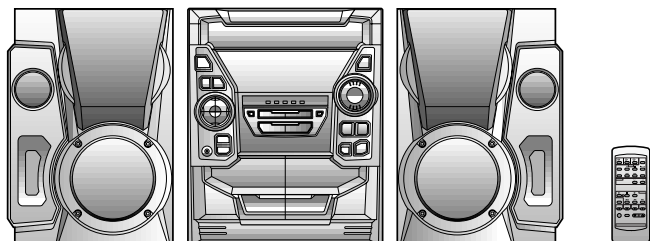


# SHARP SERVICE MANUAL

No. S3018CDBA1500



## CD-BA1500H

**COMPACT**  
**disc**  
DIGITAL AUDIO

**SAVING ENERGY**  
STAND-BY POWER  
CONSUMPTION **0.6w**

**R·D·S·E·O·N**

CD-BA1500H Mini Component System consisting of CD-BA1500H (main unit) and CP-BA1500H (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.

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

## SPECIFICATIONS

### CD-BA1500H

#### ● General

**Power source:** AC 230 V, 50 Hz  
**Power consumption:** 95 W  
**Dimensions:** Width; 270 mm (10-5/8")  
 Height; 330 mm (13")  
 Depth; 375 mm (14-6/8")  
**Weight:** 6.4 kg (14.0 lbs.)

#### ● Amplifier section

**Output power:** PMPO; 320 W (total)  
 MPO; 160 W (80 W + 80 W)  
 (DIN 45 324)  
 RMS; 100 W (50 W + 50 W)  
 (DIN 45 324)  
 RMS; 74 W (37 W + 37 W)  
 (DIN 45 500)  
**Output power:** RMS; 100 W (50 W + 50 W)  
 (For U.K.) (10 % T.H.D.)  
 RMS; 74 W (37 W + 37 W)  
 (0.9 % T.H.D.)  
**Output terminals:** Speakers; 6 ohms  
 Headphones; 16-50 ohms  
 (recommended; 32 ohms)  
 CD digital output (optical)  
**Input terminal:** Video/Auxiliary (audio signal);  
 500 mV/47 kohms

#### ● Compact disc player section

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

#### ● Tuner section

**Frequency range:** FM; 87.5 - 108 MHz  
 AM; 522 - 1,620 kHz

#### ● Cassette deck section

**Type:** Compact cassette tape  
**Frequency response:** 50 - 14,000 Hz (Normal tape)  
**Motor:** DC motor with electronic governor x 1  
**Signal/noise ratio:** 55 dB (TAPE 1, playback)  
 50 dB (TAPE 2, recording/playback)  
**Bias and erasure system:** AC  
**Tape speed:** 4.76 cm/sec. (1-7/8 ips.)  
**Wow and flutter:** 0.35 % (DIN 45 511)  
 (Except for U.K.)  
**Wow and flutter:** 0.3 % (WRMS)  
 (For U.K.)  
**Heads:** TAPE-1: Playback x 1  
 TAPE-2: Record/playback x 1  
 Erase x 1

### CP-BA1500H

#### ● Speaker section

**Type:** 3-way type [10 cm (4")  
 woofer x 2 and 5 cm (2")  
 tweeter]  
**Maximum input power:** 100 W  
**Rated input power:** 50 W  
**Impedance:** 6 ohms  
**Dimensions:** Width; 231.5 mm (9-1/8")  
 Height; 330 mm (13")  
 Depth; 210 mm (8-1/4")  
**Weight:** 3.1 kg (6.8 lbs.)/each

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

## 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-BA1500H

| STEP | REMOVAL                          | PROCEDURE   | FIGURE              |
|------|----------------------------------|---|---------------------|
| 1    | Top Cabinet                      | 1. Screw ..... (A1) x4  | 9-1                 |
| 2    | Side Panel (Left/right)          | 1. Screw ..... (B1) x8  | 9-1                 |
| 3    | CD Player Unit/<br>CD Tray Cover | 1. Turn on the power supply, open the disc tray, take out the CD cover, and close. (Note 1)<br>2. Screw ..... (C1) x1<br>3. Hook ..... (C2) x3<br>4. Hook ..... (C3) x2<br>5. Socket ..... (C4) x3  | 9-2                 |
| 4    | Rear Panel                       | 1. Screw ..... (D1) x6  | 9-2                 |
| 5    | Main PWB                         | 1. Screw ..... (E1) x5<br>2. Socket ..... (E2) x6<br>3. Flat Cable ..... (E3) x1<br>4. Lug Wire ..... (E4) x1<br>5. Flat Wire ..... (E5) x1   | 10-2                |
| 6    | RDS PWB                          | 1. Socket ..... (F2) x1   | 10-2                |
| 7    | Power PWB                        | 1. Socket ..... (G1) x1<br>2. Flat Wire ..... (G2) x1<br>3. Screw ..... (G3) x2   | 10-2                |
| 8    | Front Panel                      | 1. Screw ..... (H1) x2  | 10-2                |
| 9    | Display PWB                      | 1. Screw ..... (J1) x15<br>2. Flat Cable ..... (J2) x1  | 10-3                |
| 10   | Tape Mechanism                   | 1. Open the cassette holder.<br>2. Screw ..... (K1) x6  | 10-3                |
| 11   | Headphones PWB                   | 1. Screw ..... (L1) x1  | 10-3                |
| 12   | Turntable                        | 1. Hook ..... (M1) x2<br>2. Cover ..... (M2) x1   | 10-4                |
| 13   | Disc Tray                        | 1. Turn fully the lock lever in the arrow direction.<br>2. While holding the lock lever, rotate the cam gear until the cam gear rib engages with the clamp lever.<br>3. Push the slide holder backward to engage the claw with the groove and remove it in the direction of the arrow. .... (N1) x6 | 9-3<br>10-1<br>10-5 |
| 14   | CD Servo PWB (Note 2)            | 1. Screw ..... (P1) x1<br>2. Hook ..... (P2) x3<br>3. Socket ..... (P3) x4  | 10-6                |
| 15   | CD Mechanism                     | 1. Hook ..... (R1) x2<br>2. Hook ..... (R2) x3  | 11-1                |

#### Note 1:

How to open the changer manually. (Fig. 9-3)

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. 10-1)
3. After that, push forward the CD slide holder.

### CD-BA1500H

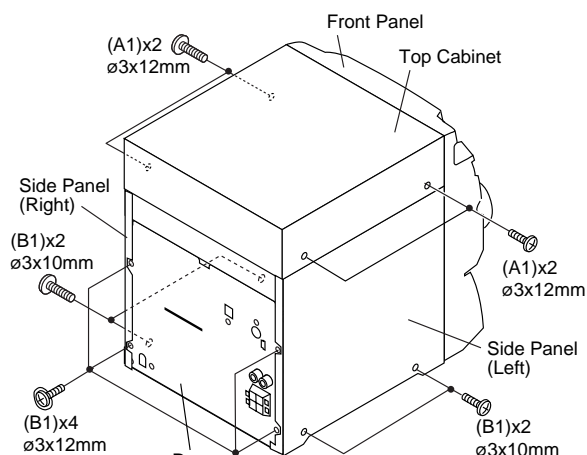


Figure 9-1

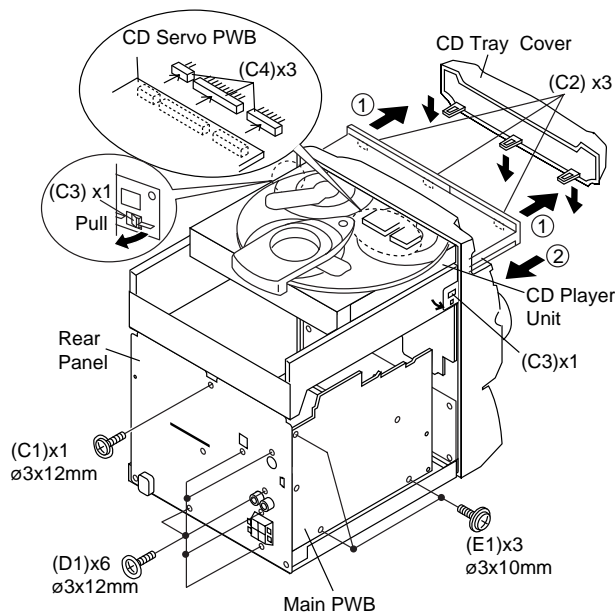


Figure 9-2

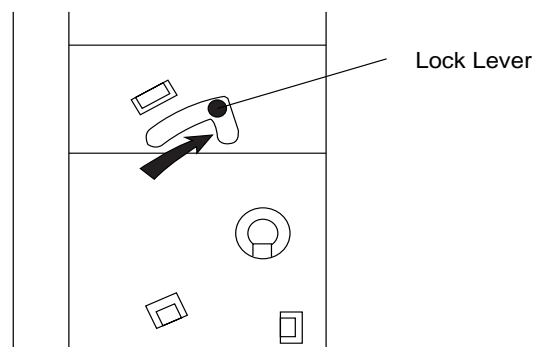


Figure 9-3

#### 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 to protect the optical pickup from electrostatic 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-BA1500H

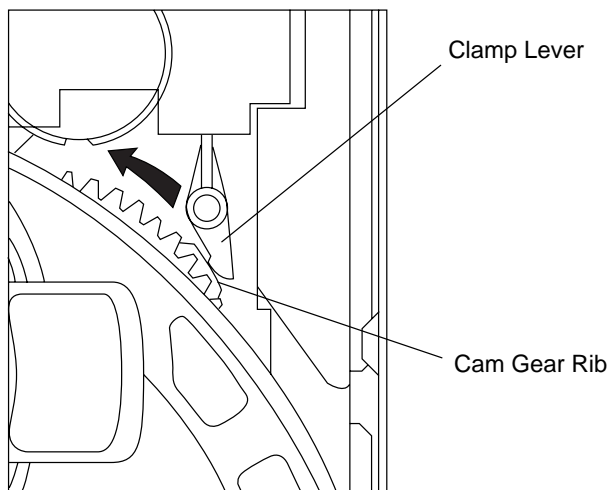


Figure 10-1

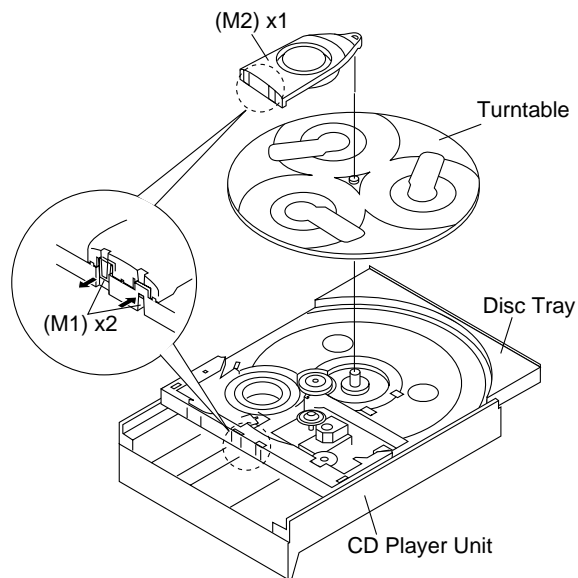


Figure 10-4

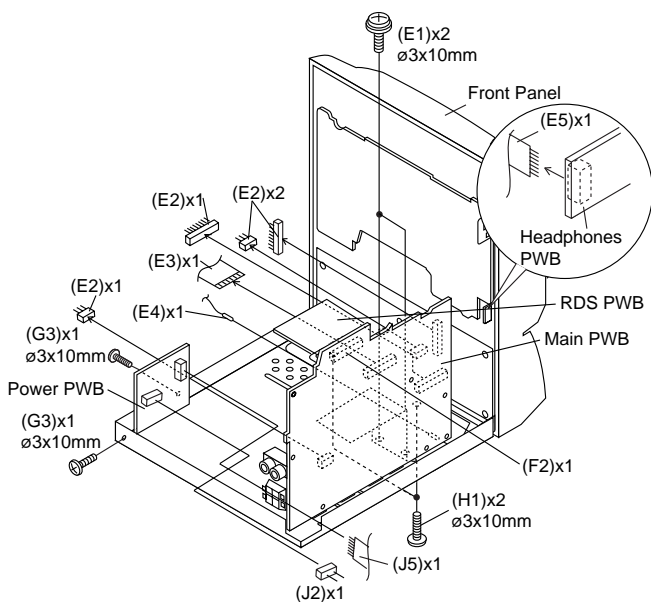


Figure 10-2

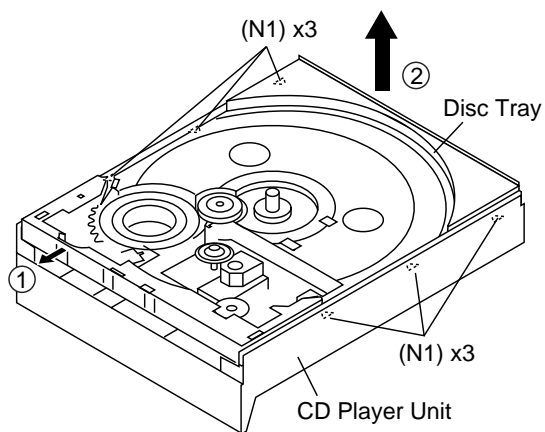


Figure 10-5

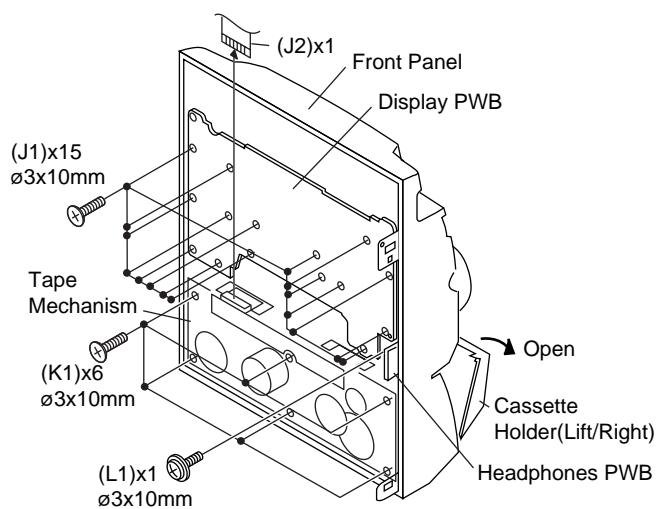


Figure 10-3

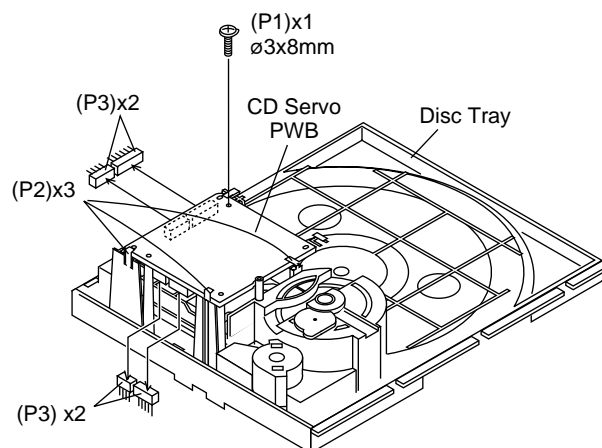


Figure 10-6

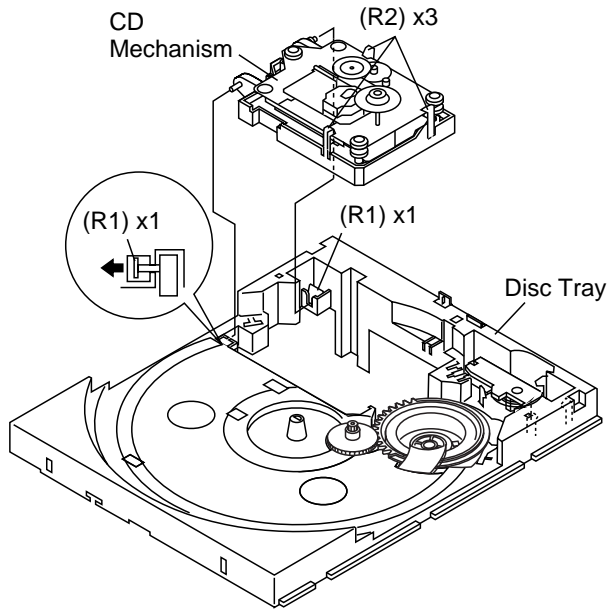


Figure 11-1

| CP-BA1500H |         |                              |        |
|------------|---------|------------------------------|--------|
| STEP       | REMOVAL | PROCEDURE                    | FIGURE |
| 1          | Woofers | 1. Front Panel ..... (A1) x1 | 11-2   |
| 2          |         | 2. Screw ..... (A2) x8       | 11-3   |
| 2          | Tweeter | 1. Screw ..... (B1) x2       | 11-3   |

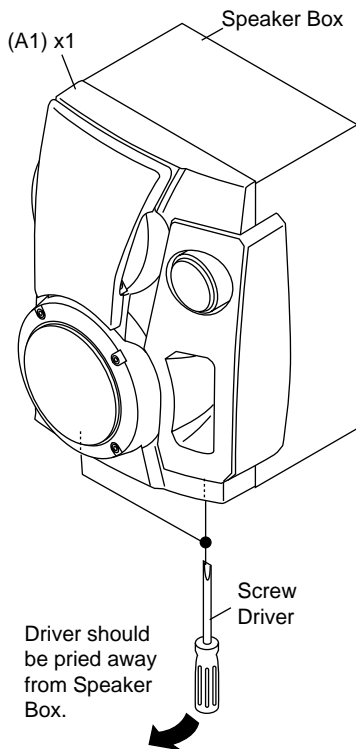


Figure 11-2

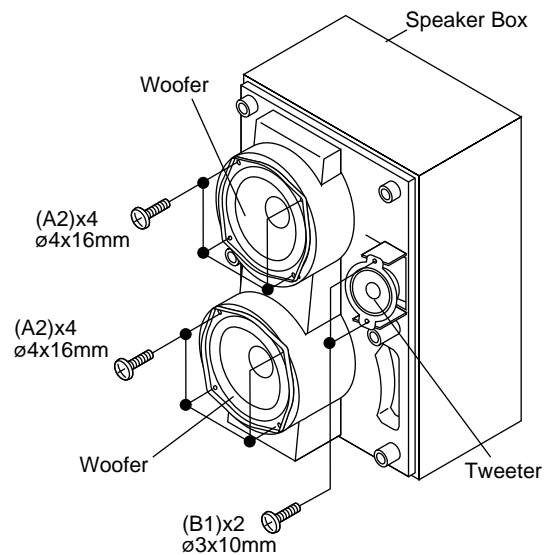


Figure 11-3

## REMOVING AND REINSTALLING THE MAIN PARTS

### TAPE MECHANISM SECTION

Perform steps 1 to 5, 8 and 10 of the disassembly method to remove the tape mechanism.

#### How to remove the record/playback and erase heads (Tape 2) (See Fig. 12-1)

1. Carefully remove the record/playback head and erase head screws (A1) x 2 pcs.

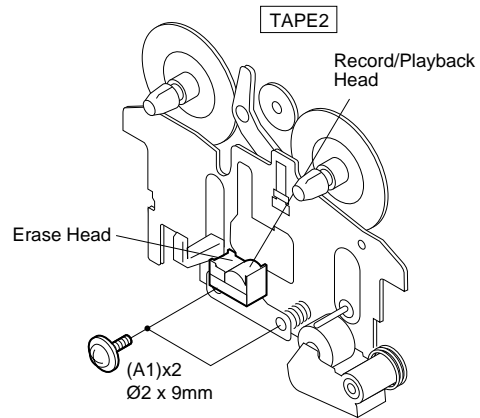


Figure 12-1

#### How to remove the playback head (Tape 1) (See Fig. 12-2)

1. Carefully remove the playback head screws (B1) x 2 pcs.

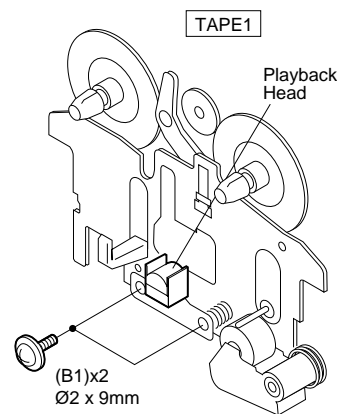


Figure 12-2

#### How to remove the pinch roller (Tape 1/2) (See Fig. 12-3)

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

**Note:**

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

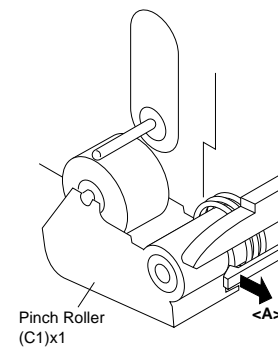


Figure 12-3

#### How to remove the belt (Tape 1) (See Fig. 12-4)

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 2) (See Fig. 12-4)

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. 12-5)

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

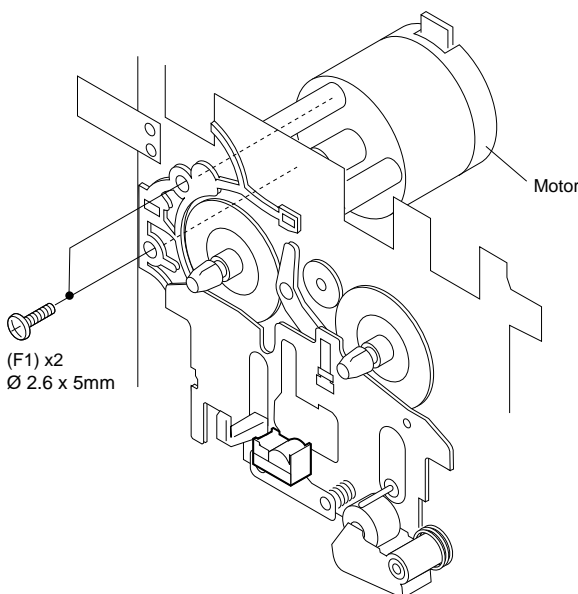


Figure 12-5

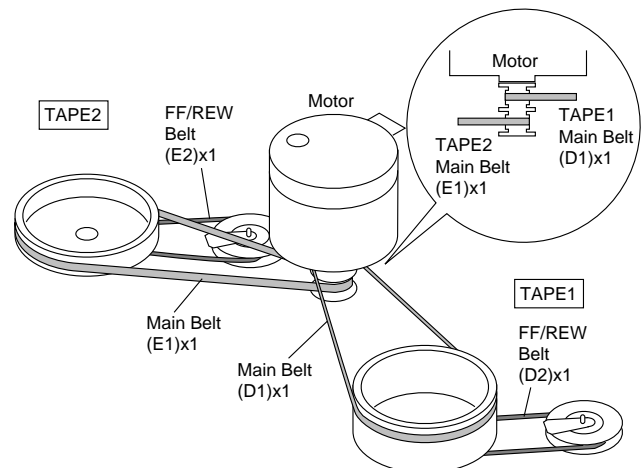


Figure 12-4

### CD MECHANISM SECTION

Perform steps 1, 2, 3, 12, 13, 14 and 15 of the disassembly method to remove the CD mechanism.

#### How to remove the T/T Up/Down motor (See Fig. 13-1)

1. Bend the hooks (A1) x 5 pcs., to remove the T/T Up/Down motor.
2. Remove the Drive belt (A2) x 1 pc.

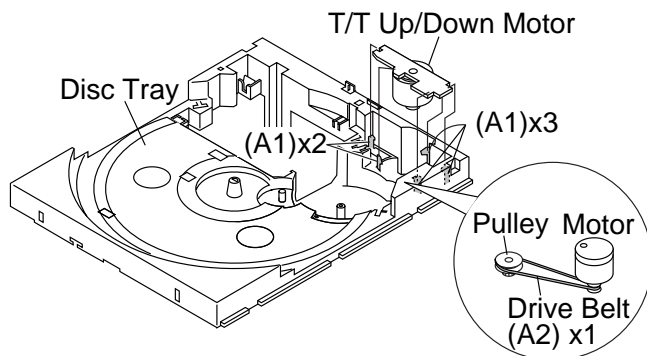


Figure 13-1

#### How to remove the pickup (See Fig. 13-2)

1. Remove the screws (B1) x 2 pcs., to remove the shaft (B2).
2. Remove the stop washer (B3) x 1 pc., to remove the gear (B4).
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 to protect the optical pickup from electrostatic damage.

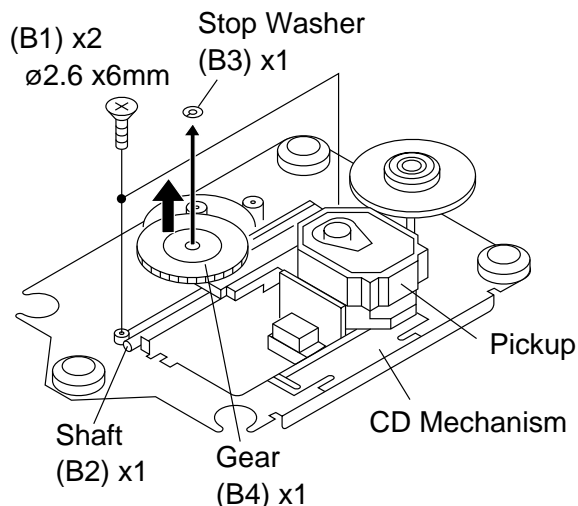


Figure 13-2

## ADJUSTMENT

### MECHANISM SECTION

• Driving Force Check

| Torque Meter  | Specified Value                        |
|---------------|--|
| Play: TW-2111 | Tape 1: Over 80 g<br>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) |

### TAPE MECHANISM

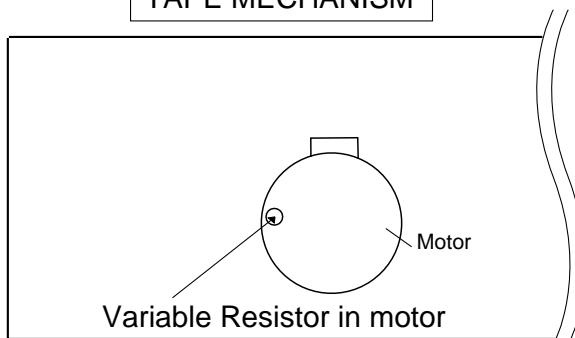


Figure 13-3

# CD-BA1500H

## 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   | 1,620 kHz         | T351                      | *1                    |
| AM Band Coverage | —         | 522 kHz           | (fL): T306<br>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

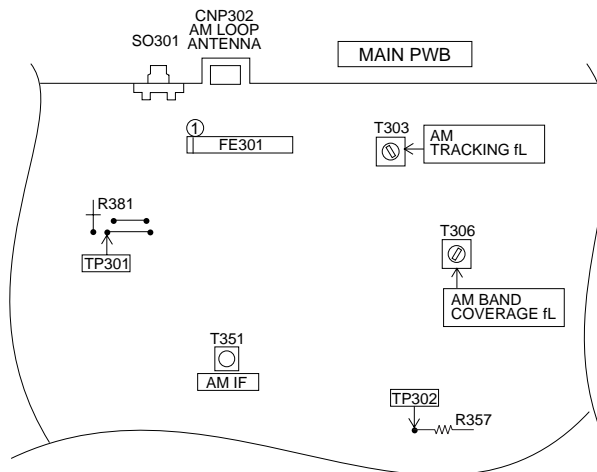


Figure 14-1 ADJUSTMENT POINT

### • FM

#### Notes:

- 1: Description of the "FM IF Adjustment" is not carried on this Manual. It is because the IF coil in the FM front end section has been best adjusted in the factory so that its further adjustment is not needed at the field. When replacing the FM front end assembly, no adjustment is needed either.
- 2: The parts in the FM front end section are prepared in a complete unit, so you can't obtain each part individually

## 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 12-2 EFBL)
- (3) Gain adjustment (The gain is compensated inside the IC so that the loop gain at the gain crossover frequency will be 0dB.)
  - \* Focus gain adjustment
  - \* Tracking gain adjustment

## CD ERROR CODE DESCRIPTION

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

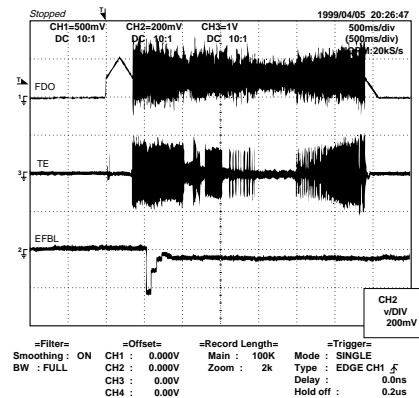


Figure 14-2



### TEST MODE

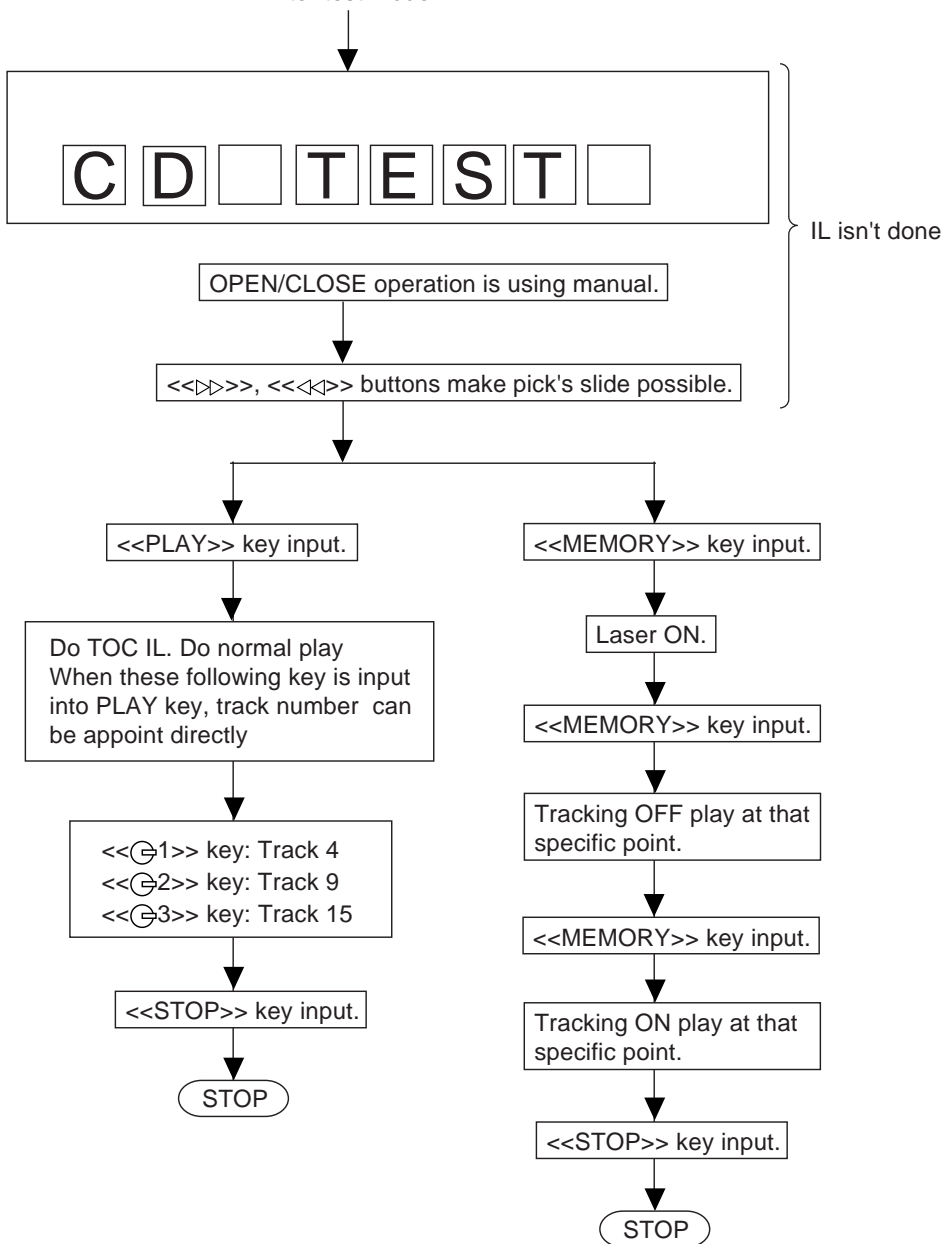
·Setting the test mode

Any one of test mode can be set by pressing several keys as follows.

