

MHC-GRX8/R800/RX88/RX99

HCR-GRX8/R800/RX99

SERVICE MANUAL

AEP Model

UK Model

MHC-RX88/RX99

E Model

MHC-GRX8/R800

Australian Model

MHC-GRX8

- MHC-GRX8/R800/RX88/RX99 is composed of following models.
As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENT MODEL NAME FOR MHC-GRX8/R800/RX88/RX99

| | | | | |
|-----------------------------------|----------|----------|----------|----------|
| | MHC-GRX8 | MHC-R800 | MHC-RX88 | MHC-RX99 |
| COMPACT DISC DECK RECEIVER SYSTEM | HCD-GRX8 | HCD-R800 | HCD-RX88 | HCD-RX99 |
| FRONT SPEAKER SYSTEM | SS-GRX8 | SS-R800 | SS-RX88 | SS-RX99 |
| SURROUND SPEAKER SYSTEM | SS-SR110 | | | SS-SR110 |

HCR-GRX8 is composed of HCD-GRX8 and SS-SR110
HCR-R800 is composed of HCD-R800 and SS-SR110
HCD-RX99 is composed of HCD-RX99 and SS-SR110

- Abbreviation
G : German model
EE : East European model
SP : Singapore model
MY : Malaysia model
MX : Mexican model
AR : Argentine model
EA3 : Saudi Arabia model
HK : Hong kong model
TW : Taiwan model
TH : Thai model

SPECIFICATIONS

General

Power requirements
European models: 230 V AC, 50/60 Hz
Other models: 120 V, 220 V or 230 - 240 V AC, 50/60 Hz.
Adjustable with the voltage selector

Power consumption
MHC-GRX8/R800: 270 watts
MHC-RX88/RX99: 240 watts

Supplied accessories

AM loop antenna (1)
Remote RM-SR8
Batteries (2)
FM lead antenna (1)
Speaker cords (4)
Front speaker pads (8)

Design and specifications are subject to change without notice.

PARTS LIST

| Ref.No. | Part No. | Description | Remark | Ref.No. | Part No. | Description | Remark |
|---------|--------------|--|--------|---------|--------------|--|--------|
| | | ACCESSORIES & PACKING MATERIALS ***** | | | | | |
| | 1-475-571-11 | COMMANDER, STANDARD (RM-SR8) | | | 3-862-011-61 | MANUAL, INSTRUCTION (DUTCH, ITALIAN, PORTUGUESE) (AEP) | |
| | 1-501-374-11 | ANTENNA, LOOP | | | 3-862-011-71 | MANUAL, INSTRUCTION (DANISH, FINNISH, SWEDISH) (AEP) | |
| | 1-501-659-41 | ANTENNA (FM) (GRX8/R800) | | | 3-862-011-81 | MANUAL, INSTRUCTION (POLISH, RUSSIAN) (AEP, EE, CIS) | |
| | 1-501-804-11 | ANTENNA (FM) (RX88/RX99) | | | 3-862-012-11 | MANUAL, INSTRUCTION (HUNGARIAN) (AEP,EE,CIS) | |
| | 1-769-317-11 | CORD, SPEAKER (2.5m) (FRONT SPEAKER) | | | 3-862-012-21 | MANUAL, INSTRUCTION (CZECH) (AEP) | |
| | 1-769-433-11 | CORD, SPEAKER(10m) (SURROUND SPEAKER) | | | 3-862-012-31 | MANUAL, INSTRUCTION (GREEK) (AEP) | |
| | 3-862-011-11 | MANUAL, INSTRUCTION (ENGLISH) (EXCEPT G, TH) | | | 3-862-012-41 | MANUAL, INSTRUCTION (TURKISH) (AEP) | |
| | 3-862-011-21 | MANUAL, INSTRUCTION (FRENCH, SPANISH) (AEP, E, SP, MY, MX, AR, EA3) | | | 3-862-015-31 | MANUAL, INSTRUCTION (ENGLISH, THAI) (TH) | |
| | 3-862-011-31 | MANUAL, INSTRUCTION (CHINESE) (E, SP, MY, HK, TW) | | | 3-862-818-11 | MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, SWEDISH, RUSSIAN) (For SS-RX88/RX99) | |
| | 3-862-011-41 | MANUAL, INSTRUCTION (ARABIC) (EA3) | | | | | |
| | 3-862-011-51 | MANUAL, INSTRUCTION (GERMAN) (AEP, G) | | | 4-991-151-21 | COVER, BATTERY (FOR RM-SR8) | |

MINI Hi-Fi COMPONENT SYSTEM

SONY®



HCD-GRX8/R800/ RX88/RX99

SERVICE MANUAL

AEP Model

UK Model

HCD-RX88/RX99

E Model

HCD-GRX8/R800

Australian Model


HCD-GRX8



Photo: HCD-GRX8

HCD-GRX8/R800/RX88/RX99 is the tuner, deck, CD and amplifier section in MHC-GRX8/R800/RX88/RX99.

This stereo system is equipped with the Dolby B-type noise reduction system*.

* Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

| | | |
|-------------------|------------------------------------|------------------------------------|
| CD SECTION | Model Name Using Similar Mechanism | HCD-H991AV |
| | CD Mechanism Type | CDM38L-5BD29AL/ CDM38LH-5BD29AL |
| | Base Unit Type | BU-5BD29AL |
| | Optical Pick-up Type | KSS-213D/Q-NP |
| TAPE DECK SECTION | Model Name Using Similar Mechanism | NEW |
| | Tape Transport Mechanism Type | TCM-230AWR1/230PWR1 |

SPECIFICATIONS

Amplifier section

HCD-RX88/RX99:

DIN power output (rated)

80 + 80 watts
(8 ohms at 1 kHz, DIN)

Continuous RMS power output (reference)

100 + 100 watts
(8 ohms at 1 kHz, 10% THD)

Music power output (reference)

170 + 170 watts
(8 ohms at 1 kHz, 10% THD)

HCD-GRX8/R800:

The following measured at AC 120, 220, 240 V
50/60 Hz

DIN power output (rated)

105 + 105 watts
(8 ohms at 1 kHz, DIN)

Continuous RMS power output (reference)

130 + 130 watts
(8 ohms at 1 kHz, 10% THD)

Peak music power output (reference)

2000 watts

Inputs

VIDEO IN, MD IN:

(phono jacks)

MIX MIC: (phone jack)

voltage 250 mV,
impedance 47 kilohms
sensitivity 1 mV,
impedance 10 kilohms

Outputs

MD OUT:

(phono jacks)

PHONES:

(stereo phone jack)

SPEAKER:

voltage 250 mV
impedance 1 kilohms
accepts headphones of 8
ohms or more
accepts impedance of 8 to
16 ohms

SURROUND SPEAKER: accepts impedance of 16 ohms
SUPER WOOFER: Voltage 1 V, impedance 1 kilohm

CD player section

System

Compact disc and digital audio system

Laser

Semiconductor laser

($\lambda=780\text{nm}$)

Emission duration:

continuous

Max. 44.6 μW^*

*This output is the value measured at a distance of

200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.

780 - 790 nm

2 Hz - 20 kHz (± 0.5 dB)

More than 90 dB

More than 90 dB

Wavelength

Frequency response

Signal-to-noise ratio

Dynamic range

CD OPTICAL DIGITAL OUT

(Square optical connector jack, rear panel)

Wavelength

600 nm

Output Level

-18 dBm

Tape player section

Recording system

4-track 2-channel stereo

Frequency response

40 - 13,000 Hz (± 3 dB),

(DOLBY NR OFF)

using Sony TYPE I cassette

40 - 14,000 Hz (± 3 dB),

using Sony TYPE II cassette

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range

87.5 - 108.0 MHz

2 band models:

3 band (FM-MW-SW) models:

87.5 - 108.0 MHz

3 band (FM-MW-LW) models:

87.5 - 108.0 MHz

4 band models:

87.5 - 108.0 MHz

Antenna

FM lead antenna

Antenna terminals

75 ohm unbalanced

Intermediate frequency

10.7 MHz

UKV tuner section (East European, CIS model)

Tuning range

65.0 - 74.0 MHz

Stereo plus

— Continued on next page —

COMPACT DISC DECK RECEIVER



MICROFILM

SONY®

www.DataSheet4U.com

AM tuner section

Tuning range

2 Band type:

531 – 1,602 kHz
(with the interval set at 9 kHz)
530 – 1,710 kHz
(with the interval set at 10 kHz)

3 Band/4 Band type:

European models:

MW:

531 – 1,602 kHz
(with the interval set at 9 kHz)

LW:

153 – 279 kHz
(with the interval set at 3 kHz)

Middle Eastern models:

MW:

531 – 1,602 kHz
(with the interval set at 9 kHz)

SW:

5.95 – 17.90 MHz
(with the interval set at 5 kHz)

Other models:

MW:

531 – 1,602 kHz
(with the interval set at 9 kHz)
530 – 1,710 kHz
(with the interval set at 10 kHz)

SW:

5.95 – 17.90 MHz
(with the interval set at 5 kHz)

Antenna

Antenna terminals

Intermediate frequency

AM loop antenna
External antenna terminal
450 kHz

General

Power requirements

European models:

230 V AC, 50/60 Hz

Other models:

120 V, 220 V or 230 - 240 V
AC, 50/60 Hz. Adjustable
with voltage selector

Power consumption

HCD-GRX8/R800:

270 watts

HCD-RX88/RX99:

240 watts

Dimensions (w/h/d)

Approx. 280 x 365 x 405
mm

Mass

HCD-GRX8/R800:

Approx. 11.7 kg

HCD-RX88/RX99:

Approx. 10.4 kg

Design and specifications are subject to change
without notice.

CAUTION

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

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

| | |
|----------|---|
| CAUTION | ; INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. |
| ADVARSEL | ; USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSÅFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING. |
| VARO! | ; AVATTAESSA JA SUOJALUKITUS OHITETTAESSA DLET ALTTIINA LASERSÄTELYLLE. |
| VARNING | ; LASERSTRÅLING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. |
| ADVARSEL | ; USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN. |

This caution label is located inside the unit.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

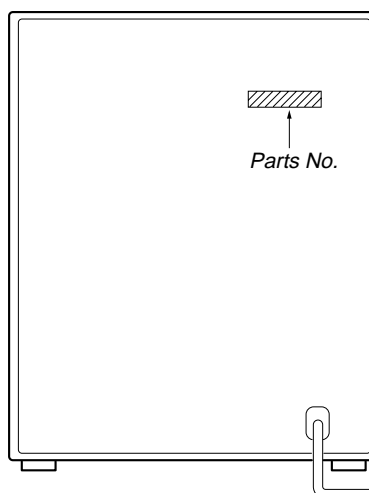
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the "S curve check" in "CD section adjustment" and check that the S curve waveform is output three times.

MODEL IDENTIFICATION — BACK PANEL —



• Abbreviation

- G : German model
- EE : East European model
- MX : Mexican model
- HK : Hong Kong model
- SP : Singapore model
- MY : Malaysia model
- TW : Taiwan model
- AUS : Australian model
- AR : Argentine model
- TH : Thailand model
- EA3 : Saudi arabia model
- EA4 : Israel model
- E2 : Without SW tuner E model.
- E3 : With SW tuner E model.

| PARTS No. | MODEL | PRODUCT COUNTRY |
|--------------|------------------|-----------------|
| 4-996-817-0□ | RX99: AEP, UK, G | MALAYSIA |
| 4-996-817-1□ | RX99: EE, CIS | MALAYSIA |
| 4-996-817-2□ | RX99: AEP, UK, G | INDONESIA |
| 4-996-817-3□ | RX99: EE, CIS | INDONESIA |
| 4-996-817-4□ | RX88 | MALAYSIA |
| 4-996-817-5□ | RX88 | INDONESIA |
| 4-996-817-6□ | GRX8: TH, EA4 | THAILAND |
| 4-996-818-0□ | GRX8: E2, E3 | INDONESIA |
| 4-996-818-1□ | GRX8: SP, MY | INDONESIA |
| 4-996-818-2□ | GRX8: TW | INDONESIA |
| 4-996-818-3□ | GRX8: HK | INDONESIA |
| 4-996-818-4□ | GRX8: AUS | INDONESIA |
| 4-996-818-5□ | GRX8: MX | INDONESIA |
| 4-997-818-8□ | R800: MX | INDONESIA |
| 4-997-818-9□ | R800: AR | INDONESIA |
| 4-997-720-0□ | GRX8: E2, E3 | MALAYSIA |
| 4-997-720-1□ | GRX8: SP, MY | MALAYSIA |
| 4-997-720-2□ | GRX8: TW | MALAYSIA |
| 4-997-720-3□ | GRX8: HK | MALAYSIA |
| 4-997-720-4□ | GRX8: AUS | MALAYSIA |
| 4-997-720-5□ | GRX8: MX | MALAYSIA |
| 4-997-720-6□ | GRX8: EA3 | MALAYSIA |
| 4-997-720-8□ | R800: MX | MALAYSIA |
| 4-997-720-9□ | R800: AR | MALAYSIA |

TABLE OF CONTENTS

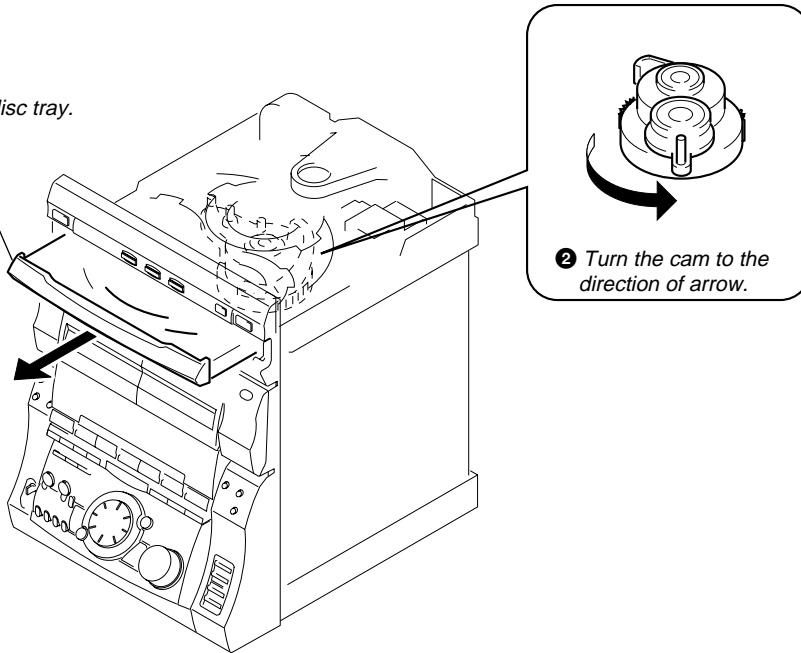
| | |
|--|---|
| <p>1. SERVICING NOTE 5</p> <p>2. GENERAL 6</p> <p>3. DISASSEMBLY</p> <p>3-1. Loading Panel 8</p> <p>3-2. Front Panel 8</p> <p>3-3. Cassette Mechanism Deck 9</p> <p>3-4. Panel Board and Cont Com Board 9</p> <p>3-5. Disc Tray 10</p> <p>4. SERVICE MODE 11</p> <p>5. MECHANICAL ADJUSTMENTS 14</p> <p>6. ELECTRICAL ADJUSTMENTS 14</p> <p>7. DIAGRAMS</p> <p>7-1. Circuit Boards Location 20</p> <p>7-2. Brock Diagrams</p> <ul style="list-style-type: none"> • Tuner Section (AEP, UK, German model) 21 • Tuner Section (East European, CIS model) 23 • CD Section 25 • Deck Section 27 • Main Section 29 • Power Section 31 • Display Section 33 <p>7-3. Printed Wiring Board — CD Section — 37</p> <p>7-4. Schematic Diagram — CD Section — 39</p> <p>7-5. Schematic Diagram —Tuner (AEP, UK, German model) Section — 41</p> <p>7-6. Printed Wiring Board —Tuner (AEP, UK, German model) Section — 43</p> <p>7-7. Printed Wiring Board —Tuner (East European, CIS model) Section — 44</p> <p>7-8. Schematic Diagram —Tuner (East European, CIS model) Section — 45</p> <p>7-9. Schematic Diagram — Deck Section — 47</p> <p>7-10. Printed Wiring Board — Deck Section — 49</p> <p>7-11. Printed Wiring Board — Main Section — 51</p> <p>7-12. Schematic Diagram — Main (1/4) Section — 53</p> <p>7-13. Schematic Diagram — Main (2/4) Section — 55</p> <p>7-14. Schematic Diagram — Main (3/4) Section — 57</p> <p>7-15. Schematic Diagram — Main (4/4) Section — 59</p> <p>7-16. Printed Wiring Board — Mic/HP Section — 61</p> <p>7-17. Schematic Diagram — Mic/HP Section — 62</p> <p>7-18. Printed Wiring Board — Power Section — 63</p> <p>7-19. Schematic Diagram — Power Section — 65</p> <p>7-20. Schematic Diagram — Transformer Section — 67</p> <p>7-21. Printed Wiring Board — Transformer Section — 69</p> <p>7-22. Printed Wiring Board — Leaf SW Section — 70</p> <p>7-23. Schematic Diagram — Leaf SW Section — 70</p> <p>7-24. Printed Wiring Board — Display Section — 71</p> <p>7-25. Schematic Diagram — Display Section — 73</p> <p>7-26. Schematic Diagram — Panel Section — 75</p> <p>7-27. Printed Wiring Board — Panel Section — 77</p> <p>7-28. Schematic Diagram — CD Motor Section — 79</p> <p>7-29. Printed Wiring Board — CD Motor Section — 81</p> <p>7-30. IC Block Diagrams 83</p> <p>7-31. IC Pin Functions 88</p> | <p>8. EXPLODED VIEWS</p> <p>8-1. Case Section 98</p> <p>8-2. Chassis Section 100</p> <p>8-3. Front Panel Section 101</p> <p>8-4. CD Mechanism Deck Section-1 (CDM38L-5BD29AL) .. 102</p> <p>8-5. CD Mechanism Deck Section-2 (CDM38L-5BD29AL) .. 103</p> <p>8-6. Base Unit Section (BU-5BD29AL) 104</p> <p>8-7. TC Mechanism Section 1 (TCM230AWR1) 105</p> <p>8-8. TC Mechanism Section 2 (TCM230AWR2) 106</p> <p>9. ELECTRICAL PARTS LIST 107</p> |
|--|---|

SECTION 1 SERVICING NOTE

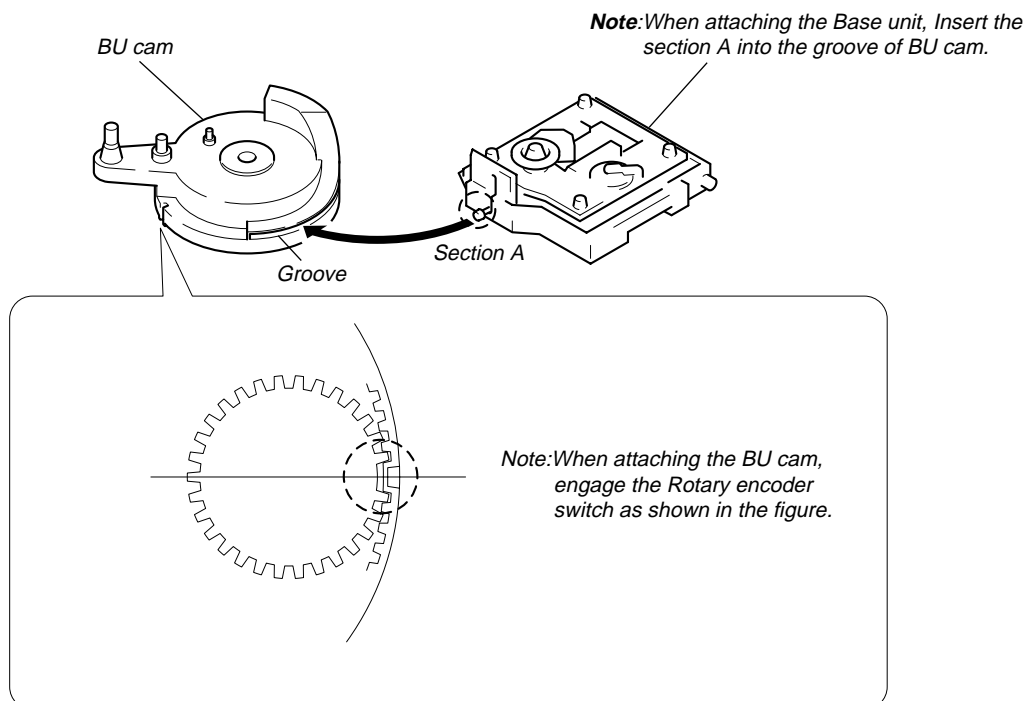
HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF

① Remove the Case.

③ pull-out the disc tray.

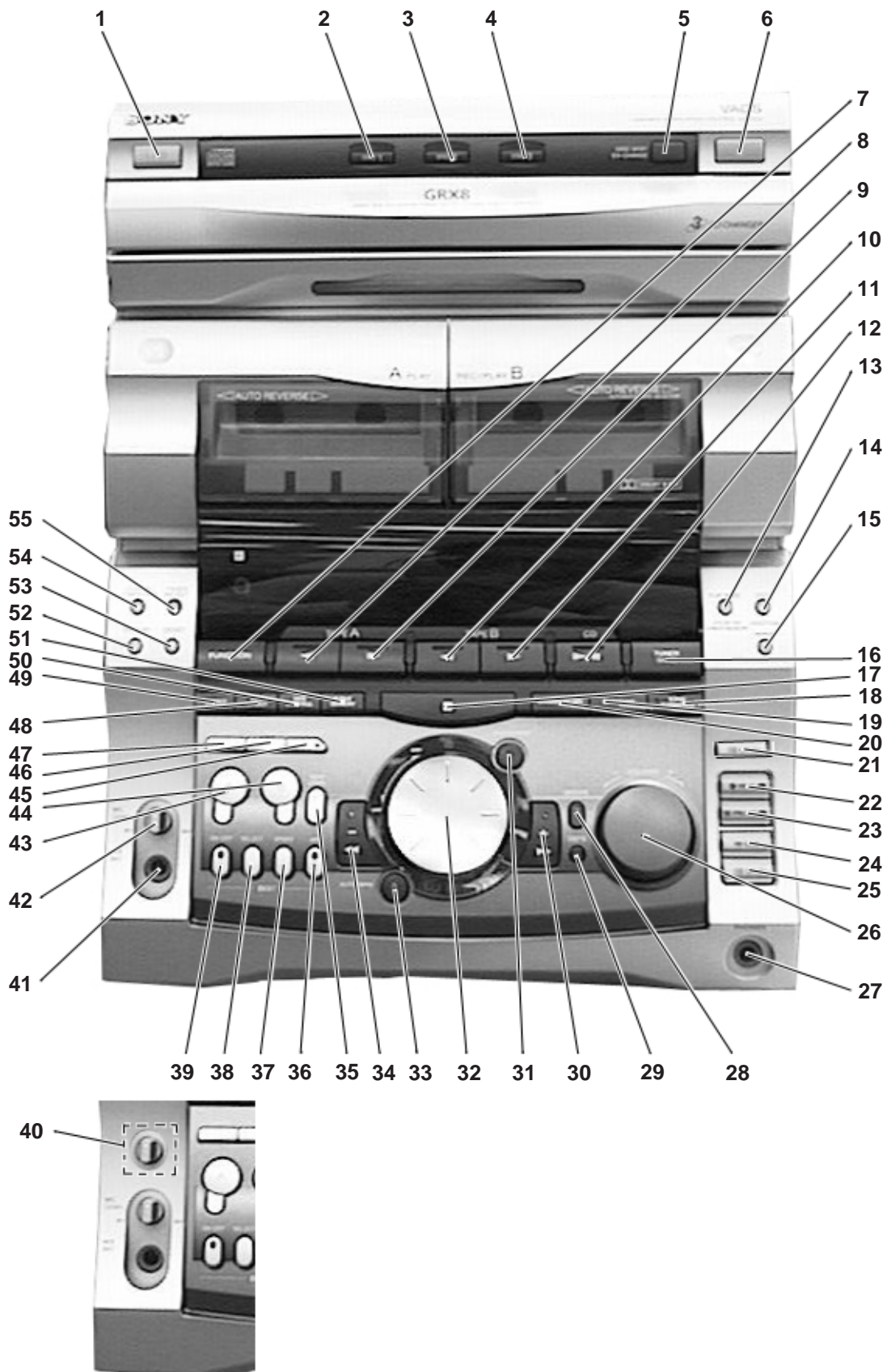


Note for Installation (ROTARY ENCODER)



SECTION 2 GENERAL

Front Panel



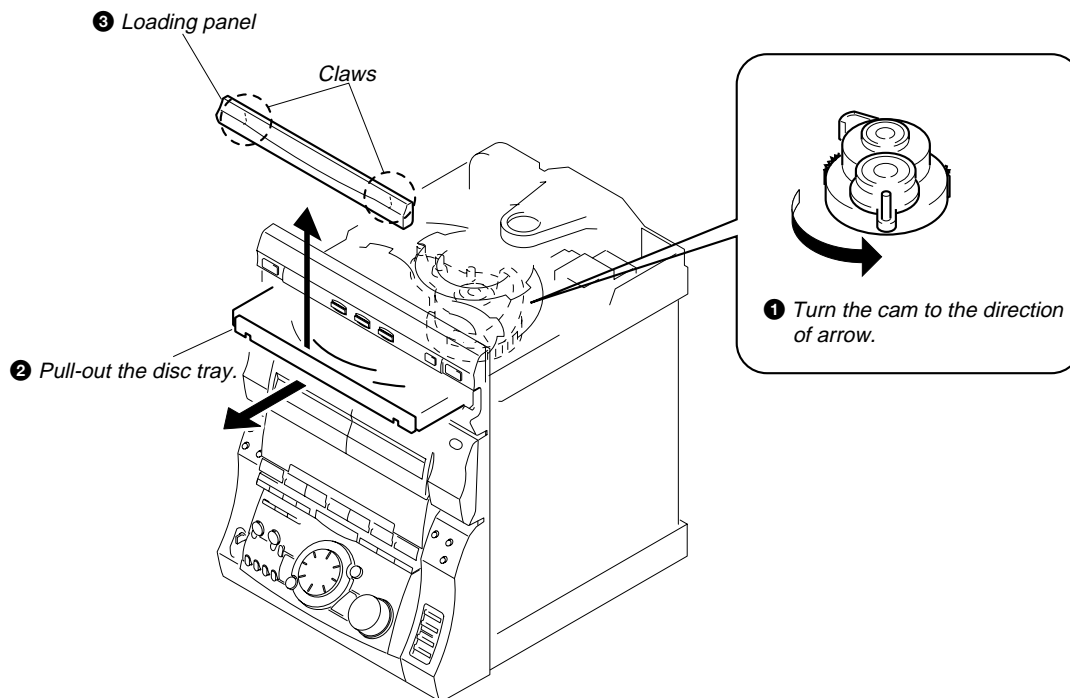
LOCATION OF PARTS AND CONTROLS

- 1 I/⏻ button
- 2 DISC 1 button
- 3 DISC 2 button
- 4 DISC 3 button
- 5 DISC SKIP/EX-CHANGE button
- 6 ≡ button
- 7 FUNCTION button
- 8 Deck A ◁ button
- 9 Deck A ▷ button
- 10 Deck B ◁ button
- 11 Deck B ▷ button
- 12 CD ▷◁ button
- 13 PLAY MODE/DOLBY NR/TUNER MEMORY button
- 14 EDIT/DIRECTION button
- 15 REPEAT/STEREO/MONO button
- 16 TUNER/BAND button
- 17 ■ button
- 18 MUTING button (RX88)
SONIC FORMATION button (GRX8/RX99/R800)
- 19 SURROUND button
- 20 KARAOKE PON/MPX button
- 21 PTY button (AEP, UK model)
- 22 ● REC button
- 23 || PAUSE button
- 24 HI-PUB button
- 25 CD SYNC button
- 26 VOLUME knob
- 27 PHONES jack
- 28 GROOVE button
- 29 DBFB button
- 30 ▶▶/+ button
- 31 ENTER/NEXT button
- 32 JOG button
- 33 AUTO BPM
- 34 ◀◀/- button
- 35 BEAT LEVEL button
- 36 JAM button
- 37 SPEED button
- 38 SELECT button
- 39 ON/OFF button
- 40 ECHO LEVEL knob (Saudi Arabia model)
- 41 MIX MIC jack
- 42 MIC LEVEL knob
- 43 PAD A button
- 44 PAD B button
- 45 NON STOP button
- 46 FLASH button
- 47 LOOP button
- 48 FILE SELECT button
- 49 EFFECT button
- 50 GEQ CONTROL button
- 51 P FILE MEMORY button
- 52 DISPLAY button
- 53 DEMO button
- 54 CLOCK/TIMER SET button
- 55 TIMER/SELECT button

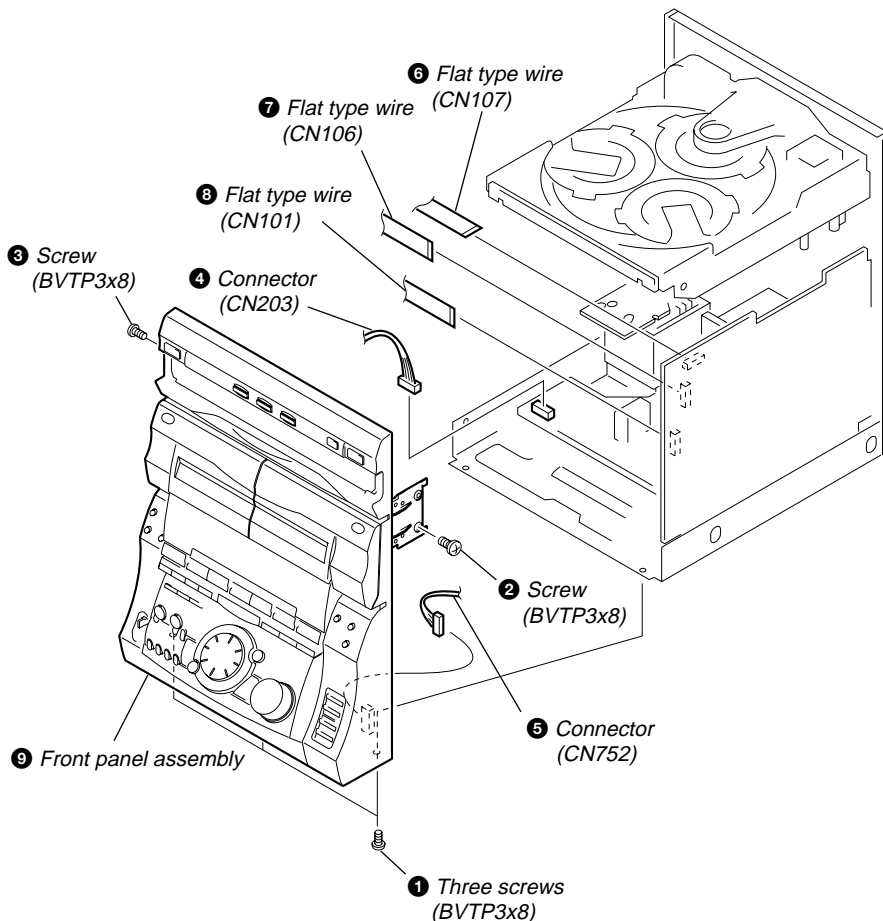
SECTION 3 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

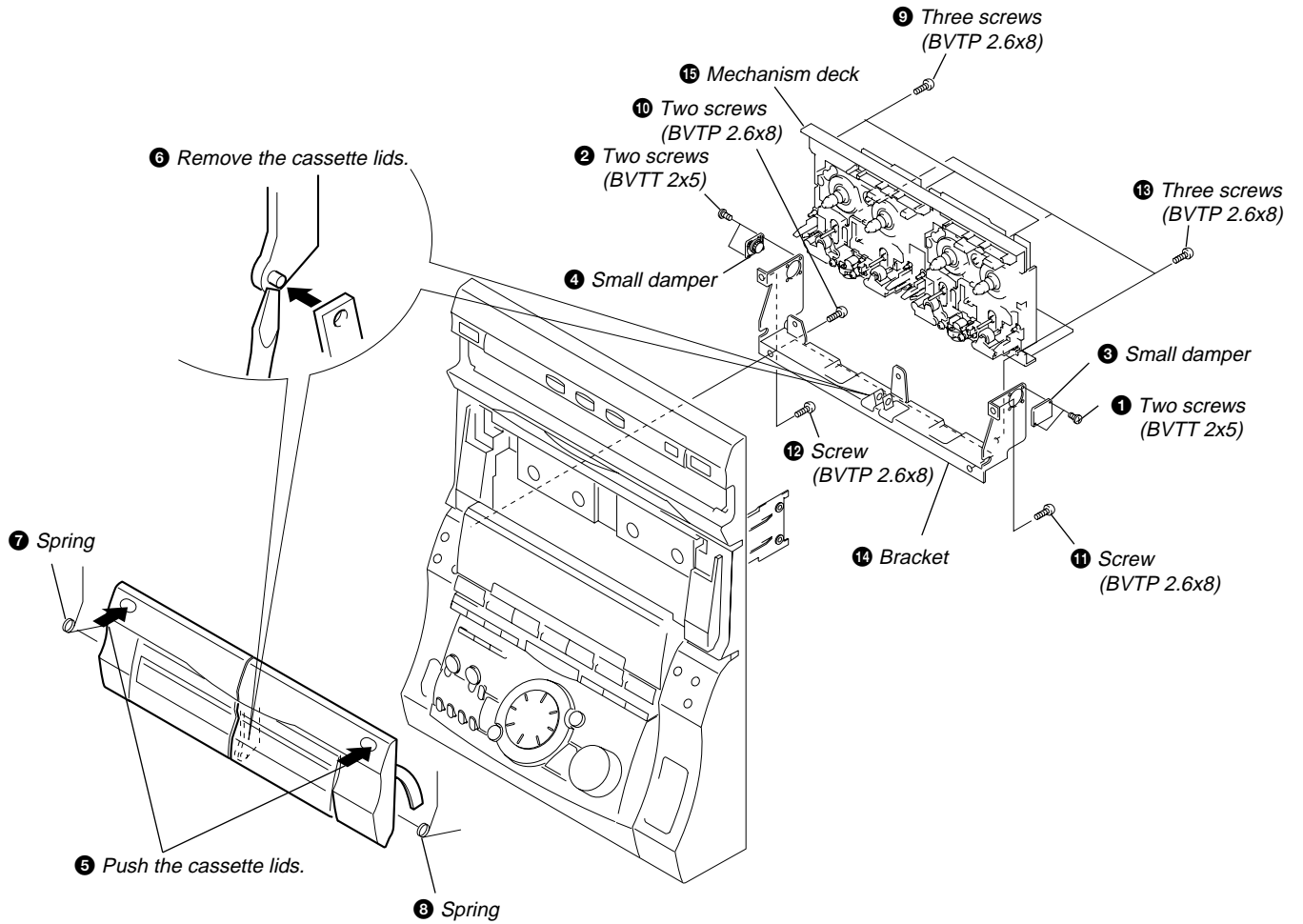
3-1. LOADING PANEL



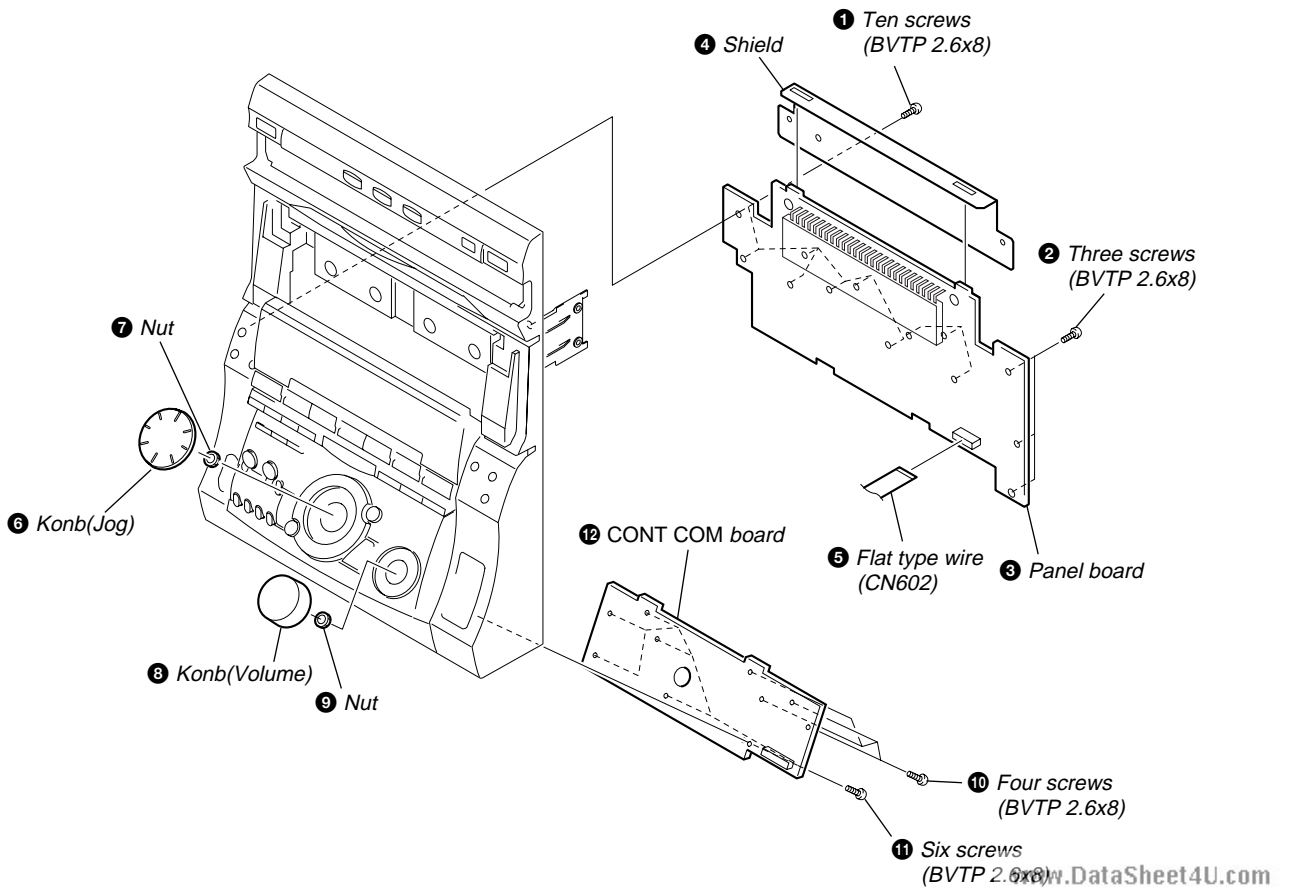
3-2. FRONT PANEL



3-3. CASSETTE MECHANISM DECK



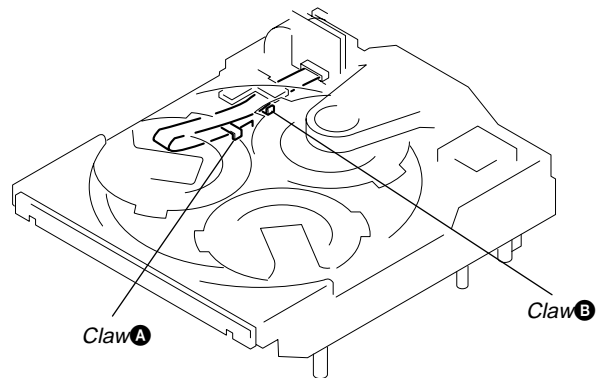
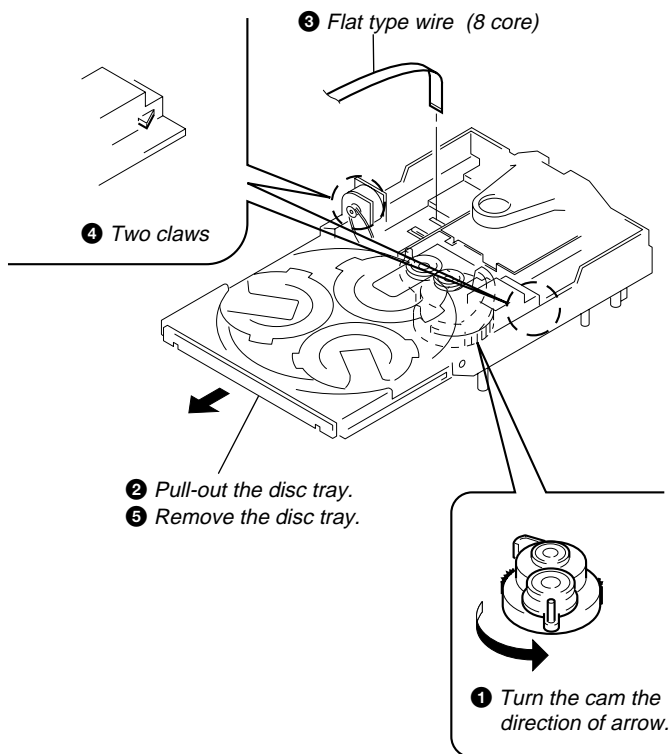
3-4. PANEL BOARD AND CONT COM BOARD



3-5. DISC TRAY

(Perform after removing the front panel.)

Note: When installing the Disc tray, pull around the flat type wire to pass through the clawA and clawB, as shown in the figure.



SECTION 4 SERVICE MODE

MC Cold Reset

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.




Procedure:

- Press three buttons , , and  simultaneously.
- The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

CD Delivery Mode

- This mode moves the pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

- Press  button to turn the set ON.
- Press  button and  button simultaneously.
- A message "LOCK" is displayed on the fluorescent indicator tube, and the CD delivery mode is set.

MC Hot Reset

- This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.






Procedure:

- Press three buttons , , and  simultaneously.
- The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

Sled Servo Mode

- This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the pick-up.

Procedure:

- Select the function "CD".
- Press three buttons , , and  simultaneously.
- The Sled Servo mode is selected, if "CD" is blanking on the fluorescent indicator tube.
- With the CD in stop status, press  button to move the pick-up to outside track, or  button to inside track.
- To exit from this mode, perform as follows:
 - Move the pick-up to the most inside track.
 - Press three buttons in the same manner as step 2.





Note:

- Always move the pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
- Do not run the sled motor excessively, otherwise the gear can be chipped.

Change-over of AM Tuner Step between 9kHz and 10kHz





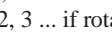
- A step of AM channels can be changed over between 9kHz and 10kHz.

Procedure:

- Press  button to turn the set ON.
- Select the function "TUNER", and press TUNER/BAND button to select the BAND "AM".
- Press  button to turn the set OFF.
- Press  and  buttons simultaneously, and the display of fluorescent indicator tube changes to "AM 9k STEP" or "AM 10k STEP", and thus the channel step is changed over.

LED and Fluorescent Indicator Tube All Lit, Key Check Mode

Procedure:

- Press three buttons , , and  simultaneously.
- LEDs and fluorescent indicator tube are all turned on.
Press  button, and the key check mode is activated.
- In the key check mode, the fluorescent indicator tube displays "K 1 V0 J0". Each time a button is pressed, "K" value increases. However, once a button is pressed, it is no longer taken into account.
 - "J" Value increases like 1, 2, 3 ... if rotating JOG knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
 - "V" Value increases like 1, 2, 3 ... if rotating  knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
- To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

Aging Mode


This mode can be used for checking the operations of the CD player and tape deck.


- When problems occur; Aging stops, and the stopped state is displayed on the fluorescent display tube.
- When no problems; Aging continues.

Preparations:

- Set the CD on the DISC1 tray.
- Insert a commercially available tape for recording (tapes which contents can be erased, etc.) in decks A and B.

Setting the aging mode:

Press the  button, **ENTER/NEXT** button, and **DISC SKIP/EX-CHANGE** button together.

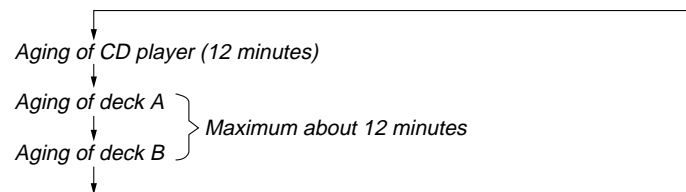
When the aging mode is set, the CD roulette mark blinks. To exit the mode, press the  button and turn OFF the power.

Sequence:

The aging mode is executed in the following sequence.

If the function is set to “CD” when the aging mode is set, aging is performed starting from the CD player. When set to “TAPE A” or “TAPE B”, aging is started from deck A.

If the function is set to others, aging will not be started until the function is switched to CD or TAPE.



Display of status:

- The aging status is displayed on the fluorescent display tube.
- Normally, the CD player displays the remaining aging time. But if operations ended abnormally, it displays the cause.
- During the aging of the tape deck, the operations performed will be displayed. If operations ended abnormally, this will be displayed at the fluorescent display tube.

CD Player

- During normal operations: Display of fluorescent display tube

****1-@@**

** : Displays “CD” and the remaining aging time (minutes) alternately. The remaining aging time is counted down from 12.

@@ : Track number being accessed.

• When operations end abnormally:

Display of fluorescent display tube

| Display | Main Cause |
|-------------|--|
| NO DISC ERR | DISC 1 is NO DISC from the beginning |
| FOCUS1 ERR | Focus is not imposed properly |
| FOCUS2 ERR | The focus deviated several times after the disc rotated normally |
| GFS ERR | GFS ERROR |
| FBIAS ERR | Error during focus bias adjustment |
| SENSOR ERR | DISC 1 was found to be NO DISC by the disc sensor |
| TABLE ERR | The table did not rotate normally |
| TRAY ERR | The tray containing the BD did not operate normally |

Tape Deck

| Display of Operations | Operation | Timing of Ending |
|-----------------------|------------|-----------------------|
| TAPE A AG-1 | TAPE A REW | Shutoff |
| TAPE A AG-2 | TAPE A FWD | 2 minute playback |
| TAPE A AG-3 | TAPE A FF | 20 seconds or shutoff |
| TAPE A AG-4 | TAPE A REV | 2 minutes playback |
| TAPE A AG-5 | TAPE A REW | Shutoff |
| TAPE B AG-1 | TAPE B REW | Shutoff |
| TAPE B AG-2 | TAPE B FWD | 2 minute playback |
| TAPE B AG-3 | TAPE B FF | 20 seconds or shutoff |
| TAPE B AG-4 | TAPE B REV | 2 minute playback |
| TAPE B AG-5 | TAPE B REW | Shutoff |

Operations during aging

- Operations are performed in the following sequence during aging

<CD player>

1. The CD tray rotates and disc 1 is selected.
2. Chucking is performed.
3. TOC is read.
4. Track 1 played back for 2 seconds.
5. The last track is played back for 2 seconds.
6. 1 to 5 is repeated.
7. After 12 minutes of aging, aging is switched to the tape deck.

<Tape Deck>

1. The tape in deck A is rewound to the head.
2. The FWD side is played back for 2 minutes.
3. The tape is fast forwarded (FF) for 20 seconds. The following procedure is performed when the tape end is reached before the 20 seconds.
4. The REV side is played back for 2 minutes.
5. The tape is rewound to the head (REW).
6. The tape in deck B is rewound to the head.
7. The FWD side is played back for 2 minutes.
8. The tape is fast forwarded (FF) for 20 seconds. The following procedure is performed when the tape end is reached before the 20 seconds.
9. The REV side is played back for 2 minutes.
10. The tape is rewound to the head (REW).
11. Aging is switched to the CD player.

SECTION 5 MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:

| | |
|-----------------------|---------------|
| record/playback heads | pinch rollers |
| erase head | rubber belts |
| capstan | idlers |
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

| Mode | Torque meter | Meter reading |
|---------------------|--------------|---|
| FWD | CQ-102C | 31 to 71 g • cm (0.43 – 0.98 oz • inch) |
| FWD back tension | CQ-102C | 2 to 6 g • cm (0.02 – 0.08 oz • inch) |
| REV | CQ-102RC | 31 to 71 g • cm (0.43 – 0.98 oz • inch) |
| REV back tension | CQ-102RC | 2 to 6 g • cm (0.02 – 0.08 oz • inch) |
| FF/REW | CQ-201B | 71 to 143 g • cm (0.98 – 1.99 oz • inch) |
| FWD tension | CQ-403A | 100 g or more (3.53 oz or more) |
| REV tension | CQ-403R | 100 g or more (3.53 oz or more) |

SECTION 6 ELECTRICAL ADJUSTMENTS

DECK SECTION
0 dB=0.775V

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

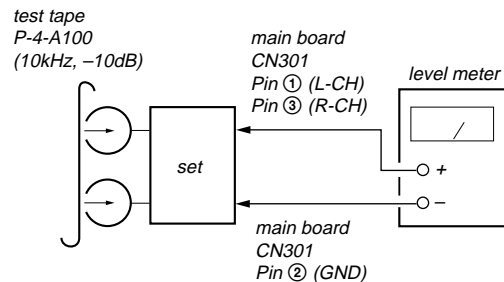
| Tape | Signal | Used for |
|----------|----------------|-----------------------|
| P-4-A100 | 10 kHz, -10 dB | Azimuth Adjustment |
| WS-48B | 3 kHz, 0 dB | Tape Speed Adjustment |
| P-4-L300 | 315 Hz, 0 dB | Level Adjustment |

Record/Playback Head Azimuth Adjustment (Deck A, Deck B)

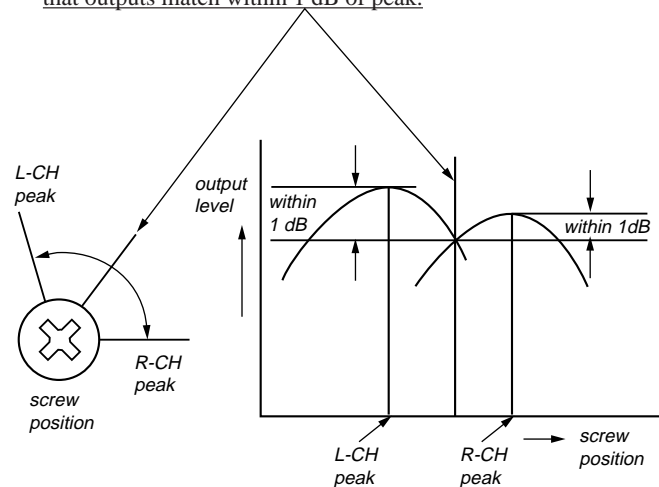
Note: Perform this adjustments for both decks.

Procedure:

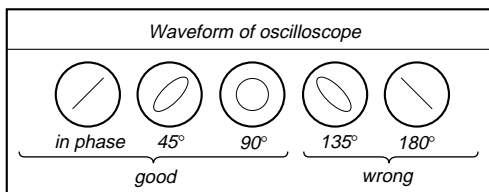
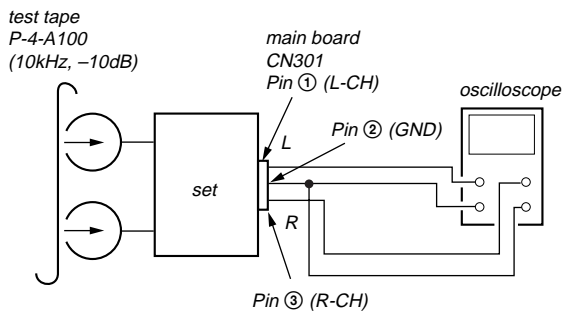
1. Mode : Playback



2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.



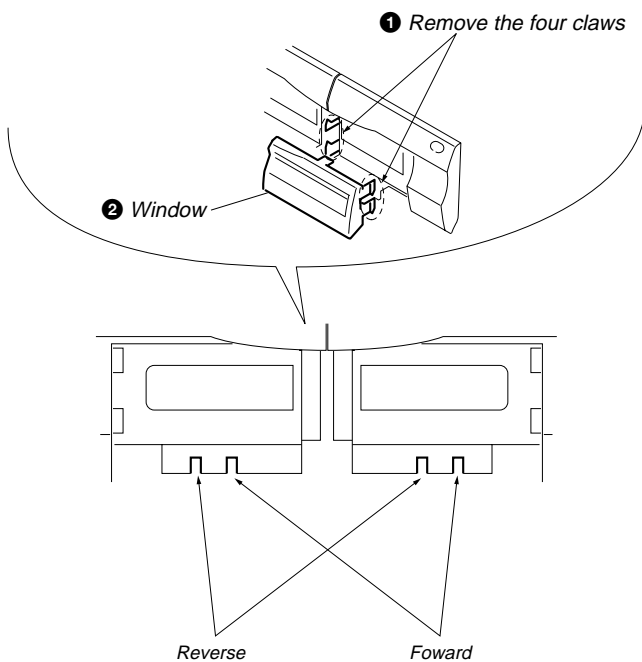
3. Mode: Playback



4. After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location: Playback Head (Deck A)

Record/Playback/Erase Head (Deck B)



Tape Speed Adjustment (Deck A)

Note: Set the test mode using the following method and begin tape speed adjustment.

In the test mode, the speed will switch to double speed or normal speed each time the [HI-DUB] button is pressed.

Procedure:

With the power turned ON, press the [] button, [ENTER/NEXT] button, and [DISC 3] button simultaneously. (The "VOLUME" on the fluorescent display tube will blink while in the test mode.) To exit the test mode, press the [I/O] button.

1. Insert the WS-48B into deck B.
2. Press the [] button of deck B.
3. Press the [HI-DUB] button and play the tape at double speed.
4. Adjust RV1001 of the LEAF SW board so that the reading of the frequency counter becomes 6000 ± 180 Hz.
5. Press the [HI-DUB] button and play the tape at normal speed.
6. Adjust RV1002 of the LEAF SW board so that the reading of the frequency counter becomes 3000 ± 90 Hz.

Adjustment Location: LEAF SW board

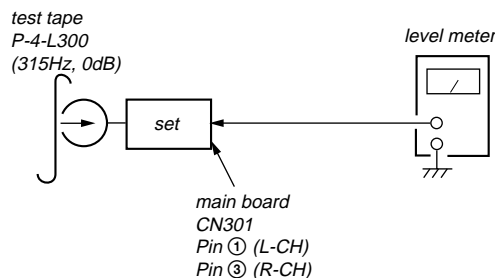
Sample Value of Wow and flutter

W.RMS (JIS) less than 0.3%
(test tape: WS-48B)

Playback Level Adjustment (Deck A, Deck B)

Procedure:

Mode: Playback



Deck A is RV311 (L-CH) and RV411 (R-CH), deck B is RV301 (L-CH) and RV401 (R-CH)

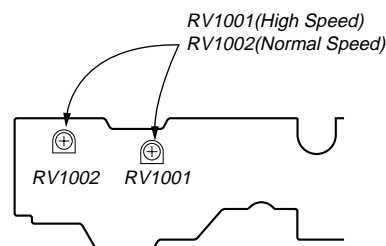
so that adjustment within the following adjustment level.

Adjustment level:

CN301 playback level: 301.5 to 338.3 mV (-8.2 to -7.2 dB)
level difference between the channels: within ± 0.5 dB

Adjustment Location: AUDIO board

Adjustment Location [LEAF SW BOARD]



Record Bias Adjustment (Deck B)

Procedure:

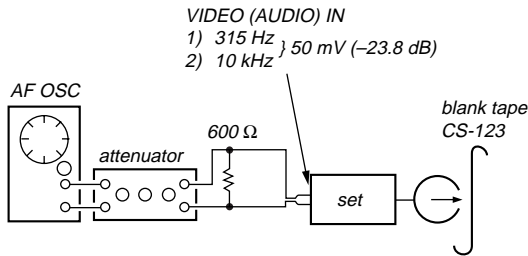
INTRODUCTION

When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.

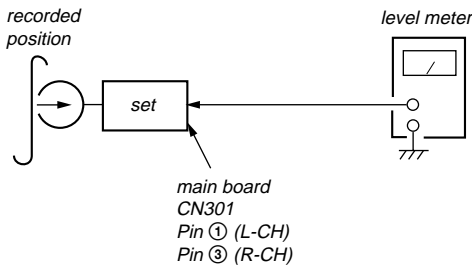
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.

(After recording, press the button without stopping will return to the position where recording was started.)

1. Press **FUNCTION** button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B, press the **REC** button, and then press the button to start recording.
3. Mode: Record



4. Mode: Playback

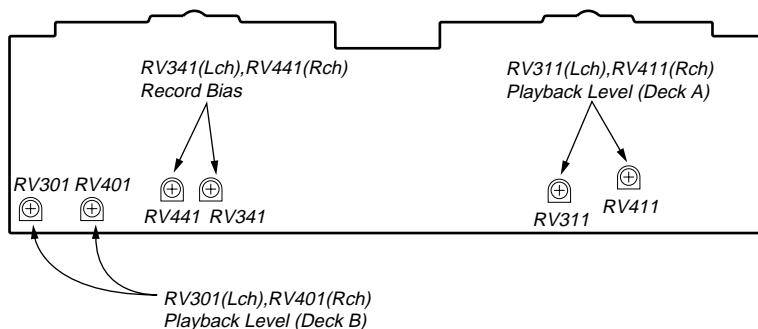


5. Confirm playback the signal recorded in step 2 become adjustment level as follows.
If these levels do not adjustment level, adjust the RV341 (L-CH) and RV441 (R-CH) on the AUDIO board to repeat steps 3 and 4.

Adjustment level: The playback output of 10 kHz level difference against 315 Hz reference should be ± 1.0 dB.

Adjustment Location: AUDIO board

Adjustment Location:
[AUDIO BOARD] (Conductor Side)



Record Level Adjustment (Deck B)

Procedure:

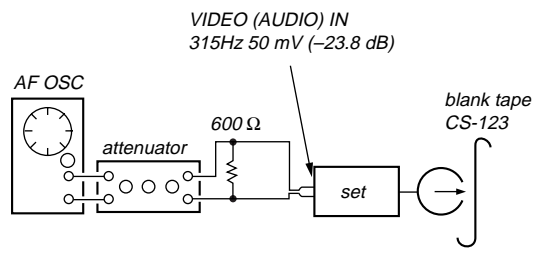
INTRODUCTION

When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.

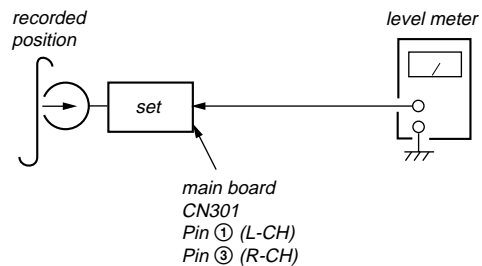
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.

(After recording, press the button without stopping will return to the position where recording was started.)

