.4 V
48	4.72 V	98	–26.4 V
49	4.97 V	99	–26.4 V
50	0 V	100	–26.4 V

IC902	
PIN NO.	VOLTAGE
1	20.3 V
2	0 V
3	9.97 V

Q905	
PIN NO.	VOLTAGE
1	14.33 V
2	20.3 V
3	13.8 V

IC904	
PIN NO.	VOLTAGE
1	20.3 V
2	0.67 V
3	5.7 V

IC704	
PIN NO.	VOLTAGE
1	5 V
2	0 V
3	5 V

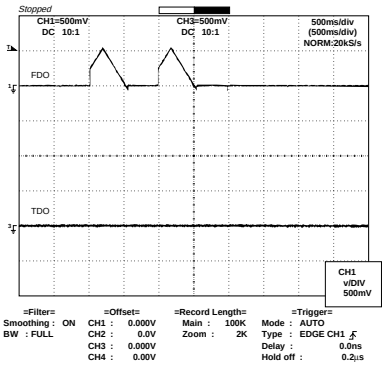
IC901 (CD-BK100W)	
PIN NO.	VOLTAGE
1	0 V
2	0 V
3	16.72 V
4	0 V
5	0 V
6	0 V
7	16.72 V
8	0 V
9	0 V
10	34.2 V
11	16.6 V
12	0 V

IC901 (CD-BP90W)	
PIN NO.	VOLTAGE
1	19.35 V
2	0 V
3	0 V
4	0 V
5	0 V
6	0 V
7	0.28 V
8	0 V
9	0 V
10	0 V
11	0 V
12	0 V

WAVEFORMS OF CD CIRCUIT

1 IC2 (24)

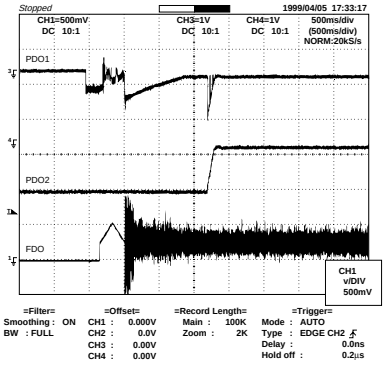
2 IC2 (23)



7 IC2 (1)

8 IC2 (2)

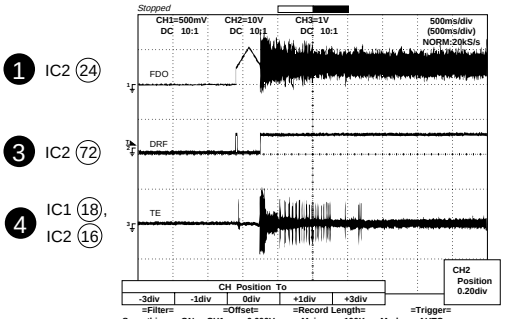
1 IC2 (24)



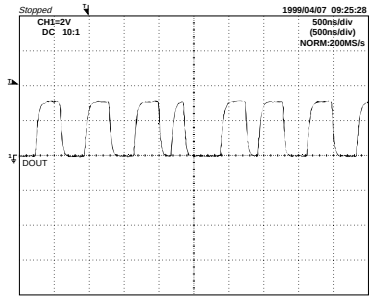
1 IC2 (24)

3 IC2 (72)

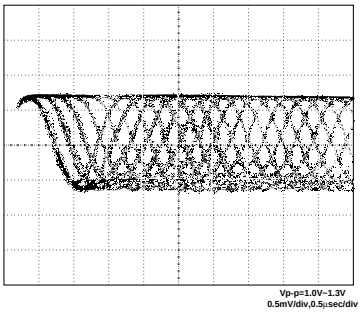
4 IC1 (18), IC2 (16)



9 IC2 (37)



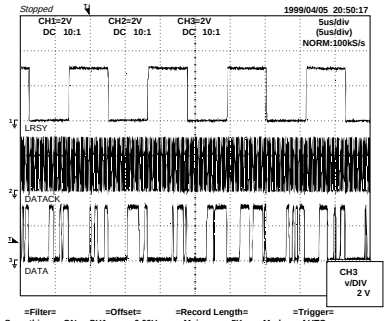
5 IC1 (27)



10 IC2 (57)

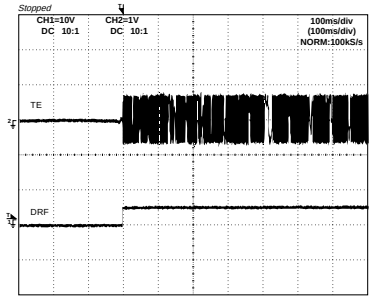
11 IC2 (58)

12 IC2 (59)



4 IC1 (18), IC2 (16)

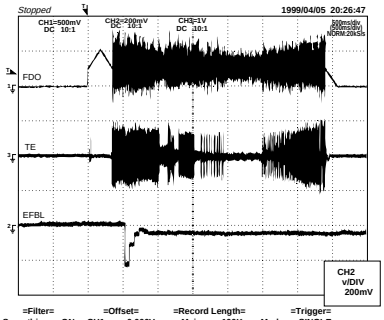
3 IC2 (72)



1 IC2 (24)

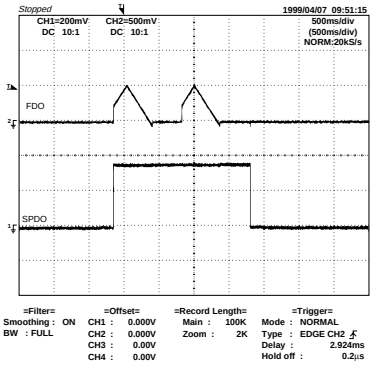
4 IC1 (18), IC2 (16)

13 IC1 (13), IC2 (22)



1 IC2 (24)

6 IC2 (25)



TROUBLESHOOTING

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the trouble shooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

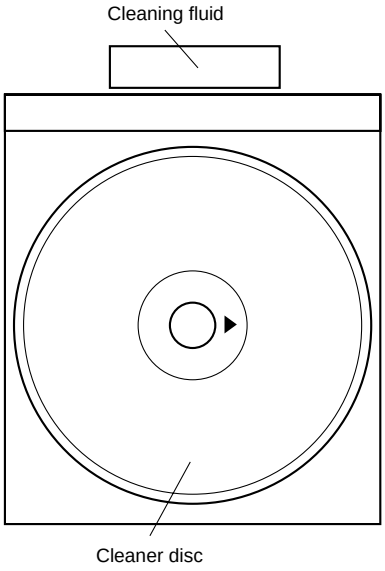
Turn off the power, and wipe the lens softly using a cleaning paper moistened with commercially available cleaning solution so as not to damage it. Be careful not to touch the lens with bare hands.

Dust gradually accumulates on the objective lens during use, and it may degrade performance. To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

		Parts code
1.	CD optical pickup Lens cleaner disc	UDSKA0004AFZZ

HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down,then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continuous to turn, press the stop button.



CAUTION

- The CD lens cleaner should be effective for 30-50 operations, however if the brushes become worn out earlier then please the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD players or on computer CD-ROM drives.
-

When a CD cannot be played

1. "E-CD01" is displayed.

(1) Check the power to IC2 (LC78641E), the presence of the clock signal (16.943 MHz) and the status of the RESET terminal (pin 71 on IC2).
(2) Does the pickup move to the PICKUP-IN Switch (SW4) position?

If (1) and (2) are OK, check the system microcomputer (especially the communication line with the DSP).

2. Pressing the CD operation key is accepted, but playback does not occur.

(1) Focus-HF system check
(2) Tracking system check
(3) Spin system check
(4) PLL system check
(5) Others

(1) Focus-HF system check.

Although a CD is inserted and the cover is closed, "NO DISC" is displayed.

Press the OPEN/CLOSE switch (SW1) without inserting a disc, and try starting the playback operation.

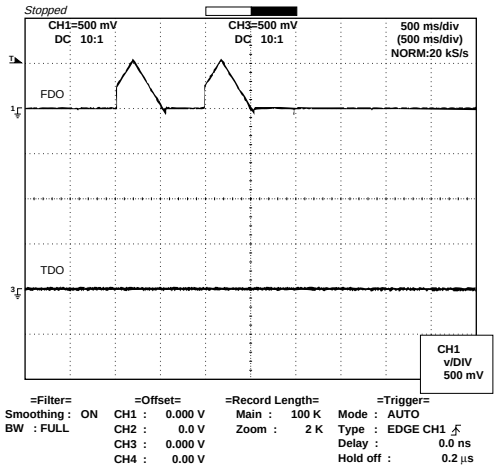


Figure 43-1

1. Does the pickup move to the PICKUP-IN Switch (SW4) position ?
   - No → Sled motor (M2).
   - Yes ↓
2. Does the focus (lens) move up and down ? (Waveform drawing Figure 43-1).
   - No → Check the focus peripheral circuit.
   - Yes ↓
3. Is the laser lit ?
   - No → Check the laser diode driver Q3 peripheral circuit.
   - Yes ↓
4. Is the turntable rotating ?
   - No → Spindle motor (M1).

When a disc is loaded, start playback operation.

1. Is focus servo activated ? (Waveform drawing Figure 43-2)
   - No → Pins 1~11 on IC1
     Check the laser diode driver Q3 peripheral circuit.
     Forcus error circuit (pins 20 and 21 on IC1).
   - Yes ↓
2. Does DRF change from "L" to "H" ?
   - No → Is the disc rotating ?
     - No → Check the spin system.
     - Yes → If the disc is spinning and a HF waveform is generated, DRF will go H.
   - Yes ↓
3. Is the HF waveform normal ? (Waveform drawing Figure 43-3)
   - No → If the level is not normal, check around pins 27~29 on IC1.

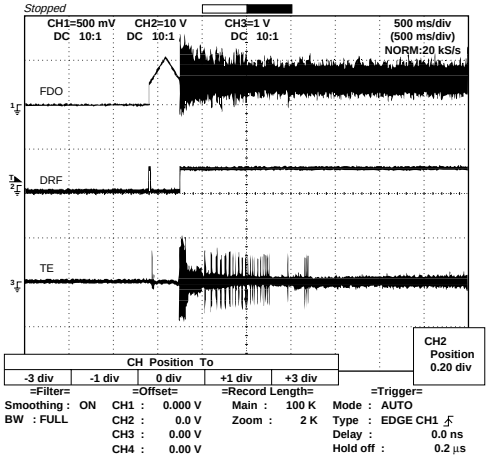


Figure 43-2

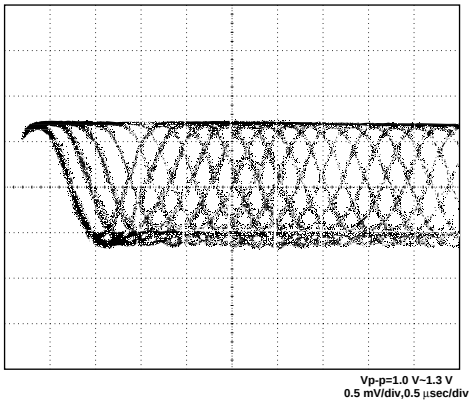


Figure 43-3

(2) Tracking system check.

Check the TE waveform at pin 18 on IC1.

If the waveform shown in Figure 44-1 appears and soon after NO DISC appears ?

Yes → The tracking servo is not activated.
Check the peripheral circuits at pins 18 and 19 on IC1, pin 16 on IC2, and CNS1A/B.

No ↓

"Initialization" is possible, but play is not possible ?

Yes → A normal jump operation cannot be completed or the beginning of the track cannot be found.
Check the around pin 23 on IC2.

No ↓

"Initialization" is not possible. → Data cannot be read. Check the VCO-PLL system.

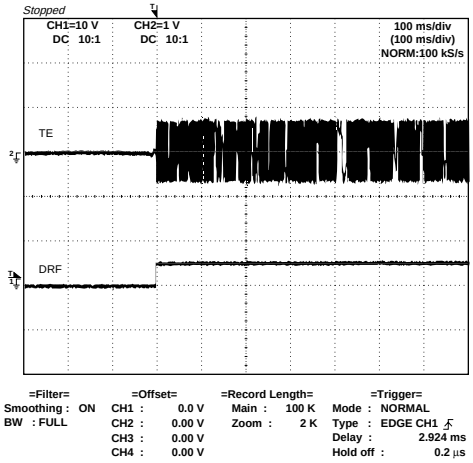


Figure 44-1

(3) Spin system check.

Press the OPEN/CLOSE switch without inserting a disc, and then try starting the play operation.