<X-BASS> + <CD> + <POWER> TEST:CD operation test

Function:-CD test mode.

-Enter test mode.

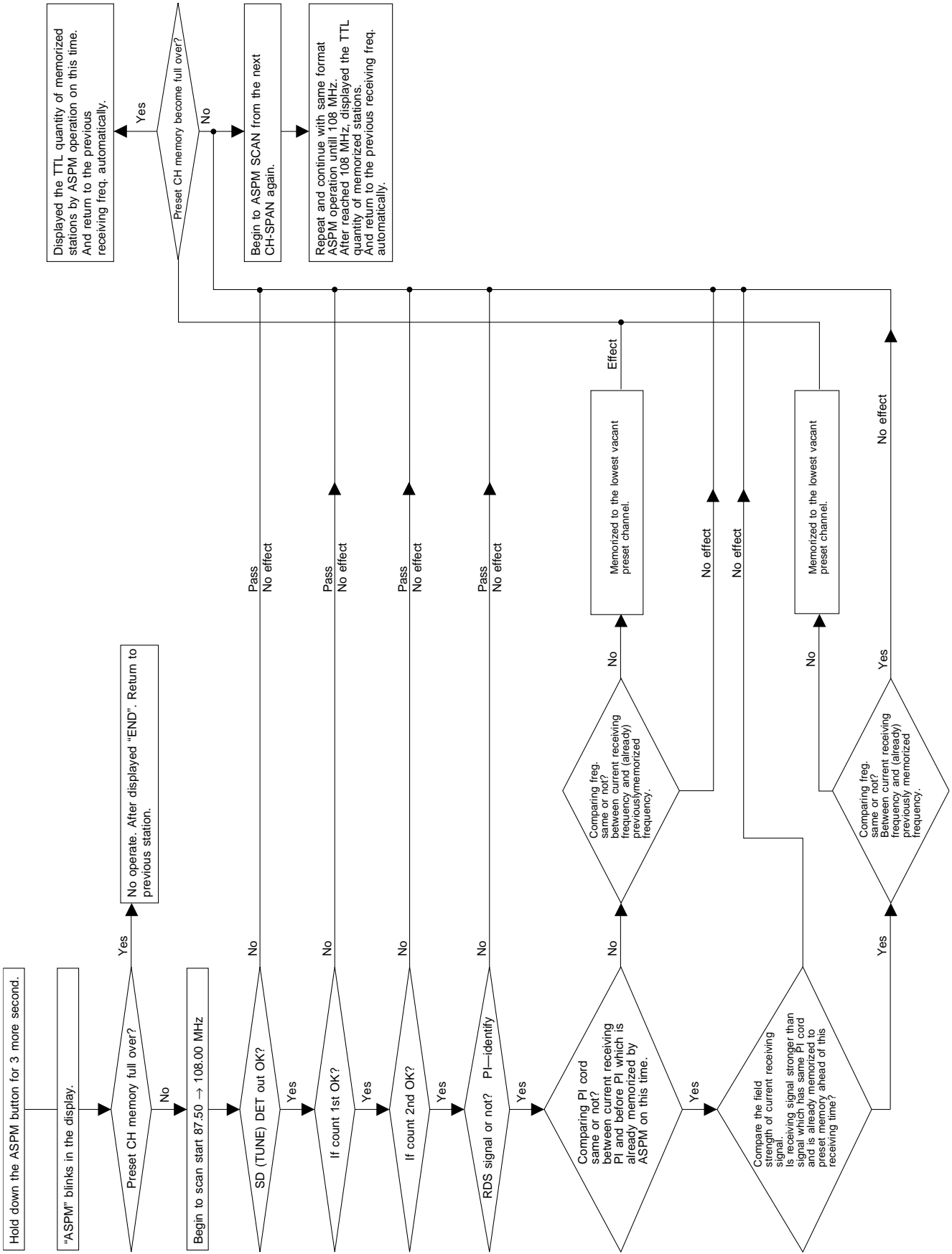


VOL — Last memory  
BAL — CENTER  
P.GEQ — FLAT  
X-BASS — OFF

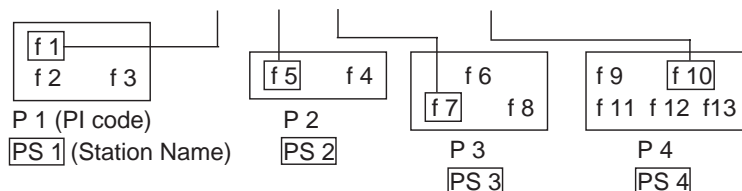
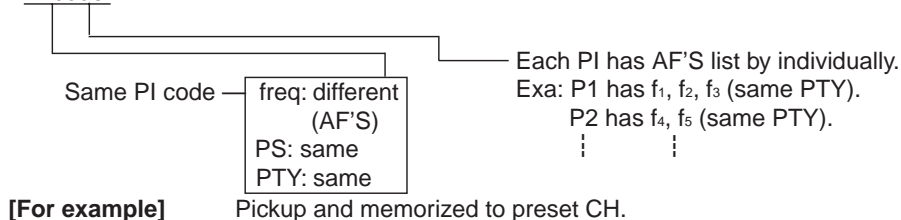
To cancel : Power OFF

Sliding the PICKUP with  
<<▶▶>>, <<◀◀>> button  
must only be in STOP mode.

## ASPM, summary operation



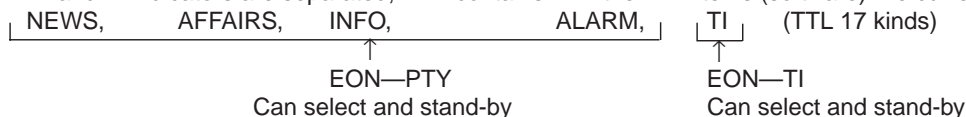
- ASPM SCAN: 87.50MHz → 108.00 MHz.
  - Only RDS signal is memorized by ASPM because RDS signal has PI code and is suitable and convenient for ASPM operation.
- ASPM  
Comparing field strength, only one strongest RDS station is memorized of all stations (repeater relay stations) that have same PI code.



- Select signals (f1, f5, f7, f10) are memorized in the preset memory by ASPM.
- If tentative - ASPM operation is repeated intentionally, never memorized (over write) at the same frequency. 1st time ASPM → strongest stations of each PI are memorized.
- ASPM is not only very useful for PTY search, but also EON operation.  
2nd time ASPM → 2nd strong stations of each PI are memorized and so on.  
PTY search function is equal to FM band search function as a result.

**1. Introduction of RDS for CD-BA1500H.**

CD-BA1500H RDS function is equal to adding EON feature to the current CD-C75H RDS.  
EON feature is EON—PTY and EON—TI.  
Although PTY and TI indicators are separated, PTY contains TI in the PTY items (software) like current PTY search items.



EON—PTY and EON—TI are basically stand-by → receive the desired program of ON station.

**2. The difference point from current CD-C75H RDS. (CD-C75H — CD-BA1500H)**

1. PTY item: added TA. (TTL 18 kind.)
2. Each “TP”, “TA” ind. light up or go out individually.  
“TA” ind. doesn't light up on current model, CD-C75H due to none EON—TI.
3. Added 3 indicators(in FL) due to adding EON feature.  
EON: Lights up only during receiving EON data (14A).  
TI: During EON-TI stand-by → Light up  
During receiving ON station. → blink.  
PTY: During EON-PTY stand-by → Light up  
During receiving ON station. → blink.

4. No adjust type (None adjusting circuit.)
5. Added EON button.
6. Need to change RDS logo due to the addition of EON feature.
7. Added EON—TI, EON—PTY function.

**3. Summary of CD-BA1500H RDS—EON operation**

EON—PTY: Select and set the desired “PTY” → stand-by → switch to ON (other network) Station at the start of desired PTY automatically → stay and listen to PTY of ON station → switch back to TN (This net) station automatically at the end of PTY (ON) i.e. after changing to another PTY (except AFFAIRS) or cancelling to receive PTY of ON station midway.

EON—TI: Select and set the “TI” → stand-by → switch to ON station at the start of traffic announcement automatically → stay and listen to TA of ON station → switch back to TN station automatically at the end of TA (ON).  
ie after TA (ON) is over or cancelled to receive TA of ON station midway.  
When switching TN → ON station.

In case of exist 2 more stations having the desired (specified) “PTY” or “TI”, the receiver will select and switch to ON station comparing field strength at the same time. But when the frequency of ON station exists in the preset-memory, then receiver switches straight to that ON station (CH), without comparing field strength so can make a quick switching from TN—ON station. Preset memory takes priority of switching TN—ON station.  
Therefore ASPM is usefull not only for PTY search but also for rapid EON switching.  
Anyway CD-BA1500H EON is basically stand-by and receiving method, along with the Guidelines for EON implementation.

# CD-BA1500H

## EON summary notice for reference

1. EON-TI/PTY EON stand-by can be set, only when EON ind. lights up.  
While EON ind. goes out (NO EON STATION), EON stand-by can't be set.  
If the EON button is pressed, then "NO EON" is indication the display.
2. EON-TI/PTY Even if switch back ON → TN station continue to keep EON stand-by.
3. EON-TI Don't switch TN → ON during TN broadcast TA. (same item)
4. EON-TI/PTY EON can be cancelled during receiving ON station by pressing EON button if necessary and switch back ON→TN.
5. EON-TI/PTY EON stand-by is perfectly cancelled (cleared) by pressing EON button 2 times during stand-by or power OFF or Tun Up/Down or change band or recall pre-set CH.
6. EON-TI/PTY After setting EON stand-by, stand-by items can be confirmed by pressing EON button one time.
7. EON-TI/PTY EON button function: • EON setting
  - Confirm stand-by items
  - Cancel (ON→TN)
  - EON clear cancel (2 times)
8. EON-TI/PTY After setting EON-TI and EON-PTY stand-by, if when EON data is not transmitted, EON ind goes out and EON stand-by is automatically cancelled display "NO EON".
9. EON-TI EON-TI stand-by can't be set. When TP=0,TA=0 (TN) even if EON ind. lights up and the EON button is pressed then "NO TI" is indication the display.
10. EON-PTY Don't switch TN → ON during TN broadcast same specified PTY. (same item of PTY)
11. EON-TI/PTY Switch TN→ON → TN station one cycle.  
Never switch TN → ON1 → ON2 → Other net to other net station.
12. EON-TI/PTY After switch TN → ON station. When ON station is NO RDS, NO signal, TA=OFF or different PTY items. The receiver switch back ON → TN displaying "NO READY".
13. During receive ON station. when ON station become to be NO RDS, NO signal, TA=ON to OFF or different PTY item, The receiver switch back ON → TN.
14. EON-TI/PTY Switch TN → ON in case of 2 more stations exist, comparing field strength and switch to the strongest station, if these signals are same strength, switch to the first previous station.  
If same frequency as AF'S exists in the preset memory, then switch TN → ON (preset memory station) straight. In case of exist 2 more preset memories of AF'S, then switch to the preset CH which taken in EON DATA first, also in this case no concern to field strength.
15. Even if switch TN → ON preset memory straight, that ON station is very weak signal, then search another AF'S (ON) station comparing field strength and switch to the strongest station as a result. Of all stations of AF'S are very weak or no good condition, then, switch back ON → TN automatically display "NO READY".
16. EON-TI/PTY No linkage volume, power ON/OFF, and switch function.

| Traffic Programme code (TP) | Traffic Announcement code (TA) | Applications   |
|-----------------------------|--------------------------------|--|
| OFF                         | OFF                            | This programme does not carry traffic announcements nor does it refer, via EON, to a programme that does.  |
| OFF                         | ON                             | This programme carries EON information about another programme which gives traffic information.  |
| ON                          | OFF                            | This programme carries traffic announcements but none are being broadcast at present and may also carry EON information about other traffic announcements. |
| ON                          | ON                             | A traffic announcement is being broadcast on this programme at present.  |

**RDS (Radio Data System) OPERATION**

RDS is a broadcasting service which a growing number of FM stations are now providing. It allows these FM stations to send additional signals along with their regular programme signals. For example, the stations send their station names, and information about what type of programme they broadcast, such as sports or music, etc.

When tuned to an FM station which provide the RDS service, the RDS will appear, the station frequency (and then the station name if sent) is displayed.

The TP (Traffic Programme) will appear on the display when the received broadcast carries traffic announcements, and the TA (Traffic Announcement) will appear whilst a traffic announcement is being received. EON will appear whilst the EON (Enhanced Other Networks Information) data is being broadcast. The PTY (Dynamic PTY Indicator) will appear whilst the Dynamic PTY station is being received.

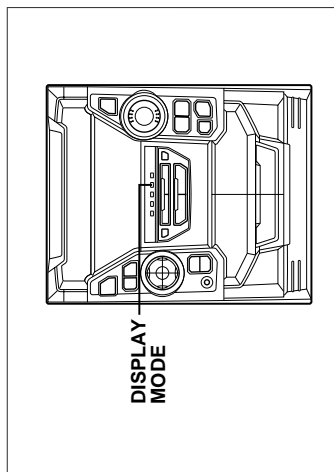
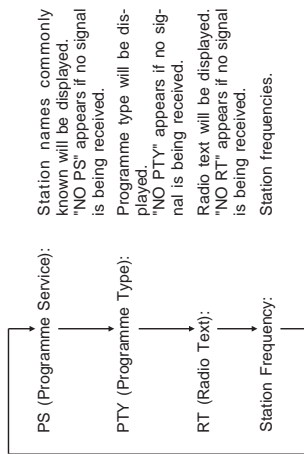
**Note:**

When the TP and TA appear at the same time, an announcement is being made. When only the TA appears, an announcement is not being made.

**Information Provided by RDS**

With the CD-BA1500H, you can display three types of RDS service. To show them in the display, press the DISPLAY MODE button.

Each time you press the DISPLAY MODE button, the display will change to show the following information.



**(Continued)**

Descriptions of the PTY (Programme Type) codes, TP (Traffic Programme) and TA (Traffic Announcement) With the CD-BA1500H, you can search for and receive the following PTY, TP and TA signals.

|                  |  |                  |   |
|------------------|--|------------------|---|
| <b>NEWS:</b>     | Short accounts of facts, events and publicly expressed views, reportage and actuality.   | <b>FINANCE:</b>  | Stock Market reports, commerce, trading etc.  |
| <b>AFFAIRS:</b>  | Topical programme expanding or enlarging upon the news, generally in different presentation style or concept, including debate, or analysis.   | <b>CHILDREN:</b> | For programmes targeted at a young audience, primarily for entertainment and interest, rather than where the objective is to educate.   |
| <b>INFO:</b>     | Programmes whose purpose is to impart advice in the widest sense.  | <b>SOCIAL:</b>   | Programmes about people and things that influence them individually or in groups. Includes: sociology, history, geography, psychology and society.  |
| <b>SPORT:</b>    | Programme concerned with any aspect of sport.  | <b>RELIGION:</b> | Any aspect of beliefs and faiths, involving a God or Gods, the nature of existence and ethics.  |
| <b>EDUCATE:</b>  | Programme intended primarily to educate, of which the formal element is fundamental.   | <b>PHONE IN:</b> | Involving members of the public expressing their views either by phone or at a public forum.  |
| <b>DRAMA:</b>    | All radio plays and serials.   | <b>TRAVEL:</b>   | Features and programmes concerned with travel to near and far destinations, package tours and travel ideas and opportunities. Not for use for Announcements about problems, delays, or roadworks affecting immediate travel where TP/TA should be used. |
| <b>CULTURE:</b>  | Programmes concerned with any aspect of national or regional culture, including language, theatre, etc.  | <b>LEISURE:</b>  | Programmes concerned with recreational activities in which the listener might participate. Examples include, Gardening, Fishing, Antique collecting, Cooking, Food & Wine etc.  |
| <b>SCIENCE:</b>  | Programmes about the natural sciences and technology.  | <b>JAZZ:</b>     | Poliphonic, syncopated music characterised by improvisation.  |
| <b>VARIED:</b>   | Used for mainly speech-based programmes usually of light-entertainment nature, not covered by other categories. Examples include: quizzes, panel games, personality interviews.  | <b>COUNTRY:</b>  | Songs which originate from, or continue the musical tradition of the American Southern States. Characterised by a straightforward melody and narrative story line.  |
| <b>POP M:</b>    | Commercial music, which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.   | <b>NATION M:</b> | Current Popular Music of the Nation or Region in that country's language, as opposed to international 'Pop' which is usually US or UK inspired and in English.  |
| <b>ROCK M:</b>   | Contemporary modern music, usually written and performed by young musicians.   | <b>OLDIES:</b>   | Music from the so-called "golden age" of popular music.   |
| <b>EASY M:</b>   | Current contemporary music considered to be "easy-listening", as opposed to Pop, Rock or Classical, or one of the specialized music styles, Jazz, Folk or Country. Music in this category is often but not always, vocal, and usually of short duration. | <b>FOLK M:</b>   | Music which has its roots in the musical culture of a particular nation, usually played on acoustic instruments. The narrative or story may be based on historical events or people.  |
| <b>LIGHT M:</b>  | Classical Musical for general, rather than specialist appreciation. Examples of music in this category are instrumental music, and vocal or choral works.  | <b>DOCUMENT:</b> | Programme concerned with factual matters, presented in an investigative style.  |
| <b>CLASSICS:</b> | Performances of major orchestral works, symphonies, chamber music etc., and including Grand Opera.   | <b>TEST:</b>     | Broadcast when testing emergency broadcast equipment or receivers.  |
| <b>OTHER M:</b>  | Musical styles not fitting into any of the other categories. Particularly used for specialist music of which Rhythm & Blues and Reggae are examples.   | <b>ALARM I:</b>  | Emergency announcement made under exceptional circumstances to give warning of events causing danger of a general nature.   |
| <b>WEATHER:</b>  | Weather reports and forecasts and Meteorological information.  | <b>NONE:</b>     | No programme type (receive only).   |
|                  |  | <b>TP:</b>       | Broadcasts which carry traffic announcements.   |
|                  |  | <b>TA:</b>       | Traffic announcements are being broadcast at present.   |

**Note:**  
 ● When the unit is in the EON stand-by mode and a programme is selected, the unit will display "TI" instead of "TA".

## 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 micro-micro-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   | POWER         | ON—OFF   |
| SW602   | CLOCK         | ON—OFF   |
| SW603   | TIMER/SLEEP   | ON—OFF   |
| SW604   | PTY TI/SEARCH | ON—OFF   |
| SW605   | EON           | ON—OFF   |
| SW606   | ASPM          | ON—OFF   |
| SW607   | DISPLAY MODE  | ON—OFF   |
| SW608   | STATION       | ON—OFF   |
| SW609   | DISC SKIP     | ON—OFF   |
| SW610   | OPEN/CLOSE    | ON—OFF   |
| SW611   | DIMMER        | ON—OFF   |
| SW612   | X-BASS/DEMO   | ON—OFF   |

| REF. NO | DESCRIPTION       | POSITION |
|---------|-------------------|----------|
| SW613   | EQUALIZER         | ON—OFF   |
| SW614   | VOLUME UP         | ON—OFF   |
| SW615   | VOLUME DOWN       | ON—OFF   |
| SW616   | CD                | ON—OFF   |
| SW617   | TAPE              | ON—OFF   |
| SW618   | TUNING /TIME DOWN | ON—OFF   |
| SW619   | MEMORY/SET        | ON—OFF   |
| SW620   | REWIND            | ON—OFF   |
| SW621   | FORWARD           | ON—OFF   |
| SW622   | PLAY/REPEAT       | ON—OFF   |
| SW623   | STOP              | ON—OFF   |
| SW625   | REC/PAUSE         | ON—OFF   |
| SW626   | TUNING/TIME UP    | ON—OFF   |
| SW627   | VIDEO/AUX         | ON—OFF   |
| SW628   | TUNER (BAND)      | ON—OFF   |

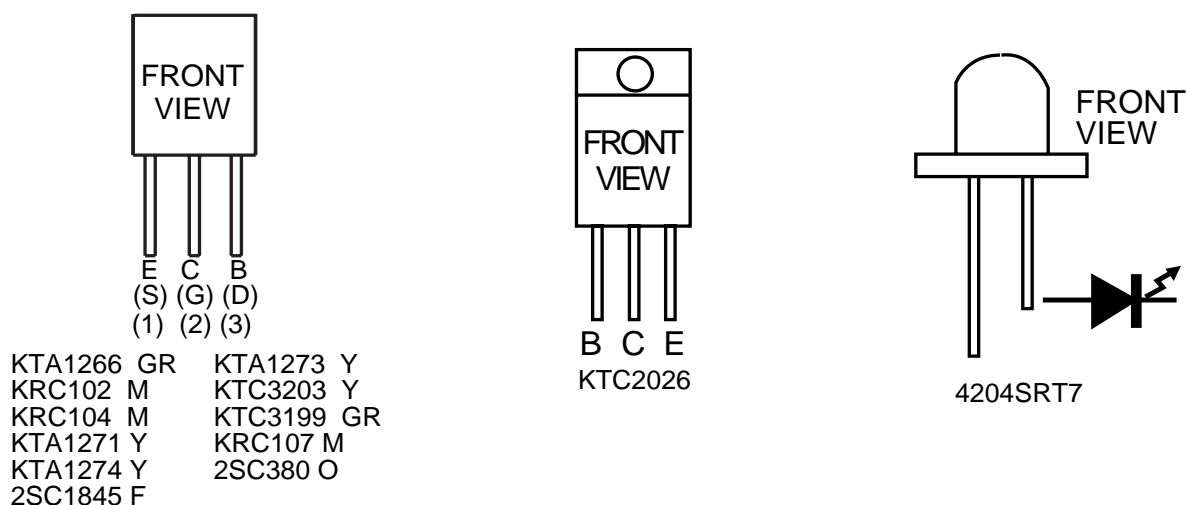


Figure 20 TYPES OF TRANSISTOR AND LED

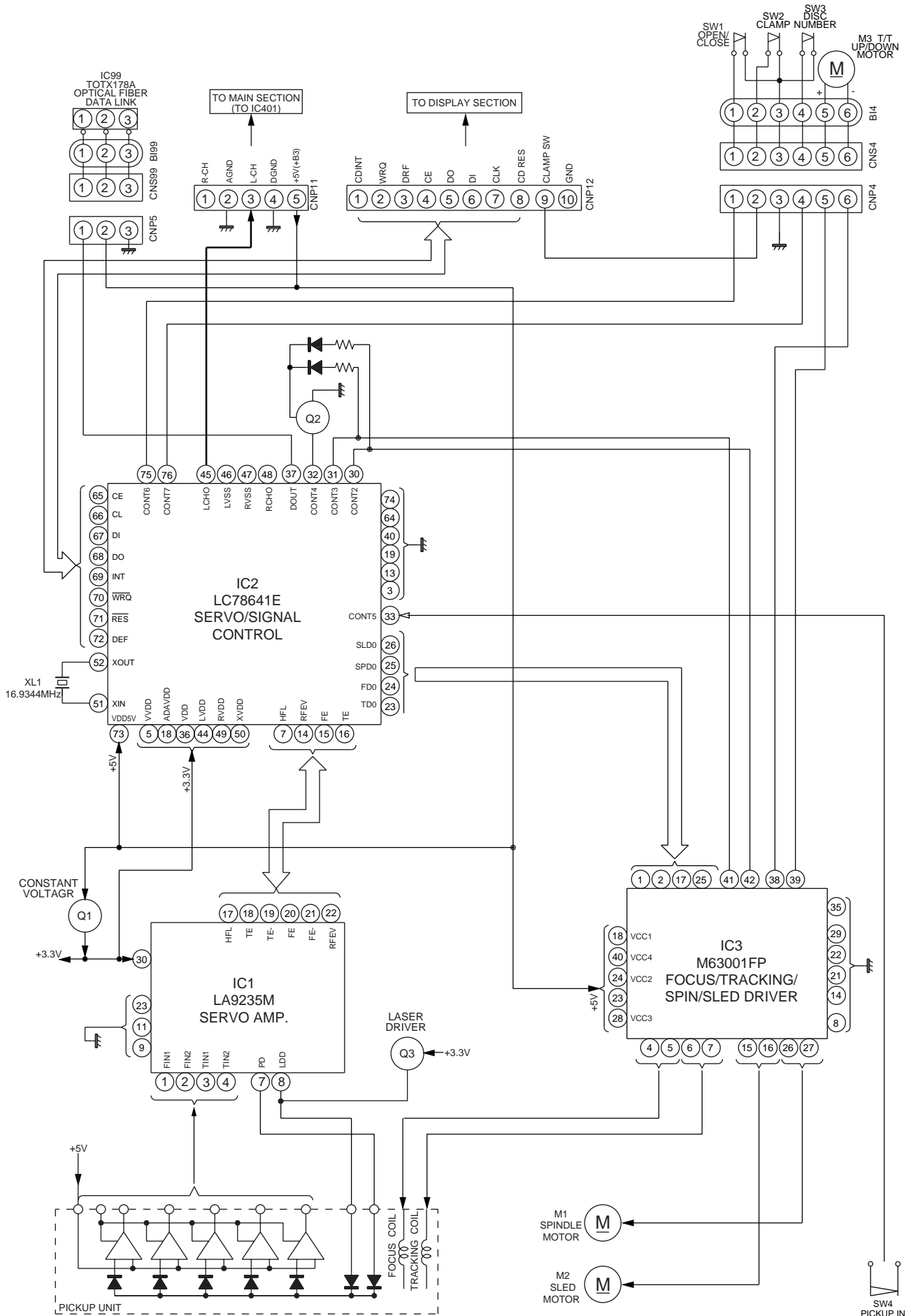


Figure 21 BLOCK DIAGRAM (1/3)

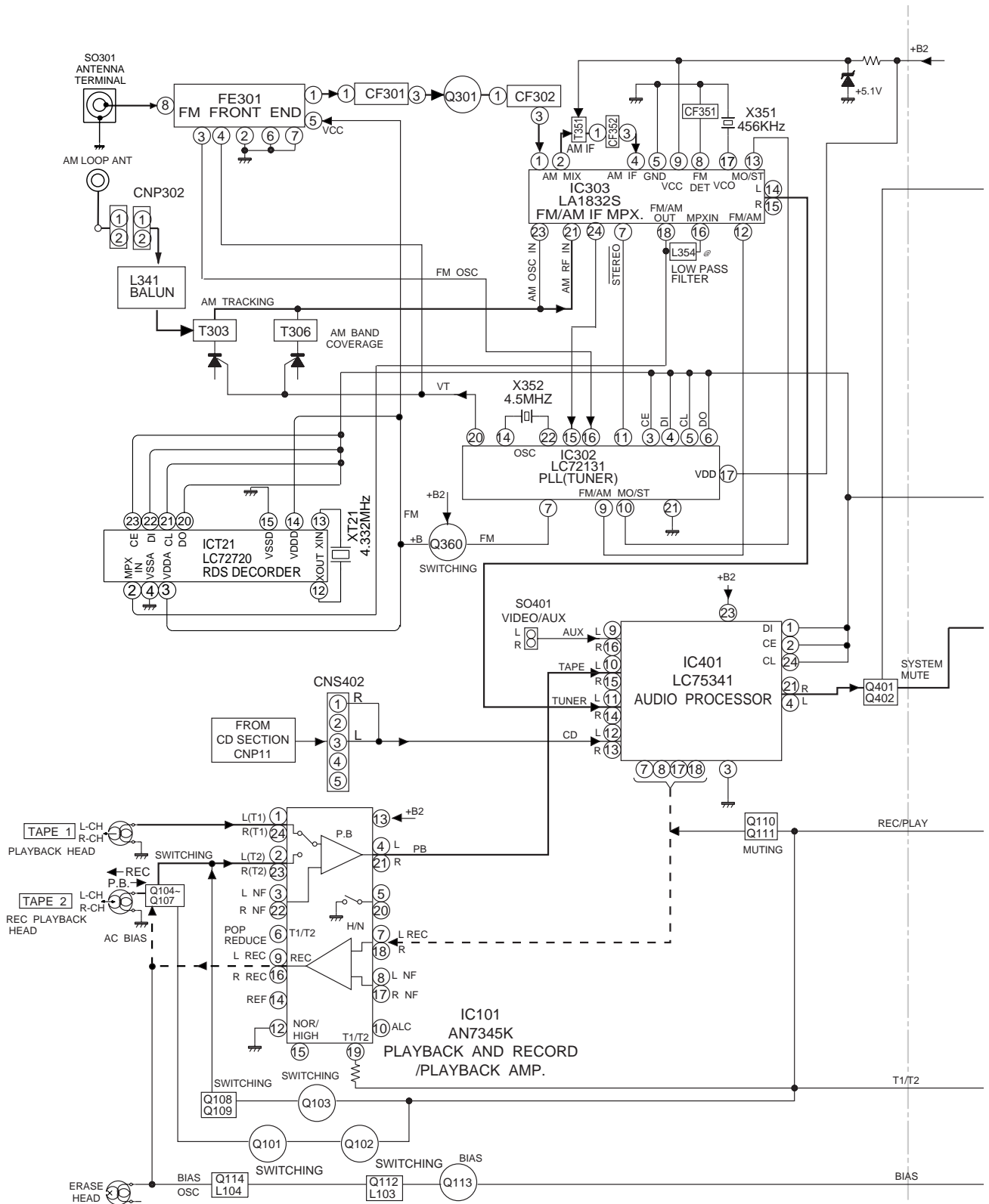


Figure 22 BLOCK DIAGRAM (2/3)



