

Service Manual

AUTOMOTIVE CONSUMER ELECTRONICS

CQ-R45LEEP CQ-R30LEEP

Removable Face High-Power Cassette / Receiver with CD Changer Control



< CQ-R45LEEP >

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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**PACKAGE AND IC BLOCK DIAGRAM/БЛОК-СХЕМЫ И ОПИСАНИЕ ВЫВОДОВ ИНТЕГРАЛЬНЫХ
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EXPLODED VIEW (TAPE DECK)/СБОРОЧНЫЙ ЧЕРТЕЖ (МАГНИТОФОН)

Panasonic

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■ FEATURES

- PLL (Phase Locked Loop) synthesizer tuning.
- 20-Stations Preset (5-FM1, 5-FM2, 5-FM3, 5-AM).
- Electronic Control of Volume, Bass, Treble, Balance and Fader.
- Metal (CrO₂)/Normal Tape Selector.
- Dolby B NR function.
 - TPS (Tape Program Search) function (CQ-R45LEEP only).
- CD Changer Control function (CQ-R45LEEP only)
- Detachable Face Plate Security

Specifications*

General

| | |
|----------------------|--|
| Power Supply | : DC 12V (11V - 16V), Test Voltage 14.4V Negative Ground |
| Tone Action | : Bass; ± 12 dB at 100Hz Treble; ± 12 dB at 10kHz |
| Current Consumption: | Less than 2.0A (Tape mode, 0.5W 4-Speaker) |
| Maximum Power Output | : 30W \times 4 (at 4 Ω) |
| Power Output | : 15W \times 4 (DIN45 324, at 4 Ω) |
| Speaker Impedance | : 4 - 8 Ω |

FM Stereo Radio

| | |
|--------------------|---|
| Frequency Range | : 64.0 ~ 74.0MHz / 87.5 ~ 108MHz |
| Usable Sensitivity | : 9dB/ μ V (S/N 30dB) [64.0~74.0MHz] 6dB/ μ V (S/N 30dB) [87.5~108MHz] |
| Stereo Separation | : 35 dB (at 1kHz) |

MW Radio

| | |
|--------------------|----------------------------|
| Frequency Range | : 530 ~ 1,602kHz |
| Usable Sensitivity | : 26dB/ μ V (S/N 20dB) |

LW Radio

| | |
|--------------------|----------------------------|
| Frequency Range | : 153 ~ 279kHz |
| Usable Sensitivity | : 30dB/ μ V (S/N 20dB) |

Tape Player

| | |
|------------------------|---|
| Reproduction System: | 4-track, 2-program stereo |
| Tape Speed | : 4.76cm/sec. |
| Frequency Response: | 35 - 14,000Hz (Normal) 35 - 17,000Hz (Metal) |
| Wow and Flutter | : 0.12% (WRMS) |
| Signal to Noise Ratio: | 52dB (Dolby NR on ; 62dB) |

Dimensions**

| | |
|-----------|--|
| Main unit | : 178 (W) \times 50 (H) \times 150 (D)mm |
|-----------|--|

Weight**

| | |
|-----------|---------|
| Main unit | : 1.6kg |
|-----------|---------|

ALIGNMENT TOOLS

1. DOLBY NR ALIGNMENT ;
Test tape : RFKZ0038
2. HEAD HEIGHT ALIGNMENT ;
Mirror tape : A-BEX SCC-1659
3. HEAD AZIMUTH ALIGNMENT ;
Test tape : TCC-153

FUSE

Use a fuses of the same specified rating (10 amps). Using different substitutes or fuses with higher ratings, or connecting the unit directly without a fuse, could cause fire or damage to the stereo unit.

MAINTENANCE

Your product is designed and manufactured to ensure a minimum of maintenance. Use a soft cloth for routine exterior cleaning. Never use benzine, thinner, or other solvent.

DIMENSIONS



* Specifications and the design are subject to possible modification without notice due to improvements in technology.

** Dimensions and Weight shown are approximate.

Installation

Preparation

- Before installation check the radio operation with antenna and speakers.
- Disconnect the cable from the negative (-) battery terminal (see caution below).

Caution:

For installation to cars with trip or navigational computers, all electronic memory settings previously registered in the computer will be lost when the battery terminal is disconnected. For this type of car, battery could not be disconnected. Therefore, extra care should be taken to prevent short circuiting.

In-dash Installation

Installation Opening

In-dash installation can be done if the car's dashboard has an opening for this unit as shown in Fig. 1. The car's dashboard should have a thickness of 4.5mm - 6mm in order to make the installation of the unit.

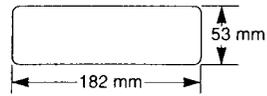


Fig. 1

Installation Precautions

1. This system is to be used only in a 12-volt, DC battery system (car) with negative ground.
2. Follow the electrical connection on pages 22 or 23 carefully. Failure to do so may result in damage to the unit.
3. Connect the power lead after other connections are made.
4. Be sure to connect the YELLOW lead to the positive terminal (+) of the battery or fuse block (BAT) terminal.
5. Insulate all exposed wires to prevent short circuiting.
6. Secure all loose wires after installing the unit.
7. Please carefully read the operating and installation instructions of the respective equipment before connecting it to this unit.

Supplied Hardware

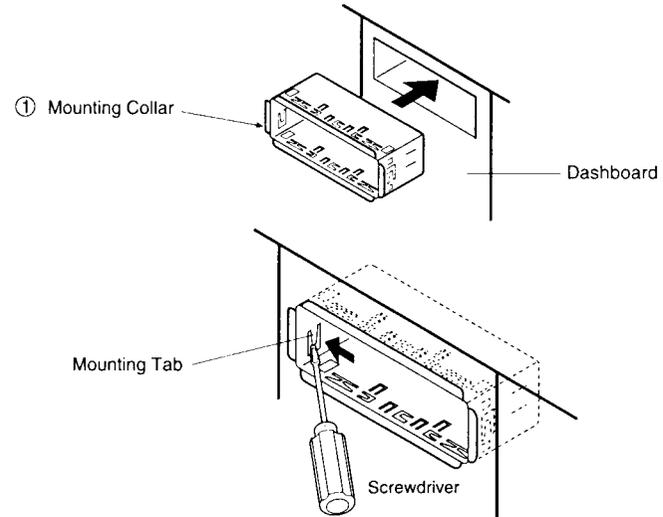
| No. | Item | Diagram | Q'ty |
|-----|---------------------------|---------|------|
| ① | Mounting Collar | | 1 |
| ② | Plain Washer (5 mmφ) | | 2 |
| ③ | Spring Washer (5 mmφ) | | 2 |
| ④ | Hex. Nut (5 mmφ) | | 2 |
| ⑤ | Rear Support Strap | | 1 |
| ⑥ | Hex. Bolt (5 mmφ x 25 mm) | | 1 |

| No. | Item | Diagram | Q'ty |
|-----|-----------------------------|---------|------|
| ⑦ | Toothed Lock Washer (5 mmφ) | | 1 |
| ⑧ | Mounting Bolt (5 mmφ) | | 1 |
| ⑨ | Dismounting Pin | | 1 |
| ⑩ | Power Connector | | 1 |
| ⑪ | Removable Face Plate Case | | 1 |

Installation Procedures

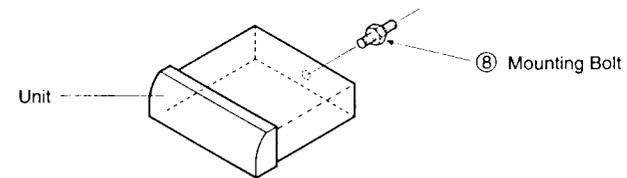
1. Secure the Mounting Collar ①.

Insert Mounting Collar ① into the car's dashboard, and bend mounting tabs out with a screwdriver.

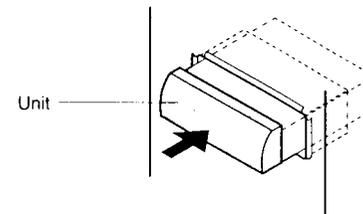


2. Secure the rear of the unit.

- a) Check the electrical connection by referring to this operating instructions.
- b) Connect the Mounting Bolt ⑧, using a suitable wrench.



- c) Insert the unit into Mounting Collar ① and push it in until "click" is heard.

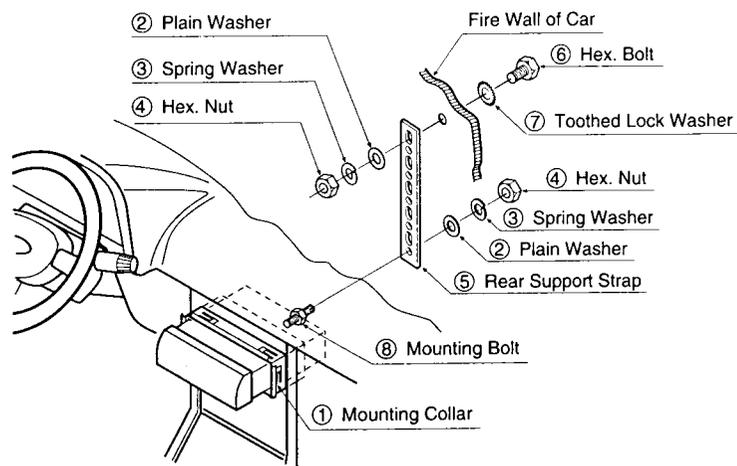


- d) Secure the rear of the unit to the car by either of the two recommended methods on the next page.

Installation continued

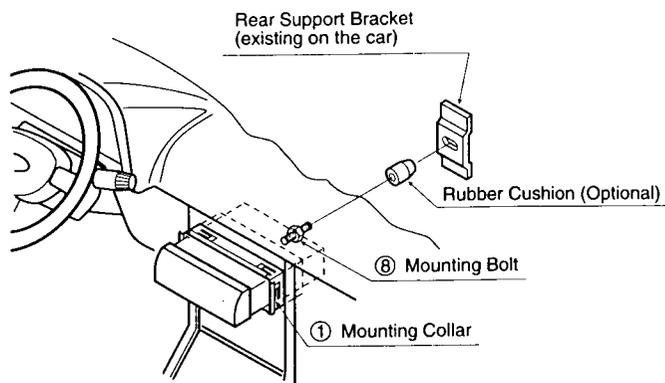
■ Using the Rear Support Strap ⑤

Affix one end of the Rear Support Strap ⑤ to the rear of the unit, and the other end to the Fire Wall of Car, or some other metallic area.

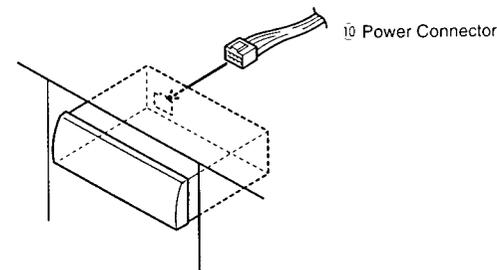


■ Using the Rubber Cushion (Optional)

(If there is an existing Rear Support Bracket on the Fire Wall of Car.)
Cover Mounting Bolt ⑧ on the rear of the unit with Rubber Cushion (Optional), and mount it into the existing Rear Support Bracket.



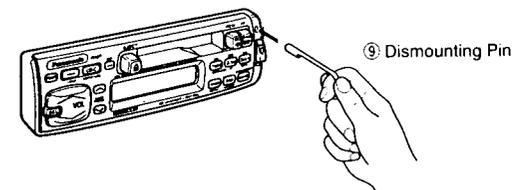
3. Plug the Power Connector ⑩.



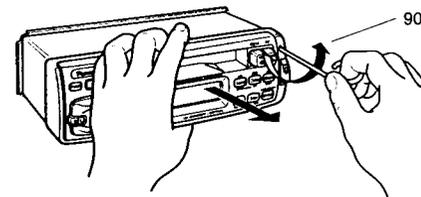
4. After installation reconnect the negative (-) battery terminal.

To Remove the Unit

a) Insert Dismounting Pin ⑨ into the right hole of the escutcheon. Push the Pin as far as possible.



b) Turn the Dismounting Pin ⑨ 90° outward.



c) Pull the Pin to remove the unit from the car's dashboard. Supporting the left end of the unit with your other hand, will facilitate its removal.

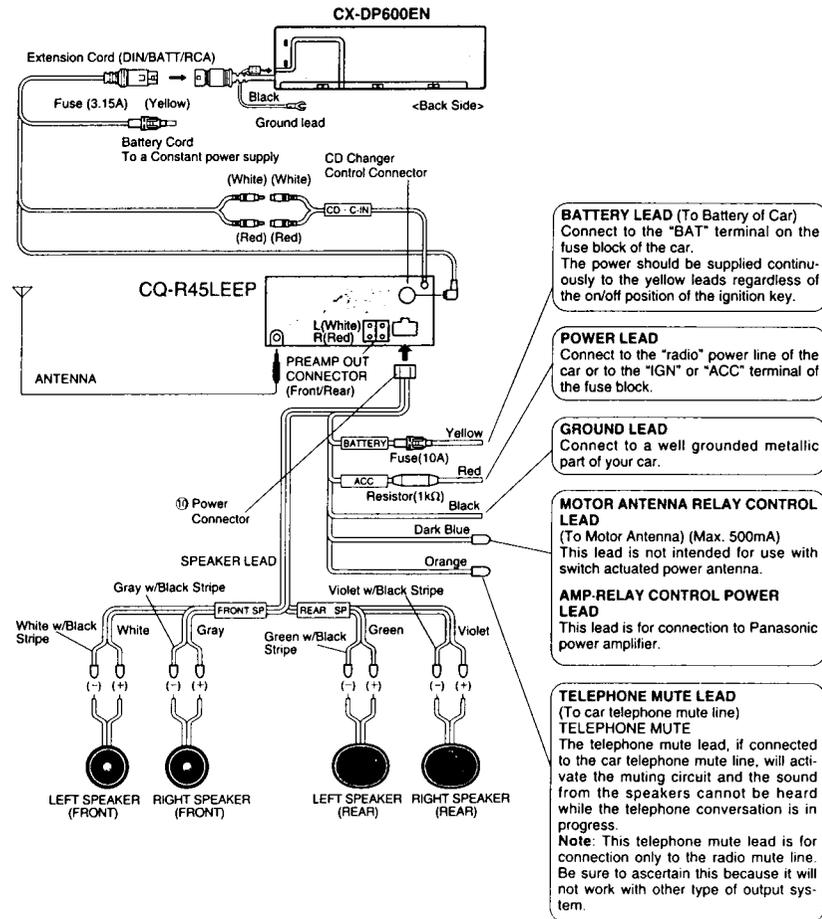
Note: Do not lose the Dismounting Pin. It will be needed to remove the unit from the car's dashboard.

Electrical Connection

- This unit can be connected to an optional CD Changer (CX-DP600EN). For details consult your nearest
- For connection to a CD changer, refer to the operating instructions of the CD Changer (CX-DP600EN).

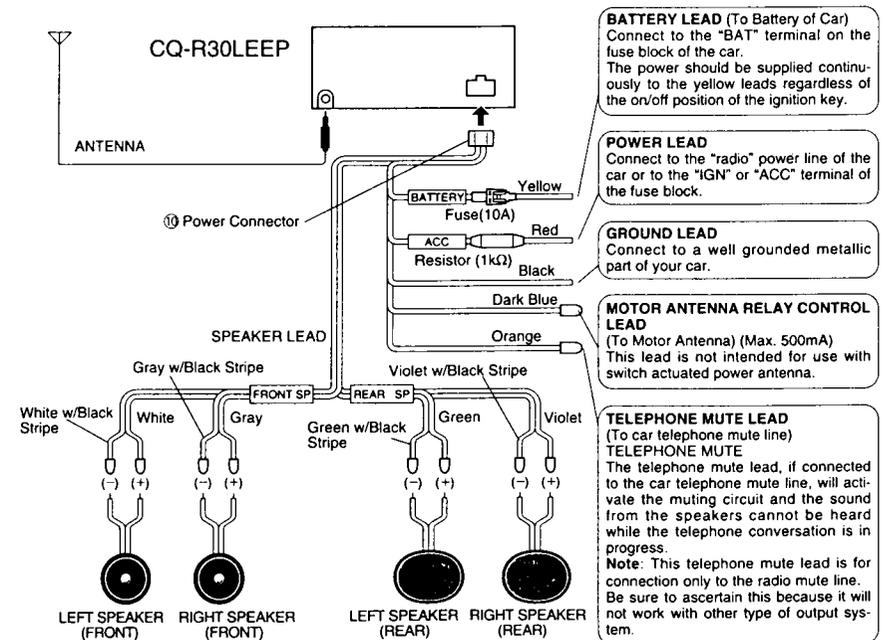
Caution:

- To prevent damage to the unit, be sure to follow the connection diagram below.
- Remove the covering of the leads about 5 mm long from their end before connecting.
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires from a possible short-circuit from the car chassis. Bundle all cables and keep cable terminals free from touching any metal parts.



