

JVC

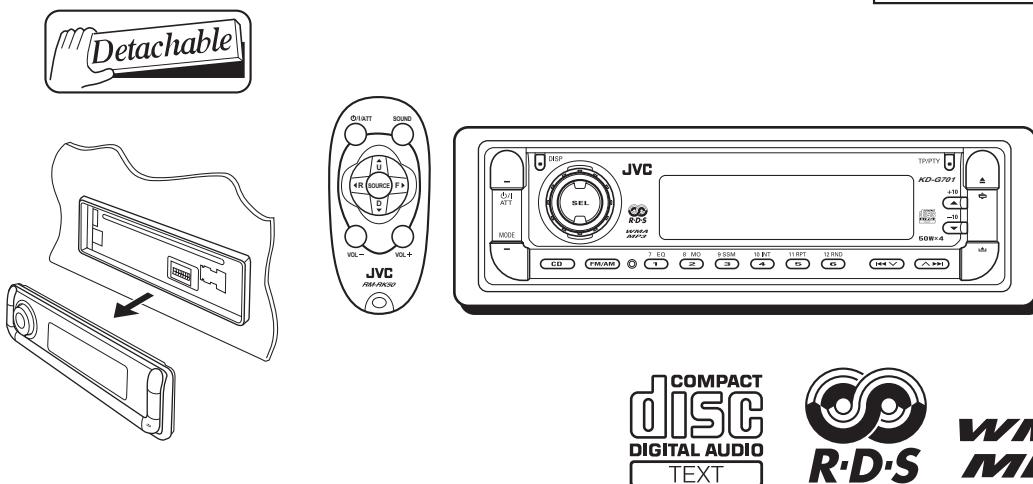
SERVICE MANUAL

CD RECEIVER

KD-G701

Area suffix

E ----- Continental Europe
EX ----- Central Europe



COMPACT
DISC
DIGITAL AUDIO
TEXT

R·D·S

WMA
MP3

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SPECIFICATION

| AUDIO AMPLIFIER SECTION | | |
|---|--|---|
| Maximum Power Output | Front | 50 W per channel |
| | Rear | 50 W per channel |
| Continuous Power Output (RMS) | Front | 19 W per channel into 4 Ω, 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion. |
| | Rear | 19 W per channel into 4 Ω, 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion. |
| Load Impedance | 4 Ω (4 Ω to 8 Ω allowance) | |
| Equalizer Control Range | Low | ±12 dB (60 Hz, 80 Hz, 100 Hz, 120 Hz) |
| | Mid | ±12 dB |
| | High | ±12 dB (8 kHz, 10 kHz, 12 kHz, 15 kHz) |
| Frequency Response | 40 Hz to 20 000 Hz | |
| Signal-to-Noise Ratio | 70 dB | |
| Line-Out Level/Impedance | 2.0 V/20 kΩ load (full scale) | |
| Output Impedance | 1 kΩ | |
| TUNER SECTION | | |
| Frequency Range | FM | 87.5 MHz to 108.0 MHz |
| | AM | (MW) 522 kHz to 1 620 kHz |
| | | (LW) 144 kHz to 279 kHz |
| [FM Tuner] | Usable Sensitivity | 11.3 dBf (1.0 μV/75 Ω) |
| | 50 dB Quieting Sensitivity | 16.3 dBf (1.8 μV/75 Ω) |
| | Alternate Channel Selectivity (400 kHz) | 65 dB |
| | Frequency Response | 40 Hz to 15 000 Hz |
| | Stereo Separation | 30 dB |
| | Capture Ratio | 1.5 dB |
| [MW Tuner] | Sensitivity | 20 μV |
| | Selectivity | 35 dB |
| [LW Tuner] | Sensitivity | 50 μV |
| CD PLAYER SECTION | | |
| Type | Compact disc player | |
| Signal Detection System | Non-contact optical pickup (semiconductor laser) | |
| Number of channels | 2 channels (stereo) | |
| Frequency Response | 5 Hz to 20 000 Hz | |
| Dynamic Range | 96 dB | |
| Signal-to-Noise Ratio | 98 dB | |
| Wow and Flutter | Less than measurable limit | |
| MP3 decoding format | MPEG1/2 Audio Layer 3 Max. Bit Rate:320 Kbps | |
| WMA (Windows Media Audio) decoding format | Max. Bit Rate:192 Kbps | |
| GENERAL | | |
| Power Requirement | Operating Voltage | DC 14.4 V (11 V to 16 V allowance) |
| Grounding System: | Negative ground | |
| Allowable Operating Temperature | 0°C to +40°C | |
| Dimensions (W × H × D) | Installation Size (approx.) | 182 mm × 52 mm × 159 mm |
| | Panel Size (approx.) | 188 mm × 58 mm × 12 mm |
| Mass (approx.) | 1.5 kg (excluding accessories) | |

Design and specifications are subject to change without notice.

SECTION 1

PRECAUTION

1.1 Safety Precautions



CAUTION Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.



CAUTION Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

1.2 Preventing static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.2.1 Grounding to prevent damage by static electricity

Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as laser products.

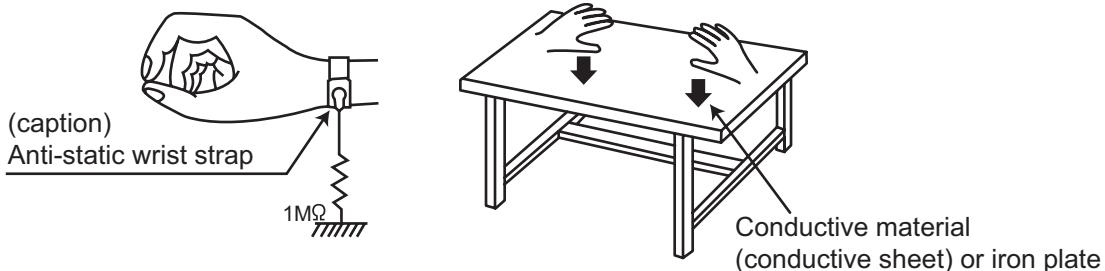
Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

(2) Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



(3) Handling the optical pickup

- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition.
(Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

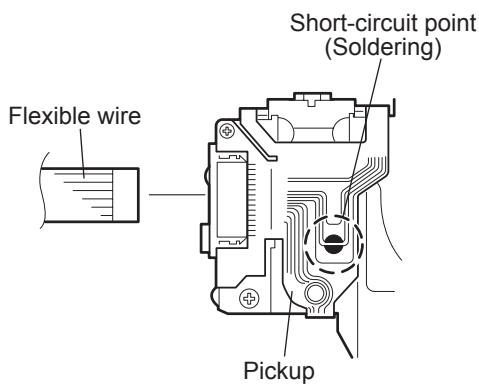
1.3 Handling the traverse unit (optical pickup)

- Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
- Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
- Handle the flexible cable carefully as it may break when subjected to strong force.
- It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.4 Attention when traverse unit is decomposed

*Please refer to "Disassembly method" in the text for the pickup unit.

- Apply solder to the short land before the flexible wire is disconnected from the connector on the pickup unit.
(If the flexible wire is disconnected without applying solder, the pickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land after connecting the flexible wire.



1.5 Important for laser products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The CD,MD and DVD player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified here in may result in hazardous radiation exposure.



CAUTION Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated.

AVOID DIRECT EXPOSURE TO BEAM.

ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.

VARNING : Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen.

VARO : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi.

REPRODUCTION AND POSITION OF LABELS

WARNING LABEL

CLASS 1
LASER PRODUCT

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated.
AVOID DIRECT EXPOSURE TO BEAM. (e)

ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler.
Undgå direkte eksponering til stråling. (d)

VARNING : Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)

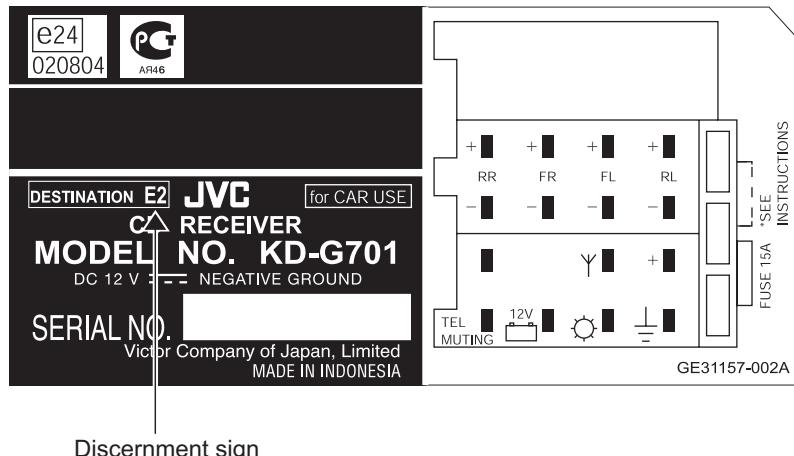
VARO : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)

SECTION 2

SPECIFIC SERVICE INSTRUCTIONS

2.1 HOW TO IDENTIFY MODELS

2.1.1 NAME PLATE



SECTION 3 DISASSEMBLY

3.1 Main body section

3.1.1 Removing the front panel assembly (See Fig.1)

- (1) Push the detach button in the lower right part of the front panel assembly.
- (2) Remove the front panel assembly.

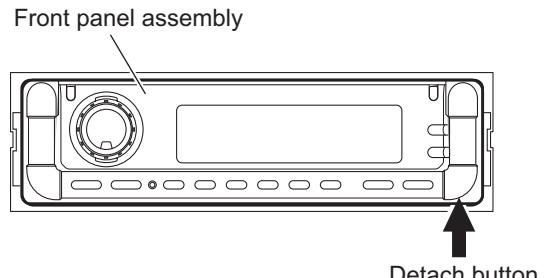
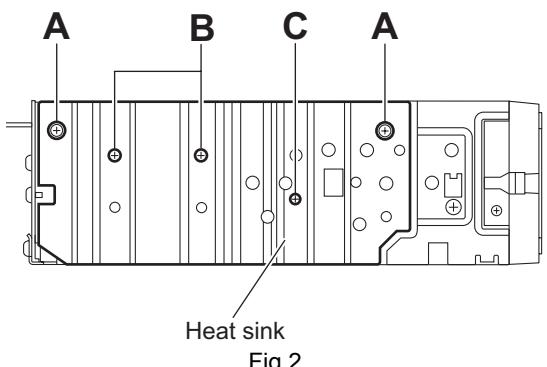


Fig.1

3.1.2 Removing the heat sink (See Fig.2)

- (1) From the left side of the main body, remove the two screws **A**, two screws **B** and screw **C** attaching the heat sink.



3.1.3 Removing the top chassis assembly

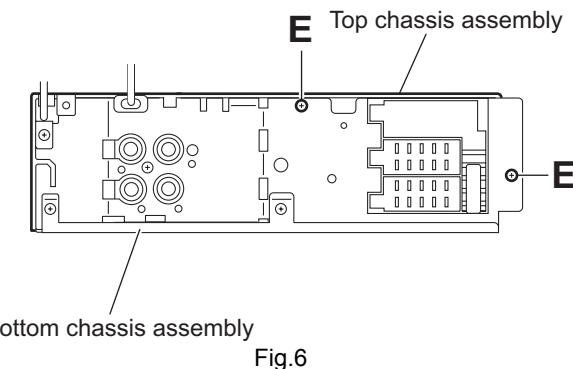
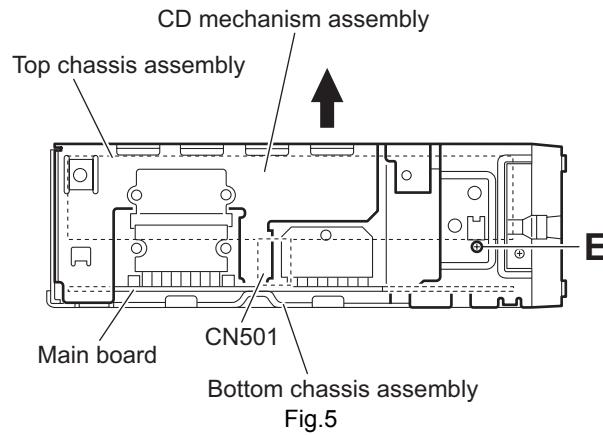
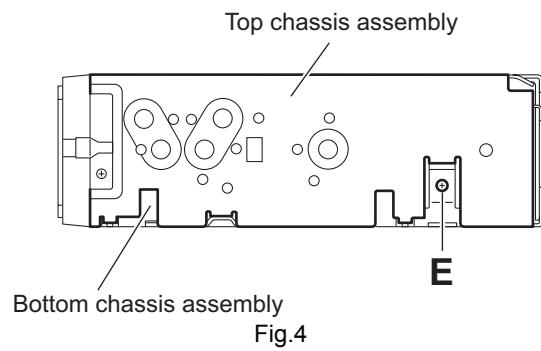
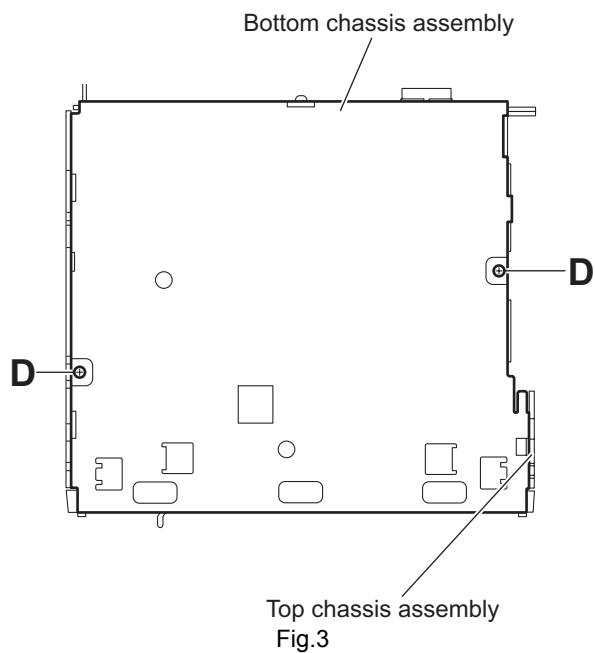
(See Figs.3 to 6)

- Prior to performing the following procedures, remove the heat sink.

Reference:

Remove the front panel assembly as required.

- (1) From the bottom side of the main body, remove the two screws **D** attaching the top chassis assembly to the bottom chassis assembly. (See Fig.3.)
- (2) From the both and rear sides of the main body, remove the four screws **E** attaching the top chassis assembly to the bottom chassis assembly. (See Figs.4 to 6.)
- (3) Lift the top chassis assembly in the direction of the arrow, disconnect the connector CN501 on the main board. (See Figs.5 and 6.)
- (4) Take out the top chassis assembly from the bottom chassis assembly.



3.1.4 Removing the front chassis

(See Figs.7 and 8)

- Prior to performing the following procedure, remove the front panel assembly, heat sink and top chassis assembly.
- (1) From the both sides of the top chassis assembly, remove the two screws **F** attaching the front chassis.

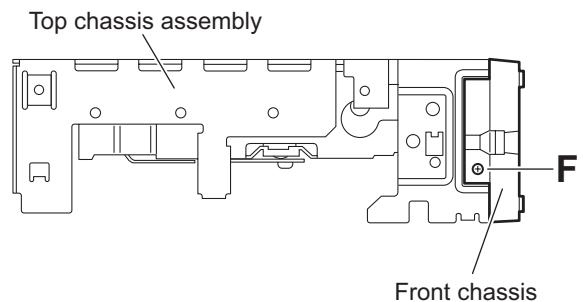


Fig.7

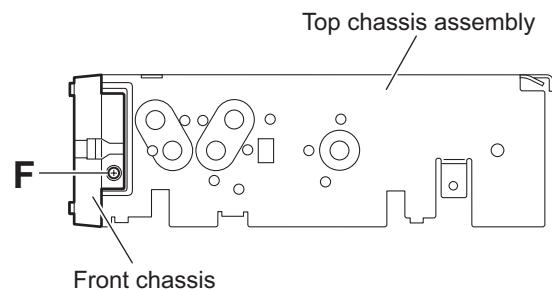


Fig.8

3.1.5 Removing the CD mechanism assembly

(See Fig.9)

- Prior to performing the following procedures, remove the front panel assembly, heat sink and top chassis assembly.
- (1) From the inside of the top chassis assembly, remove the three screws **G** attaching the CD mechanism assembly.
- (2) Take out the CD mechanism assembly from the top chassis.

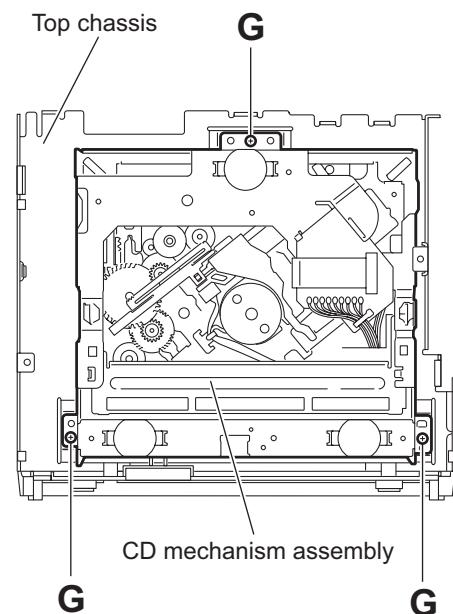


Fig.9

3.1.6 Removing the main board

(See Figs.10 and 11)

- Prior to performing the following procedures, remove the front panel assembly, heat sink and top chassis assembly.
- (1) From the rear side of the bottom chassis assembly, remove the two screws **H** attaching the rear bracket to the bottom chassis assembly. (See Fig.10.)
- (2) From the top side of the bottom chassis assembly, remove the two screws **J** attaching the main board to the bottom chassis assembly. (See Fig.11.)
- (3) Release the stopper of the connector [CN701](#) on the main board in an upward direction, disconnect the card wire from the connector [CN701](#). (See Fig.11.)
- (4) Disconnect the wire from the connector of the gear bracket unit. (See Fig.11.)
- (5) Disconnect the wire from the connector [CN702](#) and connector [CN951](#) on the main board. (See Fig.11.)

Reference:

After connecting the wires, fix the wire with the wire holders.

- (6) Take out the main board from the bottom chassis assembly.

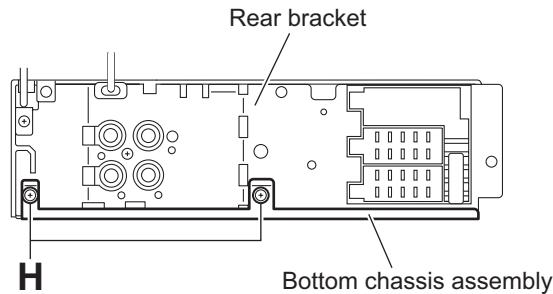


Fig.10

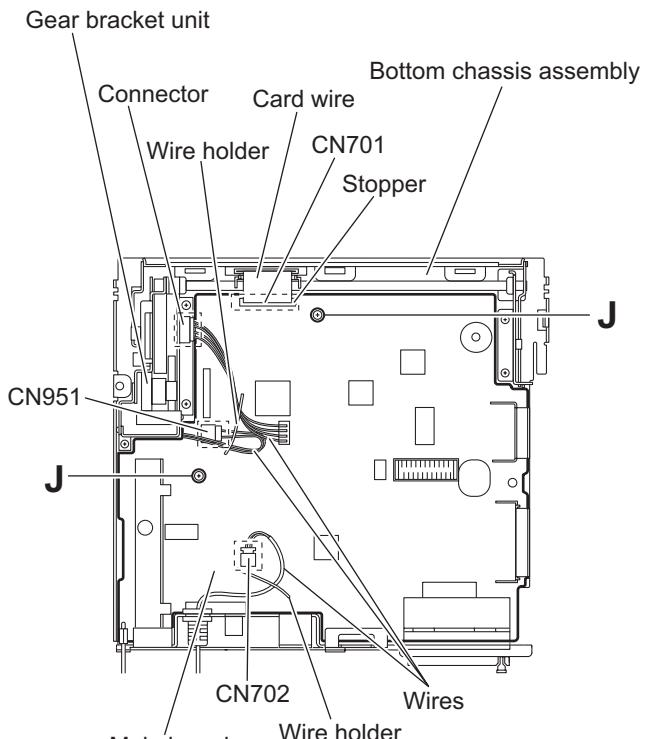


Fig.11

3.1.7 Removing the rear bracket

(See Fig.12)

- Prior to performing the following procedures, remove the front panel assembly, heat sink, top chassis assembly and main board.
- (1) Remove the screw **K** and screw **L** attaching the rear bracket to the main board.

Reference:

During reassembly, before fixing the rear bracket onto the main body, insert the steering remote into the slot.

Insert the steering remote into the slot.

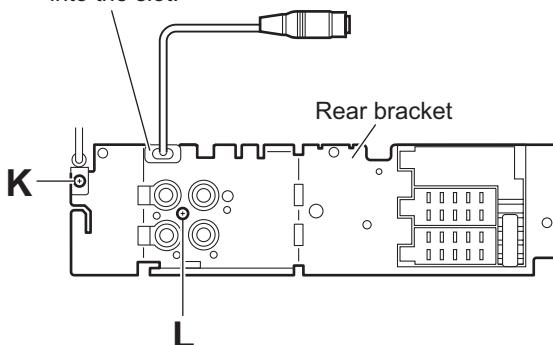


Fig.12

3.1.8 Removing the front door mechanism assembly

(See Fig.13.)

- Prior to performing the following procedures, remove the front panel assembly, heat sink, top chassis assembly and main board.