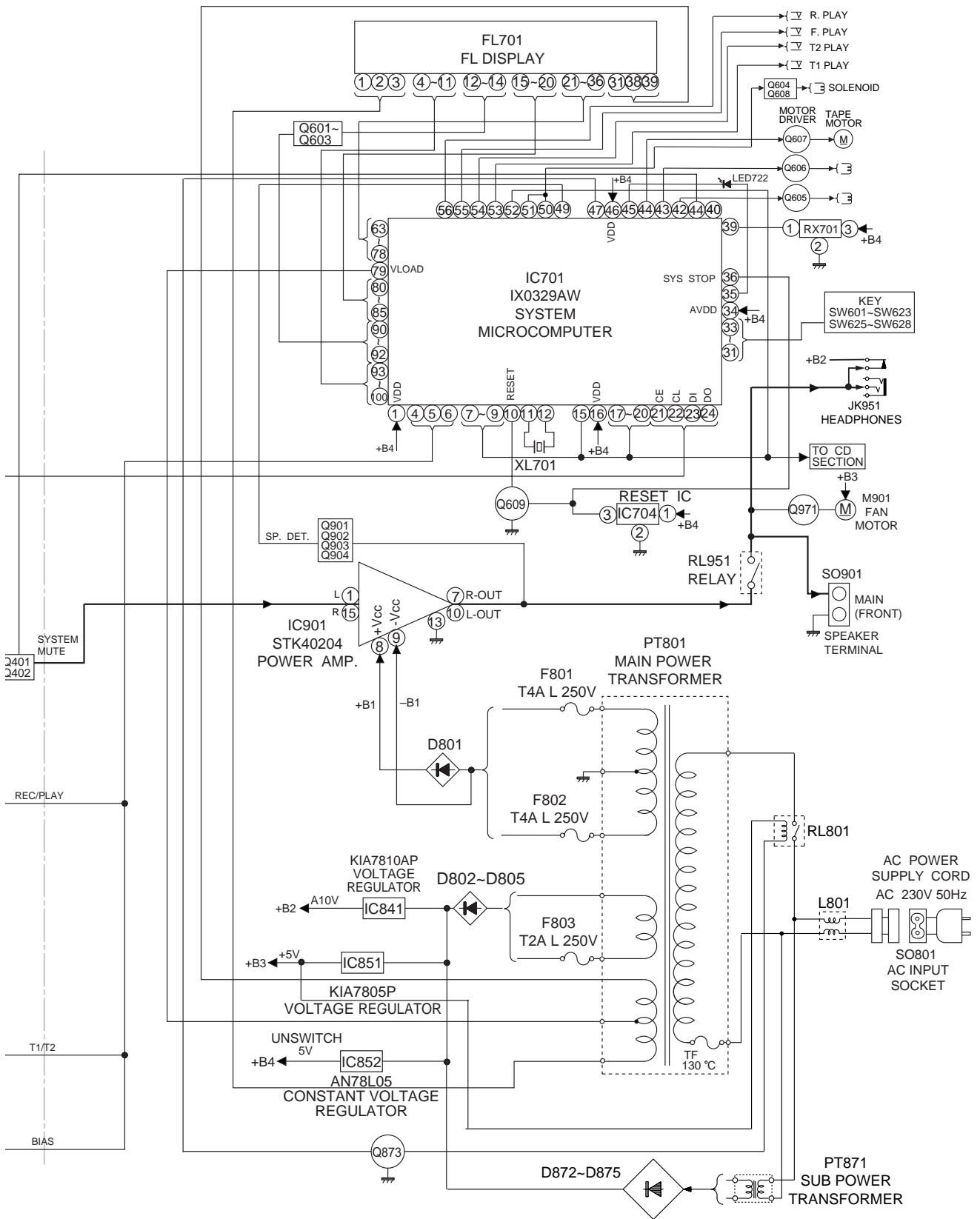
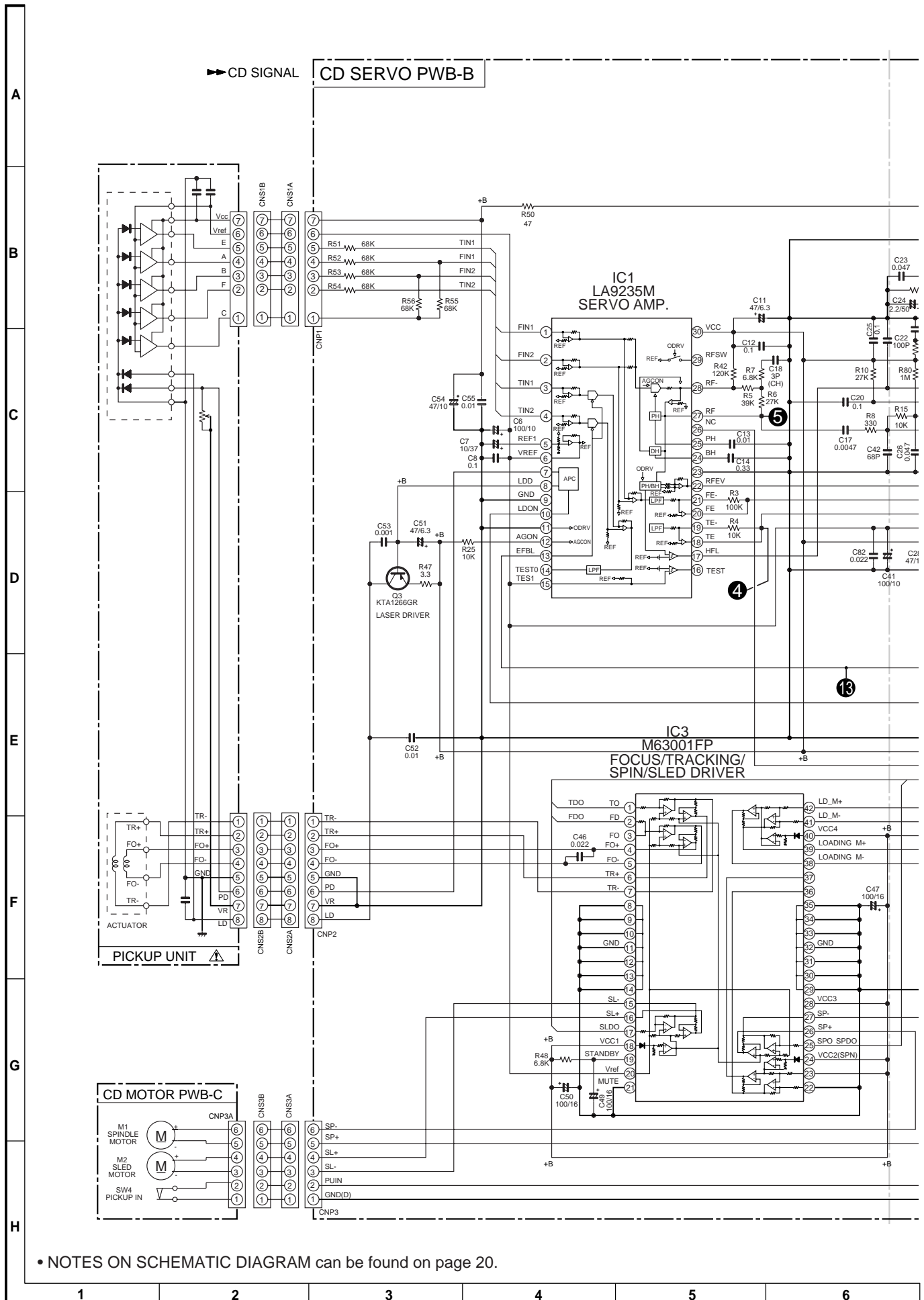


Figure 23 BLOCK DIAGRAM (3/3)

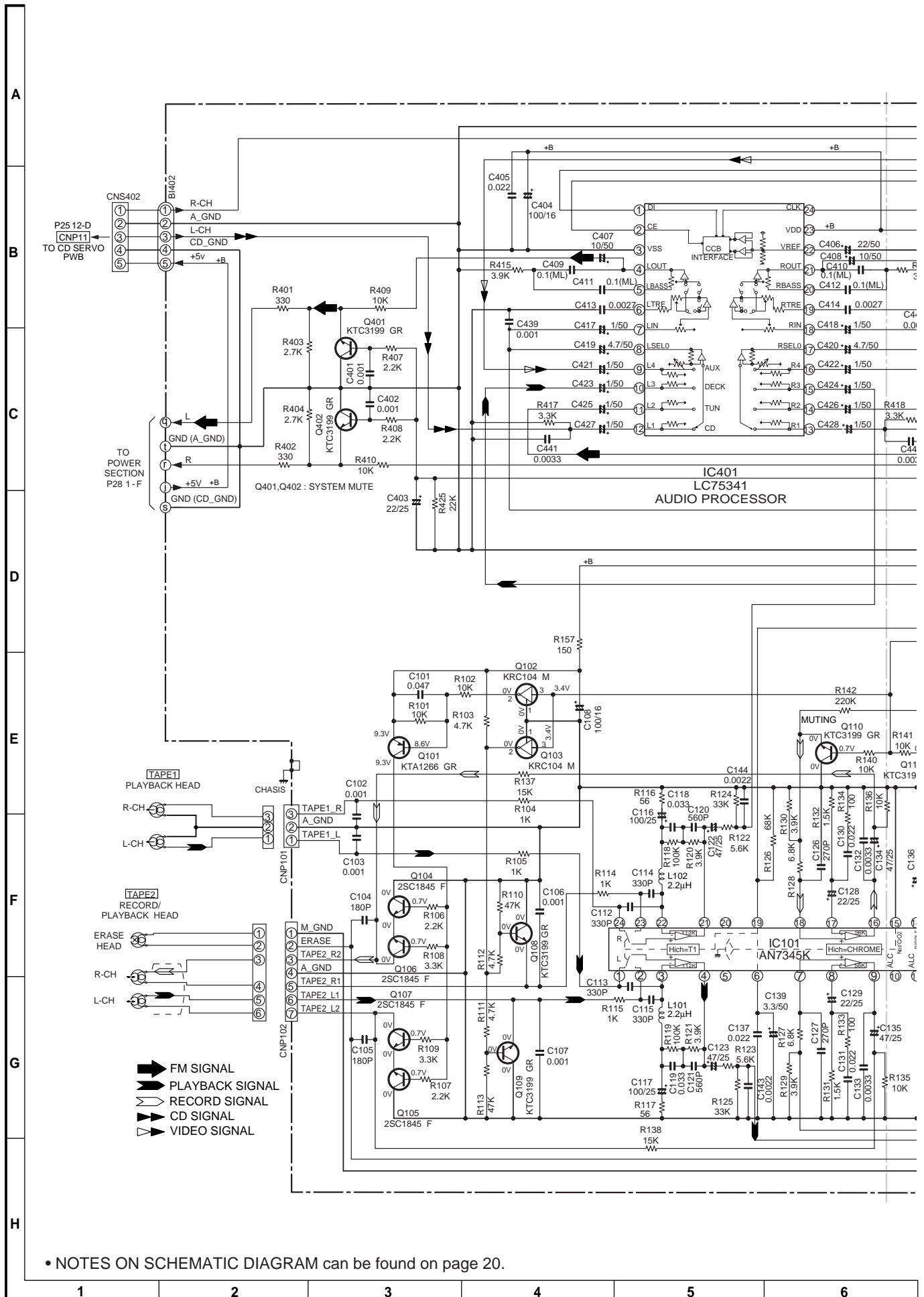


• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

Figure 24 SCHEMATIC DIAGRAM (1/10)



# CD-BA1500H



• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

Figure 26 SCHEMATIC DIAGRAM (3/10)

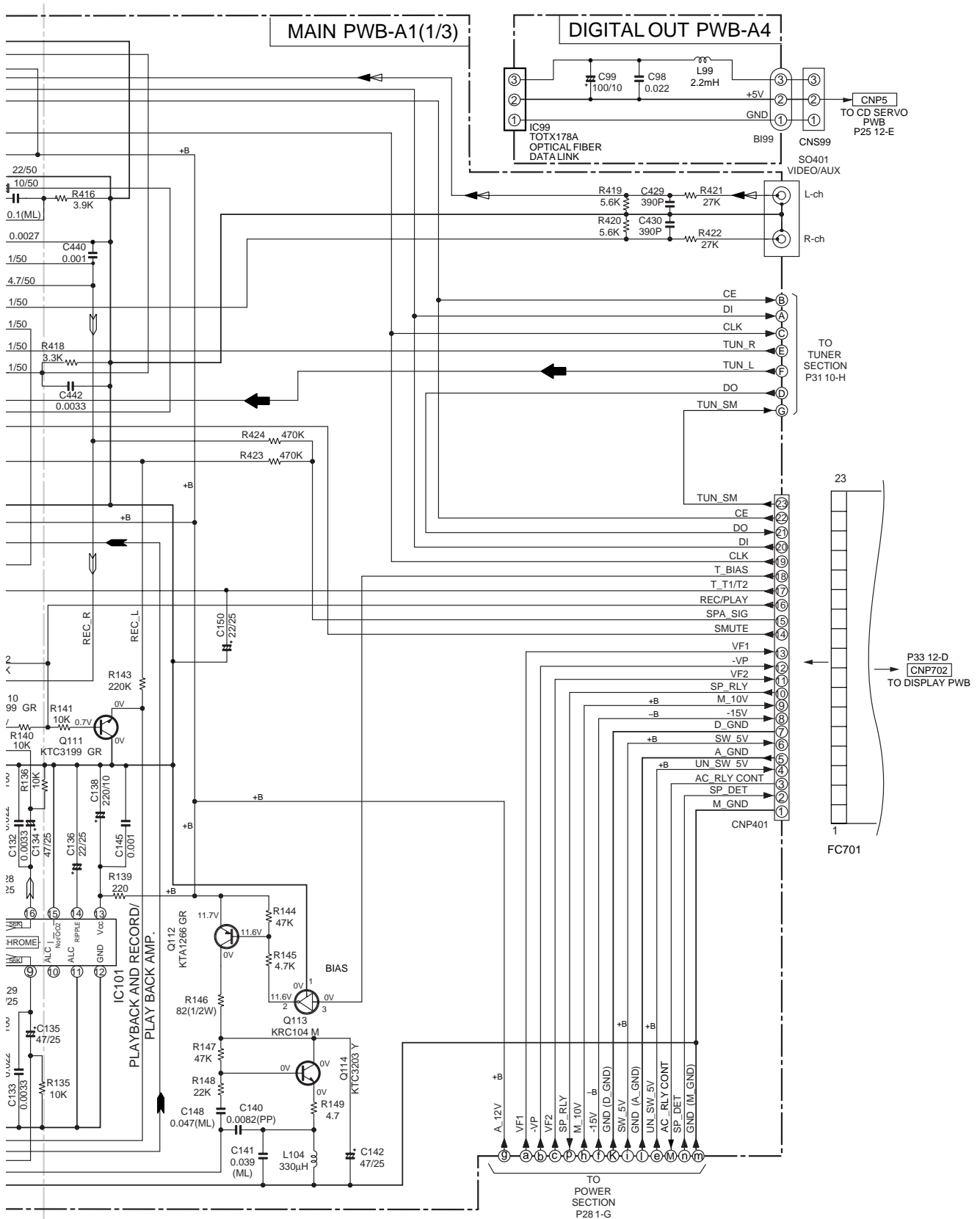


Figure 27 SCHEMATIC DIAGRAM (4/10)

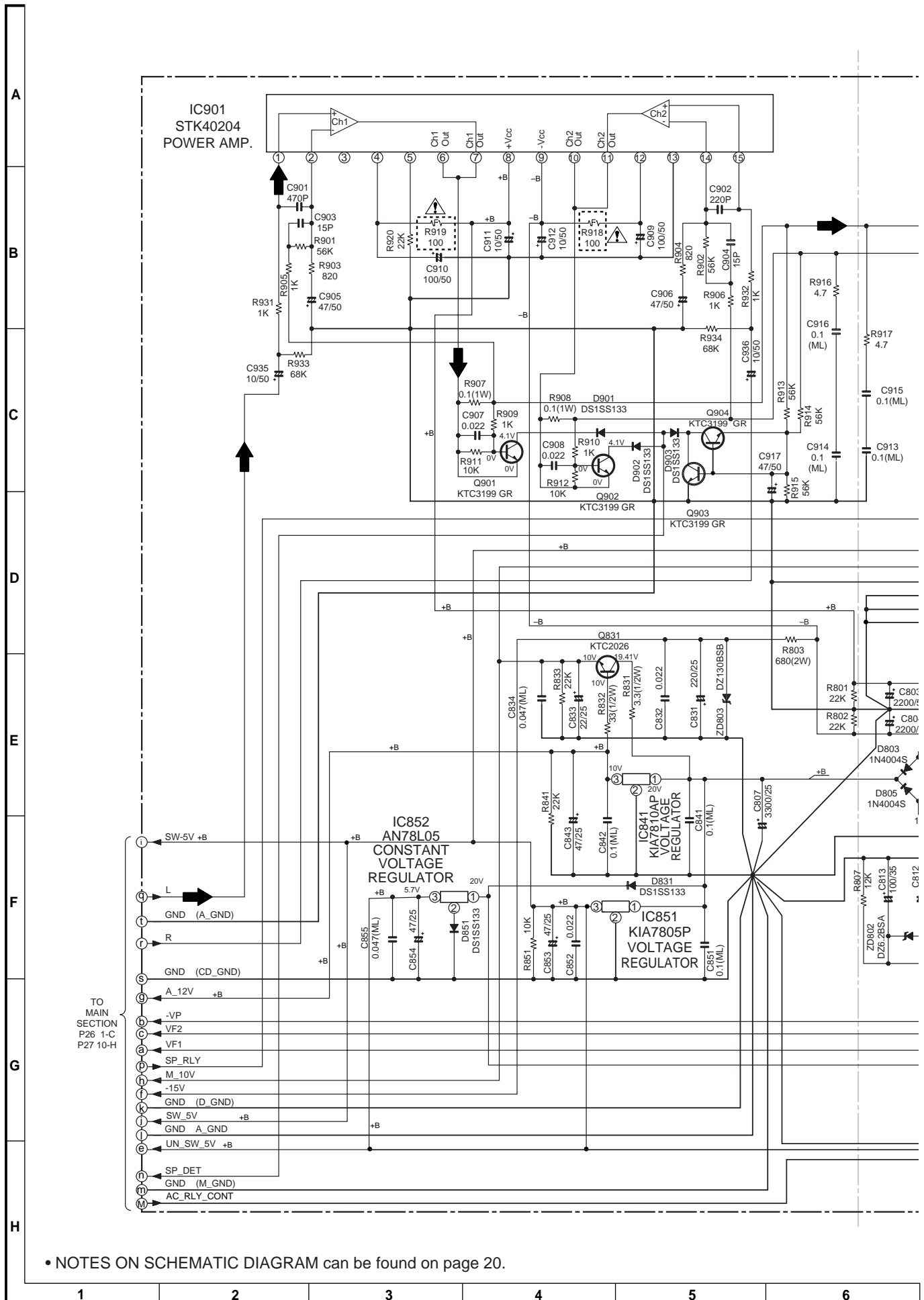
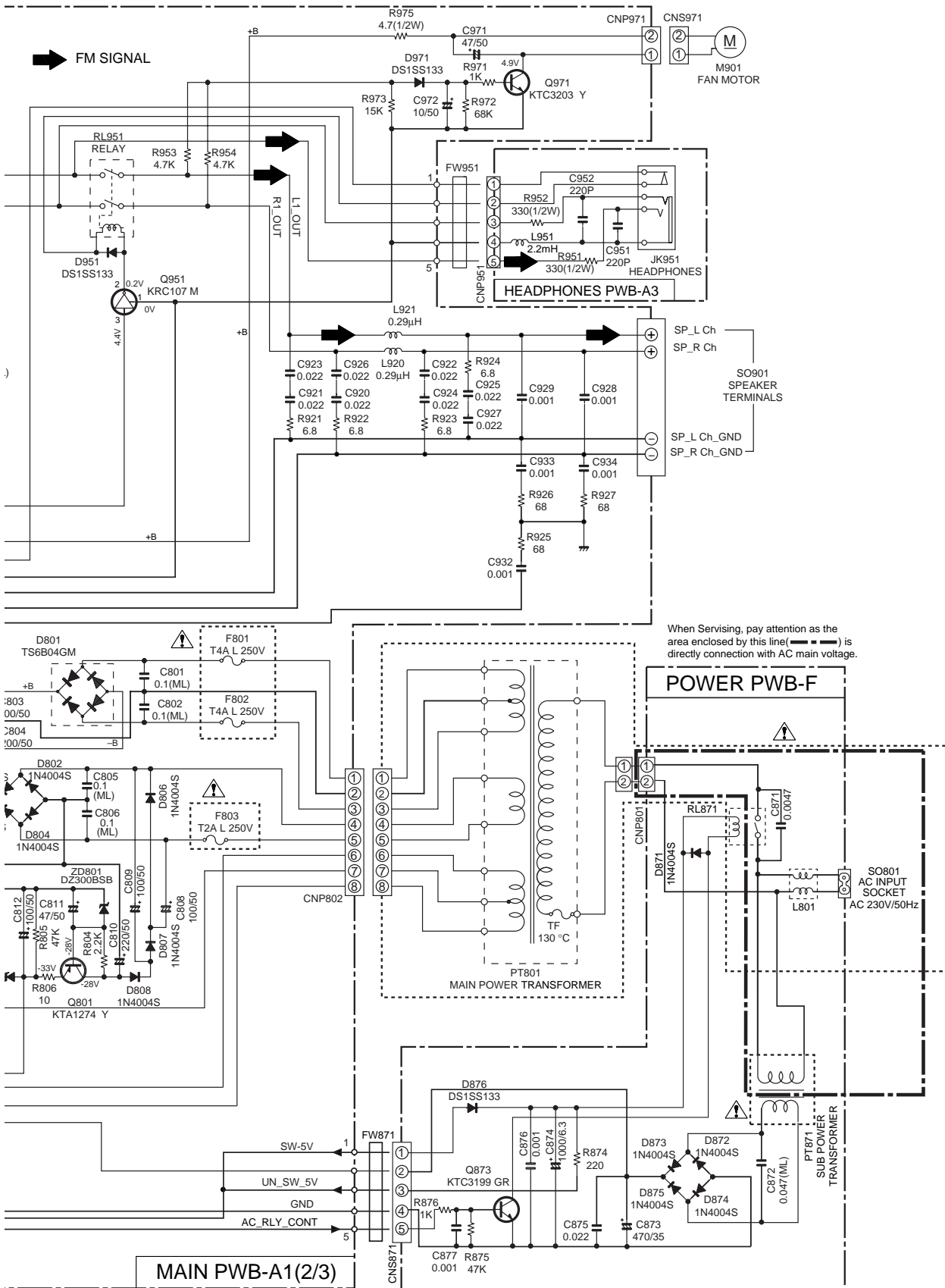


Figure 28 SCHEMATIC DIAGRAM (5/10)



|   |   |   |    |    |    |
|---|---|---|----|----|----|
| 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|----|----|----|

Figure 29 SCHEMATIC DIAGRAM (6/10)

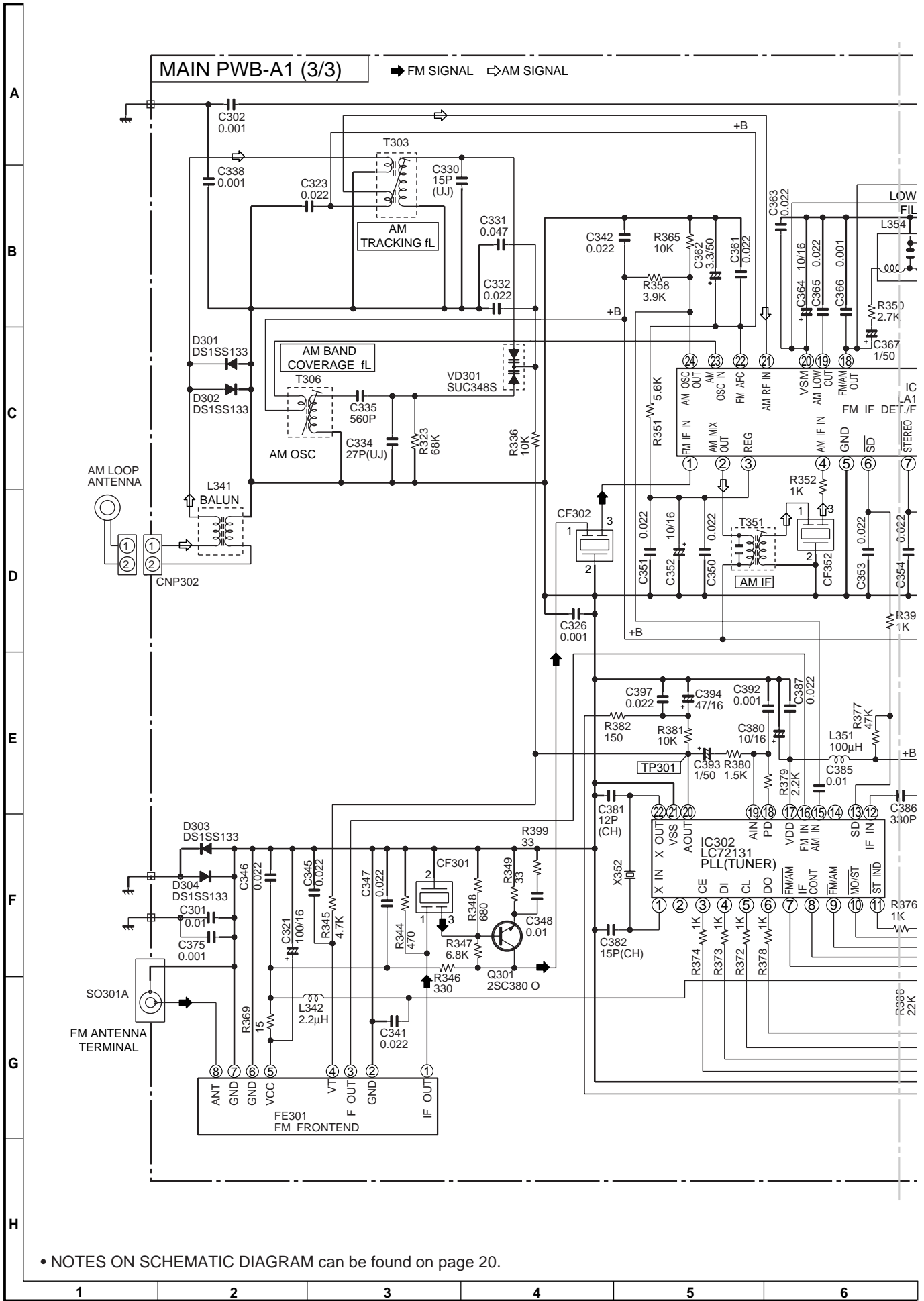
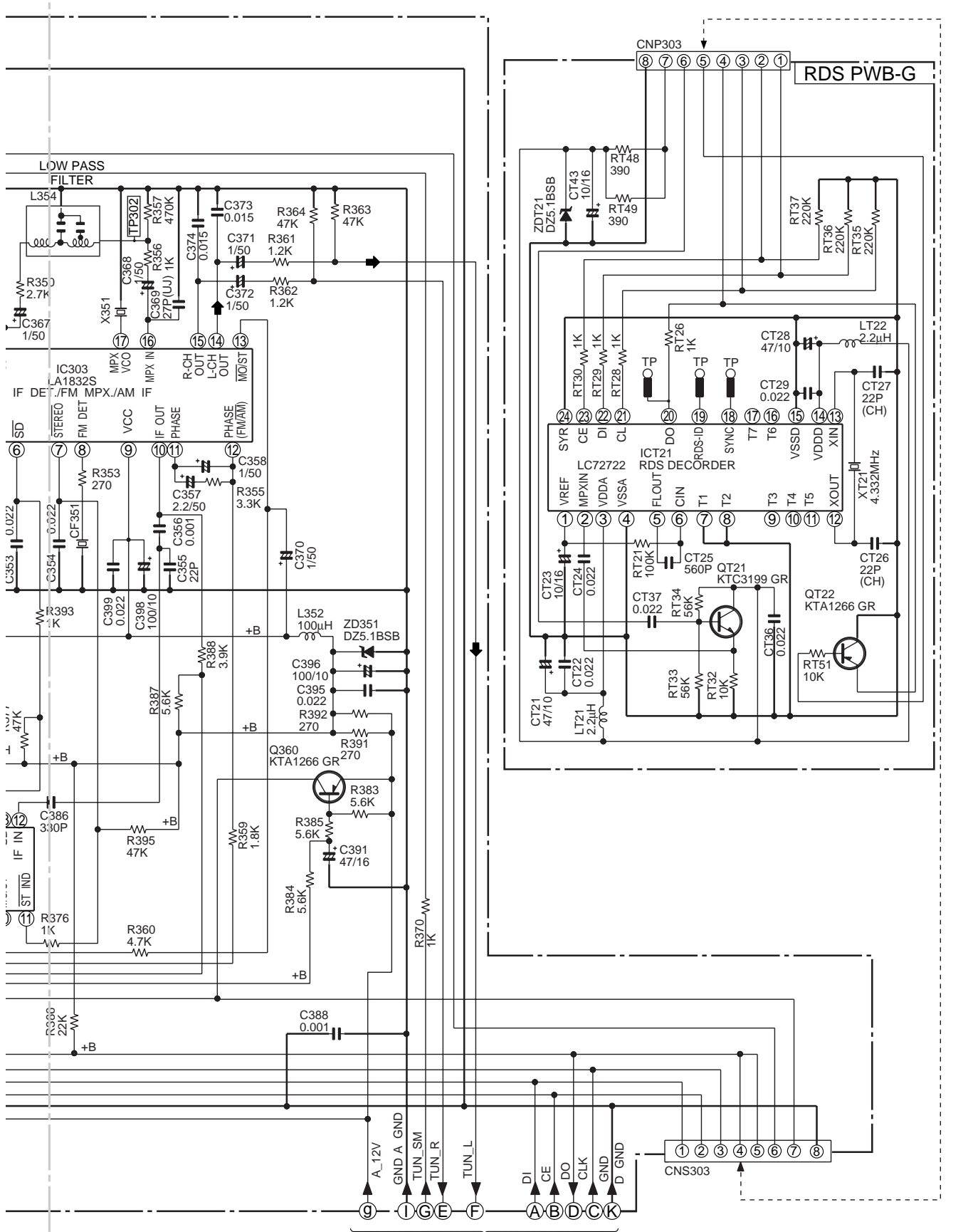