Caution:

- To prevent damage to the unit, be sure to follow the connection diagram below.
- Remove the covering of the leads about 5 mm long from their end before connecting.
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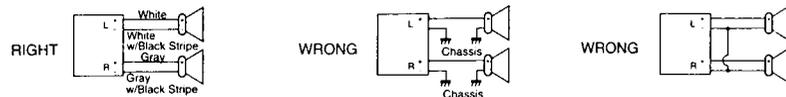


Speaker Connections

CAUTION:

1. Use ungrounded speakers only.
2. The speakers to be used with this unit should be able to handle more than 30W of audio power. If an optional amplifier is used, the speakers should be able to handle the maximum output power of the amplifier. Use of speakers with small input ratings can cause damage to the speakers.
3. The speaker impedance should be 4 - 8 ohms. If the impedance is too large or too small, it affects the output and may cause damage to the speakers or this unit.
4. Do not use 3-wire type speaker system having a common earth lead. Never connect the speaker cord to the body of the car. This unit uses the BTCL circuit, so each speaker should be connected separately using parallel vinyl insulated cords.
5. The speaker cords and the power amplifier unit should be kept away (about 30cm apart) from the antenna and antenna extension cord.
6. Follow the connection diagram below carefully. Failure to do so may cause damage to both unit and speakers.

- Unit will be damaged if speakers (Front, Rear) are not connected properly.



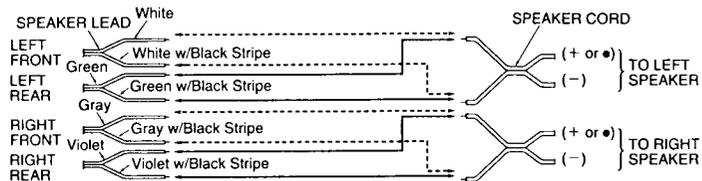
- Do not connect more than one speaker to one set of speaker leads.



2-SPEAKER SYSTEM

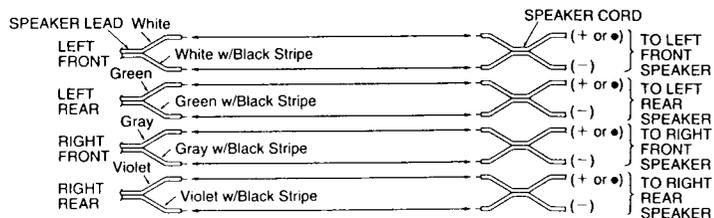
Use only front or rear speaker leads. Do not connect both (Front and Rear) together.

- When the front speakers are used, connect leads as illustrated in dotted lines (-----) below.
- When the rear speakers are used, connect leads as illustrated in actual lines (————) below.

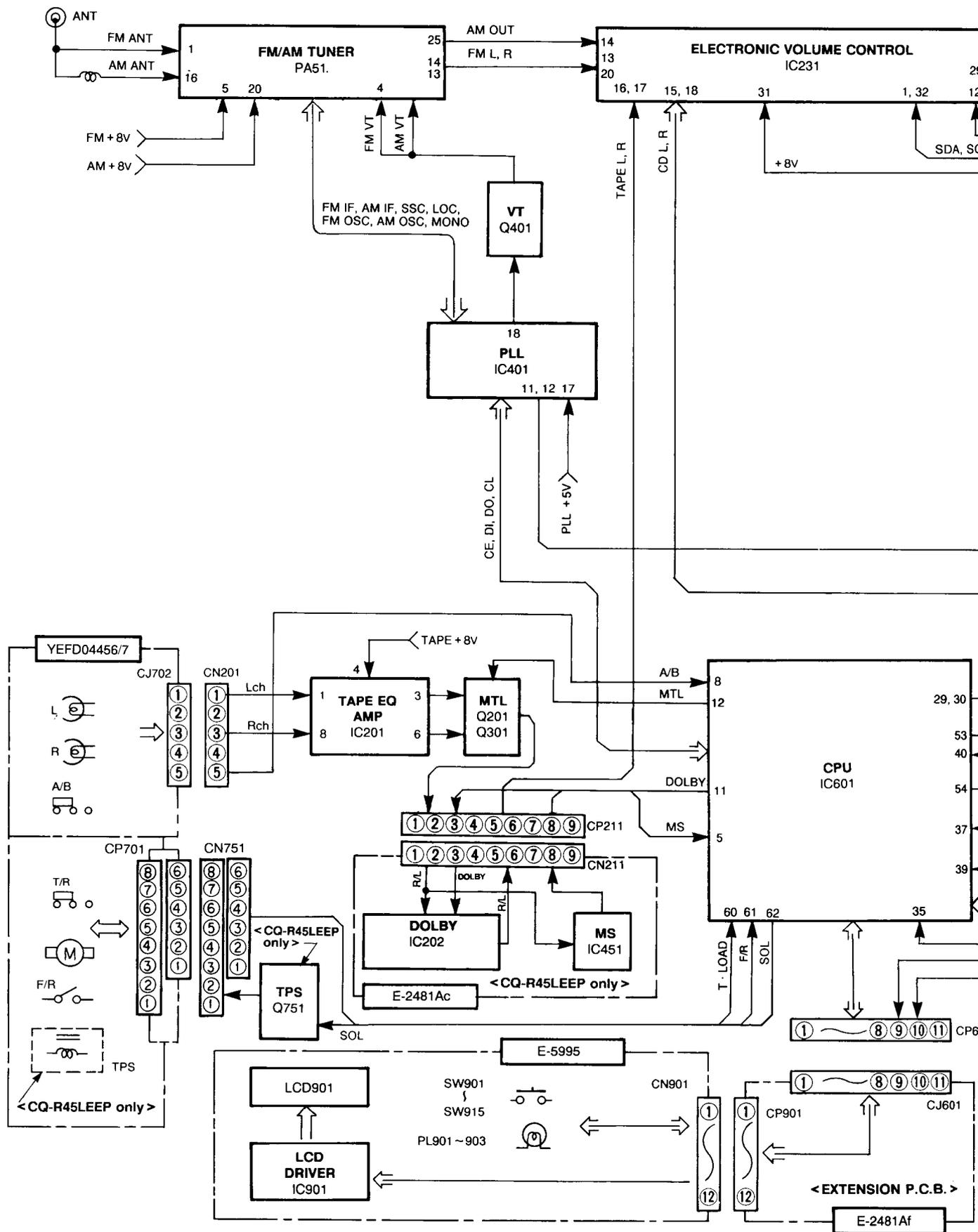


※ To prevent unused speaker leads from any short-circuiting, protect them with insulating caps.

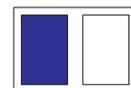
4-SPEAKER SYSTEM

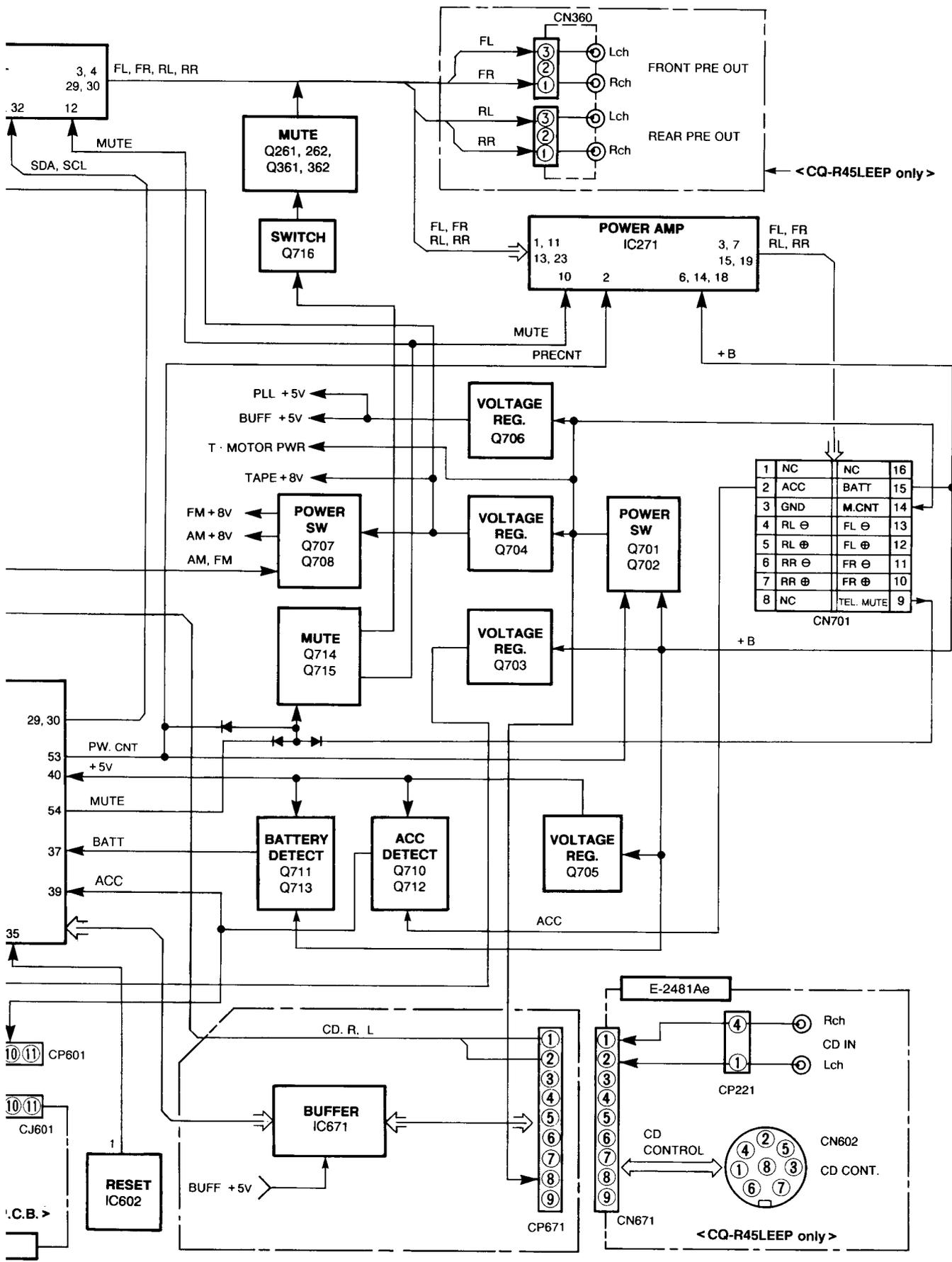


BLOCK DIAGRAM MODELS CQ-R45LEEP/CQ-R30LEEP

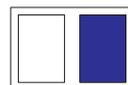


Rem

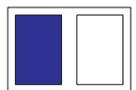
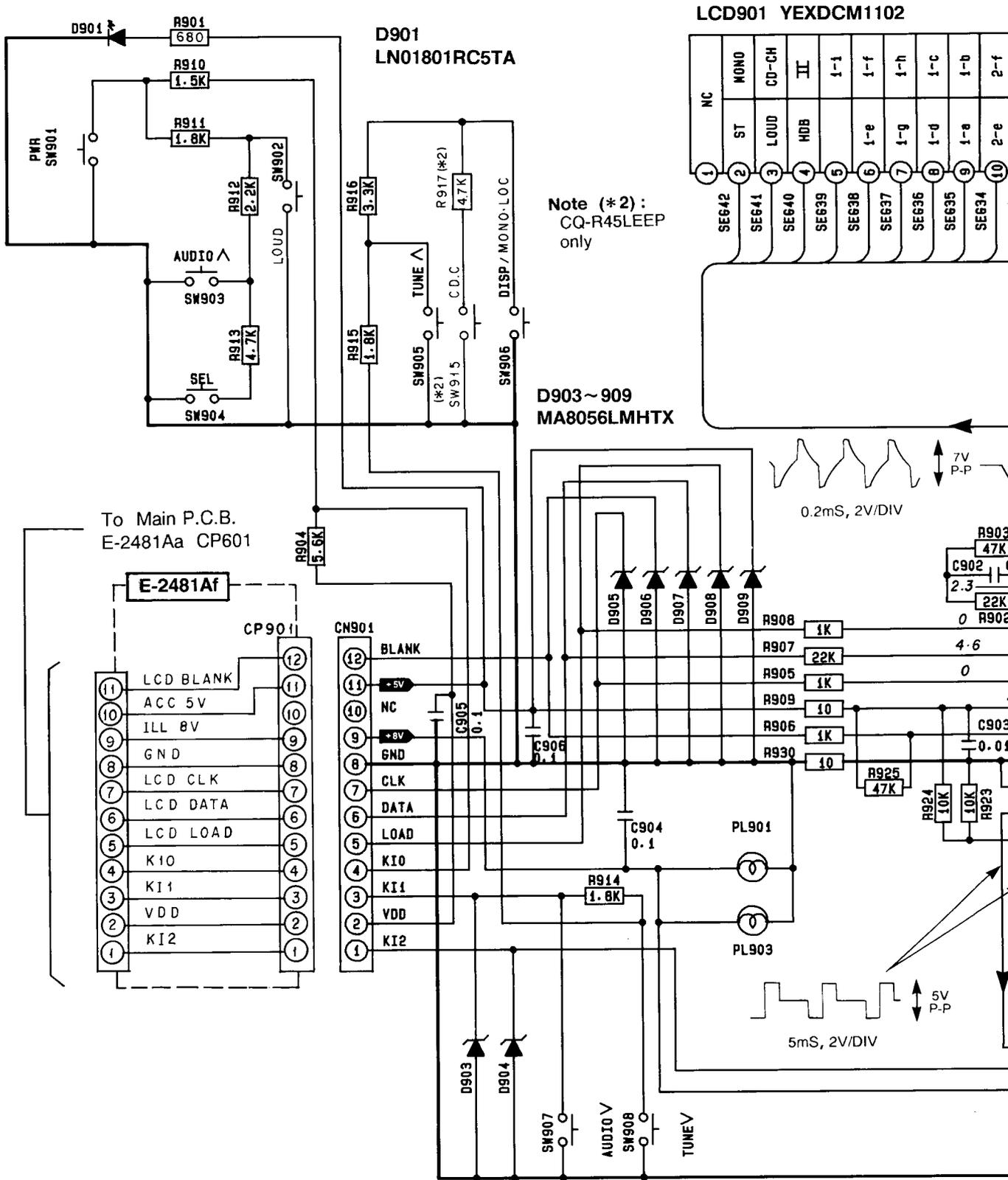




Removable Face High-Power Cassette / Receiver with CD Changer Control



SCHEMATIC DIAGRAM MODELS CQ-R45LEEP/CQ-R30LEEP (Display Block)