- From the top side of the bottom chassis assembly, remove the screw **M** attaching the FPC guide to the bottom chassis.
- Remove the five screws **N** attaching the gear bracket unit to the bottom chassis.

Reference:

When attaching the screws **M** and **N**, apply a locking agent them.

- Take out the front door mechanism assembly from the bottom chassis.

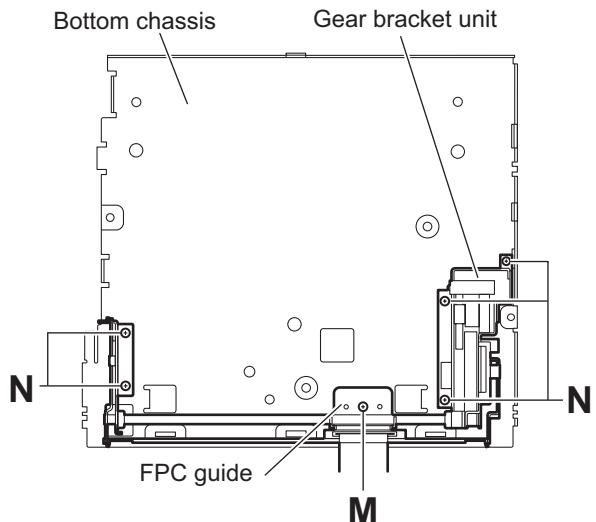


Fig.13

3.1.9 Removing the front board

(See Figs.14 to 16)

- Prior to performing the following procedures, remove the front panel assembly.

- From the rear side of the front panel assembly, remove the four screws **P** attaching the rear cover assembly to the front panel assembly. (See Fig.14.)
- Release the twelve joints **a** of the front panel assembly and remove the rear cover assembly. (See Fig.15.)
- Take out the front board from the front panel assembly. (See Fig.16.)

Note:

When removing the rear cover assembly and front board, be careful not to lose the comp. spring. (See Fig.16.)

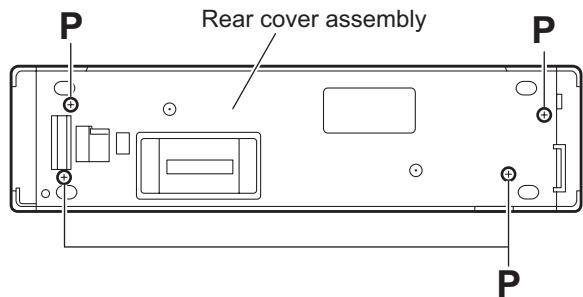


Fig.14

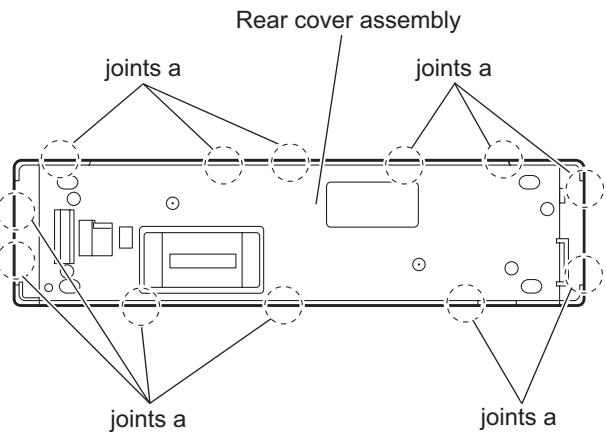


Fig.15

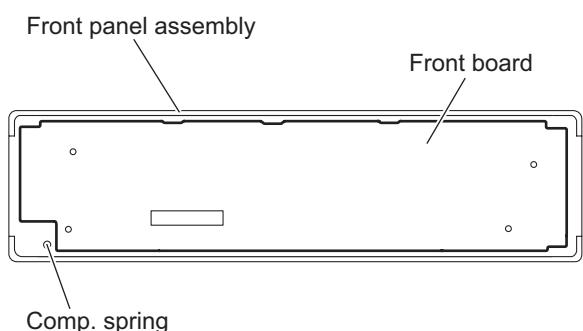


Fig.16

3.2 CD Mechanism Assembly

3.2.1 Removing the top cover

(See Figs.1 and 2)

- (1) Remove the two screws **A** on the both side of the body.
- (2) Lift the front side of the top cover and move the top cover backward to release the two joints **a**.

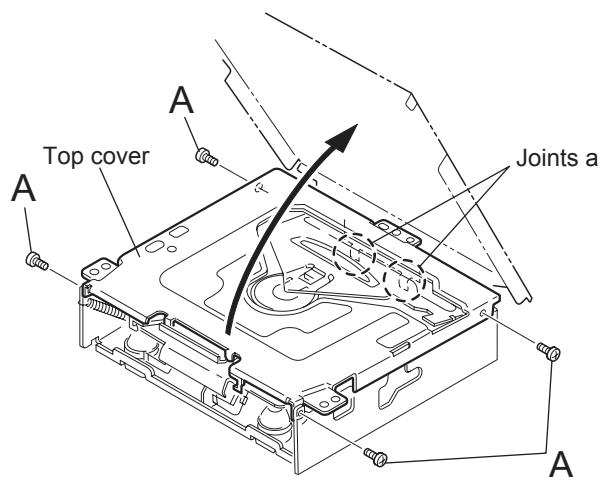


Fig.1

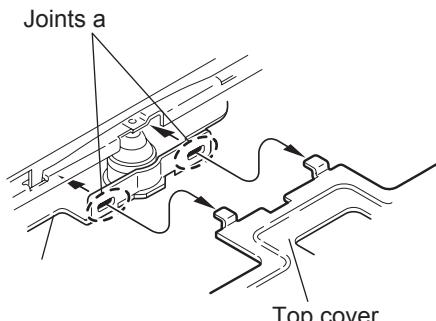


Fig.2

3.2.2 Removing the connector board

(See Figs.3 to 5)

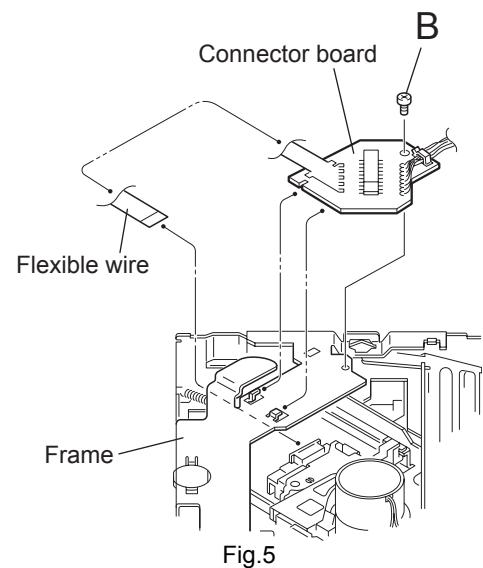
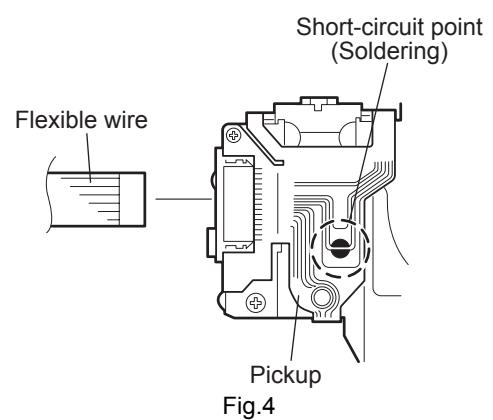
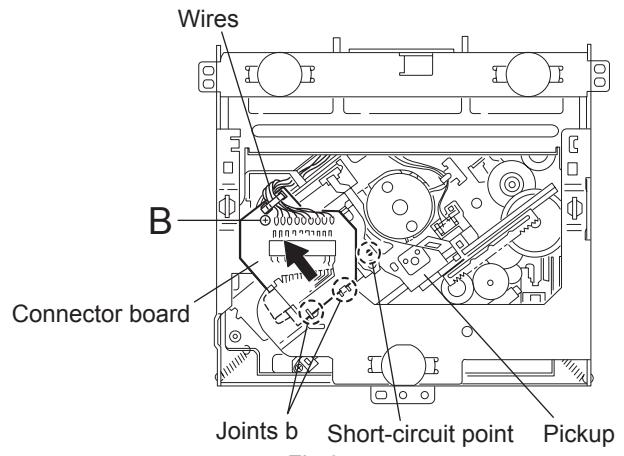
CAUTION:

Before disconnecting the flexible wire from the pickup, solder the short-circuit point on the pickup. No observance of this instruction may cause damage of the pickup.

- (1) Remove the screw **B** fixing the connector board.
- (2) Solder the short-circuit point on the connector board.
- (3) Disconnect the flexible wire from the pickup.
- (4) Move the connector board in the direction of the arrow to release the two joints **b**.
- (5) Unsolder the wire on the connector board if necessary.

CAUTION:

Unsolder the short-circuit point after reassembling.



3.2.3 Removing the DET switch

(See Figs.6 and 7)

- (1) Extend the two tabs **c** of the feed sw. holder and pull out the switch.
- (2) Unsolder the DET switch wire if necessary.

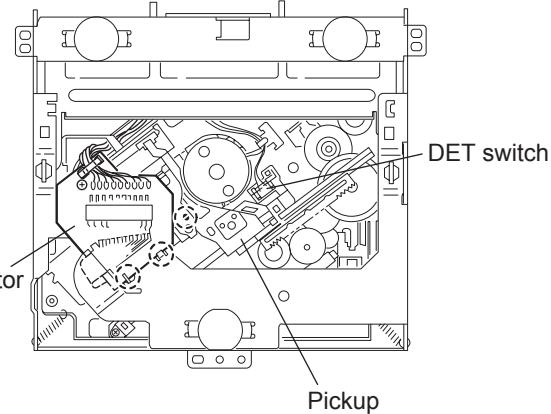


Fig.6

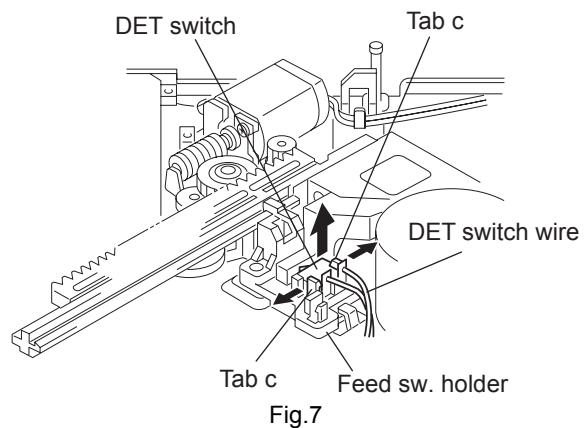


Fig.7

3.2.4 Removing the chassis unit

(See Figs.8 and 9)

- Prior to performing the following procedure, remove the top cover and connector board.

- Remove the two suspension springs (L) and (R) attaching the chassis unit to the frame.

CAUTION:

- The shape of the suspension spring (L) and (R) are different. Handle them with care.
- When reassembling, make sure that the three shafts on the underside of the chassis unit are inserted to the dampers certainly.

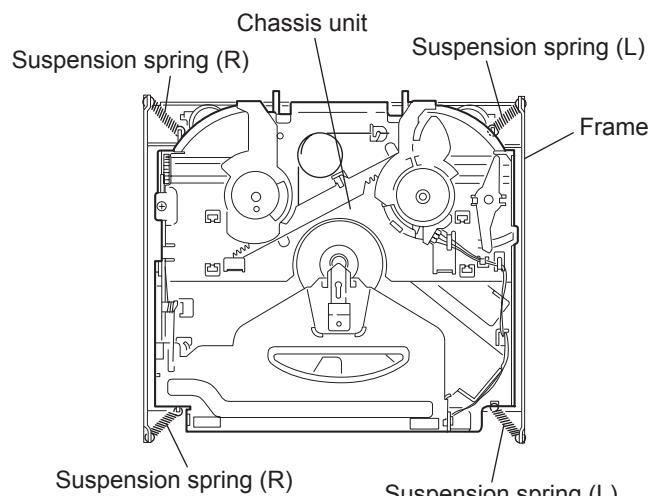


Fig.8

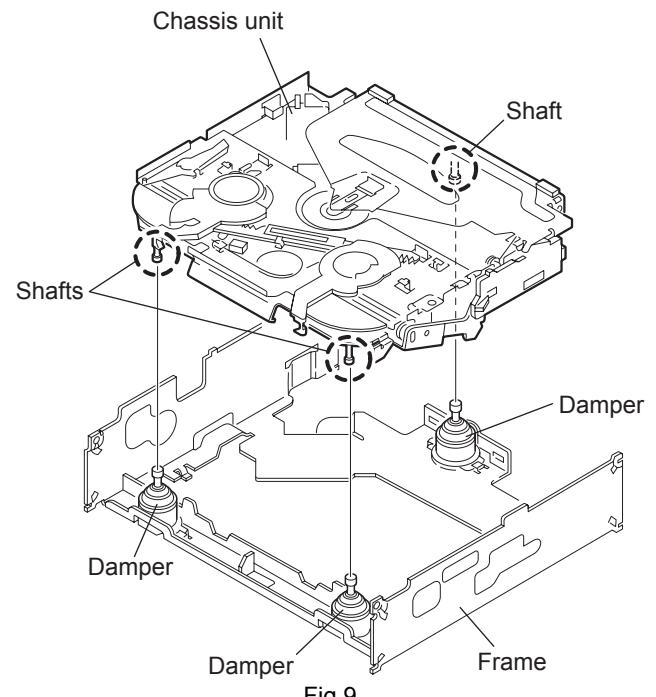


Fig.9

3.2.5 Removing the clamper assembly

(See Figs.10 and 11)

- Prior to performing the following procedure, remove the top cover.
- (1) Remove the clamper arm spring.
(2) Move the clamper assembly in the direction of the arrow to release the two joints d.

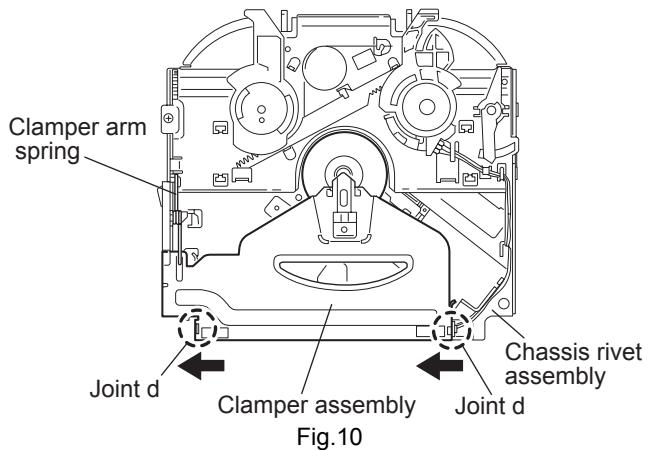


Fig.10

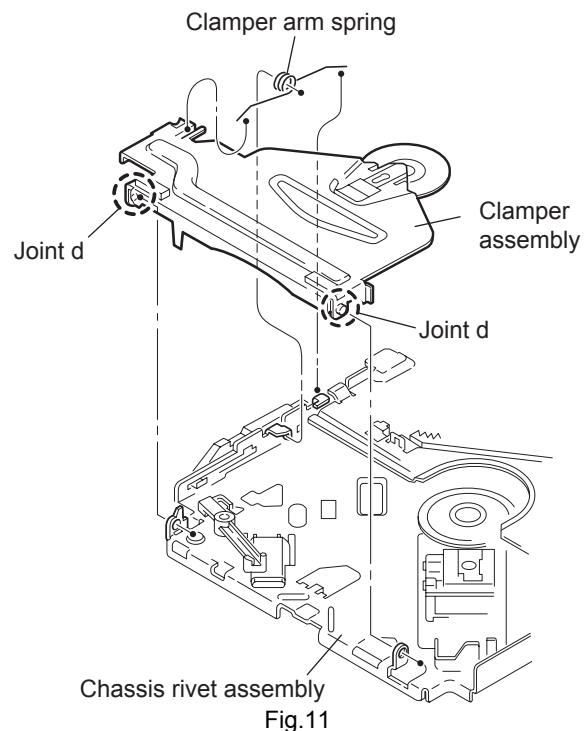


Fig.11

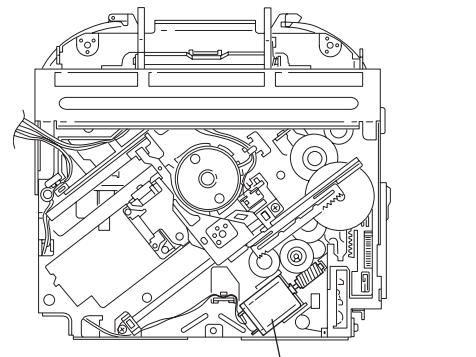
3.2.6 Removing the loading / feed motor assembly

(See Figs.12 and 13)

- Prior to performing the following procedure, remove the top cover, connector board and chassis unit.
- (1) Remove the screw **C** and move the loading / feed motor assembly in the direction of the arrow to remove it from the chassis rivet assembly.
- (2) Disconnect the wire from the loading / feed motor assembly if necessary.

CAUTION:

When reassembling, connect the wire from the loading / feed motor assembly to the flame as shown in Fig.12.



Loading / feed motor assembly
Fig.12

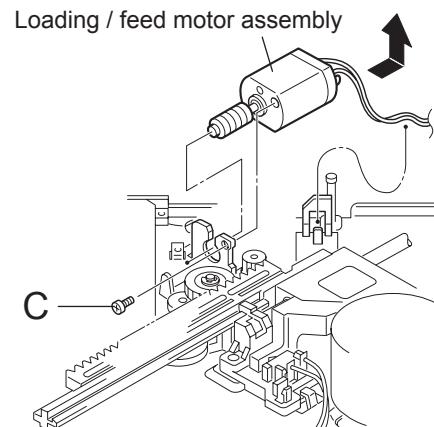


Fig.13

3.2.7 Removing the pickup unit

(See Figs.14 to 18)

- Prior to performing the following procedure, remove the top cover, connector board and chassis unit.
- (1) Remove the screw **D** and pull out the pu. shaft holder from the pu. shaft.
- (2) Remove the screw **E** attaching the feed sw. holder.
- (3) Move the part **e** of the pickup unit upward with the pu. shaft and the feed sw. holder, then release the joint **f** of the feed sw. holder in the direction of the arrow. The joint **g** of the pickup unit and the feed rack is released, and the feed sw. holder comes off.
- (4) Remove the pu. shaft from the pickup unit.
- (5) Remove the screw **F** attaching the feed rack to the pickup unit.

3.2.8 Reattaching the pickup unit

(See Figs.14 to 17)

- (1) Reattach the feed rack to the pickup unit using the screw **F**.
- (2) Reattach the feed sw. holder to the feed rack while setting the joint **g** to the slot of the feed rack and setting the part **i** of the feed rack to the switch of the feed sw. holder correctly.
- (3) As the feed sw. holder is temporarily attached to the pickup unit, set to the gear of the joint **g** and to the bending part of the chassis (joint **h**) at a time.

CAUTION:

Make sure that the part **i** on the underside of the feed rack is certainly inserted to the slot **j** of the change lock lever.

- (4) Reattach the feed sw. holder using the screw **E**.
- (5) Reattach the pu. shaft to the pickup unit. Reattach the pu. shaft holder to the pu. shaft using the screw **D**.

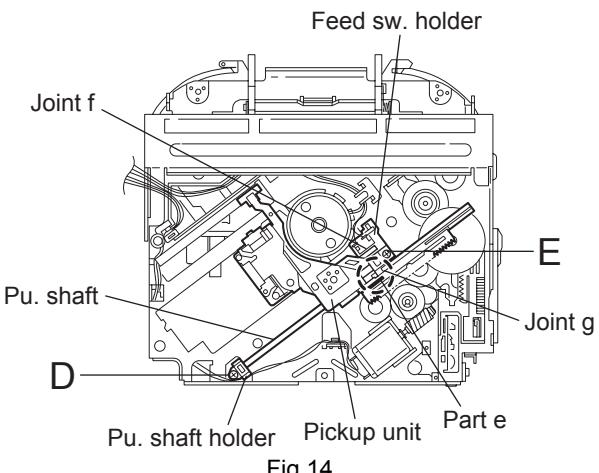


Fig.14

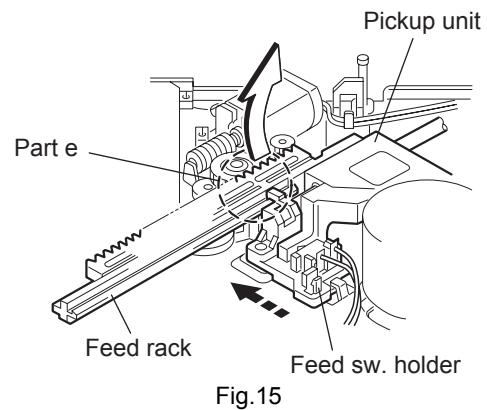


Fig.15

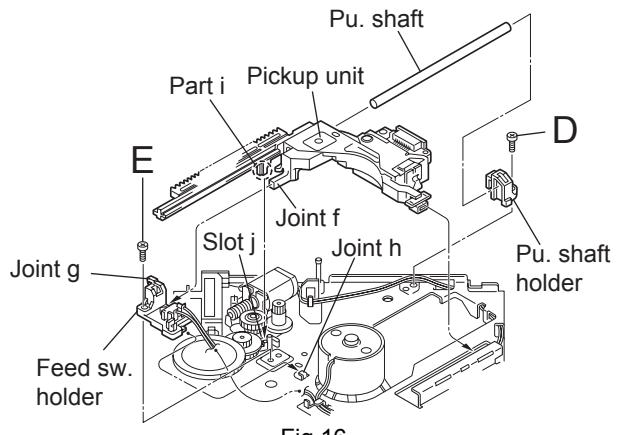


Fig.16

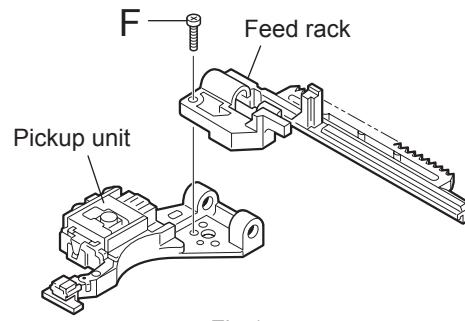


Fig.17

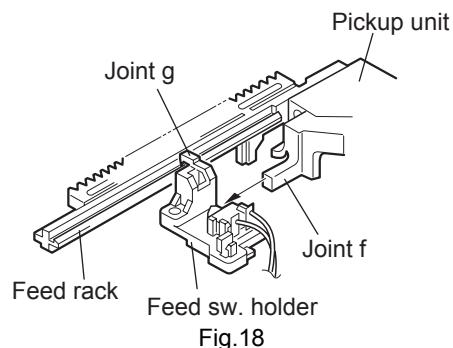


Fig.18

3.2.9 Removing the trigger arm

(See Figs.19 and 20)

- Prior to performing the following procedure, remove the top cover, connector board and clamper unit.
- (1) Turn the trigger arm in the direction of the arrow to release the joint k and pull out upward.