1. The turntable rotates a little ?
(Waveform drawing Figure 44-2)

Yes → The spin driver circuit is OK.

No ↓

2. The turntable doesn't rotate. → Check around pin 25 on IC2, pins 15 and 16 on IC3, and CNS3A/B.

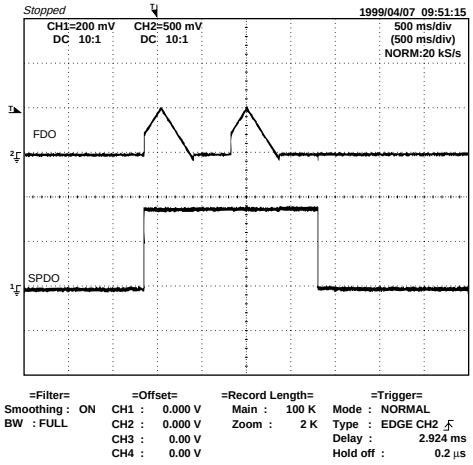


Figure 44-2

(4) PLL system check.

When a disc is loaded, start play operation.

↓

The HF waveform is normal, but the TOC data cannot be read.

↓

Check the PDO waveform. (Figure 45-1)

↓

Check around pins 1~6 on IC2.

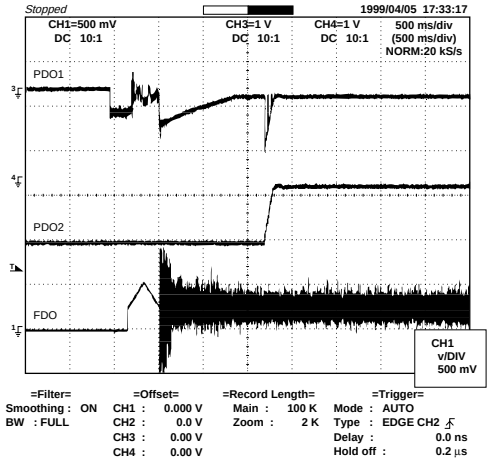


Figure 45-1

(5) Others.

The HF waveform is normal and the time is displayed normally, but no sound is produced. Or the sound has dropouts.

Is pin 35 (C2F) on IC2 "L" ?

No → There are too many error flags on a damaged disc which makes error correction impossible.

↓

Check again using a known good disc.

Yes

↓

1. When playing at normal speed.
   Check the peripheral circuit at pin 37 (DOUT) on IC2 and the waveform (Figure 45-2).

↓

If OK, Check the unit.

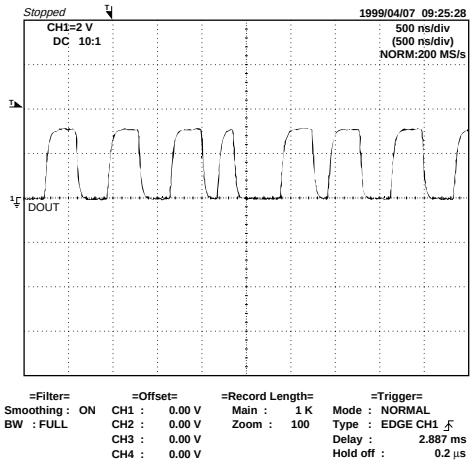


Figure 45-2

FUNCTION TABLE OF IC

IC2 VHiLC78641E-1: Servo/Signal Control (LC78641E) (1/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function		
1	PD01	Output	—	For PULL	Phase-comparison output terminal for built-in VCO control.	
2	PD02	Output	Input		Phase-comparison output terminal for built-in VCO control. Rough servo : OFF, phase servo : ON.	
3	VVSS	—	—		Ground terminal for built-in VCO.	
4	PCKIST	Input	—		Resistor terminal for setting the PDO output current.	
5	VVDD	Input	—		Power terminal for built-in VCO.	
6	FR	Input	—		Resistor terminal for setting the VCO frequency range.	
7	HFL	Input	—	Mirror detection signal input terminal.		
8	SLCIST	Input	—	For slice level control	Resistance connection terminal for current adjustment of SLCO output.	
9	SLCO	Output	—		Control output.	
10	EFMIN	Input	—		EFM signal input terminal.	
11*	JITTV	Output	Unfixed	Jitter detection/monitor terminal.		
12	JITTC	Output	—	Jitter detection/adjustment terminal.		
13	BH	Input	—	BH signal input terminal. A/D input.		
14	PH(RFENV)	Input	—	PH signal or RFENV signal input terminal. A/D input.		
15	FE	Input	—	FE signal input terminal. A/D input.		
16	TE	Input	—	TE signal input terminal. A/D input.		
17	VREF	Input	—	VREF signal input terminal. A/D input.		
18	ADAVDD	Input	—	AD for servo, D/A power terminal.		
19	ADAVSS	—	—	AD for servo, D/A ground terminal.		
20*	PHREF	Output	(1/2VDD)	PH reference output terminal. D/A output.		
21*	BHREF	Output	(1/2VDD)	BH reference output terminal. D/A output.		
22	TBLO	Output	(1/2VDD)	Output terminal for tracking balance. D/A output.		
23	TDO	Output	(1/2VDD)	Output terminal for tracking control. D/A output.		
24	FDO	Output	(1/2VDD)	Output terminal for focus control. D/A output.		
25	SPDO	Output	(1/2VDD)	Output terminal for spindle control. D/A output.		
26	SLDO	Output	(1/2VDD)	Output terminal for sled control. D/A output.		
27*	FG	Input	—	FG signal input terminal. (When not used, connect to 0 V)		
28	LASER	Output	L	LASER ON/OFF control terminal.		
29	CONT1	Input/Output	Input mode	General purpose input/output terminal 1.		Controlled with serial data command from microcomputer. When not used, set it as the input terminal and open it by connecting to 0 V, or set it as the output terminal and open it.
30	CONT2	Input/Output	Input mode	General purpose input/output terminal 2.		
31	CONT3	Input/Output	Input mode	General purpose input/output terminal 3.		
32	CONT4	Input/Output	Input mode	General purpose input/output terminal 4.		
33	CONT5	Input/Output	Input mode	General purpose input/output terminal 5.		
34*	PCK	Output	H	Clock monitor terminal for EFM data replay. 4.3218 MHz as phase clock.		
35*	C2F	Output	H	C2 flag output terminal.		
36	VDD	Input	—	Power terminal of digital system.		
37*	DOUT	Output	L	Output terminal of digital OUT. (EIAJ format)		
38*	FSX	Output	L	Output terminal of synchronous signal of 7.35 kHz divided from quartz oscillation.		
39*	EFLG	Output	L	C1, C2 correct monitor terminal.		
40	TEST	Input	—	Input terminal for test. Surely connected to 0 V.		
41*	EMPH	Input/Output	Input mode	Emphasis terminal. After resetting, it is configured as an input terminal. It can be controlled from the outside. It is also becomes a emphasis monitor terminal under command control.		
42*	MUTEL	Output	H	Mute output terminal for L channel.		
43*	MUTER	Output	H	Mute output terminal for R channel.		

In this unit, the terminal with asterisk mark (*) is open terminal which is not connected to the outside.

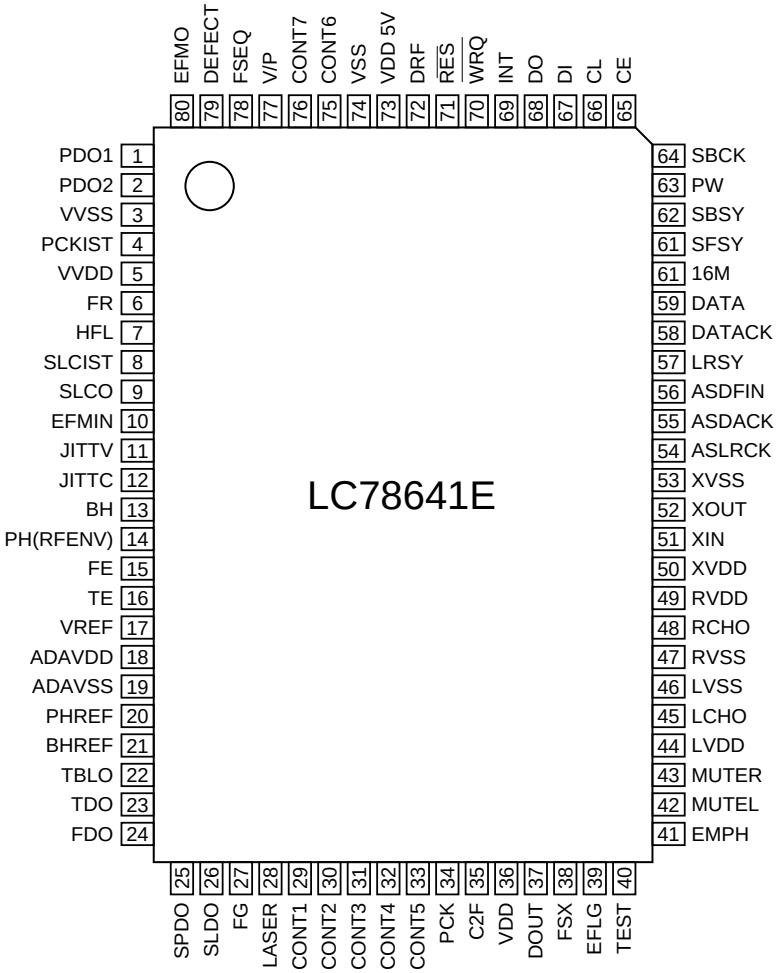
IC2 VHiLC78641E-1: Servo/Signal Control (LC78641E) (2/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
44	LVDD	Input	—	L channel D/A converter	Power terminal for L channel.
45	LCHO	Output	1/2VDD		L channel output terminal.
46	LVSS	—	—		Ground terminal for L channel. Surely connected to 0 V.
47	RVSS	—	—	R channel D/A converter	Ground terminal for R channel. Surely connected to 0 V.
48	RCHO	Output	1/2VDD		R channel output terminal.
49	RVDD	Input	—		Power terminal for R channel.
50	XVDD	Input	—	For quartz oscillation	Power terminal for quartz oscillation.
51	XIN	Input	Oscillation		Ground terminal of 16.9344 MHz quartz oscillation.
52	XOUT	Output	Oscillation		
53	XVSS	—	—		Ground terminal for quartz oscillation. Surely connected to 0 V.
54	ASLRCK	Input	—	For anti shock mode	L/R clock input terminal. (When not used, connect to 0 V)
55	ASDACK	Input	—		Bit clock input terminal. (When not used, connect to 0 V)
56	ASDFIN	Input	—		L/R channel data input terminal. (When not used, connect to 0 V)
57*	LRSY	Output	L	For digital data output	L/R clock output terminal.
58*	DATACK	Output	L		Bit clock output terminal.
59*	DATA	Output	L		L/R channel data output terminal.
60*	16M	Output	Clock output	16.9344 MHz output terminal.	
61*	SFSY	Output	L	Output terminal of synchronous signal of subcode frame. It drops when subcode stand by.	
62*	SBSY	Output	L	Output terminal of synchronous signal of subcode block.	
63*	PW	Output	L	Output terminal of sub codes P,A,R,S,T,U and W.	
64	SBCK	Input	—	Clock input terminal to read sub code. (When not used, connect to 0 V)	
65	CE	Input	—	For microcomputer interface	Chip enable signal input terminal.
66	CL	Input	—		Data transmission clock input terminal.
67	DI	Input	—		Data input terminal.
68	DO	Output	L		Data output terminal.
69	INT	Output	H		Interruption signal output terminal.
70	$\overline{\text{WRQ}}$	Output	H		Interruption signal output terminal.
71	$\overline{\text{RES}}$	Input	—	Reset input terminal of LC78640. When turning on power, set it at "L".	
72	DRF	Output	L	Focus ON detection terminal.	
73	VDD5V	Input	—	Power terminal for microcomputer interface.	
74	VSS	—	—	Ground terminal of digital system. Surely connected to 0 V.	
75	CONT6	Input/Output	Input mode	General purpose input/output terminal 6.	Controlled with serial data command from microcomputer. When not used, set it as the input terminal and open it by connecting to 0 V, or set it as the output terminal and open it.
76	CONT7	Input/Output	Input mode	General purpose input/output terminal 7.	
77*	V/P	Output	H	Monitor output terminal for automatic switch of rough servo/phase control. "H" for rough servo, and "L" for phase servo.	
78*	FSEQ	Output	L	Output terminal synchronous signal detection. "H" is output when synchronous signal detected by EFM signal matches synchronous signal internally generated.	
79	DEFECT	Input/Output	Input mode	Defect terminal. After resetting, it is configured as an input terminal. It can be controlled from the outside. It also becomes a defect monitor terminal under command control	
80*	EFMO	Output	Unfixed	EFM signal output terminal.	