TERMINALS DESCRIPTION

■ IC601 YEAM78013719

| Pin No. | Port | Description | I/O | Vol. (V) |
|---------|----------|---------------------------------|-----|----------|
| 1 | PLL. CK | PLL clock | O | 0 |
| 2 | PLL. DI | PLL data input | I | 0 |
| 3 | PLL. DO | PLL data output | O | 0 |
| 4 | ST | FM stereo | I | 4.0 |
| 5 | MS | TPS no sound detection (Note 2) | I | 4.7 |
| 6 | PLL CE | PLL chip enable | O | 0 |
| 7 | BEEP | Not used | — | — |
| 8 | A/B | Tape side input | I | 4.0 |
| 9 | GND | Ground | — | 0 |
| 10 | HDB | Not used | — | — |
| 11 | DOLBY | Dolby NR | O | 0 |
| 12 | MTL | Metal tape | O | 0 |
| 13~17 | NC | No connection | — | — |
| 18 | INIT C | (Connecting to ground) | I | (*1) |
| 19 | INIT D | Initial setting | I | 0 |
| 20 | INIT E | (Connecting to ground) | I | 0 |
| 21~23 | — | (Connecting to ground) | — | 0 |
| 24 | GND | Ground | — | 0 |
| 25 | — | (Connecting to ground) | — | 0 |
| 26 | LED | Security LED | O | 0 |
| 27 | NC | No connection | — | — |
| 28 | LCD BLNK | LCD blank | O | 0 |
| 29 | VOL CLK | Electronic volume clock | O | 4.8 |
| 30 | VOL DATA | Electronic volume data | O | 4.8 |

| Pin No. | Port | Description | I/O | Vol. (V) |
|---------|-------------------|----------------------------------|-----|----------|
| 31 | LCD CLK | LCD clock | O | 0 |
| 32 | LCD DATA | LCD data | O | 4.5 |
| 33 | LCD LOAD | LCD data load | O | 0 |
| 34 | REMO | CD changer control data (Note 2) | O | 0 |
| 35 | RESET | Reset | I | 4.7 |
| 36 | — | (Connecting to ground) | — | 0 |
| 37 | BATT | Battery detection | I | 4.9 |
| 38 | CHGR STB | CD changer strobe (Note 2) | I | 0 |
| 39 | ACC | ACC detection | I | 4.9 |
| 40 | V _{DP} | +5V power supply | — | 4.7 |
| 41 | X2 | Crystal oscillator | — | 2.3 |
| 42 | X1 | Crystal oscillator | — | 0.5 |
| 43 | — | (Connecting to ground) | — | 0 |
| 44 | NC | No connection | — | — |
| 45 | — | (Connecting to ground) | — | 0 |
| 46 | AV GND | Ground | — | 0 |
| 47 | KEY0 | Key data input | I | 4.2 |
| 48 | KEY1 | Key data input | I | 4.4 |
| 49 | KEY2 | Key data input | I | 4.4 |
| 50 | INIT A | Initial setting | I | 1.5 |
| 51 | INIT B | Initial setting (Note 3) | I | (*1) |
| 52 | SD | B/S detection | I | 0.4 |
| 53 | PW CNT | Power supply control | O | 4.6 |
| 54 | MUTE | Mute control | O | 4.7 |
| 55 | AV _{DD} | +5V power supply | — | 4.7 |
| 56 | AV _{REF} | +5V power supply | — | 4.7 |

| Pin No. | Port | Description | I/O | Vol. (V) |
|---------|----------|--------------------------------|-----|----------|
| 57 | CHGR DAT | CD changer data (Note 2) | I | 0 |
| 58 | NC | No connection | — | — |
| 59 | CHGR CLK | CD changer clock (Note 2) | I | 0 |
| 60 | T. LOAD | Tape loading | I | 4.7 |
| 61 | F/R | Tape FF/REW | I | 0 |
| 62 | SOL | Tape solenoid control (Note 2) | O | 0 |
| 63 | PRECNT | Not used | — | — |
| 64 | — | Ground | — | 0 |

Note 1 :

Voltage measurements are with respect to ground, with a voltmeter (Internal resistance : 10M ohms.)

Note 2 :

CQ-R45LEEP only.

Note 3 : (*1)

Voltage of initial setting port (INITB, C) shows as follows.

| Pin No. | Port | Voltage (V) | |
|---------|--------|-------------|------------|
| | | CQ-R45LEEP | CQ-R30LEEP |
| 18 | INIT C | 4.7 | 0 |
| 51 | INIT B | 4.7 | 2.4 |

■ IC901 YEAMSM6544GS

| Pin No. | Port | Description | I/O | Vol. (V) |
|---------|----------|------------------|-----|----------|
| 1~14 | SEG29~42 | LCD segment | O | 2.3 |
| 15 | OSC IN | CR oscillator | — | 2.2 |
| 16 | OSC-C | CR oscillator | — | 2.3 |
| 17 | OSC -R | CR oscillator | — | 2.3 |
| 18 | LOAD | LCD data loading | I | 0 |
| 19 | DATA | LCD data | I | 4.6 |
| 20 | CLOCK | LCD clock | I | 0 |
| 21 | VDD1 | +5V power supply | — | 4.7 |
| 22 | BLANK | LCD blank | I | 0 |
| 23 | GND | Ground | — | 0 |
| 24 | VLCL | LCD drive level | — | 0 |
| 25 | COM A | LCD common | O | 2.3 |
| 26 | VLCM | LCD drive level | — | 2.2 |
| 27 | COM B | LCD common | O | 2.3 |
| 28~56 | SEG1~28 | LCD segment | O | 2.3 |

ALIGNMENT INSTRUCTIONS

- Power Supply Voltage : DC 14.4V
- Output Impedance : 4Ω
- Output Power : 0.5W
- Balance, Fader Control : Center
- Tone Control (Bass/Tre) : Center

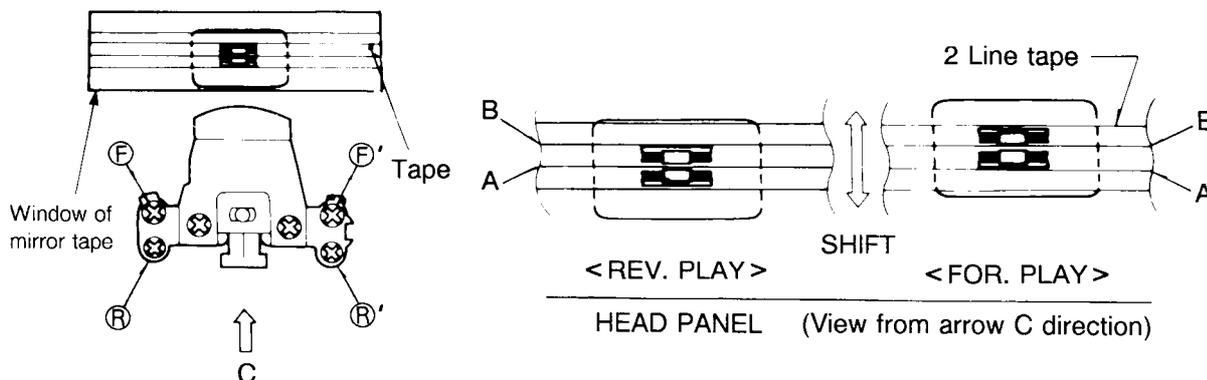
NOTE : Do not align the AM and FM package blocks. When the package block is necessary, it will be supplied already aligned at the factory.

1. DOLBY NR ALIGNMENT <CQ-R45LEEP only>

| Step | Alignment Item | Test Tape | VM Connection | Adjust | Remarks |
|------|----------------|-----------|---------------|--------|----------------------------|
| ① | DOLBY NR | RFKZ0038 | TP201-Ground | VR201 | ● Adjust for 245mV ± 14mV. |
| ② | | RFKZ0038 | TP301-Ground | VR301 | ● Adjust for 245mV ± 14mV. |

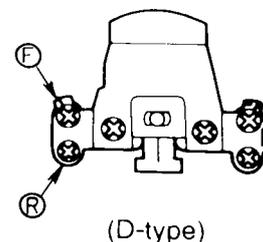
2. HEAD HEIGHT ALIGNMENT

- 2-Line Tape (Mirror tape) → A-BEX SCC-1659
- At forward play mode, adjust ⑤ and ⑤' screws so that A-line on the mirror tape runs on the center of head shield plate.
- At reverse play mode, adjust ⑥ and ⑥' screws so that B-line runs on the center of head shield plate.
- Then, again at forward play mode, check if or not A-line runs on the center. If not, re-adjust ⑤ and ⑤' screws under the same way as the above.



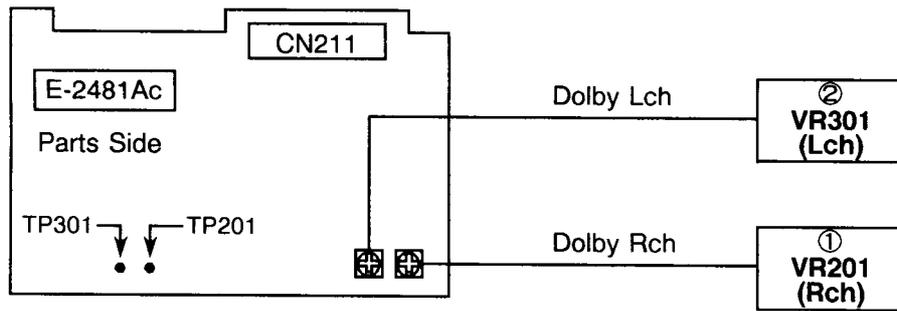
3. HEAD AZIMUTH ALIGNMENT

- Test tape is TCC-153.
- At forward play mode, adjust ⑤ screw only so that speaker terminal level shows max value.
- At reverse play mode, adjust ⑥ screw only so that speaker terminal level shows max value.
- Then, again at forward play mode, check if or not speaker terminal level still shows max value.
- If you do not have a test tape, use a tape whose recording level is than 6 kHz for head adjustment. After the above adjustment apply bonding agent to the adjustment screw.



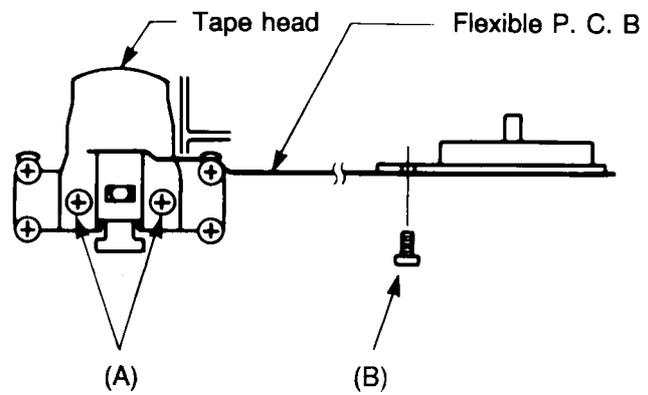
ALIGNMENT POINTS

< CQ-R45LEEP only >

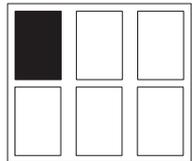
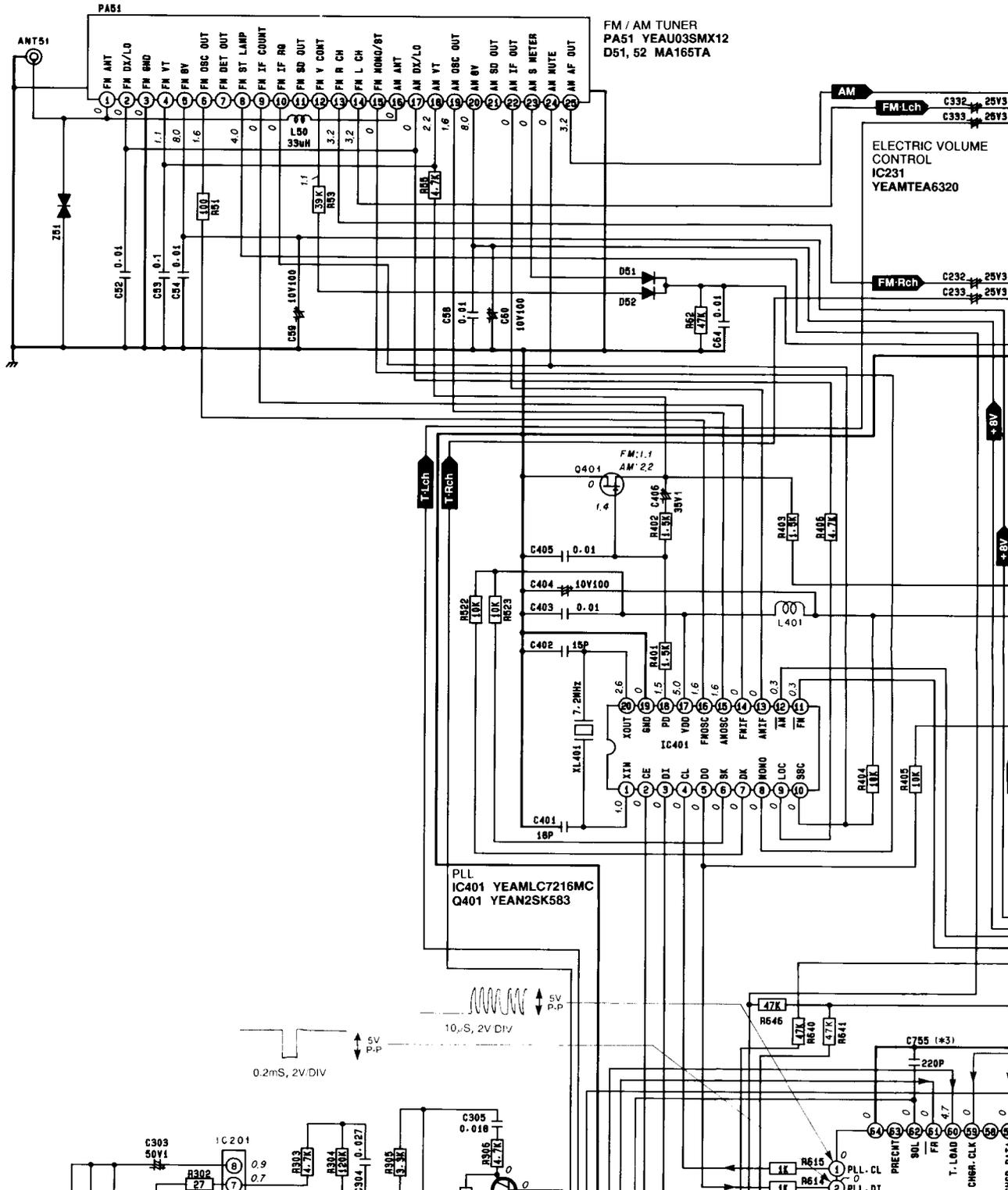


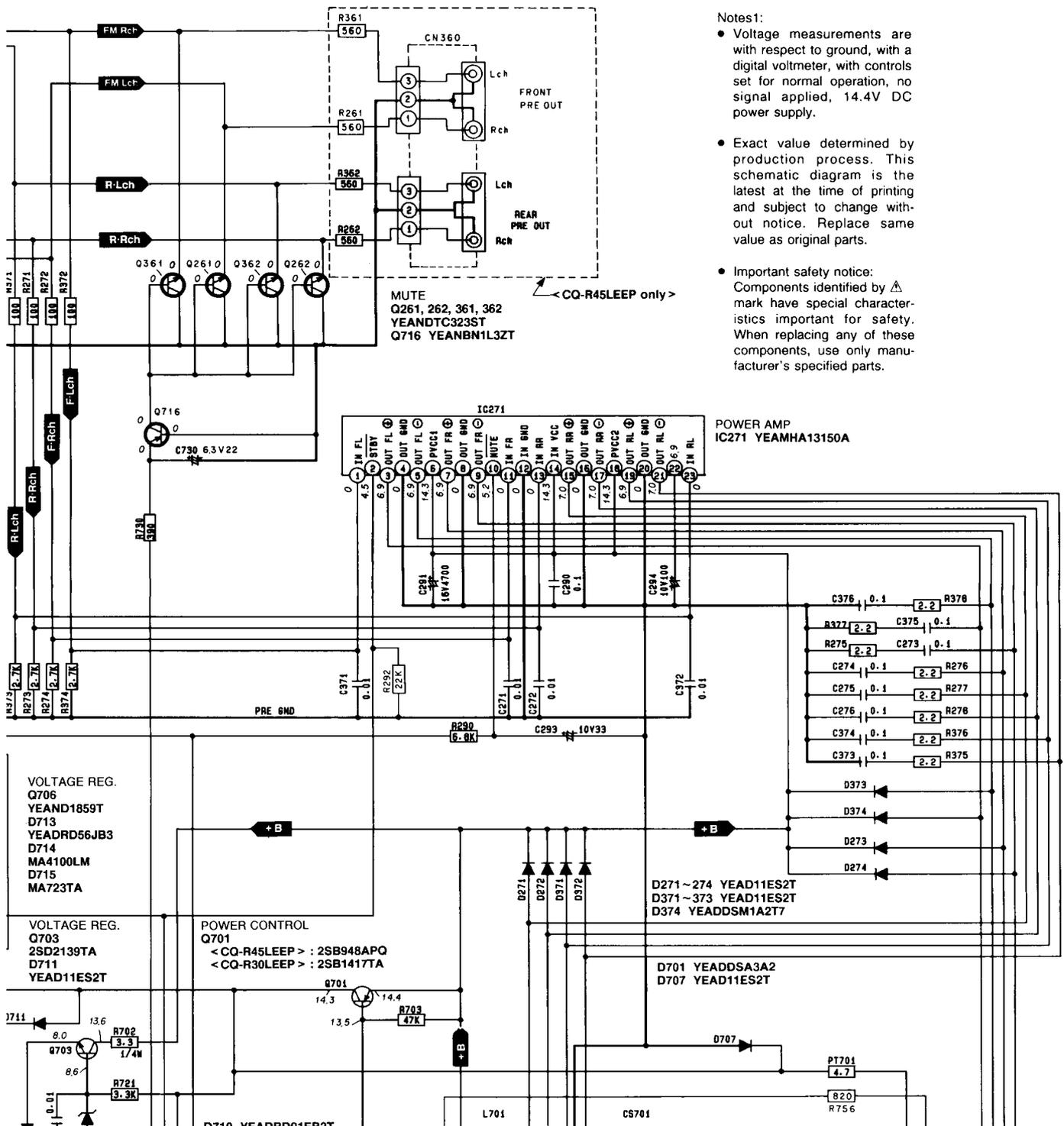
HEAD REPLACEMENT

- Remove the two screws (A) and one screw (B).
- Remove the tape head.