Figure 30 SCHEMATIC DIAGRAM (7/10)





|   |   |   |    |    |    |
|---|---|---|----|----|----|
| 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|----|----|----|

Figure 31 SCHEMATIC DIAGRAM (8/10)

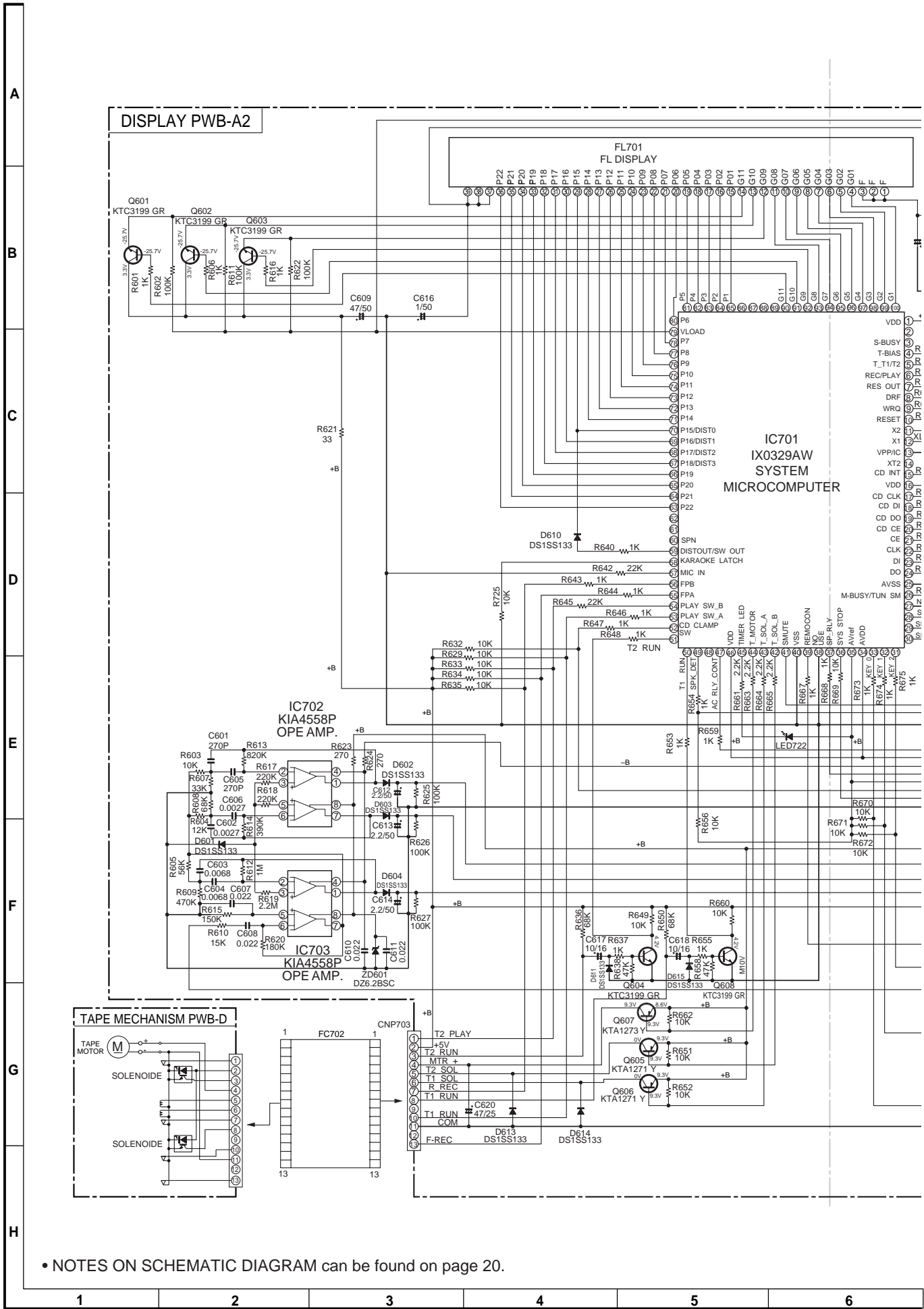
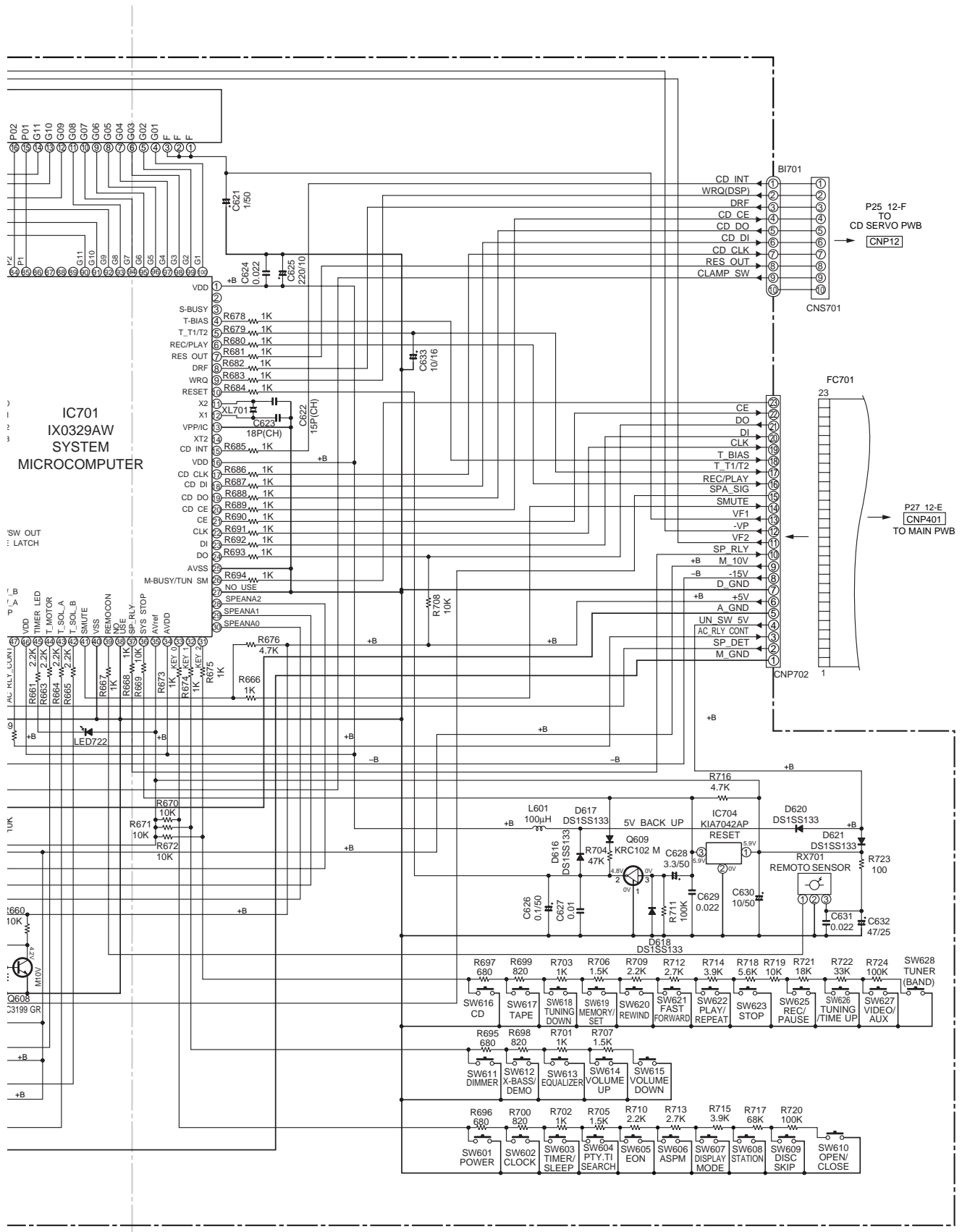


Figure 32 SCHEMATIC DIAGRAM (9/10)



|   |   |   |    |    |    |
|---|---|---|----|----|----|
| 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|----|----|----|

Figure 33 SCHEMATIC DIAGRAM (10/10)

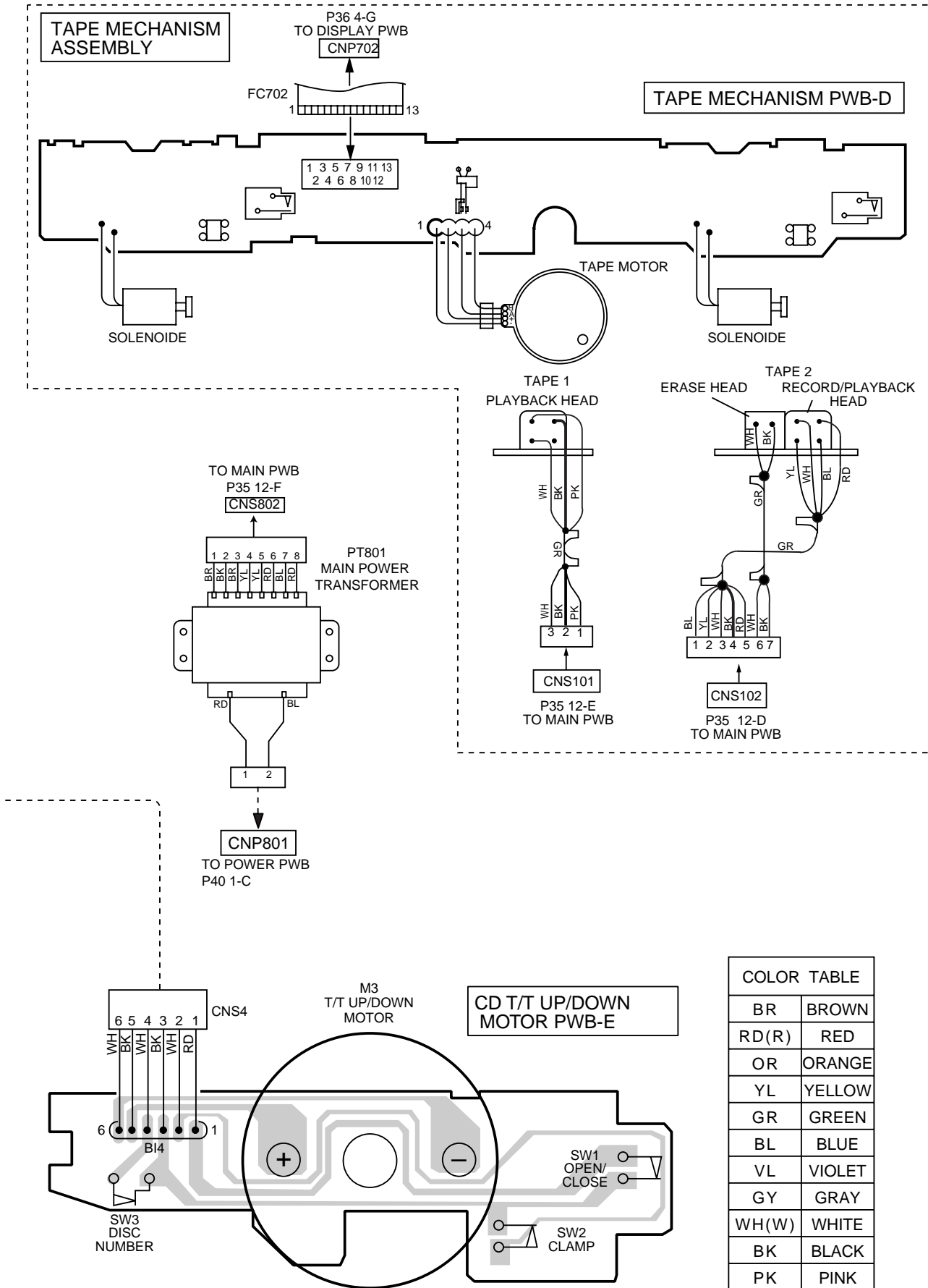


Figure 39 WIRING SIDE OF P.W.BOARD (6/7)

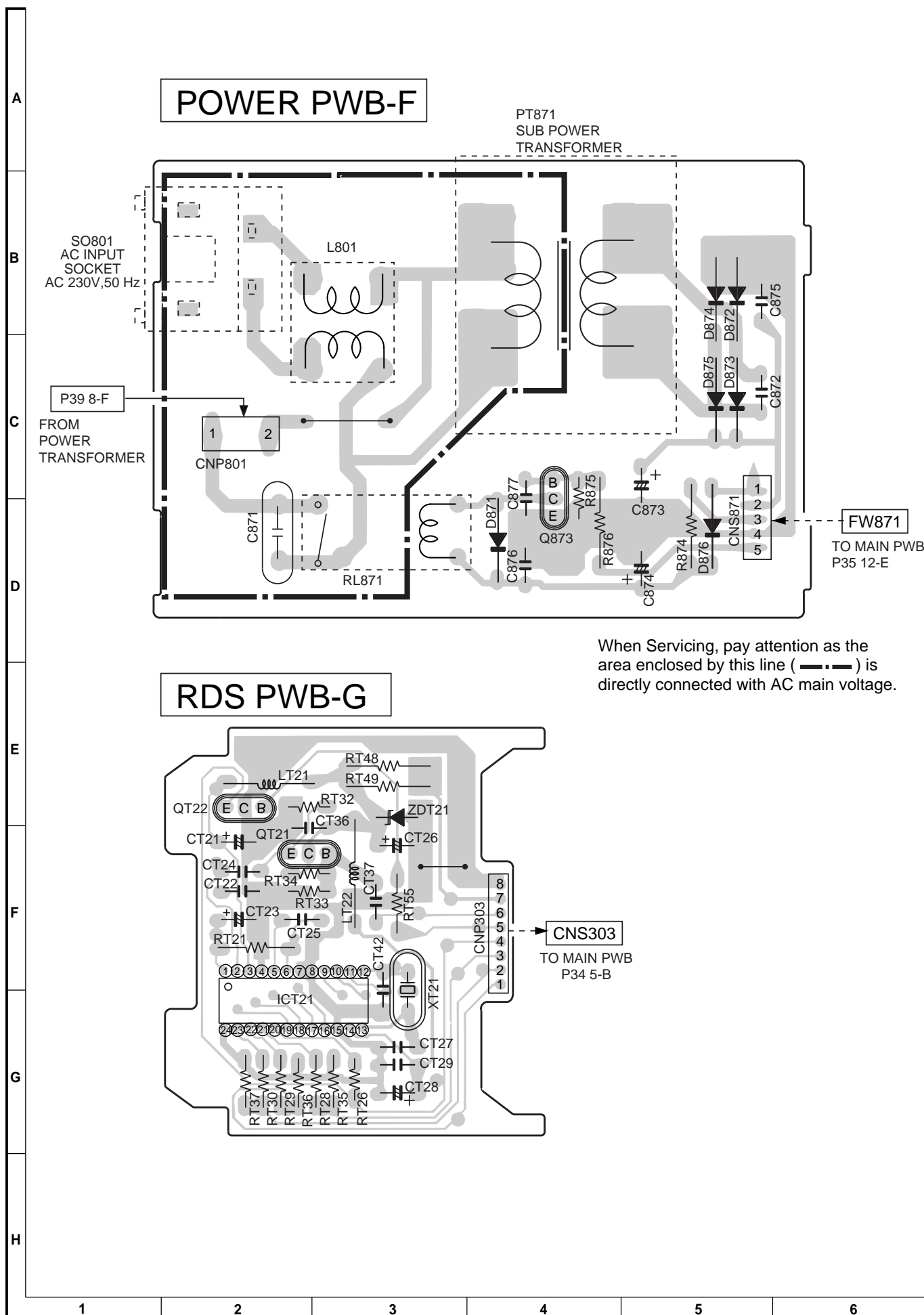


Figure 40 WIRING SIDE OF P.W.BOARD (7/7)

VOLTAGE

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

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

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

| IC101   |             |
|---------|-------------|
| PIN NO. | VOLTAGE     |
| 1       | 0V (0V)     |
| 2       | 0V (0V)     |
| 3       | 0.5V (0.5V) |
| 4       | 1.9V (1.9V) |
| 5       | 0V (0V)     |
| 6       | 0V (0V)     |
| 7       | 0V (0V)     |
| 8       | 0.6V (0.6V) |
| 9       | 3.3V (3.3V) |
| 10      | 3.3V (3.3V) |
| 11      | 0V (0V)     |
| 12      | 0V (0V)     |
| 13      | 6.7V (6.7V) |
| 14      | 4.0V (4.0V) |
| 15      | 0V (0V)     |
| 16      | 3.3V (3.3V) |
| 17      | 0.6V (0.6V) |
| 18      | 0V (0V)     |
| 19      | 0V (0V)     |
| 20      | 0V (0V)     |
| 21      | 1.9V (1.9V) |
| 22      | 0.5V (0.5V) |
| 23      | 0V (0V)     |
| 24      | 0V (0V)     |

| IC302   |             |
|---------|-------------|
| PIN NO. | VOLTAGE     |
| 1       | 2.4V (2.4V) |
| 2       | 0V (0V)     |
| 3       | 0V (0V)     |
| 4       | 0V (0V)     |
| 5       | 4.6V (4.7V) |
| 6       | 4.8V (4.9V) |
| 7       | 0.1V (9.9V) |
| 8       | 4.2V (0V)   |
| 9       | 3.3V (0V)   |
| 10      | 3.4V (0V)   |
| 11      | 4.6V (4.9V) |
| 12      | 2.2V (0V)   |
| 13      | 4.6V (4.9V) |
| 14      | 0V (0V)     |
| 15      | 0V (2.4V)   |
| 16      | 2.3V (0V)   |
| 17      | 4.6V (4.9V) |
| 18      | 0.8V (4.9V) |
| 19      | 0.8V (4.9V) |
| 20      | 1.1V (0V)   |
| 21      | 0V (0V)     |
| 22      | 2.5V (3.0V) |

| IC901   |         |
|---------|---------|
| PIN NO. | VOLTAGE |
| 1       | 0V      |
| 2       | 0V      |
| 3       | 0V      |
| 4       | 34.4V   |
| 5       | -32.9V  |
| 6       | 0V      |
| 7       | 0V      |
| 8       | 35.4V   |
| 9       | -35.4V  |
| 10      | 0V      |
| 11      | 0V      |
| 12      | -34.0V  |
| 13      | 0V      |
| 14      | 0V      |
| 15      | 0V      |

| IC852   |         |
|---------|---------|
| PIN NO. | VOLTAGE |
| 1       | 19.4V   |
| 2       | 0V      |
| 3       | 5.76V   |

| IC851   |         |
|---------|---------|
| PIN NO. | VOLTAGE |
| 1       | 19.4V   |
| 2       | 0V      |
| 3       | 5V      |

| IC841   |         |
|---------|---------|
| PIN NO. | VOLTAGE |
| 1       | 19.41V  |
| 2       | 0V      |
| 3       | 10V     |

| IC704   |         |
|---------|---------|
| PIN NO. | VOLTAGE |
| 1       | 5.0V    |
| 2       | 0V      |
| 3       | 5.0V    |

| IC702   |         |
|---------|---------|
| PIN NO. | VOLTAGE |
| 1       | 0V      |
| 2       | 0V      |
| 3       | 0V      |
| 4       | -11.0V  |
| 5       | 0V      |
| 6       | 0V      |
| 7       | 0V      |
| 8       | 5.58V   |

| IC703   |         |
|---------|---------|
| PIN NO. | VOLTAGE |
| 1       | 0V      |
| 2       | 0V      |
| 3       | 0V      |
| 4       | -11.0V  |
| 5       | 0V      |
| 6       | 0V      |
| 7       | 0V      |
| 8       | 5.58V   |

| IC701   |         |         |         |
|---------|---------|---------|---------|
| PIN NO. | VOLTAGE | PIN NO. | VOLTAGE |
| 1       | 5.0V    | 51      | 4.29V   |
| 2       | 0V      | 52      | 4.29V   |
| 3       | 5.0V    | 53      | 4.29V   |
| 4       | 0V      | 54      | 4.29V   |
| 5       | 5.0V    | 55      | 4.29V   |
| 6       | 5.0V    | 56      | 4.29V   |
| 7       | 5.0V    | 57      | 0V      |
| 8       | 1.2V    | 58      | 0V      |
| 9       | 0.87V   | 59      | -27.8V  |
| 10      | 4.84V   | 60      | -27.8V  |
| 11      | 2.38V   | 61      | 0V      |
| 12      | 2.06V   | 62      | 0V      |
| 13      | 0V      | 63      | -27.7V  |
| 14      | 0V      | 64      | -27.7V  |
| 15      | 1.4V    | 65      | -27.7V  |
| 16      | 4.89V   | 66      | -27.7V  |
| 17      | 4.8V    | 67      | -27.7V  |
| 18      | 0V      | 68      | -27.7V  |
| 19      | 2.3V    | 69      | -20.4V  |
| 20      | 0V      | 70      | -22.1V  |
| 21      | 0V      | 71      | -25.9V  |
| 22      | 0V      | 72      | -27.7V  |
| 23      | 0V      | 73      | -24.1V  |
| 24      | 4.44V   | 74      | -24.4V  |
| 25      | 0V      | 75      | -25.9V  |
| 26      | 0.3V    | 76      | -22.2V  |
| 27      | 0V      | 77      | -22.2V  |
| 28      | 0V      | 78      | -22.3V  |
| 29      | 0V      | 79      | -27.8V  |
| 30      | 0V      | 80      | -27.7V  |
| 31      | 5.1V    | 81      | -27.7V  |
| 32      | 5.1V    | 82      | -27.7V  |
| 33      | 5.1V    | 83      | -20.3V  |
| 34      | 4.9V    | 84      | -24.0V  |
| 35      | 5.0V    | 85      | -20.3V  |
| 36      | 4.9V    | 86      | 2.38V   |
| 37      | 4.9V    | 87      | 2.58V   |
| 38      | 0V      | 88      | -25.8V  |
| 39      | 5.0V    | 89      | -25.8V  |
| 40      | 0V      | 90      | -25.7V  |
| 41      | 1.7V    | 91      | -25.7V  |
| 42      | 8.0V    | 92      | -25.7V  |
| 43      | 7.9V    | 93      | -25.7V  |
| 44      | 8.0V    | 94      | -25.7V  |
| 45      | 3.8V    | 95      | -25.7V  |
| 46      | 4.89V   | 96      | -25.7V  |
| 47      | 4.89V   | 97      | -25.7V  |
| 48      | 4.89V   | 98      | -25.7V  |
| 49      | 4.29V   | 99      | -25.7V  |
| 50      | 4.29V   | 100     | -25.7V  |

| IC401   |         |
|---------|---------|
| PIN NO. | VOLTAGE |
| 1       | 0V      |
| 2       | 0V      |
| 3       | 0V      |
| 4       | 5.0V    |
| 5       | 5.0V    |
| 6       | 5.0V    |
| 7       | 5.0V    |
| 8       | 5.0V    |
| 9       | 5.0V    |
| 10      | 5.0V    |
| 11      | 5.0V    |
| 12      | 5.0V    |
| 13      | 5.0V    |
| 14      | 5.0V    |
| 15      | 5.0V    |
| 16      | 5.0V    |
| 17      | 5.0V    |
| 18      | 5.0V    |
| 19      | 5.0V    |
| 20      | 5.0V    |
| 21      | 5.0V    |
| 22      | 5.0V    |
| 23      | 10.0V   |
| 24      | 0V      |

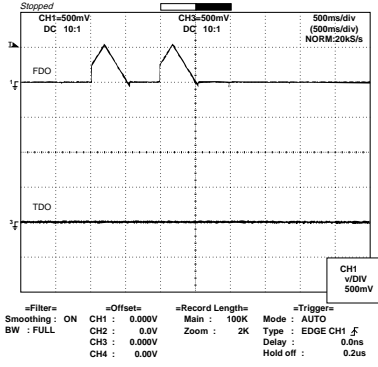
| FE301   |            |
|---------|------------|
| PIN NO. | VOLTAGE    |
| 1       | 0V(0V)     |
| 2       | 0V(0V)     |
| 3       | 2.6V(0V)   |
| 4       | 2.0V(1.1V) |
| 5       | 8.5V(0V)   |
| 6       | 0V(0V)     |
| 7       | 0V(0V)     |
| 8       | 0V(0V)     |

| IC303   |             |
|---------|-------------|
| PIN NO. | VOLTAGE     |
| 1       | 2.1V (2.1V) |
| 2       | 4.5V (4.8V) |
| 3       | 2.1V (2.1V) |
| 4       | 2.1V (2.1V) |
| 5       | 0V (0V)     |
| 6       | 4.6V (4.9V) |
| 7       | 4.6V (4.9V) |
| 8       | 2.4V (3.2V) |
| 9       | 4.5V (4.8V) |
| 10      | 3.9V (0V)   |
| 11      | 3.3V (1.8V) |
| 12      | 3.3V (1.1V) |
| 13      | 3.5V (2.0V) |
| 14      | 1.2V (1.2V) |
| 15      | 1.2V (1.2V) |
| 16      | 2.0V (2.0V) |
| 17      | 2.7V (0V)   |
| 18      | 2.1V (0.9V) |
| 19      | 0V (1.9V)   |
| 20      | 0.3V (0.9V) |
| 21      | 2.6V (2.0V) |
| 22      | 2.6V (2.0V) |
| 23      | 4.5V (4.8V) |
| 24      | 3.0V (3.3V) |

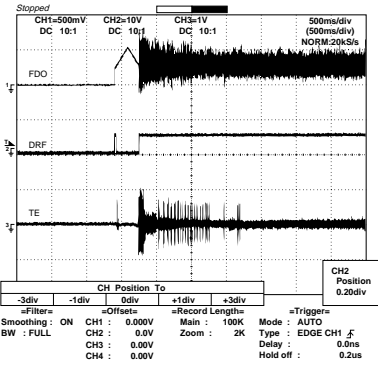
| ICT21   |         |
|---------|---------|
| PIN NO. | VOLTAGE |
| 1       | 2.6V    |
| 2       | 2.59V   |
| 3       | 5.2V    |
| 4       | 0V      |
| 5       | 2.72V   |
| 6       | 2.55V   |
| 7       | 0V      |
| 8       | 0V      |
| 9       | 0V      |
| 10      | 0V      |
| 11      | 0V      |
| 12      | 2.66V   |
| 13      | 2.56V   |
| 14      | 5.21V   |
| 15      | 0V      |
| 16      | 0V      |
| 17      | 0V      |
| 18      | 1.4V    |
| 19      | 1.7V    |
| 20      | 4.6V    |
| 21      | 4.3V    |
| 22      | 0V      |
| 23      | 0V      |
| 24      | 0V      |

# WAVEFORMS OF CD CIRCUIT

1 IC2 (24)

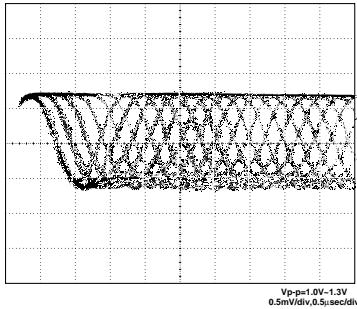


2 IC2 (23)



3 IC2 (72)

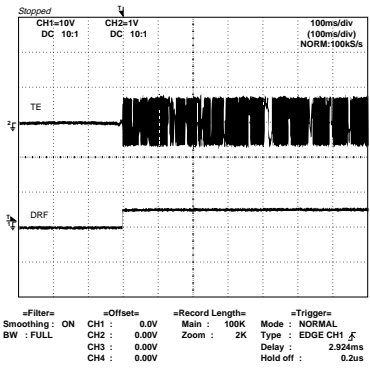
4 IC1 (18), IC2 (16)



5 IC1 (27)

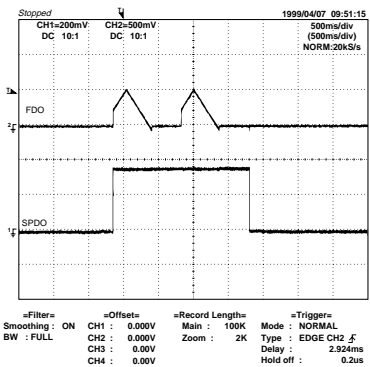
4 IC1 (18), IC2 (16)

3 IC2 (72)



1 IC2 (24)

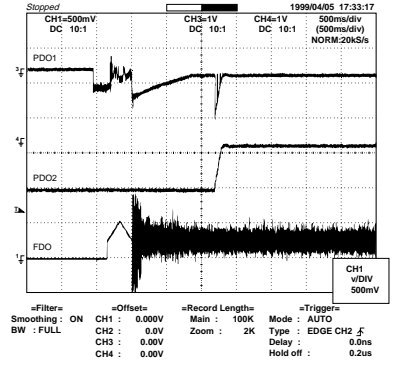
6 IC2 (25)



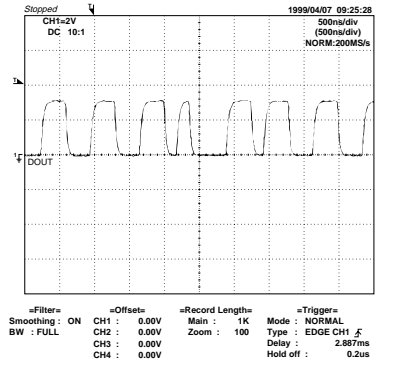
7 IC2 (1)

8 IC2 (2)

1 IC2 (24)



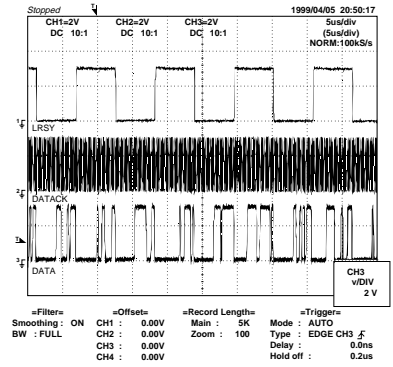
9 IC2 (37)



10 IC2 (57)

11 IC2 (58)

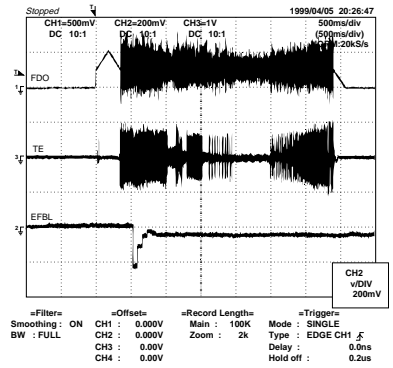
12 IC2 (59)



1 IC2 (24)

4 IC1 (18), IC2 (16)

13 IC1 (13), IC2 (22)



## TROUBLE SHOOTING

### 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 the power off.

Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.

Do not touch the lens with the bare hand.