1. Press **FUNCTION** button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B, press the **REC** button, and then press the button to start recording.
3. Mode: Record



4. Mode: Playback

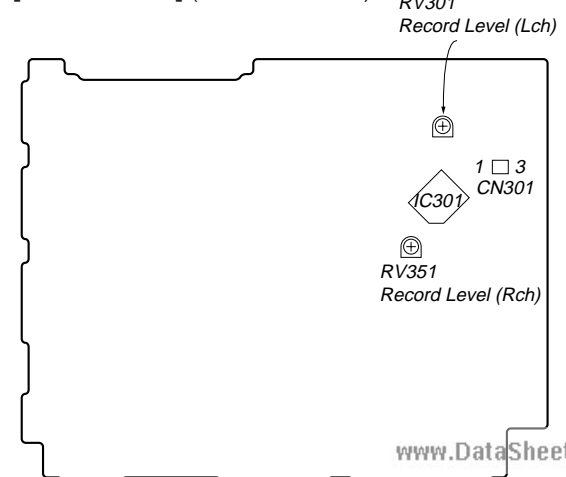


5. Confirm playback the signal recorded in step 2 become adjustment level as follows.
If these levels do not adjustment level, adjust the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 3 and 4.

Adjustment level:
CN403 playback level: 47.2 to 53.0 mV (-24.3 to -23.3 dB)

Adjustment Location: MAIN board

[MAIN BOARD] (Conductor Side)



TUNER SECTION

0dB=1μV

Note 1: As a front-end (FE1) is difficult to repair if faulty, replace it with new one.

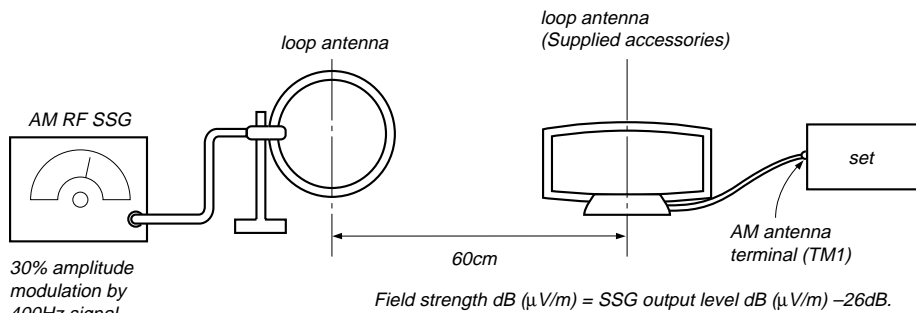
Note 2: No adjustment is needed due to a tuner pack for except AEP, UK, German, East European, CIS models.

AM Tuned Level Adjustment (AEP, UK, German, East European, CIS model only)

Note: FM Tuned Level adjustment should be performed after this AM Tuned Level Adjustment.

Setting:

Band: MW



Modulation: 999 kHz (at 9 kHz step)
1,050 kHz (at 10 kHz step)

Procedure:

1. Set the output of SSG so that the input level of the set becomes 55 dB.
2. Tune the set to 999 kHz or 1,050 kHz.
3. Adjust RV41 to the point (moment) when the TUNED indicator will change from going off to going on.

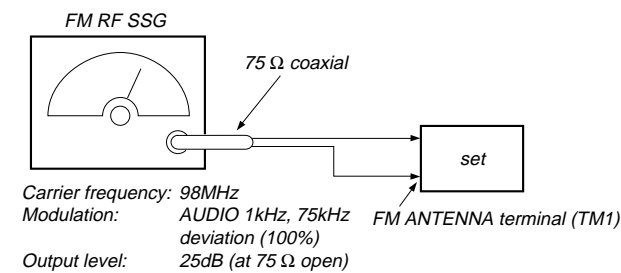
Adjustment Location: TCB board

FM Tuned Level Adjustment (AEP, UK, German, East European, CIS model only)

Note: This adjustment should be performed after the AM Tuned Level Adjustment.

Setting:

Band: FM



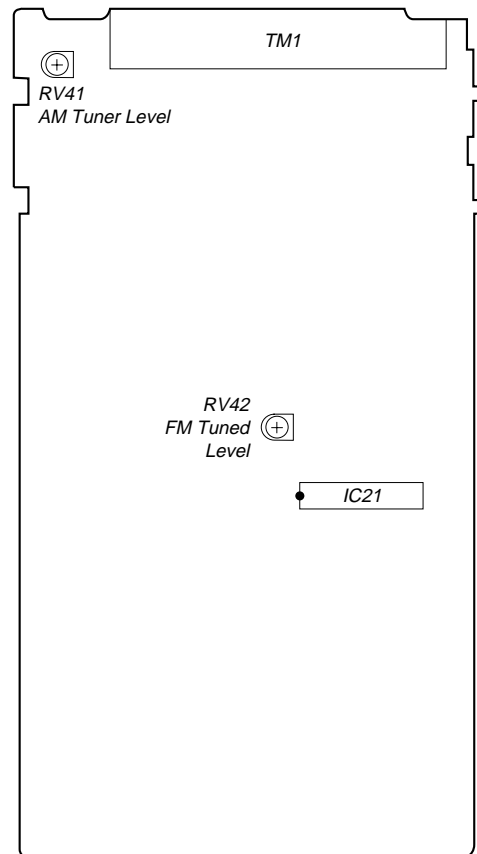
Procedure:

1. Supply a 25 dB 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Adjust RV42 to the point (moment) when the TUNED indicator will change from going off to going on.

Adjustment Location: TCB board

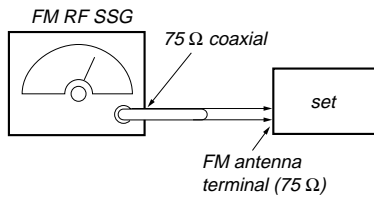
Adjustment Location

[TCB BOARD] (Component Side)



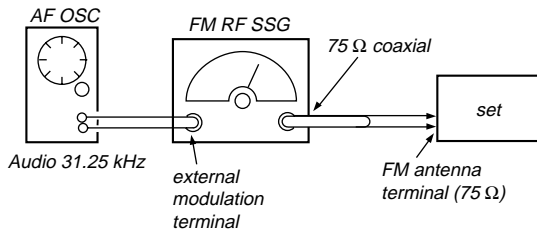
FM Polar Adjustment (East European, CIS model only)

Connection 1 :



Carrier frequency: 69 MHz
 Output level: 1 mV (60 dBμ) (at 75 Ω open)
 Modulation: AUDIO 1 kHz, 10 kHz deviation

Connection 2 :

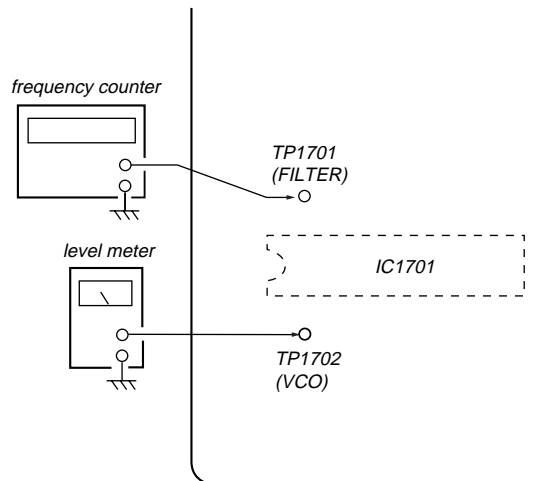


Carrier frequency: 69 MHz
 Output level: 1 mV (60 dBμ) (at 75 Ω open)
 Modulation: AUDIO 31.25 kHz, 10 kHz deviation
 (EXTERNAL MODULATION)

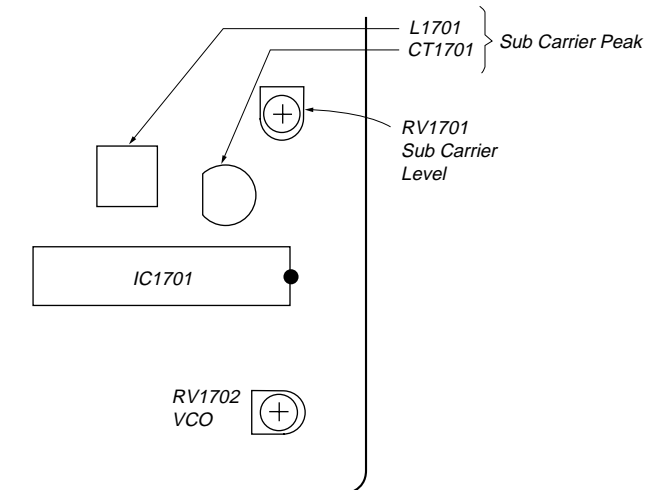
Adjustment Location: TCB board

Adjustment Location:

[TCB BOARD] (Conductor Side)



[TCB BOARD] (Component Side)



Procedure :

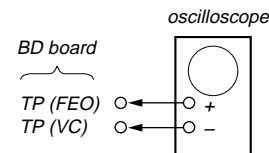
1. Set the modulation of FM RF SSG to AUDIO 1 kHz, 10 kHz deviation according to "Connection 1".
2. Tune the set to 69 MHz.
3. Adjust the RV1702 so that the reading of frequency counter connected to TP1702 (VCO) becomes within 31.25 kHz ± 0.05 kHz. (VCO adjustment)
4. Then record the reading of the level meter connected to TP1701.
5. Set the modulation of FM RF SSG to AUDIO 31.25 kHz, 10 kHz deviation according to "Connection 2".
6. Tune the set to 69 MHz.
7. Set the CT1701 to be mechanical center.
8. Adjust the L1701 so that the reading of the level meter connected to TP1701 (FILTER) becomes maximum. Then adjust the CT1701 so that the reading of the level meter connected to TP1701 (FILTER) becomes maximum. (SUB CARRIER PEAK Adjustment)
9. Adjust the RV1701 so that the level at the moment becomes 14 dB higher value than the level recorded in step 4. (SUB CARRIER LEVEL Adjustment)

CD SECTION

Note:

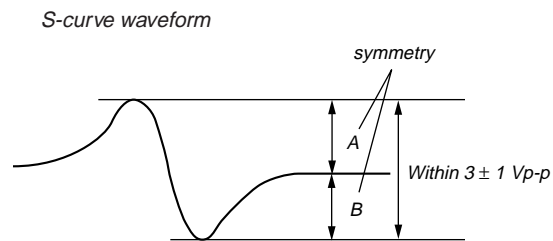
1. CD Block is basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S Curve Check



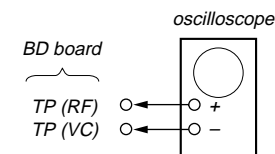
Procedure :

1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and Ground by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3 ± 1 Vp-p.



6. After check, remove the lead wire connected in step 2.
- Note:**
- Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
 - Take sweep time as long as possible and light up the brightness to obtain best waveform.

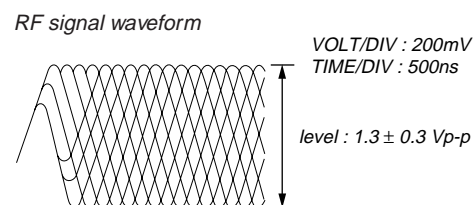
RF Level Check



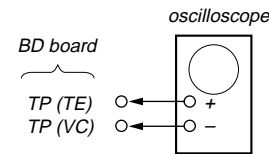
Procedure :

1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note: Clear RF signal waveform means that the shape “◇” can be clearly distinguished at the center of the waveform.

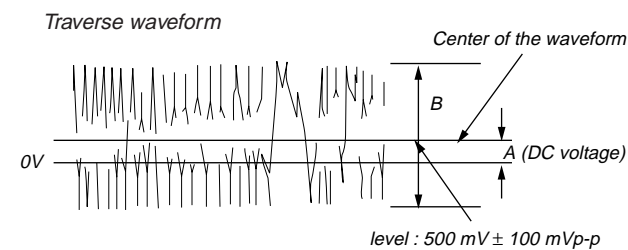


E-F Balance (Traverse) Check

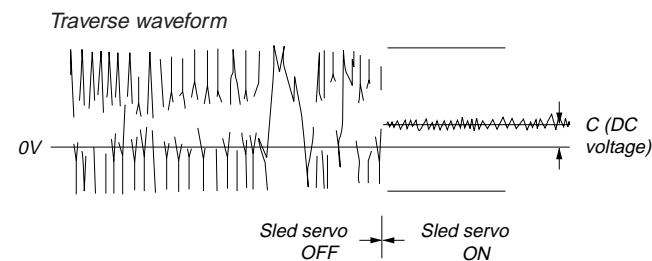


Procedure :

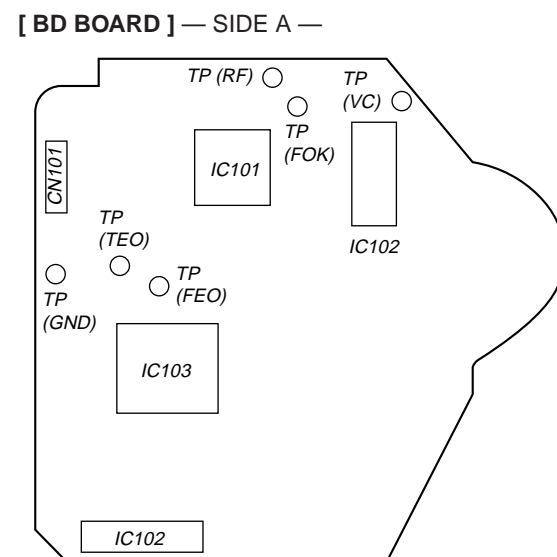
1. Connect oscilloscope to test point TP (TEO) on BD board.
2. Turned Power switch on. Press **FUNCTION** button to select CD.
3. Put disc (YEDS-18) in to play the number five track.
4. Press the **STOP** button, **ENTER/NEXT** button and **PLAY** button simultaneously several times until the “SHUFFLE” on the fluorescent display tube blinks. (The sledding servo is turned OFF.)
5. Check the level B of the oscilloscope’s waveform and the A (DC voltage) of the center of the Traverse waveform. Confirm the following :
 $A/B \times 100 = \text{less than } \pm 7\%$



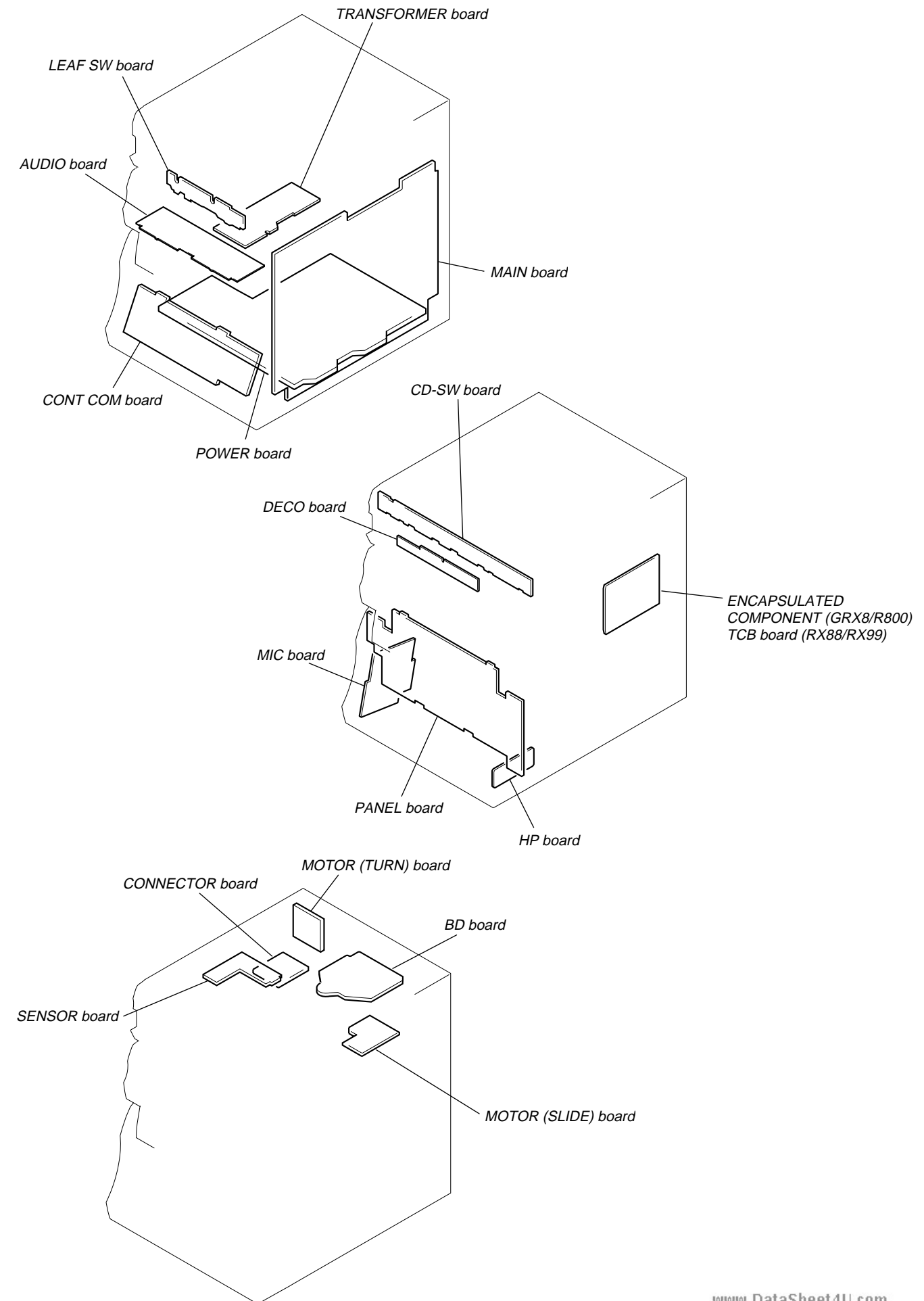
6. Press the **STOP** button, **ENTER/NEXT** button and **PLAY** button simultaneously several times until the “SHUFFLE” on the fluorescent display tube goes off. (The tracking servo and sledding servo are turned ON.) Confirm the C (DC voltage) is almost equal to the A (DC voltage) is step 5.



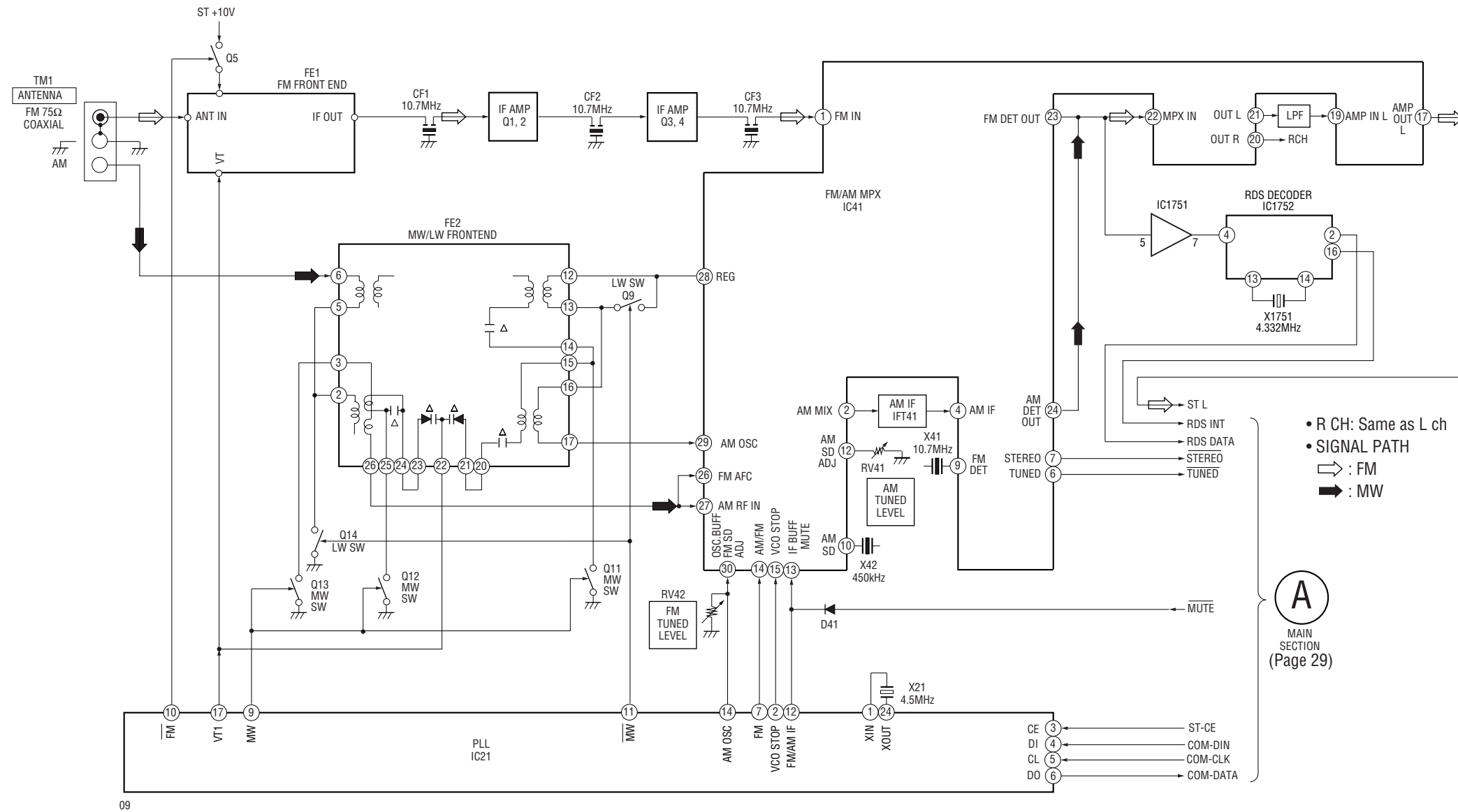
Adjustment Location :



7-1. CIRCUIT BOARDS LOCATION

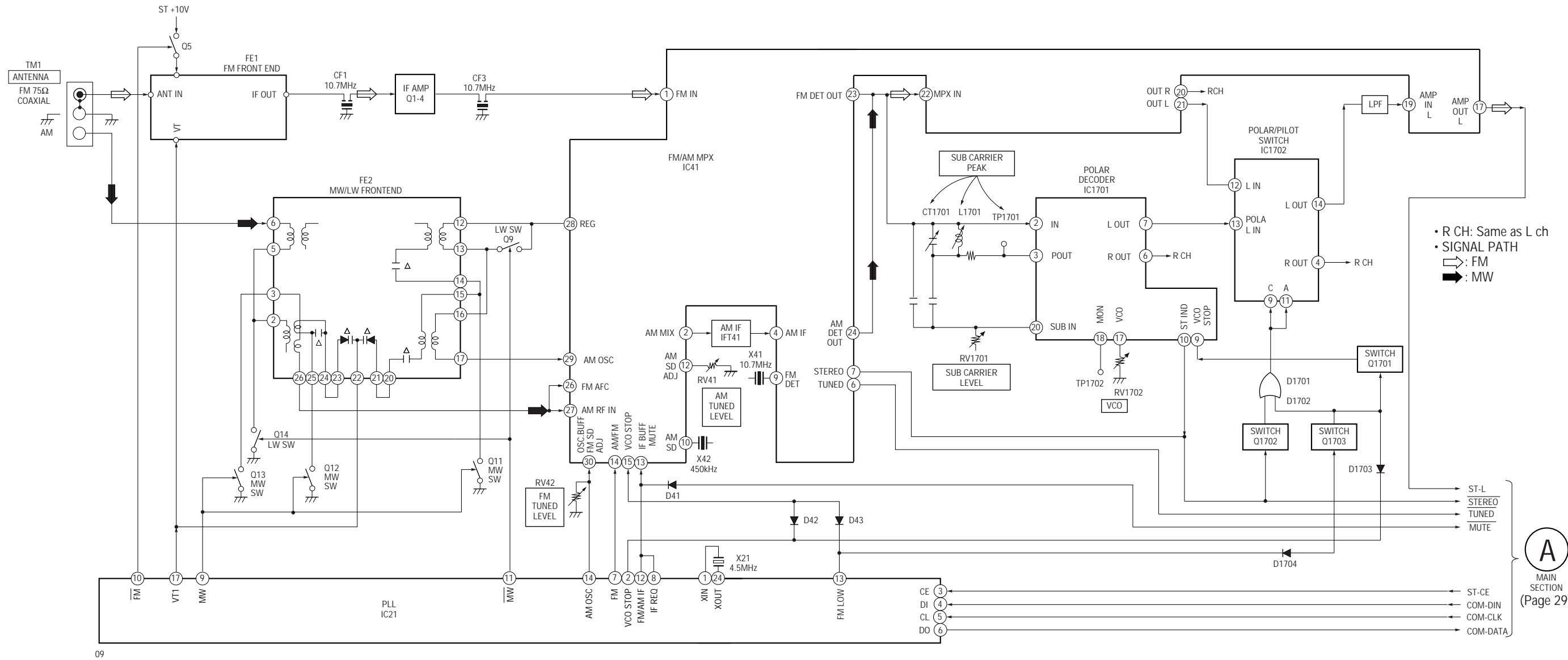


7-2. BLOCK DIAGRAMS
- TUNER SECTION - (AEP, UK, German model)

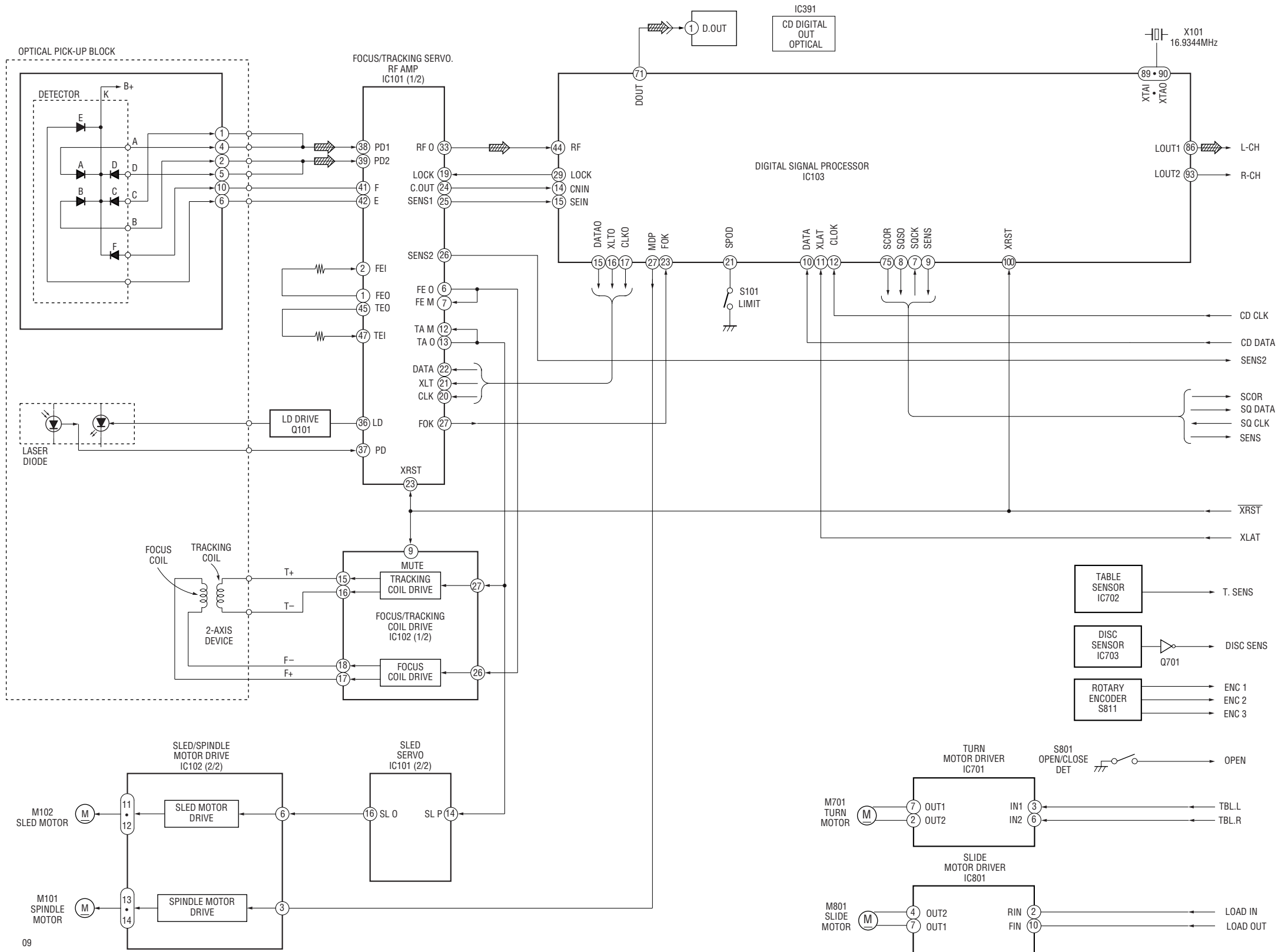


09

- TUNER SECTION - (East European, CIS model)



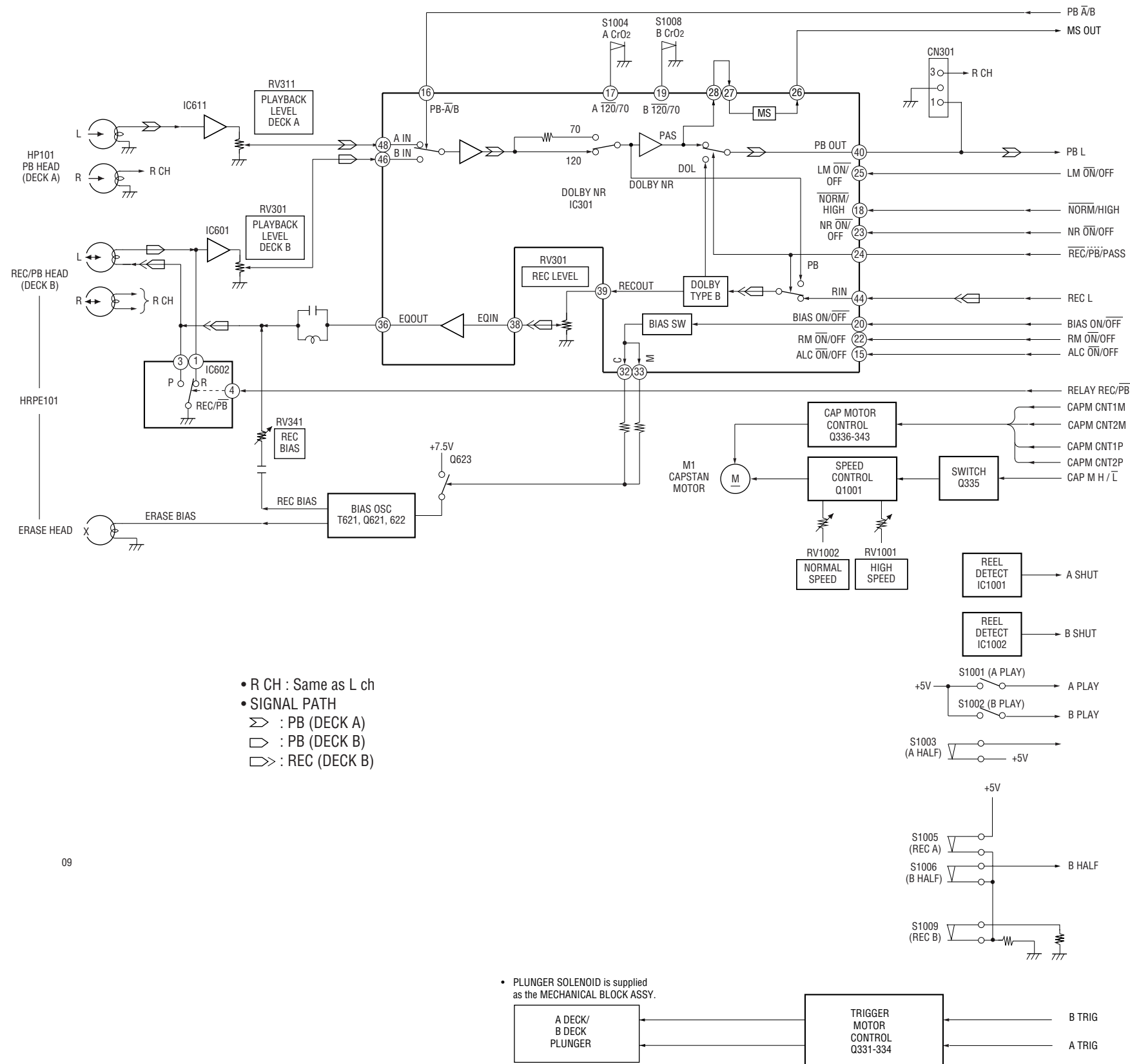
- CD SECTION -



C
MAIN SECTION
(Page 29)

- R CH: Same as L ch
- SIGNAL PATH
- ▨ : CD
- ▨▨ : Digital out

- DECK SECTION -



B
MAIN SECTION
(Page 29)

09

— MAIN SECTION —

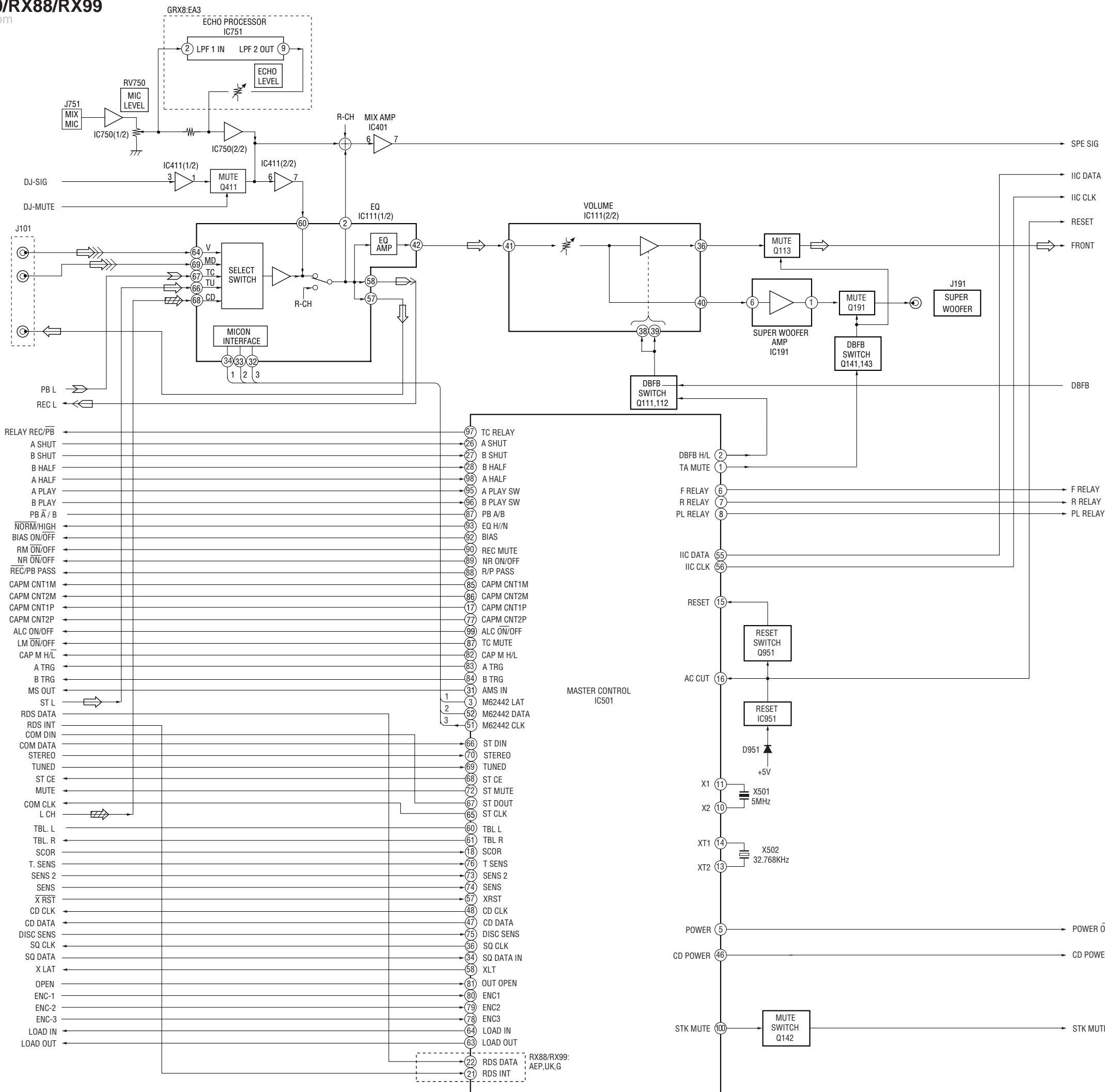
(Page 34)
DISPLAY SECTION
F

VIDEO/IN (AUDIO) L
MD IN L
MD/VIDEO (AUDIO) OUT L

B
DECK SECTION
(Page 28)

A
TUNER SECTION
(Page 22, 24)

C
CD SECTION
(Page 26)



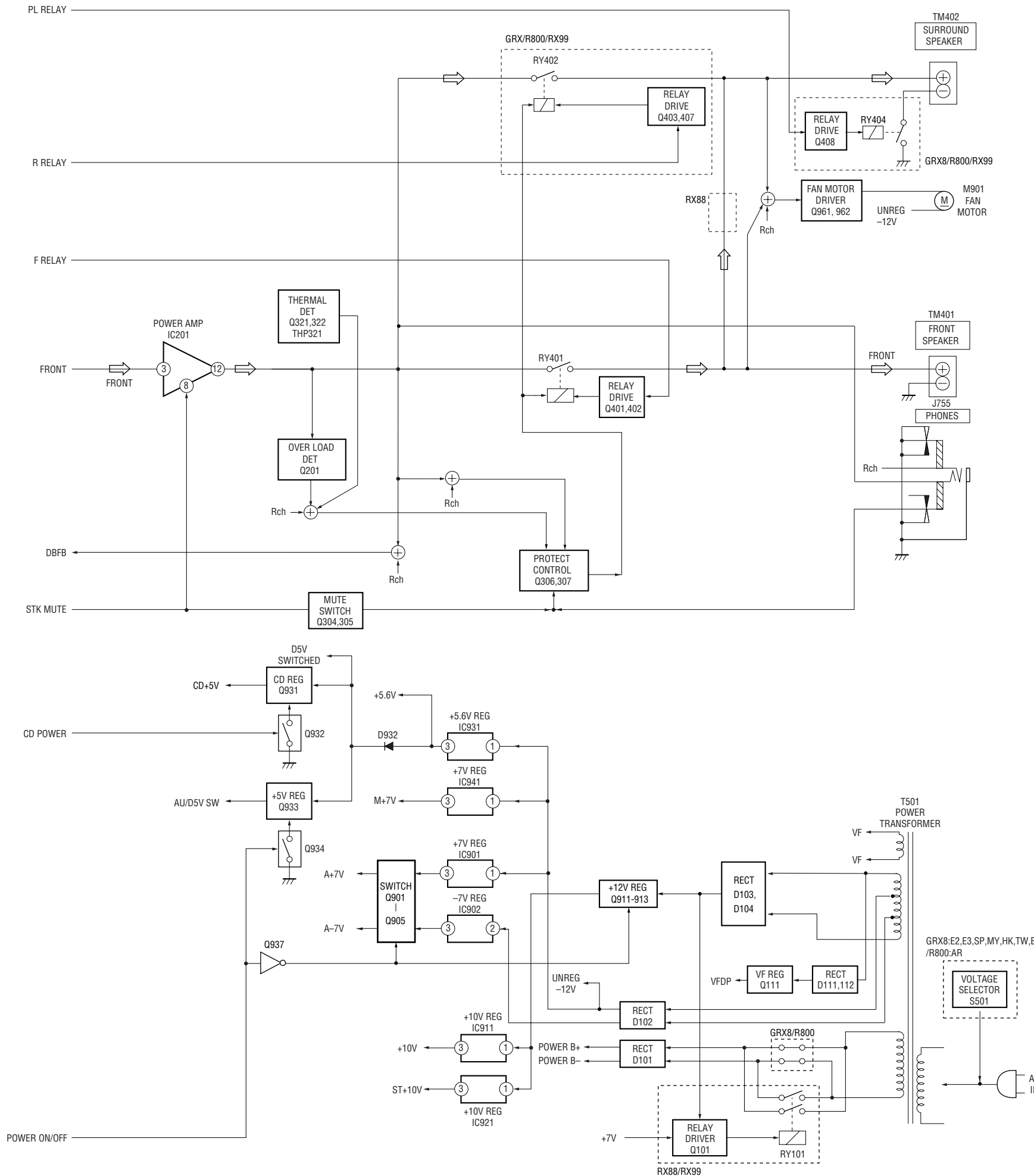
E
DISPLAY SECTION
(Page 33)

D
POWER SECTION
(Page 31)

- R CH: Same as L ch
- SIGNAL PATH
 - ⇒ : FM
 - ⇨ : CD
 - ⇩ : PB
 - ⇨ : REC
 - ⇨⇨ : VIDEO/MD
- Abbreviation
 - G : German model.
 - EA3 : Saudi Arabia model.

- POWER SECTION -

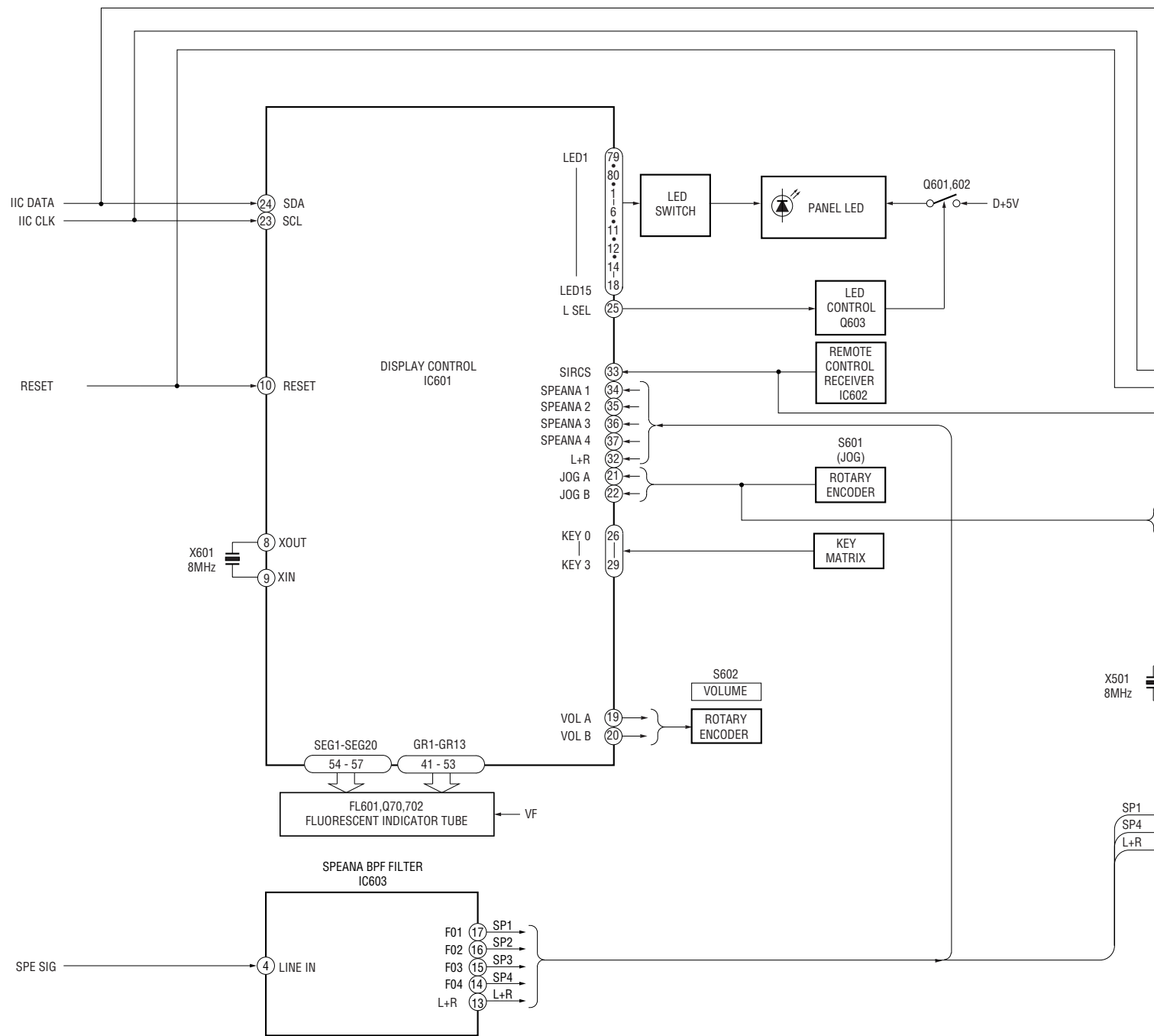
D
MAIN SECTION
(Page 30)



- R CH : Same as L ch
- SIGNAL PATH
 ⇨ : FM
- Abbreviation
 E2 : Without SW tuner E model.
 E3 : Without SW tuner E model.
 EA3 : Saudi Arabia model.
 SP : Singapore model.
 MY : Malaysia model.
 HK : Hong Kong model.
 TW : Taiwan model.
 AR : Argentine model.

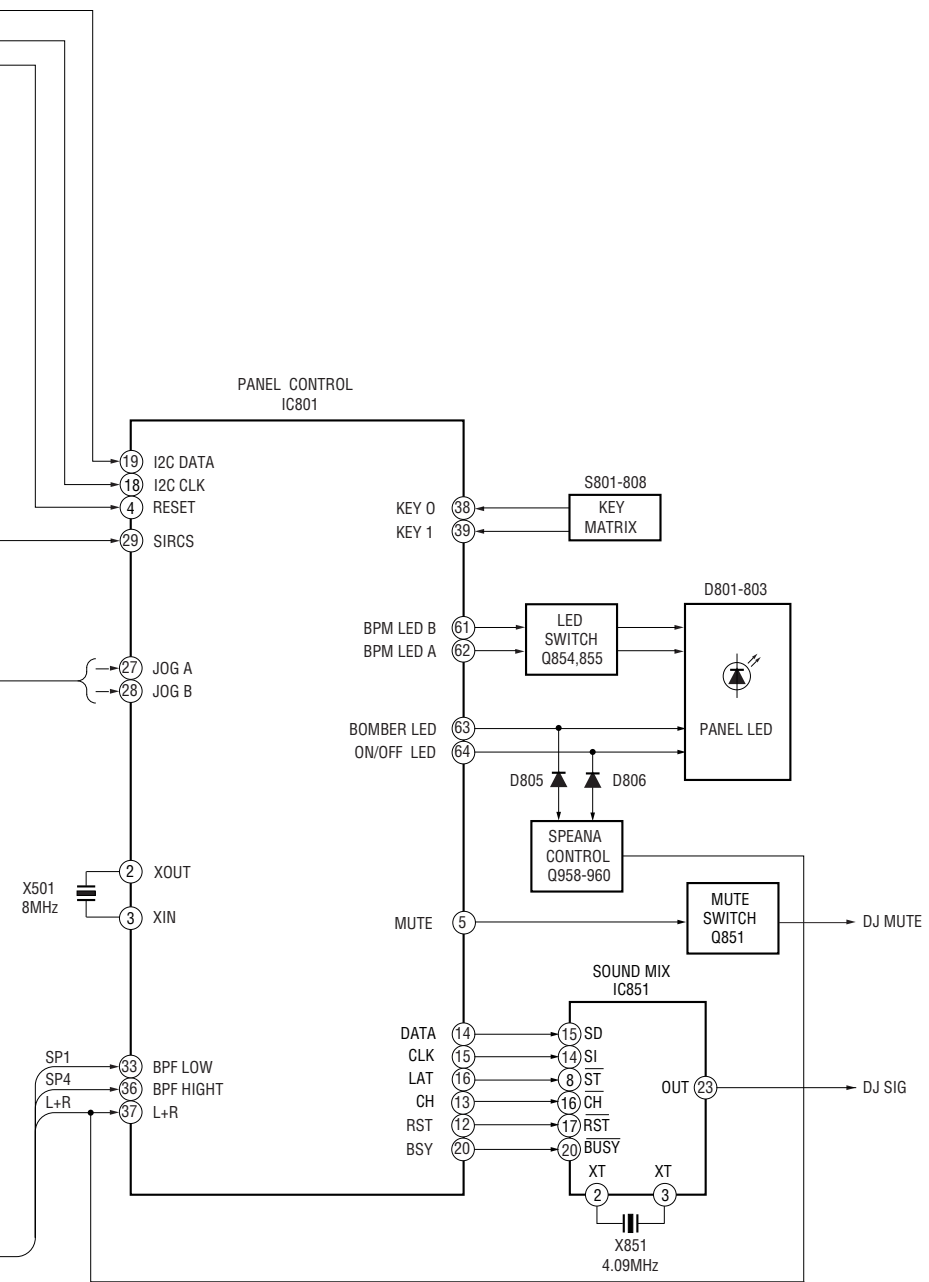
- DISPLAY SECTION -

E
MAIN SECTION
(Page 30)



09

F
MAIN SECTION
(Page 29)



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
 (In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$ 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{ W}$ or less unless otherwise specified.
- Δ : internal component.
- \square : panel designation.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

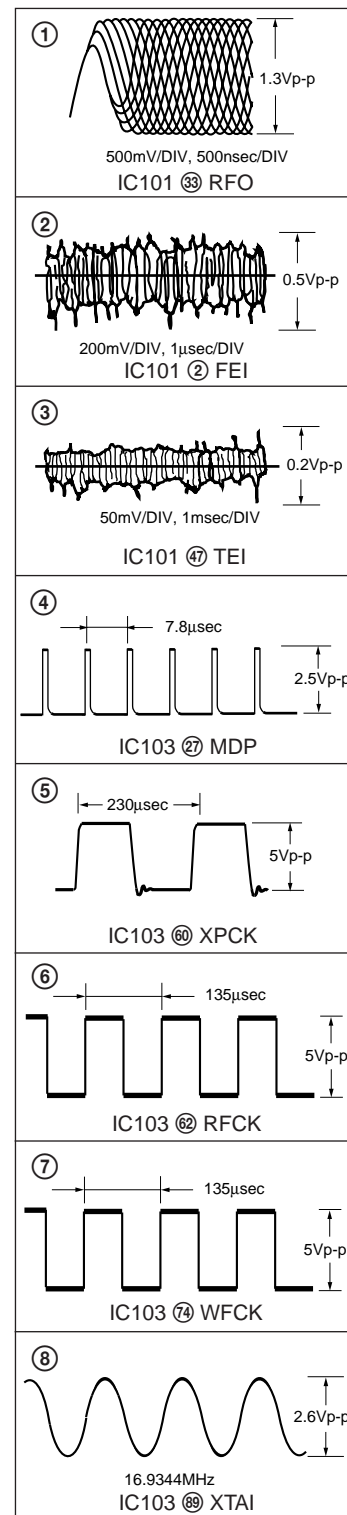
- $\text{B}+$: B+ Line.
- $\text{B}-$: B- Line.
- \square : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 - \Rightarrow : FM
 - \Rightarrow : AM
 - \Rightarrow : VIDEO/MD
 - \Rightarrow : PB (DECK A)
 - \Rightarrow : PB (DECK B)
 - \Rightarrow : REC (DECK B)
 - \Rightarrow : CD
 - \Rightarrow : digital out
- Abbreviation
 - G : German model.
 - E2 : Without SW tuner E model.
 - E3 : With SW tuner E model.
 - EA3 : Saudi Arabia model.
 - EA4 : Israeli model.
 - EE : East European model.
 - AUS : Australian model.
 - SP : Singapore model.
 - MY : Malaysia model.
 - HK : Hong Kong model.
 - TW : Taiwan model.
 - AR : Argentine model.
 - IA : Indonesian model.
 - TH : Thai model.
 - MX : Mexican model.
 - SAF : South African model.

For printed wiring boards.

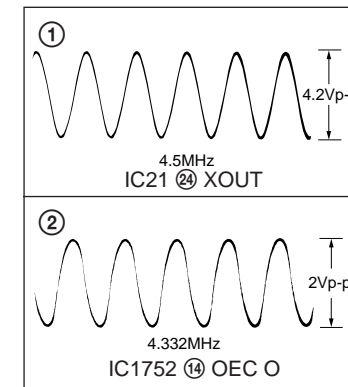
Note:

- \circ : parts extracted from the component side.
- \blacksquare : parts mounted on the conductor side.
- \circ : Through hole.
- \square : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)

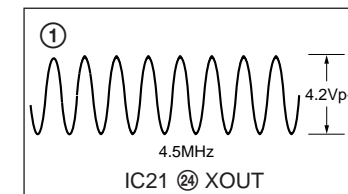
WAVEFORMS
- CD SECTION -



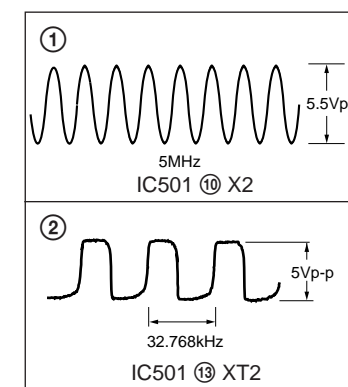
- TUNER SECTION -
(AEP, UK, German model)



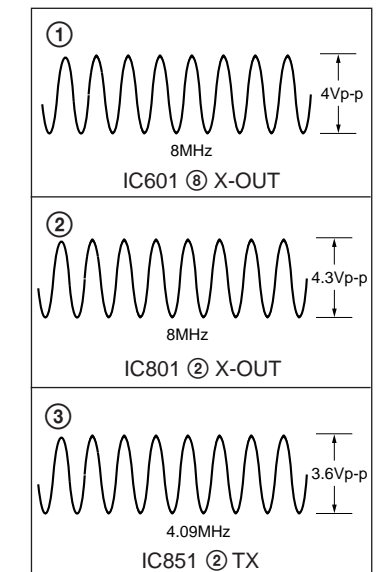
- TUNER SECTION -
(East European, CIS model)



- MAIN SECTION -



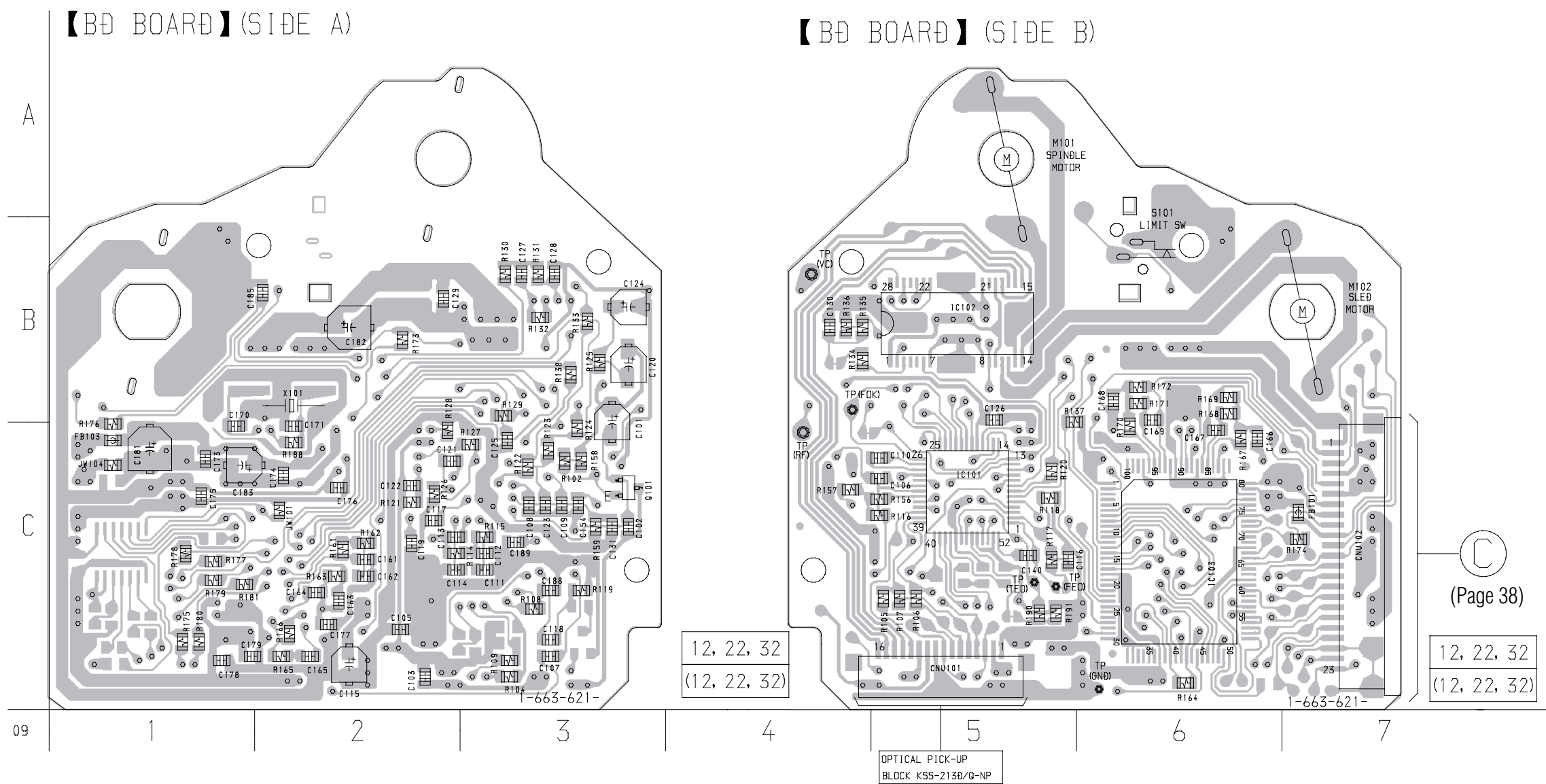
- DISPLAY SECTION -



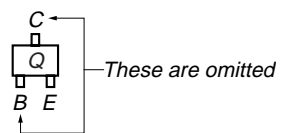
7-3. PRINTED WIRING BOARD — CD SECTION —
• See page 20 for Circuit Boards Location.

• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| IC101 | C-5 |
| IC102 | B-5 |
| IC103 | C-6 |
| Q101 | C-3 |

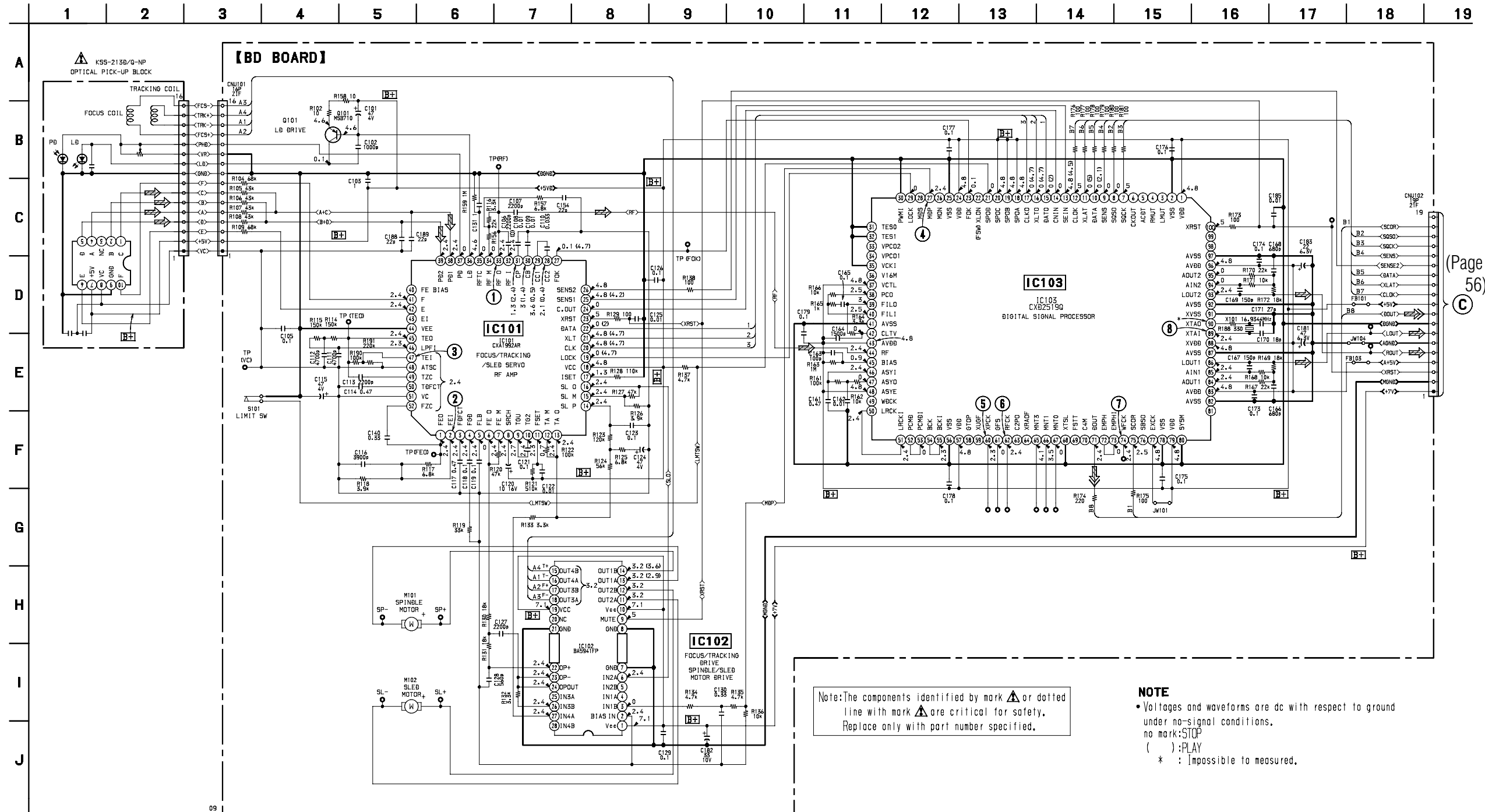


• Indication of transistor



7-4. SCHEMATIC DIAGRAM — CD SECTION —

- See page 35 for Waveforms.
- See page 85 for IC Block Diagrams.
- See page 88 for IC Pin Functions.

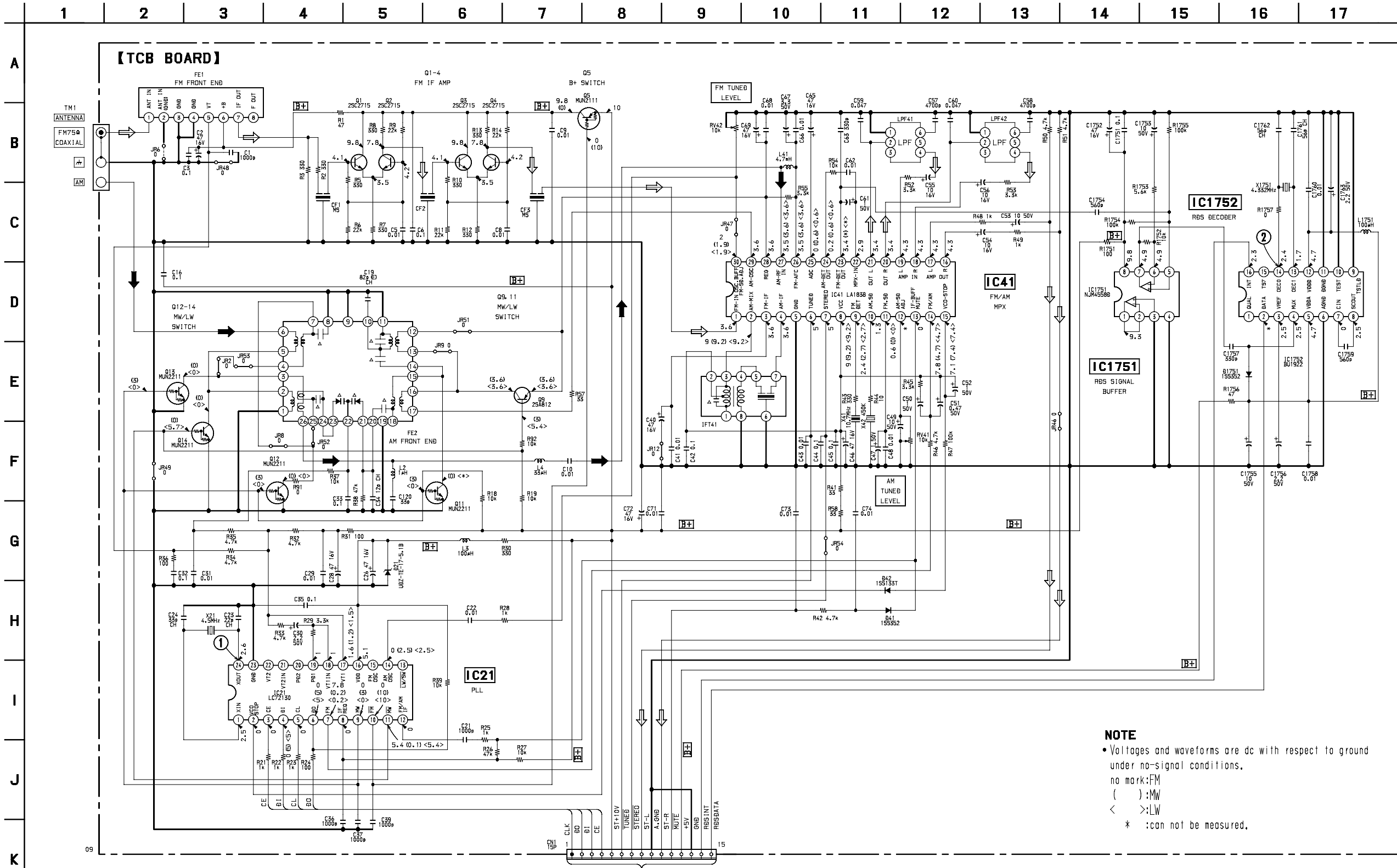


(Page 56)
C

NOTE
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark: STOP
() : PLAY
* : Impossible to measured.

7-5. SCHEMATIC DIAGRAM – TUNER SECTION – (AEP, UK, German model)

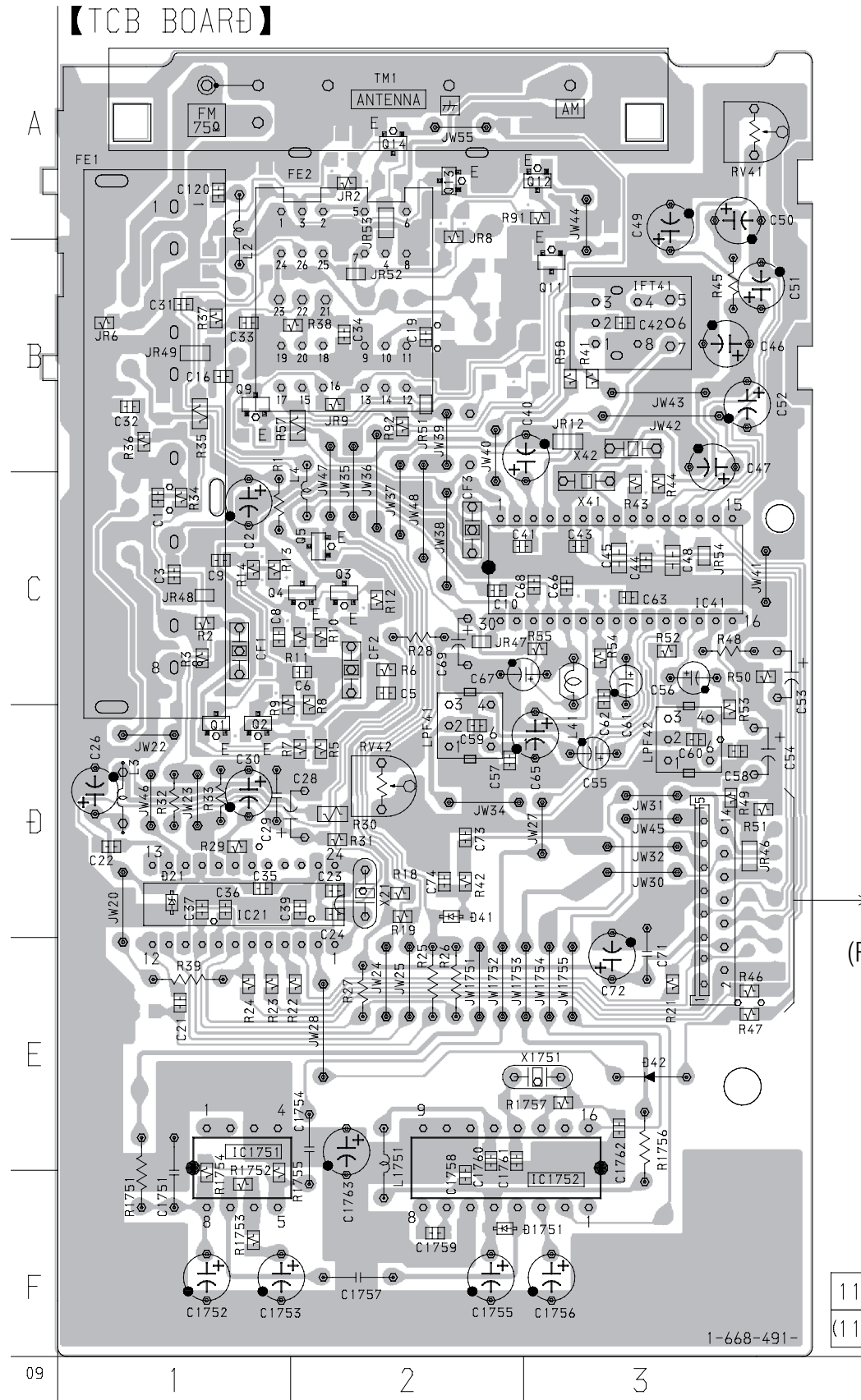
- See page 36 for Waveforms.
- See page 83 for IC Block Diagrams.



NOTE
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark:FM
():MW
< >:LW
* :can not be measured.

(Page 53)

7-6. PRINTED WIRING BOARD – TUNER SECTION – (AEP, UK, German model)
 • See page 20 for Circuit Boards Location.



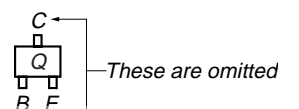
• **Semiconductor Location**

| Ref. No. | Location |
|----------|----------|
| D21 | D-1 |
| D41 | D-2 |
| D42 | E-3 |
| D1751 | F-2 |
| IC21 | D-1 |
| IC41 | C-3 |
| IC1751 | E-1 |
| IC1752 | F-3 |
| Q1 | D-1 |
| Q2 | D-1 |
| Q3 | C-2 |
| Q4 | C-2 |
| Q5 | C-2 |
| Q9 | B-1 |
| Q11 | B-3 |
| Q12 | A-3 |
| Q13 | A-2 |
| Q14 | A-2 |

A
(Page 52)

11
(11)

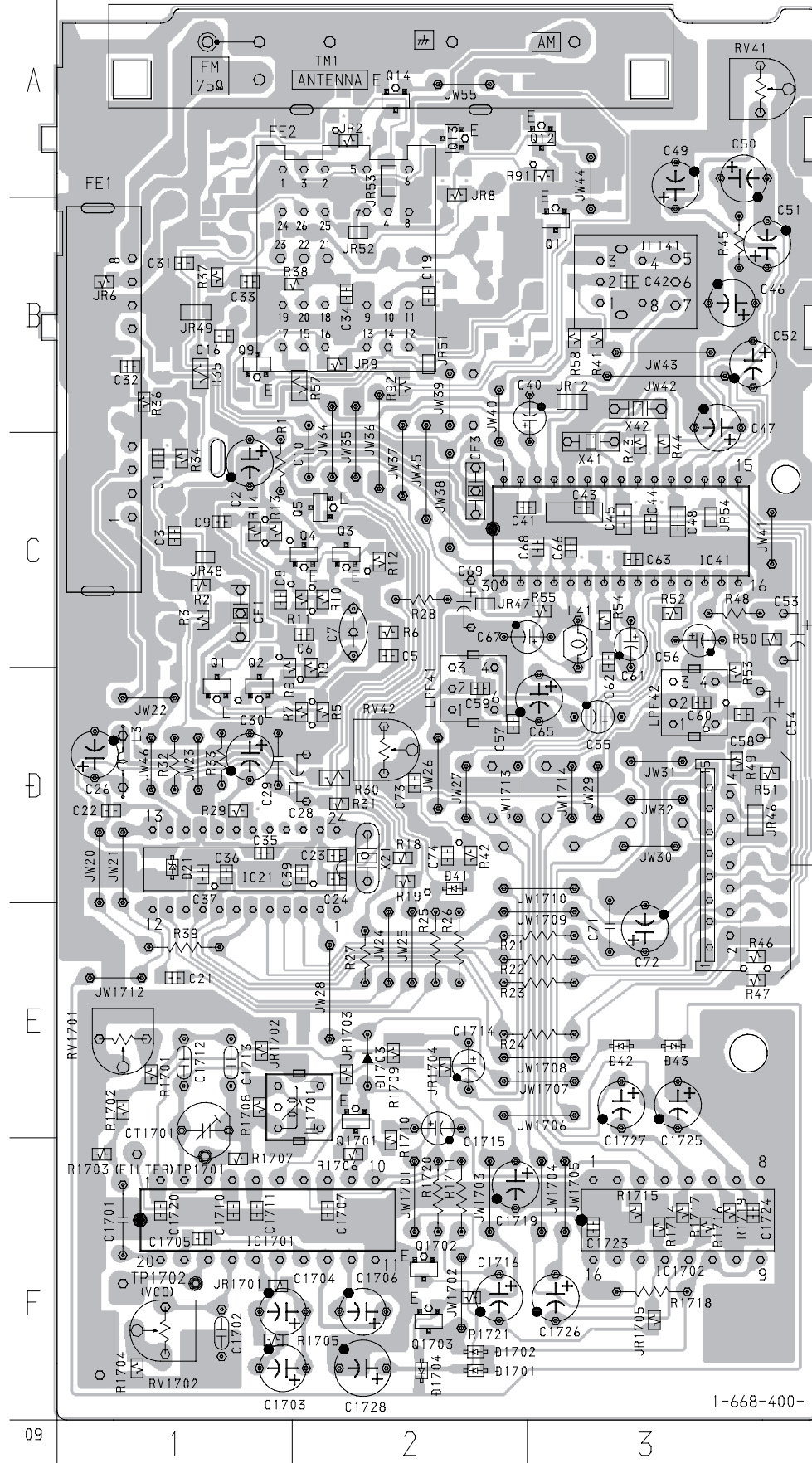
• **Indication of transistor**



7-7. PRINTED WIRING BOARD – TUNER SECTION – (East European, CIS model)

• See page 20 for Circuit Boards Location.

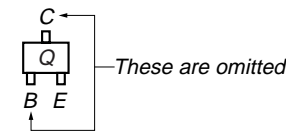
【TCB BOARD】



• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| D1 | D-1 |
| D41 | D-2 |
| D42 | E-3 |
| D43 | E-3 |
| D1701 | F-2 |
| D1702 | F-2 |
| D1703 | E-2 |
| D1704 | F-2 |
| IC21 | D-1 |
| IC41 | C-3 |
| IC1701 | F-1 |
| IC1702 | F-3 |
| Q1 | D-1 |
| Q2 | D-2 |
| Q3 | C-2 |
| Q4 | C-2 |
| Q5 | C-2 |
| Q9 | B-1 |
| Q11 | B-3 |
| Q12 | A-3 |
| Q13 | A-2 |
| Q14 | A-2 |
| Q1701 | E-2 |
| Q1702 | F-2 |
| Q1703 | F-2 |

• Indication of transistor

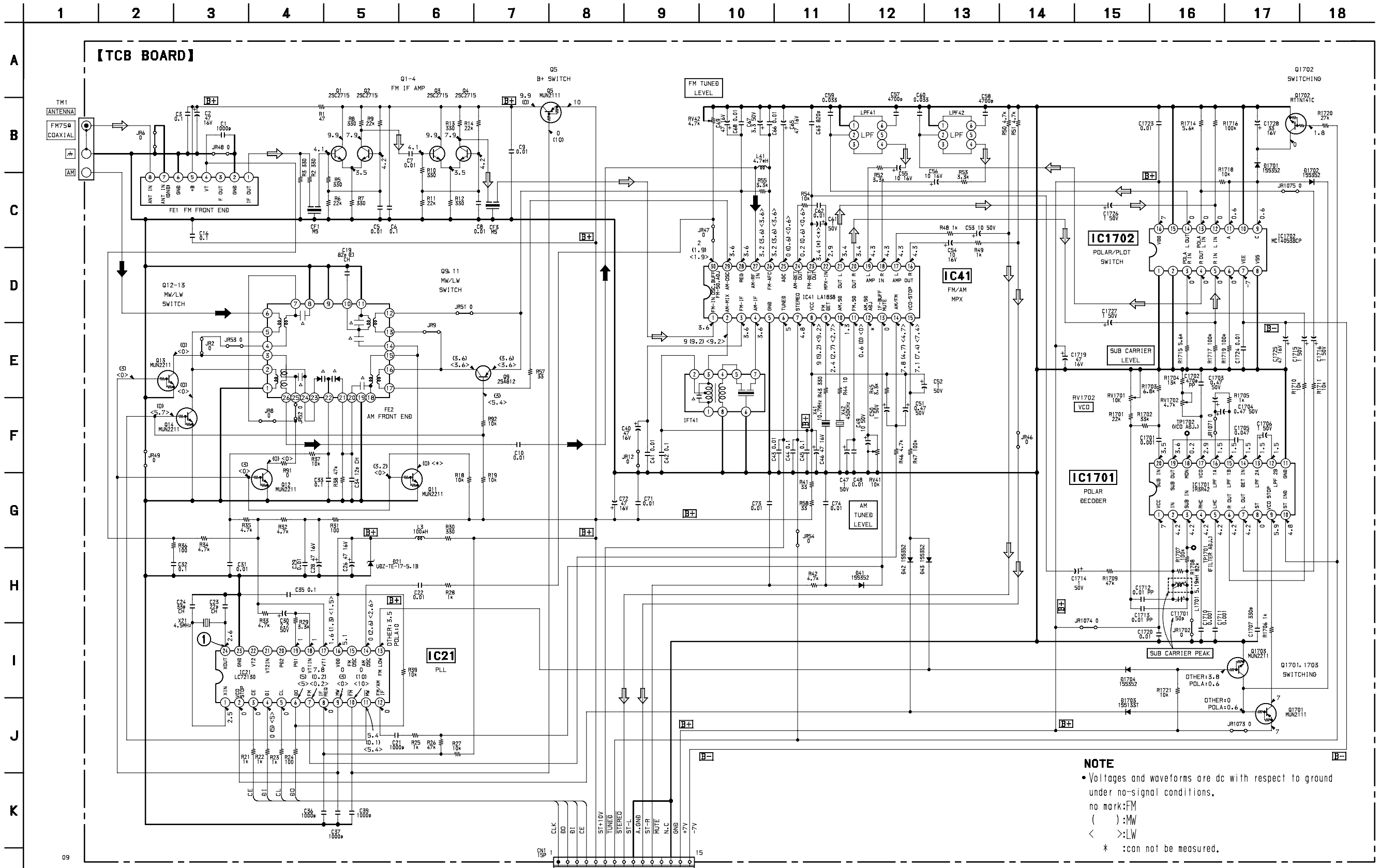


(A)
(Page 52)

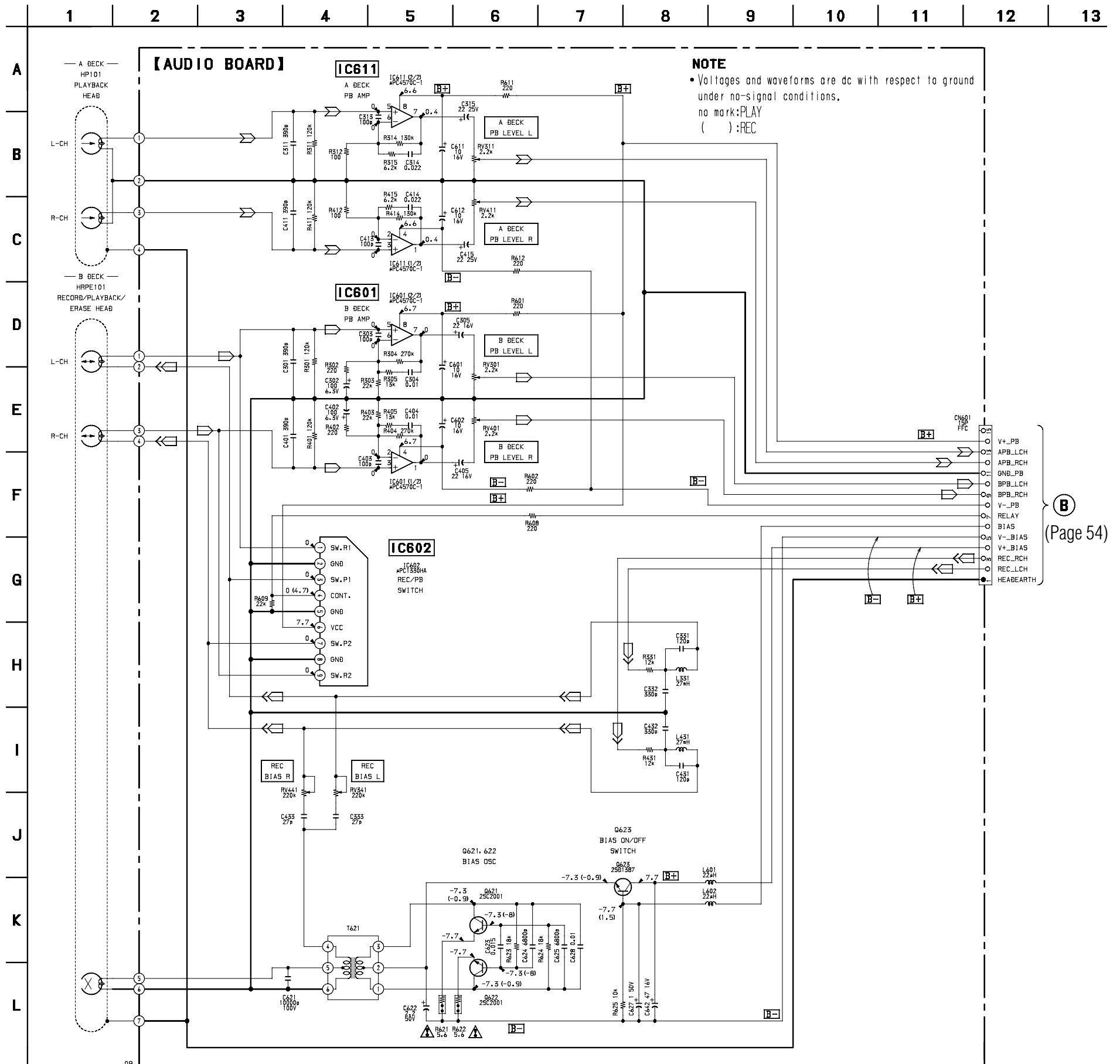
11
(11)

7-8. SCHEMATIC DIAGRAM – TUNER SECTION – (East European, CIS model)

- See page 36 for Waveforms.
- See page 83 for IC Block Diagrams.

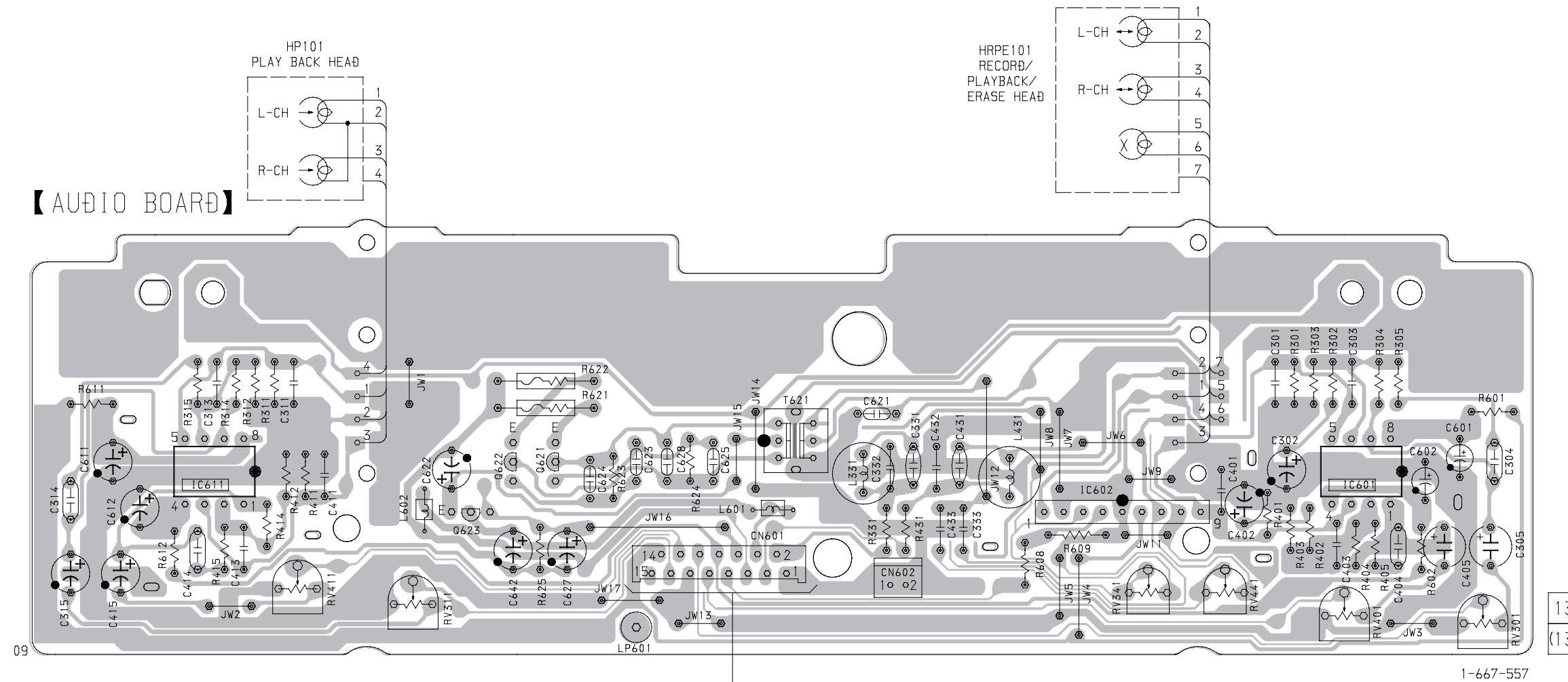


7-9. SCHEMATIC DIAGRAM – DECK SECTION –
• See page 87 for IC Block Diagrams.

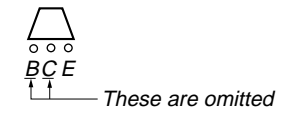


(B)
(Page 54)

7-10. PRINTED WIRING BOARD – DECK SECTION –
• See page 20 for Circuit Boards Location.



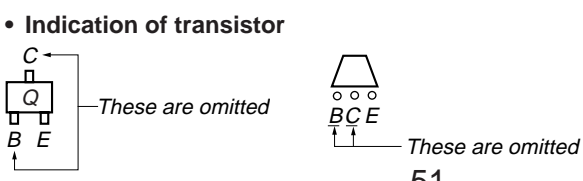
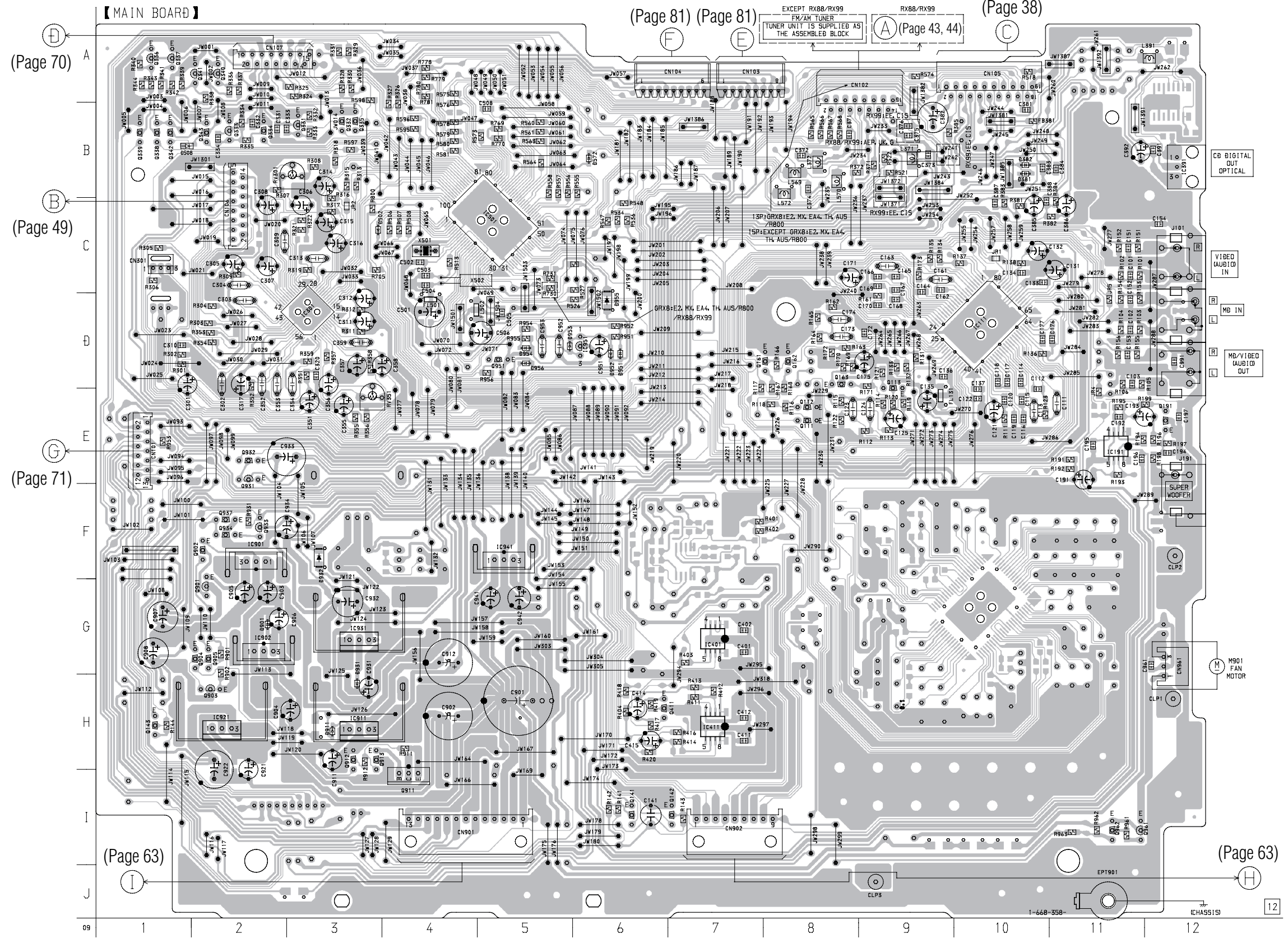
• Indication of transistor



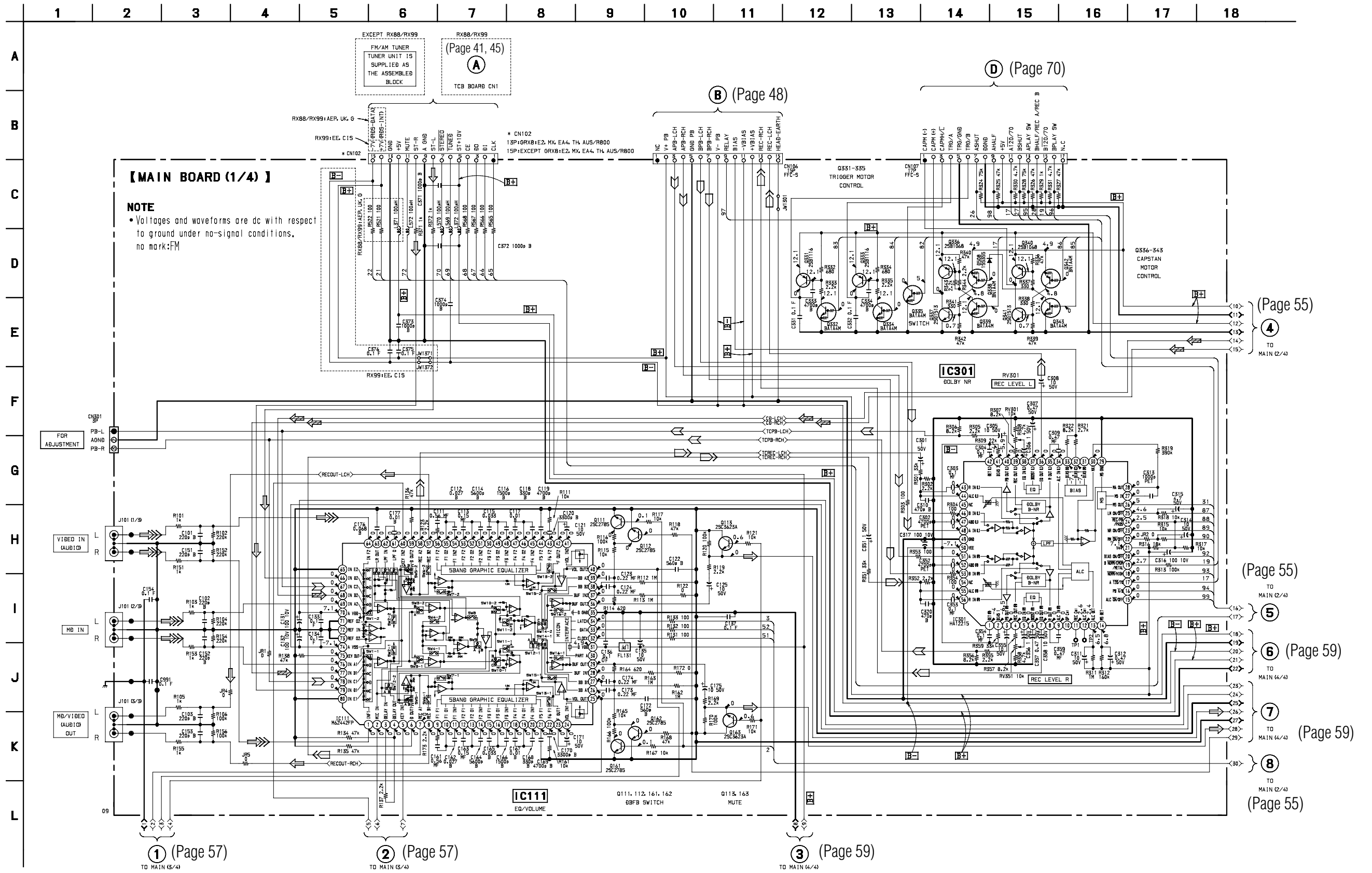
7-11. PRINTED WIRING BOARD – MAIN SECTION –
• See page 20 for Circuit Boards Location.

• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| D381 | B-10 |
| D382 | B-10 |
| D502 | C-3 |
| D508 | B-1 |
| D572 | B-6 |
| D901 | G-2 |
| D911 | H-3 |
| D931 | H-3 |
| D932 | F-3 |
| D951 | D-6 |
| D952 | D-6 |
| D953 | D-5 |
| D954 | D-5 |
| D955 | D-6 |
| D956 | D-5 |
| IC111 | D-10 |
| IC191 | E-11 |
| IC301 | D-3 |
| IC391 | B-12 |
| IC401 | G-7 |
| IC411 | H-7 |
| IC501 | C-5 |
| IC901 | F-2 |
| IC902 | G-2 |
| IC911 | H-3 |
| IC921 | H-2 |
| IC931 | G-3 |
| IC941 | F-5 |
| IC951 | D-6 |
| Q111 | E-8 |
| Q112 | E-8 |
| Q113 | E-9 |
| Q141 | I-6 |
| Q142 | I-7 |
| Q143 | H-1 |
| Q161 | D-8 |
| Q162 | D-8 |
| Q163 | D-8 |
| Q191 | E-12 |
| Q331 | B-3 |
| Q332 | B-3 |
| Q333 | B-2 |
| Q334 | B-2 |
| Q335 | B-3 |
| Q336 | A-1 |
| Q337 | A-1 |
| Q338 | B-1 |
| Q339 | B-1 |
| Q340 | A-2 |
| Q341 | A-2 |
| Q342 | B-1 |
| Q343 | B-2 |
| Q411 | H-6 |
| Q901 | G-2 |
| Q902 | F-2 |
| Q903 | H-2 |
| Q904 | G-2 |
| Q905 | G-2 |
| Q911 | I-4 |
| Q912 | H-3 |
| Q913 | H-3 |
| Q931 | E-2 |
| Q932 | E-2 |
| Q933 | F-2 |
| Q934 | F-2 |
| Q937 | F-2 |
| Q951 | D-5 |
| Q961 | I-11 |
| Q962 | I-11 |

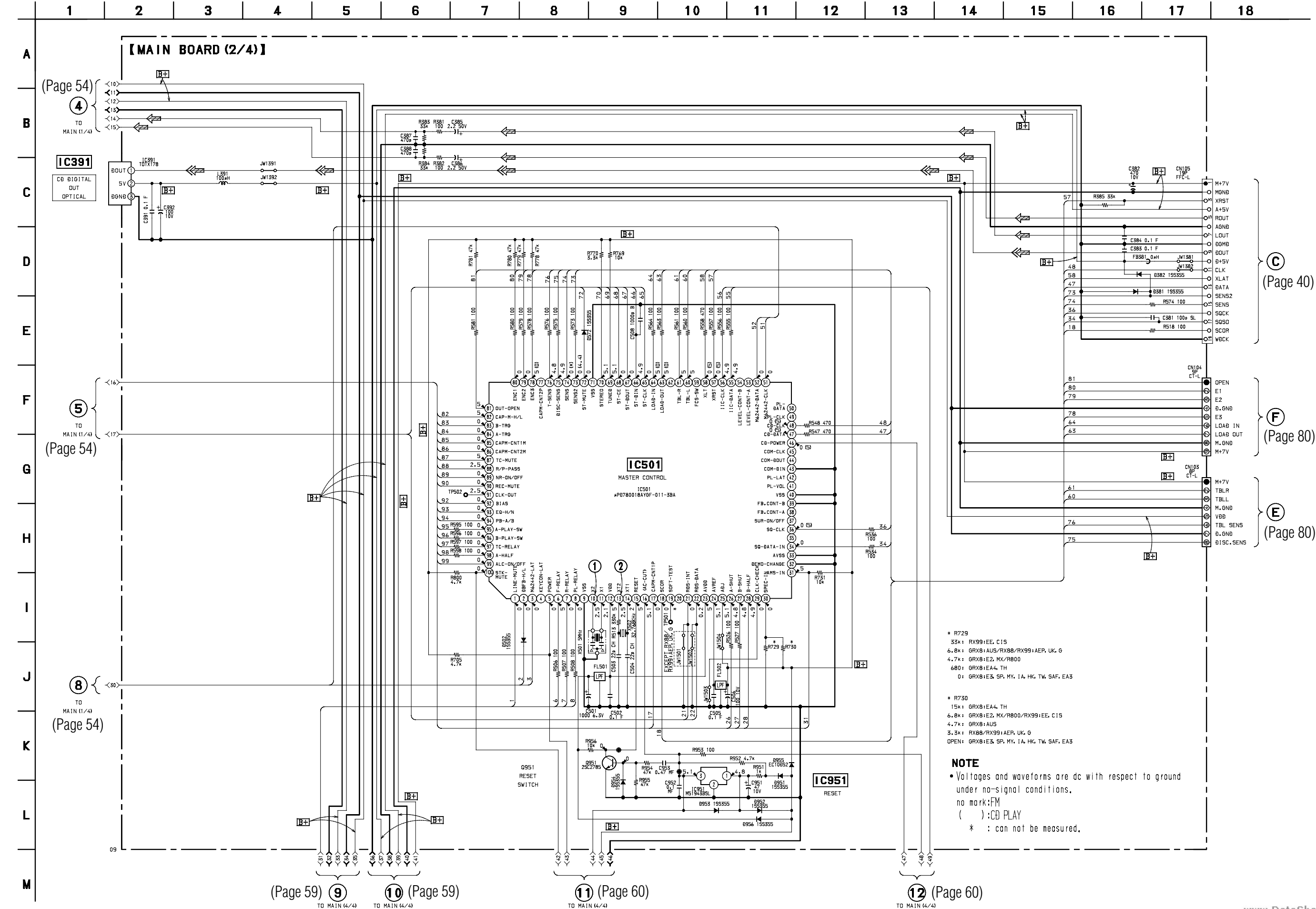


7-12. SCHEMATIC DIAGRAM – MAIN (1/4) SECTION –

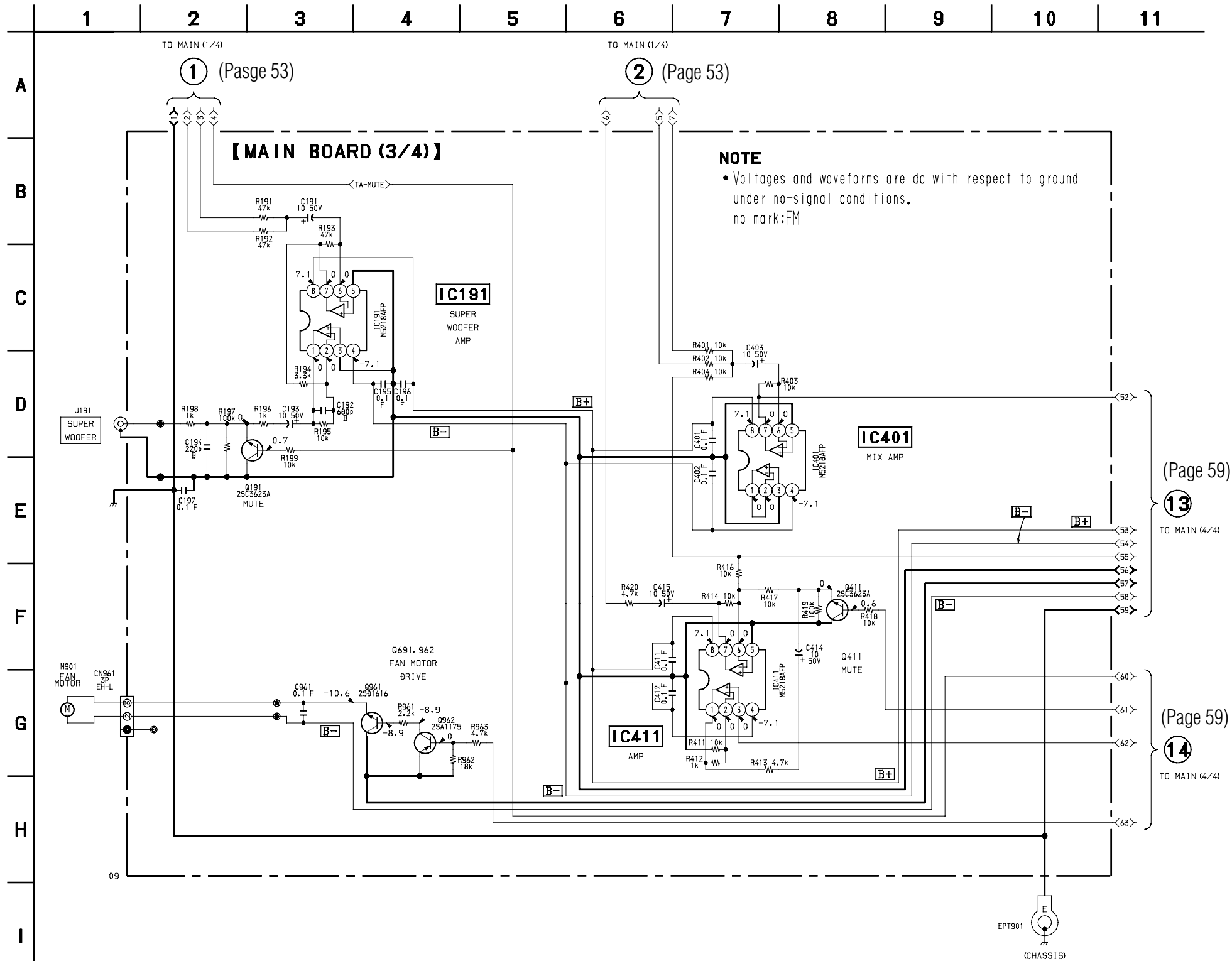


7-13. SCHEMATIC DIAGRAM – MAIN (2/4) SECTION –

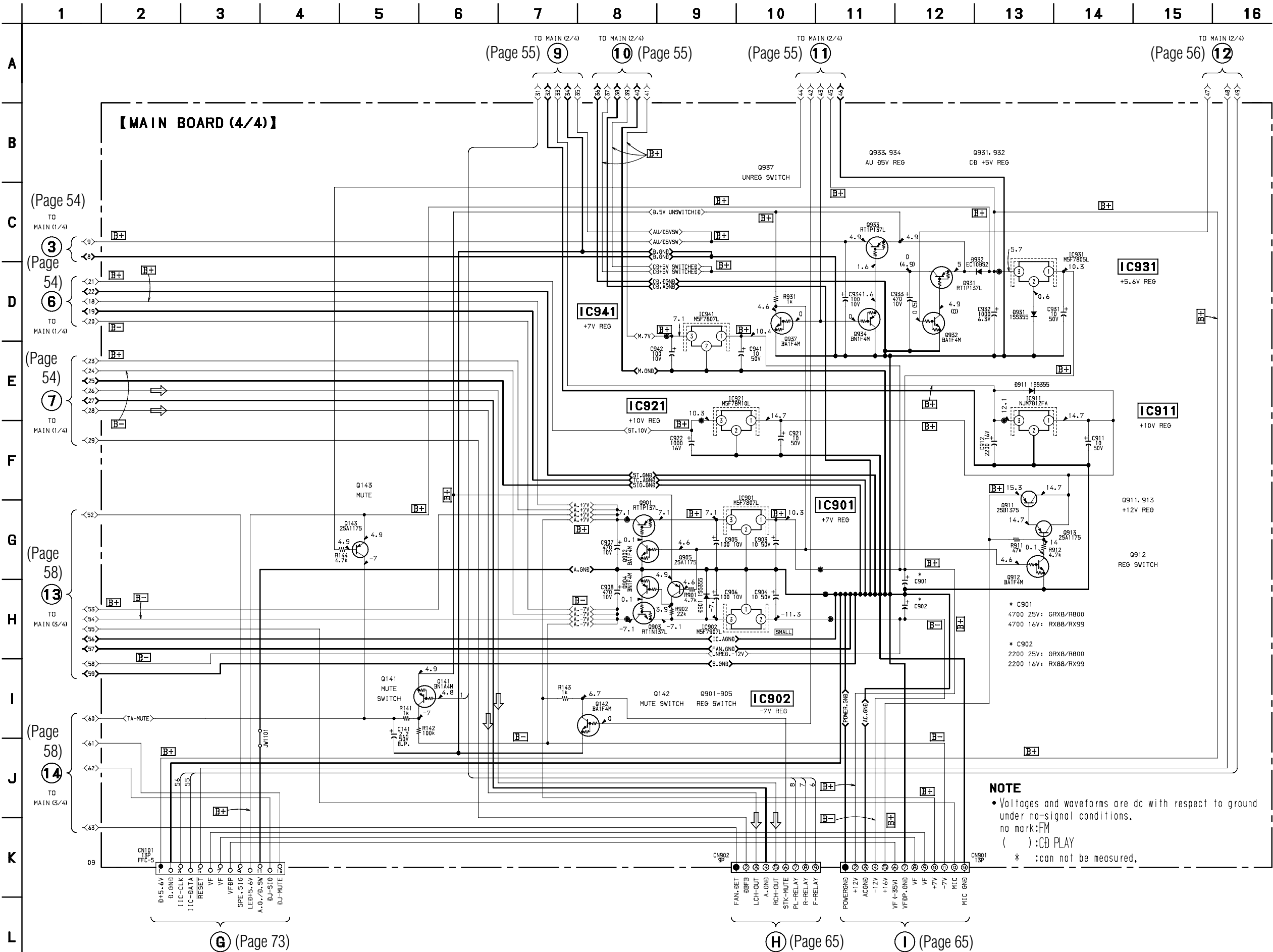
- See page 36 for Waveforms.
- See page 51 for Printed Wiring Board.
- See page 93 for IC Pin Functions.



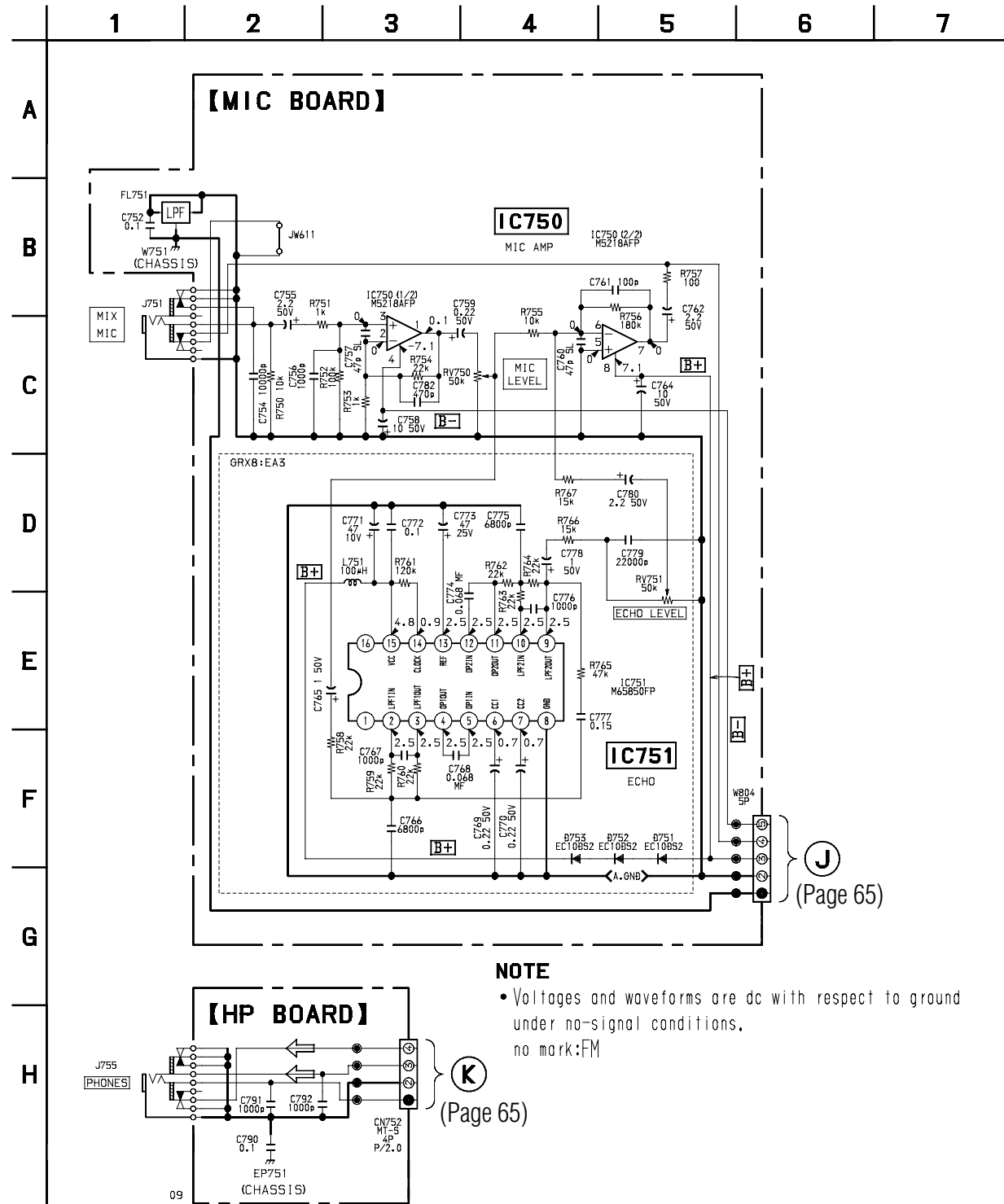
7-14. SCHEMATIC DIAGRAM – MAIN (3/4) SECTION –
 • See page 51 for Printed Wiring Board.



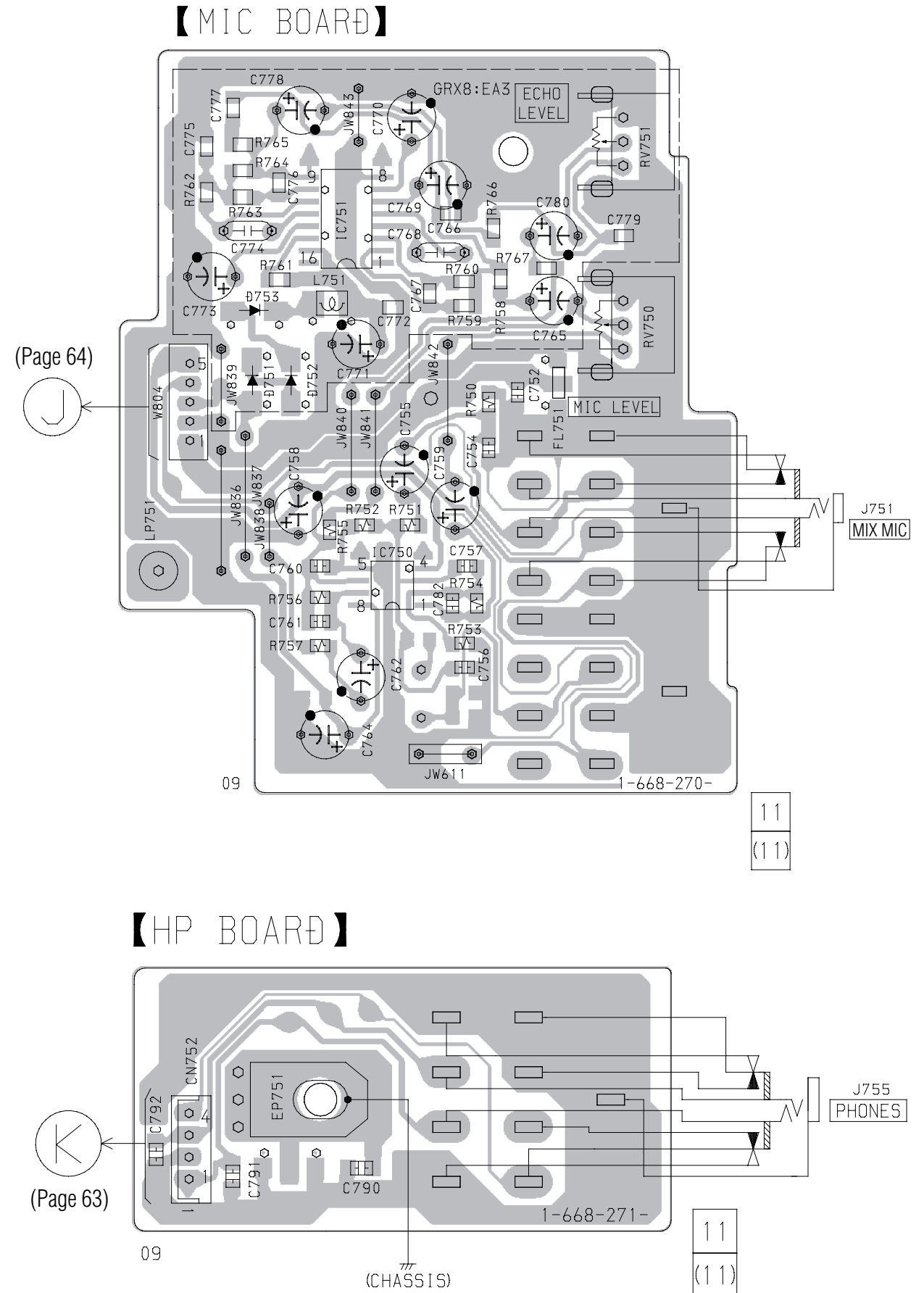
7-15. SCHEMATIC DIAGRAM – MAIN (4/4) SECTION –
• See page 51 for Printed Wiring Board.



7-16. SCHEMATIC DIAGRAM – MIC/HP SECTION –
• See page 87 for IC Block Diagrams.



7-17. PRINTED WIRING BOARD – MIC/HP SECTION –
• See page 20 for Circuit Boards Location.