SCHEMATIC DIAGRAM MODELS CQ-R45LEEP/CQ-R30LEEP (Main Block)





Notes1:

- Voltage measurements are with respect to ground, with a digital voltmeter, with controls set for normal operation, no signal applied, 14.4V DC power supply.
- Exact value determined by production process. This schematic diagram is the latest at the time of printing and subject to change without notice. Replace same value as original parts.
- Important safety notice: Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

MUTE
Q261, 262, 361, 362
YEANDTC323ST
Q716 YEANBN13ZT
◀ CQ-R45LEEP only ▶

POWER AMP
IC271 YEAAMHA13150A

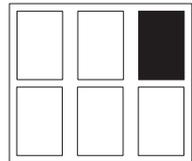
VOLTAGE REG.
Q706
YEAND1859T
D713
YEADDR56JB3
D714
MA4100LM
D715
MA723TA

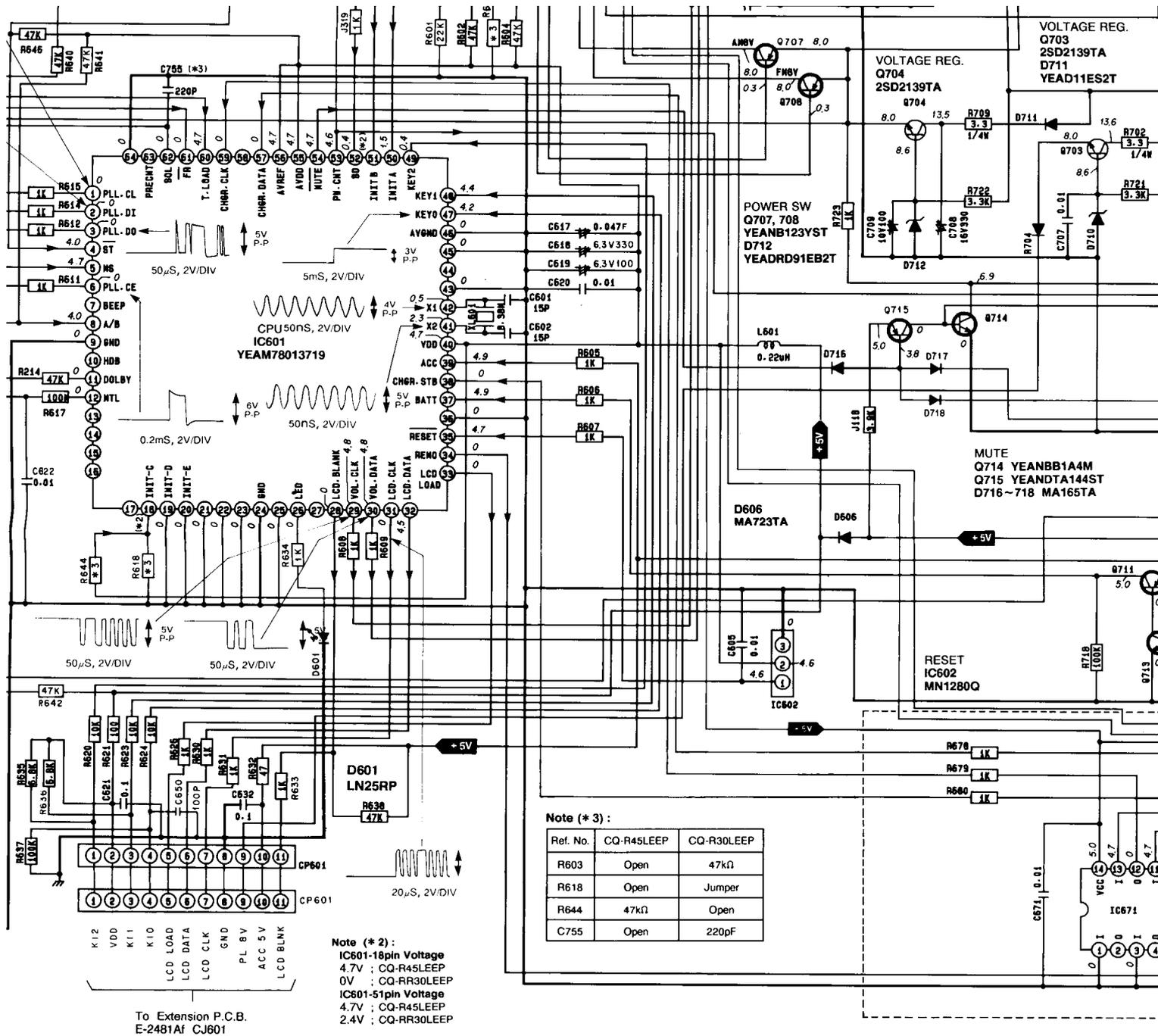
VOLTAGE REG.
Q703
2SD2139TA
D711
YEAD11ES2T

POWER CONTROL
Q701
< CQ-R45LEEP > : 2SB948APO
< CQ-R30LEEP > : 2SB1417TA

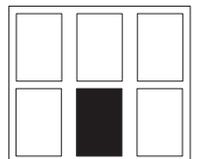
D271 ~ 274 YEAD11ES2T
D371 ~ 373 YEAD11ES2T
D374 YEADDSM1A2T7

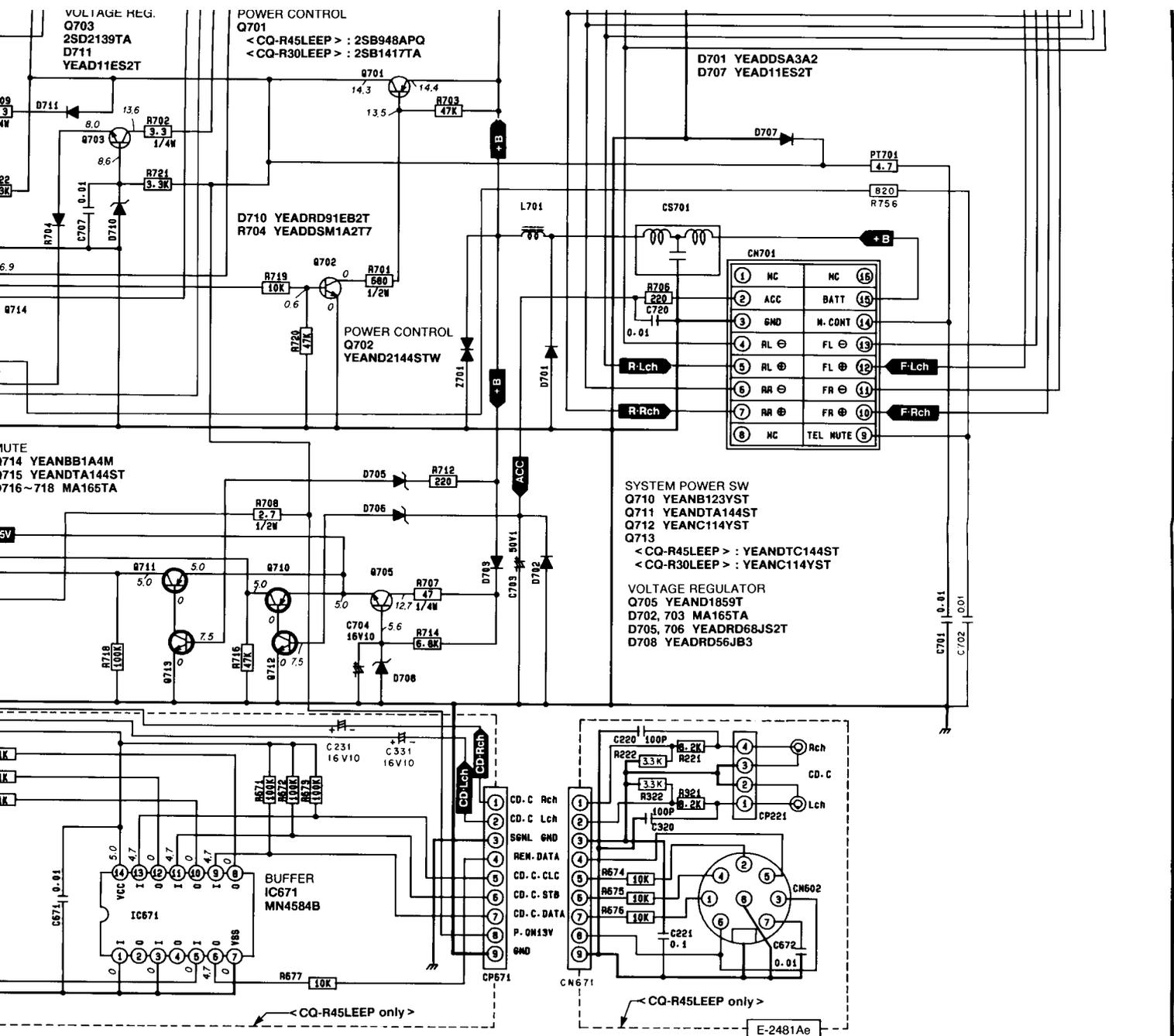
D701 YEADDSA3A2
D707 YEAD11ES2T



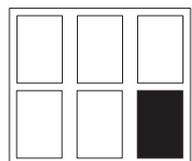


Removable





Removable Face High-Power Cassette / Receiver with CD Changer Control



— WIRING DIAGRAM MODELS CQ-R45LEEP/CQ-R30LEEP (Main Block) —

| | | | | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Q201 | Q261 | Q262 | Q301 | Q361 | Q362 | Q701 | Q702 | Q703 | Q704 |
| B 0V | B 13.5V | B 0.6V | B 8.6V | B 8.6V |
| C 0V | C 14.3V | C 0V | C 13.6V | C 13.5V |
| E 0V | E 14.4V | E 0V | E 8.0V | E 8.0V |
| Q707 | Q708 | Q710 | Q711 | Q712 | Q713 | Q714 | Q715 | Q716 | Q401 |
| B 0.3V | B 0.3V | B 0V | B 0V | B 7.5V | B 7.5V | B 0V | B 3.8V | B 0V | G 1.4V |
| C 8.0V | C 8.0V | C 5.0V | C 5.0V | C 0V | C 0V | C 6.9V | C 0V | C 0V | D 1.1V |
| E 8.0V | E 8.0V | E 5.0V | E 5.0V | E 0V | E 0V | E 0V | E 5.0V | E 0V | E 2.2V |
| | | | | | | | | | S 0V |

| IC201 | | | |
|-------|-------|---|-------|
| 1 | 0.9 V | 5 | 0 V |
| 2 | 0.7 V | 6 | 3.1 V |
| 3 | 3.2 V | 7 | 0.8 V |
| 4 | 8.0 V | 8 | 0.9 V |

| IC202 | | | |
|-------|-------|----|-------|
| 1 | — | 9 | — |
| 2 | 8.0 V | 10 | 0.3 V |
| 3 | 3.3 V | 11 | 3.9 V |
| 4 | 3.8 V | 12 | 7.9 V |
| 5 | 4.4 V | 13 | 1.1 V |
| 6 | 3.9 V | 14 | 3.3 V |
| 7 | 0.3 V | 15 | 0 V |
| 8 | — | 16 | — |

| IC401 | | | |
|-------|-------|----|-------|
| 1 | 1.0 V | 11 | 0.3 V |
| 2 | 0 V | 12 | 0.3 V |
| 3 | 0 V | 13 | 0 V |
| 4 | 0 V | 14 | 0 V |
| 5 | 0 V | 15 | 1.6 V |
| 6 | 0 V | 16 | 1.6 V |
| 7 | 0 V | 17 | 5.0 V |
| 8 | 0 V | 18 | 1.5 V |
| 9 | 0 V | 19 | 0 V |
| 10 | 0 V | 20 | 2.6 V |

| IC231 | | | |
|-------|-------|----|-------|
| 1 | 4.7 V | 17 | 3.6 V |
| 2 | 0 V | 18 | — V |
| 3 | 4.0 V | 19 | 8.0 V |
| 4 | 4.0 V | 20 | 3.6 V |
| 5 | 3.8 V | 21 | 4.0 V |
| 6 | 4.0 V | 22 | — |
| 7 | 3.9 V | 23 | 4.0 V |
| 8 | 2.7 V | 24 | — |
| 9 | — | 25 | 2.8 V |
| 10 | 4.0 V | 26 | 3.9 V |
| 11 | — | 27 | 4.0 V |
| 12 | 6.8 V | 28 | 3.9 V |
| 13 | 3.6 V | 29 | 4.0 V |
| 14 | 3.6 V | 30 | 4.0 V |
| 15 | — V | 31 | 8.0 V |
| 16 | 3.6 V | 32 | 4.0 V |