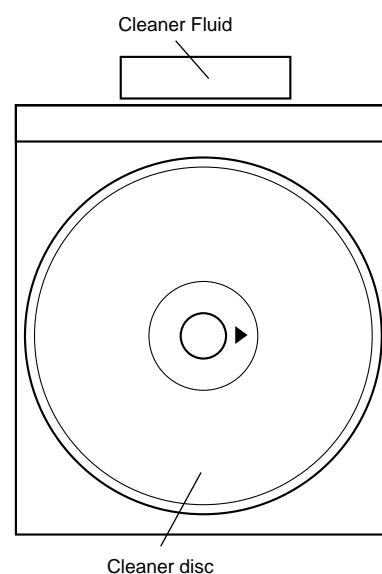
|  | Parts code    |
|--|---------------|
| 1. CD optical pickup Lens cleaner disc | UDSKA0004AFZZ |

#### HOW TO USE

- 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.
- Place the CD cleaner disc onto the CD disc tray with the brush side down, then press the play button.
- 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 rinses with clean water and seek medical advice.
- The CD cleaner disk must not be used on car CD players or on computer CD ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting this product is



### When a CD cannot be played

#### 1. "E-CD01" is displayed.

- (1) Check the power to IC2 (LC78641E), the presence of the clock signal (16.93 MHz) and the status of the RESET terminal (pin 71 on IC2).
- (2) Did 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



# CD-BA1500H

## (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.

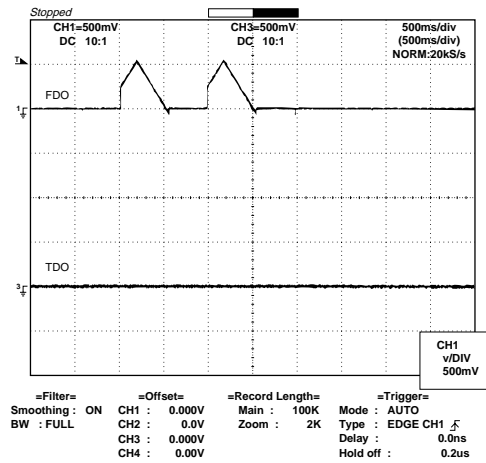
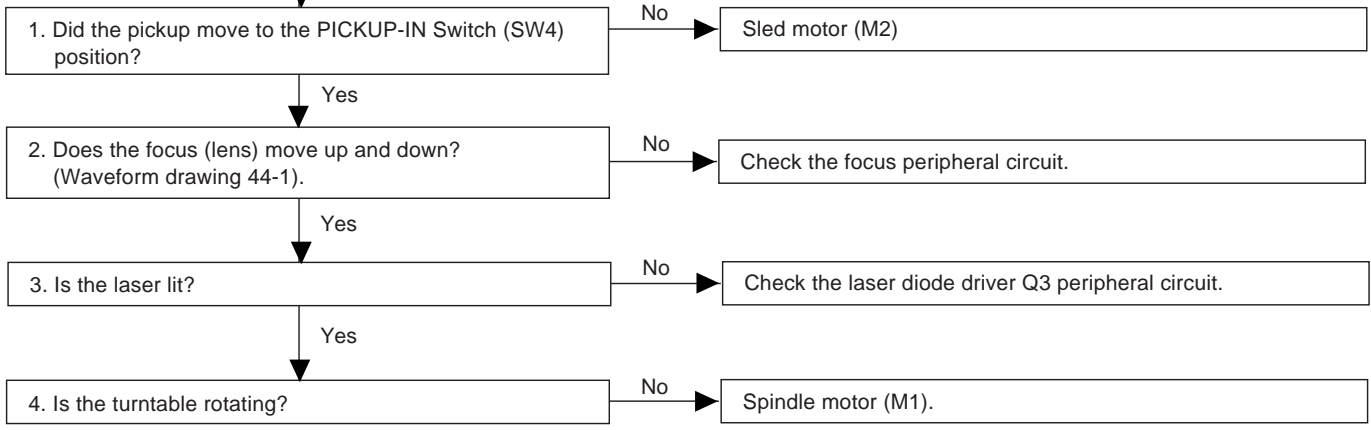


Figure 44-1



When a disc is loaded, start playback operation.

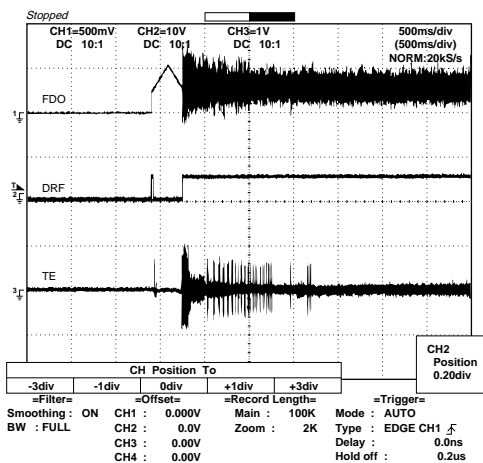
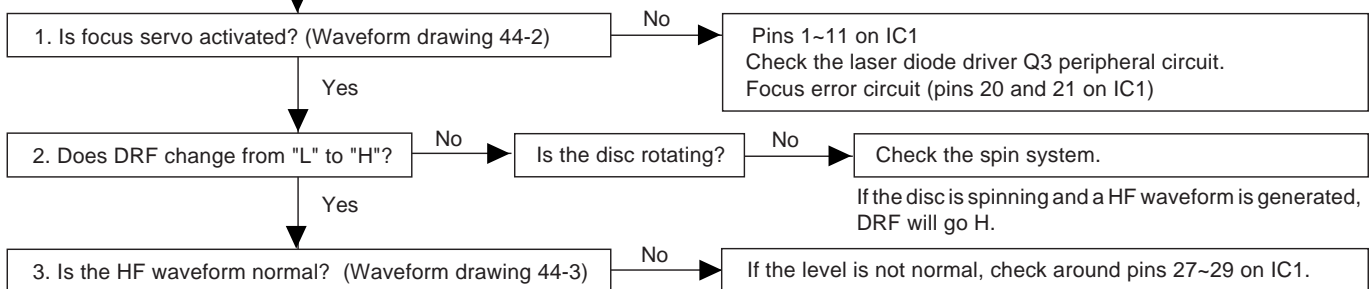


Figure 44-2

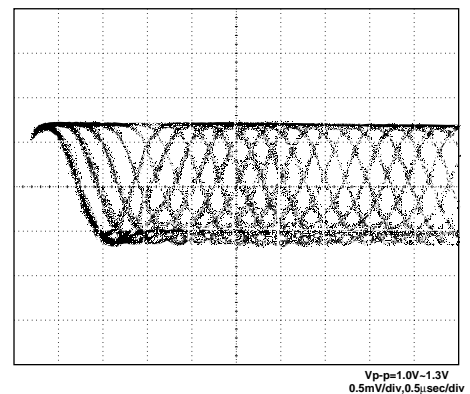


Figure 44-3

**(2) Tracking system check**

Check the TE waveform at pin 18 on IC1.

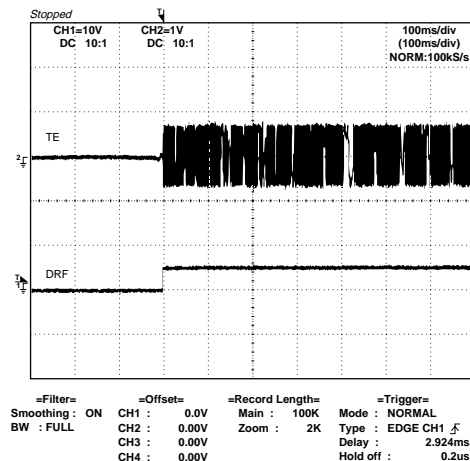
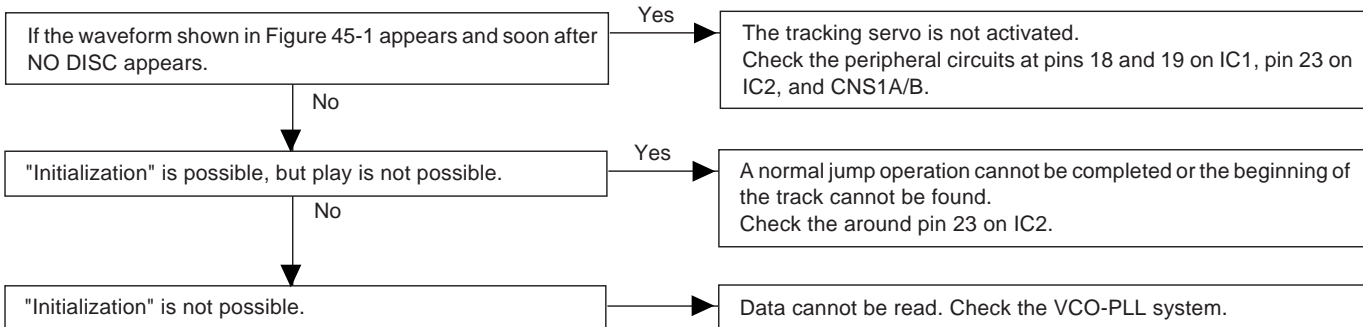


Figure 45-1

**(3) Spin system check**

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

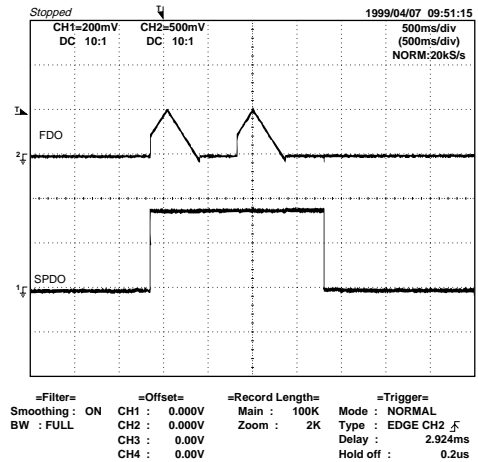
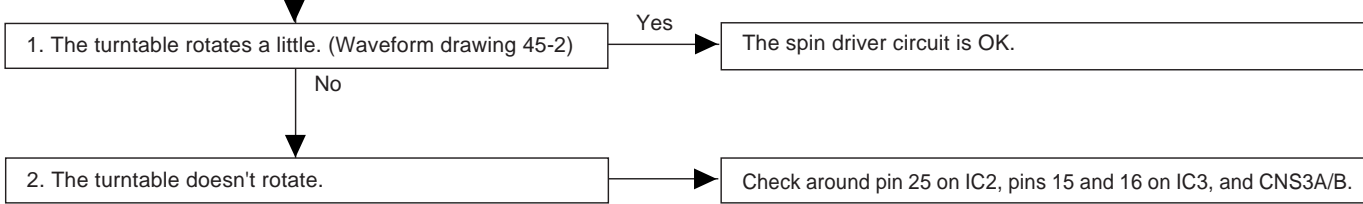


Figure 45-2

# CD-BA1500H

## (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 46-1)

Check around pins 1~6 on IC2.

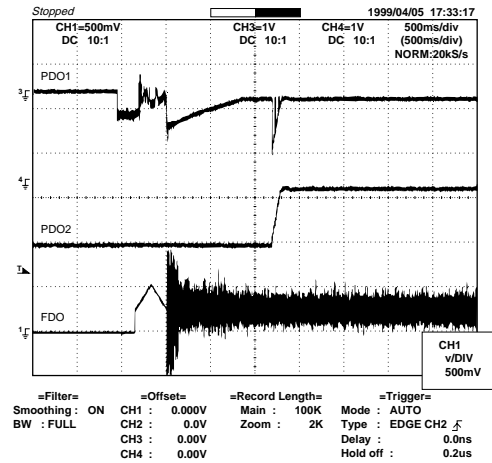


Figure 46-1

## (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"?

Yes

1. When playing at normal speed  
Check the peripheral circuit at pin 37 (DOUT) on IC2 and the waveform (Figure 46-2).

If OK, check the unit.

No

There are too many error flags on a damaged disc which makes error correction impossible.

Check again using a known good disc.

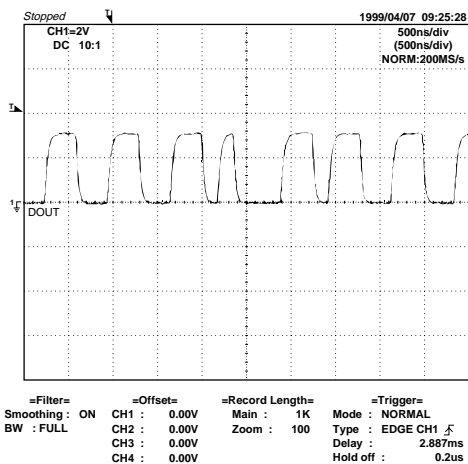
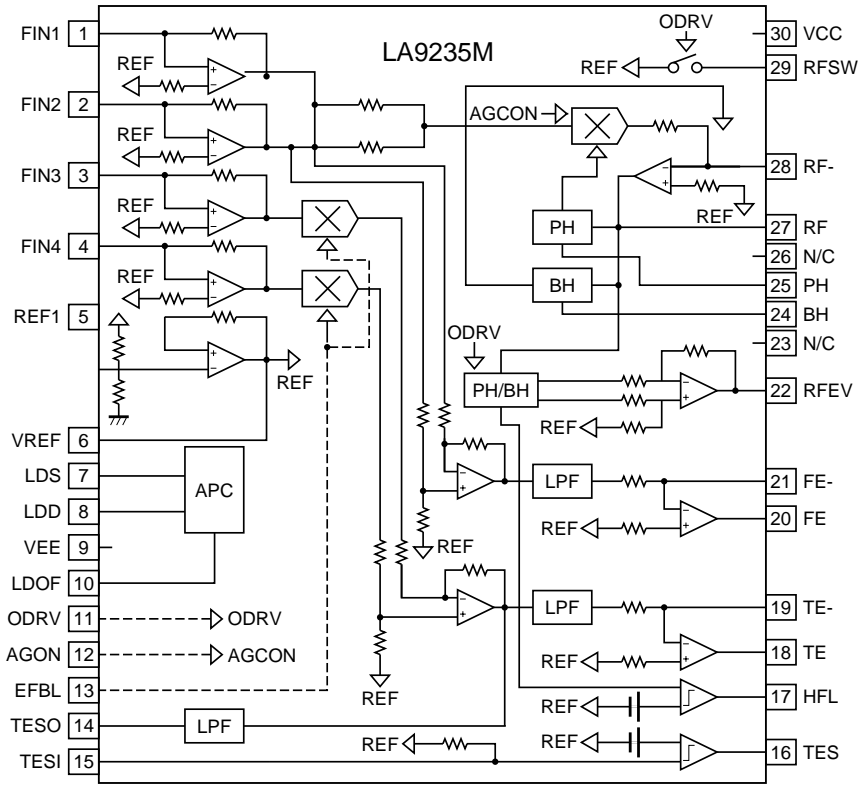


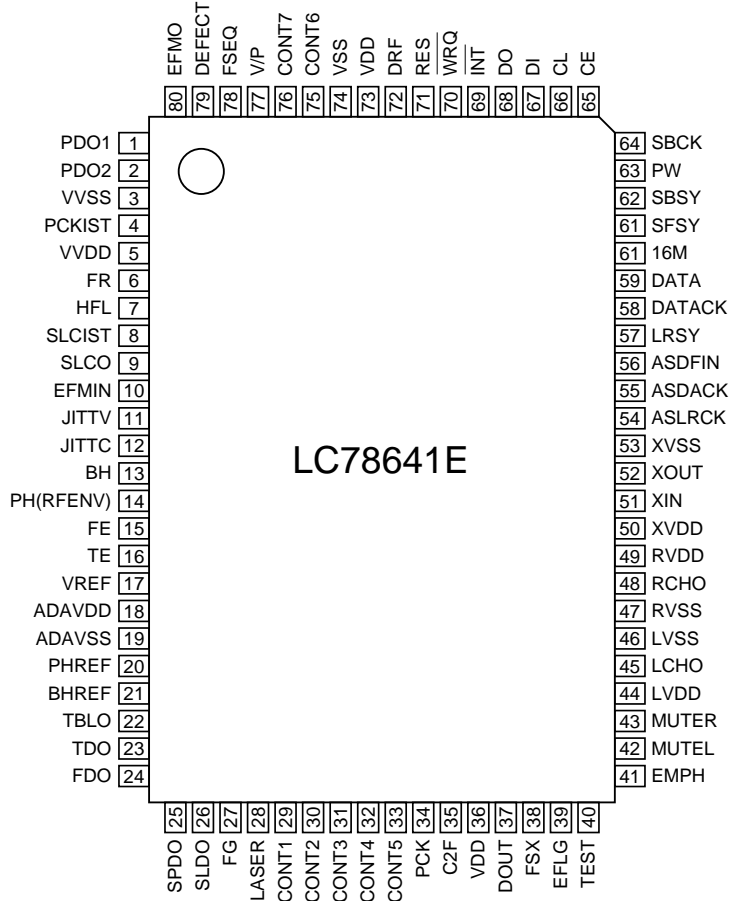
Figure 46-2

**FUNCTION TABLE OF IC**

**IC1 VHiLA9235M/-1: Servo Amp. (LA9235M)**



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



**Figure 47 BLOCK DIAGRAM OF IC**

# CD-BA1500H

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

| Pin No. | Terminal Name | Input/Output | Setting in Reset | Function  |  |
|---------|---------------|--------------|------------------|---|--|
| 1       | PDO1          | Output       | –                | For PULL  | Phase-comparison output terminal for built-in VOC control.   |
| 2       | PDO2          | Output       | –                |   | Phase-comparison output terminal for built-in VOC control. Rough servo : OFF, phase servo : ON.  |
| 3       | VVSS          | –            | –                |   | Ground terminal for built-in VCO.  |
| 4       | PCKIST        | AI           | –                |   | Resistor terminal for setting the PDO output current.  |
| 5       | VVDD          | –            | –                |   | Power terminal for built-in VCO.   |
| 6       | FR            | AI           | –                |   | Resistor terminal for setting the VCO frequency range.   |
| 7       | HFL           | Input        | –                | Mirror detection signal input terminal.   |  |
| 8       | SLCIST        | AI           | –                | 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        | –            | –                | 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 0V)   |  |
| 28      | LASER         | Output       | L                | LASER ON/OFF control terminal.  |  |
| 29      | CONT1         | In/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 0V, or set it as the output terminal and open it. |
| 30      | CONT2         | In/Output    | Input mode       | General purpose input/output terminal 2.  |  |
| 31      | CONT3         | In/Output    | Input mode       | General purpose input/output terminal 3.  |  |
| 32      | CONT4         | In/Output    | Input mode       | General purpose input/output terminal 4.  |  |
| 33      | CONT5         | In/Output    | Input mode       | General purpose input/output terminal 5.  |  |
| 34*     | PCK           | Output       | H                | Clock monitor terminal for EFM data replay. 4.3218MHz as phase clock.   |  |
| 35*     | C2F           | Output       | H                | C2 flag output terminal.  |  |
| 36      | VDD           | –            | –                | 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 7.35kHz divided from quartz oscillation.   |  |
| 39*     | EFLG          | Output       | L                | C1,C2 correct monitor terminal.   |  |
| 40      | TEST          | Input        | –                | Input terminal for test. Surely connected to 0V.  |  |
| 41*     | EMPH          | In/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          | –            | –                | L channel                                | Power terminal for L channel.   |
| 45      | LCHO          | Output       | 1/2VDD           | D/A converter                            | L channel output terminal.  |
| 46      | LVSS          | –            | –                |  | Ground terminal for L channel. Surely connected to 0V.  |
| 47      | RVSS          | –            | –                | R channel                                | Ground terminal for R channel. Surely connected to 0V.  |
| 48      | RCHO          | OUTPUT       | 1/2VDD           | D/A converter                            | R channel output terminal.  |
| 49      | RVDD          | –            | –                |  | Power terminal for R channel.   |
| 50      | XVDD          | –            | –                | For quartz oscillation                   | Power terminal for quartz oscillation.  |
| 51      | XIN           | Input        | Oscillation      |  | Ground terminal of 16.9344MHz quartz oscillation.   |
| 52      | XOUT          | Output       | Oscillation      |  | Ground terminal for quartz oscillation. Surely connected to 0V.   |
| 53      | XVSS          | –            | –                | For anti shock mode                      | L/R clock input terminal. (When not used,connect to 0V)   |
| 54      | ASLRCK        | Input        | –                |  | Bit clock input terminal. (When not used,connect to 0V)   |
| 55      | ASDACK        | Input        | –                |  | L/R channel data input terminal. (When not used,connect to 0V)  |
| 56      | ASDFIN        | Input        | –                |  | L/R clock output terminal.  |
| 57*     | LRSY          | Output       | L                | For digital data output                  | Bit clock output terminal.  |
| 58*     | DATAACK       | Output       | L                |  | L/R channel data output terminal.   |
| 59*     | DATA          | Output       | L                |  | 16.9344MHz output terminal.   |
| 60*     | 16M           | Output       | Clock output     |  | Output terminal of synchronous signal of subcode frame. It drops when subcode stand by.   |
| 61*     | SFSY          | Output       | L                |  | Output terminal of synchronous signal of subcode block.   |
| 62*     | SBSY          | Output       | L                |  | Output terminal of subcodes P,A,R,S,T,U and W.  |
| 63*     | PW            | Output       | L                |  | Clock input terminal to read subcode. (When not used,connect to 0V)   |
| 64      | SBCK          | Input        | –                | For microcomputer interface              | Chip enable signal input terminal.  |
| 65      | CE            | Input        | –                |  | Data transmission clock input terminal.   |
| 66      | CL            | Input        | –                |  | Data input terminal.  |
| 67      | DI            | Input        | –                |  | Data output terminal.   |
| 68      | DO            | Output       | L                |  | Interrupt signal output terminal.   |
| 69      | INT           | Output       | H                |  | Interrupt signal output terminal.   |
| 70      | WRQ           | Output       | H                |  | Reset input terminal of LC78640. When turning on power, set it at "L".  |
| 71      | RES           | Input        | –                |  | Focus ON detection terminal.  |
| 72      | DRF           | Output       | L                |  | Power terminal for microcomputer interface.   |
| 73      | VDD5V         | –            | –                |  | Ground terminal of digital system. Surely connected to 0V.  |
| 74      | VSS           | –            | –                |  | 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 0V, or set it as the output terminal and open it. |
| 75      | CONT6         | In/Output    | Input mode       | General purpose input/output terminal 7. |   |
| 76      | CONT7         | In/Output    | Input mode       |  | Monitor output terminal for automatic switch of rough servo/phase control. "H" for rough servo, and "L" for phase servo.  |
| 77*     | V/ *P         | Output       | H                |  | Output terminal synchronous signal detection. "H" is output when synchronous signal detected by EFM signal matches synchronous signal internally generated.   |
| 78*     | FSEQ          | Output       | L                |  | 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   |
| 79*     | DEFECT        | In/Output    | Input mode       |  | EFM signal output terminal.   |
| 80*     | EFMO          | Output       | Unfixed          |  |   |

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 (VDD5V) for a microcomputer interface :

CE (65pin), CL (66pin), DI (67pin), DO (68pin), INT (69pin), WRQ (70pin), RES (71pin), DRF (72pin),

CONT6 (75pin), CONT7 (76pin)

# CD-BA1500H

## IC701 RH-iX0329AWZZ: System Microcomputer (IX0329AW) (1/2)

| Pin No. | Port Name   | Terminal Name    | Input/Output   | Function  |
|---------|-------------|------------------|----------------|---|
| 1       | VDD         | VDD              | —              | (+) POWER SUPPLY  |
| 2*      | P37         | —                | —              | GND   |
| 3*      | P36         | S-BUSY           | Output         | COMMIJNTCATE TO MPEG U-COM                                  |
| 4       | P35         | T-BTAS           | 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 UCOM RESET                              |
| 8       | P31         | DRF              | Input          | CD RF LEVEL DETECTION                                       |
| 9       | P30         | WRQ              | Input          | CD DSP WRITE REQUSET  |
| 10      | RESET       | RESET            | Input          | RESET   |
| 11      | X2          | X2               | Output         | MAIN CLOCK  |
| 12      | X1          | X1               | Input          | MAIN CLOCK  |
| 13      | Vpp/IC      | VPP/IC           | —              | GND   |
| 14*     | XT2         | XT2              | —              | OPEN  |
| 15      | P04         | CD INT           | Input          | CD DSP INTERRUPT  |
| 16      | VDD         | VDD              | —              | (+) POWER SUPPLY  |
| 17      | P27         | CD CLK           | Output         | CD DSP CLOCK/MPEG UCOM CLOCK                                |
| 18      | P26         | CD ID            | Outout         | CD DSP COMMAND/MPEG UCOM COMMA                              |
| 19      | P25         | CD DO            | Input          | CD DSP CODE Q OUT/MPEG UCOM DATA INPUT                      |
| 20      | P24         | CD CE            | Output         | CD DSP CE OUTPUT  |
| 21      | P23         | CE               | Output         | CE OUTPUT   |
| 22      | P22         | CLK              | Output         | CLOCK OUTPUT  |
| 23      | P21         | DT               | Output         | DATA OUTPUT   |
| 24      | P20         | DO               | Output         | DATA INPUT  |
| 25      | AVss        | AVSS             | —              | ANALOG GROUND   |
| 26      | ANI7<br>P17 | TUN SM<br>M-BUSY | Input<br>Input | TUNER SIGNAL METER INPUT<br>COMMUNJCATE TO MPEGU COM M_BUSY |
| 27      | ANI6        | NO USE           | Input          | GND   |
| 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   | KEY2-KEY0        | Input          | KEY INPUT   |
| 34      | AVDD        | AVDD             | —              | ANALOG VDD  |
| 35      | AVREF       | AVref            | —              | ANALOG REF VOLTAGE  |
| 36      | INTP3       | SYS STOP         | Input          | SYSTEM STOP INPUT   |
| 37      | P02         | SP_RLY           | Output         | SPEAKER OUTPUT RELAY CONTROL                                |
| 38      | INTP1       | NO USE           | Input          | GND   |
| 39      | INTP0       | REMOCON          | Input          | REMOCON INPUT   |
| 40      | Vss         | VSS              | —              | GROUND VOLTAGE  |
| 41      | P74         | SMUTE            | Output         | SYSTEM MUTE CONTROL   |
| 42      | P73         | T_SOL_B          | Output         | TAPE2 SOLENOID CONTROL                                      |
| 43      | P72         | T_SOL_A          | Output         | TAPE1 SOLENOID CONTROL                                      |
| 44      | P71         | T_MOTOR          | Output         | TAPE MOTOR CONTROL  |
| 45      | P70         | TIMER LED        | Output         | TIMER LED CONTROL   |
| 46      | VDD         | VDD              | —              | (+) POWER SUPPLY  |
| 47      | P127        | AC RLY_CONT      | Output         | AC RELAY CONTROL  |
| 48*     | P126        | SPRLY            | Output         | SPEAKER OUTPUT RELY CONTROL                                 |
| 49      | P125        | SP_DET           | Input          | SPEAKER OUTPUT DETDCTION                                    |
| 50      | P124        | T1 RUN           | Input          | TAPE1 RUN PULSE INPUT                                       |
| 51      | P123        | T2 RUN           | Input          | TAPE2 RUN PULSE INPUT                                       |
| 52      | P122        | CD CLAMP         | Intput         | CD CHANGER CLAMP SWITCH                                     |
| 53      | P121        | PLAY SW_A        | Input          | PLAY SWITCH FOR T1  |

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

**IC701 RH-iX0329AWZZ: System Microcomputer (IX0329AW) (2/2)**

| Pin No. | Port Name                | Terminal Name          | Input/Output    | Function                               |
|---------|--------------------------|------------------------|-----------------|--|
| 54      | P120                     | PLAY SW_B              | Input           | PLAY SWITCH FOR T2                     |
| 55      | P119                     | PPA                    | Input           | TAPE2 A-SIDE FULL PROOF                |
| 56      | P118                     | FPB                    | Input           | TAPE2 B_SIDE FULL PROOF                |
| 57      | P117                     | MIC IN                 | Input           | MIC SWITCH                             |
| 58      | P116                     | KARAOKE LATCH          | Output          | KARAOKE LATCH                          |
| 59      | P115                     | DISTOUT/SW OUT         | Output          | DISTINATION OUTPUT                     |
| 60*     | FIP39                    | SPN                    | Input           | TUNER SPAN CHANGE                      |
| 61*,62* | FIP38-FIP37              | NO USE                 | Input           | OPEN                                   |
| 63-66   | FIP36-FIP33              | P22-P19                | Output          | FL DISPLAY DRIVER                      |
| 67-70   | FIP32-FIP29<br>P103-P100 | P18-P15<br>DIST3-DIST0 | Output<br>Input | FL DISPLAY DRIVER<br>DISTINATION INPUT |
| 71-78   | FIP28-FIP21              | P14-P7                 | Output          | FL DISPLAY DRIVER                      |
| 79      | VLOAD                    | VLOAD                  | —               | FL DRIVER (-) POWER SUPPLY.-30V        |
| 80-85   | FIP20-FIP15              | P6-P1                  | Output          | FL DISPLAY SEGMENT                     |
| 86*-89* | FIP14-FIP11              | —                      | Input           | OPEN                                   |
| 90-100  | FIP30-FIP0               | G11-G1                 | IOutput         | FL DISPLAY SEGMENT DRIVER              |

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

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

| Pin No. | Terminal Name | Function                         |
|---------|---------------|----------------------------------|
| 1       | IN2-          | CH2 inverted input.              |
| 2       | IN1A-         | CH1 inverted input.              |
| 3       | IN1B-         | CH1 output offset control.       |
| 4       | OUT1-         | CH1 inverted output.             |
| 5       | OUT1+         | CH1 non-inverted output.         |
| 6       | OUT2-         | CH2 inverted output.             |
| 7       | OUT2+         | CH2 non-inverted output.         |
| 8-14    | GND           | GND                              |
| 15      | OUT3+         | CH3 non-inverted output.         |
| 16      | OUT3-         | CH3 inverted output.             |
| 17      | IN3-          | 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      | IN4-          | CH4 inverted input.              |
| 26      | OUT4-         | CH4 inverted output.             |
| 27      | OUT4+         | 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      | OUT6+         | CH6 non-inverted output.         |
| 39      | OUT6-         | CH6 inverted output.             |
| 40      | VCC4          | Power supply 4 (CH6).            |
| 41      | IN6-          | CH6 inverted input.              |
| 42      | IN6+          | CH6 non-inverted input.          |