In this unit, the terminal with asterisk mark (*) is open terminal which is not connected to the outside.

Be sure to supply the same potential to each power terminal. (VVDD, ADAVDD, VDD, LVDD, RVDD, XVDD)
Terminal witch is controlled by the power terminal (VDD5 V) for a microcomputer interface :
CE (65 pin), CL (66 pin), DI (67 pin), DO (68 pin), INT (69 pin), $\overline{\text{WRQ}}$ (70 pin), $\overline{\text{RES}}$ (71 pin), DRF (72 pin), CONT6 (75 pin), CONT7 (76 pin)

IC2 VHiLC78641E-1: Servo/Signal Control (LC78641E)



IC1 VHiLA9235M-1: Servo Amp. (LA9235M)

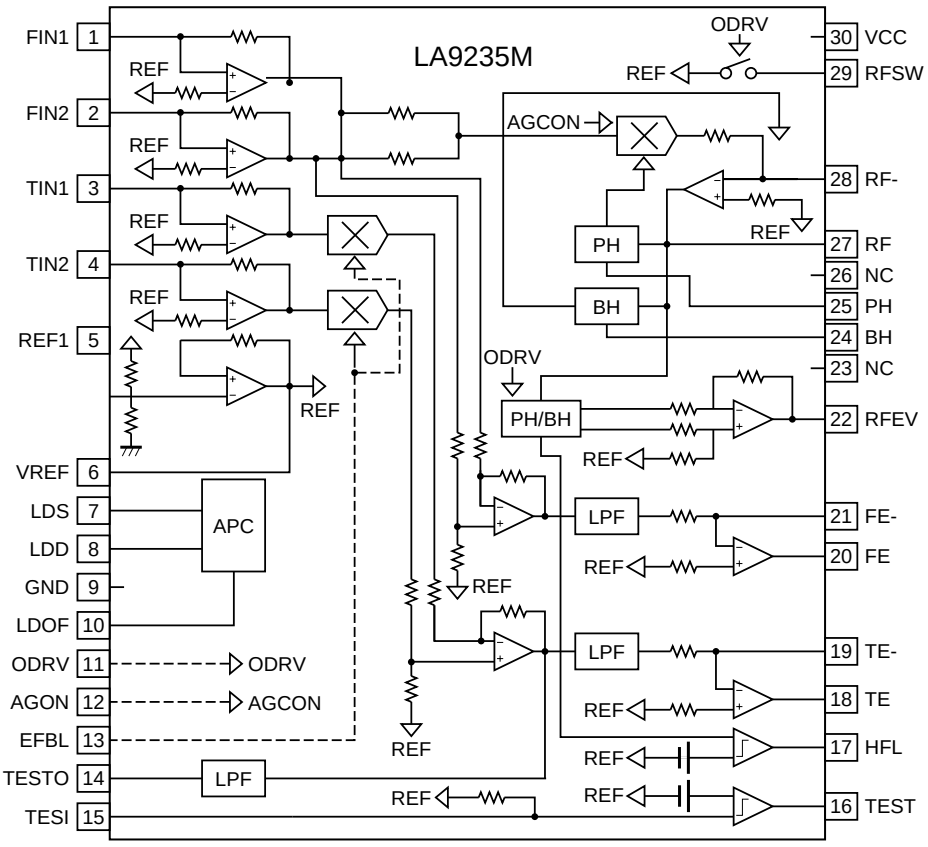


Figure 48 BLOCK DIAGRAM OF IC

IC701 RH-iX0362AWZZ: System Microcomputer (IX0362AW) (1/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1	VDD	VDD	Input	(+) POWER SUPPLY.
2	P37	-20 dB ATT	Output	-20 dB ATTENUATOR.
3*	P36	NO USE	Output	GND
		DSA_STB	Input/Output	DSA STRUBE
4	P35	T_BIAS	Output	TAPE RECORD BIAS.
5	P34	T_T1/T2	Output	TAPE T1/T2 CHANGE.
6	P33	REC/PLAY	Output	TAPE REC/PLAY CHANGE.
7	P32	RES OUT	Output	CD DSP RESET & MPEG MICROCOMPUTER RESET.
8	P31	DRF	Input	CD RF LEVEL DETECTION.
9	P30	WRQ	Input	CD DSP WRITE REQUEST.
10	RESET	RESET	Input	RESET.
11	X2	X2	Output	MAIN CLOCK.
12	X1	X1	Input	MAIN CLOCK.
13	VPP/IC	XVPP/IC	—	GND
14*	XT2	XT2	—	OPEN.
15	P04	SPN	Input	TUNER SPAN CHANGE.
16	VDD	VDD	Input	(+) POWER SUPPLY.
17	P27	CD CLK	Output	CD DSP CLOCK.
18	P26	CD DI	Output	CD DSP COMMAND.
19	P25	CD DO	Input	CD DSP CODE Q OUT.
20	P24	CD CE	Output	CD DSP CE OUTPUT.
21	P23	CE	Output	CE OUTPUT.
22	P22	CLK	Output	CLOCK OUTPUT.
23	P21	DI	Output	DATA OUTPUT.
24	P20	DO	Input	DATA INPUT.
25	AVSS	AVSS	—	ANALOG GROUND.
26	ANI7	O/C SW	Input	CD OPEN/CLOSE SWITCH.
		DISC NO SW	Input	CD DISC NUMBER SWITCH.
		DSA_DATA	Input/Output	DS DATA INPUT.
27	ANI6	NO USE	Input	GND
		TUNER SM	Input	TUNER SIGNAL METER INPUT.
		DSA_ACK	Input/Output	DSA ACR.
28	ANI5	SPEANA 2	Input	SPEANA DATA INPUT 16 kHz.
29	ANI4	SPEANA 1	Input	SPEANA DATA INPUT 1 kHz.
30	ANI3	SPEANA 0	Input	SPEANA DATA INPUT 63 kHz.
31-33	ANI2-ANI0	KEY 2-KEY 0	Input	KEY INPUT.
34	AVDD	AVDD	Input	ANALOG VDD.
35	AVREF	AVREF	Input	ANALOG REF VOLTAGE.
36	INTP3	P_IN	Input	POWER FAILURE DETECT.
37*	P02	JOG 1	Input	JOG VOLUME INPUT 1.
38	P01	JOG 0	Input	JOG VOLUME INPUT 0.
39	INTP0	REMOCON	Input	REMOCON INPUT.
40	VSS	VSS	—	GROUND VOLTAGE.
41	P74	SMUTE	Output	SYSTEM MUTE CONTROL.
42	P73	T_SOL_B	Output	TAPE 2 SOLENOID CONTROL.
43	P72	T_SOL_A	Output	TAPE 1 SOLENOID CONTROL.
44	P71	T_MOTOR	Output	TAPE MOTOR CONTROL.
45	P70	TIMER LED	Output	TIMER LED CONTROL.
46	VDD	VDD	Input	(+) POWER SUPPLY.
47*	P127	AC RLY_CONT	Output	AC RELAY CONTROL.
48	P126	SP-RLY	Output	SPEAKER OUTPUT RELAY CONTROL.
49	P125	SP_DET	Input	SPEAKER OUTPUT DETECTION.

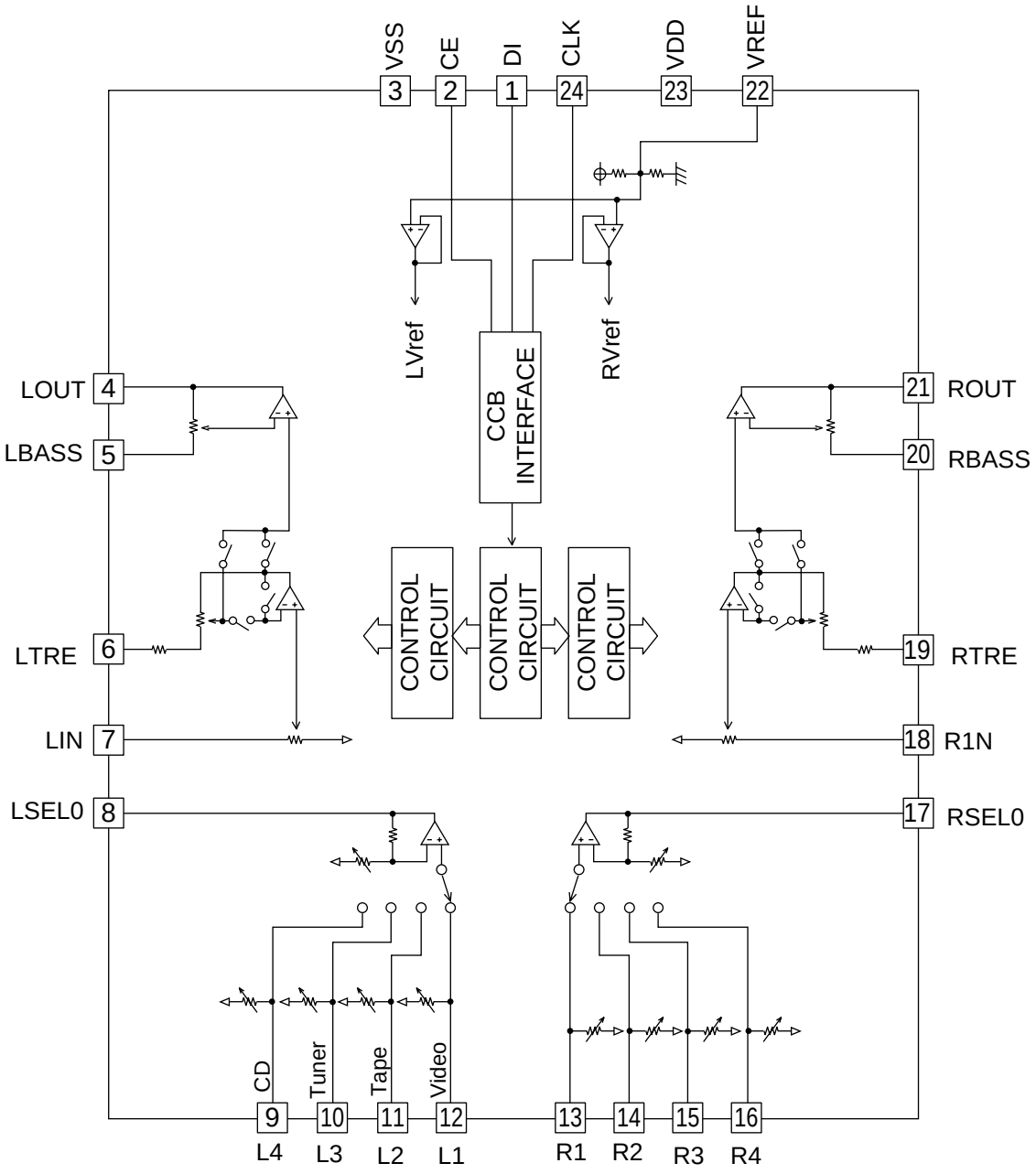
In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0362AWZZ: System Microcomputer (IX0362AW) (2/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
50	P124	T 1 RUN	Input	TAPE 1 RUN PULSE INPUT.
51	P123	T 2 RUN	Input	TAPE 2 RUN PULSE INPUT.
52	P122	CD CLAMP SW	Input	CD CHANGER CLAMP SWITCH.
53	P121	NO USE	Input	GND
54	P120	PLAY SW_B	Input	PLAY SWITCH FOR T 2.
55	P117	FPA	Input	TAPE 2 A-SIDE FULL PROOF.
56	P116	FPB	Input	TAPE 2 B-SIDE FULL PROOF.
57	P115	MIC SW	Input	MIC SWITCH.
58*	P114	LCK 0	Output	LED DRIVER LCK.
59	P113	DISTOUT	Output	DESTINATION OUTPUT.
60	FIP39	NO USE	Output	GND
61*	FIP38	KARAOKE LATCH	Output	KARAOKE LATCH.
62*	FIP37	NO USE	Output	GND
		MPEG_POW	Output	MPEG POWER CONTROL.
63*	FIP36	NO USE	Output	GND
		RDS RST/ESS_ACK	Output	RDS FAN RESET.
64*	FIP35	NO USE	Input	GND
		RDS RDDA/ESS_STB	Input	RDS TRANSMIT DATA INPUT/DSA STROBE.
65*	FIP34	NO USE	Output	GND
		RDS RDCL/ESS_DI	Output	RDS CLOCK/DSA DATA OUTPUT.
66*	FIP33	NO USE	Input	GND
		RDS READY/ESS_DO	Input	RDS READY/DSA DATA INPUT.
67*	P103	DIST3	Input	DESTINATION INPUT.
	FIP32	P22	Output	FL DISPLAY DRIVER.
68*	P102	DIST2	Input	DESTINATION INPUT.
	FIP31	P21	Output	FL DISPLAY DRIVER.
69	P101	DIST1	Input	DESTINATION INPUT.
	FIP30	P20	Output	FL DISPLAY DRIVER.
70*	P100	DIST0	Input	DESTINATION INPUT.
	FIP29	P19	Output	FL DISPLAY DRIVER.
71-78	FIP28-FIP21	P18-P11	Output	FL DISPLAY DRIVER.
79	VLOAD	VLOAD	Input	FL DRIVER (-) POWER SUPP. -30 V
80-89	FIP20-FIP11	P10-P1	Output	FL DISPLAY DRIVER.
90-100	FIP10-FIP0	G11-G1	Output	FL DISPLAY DRIVER.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC601 VHiLC75341/-1: Audio Processor (LC75341)