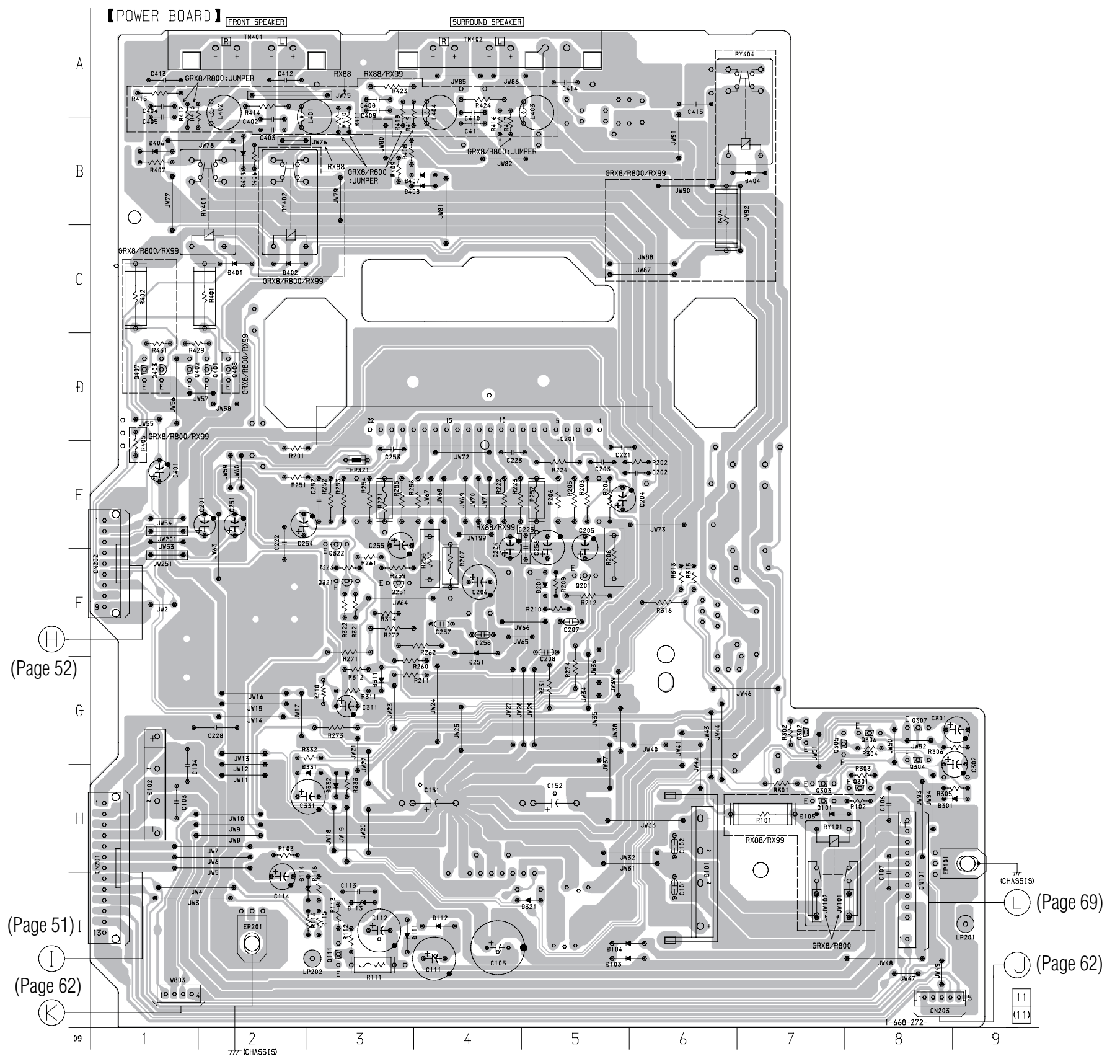
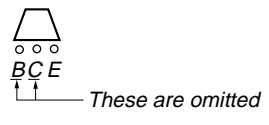


7-18. PRINTED WIRING BOARD – POWER SECTION –
• See page 20 for Circuit Boards Location.

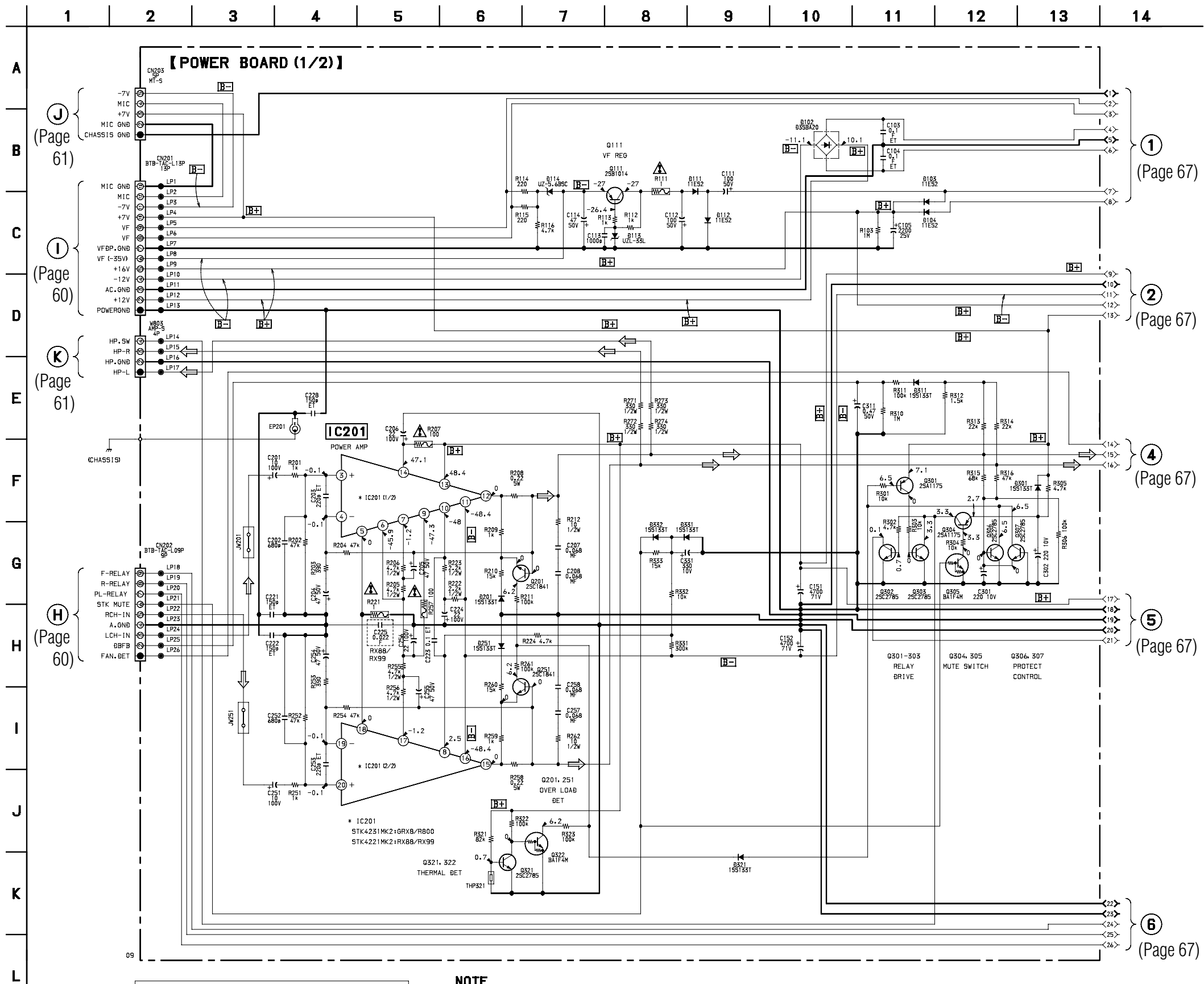
• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| D101 | H-6 |
| D102 | H-1 |
| D103 | I-5 |
| D104 | I-5 |
| D105 | H-7 |
| D111 | I-3 |
| D112 | I-4 |
| D113 | I-3 |
| D114 | I-3 |
| D201 | F-5 |
| D251 | F-4 |
| D301 | H-9 |
| D311 | G-3 |
| D321 | I-5 |
| D331 | H-3 |
| D332 | H-3 |
| D401 | C-2 |
| D402 | C-2 |
| D404 | B-7 |
| D405 | B-2 |
| D406 | B-1 |
| D407 | B-4 |
| D408 | B-4 |
| IC201 | D-5 |
| Q101 | H-7 |
| Q111 | I-3 |
| Q201 | F-5 |
| Q251 | F-3 |
| Q301 | H-8 |
| Q302 | G-7 |
| Q303 | H-7 |
| Q304 | G-8 |
| Q305 | G-7 |
| Q306 | G-8 |
| Q307 | G-8 |
| Q321 | F-3 |
| Q322 | E-3 |
| Q401 | D-2 |
| Q402 | D-1 |
| Q403 | D-1 |
| Q407 | D-1 |
| Q408 | D-2 |

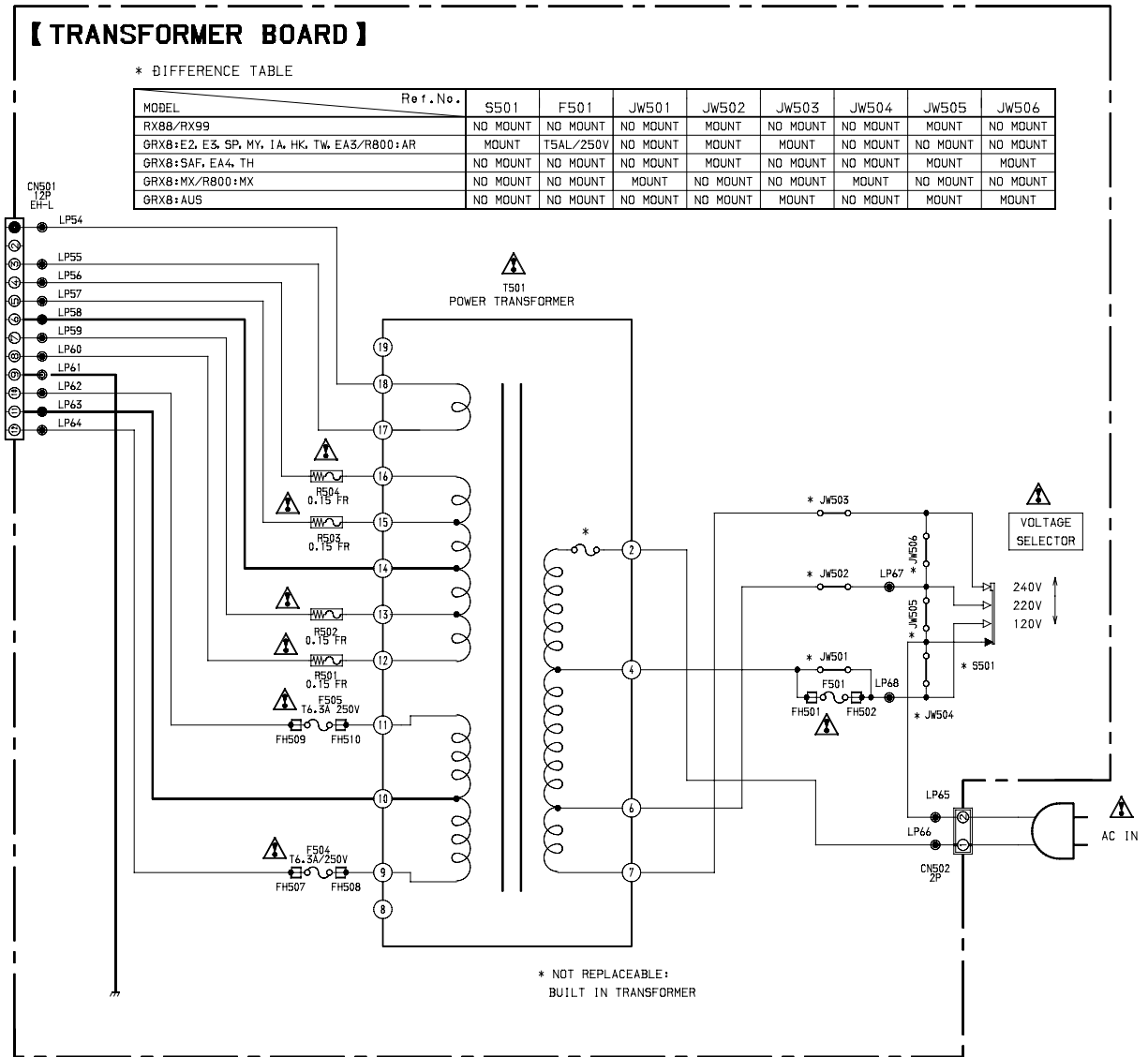
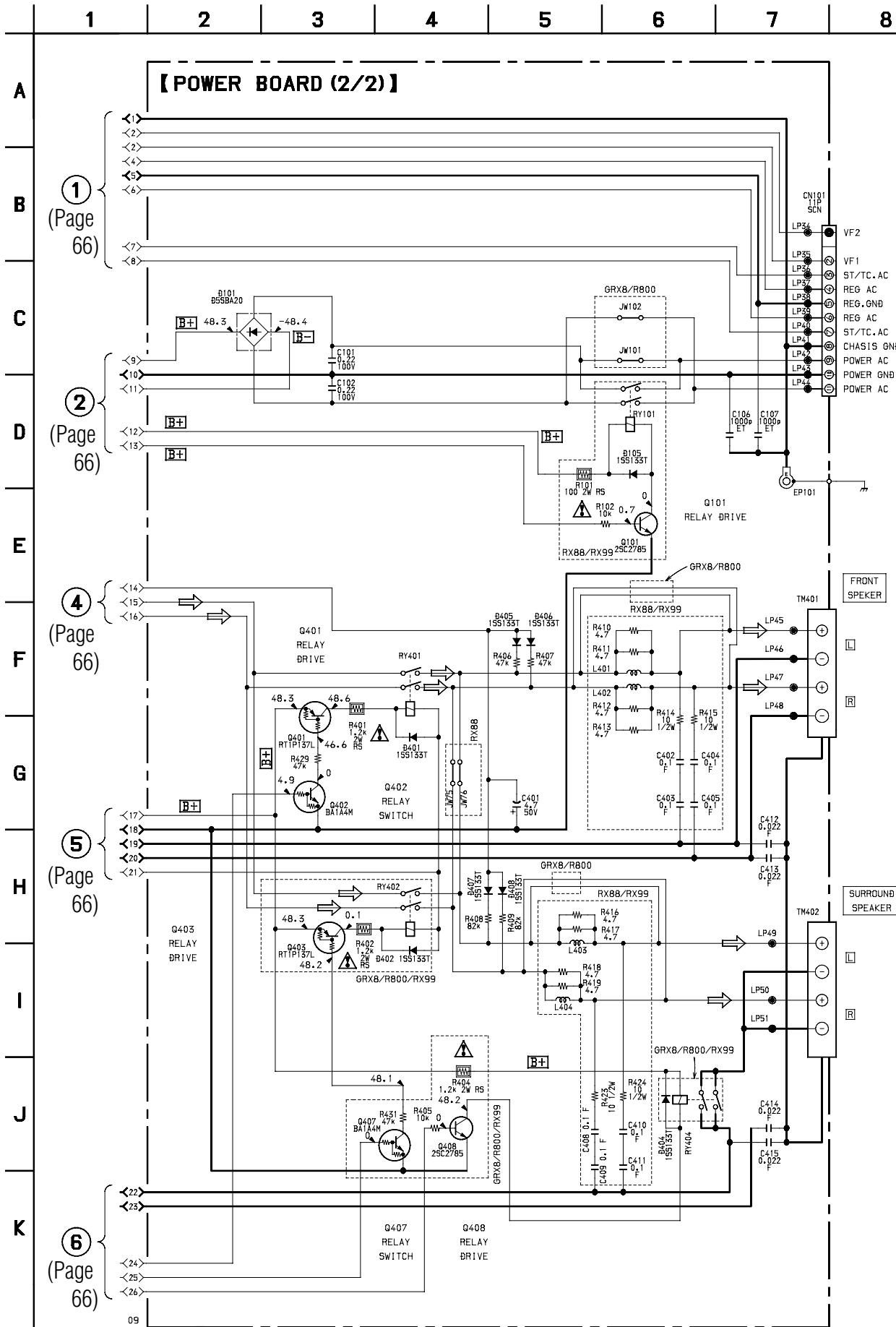
• Indication of transistor



7-19. SCHEMATIC DIAGRAM – POWER SECTION –



7-20. SCHEMATIC DIAGRAM – TRANSFORMER SECTION –
• See page 63 for Printed Wiring Board. (POWER BOARD)

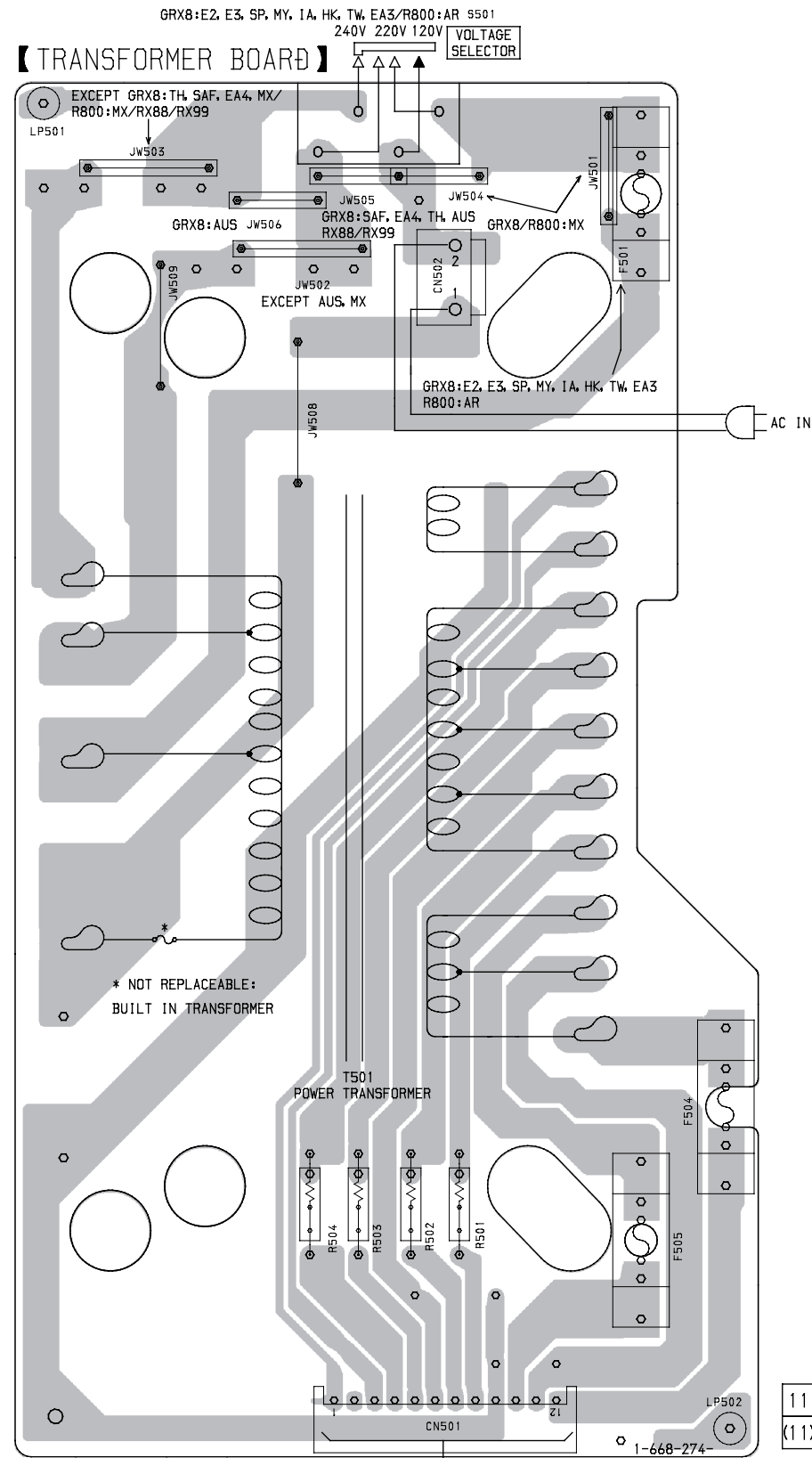


NOTE

• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark:FM

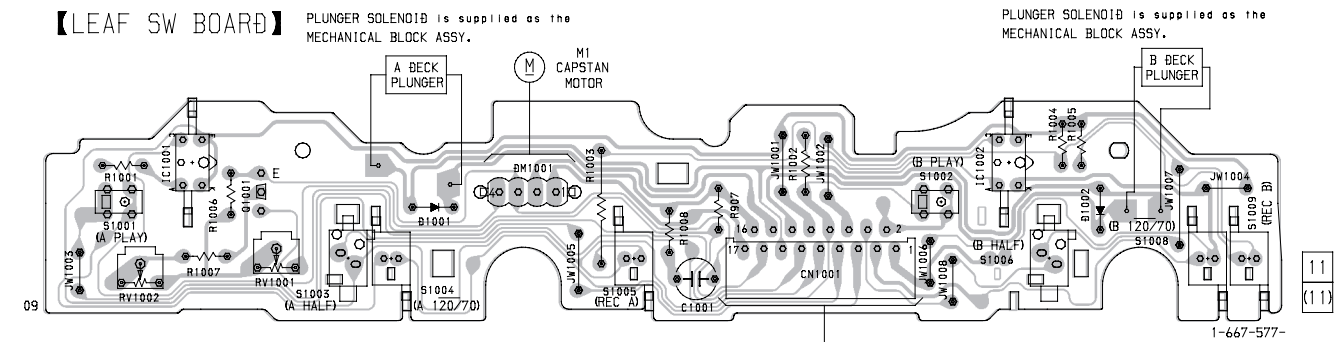
Note: The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

7-21. PRINTED WIRING BOARD – TRANSFORMER SECTION –
 • See page 20 for Circuit Boards Location.

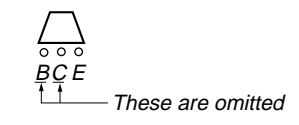


(Page 64)

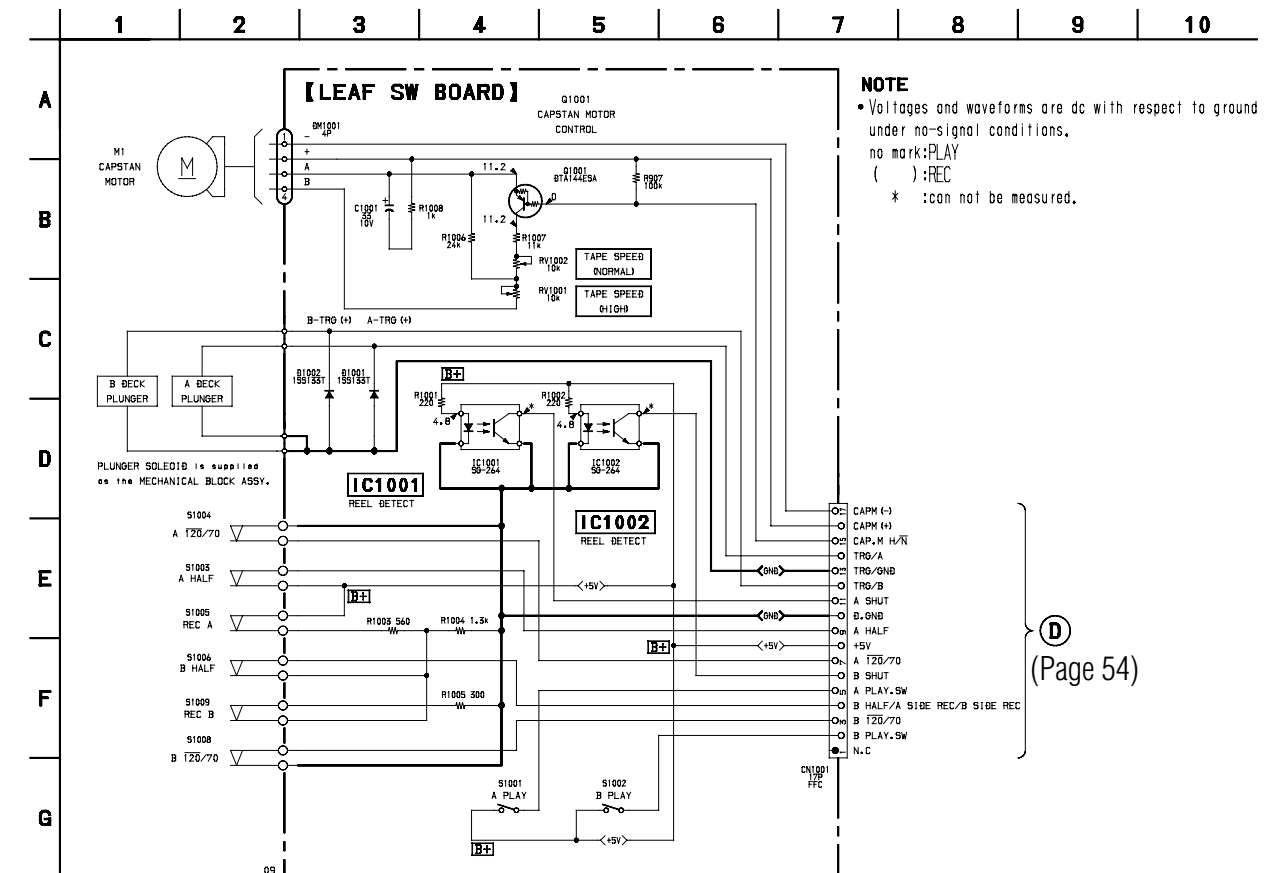
7-22. PRINTED WIRING BOARD – LEAF SW SECTION –
 • See page 20 for Circuit Boards Location.



• Indication of transistor



7-23. SCHEMATIC DIAGRAM – LEAF SW SECTION –

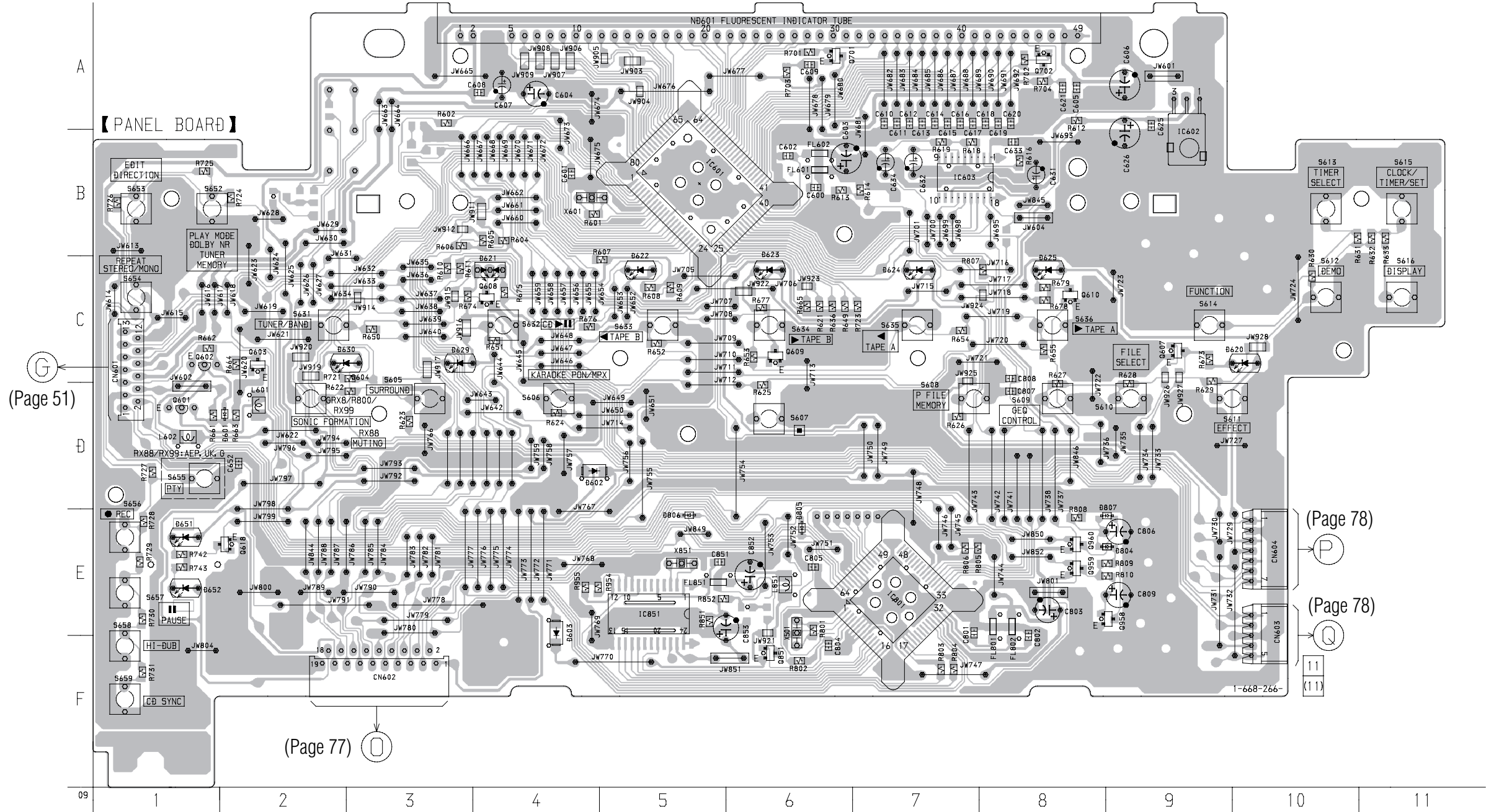


(Page 54)

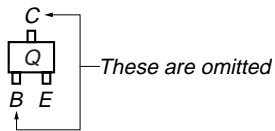
7-24. PRINTED WIRING BOARD – DISPLAY SECTION –
• See page 20 for Circuit Boards Location.

• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| D601 | D-2 |
| D602 | D-4 |
| D603 | D-4 |
| D620 | C-10 |
| D621 | C-4 |
| D622 | C-5 |
| D623 | C-6 |
| D624 | C-7 |
| D625 | C-8 |
| D629 | C-3 |
| D630 | C-2 |
| D651 | E-1 |
| D652 | E-1 |
| D804 | I-17 |
| D805 | E-6 |
| D806 | E-5 |
| D807 | E-9 |
| IC601 | B-5 |
| IC602 | A-9 |
| IC603 | B-7 |
| IC801 | E-7 |
| IC851 | E-5 |
| Q601 | D-1 |
| Q602 | C-1 |
| Q603 | C-2 |
| Q607 | C-9 |
| Q608 | C-4 |
| Q609 | C-6 |
| Q610 | C-8 |
| Q618 | E-2 |
| Q701 | A-6 |
| Q702 | A-8 |
| Q851 | F-6 |
| Q958 | E-9 |
| Q959 | E-8 |
| Q960 | E-8 |

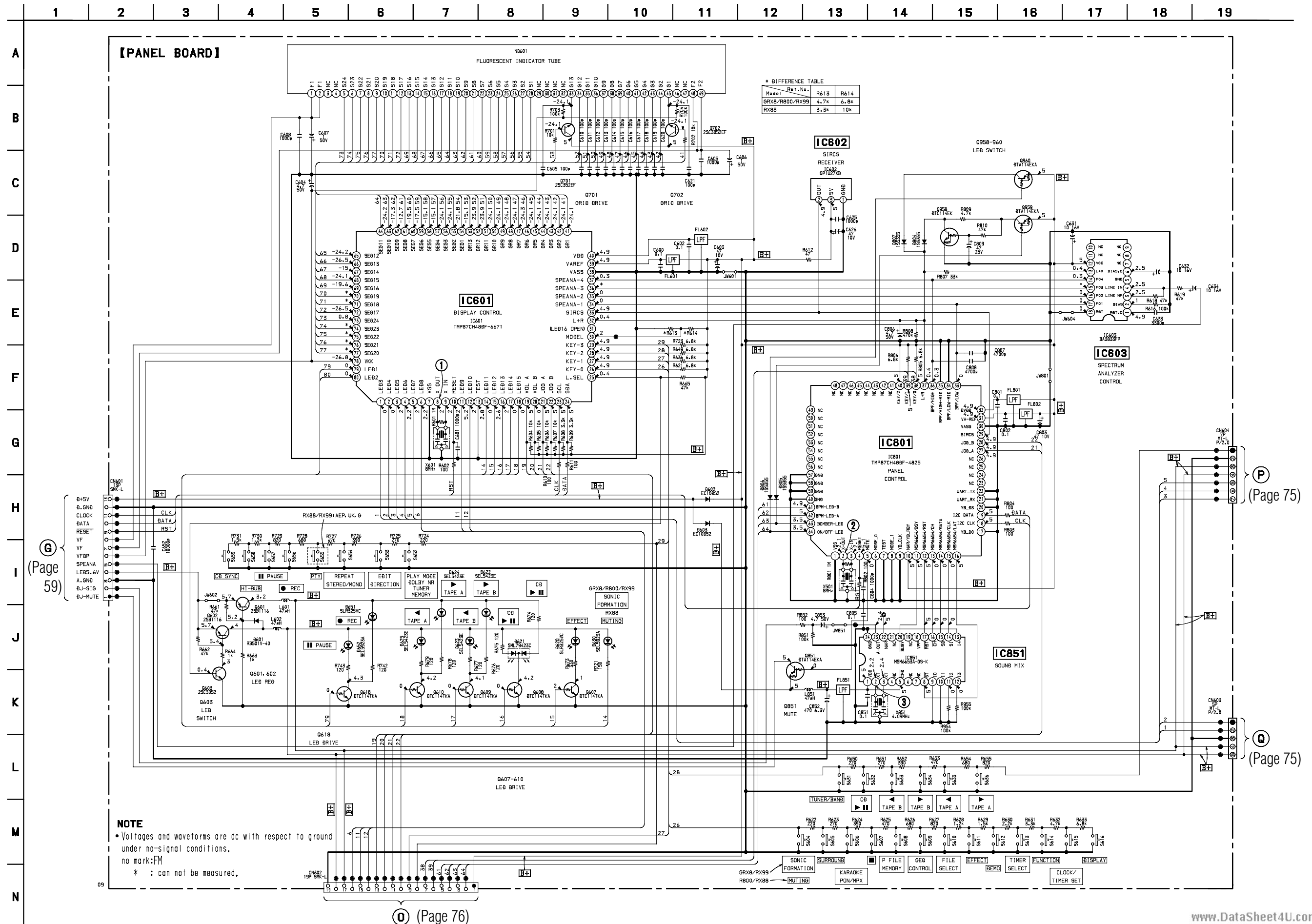


• Indication of transistor

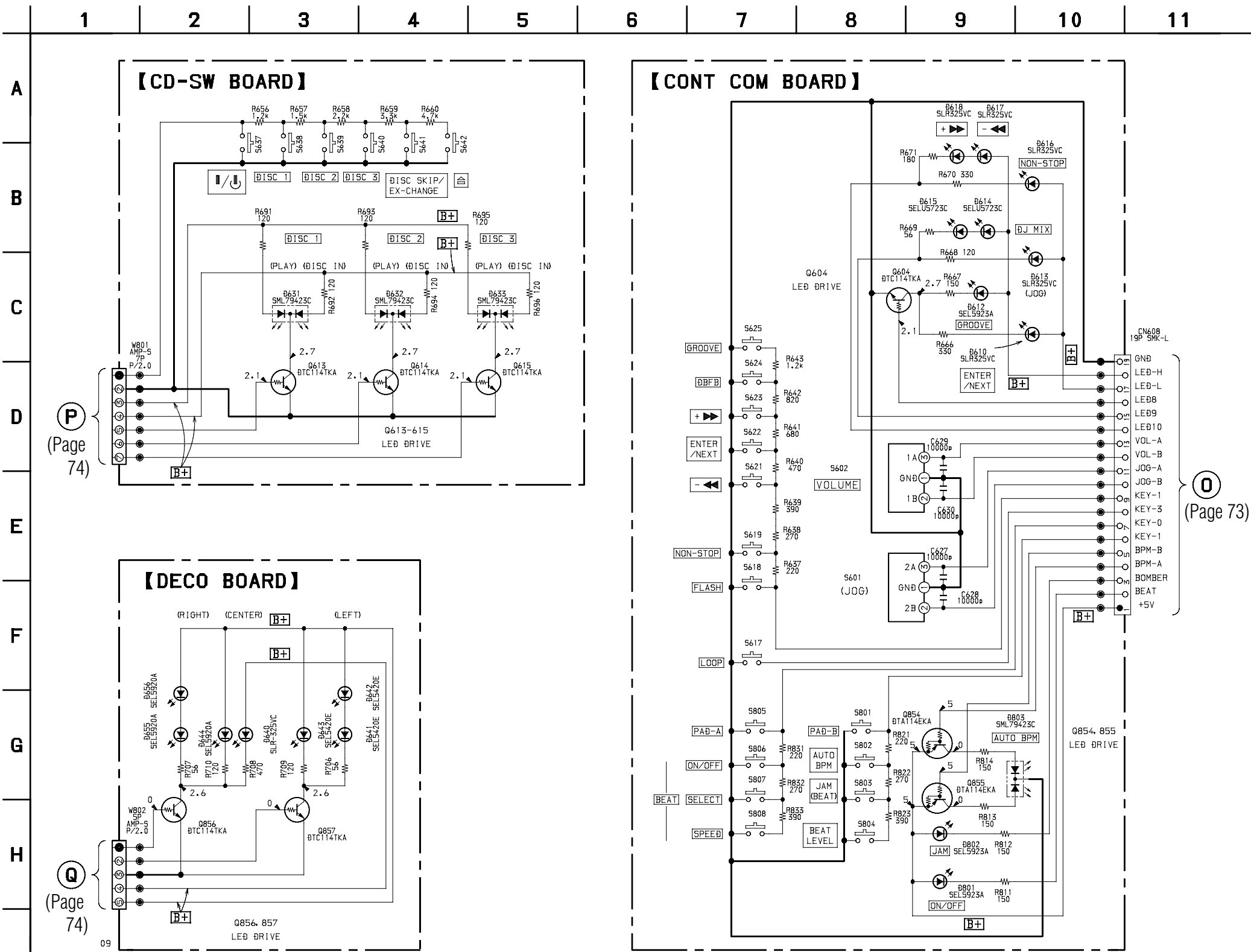


7-25. SCHEMATIC DIAGRAM – DISPLAY SECTION –

- See page 36 for Waveforms.
- See page 87 for IC Block Diagrams.
- See page 96 for IC Pin Functions.



7-26. SCHEMATIC DIAGRAM – PANEL SECTION –



(Page 74)

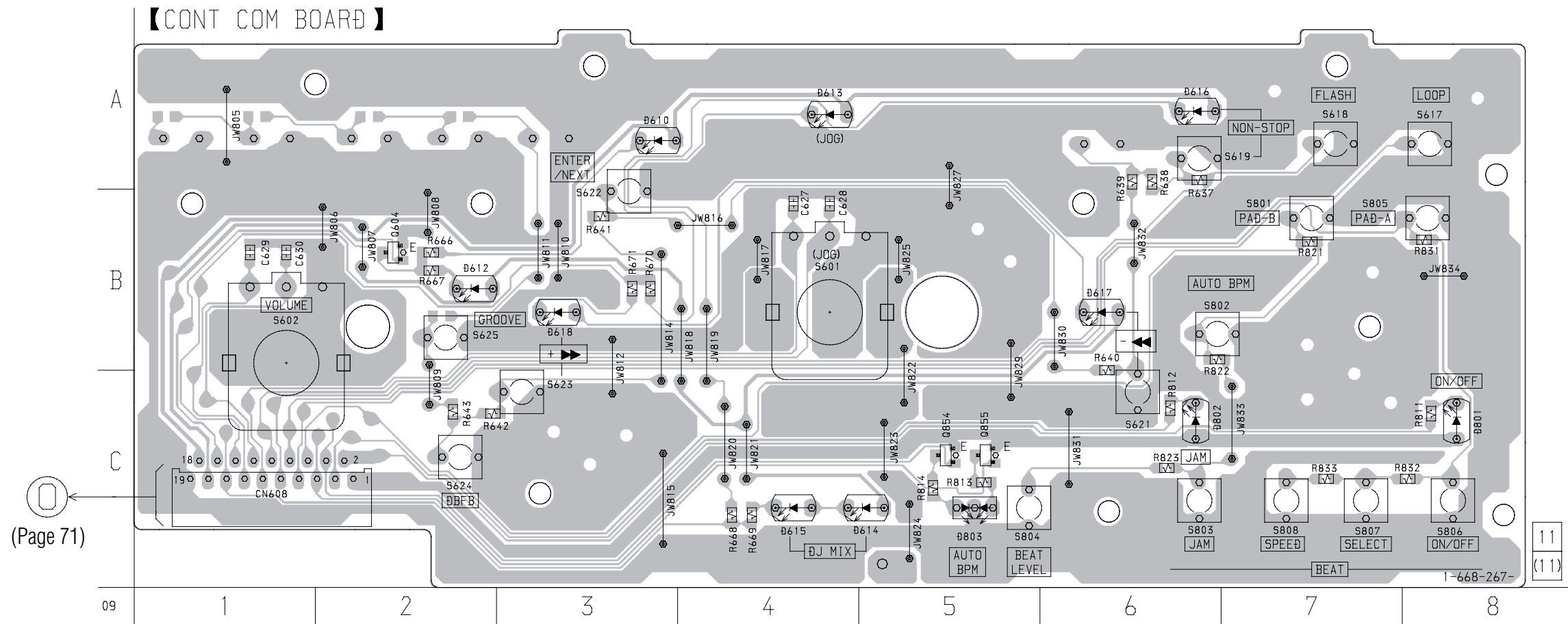
(Page 74)

(Page 73)

NOTE

• Voltages and waveforms are dc with respect to ground under no-signal conditions, no mark:FM

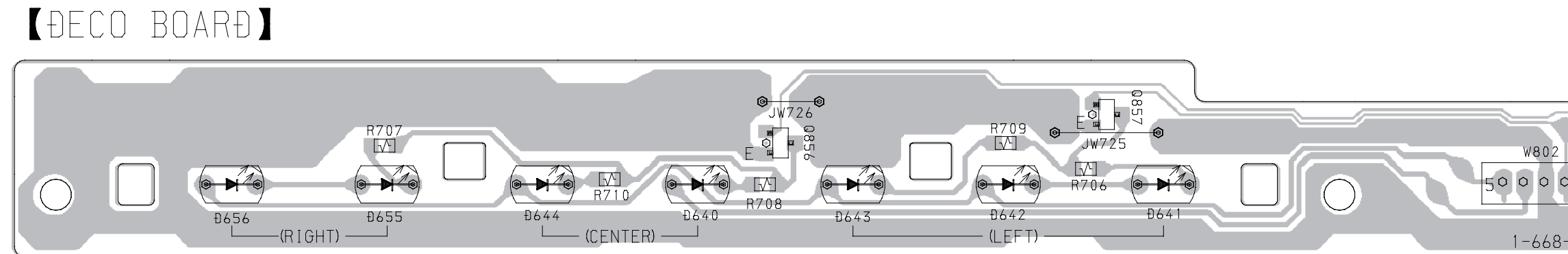
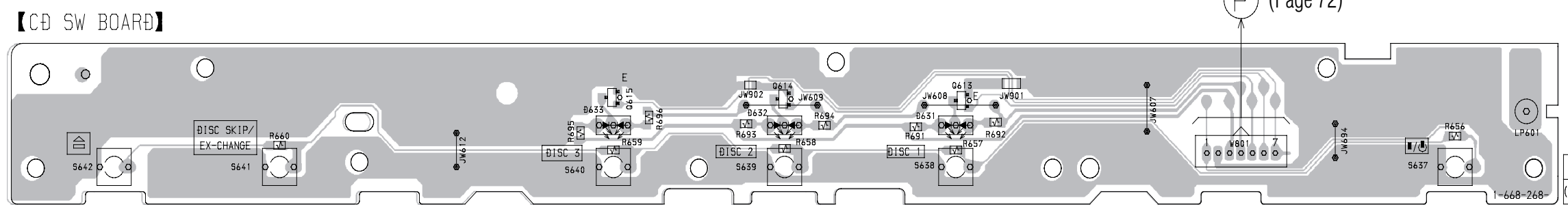
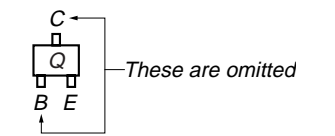
7-27. PRINTED WIRING BOARD – PANEL SECTION –
 • See page 20 for Circuit Boards Location.



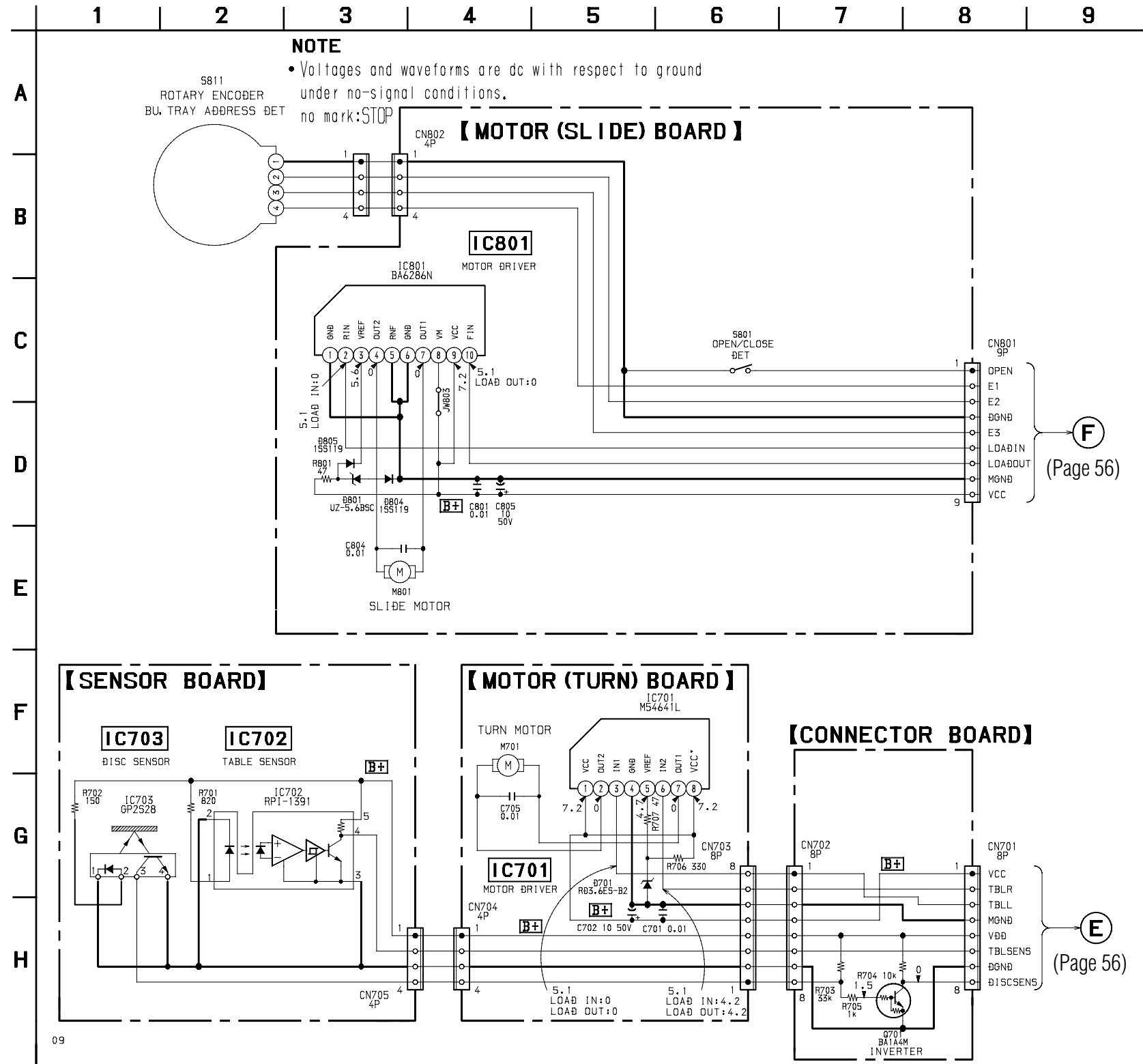
• **Semiconductor Location**

| Ref. No. | Location |
|----------|----------|
| D610 | A-3 |
| D612 | B-2 |
| D613 | A-4 |
| D614 | C-5 |
| D615 | C-4 |
| D616 | A-6 |
| D617 | B-6 |
| D618 | B-3 |
| D801 | C-8 |
| D802 | C-6 |
| D803 | C-5 |
| Q604 | B-2 |
| Q854 | C-5 |
| Q855 | C-5 |

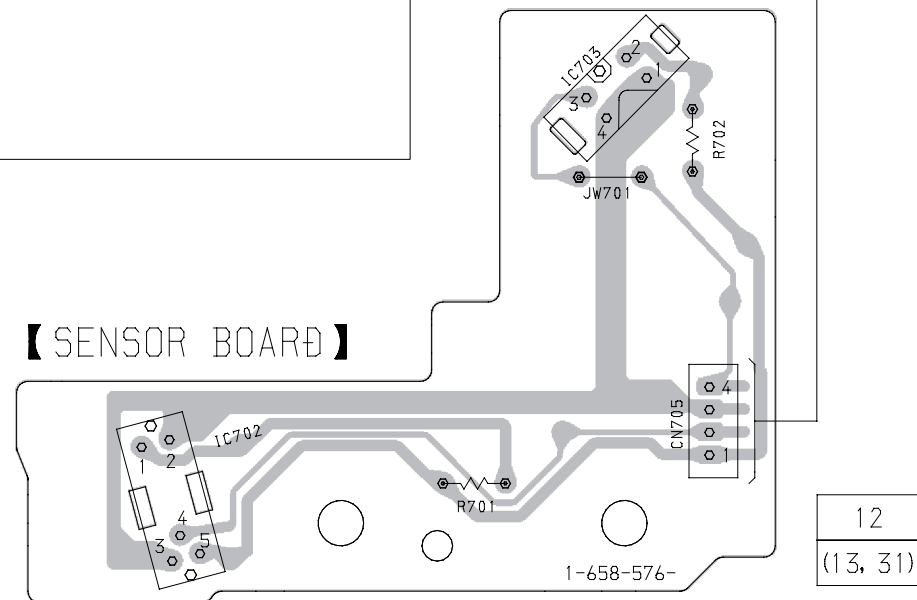
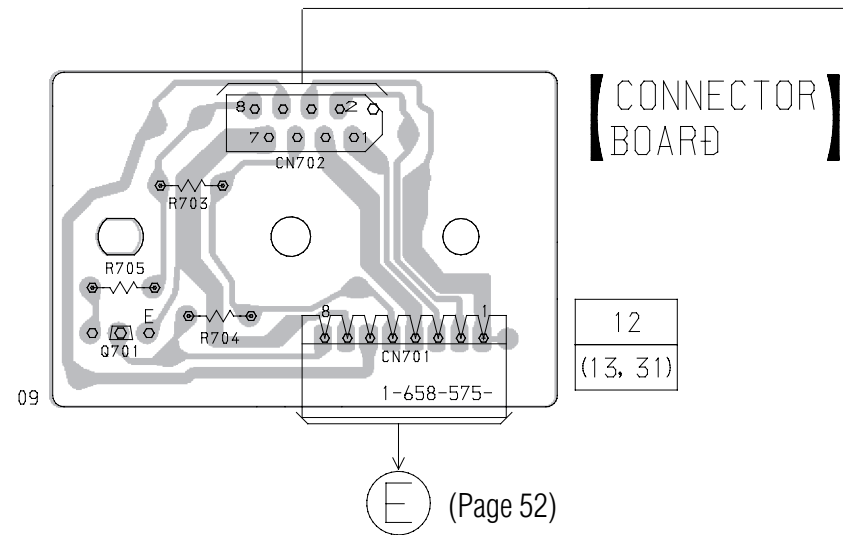
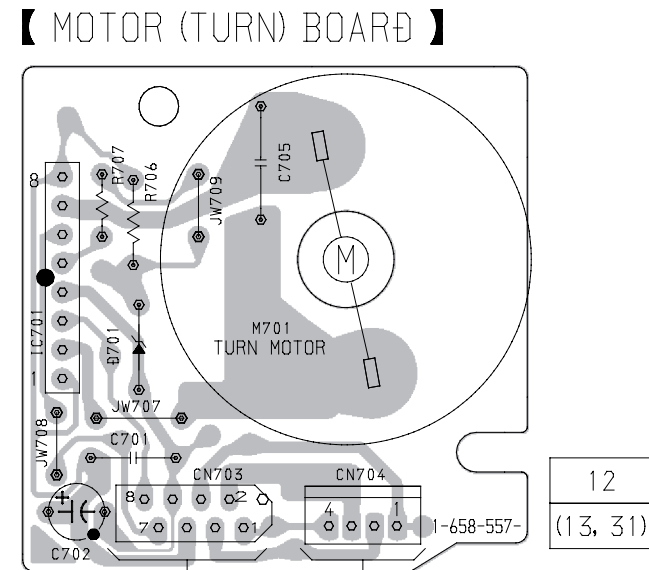
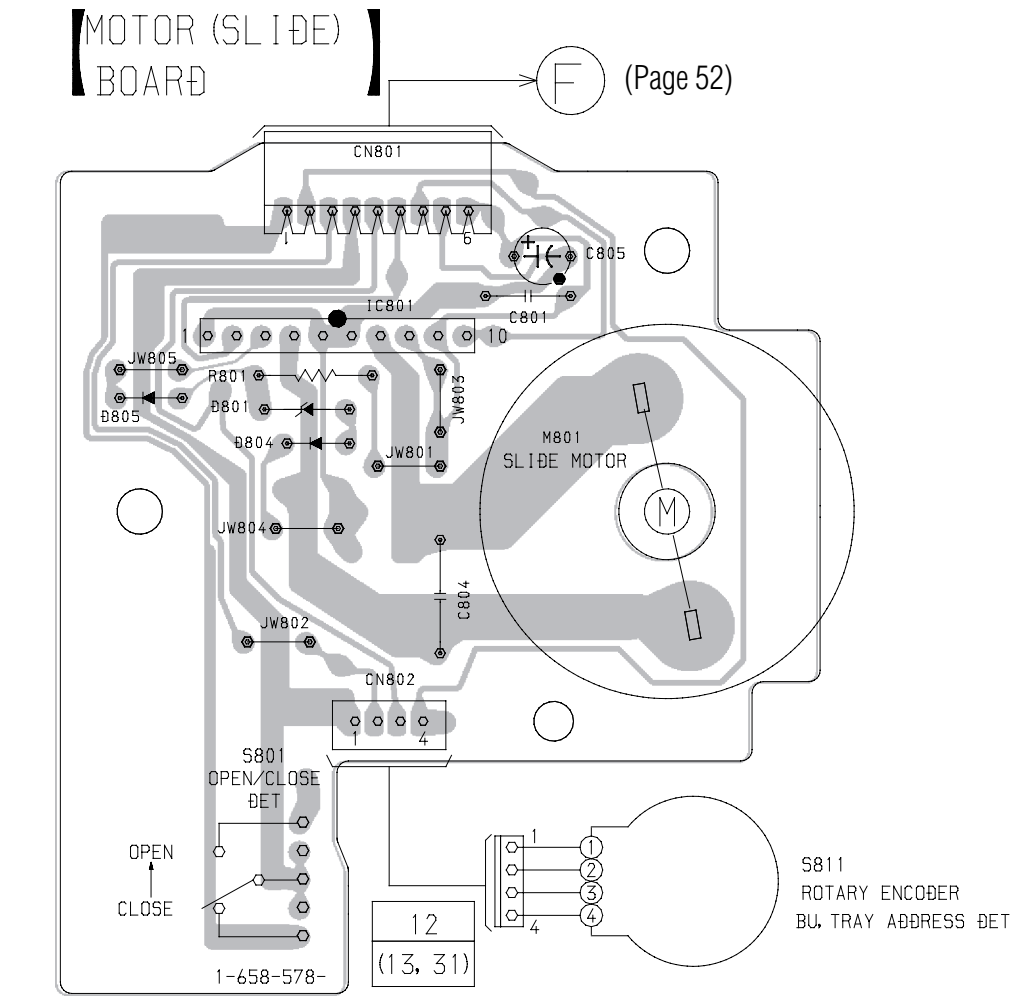
• **Indication of transistor**



7-28. SCHEMATIC DIAGRAM – CD MOTOR SECTION –
• See page 87 for IC Block Diagrams.



7-29. PRINTED WIRING BOARD – CD MOTOR SECTION –
 • See page 20 for Circuit Boards Location.