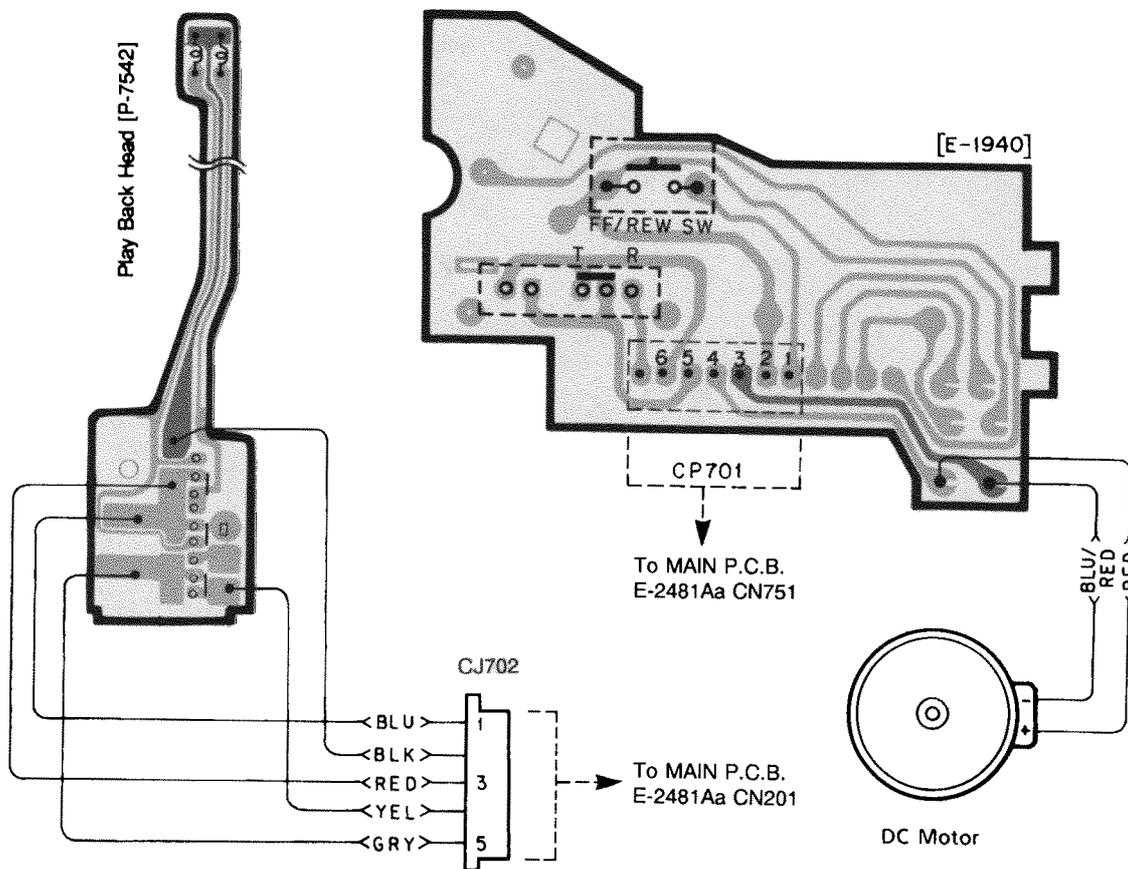
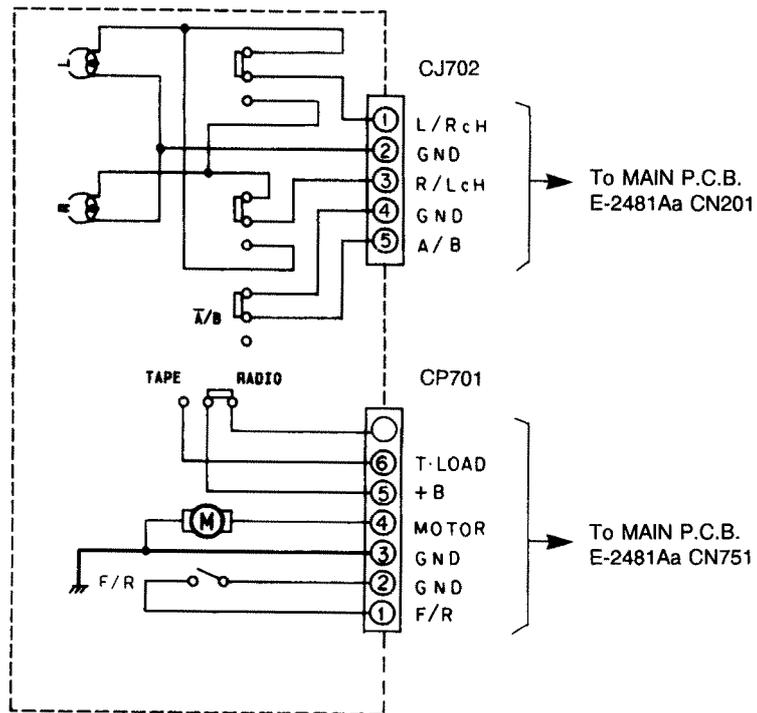
| IC271 | | | |
|-------|--------|----|--------|
| 1 | 0 V | 13 | 0 V |
| 2 | 4.5 V | 14 | 14.2 V |
| 3 | 6.9 V | 15 | 7.0 V |
| 4 | 0 V | 16 | 0 V |
| 5 | 6.9 V | 17 | 7.0 V |
| 6 | 14.3 V | 18 | 14.3 V |
| 7 | 6.9 V | 19 | 6.9 V |
| 8 | 0 V | 20 | 0 V |
| 9 | 6.9 V | 21 | 7.0 V |
| 10 | 5.2 V | 22 | 6.9 V |
| 11 | 0 V | 23 | 0 V |
| 12 | 0 V | | |

| IC602 | |
|-------|-------|
| 1 | 4.6 V |
| 2 | 4.6 V |
| 3 | 0 V |

| IC451 | | | |
|-------|-------|---|-------|
| 1 | 1.2 V | 6 | 4.5 V |
| 2 | 2.6 V | 7 | — |
| 3 | 3.8 V | 8 | — |
| 4 | — | 9 | 6.2 V |
| 5 | 0 V | | |

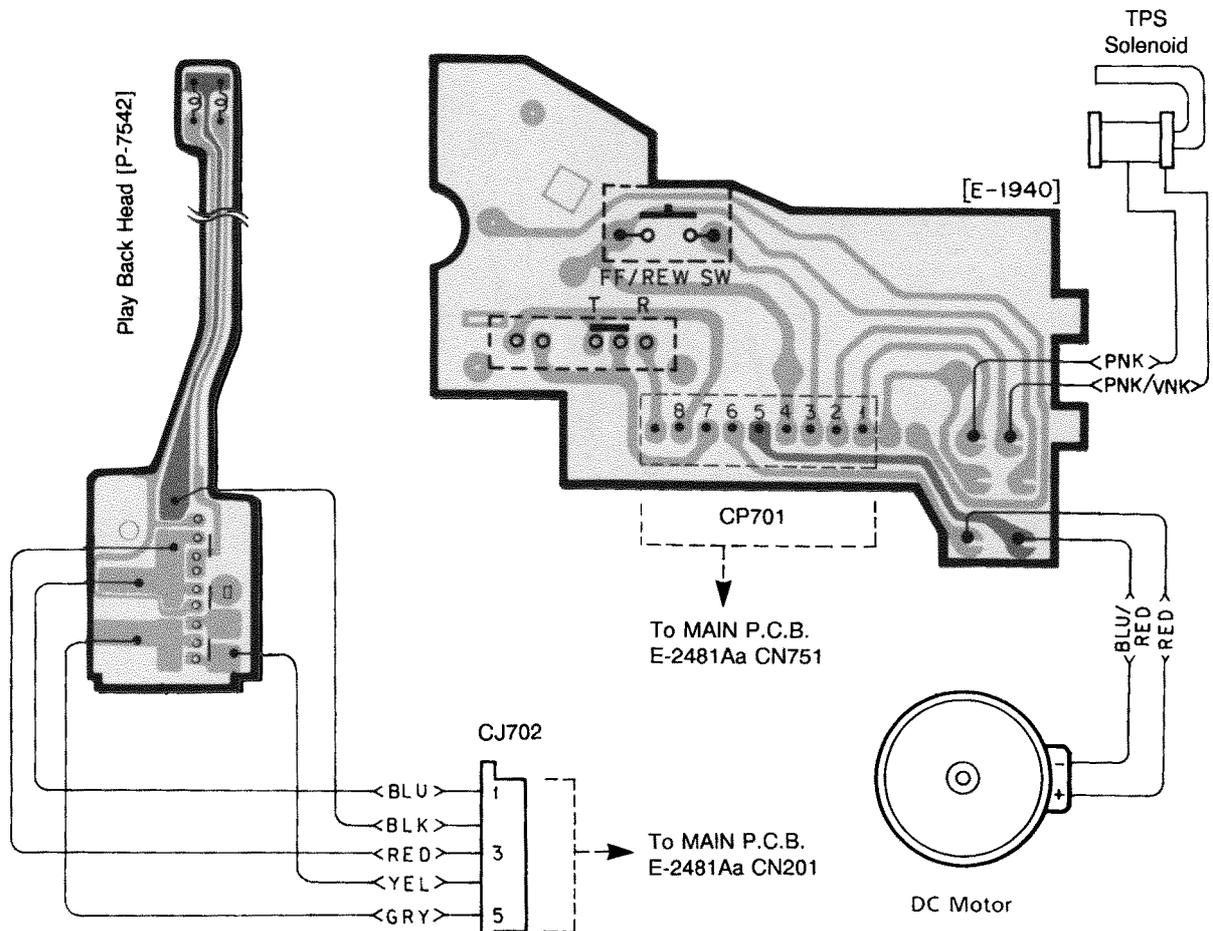
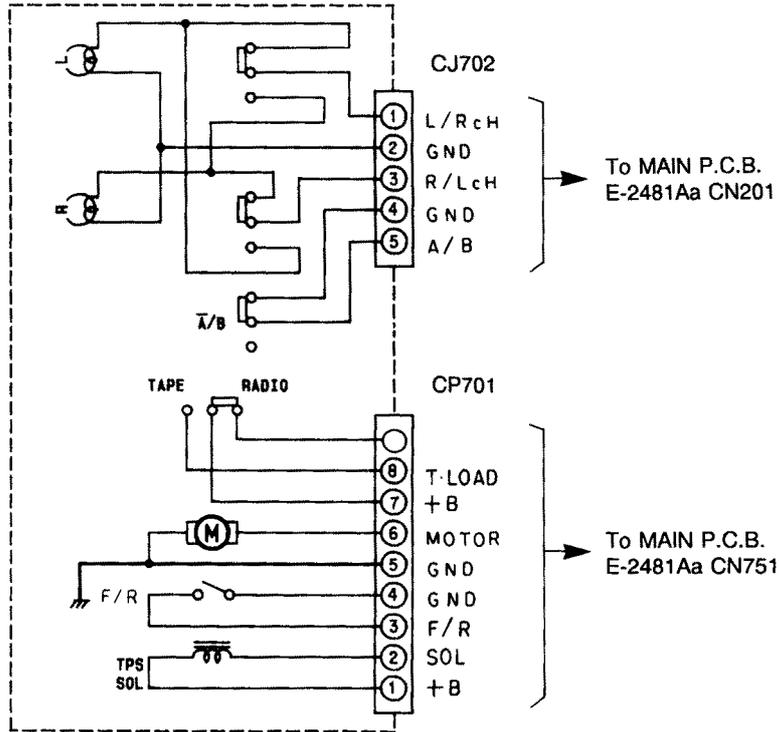
| PA51 | | | |
|------|-------|----|-------|
| 1 | 0 V | 14 | 3.2 V |
| 2 | 0 V | 15 | 0 V |
| 3 | 0 V | 16 | 0 V |
| 4 | 1.1 V | 17 | 0 V |
| 5 | 8.0 V | 18 | 2.2 V |
| 6 | 1.6 V | 19 | 1.6 V |
| 7 | — | 20 | 8.0 V |
| 8 | 4.0 V | 21 | — |
| 9 | 0 V | 22 | 0 V |
| 10 | 0 V | 23 | 0 V |
| 11 | — | 24 | 0 V |
| 12 | 1.1 V | 25 | 3.2 V |
| 13 | 3.2 V | | |

SCHEMATIC / WIRING DIAGRAM (Tape Block)
MODEL CQ-R30LEEP



**Removable Face High-Power Cassette /
 Receiver with CD Changer Control**

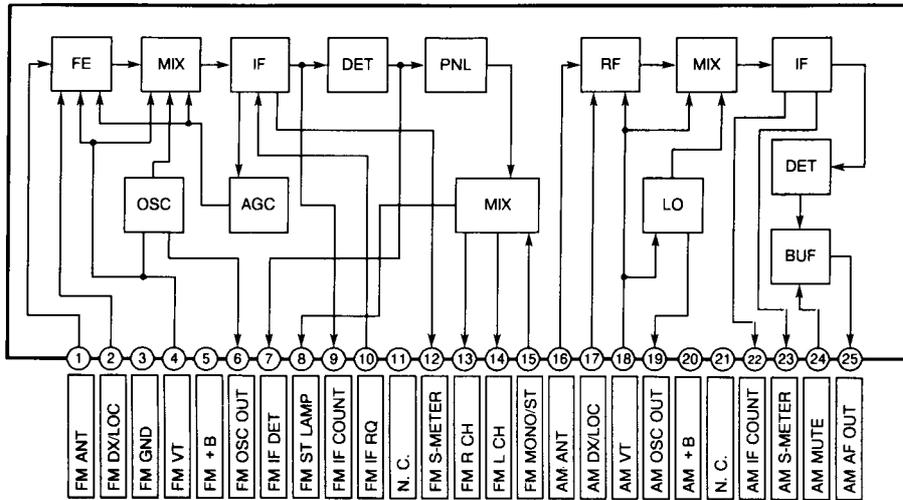
SCHEMATIC / WIRING DIAGRAM (Tape Block)
MODEL CQ-R45LEEP



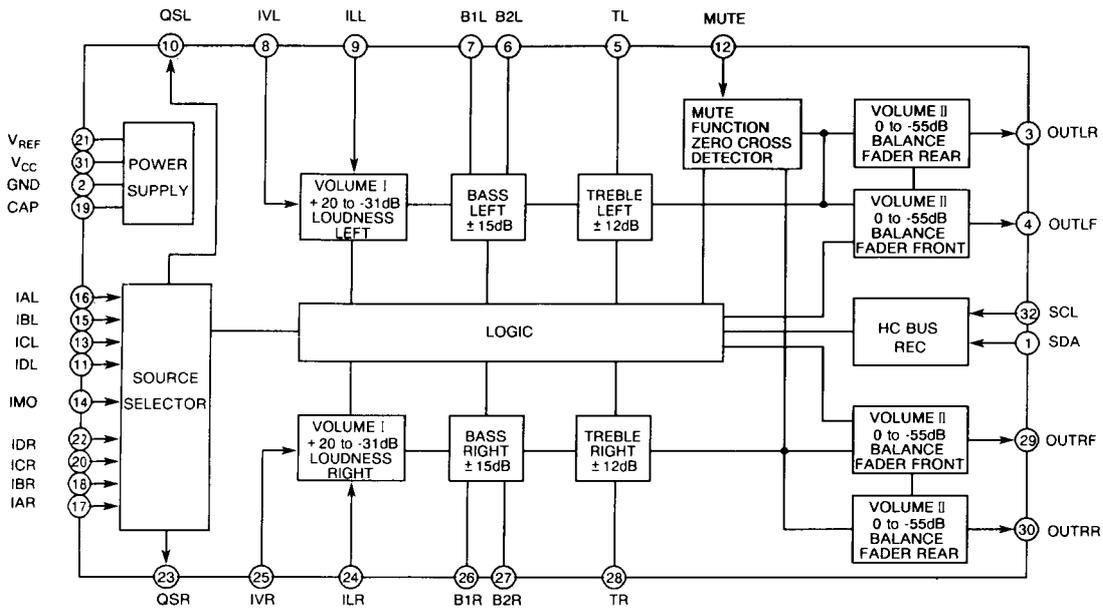
**Removable Face High-Power Cassette /
Receiver with CD Changer Control**