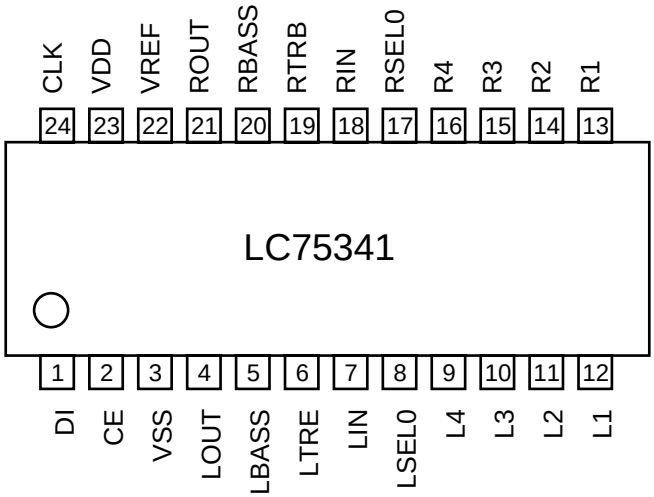


Figure 51 BLOCK DIAGRAM OF IC

IC3 VHiM63001FP-1: Focus/Tracking/Spin/Sled Driver (M63001FP)

Pin No.	Terminal Name	Function
1	TO	CH2 inverted input.
2	FD	CH1 inverted input.
3*	FO	CH1 output offset control.
4	FO+	CH1 inverted output.
5	FO-	CH1 non-inverted output.
6	TR+	CH2 inverted output.
7	TR-	CH2 non-inverted output.
8-14	GND	GND
15	SL-	CH3 non-inverted output.
16	SL+	CH3 inverted output.
17	SLDO	CH3 inverted input.
18	VCC1	Power supply 1 (CH1, CH2, CH3)
19	STANDBY	STANDBY signal input.
20	VRFE	CH1-CH4 Reference voltage input.
21	MUTE	Mute signal input (CH6).
22	IN5-	CH5 inverted input.
23	IN5+	CH5 non-inverted input.
24	VCC2	Power supply 2 (CH4).
25	SPO SPDO	CH4 inverted input.
26	SP+	CH4 inverted output.
27	SP-	CH4 non-inverted output.
28	VCC3	Power supply 3 (CH5).
29-35	GND	GND
36*	OUT5+	CH5 non-inverted output.
37*	OUT5-	CH5 inverted output.
38	LOADING M-	CH6 non-inverted output.
39	LOADING M+	CH6 inverted output.
40	VCC4	Power supply 4 (CH6).
41	LD_M-	CH6 inverted input.
42	LD_M+	CH6 non-inverted input.

In this unit, the terminal with asterisk mark (*) is open terminal which is not connected to the outside.

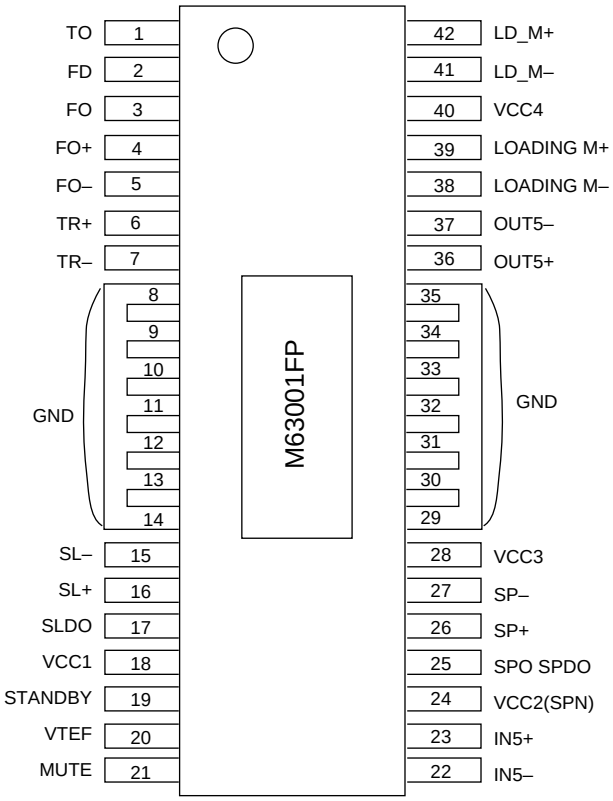
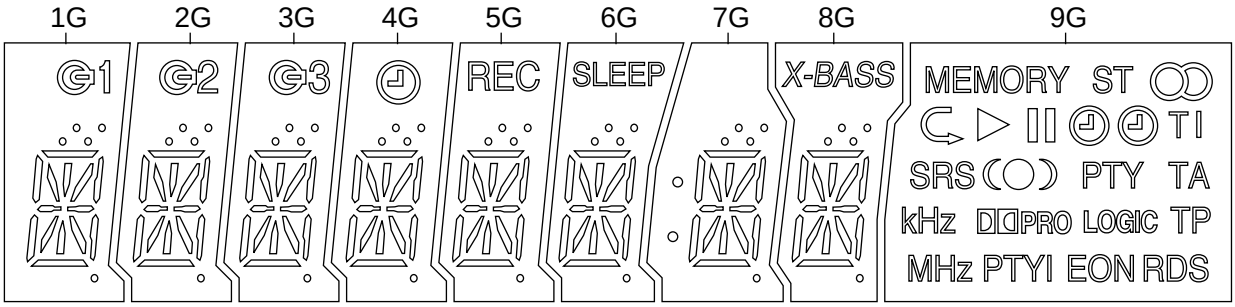
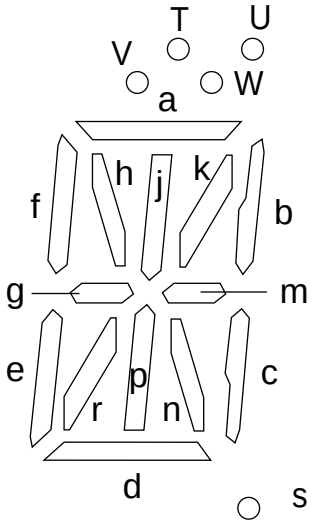


Figure 52 BLOCK DIAGRAM OF IC

FL DISPLAY

FL701 VVKSVA9MS13-1: FL Display





	1G	2G	3G	4G	5G	6G	7G	8G	9G
P1	G1	G2	G3	◴	REC	SLEEP	:	X-BASS	PTYI
P2	U	U	U	U	U	U	U	U	
P3	T	T	T	T	T	T	T	T	TA
P4	V	V	V	V	V	V	V	V	TP
P5	W	W	W	W	W	W	W	W	RDS
P6	a	a	a	a	a	a	a	a	TI
P7	b	b	b	b	b	b	b	b	◯◯
P8	k	k	k	k	k	k	k	k	ST
P9	j	j	j	j	j	j	j	j	MEMORY
P10	h	h	h	h	h	h	h	h	PTY
P11	f	f	f	f	f	f	f	f	↻
P12	m	m	m	m	m	m	m	m	▯▯
P13	d	d	d	d	d	d	d	d	MHz
P14	g	g	g	g	g	g	g	g	▷
P15	p	p	p	p	p	p	p	p	kHz
P16	e	e	e	e	e	e	e	e	EON
P17	n	n	n	n	n	n	n	n	DOLBY PRO LOGIC
P18	r	r	r	r	r	r	r	r	SRS (◯)
P19	c	c	c	c	c	c	c	c	◴ (L)
P20	s	s	s	s	s	s	s	s	◴ (R)

— M E M O —

SHARP PARTS GUIDE

MINI COMPONENT SYSTEM

MODEL CD-BK100W

CD-BK100W Mini Component System consisting of CD-BK100W (main unit) and CP-BK100 (speaker system).

MINI COMPONENT SYSTEM

MODEL CD-BP90W

CD-BP90W Mini Component System consisting of CD-BP90W (main unit) and CP-BP90 (speaker system).

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC ..... Ceramic type
VCK..... Ceramic type
VCT..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN..... Cylindrical type (without lead wire)
VC • • TV..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN..... Cylindrical type (without lead wire)
VR • • TV..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with " ⚠ " are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

CD-BK100W/CD-BP90W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION

CD-BK100W/CD-BP90W

INTEGRATED CIRCUITS

IC1	VHILA9235M/-1	J	AQ	Servo Amp.,LA9235M
IC2	VHILC78641E-1	J	AV	Servo/Signal Control,LC78641E
IC3	VHIM63001FP-1	J	AX	Focus/Tracking/Spin/Sled Driver, M63001FP
IC101	VHIAN7345K/-1	J	AM	Record/Playback Amp.,AN7345K
IC301	VHITA7358AP-1	J	AG	FM Front End,TA7358AP
IC302	VHILC72131/-1	J	AP	PLL (Tuner),LC72131
IC303	VHILA1832S/-1	J	AN	FM IF Det./FM Mpx./AM IF, LA1832S
IC601	VHILC75341/-1	J	AM	Audio Processor,LC75341
IC701	RH-IX0362AWZZ	J	AV	System Microcomputer, IX0362AW
IC704	VHIKIA7042AP1	J	AC	System Reset,KIA7042A
IC901	VHILA4282//-1	J	AM	Power Amp.,LA4282 [CD-BK100W]
IC901	92L28405415000	J		Power Amp.,BA5415A [CD-BP90W]
IC902	VHIKIA7810AP1	J	AF	Voltage Regulator,KIA7810AP
IC904	VHIKIA7805P-1	J	AF	Voltage Regulator,KIA7805AP

TRANSISTORS

Q1	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q2	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q3	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q101	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q102,103	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q104~107	VS2SC1845F/-1	J	AC	Silicon,NPN,2SC1845 F
Q108~111	VS2SC3331//-1	J	AB	Silicon,NPN,2SC3331 S
Q112	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q113	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q114	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q302	VSKTC3194Y/-1	J	AD	Silicon,NPN,KTC3194 Y
Q360	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q401~408	92L2830901403	J		Silicon,NPN,9014 C [CD-BK100W Only]
Q601,602	VS2SC3331//-1	J	AB	Silicon,NPN,2SC3331 S
Q701	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q704,705	VSKTA1271Y/-1	J	AC	Silicon,PNP,KTA1271 Y
Q706	VSKTA1273Y/-1	J	AE	Silicon,PNP,KTA1273 Y
Q707	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q708	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q901,902	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M [CD-BK100W Only]
Q904	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q905	VSKTC2026//-1	J	AF	Silicon,NPN,KTC2026

DIODES

D21,22	VHD1SS133//-1	J	AA	Silicon,1SS133
D93	VHD1SS133//-1	J	AA	Silicon,1SS133
D301~306	VHD1SS133//-1	J	AA	Silicon,1SS133
D303A	VHD1SS133//-1	J	AA	Silicon,1SS133
D304A	VHD1SS133//-1	J	AA	Silicon,1SS133
D701~703	VHD1SS133//-1	J	AA	Silicon,1SS133
D707~711	VHD1SS133//-1	J	AA	Silicon,1SS133
D714	VHD1SS133//-1	J	AA	Silicon,1SS133
D716	VHD1SS133//-1	J	AA	Silicon,1SS133
D901	92L2810414800	J		Silicon,1N4148 [CD-BP90W Only]
D902	92L2810400130	J		Silicon,1N4001
D907~917	VHD1N4004S/-1	J	AB	Silicon,1N4004S
D918	VHD1SS133//-1	J	AA	Silicon,1SS133
D922	92L2810414800	J		Silicon,1N4148
LED722	VHP4204SRT7-1	J	AD	LED,Red,4204SRT7
ZD61	VHEDZ3R9BSB-1	J	AC	Zener,3.9V,DZ3.9BSB
ZD902	VHEDZ300BSB-1	J	AB	Zener,30V,DZ30BSB
ZD903	VHEMTZJ6R2A-1	J	AA	Zener,6.2V,MTZJ6.2A