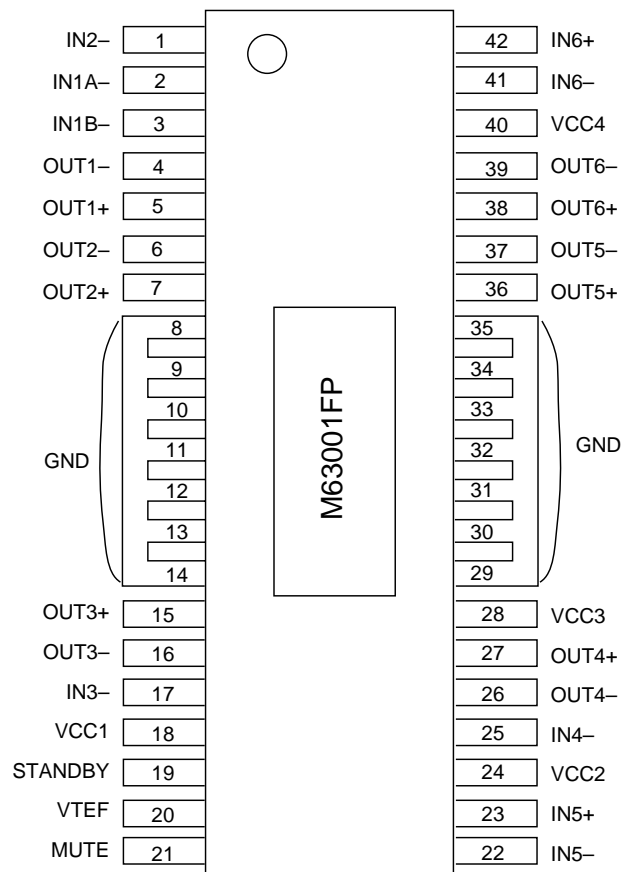


Figure 51 BLOCK DIAGRAM OF IC



CD-BA1500H

IC401 VHiLC75341/-1: Audio Processor (LC75341)

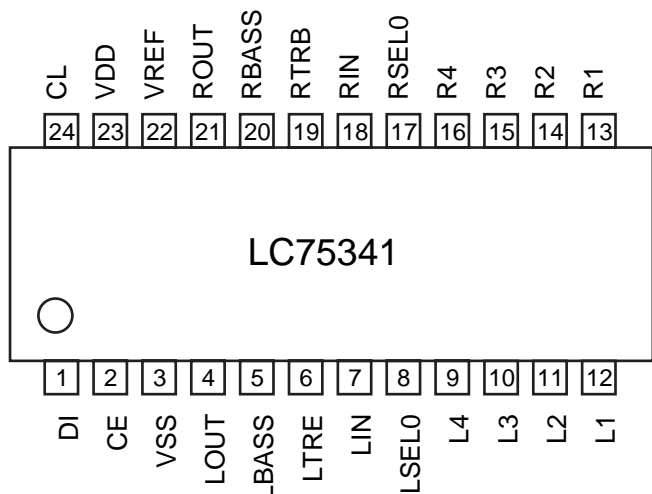
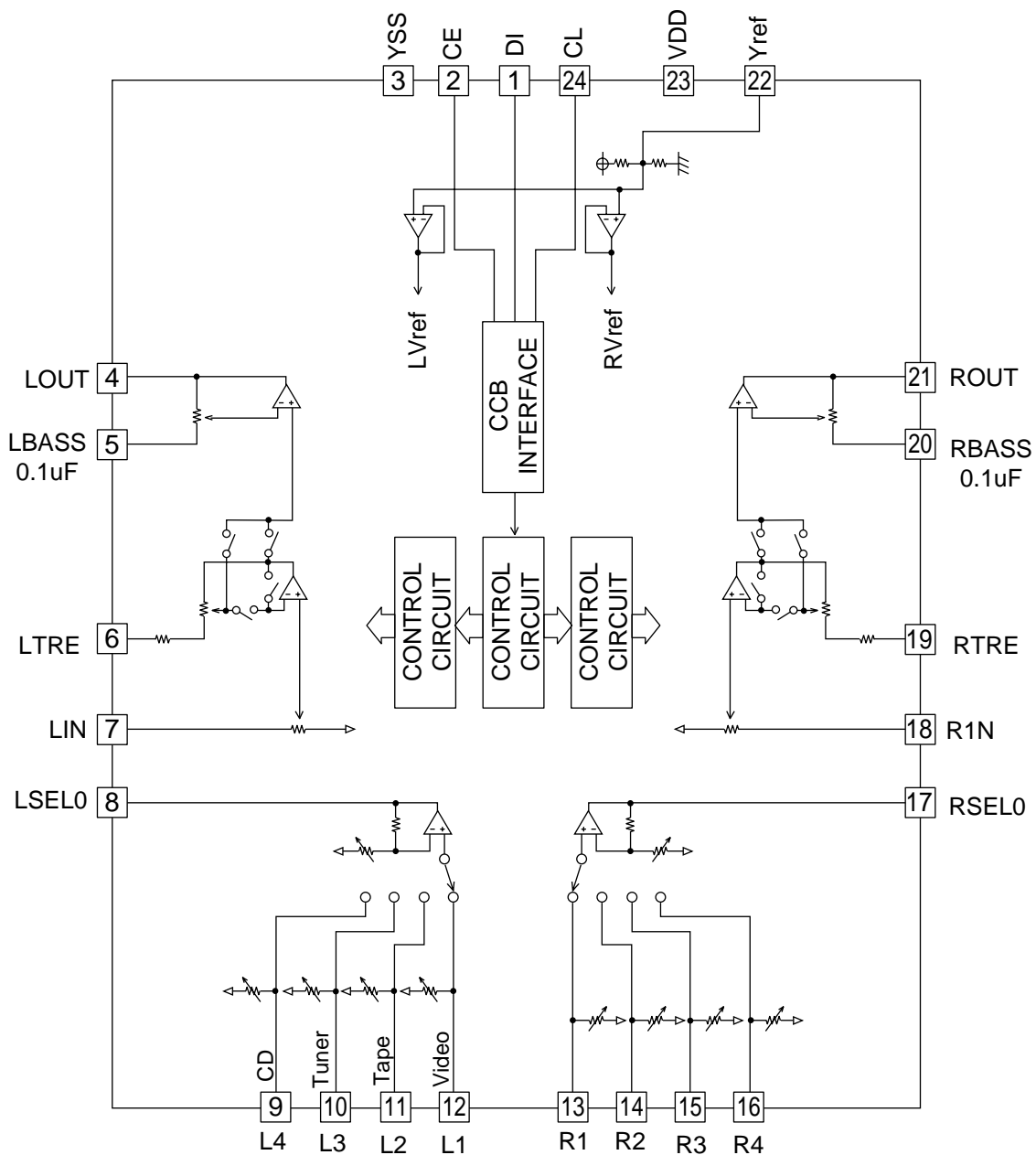
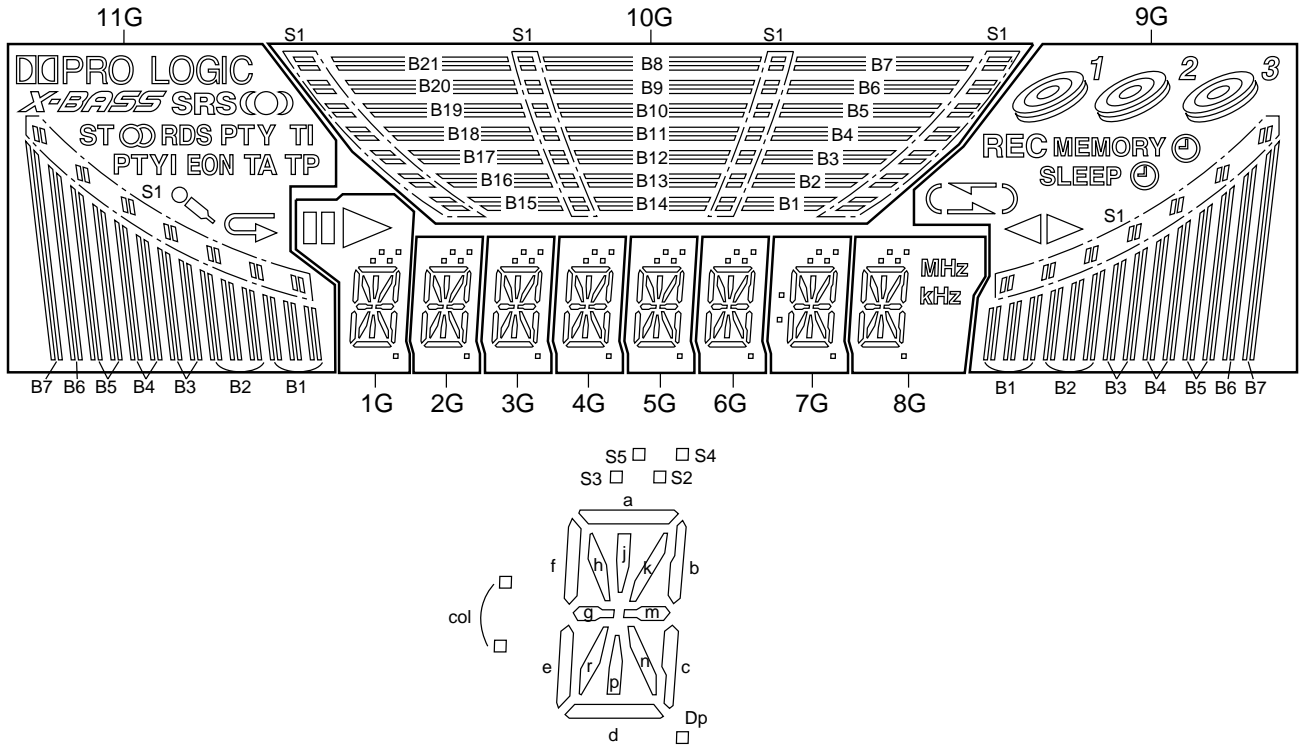


Figure 52 BLOCK DIAGRAM OF IC

FL701 VVKBJ749GNK-1: FL Display



|     | 11G         | 10G | 9G     | 8G  | 7G  | 6G | 5G | 4G | 3G | 2G | 1G |
|-----|-------------|-----|--------|-----|-----|----|----|----|----|----|----|
| P1  | S1          | S1  | S1     | Dp  | Dp  | Dp | Dp | Dp | Dp | Dp | Dp |
| P2  | B1          | B1  | B1     | d   | d   | d  | d  | d  | d  | d  | d  |
| P3  | B2          | B2  | B2     | c   | c   | c  | c  | c  | c  | c  | c  |
| P4  | B3          | B3  | B3     | n   | n   | n  | n  | n  | n  | n  | n  |
| P5  | B4          | B4  | B4     | p   | p   | p  | p  | p  | p  | p  | p  |
| P6  | B5          | B5  | B5     | r   | r   | r  | r  | r  | r  | r  | r  |
| P7  | B6          | B6  | B6     | e   | e   | e  | e  | e  | e  | e  | e  |
| P8  | B7          | B7  | B7     | m   | m   | m  | m  | m  | m  | m  | m  |
| P9  | DIPRO LOGIC | B8  |        | g   | g   | g  | g  | g  | g  | g  | g  |
| P10 | X-BASS      | B9  |        | /   | col | /  | /  | /  | /  | /  | /  |
| P11 | SRS         | B10 |        | b   | b   | b  | b  | b  | b  | b  | b  |
| P12 | ST          | B11 | REC    | k   | k   | k  | k  | k  | k  | k  | k  |
| P13 |             | B12 | MEMORY | j   | j   | j  | j  | j  | j  | j  | j  |
| P14 | RDS         | B13 |        | h   | h   | h  | h  | h  | h  | h  | h  |
| P15 | PTY         | B14 |        | f   | f   | f  | f  | f  | f  | f  | f  |
| P16 | TI          | B15 | SLEEP  | a   | a   | a  | a  | a  | a  | a  | a  |
| P17 | TP          | B16 |        | S2  | S2  | S2 | S2 | S2 | S2 | S2 | S2 |
| P18 | TA          | B17 |        | S3  | S3  | S3 | S3 | S3 | S3 | S3 | S3 |
| P19 | PTYI        | B18 |        | S4  | S4  | S4 | S4 | S4 | S4 | S4 | S4 |
| P20 | EON         | B19 |        | S5  | S5  | S5 | S5 | S5 | S5 | S5 | S5 |
| P21 |             | B20 |        | MHz | /   | /  | /  | /  | /  | /  |    |
| P22 |             | B21 | /      | kHz | /   | /  | /  | /  | /  | /  |    |

Figure 53 FL DISPLAY

# SHARP PARTS GUIDE

MODEL

# CD-BA1500H

CD-BA1500H Mini Component System consisting of CD-BA1500H (main unit) and CP-BA1500H (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-BA1500H

| NO.                        | PARTS CODE    | ★ PRICE RANK | DESCRIPTION                               |
|----------------------------|---------------|--------------|---|
| <b>CD-BA1500H</b>          |               |              |   |
| <b>INTEGRATED CIRCUITS</b> |               |              |   |
| 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         | Playback and Record/Playback Amp.,AN7345K |
| IC302                      | VHILC72131/-1 | J AP         | PLL (Tuner),LC72131                       |
| IC303                      | VHILA1832S/-1 | J AN         | FM IF Det./FM Mpx./AM IF,LA1832S          |
| IC401                      | VHILC75341/-1 | J AM         | Audio Processor,LC75341                   |
| IC701                      | RH-IX0329AWZZ | J AX         | System Microcomputer, IX0329AW            |
| IC702,703                  | VHIKIA4558P-1 | J AC         | Ope Amp.,KIA4558P                         |
| IC704                      | VHIKIA7042AP1 | J AC         | Reset,KIA7042AP                           |
| IC841                      | VHIKIA7810AP1 | J AF         | Voltage Regulator,KIA7810AP               |
| IC851                      | VHIKIA7805P-1 | J AF         | Voltage Regulator,KIA7805P                |
| IC852                      | VHIAN78L05/-1 | J AE         | Constant Voltage Regulator, AN78L05       |
| IC901                      | VHISTK40204-1 | J AX         | Power AMP.,STK40204                       |
| ICT21                      | VHILC72722/-1 | J AY         | RDS Decoder,LC72722                       |

| NO.                | PARTS CODE    | ★ PRICE RANK | DESCRIPTION            |
|--------------------|---------------|--------------|------------------------|
| <b>TRANSISTORS</b> |               |              |                        |
| 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           | VSKTC3199GR-1 | J AB         | Silicon,NPN,KTC3199 GR |
| 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  |
| Q301               | VS2SC380-O/-1 | J AC         | Silicon,NPN,2SC380 O   |
| Q360               | VSKTA1266GR-1 | J AB         | Silicon,PNP,KTA1266 GR |
| Q401,402           | VSKTC3199GR-1 | J AB         | Silicon,NPN,KTC3199 GR |
| Q601-604           | VSKTC3199GR-1 | J AB         | Silicon,NPN,KTC3199 GR |
| Q605,606           | VSKTA1271Y/-1 | J AC         | Silicon,PNP,KTA1271 Y  |
| Q607               | VSKTA1273Y/-1 | J AE         | Silicon,PNP,KTA1273 Y  |
| Q608               | VSKTC3199GR-1 | J AB         | Silicon,NPN,KTC3199 GR |
| Q609               | VSKRC102M/-1  | J AC         | Digital,NPN,KRC102 M   |
| Q801               | VSKTA1274Y/-1 | J AE         | Silicon,PNP,KTA1274 Y  |
| Q831               | VSKTC2026/-1  | J AF         | Silicon,NPN,KTC2026    |
| Q873               | VSKTC3199GR-1 | J AB         | Silicon,NPN,KTC3199 GR |
| Q901-904           | VSKTC3199GR-1 | J AB         | Silicon,NPN,KTC3199 GR |
| Q951               | VSKRC107M/-1  | J AC         | Digital,NPN,KRC107 M   |
| Q971               | VSKTC3203Y/-1 | J AC         | Silicon,NPN,KTC3203 Y  |
| QT21               | VSKTC3199GR-1 | J AB         | Silicon,NPN,KTC3199 GR |
| QT22               | VSKTA1266GR-1 | J AB         | Silicon,PNP,KTA1266 GR |

| NO.           | PARTS CODE    | ★ PRICE RANK | DESCRIPTION                  |
|---------------|---------------|--------------|------------------------------|
| <b>DIODES</b> |               |              |                              |
| D21,22        | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D301-304      | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D601-604      | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D610-611      | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D613-617      | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D620,621      | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D801          | VHDS6B04GM-1  | J AP         | Silicon,TS6B04GM             |
| D802-808      | VHD1N4004S/-1 | J AB         | Silicon,1N4004S              |
| D831          | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D851          | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D871-875      | VHD1N4004S/-1 | J AB         | Silicon,1N4004S              |
| D876          | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D901-903      | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D951          | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| D971          | VHDDS1SS133-1 | J AB         | Silicon,DS1SS133             |
| LED722        | VHP4204SRT7-1 | J AD         | LED,Red,4204SRT7             |
| VD301         | VHCSVC348S/-1 | J AK         | Variable Capacitance,SVC348S |
| ZD61          | VHEDZ3R9BSB-1 | J AC         | Zener,3.9V,DZ3.9BSB          |
| ZD351         | VHEDZ5R1BSB-1 | J AC         | Zener,5.1V,DZ5.1BSB          |
| ZD601         | VHEDZ6R2BSC-1 | J AB         | Zener,DZ6.2BSC               |
| ZD801         | VHEDZ300BSB-1 | J AB         | Zener,30V,DZ300BSB           |
| ZD802         | VHEDZ6R2BSA-1 | J AB         | Zener,6.2V,DZ6.2BSA          |
| ZD803         | VHEDZ130BSB-1 | J AB         | Zener,DZ130BSB               |
| ZDT21         | VHEDZ5R1BSB-1 | J AC         | Zener,5.1V,DZ5.1BSB          |

| NO.                 | PARTS CODE    | ★ PRICE RANK | DESCRIPTION               |
|---------------------|---------------|--------------|---------------------------|
| <b>FILTERS</b>      |               |              |                           |
| CF301,302           | RFILF0072AFZZ | J AG         | FM IF                     |
| CF351               | RFILF0003AWZZ | J AK         | FM IF                     |
| CF352               | RFILA0009AWZZ | J AE         | AM IF                     |
| <b>TRANSFORMERS</b> |               |              |                           |
| △ PT801             | RTRNP0295AWZZ | J BD         | Power                     |
| △ PT871             | RTRNP0313AWZZ | J AN         | Power                     |
| T303                | RCILA0052AWZZ | J AE         | AM Antenna                |
| T306                | RCILB0058AWZZ | J AC         | OSC,AM                    |
| T351                | RCILI0019AWZZ | J AD         | AM IF                     |
| <b>COILS</b>        |               |              |                           |
| L61                 | VP-XHR82K0000 | J AC         | 0.82 μH                   |
| L62                 | VP-XH2R2K0000 | J AB         | 2.2 μH,Choke              |
| L99                 | VP-DH2R2K0000 | J AB         | 2.2 mH,Peaking            |
| L101,102            | VP-MK2R2K0000 | J AC         | 2.2 mH                    |
| L104                | VP-MK331K0000 | J AB         | 330 μH,Choke              |
| L341                | RBLN-0002AWZZ | J            | Balun                     |
| L342                | VP-DH2R2K0000 | J AB         | 2.2 mmH,Peaking           |
| L351,352            | VP-DH101K0000 | J AB         | 100 μH,Choke              |
| L354                | RFILL0001AWZZ | J AE         | Low Pass Filter           |
| L601                | VP-DH101K0000 | J AB         | 100 μH,Choke              |
| △ L801              | RCILZ0022AWZZ | J            | Line Filter               |
| L920,921            | RCILZ0137AFZZ | J AA         | 0.29 μH                   |
| L951                | VP-DH2R2K0000 | J AB         | 2.2 mH,Peaking            |
| LT21,22             | VP-XH2R2K0000 | J AB         | 2.2 μH,Choke              |
| <b>VIBRATORS</b>    |               |              |                           |
| X351                | 92LCRSTL1425A | J AF         | Crystal,456 kHz           |
| X352                | RCRSP0002AWZZ | J AH         | Crystal,4.5 MHz           |
| XL1                 | RCRSP0005AFZZ | J            | Crystal                   |
| XL701               | RCRSP0003AWZX | J            | Crystal                   |
| XT21                | RCRSP0010AWZZ | J AH         | Crystal,4.332 MHz         |
| <b>CAPACITORS</b>   |               |              |                           |
| C6                  | VCEAZA1AW107M | J AB         | 100 μF,10V,Electrolytic   |
| C7                  | VCEAZA1CW106M | J AC         | 10 μF,16V,Electrolytic    |
| C8                  | VCKYTV1HB104K | J AB         | 0.1 μF,50V                |
| C11                 | RC-EZY474AF0J | J            | 0.47 μF,6.3V,Electrolytic |
| C12                 | VCKYTV1HB104K | J AB         | 0.1 μF,50V                |
| C13                 | VCKYTV1HB103K | J AA         | 0.01 μF,50V               |
| C14                 | VCKYTV1EF334Z | J AB         | 0.33 μF,25V               |
| C16                 | VCCSPA1HL6R0J | J AA         | 6 pF,50V                  |
| C17                 | VCKYTV1HB472K | J AA         | 0.0047 μF,50V             |
| C18                 | VCCCTV1HH3R0C | J AA         | 3 pF (CH),50V             |
| C20,21              | VCKYTV1HB104K | J AB         | 0.1 μF,50V                |
| C22                 | VCKYTV1HB101K | J AA         | 100 pF,50V                |
| C23                 | VCKYTV1HB473K | J AA         | 0.047 μF,50V              |
| C24                 | VCEAZA1HW225M | J AB         | 2.2 μF,50V,Electrolytic   |
| C25                 | VCKYTV1HB104K | J AB         | 0.1 μF,50V                |
| C26                 | VCKYTV1HB473K | J AA         | 0.047 μF,50V              |
| C27                 | VCKYTV1HB104K | J AB         | 0.1 μF,50V                |
| C28                 | VCEAZA1AW476M | J AB         | 47 μF,10V,Electrolytic    |
| C29,30              | VCKYTV1HB104K | J AB         | 0.1 μF,50V                |
| C31                 | VCEAZA1AW107M | J AB         | 100 μF,10V,Electrolytic   |
| C34                 | VCTYBT1EF223Z | J AA         | 0.022 μF,25V              |
| C35,36              | VCCSPA1HL8R2J | J            | 8.8 μF,50V                |
| C38,39              | VCEAZA1CW106M | J AC         | 10 μF,16V,Electrolytic    |
| C40                 | VCKYTV1HB152K | J AA         | 0.0015 μF,50V             |
| C41                 | VCEAZA1AW107M | J AB         | 100 μF,10V,Electrolytic   |
| C42                 | VCCSTV1HL680J | J AA         | 68 pF,50V                 |
| C43                 | VCKYTV1HB152K | J AA         | 0.0015 μF,50V             |
| C44                 | VCKYTV1HB104K | J AB         | 0.1 μF,50V                |
| C45                 | VCEAZA1AW107M | J AB         | 100 μF,10V,Electrolytic   |
| C46                 | VCKYTV1EF223Z | J AA         | 0.022 μF,25V              |
| C47                 | VCEAZA1CW107M | J AC         | 100 μF,16V,Electrolytic   |
| C49,50              | VCEAZA1CW107M | J AC         | 100 μF,16V,Electrolytic   |
| C51                 | VCEAZA1AW476M | J AB         | 47 μF,10V,Electrolytic    |
| C52                 | VCTYPA1CX103K | J AA         | 0.01 μF,16V               |
| C53                 | VCKYTV1HB102K | J AA         | 0.001 μF,50V              |
| C54                 | VCEAZA1AW476M | J AB         | 47 μF,10V,Electrolytic    |
| C55                 | VCKYTV1HB103K | J AA         | 0.01 μF,50V               |
| C56                 | VCEAZA0JW337M | J AC         | 330 μF,6.3V,Electrolytic  |
| C64                 | RC-EZY474AF0J | J            | 0.47 μF,6.3V,Electrolytic |
| C71                 | VCKYTV1HB101K | J AA         | 100 pF,50V                |
| C72                 | VCKYTV1HB103K | J AA         | 0.01 μF,50V               |