PACKAGE AND IC BLOCK DIAGRAM

● PA51 YEAU03SMX12

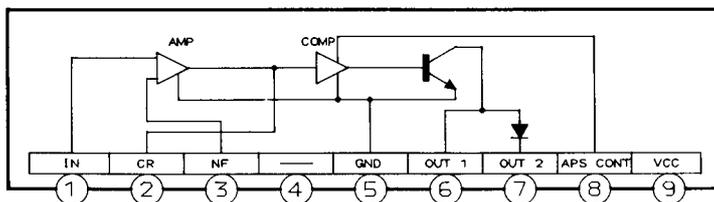


● IC231 YEAMTEA6320

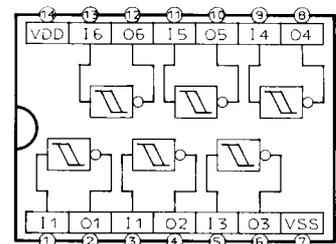


< CQ-R45LEEP only >

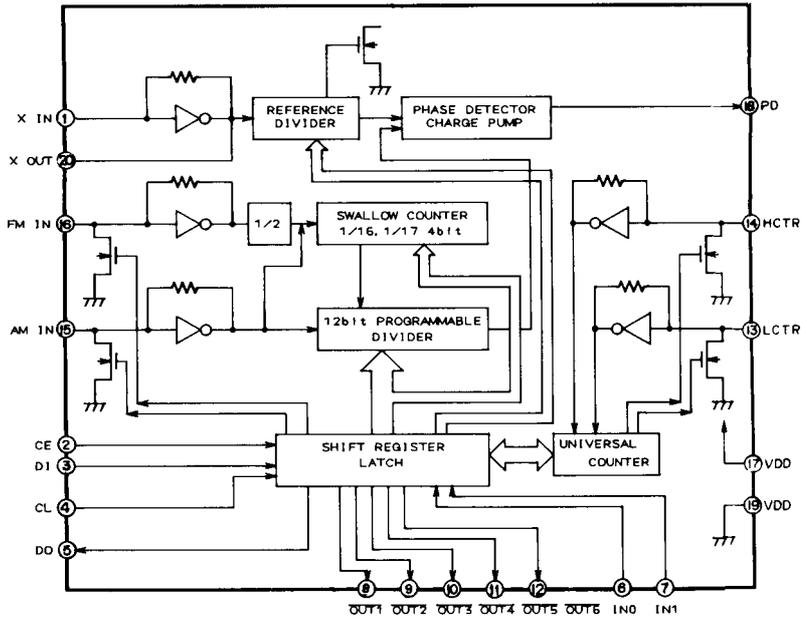
● IC451 YEAMLA2000S



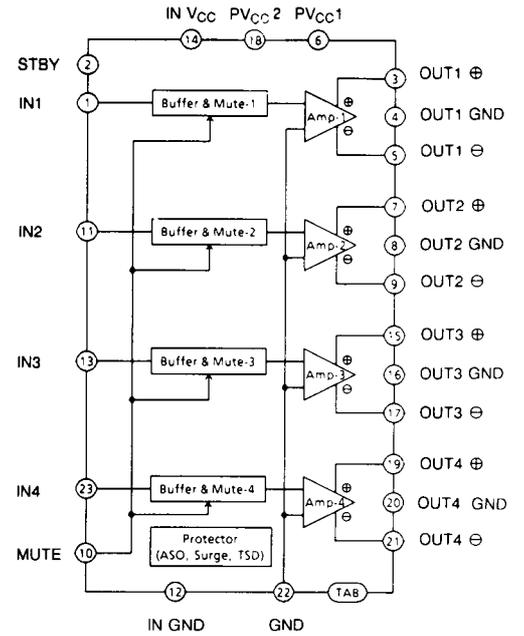
● IC671 MN4584B



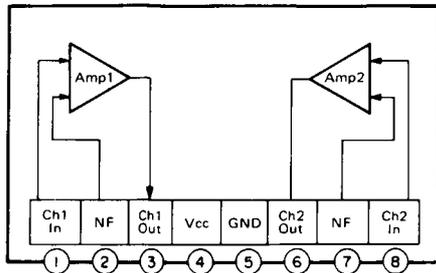
● IC401 YEAMLC7216MC



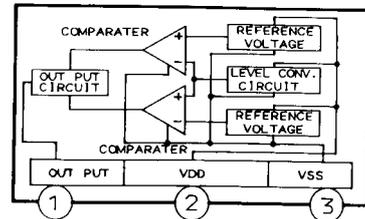
● IC271 YEAMHA13150A



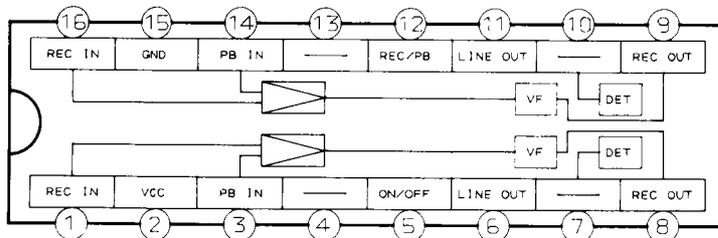
● IC201 YEAMLA3161



● IC602 MN1280Q



● IC202 YEAMCXA1102P



Replacement Parts List
Models NO. CQ-R45LEEP/CQ-R30LEEP

NOTES :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice : Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Next to the Ref. No. in the parts list is a location key, to show the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|------------------------------|--------------|-----------|-------------------------|---------|------------|
| ICs & TRANSISTORS | | | | | |
| MAIN BLOCK | | | | | |
| [E2481A] | | | | | |
| IC201 | YEAMLA3161 | | IC | 1 | |
| IC202 | YEAMCX1102P | | IC | 1 | |
| IC231 | YEAMTEA6320 | | IC | 1 | |
| IC271 | YEAMHA13150A | | IC | 1 | |
| IC401 | YEAMLC7216MC | | IC | 1 | |
| IC451 | YEAMLA2000S | | IC | 1 | CQ-R45LEEP |
| IC601 | YEAM78013719 | | IC | 1 | |
| IC602 | MN1280Q | | IC | 1 | |
| IC671 | MN4584B | | IC | 1 | CQ-R45LEEP |
| PA51 | YEAU03SMX12 | | Electronic Tuner | 1 | |
| Q201 | YEANDTC144ST | | Transistor | 1 | |
| Q261, 262 | YEANDTC323ST | | Transistor | 2 | |
| Q301 | YEANDTC144ST | | Transistor | 1 | |
| Q361, 362 | YEANDTC323ST | | Transistor | 2 | |
| Q401 | YEAN2SK583 | | Transistor | 1 | |
| Q701 | 2SB948APQ | | Transistor | 1 | CQ-R45LEEP |
| | 2SB1417TA | | | 1 | CQ-R30LEEP |
| Q702 | YEAND2144STW | | Transistor | 1 | |
| Q703, 704 | 2SD2139TA | | Transistor | 2 | |
| Q705, 706 | YEAND1859T | | Transistor | 2 | |
| Q707, 708 | YEANB123YST | | Transistor | 2 | |

| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|----------------------|--------------|-----------|-------------------------|---------|------------|
| Q710 | YEANB123YST | | Transistor | 1 | |
| Q711 | YEANDTA144ST | | Transistor | 1 | |
| Q712 | YEANC114YST | | Transistor | 1 | |
| Q713 | YEANDTC144ST | | Transistor | 1 | CQ-R45LEEP |
| | YEANC114YST | | | 1 | CQ-R30LEEP |
| Q714 | YEANBB1A4M | | Transistor | 1 | |
| Q715 | YEANDTA144ST | | Transistor | 1 | |
| Q716 | YEANBN1L3ZT | | Transistor | 1 | |
| Q751 | YEAN2SD1111 | | Transistor | 1 | CQ-R45LEEP |
| | | | | | |
| | | | | | |
| DISPLAY BLOCK | | | | | |
| [E5995] | | | | | |
| IC901 | YEAMSM6544GS | | IC | 1 | |
| | | | | | |
| | | | | | |
| DIODES | | | | | |
| MAIN BLOCK | | | | | |
| [E2481A] | | | | | |
| D51, 52 | MA165TA | | Diodes | 2 | |
| D271 to 274 | YEAD11ES2T | | Diodes | 4 | |
| D371 to 373 | YEAD11ES2T | | Diodes | 3 | |
| D374 | YEADDSM1D2T7 | | Diode | 1 | |
| D601 | LN25RP | | LED | 1 | |
| D606 | MA723TA | | Diode | 1 | |
| D701 | YEADSA3A2 | | Diode | 1 | |
| D702, 703 | MA165TA | | Diode | 2 | |
| D705, 706 | YEADRD68JS2T | | Diode | 2 | |
| D707 | YEAD11ES2T | | Diode | 1 | |
| D708 | YEADRD56JB3 | | Diode | 1 | |
| D710 | YEADRD91EB2T | | Diode | 1 | |
| D711 | YEAD11ES2T | | Diode | 1 | |
| D712 | YEADRD91EB2T | | Diode | 1 | |

| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|----------------------|--------------|-----------|-----------------------------|---------|------------|
| D713 | YEADRD56JB3 | | Diode | 1 | |
| D714 | MA4100LM | | Diode | 1 | |
| D715 | MA723TA | | Diode | 1 | |
| D716 to 718 | MA165TA | | Diode | 3 | |
| D751 | YEAD11ES2T | | Diode | 1 | CQ-R45LEEP |
| D752 | MA4051LMTA | | Diode | 1 | |
| R704 | YEADDSM1D2T7 | | Diode | 1 | |
| Z701 | ERZC07DK470 | | ZNR | 1 | |
| DISPLAY BLOCK | | | | | |
| [E5995] | | | | | |
| D901 | LN01801RC5TA | | LED | 1 | |
| D903 to 909 | MA8056LMHTX | | Diodes | 7 | |
| CAPACITORS | | | | | |
| MAIN BLOCK | | | | | |
| [E2481A] | | | | | |
| C52 | YEE05Y103N | | Ceramic, 0.01MFD 50WV | 1 | |
| C53 | YEU05F104Z | | Ceramic, 0.1MFD 50WV | 1 | |
| C54, 58 | YEE05Y103N | | Ceramic, 0.01MFD 50WV | 2 | |
| C59 | ECEA1AKS101B | | Electrolytic, 100MFD 10WV | 1 | |
| C60 | ECEA1AKS101I | | Electrolytic, 100MFD 10WV | 1 | |
| C64 | YEE05Y103N | | Ceramic, 0.01MFD 50WV | 1 | |
| C201 | YEE05X122M | | Ceramic, 0.0012MFD 16WV | 1 | |
| C202 | ECEA1AKS221I | | Electrolytic, 220MFD 10WV | 1 | |
| C203 | ECEA1HKS010I | | Electrolytic, 1MFD 50WV | 1 | |
| C204 | YECQC1H273JS | | Plastic Film, 0.027MFD 50WV | 1 | |
| C205 | YECQC1H183JS | | Plastic Film, 0.018MFD 50WV | 1 | |
| C207 | ECEA1HKS010B | | Electrolytic, 1MFD 50WV | 1 | CQ-R45LEEP |
| C208 | ECEA1HKS68I | | Electrolytic, 0.68MFD 50WV | 1 | CQ-R45LEEP |
| C215 | ECEA1AKS221I | | Electrolytic, 220MFD 10WV | 1 | |

| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|-------------|--------------|-----------|------------------------------|---------|------------|
| C216 | ECEA1AKS221I | | Electrolytic, 220MFD 10WV | 1 | CQ-R45LEEP |
| C217 | ECEA1HKS0R1I | | Electrolytic, 0.1MFD 50WV | 1 | CQ-R45LEEP |
| C220 | YEU05B101K | | Ceramic, 100PF 50WV | 1 | CQ-R45LEEP |
| C221 | YEU05F104Z | | Ceramic, 0.1MFD 50WV | 1 | CQ-R45LEEP |
| C231 | ECEA1CKS100I | | Electrolytic, 10MFD 16WV | 1 | CQ-R45LEEP |
| C232, 233 | ECEA1EKS3R3I | | Electrolytic, 3.3MFD 25WV | 2 | |
| C235 | ECEA1HSNR22I | | Electrolytic, 0.22MFD 50WV | 1 | |
| C236 | YECQC1H333JS | | Plastic Film, 0.033MFD 50WV | 1 | |
| C237 | YECQC1H562JS | | Plastic Film, 0.0056MFD 50WV | 1 | |
| C239, 240 | ECEA1EKS3R3I | | Electrolytic, 3.3MFD 25WV | 2 | |
| C241 | ECEA1AKS470I | | Electrolytic, 47MFD 10WV | 1 | |
| C242 | ECEA1AKS101I | | Electrolytic, 100MFD 10WV | 1 | |
| C243 | ECQV1H104JM2 | | Plastic Film, 0.1MFD 50WV | 1 | |
| C244 | ECEA1AKS221I | | Electrolytic, 220MFD 10WV | 1 | |
| C271, 272 | YEE05Y103N | | Ceramic, 0.01MFD 50WV | 2 | |
| C273 to 276 | ECQV1H104JM3 | | Plastic Film, 0.1MFD 50WV | 4 | |
| C290 | ECQV1H104JM2 | | Plastic Film, 0.1MFD 50WV | 1 | |
| C291 | ECA1CM472 | | Electrolytic, 4700MFD 16WV | 1 | |
| C293 | ECEA1AKS330I | | Electrolytic, 33MFD 10WV | 1 | |
| C294 | ECEA1AU101I | | Electrolytic, 100MFD 10WV | 1 | |
| C295 | YEE05Y103N | | Ceramic, 0.01MFD 50WV | 1 | |
| C301 | YEE05X122M | | Ceramic, 0.0012MFD 16WV | 1 | |
| C302 | ECEA1AKS221I | | Electrolytic, 220MFD 10WV | 1 | |
| C303 | ECEA1HKS010I | | Electrolytic, 1MFD 50WV | 1 | |
| C304 | YECQC1H273JS | | Plastic Film, 0.027MFD 50WV | 1 | |
| C305 | YECQC1H183JS | | Plastic Film, 0.018MFD 50WV | 1 | |
| C307 | ECEA1HKS010I | | Electrolytic, 1MFD 50WV | 1 | CQ-R45LEEP |
| C308 | ECEA1HKS68I | | Electrolytic, 0.68MFD 50WV | 1 | CQ-R45LEEP |
| C320 | YEU05B101K | | Ceramic, 100PF 50WV | 1 | CQ-R45LEEP |
| C331 | ECEA1CKS100I | | Electrolytic, 10MFD 16WV | 1 | CQ-R45LEEP |
| C332, 333 | ECEA1EKS3R3I | | Electrolytic, 3.3MFD 25WV | 2 | |
| C335 | ECEA1HSNR22I | | Electrolytic, 0.22MFD 50WV | 1 | |
| C336 | YECQC1H333JS | | Plastic Film, 0.033MFD 50WV | 1 | |
| C337 | YECQC1H562JS | | Plastic Film, 0.0056MFD 50WV | 1 | |