FILTERS

BF301	RFILR0008AWZZ	J	AE	Band Pass Filter
CF302	RFILF0124AFZZ	J	AD	FM IF,10.7 MHz
CF351	RFILF0003AWZZ	J	AK	FM IF,10.7 MHz
CF352	RFILA0009AWZZ	J	AE	AM IF,450 kHz

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION

TRANSFORMERS

⚠ PT801	92L2950090W710	J		Power with CNS801/CNS901 [CD-BP90W]
⚠ PT801	92L2950100W710	J	BC	Power with CNS801/CNS901 [CD-BK100W]
T301	RCILB0065AWZZ	J	AC	FM OSC.
T302	RCILI0017AWZZ	J	AB	FM IF
T303	RCILA0052AWZZ	J	AE	AM Antenna
T306	RCILB0058AWZZ	J	AC	AM OSC.
T351	RCILI0019AWZZ	J	AD	AM IF

COILS

L61	VP-XHR82K0000	J	AC	0.82 µH,Choke
L62	VP-XH2R2K0000	J	AB	2.2 µH,Choke
L103	VP-DH101K0000	J	AB	100 µH,Choke
L104	VP-MK331K0000	J	AB	330 µH,Choke
L312	RCILR0056AWZZ	J	AB	FM RF
L351,352	VP-DH101K0000	J	AB	100 µH,Choke
L701	VP-DH101K0000	J	AB	100 µH,Choke

VARIABLE RESISTOR

VR1	92L29200503030	J	AG	50 kohms (A) [Mic Volume] [CD-BK100W Only]

VARIABLE CAPACITORS

VD301	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S
VD302,303	VHCSVC211C/-1	J	AG	Variable Capacitance,SVC211C

VIBRATORS

X351	92LCRSTL1425A	J	AF	Crystal,456 kHz
X352	RCRSP0002AWZZ	J	AH	Crystal,4.5 MHz
XL1	92LCRSTL1746A	J	AC	Crystal,16.943 MHz
XL701	RCRSP0003AWZZ	J	AH	Crystal,4.1943 MHz

CAPACITORS

C6	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C7	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C8	92L27100104108	J		0.1 µF,25V
C11	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
C12	92L27100104108	J		0.1 µF,25V
C13	92L27100103108	J		0.01 µF,50V
C14	92L27100334008	J		0.33 µF,50V
C17	92L27100472108	J		0.0047 µF,50V
C18	92L27100030108	J		3 pF,50V
C19	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C20,21	92L27100104108	J		0.1 µF,25V
C22	92L27100101108	J		100 pF,50V
C23	92L27100473108	J		0.047 µF,50V
C24	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C25	92L27100104108	J		0.1 µF,25V
C26	92L27100473108	J		0.047 µF,50V
C27	92L27100104108	J		0.1 µF,25V
C28	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
C29,30	92L27100104108	J		0.1 µF,25V
C31	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C34	92L27100223108	J		0.022 µF,50V
C38,39	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C40	92L27100152108	J		0.0015 µF,50V
C41	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C42	92L27100680508	J		68 pF,50V
C43	92L27100152108	J		0.0015 µF,50V
C44	92L27100104108	J		0.1 µF,25V
C45	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C46	92L27100223108	J		0.022 µF,50V
C47	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C49,50	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C51	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
C52	92L27100103108	J		0.01 µF,50V
C53	92L27100102108	J		0.001 µF,50V
C54	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
C55	92L27100103108	J		0.01 µF,50V
C56	VCEAZA0JW477M	J	AC	470 µF,6.3V,Electrolytic
C57,58	92L27100300508	J		30 pF,50V
C64	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
C71~78	92L27100101108	J		100 pF,50V
C80	92L27100104108	J		0.1 µF,25V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C81~83	92L27100223108	J		0.022 µF,50V
C101	VCKZPA1HF473Z	J	AA	0.047 µF,50V
C102,103	92L2700056143	J		560 pF,50V
C104,105	92L2700018143	J		180 pF,50V
C106,107	92L2700056143	J		560 pF,50V
C108	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C109	92L2700010243	J		0.001 µF,50V
C110	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C112~115	92L2700033143	J		330 pF,50V
C116,117	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C118,119	92L2760033322	J		0.033 µF,100V,Mylar
C120,121	92L2700056143	J		560 pF,50V
C122,123	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C126,127	92L2700027143	J		270 pF,50V
C128,129	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C130,131	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C132,133	92L2700033243	J		0.0033 µF,50V
C134,135	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C136	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C137	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C138	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic
C139	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C140	VCQPKA2AA822J	J	AA	0.0082 µF,100V,Polypropylene
C141	VCQYKA1HM393K	J	AB	0.039 µF,50V,Mylar
C142	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C145~147	92L2700010243	J		0.001 µF,50V
C148	VCKZPA1HF473Z	J	AA	0.047 µF,50V
C150	92L2700033243	J		0.0033 µF,50V
C301,302	92L2700010243	J		0.001 µF,50V
C303	92L2691010043	J		10 pF,50V
C304	92L2700010243	J		0.001 µF,50V
C304A	92L2691010143	J		100 pF,50V
C305	92L2691005043	J		5 pF,50V
C306	92L2700022343	J		0.022 µF,50V
C307	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C308	92L2691005043	J		5 pF,50V
C309	92L2700010243	J		0.001 µF,50V
C310	92L2691015043	J		15 pF,50V
C311	92L2691018043	J		18 pF,50V
C312	92L2700022343	J		0.022 µF,50V
C313	92L2691022043	J		22 pF,50V
C314,315	92L2700047243	J		0.0047 µF,50V
C316	92L2700022343	J		0.022 µF,50V
C317	92L2700010243	J		0.001 µF,50V
C318,319	92L2691010143	J		100 pF,50V
C320	92L2700022343	J		0.022 µF,50V
C321,322	92L2700010243	J		0.001 µF,50V
C323	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C324	92L2691004043	J		4 pF,50V
C330	92L2691015043	J		15 pF,50V
C331	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C332	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C334	92L2691027043	J		27 pF,50V
C335	92L2700056143	J		560 pF,50V
C342	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C350,351	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C352	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C353,354	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C355	92L2691022043	J		22 pF,50V
C356	92L2700010243	J		0.001 µF,50V
C357	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C358	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C361	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C362	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C363	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C364	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C365	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C366	92L2700010243	J		0.001 µF,50V
C367,368	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C369	92L2691027043	J		27 pF,50V
C370~372	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C373,374	92L2760015322	J		0.015 µF,100V,Mylar
C380	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C381	92L2691012043	J		12 pF,50V
C382	92L2691015043	J		15 pF,50V
C385	92L2700010343	J		0.01 µF,50V
C386	92L2700033143	J		330 pF,50V
C387	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C391	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C392	92L2700010243	J		0.001 µF,50V
C393	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C394	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C395	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C396	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C397	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C398	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C399	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C401,402	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic [CD-BK100W Only]
C403	92L2700022143	J		220 pF,50V [CD-BK100W Only]
C404	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic [CD-BK100W Only]
C405	92L2700047243	J		0.0047 µF,50V [CD-BK100W Only]
C406	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic [CD-BK100W Only]
C407	VCEAZA1HW475M	J	AB	4.7 µF,50V,Electrolytic [CD-BK100W Only]
C408	VCEAZA0JW227M	J	AC	220 µF,6.3V,Electrolytic [CD-BK100W Only]
C409	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic [CD-BK100W Only]
C411	VCEAZA1CW227M	J	AC	220 µF,10V,Electrolytic [CD-BK100W Only]
C412,413	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic [CD-BK100W Only]
C414	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic [CD-BK100W Only]
C420,421	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic [CD-BK100W Only]
C433	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic [CD-BK100W Only]
C440,441	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic [CD-BK100W Only]
C601,602	92L2700010243	J		0.001 µF,50V
C603	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C604	VCEAZA1EW107M	J	AB	100 µF,25V,Electrolytic
C605	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C606	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C607,608	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C609~612	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C613,614	92L2760027222	J		0.0027 µF,100V,Mylar
C615,616	VCKYPA1HB221K	J	AA	220 pF,50V
C617,618	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C619	VCKYPA1HB221K	J	AA	220 pF,50V
C623~630	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C701	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C702	RC-EZD227AF1A	J	AC	220 µF,10V,Electrolytic
C703,704	92L2691030043	J		30 pF,50V
C705	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C707,708	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C710	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C713	RC-EZD104AF1H	J	AB	0.1 µF,50V,Electrolytic
C714	92L2700010363	J		0.01 µF,50V
C715	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C716	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C717	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C718	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C719	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C720	VCEAZA1AW226M	J		22 µF,10V,Electrolytic
C901	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar [CD-BP90W Only]
C902	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic [CD-BP90W Only]
C903,904	92L2700047143	J		470 pF,50V
C905	VCKZPA1HF223Z	J	AA	0.022 µF,50V [CD-BK100W]
C905	VCEAZV1HW477M	J		470 µF,50V,Electrolytic [CD-BP90W]
C906	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic [CD-BK100W]
C906	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar [CD-BP90W]
C907	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic [CD-BP90W]
C907	VCEAZA1EW107M	J	AB	100 µF,25V,Electrolytic [CD-BK100W]
C908	VCQYKA1HM823K	J	AC	0.082 µF,50V,Mylar [CD-BK100W]
C908	VCEAZV1HW477M	J		470 µF,50V,Electrolytic [CD-BP90W]
C909	VCQYKA1HM823K	J	AC	0.082 µF,50V,Mylar [CD-BK100W Only]
C910	VCEAZA1EW107M	J	AB	100 µF,25V,Electrolytic [CD-BK100W Only]

CD-BK100W/CD-BP90W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C911	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic [CD-BP90W]
C911	VCKZPA1HF223Z	J	AA	0.022 µF,50V [CD-BK100W]
C912	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic [CD-BP90W]
C912	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar [CD-BK100W]
C913	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar [CD-BK100W Only]
C914	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic [CD-BP90W]
C914	VCEAZA1EW477M	J	AD	470 µF,25V,Electrolytic [CD-BK100W]
C915	VCEAZA1EW477M	J	AD	470 µF,25V,Electrolytic [CD-BK100W Only]
C916	VCEAZA1HW475M	J	AB	4.7 µF,50V,Electrolytic [CD-BP90W]
C916	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar [CD-BK100W]
C917	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar [CD-BK100W Only]
C918	VCKYPA1HB221K	J	AA	220 pF,50V [CD-BK100W Only]
C919	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C933	VCCSPA1HL680J	J	AA	68 pF,50V
C934	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C935	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C938	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C939,940	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C943	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C944	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C945	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C946	VCEAZW1HW228M	J	AH	2200 µF,50V,Electrolytic [CD-BK100W]
C946	VCEAZW1VW338M	J		3300 µF,35V,Electrolytic [CD-BP90W]
C947	VCEAZW1VW338M	J		3300 µF,35V,Electrolytic
C950~953	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C954	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C955~957	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C958,959	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic

RESISTORS

	92L32100000008	J		0 ohm,Jamper
R3	92L32150104008	J		100 kohm,1/8W
R4	92L32150103008	J		10 kohm,1/8W
R5	92L32150393008	J		39 kohms,1/8W
R6	92L32150273008	J		27 kohms,1/8W
R7	92L32150682008	J		6.8 kohms,1/8W
R8	92L32150331008	J		330 ohms,1/8W
R10	92L32150273008	J		27 kohms,1/8W
R11	92L32150123008	J		12 kohms,1/8W
R12,13	92L32150681008	J		680 ohms,1/8W
R14	92L32150122008	J		1.2 kohms,1/8W
R15,16	92L32150103008	J		10 kohm,1/8W
R17	92L32150102008	J		1 kohm,1/8W
R19	92L32150470008	J		47 ohms,1/8W
R20	92L32150221008	J		220 ohms,1/8W
R21,22	92L32150471008	J		470 ohms,1/8W
R25	92L32150103008	J		10 kohm,1/8W
R35	92L32150102008	J		1 kohm,1/8W
R38	92L32150271008	J		270 ohms,1/8W
R39	92L32150471008	J		470 ohms,1/8W
R40	92L32150122008	J		1.2 kohms,1/8W
R42	92L32150124008	J		120 kohms,1/8W
R44	92L32150102008	J		1 kohm,1/8W
R45	92L32150122008	J		1.2 kohms,1/8W
R46	92L32150102008	J		1 kohm,1/8W
R47	92L32159330008	J		3.3 ohms,1/8W
R48	92L32150682008	J		6.8 kohms,1/8W
R50	92L32150470008	J		47 ohms,1/8W
R51~56	92L32150683008	J		68 kohms,1/8W
R58	92L32150221008	J		220 ohms,1/8W
R67,68	92L32150102008	J		1 kohm,1/8W
R71~78	92L32150102008	J		1 kohm,1/8W
R79	92L32150155008	J		1.5 Mohms,1/8W
R80	92L32150105008	J		1 Mohm,1/8W
R81,82	92L32150222008	J		2.2 kohms,1/8W
R83,84	92L32150103008	J		10 kohm,1/8W
R94,95	92L32150103008	J		10 kohm,1/8W
R101,102	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R103	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R104,105	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R106,107	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R108,109	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R110	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R111,112	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R113	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R114,115	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R116,117	VRD-ST2CD560J	J	AA	56 ohms,1/6W
R118,119	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R120,121	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R122,123	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R124,125	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R126	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R127,128	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R129,130	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R131,132	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R133,134	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R135,136	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R137,138	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R139	VRD-ST2CD181J	J	AA	180 ohms,1/6W
R140,141	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R142,143	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R144	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R145	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R146	VRD-ST2CD820J	J	AA	82 ohms,1/6W
R147	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R148	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R149	VRD-ST2CD4R7J	J	AA	4.7 ohms,1/6W
R150,151	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R157	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R302	VRD-ST2CD100J	J	AA	10 ohm,1/6W
R309	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R311	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R313	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R314	VRD-ST2CD220J	J	AA	22 ohms,1/6W
R316	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R322	VRD-ST2CD681J	J	AA	680 ohms,1/6W
R323	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R325	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R327	VRD-ST2CD330J	J	AA	33 ohms,1/6W
R336	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R350	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R351	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R352	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R353	VRD-ST2CD561J	J	AA	560 ohms,1/6W
R355	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R356	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R357	VRD-ST2CD474J	J	AA	470 kohms,1/6W
R358	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R359	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
R360	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R361,362	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W [CD-BP90W]
R361,362	VRD-ST2CD512J	J	AA	5.1 kohms,1/6W [CD-BK100W]
R363,364	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R365	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R372~374	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R375	VRD-ST2CD821J	J	AA	820 ohms,1/6W
R376	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R377	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R378	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R379	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R380	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R381	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R382	VRD-ST2CD151J	J	AA	150 ohms,1/6W
R383~385	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R386	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R387	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R388	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R393	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R395	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R401	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W [CD-BK100W Only]
R402	VRD-ST2CD102J	J	AA	1 kohm,1/6W [CD-BK100W Only]
R403	VRD-ST2CD474J	J	AA	470 kohms,1/6W [CD-BK100W Only]
R404	VRD-ST2CD105J	J	AA	1 Mohm,1/6W [CD-BK100W Only]
R405	VRD-ST2CD104J	J	AA	100 kohm,1/6W [CD-BK100W Only]
R407	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W [CD-BK100W Only]
R408	VRD-ST2CD561J	J	AA	560 ohms,1/6W [CD-BK100W Only]

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R409,410	VRD-ST2CD103J	J	AA	10 kohm,1/6W [CD-BK100W Only]
R411	VRD-ST2CD271J	J	AA	270 ohms,1/6W [CD-BK100W Only]
R412	VRD-ST2CD331J	J	AA	330 ohms,1/6W [CD-BK100W Only]
R414~416	VRD-ST2CD331J	J	AA	330 ohms,1/6W [CD-BK100W Only]
R417~420	VRD-ST2CD474J	J	AA	470 kohms,1/6W [CD-BK100W Only]
R421~424	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W [CD-BK100W Only]
R425	VRD-ST2CD331J	J	AA	330 ohms,1/6W [CD-BK100W Only]
R426~428	VRD-ST2CD103J	J	AA	10 kohm,1/6W [CD-BK100W Only]
R429~432	VRD-ST2CD223J	J	AA	22 kohms,1/6W [CD-BK100W Only]
R433	VRD-ST2CD331J	J	AA	330 ohms,1/6W [CD-BK100W Only]
R434	VRD-ST2CD474J	J	AA	470 kohms,1/6W [CD-BK100W Only]
R435	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W [CD-BK100W Only]
R436	VRD-ST2CD474J	J	AA	470 kohms,1/6W [CD-BK100W Only]
R437	VRD-ST2CD331J	J	AA	330 ohms,1/6W [CD-BK100W Only]
R438	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W [CD-BK100W Only]
R439	VRD-ST2CD331J	J	AA	330 ohms,1/6W [CD-BK100W Only]
R601,602	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R603,604	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
R607,608	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R609,610	VRD-ST2CD223J	J	AA	22 kohms,1/6W [CD-BP90W]
R609,610	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W [CD-BK100W]
R615,616	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R617,618	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R625	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R700	VRD-ST2CD105J	J	AA	1 Mohm,1/6W
R701	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R702~721	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R722	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R724,725	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R726~729	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R732~737	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R742	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R743	VRD-ST2CD330J	J	AA	33 ohms,1/6W
R744	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R745	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R748~751	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R753	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R755	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R758,759	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R766~769	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R770	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R772	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R773	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R775~777	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R778	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R779	VRD-ST2EE3R3J	J	AA	3.3 ohms,1/4W
R792	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R901,902	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W [CD-BP90W Only]
R903,904	92L3200243302	J		240 ohms,1/4W [CD-BP90W Only]
R905	VRD-ST2CD121J	J	AA	120 ohms,1/6W [CD-BK100W Only]
R906,907	VRD-ST2CD102J	J	AA	1 kohm,1/6W [CD-BK100W Only]
R908	VRD-ST2CD121J	J	AA	120 ohms,1/6W [CD-BK100W Only]
R909	VRD-ST2CD563J	J	AA	56 kohms,1/6W [CD-BK100W Only]
R910	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W [CD-BP90W]
R910	VRD-ST2EE271J	J	AA	270 ohms,1/4W [CD-BK100W]
R911	VRD-ST2EE271J	J	AA	270 ohms,1/4W [CD-BK100W Only]
R912,913	VRD-ST2CD4R7J	J	AA	4.7 ohms,1/6W [CD-BK100W Only]
R914	VRD-ST2EE223J	J	AA	22 kohms,1/4W [CD-BK100W Only]
R915	VRD-ST2EE821J	J	AA	820 ohms,1/4W [CD-BK100W Only]
R916,917	VRD-ST2CD181J	J	AA	180 ohms,1/6W [CD-BP90W]
R916,917	VRD-ST2CD331J	J	AA	330 ohms,1/6W [CD-BK100W]
R922	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R923	VRD-ST2CD330J	J	AA	33 ohms,1/6W
R925	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R926	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R927	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R928	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R929,930	VRD-ST2CD221J	J	AA	220 ohms,1/6W
RD01	VRD-ST2CD681J	J	AA	680 ohms,1/6W
RD02	VRD-ST2CD821J	J	AA	820 ohms,1/6W
RD03	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RD04	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
RD05	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
RD06	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
RD07	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
RD08	VRD-ST2CD563J	J	AA	56 kohms,1/6W
RD09	VRD-ST2CD104J	J	AA	100 kohm,1/6W
RD10	VRD-ST2CD821J	J	AA	820 ohms,1/6W
RD11	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RD12	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
RD13	VRD-ST2CD681J	J	AA	680 ohms,1/6W
RD14	VRD-ST2CD821J	J	AA	820 ohms,1/6W
RD15	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RD16	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
RD17	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
RD18	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
RD19	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
RD20	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
RD21	VRD-ST2CD103J	J	AA	10 kohm,1/6W
RD22	VRD-ST2CD153J	J	AA	15 kohms,1/6W
RD23	VRD-ST2CD333J	J	AA	33 kohms,1/6W
RD24	VRD-ST2CD104J	J	AA	100 kohm,1/6W
RD25	VRD-ST2CD681J	J	AA	680 ohms,1/6W
RD26	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W

OTHER CIRCUITRY PARTS

BI4/CNS4	92L33528111060	J		Connector Ass'y,6/6Pin
BI601/CNS601	92L33530260500	J		Connector Ass'y,5/5Pin
BI702/CNS702	92L33528361100	J		Connector Ass'y,10/10Pin
CNP1	92L33607150000	J		Plug,7Pin
CNP2	92L33608170000	J		Plug,8Pin
CNP3,4	92L33606130000	J		Plug,6Pin
CNP3A	92LCONE6P53254	J	AC	Plug,6Pin
CNP11	92L33605110000	J		Plug,5Pin
CNP12	92L33610210010	J		Plug,10Pin
CNP101	92L33603210100	J		Plug,3Pin
CNP102	92L33607210100	J		Plug,7Pin
CNP302	92L33602170000	J		Plug,2Pin
CNP701	92L33609604210	J		Socket,21Pin
CNP801	92L33680010200	J		Plug,2Pin [CD-BP90W]
CNP801	92L33680010500	J		Plug,5Pin [CD-BK100W]
CNP901	33625010601B	J		Plug,5Pin
CNS1A/B	92L33528780070	J		Connector Ass'y,7/7Pin
CNS2A/B	92L33528780080	J		Connector Ass'y,8/8Pin
CNS3A/B	92L33528610060	J		Connector Ass'y,6/6Pin
⚠ F901	92LFUSET252E	J	AD	Fuse,T2.5A L 250V
⚠ F902	92LFUSET162E	J	AC	Fuse,T1.6A L 250V
FFC701	92L33557280210	J		Flat Cable,21Pin
FFC702	92L33557130110	J		Flat Cable,11Pin
FL701	VVKSVA9MS13-1	J	AZ	FL Display
JK1	92L26410100310	J	AF	Socket,Mic [CD-BK100W Only]
JK901	92L26402100040	J	AF	Socket,Headphones
JP401	92L33426260040	J		Connector Ass'y,3Pin [CD-BK100W Only]
JP402	92L33428260030	J		Plug,3Pin [CD-BK100W Only]
LUG1	92L16310130000	J		Lug Terminal
M1	92LMTR2790CASY	J	BB	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
M3	92LTWMEN7E6Y	J	AR	Motor with Worm Pulley [T/T Up/Down Loading]
PW901A	92L33426190050	J		Flat Wire,5Pin
PW901B	92L3362501051B	J		Socket,5Pin
RX701	VHLN63H380A-1	J	AK	Remote Sensor
SO302	QTANC0206AWZZ	J	AD	Terminal,FM Antenna
SO901	QTANA0416AWZZ	J	AE	Terminal,Speaker
SO902	QSOCA0204AWZZ	J	AF	AC Input Socket

CD-BK100W/CD-BP90W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
SOK2	92L33628210100	J		Socket,21Pin
SOK3	92L33620110100	J		Socket,11Pin
SW1	SWMPU10780MLB	J	AH	Switch,Push Type [Open/Close]
SW2	SWMPU11470MLB	J	AE	Switch,Push Type [Clamp]
SW3	SWMPU11470MLB	J	AE	Switch,Push Type [Disc Number]
SW4	QSW-F9001AW01	J	AD	Switch,Push Type [Pickup In]
SW601	QSW-S0024AWZZ	J	AE	Switch,Slide Type [Span Selector]
SW701	92LSWICHT1663T	J	AC	Switch,Key Type [ON/Stand-by]
SW702	92LSWICHT1663T	J	AC	Switch,Key Type [Clock]
SW703	92LSWICHT1663T	J	AC	Switch,Key Type [Timer]
SW709	92LSWICHT1663T	J	AC	Switch,Key Type [Disc Skip]
SW710	92LSWICHT1663T	J	AC	Switch,Key Type [Open/Close]
SW711	92LSWICHT1663T	J	AC	Switch,Key Type [EQ./X-Bass/Demo]
SW712	92LSWICHT1663T	J	AC	Switch,Key Type [Volume Up]
SW713	92LSWICHT1663T	J	AC	Switch,Key Type [Volume Down]
SW714	92LSWICHT1663T	J	AC	Switch,Key Type [CD]
SW715	92LSWICHT1663T	J	AC	Switch,Key Type [Tape]
SW716	92LSWICHT1663T	J	AC	Switch,Key Type [Tuning Down]
SW717	92LSWICHT1663T	J	AC	Switch,Key Type [Memory/Set]
SW718	92LSWICHT1663T	J	AC	Switch,Key Type [Rewind]
SW719	92LSWICHT1663T	J	AC	Switch,Key Type [Fast Forward]
SW720	92LSWICHT1663T	J	AC	Switch,Key Type [Play]
SW721	92LSWICHT1663T	J	AC	Switch,Key Type [Stop]
SW723	92LSWICHT1663T	J	AC	Switch,Key Type [REC Pause]
SW724	92LSWICHT1663T	J	AC	Switch,Key Type [Tuning Up]
SW725	92LSWICHT1663T	J	AC	Switch,Key Type [Tuner Band]
⚠ SW801	QSOCE0008AWZZ	J	AH	Switch,Slide Type [Voltage Selector] [CD-BK100W Only]