CAUTION:

When reassembling, insert the part m and n of the trigger arm into the part p and q at the slot of the chassis rivet assembly respectively and join the joint k at a time.

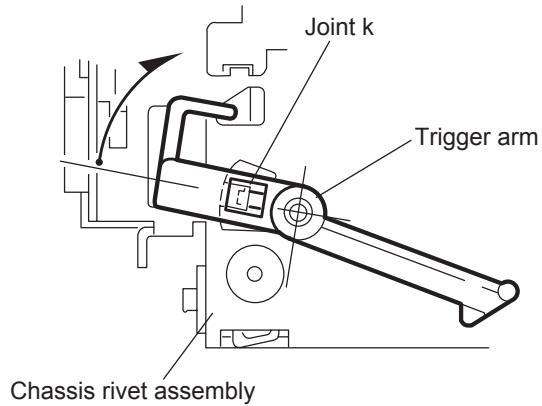


Fig.19

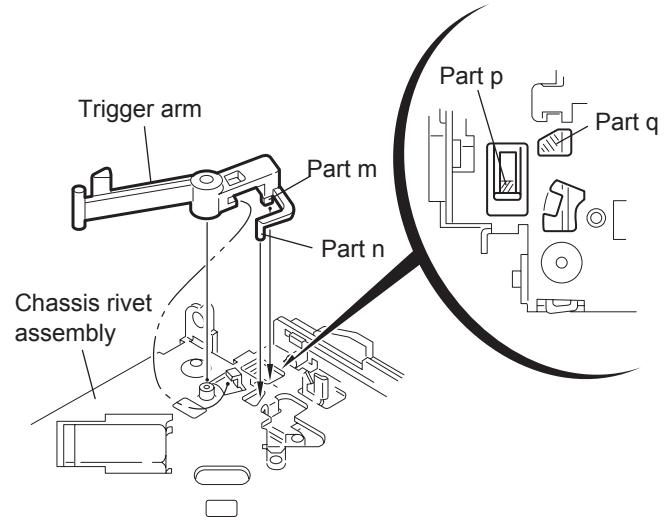


Fig.20

3.2.10 Removing the top plate assembly

(See Fig.21)

- Prior to performing the following procedure, remove the top cover, connector board, chassis unit, and clamper assembly.
- (1) Remove the screw H.
- (2) Move the top plate assembly in the direction of the arrow to release the two joints r.
- (3) Unsolder the wire marked s if necessary.

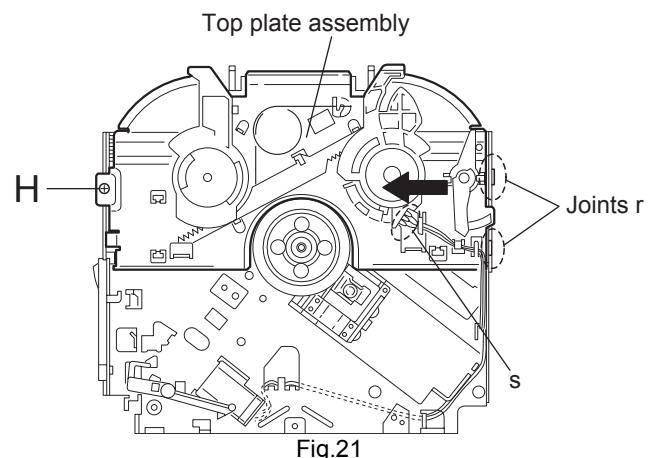


Fig.21

3.2.11 Removing the mode sw. / select lock arm

(See Figs.22 and 23)

- Prior to performing the following procedure, remove the top plate assembly.
- (1) Bring up the mode sw. to release from the link plate (joint t) and turn in the direction of the arrow to release the joint u.
- (2) Unsolder the wire of the mode sw. marked s if necessary.
- (3) Turn the select lock arm in the direction of the arrow to release the two joints v.
- (4) The select lock arm spring comes off the select lock arm at the same time.

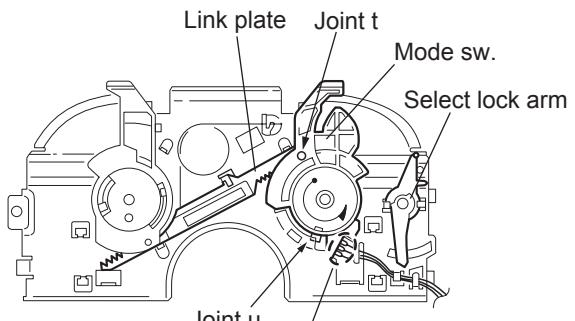


Fig.22

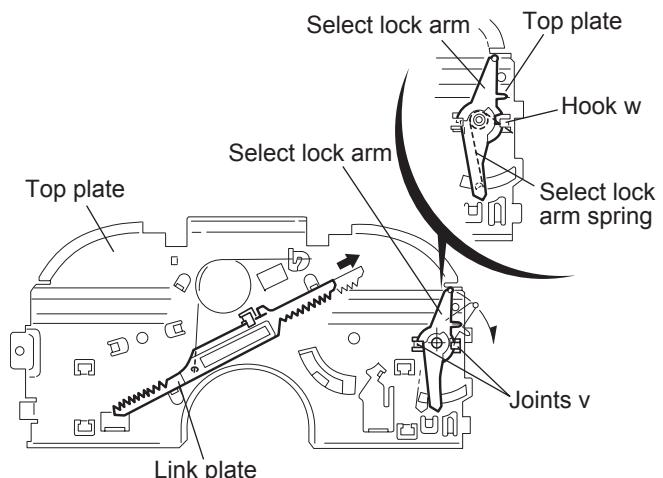


Fig.23

3.2.12 Reassembling the mode sw. / select lock arm (See Figs.24 to 26)

REFERENCE:

Reverse the above removing procedure.

- (1) Reattach the select lock arm spring to the top plate and set the shorter end of the select lock arm spring to the hook w on the top plate.
- (2) Set the other longer end of the select lock arm spring to the boss x on the underside of the select lock arm, and join the select lock arm to the slots (joint v). Turn the select lock arm as shown in the figure.
- (3) Reattach the mode sw. while setting the part t to the first peak of the link plate gear, and join the joint u.

CAUTION:

When reattaching the mode sw., check if the points y and z are correctly fitted and if each part operates properly.

Select lock arm spring

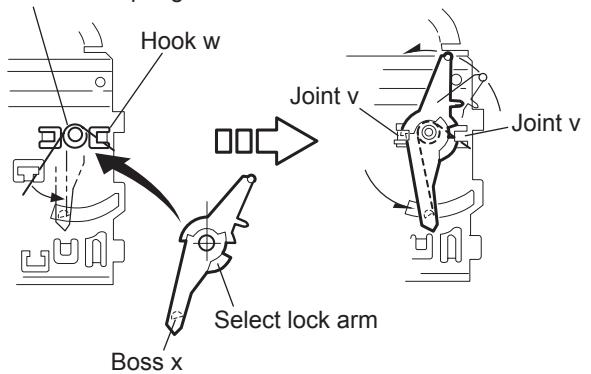


Fig.24

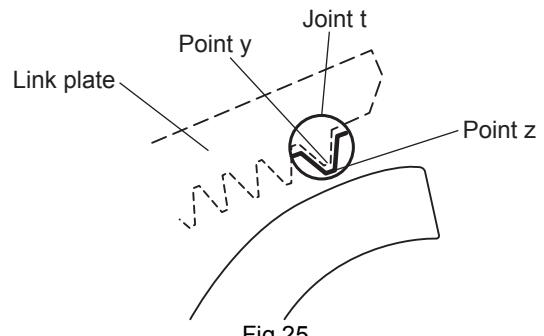


Fig.25

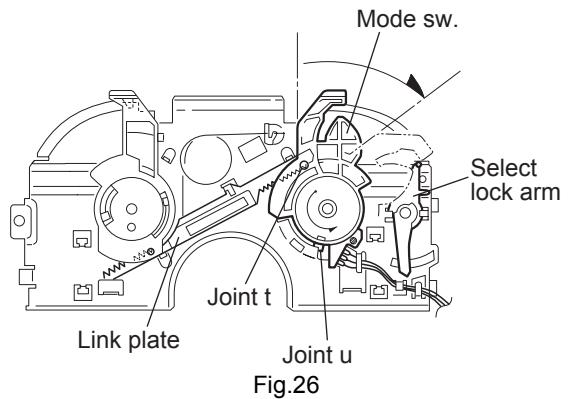


Fig.26

3.2.13 Removing the select arm R / link plate

(See Figs.27 and 28)

- Prior to performing the following procedure, remove the top plate assembly.
- (1) Bring up the select arm R to release from the link plate (joint a') and turn as shown in the figure to release the two joints b' and joint c'.
- (2) Move the link plate in the direction of the arrow to release the joint d'. Remove the link plate spring at the same time.

REFERENCE:

Before removing the link plate, remove the mode sw..

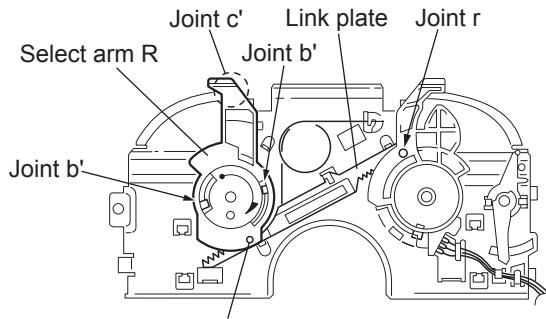


Fig.27

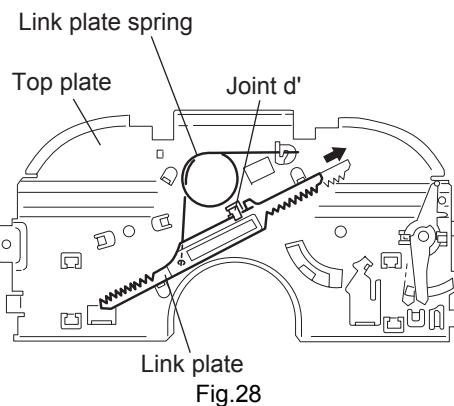


Fig.28

3.2.14 Reattaching the Select arm R / link plate

(See Figs.29 and 30)

REFERENCE:

Reverse the above removing procedure.

- Reattach the link plate spring.
- Reattach the link plate to the link plate spring while joining them at joint d'.
- Reattach the joint a' of the select arm R to the first peak of the link plate while joining the two joints b' with the slots. Then turn the select arm R as shown in the figure. The top plate is joined to the joint c'.

CAUTION:

When reattaching the select arm R, check if the points e' and f' are correctly fitted and if each part operates properly.

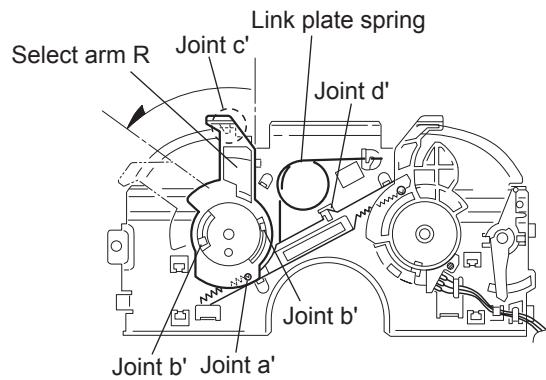


Fig.29

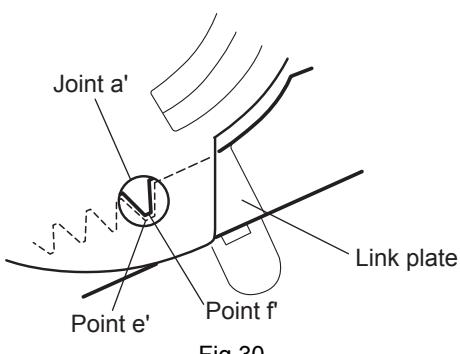


Fig.30

3.2.15 Removing the loading roller assembly

(See Figs.31 to 33)

- Prior to performing the following procedure, remove the clamer assembly and top plate assembly.
- (1) Push inward the loading roller assembly on the gear side and detach it upward from the slot of the joint **g'** of the lock arm rivet assembly.
- (2) Detach the loading roller assembly from the slot of the joint **h'** of the lock arm rivet assembly.

The roller guide comes off the gear section of the loading roller assembly.

Remove the roller guide and the HL washer from the shaft of the loading roller assembly.

- (3) Remove the screw **J** attaching the lock arm rivet assembly.
- (4) Push the shaft at the joint **i'** of the lock arm rivet assembly inward to release the lock arm rivet assembly from the slot of the **L** side plate.
- (5) Extend the lock arm rivet assembly outward and release the joint **j'** from the boss of the chassis rivet assembly. The roller guide springs on both sides come off at the same time.

CAUTION:

When reassembling, reattach the left and right roller guide springs to the lock arm rivet assembly before reattaching the lock arm rivet assembly to the chassis rivet assembly. Make sure to fit the part **k'** of the roller guide spring inside of the roller guide. (Refer to Fig.34.)

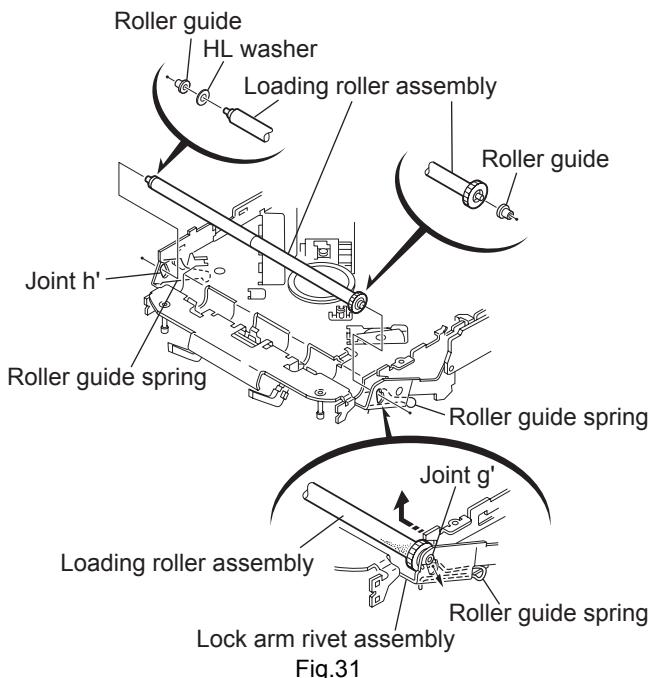


Fig.31

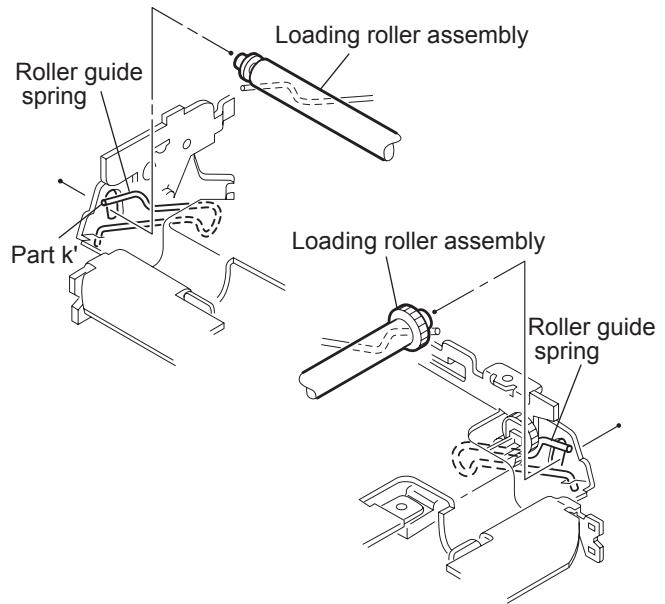


Fig.32

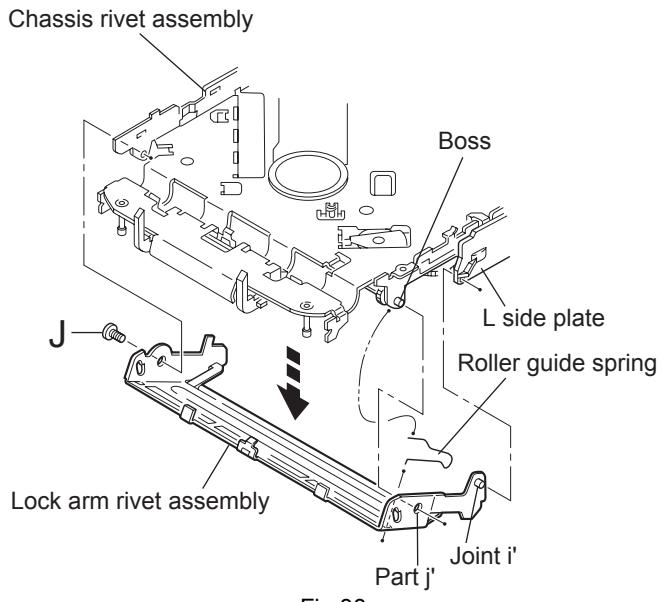


Fig.33

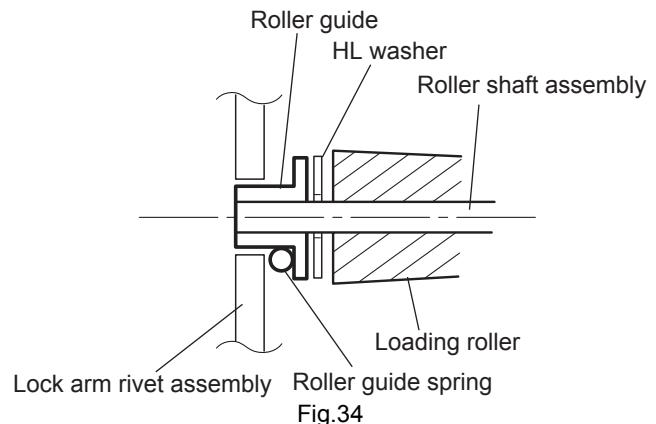


Fig.34

3.2.16 Removing the loading gear 5, 6 and 7

(See Figs.35 and 36)

- Prior to performing the following procedure, remove the top cover, chassis unit, pickup unit and top plate assembly.

(1) Remove the screw K attaching the loading gear bracket.

The loading gear 6 and 7 come off the loading gear bracket.

(2) Pull out the loading gear 5.