| NO.      | PARTS CODE    | ★ PRICE RANK | DESCRIPTION                  | NO.      | PARTS CODE    | ★ PRICE RANK | DESCRIPTION               |
|----------|---------------|--------------|------------------------------|----------|---------------|--------------|---------------------------|
| C73~78   | VCKYTV1HB101K | J AA         | 100 pF,50V                   | C407,408 | VCEAZA1HW106M | J AB         | 10 μF,50V,Electrolytic    |
| C80      | VCKYTV1HB104K | J AB         | 0.1 μF,50V                   | C409~412 | VCQYKA1HM104K | J AB         | 0.1 μF,50V,Mylar          |
| C81~83   | VCKYTV1EF223Z | J AA         | 0.022 μF,25V                 | C413,414 | VCTYMN1CX272K | J AA         | 0.0027 μF,16V             |
| C98      | VCKZPA1HF223Z | J AA         | 0.022 μF,50V                 | C417,418 | VCEAEA1HW105M | J AB         | 1 μF,50V,Electrolytic     |
| C99      | VCEAZA1AW107M | J AB         | 100 μF,10V,Electrolytic      | C419,420 | VCEAZA1HW475M | J AB         | 4.7 μF,50V,Electrolytic   |
| C102,103 | VCKYMN1HB102K | J AA         | 0.001 μF,50V                 | C421~428 | VCEAEA1HW105M | J AB         | 1 μF,50V,Electrolytic     |
| C104,105 | VCKYMN1HB181K | J AA         | 180 pF,50V                   | C429,430 | VCKYMN1HB391K | J AA         | 390 pF,50V                |
| C106,107 | VCKYMN1HB102K | J AA         | 0.001 μF,50V                 | C439,440 | VCKYPA1HB102K | J AA         | 0.001 μF,50V              |
| C108     | VCEAZA1CW107M | J AC         | 100 μF,16V,Electrolytic      | C441     | VCTYPA1EX332K | J AA         | 0.0033, 25V               |
| C112~115 | VCKYMN1HB331K | J AA         | 330 pF,50V                   | C442     | VCTYPA1CX332K | J AA         | 0.0033, 25V               |
| C116,117 | VCEAZA1EW107M | J AB         | 100 μF,25V,Electrolytic      | C601     | VCCSPA1HL271J | J AA         | 270 pF,50V                |
| C118,119 | VCTYPA1EX333K | J AA         | 0.033 μF,25V                 | C602     | VCTYMN1CX272K | J AA         | 0.0027 μF,16V             |
| C120,121 | VCKYMN1HB561K | J AA         | 560 pF,50V                   | C603,604 | VCTYMN1CX682K | J AA         | 0.0068 μF,16V             |
| C122,123 | VCEAZA1EW476M | J AB         | 47 μF,25V,Electrolytic       | C605     | VCKYMN1HB271K | J AA         | 270 pF,50V                |
| C126,127 | VCKYMN1HB271K | J AA         | 270 pF,50V                   | C606     | VCTYMN1CX272K | J AA         | 0.0027 μF,16V             |
| C128,129 | VCEAZA1EW226M | J AB         | 22 μF,25V,Electrolytic       | C607,608 | VCTYMN1EF223Z | J AA         | 0.022 μF,25V              |
| C130,131 | VCTYPA1CX223K | J AA         | 0.022 μF,16V                 | C609     | VCEAZA1HW476M | J AB         | 47 μF,50V,Electrolytic    |
| C132,133 | VCTYMN1CX332K | J AA         | 0.0033 μF,16V                | C610     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V              |
| C134,135 | VCEAZA1AW476M | J AB         | 47 μF,25V,Electrolytic       | C611     | VCKZPA1HF223Z | J AA         | 0.022 μF,50V              |
| C136     | VCEAZA1EW226M | J AB         | 22 μF,25V,Electrolytic       | C612~614 | VCEAEA1HW225M | J AB         | 2.2 μF,50V,Electrolytic   |
| C137     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C616     | VCEAEA1HW105M | J AB         | 1 μF,50V,Electrolytic     |
| C138     | VCEAZA1AW227M | J AC         | 220 μF,10V,Electrolytic      | C617,618 | VCEAZA1CW106M | J AC         | 10 μF,16V,Electrolytic    |
| C139     | VCEAEA1HW335M | J AB         | 3.3 μF,50V,Electrolytic      | C620     | VCEAZA1EW476M | J AB         | 47 μF,25V,Electrolytic    |
| C140     | VCQPKA2AA822J | J AA         | 0.0082 μF,100V,Polypropylene | C621     | VCEAEA1HW105M | J AB         | 1 μF,50V,Electrolytic     |
| C141     | VCQYKA1HM393K | J AB         | 0.039 μF,50V,Mylar           | C622     | VCCCMN1HH150J | J AA         | 15 pF (CH),50V            |
| C142     | VCEAZA1EW476M | J AB         | 47 μF,25V,Electrolytic       | C623     | VCCCMN1HH180J | J AA         | 18 pF (CH),50V            |
| C143,144 | VCTYMN1CX222K | J AA         | 0.0022 μF,16V                | C624     | VCTYBT1EF223Z | J AA         | 0.022 μF,25V              |
| C145     | VCKYMN1HB102K | J AA         | 0.001 μF,50V                 | C625     | VCEAZA1AW227M | J AC         | 220 μF,10V,Electrolytic   |
| C148     | VCQYKA1HM473K | J AB         | 0.047 μF,50V,Mylar           | C626     | VCEAEA1HW104M | J AB         | 0.1 μF,50V,Electrolytic   |
| C150     | VCEAZA1EW226M | J AB         | 22 μF,25V,Electrolytic       | C627     | VCTYMN1CY103N | J AA         | 0.01 μF,16V               |
| C301     | VCTYMN1CY103N | J AA         | 0.01 μF,16V                  | C628     | VCEAEA1HW335M | J AB         | 3.3 μF,50V,Electrolytic   |
| C302     | VCKYMN1HB102K | J AA         | 0.001 μF,50V                 | C629     | VCKZPA1HF223Z | J AA         | 0.022 μF,50V              |
| C321     | VCEAZA1CW107M | J AC         | 100 μF,16V,Electrolytic      | C630     | VCEAZA1HW106M | J AB         | 10 μF,50V,Electrolytic    |
| C323     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C631     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V              |
| C330     | VCCUMN1HJ150J | J AA         | 15 pF (UJ),50V               | C632     | VCEAZA1EW476M | J AB         | 47 μF,25V,Electrolytic    |
| C331     | VCKZPA1HF473Z | J AA         | 0.047 μF,50V                 | C633     | VCEAZA1CW106M | J AC         | 10 μF,16V,Electrolytic    |
| C332     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C634     | VCKYBT1HB102K | J AA         | 0.001 μF,50V              |
| C334     | VCCUMN1HJ270J | J AA         | 27 pF (UJ),50V               | C801,802 | VCQYKA1HM104K | J AB         | 0.1 μF,50V,Mylar          |
| C335     | VCKYMN1HB561K | J AA         | 560 pF,50V                   | C803,804 | VCEAZW1HW228M | J AH         | 2200 μF,50V,Electrolytic  |
| C338     | VCKYMN1HB102K | J AA         | 0.001 μF,50V                 | C805,806 | VCQYKA1HM104K | J AB         | 0.1 μF,50V,Mylar          |
| C341,342 | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C807     | VCEAZW1EW338M | J AG         | 3300 μF,25V,Electrolytic  |
| C345~347 | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C808,809 | VCEAZA1HW107M | J AC         | 100 μF,50V,Electrolytic   |
| C348     | VCTYMN1CY103N | J AA         | 0.01 μF,16V                  | C810     | VCEAZV1HW227M | J AD         | 220 μF,50V,Electrolytic   |
| C351     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C811     | VCEAZA1HW476M | J AB         | 47 μF,50V,Electrolytic    |
| C352     | VCEAZA1CW106M | J AC         | 10 μF,16V,Electrolytic       | C812     | VCEAZA1HW107M | J AC         | 100 μF,50V,Electrolytic   |
| C353,354 | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C813     | VCEAZA1VW107M | J AC         | 100 μF,35V,Electrolytic   |
| C355     | VCCSMN1HL220J | J AA         | 22 pF,50V                    | C831     | VCEAZA1EW227M | J AC         | 220 μF,25V,Electrolytic   |
| C356     | VCKYMN1HB102K | J AA         | 0.001 μF,50V                 | C832     | VCKZPA1HF223Z | J AA         | 0.022 μF,50V              |
| C357     | VCEAEA1HW225M | J AB         | 2.2 μF,50V,Electrolytic      | C833     | VCEAZA1EW226M | J AB         | 22 μF,25V,Electrolytic    |
| C358     | VCEAEA1HW105M | J AB         | 1 μF,50V,Electrolytic        | C834     | VCQYKA1HM473K | J AB         | 0.047 μF,50V,Mylar        |
| C361     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C841,842 | VCQYKA1HM104K | J AB         | 0.1 μF,50V,Mylar          |
| C362     | VCEAEA1HW335M | J AB         | 3.3 μF,50V,Electrolytic      | C843     | VCEAZA1EW476M | J AB         | 47 μF,25V,Electrolytic    |
| C363     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C851     | VCQYKA1HM104K | J AB         | 0.1 μF,50V,Mylar          |
| C364     | VCEAZA1CW106M | J AC         | 10 μF,16V,Electrolytic       | C852     | VCKZPA1HF223Z | J AA         | 0.022 μF,50V              |
| C365     | VCKZPA1HF223Z | J AA         | 0.022 μF,50V                 | C853,854 | VCEAZA1EW476M | J AB         | 47 μF,25V,Electrolytic    |
| C366     | VCKYMN1HB102K | J AA         | 0.001 μF,50V                 | C855     | VCQYKA1HM473K | J AB         | 0.047 μF,50V,Mylar        |
| C367,368 | VCEAEA1HW105M | J AB         | 1 μF,50V,Electrolytic        | △C871    | RC-KZ001LAWZZ | J AB         | 0.0047 μF,250V,AC,Ceramic |
| C369     | VCCUMN1HJ270J | J AA         | 27 pF (UJ),50V               | C872     | VCQYKA1HM473K | J AB         | 0.047 μF,50V,Mylar        |
| C370~372 | VCEAEA1HW105M | J AB         | 1 μF,50V,Electrolytic        | C873     | VCEAZV1VW477M | J AD         | 470 μF,35V,Electrolytic   |
| C373,374 | VCTYPA1CX153K | J AA         | 0.015 μF,16V                 | C874     | VCEAZA0JW108M | J AC         | 1000 μF,6.3V,Electrolytic |
| C375     | VCKYMN1HB102K | J AA         | 0.001 μF,50V                 | C875     | VCKZPA1HF223Z | J AA         | 0.022 μF,50V              |
| C380     | VCEAZA1CW106M | J AC         | 10 μF,16V,Electrolytic       | C876,877 | VCKYPA1HB102K | J AA         | 0.001 μF,50V              |
| C381     | VCCCMN1HH120J | J AA         | 12 pF (CH),50V               | C901,902 | VCCSPA1HL471J | J AA         | 470 pF,50V                |
| C382     | VCCCMN1HH150J | J AA         | 15 pF (CH),50V               | C903,904 | VCCSPA1HL150J | J AA         | 15 pF,50V                 |
| C385     | VCTYMN1CY103N | J AA         | 0.01 μF,16V                  | C905,906 | VCEAZA1HW476M | J AB         | 47 μF,25V,Electrolytic    |
| C386     | VCKYMN1HB331K | J AA         | 330 pF,50V                   | C907,908 | VCKZPA1HF223Z | J AA         | 0.022 μF,50V              |
| C387     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C909,910 | VCEAZA1HW107M | J AC         | 100 μF,50V,Electrolytic   |
| C388     | VCKYPA1HB102K | J AA         | 0.001 μF,50V                 | C911,912 | VCEAZA1HW106M | J AB         | 10 μF,50V,Electrolytic    |
| C391     | VCEAZA1CW476M | J AB         | 47 μF,16V,Electrolytic       | C913~916 | VCQYKA1HM104K | J AB         | 0.1 μF,50V,Mylar          |
| C392     | VCKYMN1HB102K | J AA         | 0.001 μF,50V                 | C917     | VCEAZA1HW476M | J AB         | 47 μF,50V,Electrolytic    |
| C393     | VCEAEA1HW105M | J AB         | 1 μF,50V,Electrolytic        | C920~927 | VCKZPA1HF223Z | J AA         | 0.022 μF,50V              |
| C394     | VCEAZA1CW476M | J AB         | 47 μF,16V,Electrolytic       | C928,929 | VCKYPA1HB102K | J AA         | 0.001 μF,50V              |
| C395     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C932~934 | VCKYPA1HB102K | J AA         | 0.001 μF,50V              |
| C396     | VCEAZA1AW107M | J AB         | 100 μF,10V,Electrolytic      | C935,936 | VCEAZA1HW106M | J AB         | 10 μF,50V,Electrolytic    |
| C397     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C951,952 | VCCSPA1HL221J | J AA         | 220 pF,50V                |
| C398     | VCEAZA1AW107M | J AB         | 100 μF,10V,Electrolytic      | C971     | VCEAZA1HW476M | J AB         | 47 μF,50V,Electrolytic    |
| C399     | VCTYMN1EF223Z | J AA         | 0.022 μF,25V                 | C972     | VCEAZA1HW106M | J AB         | 10 μF,50V,Electrolytic    |
| C401,402 | VCKYMN1HB102K | J AA         | 0.001 μF,50V                 | CT21     | VCEAZA1AW476M | J AB         | 47 μF,10V,Electrolytic    |
| C403     | VCEAZA1EW226M | J AB         | 22 μF,25V,Electrolytic       | CT22     | VCKZPA1HF223Z | J AA         | 0.022 μF,50V              |
| C404     | VCEAZA1CW107M | J AC         | 100 μF,16V,Electrolytic      | CT23     | VCEAZA1CW106M | J AC         | 10 μF,16V,Electrolytic    |
| C405     | VCKZPA1HF223Z | J AA         | 0.022 μF,50V                 | CT24     | VCKZPA1HF223Z | J AA         | 0.022 μF,50V              |
| C406     | VCEAZA1HW226M | J AB         | 22 μF,50V,Electrolytic       | CT25     | VCCSPA1HL561J | J AA         | 560 pF,50V                |

# CD-BA1500H

| NO.     | PARTS CODE    | ★ | PRICE RANK | DESCRIPTION            |
|---------|---------------|---|------------|------------------------|
| CT26,27 | VCCCPA1HH220J | J | AA         | 22 pF (CH),50V         |
| CT28    | VCEAZA1AW476M | J | AB         | 47 μF,10V,Electrolytic |
| CT29    | VCKZPA1HF223Z | J | AA         | 0.022 μF,50V           |
| CT36,37 | VCKZPA1HF223Z | J | AA         | 0.022 μF,50V           |
| CT43    | VCEAZA1CW106M | J | AC         | 10 μF,16V,Electrolytic |

## RESISTORS

|          |               |   |    |                               |
|----------|---------------|---|----|-------------------------------|
|          | VRD-MN2BD000C | J | AA | 0 ohm,Jumper,ø1.4×3.5mm,Ivory |
| R3       | VRS-TV2AB104J | J | AA | 100 kohm,1/10W                |
| R4       | VRS-TV2AB103J | J | AA | 10 kohm,1/10W                 |
| R5       | VRS-TV2AB393J | J | AA | 39 kohms,1/10W                |
| R6       | VRS-TV2AB273J | J | AA | 27 kohms,1/10W                |
| R7       | VRS-TV2AB682J | J | AA | 6.8 kohms,1/10W               |
| R8       | VRS-TV2AB331J | J | AA | 330 ohms,1/10W                |
| R10      | VRS-TV2AB273J | J | AA | 27 kohms,1/10W                |
| R11      | VRS-TV2AB123J | J | AA | 12 kohms,1/10W                |
| R12,13   | VRS-TV2AB681J | J | AA | 680 ohms,1/10W                |
| R14      | VRS-TV2AB122J | J | AA | 1.2 kohms,1/10W               |
| R15      | VRS-TV2AB103J | J | AA | 10 kohm,1/10W                 |
| R16      | VRD-ST2CD103J | J | AA | 10 kohm,1/6W                  |
| R17      | VRD-ST2CD102J | J | AA | 1 kohm,1/6W                   |
| R19      | VRD-ST2CD470J | J | AA | 47 ohms,1/6W                  |
| R20      | VRS-TV2AB221J | J | AA | 220 ohms,1/10W                |
| R21,22   | VRS-TV2AB471J | J | AA | 470 ohms,1/10W                |
| R25      | VRD-ST2CD103J | J | AA | 10 kohm,1/6W                  |
| R35      | VRD-ST2CD102J | J | AA | 1 kohm,1/6W                   |
| R38      | VRD-ST2CD271J | J | AA | 270 ohms,1/6W                 |
| R39      | VRD-ST2CD471J | J | AA | 470 ohms,1/6W                 |
| R40      | VRS-TV2AB122J | J | AA | 1.2 kohms,1/10W               |
| R42      | VRS-TV2AB124J | J | AA | 120 kohms,1/10W               |
| R44      | VRD-ST2CD102J | J | AA | 1 kohm,1/6W                   |
| R45      | VRS-TV2AB122J | J | AA | 1.2 kohms,1/10W               |
| R46      | VRS-TV2AB102J | J | AA | 1 kohm,1/10W                  |
| R47      | VRD-ST2EE3R3J | J | AA | 3.3 ohms,1/4W                 |
| R48      | VRS-TV2AB682J | J | AA | 6.8 kohms,1/10W               |
| R50      | VRS-TV2AB470J | J | AA | 47 ohms,1/10W                 |
| R51-54   | VRS-TV2AB683J | J | AA | 68 kohms,1/10W                |
| R55,56   | VRD-ST2CD683J | J | AA | 68 kohms,1/6W                 |
| R58      | VRD-ST2CD221J | J | AA | 220 ohms,1/6W                 |
| R67,68   | VRD-ST2CD102J | J | AA | 1 kohm,1/6W                   |
| R71-78   | VRD-ST2CD102J | J | AA | 1 kohm,1/6W                   |
| R79      | VRS-TV2AB155J | J | AA | 1.5 Mohms,1/10W               |
| R80      | VRD-ST2CD105J | J | AA | 1 Mohm,1/6W                   |
| R81,82   | VRS-TV2AB222J | J | AA | 2.2 kohms,1/10W               |
| R83,84   | VRS-TV2AB103J | J | AA | 10 kohm,1/10W                 |
| R87      | VRD-ST2CD121J | J | AA | 120 ohms,1/6W                 |
| R88      | VRS-TV2AB682J | J | AA | 6.8 kohms,1/10W               |
| R94,95   | VRS-TV2AB103J | J | AA | 10 kohm,1/10W                 |
| R101,102 | VRD-MN2BD103J | J | AA | 10 kohm,1/8W                  |
| R103     | VRD-MN2BD472J | J | AA | 4.7 kohms,1/8W                |
| R104,105 | VRD-MN2BD102J | J | AA | 1 kohm,1/8W                   |
| R106,107 | VRD-MN2BD222J | J | AA | 2.2 kohms,1/8W                |
| R108,109 | VRD-MN2BD332J | J | AA | 3.3 kohms,1/8W                |
| R110     | VRD-MN2BD473J | J | AA | 47 kohms,1/8W                 |
| R111,112 | VRD-MN2BD472J | J | AA | 4.7 kohms,1/8W                |
| R113     | VRD-MN2BD473J | J | AA | 47 kohms,1/8W                 |
| R114,115 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W                   |
| R116,117 | VRD-ST2CD560J | J | AA | 56 ohms,1/6W                  |
| R118,119 | VRD-MN2BD104J | J | AA | 100 kohm,1/8W                 |
| R120,121 | VRD-MN2BD392J | J | AA | 3.9 kohms,1/8W                |
| R122,123 | VRD-MN2BD562J | J | AA | 5.6 kohms,1/8W                |
| R124,125 | VRD-MN2BD333J | J | AA | 33 kohms,1/8W                 |
| R126     | VRD-MN2BD683J | J | AA | 68 kohms,1/8W                 |
| R127,128 | VRD-MN2BD682J | J | AA | 6.8 kohms,1/8W                |
| R129,130 | VRD-MN2BD392J | J | AA | 3.9 kohms,1/8W                |
| R131,132 | VRD-MN2BD152J | J | AA | 1.5 kohms,1/8W                |
| R133,134 | VRD-MN2BD101J | J | AA | 100 ohm,1/8W                  |
| R135,136 | VRD-MN2BD103J | J | AA | 10 kohm,1/8W                  |
| R137     | VRD-MN2BD153J | J | AA | 15 kohms,1/8W                 |
| R138     | VRD-ST2CD153J | J | AA | 15 kohms,1/6W                 |
| R139     | VRD-ST2EE221J | J | AA | 220 ohms,1/4W                 |
| R140     | VRD-ST2CD103J | J | AA | 10 kohm,1/6W                  |
| R141     | VRD-MN2BD103J | J | AA | 10 kohm,1/8W                  |
| R142,143 | VRD-ST2CD224J | J | AA | 220 kohms,1/6W                |
| R144     | VRD-MN2BD473J | J | AA | 47 kohms,1/8W                 |
| R145     | VRD-ST2CD472J | J | AA | 4.7 kohms,1/6W                |
| R146     | VRD-RT2HD820J | J | AA | 82 ohms,1/2W                  |
| R147     | VRD-MN2BD473J | J | AA | 47 kohms,1/8W                 |
| R148     | VRD-MN2BD223J | J | AA | 22 kohms,1/8W                 |
| R149     | VRD-ST2CD472J | J | AA | 4.7 ohms,1/6W                 |
| R157     | VRD-ST2EE151J | J | AA | 150 ohms,1/4W                 |

| NO.      | PARTS CODE    | ★ | PRICE RANK | DESCRIPTION    |
|----------|---------------|---|------------|----------------|
| R323     | VRD-MN2BD683J | J | AA         | 68 kohms,1/8W  |
| R336     | VRD-MN2BD103J | J | AA         | 10 kohm,1/8W   |
| R344     | VRD-MN2BD471J | J | AA         | 470 ohms,1/8W  |
| R345     | VRD-MN2BD472J | J | AA         | 4.7 kohms,1/8W |
| R346     | VRD-MN2BD331J | J | AA         | 330 ohms,1/8W  |
| R347     | VRD-MN2BD682J | J | AA         | 6.8 kohms,1/8W |
| R348     | VRD-MN2BD681J | J | AA         | 680 ohms,1/8W  |
| R349     | VRD-MN2BD330J | J | AA         | 33 ohms,1/8W   |
| R350     | VRD-ST2CD272J | J | AA         | 2.7 kohms,1/6W |
| R351     | VRD-MN2BD562J | J | AA         | 5.6 kohms,1/8W |
| R352     | VRD-MN2BD102J | J | AA         | 1 kohm,1/8W    |
| R353     | VRD-MN2BD271J | J | AA         | 270 ohms,1/8W  |
| R355     | VRD-MN2BD332J | J | AA         | 3.3 kohms,1/8W |
| R356     | VRD-MN2BD102J | J | AA         | 1 kohm,1/8W    |
| R357     | VRD-ST2CD474J | J | AA         | 470 kohms,1/6W |
| R358     | VRD-ST2CD392J | J | AA         | 3.9 kohms,1/6W |
| R359     | VRD-MN2BD182J | J | AA         | 1.8 kohms,1/8W |
| R360     | VRD-MN2BD472J | J | AA         | 4.7 kohms,1/8W |
| R361,362 | VRD-MN2BD122J | J | AA         | 1.2 kohms,1/8W |
| R363,364 | VRD-MN2BD473J | J | AA         | 47 kohms,1/8W  |
| R365     | VRD-MN2BD103J | J | AA         | 10 kohm,1/8W   |
| R369     | VRD-MN2BD150J | J | AA         | 15 ohms,1/8W   |
| R370     | VRD-ST2CD102J | J | AA         | 1 kohm,1/6W    |
| R372-374 | VRD-MN2BD102J | J | AA         | 1 kohm,1/8W    |
| R376     | VRD-MN2BD102J | J | AA         | 1 kohm,1/8W    |
| R377     | VRD-MN2BD473J | J | AA         | 47 kohms,1/8W  |
| R378     | VRD-MN2BD102J | J | AA         | 1 kohm,1/8W    |
| R379     | VRD-MN2BD222J | J | AA         | 2.2 kohms,1/8W |
| R380     | VRD-MN2BD152J | J | AA         | 1.5 kohms,1/8W |
| R381     | VRD-MN2BD103J | J | AA         | 10 kohm,1/8W   |
| R382     | VRD-ST2EE151J | J | AA         | 150 ohms,1/4W  |
| R383     | VRD-MN2BD562J | J | AA         | 5.6 kohms,1/8W |
| R384     | VRD-ST2CD562J | J | AA         | 5.6 kohms,1/6W |
| R385     | VRD-MN2BD562J | J | AA         | 5.6 kohms,1/8W |
| R386     | VRD-ST2CD223J | J | AA         | 22 kohms,1/6W  |
| R387     | VRD-ST2CD562J | J | AA         | 5.6 kohms,1/6W |
| R388     | VRD-MN2BD392J | J | AA         | 3.9 kohms,1/8W |
| R391,392 | VRD-ST2EE271J | J | AA         | 270 ohms,1/4W  |
| R393     | VRD-MN2BD102J | J | AA         | 1 kohm,1/8W    |
| R395     | VRD-MN2BD473J | J | AA         | 47 kohms,1/8W  |
| R399     | VRD-MN2BD330J | J | AA         | 33 ohms,1/8W   |
| R401,402 | VRD-MN2BD331J | J | AA         | 330 ohms,1/8W  |
| R403,404 | VRD-MN2BD272J | J | AA         | 2.7 kohms,1/8W |
| R407     | VRD-MN2BD222J | J | AA         | 2.2 kohms,1/8W |
| R408     | VRD-ST2CD222J | J | AA         | 2.2 kohms,1/6W |
| R409,410 | VRD-ST2CD103J | J | AA         | 10 kohm,1/6W   |
| R415,416 | VRD-MN2BD392J | J | AA         | 3.9 kohms,1/8W |
| R417,418 | VRD-MN2BD332J | J | AA         | 3.3 kohms,1/8W |
| R419,420 | VRD-MN2BD562J | J | AA         | 5.6 kohms,1/8W |
| R421,422 | VRD-MN2BD273J | J | AA         | 27 kohms,1/8W  |
| R423,424 | VRD-ST2CD474J | J | AA         | 470 kohms,1/6W |
| R425     | VRD-MN2BD223J | J | AA         | 22 kohms,1/8W  |
| R601     | VRD-ST2CD102J | J | AA         | 1 kohm,1/6W    |
| R602     | VRD-MN2BD104J | J | AA         | 100 kohm,1/8W  |
| R603     | VRD-MN2BD103J | J | AA         | 10 kohm,1/8W   |
| R604     | VRD-ST2CD123J | J | AA         | 12 kohms,1/6W  |
| R605     | VRD-MN2BD563J | J | AA         | 56 kohms,1/8W  |
| R606     | VRD-ST2CD102J | J | AA         | 1 kohm,1/6W    |
| R607     | VRD-MN2BD333J | J | AA         | 33 kohms,1/8W  |
| R608     | VRD-MN2BD683J | J | AA         | 68 kohms,1/8W  |
| R609     | VRD-MN2BD474J | J | AA         | 470 kohms,1/8W |
| R610     | VRD-MN2BD153J | J | AA         | 15 kohms,1/8W  |
| R611     | VRD-MN2BD104J | J | AA         | 100 kohm,1/8W  |
| R612     | VRD-ST2CD105J | J | AA         | 1 Mohm,1/6W    |
| R613     | VRD-MN2BD824J | J | AA         | 820 kohms,1/8W |
| R614     | VRD-ST2CD394J | J | AA         | 390 kohms,1/6W |
| R615     | VRD-MN2BD154J | J | AA         | 150 kohms,1/8W |
| R616     | VRD-ST2CD102J | J | AA         | 1 kohm,1/6W    |
| R617     | VRD-ST2CD224J | J | AA         | 220 kohms,1/6W |
| R618     | VRD-MN2BD224J | J | AA         | 220 kohms,1/8W |
| R619     | VRD-ST2CD225J | J | AA         | 2.2 Mohms,1/6W |
| R620     | VRD-MN2BD184J | J | AA         | 180 kohms,1/8W |
| R621     | VRD-MN2BD330J | J | AA         | 33 ohms,1/8W   |
| R622     | VRD-MN2BD104J | J | AA         | 100 kohm,1/8W  |
| R623,624 | VRD-ST2EE271J | J | AA         | 270 ohms,1/4W  |
| R625-627 | VRD-MN2BD104J | J | AA         | 100 kohm,1/8W  |
| R629,630 | VRD-ST2CD103J | J | AA         | 10 kohm,1/6W   |
| R632-635 | VRD-ST2CD103J | J | AA         | 10 kohm,1/6W   |
| R636     | VRD-MN2BD683J | J | AA         | 68 kohms,1/8W  |
| R637     | VRD-MN2BD102J | J | AA         | 1 kohm,1/8W    |
| R638     | VRD-MN2BD473J | J | AA         | 47 kohms,1/8W  |
| R640,641 | VRD-MN2BD102J | J | AA         | 1 kohm,1/8W    |

| NO.        | PARTS CODE    | ★ PRICE RANK | DESCRIPTION          | NO.                          | PARTS CODE     | ★ PRICE RANK | DESCRIPTION                       |
|------------|---------------|--------------|----------------------|------------------------------|----------------|--------------|-----------------------------------|
| R642       | VRD-MN2BD223J | J AA         | 22 kohms,1/8W        | RT28-30                      | VRD-ST2CD102J  | J AA         | 1 kohm,1/6W                       |
| R643,644   | VRD-MN2BD102J | J AA         | 1 kohm,1/8W          | RT32                         | VRD-ST2CD103J  | J AA         | 10 kohm,1/6W                      |
| R645       | VRD-MN2BD223J | J AA         | 22 kohms,1/8W        | RT33,34                      | VRD-ST2CD563J  | J AA         | 56 kohms,1/6W                     |
| R646-648   | VRD-MN2BD102J | J AA         | 1 kohm,1/8W          | RT35-37                      | VRD-ST2CD224J  | J AA         | 220 kohms,1/6W                    |
| R649       | VRD-MN2BD103J | J AA         | 10 kohm,1/8W         | RT48,49                      | VRD-ST2EE391J  | J AA         | 390 ohms,1/4W                     |
| R650       | VRD-ST2CD683J | J AA         | 68 kohms,1/6W        | RT51                         | VRD-ST2CD103J  | J AA         | 10 kohm,1/6W                      |
| R651,652   | VRD-MN2BD103J | J AA         | 10 kohm,1/8W         | <b>OTHER CIRCUITRY PARTS</b> |                |              |                                   |
| R653       | VRD-MN2BD102J | J AA         | 1 kohm,1/8W          | BI4/CNS4                     | QCNWN1572AWZZ  | J AF         | Connector Ass'y,6/6Pin            |
| R654       | VRD-ST2CD102J | J AA         | 1 kohm,1/6W          | BI99/CNS99                   | QCNWN1611AWZZ  | J AG         | Connector Ass'y,3Pin              |
| R655       | VRD-MN2BD102J | J AA         | 1 kohm,1/8W          | BI402/CNS402                 | QCNWN1561AWZZ  | J AF         | Connector Ass'y,5Pin              |
| R656       | VRD-ST2CD103J | J AA         | 10 kohm,1/6W         | BI701/CNS701                 | QCNWN1562AWZZ  | J AH         | Connector Ass'y,10/10Pin          |
| R658       | VRD-MN2BD473J | J AA         | 47 kohms,1/8W        | CNP1                         | QCNCM704GAWZZ  | J AC         | Plug,7Pin                         |
| R659       | VRD-MN2BD102J | J AA         | 1 kohm,1/8W          | CNP2                         | QCNCM704HAWZZ  | J AC         | Plug,8Pin                         |
| R660       | VRD-MN2BD103J | J AA         | 10 kohm,1/8W         | CNP3                         | 92LCONE6P53253 | J AC         | Plug,6Pin                         |
| R661       | VRD-ST2CD222J | J AA         | 2.2 kohms,1/6W       | CNP3A                        | 92LCONE6P53254 | J AC         | Plug,6Pin                         |
| R662       | VRD-MN2BD103J | J AA         | 10 kohm,1/8W         | CNP4                         | QCNCM705AFZZ   | J AB         | Plug,6Pin                         |
| R663-665   | VRD-ST2CD222J | J AA         | 2.2 kohms,1/6W       | CNP5                         | 92LCONE3P53254 | J AB         | Plug,3Pin                         |
| R666       | VRD-MN2BD102J | J AA         | 1 kohm,1/8W          | CNP11                        | 92LCONE5P53254 | J AB         | Plug,5Pin                         |
| R667,668   | VRD-ST2CD102J | J AA         | 1 kohm,1/6W          | CNP12                        | 92LCONEAP53254 | J AD         | Plug,10Pin                        |
| R669,670   | VRD-ST2CD103J | J AA         | 10 kohm,1/6W         | CNP101                       | QCNCM705CAFZZ  | J AA         | Plug,3Pin                         |
| R671       | VRD-MN2BD103J | J AA         | 10 kohm,1/8W         | CNP102                       | QCNCM705GAFZZ  | J AB         | Plug,7Pin                         |
| R672       | VRD-ST2CD103J | J AA         | 10 kohm,1/6W         | CNP302                       | 92LCONE2P5268  | J AB         | Plug,2Pin                         |
| R673-675   | VRD-ST2CD102J | J AA         | 1 kohm,1/6W          | CNP303                       | QCNCM010HAWZZ  | J AC         | Plug,8Pin                         |
| R676       | VRD-ST2CD472J | J AA         | 4.7 kohms,1/6W       | CNP401                       | QCNCWZG23AWZZ  | J AK         | Plug,23Pin                        |
| R677-694   | VRD-ST2CD102J | J AA         | 1 kohm,1/6W          | CNP702                       | QCNCWZF23AWZZ  | J AK         | Plug,23Pin                        |
| R695-697   | VRD-ST2CD681J | J AA         | 680 ohms,1/6W        | CNP703                       | QCNCWZF13AWZZ  | J            | Plug,13Pin                        |
| R698-700   | VRD-ST2CD821J | J AA         | 820 ohms,1/6W        | △ CNP801                     | QCNCM049BAWZZ  | J AC         | Plug,2Pin                         |
| R701-703   | VRD-ST2CD102J | J AA         | 1 kohm,1/6W          | CNP802                       | QCNCM035HAWZZ  | J AB         | Plug,8Pin                         |
| R704       | VRD-MN2BD473J | J AA         | 47 kohms,1/8W        | CNP951                       | QCNCW012EAWZZ  | J AC         | Plug,5Pin                         |
| R705,706   | VRD-ST2CD152J | J AA         | 1.5 kohms,1/6W       | CNP971                       | 92LCONE2P53253 | J AB         | Plug,2Pin                         |
| R707       | VRD-MN2BD152J | J AA         | 1.5 kohms,1/8W       | CNS1A/B                      | QCNWN1537AWZZ  | J AG         | Connector Ass'y,7/7Pin            |
| R708       | VRD-ST2CD103J | J AA         | 10 kohm,1/6W         | CNS2A/B                      | QCNWN1538AWZZ  | J AG         | Connector Ass'y,8/8Pin            |
| R709,710   | VRD-ST2CD222J | J AA         | 2.2 kohms,1/6W       | CNS3A/B                      | QCNWN1539AWZZ  | J AE         | Connector Ass'y,6/6Pin            |
| R711       | VRD-MN2BD104J | J AA         | 100 kohm,1/8W        | CNS971                       | QCNWN1389AWZZ  | J AC         | Connector Ass'y,2Pin              |
| R712,713   | VRD-ST2CD272J | J AA         | 2.7 kohms,1/6W       | △ F801,802                   | 92LFUSET402E   | J AD         | Fuse,T4A L 250V                   |
| R714       | VRD-MN2BD392J | J AA         | 3.9 kohms,1/8W       | △ F803                       | 92LFUSE-T202E  | J AD         | Fuse,T2A L 250V                   |
| R715       | VRD-ST2CD392J | J AA         | 3.9 kohms,1/6W       | FC701                        | QCNWN1564AWZZ  | J AG         | Flat Cable,23Pin                  |
| R716       | VRD-ST2CD472J | J AA         | 4.7 kohms,1/6W       | FC702                        | QCNWN1544AWZZ  | J AE         | Flat Cable,13Pin                  |
| R717       | VRD-MN2BD683J | J AA         | 68 kohms,1/8W        | FE301                        | RTUNS0012AWZZ  | J AV         | FM Front End                      |
| R718       | VRD-MN2BD562J | J AA         | 5.6 kohms,1/8W       | FL701                        | VVKBJ749GNK-1  | J BD         | FL Display                        |
| R719       | VRD-ST2CD103J | J AA         | 10 kohm,1/6W         | FW871                        | QCNWN1627AWZZ  | J AE         | Connector Ass'y,5Pin              |
| R720       | VRD-MN2BD104J | J AA         | 100 kohm,1/8W        | FW951                        | QCNWN1563AWZZ  | J            | Connector Ass'y,5Pin              |
| R721       | VRD-ST2CD183J | J AA         | 18 kohms,1/6W        | IC99                         | VHPTOTX178A-1  | J AP         | Optical Fiber Data Link, TOTX178A |
| R722       | VRD-ST2CD333J | J AA         | 33 kohms,1/6W        | JK951                        | QJAKM0004AWZZ  | J AK         | Jack,Headphones                   |
| R723       | VRD-ST2CD101J | J AA         | 100 ohm,1/6W         | M1                           | 92LMMTR1651B   | J            | Motor with Chassis [Spindle]      |
| R724       | VRD-ST2CD104J | J AA         | 100 kohm,1/6W        | M2                           | 92LMMTR1854A   | J AP         | Motor with Gear [Sled]            |
| R725       | VRD-ST2CD103J | J AA         | 10 kohm,1/6W         | M3                           | 92LTWMEN7E6Y   | J AR         | Motor with Worm Pulley            |
| R801,802   | VRD-ST2EE223J | J AA         | 22 kohms,1/4W        | M901                         | RMOTV0027AWZZ  | J AM         | Motor,Air Cooling Fan             |
| R803       | VRS-VV3DA681J | J AC         | 680 ohms,2W          | △ RL871                      | RRLYD0011AWZZ  | J AE         | Relay                             |
| R804       | VRD-ST2CD222J | J AA         | 2.2 kohms,1/6W       | RL951                        | RRLYD0014AWZZ  | J AK         | Relay                             |
| R805       | VRD-ST2CD473J | J AA         | 47 kohms,1/6W        | RX701                        | VHLN63H380A-1  | J AK         | Remote Sensor,N63H380A            |
| R806       | VRD-ST2CD100J | J AA         | 10 ohm,1/6W          | SO301                        | QTANC0101AWZZ  | J AF         | FM Antenna Terminal               |
| R807       | VRD-ST2CD123J | J AA         | 12 kohms,1/6W        | SO401                        | QSOCJ0219AWZZ  | J AD         | Jack,Video/AUX                    |
| R832       | VRD-RT2HD330J | J AA         | 33 ohms,1/2W         | △ SO801                      | QSOC A0204AWZZ | J AF         | Socket,AC Input                   |
| R833       | VRD-ST2CD223J | J AA         | 22 kohms,1/6W        | SO901                        | QTANA0417AWZZ  | J AE         | Terminal,Speaker                  |
| R841       | VRD-ST2CD223J | J AA         | 22 kohms,1/6W        | SW1                          | SWMPU10780MLB  | J            | Switch,Push Type [Open/close]     |
| R851       | VRD-ST2CD103J | J AA         | 10 kohm,1/6W         | SW2                          | SWMPU11470MLB  | J            | Switch,Push Type [Clamp]          |
| R874       | VRD-ST2CD221J | J AA         | 220 ohms,1/6W        | SW3                          | SWMPU11470MLB  | J            | Switch,Push Type [Disc number]    |
| R875       | VRD-ST2CD473J | J AA         | 47 kohms,1/6W        | SW4                          | QSW-F9001AW01  | J AD         | Switch,Leaf Type [Pick up in]     |
| R876       | VRD-ST2CD102J | J AA         | 1 kohm,1/6W          | SW601                        | QSW-K0009AWZZ  | J            | Switch,Key Type [POWER]           |
| R901,902   | VRD-ST2CD563J | J AA         | 56 kohms,1/6W        | SW602                        | QSW-K0009AWZZ  | J            | Switch,Key Type [CLOCK]           |
| R903,904   | VRD-ST2CD821J | J AA         | 820 ohms,1/6W        | SW603                        | QSW-K0009AWZZ  | J            | Switch,Key Type [TIMER/SLEEP]     |
| R905,906   | VRD-ST2CD102J | J AA         | 1 kohm,1/6W          | SW604                        | QSW-K0009AWZZ  | J            | Switch,Key Type [PTY.TI SEARCH]   |
| R907,908   | VRN-VV3AAR10J | J            | 0.1 ohm,1W           | SW605                        | QSW-K0009AWZZ  | J            | Switch,Key Type [EON]             |
| R909,910   | VRD-ST2CD102J | J AA         | 1 kohm,1/6W          | SW606                        | QSW-K0009AWZZ  | J            | Switch,Key Type [ASPM]            |
| R911,912   | VRD-ST2CD103J | J AA         | 10 kohm,1/6W         | SW607                        | QSW-K0009AWZZ  | J            | Switch,Key Type [DISPLAY MODE]    |
| R913-915   | VRD-ST2CD563J | J AA         | 56 kohms,1/6W        | SW608                        | QSW-K0009AWZZ  | J            | Switch,Key Type [STATION]         |
| R916,917   | VRD-ST2EE4R7J | J AA         | 4.7 ohms,1/4W        | SW609                        | QSW-K0009AWZZ  | J            | Switch,Key Type [DISC SKIP]       |
| △ R918,919 | VRG-ST2EC101J | J AB         | 100 ohm,1/4W,Fusible | SW610                        | QSW-K0009AWZZ  | J            | Switch,Key Type [OPEN/CLOSE]      |
| R920       | VRD-ST2CD223J | J AA         | 22 kohms,1/6W        | SW611                        | QSW-K0009AWZZ  | J            | Switch,Key Type [DIMMER]          |
| R921-924   | VRD-ST2EE6R8J | J AA         | 6.8 ohms,1/4W        | SW612                        | QSW-K0009AWZZ  | J            | Switch,Key Type [X-BASS/DEMO]     |
| R925-927   | VRD-ST2CD680J | J AA         | 68 ohms,1/6W         | SW613                        | QSW-K0009AWZZ  | J            | Switch,Key Type [EQUALIZER]       |
| R931,932   | VRD-MN2BD102J | J AA         | 1 kohm,1/8W          | SW614                        | QSW-K0009AWZZ  | J            | Switch,Key Type [VOLUME UP]       |
| R933,934   | VRD-ST2CD683J | J AA         | 68 kohms,1/6W        | SW615                        | QSW-K0009AWZZ  | J            | Switch,Key Type [VOLUME DOWN]     |
| R951,952   | VRD-RT2HD331J | J AA         | 330 ohms,1/2W        |                              |                |              |                                   |
| R953,954   | VRD-ST2CD472J | J AA         | 4.7 kohms,1/6W       |                              |                |              |                                   |
| R971       | VRD-ST2CD102J | J AA         | 1 kohm,1/6W          |                              |                |              |                                   |
| R972       | VRD-ST2CD683J | J AA         | 68 kohms,1/6W        |                              |                |              |                                   |
| R973       | VRD-ST2CD153J | J AA         | 15 kohms,1/6W        |                              |                |              |                                   |
| R975       | VRD-RT2HD4R7J | J AA         | 4.7 ohms,1/2W        |                              |                |              |                                   |
| RT21       | VRD-ST2CD104J | J AA         | 100 kohm,1/6W        |                              |                |              |                                   |
| RT26       | VRD-ST2CD102J | J AA         | 1 kohm,1/6W          |                              |                |              |                                   |