CD MECHANISM PARTS

301	NGERH0011AWZZ	J	AC	Gear,Middle
302	NGERH0012AWZZ	J	AC	Gear,Drive
303	MLEVP0080AWZZ	J	AC	Rail,Guide
304	NSFTM0020AWFW	J	AD	Shaft,Guide
305	92LM-CUSN1524A	J	AC	Cushion
⚠ 306	92LHPC1LXASY	J	BD	Pickup Unit Ass'y
306- 1	————		—	Pickup Unit (Not Replacement Item)
306- 2	NGERR0043AFZZ	J	AC	Gear,Rack
306- 3	MSPRC0961AFZZ	J	AA	Spring,Rack
701	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
702	XHBSD20P05000	J	AA	Screw,ø2×5mm
703	XBBSD20P03000	J	AA	Screw,ø2×3mm
704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×3.8×0.25mm
M1	92LMTR2790CASY	J	BB	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
SW4	QSW-F9001AW01	J	AD	Switch,Push Type [Pickup In]

CABINET PARTS

201	92LCAB090WASSY	J		Front Panel Ass'y [CD-BP90W]
201	92LCAB100WASSY	J		Front Panel Ass'y [CD-BK100W]
201- 1	————		—	Front Panel (Not Replacement Item)
201- 2	92L60100100001	J		Cassette Holder [Tape 1] [CD-BP90W]
201- 2	92L60100100002	J	AG	Cassette Holder [Tape 1] [CD-BK100W]
201- 3	92L60110100001	J		Cassette Holder [Tape 2] [CD-BP90W]
201- 3	92L60110100002	J	AG	Cassette Holder [Tape 2] [CD-BK100W]
201- 4	92L62600100001	J		Cover,Cassette Holder [Tape 1] [CD-BP90W]
201- 4	92L62600100002	J		Cover,Cassette Holder [Tape 1] [CD-BK100W]
201- 5	92L62610100001	J		Cover,Cassette Holder [Tape 2] [CD-BP90W]
201- 5	92L62610100002	J		Cover,Cassette Holder [Tape 2] [CD-BK100W]
201- 6	92L60300100001	J	AE	Panel,Cassette Holder [Tape 1]
201- 7	92L60310100001	J	AE	Panel,Cassette Holder [Tape 2]
201- 8	92L60320100001	J		Panel,Display [CD-BP90W]
201- 8	92L60320100002	J		Panel,Display [CD-BK100W]
201- 9	92L80200100001	J		Button,ON/Stand-by [CD-BP90W]
201- 9	92L80200100002	J	AD	Button,ON/Stand-by [CD-BK100W]
201-10	92L80420100001	J		Button,Timer/Sleep [CD-BP90W]
201-10	92L80420100002	J	AE	Button,Timer/Sleep [CD-BK100W]
201-11	92L80210100001	J	AE	Button,Function
201-12	92L80410100001	J		Volume Ring
201-13	92L80230100001	J		Button,Disk Skip [CD-BP90W]
201-13	92L80230100002	J	AE	Button,Disk Skip [CD-BK100W]
201-14	92L80220100001	J		Button,Operation [CD-BP90W]
201-14	92L80220100002	J	AF	Button,Operation [CD-BK100W]
201-16	MLIFP0008AWZZ	J	AD	Damper
201-17	92L54000100010	J		Spring,Cassette Holder [Tape 1]
201-18	92L54010100010	J		Spring,Cassette Holder [Tape 2]
201-19	92L80430100001	J	AE	Button,Equalizer
201-20	92L19000100010	J		Cover,Remote Sensor
201-21	92L62630100010	J		Bracket,Cassette Holder Lock Lever [Tape 1]
201-22	92L54020100010	J		Spring,Cassette Holder Lock
201-23	92L62400100001	J		Lock Lever,Cassette Holder [Tape 1]
201-24	92L62410100001	J		Lock Lever,Cassette Holder [Tape 2]
201-25	92L80400100001	J	AE	Button,Volume
201-26	92L80600100001	J		Badge,SHARP
201-28	92L62660100010	J		Bracket,Cassette Holder Lock Lever [Tape 2]
202	92LLSD090WASSY	J		Side Panel Ass'y,Left [CD-BP90W]
202	92LLSD100WASSY	J		Side Panel Ass'y,Left [CD-BK100W]
202- 1	————		—	Side Panel,Left (Not Replacement Item)
202- 2	92L13800100000	J		Cushion,Leg
203	92LRSD090WASSY	J		Side Panel Ass'y,Right [CD-BP90W]
203	92LRSD100WASSY	J		Side Panel Ass'y,Right [CD-BK100W]
203- 1	————		—	Side Panel,Right (Not Replacement Item)
203- 2	92L13800100000	J		Cushion,Leg
204	92L60010100001	J		Top Cabinet [CD-BP90W]
204	92L60010100002	J		Top Cabinet [CD-BK100W]
205	92L80440100001	J	AB	Knob,Mic Volume [CD-BK100W Only]
206	92L60120100001	J	AG	Cover,CD Tray
207	92L15800090010	J		Rear Panel [CD-BP90W]
207	92L15800100010	J		Rear Panel [CD-BK100W]
208	92L15600100010	J		Bracket,PWB
209	92L62640100010	J		Holder,LED
210	92LBTM100WASSY	J		Main Chassis Ass'y
210- 1	————		—	Main Chassis (Not Replacement Item)
210- 2	92L62650100010	J		Holder,PWB
214	92L62620100010	J		Holder,Display
219	92L13800100000	J		Cushion,Leg
220	92L1510090W000	J		Heat Sink [CD-BP90W]
220	92L1510100W000	J		Heat Sink [CD-BK100W]
223	92L33426120110	J		Lug Wire
⚠ 224	QFSHD0001AWZZ	J	AB	Fuse Holder
225	92LBE231616	J	AD	Belt
227	92LEVA0330702	J	AD	Velvet Carpet,Chassis
228	92LMAG0104302	J	AE	Magnet
229	92LMT0304302	J	AB	Plate,Metal
230	92LNBAND1318A	J	AA	Nylon Band
231	92LNM0305401	J	AB	Velvet Carpet
232	92LPT0303002	J	AB	Roller
233	92LPT0304303	J	AB	Lever,Stop
234	92LPT0304304	J	AB	Stopper
235	92LPT0304305	J	AE	Lever,Lock
236	92LPT0304306	J	AG	Stabilizer
237	92LPT0304307	J	AC	Support,Cam
238	92LPT0304308	J	AB	Lock Gear Pin
239	92LPT0304309	J	AB	Cap,Pulley Stopper
240	92LPT0305413	J	AG	Cam Gear Lower
241	92LPT0309506	J	AD	Gear,Turntable Drive
242	92LPT0309507	J	AD	Gear,Open/Close Drive
243	92LPT0309508	J	AD	Gear,Planet
244	92LPT0309509	J	AD	Gear,Drive
245	92LPT0309510	J	AE	Gear,Pulley
246	92LPT0309511	J	AD	Gear,Middle
247	92LPT0311101	J	AB	Lever,Clamp
248	92LPT0311102	J	AC	Lever,Disc
249	92LPT0312005	J	AL	Gear,Cam
250	92LPT0320201	J	AE	Support,Stabilizer

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
251	92LPT0330301	J	AU	Chassis,Loading
252	92LPT0330803	J	AK	Chassis,CD
253	92LPT0331003	J	AT	Chassis,Slide
254	92LPT0331105	J	AM	Turntable
255	92LSP0304303	J	AB	Spring,Stopper
256	92LSP0304305	J	AB	Spring,Lock
257	92LSP0304306	J	AB	Spring,Lock Gear
258	92L5601100W000	J	BM	Tape Mechanism Ass'y
258- 1	92PF513-853	J	BL	Head Plate Block [Tape 2]
258- 2	92PF525-336	J	BE	Motor with Pulley [Tape]
258- 3	92PF567-677	J	BA	Tape Mechanism PWB Ass'y
258- 4	92PFF19N-21	J	AL	Belt,Main [Tape 2]
258- 5	92PF514-133	J	AL	Pinch Roller
258- 6	92PF19S-31	J	AL	Belt,FF/REW [Tape 2]
258- 7	92LPFF19N-11	J		Belt,Main [Tape 1]
258- 8	92LPF522-061	J		Clutch Ass'y Block [Tape 1]
258- 9	92PFF19S-52	J	AL	Belt,FF/REW [Tape 1]
258-10	92PF513-861	J	AG	Head Plate Block [Tape 1]
258-11	92PF522-063	J	AZ	Clutch Ass'y Block [Tape 2]
261	92L2032100W020	J		Label,Laser
601	92L12930080444	J		Screw,ø3×8mm
602	92L12930100434	J		Screw,ø3×10mm
603	92L1293010434A	J		Screw,ø3×10mm
604	92L1293012434A	J		Screw,ø3×12mm
605	92L1304008434A	J		Screw,ø4×8mm
606	92L13126100437	J		Screw,ø2.6×10mm
607	92L13130100437	J		Screw,ø3×10mm
608	92L13130100447	J		Screw,ø3×10mm
609	92L13130120437	J		Screw,ø3×12mm
610	92L12930074340	J		Screw,ø3×7mm
611	92LSC0308MBZI	J	AB	Screw,ø3×8mm
612	92LSC0308RBZI	J	AB	Screw,ø3×8mm

ACCESSORIES/PACKING PARTS

⚠	QACCB0012AW00	J	AS	AC Power Supply Cord
⚠	QACCE0007AW00	J	AH	AC Power Supply Cord
⚠	QPLGA0003AWZZ	J	AF	Adaptor,AC Plug
⚠	QPLGA0004AWZZ	J	AF	Adaptor,AC Plug
	92L1350100W010	J		Packing Add.,Left
	92L1351100W010	J		Packing Add.,Right
	92L1352100W010	J		Packing Add.,Top
	92L1353100W010	J		Packing Add.,Bottom
	92L1940100W010	J		Polyethylene Bag,Accessories
	92L19409816010	J		Polyethylene Bag,Remote Control
	92L19418470000	J		Mirror Mat
	92L19465650401	J		Polyethylene Bag,Unit
	92L2010090W010	J		Operation Manual [CD-BP90W]
	92L2010100W010	J		Operation Manual [CD-BK100W Except for Thailand/ Australia/New Zealand]
	92L2010100W020	J	AG	Operation Manual [CD-BK100W for Australia/New Zealand]
	92L2010100W030	J		Operation Manual [CD-BK100W for Thailand]
	92L20200196000	J		Warranty Card [CD-BK100W for Australia/New Zealand Only]
	92L2031100W030	J		Label,Bar Code [CD-BK100W Only]
	92L2033090W010	J		Label,Feature [Tape 1] [CD-BP90W]
	92L2033100W020	J		Label,Feature [Tape 1] [CD-B100W]
	92L2033100W030	J		Label,Feature [Tape 2]
	92L2034090W010	J		VM No.Label
	92L2034090W020	J		Label,Packing Case Mark
	92L2035100W020	J		Label,Mic [CD-BK100W Only]
	92L2060090W010	J		Packing Case [CD-BP90W]
	92L2060100W020	J		Packing Case [CD-BK100W]
	92L2080100W010	J		Paper Sheet A
	92L2080100W020	J		Paper Sheet B
⚠	92L24801800222	J		AC Power Supply Cord
⚠	92L24802131030	J		AC Power Supply Cord
	92L33324152100	J		FM Antenna
	92L47300100010	J		AM Loop Antenna
	RRMCG0229AWSA	J	AR	Remote Control
	GFTAB1022AWSB	J	AK	Battery Lid,Remote Control

