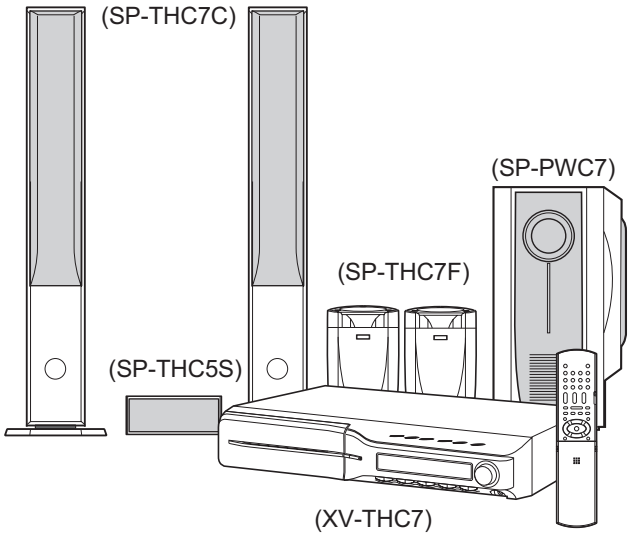
JVC

SERVICE MANUAL

DVD DIGITAL THEATER SYSTEM

TH-C7

Area suffix
J ---------- U.S.A.



Digital Direct Progressive Scan
AV COMPU LINK

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

TABLE OF CONTENTS

1 PRECAUTION 1-4
2 SPECIFIC SERVICE INSTRUCTIONS 1-7
3 DISASSEMBLY 1-8
4 ADJUSTMENT 1-30
5 TROUBLESHOOTING 1-35

No.MB415
2005/7

SPECIFICATION

Center unit (XV-THC7)

Audio section	Total Harmonic Distortion *1		0.02%
	Digital input *2	DIGITAL IN (DBS) (OPTICAL)	- 21 dBm to - 15 dBm (660 nm ±30 nm)
Video section	Video System		NTSC
	Horizontal Resolution		500 lines
	Signal-to-Noise Ratio		64 dB
	Video output level	Composite	1.0 V(p-p)/75 Ω
		S-video-Y	1.0 V(p-p)/75 Ω
		S-video-C	0.286 V(p-p)/75 Ω
		Component-Y	1.0 V(p-p)/75 Ω
		Component-PB/PR	0.7 V(p-p)/75 Ω
	Video input sensitivity/ Impedance (VCR IN)	Composite	1.0 V(p-p)/75 Ω
		S-video-Y	1.0 V(p-p)/75 Ω
		S-video-C	0.286 V(p-p)/75 Ω
Tuner section	Tuning Range	FM	87.5 MHz to 108.0 MHz
		AM	530 kHz to 1 710 kHz
General	Power Requirements		AC 120 V , 60 Hz
	Power Consumption		16 W (at operation) 1.3 W (in standby mode)
	Dimensions (W × H × D)		400 mm × 85 mm × 399 mm(15-3/4 inches × 3-3/8 inches × 15-3/4 inches)
	Mass		4.2 kg (9.3 lbs)

*1: This value is measured at System cord CONNECTOR for reference.

*2: Corresponding to Linear PCM, Dolby Digital, and DTS Digital Surround (with sampling frequency -32 kHz, 44.1 kHz, 48 kHz)

Subwoofer (SP-PWC7)

Amplifier section	Front/Center/Surround	167 W per channel, RMS at 3 Ω at 1kHz, with 10 % total harmonic distortion.
	Subwoofer	167 W, RMS at 3 Ω at 100 Hz, with 10 % total harmonic distortion.
Speaker section	Speaker unit	25 cm (9-7/8 inches) Bass-reflex
	Power Handling Capacity	170 W
	Impedance	3 Ω
	Frequency Range	25 Hz to 200 Hz
General	Power Requirements	AC 120 V , 60 Hz
	Power Consumption	160 W (at operation) 0 W (in standby mode)
	Dimensions (W × H × D)	264 mm × 481 mm × 459 mm(10-7/16 inches × 18-15/16 inches ×18-1/8 inches)
	Mass	16.5 kg (37 lbs)

Satellite Speakers (SP-XTHC7)

Front speakers (SP-THC7F)	Speaker unit	Woofer	10 cm (3-15/16 inches) × 4
		Tweeter	4 cm (1-5/8 inches) Bass-reflex, Magnetically Shielded
	Power Handling Capacity		170 W
	Impedance		3 Ω
	Frequency Range		60 Hz to 20 kHz
	Dimensions (W × H × D)		270 mm × 1 085 mm × 310 mm(10-11/16 inches × 42-3/4 inches × 12-1/4 inches)
	Mass		8.8 kg (19.4 lbs) each
Center speaker (SP-THC7C)	Speaker unit	Woofer	10 cm (3-15/16 inches) × 2
		Tweeter	4 cm (1-5/8 inches) Bass-reflex, Magnetically Shielded
	Power Handling Capacity		170 W
	Impedance		3 Ω
	Frequency Range		65 Hz to 20 kHz
	Dimensions (W × H × D)		380 mm × 141 mm × 163 mm(15 inches × 4-9/16 inches × 6-7/16 inches)
	Mass		3.4 kg (7.5 lbs)
Surround speakers (SP-THC5S)	Speaker unit		8.0 cm (3-3/16 inches) Bass-reflex
	Power Handling Capacity		170 W
	Impedance		3 Ω
	Frequency Range		80 Hz to 20 kHz
	Dimensions (W × H × D)		111.5 mm × 148 mm × 106.5 mm(4-7/16 inches × 5-7/8 inches × 4-1/4 inches)
	Mass		0.44 kg (0.97 lbs) each

Designs & specifications are subject to change without notice.