# CD-BA1500H

| NO.   | PARTS CODE    | ★ PRICE RANK | DESCRIPTION                        |
|-------|---------------|--------------|------------------------------------|
| SW616 | QSW-K0009AWZZ | J            | Switch,Key Type [CD]               |
| SW617 | QSW-K0009AWZZ | J            | Switch,Key Type [TAPE]             |
| SW618 | QSW-K0009AWZZ | J            | Switch,Key Type [TUNING/TIME DOWN] |
| SW619 | QSW-K0009AWZZ | J            | Switch,Key Type [MEMORY/SET]       |
| SW620 | QSW-K0009AWZZ | J            | Switch,Key Type [REWIND]           |
| SW621 | QSW-K0009AWZZ | J            | Switch,Key Type [FORWARD]          |
| SW622 | QSW-K0009AWZZ | J            | Switch,Key Type [PLAY/REPEAT]      |
| SW623 | QSW-K0009AWZZ | J            | Switch,Key Type [STOP]             |
| SW625 | QSW-K0009AWZZ | J            | Switch,Key Type [REC/PAUSE]        |
| SW626 | QSW-K0009AWZZ | J            | Switch,Key Type [TUNING/TIME UP]   |
| SW627 | QSW-K0009AWZZ | J            | Switch,Key Type [VIDEO/AUX]        |
| SW628 | QSW-K0009AWZZ | J            | Switch,Key Type [TUNER (BAND)]     |

## MECHANICAL 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    | 92LMCUSN1524A  | J AD | 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    | XBSSD20P03000  | J AA | Screw,ø2×3mm                       |
| 704    | LX-VWZ1070AFZZ | J AA | Washer,ø1.5×ø3.8×0.25mm            |
| M1     | 92LMMTR1651B   | J    | Motor with Chassis [Spindle]       |
| M2     | 92LMMTR1854A   | J AP | Motor with Gear [Sled]             |
| SW4    | QSW-F9001AW01  | J AD | Switch,Leaf Type [Pickup In]       |

## CABINET PARTS

|        |                |      |   |
|--------|----------------|------|---|
| 201    | 92LCAB3284AASY | J    | Front Cabinet Ass'y                     |
| 201- 1 |                |      | Front Panel (Not Replacement Item)      |
| 201- 2 | GDORF0074AWSA  | J AE | Cassette Holder,Tape 1                  |
| 201- 3 | GDORF0075AWSA  | J AE | Cassette Holder,Tape 2                  |
| 201- 4 | GCOVA1251AWSA  | J AH | Cassette Cover,Tape 1                   |
| 201- 5 | GCOVA1252AWSA  | J AH | Cassette Cover,Tape 2                   |
| 201- 6 | HDECQ0521AWSA  | J AD | Cassette Panel,Tape 1                   |
| 201- 7 | HDECQ0522AWSA  | J AD | Cassette Panel,Tape 2                   |
| 201- 8 | HDECQ0548AWSA  | J AH | Panel,Amp                               |
| 201-10 | JKNBZ0649AWSA  | J AF | Button,Volume UP/DOWN                   |
| 201-11 | JKNBZ0648AWSA  | J AG | Button,Center Operation                 |
| 201-12 | JKNBZ0714AWSA  | J AF | Button,Power/ON/Stand-by                |
| 201-13 | JKNBZ0658AWSA  | J AF | Button,CD/Tuner (BAND)                  |
| 201-14 | JKNBZ0659AWSA  | J AF | Button,Tape/Video/Aux                   |
| 201-15 | JKNBZ0660AWSA  | J AF | Button,Tuning/TIME                      |
| 201-16 | JKNBZ0661AWSA  | J AE | Button,Dimmer                           |
| 201-20 | GCOVA1258AWSA  | J AB | Power LED,Top                           |
| 201-21 | MLIFP0008AWZZ  | J AD | Damper                                  |
| 201-22 | MSPRD0138AWFJ  | J    | Spring,Cassette,Tape 1                  |
| 201-23 | MSPRD0137AWFJ  | J    | Spring,Cassette,Tape 2                  |
| 201-24 | 92LBADGE1671A  | J AC | Badge,SHARP                             |
| 201-25 | JKNBZ0650AWSA  | J AF | Button,Disc Skip/X-BASS                 |
| 201-26 | JKNBZ0651AWSA  | J AF | Button,RDS                              |
| 202    | 92LCAB3283BASY | J AM | Side Panel Ass'y,Left                   |
| 202- 1 |                |      | Side Panel,Left (Not Replacement Item)  |
| 202- 2 | PCUSG0022AWZZ  | J AB | Cushion,Leg                             |
| 203    | 92LCAB3283CASY | J AM | Side Panel Ass'y,Right                  |
| 203- 1 |                |      | Side Panel,Right (Not Replacement Item) |
| 203- 2 | PCUSG0022AWZZ  | J AB | Cushion,Leg                             |
| 204    | 92LCOV3303AASY | J AM | CD Tray Cover Ass'y                     |
| 204- 1 |                |      | Cover,CD Tray (Not Replacement Item)    |
| 204- 2 | GCOVA1254AWSA  | J AE | Cover,CD Tray Panel,Left                |
| 204- 3 | GCOVA1255AWSA  | J AE | Cover,CD Tray Panel,Right               |
| 205    | GCAB-1184AWSA  | J AP | Top Cabinet                             |
| 206    | GITAR0559AWSA  | J AK | Rear Panel [For Europe]                 |
| 206    | GITAR0561AWSA  | J    | Rear Panel [For U.K.]                   |
| 208    | LANGK0110AWFW  | J AE | Bracket,Cassette Lock,Tape 1            |
| 209    | LANGK0111AWFW  | J AE | Bracket,Cassette Lock,Tape 2            |

| NO.   | PARTS CODE     | ★ PRICE RANK | DESCRIPTION                 |
|-------|----------------|--------------|-----------------------------|
| 210   | LANGK0192AWFW  | J AD         | Bracket,Fan Support         |
| 213   | LCHSM0094AWFW  | J AP         | Main Chassis                |
| 214   | LHLDZ1241AWZZ  | J AE         | Holder,FL Display           |
| 219   | MLOKC0003AWZZ  | J AD         | Lock Lever,Cassette,Tape 1  |
| 220   | MLOKC0004AWZZ  | J AD         | Lock Lever,Cassette,Tape 2  |
| 221   | MSPRD0109AWFJ  | J AB         | Spring,Cassette Lock,Tape 1 |
| 222   | MSPRD0110AWFJ  | J AB         | Spring,Cassette Lock,Tape 2 |
| 223   | NFANP0001AWZZ  | J AD         | Rotary Fan                  |
| 224   | 92LPT0331105   | J AM         | Turntable                   |
| 225   | PCUSG0022AWZZ  | J AB         | Cushion,Leg                 |
| 226   | PRDAR0148AWFW  | J AR         | Heat Sink,Main              |
| 230   | QCNWN1615AWZZ  | J AC         | Lug Wire                    |
| △ 231 | QFSDH0001AWZZ  | J AB         | Holder,Fuse                 |
| 232   | 92LBE241414    | J AD         | Belt,Drive                  |
| 233   | 92LCSPR1431C   | J AA         | Spring,Ring                 |
| 234   | 92LEVA0330702  | J            | Cushion,CD Player Unit      |
| 235   | 92LMAG0104302  | J            | Magnet                      |
| 236   | 92LMT0304302   | J            | Plate,Metal                 |
| 237   | 92LNBAND1318A  | J AA         | Nylon Band,80mm             |
| 238   | 92LNM0305401   | J            | Velvet Cushion              |
| 239   | 92LPT0303002   | J AB         | Roller                      |
| 240   | 92LPT0304303   | J AB         | Lever,Stop                  |
| 241   | 92LPT0304304   | J            | Stopper,Cam Gear            |
| 242   | 92LPT0304305   | J AE         | Lever,Lock                  |
| 243   | 92LPT0304306   | J            | Stabilizer                  |
| 244   | 92LPT0304307   | J AC         | Support,Cam                 |
| 245   | 92LPT0304308   | J            | Lock Gear Pin               |
| 246   | 92LPT0304309   | J            | Cap,Pulley Stopper          |
| 247   | 92LPT0305413   | J            | Cam Gear Lower              |
| 248   | 92LPT0309506   | J AD         | Gear,Turntable Drive        |
| 249   | 92LPT0309507   | J AD         | Gear,Open/Close Drive       |
| 250   | 92LPT0309508   | J AD         | Gear,Planet                 |
| 251   | 92LPT0309509   | J AD         | Gear,Drive                  |
| 252   | 92LPT0309510   | J AE         | Gear,Pulley                 |
| 253   | 92LPT0309511   | J AD         | Gear,Middle                 |
| 254   | 92LPT0311101   | J AB         | Lever,Clamp                 |
| 255   | 92LPT0311102   | J AC         | Lever,Disc                  |
| 256   | 92LPT0312005   | J            | Gear,Cam                    |
| 257   | 92LPT0320201   | J AE         | Support,Stabilizer          |
| 258   | 92LPT0330301   | J AU         | Chassis,CD Player Unit      |
| 259   | 92LPT0330803   | J AK         | CD,Chassis                  |
| 260   | 92LPT0331003   | J AT         | Shassis,Disc Tray           |
| 262   | 92LSP0304303   | J            | Spring,Stopper              |
| 263   | 92LSP0304305   | J AB         | Spring,Lock                 |
| 264   | 92LSP0304306   | J            | Spring,Lock Gear            |
| 267   | LANGK0184AWFW  | J AG         | Bracket,Tuner PWB           |
| 268   | KMECB0011AWZZ  | J BH         | Tape Mechanism Ass'y        |
| 274   | 92LCAUT1706A1  | J AC         | Label,Class 3A Laser        |
| 275   | 92LCAUT1706B   | J AA         | Label,Laser                 |
| 276   | PSHEZ0067AWZZ  | J            | Sheet,PWB Support           |
| 278   | LANGF0039AWFW1 | J AC         | Support Powertransformer    |
| 281   | QLUGP0002AWZZ  | J AB         | Lug                         |
| 282   | QLUGP0001AWZZ  | J AC         | Lug                         |
| 601   | XBSSD20P04000  | J AA         | Screw,ø2×4mm                |
| 604   | XEBSF30P12000  | J AA         | Screw,ø3×12mm               |
| 605   | XESSD30P10000  | J AA         | Screw,ø3×10mm               |
| 606   | XHBSD26P04000  | J AA         | Screw,ø2.6×4mm              |
| 607   | XJBSD30P12000  | J AA         | Screw,ø3×12mm               |
| 608   | XJBSD30P10000  | J AA         | Screw,ø3×10mm               |
| 609   | XJBSD30P14000  | J AA         | Screw,ø3×14mm               |
| 610   | XJBSF30P10000  | J AA         | Screw,ø3×10mm               |
| 611   | XJSSD30P10000  | J AA         | Screw,ø3×10mm               |
| 612   | LX-HZ0009AWFD  | J AC         | Screw,Special               |
| 613   | LX-HZ0169AFFD  | J AA         | Screw,ø4×8mm                |
| 614   | LX-JZ0010AFFD  | J AA         | Screw,ø3×10mm               |
| 615   | XEBSD30P10000  | J AA         | Screw,ø3×10mm               |
| 616   | LX-BZ2222AXZZ  | J            | Screw,Special               |
| 617   | LX-JZ0003AWFF  | J AA         | Screw,ø3×12mm               |
| 618   | 92LSC0308MBZI  | J AB         | Screw,ø3×8mm                |
| 619   | 92LSC0308RBZI  | J            | Screw,ø3×8mm                |

## ACCESSORIES/PACKING PARTS

|   |               |      |                                   |
|---|---------------|------|-----------------------------------|
| 1 | SPAKP0013AWZZ | J AC | Polyethylene Bag,Unit             |
| 2 | 92L411-0075   | J AG | Polyethylene Bag,Speaker          |
| 3 | SPAKA0235AWZZ | J    | Packing Add.,Left/Right           |
| 4 | 92L412-0133   | J AN | Packing Add.,Speaker              |
| 5 | TLABZ0690AWZZ | J    | Feature Label,Tape 1 [For Europe] |
| 5 | TLABZ0693AWZZ | J    | Feature Label,Tape 1 [For U.K.]   |
| 6 | TLABZ0691AWZZ | J    | Feature Label,Tape 2              |
| 7 | QANTL0008AWZZ | J AH | AM Loop Antenna                   |



| NO. | PARTS CODE    | ★ | PRICE RANK | DESCRIPTION                              |
|-----|---------------|---|------------|--|
| △8  | QACCB0008AW00 | J | AW         | AC Power Supply Cord<br>[For U.K.]       |
| △8  | QACCE0011AW00 | J | AM         | AC Power Supply Cord<br>[For Europe]     |
| 9   | RRMCG0219AWSA | J | AR         | Remote Control                           |
| 9-1 | GFTAB1022AWSB | J | AK         | Battery Lid, Remote Control              |
| 10  | TINSE0297AWZZ | J | AF         | Operation Manual [For U.K.]              |
| 10  | TINSZ0526AWZZ | J | AS         | Operation Manual [For Europe]            |
| 11  | TINSE0298AWZZ | J | AB         | Quick Guide [For U.K. Only]              |
| 13  | TLABZ0604AWZZ | J | AB         | Label,Energy [For U.K. Only]             |
| 14  | TLABZ0605AWZZ | J | AB         | Label,Saving Energy                      |
| 15  | 92LBAG1460C1  | J | AB         | Polyethylene Bag,Accessories             |
| 16  | 92LBAG1770A   | J | AB         | Polyethylene Bag,AC Power<br>Supply Cord |
| 17  | 92LFANT1535A  | J | AF         | FM Antenna                               |
| 18  | SPAKC0880AWZZ | J |            | Packing Case [For Europe]                |
| 18  | SPAKC0959AWZZ | J | AS         | Packing Case [For U.K.]                  |
| 19  | TGAN-3170UMZZ | J | AE         | Warranty Card [For U.K.]                 |
| 20  | SPAKZ0573AWZZ | J |            | Sheet,CD Tray                            |
| 21  | TLABE0382AWZZ | J |            | Label,Bar Code [For U.K.]                |
| 21  | TLABE0387AWZZ | J |            | Label,Bar Code [For Europe]              |
| 22  | TLABN0112AWZZ | J |            | Label,Serial Number                      |

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

|          |                |   |    |   |
|----------|----------------|---|----|---|
| PWB-A1~4 | 92LPWB3284MANS | J | —  | Main/Display/Headphones/Digital<br>Out (Combined Ass'y) |
| PWB-B    | 92LPWB3306CDUS | J | —  | CD Servo  |
| PWB-C    | QPWBF0027AWZZ  | J | AD | CD Motor (PWB Only)                                     |
| PWB-D    | —              | — | —  | Tape Mechanism  |
| PWB-E    | 92LPC99C017    | J | —  | CD T/T Up/Down Motor<br>(PWB Only)                      |
| PWB-F    | 92LPWB3284PWRS | J | —  | Power   |
| PWB-G    | 92LPWB3284RDSS | J | —  | RDS   |

### OTHER SERVICE PART

|               |   |    |                        |
|---------------|---|----|------------------------|
| UDSKA0004AFZZ | J | AZ | CD Pickup Lens Cleaner |
|---------------|---|----|------------------------|

## CP-BA1500H

### SPEAKER BOX PARTS

|       |               |   |    |   |
|-------|---------------|---|----|---|
| 901   | 92L126-0009   | J | BA | Front Panel Ass'y,Left                      |
| 902   | 92L126-0010   | J | BA | Front Panel Ass'y,Right                     |
| 903   | 92L121-0178   | J | AP | Net Frame Ass'y                             |
| 904   | 92L051-0095   | J | AY | Speaker Box Ass'y,Left                      |
| 905   | 92L051-0096   | J | AY | Speaker Box Ass'y,Right                     |
| 907   | 92L394-0056   | J | AC | Foot Cushion                                |
| 908   | 92L394-0055   | J | AC | Port Cushion                                |
| 909   | 92L251-0365   | J |    | Label,Specifications                        |
| 912   | 92L319-0027   | J | AE | Catching Holder                             |
| 913   | 92L372-0109   | J | AB | Screw,ø3×10mm                               |
| 914   | 92L372-0100   | J | AC | Screw,ø4×16mm                               |
| 915   | 92L122-0048   | J | AG | Speaker Cord Ass'y<br>(With Capacitor C1,2) |
| 916   | 92L291-0079   | J | AG | Speaker Cord                                |
| SP1~4 | VSPA010WB13CA | J | AV | Woofer                                      |
| SP5,6 | VSP0051TBN46A | J | AQ | Tweeter                                     |

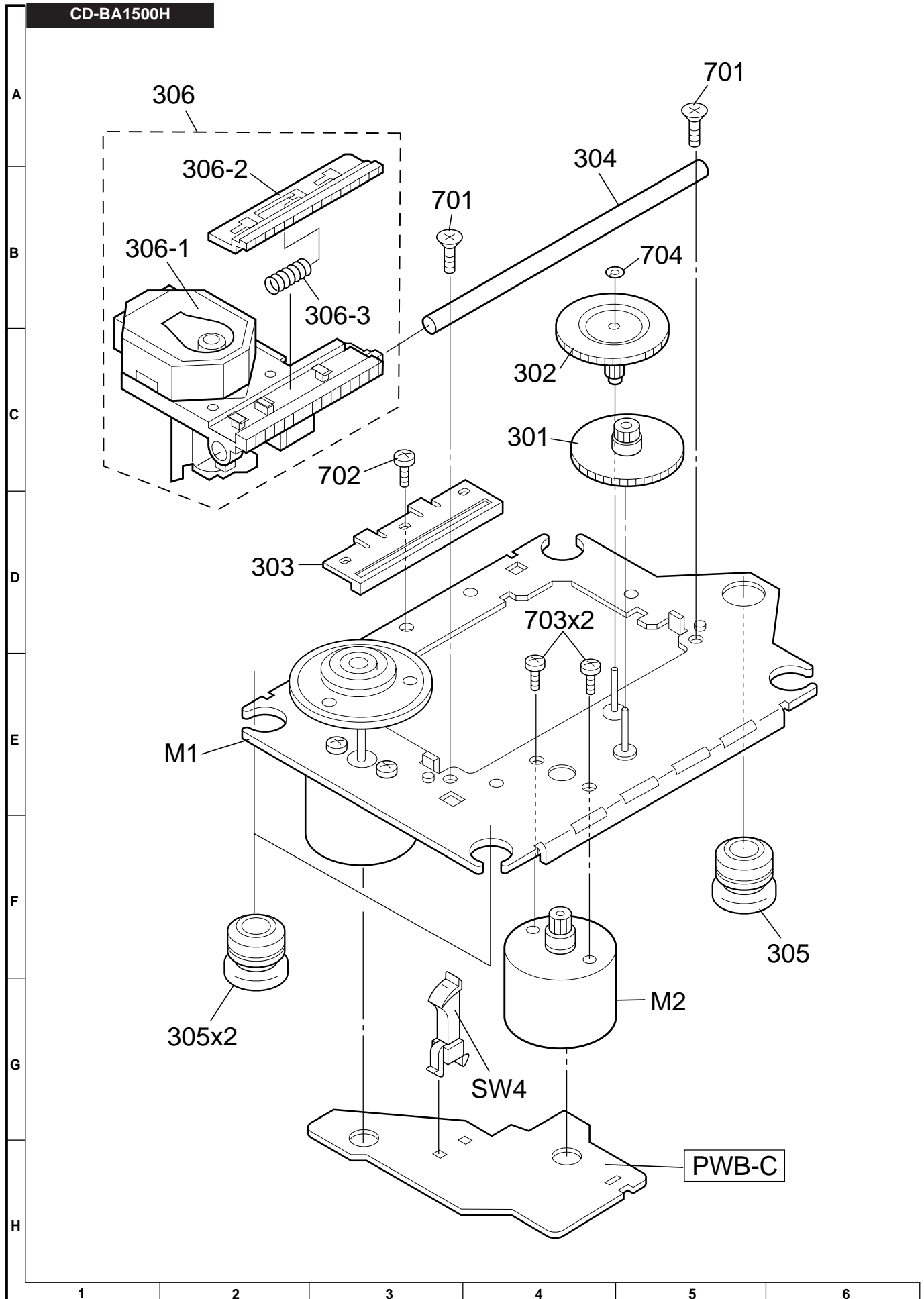


Figure 7 CD MECHANISM EXPLODED VIEW

CD-BA1500H

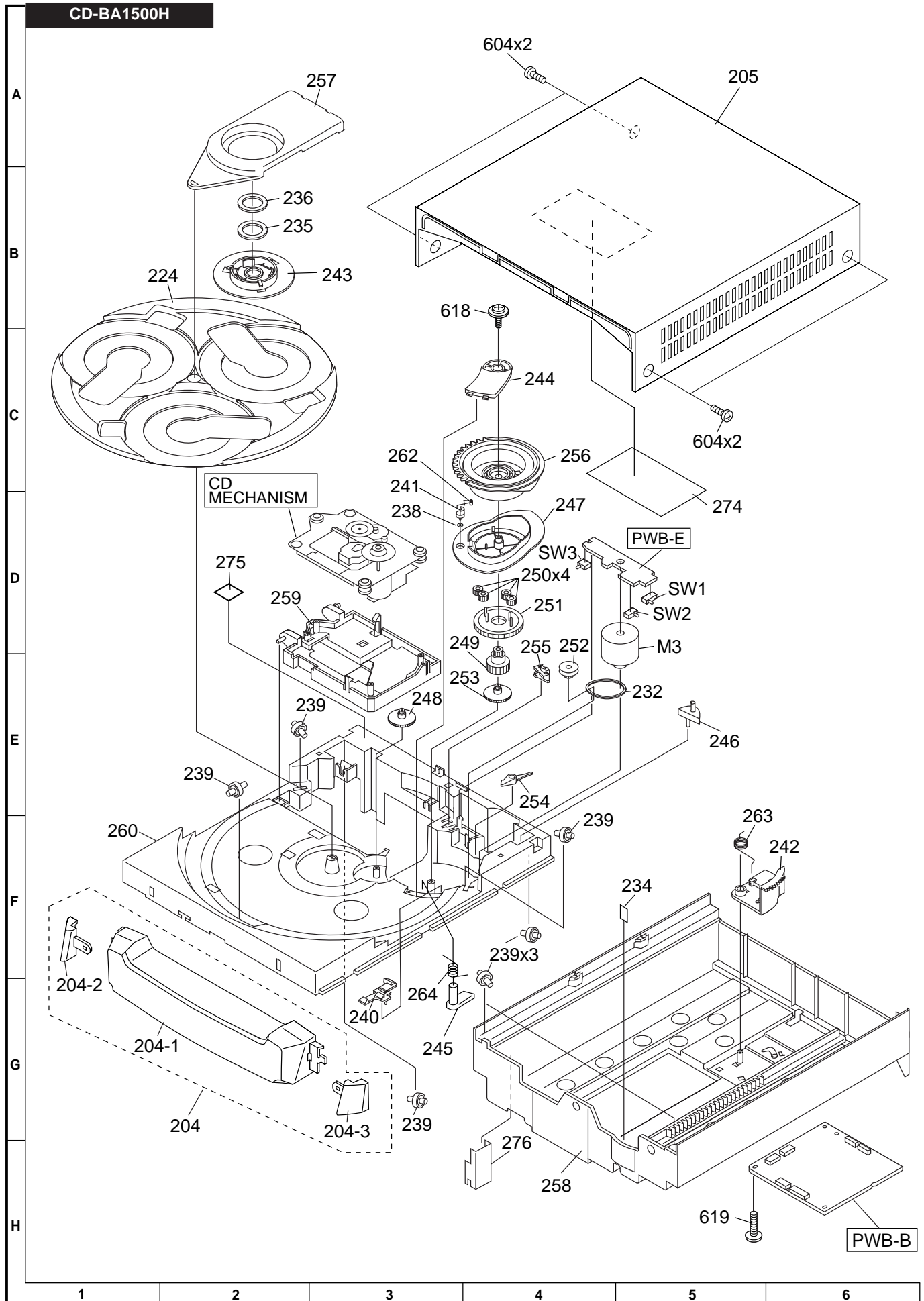


Figure 9 CABINET EXPLODED VIEW (2/2)

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