P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A	92L2370090W000	J	—	Main [CD-BP90W]
PWB-A	92L2370100W000	J	—	Main [CD-BK100W]
PWB-B	92L2370100W400	J	—	Display
PWB-C	92L2370100W100	J	—	Mic [CD-BK100W Only]
PWB-D	92L2370090W400	J	—	Headphones [CD-BP90W]
PWB-D	92L2370100W200	J	—	Headphones [CD-BK100W]
PWB-E	92L2370100W300	J	—	CD Servo
PWB-F	92PF567-649	J	—	Tape Mechanism
PWB-G	92LPC99C017	J	AE	CD Loading Motor (PWB Only)
PWB-H	QPWBF0027AWZZ	J	AD	CD Motor (PWB Only)

OTHER SERVICE PART

	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner

CP-BK100/CP-BP90

SPEAKER BOX PARTS

901	92L2391090W100	J	Speaker Box Ass'y [CP-BP90]
901	92L2391100W000	J	Speaker Box Ass'y [CP-BK100]

PACKING PARTS

	92LPA044	J	Packing Add.
	92L19438540401	J	Polyethylene Bag,Speaker

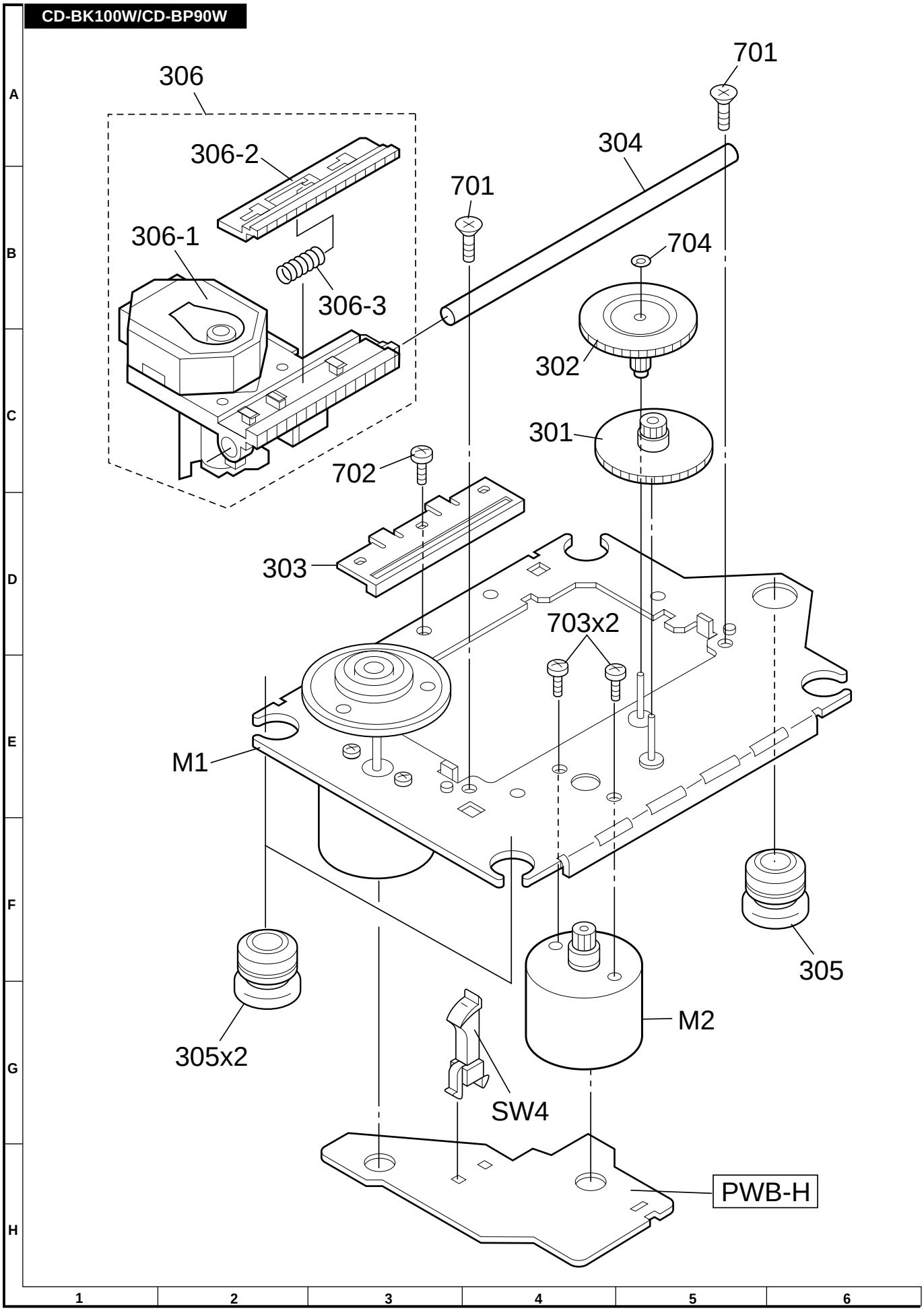
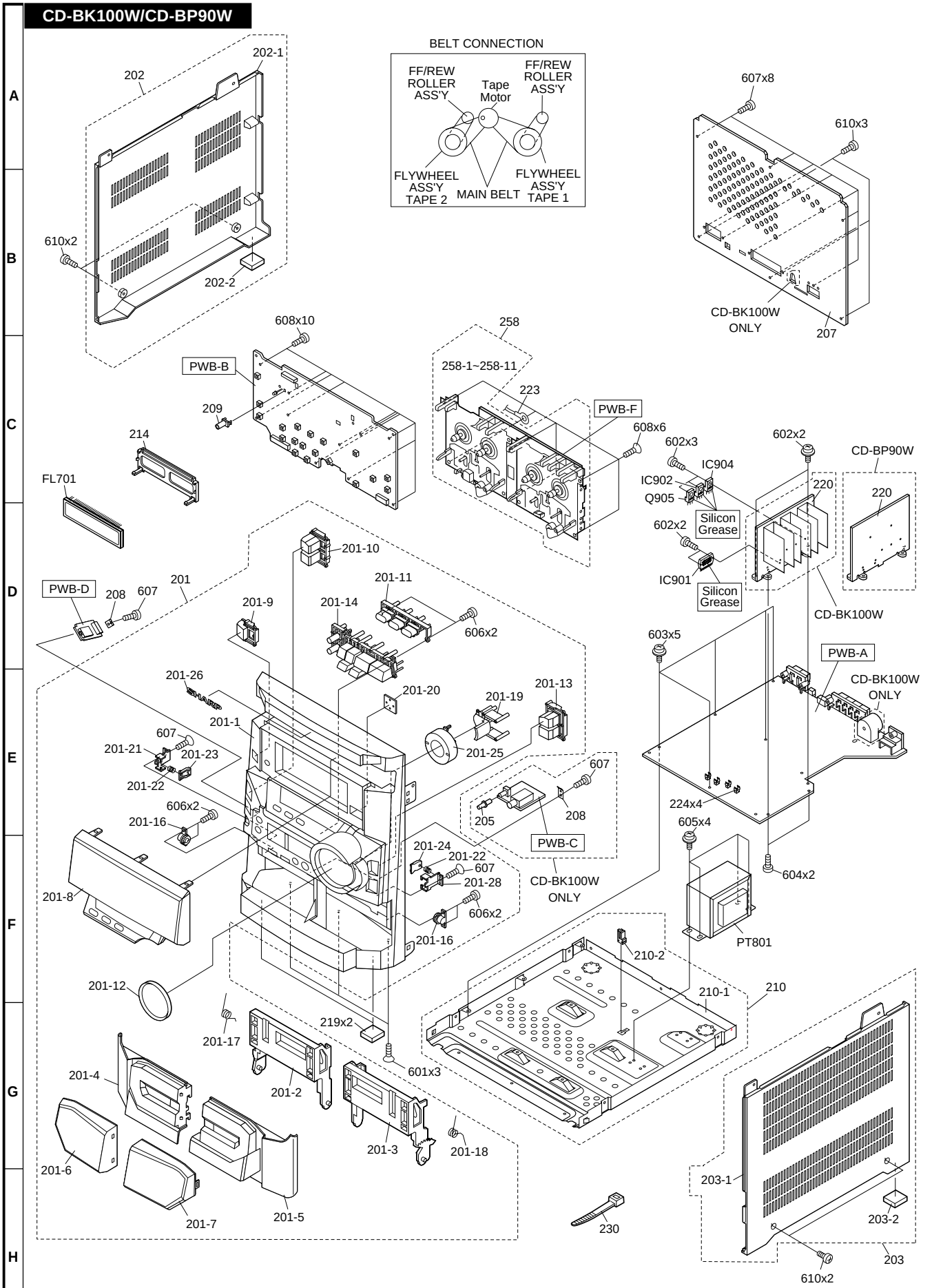


Figure 7 CD MECHANISM EXPLODED VIEW



Note: Only the unit and consumable parts are supplied as parts supply for the Tape mechanism.

Figure 8 CABINET EXPLODED VIEW (1/2)

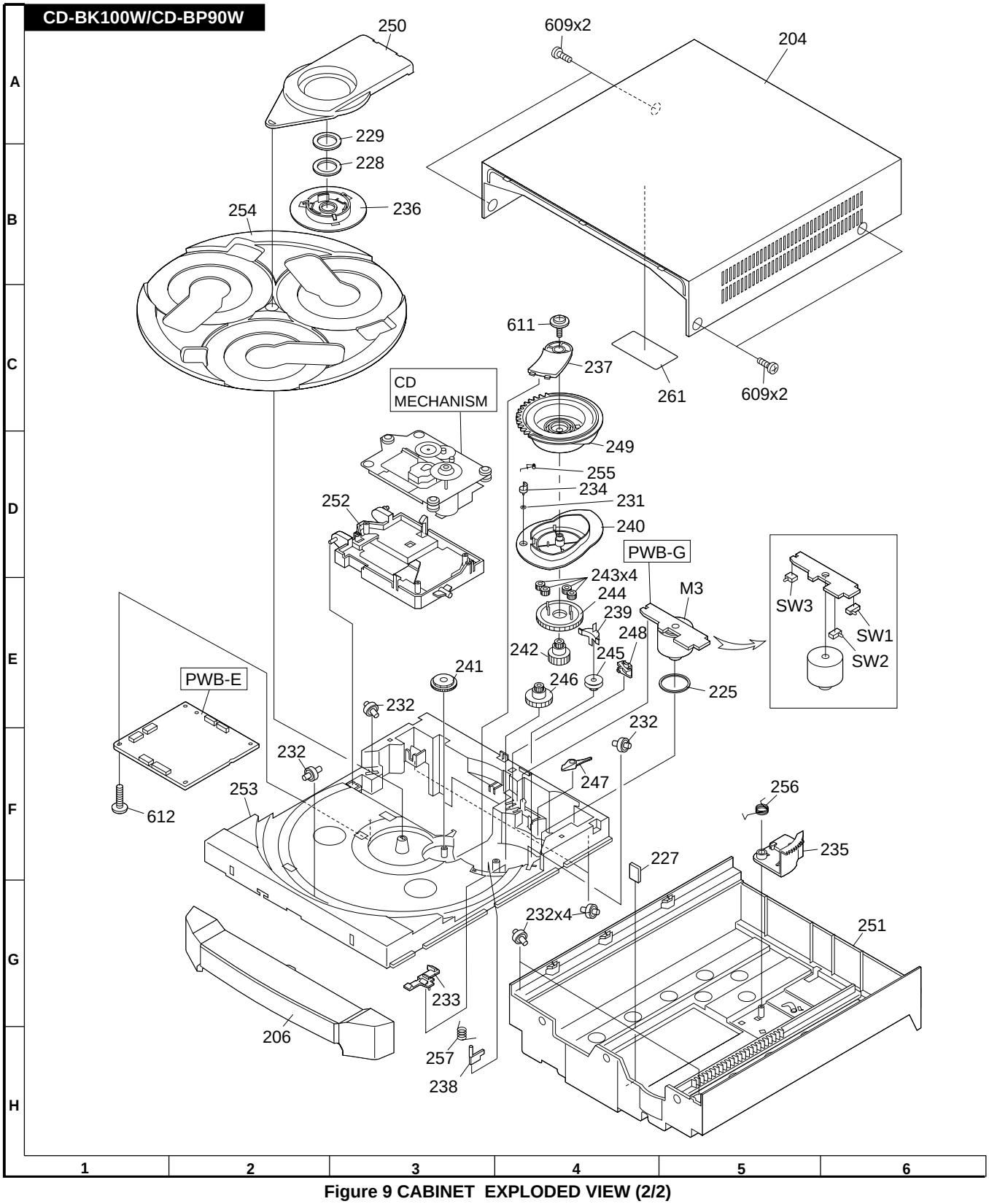


Figure 9 CABINET EXPLODED VIEW (2/2)

SHARP

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