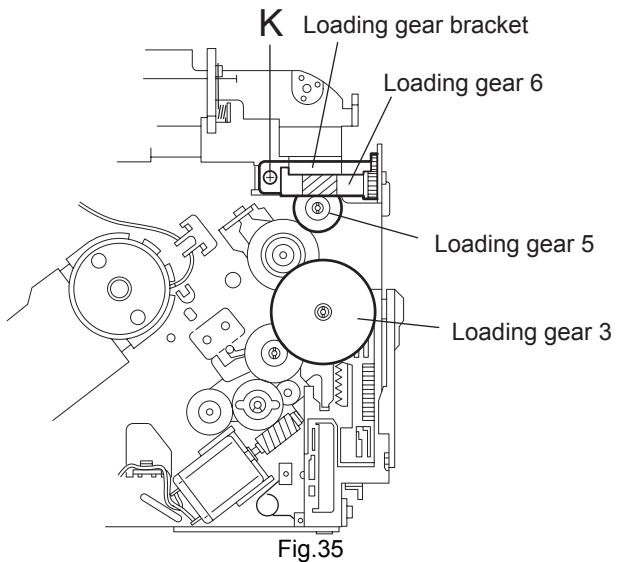


Fig.35

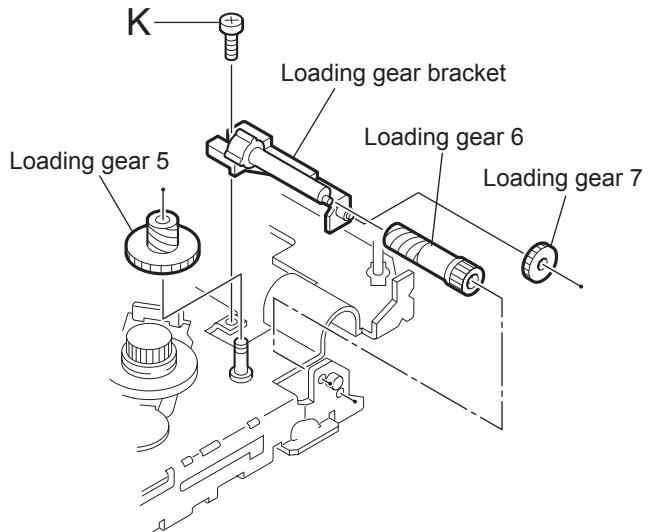
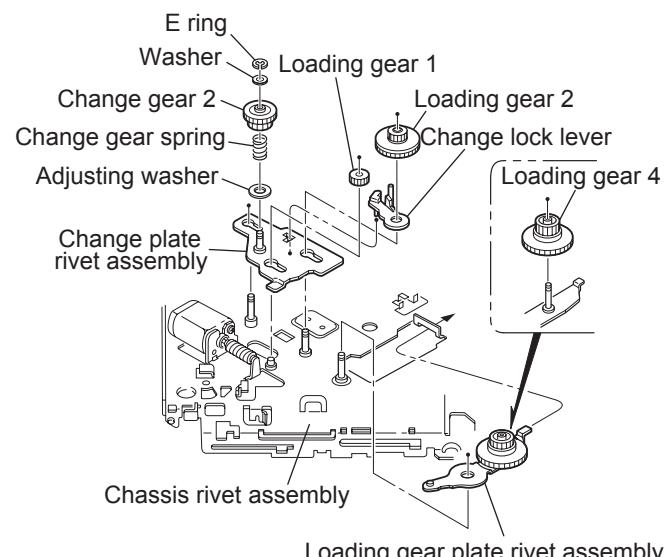
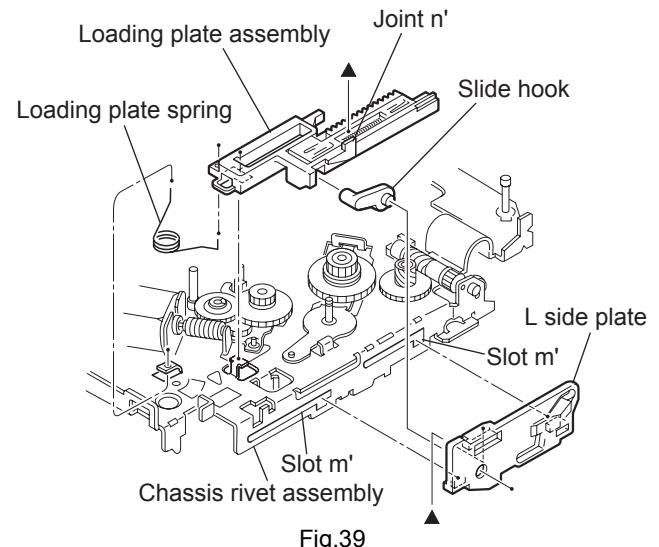
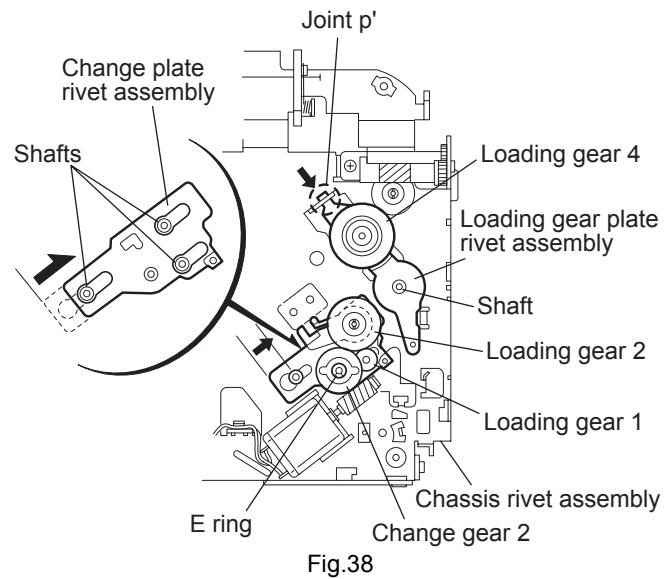
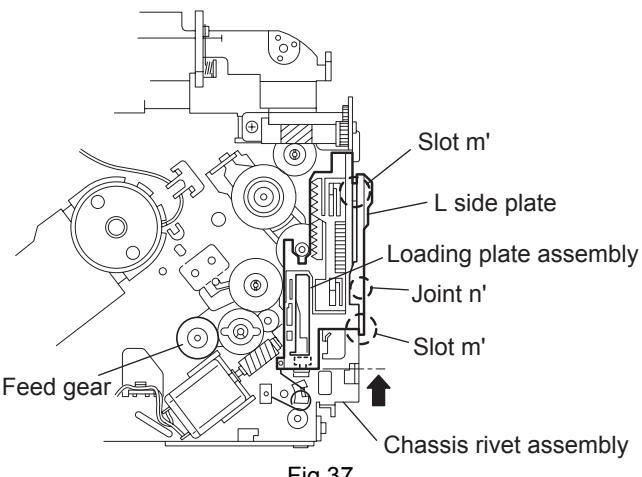


Fig.36

3.2.17 Removing the gears

(See Figs.37 to 40)

- Prior to performing the following procedure, remove the top cover, chassis unit, top plate assembly and pickup unit.
- Pull out the loading gear 3. (See Fig.35.)
- (1) Pull out the feed gear.
 (2) Move the loading plate assembly in the direction of the arrow to release the L side plate from the two slots m' of the chassis rivet assembly. (See Fig.37.)
 (3) Detach the loading plate assembly upward from the chassis rivet assembly while releasing the joint n'. Remove the slide hook and loading plate spring from the loading plate assembly.
 (4) Pull out the loading gear 2 and remove the change lock lever.
 (5) Remove the E ring and washer attaching the changer gear 2.
 (6) The changer gear 2, change gear spring and adjusting washer come off.
 (7) Remove the loading gear 1.
 (8) Move the change plate rivet assembly in the direction of the arrow to release from the three shafts of the chassis rivet assembly upward. (See Fig.38.)
 (9) Detach the loading gear plate rivet assembly from the shaft of the chassis rivet assembly upward while releasing the joint p'. (See Figs.38 and 40.)
 (10) Pull out the loading gear 4.



3.2.18 Removing the turn table / spindle motor

(See Figs.41 and 42)

- Prior to performing the following procedure, remove the top cover, connector board, chassis unit and clamp assembly.
- (1) Remove the two screws **L** attaching the spindle motor assembly through the slot of the turn table on top of the body.
- (2) Unsolder the wire on the connector board if necessary.

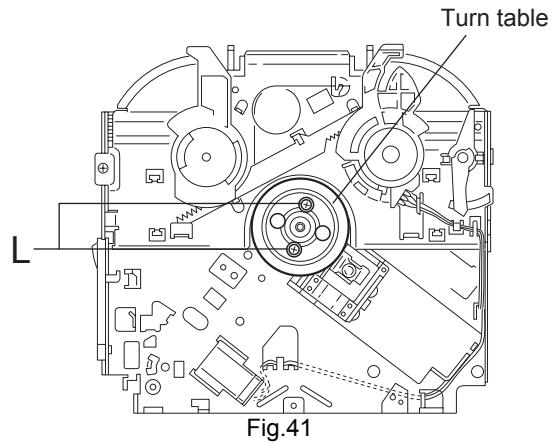


Fig.41

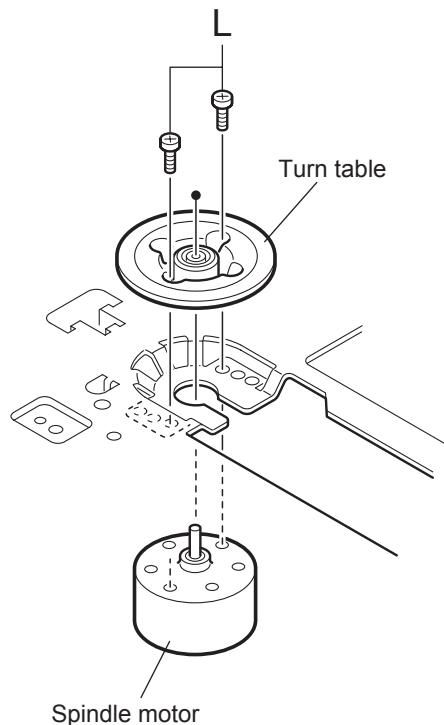


Fig.42

SECTION 4 ADJUSTMENT

4.1 Adjustment method

■ Test instruments required for adjustment

- (1) Digital oscilloscope (100MHz)
- (2) Electric voltmeter
- (3) Digital tester
- (4) Tracking offset meter
- (5) Test Disc JVC :CTS-1000
- (6) Extension cable for check
EXTSH002-22P × 1

■ Standard volume position

Balance and Bass &Treble volume : Indication"0"
Loudness : OFF

■ How to connect the extension cable for adjusting

Caution:

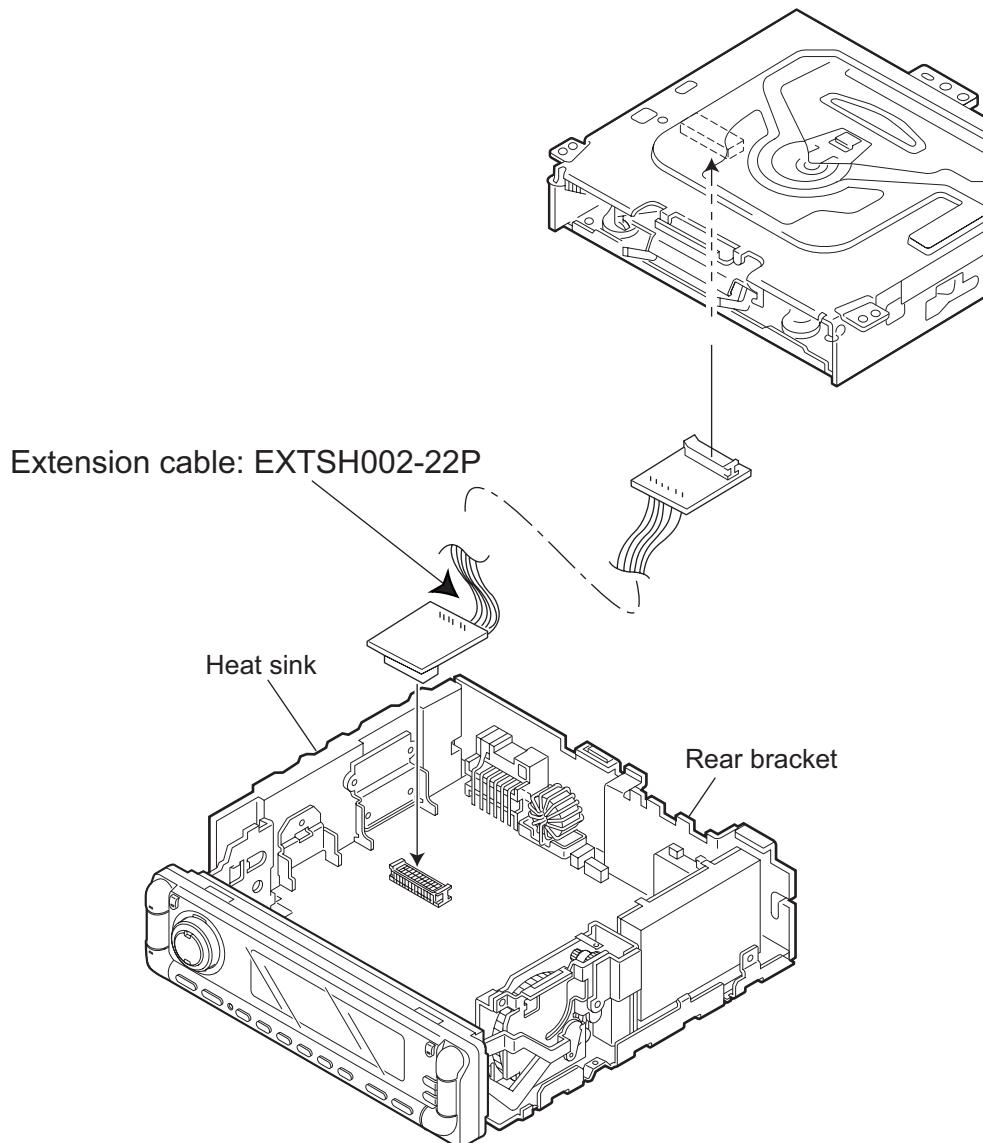
Be sure to attach the heat sink and rear bracket onto the power amplifier IC and regulator IC respectively, before supply the power. If voltage is applied without attaching these parts, the power amplifier IC and regulator IC will be destroyed by heat.

■ Standard measuring conditions

Power supply voltage DC14.4V(10.5 to 16V)
Load impedance 20KΩ(2 Speakers connection)
Output Level Line out 2.0V (Vol. MAX)

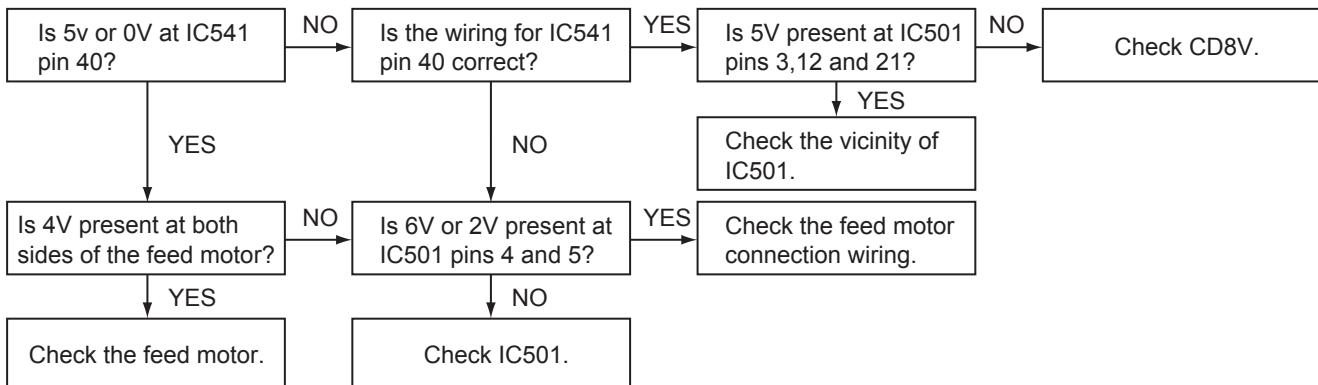
■ Dummy load

Exclusive dummy load should be used for AM, and FM. For FM dummy load, there is a loss of 6dB between SSG output and antenna input. The loss of 6dB need not be considered since direct reading of figures are applied in this working standard.

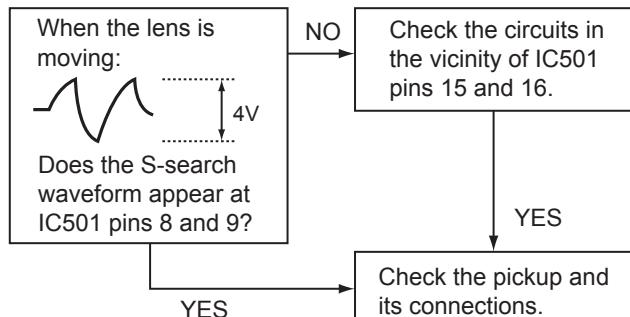


SECTION 5 TROUBLESHOOTING

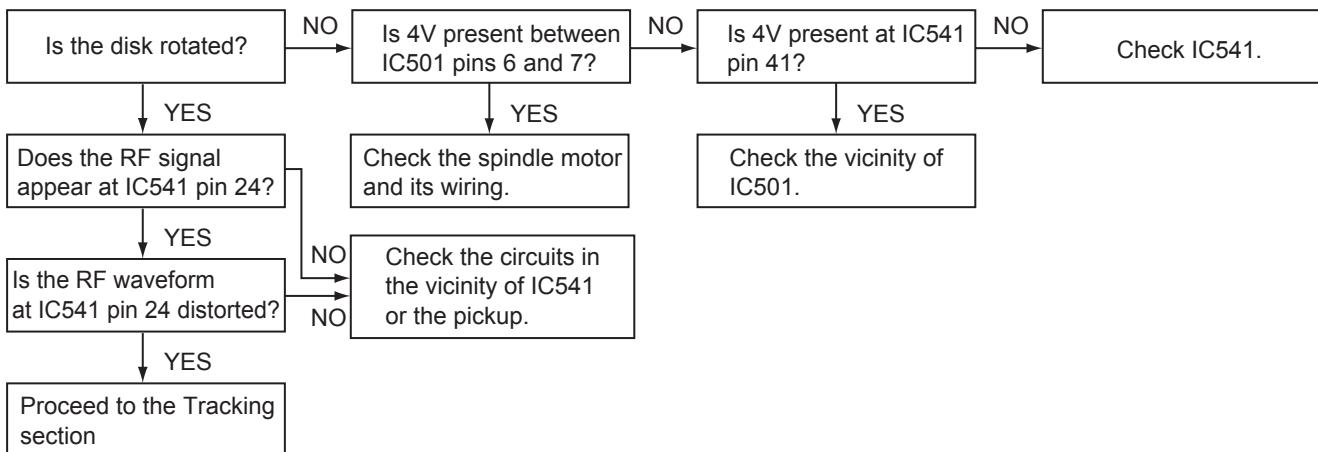
5.1 Feed section



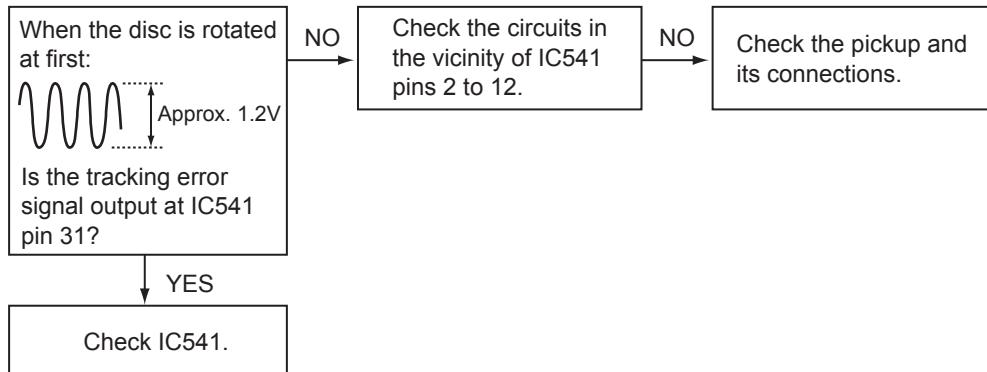
5.2 Focus section



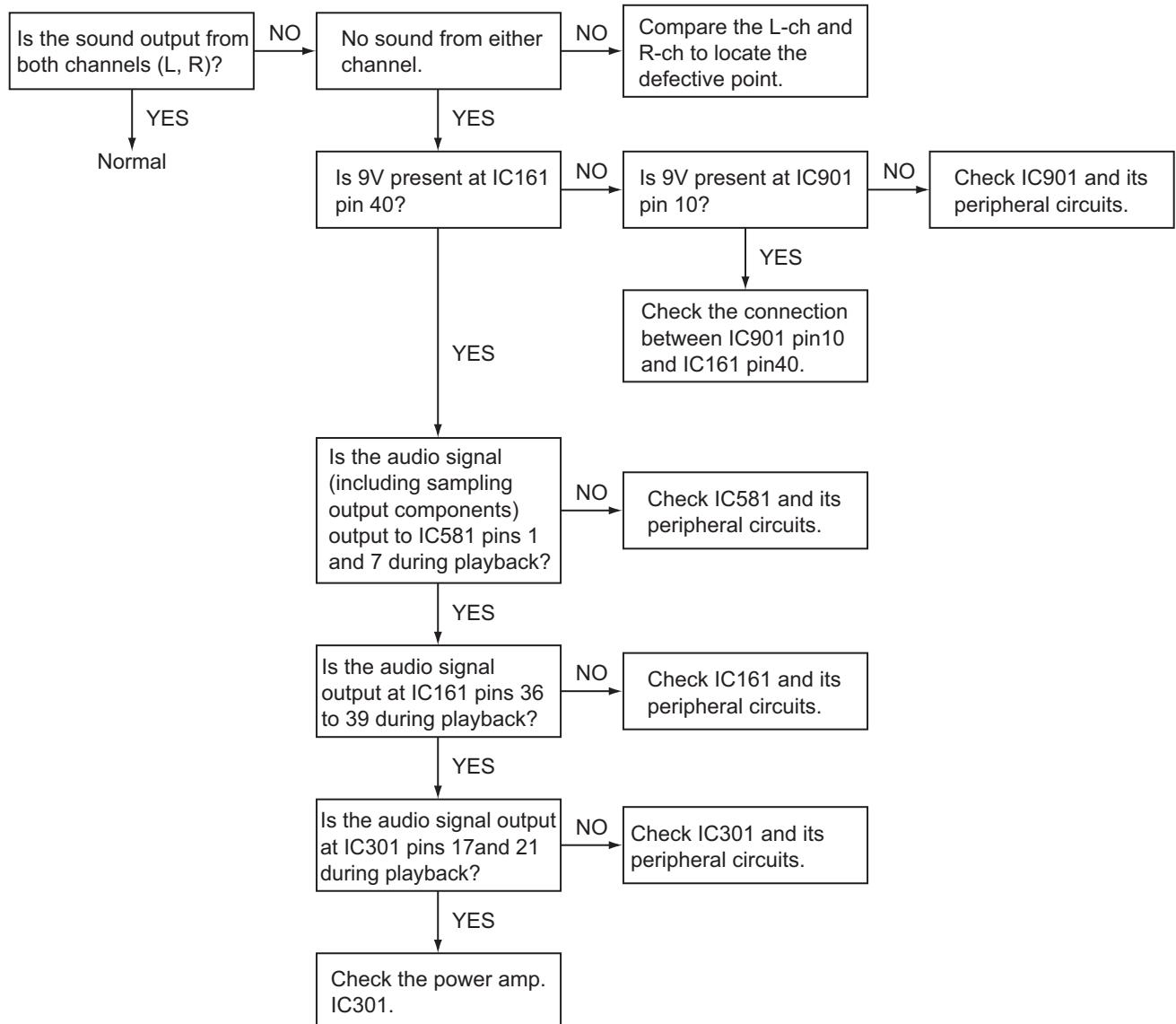
5.3 Spindle section



5.4 Tracking section



5.5 Signal processing section



5.6 Maintenance of laser pickup

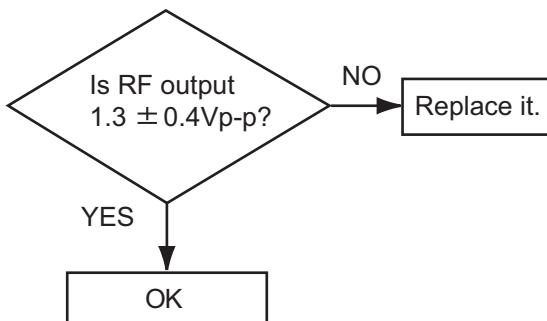
(1) Cleaning the pick up lens

Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

(2) Life of the laser diode

When the life of the laser diode has expired, the following symptoms will appear.