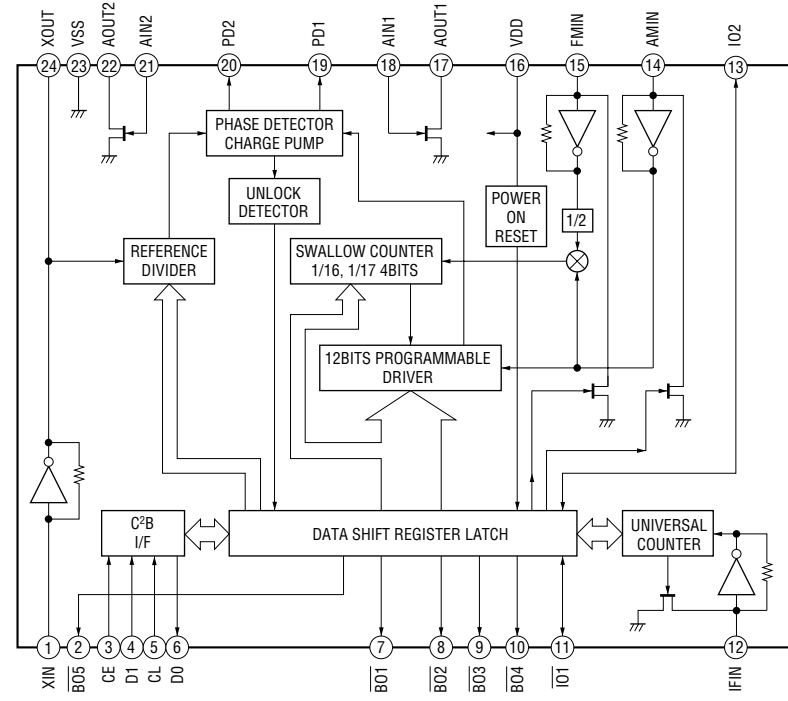
• Indication of transistor

BCE
↑↑ These are omitted

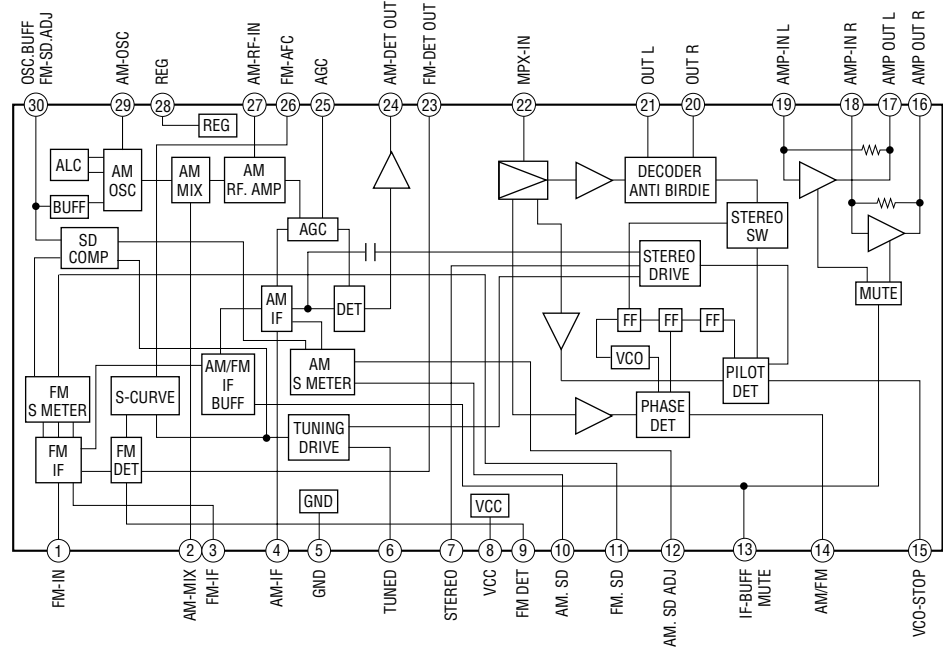
7-30. IC BLOCK DIAGRAMS

•Tuner section

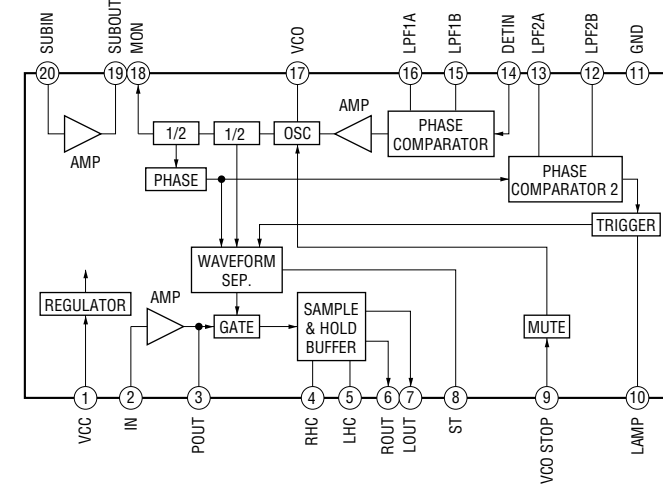
IC21 LC72130



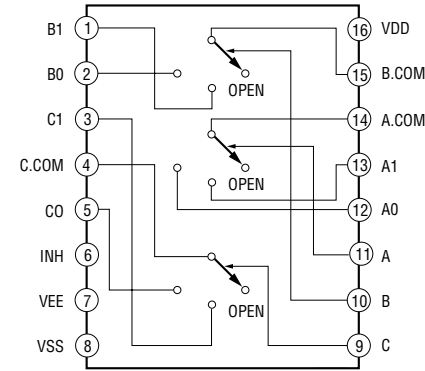
IC41 LA1838



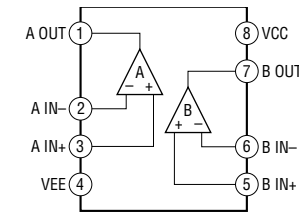
IC1701 IR3R42



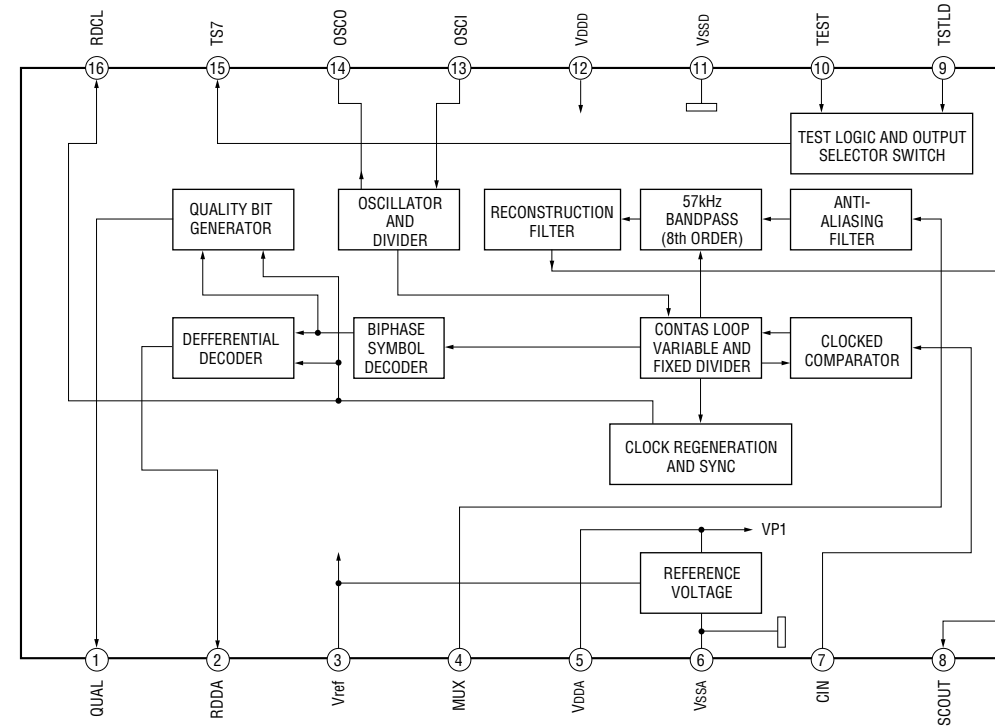
IC1702 MC14053BCP



IC1751 NJM4558D

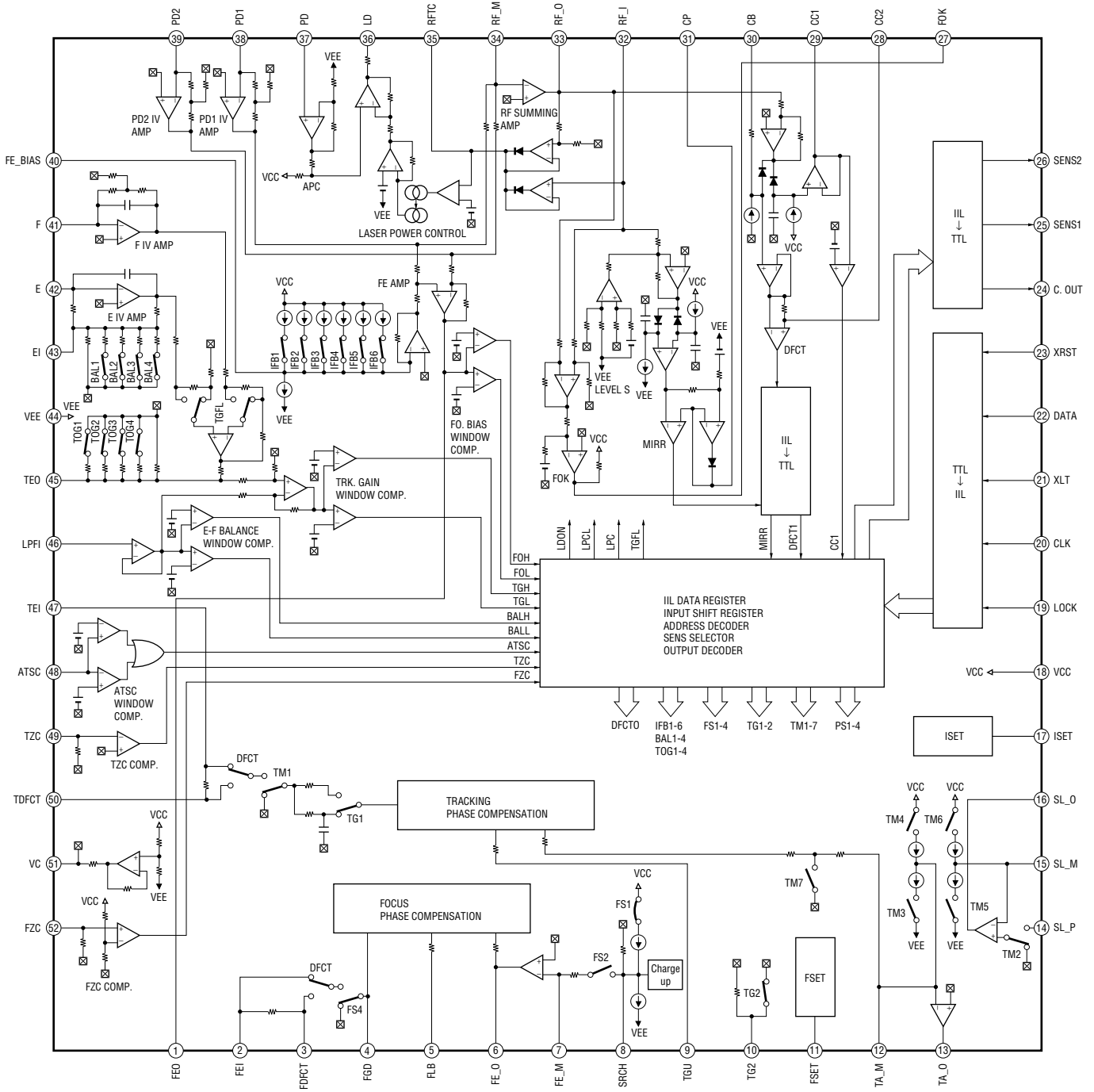


IC1752 BU1922

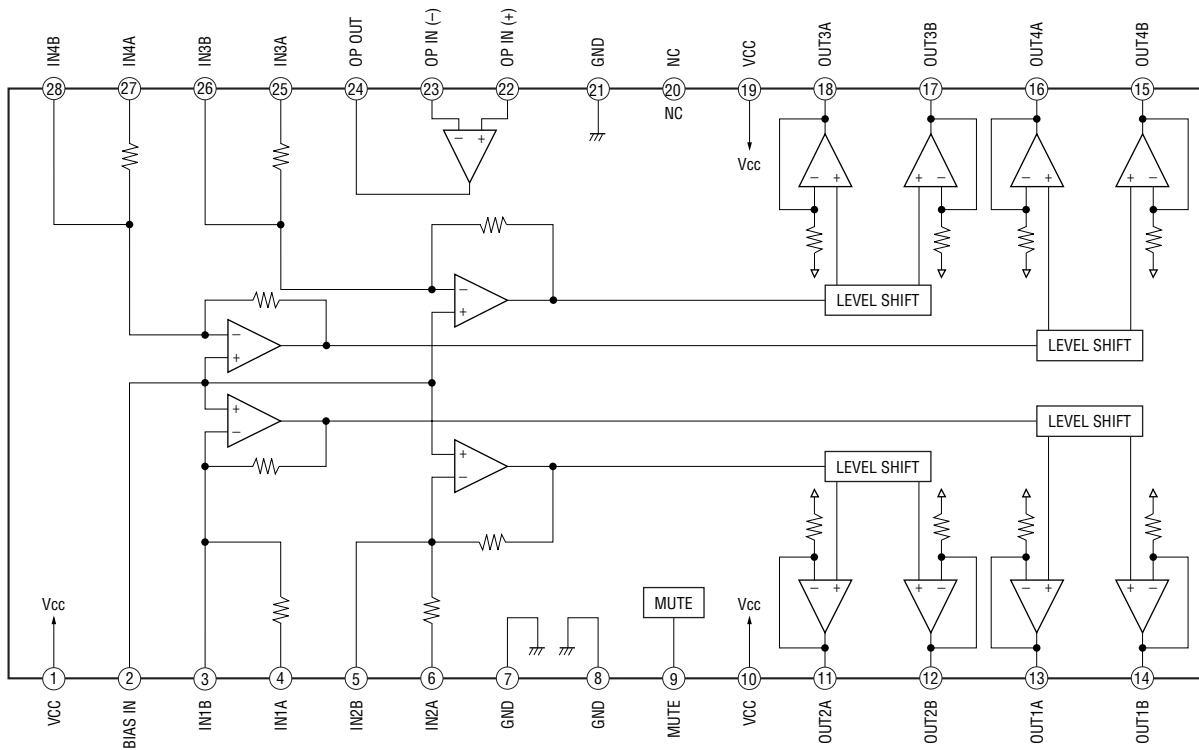


• CD section

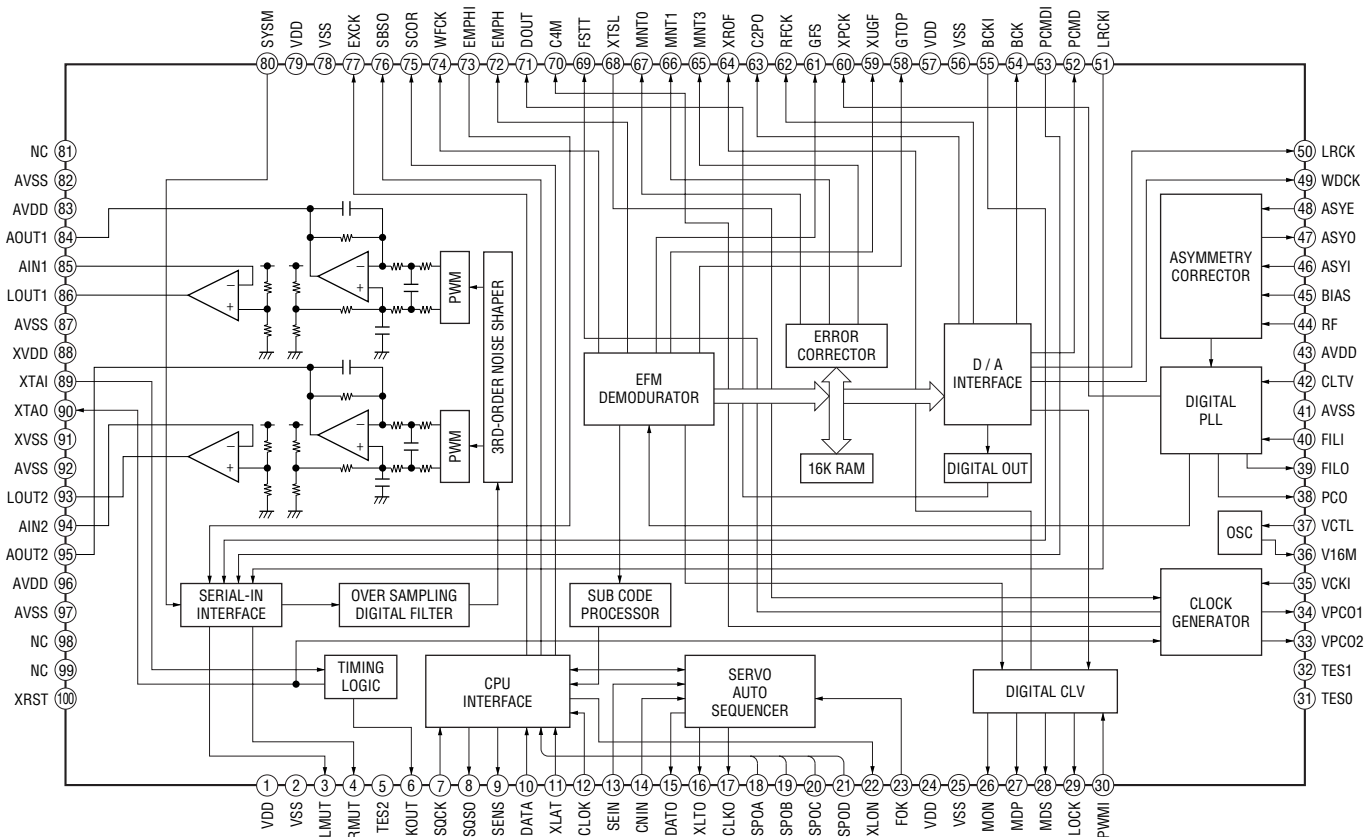
IC101 CXA1992AR



IC102 BA5941FP

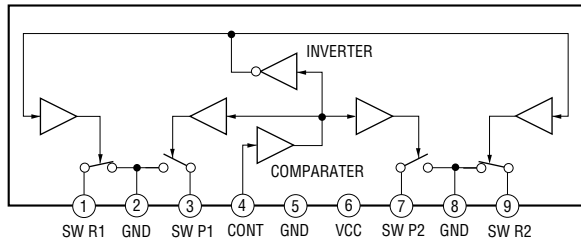


IC103 CXD2519Q



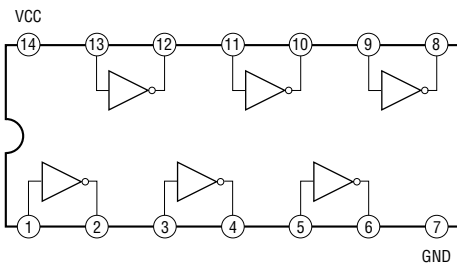
• Deck section

IC602 uPC1330HA



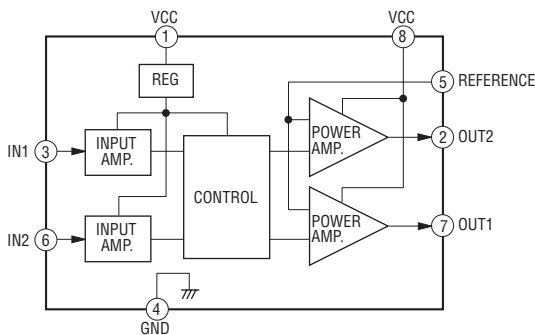
• Main section

IC392 MC74HCU04F

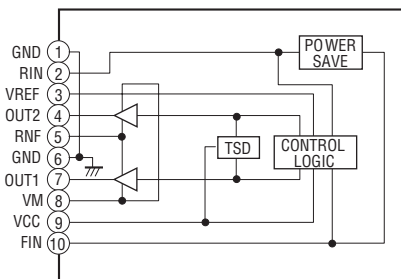


• CD motor section

IC701 M54641L

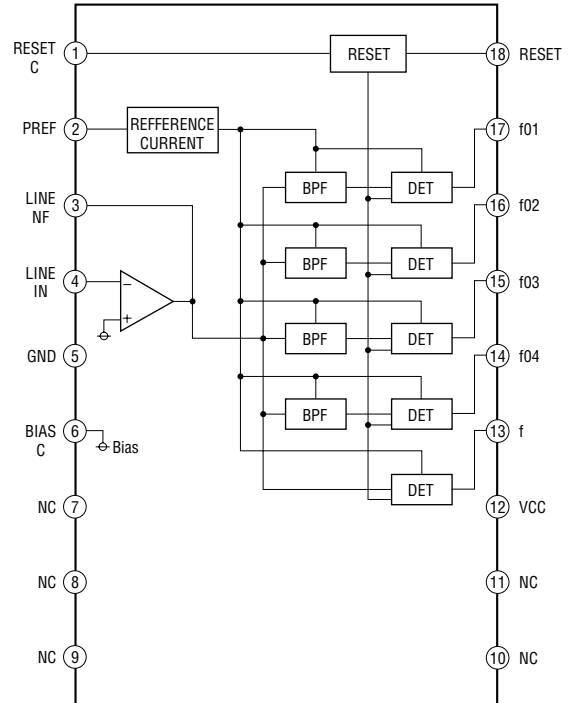


IC801 BA6286N

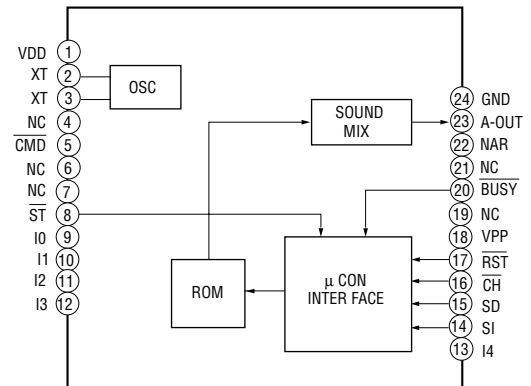


• Display section

IC603 BA3833FP

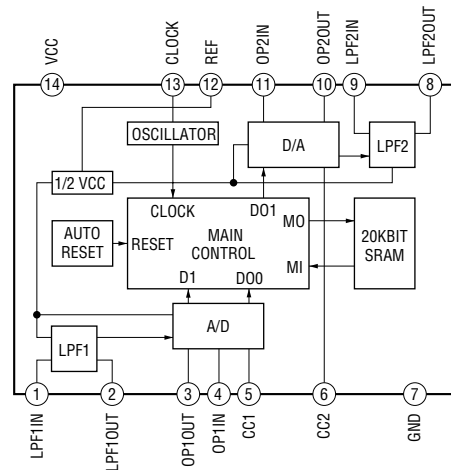


IC851 MSM6653A-517GS-K



• Mic section

IC751 M65850FP



7-31. IC PIN FUNCTIONS

• IC101 FOCUS/TRACKING/SLED SERVO RF AMP (CXA1992AR)

| Pin No. | Pin Name | I/O | Function |
|---------|----------|-----|---|
| 1 | FEO | O | Focus error amplifier output Connected internally to the window comparator input for bias adjustment |
| 2 | FEI | I | Focus error input |
| 3 | DFCT | I | Capacitor connection pin for defect time constant |
| 4 | FGD | I | Ground this pin through a capacitor for cutting the focus servo high-frequency gain |
| 5 | FLB | I | External time constant setting pin for boosting the focus servo low-frequency |
| 6 | FE O | O | Focus drive output |
| 7 | FE M | I | Focus amplifier inverted input |
| 8 | SRCH | I | External time constant setting pin for generating focus search waveform |
| 9 | TGU | I | External time constant setting pin for switching tracking high-frequency gain |
| 10 | TG2 | I | External time constant setting pin for switching tracking high-frequency gain |
| 11 | FSET | I | Peak frequency setting pin for focus and tracking phase compensation amplifier |
| 12 | TA M | I | Tracking amplifier inverted input |
| 13 | TA O | O | Tracking drive output |
| 14 | SL P | I | Sled amplifier non-inverted input |
| 15 | SL M | I | Sled amplifier inverted input |
| 16 | SL O | O | Sled drive output |
| 17 | ISET | I | Connect an external capacitance to set the current which determines the Focus search, Track jump, and Sled kick heights |
| 18 | Vcc | I | Positive power supply |
| 19 | LOCK | I | The sled overrun prevention circuit operates when this pin is Low (No pull-up resistance) |
| 20 | CLK | I | Serial data transfer clock input from CPU (No pull-up resistance) |
| 21 | XLT | I | Lach input from CPU (No pull-up resistance) |
| 22 | DATA | I | Serial data input from CPU (No pull-up resistance) |
| 23 | XRST | I | Reset input; resets at Low (No pull-up resistance) |
| 24 | C.OUT | O | Track number count signal output |
| 25 | SENS1 | O | Outputs FZC, DFCT1, TZC, BALH, TGH, FOH, ATSC, and others according to the command from CPU |
| 26 | SENS2 | O | Outputs DFCT2, MIRR, BALL, TGL, FOL, and others according to the command from CPU |
| 27 | FOK | O | Focus OK comparator output |
| 28 | CC2 | I | Input for the defect bottom hold output with capacitance coupled |
| 29 | CC1 | O | Defect bottom hold output Connected internally to the interruption comparator input |
| 30 | CB | I | Connection pin for defect bottom hold capacitor |
| 31 | CP | I | Connection pin for MIRR hold capacitor MIRR comparator non-inverted input |
| 32 | RF I | I | Input for the RF summing amplifier output with capacitance coupled |
| 33 | RF O | O | RF summing amplifier output Eye-pattern check point |

• Abbreviation

FZC : Focus zero-cross

DFCT : Defect

TZC : Tracking zero-cross

BALH : E-F Balance (High)

TGH : Tracking Gain (High)

FOH : Focus Bias (High)

ATSC : Anti Shock

MIRR : Mirror

BALL : E-F Balance (Low)

TGL : Tracking Gain (Low)

FOL : Focus Bias (Low)

| Pin No. | Pin Name | I/O | Function |
|---------|----------|-----|---|
| 34 | RF M | I | RF summing amplifier inverted input The RF amplifier gain is determined by the resistance connected between this pin and RFO pin |
| 35 | RFTC | I | External time constant setting pin during RF level control |
| 36 | LD | O | APC amplifier output |
| 37 | PD | I | APC amplifier input |
| 38 | PD1 | I | RF I-V amplifier inverted input |
| 39 | PD2 | I | Connect these pins to the photo diode A+C and B+D pins |
| 40 | FE BIAS | I | Bias adjustment of focus error amplifier Leave this pin open for automatic adjustment |
| 41 | F | I | F I-V and E I-V amplifier inverted input |
| 42 | E | I | Connect these pins to photo diodes F and E |
| 43 | EI | - | I-V amplifier E gain adjustment (When not using automatic balance adjustment) |
| 44 | VEE | - | Negative power supply |
| 45 | TEO | O | Tracking error amplifier output E-F signal is output |
| 46 | LPFI | I | Comparator input for balance adjustment (Input from TEO through LPF) |
| 47 | TEI | I | Tracking error input |
| 48 | ATSC | I | Window comparator input for ATSC detection |
| 49 | TZC | I | Trackig zero-cross comparator input |
| 50 | TDFCT | I | Capacitor connection pin for defect time constant |
| 51 | VC | O | $(V_{CC} + V_{EE})/2$ direct voltage output |
| 52 | FZC | I | Focus zero-cross comparator input |

- Abbreviation
APC : Auto Power Control

• IC103 DIGITAL SIGNAL PROCESSOR (CXD2519Q)

| Pin No. | Pin Name | I/O | Function |
|---------|----------|-----|--|
| 1 | VDD | – | +5V power supply |
| 2 | VSS | – | Ground |
| 3 | LMUT | O | Lch “L” detection flog (Not used) |
| 4 | RMUT | O | Rch “L” detection flog (Not used) |
| 5 | ACDT | O | Test output (Not used) |
| 6 | CKOUT | O | Master clock divider output (Not used) |
| 7 | SQCK | I | Clock input for SQSO read out |
| 8 | SQSO | O | Serial output for Sub-Q 80bit |
| 9 | SENS | O | SENS signal output to CPU |
| 10 | DATA | I | Serial data input, supplied from CPU |
| 11 | XLAT | I | Latch input, supplied from CPU |
| 12 | CLOK | I | Serial data transfer clock input, supplied from CPU |
| 13 | SEIN | I | SENS input from IC101 |
| 14 | CNIN | I | Numbers of track jump counted signal input |
| 15 | DATO | O | Serial data output to IC101 |
| 16 | XLTO | O | Serial data latch output to IC101 |
| 17 | CLKO | O | Serial data transfer clock output to IC101 |
| 18 | SPOA | I | Micro computer demodulation interface (Input A) |
| 19 | SPOB | I | Micro computer demodulation interface (Input B) |
| 20 | SPOC | I | Micro computer demodulation interface (Input C) |
| 21 | SPOD | I | Micro computer demodulation interface (Input D) |
| 22 | XLON | O | Micro computer demodulation interface (Output) |
| 23 | FOK | I | Focus OK input |
| 24 | VDD | – | +5V power supply |
| 25 | VSS | – | Ground |
| 26 | MON | O | Output to control ON/OFF of spindle motor (Not used) |
| 27 | MDP | O | Output to control spindle motor servo |
| 28 | MDS | O | Output to control spindle motor servo (Not used) |
| 29 | LOCK | O | GFS is sampled by 460Hz |
| 30 | PWMI | I | Input to control the outside spindle motor |
| 31 | TES0 | I | Test pin (Connected to ground) |
| 32 | TES1 | I | Test pin (Connected to ground) |
| 33 | VPCO2 | O | Charge-pump output (Not used) |
| 34 | VPCO1 | O | Charge-pump output (Not used) |
| 35 | VCKI | I | VCO2 oscillator input (Not used) |
| 36 | V16M | O | VCO2 oscillator output (Not used) |
| 37 | VCTL | I | VCO2 control voltage input |
| 38 | PCO | O | Charge-pump output to master PLL |
| 39 | FILO | O | Filter output to master PLL |
| 40 | FILI | I | Filter input for master PLL |

• Abbreviation

GFS : Guarded Frame Sync

PLL : Phase Locked Loop

| Pin No. | Pin Name | I/O | Function |
|---------|----------|-----|--|
| 41 | AVSS | – | Analog ground |
| 42 | CLTV | I | Control voltage input for VCO |
| 43 | AVDD | – | Analog power supply |
| 44 | RF | I | EFM signal input |
| 45 | BIAS | I | Asymmetry circuit constant current input |
| 46 | ASYI | I | Asymmetry compare voltage input |
| 47 | ASYO | O | EFM full swing output (“L” =Vss, “H” =VDD) |
| 48 | ASYE | I | Asymmetry circuit ON/OFF (“L”=OFF, “H”=ON) |
| 49 | WDCK | O | D/A interface Word clock $f=2f_s$ (Not used) |
| 50 | LRCK | O | D/A interface LR clock output $f=F_s$ |
| 51 | LRCKI | I | D/A interface LR clock input $f=F_s$ |
| 52 | PCMD | O | D/A interface Serial data output |
| 53 | PCMDI | I | D/A interface Serial data input |
| 54 | BCK | O | D/A interface Bit clock output |
| 55 | BCKI | I | D/A interface Bit clock input |
| 56 | VSS | – | Ground |
| 57 | VDD | – | +5V power supply |
| 58 | GTOP | O | Not used |
| 59 | XUGF | O | Not used |
| 60 | XPLCK | O | EFM decoder PLL clock output |
| 61 | GFS | O | “H” Playback EFM sync and interpolation protection timing much |
| 62 | RFCK | O | Read frame clock signal output |
| 63 | C2PO | O | Not used |
| 64 | XRAOF | O | Internal RAM overflow detection signal output (Not used) |
| 65 | MNT3 | O | Not used |
| 66 | MNT1 | O | Not used |
| 67 | MNT0 | O | Not used |
| 68 | XTSL | I | Not used |
| 69 | FSTT | O | 2/3 divider output (Not used) |
| 70 | C4M | O | 4.2336MHz output(Not used) |
| 71 | DOUT | O | Digital audio signal output |
| 72 | EMPH | O | Playback disc output in emphasis mode |
| 73 | EMPHI | I | “H” =Input when de-emphasis ON |
| 74 | WFCK | O | Write frame clock signal output |
| 75 | SCOR | O | Sub-code sync output |
| 76 | SBSO | O | Sub-P through Sub-W serial output |
| 77 | EXCK | I | Clock input for SBSO read-out |
| 78 | VSS | – | Ground |
| 79 | VDD | – | +5V power supply |
| 80 | SYSM | I | System mute input |

- Abbreviation

EFM : Eight to Fourteen Modulation

| Pin No. | Pin Name | I/O | Function |
|---------|----------|-----|---------------------------------|
| 81 | — | – | Not used |
| 82 | AVSS | – | Analog ground |
| 83 | AVDD | – | Analog power supply |
| 84 | AOUT1 | O | Lch analog output |
| 85 | AIN1 | I | Lch opamp input |
| 86 | LOUT1 | O | Lch line output |
| 87 | AVSS | – | Analog ground |
| 88 | XVDD | – | Master clock power supply |
| 89 | XTAI | I | X'tal oscillator circuit input |
| 90 | XTAO | O | X'tal oscillator circuit output |
| 91 | XVSS | – | Master clock ground |
| 92 | AVSS | – | Analog ground |
| 93 | LOUT2 | O | Rch line output |
| 94 | AIN2 | I | Rch opamp input |
| 95 | AOUT2 | O | Rch analog output |
| 96 | AVDD | – | Analog power supply |
| 97 | AVSS | – | Analog ground |
| 98 | — | – | Not used |
| 99 | — | – | Not used |
| 100 | XRST | I | System reset input |

• IC501 MASTER CONTROL (uPD780018AYGF-011-3BA)

| Pin No. | Pin Name | I/O | Function |
|---------|-------------|-----|--|
| 1 | LINE-MUTE | O | Line mute signal output |
| 2 | DBFB-H/L | O | DBFB H/L select signal output |
| 3 | M62442-LAT | O | Latch signal output for IC111 (M62442FP) |
| 4 | KCON-LAT | O | Not used |
| 5 | POWER | O | Power ON/OFF signal output |
| 6 | F-RELAY | O | Front speaker relay control output (Not used) |
| 7 | R-RELAY | O | Rear speaker relay control output |
| 8 | PL-RELAY | O | Not used |
| 9 | VSS | – | Ground |
| 10 | X2 | O | X'tal (5MHz) |
| 11 | X1 | I | |
| 12 | VDD | – | Power supply (+5V) |
| 13 | XT2 | O | X'tal (32.768 KHz) |
| 14 | XT1 | I | |
| 15 | RESET | I | Reset signal input |
| 16 | (AC-CUT) | I | Back up signal input |
| 17 | CAPM-CNTIP | I | Capstan motor control 1 (+) signal output |
| 18 | SCOR | O | Subcode data request signal output |
| 19 | SOFT-TEST | O | Software test port |
| 20 | — | – | Not used |
| 21 | RDS-INT | I | RDS data interrupt input |
| 22 | RDS-DATA | I | RDS data interrupt input |
| 23 | AVDD | – | Power supply (+5V) |
| 24 | AVREF | I | Analog reference voltage input. |
| 25 | ADJ | I | CD adjust point port Normal "H" |
| 26 | A-SHUT | I | A Deck reel pulse detector |
| 27 | B-SHUT | I | B Deck reel pulse detector |
| 28 | B-HALF | I | Half detector signal input |
| 29 | CLK-CHECK | I | Connected to ground |
| 30 | SPEC-IN | I | Version select signal input |
| 31 | AMS-IN | I | Connected to ground |
| 32 | DEMO-CHANGE | I | DEMO H/L select signal input (Connected to ground) |
| 33 | AVSS | – | Ground |
| 34 | SQ-DATA-IN | I | Subcode Q data clock input |
| 35 | — | – | Not used |
| 36 | SQ-CLK | I | Sub code Q data clock input |
| 37 | SUR-ON/OFF | O | Not used |
| 38 | FB CONT-A | I | Not used |
| 39 | FB CONT-B | I | Connected to ground |
| 40 | VSS | – | Ground |
| 41 | PL-VOL | O | Latch signal output to erectrial volume (Not used) |
| 42 | PL-LAT | O | Latch signal input to pro-logic (Not used) |
| 43 | COM-DIN | I | Connected to ground |
| 44 | COM-DOUT | O | Common serial data output (Not used) |

• Abbreviation

APC : Auto Power Control

| Pin No. | Pin Name | I/O | Function |
|---------|--------------|-----|--|
| 45 | COM-CLK | O | Common serial clock output |
| 46 | CD-POWER | O | CD power on signal output |
| 47 | CD-DATA | O | CD data output |
| 48 | CD-CLK | O | CD clock output |
| 49 | PL-CLK | O | Clock signal output to pro-logic (Not used) |
| 50 | PL-DATA | I | Data signal output to pro-logic (Not used) |
| 51 | M62442-CLK | O | Clock signal output for IC111 (M62442FP) |
| 52 | M62442-DATA | O | Data signal output for IC111 (M62442FP) |
| 53 | LEVEL-CONT-A | O | Not used |
| 54 | LEVEL-CONT-B | O | Not used |
| 55 | IIC-DATA | O | Data output for IC601 |
| 56 | IIC-CLK | O | Clock output for IC601 |
| 57 | XRST | O | CD reset signal output |
| 58 | XLT | O | CD latch signal output |
| 59 | FCS-SW | O | Not used |
| 60 | TBL-L | O | Table motor control output |
| 61 | TBL-R | O | |
| 62 | — | O | Not used |
| 63 | LOAD-OUT | O | Loading motor control signal output |
| 64 | LOAD-IN | O | |
| 65 | ST-CLK | O | Tuner clock output |
| 66 | ST-DIN | I | Tuner data input |
| 67 | ST-DOUT | O | Tuner data output |
| 68 | ST-CE | O | Tuner chip enable output |
| 69 | TUNED | I | Tuned detection for tuner |
| 70 | STEREO | I | Stereo detection for tuner |
| 71 | VSS | – | Ground |
| 72 | ST-MUTE | O | Tuner mute signal output |
| 73 | SENS2 | I | BD Condition signal input |
| 74 | SENS | I | |
| 75 | DISC-SENS | I | Slit sensor of disc table input |
| 76 | T-SENS | I | CD table detection signal input |
| 77 | CAPM-CNT2P | O | Capstan motor control 2 (+) signal output |
| 78 | ENC 3 | I | Disc tray address detect encoder input |
| 79 | ENC 2 | I | |
| 80 | ENC 1 | I | |
| 81 | OUT-OPEN | O | Loading out detection signal output |
| 82 | CAP-M-H/L | O | Capstan motor H/N speed select signal output |
| 83 | B-TRG | O | Trigger motor control output |
| 84 | A-TRG | O | Trigger motor control output |
| 85 | CAPM-CONT1M | O | Capstan motor control 1 (–) signal output |
| 86 | CAPM-CONT2M | O | Capstan motor control 2 (–) signal output |
| 87 | TC-MUTE | O | TC mute ON/OFF selection output |

| Pin No. | Pin Name | I/O | Function |
|---------|------------|-----|--|
| 88 | R/P-PASS | O | REC/PB/PASS selection output |
| 89 | NR-ON/OFF | O | NR ON/OFF signal output |
| 90 | REC-MUTE | O | REC mute ON/OFF selection output |
| 91 | CLK-OUT | O | Clock out signal check |
| 92 | BIAS | O | Bias ON/OFF signal output |
| 93 | EQ-H/N | O | Equalizer H/N select output |
| 94 | PB-A/B | O | PB Deck A/Deck B select output |
| 95 | A-PLAY-SW | I | Deck A play detect |
| 96 | B-PLAY-SW | I | Deck B play detect |
| 97 | TC-RELAY | O | REC/PB head selection output for IC602 |
| 98 | A-HALF | I | Deck A cassette detect |
| 99 | ALC-ON/OFF | O | ALC ON/OFF output signal |
| 100 | STK-MUTE | O | Power amp ON/OFF signal output |

• IC601 DISPLAY CONTROL (TMP87CM74AF)

| Pin No. | Pin Name | I/O | Function |
|----------|----------------------|-----|--|
| 1 to 6 | LED3 to LED8 | O | LED driver output |
| 7 | VSS | – | Ground |
| 8 | X OUT | O | X'tall (8MHz) |
| 9 | X IN | I | |
| 10 | RESET | I | Reset signal input from main controller |
| 11 | LED9 | O | LED driver output |
| 12 | LED10 | O | |
| 13 | TEST | I | Connected ground |
| 14 to 18 | LED11 to LED15 | O | LED driver output |
| 19 | VOL A | I | Rotary encoder (S602) pulse input |
| 20 | VOL B | I | |
| 21 | JOG A | I | Rotaly encoder (S601) pulse input |
| 22 | JOG B | I | |
| 23 | SCL | O | Serial clock input from master controller |
| 24 | SDA | O | Serial data input from master controller |
| 25 | L. SEL | O | LED select signal output |
| 26 to 29 | KEY 0 to KEY 3 | I | Key input |
| 30 | MODEL | I | Version select signal input |
| 31 | (LED 16 OPEN) | – | LED driver output (Not used) |
| 32 | L + R | I | Spectrum analyzer (high frequency) input |
| 33 | SIRCS | I | Remote commander signal input |
| 34 to 37 | SPEANA 1 to SPEANA 4 | I | Spectrum analyzer input |
| 38 | VASS | – | Ground |
| 39 | VAREF | I | Analog reference voltage input |
| 40 | VDD | – | Power supply (+5V) |
| 41 to 53 | GR 1 to GR13 | O | FL gride signal output |
| 54 to 77 | SEG 1 to SEG 24 | O | FL segment signal output |
| 78 | VKK | – | Power supply (–25V) for FL segment signal output |
| 79 | LED 1 | O | LED driver output |
| 80 | LED 2 | O | |

• Abbreviation

FL : Fluorescent indicator tube

• IC801 PANEL CONTROL (TMP87CH48DF)

| Pin No. | Pin Name | I/O | Function |
|----------|--------------|-----|--|
| 1 | VSS | – | Ground |
| 2 | X OUT | O | X'tall (8MHz) |
| 3 | X IN | I | |
| 4 | RESET | I | Reset signal input |
| 5 | MUTE | I | Mute ON/OFF selection input |
| 6 | MODE_0 | I | Connected to ground |
| 7 | TEST | – | |
| 8 | MODE_1 | I | |
| 9 | YB_CLK | O | |
| 10 | NAR/YB_RDY | I | Connected to VDD |
| 11 | MSM6654/BSY | I | Busy signal input for IC851 (MSM6653A) |
| 12 | MSM6654/RST | O | Reset signal output for IC851 (MSM6653A) |
| 13 | MSM6654/CH | O | Channel signal output for IC851 (MSM6653A) |
| 14 | MSM6654/DATA | O | Data signal output for IC851 (MSM6653A) |
| 15 | MSM6654/CLK | O | Clock signal output for IC851 (MSM6653A) |
| 16 | MSM6654/LAT | O | Latch signal output for IC851 (MSM6653A) |
| 17 | YB_D0 | I | Connected to ground |
| 18 | IC2 CLK | I | Serial clock input from master controller |
| 19 | IC2 DATA | I | Serial data input from master controller |
| 20 | YB_D3 | I | Connected to ground |
| 21 | UART RX | I | |
| 22 | UART TX | O | |
| 23 to 26 | NC | O | Connected to ground |
| 27 | JOG_A | I | Rotary encoder (S601) pulse input |
| 28 | JOG_B | I | |
| 29 | SIRCS | I | Remote commander signal input |
| 30 | VASS | – | Ground |
| 31 | VAREF | I | Analog reference voltage input |
| 32 | DVDD | – | Power supply (+5V) |
| 33 | BPF/LOW | I | Spectrum analyzer input |
| 34 | BPF/LOW-MID | I | Connected to ground |
| 35 | BPF/HIGH-MID | I | Connected to ground |
| 36 | BPF/HIGH | I | Spectrum analyzer input |
| 37 | L + R | I | Spectrum analyzer (high frequency) input |
| 38 | KEY/0 | I | Key input |
| 39 | KEY/1 | I | |
| 40 | KEY/2 | I | Connected to VDD |
| 41 to 56 | NC | O | Not used |
| 57 to 60 | GND | – | Ground |
| 61 | BPM_LED_B | O | LED Drive output |
| 62 | BPM_LED_A | O | |
| 63 | BOMBER_LED | O | |
| 64 | ON/OFF_LED | O | |

SECTION 8 EXPLODED VIEWS

NOTE:

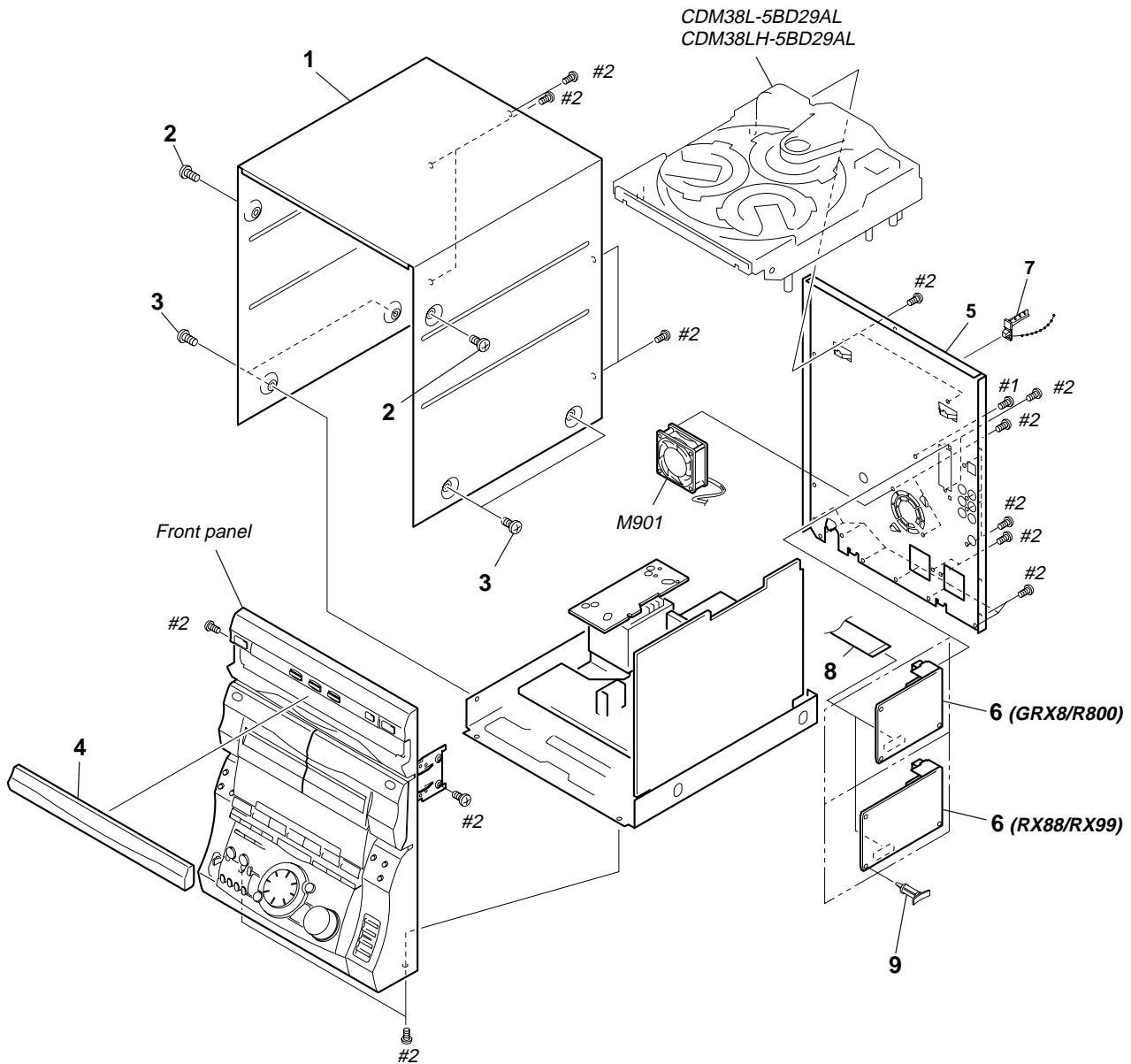
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- Abbreviation
- G : German model
- EE : East European model
- EA3 : Saudi Arabia model
- EA4 : Israel model
- MX : Mexican model
- HK : Hong Kong model
- SP : Singapore model
- MY : Malaysia model
- TW : Taiwan model

- AUS : Australian model
- AR : Argentine model
- TH : Thailand model
- E2 : Without SW tuner E model
- E3 : With SW tuner E model

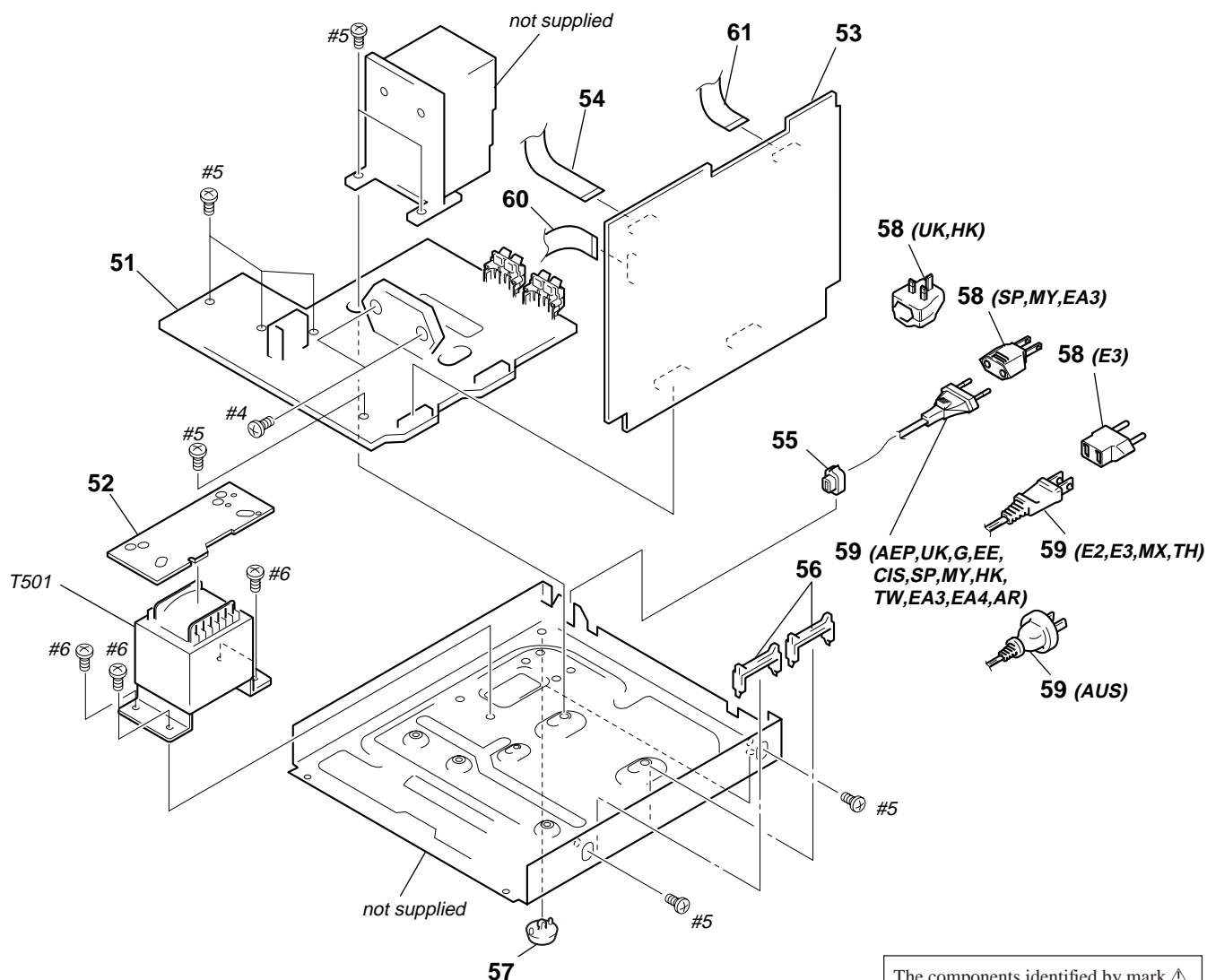
The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

8-1. CASE SECTION



| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---|--------|----------|--------------|--|--------|
| 1 | 4-996-816-01 | CASE | | * 5 | 4-996-818-81 | PANEL, BACK (INDONESIA PRODUCT)(R800:MX) | |
| 2 | 3-363-099-71 | SCREW (CASE 3 TP2) | | * 5 | 4-996-818-91 | PANEL, BACK (INDONESIA PRODUCT)(R800:AR) | |
| 3 | 3-363-099-11 | SCREW (CASE 3 TP2) | | * 5 | 4-997-720-01 | PANEL, BACK (MALAYSIA PRODUCT)(GRX8:E2,E3) | |
| 4 | 4-996-784-11 | PANEL, LOADING (RX88) | | * 5 | 4-997-720-11 | PANEL, BACK (MALAYSIA PRODUCT)(GRX8:SP,MY) | |
| 4 | 4-996-784-21 | PANEL, LOADING (GRX8) | | * 5 | 4-997-720-21 | PANEL, BACK (MALAYSIA PRODUCT)(GRX8:TW) | |
| 4 | 4-996-784-71 | PANEL, LOADING (RX99) | | * 5 | 4-997-720-31 | PANEL, BACK (MALAYSIA PRODUCT)(GRX8:HK) | |
| 4 | 4-996-784-91 | PANEL, LOADING (R800) | | * 5 | 4-997-720-41 | PANEL, BACK (MALAYSIA PRODUCT)(GRX8:AUS) | |
| * 5 | 4-996-817-01 | PANEL, BACK (MALAYSIA PRODUCT)(RX99:AEP,UK,G) | | * 5 | 4-997-720-51 | PANEL, BACK (MALAYSIA PRODUCT)(GRX8:MX) | |
| * 5 | 4-996-817-11 | PANEL, BACK (MALAYSIA PRODUCT)(RX99:EE,CIS) | | * 5 | 4-997-720-61 | PANEL, BACK (GRX8:EA3) | |
| * 5 | 4-996-817-21 | PANEL, BACK (INDONESIA PRODUCT)(RX99:AEP,UK,G) | | * 5 | 4-997-720-81 | PANEL, BACK (MALAYSIA PRODUCT)(R800:MX) | |
| * 5 | 4-996-817-31 | PANEL, BACK (INDONESIA PRODUCT)(RX99:EE,CIS) | | * 5 | 4-997-720-91 | PANEL, BACK (MALAYSIA PRODUCT)(R800:AR) | |
| * 5 | 4-996-817-41 | PANEL, BACK (MALAYSIA PRODUCT)(RX88) | | * 6 | A-4303-588-A | TCB BOARD, COMPLETE (EE,CIS) | |
| * 5 | 4-996-817-51 | PANEL, BACK (INDONESIA PRODUCT)(RX88) | | * 6 | A-4303-590-A | TCB BOARD, COMPLETE (AEP,UK,G) | |
| * 5 | 4-996-817-61 | PANEL, BACK (GRX8:EA4,TH) | | 6 | 1-233-545-11 | ENCAPSULATED COMPONENT (E2,MX,EA4,TH,AUS,AR) | |
| * 5 | 4-996-818-01 | PANEL, BACK (INDONESIA PRODUCT)(GRX8:E2,E3) | | 6 | 1-233-546-11 | ENCAPSULATED COMPONENT (E3,SP,MY,HK,TW,EA3) | |
| * 5 | 4-996-818-11 | PANEL, BACK (INDONESIA PRODUCT)(GRX8:SP,MY) | | 7 | 4-956-370-12 | BAND, PLUG FIXED (UK,HK,AUS) | |
| * 5 | 4-996-818-21 | PANEL, BACK (INDONESIA PRODUCT)(GRX8:TW) | | 8 | 1-773-009-11 | WIRE (FLAT TYPE)(15 CORE)(150mm) (AEP,UK,G,EE,CIS,E3,SP,MY,HK,TW,EA3) | |
| * 5 | 4-996-818-31 | PANEL, BACK (INDONESIA PRODUCT)(GRX8:HK) | | 8 | 1-769-977-11 | WIRE (FLAT TYPE)(13 CORE)(150mm) (E2,MX,EA4,TH,AUS,AR) | |
| * 5 | 4-996-818-41 | PANEL, BACK (INDONESIA PRODUCT)(GRX8:AUS) | | 9 | 4-924-098-91 | HOLDER, PC BOARD (RX88,RX99) | |
| * 5 | 4-996-818-51 | PANEL, BACK (INDONESIA PRODUCT)(GRX8:MX) | | M901 | 1-698-792-11 | FAN, DC (RX88/RX99) | |
| | | | | M901 | 1-763-048-21 | FAN, D.C. (GRX8/R800) | |