MODELS CQ-R45LEEP/CQ-R30LEEP

CQ-R30LEEP
CQ-R45LEEP

| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|-----------|-------------|-----------|-------------------------|---------|------------|
| R209 | ERDS2TJ332 | | Carbon, 3.3k ohms 0.25W | 1 | |
| R214 | ERDS2TJ473 | | Carbon, 47k ohms 0.25W | 1 | |
| R215 | ERDS2TJ433 | | Carbon, 43k ohms 0.25W | 1 | |
| R216 | ERDS2TJ103 | | Carbon, 10k ohms 0.25W | 1 | |
| R218 | ERD25TJ102 | | Carbon, 1k ohms 0.25W | 1 | |
| R221 | ERDS2TJ822 | | Carbon, 8.2k ohms 0.25W | 1 | CQ-R45LEEP |
| R222 | ERDS2TJ332 | | Carbon, 3.3k ohms 0.25W | 1 | CQ-R45LEEP |
| R241 | ERDS2TJ102 | | Carbon, 1k ohms 0.25W | 1 | |
| R242 | ERDS2TJ333 | | Carbon, 33k ohms 0.25W | 1 | |
| R245, 246 | ERDS2TJ181 | | Carbon, 180 ohms 0.25W | 2 | |
| R261, 262 | ERDS2TJ561 | | Carbon, 560 ohms 0.25W | 2 | CQ-R45LEEP |
| R271, 272 | ERD25TJ101 | | Carbon, 100 ohms 0.25W | 2 | |
| R273, 274 | ERD25TJ272 | | Carbon, 2.7k ohms 0.25W | 2 | |
| R275 | ERDS2TJ2R2 | | Carbon, 2.2 ohms 0.25W | 1 | |
| R276 | ERD25TJ2R2 | | Carbon, 2.2 ohms 0.25W | 1 | |
| R277, 278 | ERDS2TJ2R2 | | Carbon, 2.2 ohms 0.25W | 2 | |
| R290 | ERD25TJ682 | | Carbon, 6.8k ohms 0.25W | 1 | |
| R292 | ERDS2TJ223 | | Carbon, 22k ohms 0.25W | 1 | |
| R301 | ERDS2TJ333 | | Carbon, 33k ohms 0.25W | 1 | |
| R302 | ERDS2TJ270T | | Carbon, 27 ohms 0.25W | 1 | |
| R303 | ERDS2TJ472 | | Carbon, 4.7k ohms 0.25W | 1 | |
| R304 | ERDS2TJ124 | | Carbon, 120k ohms 0.25W | 1 | |
| R305 | ERDS2TJ332 | | Carbon, 3.3k ohms 0.25W | 1 | |
| R306 | ERDS2TJ472 | | Carbon, 4.7k ohms 0.25W | 1 | |
| R307 | ERDS2TJ104 | | Carbon, 100k ohms 0.25W | 1 | |
| R308 | ERDS2TJ562 | | Carbon, 5.6k ohms 0.25W | 1 | |
| R309 | ERDS2TJ332 | | Carbon, 3.3k ohms 0.25W | 1 | |
| R321 | ERDS2TJ822 | | Carbon, 8.2k ohms 0.25W | 1 | CQ-R45LEEP |
| R322 | ERDS2TJ332 | | Carbon, 3.3k ohms 0.25W | 1 | CQ-R45LEEP |
| R345, 346 | ERDS2TJ181 | | Carbon, 180 ohms 0.25W | 2 | |
| R361, 362 | ERDS2TJ561 | | Carbon, 560 ohms 0.25W | 2 | CQ-R45LEEP |
| R371, 372 | ERD25TJ101 | | Carbon, 100 ohms 0.25W | 2 | |
| R373, 374 | ERDS2TJ272 | | Carbon, 2.7k ohms 0.25W | 2 | |
| R375, 376 | ERD25TJ2R2 | | Carbon, 2.2 ohms 0.25W | 2 | |

| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|-------------|------------|-----------|-------------------------|---------|------------|
| R377, 378 | ERDS2TJ2R2 | | Carbon, 2.2 ohms 0.25W | 2 | |
| R401, 402 | ERDS2TJ152 | | Carbon, 1.5k ohms 0.25W | 2 | |
| R403 | ERD25TJ152 | | Carbon, 1.5k ohms 0.25W | 1 | |
| R404, 405 | ERDS2TJ103 | | Carbon, 10k ohms 0.25W | 2 | |
| R406 | ERD25TJ472 | | Carbon, 4.7k ohms 0.25W | 1 | |
| R451, 452 | ERDS2TJ224 | | Carbon, 220k ohms 0.25W | 2 | CQ-R45LEEP |
| R453 | ERDS2TJ223 | | Carbon, 22k ohms 0.25W | 1 | CQ-R45LEEP |
| R454 | ERDS2TJ224 | | Carbon, 220k ohms 0.25W | 1 | CQ-R45LEEP |
| R455 | ERDS2TJ102 | | Carbon, 1k ohms 0.25W | 1 | CQ-R45LEEP |
| R456 | ERDS2TJ471 | | Carbon, 470 ohms 0.25W | 1 | CQ-R45LEEP |
| R522, 523 | ERDS2TJ103 | | Carbon, 10k ohms 0.25W | 2 | |
| R601 | ERDS2TJ223 | | Carbon, 22k ohms 0.25W | 1 | |
| R602 | ERDS2TJ473 | | Carbon, 47k ohms 0.25W | 1 | |
| R603 | ERDS2TJ473 | | Carbon, 47k ohms 0.25W | 1 | CQ-R30LEEP |
| R604 | ERDS2TJ473 | | Carbon, 47k ohms 0.25W | 1 | |
| R605 to 609 | ERDS2TJ102 | | Carbon, 1k ohms 0.25W | 5 | |
| R611, 612 | ERDS2TJ102 | | Carbon, 1k ohms 0.25W | 2 | |
| R614, 615 | ERDS2TJ102 | | Carbon, 1k ohms 0.25W | 2 | |
| R617 | ERDS2TJ104 | | Carbon, 100k ohms 0.25W | 1 | |
| R620 | ERDS2TJ103 | | Carbon, 10k ohms 0.25W | 1 | |
| R621 | ERDS2TJ101 | | Carbon, 100 ohms 0.25W | 1 | |
| R623, 624 | ERDS2TJ103 | | Carbon, 10k ohms 0.25W | 2 | |
| R626 | ERDS2TJ102 | | Carbon, 1k ohms 0.25W | 1 | |
| R627, 628 | ERD25TJ103 | | Carbon, 10k ohms 0.25W | 2 | |
| R630, 631 | ERDS2TJ102 | | Carbon, 1k ohms 0.25W | 2 | |
| R632 | ERDS2FJ470 | | Carbon, 47 ohms 0.25W | 1 | |
| R633, 634 | ERDS2TJ102 | | Carbon, 1k ohms 0.25W | 2 | |
| R635, 636 | ERDS2TJ682 | | Carbon, 6.8k ohms 0.25W | 2 | |
| R637 | ERDS2TJ104 | | Carbon, 100k ohms 0.25W | 1 | |
| R638 | ERDS2TJ473 | | Carbon, 47k ohms 0.25W | 1 | |
| R640, 641 | ERD25TJ473 | | Carbon, 47k ohms 0.25W | 2 | |
| R642 | ERDS2TJ473 | | Carbon, 47k ohms 0.25W | 1 | |
| R644 | ERDS2TJ473 | | Carbon, 47k ohms 0.25W | 1 | CQ-R45LEEP |
| R646 | ERD25TJ473 | | Carbon, 47k ohms 0.25W | 1 | |

| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|-------------|-------------|-----------|-------------------------|---------|------------|
| R671 to 673 | ERDS2TJ104 | | Carbon, 100k ohms 0.25W | 3 | CQ-R45LEEP |
| R674 to 677 | ERDS2TJ103 | | Carbon, 10k ohms 0.25W | 4 | CQ-R45LEEP |
| R678 to 680 | ERDS2TJ102 | | Carbon, 1k ohms 0.25W | 3 | CQ-R45LEEP |
| R701 | ERDS1FJ681 | | Carbon, 680 ohms 0.5W | 1 | |
| R702 | ERD25FJ3R3T | | Carbon, 3.3 ohms 0.25W | 1 | |
| R703 | ERDS2TJ473 | | Carbon, 47k ohms 0.25W | 1 | |
| R706 | ERDS2TJ221 | | Carbon, 220 ohms 0.25W | 1 | |
| R707 | ERDS2FJ470 | | Carbon, 47 ohms 0.25W | 1 | |
| R708 | ERDS1FJ2R7 | | Carbon, 2.7 ohms 0.5W | 1 | |
| R709 | ERDS2FJ3R3T | | Carbon, 3.3 ohms 0.25W | 1 | |
| R710 | ERDS2FJ470 | | Carbon, 47 ohms 0.25W | 1 | |
| R711 | ERDS2TJ181 | | Carbon, 180 ohms 0.25W | 1 | |
| R712 | ERDS2TJ221 | | Carbon, 220 ohms 0.25W | 1 | |
| R714 | ERDS2TJ682 | | Carbon, 6.8k ohms 0.25W | 1 | |
| R716 | ERDS2TJ473 | | Carbon, 47k ohms 0.25W | 1 | |
| R718 | ERDS2TJ104 | | Carbon, 100k ohms 0.25W | 1 | |
| R719 | ERDS2TJ103 | | Carbon, 10k ohms 0.25W | 1 | |
| R720 | ERDS2TJ473 | | Carbon, 47k ohms 0.25W | 1 | |
| R721 | ERD25TJ332 | | Carbon, 3.3k ohms 0.25W | 1 | |
| R722 | ERDS2TJ332 | | Carbon, 3.3k ohms 0.25W | 1 | |
| R723 | ERDS2TJ102 | | Carbon, 1k ohms 0.25W | 1 | |
| R724 | ERDS2TJ103 | | Carbon, 10k ohms 0.25W | 1 | |
| R725 | ERDS2TJ471 | | Carbon, 470 ohms 0.25W | 1 | |
| R730 | ERD25TJ391 | | Carbon, 390 ohms 0.25W | 1 | |
| R752 | ERDS2TJ103 | | Carbon, 10k ohms 0.25W | 1 | |
| R753 | ERDS2TJ472 | | Carbon, 4.7k ohms 0.25W | 1 | CQ-R45LEEP |
| R754 | ERDS2TJ332 | | Carbon, 3.3k ohms 0.25W | 1 | CQ-R45LEEP |
| R755 | ERDS2TJ472 | | Carbon, 4.7k ohms 0.25W | 1 | CQ-R45LEEP |
| R756 | ERDS2TJ821 | | Carbon, 820 ohms 0.25W | 1 | |
| J118 | ERDS2TJ392 | | Carbon, 3.9k ohms 0.25W | 1 | |
| J319 | ERD25TJ102 | | Carbon, 1k ohms 0.25W | 1 | |
| | | | | | |
| | | | | | |
| | | | | | |

| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|----------------------|--------------|-----------|-------------------------|---------|------------|
| DISPLAY BLOCK | | | | | |
| [E5995] | | | | | |
| R901 | ERJ8GEYJ681V | | Chip, 680 ohms 0.13W | 1 | |
| R902 | ERJ6GEYJ223 | | Chip, 22k ohms 0.1W | 1 | |
| R903 | ERJ6GEYJ473 | | Chip, 47k ohms 0.1W | 1 | |
| R904 | ERJ6GEYJ562 | | Chip, 5.6k ohms 0.1W | 1 | |
| R905, 906 | ERJ6GEYJ102 | | Chip, 1k ohms 0.1W | 2 | |
| R907 | ERJ6GEYJ223 | | Chip, 22k ohms 0.1W | 1 | |
| R908 | ERJ6GEYJ102 | | Chip, 1k ohms 0.1W | 1 | |
| R909 | ERJ6GEYJ100 | | Chip, 10 ohms 0.1W | 1 | |
| R910 | ERJ6GEYJ152 | | Chip, 1.5k ohms 0.1W | 1 | |
| R911 | ERJ6GEYJ182 | | Chip, 1.8k ohms 0.1W | 1 | |
| R912 | ERJ6GEYJ222 | | Chip, 2.2k ohms 0.1W | 1 | |
| R913 | ERJ6GEYJ472 | | Chip, 4.7k ohms 0.1W | 1 | |
| R914, 915 | ERJ6GEYJ182 | | Chip, 1.8k ohms 0.1W | 2 | |
| R916 | ERJ6GEYJ332 | | Chip, 3.3k ohms 0.1W | 1 | |
| R917 | ERJ6GEYJ472 | | Chip, 4.7k ohms 0.1W | 1 | CQ-R45LEEP |
| R918, 919 | ERJ6GEYJ182 | | Chip, 1.8k ohms 0.1W | 2 | |
| R920 | ERJ6GEYJ332 | | Chip, 3.3k ohms 0.1W | 1 | |
| R921 | ERJ6GEYJ472 | | Chip, 4.7k ohms 0.1W | 1 | |
| R922 | ERJ6GEYJ153 | | Chip, 15k ohms 0.1W | 1 | |
| R923, 924 | ERJ6GEYJ103 | | Chip, 10k ohms 0.1W | 2 | |
| R925 | ERJ6GEYJ473 | | Chip, 47k ohms 0.1W | 1 | |
| R926, 927 | ERJ6GEYJ102 | | Chip, 1k ohms 0.1W | 2 | |
| R930 | ERJ6GEYJ100 | | Chip, 10 ohms 0.1W | 1 | |
| R932 | ERJ6GEYJ150 | | Chip, 15 ohms 0.1W | 1 | CQ-R45LEEP |
| | ERJ6GEYJ5R6 | | Chip, 5.6 ohms 0.1W | 1 | CQ-R30LEEP |
| CONNECTORS | | | | | |
| MAIN BLOCK | | | | | |
| [E2481A] | | | | | |
| CN201 | YEAEM2005S | | Connector, 5P | 1 | |
| CN211 | YEAETSCP09XA | | Connector, 9P | 1 | |

| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|----------------------|--------------|-----------|-------------------------|---------|------------|
| CN360 | YEAE02166 | | Connector, 4P RCA | 1 | CQ-R45LEEP |
| CN602 | YEAE012307 | | Connector, 8P DIN | 1 | CQ-R45LEEP |
| CN671 | YEAETSCP09XA | | Connector, 9P | 1 | CQ-R45LEEP |
| CN701 | YEAE012194 | | Connector, 16P | 1 | |
| CN751 | YEAE0906MXN1 | | Connector, 9P | 1 | CQ-R45LEEP |
| | YEAE0706MXN1 | | Connector, 7P | 1 | CQ-R30LEEP |
| CP211 | YEAETSCP09P | | Connector, 9P | 1 | |
| CP221 | YEAE012242 | | Connector, 2P RCA cord | 1 | CQ-R45LEEP |
| CP601 | YEAETJCA11 | | Connector, 11P | 1 | |
| CP671 | YEAETSCP09P | | Connector, 9P | 1 | CQ-R45LEEP |
| CP901 | YEAE012298 | | Connector, 12P | 1 | |
| CJ702 | YEAE012314 | | Connector, 5P | 1 | |
| DISPLAY BLOCK | | | | | |
| [E5995] | | | | | |
| CN901 | YEAE012282 | | Connector, 12P | 1 | |
| SWITCHES | | | | | |
| SW901 to 914 | EVQ21505R | | Switch | 14 | |
| SW915 | EVQ21505R | | Switch | 1 | CQ-R45LEEP |
| CRYSTALS | | | | | |
| XL401 | YEXL49U072TA | | Crystal OSC | 1 | |
| XL601 | YEXL49U838TA | | Crystal OSC | 1 | |
| COILS | | | | | |
| L50 | YELT02C330KT | | Coil | 1 | |
| L401 | YELT02C101KT | | Coil | 1 | CQ-R45LEEP |
| L601 | YELT02CR22KT | | Coil | 1 | |
| L701 | YETQ026F123 | | Coil | 1 | |

| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|---------------------------|-------------------|-----------|---------------------------|---------|------------|
| LCD | | | | | |
| LCD901 | YEXDCM1102 | | LCD | 1 | |
| VARIABLE RESISTORS | | | | | |
| VR201, 301 | YEVN632C47K | | Variable Resistor | 2 | CQ-R45LEEP |
| THERMISTOR | | | | | |
| PT701 | YERT6AR4R7MT | | Thermistor | 1 | |
| PRINTING | | | | | |
| | YEFM282483 | | Operating Instructions | 1 | |
| INSTALLATION PARTS | | | | | |
| | YEFX0213629A | | Mounting Collar | 1 | |
| | YEFG04019 | | Rear Support Strap | 1 | |
| | YEP9FZ2311 | | Screws and Washers Kit | 1 | |
| | YEAJ02720 | | Power Connector | 1 | |
| | YEFA131100 | | Removable Face Plate Case | 1 | |
| MISCELLANEOUS | | | | | |
| F1 | △ XBA1C100NS1 | | Fuse, 10A | 1 | |
| PL901, 902 | YEAL01204A | | Pilot Lamp | 2 | |
| PL903 | YEAL01202 | | Pilot Lamp | 1 | |
| Z51 | YEAL02010T | | Neon Lamp | 1 | |
| ANT51 | YAAA10060 | | Antenna Receptacle | 1 | |
| 1 | (4-B) YEFA031354B | | Upper Cover | 1 | |
| 2 | (1-B) YEFA05594B | | Bottom Cover | 1 | |
| 3 | (2-B) YEFA07333A | | Front Plate | 1 | |