- The level of RF output (EFM output: amplitude of eye pattern) will be low.



(3) Semi-fixed resistor on the APC PC board

The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.

If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced. If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

5.7 Replacement of laser pickup

Turn off the power switch and, disconnect the power cord.

Replace the pickup with a normal one. (Refer to "Removing the pickup unit" on the previous page.)

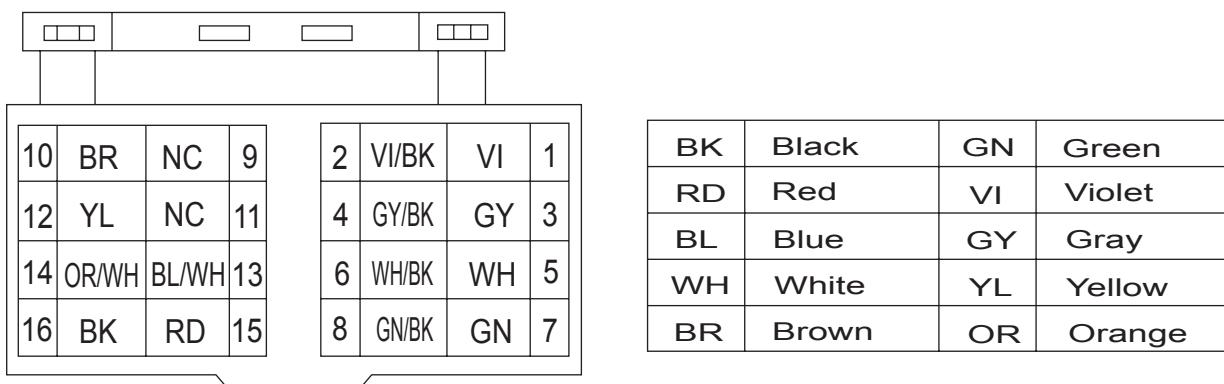
Plug the power cord in, and turn the power on. At this time, check that the laser emits for about seconds and the objective lens moves up and down. Note: Do not observe the laser beam directly.

Play a disc.

Check the eye-pattern at RF test point.

Finish.

5.8 16 PIN CORD DIAGRAM



| | | | |
|--------|-----------------------|--------|------------------------|
| RR | Rear Right | ANT | Auto Antenna |
| FR | Front Right | ACC | ACC Line |
| FL | Front Left | TEL | Telephone Muting |
| RL | Rear Left | GND | Ground |
| REMOTE | Remote | MEMORY | Memory Backup Battery+ |
| ILL | Illuminations Control | | |



VICTOR COMPANY OF JAPAN, LIMITED

AV & MULTIMEDIA COMPANY MOBILE ENTERTAINMENT CATEGORY 10-1, 1chome, Ohwatari-machi, Maebashi-city, 371-8543, Japan

(No.MA057B)

PARTS LIST

[KD-G701]

* All printed circuit boards and its assemblies are not available as service parts.

Area suffix

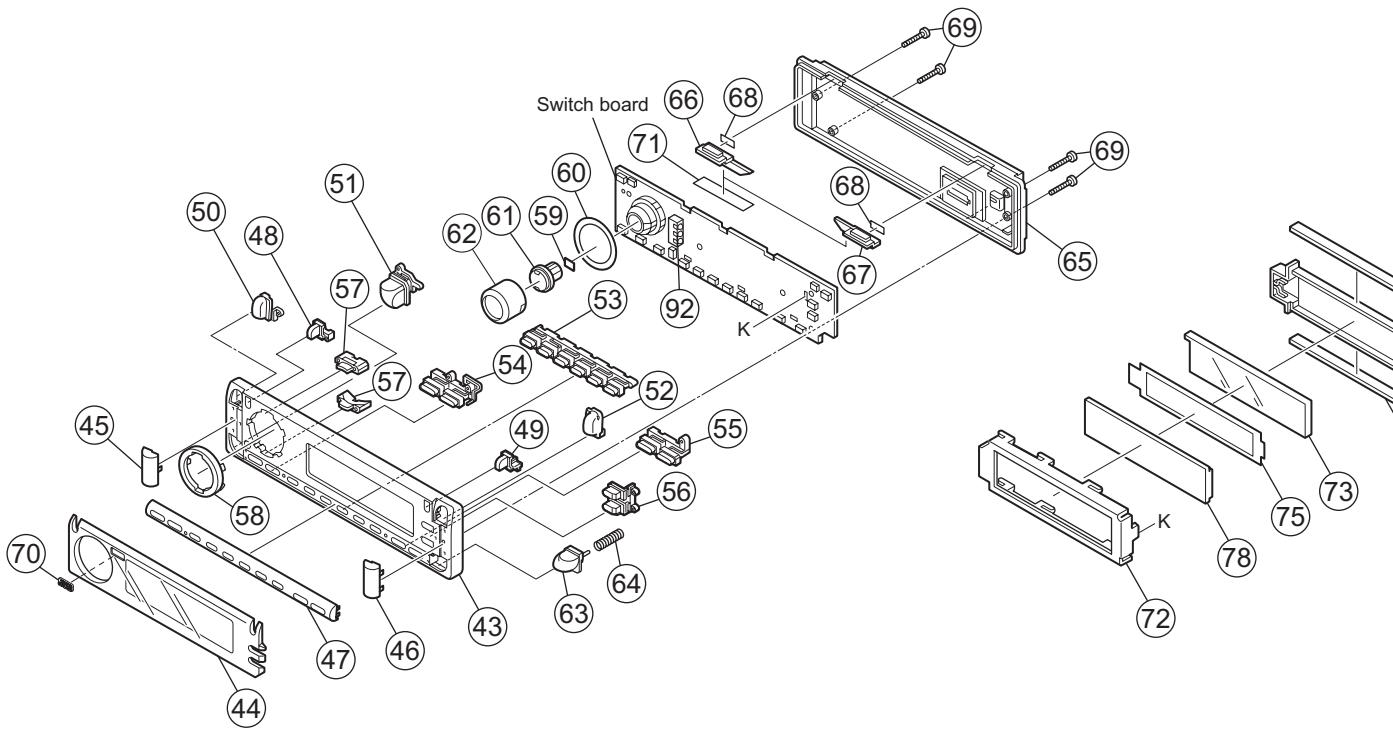
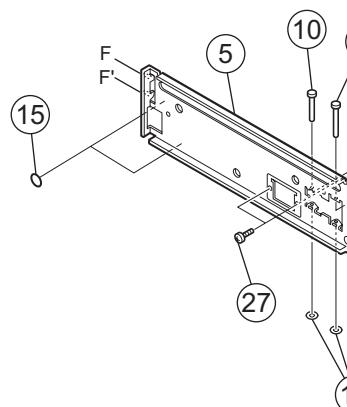
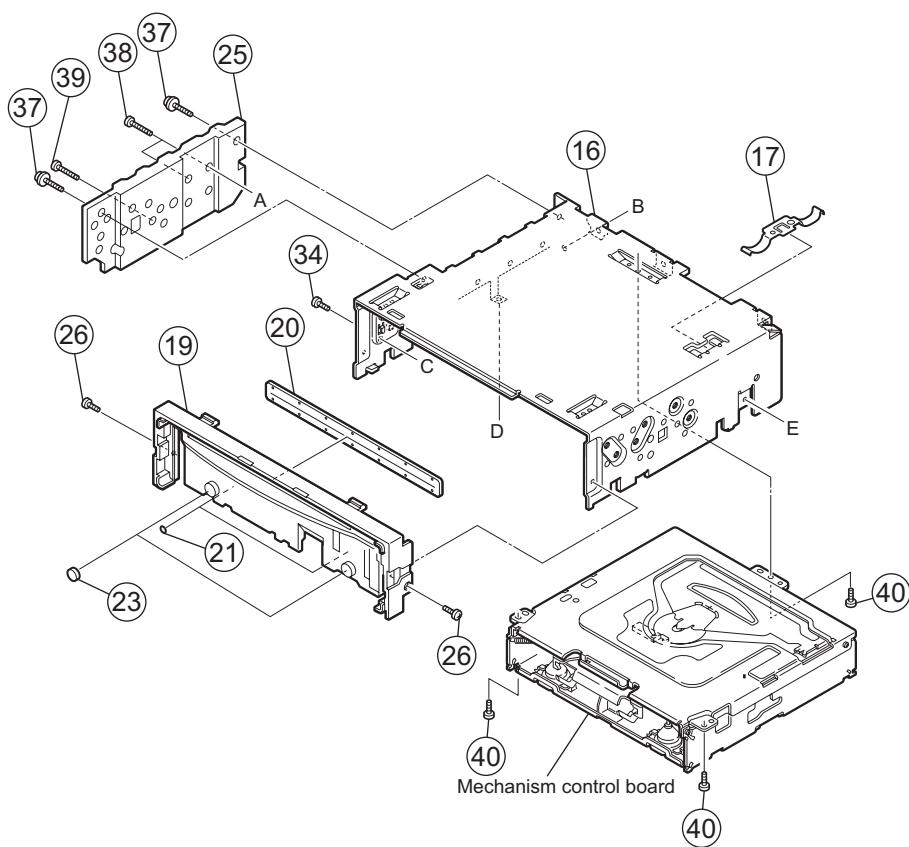
E ----- Southern Europe
EX ----- Northern Europe

- Contents -

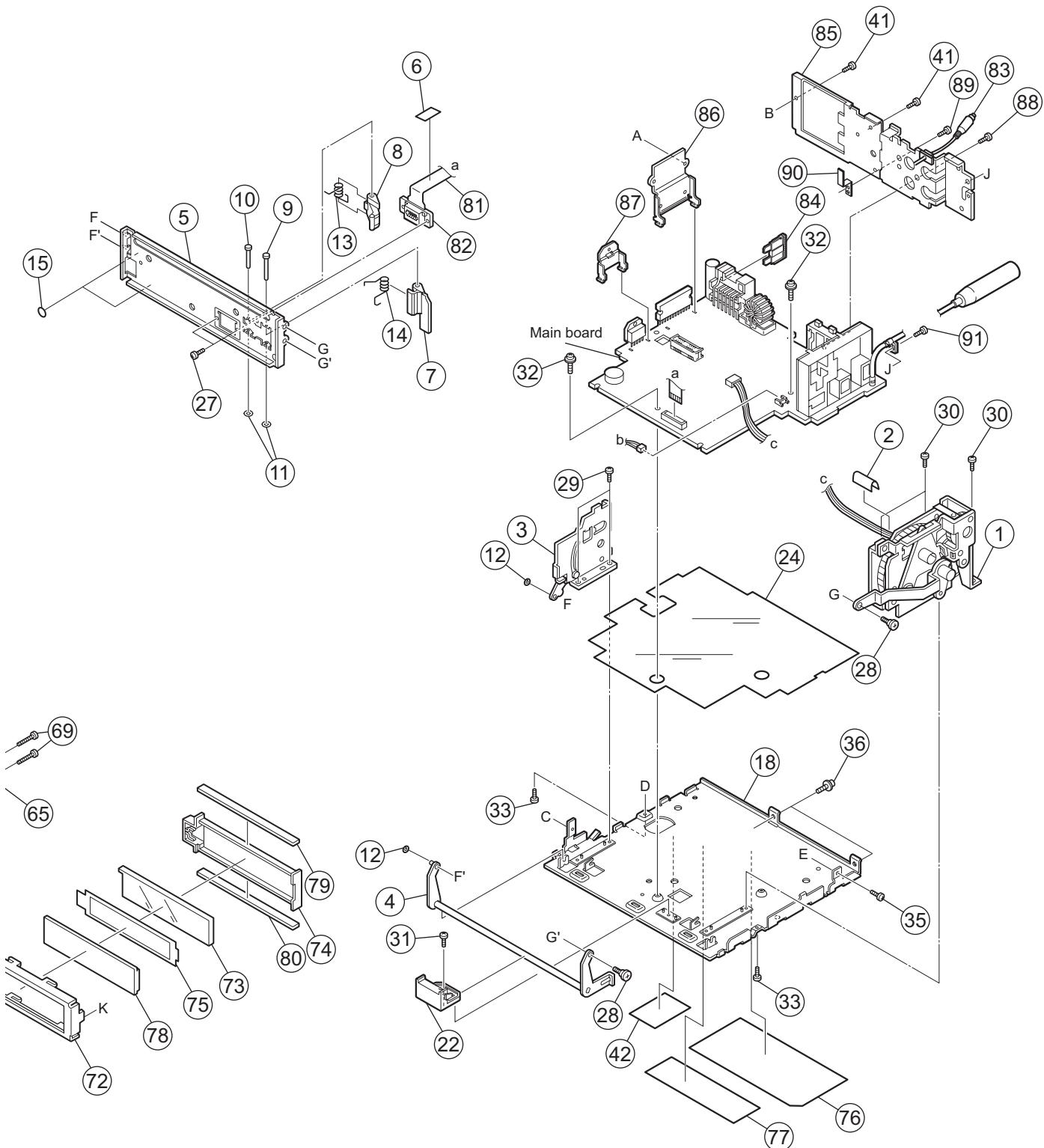
| | |
|--|------|
| Exploded view of general assembly and parts list (Block No.M1) | 3-2 |
| CD mechanism assembly and parts list (Block No.MB) | 3-6 |
| Electrical parts list (Block No.01,02)(KD-G701E,EX) | 3-8 |
| Electrical parts list (Block No.03,04)(KD-G701E2,EX2) | 3-13 |
| Packing materials and accessories parts list (Block No.M3) | 3-18 |

Exploded view of general assembly and parts list

Block No. M 1 M M



M 1 M M



General Assembly

Block No. [M][1][M][M]

| △ | Symbol No. | Part No. | Part Name | Description | Local |
|----|------------|---------------|-----------------|-----------------|-------|
| 1 | | GE20156-001A | GEAR BKT UNIT | | |
| 2 | | FSYH4036-100 | SHEET | | |
| 3 | | GE30968-001A | LEVER BKT UNIT | | |
| 4 | | GE30964-001A | LOWER LEVER ASS | | |
| 5 | | GE30975-001A | FRONT BKT ASSY | | |
| 6 | | FSYH4036-100 | SHEET | | |
| 7 | | GE30972-001A | DETACH LEVER | | |
| 8 | | GE30973-001A | KICK LEVER | | |
| 9 | | GE40192-002A | SHAFT | | |
| 10 | | GE40193-002A | SHAFT | | |
| 11 | | WDL123525 | SLIT WASHER | (x2) | |
| 12 | | WDL215025 | WASHER | (x2) | |
| 13 | | GE40194-001A | T SPRING | | |
| 14 | | GE40195-002A | T SPRING | | |
| 15 | | GE40218-009A | SHEET | (x2) | |
| 16 | | GE10073-004A | TOP CHASSIS | | |
| 17 | | GE40135-001A | EARTH PLATE | | |
| 18 | | GE10074-001A | BOTTOM CHASSIS | | |
| 19 | | GE10075-005A | FRONT CHASSIS | | |
| 20 | | GE40156-001A | BLIND | | |
| 21 | | GE40224-001A | MIRROR SHEET | (x2) | |
| 22 | | GE30974-001A | FPC GUIDE | | |
| 23 | | GE40196-001A | ABSORBER | (x2) | |
| 24 | | GE31204-003A | INSULATOR | | |
| 25 | | GE31206-002A | HEAT SINK | | |
| 26 | | QYSPSP2003ZA | SCREW | M2 x 3mm(x2) | |
| 27 | | QYSPSGU2040MA | TAP SCREW | M2 x 4mm(x2) | |
| 28 | | LV42181-002A | SPECIAL SCREW | (x2) | |
| 29 | | LV40865-002A | SCREW | (x2) | |
| 30 | | LV40865-002A | SCREW | (x3) | |
| 31 | | LV40865-002A | SCREW | | |
| 32 | | LV41200-004A | SPECIAL SCREW | (x2) | |
| 33 | | QYSDST2606ZA | TAP SCREW | M2.6 x 6mm(x2) | |
| 34 | | QYSDST2604ZA | TAP SCREW | M2.6 x 4mm | |
| 35 | | QYSDST2604ZA | TAP SCREW | M2.6 x 4mm | |
| 36 | | LV41200-004A | SPECIAL SCREW | (x2) | |
| 37 | | FSKZ4005-004 | SCREW | (x2) | |
| 38 | | QYSDST2610ZA | TAP SCREW | M2.6 x 10mm(x2) | |
| 39 | | QYSDST2612ZA | TAP SCREW | M2.6 x 12mm | |
| 40 | | QYSDST2604ZA | TAP SCREW | M2.6 x 4mm(x3) | |
| 41 | | QYSDST2604ZA | TAP SCREW | M2.6 x 4mm(x2) | |
| 42 | | GE40218-011A | SHEET | | |
| 43 | | GE10084-003A | FRONT PANEL | | |
| 44 | | GE31184-005A | FINDER ASSY | | |
| 45 | | GE31199-001A | COVER PLATE L | | |
| 46 | | GE31218-003A | COVER PLATE R | | |
| 47 | | GE31198-001A | COVER PLATE B | | |
| 48 | | GE31189-001A | DISPLAY BUTTON | | |
| 49 | | GE31190-001A | ANGLE BUTTON | | |
| 50 | | GE31185-001A | POWER BUTTON | | |
| 51 | | GE31186-001A | MODE BUTTON | | |
| 52 | | GE31187-001A | EJECT BUTTON | | |
| 53 | | GE20166-001A | PRESET BUTTON | | |
| 54 | | GE31191-003A | D.FUNC BUTTON | | |
| 55 | | GE31192-001A | SEARCH BUTTON | | |
| 56 | | GE31193-001A | UP/DOWN BUTTON | | |
| 57 | | GE31197-001A | RIM LENS | (x2) | |
| 58 | | GE31196-001A | RIM COVER | | |
| 59 | | FSYH4036-032 | SHEET | | |
| 60 | | GE40218-002A | SHEET | | |
| 61 | | GE31195-002A | SEL BUTTON | | |
| 62 | | GE31194-003A | KNOB | | |
| 63 | | GE31188-001A | DETACH BUTTON | | |
| 64 | | GE40202-004A | COMP.SPRING | | |
| 65 | | GE10085-003A | REAR COVER | | |
| 66 | | GE40211-001A | REAR LENS | | |
| 67 | | GE40216-001A | REAR LENS (R) | | |
| 68 | | GE40218-010A | SHEET | (x2) | |
| 69 | | VKZ4777-010 | MINI SCREW | (x4) | |
| 70 | | GE40204-001A | JVC BADGE | | |
| 71 | | GE40218-015A | SHEET | (x2) | |
| 72 | | GE31201-002A | LCD CASE | | |
| 73 | | GE31036-001A | LCD LENS | | |
| 74 | | GE31037-001A | LENS CASE | | |

| △ | Symbol No. | Part No. | Part Name | Description | Local |
|---|------------|---------------|-----------------|-------------|----------------|
| | 75 | GE40200-002A | LIGHTING SHEET | | |
| | 76 | GE31157-001A | NAME PLATE | | G701E,G701EX |
| | 76 | GE31157-002A | NAME PLATE | | G701E2,G701EX2 |
| | 77 | LV41843-002A | LASER CAUTION | | |
| | 78 | QLD0296-001 | LCD MODULE | | |
| | 79 | QNZ0442-001 | LCD CONNECTOR | | |
| | 80 | QNZ0442-001 | LCD CONNECTOR | | |
| | 81 | QAL0587-001 | FPC CABLE | | |
| | 82 | QNZ0664-003 | FRONT CONNECTOR | | |
| | 83 | QAM0544-002 | STEERING CABLE | | |
| △ | 84 | QMFZ047-150-T | FUSE | 15A | |
| | 85 | GE31205-011A | REAR BRACKET | | |
| | 86 | GE40207-001A | POWER IC BKT | | |
| | 87 | GE40124-002A | REG BRACKET | | |
| | 88 | QYSDSF2606ZA | TAP SCREW | M2.6 x 6mm | |
| | 89 | QYSDST2604ZA | TAP SCREW | M2.6 x 4mm | |
| | 90 | GE40214-001A | WIRE HOLDER | | |
| | 91 | QYSDST2604ZA | TAP SCREW | M2.6 x 4mm | |
| | 92 | FSKS3017-002 | LED HOLDER | | |