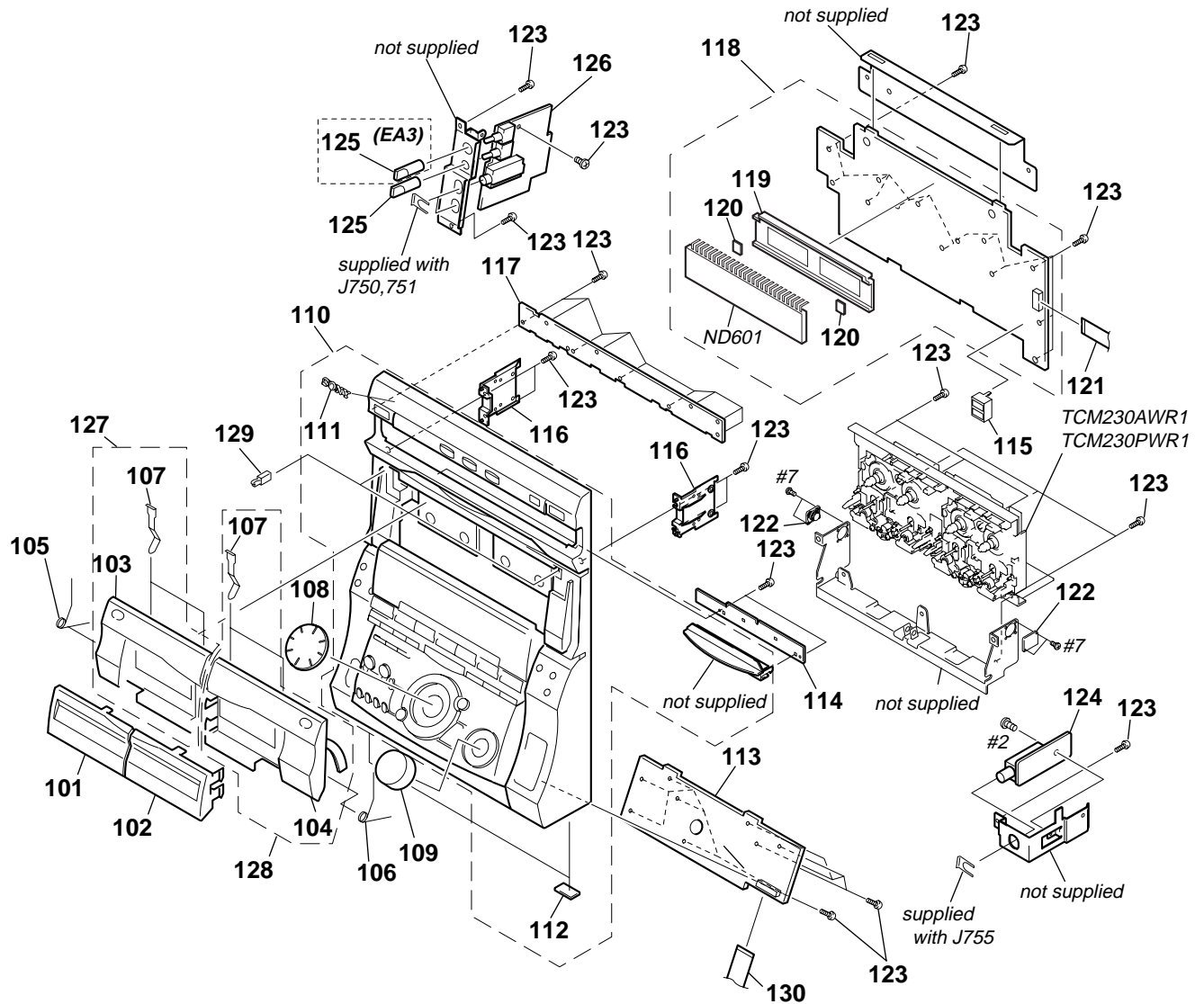
8-2. CHASSIS SECTION



The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

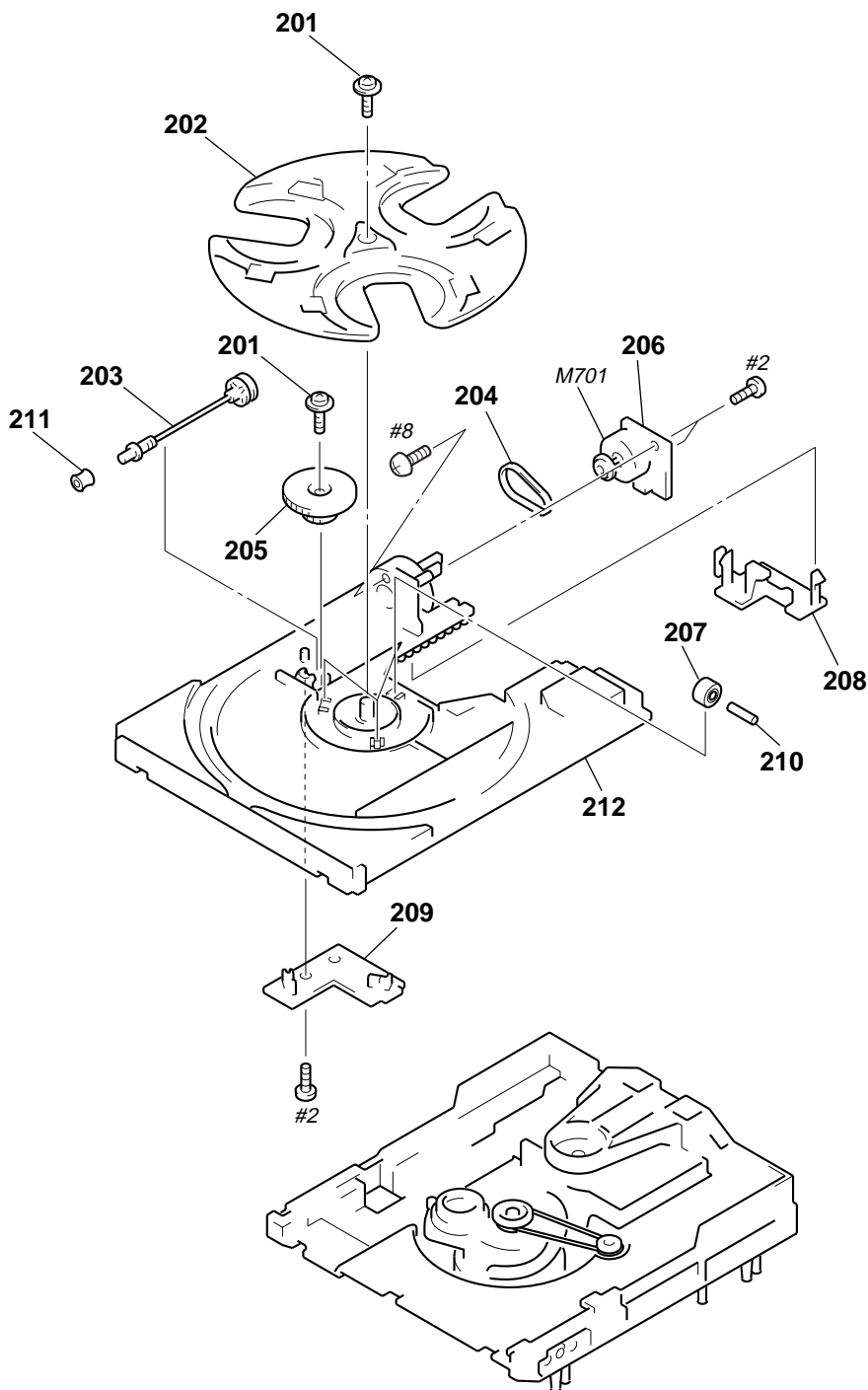
| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---|--------|----------|--------------|--|--------|
| * 51 | A-4407-260-A | POWER BOARD, COMPLETE (GRX8/R800) | | * 56 | 4-988-533-01 | HOLDER, PWB | |
| * 51 | A-4407-300-A | POWER BOARD, COMPLETE (RX88) | | 57 | 4-965-822-01 | FOOT | |
| * 51 | A-4407-722-A | POWER BOARD, COMPLETE (RX99) | | △ 58 | 1-569-007-11 | ADAPTOR, CONVERSION 2P (E3) | |
| * 52 | 1-668-274-11 | TRANSFORMER BOARD | | △ 58 | 1-569-008-11 | ADAPTOR, CONVERSION 2P (SP,MY,EA3) | |
| * 53 | A-4405-131-A | MAIN BOARD, COMPLETE (GRX8:E3,SP,MY,HK,TW,EA3) | | △ 58 | 1-770-019-11 | ADAPTOR, CONVERSION PLUG 3P (UK,HK) | |
| * 53 | A-4405-146-A | MAIN BOARD, COMPLETE (RX88/RX99:AEP,UK,G) | | △ 59 | 1-558-943-41 | CORD, POWER (E2,E3,MX,) | |
| * 53 | A-4407-252-A | MAIN BOARD, COMPLETE (GRX8:E2,MX/R800) | | △ 59 | 1-575-651-21 | CORD, POWER (AEP,UK,G,EE,CIS,SP,MY,HK,TW,EA3,EA4,AR) | |
| * 53 | A-4407-322-A | MAIN BOARD, COMPLETE (RX99:EE,CIS) | | △ 59 | 1-696-845-31 | CORD, POWER (AUS) | |
| * 53 | A-4407-723-A | MAIN BOARD, COMPLETE (GRX8:AUS) | | △ 59 | 1-751-326-21 | CORD, POWER (TH) | |
| * 53 | A-4407-749-A | MAIN BOARD, COMPLETE (GRX8:EA4,TH) | | 60 | 1-773-011-11 | WIRE (FLAT TYPE)(15 CORE)(170mm) | |
| 54 | 1-773-041-11 | WIRE (FLAT TYPE) (17 CORE) | | 61 | 1-773-112-11 | WIRE (FLAT TYPE)(19 CORE)(140mm) | |
| 55 | 3-703-244-00 | BUSHING (FBS001), CORD (AEP,UK,G,EE,CIS,SP,MY,HK,TW,EA3,EA4,AUS,AR) | | △ T501 | 1-431-708-11 | TRANSFORMER, POWER (AEP,UK,G,EE,CIS,TH) | |
| 55 | 3-703-571-11 | BUSHING (S) (4516), CORD (E2,E3,MX,TH) | | △ T501 | 1-431-709-11 | TRANSFORMER, POWER (E2,E3,SP,MY,MX,HK,EA3,EA4,TW,AUS,AR) | |

8-3. FRONT PANEL SECTION



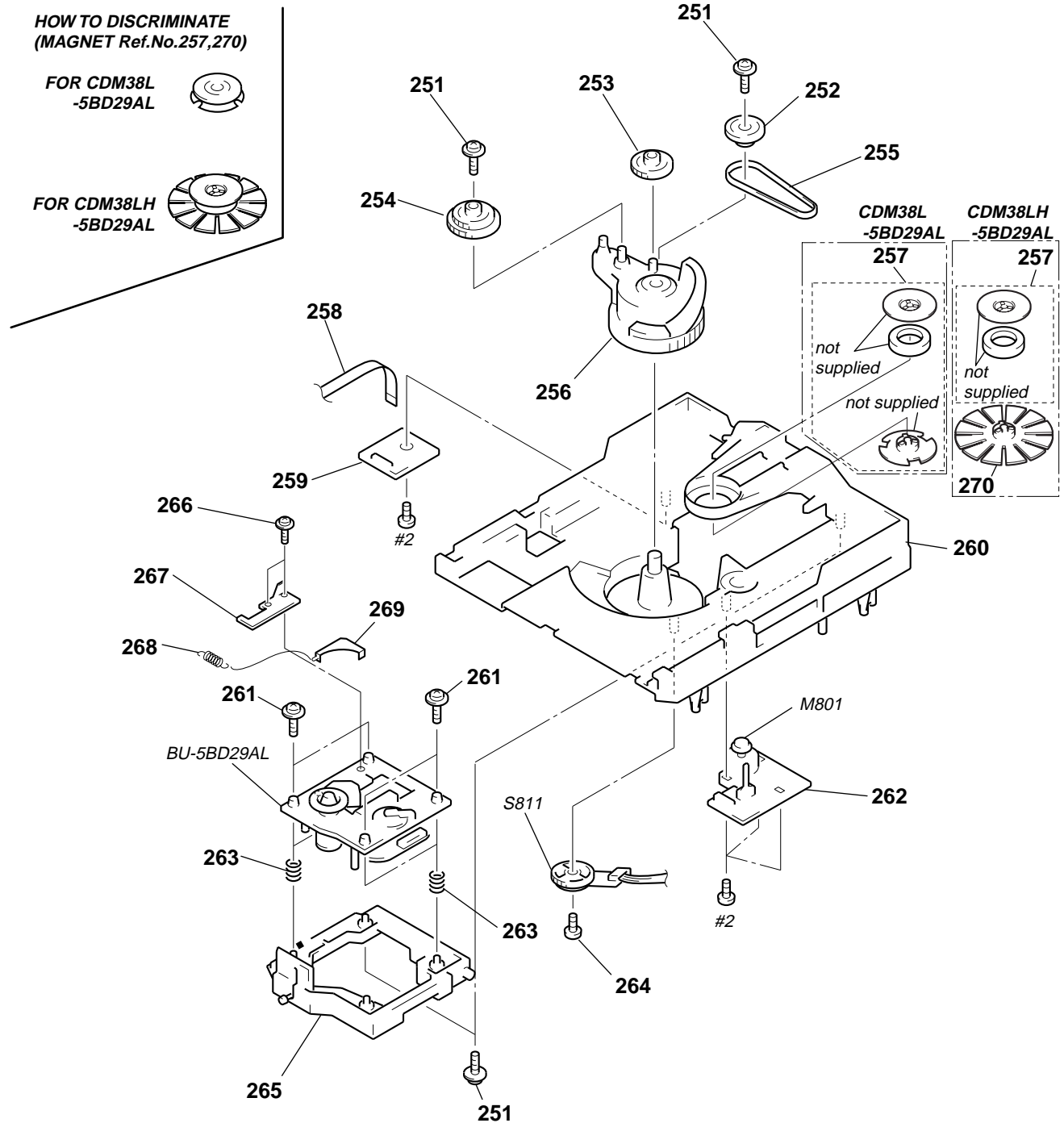
| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--|--------|----------|--------------|--|--------|
| 101 | 4-996-808-01 | WINDOW (TCL) | | * 117 | 1-668-268-11 | CD-SW BOARD | |
| 102 | 4-996-809-01 | WINDOW (TCR) | | * 118 | A-4407-257-A | PANEL BOARD, COMPLETE (GRX8/R800/RX99:EE,CIS) | |
| 103 | 4-996-799-01 | LID (A), CASSETTE | | * 118 | A-4407-308-A | PANEL BOARD, COMPLETE (RX88) | |
| 104 | 4-996-800-01 | LID (B), CASSETTE | | * 118 | A-4407-720-A | PANEL BOARD, COMPLETE (RX99:AEP,UK,G) | |
| 105 | 4-996-732-01 | SPRING (A DECK) | | * 119 | 4-996-796-01 | HOLDER, FL TUBE | |
| 106 | 4-996-733-01 | SPRING (B DECK) | | * 120 | 4-932-810-31 | CUSHION (FL) | |
| 107 | 4-959-229-11 | DETENT, CASSETTE | | 121 | 1-769-974-11 | WIRE (FLAT TYPE) (13 CORE) | |
| 108 | 4-996-810-01 | KNOB (JOG) | | 122 | 3-319-224-01 | DAMPER, SMALL | |
| 109 | 4-996-811-01 | KNOB (VOL) | | 123 | 4-951-620-01 | SCREW (2.6X8), +BVTP | |
| 110 | X-4949-323-1 | PANEL ASSY, FRONT (EXCEPT AEP,UK,G,EA3) | | * 124 | 1-668-271-11 | HP BOARD | |
| 110 | X-4949-329-1 | PANEL ASSY, FRONT (RX99:AEP,UK,G) | | 125 | 4-986-893-51 | KNOB (MICROPHONE) | |
| 110 | X-4949-509-1 | PANEL ASSY, FRONT (RX88) | | * 126 | 1-668-270-11 | MIC BOARD | |
| 110 | X-4949-510-1 | PANEL ASSY, FRONT (GRX8:EA3) | | 127 | X-4949-941-1 | LID (L) ASSY, CASSETTE | |
| 111 | 4-962-708-11 | EMBLEM (4-A), SONY | | 128 | X-4949-942-1 | LID (R) ASSY, CASSETTE | |
| 112 | 4-988-663-01 | FOOT (FELT) | | 129 | 4-995-081-01 | LATCH, DC | |
| * 113 | A-4407-304-A | CONT COM BOARD, COMPLETE (EXCEPT GRX8:EA4,TH) | | 130 | 1-773-109-11 | WIRE (FLAT TYPE)(19 CORE)(110mm) | |
| * 114 | 1-668-269-11 | DECO BOARD | | ND601 | 1-517-731-21 | INDICATOR TUBE, FLUORESCENT | |
| 115 | 4-996-812-01 | HOLDER (LED) | | | | | |
| 116 | 4-996-716-01 | HOLDER (CDM) | | | | | |

8-4. CD MECHANISM DECK SECTION-1 (CDM38L-5BD29AL) (CDM38LH-5BD29AL)



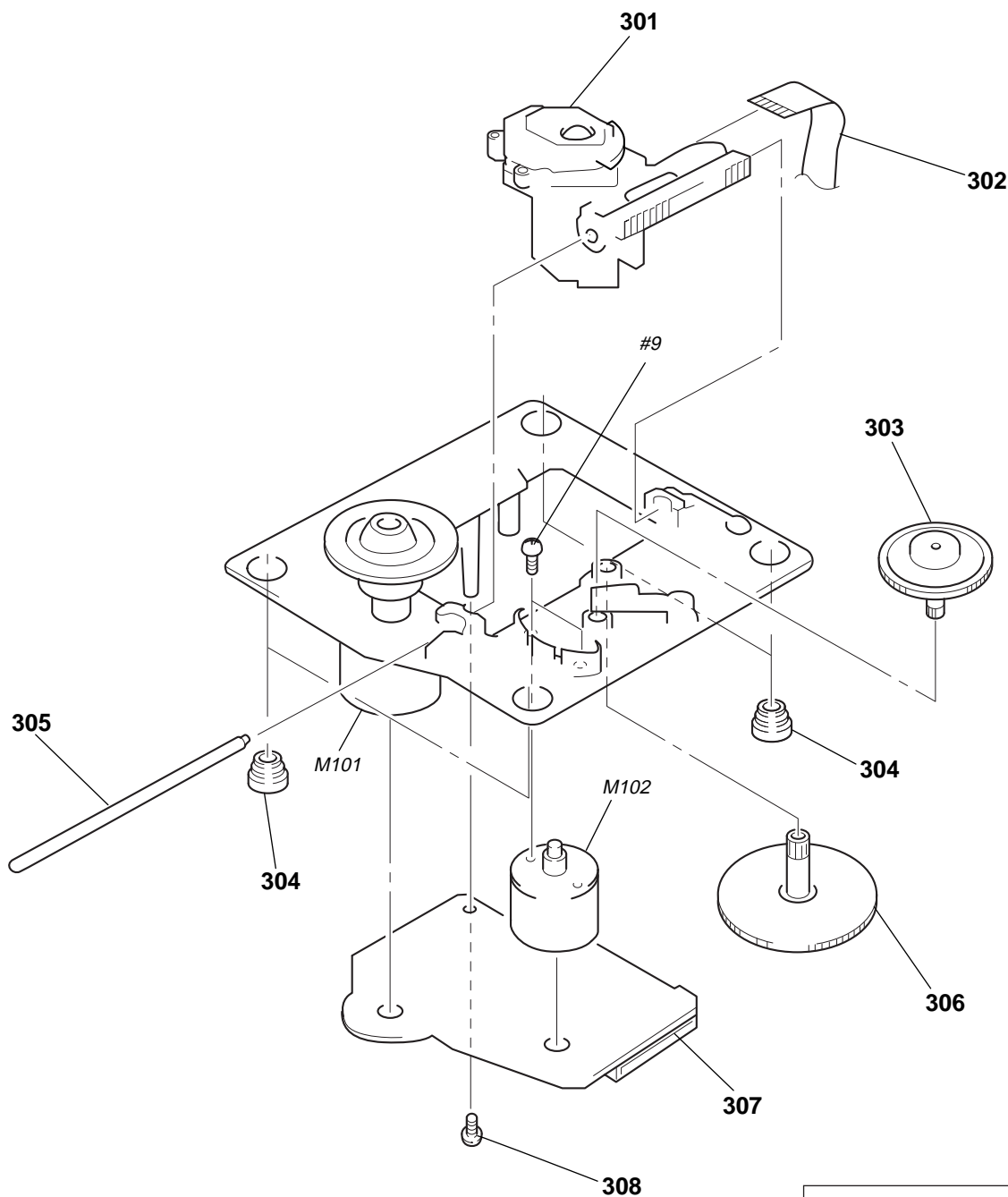
| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--------------------|--------|----------|--------------|-------------------|--------|
| 201 | 4-981-789-01 | BRACKET (2), YOKE | | 208 | 4-977-941-01 | BEARING (WORM) | |
| 202 | 4-977-945-01 | TRAY (TURN) | | * 209 | 1-658-576-11 | SENSOR BOARD | |
| 203 | X-4946-665-1 | SHAFT ASSY, WORM | | 210 | 4-934-376-01 | SHAFT (ROLLER) | |
| 204 | 4-977-943-01 | BELT (TURN) (1.2) | | 211 | 4-981-187-01 | COLLAR (WORM) | |
| 205 | 4-977-956-01 | WHEEL, WORM | | 212 | 4-977-944-01 | TRAY (SLIDE) | |
| * 206 | 1-658-577-11 | MOTOR (TURN) BOARD | | M701 | A-4672-004-A | MOTOR ASSY (TURN) | |
| 207 | 4-988-162-01 | ROLLER | | | | | |

8-5. CD MECHANISM DECK SECTION-2 (CDM38L-5BD29AL / CDM38LH-5BD29AL)



| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|---------------------------------|--------|----------|--------------|--|--------|
| 251 | 4-917-583-71 | BRACKET, YOKE | | * 262 | 1-658-578-11 | MOTOR (SLIDE) BOARD | |
| 252 | 4-977-954-01 | PULLEY (SL) | | 263 | 4-982-447-01 | SPRING (BU), COMPRESSION | |
| 253 | 4-977-953-01 | GEAR (SL-A) | | 264 | 4-951-620-41 | SCREW (2.6), +BVTP | |
| 254 | 4-977-955-01 | GEAR (SL-B) | | * 265 | X-4946-666-1 | HOLDER (BU) ASSY | |
| 255 | 4-977-942-01 | BELT (SL) (1.4) | | 266 | 4-989-494-01 | SCREW (SLIDER), STEP | |
| 256 | X-4946-667-1 | CAM ASSY, BU | | 267 | 4-989-492-21 | SLIDER (38) | |
| 257 | 1-452-879-11 | MAGNET (CDM38L-5BD29AL) | | 268 | 4-989-819-02 | SPRING, TENSION | |
| 257 | 1-452-925-21 | MAGNET ASSY (CDM38LH-5BD29AL) | | 269 | 4-989-491-21 | COVER, LENS | |
| 258 | 1-776-042-11 | WIRE (FLAT TYPE) (8 CORE) | | 270 | 4-933-142-11 | PULLEY (L), PRESS (CDM38LH-5BD29AL) | |
| * 259 | 1-658-575-11 | CONNECTOR BOARD | | M801 | A-4672-004-A | MOTOR ASSY (SLIDE) | |
| * 260 | X-4946-668-1 | CHASSIS (CDM) ASSY | | S811 | 1-473-335-11 | ENCODER, ROTARY (BU, TRAY ADDRESS DET) | |
| 261 | 4-985-672-01 | SCREW (+PTPWH M2.6X6), FLOATING | | | | | |

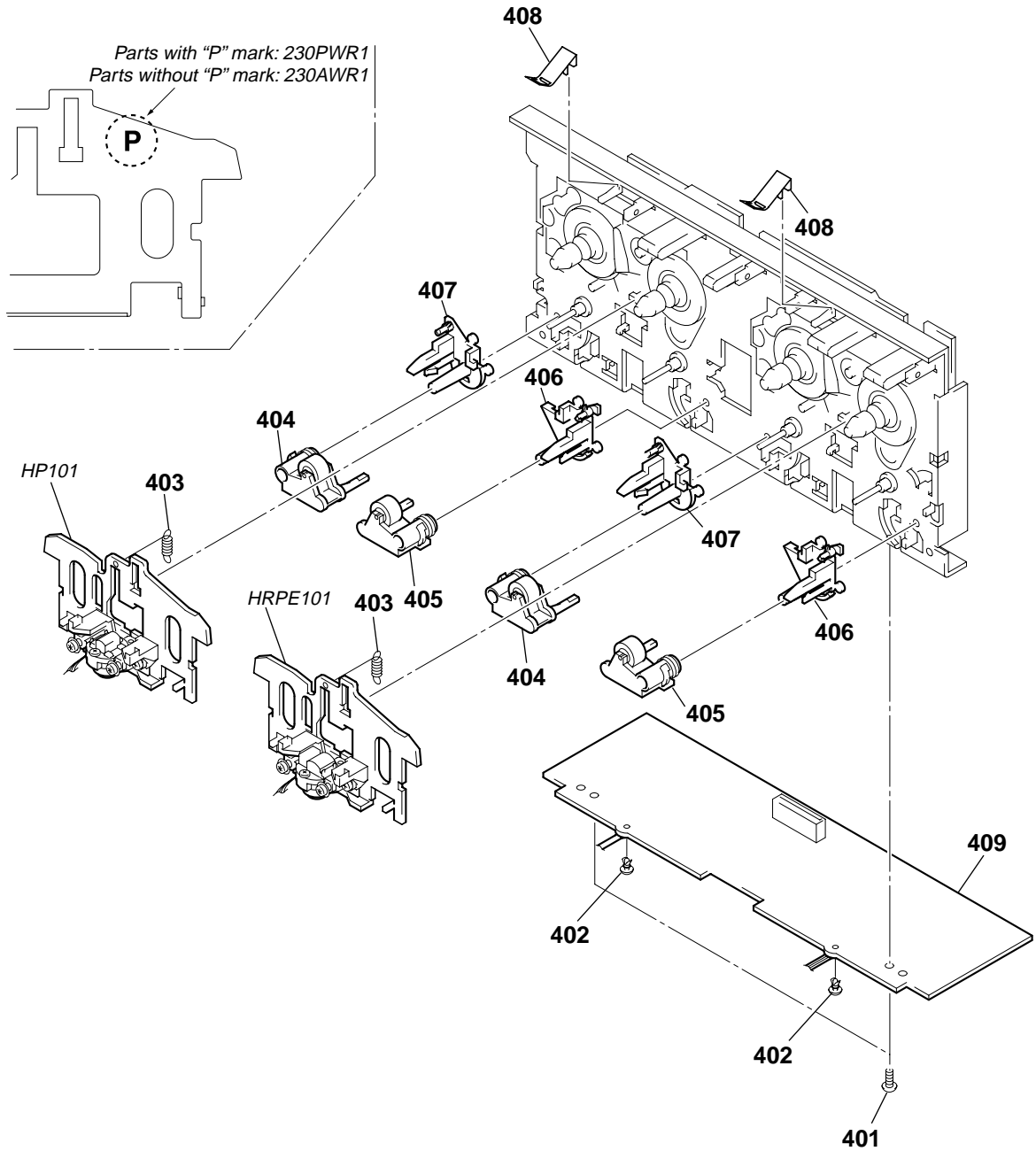
8-6. BASE UNIT SECTION (BU-5BD29AL)



| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|-------------------------------------|--------|----------|--------------|----------------------|--------|
| Δ 301 | 8-820-020-02 | OPTICAL PICK-UP BLOCK KSS-213D/Q-NP | | 306 | 4-917-564-01 | GEAR (P), FLATNESS | |
| 302 | 1-769-069-11 | WIRE (FLAT TYPE) (16 CORE) | | * 307 | A-4699-522-A | BD BOARD, COMPLETE | |
| 303 | 4-912-567-21 | GEAR (M) | | 308 | 4-951-620-01 | SCREW (2.6X8), +BVTP | |
| 304 | 4-951-940-01 | INSULATOR (BU) | | M101 | X-4917-523-4 | MOTOR ASSY (SPINDLE) | |
| 305 | 4-917-565-01 | SHAFT, SLED | | M102 | X-4917-504-1 | MOTOR ASSY (SLED) | |

8-7. TC MECHANISM SECTION 1 (TCM230AWR1) (TCM230PWR1)

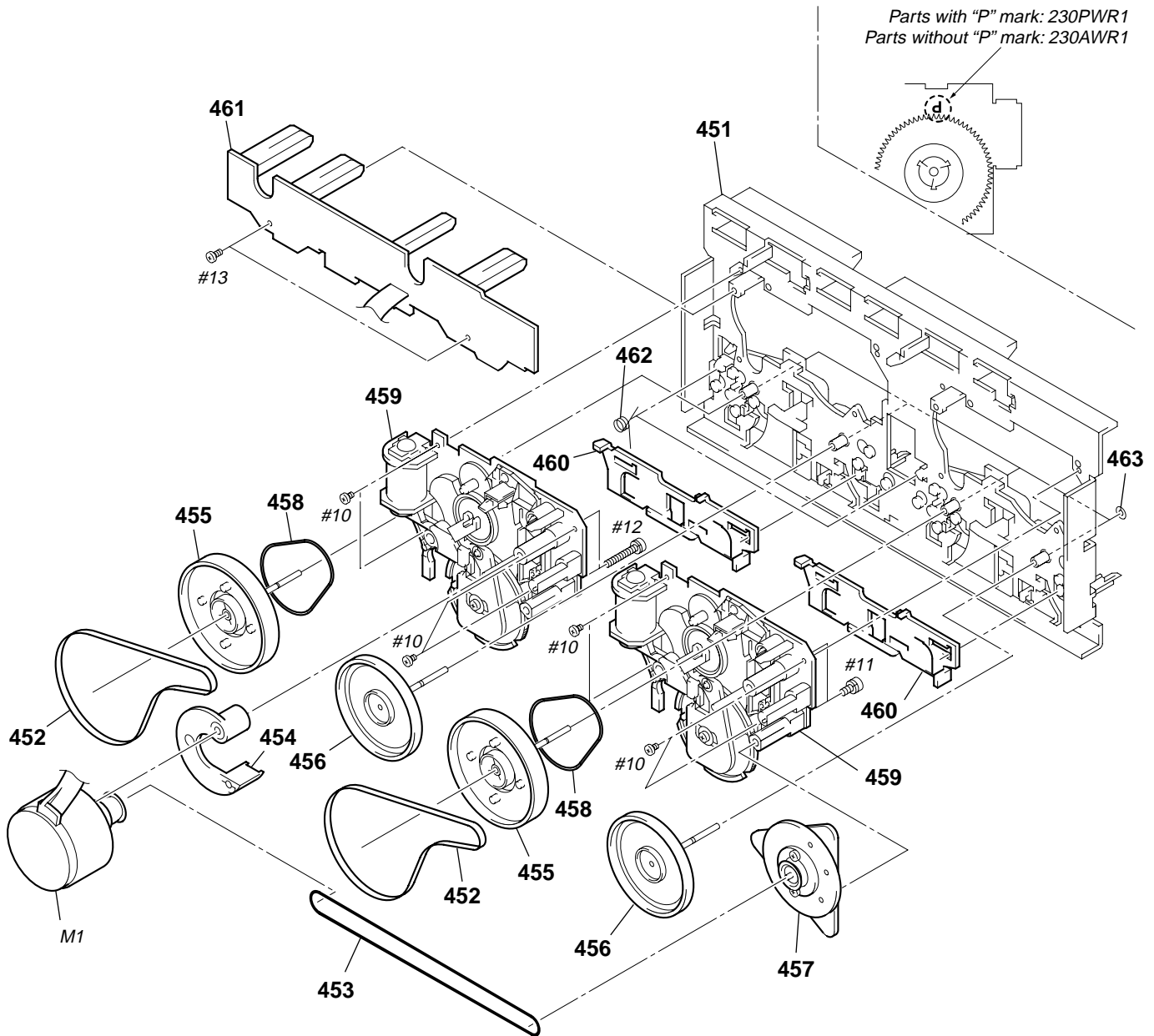
***NOTE:** Two types of parts which are not interchangeable are available for the Head deck (A) ASSY and Head deck (B) ASSY. When replacing the parts, refer to the following figure, and use the appropriate part



| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|----------------------------------|--------|----------|--------------|--------------------------------------|--------|
| 401 | 3-376-464-11 | SCREW (+PTT 2.6X6), GROUND POINT | | 407 | 3-016-565-01 | BASE (PINCH LEVER REV) | |
| 402 | 3-911-116-21 | RIVET, PUSH | | 408 | 3-016-567-02 | SPRING (CASSETTE), LEAF | |
| 403 | 3-016-574-01 | SPRING (HEAD), TENSION | | * 409 | A-2007-731-A | AUDIO BOARD, COMPLETE | |
| 404 | X-3374-156-2 | PINCH LEVER (REV) ASSY | | HP101 | A-2056-681-A | DECK (A) ASSY, HEAD (230AWR1)(*NOTE) | |
| 405 | X-3374-155-2 | PINCH LEVER (FWD) ASSY | | HP101 | A-2056-683-A | DECK (A) ASSY, HEAD (230PWR1)(*NOTE) | |
| 406 | 3-016-564-01 | BASE (PINCH LEVER FWD) | | HRPE101 | A-2056-682-A | DECK (B) ASSY, HEAD (230AWR1)(*NOTE) | |
| | | | | HRPE101 | A-2056-684-A | DECK (B) ASSY, HEAD (230PWR1)(*NOTE) | |

8-8. TC MECHANISM SECTION 2 (TCM230AWR1) (TCM230PWR1)

***NOTE:** Two types of parts which are not interchangeable are available for the mechanical block assembly. When replacing the parts, refer to the following figure, and use the appropriate part.



| Ref. No. | Part No. | Description | Remark |
|----------|--------------|----------------------|--------|
| * 451 | X-3374-214-1 | CASSIS ASSY, MAIN | |
| 452 | 3-016-570-01 | BELT (CAPSTAN) | |
| 453 | 3-016-569-01 | BELT (TENSION) | |
| 454 | 3-017-360-01 | BRACKET (MOTOR) | |
| 455 | X-3374-234-1 | FLYWHEEL (FWD) ASSY | |
| 456 | X-3374-235-1 | FLYWHEEL (REV) ASSY | |
| 457 | X-3374-238-1 | PULLEY ASSY, TENSION | |
| 458 | 3-024-405-01 | BELT (FR) | |

| Ref. No. | Part No. | Description | Remark |
|----------|--------------|--|--------|
| 459 | A-2004-629-A | MECHANICAL BLOCK ASSY (230AWR1)(*NOTE) | |
| 459 | A-2004-630-A | MECHANICAL BLOCK ASSY (230PWR1)(*NOTE) | |
| 460 | 3-016-566-01 | SLIDER, REVERSE | |
| * 461 | A-2007-732-A | LEAF SW BOARD, COMPLETE | |
| 462 | 3-016-575-01 | SPRING, TORSION | |
| 463 | 3-019-208-01 | WASHER, STOPPER | |
| M1 | A-2004-628-A | MOTOR ASSY, CAPSTAN | |

SECTION 9 ELECTRICAL PARTS LIST

AUDIO

Note:

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
uF : μ F
- COILS
uH : μ H
- Abbreviation
G : German model.
EE : East European model.
AUS : Australian model.
EA3 : Saudi Arabia model.
EA4 : Israel model.
SP : Singapore model.
TW : Thai model.
HK : Hong Kong model.
MY : Malaysia model.
TH : Thailand model.
E2 : Without SW tuner E model.
E3 : With SW tuner E model.
MX : Mexican model.
AR : Argentine model.

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--|-----------------|----------|----------|----------------|--------|
| * | A-2007-731-A | AUDIO MOUNTED BOARD, COMPLETE ***** | | | | < CONNECTOR > | |
| | | < CAPACITOR > | | | | | |
| C301 | 1-162-289-31 | CERAMIC | 390PF 10% 50V | | | | |
| C302 | 1-126-968-11 | ELECT | 100uF 20% 6.3V | | | | |
| C303 | 1-162-282-31 | CERAMIC | 100PF 10% 50V | | | | |
| C304 | 1-130-483-00 | MYLAR | 0.01uF 5% 50V | | | | |
| C305 | 1-107-715-11 | ELECT | 22uF 20% 16V | | | | |
| C311 | 1-162-289-31 | CERAMIC | 390PF 10% 50V | | | | |
| C313 | 1-162-282-31 | CERAMIC | 100PF 10% 50V | | | | |
| C314 | 1-130-487-00 | MYLAR | 0.022uF 5% 50V | | | | |
| C315 | 1-126-233-11 | ELECT | 22uF 20% 50V | | | | |
| C331 | 1-137-427-11 | FILM | 120PF 5% 50V | | | | |
| C332 | 1-162-288-31 | CERAMIC | 330PF 10% 50V | | | | |
| C333 | 1-162-209-31 | CERAMIC | 27PF 5% 50V | | | | |
| C401 | 1-162-289-31 | CERAMIC | 390PF 10% 50V | | | | |
| C402 | 1-126-968-11 | ELECT | 100uF 20% 6.3V | | | | |
| C403 | 1-162-282-31 | CERAMIC | 100PF 10% 50V | | | | |
| C404 | 1-130-483-00 | MYLAR | 0.01uF 5% 50V | | | | |
| C405 | 1-107-715-11 | ELECT | 22uF 20% 16V | | | | |
| C411 | 1-162-289-31 | CERAMIC | 390PF 10% 50V | | | | |
| C413 | 1-162-282-31 | CERAMIC | 100PF 10% 50V | | | | |
| C414 | 1-130-487-00 | MYLAR | 0.022uF 5% 50V | | | | |
| C415 | 1-126-233-11 | ELECT | 22uF 20% 50V | | | | |
| C431 | 1-137-427-11 | FILM | 120PF 5% 50V | | | | |
| C432 | 1-162-288-31 | CERAMIC | 330PF 10% 50V | | | | |
| C433 | 1-162-209-31 | CERAMIC | 27PF 5% 50V | | | | |
| C601 | 1-104-396-11 | ELECT | 10uF 20% 16V | | | | |
| C602 | 1-104-396-11 | ELECT | 10uF 20% 16V | | | | |
| C611 | 1-104-396-11 | ELECT | 10uF 20% 16V | | | | |
| C612 | 1-137-150-11 | FILM | 0.01uF 5% 100V | | | | |
| C622 | 1-126-961-11 | ELECT | 2.2uF 20% 50V | | | | |
| C623 | 1-136-155-00 | FILM | 0.015uF 5% 50V | | | | |
| C624 | 1-130-481-00 | MYLAR | 0.0068uF 5% 50V | | | | |
| C625 | 1-130-481-00 | MYLAR | 0.0068uF 5% 50V | | | | |
| C627 | 1-124-903-11 | ELECT | 1uF 20% 50V | | | | |
| C628 | 1-136-153-00 | FILM | 0.01uF 5% 50V | | | | |
| C642 | 1-104-664-11 | ELECT | 47uF 20% 16V | | | | |
| | | | | | | < HEAD > | |
| CN601 | 1-695-338-11 | PIN, CONNECTOR (PC BOARD) 15P | | | | | |
| HP101 | A-2056-681-A | DECK (A) ASSY, HEAD (PLAY BACK HEAD) | | | | | |
| | 7-685-783-09 | SCREW +PTT 2X6 (S) | | | | | |
| HRPE101 | A-2056-682-A | DECK (B) ASSY, HEAD (RECORD/PLAY BACK/ERASE HEAD) | | | | | |
| | | | | | | < IC > | |
| IC601 | 8-759-111-44 | IC UPC4570C-1 | | | | | |
| IC602 | 8-759-143-54 | IC UPC1330HA | | | | | |
| IC611 | 8-759-111-44 | IC UPC4570C-1 | | | | | |
| | | | | | | < COIL > | |
| L331 | 1-410-780-11 | INDUCTOR 27mH | | | | | |
| L431 | 1-410-780-11 | INDUCTOR 27mH | | | | | |
| L601 | 1-414-193-41 | INDUCTOR, MICRO 22uH | | | | | |
| L602 | 1-414-193-41 | INDUCTOR, MICRO 22uH | | | | | |
| | | | | | | < TRANSISTOR > | |
| Q621 | 8-729-142-46 | TRANSISTOR 2SC2001-LK | | | | | |
| Q622 | 8-729-142-46 | TRANSISTOR 2SC2001-LK | | | | | |
| Q623 | 8-729-801-93 | TRANSISTOR 2SD1387 | | | | | |
| | | | | | | < RESISTOR > | |
| R301 | 1-247-881-00 | CARBON | 120K 5% 1/4W | | | | |
| R302 | 1-249-409-11 | CARBON | 220 5% 1/4W F | | | | |
| R303 | 1-249-433-11 | CARBON | 22K 5% 1/4W | | | | |
| R304 | 1-247-889-00 | CARBON | 270K 5% 1/4W | | | | |
| R305 | 1-247-858-11 | CARBON | 13K 5% 1/4W | | | | |
| R311 | 1-247-881-00 | CARBON | 120K 5% 1/4W | | | | |
| R312 | 1-247-807-31 | CARBON | 100 5% 1/4W | | | | |
| R314 | 1-247-882-11 | CARBON | 130K 5% 1/4W | | | | |
| R315 | 1-247-850-11 | CARBON | 6.2K 5% 1/4W | | | | |
| R331 | 1-249-430-11 | CARBON | 12K 5% 1/4W | | | | |
| R401 | 1-247-881-00 | CARBON | 120K 5% 1/4W | | | | |
| R402 | 1-249-409-11 | CARBON | 220 5% 1/4W F | | | | |
| R403 | 1-249-433-11 | CARBON | 22K 5% 1/4W | | | | |
| R404 | 1-247-889-00 | CARBON | 270K 5% 1/4W | | | | |

AUDIO**BD**

| Ref. No. | Part No. | Description | | | Remark | Ref. No. | Part No. | Description | | | Remark |
|----------|--------------|-------------------------------|----------|-----|--------|----------|--------------|------------------------------------|----------|-----|--------|
| R405 | 1-247-858-11 | CARBON | 13K | 5% | 1/4W | C123 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| R411 | 1-247-881-00 | CARBON | 120K | 5% | 1/4W | C124 | 1-126-607-11 | ELECT CHIP | 47uF | 20% | 4V |
| R412 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | C125 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V |
| R414 | 1-247-882-11 | CARBON | 130K | 5% | 1/4W | C126 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| R415 | 1-247-850-11 | CARBON | 6.2K | 5% | 1/4W | C127 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF | 10% | 100V |
| R431 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W | C128 | 1-163-135-00 | CERAMIC CHIP | 560PF | 5% | 50V |
| R601 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F | C129 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| R602 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F | C130 | 1-164-336-11 | CERAMIC CHIP | 0.33uF | | 25V |
| R608 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F | C131 | 1-164-346-11 | CERAMIC CHIP | 1uF | | 16V |
| R609 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | C140 | 1-110-501-11 | CERAMIC CHIP | 0.33uF | 10% | 16V |
| R611 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F | C154 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| R612 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F | C161 | 1-164-005-11 | CERAMIC CHIP | 0.47uF | | 25V |
| △R621 | 1-212-851-00 | FUSIBLE | 5.6 | 5% | 1/4W F | C162 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V |
| △R622 | 1-212-851-00 | FUSIBLE | 5.6 | 5% | 1/4W F | C163 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V |
| R623 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W | C164 | 1-163-145-00 | CERAMIC CHIP | 0.0015uF | 5% | 50V |
| R624 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W | C165 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V |
| R625 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | C166 | 1-163-137-00 | CERAMIC CHIP | 680PF | 5% | 50V |
| | | < VARIABLE RESISTOR > | | | | | | | | | |
| RV301 | 1-238-598-11 | RES, ADJ, CARBON 2.2K | | | | C167 | 1-163-121-00 | CERAMIC CHIP | 150PF | 5% | 50V |
| RV311 | 1-238-598-11 | RES, ADJ, CARBON 2.2K | | | | C170 | 1-163-099-00 | CERAMIC CHIP | 18PF | 5% | 50V |
| RV341 | 1-241-768-11 | RES, ADJ, CARBON 220K | | | | C171 | 1-163-237-11 | CERAMIC CHIP | 27PF | 5% | 50V |
| RV401 | 1-238-598-11 | RES, ADJ, CARBON 2.2K | | | | C173 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| RV411 | 1-238-598-11 | RES, ADJ, CARBON 2.2K | | | | C174 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| RV441 | 1-241-768-11 | RES, ADJ, CARBON 220K | | | | C175 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| | | < TRANSFORMER > | | | | | | | | | |
| T621 | 1-423-980-11 | TRANSFORMER, BIAS OSCILLATION | | | | C176 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| ***** | | | | | | | | | | | |
| * | A-4699-522-A | BD BOARD, COMPLETE | | | | C177 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| | | ***** | | | | | | | | | |
| | | < CAPACITOR > | | | | | | | | | |
| C101 | 1-126-607-11 | ELECT CHIP | 47uF | 20% | 4V | C178 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C102 | 1-163-141-00 | CERAMIC CHIP | 0.001uF | 5% | 50V | C179 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C103 | 1-164-346-11 | CERAMIC CHIP | 1uF | | 16V | C181 | 1-126-205-11 | ELECT CHIP | 47uF | 20% | 6.3V |
| C105 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C182 | 1-126-393-11 | ELECT CHIP | 33uF | 20% | 10V |
| C106 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF | 10% | 100V | C183 | 1-124-778-00 | ELECT CHIP | 22uF | 20% | 6.3V |
| C107 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF | 10% | 100V | C185 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C108 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | C188 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C109 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | C189 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C110 | 1-163-989-11 | CERAMIC CHIP | 0.033uF | 10% | 25V | | | < CONNECTOR > | | | |
| C111 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF | 5% | 50V | CNU101 | 1-770-014-11 | CONNECTOR, FFC/FPC 16P | | | |
| C112 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF | 5% | 50V | CNU102 | 1-778-874-11 | CONNECTOR, FFC (LIF (NON-ZIF)) 19P | | | |
| C113 | 1-164-161-11 | CERAMIC CHIP | 0.0022uF | 10% | 100V | | | < FERRITE BEAD > | | | |
| C114 | 1-164-005-11 | CERAMIC CHIP | 0.47uF | | 25V | FB101 | 1-414-234-11 | INDUCTOR CHIP 0UH | | | |
| C115 | 1-126-607-11 | ELECT CHIP | 47uF | 20% | 4V | FB103 | 1-414-234-11 | INDUCTOR CHIP 0UH | | | |
| C116 | 1-163-016-00 | CERAMIC CHIP | 0.0039uF | 10% | 50V | | | < IC > | | | |
| C117 | 1-164-005-11 | CERAMIC CHIP | 0.47uF | | 25V | IC101 | 8-752-080-62 | IC CXA1992AR | | | |
| C118 | 1-164-004-11 | CERAMIC CHIP | 0.1uF | 10% | 25V | IC102 | 8-759-429-32 | IC BA5941FP-E2 | | | |
| C119 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | IC103 | 8-752-378-66 | IC CXD2519Q | | | |
| C120 | 1-124-779-00 | ELECT CHIP | 10uF | 20% | 16V | | | < JUMPER RESISTOR > | | | |
| C121 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | JW101 | 1-216-295-91 | SHORT | 0 | | |
| C122 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | JW104 | 1-216-295-91 | SHORT | 0 | | |
| | | | | | | | | < MOTOR > | | | |
| | | | | | | M101 | X-4917-523-4 | MOTOR ASSY (SPINDLE) | | | |
| | | | | | | M102 | X-4917-504-1 | MOTOR ASSY (SLED) | | | |

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--------------------------|--------|----------|--------------|--|--------|
| | | < TRANSISTOR > | | | | | |
| Q101 | 8-729-010-08 | TRANSISTOR MSB710-R | | R177 | 1-216-025-91 | RES, CHIP 100 5% 1/10W | |
| | | < RESISTOR > | | R178 | 1-216-025-91 | RES, CHIP 100 5% 1/10W | |
| R102 | 1-216-001-00 | METAL CHIP 10 5% 1/10W | | R179 | 1-216-025-91 | RES, CHIP 100 5% 1/10W | |
| R104 | 1-216-093-00 | METAL CHIP 68K 5% 1/10W | | | | | |
| R105 | 1-216-088-00 | METAL CHIP 43K 5% 1/10W | | R180 | 1-216-025-91 | RES, CHIP 100 5% 1/10W | |
| R106 | 1-216-088-00 | METAL CHIP 43K 5% 1/10W | | R181 | 1-216-025-91 | RES, CHIP 100 5% 1/10W | |
| R107 | 1-216-088-00 | METAL CHIP 43K 5% 1/10W | | R188 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| | | | | R190 | 1-216-097-91 | RES, CHIP 100K 5% 1/10W | |
| R108 | 1-216-088-00 | METAL CHIP 43K 5% 1/10W | | R191 | 1-216-105-91 | RES, CHIP 220K 5% 1/10W | |
| R109 | 1-216-093-00 | METAL CHIP 68K 5% 1/10W | | | | < SWITCH > | |
| R114 | 1-216-101-00 | METAL CHIP 150K 5% 1/10W | | S101 | 1-572-085-11 | SWITCH, LEAF (LIMIT) | |
| R115 | 1-216-101-00 | METAL CHIP 150K 5% 1/10W | | | | < VIBRATOR > | |
| R116 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | | X101 | 1-767-408-21 | VIBRATOR, CRYSTAL (16.9344MHz) | |
| R117 | 1-216-069-00 | METAL CHIP 6.8K 5% 1/10W | | | | ***** | |
| R118 | 1-216-063-91 | RES, CHIP 3.9K 5% 1/10W | | | | | |
| R119 | 1-216-085-00 | METAL CHIP 33K 5% 1/10W | | * | 1-668-268-11 | CD-SW BOARD ***** | |
| R120 | 1-216-089-91 | RES, CHIP 47K 5% 1/10W | | | | < DIODE > | |
| R121 | 1-216-114-00 | RES, CHIP 510K 5% 1/10W | | D631 | 8-719-056-13 | DIODE SML79423C-TP15 (DISC 1) | |
| | | | | D632 | 8-719-056-13 | DIODE SML79423C-TP15 (DISC 2) | |
| R122 | 1-216-097-91 | RES, CHIP 100K 5% 1/10W | | D633 | 8-719-056-13 | DIODE SML79423C-TP15 (DISC 3) | |
| R123 | 1-216-099-00 | METAL CHIP 120K 5% 1/10W | | | | < JUMPER RESISTOR > | |
| R124 | 1-216-091-00 | METAL CHIP 56K 5% 1/10W | | JW901 | 1-216-296-91 | SHORT 0 | |
| R125 | 1-216-069-00 | METAL CHIP 6.8K 5% 1/10W | | JW902 | 1-216-295-91 | SHORT 0 | |
| R126 | 1-216-063-91 | RES, CHIP 3.9K 5% 1/10W | | | | < TRANSISTOR > | |
| | | | | Q613 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| R127 | 1-216-089-91 | RES, CHIP 47K 5% 1/10W | | Q614 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| R128 | 1-216-098-00 | METAL CHIP 110K 5% 1/10W | | Q615 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| R129 | 1-216-025-91 | RES, CHIP 100 5% 1/10W | | | | < RESISTOR > | |
| R130 | 1-216-079-00 | METAL CHIP 18K 5% 1/10W | | R656 | 1-216-051-00 | METAL CHIP 1.2K 5% 1/10W | |
| R131 | 1-216-079-00 | METAL CHIP 18K 5% 1/10W | | R657 | 1-216-053-00 | METAL CHIP 1.5K 5% 1/10W | |
| | | | | R658 | 1-216-057-00 | METAL CHIP 2.2K 5% 1/10W | |
| R132 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | | R659 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | |
| R133 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | | R660 | 1-216-065-91 | RES,CHIP 4.7K 5% 1/10W | |
| R134 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W | | | | | |
| R135 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W | | R691 | 1-216-027-00 | METAL CHIP 120 5% 1/10W | |
| R136 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | | R692 | 1-216-027-00 | METAL CHIP 120 5% 1/10W | |
| | | | | R693 | 1-216-027-00 | METAL CHIP 120 5% 1/10W | |
| R137 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W | | R694 | 1-216-027-00 | METAL CHIP 120 5% 1/10W | |
| R138 | 1-216-025-91 | RES, CHIP 100 5% 1/10W | | R695 | 1-216-027-00 | METAL CHIP 120 5% 1/10W | |
| R156 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W | | R696 | 1-216-027-00 | METAL CHIP 120 5% 1/10W | |
| R157 | 1-216-069-00 | METAL CHIP 6.8K 5% 1/10W | | | | < SWITCH > | |
| R158 | 1-216-001-00 | METAL CHIP 10 5% 1/10W | | S637 | 1-762-875-21 | SWITCH, KEYBOARD (H/C) | |
| | | | | S638 | 1-762-875-21 | SWITCH, KEYBOARD (DISC 1) | |
| R159 | 1-216-121-91 | RES, CHIP 1M 5% 1/10W | | S639 | 1-762-875-21 | SWITCH, KEYBOARD (DISC 2) | |
| R161 | 1-216-097-91 | RES, CHIP 100K 5% 1/10W | | S640 | 1-762-875-21 | SWITCH, KEYBOARD (DISC 3) | |
| R162 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | | S641 | 1-762-875-21 | SWITCH, KEYBOARD (DISC SKIP/EX-CHANGE) | |
| R163 | 1-216-121-91 | RES, CHIP 1M 5% 1/10W | | | | | |
| R164 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | | S642 | 1-762-875-21 | SWITCH, KEYBOARD (≡) | |
| | | | | | | ***** | |
| R165 | 1-216-049-91 | RES, CHIP 1K 5% 1/10W | | | | | |
| R166 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | | | | | |
| R167 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W | | | | | |
| R168 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | | | | | |
| R169 | 1-216-079-00 | METAL CHIP 18K 5% 1/10W | | | | | |
| | | | | | | | |
| R170 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W | | | | | |
| R171 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | | | | | |
| R172 | 1-216-079-00 | METAL CHIP 18K 5% 1/10W | | | | | |
| R173 | 1-216-025-91 | RES, CHIP 100 5% 1/10W | | | | | |
| R174 | 1-216-033-00 | METAL CHIP 220 5% 1/10W | | | | | |
| | | | | | | | |
| R175 | 1-216-025-91 | RES, CHIP 100 5% 1/10W | | | | | |
| R176 | 1-216-025-91 | RES, CHIP 100 5% 1/10W | | | | | |

CONNECTOR

CONT COM

DECO

| Ref. No. | Part No. | Description | Remark |
|----------|--------------|-----------------------------------|--------|
| * | 1-658-575-11 | CONNECTOR BOARD ***** | |
| | | < CONNECTOR > | |
| * CN701 | 1-568-946-11 | PIN, CONNECTOR 8P | |
| CN702 | 1-750-413-11 | CONNECTOR, FFC/FPC 8P | |
| | | < TRANSISTOR > | |
| Q701 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| | | < RESISTOR > | |
| R703 | 1-249-435-11 | CARBON 33K 5% | 1/4W |
| R704 | 1-249-429-11 | CARBON 10K 5% | 1/4W |
| R705 | 1-249-417-11 | CARBON 1K 5% | 1/4W F |
| ***** | | | |
| * | A-4407-304-A | CONT COM BOARD, COMPLETE ***** | |
| | | < CAPACITOR > | |
| C627 | 1-164-232-11 | CERAMIC CHIP 0.01uF | 50V |
| C628 | 1-164-232-11 | CERAMIC CHIP 0.01uF | 50V |
| C629 | 1-164-232-11 | CERAMIC CHIP 0.01uF | 50V |
| C630 | 1-164-232-11 | CERAMIC CHIP 0.01uF | 50V |
| | | < CONNECTOR > | |
| * CN608 | 1-568-862-11 | SOCKET, CONNECTOR 19P | |
| | | < DIODE > | |
| D610 | 8-719-063-93 | DIODE SLR325VC-N-T32 (ENTER/NEXT) | |
| D612 | 8-719-057-97 | DIODE SEL5923A-TP15 (GROOVE) | |
| D613 | 8-719-063-93 | DIODE SLR325VC-N-T32 (JOG) | |
| D614 | 8-719-064-65 | DIODE SELU5723C-TP15 (DJ MIX) | |
| D615 | 8-719-064-65 | DIODE SELU5723C-TP15 (DJ MIX) | |
| D616 | 8-719-063-93 | DIODE SLR325VC-N-T32 (NON-STOP) | |
| D617 | 8-719-063-93 | DIODE SLR325VC-N-T32 (-◀◀) | |
| D618 | 8-719-063-93 | DIODE SLR325VC-N-T32 (+▶▶) | |
| D801 | 8-719-057-97 | DIODE SEL5923A-TP15 (ON/OFF) | |
| D802 | 8-719-057-97 | DIODE SEL5923A-TP15 (JAM) | |
| D803 | 8-719-056-13 | DIODE SML79423C-TP15 (AUTO BPM) | |
| | | < TRANSISTOR > | |
| Q604 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| Q854 | 8-729-027-23 | TRANSISTOR DTA114EKA-T146 | |
| Q855 | 8-729-027-23 | TRANSISTOR DTA114EKA-T146 | |
| | | < RESISTOR > | |
| R637 | 1-216-033-00 | METAL CHIP 220 5% | 1/10W |
| R638 | 1-216-035-00 | METAL CHIP 270 5% | 1/10W |
| R639 | 1-216-039-00 | METAL CHIP 390 5% | 1/10W |
| R640 | 1-216-041-00 | METAL CHIP 470 5% | 1/10W |
| R641 | 1-216-045-00 | METAL CHIP 680 5% | 1/10W |
| R642 | 1-216-047-91 | RES,CHIP 820 5% | 1/10W |
| R643 | 1-216-051-00 | METAL CHIP 1.2K 5% | 1/10W |
| R666 | 1-216-037-00 | METAL CHIP 330 5% | 1/10W |
| R667 | 1-216-029-00 | METAL CHIP 150 5% | 1/10W |

| Ref. No. | Part No. | Description | Remark |
|----------|--------------|--------------------------------|--------|
| R668 | 1-216-027-00 | METAL CHIP 120 5% | 1/10W |
| R669 | 1-216-019-00 | METAL CHIP 56 5% | 1/10W |
| R670 | 1-216-037-00 | METAL CHIP 330 5% | 1/10W |
| R671 | 1-216-031-00 | METAL CHIP 180 5% | 1/10W |
| R811 | 1-216-029-00 | METAL CHIP 150 5% | 1/10W |
| R812 | 1-216-029-00 | METAL CHIP 150 5% | 1/10W |
| R813 | 1-216-029-00 | METAL CHIP 150 5% | 1/10W |
| R814 | 1-216-029-00 | METAL CHIP 150 5% | 1/10W |
| R821 | 1-216-033-00 | METAL CHIP 220 5% | 1/10W |
| R822 | 1-216-035-00 | METAL CHIP 270 5% | 1/10W |
| R823 | 1-216-039-00 | METAL CHIP 390 5% | 1/10W |
| R831 | 1-216-033-00 | METAL CHIP 220 5% | 1/10W |
| R832 | 1-216-035-00 | METAL CHIP 270 5% | 1/10W |
| R833 | 1-216-039-00 | METAL CHIP 390 5% | 1/10W |
| | | < SWITCH > | |
| S601 | 1-473-534-11 | ENCODER, ROTARY (JOG) | |
| S602 | 1-473-392-11 | ENCODER, ROTARY (VOLUME) | |
| S617 | 1-762-875-21 | SWITCH, KEYBOARD (LOOP) | |
| S618 | 1-762-875-21 | SWITCH, KEYBOARD (FLASH) | |
| S619 | 1-762-875-21 | SWITCH, KEYBOARD (NON-STOP) | |
| S621 | 1-762-875-21 | SWITCH, KEYBOARD (-◀◀) | |
| S622 | 1-762-875-21 | SWITCH, KEYBOARD (ENTER/NEXT) | |
| S623 | 1-762-875-21 | SWITCH, KEYBOARD (+▶▶) | |
| S624 | 1-762-875-21 | SWITCH, KEYBOARD (DBFB) | |
| S625 | 1-762-875-21 | SWITCH, KEYBOARD (GROOVE) | |
| S801 | 1-762-875-21 | SWITCH, KEYBOARD (PAD-B) | |
| S802 | 1-762-875-21 | SWITCH, KEYBOARD (AUTO BPM) | |
| S803 | 1-762-875-21 | SWITCH, KEYBOARD (JAM-BEAT) | |
| S804 | 1-762-875-21 | SWITCH, KEYBOARD (BEAT LEVEL) | |
| S805 | 1-762-875-21 | SWITCH, KEYBOARD (PAD-A) | |
| S806 | 1-762-875-21 | SWITCH, KEYBOARD (ON/OFF-BEAT) | |
| S807 | 1-762-875-21 | SWITCH, KEYBOARD (SELECT-BEAT) | |
| S808 | 1-762-875-21 | SWITCH, KEYBOARD (SPEED-BEAT) | |
| ***** | | | |
| * | 1-668-269-11 | DECO BOARD ***** | |
| | | < DIODE > | |
| D640 | 8-719-063-93 | DIODE SLR325VC-N-T32 (CENTER) | |
| D641 | 8-719-032-86 | DIODE SEL5420E (LEFT) | |
| D642 | 8-719-032-86 | DIODE SEL5420E (LEFT) | |
| D643 | 8-719-032-86 | DIODE SEL5420E (LEFT) | |
| D644 | 8-719-033-06 | DIODE SEL5920A (CENTER) | |
| D655 | 8-719-033-06 | DIODE SEL5920A (RIGHT) | |
| D656 | 8-719-033-06 | DIODE SEL5920A (RIGHT) | |
| | | < TRANSISTOR > | |
| Q856 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| Q857 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| | | < RESISTOR > | |
| R706 | 1-216-019-00 | METAL CHIP 56 5% | 1/10W |
| R707 | 1-216-019-00 | METAL CHIP 56 5% | 1/10W |
| R708 | 1-216-041-00 | METAL CHIP 470 5% | 1/10W |

| | | | |
|-------------|-----------|----------------|-------------|
| DECO | HP | LEAF SW | MAIN |
|-------------|-----------|----------------|-------------|

| Ref. No. | Part No. | Description | | | Remark |
|----------|--------------|--------------------------------|---------|-----|--------|
| R709 | 1-216-027-00 | METAL CHIP | 120 | 5% | 1/10W |
| R710 | 1-216-027-00 | METAL CHIP | 120 | 5% | 1/10W |
| ***** | | | | | |
| * | 1-668-271-11 | HP BOARD | ***** | | |
| | | < CAPACITOR > | | | |
| C790 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C791 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C792 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| | | < CONNECTOR > | | | |
| CN752 | 1-506-469-11 | PIN, CONNECTOR 4P | | | |
| | | < GROUND PLATE > | | | |
| * EP751 | 1-537-738-21 | TERMINAL, EARTH | | | |
| | | < JACK > | | | |
| J755 | 1-784-224-11 | JACK (LARGE TYPE)(PHONES) | | | |
| ***** | | | | | |
| * | A-2007-732-A | LEAF SW BOARD, COMPLETE | ***** | | |
| | | < CAPACITOR > | | | |
| C1001 | 1-128-124-11 | ELECT | 33uF | 20% | 10V |
| | | < CONNECTOR > | | | |
| CN1001 | 1-568-860-11 | SOCKET, CONNECTOR 17P | | | |
| CN1001 | 1-784-459-11 | CONNECTOR, FFC/FPC 17P | | | |
| | | < DIODE > | | | |
| D1001 | 8-719-911-19 | DIODE 1SS119 | | | |
| D1002 | 8-719-911-19 | DIODE 1SS119 | | | |
| | | < CONNECTOR > | | | |
| * DM1001 | 1-784-581-11 | HOLDER, CABLE (2.5MM PITCH) 4P | | | |
| | | < IC > | | | |
| IC1001 | 8-749-014-38 | IC PHOTO INTERRUPTER SG-264 | | | |
| IC1002 | 8-749-014-38 | IC PHOTO INTERRUPTER SG-264 | | | |
| | | < TRANSISTOR > | | | |
| Q1001 | 8-729-029-56 | TRANSISTOR DTA144ESA | | | |
| Q1001 | 8-729-900-65 | TRANSISTOR DTA144ES | | | |
| | | < RESISTOR > | | | |
| R907 | 1-247-879-11 | CARBON | 100K | 5% | 1/4W |
| R1001 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F |
| R1002 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F |
| R1003 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W F |
| R1004 | 1-247-834-11 | CARBON | 1.3K | 5% | 1/4W |
| R1005 | 1-247-818-11 | CARBON | 300 | 5% | 1/4W |

| Ref. No. | Part No. | Description | | | Remark |
|----------|--------------|--|---------------------------|-----|--------|
| R1006 | 1-247-864-11 | CARBON | 24K | 5% | 1/4W |
| R1007 | 1-247-856-00 | CARBON | 11K | 5% | 1/4W |
| R1008 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| | | < VARIABLE RESISTOR > | | | |
| RV1001 | 1-241-785-11 | RES, ADJ, CARBON 10K | | | |
| RV1002 | 1-241-785-11 | RES, ADJ, CARBON 10K | | | |
| | | < SWITCH > | | | |
| S1001 | 1-570-953-11 | SWITCH, PUSH (1 KEY) (A PLAY) | | | |
| S1002 | 1-570-953-11 | SWITCH, PUSH (1 KEY) (B PLAY) | | | |
| S1003 | 1-771-333-11 | SWITCH, LEAF (A HALF) | | | |
| S1004 | 1-771-205-11 | SWITCH, LEAF (A 120/70) | | | |
| S1005 | 1-771-205-11 | SWITCH, LEAF (REC A) | | | |
| S1006 | 1-771-333-11 | SWITCH, LEAF (B HALF) | | | |
| S1008 | 1-771-205-11 | SWITCH, LEAF (B 120/70) | | | |
| S1009 | 1-771-205-11 | SWITCH, LEAF (REC B) | | | |
| ***** | | | | | |
| * | A-4405-131-A | MAIN BOARD, COMPLETE | ***** | | |
| | | | (GRX8:E3,SP,MY,HK,TW,EA3) | | |
| * | A-4405-146-A | MAIN BOARD, COMPLETE | ***** | | |
| | | | (RX88/RX99:AEP,UK,G) | | |
| * | A-4407-252-A | MAIN BOARD, COMPLETE (GRX8:E2,MX/R800) | ***** | | |
| * | A-4407-322-A | MAIN BOARD, COMPLETE (RX99:EE,CIS) | ***** | | |
| * | A-4407-723-A | MAIN BOARD, COMPLETE (GRX8:AUS) | ***** | | |
| * | A-4407-749-A | MAIN BOARD, COMPLETE (GRX8:EA4,TH) | ***** | | |
| | 7-685-646-79 | SCREW +BVTP 3X8 TYPE2 N-S | | | |
| | | < CAPACITOR > | | | |
| C101 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10% | 50V |
| C102 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10% | 50V |
| C103 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10% | 50V |
| C111 | 1-137-195-11 | FILM | 0.56uF | 5% | 50V |
| C112 | 1-163-986-00 | CERAMIC CHIP | 0.027uF | 10% | 25V |
| C113 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C114 | 1-163-018-00 | CERAMIC CHIP | 0.0056uF | 5% | 50V |
| C115 | 1-163-989-11 | CERAMIC CHIP | 0.033uF | 10% | 25V |
| C116 | 1-163-011-11 | CERAMIC CHIP | 0.0015uF | 10% | 50V |
| C117 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C118 | 1-163-003-11 | CERAMIC CHIP | 330PF | 10% | 50V |
| C119 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF | 5% | 50V |
| C120 | 1-164-182-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V |
| C121 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C122 | 1-163-006-11 | CERAMIC CHIP | 560PF | 10% | 50V |
| C123 | 1-136-169-00 | FILM | 0.22uF | 5% | 50V |
| C124 | 1-136-169-00 | FILM | 0.22uF | 5% | 50V |
| C125 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |

MAIN

| Ref. No. | Part No. | Description | | | Remark | Ref. No. | Part No. | Description | | | Remark |
|----------|--------------|--------------|----------|-----|--------|----------|--------------|--------------|----------|-----|---------------|
| C131 | 1-126-933-11 | ELECT | 100uF | 20% | 10V | C334 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF | 5% | 50V |
| C132 | 1-126-933-11 | ELECT | 100uF | 20% | 10V | C351 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C133 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C352 | 1-130-479-00 | MYLAR | 0.0047uF | 5% | 50V |
| C134 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C353 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C135 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | C354 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C136 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C355 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C137 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C356 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C141 | 1-124-767-00 | ELECT | 2.2uF | 20% | 50V | C357 | 1-126-959-11 | ELECT | 0.47uF | 20% | 50V |
| C151 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10% | 50V | C358 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C152 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10% | 50V | C359 | 1-136-173-00 | FILM | 0.47uF | 5% | 50V |
| C153 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10% | 50V | C371 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C154 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C372 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C161 | 1-137-195-11 | FILM | 0.56uF | 5% | 50V | C373 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C162 | 1-163-986-00 | CERAMIC CHIP | 0.027uF | 10% | 25V | C374 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C163 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V | C375 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C164 | 1-163-018-00 | CERAMIC CHIP | 0.0056uF | 5% | 50V | | | | | | (RX99:EE,CIS) |
| C165 | 1-163-989-11 | CERAMIC CHIP | 0.033uF | 10% | 25V | C376 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C166 | 1-163-011-11 | CERAMIC CHIP | 0.0015uF | 10% | 50V | | | | | | (RX99:EE,CIS) |
| C167 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | C381 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C168 | 1-163-003-11 | CERAMIC CHIP | 330PF | 10% | 50V | C382 | 1-126-925-11 | ELECT | 470uF | 20% | 10V |
| C169 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF | 5% | 50V | C383 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C170 | 1-164-182-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V | C384 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C171 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | C385 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C172 | 1-163-006-11 | CERAMIC CHIP | 560PF | 10% | 50V | C386 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C173 | 1-136-169-00 | FILM | 0.22uF | 5% | 50V | C387 | 1-163-005-11 | CERAMIC CHIP | 470PF | 10% | 50V |
| C174 | 1-136-169-00 | FILM | 0.22uF | 5% | 50V | C388 | 1-163-005-11 | CERAMIC CHIP | 470PF | 10% | 50V |
| C175 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | C391 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C176 | 1-164-344-11 | CERAMIC CHIP | 0.068uF | 10% | 25V | C392 | 1-126-933-11 | ELECT | 100uF | 20% | 10V |
| C177 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | C401 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C191 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | C402 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C192 | 1-163-007-11 | CERAMIC CHIP | 680PF | 10% | 50V | C403 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C193 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | C411 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C194 | 1-163-001-11 | CERAMIC CHIP | 220PF | 10% | 50V | C412 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C195 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C414 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C196 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C415 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C197 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C501 | 1-126-916-11 | ELECT | 1000uF | 20% | 6.3V |
| C301 | 1-126-960-11 | ELECT | 1uF | 20% | 50V | C502 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C302 | 1-130-479-00 | MYLAR | 0.0047uF | 5% | 50V | C503 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C303 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V | C504 | 1-163-235-11 | CERAMIC CHIP | 22PF | 5% | 50V |
| C304 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V | C505 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V |
| C305 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | C506 | 1-126-933-11 | ELECT | 100uF | 20% | 10V |
| C306 | 1-126-960-11 | ELECT | 1uF | 20% | 50V | C508 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C307 | 1-126-959-11 | ELECT | 0.47uF | 20% | 50V | C901 | 1-126-937-11 | ELECT | 4700uF | 20% | 16V |
| C308 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | | | | | | (RX88/RX99) |
| C309 | 1-136-173-00 | FILM | 0.47uF | 5% | 50V | C901 | 1-128-548-11 | ELECT | 4700uF | 20% | 25V |
| C310 | 1-163-005-11 | CERAMIC CHIP | 470PF | 10% | 50V | | | | | | (GRX8/R800) |
| C311 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | C902 | 1-126-768-11 | ELECT | 2200uF | 20% | 16V |
| C312 | 1-126-959-11 | ELECT | 0.47uF | 20% | 50V | | | | | | (RX88/RX99) |
| C313 | 1-130-471-00 | MYLAR | 0.001uF | 5% | 50V | C902 | 1-126-943-11 | ELECT | 2200uF | 20% | 25V |
| C314 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | | | | | | (GRX8/R800) |
| C315 | 1-126-963-11 | ELECT | 4.7uF | 20% | 50V | C903 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C316 | 1-126-933-11 | ELECT | 100uF | 20% | 10V | C904 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C317 | 1-126-933-11 | ELECT | 100uF | 20% | 10V | C905 | 1-126-933-11 | ELECT | 100uF | 20% | 10V |
| C320 | 1-163-005-11 | CERAMIC CHIP | 470PF | 10% | 50V | C906 | 1-126-933-11 | ELECT | 100uF | 20% | 10V |
| C331 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C907 | 1-126-925-11 | ELECT | 470uF | 20% | 10V |
| C332 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | C908 | 1-126-925-11 | ELECT | 470uF | 20% | 10V |
| C333 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF | 5% | 50V | C911 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| | | | | | | C912 | 1-126-768-11 | ELECT | 2200uF | 20% | 16V |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--|-----------------|----------|--------------|-----------------------------|--------|
| C921 | 1-126-964-11 | ELECT | 10uF 20% 50V | IC391 | 8-749-923-04 | IC TOTX178 | |
| C922 | 1-126-767-11 | ELECT | 1000uF 20% 16V | IC401 | 8-759-636-55 | IC M5218AFP | |
| C931 | 1-126-964-11 | ELECT | 10uF 20% 50V | | | | |
| C932 | 1-126-916-11 | ELECT | 1000uF 20% 6.3V | IC411 | 8-759-636-55 | IC M5218AFP | |
| C933 | 1-126-925-11 | ELECT | 470uF 20% 10V | IC501 | 8-759-496-10 | IC uPD780018AYGF-011-3BA | |
| C934 | 1-126-933-11 | ELECT | 100uF 20% 10V | IC901 | 8-759-604-86 | IC M5F7807L | |
| C941 | 1-126-964-11 | ELECT | 10uF 20% 50V | IC902 | 8-759-604-90 | IC M5F7907L | |
| C942 | 1-126-933-11 | ELECT | 100uF 20% 10V | IC911 | 8-759-231-58 | IC TA7812S | |
| C951 | 1-126-967-11 | ELECT | 47uF 20% 10V | IC921 | 8-759-604-38 | IC M5F78M10 | |
| C952 | 1-136-165-00 | FILM | 0.1uF 5% 50V | IC931 | 8-759-231-53 | IC TA7805S | |
| C953 | 1-136-173-00 | FILM | 0.47uF 5% 50V | IC941 | 8-759-604-86 | IC M5F7807L | |
| C961 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V | IC951 | 8-759-635-63 | IC M51943BSL | |
| C991 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V | | | < JACK > | |
| | | < CONNECTOR > | | | | | |
| * CN101 | 1-568-832-11 | SOCKET, CONNECTOR 13P | | J101 | 1-774-411-11 | JACK, PIN 6P | |
| CN102 | 1-784-600-11 | SOCKET, CONNECTOR (NON ZIF) 15P (GRX8:E3,SP,MY,HK,TW,EA3/RX88/RX99) | | J191 | 1-774-785-11 | JACK, PIN 1P (SUPER WOOFER) | |
| CN102 | 1-784-601-11 | SOCKET, CONNECTOR (NON ZIF) 13P (GRX8:E2,MX,EA4,TH,AUS/R800) | | | | < JUMPER RESISTOR > | |
| * CN103 | 1-568-946-11 | PIN, CONNECTOR 8P | | JR1 | 1-216-295-91 | SHORT | 0 |
| * CN104 | 1-568-947-11 | PIN, CONNECTOR 9P | | JR2 | 1-216-295-91 | SHORT | 0 |
| CN105 | 1-764-698-11 | SOCKET, CONNECTOR (NON ZIF) 19P | | JR4 | 1-216-295-91 | SHORT | 0 |
| CN106 | 1-568-834-11 | SOCKET, CONNECTOR 15P | | JR5 | 1-216-295-91 | SHORT | 0 |
| * CN107 | 1-568-836-11 | SOCKET, CONNECTOR 17P | | | | < COIL > | |
| * CN301 | 1-568-449-11 | HOUSING, CONNECTOR(PC BOARD) 3P | | L371 | 1-412-032-11 | INDUCTOR CHIP 100uH | |
| CN901 | 1-778-982-11 | CONNECTOR, BOARD TO BOARD 13P | | | | (RX88/RX99:AEP,UK,G) | |
| CN902 | 1-770-728-11 | CONNECTOR, BOARD TO BOARD 9P | | L372 | 1-412-032-11 | INDUCTOR CHIP 100uH | |
| * CN961 | 1-564-518-11 | PLUG, CONNECTOR 3P | | L391 | 1-412-032-11 | INDUCTOR CHIP 100uH | |
| | | < DIODE > | | L569 | 1-412-032-11 | INDUCTOR CHIP 100uH | |
| D381 | 8-719-988-62 | DIODE 1SS355 | | L570 | 1-412-032-11 | INDUCTOR CHIP 100uH | |
| D382 | 8-719-988-62 | DIODE 1SS355 | | L572 | 1-412-032-11 | INDUCTOR CHIP 100uH | |
| D502 | 8-719-988-62 | DIODE 1SS355 | | | | < FILTER > | |
| D508 | 8-719-988-62 | DIODE 1SS355 | | FL131 | 1-233-289-21 | FILTER, EMI (SMD) | |
| D572 | 8-719-988-62 | DIODE 1SS355 | | FL501 | 1-233-289-21 | FILTER, EMI (SMD) | |
| D901 | 8-719-988-62 | DIODE 1SS355 | | FL502 | 1-233-289-21 | FILTER, EMI (SMD) | |
| D911 | 8-719-988-62 | DIODE 1SS355 | | | | < TRANSISTOR > | |
| D931 | 8-719-988-62 | DIODE 1SS355 | | Q111 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 | |
| D932 | 8-719-210-33 | DIODE EC10DS2 | | Q112 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 | |
| D951 | 8-719-988-62 | DIODE 1SS355 | | Q113 | 8-729-141-30 | TRANSISTOR 2SC3623A-LK | |
| D952 | 8-719-988-62 | DIODE 1SS355 | | Q141 | 8-729-422-57 | TRANSISTOR UN4111 | |
| D953 | 8-719-988-62 | DIODE 1SS355 | | Q142 | 8-729-900-36 | TRANSISTOR DTC124ES | |
| D954 | 8-719-988-62 | DIODE 1SS355 | | Q143 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | |
| D955 | 8-719-210-33 | DIODE EC10DS2 | | Q161 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 | |
| D956 | 8-719-988-62 | DIODE 1SS355 | | Q162 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 | |
| | | < GROUND TERMINAL > | | Q163 | 8-729-141-30 | TRANSISTOR 2SC3623A-LK | |
| * EPT901 | 4-870-539-11 | PLATE, GROUND | | Q191 | 8-729-141-30 | TRANSISTOR 2SC3623A-LK | |
| | | < COIL > | | Q331 | 8-729-118-00 | TRANSISTOR 2SB1116-L | |
| FB381 | 1-414-234-11 | INDUCTOR CHIP 0UH | | Q332 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| | | < IC > | | Q333 | 8-729-118-00 | TRANSISTOR 2SB1116-L | |
| IC111 | 8-759-495-24 | IC M62442FP-TP | | Q334 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| IC191 | 8-759-636-55 | IC M5218AFP | | Q335 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| IC301 | 8-759-495-26 | IC HA12215 | | Q336 | 8-729-116-55 | TRANSISTOR 2SB1068 | |
| | | | | Q337 | 8-729-144-44 | TRANSISTOR 2SD1513 | |
| | | | | Q338 | 8-729-422-57 | TRANSISTOR UN4111 | |
| | | | | Q339 | 8-729-900-80 | TRANSISTOR DTC114ES | |

MAIN

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|--------------|--------------|------------------------|--------|----------|--------------|--------------------|--------|
| Q340 | 8-729-166-55 | TRANSISTOR 2SB1068 | | R154 | 1-216-105-91 | RES,CHIP 220K 5% | 1/10W |
| Q341 | 8-729-144-44 | TRANSISTOR 2SD1513 | | R155 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W |
| Q342 | 8-729-422-57 | TRANSISTOR UN4111 | | R156 | 1-216-097-91 | RES,CHIP 100K 5% | 1/10W |
| Q343 | 8-729-900-80 | TRANSISTOR DTC114ES | | R161 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| Q411 | 8-729-141-30 | TRANSISTOR 2SC3623A-LK | | R162 | 1-216-121-91 | RES,CHIP 1M 5% | 1/10W |
| Q901 | 8-729-040-20 | TRANSISTOR RT1P137L-TP | | R163 | 1-216-111-91 | RES,CHIP 390K 5% | 1/10W |
| Q902 | 8-729-900-36 | TRANSISTOR DTC124ES | | R164 | 1-216-044-00 | METAL CHIP 620 5% | 1/10W |
| Q903 | 8-729-040-19 | TRANSISTOR RT1N137L-TP | | R165 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| Q904 | 8-729-900-63 | TRANSISTOR DTA124ES | | R166 | 1-216-097-91 | RES,CHIP 100K 5% | 1/10W |
| Q905 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | R167 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| Q911 | 8-729-141-83 | TRANSISTOR 2SB1094-LK | | R168 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W |
| Q912 | 8-729-900-36 | TRANSISTOR DTC124ES | | R169 | 1-216-057-00 | METAL CHIP 2.2K 5% | 1/10W |
| Q913 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | R170 | 1-216-097-91 | RES,CHIP 100K 5% | 1/10W |
| Q931 | 8-729-040-20 | TRANSISTOR RT1P137L-TP | | R171 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| Q932 | 8-729-900-36 | TRANSISTOR DTC124ES | | R172 | 1-216-295-91 | SHORT 0 | |
| Q933 | 8-729-040-20 | TRANSISTOR RT1P137L-TP | | R173 | 1-216-057-00 | METAL CHIP 2.2K 5% | 1/10W |
| Q934 | 8-729-900-63 | TRANSISTOR DTA124ES | | R191 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W |
| Q937 | 8-729-900-36 | TRANSISTOR DTC124ES | | R192 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W |
| Q951 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 | | R193 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W |
| Q961 | 8-729-111-29 | TRANSISTOR 2SD1616A-K | | R194 | 1-216-061-00 | METAL CHIP 3.3K 5% | 1/10W |
| Q962 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | R195 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| < RESISTOR > | | | | R196 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W |
| R101 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W | R197 | 1-216-097-91 | RES,CHIP 100K 5% | 1/10W |
| R102 | 1-216-105-91 | RES,CHIP 220K 5% | 1/10W | R198 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W |
| R103 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W | R199 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| R104 | 1-216-105-91 | RES,CHIP 220K 5% | 1/10W | R301 | 1-216-085-00 | METAL CHIP 33K 5% | 1/10W |
| R105 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W | R302 | 1-216-057-00 | METAL CHIP 2.2K 5% | 1/10W |
| R106 | 1-216-097-91 | RES,CHIP 100K 5% | 1/10W | R303 | 1-216-025-91 | RES,CHIP 100 5% | 1/10W |
| R111 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W | R304 | 1-216-025-91 | RES,CHIP 100 5% | 1/10W |
| R112 | 1-216-121-91 | RES,CHIP 1M 5% | 1/10W | R305 | 1-216-057-00 | METAL CHIP 2.2K 5% | 1/10W |
| R113 | 1-216-111-91 | RES,CHIP 390K 5% | 1/10W | R306 | 1-216-071-00 | METAL CHIP 8.2K 5% | 1/10W |
| R114 | 1-216-044-00 | METAL CHIP 620 5% | 1/10W | R307 | 1-216-071-00 | METAL CHIP 8.2K 5% | 1/10W |
| R115 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W | R308 | 1-216-065-91 | RES,CHIP 4.7K 5% | 1/10W |
| R116 | 1-216-105-91 | RES,CHIP 220K 5% | 1/10W | R309 | 1-216-081-00 | METAL CHIP 22K 5% | 1/10W |
| R117 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W | R311 | 1-216-121-91 | RES,CHIP 1M 5% | 1/10W |
| R118 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W | R312 | 1-216-102-00 | RES,CHIP 160K 5% | 1/10W |
| R119 | 1-216-057-00 | METAL CHIP 2.2K 5% | 1/10W | R313 | 1-216-097-91 | RES,CHIP 100K 5% | 1/10W |
| R120 | 1-216-097-91 | RES,CHIP 100K 5% | 1/10W | R315 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| R121 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W | R316 | 1-216-079-00 | METAL CHIP 18K 5% | 1/10W |
| R122 | 1-216-295-91 | SHORT 0 | | R317 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| R123 | 1-216-057-00 | METAL CHIP 2.2K 5% | 1/10W | R318 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| R131 | 1-216-025-91 | RES,CHIP 100 5% | 1/10W | R319 | 1-216-111-91 | RES,CHIP 390K 5% | 1/10W |
| R132 | 1-216-025-91 | RES,CHIP 100 5% | 1/10W | R321 | 1-216-059-00 | METAL CHIP 2.7K 5% | 1/10W |
| R133 | 1-216-025-91 | RES,CHIP 100 5% | 1/10W | R322 | 1-216-071-00 | METAL CHIP 8.2K 5% | 1/10W |
| R134 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W | R324 | 1-216-094-00 | RES,CHIP 75K 5% | 1/10W |
| R135 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W | R325 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W |
| R136 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W | R326 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W |
| R137 | 1-216-057-00 | METAL CHIP 2.2K 5% | 1/10W | R327 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W |
| R138 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W | R328 | 1-216-094-00 | RES,CHIP 75K 5% | 1/10W |
| R141 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W | R329 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W |
| R142 | 1-216-097-91 | RES,CHIP 100K 5% | 1/10W | R330 | 1-216-065-91 | RES,CHIP 4.7K 5% | 1/10W |
| R143 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W | R331 | 1-216-065-91 | RES,CHIP 4.7K 5% | 1/10W |
| R144 | 1-216-065-91 | RES,CHIP 4.7K 5% | 1/10W | R332 | 1-216-045-00 | METAL CHIP 680 5% | 1/10W |
| R151 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W | R333 | 1-216-057-00 | METAL CHIP 2.2K 5% | 1/10W |
| R152 | 1-216-105-91 | RES,CHIP 220K 5% | 1/10W | R334 | 1-216-045-00 | METAL CHIP 680 5% | 1/10W |
| R153 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W | R335 | 1-216-057-00 | METAL CHIP 2.2K 5% | 1/10W |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|-------------|----------------------|----------|--------------|-------------|-------------------------------|
| R336 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W | R560 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R337 | 1-216-037-00 | METAL CHIP | 330 5% 1/10W | R561 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R338 | 1-216-037-00 | METAL CHIP | 330 5% 1/10W | R563 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R339 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W | R564 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R340 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W | R565 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R341 | 1-216-037-00 | METAL CHIP | 330 5% 1/10W | R566 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R342 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W | R567 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R343 | 1-216-057-00 | METAL CHIP | 2.2K 5% 1/10W | R568 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R344 | 1-216-057-00 | METAL CHIP | 2.2K 5% 1/10W | R573 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R351 | 1-216-085-00 | METAL CHIP | 33K 5% 1/10W | R574 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R352 | 1-216-057-00 | METAL CHIP | 2.2K 5% 1/10W | R575 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R353 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R576 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R354 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R578 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R355 | 1-216-057-00 | METAL CHIP | 2.2K 5% 1/10W | R579 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R356 | 1-216-071-00 | METAL CHIP | 8.2K 5% 1/10W | R580 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R357 | 1-216-071-00 | METAL CHIP | 8.2K 5% 1/10W | R581 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R358 | 1-216-065-91 | RES,CHIP | 4.7K 5% 1/10W | R595 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R359 | 1-216-085-00 | METAL CHIP | 33K 5% 1/10W | R596 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R371 | 1-216-049-91 | RES,CHIP | 1K 5% 1/10W | R597 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R372 | 1-216-049-91 | RES,CHIP | 1K 5% 1/10W | R598 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R381 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R705 | 1-216-065-91 | RES,CHIP | 4.7K 5% 1/10W |
| R382 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R729 | 1-216-045-00 | METAL CHIP | 680 5% 1/10W |
| R383 | 1-216-085-00 | METAL CHIP | 33K 5% 1/10W | | | | (GRX8:EA4,TH) |
| R384 | 1-216-085-00 | METAL CHIP | 33K 5% 1/10W | R729 | 1-216-065-91 | RES,CHIP | 4.7K 5% 1/10W |
| R385 | 1-216-085-00 | METAL CHIP | 33K 5% 1/10W | | | | (GRX8:E2,MX/R800) |
| R401 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R729 | 1-216-069-00 | METAL CHIP | 6.8K 5% 1/10W |
| R402 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | | | | (GRX8:AUS/RX88/RX99:AEP,UK,G) |
| R403 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R729 | 1-216-085-00 | METAL CHIP | 33K 5% 1/10W |
| R404 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | | | | (RX99:EE,CIS) |
| R411 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R729 | 1-216-295-91 | SHORT | 0 |
| R412 | 1-216-049-91 | METAL CHIP | 1K 5% 1/10W | | | | (GRX8:E3,SP,MY,HK,TW,EA3) |
| R413 | 1-216-065-91 | RES,CHIP | 4.7K 5% 1/10W | R730 | 1-216-061-00 | METAL CHIP | 3.3K 5% 1/10W |
| R414 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | | | | (RX88/RX99:AEP,UK,G) |
| R416 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R730 | 1-216-065-91 | RES,CHIP | 4.7K 5% 1/10W |
| R417 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | | | | (GRX8:AUS) |
| R418 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W | R730 | 1-216-069-00 | METAL CHIP | 6.8K 5% 1/10W |
| R419 | 1-216-097-91 | RES,CHIP | 100K 5% 1/10W | | | | (GRX8:E2,MX/R800/RX99:EE,CIS) |
| R420 | 1-216-065-91 | RES,CHIP | 4.7K 5% 1/10W | R730 | 1-216-077-00 | METAL CHIP | 15K 5% 1/10W |
| R506 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | | | | (GRX8:EA4,TH) |
| R507 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R731 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W |
| R508 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R769 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W |
| R513 | 1-216-109-00 | METAL CHIP | 330K 5% 1/10W | R770 | 1-216-061-00 | METAL CHIP | 3.3K 5% 1/10W |
| R518 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R778 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W |
| R521 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R779 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W |
| | | | (RX88/RX99:AEP,UK,G) | R780 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W |
| R522 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R781 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W |
| | | | (RX88/RX99:AEP,UK,G) | R800 | 1-216-065-91 | RES,CHIP | 4.7K 5% 1/10W |
| R526 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R901 | 1-216-065-91 | RES,CHIP | 4.7K 5% 1/10W |
| R527 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R902 | 1-216-081-00 | METAL CHIP | 22K 5% 1/10W |
| R534 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R911 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W |
| R536 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R912 | 1-216-065-91 | RES,CHIP | 4.7K 5% 1/10W |
| R547 | 1-216-041-00 | RES,CHIP | 470 5% 1/10W | R931 | 1-216-049-91 | RES,CHIP | 1K 5% 1/10W |
| R548 | 1-216-041-00 | RES,CHIP | 470 5% 1/10W | R951 | 1-216-049-91 | RES,CHIP | 1K 5% 1/10W |
| R555 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R952 | 1-216-065-91 | RES,CHIP | 4.7K 5% 1/10W |
| R556 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R953 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W |
| R557 | 1-216-025-91 | RES,CHIP | 100 5% 1/10W | R954 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W |
| R558 | 1-216-041-00 | RES,CHIP | 470 5% 1/10W | R955 | 1-216-089-91 | RES,CHIP | 47K 5% 1/10W |
| | | | | R956 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W |
| | | | | R961 | 1-216-057-00 | METAL CHIP | 2.2K 5% 1/10W |

MAIN **MIC**

| Ref. No. | Part No. | Description | Remark |
|-----------------------|--------------|-------------------------------|-------------------|
| R962 | 1-216-079-00 | METAL CHIP 18K 5% | 1/10W |
| R963 | 1-216-065-91 | RES,CHIP 4.7K 5% | 1/10W |
| < VARIABLE RESISTOR > | | | |
| RV301 | 1-241-764-11 | RES, ADJ, CARBON 10K | |
| RV351 | 1-241-764-11 | RES, ADJ, CARBON 10K | |
| < VIBRATOR > | | | |
| X501 | 1-579-233-11 | VIBRATOR, CERAMIC (5MHz) | |
| X502 | 1-567-098-41 | VIBRATOR, CRYSTAL (32.768kHz) | |
| ***** | | | |
| * | 1-668-270-11 | MIC BOARD ***** | |
| < CAPACITOR > | | | |
| C752 | 1-163-038-91 | CERAMIC CHIP 0.1uF | 25V |
| C754 | 1-164-232-11 | CERAMIC CHIP 0.01uF | 50V |
| C755 | 1-126-961-11 | ELECT 2.2uF 20% | 50V |
| C756 | 1-163-009-11 | CERAMIC CHIP 0.001uF 10% | 50V |
| C757 | 1-163-243-11 | CERAMIC CHIP 47PF 5% | 50V |
| C758 | 1-126-964-11 | ELECT 10uF 20% | 50V |
| C759 | 1-126-957-11 | ELECT 0.22uF 20% | 50V |
| C760 | 1-163-243-11 | CERAMIC CHIP 47PF 5% | 50V |
| C761 | 1-163-251-11 | CERAMIC CHIP 100PF 5% | 50V |
| C762 | 1-126-961-11 | ELECT 2.2uF 20% | 50V |
| C764 | 1-126-964-11 | ELECT 10uF 20% | 50V |
| C765 | 1-126-301-11 | ELECT 1uF 20% | 50V (GRX8:EA3) |
| C766 | 1-163-019-00 | CERAMIC CHIP 0.0068uF 10% | 50V (GRX8:EA3) |
| C767 | 1-163-009-11 | CERAMIC CHIP 0.001uF 10% | 50V (GRX8:EA3) |
| C768 | 1-136-495-11 | FILM 0.068uF 5% | 50V (GRX8:EA3) |
| C769 | 1-124-464-11 | ELECT 0.22uF 20% | 50V (GRX8:EA3) |
| C770 | 1-124-464-11 | ELECT 0.22uF 20% | 50V (GRX8:EA3) |
| C771 | 1-124-589-11 | ELECT 47uF 20% | 16V (GRX8:EA3) |
| C772 | 1-164-004-11 | CERAMIC CHIP 0.1uF 10% | 25V (GRX8:EA3) |
| C773 | 1-124-589-11 | ELECT 47uF 20% | 16V (GRX8:EA3) |
| C774 | 1-136-495-11 | FILM 0.068uF 5% | 50V (GRX8:EA3) |
| C775 | 1-163-019-00 | CERAMIC CHIP 0.0068uF 10% | 50V (GRX8:EA3) |
| C776 | 1-163-009-11 | CERAMIC CHIP 0.001uF 10% | 50V (GRX8:EA3) |
| C777 | 1-164-492-11 | CERAMIC CHIP 0.15uF 10% | 16V (GRX8:EA3) |
| C778 | 1-126-301-11 | ELECT 1uF 20% | 50V (GRX8:EA3) |
| C779 | 1-163-037-11 | CERAMIC CHIP 0.022uF 10% | 25V (GRX8:EA3) |
| C780 | 1-124-257-00 | ELECT 2.2uF 20% | 50V (GRX8:EA3) |

| Ref. No. | Part No. | Description | Remark |
|-----------------------|--------------|--------------------------------------|---------------------|
| C782 | 1-163-005-11 | CERAMIC CHIP 470PF 10% | 50V |
| < DIODE > | | | |
| D751 | 8-719-210-33 | DIODE EC10DS2 (GRX8:EA3) | |
| D752 | 8-719-210-33 | DIODE EC10DS2 (GRX8:EA3) | |
| D753 | 8-719-210-33 | DIODE EC10DS2 (GRX8:EA3) | |
| < FILTER > | | | |
| FL751 | 1-233-289-21 | FILTER, CHIP EMI | |
| < IC > | | | |
| IC750 | 8-759-636-55 | IC M5218AFP | |
| IC751 | 8-759-496-41 | IC M65850FP-E1 (GRX8:EA3) | |
| < JACK > | | | |
| J751 | 1-784-224-11 | JACK (LARGE TYPE) (MIX MIC) | |
| < COIL > | | | |
| L751 | 1-412-032-11 | INDUCTOR CHIP 100uH (GRX8:EA3) | |
| < RESISTOR > | | | |
| R750 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| R751 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W |
| R752 | 1-216-097-91 | RES,CHIP 100K 5% | 1/10W |
| R753 | 1-216-049-91 | RES,CHIP 1K 5% | 1/10W |
| R754 | 1-216-081-00 | METAL CHIP 22K 5% | 1/10W |
| R755 | 1-216-073-00 | METAL CHIP 10K 5% | 1/10W |
| R756 | 1-216-103-00 | METAL CHIP 180K 5% | 1/10W |
| R757 | 1-216-025-91 | RES,CHIP 100 5% | 1/10W |
| R758 | 1-216-081-00 | METAL CHIP 22K 5% | 1/10W (GRX8:EA3) |
| R759 | 1-216-081-00 | METAL CHIP 22K 5% | 1/10W (GRX8:EA3) |
| R760 | 1-216-081-00 | METAL CHIP 22K 5% | 1/10W (GRX8:EA3) |
| R761 | 1-216-099-00 | METAL CHIP 120K 5% | 1/10W (GRX8:EA3) |
| R762 | 1-216-081-00 | METAL CHIP 22K 5% | 1/10W (GRX8:EA3) |
| R763 | 1-216-081-00 | METAL CHIP 22K 5% | 1/10W (GRX8:EA3) |
| R764 | 1-216-081-00 | METAL CHIP 22K 5% | 1/10W (GRX8:EA3) |
| R765 | 1-216-089-91 | RES,CHIP 47K 5% | 1/10W (GRX8:EA3) |
| R766 | 1-216-077-00 | METAL CHIP 15K 5% | 1/10W (GRX8:EA3) |
| R767 | 1-216-077-00 | METAL CHIP 15K 5% | 1/10W (GRX8:EA3) |
| < VARIABLE RESISTOR > | | | |
| RV750 | 1-225-587-11 | RES, VAR 50K (MIC LEVEL) | |
| RV751 | 1-225-587-11 | RES, VAR 50K (ECHO LEVEL) (GRX8:EA3) | |
| <CONNECTOR> | | | |
| * W751 | 1-690-880-31 | LEAD (WITH CONNECTOR) | |
| ***** | | | |

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|---------------------|----------------------|--------------|
| MOTOR (TURN) | MOTOR (SLIDE) | PANEL |
|---------------------|----------------------|--------------|

| Ref. No. | Part No. | Description | | | | Remark |
|----------|--------------|------------------------------|--------|-----|--------|--------|
| * | 1-658-577-11 | MOTOR (TURN) BOARD ***** | | | | |
| | | < CAPACITOR > | | | | |
| C701 | 1-162-306-11 | CERAMIC | 0.01uF | 20% | 16V | |
| C702 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | |
| C705 | 1-162-306-11 | CERAMIC | 0.01uF | 20% | 16V | |
| | | < CONNECTOR > | | | | |
| CN703 | 1-750-413-11 | CONNECTOR, FFC/FPC 8P | | | | |
| CN704 | 1-506-469-11 | PIN, CONNECTOR 4P | | | | |
| | | < DIODE > | | | | |
| D701 | 8-719-109-69 | DIODE RD3.6ES-B2 | | | | |
| | | < IC > | | | | |
| IC701 | 8-759-633-65 | IC M54641L | | | | |
| | | < RESISTOR > | | | | |
| R706 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W | |
| R707 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W F | |
| ***** | | | | | | |
| * | 1-658-578-11 | MOTOR (SLIDE) BOARD ***** | | | | |
| | | < CAPACITOR > | | | | |
| C801 | 1-162-306-11 | CERAMIC | 0.01uF | 20% | 16V | |
| C804 | 1-162-306-11 | CERAMIC | 0.01uF | 20% | 16V | |
| C805 | 1-126-964-11 | ELECT | 10uF | 20% | 50V | |
| | | < CONNECTOR > | | | | |
| * CN801 | 1-568-947-11 | PIN, CONNECTOR 9P | | | | |
| | | < DIODE > | | | | |
| D801 | 8-719-010-43 | DIODE UZ-5.6BSC | | | | |
| D804 | 8-719-911-19 | DIODE 1SS119 | | | | |
| D805 | 8-719-911-19 | DIODE 1SS119 | | | | |
| | | < IC > | | | | |
| IC801 | 8-759-274-09 | IC BA6286N | | | | |
| | | < RESISTOR > | | | | |
| R801 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W F | |
| | | < SWITCH > | | | | |
| S801 | 1-762-527-11 | SWITCH, ROTARY | | | | |
| ***** | | | | | | |

| Ref. No. | Part No. | Description | | | | Remark |
|----------|--------------|---|----------|-----|------|--------|
| * | A-4407-257-A | PANEL BOARD, COMPLETE ***** (GRX8/R800/RX99:EE,CIS) | | | | |
| * | A-4407-308-A | PANEL BOARD, COMPLETE (RX88) ***** | | | | |
| * | A-4407-720-A | PANEL BOARD, COMPLETE (RX99:AEP,UK,G) ***** | | | | |
| | | < CAPACITOR > | | | | |
| C600 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | |
| C601 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C602 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | |
| C603 | 1-124-589-11 | ELECT | 47uF | 20% | 16V | |
| C604 | 1-124-259-11 | ELECT | 4.7uF | 20% | 50V | |
| C605 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C606 | 1-126-160-11 | ELECT | 1uF | 20% | 50V | |
| C607 | 1-126-160-11 | ELECT | 1uF | 20% | 50V | |
| C608 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C609 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C610 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C611 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C612 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C613 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C614 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C615 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C616 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C617 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C618 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C619 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C620 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C621 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C625 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C626 | 1-124-589-11 | ELECT | 47uF | 20% | 16V | |
| C631 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C632 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C633 | 1-164-182-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V | |
| C634 | 1-126-157-11 | ELECT | 10uF | 20% | 16V | |
| C652 | 1-164-232-11 | CERAMIC CHIP | 0.01uF | | 50V | |
| C801 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | |
| C802 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | |
| C803 | 1-124-589-11 | ELECT | 47uF | 20% | 16V | |
| C804 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V | |
| C805 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | |
| C806 | 1-126-963-11 | ELECT | 4.7uF | 20% | 50V | |
| C807 | 1-163-017-00 | CERAMIC CHIP | 4700PF | 10% | 50V | |
| C808 | 1-163-017-00 | CERAMIC CHIP | 4700PF | 10% | 50V | |
| C809 | 1-126-967-11 | ELECT | 47uF | 20% | 50V | |
| C851 | 1-163-038-91 | CERAMIC CHIP | 0.1uF | | 25V | |
| C852 | 1-126-935-11 | ELECT | 470uF | 20% | 6.3V | |
| C853 | 1-126-963-11 | ELECT | 4.7uF | 20% | 50V | |
| | | < CONNECTOR > | | | | |
| * CN601 | 1-568-832-11 | SOCKET, CONNECTOR 13P | | | | |

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| PANEL |
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| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--|--------|----------|--------------|-----------------------------|--------|
| CN602 | 1-764-698-11 | SOCKET, CONNECTOR 19P | | JW927 | 1-216-295-91 | SHORT 0 | |
| * CN603 | 1-568-943-11 | PIN, CONNECTOR 5P | | JW928 | 1-216-295-91 | SHORT 0 | |
| CN604 | 1-506-486-11 | PIN, CONNECTOR 7P | | | | < COIL > | |
| | | < DIODE > | | L601 | 1-412-031-11 | INDUCTOR CHIP 47uH | |
| D601 | 8-719-058-24 | DIODE RB501V-40TE-17 | | L602 | 1-412-031-11 | INDUCTOR CHIP 47uH | |
| D602 | 8-719-210-33 | DIODE EC10DS2 | | L851 | 1-412-031-11 | INDUCTOR CHIP 47uH | |
| D603 | 8-719-210-33 | DIODE EC10DS2 | | | | < FLUORECENT INDICATOR > | |
| D620 | 8-719-063-93 | DIODE SLR325VC-N-T32 (EFFECT) | | ND601 | 1-517-731-21 | INDICATOR TUBE, FLUORESCENT | |
| D621 | 8-719-056-13 | DIODE SML79423C-TP15 (CD ►►) | | | | < TRANSISTOR > | |
| D622 | 8-719-058-03 | DIODE SEL5423E-TP15 (◀ TAPE B) | | Q601 | 8-729-118-00 | TRANSISTOR 2SB1116-L | |
| D623 | 8-719-058-03 | DIODE SEL5423E-TP15 (► TAPE B) | | Q602 | 8-729-118-00 | TRANSISTOR 2SB1116-L | |
| D624 | 8-719-058-03 | DIODE SEL5423E-TP15 (◀ TAPE A) | | Q603 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| D625 | 8-719-058-03 | DIODE SEL5423E-TP15 (► TAPE A) | | Q607 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| D630 | 8-719-057-97 | DIODE SEL5923A-TP15 (SONIC FORMATION) GRX8/RX99/R800/(MUTING)RX88 | | Q608 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| D651 | 8-719-063-93 | DIODE SLR325VC-N-T32 (● REC) | | Q609 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| D652 | 8-719-057-97 | DIODE SEL5923A-TP15 (► PAUSE) | | Q610 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| D804 | 8-719-988-62 | DIODE 1SS355 | | Q618 | 8-729-027-60 | TRANSISTOR DTC144TKA-T146 | |
| D805 | 8-719-988-62 | DIODE 1SS355 | | Q701 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| D806 | 8-719-988-62 | DIODE 1SS355 | | Q702 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| D807 | 8-719-988-62 | DIODE 1SS355 | | Q851 | 8-729-027-23 | TRANSISTOR DTA114EKA-T146 | |
| | | < FILTER > | | Q958 | 8-729-900-53 | TRANSISTOR DTC114EK | |
| FL601 | 1-233-289-21 | FILTER, CHIP EMI | | Q959 | 8-729-027-23 | TRANSISTOR DTA114EKA-T146 | |
| FL602 | 1-233-289-21 | FILTER, CHIP EMI | | Q960 | 8-729-027-23 | TRANSISTOR DTA114EKA-T146 | |
| FL801 | 1-233-289-21 | FILTER, CHIP EMI | | | | < RESISTOR > | |
| FL802 | 1-233-289-21 | FILTER, CHIP EMI | | R601 | 1-216-121-91 | RES,CHIP 1M 5% 1/10W | |
| FL851 | 1-233-289-21 | FILTER, CHIP EMI | | R602 | 1-216-025-91 | RES,CHIP 100 5% 1/10W | |
| | | < IC > | | R604 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| IC601 | 8-759-496-12 | IC TMP87CM74AF-6671 | | R605 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| IC602 | 8-759-332-18 | IC GP1U27XB | | R606 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| IC603 | 8-759-495-25 | IC BA3833FP | | R607 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| IC801 | 8-759-496-11 | IC TMP87CH48DF-4825 | | R608 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | |
| IC851 | 8-759-498-98 | IC MSM6653A-GS-K | | R609 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | |
| | | < JUMPER RESISTOR > | | R610 | 1-216-025-91 | RES,CHIP 100 5% 1/10W | |
| JW903 | 1-216-296-91 | SHORT 0 | | R611 | 1-216-025-91 | RES,CHIP 100 5% 1/10W | |
| JW904 | 1-216-296-91 | SHORT 0 | | R612 | 1-216-017-91 | RES,CHIP 47 5% 1/10W | |
| JW905 | 1-216-296-91 | SHORT 0 | | R613 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | |
| JW906 | 1-216-295-91 | SHORT 0 | | | | (RX88) | |
| JW907 | 1-216-296-91 | SHORT 0 | | R613 | 1-216-065-91 | RES,CHIP 4.7K 5% 1/10W | |
| JW908 | 1-216-296-91 | SHORT 0 | | | | (GRX8/R800/RX99) | |
| JW909 | 1-216-296-91 | SHORT 0 | | R614 | 1-216-069-00 | METAL CHIP 6.8K 5% 1/10W | |
| JW911 | 1-216-296-91 | SHORT 0 | | | | (GRX8/R800/RX99) | |
| JW912 | 1-216-295-91 | SHORT 0 | | R614 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| JW914 | 1-216-296-91 | SHORT 0 | | | | (RX88) | |
| JW915 | 1-216-296-91 | SHORT 0 | | R616 | 1-216-097-91 | RES,CHIP 100K 5% 1/10W | |
| JW916 | 1-216-296-91 | SHORT 0 | | R618 | 1-216-089-91 | RES,CHIP 47K 5% 1/10W | |
| JW919 | 1-216-295-91 | SHORT 0 | | R619 | 1-216-089-91 | RES,CHIP 47K 5% 1/10W | |
| JW920 | 1-216-295-91 | SHORT 0 | | R621 | 1-216-069-00 | METAL CHIP 6.8K 5% 1/10W | |
| JW921 | 1-216-295-91 | SHORT 0 | | R622 | 1-216-033-00 | METAL CHIP 220 5% 1/10W | |
| JW922 | 1-216-295-91 | SHORT 0 | | R623 | 1-216-035-00 | METAL CHIP 270 5% 1/10W | |
| JW923 | 1-216-296-91 | SHORT 0 | | R624 | 1-216-039-00 | METAL CHIP 390 5% 1/10W | |
| JW924 | 1-216-296-91 | SHORT 0 | | R625 | 1-216-041-00 | METAL CHIP 470 5% 1/10W | |
| JW925 | 1-216-295-91 | SHORT 0 | | R626 | 1-216-045-00 | METAL CHIP 680 5% 1/10W | |
| JW926 | 1-216-295-91 | SHORT 0 | | R627 | 1-216-047-91 | RES,CHIP 820 5% 1/10W | |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|-------------|---------|----------|----------|---------------|--|
| R628 | 1-216-051-00 | METAL CHIP | 1.2K 5% | 1/10W | | < SWITCH > | |
| R629 | 1-216-053-00 | METAL CHIP | 1.5K 5% | 1/10W | | | |
| R630 | 1-216-057-00 | METAL CHIP | 2.2K 5% | 1/10W | | | |
| R631 | 1-216-061-00 | METAL CHIP | 3.3K 5% | 1/10W | S604 | 1-762-875-21 | SWITCH, KEYBOARD (SONIC FORMATION):GRX8/R800/RX99/(MUTING):RX88 |
| R632 | 1-216-065-91 | RES,CHIP | 4.7K 5% | 1/10W | S605 | 1-762-875-21 | SWITCH, KEYBOARD (SURROUND) |
| R633 | 1-216-069-00 | METAL CHIP | 6.8K 5% | 1/10W | S606 | 1-762-875-21 | SWITCH, KEYBOARD (KARAOKE PON/MPX) |
| R636 | 1-216-069-00 | METAL CHIP | 6.8K 5% | 1/10W | S607 | 1-762-875-21 | SWITCH, KEYBOARD (■) |
| R649 | 1-216-069-00 | METAL CHIP | 6.8K 5% | 1/10W | S608 | 1-762-875-21 | SWITCH, KEYBOARD (P FILE MEMORY) |
| R650 | 1-216-033-00 | METAL CHIP | 220 5% | 1/10W | S609 | 1-762-875-21 | SWITCH, KEYBOARD (GEQ CONTROL) |
| R651 | 1-216-035-00 | METAL CHIP | 270 5% | 1/10W | S610 | 1-762-875-21 | SWITCH, KEYBOARD (FILE SELECT) |
| R652 | 1-216-039-00 | METAL CHIP | 390 5% | 1/10W | S611 | 1-762-875-21 | SWITCH, KEYBOARD (EFFECT) |
| R653 | 1-216-041-00 | METAL CHIP | 470 5% | 1/10W | S612 | 1-762-875-21 | SWITCH, KEYBOARD (DEMO) |
| R654 | 1-216-045-00 | METAL CHIP | 680 5% | 1/10W | S613 | 1-762-875-21 | SWITCH, KEYBOARD (TIMER SELECT) |
| R655 | 1-216-047-91 | RES,CHIP | 820 5% | 1/10W | S614 | 1-762-875-21 | SWITCH, KEYBOARD (FUNCTION) |
| R661 | 1-216-089-91 | RES,CHIP | 47K 5% | 1/10W | S615 | 1-762-875-21 | SWITCH, KEYBOARD (CLOCK/TIMER SET) |
| R662 | 1-216-089-91 | RES,CHIP | 47K 5% | 1/10W | S616 | 1-762-875-21 | SWITCH, KEYBOARD (DISPLAY) |
| R663 | 1-216-049-91 | RES,CHIP | 1K 5% | 1/10W | S631 | 1-762-875-21 | SWITCH, KEYBOARD (TUNER/BAND) |
| R664 | 1-216-049-91 | RES,CHIP | 1K 5% | 1/10W | S632 | 1-762-875-21 | SWITCH, KEYBOARD (CD ▶▶) |
| R665 | 1-216-089-91 | RES,CHIP | 47K 5% | 1/10W | S633 | 1-762-875-21 | SWITCH, KEYBOARD (◀ TAPE B) |
| R673 | 1-216-037-00 | METAL CHIP | 330 5% | 1/10W | S634 | 1-762-875-21 | SWITCH, KEYBOARD (▶ TAPE B) |
| R674 | 1-216-027-00 | METAL CHIP | 120 5% | 1/10W | S635 | 1-762-875-21 | SWITCH, KEYBOARD (◀ TAPE A) |
| R675 | 1-216-027-00 | METAL CHIP | 120 5% | 1/10W | S636 | 1-762-875-21 | SWITCH, KEYBOARD (▶ TAPE A) |
| R676 | 1-216-027-00 | METAL CHIP | 120 5% | 1/10W | S652 | 1-762-875-21 | SWITCH, KEYBOARD (PLAY MODE, DOLBY NR, TUNER MEMORY) |
| R677 | 1-216-027-00 | METAL CHIP | 120 5% | 1/10W | S653 | 1-762-875-21 | SWITCH, KEYBOARD (EDIT, DIRECTION) |
| R678 | 1-216-027-00 | METAL CHIP | 120 5% | 1/10W | S654 | 1-762-875-21 | SWITCH, KEYBOARD (REPEAT, STEREO/MONO) |
| R679 | 1-216-027-00 | METAL CHIP | 120 5% | 1/10W | S655 | 1-762-875-21 | SWITCH, KEYBOARD (PTY) (RX88/RX99:AEP,UK,G) |
| R701 | 1-216-073-00 | METAL CHIP | 10K 5% | 1/10W | S656 | 1-762-875-21 | SWITCH, KEYBOARD (● REC) |
| R702 | 1-216-073-00 | METAL CHIP | 10K 5% | 1/10W | S657 | 1-762-875-21 | SWITCH, KEYBOARD (■ PAUSE) |
| R703 | 1-216-097-91 | RES,CHIP | 100K 5% | 1/10W | S658 | 1-762-875-21 | SWITCH, KEYBOARD (HI-DUB) |
| R704 | 1-216-097-91 | RES,CHIP | 100K 5% | 1/10W | S659 | 1-762-875-21 | SWITCH, KEYBOARD (CD SYNC) |
| R721 | 1-216-029-00 | METAL CHIP | 150 5% | 1/10W | | < VIBRATOR > | |
| R723 | 1-216-069-00 | METAL CHIP | 6.8K 5% | 1/10W | X501 | 1-579-125-11 | VIBRATOR, CERAMIC (8MHz) |
| R724 | 1-216-033-00 | METAL CHIP | 220 5% | 1/10W | X601 | 1-579-125-11 | VIBRATOR, CERAMIC (8MHz) |
| R725 | 1-216-035-00 | METAL CHIP | 270 5% | 1/10W | X851 | 1-767-353-11 | VIBRATOR, CERAMIC (4.09MHz) |
| R726 | 1-216-039-00 | METAL CHIP | 390 5% | 1/10W | | | |
| R727 | 1-216-041-00 | METAL CHIP | 470 5% | 1/10W | | | |
| R728 | 1-216-045-00 | METAL CHIP | 680 5% | 1/10W | | | |
| R729 | 1-216-047-91 | RES,CHIP | 820 5% | 1/10W | | | |
| R730 | 1-216-051-00 | METAL CHIP | 1.2K 5% | 1/10W | | | |
| R731 | 1-216-053-00 | METAL CHIP | 1.5K 5% | 1/10W | | | |
| R742 | 1-216-027-00 | METAL CHIP | 120 5% | 1/10W | | | |
| R743 | 1-216-027-00 | METAL CHIP | 120 5% | 1/10W | | | |
| R801 | 1-216-121-91 | RES,CHIP | 1M 5% | 1/10W | | | |
| R802 | 1-216-025-91 | RES,CHIP | 100 5% | 1/10W | | | |
| R803 | 1-216-025-91 | RES,CHIP | 100 5% | 1/10W | | | |
| R804 | 1-216-025-91 | RES,CHIP | 100 5% | 1/10W | | | |
| R805 | 1-216-069-00 | METAL CHIP | 6.8K 5% | 1/10W | | | |
| R806 | 1-216-069-00 | METAL CHIP | 6.8K 5% | 1/10W | | | |
| R807 | 1-216-085-00 | METAL CHIP | 33K 5% | 1/10W | | | |
| R808 | 1-216-113-00 | METAL CHIP | 470K 5% | 1/10W | | | |
| R809 | 1-216-065-91 | RES,CHIP | 4.7K 5% | 1/10W | | | |
| R810 | 1-216-089-91 | RES,CHIP | 47K 5% | 1/10W | | | |
| R851 | 1-216-097-91 | RES,CHIP | 100K 5% | 1/10W | | | |
| R852 | 1-216-025-91 | RES,CHIP | 100 5% | 1/10W | | | |
| R954 | 1-216-097-91 | RES,CHIP | 100K 5% | 1/10W | | | |
| R955 | 1-216-097-91 | RES,CHIP | 100K 5% | 1/10W | | | |
| | | | | | | < CAPACITOR > | |
| | | | | | C101 | 1-130-781-00 | FILM 0.22uF 10% 100V |
| | | | | | C102 | 1-130-781-00 | FILM 0.22uF 10% 100V |
| | | | | | C103 | 1-164-159-21 | CERAMIC 0.1uF 50V |
| | | | | | C104 | 1-164-159-21 | CERAMIC 0.1uF 50V |
| | | | | | C105 | 1-126-943-11 | ELECT 2200uF 20% 25V |
| | | | | | C106 | 1-162-294-31 | CERAMIC 0.001uF 10% 50V |
| | | | | | C107 | 1-162-294-31 | CERAMIC 0.001uF 10% 50V |
| | | | | | C111 | 1-126-968-11 | ELECT 100uF 20% 50V |
| | | | | | C112 | 1-126-968-11 | ELECT 100uF 20% 50V |

* A-4407-260-A POWER BOARD, COMPLETE (GRX8/R800)
****** A-4407-300-A POWER BOARD, COMPLETE (RX88)
****** A-4407-722-A POWER BOARD, COMPLETE (RX99)