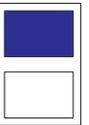
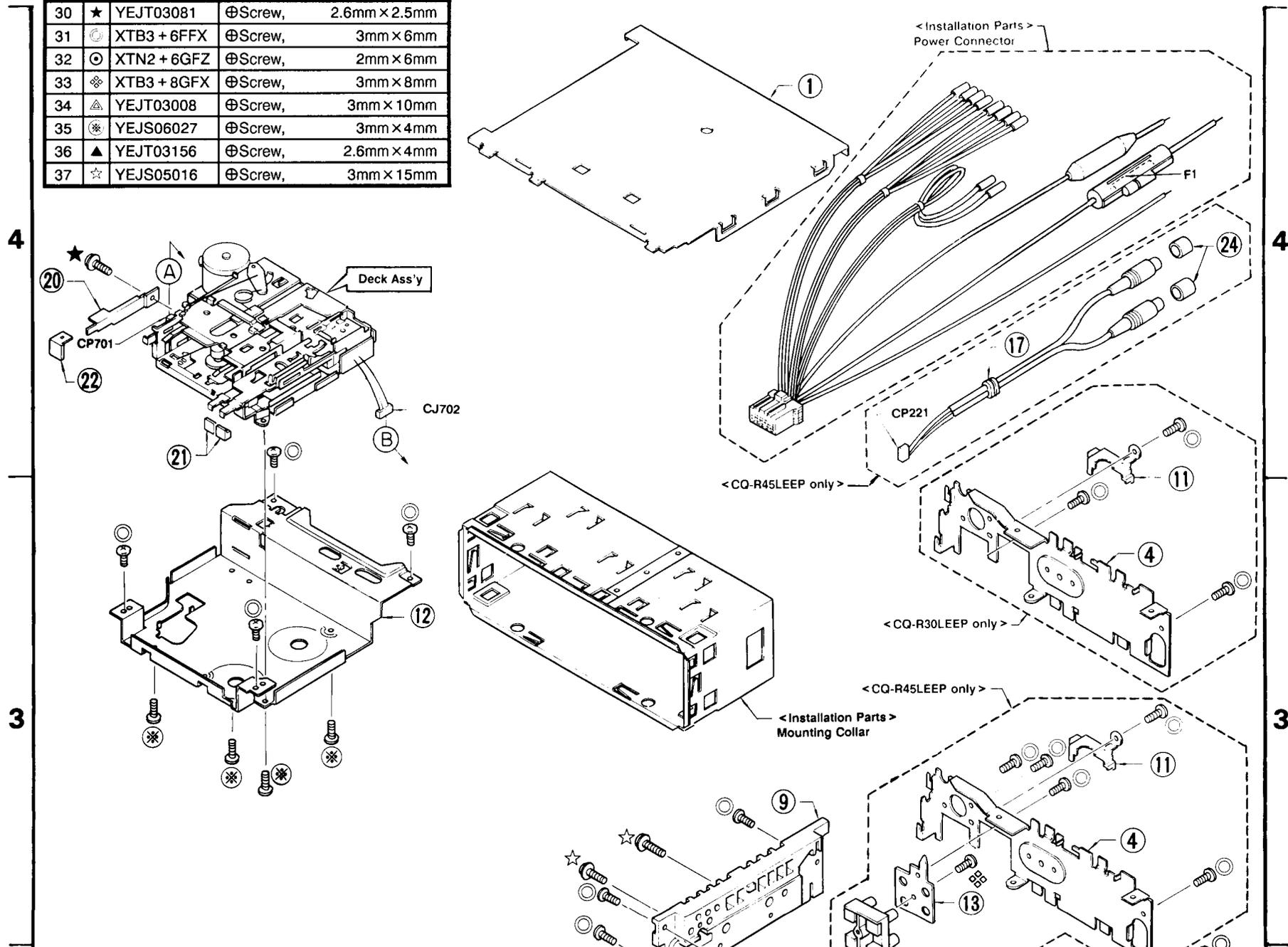
| Ref. No. | Part No. | Part Code | Part Name & Description | Pcs set | Remarks |
|----------|-----------------------|-----------|-----------------------------|---------|------------|
| 4 | (3-C) YEFA08404BK | | Rear Plate | 1 | CQ-R45LEEP |
| | YEFA08401AK | | | 1 | CQ-R30LEEP |
| 5 | (2-C) YEFA09505 | | Side Plate Ass'y (R) | 1 | |
| 6 | (2-B) YEFC024271L | | Escutcheon Ass'y (Unit) | 1 | |
| 7 | (1-A) YEFC024814 | | Escutcheon Ass'y (Detacher) | 1 | CQ-R45LEEP |
| | YEFC024813 | | | 1 | CQ-R30LEEP |
| 8 | (2-A) YEFA131107K | | Cover (Detacher) | 1 | |
| 9 | (3-B) YEFF01796 | | Heat Sink | 1 | |
| 10 | (1-B) YEFX0213648A | | Bracket, IC271 | 1 | |
| 11 | (3-C) YEFX0213649A | | Bracket, CN701 | 1 | |
| 12 | (3-A) YEFX0213652B | | Bracket, Deck | 1 | |
| 13 | (2-C) YEFX0213650 | | Bracket CN360 | 1 | CQ-R45LEEP |
| 14 | (2-A) YEFK04482 | | Holder, PL903 | 1 | |
| 15 | (2-A) YEFR04333 | | Illumination Cap, PL903 | 1 | |
| 16 | (1-A) YEFK06641 | | Holder, LCD | 1 | |
| 17 | YEFX007380 | | Cord Clamper | 1 | CQ-R45LEEP |
| 18 | (1-A) YEFX0011513 | | Transparent Plate, LCD | 1 | |
| 19 | (1-A) YEFX0213651A | | Bracket, LCD | 1 | |
| 20 | (4-A) YEFX0461522 | | Lever, Deck | 1 | |
| 21 | (4-A) YEFX9991190A | | Blind Piece, FF/REW | 2 | |
| 22 | (4-A) YEFX9991191 | | Blind Piece, Eject | 1 | |
| 23 | (1-B) YEFV011566 | | Insulator | 1 | |
| 24 | (4-C) YEFR04187 | | RCA Connector Cap | 2 | CQ-R45LEEP |
| 25 | (2-C) YEAT03240 | | Terminal | 2 | |
| 26 | (1-B) (1-C) YEAT03420 | | Terminal | 3 | |
| 30 | ★ YEJT03081 | | Screw, 2.6mm × 2.5mm | 1 | |
| 31 | ☉ XTB3 + 6FFX | | Screw, 3mm × 6mm | 14 | CQ-R45LEEP |
| | | | | 11 | CQ-R30LEEP |
| 32 | ☉ XTN2 + 6GFZ | | Screw, 2mm × 6mm | 5 | |
| 33 | ⊕ XTB3 + 8GFX | | Screw, 3mm × 8mm | 1 | CQ-R45LEEP |
| 34 | △ YEJT03009 | | Screw, 3mm × 8mm | 3 | |
| 35 | ⊗ YEJS06027 | | Screw, 3mm × 4mm | 4 | |
| 36 | ▲ YEJT03156 | | Screw, 2.6mm × 4mm | 2 | |
| 37 | ☆ YEJS05016 | | Screw, 3mm × 15mm | 2 | |

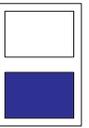
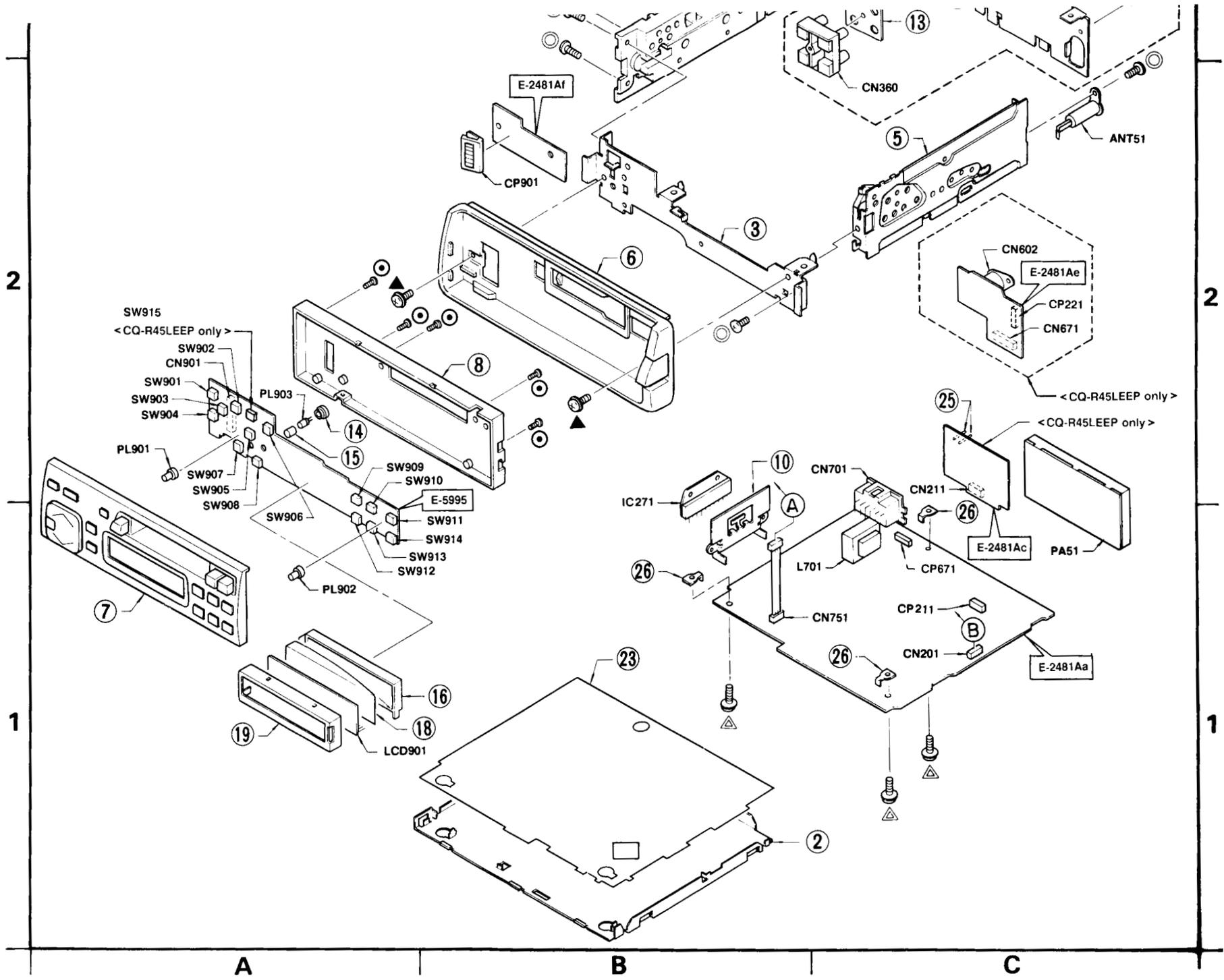
EXPLODED VIEW (UNIT)

■ Numbers in ○ are indicated REF.No. in the REPLACEMENT PARTS LIST

■ The symbols next to the screws indicate as follows.

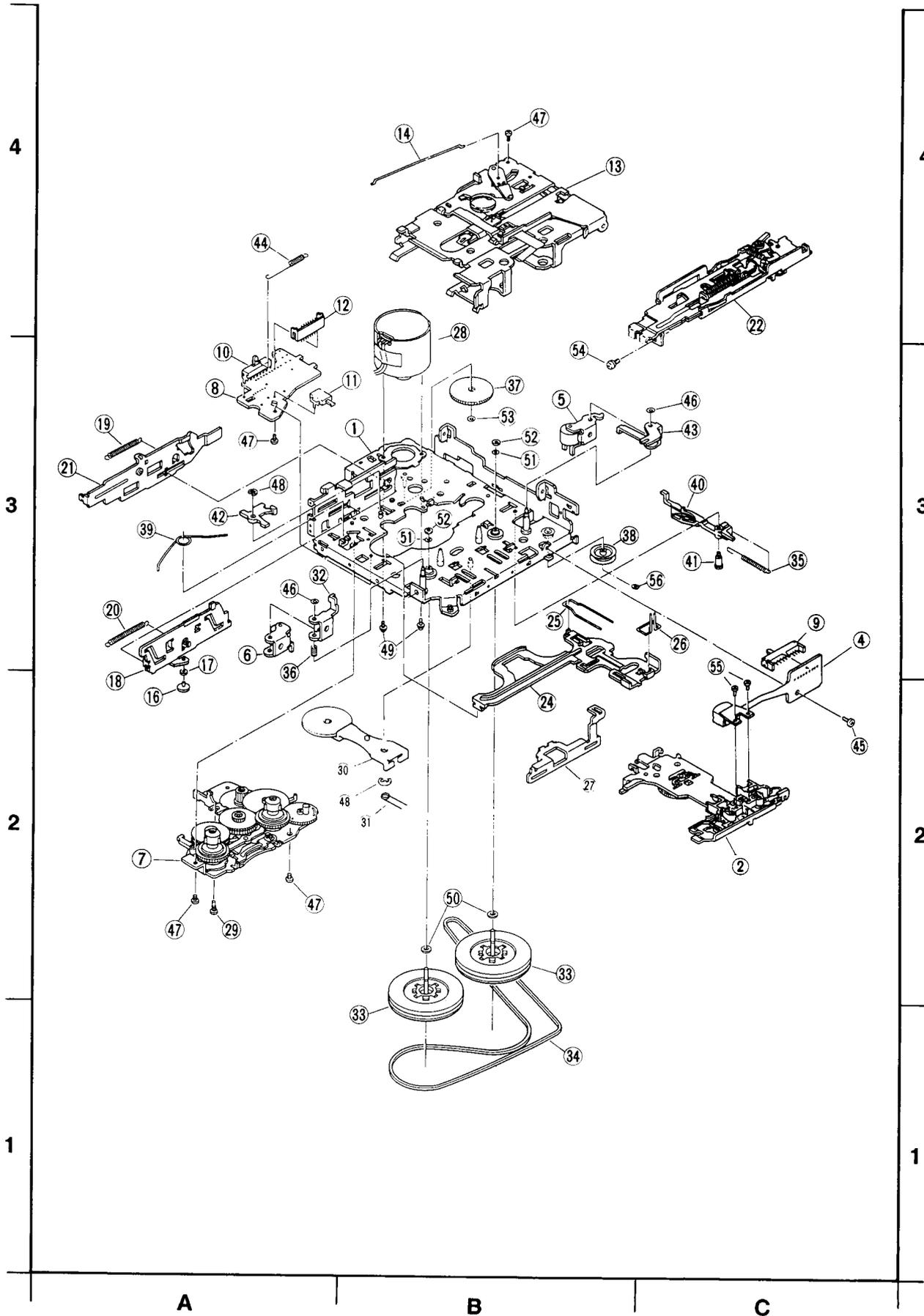
| | | | | |
|----|---|-------------|---------|---------------|
| 30 | ★ | YEJT03081 | ⊕Screw, | 2.6mm × 2.5mm |
| 31 | ⊙ | XTB3 + 6FFX | ⊕Screw, | 3mm × 6mm |
| 32 | ⊙ | XTN2 + 6GFZ | ⊕Screw, | 2mm × 6mm |
| 33 | ⊙ | XTB3 + 8GFX | ⊕Screw, | 3mm × 8mm |
| 34 | △ | YEJT03008 | ⊕Screw, | 3mm × 10mm |
| 35 | ⊙ | YEJS06027 | ⊕Screw, | 3mm × 4mm |
| 36 | ▲ | YEJT03156 | ⊕Screw, | 2.6mm × 4mm |
| 37 | ☆ | YEJS05016 | ⊕Screw, | 3mm × 15mm |





EXPLODED VIEW (TAPE DECK) <CQ-R30LEEP>

■ Numbers in ○ are indicated REF.No. in the REPLACEMENT PARTS LIST



EXPLODED VIEW (TAPE DECK) < CQ-R45LEEP >

■ Numbers in ○ are indicated REF.No. in the REPLACEMENT PARTS LIST