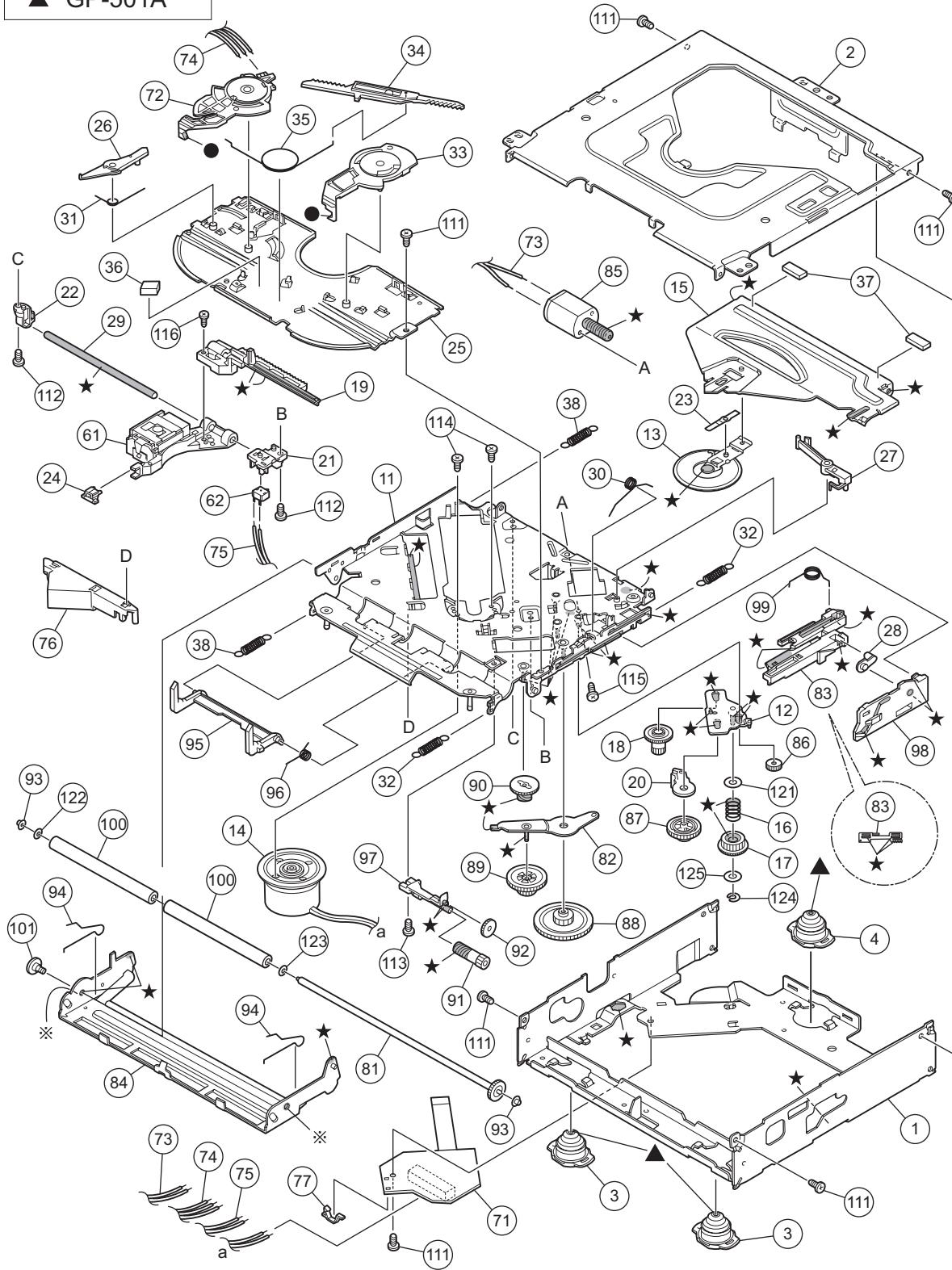
CD mechanism assembly and parts list

Block No. M B M M

Grease

- ★ TNG-87
- ※ GP-501MK
- CFD-005Z
- ▲ GP-501A

TN-2001-1011



CD mechanism

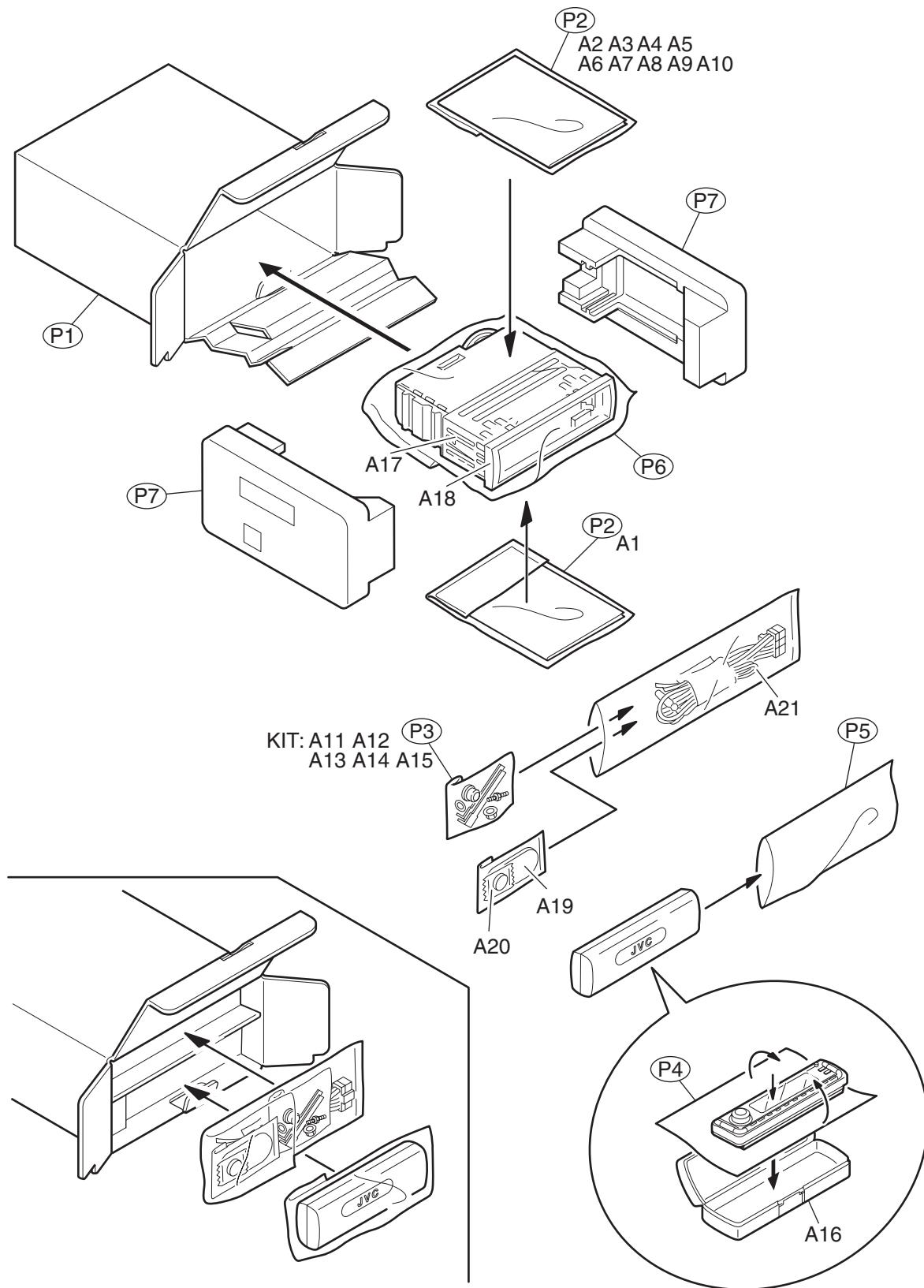
Block No. [M][B][M][M]

| △ | Symbol No. | Part No. | Part Name | Description | Local |
|-----|------------|----------|-----------------|-------------|-------|
| 1 | 30320101T | | FRAME | | |
| 2 | 30320102T | | TOP COVER | | |
| 3 | 30320115T | | DANPER F | | |
| 4 | 30320116T | | DANPER R | | |
| 11 | 303205505T | | CHASSIS RIVET | | |
| 12 | 303205503T | | CHANGE P. RVT A | | |
| 13 | 303205301T | | CLAMPER ASSY | | |
| 14 | 303205302T | | SPINDLE MOTOR A | | |
| 15 | 30320502T | | CLAMPER ARM | | |
| 16 | 30320503T | | CHANGE GEAR SPG | | |
| 17 | 30320505T | | CHANGE GEAR 2 | | |
| 18 | 30320506T | | FEED GEAR | | |
| 19 | 30320507T | | FEED RACK | | |
| 20 | 30320509T | | CHANGE LOCK RAR | | |
| 21 | 30320510T | | FEED SW HOLDER | | |
| 22 | 30320511T | | PU SHAFT HOLDER | | |
| 23 | 30320513T | | CLAMPER SUB SPG | | |
| 24 | 30320514T | | FD SUB HOLDER | | |
| 25 | 30320518T | | TOP PLATE | | |
| 26 | 30320519T | | SELECT LOCK ARM | | |
| 27 | 30320520T | | TRIGGER ARM | | |
| 28 | 30320521T | | SLIDE HOOK | | |
| 29 | 30320522T | | PU SHAFT | | |
| 30 | 30320525T | | CLAMPER ARM SPG | | |
| 31 | 30320526T | | SELECT L ARM SP | | |
| 32 | 30320538T | | SUSPENSION SP R | | |
| 33 | 30320529T | | SELECT ARM R | | |
| 34 | 30320530T | | LINK PLATE | | |
| 35 | 30320531T | | LINK PLATE SPG | | |
| 36 | 30320523T | | CUSHION F | | |
| 37 | 30320524T | | CUSHION R | | |
| 38 | 30320539T | | SUSPENSION SP L | | |
| 61 | 69011614T | | PICKUP OPT-725 | | |
| 62 | 64180406T | | DET SW ESE22 | | |
| 71 | 303210301T | | CONN PWB ASS'Y | | |
| 72 | 30321002T | | MODE SW | | |
| 73 | 30321003T | | LOAD MOTOR WIRE | | |
| 74 | 30321005T | | MODE SW WIRE | | |
| 75 | 30321009T | | SL. WIRE | | |
| 76 | 30321011T | | WIRE HOLDER | | |
| 77 | 19501403T | | WIRE CLUMPER | | |
| 81 | 303211301T | | ROLLER SHAFT AS | | |
| 82 | 303211501T | | L GEAR PLATE RV | | |
| 83 | 303211302T | | LOADING PLATE A | | |
| 84 | 303211502T | | LOCK ARM RV ASS | | |
| 85 | 303211303T | | L/F MOTOR ASS'Y | | |
| 86 | 30321101T | | LOADING GEAR 1 | | |
| 87 | 30321102T | | LOADING GEAR 2 | | |
| 88 | 30321103T | | LOADING GEAR 3 | | |
| 89 | 30321104T | | LOADING GEAR 4 | | |
| 90 | 30321105T | | LOADING GEAR 5 | | |
| 91 | 30321106T | | LOADING GEAR 6 | | |
| 92 | 30321107T | | LOADING GEAR 7 | | |
| 93 | 30321149T | | ROLLER GUIDE | | |
| 94 | 30321114T | | ROLLER GUIDE SP | | |
| 95 | 30321116T | | DISC STOPPER AR | | |
| 96 | 30321117T | | DISC ST ARM SPG | | |
| 97 | 30321118T | | LD GEAR BRACKET | | |
| 98 | 30321125T | | L SIDE PLATE | | |
| 99 | 30321131T | | LOAD PLATE SPG | | |
| 100 | 30321133T | | LDG ROLLER | | |
| 101 | 18211223T | | COLLAR SCREW | | |
| 111 | 9P0420031T | | SCREW | | |
| 112 | 9P0420041T | | TAP.SCREW | | |
| 113 | 9B0320041T | | SCREW | | |
| 114 | 9C0117183T | | SCREW | | |
| 115 | 9C0120203T | | SCREW | | |
| 116 | 9C0317503T | | SCREW | | |
| 121 | 9W0130170T | | PW 3.5X8X0.3 | | |
| 122 | 9W0513060T | | HL WASHER | | |
| 123 | 9W0710070T | | L WASHER | | |
| 124 | 9E0100152T | | E RING | | |
| 125 | 9W0113020T | | PW 2.1X4X0.13 | | |

Packing materials and accessories parts list

Block No. M 3 M M

No additional / supplemental order of WARRANTY CARDS are available.



Packing and Accessories

Block No. [M][3][M][M]

| △ | Symbol No. | Part No. | Part Name | Description | Local |
|------|------------|---------------|-----------------|---------------------|----------------|
| A 1 | | GET0199-001A | INST BOOK | ENG GER FRE DUT | |
| A 2 | | GET0199-002A | INST BOOK | SPA ITA POL RUS | G701E,G701E2 |
| A 2 | | GET0199-003A | INST BOOK | SWE DAN FIN GRE | G701EX,G701EX2 |
| A 3 | | GET0199-005A | INSTALL MANUAL | | |
| A 4 | | GET0199-006A | INSTALL MANUAL | | G701E,G701E2 |
| A 4 | | GET0199-007A | INSTALL MANUAL | | G701EX,G701EX2 |
| A 5 | ----- | | WARRANTY CARD | BT-54023-1 | |
| A 6 | | VND3050-002 | IDENTITY CARD | | |
| A 7 | | VND3046-001 | SERIAL TICKET | | |
| A 8 | | LVT1120-002A | MP3 GUIDE | | |
| A 9 | | GET0210-001A | DEMO MODE SHEET | | G701E,G701E2 |
| A 9 | | GET0210-002A | DEMO MODE SHEET | | G701EX,G701EX2 |
| A 10 | | GET0213-001A | CAUTION SHEET | | |
| A 11 | | VKZ4027-202 | PLUG NUT | | |
| A 12 | | VKH4871-003 | MOUNT BOLT | | |
| A 13 | | VKZ4328-003 | LOCK NUT | | |
| A 14 | | QYWWS53A008ZA | WASHER | 0mm/5.3mm x | |
| A 15 | | GE40130-002A | HOOK | (x2) | |
| A 16 | | FSJB3002-00C | HARD CASE | | |
| A 17 | | GE20137-003A | MOUNTING SLEEVE | | |
| A 18 | | GE20164-003A | TRIM PLATE | | |
| A 19 | | RM-RK50 | REMOCON UNIT | | |
| A 20 | ----- | | BATTERY | | |
| A 21 | | QAM0176-002 | POWER CORD | | |
| KIT | | SRW-385U | SCREW PARTS KIT | A11 A12 A13 A14 A15 | |
| P 1 | | GE31158-003A | CARTON | | |
| P 2 | | FSPG4002-001 | POLY BAG | (x2) | |
| P 3 | | QPA00801205 | POLY BAG | 8cm x 12cm | |
| P 4 | | FSYH4036-068 | SHEET | | |
| P 5 | | QPA01003003 | POLY BAG | 10cm x 30cm | |
| P 6 | | QPC03004315P | POLY BAG | 30cm x 43cm | |
| P 7 | | GE10086-004A | CUSHION | (x2) | |

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SCHEMATIC DIAGRAMS

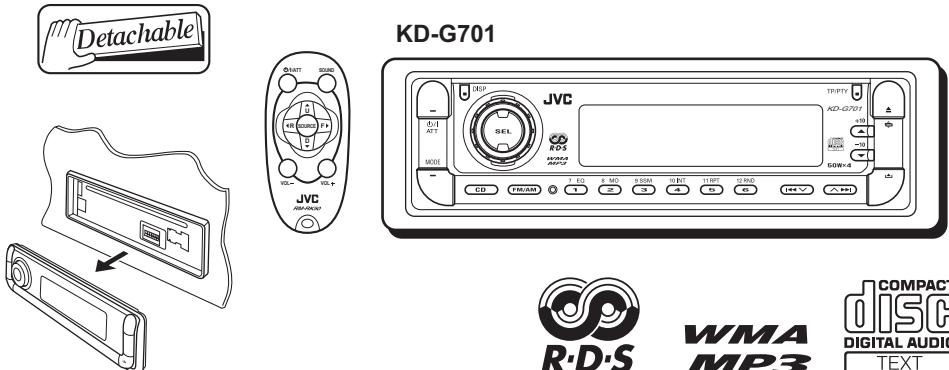
CD RECEIVER

KD-G701

CD-ROM No.SML200503

Area suffix

E ----- Southern Europe
EX ----- Northern Europe



Contents

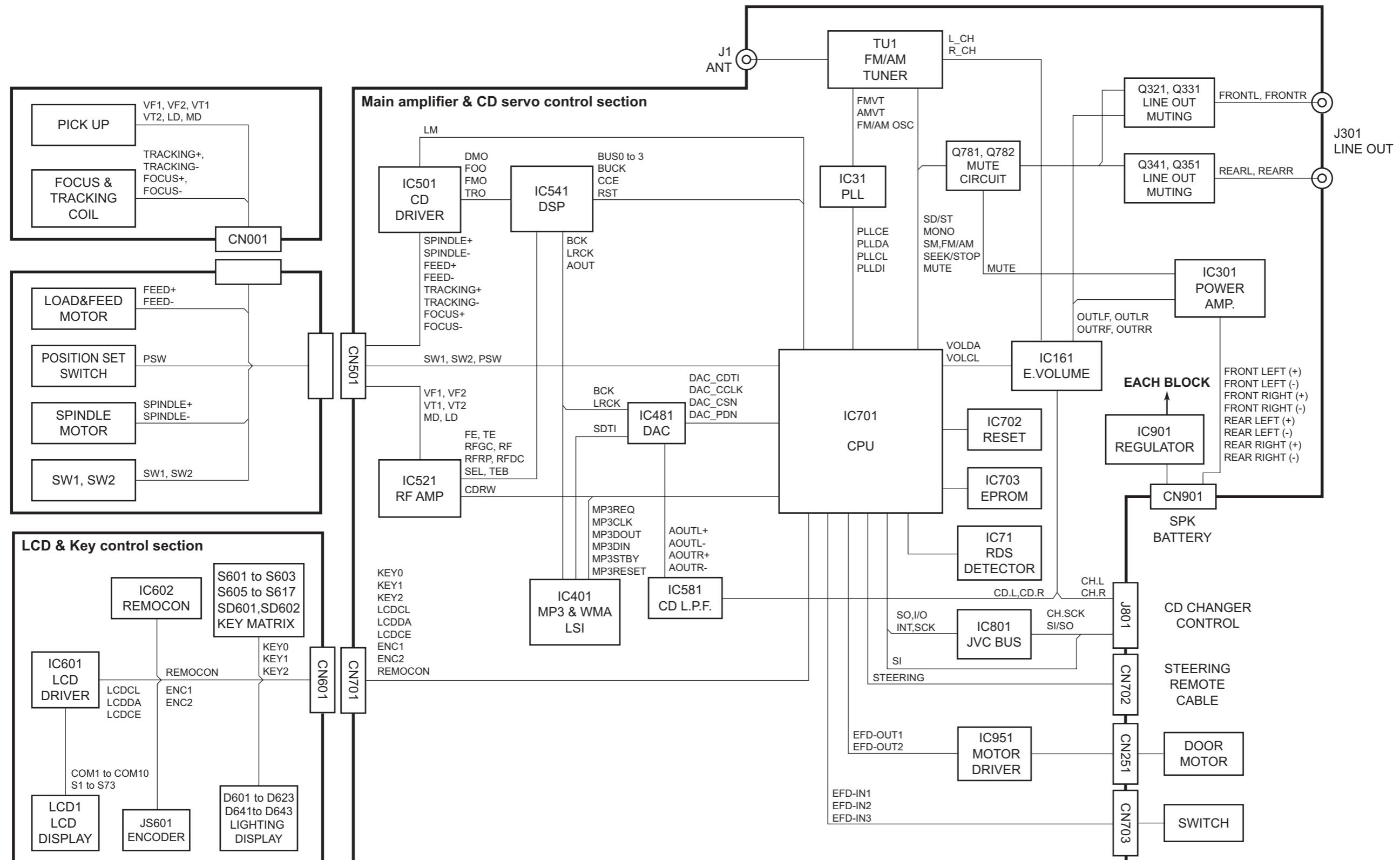
| | |
|--|-----------|
| Block diagram | 2-1 |
| Standard schematic diagrams (For E,EX version) | 2-2 |
| Standard schematic diagrams (For E2,EX2 version) | 2-5 |
| Printed circuit boards | 2-8 to 11 |