POWER

| Ref. No. | Part No. | Description | | | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|-------------------------------|---------|-----|--------------------|----------|--------------|---|--------|
| C113 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V | | | < DIODE > | |
| C114 | 1-126-967-11 | ELECT | 47uF | 20% | 50V | D101 | 8-719-510-68 | DIODE D5SBA20F01 | |
| C151 | 1-128-493-21 | ELECT | 4700uF | 20% | 71V | D102 | 8-719-028-23 | DIODE D3SBA20-4101 | |
| C152 | 1-128-493-21 | ELECT | 4700uF | 20% | 71V | D103 | 8-719-200-82 | DIODE 11ES2 | |
| C201 | 1-128-582-11 | ELECT | 10uF | 20% | 100V | D104 | 8-719-200-82 | DIODE 11ES2 | |
| C202 | 1-162-292-31 | CERAMIC | 680PF | 10% | 50V | D105 | 8-719-991-33 | DIODE 1SS133T-77 (RX88/RX99) | |
| C203 | 1-162-286-21 | CERAMIC | 220PF | 10% | 50V | D111 | 8-719-200-82 | DIODE 11ES2 | |
| C204 | 1-126-967-11 | ELECT | 47uF | 20% | 50V | D112 | 8-719-200-82 | DIODE 11ES2 | |
| C205 | 1-126-967-11 | ELECT | 47uF | 20% | 50V | D113 | 8-719-002-60 | DIODE UZL-33L | |
| C206 | 1-128-560-11 | ELECT | 22uF | 20% | 100V | D114 | 8-719-010-43 | DIODE UZ-5.6BSC | |
| C207 | 1-130-493-00 | MYLAR | 0.068uF | 5% | 50V | D201 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C208 | 1-130-493-00 | MYLAR | 0.068uF | 5% | 50V | D251 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C221 | 1-162-284-31 | CERAMIC | 150PF | 10% | 50V | D301 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C222 | 1-162-284-31 | CERAMIC | 150PF | 10% | 50V | D311 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C223 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V | D321 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C224 | 1-128-560-11 | ELECT | 22uF | 20% | 100V | D331 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C225 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V (RX88/RX99) | D332 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C228 | 1-162-284-31 | CERAMIC | 150PF | 10% | 50V | D401 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C251 | 1-128-582-11 | ELECT | 10uF | 20% | 100V | D402 | 8-719-911-19 | DIODE 1SS119 (GRX8/R800/RX99) | |
| C252 | 1-162-292-31 | CERAMIC | 680PF | 10% | 50V | D404 | 8-719-911-19 | DIODE 1SS119 (GRX8/R800/RX99) | |
| C253 | 1-162-286-21 | CERAMIC | 220PF | 10% | 50V | D405 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C254 | 1-126-967-11 | ELECT | 47uF | 20% | 50V | D406 | 8-719-991-33 | DIODE 1SS133T-77 | |
| C255 | 1-126-967-11 | ELECT | 47uF | 20% | 50V | D407 | 8-719-911-19 | DIODE 1SS119 | |
| C256 | 1-128-560-11 | ELECT | 22uF | 20% | 100V | D408 | 8-719-911-19 | DIODE 1SS119 | |
| C257 | 1-130-493-00 | MYLAR | 0.068uF | 5% | 50V | | | < GROUND PLATE > | |
| C258 | 1-130-493-00 | MYLAR | 0.068uF | 5% | 50V | | | | |
| C301 | 1-126-923-11 | ELECT | 220uF | 20% | 10V | * EP101 | 1-537-738-21 | TERMINAL, EARTH | |
| C302 | 1-126-923-11 | ELECT | 220uF | 20% | 10V | * EP201 | 1-537-738-21 | TERMINAL, EARTH | |
| C311 | 1-126-959-11 | ELECT | 0.47uF | 20% | 50V | | | < IC > | |
| C331 | 1-126-924-11 | ELECT | 330uF | 20% | 10V | IC201 | 8-749-921-68 | IC STK-4231MK2 (GRX8/R800) | |
| C401 | 1-126-963-11 | ELECT | 4.7uF | 20% | 50V | IC201 | 8-749-922-65 | IC STK-4221MK2 (RX88/RX99) | |
| C402 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V (RX88/RX99) | | | < COIL > | |
| C403 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V (RX88/RX99) | L401 | 1-420-872-00 | COIL, AIR-CORE (RX88/RX99) | |
| C404 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V (RX88/RX99) | L402 | 1-420-872-00 | COIL, AIR-CORE (RX88/RX99) | |
| C405 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V (RX88/RX99) | L403 | 1-420-872-00 | COIL, AIR-CORE (RX88/RX99) | |
| C408 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V (RX88/RX99) | L404 | 1-420-872-00 | COIL, AIR-CORE (RX88/RX99) | |
| C409 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V (RX88/RX99) | | | < TRANSISTOR > | |
| C410 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V (RX88/RX99) | Q101 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 (RX88/RX99) | |
| C411 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V (RX88/RX99) | Q111 | 8-729-118-01 | TRANSISTOR 2SB1116 | |
| C412 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V | Q201 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | |
| C413 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V | Q251 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | |
| C414 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V | Q301 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | |
| C415 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V | Q302 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 | |
| | | < CONNECTOR > | | | | Q303 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 | |
| CN201 | 1-778-981-11 | CONNECTOR, BOARD TO BOARD 13P | | | | Q304 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | |
| CN202 | 1-770-724-11 | CONNECTOR, BOARD TO BOARD 9P | | | | Q305 | 8-729-900-36 | TRANSISTOR DTC124ES | |
| * CN203 | 1-573-128-11 | PIN, CONNECTOR 5P | | | | Q306 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 | |
| | | | | | | Q307 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 | |
| | | | | | | Q321 | 8-729-119-78 | TRANSISTOR 2SC403SP-51 | |
| | | | | | | Q322 | 8-729-900-36 | TRANSISTOR DTC124ES | |
| | | | | | | Q401 | 8-729-040-20 | TRANSISTOR RT1P137L-TP | |
| | | | | | | Q402 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| | | | | | | Q403 | 8-729-040-20 | TRANSISTOR RT1P137L-TP (GRX8/R800/RX99) | |

| Ref. No. | Part No. | Description | Remark | | | Ref. No. | Part No. | Description | Remark | | |
|----------|--------------|--------------|------------------------------|-----|-------------|----------|--------------|--------------------------------|--------|----|------------------|
| Q407 | 8-729-900-80 | TRANSISTOR | DTC114ES (GRX8/R800/RX99) | | | R314 | 1-247-863-91 | CARBON | 22K | 5% | 1/4W |
| Q408 | 8-729-119-78 | TRANSISTOR | 2SC403SP-51 (GRX8/R800/RX99) | | | R315 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W |
| | | < RESISTOR > | | | | R316 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| | | | | | | R321 | 1-249-440-11 | CARBON | 82K | 5% | 1/4W |
| △ R101 | 1-215-886-11 | METAL OXIDE | 100 | 5% | 2W F | R322 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| | | | | | (RX88/RX99) | R323 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R102 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | R331 | 1-247-890-11 | CARBON | 300K | 5% | 1/4W |
| | | | | | (RX88/RX99) | R332 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R103 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | R333 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| △ R111 | 1-217-637-00 | FUSIBLE | 1 | 5% | 1/4W F | △ R401 | 1-216-457-00 | METAL OXIDE | 1.2K | 5% | 2W F |
| R112 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F | △ R402 | 1-216-457-00 | METAL OXIDE | 1.2K | 5% | 2W F |
| | | | | | | | | | | | (GRX8/R800/RX99) |
| R113 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F | △ R404 | 1-216-457-00 | METAL OXIDE | 1.2K | 5% | 2W F |
| R114 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W | | | | | | (GRX8/R800/RX99) |
| R115 | 1-247-815-91 | CARBON | 220 | 5% | 1/4W | | | | | | (GRX8/R800/RX99) |
| R116 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F | R405 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R201 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F | | | | | | (GRX8/R800/RX99) |
| | | | | | | R406 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R202 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | | | | | | |
| R203 | 1-249-412-11 | CARBON | 390 | 5% | 1/4W F | R407 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R204 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | R408 | 1-249-440-11 | CARBON | 82K | 5% | 1/4W |
| R205 | 1-260-107-11 | CARBON | 4.7K | 5% | 1/2W | R409 | 1-249-440-11 | CARBON | 82K | 5% | 1/4W |
| R206 | 1-260-107-11 | CARBON | 4.7K | 5% | 1/2W | R410 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W F |
| | | | | | | | | | | | (RX88/RX99) |
| △ R207 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W F | R411 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W F |
| R208 | 1-220-893-11 | METAL | 0.22 | 10% | 5W | | | | | | (RX88/RX99) |
| R209 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F | R412 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W F |
| R210 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | | | | | | (RX88/RX99) |
| R211 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | R413 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W F |
| | | | | | | | | | | | (RX88/RX99) |
| R212 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W | R414 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| △ R221 | 1-217-637-00 | FUSIBLE | 1 | 5% | 1/4W F | | | | | | (RX88/RX99) |
| R222 | 1-260-103-11 | CARBON | 2.2K | 5% | 1/2W | R415 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R223 | 1-260-103-11 | CARBON | 2.2K | 5% | 1/2W | | | | | | (RX88/RX99) |
| R224 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F | R416 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W F |
| | | | | | | | | | | | (RX88/RX99) |
| R251 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F | R417 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W F |
| R252 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | | | | | | (RX88/RX99) |
| R253 | 1-249-412-11 | CARBON | 390 | 5% | 1/4W F | R418 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W F |
| R254 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | | | | | | (RX88/RX99) |
| R255 | 1-260-107-11 | CARBON | 4.7K | 5% | 1/2W | R419 | 1-249-389-11 | CARBON | 4.7 | 5% | 1/4W F |
| | | | | | | | | | | | (RX88/RX99) |
| R256 | 1-260-107-11 | CARBON | 4.7K | 5% | 1/2W | R423 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| △ R257 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W F | | | | | | (RX88/RX99) |
| R258 | 1-220-893-11 | METAL | 0.22 | 10% | 5W | R424 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R259 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F | | | | | | (RX88/RX99) |
| R260 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | | | | | | (RX88/RX99) |
| | | | | | | R429 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R261 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | R431 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R262 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W | | | | | | (GRX8/R800/RX99) |
| R271 | 1-260-093-11 | CARBON | 330 | 5% | 1/2W | | | | | | |
| R272 | 1-260-093-11 | CARBON | 330 | 5% | 1/2W | | | | | | |
| R273 | 1-260-093-11 | CARBON | 330 | 5% | 1/2W | | | | | | |
| | | | | | | | | | | | < RELAY > |
| R274 | 1-260-093-11 | CARBON | 330 | 5% | 1/2W | RY101 | 1-755-195-11 | RELAY (RX88/RX99) | | | |
| R301 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | RY401 | 1-755-141-11 | RELAY | | | |
| R302 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F | RY402 | 1-755-141-11 | RELAY (GRX8/R800/RX99) | | | |
| R303 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | RY404 | 1-515-920-11 | RELAY (24V)(GRX8/R800/RX99) | | | |
| R304 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | | | | | | < THERMISTOR > |
| | | | | | | | | | | | |
| R305 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F | THP321 | 1-807-796-11 | THERMISTOR | | | |
| R306 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | | | | | | < TERMINAL > |
| R310 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | | | | | | |
| R311 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | | | | | | |
| R312 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F | | | | | | |
| | | | | | | TM401 | 1-537-842-11 | TERMINAL BOARD (FRONT SPEAKER) | | | |
| R313 | 1-247-863-91 | CARBON | 22K | 5% | 1/4W | | | | | | |

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

POWER

SENSOR

TCB

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--|----------------|----------|--------------|-----------------------|------------------|
| TM402 | 1-537-240-11 | TERMINAL BOARD (CHECKER PIN) (SURROUND SPEAKER) | | C49 | 1-126-964-11 | ELECT | 10uF 20% 50V |
| | | | | C50 | 1-126-960-11 | ELECT | 1.0uF 20% 50V |
| | | | | C51 | 1-126-959-11 | ELECT | 0.47uF 20% 50V |
| | | | | C52 | 1-126-960-11 | ELECT | 1.0uF 20% 50V |
| ***** | | | | | | | |
| * | 1-658-576-11 | SENSOR BOARD ***** | | C53 | 1-126-964-11 | ELECT | 10uF 20% 50V |
| | | < IC > | | C54 | 1-104-396-11 | ELECT | 10uF 20% 16V |
| | | | | C55 | 1-104-396-11 | ELECT | 10uF 20% 16V |
| IC702 | 8-749-924-18 | IC PHOTO INTERRUPTER RPI-1391 | | C56 | 1-104-396-11 | ELECT | 10uF 20% 16V |
| IC703 | 8-749-924-30 | IC PHOTO REFLECTOR GP2S28 | | C57 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF 10% 50V |
| | | < RESISTOR > | | C58 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF 10% 50V |
| R701 | 1-249-416-11 | CARBON | 820 5% 1/4W F | C59 | 1-163-989-11 | CERAMIC CHIP | 0.033uF 10% 25V |
| R702 | 1-249-407-11 | CARBON | 150 5% 1/4W F | C60 | 1-163-989-11 | CERAMIC CHIP | 0.033uF 10% 25V |
| | | | | C61 | 1-126-301-11 | ELECT | 1.0uF 20% 50V |
| | | | | C62 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| ***** | | | | | | | |
| * | A-4303-588-A | TCB BOARD, COMPLETE (EE,CIS) ***** | | C63 | 1-163-133-00 | CERAMIC CHIP | 470PF 5% 50V |
| | | < CAPACITOR > | | C64 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C1 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V | C65 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C2 | 1-126-967-11 | ELECT | 47uF 20% 16V | C66 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C3 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V | C67 | 1-126-162-11 | ELECT | 3.3uF 20% 50V |
| C5 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V | C68 | 1-163-031-11 | CERAMIC | 0.01uF 50V |
| C6 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V | C69 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C7 | 1-101-004-00 | CERAMIC | 0.01uF 50V | C71 | 1-162-306-11 | CERAMIC | 0.01uF 30% 16V |
| C8 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V | C72 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C9 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V | C73 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C10 | 1-162-306-11 | CERAMIC CHIP | 0.01uF 30% 16V | C74 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C16 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V | C1701 | 1-162-294-31 | CERAMIC CHIP | 0.001uF 10% 50V |
| C19 | 1-163-249-11 | CERAMIC CHIP | 82PF 5% 50V | C1702 | 1-130-014-00 | FILM | 470PF 5% 50V |
| C21 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V | C1703 | 1-126-959-11 | ELECT | 0.47uF 20% 50V |
| C22 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V | C1704 | 1-126-959-11 | ELECT | 0.47uF 20% 50V |
| C23 | 1-163-235-11 | CERAMIC CHIP | 22PF 5% 50V | C1705 | 1-163-035-00 | CERAMIC CHIP | 0.047uF 50V |
| C24 | 1-163-239-11 | CERAMIC CHIP | 33PF 5% 50V | C1706 | 1-126-960-11 | ELECT | 1.0uF 20% 50V |
| C26 | 1-126-967-11 | ELECT | 47uF 20% 16V | C1707 | 1-163-129-00 | CERAMIC CHIP | 330PF 5% 50V |
| C28 | 1-126-967-11 | ELECT | 47uF 20% 16V | C1710 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V |
| C29 | 1-162-306-11 | CERAMIC | 0.01uF 30% 16V | C1711 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V |
| C30 | 1-126-961-11 | ELECT | 2.2uF 20% 50V | C1712 | 1-130-736-11 | FILM | 0.01uF 5% 50V |
| C31 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V | C1713 | 1-130-736-11 | FILM | 0.01uF 5% 50V |
| C32 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V | C1714 | 1-126-960-11 | ELECT | 1.0uF 20% 50V |
| C33 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V | C1715 | 1-126-960-11 | ELECT | 1.0uF 20% 50V |
| C34 | 1-163-229-11 | CERAMIC CHIP | 12PF 5% 50V | C1716 | 1-126-960-11 | ELECT | 1.0uF 20% 50V |
| C35 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V | C1719 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C36 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V | C1720 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C37 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V | C1723 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C39 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V | C1724 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C40 | 1-126-967-11 | ELECT | 47uF 20% 16V | C1725 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C41 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V | C1726 | 1-126-960-11 | ELECT | 1.0uF 20% 50V |
| C42 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V | C1727 | 1-126-960-11 | ELECT | 1.0uF 20% 50V |
| C43 | 1-163-031-91 | CERAMIC CHIP | 0.01uF 50V | C1728 | 1-126-966-11 | ELECT | 33uF 20% 16V |
| C44 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V | | | < FILTER > | |
| C45 | 1-163-077-00 | CERAMIC CHIP | 0.1uF 50V | CF1 | 1-567-389-11 | FILTER, CERAMIC | |
| C46 | 1-126-967-11 | ELECT | 47uF 20% 16V | CF3 | 1-567-389-11 | FILTER, CERAMIC | |
| C47 | 1-126-301-11 | ELECT | 1.0uF 20% 50V | | | < CONNECTOR > | |
| C48 | 1-163-059-00 | CERAMIC CHIP | 0.01uF 50V | * CN1 | 1-568-834-11 | SOCKET, CONNECTOR 15P | |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|----------------------------------|--------|----------|--------------|--------------------------|--------|
| | | < TRIMMER > | | | | < TRANSISTOR > | |
| CT1701 | 1-141-444-11 | CAP, CERAMIC TRIMMER 50PF | | Q1 | 8-729-201-27 | TRANSISTOR 2SC2715Y | |
| CT1701 | 1-141-569-11 | CAP, ADJ 50PF | | Q2 | 8-729-201-27 | TRANSISTOR 2SC2715Y | |
| | | < DIODE > | | Q3 | 8-729-201-27 | TRANSISTOR 2SC2715Y | |
| D21 | 8-719-976-99 | DIODE DTZ5.1B | | Q4 | 8-729-201-27 | TRANSISTOR 2SC2715Y | |
| D41 | 8-719-016-74 | DIODE 1SS352 | | Q5 | 8-729-216-22 | TRANSISTOR MUN2111 | |
| D42 | 8-719-016-74 | DIODE 1SS352 | | Q9 | 8-729-216-22 | TRANSISTOR 2SA812-M5M6 | |
| D43 | 8-719-016-74 | DIODE 1SS352 | | Q11 | 8-729-421-22 | TRANSISTOR MUN2211 | |
| D1701 | 8-719-016-74 | DIODE 1SS352 | | Q12 | 8-729-421-22 | TRANSISTOR MUN2211 | |
| D1702 | 8-719-016-74 | DIODE 1SS352 | | Q13 | 8-729-421-22 | TRANSISTOR MUN2211 | |
| D1703 | 8-719-991-33 | DIODE 1SS133T | | Q14 | 8-729-421-22 | TRANSISTOR MUN2211 | |
| D1704 | 8-719-016-74 | DIODE 1SS352 | | Q1701 | 8-729-424-08 | TRANSISTOR MUN2111 | |
| | | < FRONTEND > | | Q1702 | 8-729-027-43 | TRANSISTOR RT1N141C | |
| FE1 | 1-693-335-11 | FRONT END (3 GANG) | | Q1703 | 8-729-421-22 | TRANSISTOR MUN2211 | |
| FE2 | 1-233-514-11 | ENCAPSULATED COMPONENT | | | | < RESISTOR > | |
| | | < IC > | | R1 | 1-249-401-11 | CARBON 47 5% 1/4W F | |
| IC21 | 8-759-288-54 | IC LC72130 | | R2 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| IC41 | 8-759-495-82 | IC LA1838 | | R3 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| IC1701 | 8-759-063-04 | IC IR3R42 | | R5 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| IC1702 | 8-759-140-53 | IC uPD4053BC | | R6 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W | |
| | | < IFT > | | R7 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| IFT41 | 1-409-636-11 | TRANSFORMER, IF (CERAMIC FILTER) | | R8 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| | | < JUMPER RESISTOR > | | R9 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W | |
| JR2 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R10 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| JR6 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R11 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W | |
| JR8 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R12 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| JR9 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R13 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| JR12 | 1-216-296-91 | METAL CHIP 0 5% 1/8W | | R14 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W | |
| JR46 | 1-216-296-91 | METAL CHIP 0 5% 1/8W | | R18 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| JR47 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R19 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| JR48 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R21 | 1-249-417-11 | CARBON 1.0K 5% 1/4W | |
| JR49 | 1-216-296-91 | METAL CHIP 0 5% 1/8W | | R22 | 1-249-417-11 | CARBON 1.0K 5% 1/4W | |
| JR51 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R23 | 1-249-417-11 | CARBON 1.0K 5% 1/4W | |
| JR52 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R24 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| JR53 | 1-216-296-91 | METAL CHIP 0 5% 1/8W | | R25 | 1-249-417-11 | CARBON 1.0K 5% 1/4W F | |
| JR54 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R26 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| JR1701 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R27 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| JR1702 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R28 | 1-249-417-11 | CARBON 1.0K 5% 1/4W F | |
| JR1703 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R29 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W | |
| JR1704 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R30 | 1-216-186-00 | METAL CHIP 330 5% 1/8W | |
| JR1705 | 1-216-295-91 | METAL CHIP 0 5% 1/10W | | R31 | 1-216-025-91 | METAL CHIP 100 5% 1/10W | |
| | | < COIL > | | R32 | 1-249-425-11 | CARBON 4.7K 5% 1/4W F | |
| L3 | 1-410-521-11 | MICRO INDUCTOR 100uH | | R33 | 1-249-425-11 | CARBON 4.7K 5% 1/4W F | |
| L41 | 1-407-500-00 | MICRO INDUCTOR 4.7mH | | R34 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W | |
| L1701 | 1-409-497-11 | COIL (FILTER) | | R35 | 1-216-214-00 | METAL CHIP 4.7K 5% 1/8W | |
| | | < FILTER > | | R36 | 1-216-025-91 | METAL CHIP 100 5% 1/10W | |
| LPF41 | 1-239-845-11 | FILTER, LOW PASS | | R37 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W | |
| LPF42 | 1-239-845-11 | FILTER, LOW PASS | | R38 | 1-216-089-91 | METAL CHIP 47K 5% 1/10W | |
| | | | | R39 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| | | | | R41 | 1-216-013-00 | METAL CHIP 33 5% 1/10W | |
| | | | | R42 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W | |
| | | | | R43 | 1-216-037-00 | METAL CHIP 330 5% 1/10W | |
| | | | | R44 | 1-216-001-00 | METAL CHIP 10 5% 1/10W | |
| | | | | R45 | 1-247-843-11 | CARBON 3.3K 5% 1/4W F | |
| | | | | R46 | 1-216-065-00 | METAL CHIP 4.7K 5% 1/10W | |

TCB

| Ref. No. | Part No. | Description | Remark |
|-----------------------|--------------|--------------------------------|----------------|
| R47 | 1-216-097-91 | METAL CHIP | 100K 5% 1/10W |
| R48 | 1-249-417-11 | CARBON | 1.0K 5% 1/4W F |
| R49 | 1-216-049-91 | METAL CHIP | 1.0K 5% 1/10W |
| R50 | 1-216-065-00 | METAL CHIP | 4.7K 5% 1/10W |
| R51 | 1-216-065-00 | METAL CHIP | 4.7K 5% 1/10W |
| R52 | 1-216-061-00 | METAL CHIP | 3.3K 5% 1/10W |
| R53 | 1-216-061-00 | METAL CHIP | 3.3K 5% 1/4W |
| R54 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W |
| R55 | 1-216-061-00 | METAL CHIP | 3.3K 5% 1/10W |
| R57 | 1-216-162-00 | METAL CHIP | 33 5% 1/8W |
| R58 | 1-216-013-00 | METAL CHIP | 33 5% 1/10W |
| R91 | 1-216-295-91 | METAL CHIP | 0 5% 1/10W |
| R92 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W |
| R1701 | 1-216-081-00 | METAL CHIP | 22K 5% 1/10W |
| R1702 | 1-216-085-00 | METAL CHIP | 33K 5% 1/10W |
| R1703 | 1-216-069-00 | METAL CHIP | 6.8K 5% 1/10W |
| R1704 | 1-216-076-00 | METAL CHIP | 13K 5% 1/10W |
| R1705 | 1-216-049-91 | METAL CHIP | 1.0K 5% 1/10W |
| R1706 | 1-216-049-91 | METAL CHIP | 1.0K 5% 1/10W |
| R1707 | 1-216-097-91 | METAL CHIP | 100K 5% 1/10W |
| R1708 | 1-216-095-00 | METAL CHIP | 82K 5% 1/10W |
| R1709 | 1-216-089-91 | METAL CHIP | 47K 5% 1/10W |
| R1710 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W |
| R1711 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| R1714 | 1-216-067-00 | METAL CHIP | 5.6K 5% 1/10W |
| R1715 | 1-216-067-00 | METAL CHIP | 5.6K 5% 1/10W |
| R1716 | 1-216-097-91 | METAL CHIP | 100K 5% 1/10W |
| R1717 | 1-216-097-91 | METAL CHIP | 100K 5% 1/10W |
| R1718 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| R1719 | 1-216-097-91 | METAL CHIP | 100K 5% 1/10W |
| R1720 | 1-249-434-11 | CARBON | 27K 5% 1/4W |
| R1721 | 1-216-073-00 | METAL CHIP | 10K 5% 1/10W |
| < VARIABLE RESISTOR > | | | |
| RV41 | 1-238-600-11 | RES, ADJ, CARBON 10K | |
| RV42 | 1-238-600-11 | RES, ADJ, CARBON 10K | |
| RV1701 | 1-238-600-11 | RES, ADJ, CARBON 10K | |
| RV1702 | 1-238-599-11 | RES, ADJ, CARBON 4.7K | |
| < TERMINAL > | | | |
| TM1 | 1-537-488-11 | TERMINAL BOARD (ANT) (ANTENNA) | |
| < TEST PIN > | | | |
| TP1701 | 1-536-354-00 | PIN, POST | |
| TP1702 | 1-536-354-00 | PIN, POST | |
| < VIBRATOR > | | | |
| X21 | 1-760-549-31 | VIBRATOR, CRYSTAL (4.5MHz) | |
| X21 | 1-760-549-11 | VIBRATOR, CRYSTAL (4.5MHz) | |
| X41 | 1-767-825-21 | FILTER, CERAMIC (10.7MHz) | |
| X42 | 1-527-981-00 | FILTER, CERAMIC (450kHz) | |

| Ref. No. | Part No. | Description | Remark |
|---------------|--------------|--------------------------------|------------------|
| * | A-4303-590-A | TCB BOARD, COMPLETE (AEP,UK,G) | ***** |
| < CAPACITOR > | | | |
| C1 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V |
| C2 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C3 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V |
| C5 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C6 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V |
| C8 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C9 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C10 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C16 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V |
| C19 | 1-163-249-11 | CERAMIC CHIP | 82PF 5% 50V |
| C21 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V |
| C22 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C23 | 1-163-235-11 | CERAMIC CHIP | 22PF 5% 50V |
| C24 | 1-163-239-11 | CERAMIC CHIP | 33PF 5% 50V |
| C26 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C28 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C29 | 1-162-306-11 | CERAMIC | 0.01uF 30% 16V |
| C30 | 1-126-961-11 | ELECT | 2.2uF 20% 50V |
| C31 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C32 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V |
| C33 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V |
| C34 | 1-163-229-11 | CERAMIC CHIP | 12PF 5% 50V |
| C35 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V |
| C36 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V |
| C37 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V |
| C39 | 1-163-141-00 | CERAMIC CHIP | 0.001uF 5% 50V |
| C40 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C41 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C42 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V |
| C43 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C44 | 1-163-038-91 | CERAMIC CHIP | 0.1uF 25V |
| C45 | 1-163-077-00 | CERAMIC CHIP | 0.1uF 50V |
| C46 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C47 | 1-126-301-11 | ELECT | 1.0uF 20% 50V |
| C48 | 1-163-059-00 | CERAMIC CHIP | 0.01uF 50V |
| C49 | 1-126-964-11 | ELECT | 10uF 20% 50V |
| C50 | 1-126-960-11 | ELECT | 1.0uF 20% 50V |
| C51 | 1-126-959-11 | ELECT | 0.47uF 20% 50V |
| C52 | 1-126-960-11 | ELECT | 1.0uF 20% 50V |
| C53 | 1-126-964-11 | ELECT | 10uF 20% 50V |
| C54 | 1-104-396-11 | ELECT | 10uF 20% 16V |
| C55 | 1-104-396-11 | ELECT | 10uF 20% 16V |
| C56 | 1-104-396-11 | ELECT | 10uF 20% 16V |
| C57 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF 10% 50V |
| C58 | 1-163-017-00 | CERAMIC CHIP | 0.0047uF 10% 50V |
| C59 | 1-163-809-11 | CERAMIC CHIP | 0.047uF 10% 25V |
| C60 | 1-163-809-11 | CERAMIC CHIP | 0.047uF 10% 25V |
| C61 | 1-126-301-11 | ELECT | 1uF 20% 50V |
| C62 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C63 | 1-163-129-00 | CERAMIC CHIP | 330PF 5% 50V |
| C65 | 1-126-967-11 | ELECT | 47uF 20% 16V |
| C66 | 1-163-031-11 | CERAMIC CHIP | 0.01uF 50V |
| C67 | 1-126-16211 | ELECT | 3.3uF 20% 50V |

| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|----------------------------------|------------|----------|----------|----------------|---------------------------|
| C68 | 1-163-031-11 | CERAMIC | 0.01uF | 50V | JR48 | 1-216-295-11 | METAL CHIP 0 5% 1/10W |
| C69 | 1-126-967-11 | ELECT | 47uF 20% | 16V | JR49 | 1-216-296-11 | METAL CHIP 0 5% 1/8W |
| C71 | 1-162-306-11 | CERAMIC | 0.01uF 30% | 16V | JR51 | 1-216-295-11 | METAL CHIP 0 5% 1/10W |
| C72 | 1-126-967-11 | ELECT | 47uF 20% | 16V | JR52 | 1-216-295-11 | METAL CHIP 0 5% 1/10W |
| C73 | 1-163-031-11 | CERAMIC | 0.01uF | 50V | JR53 | 1-216-296-11 | METAL CHIP 0 5% 1/8W |
| C74 | 1-163-031-11 | CERAMIC | 0.01uF | 50V | JR54 | 1-216-295-11 | METAL CHIP 0 5% 1/10W |
| C120 | 1-163-105-00 | CERAMIC CHIP | 33PF 5% | 50V | | < COIL > | |
| C1751 | 1-164-159-21 | CERAMIC | 0.1uF | 50V | L2 | 1-414-142-11 | MICRO INDUCTOR 1uH |
| C1752 | 1-126-967-11 | ELECT | 47uF 20% | 16V | L3 | 1-410-521-11 | MICRO INDUCTOR 100uH |
| C1753 | 1-126-964-11 | ELECT | 10uF 20% | 50V | L4 | 1-410-515-11 | INDUCTOR 33uH |
| C1754 | 1-162-291-31 | CERAMIC | 560PF 10% | 50V | L41 | 1-407-500-00 | MICRO INDUCTOR 4.7mH |
| C1755 | 1-126-964-11 | ELECT | 10uF 20% | 50V | L1751 | 1-410-521-11 | MICRO INDUCTOR 100uH |
| C1756 | 1-126-961-11 | ELECT | 2.2uF 20% | 50V | | < FILTER > | |
| C1757 | 1-162-288-31 | CERAMIC | 330PF 10% | 50V | LPF41 | 1-239-845-11 | FILTER, LOW PASS |
| C1758 | 1-163-031-11 | CERAMIC CHIP | 0.01uF | 50V | LPF42 | 1-239-845-11 | FILTER, LOW PASS |
| C1759 | 1-163-135-00 | CERAMIC CHIP | 560PF 5% | 50V | | < TRANSISTOR > | |
| C1760 | 1-163-031-11 | CERAMIC CHIP | 0.01uF | 50V | Q1 | 8-729-201-27 | TRANSISTOR 2SC2715Y-TE85L |
| C1761 | 1-163-245-11 | CERAMIC CHIP | 56PF 5% | 50V | Q2 | 8-729-201-27 | TRANSISTOR 2SC2715Y-TE85L |
| C1762 | 1-163-245-11 | CERAMIC CHIP | 56PF 5% | 50V | Q3 | 8-729-201-27 | TRANSISTOR 2SC2715Y-TE85L |
| C1763 | 1-126-961-11 | ELECT | 2.2uF 20% | 50V | Q4 | 8-729-201-27 | TRANSISTOR 2SC2715Y-TE85L |
| | | < FILTER > | | | Q5 | 8-729-424-08 | TRANSISTOR MUN2111 |
| CF1 | 1-579-374-71 | FILTER, CERAMIC | | | Q9 | 8-729-216-22 | TRANSISTOR 2SA812-M5M6 |
| CF2 | 1-760-393-11 | FILTER, CERAMIC | | | Q11 | 8-729-421-22 | TRANSISTOR MUN2211 |
| CF3 | 1-760-393-11 | FILTER, CERAMIC | | | Q12 | 8-729-421-22 | TRANSISTOR MUN2211 |
| | | < CONNECTOR > | | | Q13 | 8-729-421-22 | TRANSISTOR MUN2211 |
| * CN1 | 1-568-834-11 | SOCKET, CONNECTOR 15P | | | Q14 | 8-729-421-22 | TRANSISTOR MUN2211 |
| | | < DIODE > | | | | < RESISTOR > | |
| D21 | 8-719-976-99 | DIODE UDZ-TE-17-5.1B | | | R1 | 1-249-401-11 | CARBON 47 5% 1/4W F |
| D41 | 8-719-016-74 | DIODE 1SS352-TPH3 | | | R2 | 1-216-037-00 | METAL CHIP 330 5% 1/10W |
| D42 | 8-719-991-33 | DIODE 1SS133T-77 | | | R3 | 1-216-037-00 | METAL CHIP 330 5% 1/10W |
| D1751 | 8-719-016-74 | DIODE 1SS352-TPH3 | | | R5 | 1-216-037-00 | METAL CHIP 330 5% 1/10W |
| | | < FRONT-END > | | | R6 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W |
| FE1 | 1-693-357-11 | FRONT END (4 GANG) | | | R7 | 1-216-037-00 | METAL CHIP 330 5% 1/10W |
| FE2 | 1-233-514-11 | ENCAPSULATED COMPONENT | | | R8 | 1-216-037-00 | METAL CHIP 330 5% 1/10W |
| | | < IC > | | | R9 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W |
| IC21 | 8-759-288-54 | IC LC72130 | | | R10 | 1-216-037-00 | METAL CHIP 330 5% 1/10W |
| IC41 | 8-759-495-82 | IC LA1838 | | | R11 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W |
| IC1751 | 8-759-634-51 | IC M5218AP | | | R12 | 1-216-037-00 | METAL CHIP 330 5% 1/10W |
| IC1752 | 8-759-450-86 | IC BU1922 | | | R13 | 1-216-037-00 | METAL CHIP 330 5% 1/10W |
| | | < IFT > | | | R14 | 1-216-081-00 | METAL CHIP 22K 5% 1/10W |
| IFT41 | 1-409-636-11 | TRANSFORMER, IF (CERAMIC FILTER) | | | R18 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W |
| | | < JUMPER RESISTOR > | | | R19 | 1-216-073-00 | METAL CHIP 10K 5% 1/10W |
| JR2 | 1-216-295-91 | METAL CHIP | 0 5% | 1/10W | R21 | 1-216-049-91 | METAL CHIP 1.0K 5% 1/10W |
| JR6 | 1-216-295-91 | METAL CHIP | 0 5% | 1/10W | R22 | 1-216-049-91 | METAL CHIP 1.0K 5% 1/10W |
| JR8 | 1-216-295-91 | METAL CHIP | 0 5% | 1/10W | R23 | 1-216-049-91 | METAL CHIP 1.0K 5% 1/10W |
| JR9 | 1-216-295-91 | METAL CHIP | 0 5% | 1/10W | R24 | 1-216-025-91 | METAL CHIP 100 5% 1/10W |
| JR12 | 1-216-296-91 | METAL CHIP | 0 5% | 1/8W | R25 | 1-249-417-11 | CARBON 1K 5% 1/4W F |
| JR46 | 1-216-296-91 | METAL CHIP | 0 5% | 1/8W | R26 | 1-249-437-11 | CARBON 47K 5% 1/4W |
| JR47 | 1-216-295-11 | METAL CHIP | 0 5% | 1/10W | R27 | 1-249-429-11 | CARBON 10K 5% 1/4W |
| | | | | | R28 | 1-249-417-11 | CARBON 1K 5% 1/4W F |
| | | | | | R29 | 1-216-061-00 | METAL CHIP 3.3K 5% 1/10W |
| | | | | | R30 | 1-216-186-00 | METAL CHIP 330 5% 1/8W |
| | | | | | R31 | 1-216-025-91 | METAL CHIP 100 5% 1/10W |

TCB TRANSFORMER

| Ref. No. | Part No. | Description | Remark |
|-----------------------|--------------|--------------------------------|-----------|
| R32 | 1-249-425-11 | CARBON 4.7K | 5% 1/4W F |
| R33 | 1-249-425-11 | CARBON 4.7K | 5% 1/4W F |
| R34 | 1-249-425-11 | CARBON 4.7K | 5% 1/10W |
| R35 | 1-216-214-00 | METAL CHIP 4.7K | 5% 1/8W |
| R36 | 1-216-025-91 | METAL CHIP 100 | 5% 1/10W |
| R37 | 1-216-073-00 | METAL CHIP 10K | 5% 1/10W |
| R38 | 1-216-089-91 | METAL CHIP 47K | 5% 1/10W |
| R39 | 1-249-429-11 | CARBON 10K | 5% 1/4W |
| R41 | 1-216-013-00 | METAL CHIP 33 | 5% 1/10W |
| R42 | 1-216-065-00 | METAL CHIP 4.7K | 5% 1/10W |
| R43 | 1-216-037-00 | METAL CHIP 330 | 5% 1/10W |
| R44 | 1-216-001-00 | METAL CHIP 10 | 5% 1/10W |
| R45 | 1-247-843-11 | CARBON 3.3K | 5% 1/4W F |
| R46 | 1-216-065-00 | METAL CHIP 4.7K | 5% 1/10W |
| R47 | 1-216-097-91 | METAL CHIP 100K | 5% 1/10W |
| R48 | 1-249-417-11 | CARBON 1K | 5% 1/4W F |
| R49 | 1-216-049-91 | METAL CHIP 1.0K | 5% 1/10W |
| R50 | 1-216-065-00 | METAL CHIP 4.7K | 5% 1/10W |
| R51 | 1-216-065-00 | METAL CHIP 4.7K | 5% 1/10W |
| R52 | 1-216-061-00 | METAL CHIP 3.3K | 5% 1/10W |
| R53 | 1-216-061-00 | METAL CHIP 3.3K | 5% 1/10W |
| R54 | 1-216-073-00 | METAL CHIP 10K | 5% 1/10W |
| R55 | 1-216-061-00 | METAL CHIP 3.3K | 5% 1/10W |
| R57 | 1-216-162-00 | METAL CHIP 33 | 5% 1/8W |
| R58 | 1-216-013-00 | METAL CHIP 33 | 5% 1/10W |
| R91 | 1-216-295-91 | METAL CHIP 0 | 5% 1/10W |
| R92 | 1-216-073-00 | METAL CHIP 10K | 5% 1/10W |
| R1751 | 1-247-807-31 | CARBON 100 | 5% 1/4W |
| R1752 | 1-216-073-00 | METAL CHIP 10K | 5% 1/10W |
| R1753 | 1-216-067-00 | METAL CHIP 5.6K | 5% 1/10W |
| R1754 | 1-216-097-91 | METAL CHIP 100K | 5% 1/10W |
| R1755 | 1-216-097-91 | METAL CHIP 100K | 5% 1/10W |
| R1756 | 1-249-401-11 | CARBON 47 | 5% 1/4W F |
| R1757 | 1-216-295-91 | METAL CHIP 0 | 5% 1/10W |
| < VARIABLE RESISTOR > | | | |
| RV41 | 1-238-600-11 | RES, ADJ, CARBON 10K | |
| RV42 | 1-238-600-11 | RES, ADJ, CARBON 10K | |
| < TERMINAL > | | | |
| TM1 | 1-537-488-11 | TERMINAL BOARD (ANT) (ANTENNA) | |
| < VIBRATOR > | | | |
| X21 | 1-760-549-11 | VIBRATOR, CRYSTAL (4.5MHz) | |
| X41 | 1-767-825-21 | FILTER, CERAMIC (10.7MHz) | |
| X42 | 1-527-981-00 | FILTER, CERAMIC (450KHz) | |
| X1751 | 1-579-900-21 | VIBRATOR, CRYSTAL (4.332MHz) | |
| ***** | | | |
| * | 1-668-274-11 | TRANSFORMER BOARD | ***** |
| < CONNECTOR > | | | |
| CN501 | 1-564-527-11 | PLUG, CONNECTOR 12P | |
| CN502 | 1-774-108-11 | PIN, CONNECTOR (PC BOARD) 2P | |

| Ref. No. | Part No. | Description | Remark |
|-----------------|--------------|---|--|
| < FUSE > | | | |
| △ F501 | 1-532-505-31 | FUSE T5AL/250V | (E2,E3,SP,MY,HK,TW,EA3,AR) |
| △ F504 | 1-532-506-31 | FUSE T6.3A/250V | |
| △ F505 | 1-532-506-31 | FUSE T6.3A/250V | |
| < FUSE HOLDER > | | | |
| FH501 | 1-533-233-21 | HOLDER, FUSE | (E2,E3,SP,MY,HK,TW,EA3,AR) |
| FH502 | 1-533-233-21 | HOLDER, FUSE | (E2,E3,SP,MY,HK,TW,EA3,AR) |
| FH507 | 1-533-233-21 | HOLDER, FUSE | |
| FH508 | 1-533-233-21 | HOLDER, FUSE | |
| FH509 | 1-533-233-21 | HOLDER, FUSE | |
| FH510 | 1-533-233-21 | HOLDER, FUSE | |
| < RESISTOR > | | | |
| △ R501 | 1-219-120-11 | FUSIBLE 0.15 | 5% 1/4W F |
| △ R502 | 1-219-120-11 | FUSIBLE 0.15 | 5% 1/4W F |
| △ R503 | 1-219-120-11 | FUSIBLE 0.15 | 5% 1/4W F |
| △ R504 | 1-219-120-11 | FUSIBLE 0.15 | 5% 1/4W F |
| < SWITCH > | | | |
| △ S501 | 1-771-291-11 | SELECTOR, VOLTAGE (VOLTAGE SELECTOR) | (GRX8:E2,E3,SP,MY,IA,HK,TW,EA3/R800:AR) |
| < TRANSFORMER > | | | |
| △ T501 | 1-431-708-11 | TRANSFORMER, POWER (AEP,UK,G,EE,CIS,TH) | |
| △ T501 | 1-431-709-11 | TRANSFORMER, POWER | (E2,E3,SP,MY,MX,HK,EA3,EA4,TW,AUS,AR) |
| ***** | | | |
| MISCELLANEOUS | | | |
| ***** | | | |
| 6 | 1-233-545-11 | ENCAPSULATED COMPONENT | (E2,MX,EA4,TH,AUS,AR) |
| 6 | 1-233-546-11 | ENCAPSULATED COMPONENT | (E3,SP,MY,HK,TW,EA3) |
| 8 | 1-773-009-11 | WIRE (FLAT TYPE)(15 CORE)(150mm) | (AEP,UK,G,EE,CIS,E3,SP,MY,HK,TW,EA3) |
| 8 | 1-769-977-11 | WIRE (FLAT TYPE)(13 CORE)(150mm) | (EA,MX,EA4,TH,AUS,AR) |
| 54 | 1-773-041-11 | WIRE (FLAT TYPE) (17 CORE) | |
| △ 58 | 1-569-007-11 | ADAPTOR, CONVERSION 2P (E3) | |
| △ 58 | 1-569-008-11 | ADAPTOR, CONVERSION 2P (SP,MY,EA3) | |
| △ 58 | 1-770-019-11 | ADAPTOR, CONVERSION PLUG 3P (UK,HK) | |
| △ 59 | 1-558-943-41 | CORD, POWER (E2,E3,MX) | |
| △ 59 | 1-575-651-21 | CORD, POWER | (AEP,UK,G,EE,CIS,SP,MY,HK,TW,EA3,EA4,AR) |
| △ 59 | 1-696-845-31 | CORD, POWER (AUS) | |
| △ 59 | 1-751-326-21 | CORD, POWER (TH) | |
| 60 | 1-773-011-11 | WIRE (FLAT TYPE)(15 CORE)(170mm) | |
| 61 | 1-773-112-11 | WIRE (FLAT TYPE)(19 CORE)(140mm) | |
| 121 | 1-769-974-11 | WIRE (FLAT TYPE) (13 CORE) | |
| 130 | 1-773-109-11 | WIRE (FLAT TYPE)(19 CORE)(110mm) | |
| 257 | 1-452-879-11 | MAGNET (CDM38L-5BD29AL) | |
| 257 | 1-452-925-21 | MAGNET ASSY (CDM38LH-5BD29AL) | |
| 258 | 1-776-042-11 | WIRE (FLAT TYPE) (8CORE) | |
| HP101 | A-2056-681-A | DECK (A) ASSY, HEAD (230AWR1) | |

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

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| Ref. No. | Part No. | Description | Remark |
|----------|--------------|---|--------|
| HP101 | A-2056-683-A | DECK (A) ASSY, HEAD (230PWR1) | |
| HRPE101 | A-2056-682-A | DECK (B) ASSY, HEAD (230AWR1) | |
| HRPE101 | A-2056-684-A | DECK (B) ASSY, HEAD (230PWR1) | |
| M1 | A-2004-628-A | MOTOR ASSY, CAPSTAN | |
| M701 | A-4672-004-A | MOTOR ASSY (TURN) | |
| M801 | A-4672-004-A | MOTOR ASSY (SLIDE) | |
| M901 | 1-698-792-11 | FAN, DC (RX88/RX99) | |
| M901 | 1-763-048-21 | FAN, D.C. (GRX8/R800) | |
| ND601 | 1-517-731-21 | INDICATOR TUBE, FLUORESCENT | |
| S811 | 1-473-335-11 | ENCODER,ROTARY (BU,TRAY ADDRESS DET) | |
| △ T501 | 1-431-708-11 | TRANSFORMER, POWER (AEP,UK,G,EE,CIS,TH) | |
| △ T501 | 1-431-709-11 | TRANSFORMER, POWER (E2,E3,SP,MY,MX,HK,TW,AUS,EA3,EA4,AR) | |

ACCESSORIES & PACKING MATERIALS

| | |
|--------------|--|
| 1-475-571-11 | COMMANDER, STANDARD (RM-SR8)(RX88) |
| 1-501-374-11 | ANTENNA, LOOP (RX88) |
| 1-501-804-11 | ANTENNA (FM)(RX88:AEP,UK,G) |
| 3-862-011-11 | MANUAL, INSTRUCTION (RX88)(ENGLISH) |
| 3-862-011-21 | MANUAL, INSTRUCTION (RX88:AEP) (FRENCH,SPANISH) |
| 3-862-011-51 | MANUAL, INSTRUCTION (RX88:AEP,G) (GERMAN) |
| 3-862-011-61 | MANUAL, INSTRUCTION (RX88:AEP) (DUTCH,ITALIAN,POLISH) |
| 4-991-151-21 | COVER, BATTERY (FOR RM-SR8)(RX88) |

HARDWARE LIST

| | | |
|-----|--------------|--------------------------------|
| #1 | 7-685-872-09 | SCREW +BVTT 3X8 (S) |
| #2 | 7-685-646-79 | SCREW +BVTP 3X8 TYPE2 N-S |
| #3 | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 N-S |
| #4 | 7-685-650-79 | SCREW +BVTP 3X16 TYPE2 IT-3 |
| #5 | 7-685-871-01 | SCREW +BVTT 3X6 (S) |
| #6 | 7-685-880-09 | SCREW +BVTT 4X6 (S)(GRX8/R800) |
| #6 | 7-685-871-01 | SCREW +BVTT 3X6 (S)(RX88/RX99) |
| #7 | 7-685-852-04 | SCREW +BVTT 2X5 (S) |
| #8 | 7-621-775-10 | SCREW +B 2.6X4 |
| #9 | 7-621-255-15 | SCREW +P 2X3 |
| #10 | 7-685-850-04 | SCREW +BVTT 2X3 (S) |
| #11 | 7-628-254-15 | SCREW +PS 2.6X6 |
| #12 | 7-628-254-50 | SCREW +PS 2.6X16 |
| #13 | 7-628-851-04 | SCREW +BVTT 2X4 (S) |

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

SS-GRX8/GRX10/RX99

SERVICE MANUAL



AEP Model
UK Model
SS-RX99

E Model
SS-GRX8/GRX10

Australian Model
SS-GRX8

This set is the speaker system in
MHC-GRX8/GRX10AV/RX99.

SPECIFICATIONS

| | |
|--------------------|--|
| Speaker system | 4-way, 5-unit, bass-reflex type, magnetically shielded type |
| Speaker units | |
| Woofer: | 17 cm, cone type |
| Centre Tweeter: | 5 cm, cone type |
| Side Tweeter: | 5 cm, cone type x2 |
| Super Tweeter: | 2 cm, dome type |
| Nominal impedance | 8 ohms |
| Dimensions (w/h/d) | Approx. 230 x 365 x 320 mm |
| Mass | Approx. 5.5 kg net per speaker |

Design and specification subject to change without notice.

SPEAKER SYSTEM

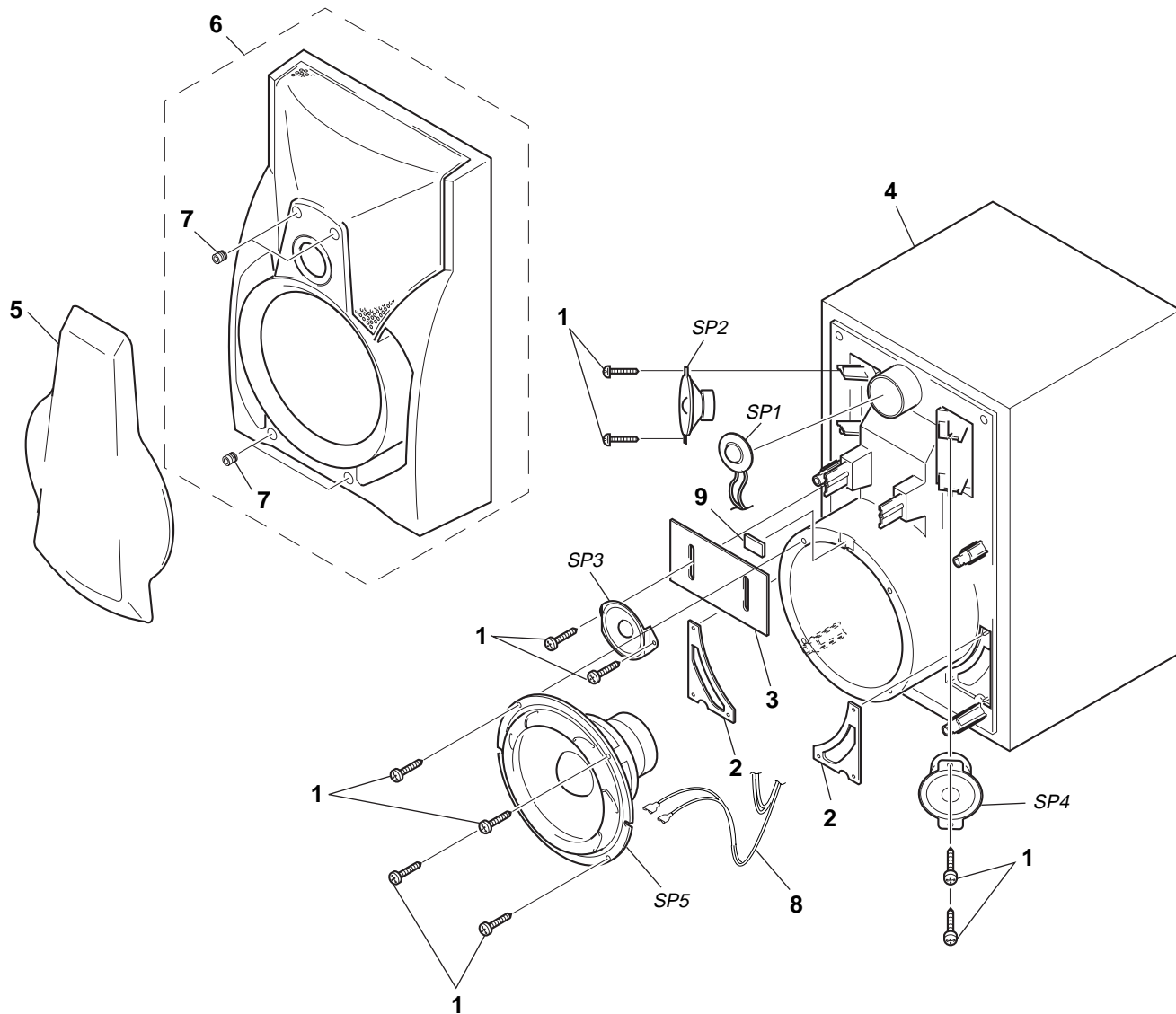


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EXPLODED VIEW AND PARTS LIST

NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
 - Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation
G : German model
AED : North European model



| Ref. No. | Part No. | Description | Remark | Ref. No. | Part No. | Description | Remark |
|----------|--------------|--|--------|---------------------------------|---|-----------------------------|--------|
| 1 | 4-874-614-21 | SCREW (4) (3.5X14), TAPPING | | SP3 | 1-505-518-11 | SPEAKER (5cm) (GRX8/GRX10) | |
| 2 | 4-997-191-01 | PACKING | | SP3 | 1-505-861-11 | SPEAKER (5cm) (RX99) | |
| 3 | 4-997-169-01 | PACKING | | SP4 | 1-505-510-11 | SPEAKER (5cm) (RX99) | |
| * 4 | A-4384-938-A | CABINET ASSY, SPEAKER (INCLUDING TERMINAL BOARD)(EXCEPT G, AED) | | SP4 | 1-505-583-11 | SPEAKER (5cm) (GRX8/GRX10) | |
| * 4 | A-4384-965-A | CABINET ASSY, SPEAKER (INCLUDING TERMINAL BOARD)(G, AED) | | SP5 | 1-505-857-11 | SPEAKER (17cm) (RX99) | |
| 5 | X-4949-353-1 | FRAME ASSY, GRILLE | | SP5 | 1-505-858-11 | SPEAKER (17cm) (GRX8/GRX10) | |
| 6 | X-4949-354-1 | PANEL ASSY, FRONT | | ***** | | | |
| * 7 | 4-963-075-01 | CATCHER | | ACCESSORIES & PACKING MATERIALS | | | |
| 8 | 1-783-580-11 | CORD | | ***** | | | |
| 9 | 4-942-029-01 | PACKING | | 1-769-306-11 | CORD, SPEAKER | | |
| SP1 | 1-505-841-11 | SPEAKER (2cm) | | 3-862-818-11 | MANUAL, INSTRUCTION (ENGLISH,FRENCH,GERMAN,SWEDISH,RUSSIAN) (RX99) | | |
| SP2 | 1-505-510-11 | SPEAKER (5cm) (RX99) | | | | | |
| SP2 | 1-505-583-11 | SPEAKER (5cm) (GRX8/GRX10) | | | | | |

SS-SR110

SERVICE MANUAL

*Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model*



This set is the speaker system in
MHC-GRX8/GRX10AV/R800/
RX99/RX110AV/V818/V919AV.

SPECIFICATIONS

| | |
|--------------------|------------------------------------|
| Speaker system | 1-way, 1-unit, bass-reflex type |
| Speaker units | |
| Full-range: | 8 cm, cone type |
| Nominal impedance | 16 ohms |
| Dimensions (w/h/d) | Approx. 230 x 85 x 215 mm |
| Mass | Approx. 1.0 kg net per speaker |

Design and specification subject to change without notice.

SPEAKER SYSTEM



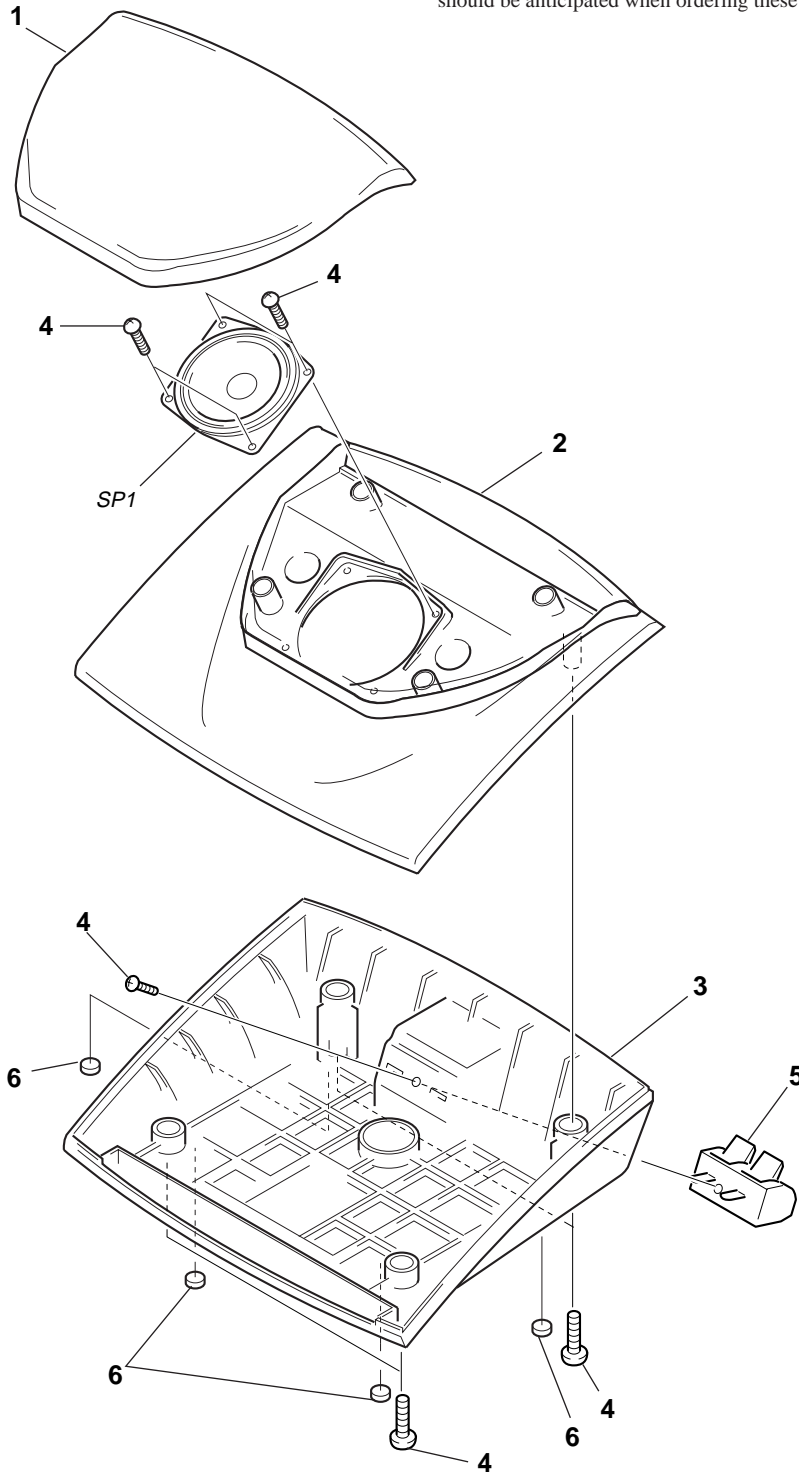
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EXPLODED VIEW AND PARTS LIST

NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



| Ref. No. | Part No. | Description | Remark |
|----------|--------------|--------------------------------|--------|
| 1 | X-4949-447-1 | FRAME ASSY, GRILLE | |
| * 2 | 4-996-497-01 | CABINET | |
| * 3 | 4-996-498-01 | BASE | |
| 4 | 7-685-661-29 | SCREW +BVTP 4 x 12 TYPE 2 SLIT | |
| 5 | 1-537-775-11 | TERMINAL BOARD | |
| 6 | 4-982-339-01 | FOOT | |
| SP1 | 1-505-302-11 | SPEAKER (8cm) | |

| Ref. No. | Part No. | Description | Remark |
|----------|--------------|---------------------------------|--------|
| | | ACCESSORIES & PACKING MATERIALS | |
| | | ***** | |
| | 1-769-433-11 | CORD, SPEAKER | |