Safety precaution

 **CAUTION** Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

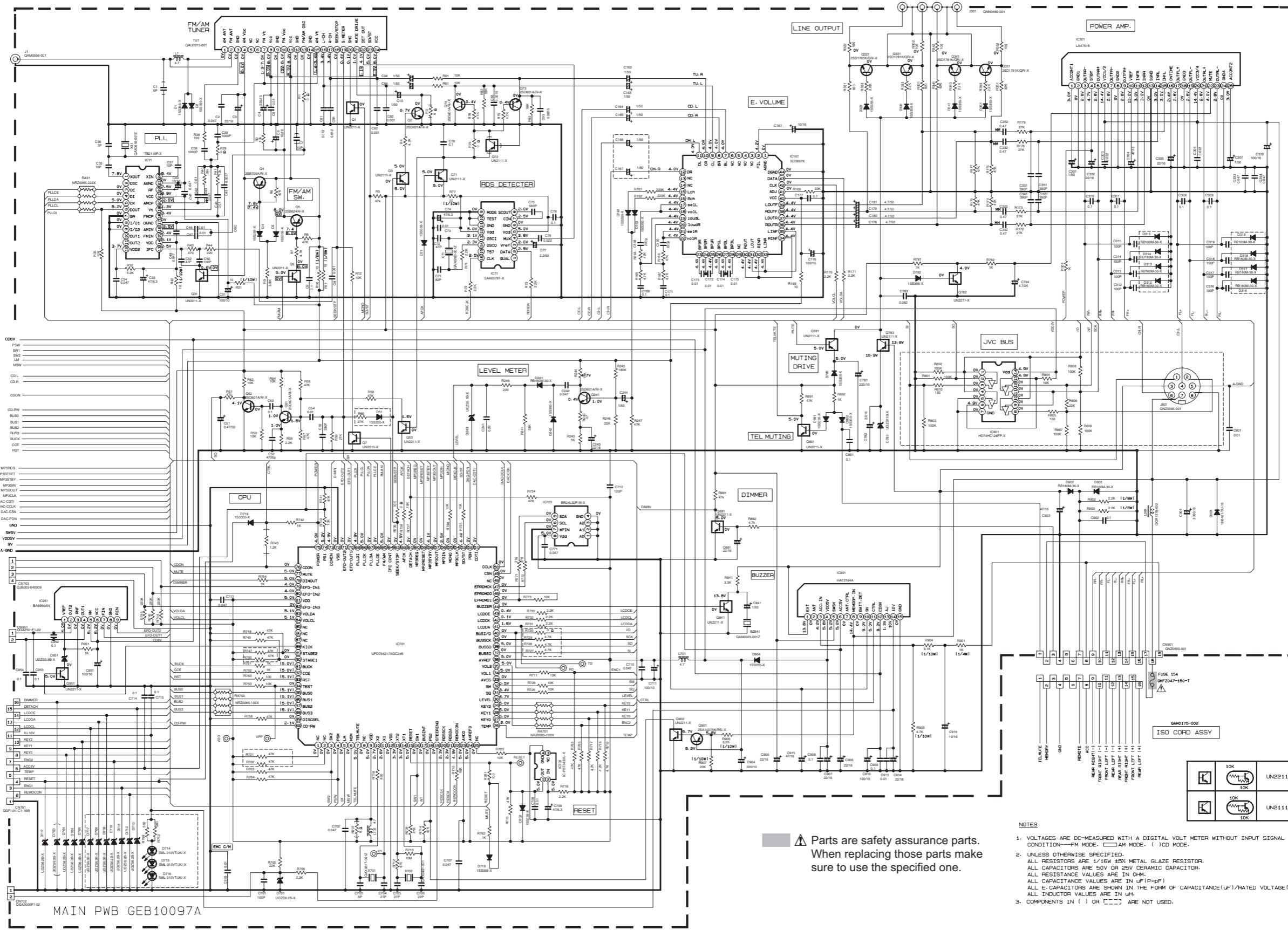
 **CAUTION** Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

Block diagram

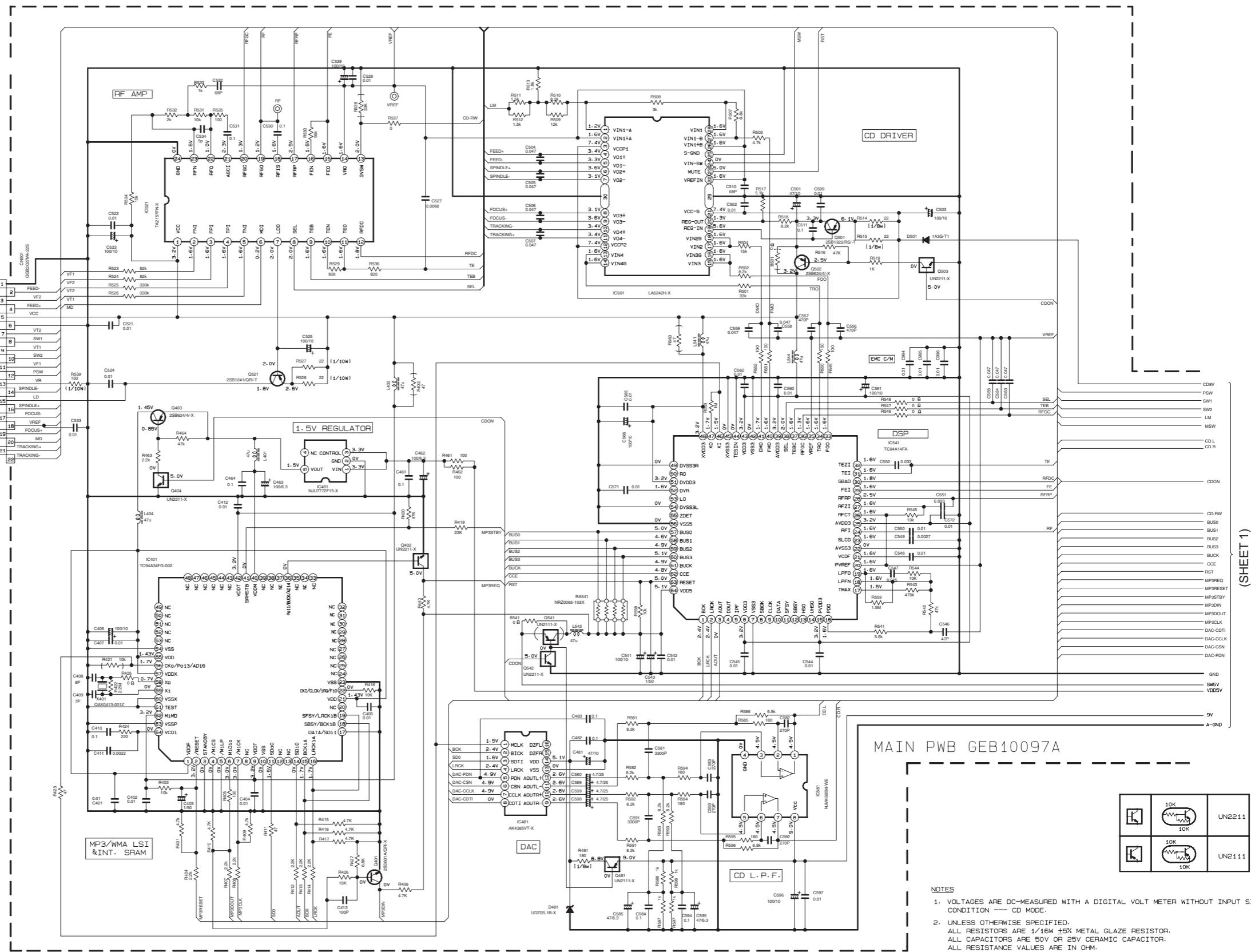
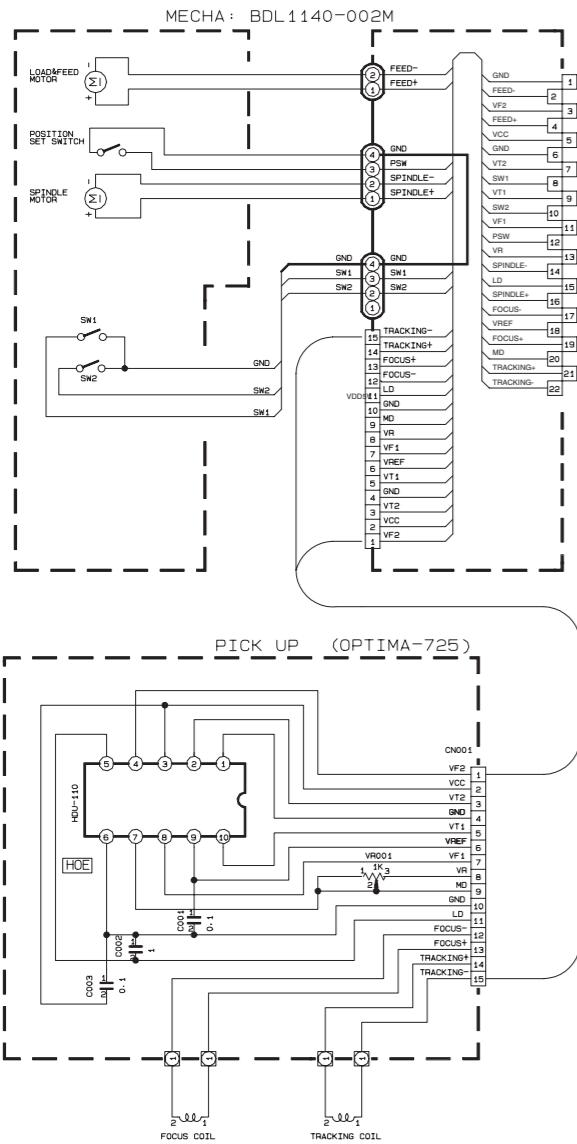


Standard schematic diagrams (For E, EX version)

■ Main amplifier section



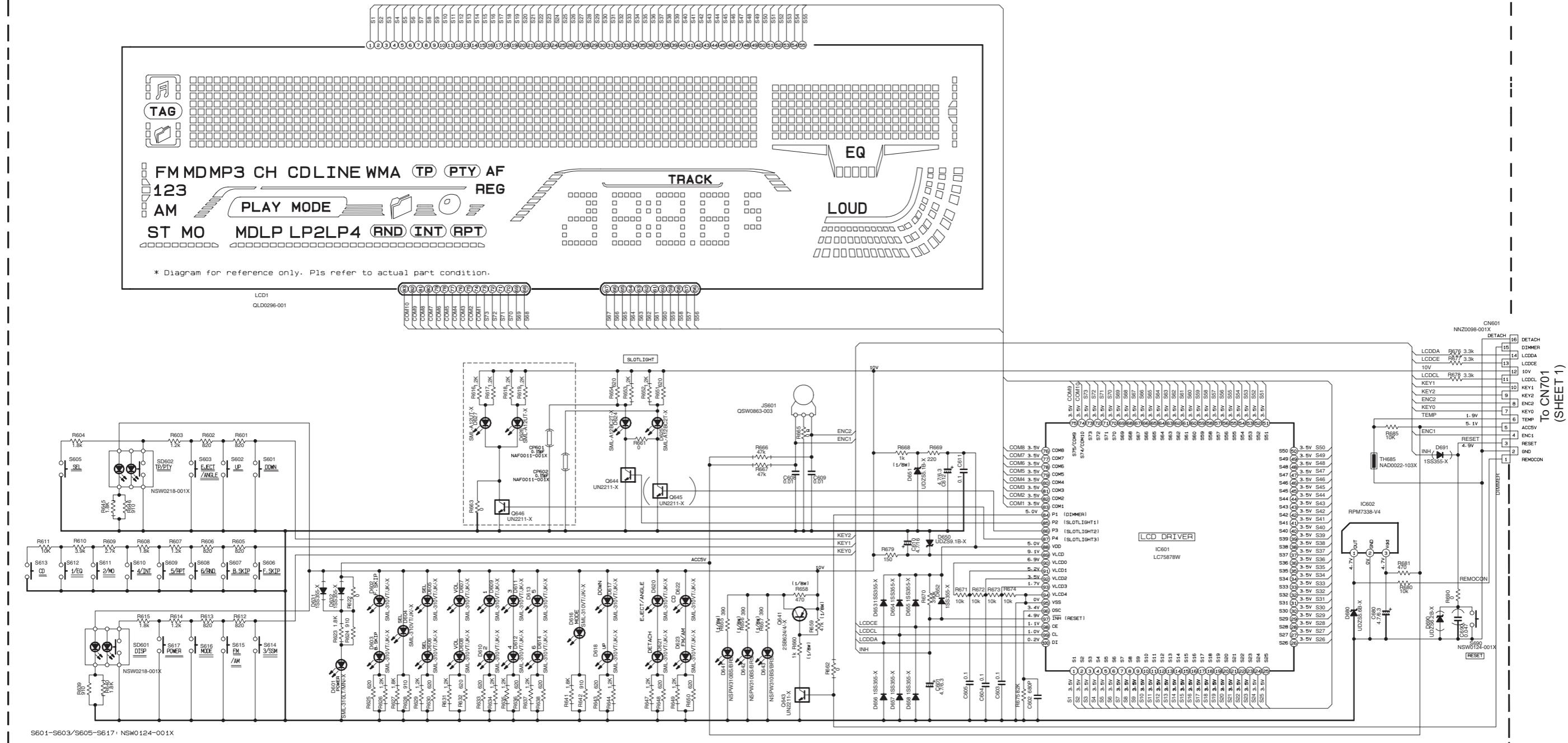
■ CD servo control section



(SHEET 1)

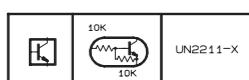
SHEET 2

LCD & control section



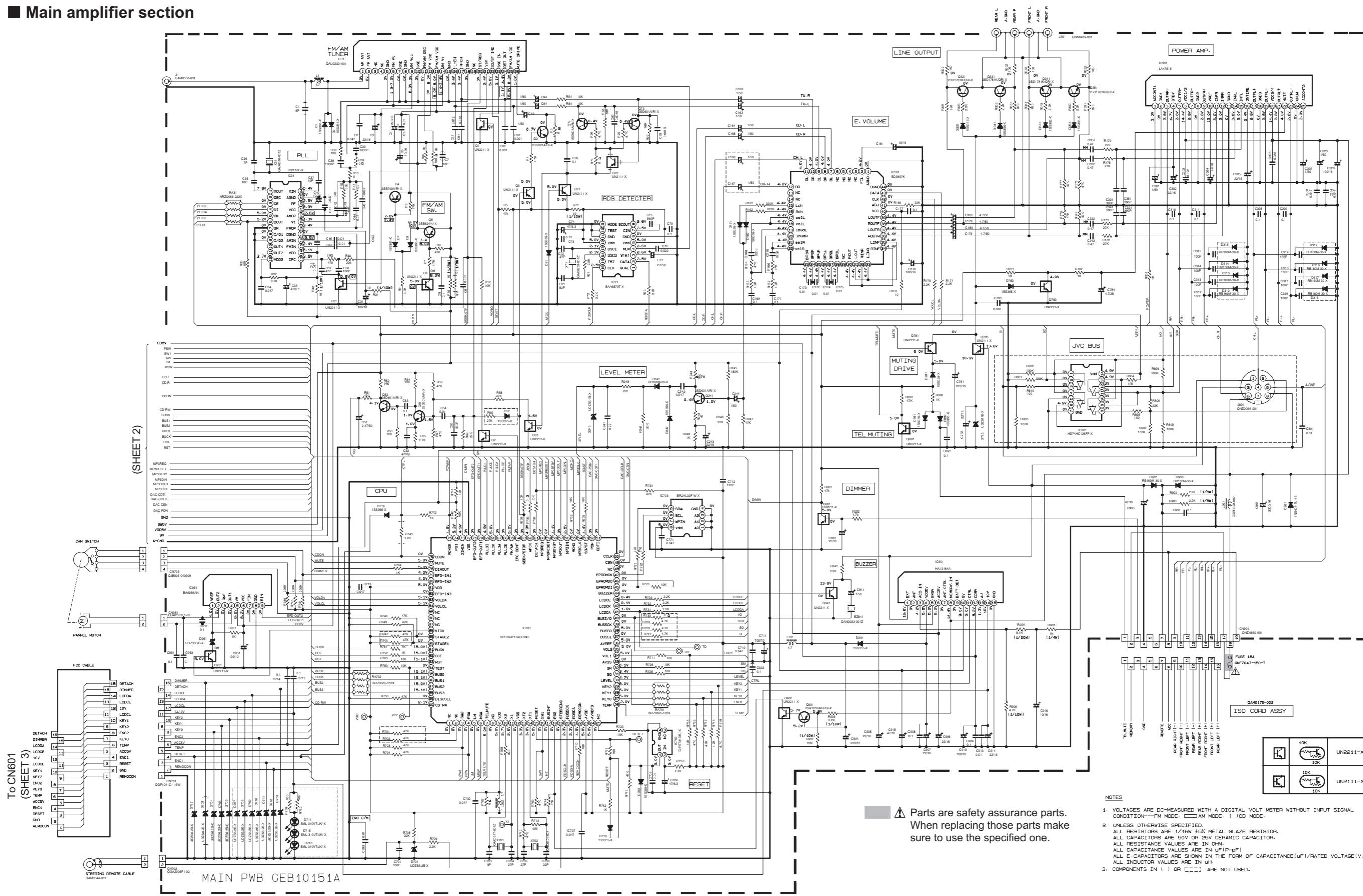
#NOTE
 SML-310LT/MN/-X ---- RED LED (POWER)
 SML-310V/JK/-X ---- RED LED (OTHERS)
 NSPW310BS/BRS/ ----- WHITE LED
 R616-R619: 1/10W ±5% METAL GLAZE RESISTORS
 R623-R654: 1/10W ±5% METAL GLAZE RESISTORS

- NOTES**
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION---CD MODE.
 - UNLESS OTHERWISE SPECIFIED:
 ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
 ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
 ALL RESISTANCE VALUES ARE IN OHM.
 ALL CAPACITANCE VALUES ARE IN uF(pF).
 ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V).
 - COMPONENTS IN () OR [] ARE NOT USED.

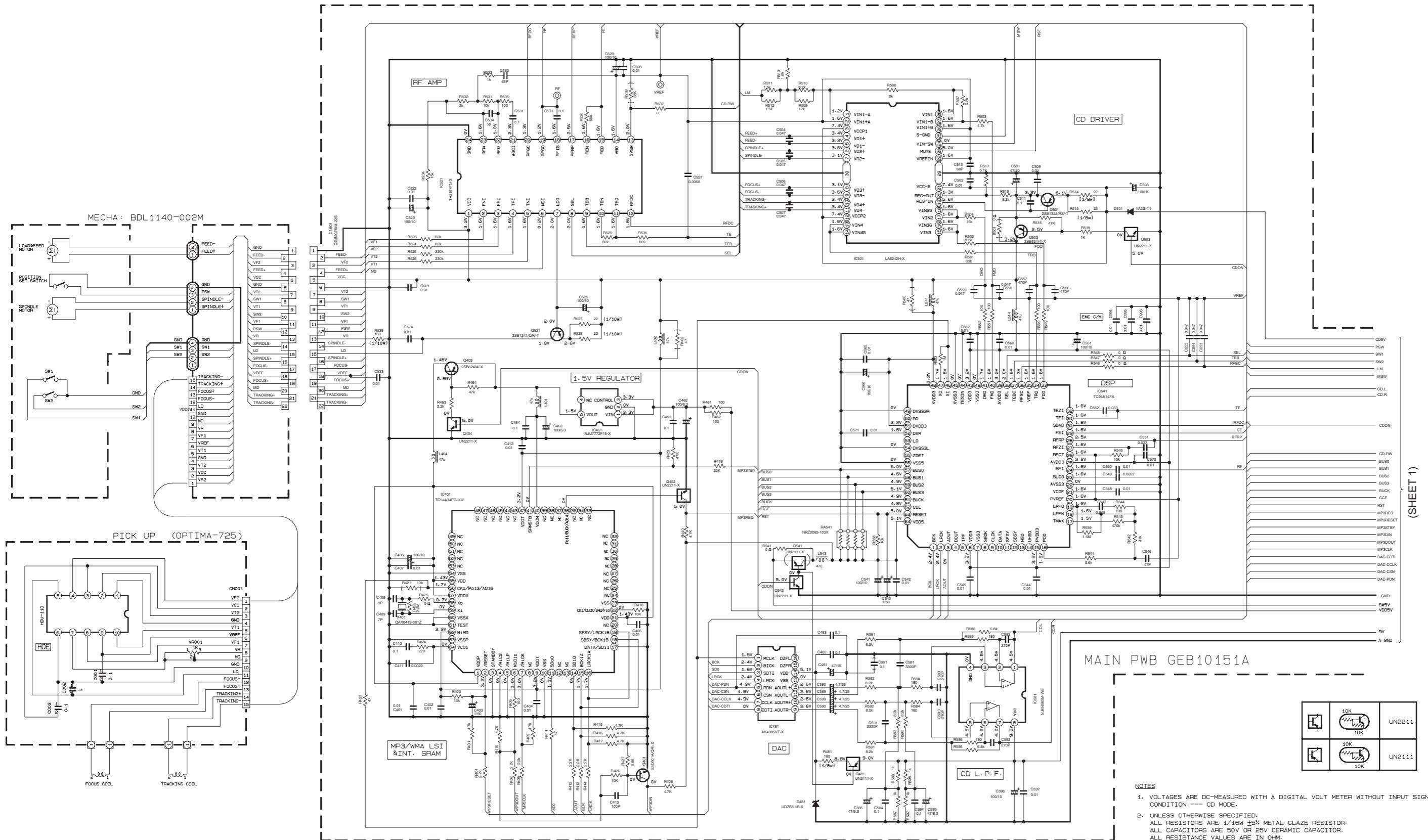


Standard schematic diagrams (For E2, EX2 version)

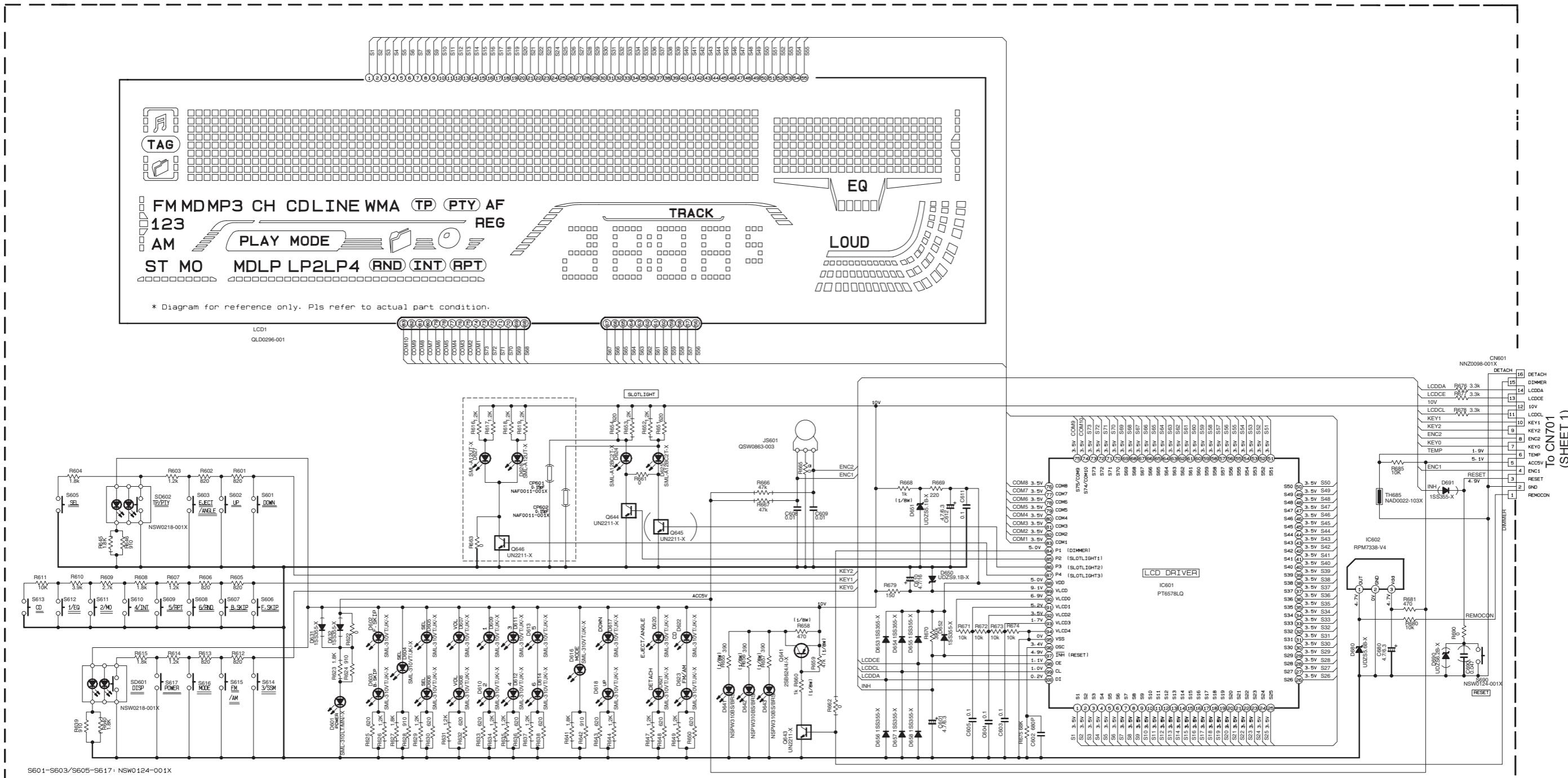
■ Main amplifier section



CD servo control section



LCD & control section

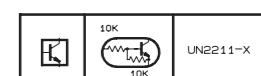


SW PWB GEB10102A (AgTh/Double reflow)

#NOTE

SML-310LT/MN/-X --- RED LED (POWER)
SML-310VT/JK/-X --- RED LED (OTHERS)
NSPW310BS/BRS/ --- WHITE LED
R616-R619: 1/10W ±5% METAL GLAZE RESISTORS
R623-R654: 1/10W ±5% METAL GLAZE RESISTORS

- NOTES**
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION---CD MODE.
 2. UNLESS OTHERWISE SPECIFIED:
ALL RESISTORS ARE 1/16W 15% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM.
ALL CAPACITANCE VALUES ARE IN uF(p=PF).
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V).
 3. COMPONENTS IN () OR [] ARE NOT USED.

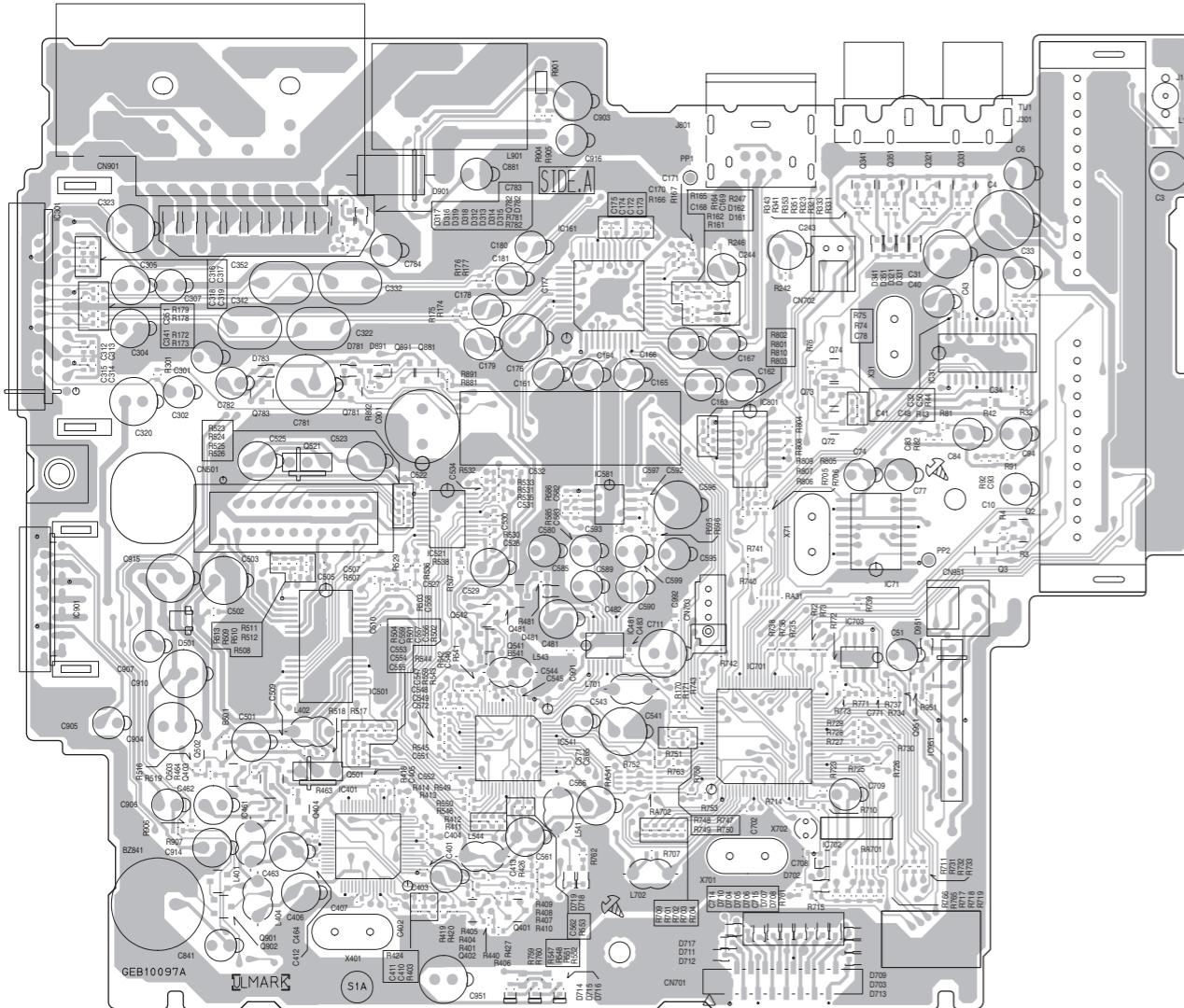


TO CN701
(SHEET 1)

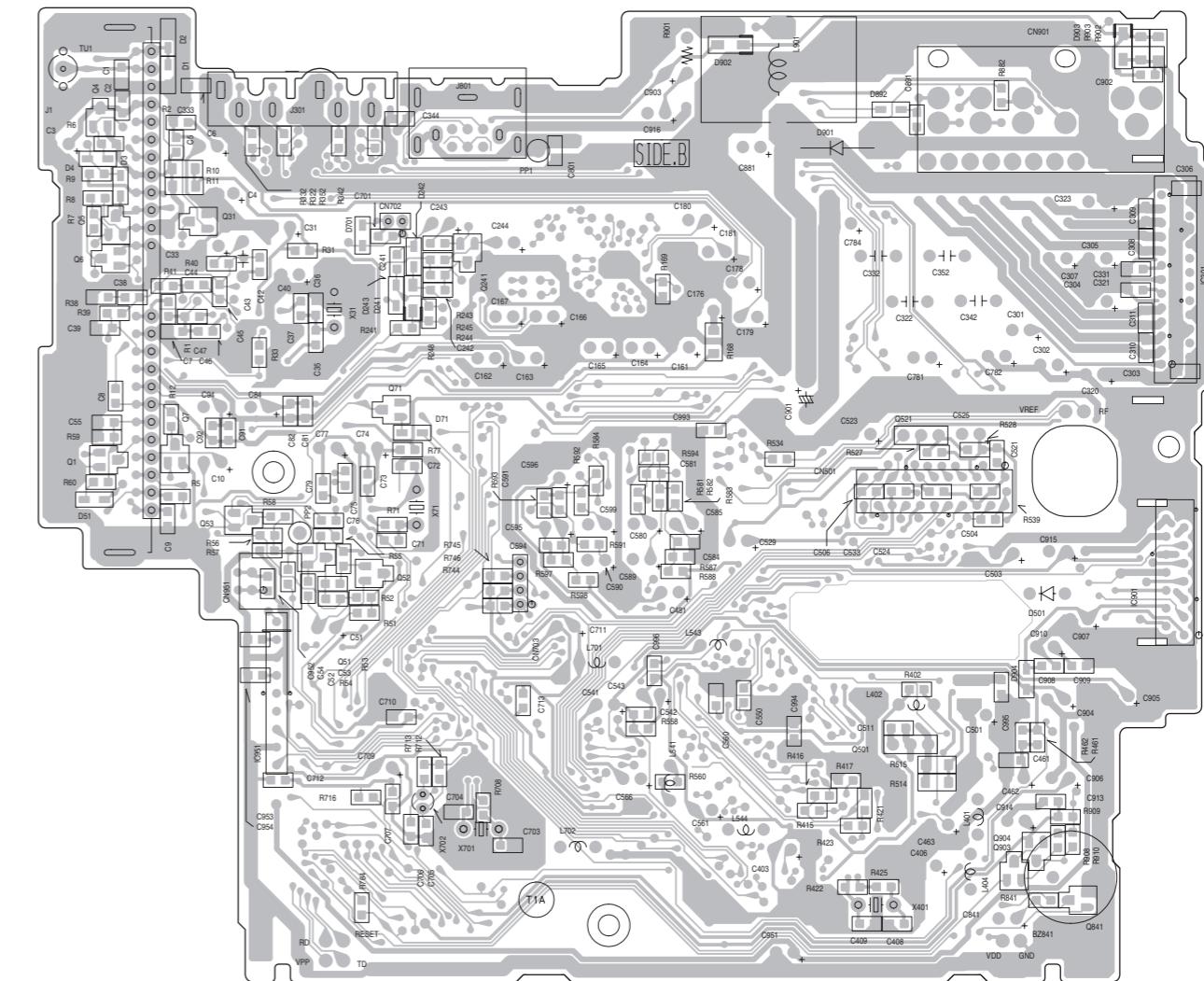
Printed circuit boards

■ Main board (For E, EX version)

Forward side

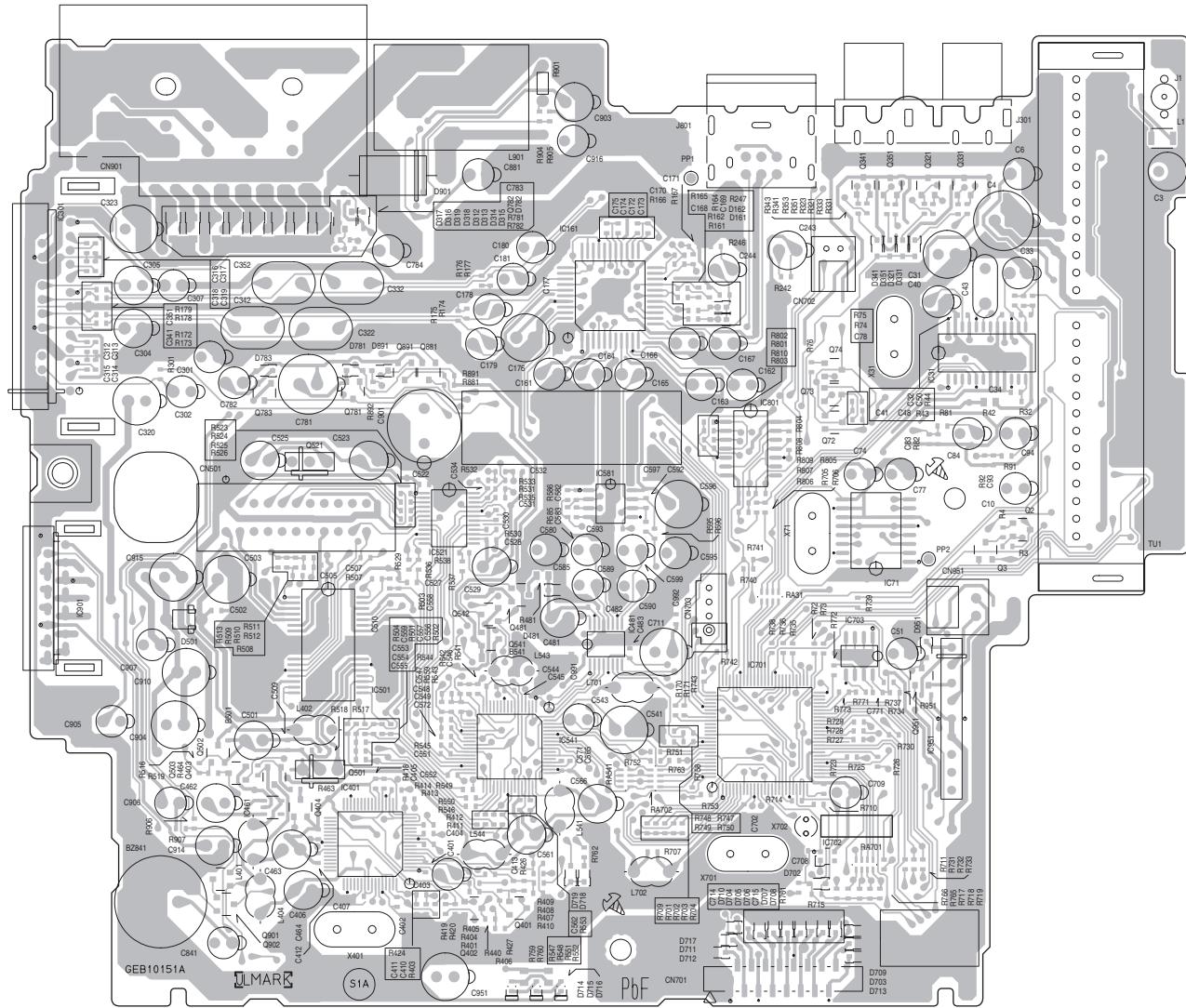


Reverse side



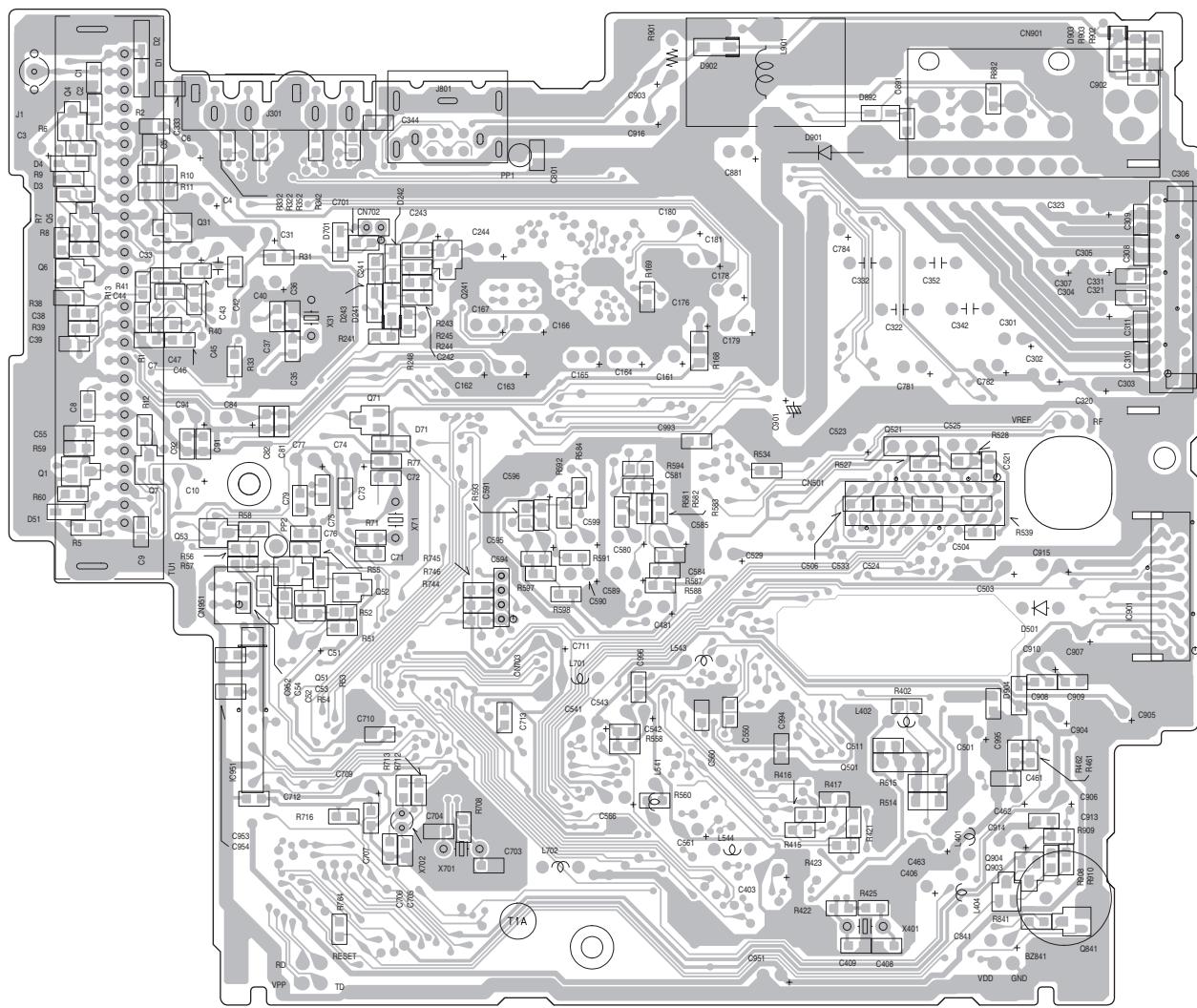
■ Main board (For E2, EX2 version)

Forward side



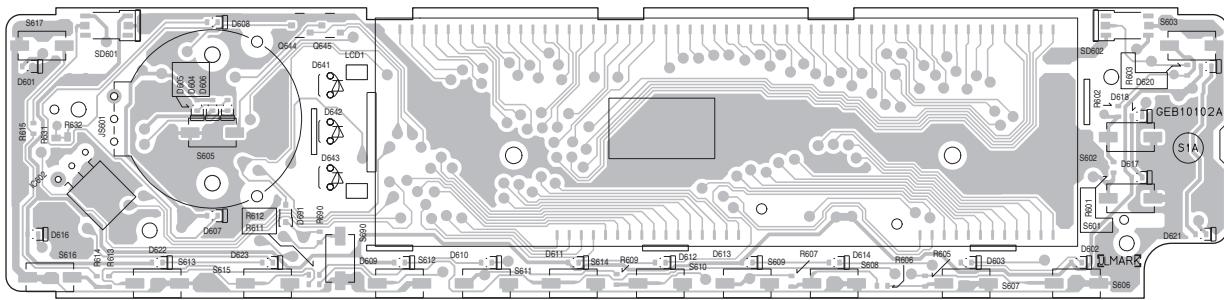
■ Main board

Reverse side

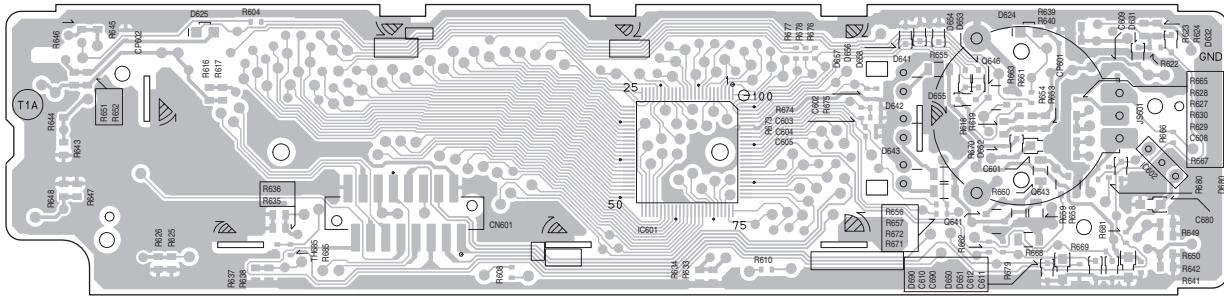


■ Switch board (Common)

Forward side



Reverse side



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Victor Company of Japan, Limited

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