SECTION 1
PRECAUTION

1.1 Safety Precautions

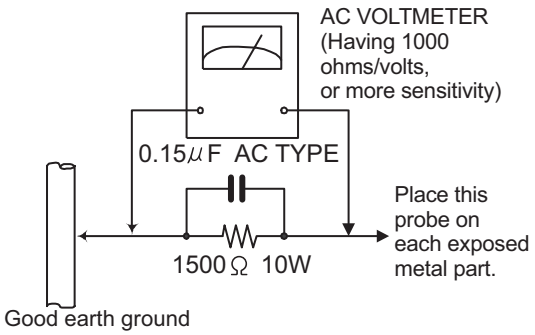
(1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.

(2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.

(4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.

(5) Leakage shock hazard testing
After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.Do not use a line isolation transformer during this check.
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000Ω per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
Measure the AC voltage across the resistor with the AC voltmeter.
Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



1.2 Warning

(1) This equipment has been designed and manufactured to meet international safety standards.
(2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
(3) Repairs must be made in accordance with the relevant safety standards.
(4) It is essential that safety critical components are replaced by approved parts.
(5) If mains voltage selector is provided, check setting for local voltage.

1.3 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.

1.4 Critical parts for safety

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▮) and ICP (●) or identified by the " ⚠ " mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer.
(This regulation dose not Except the J and C version)

1.5 Preventing static electricity

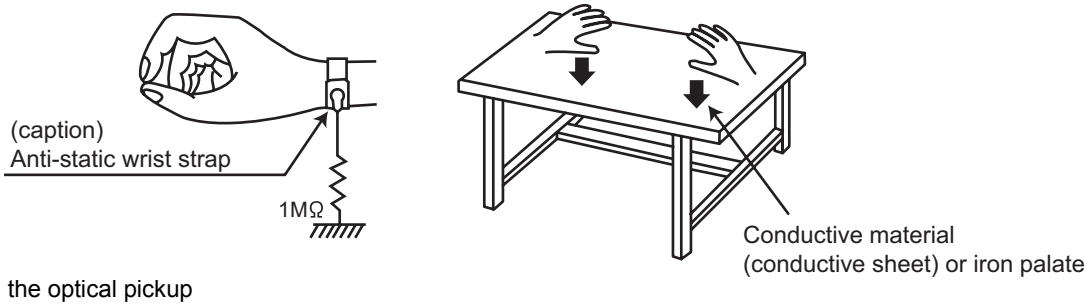
Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.5.1 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.

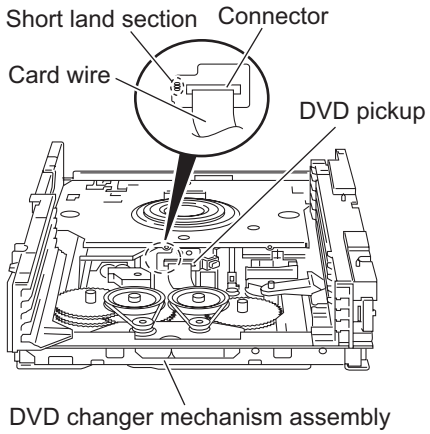
1.6 Handling the traverse unit (optical pickup)

(1) Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
(2) 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.
(3) Handle the flexible cable carefully as it may break when subjected to strong force.
(4) I t is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.7 Attention when traverse unit is decomposed

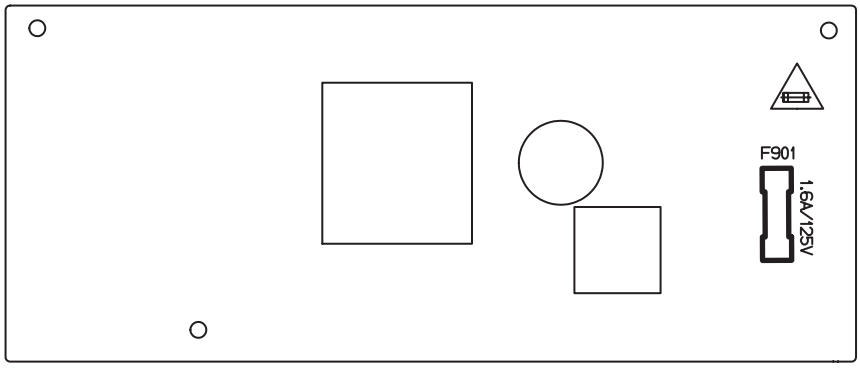
***Please refer to "Disassembly method" in the text for the pickup unit.**

- Apply solder to the short land sections before the flexible wire is disconnected from the connecto on the servo board. (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 sections after connecting the flexible wire.

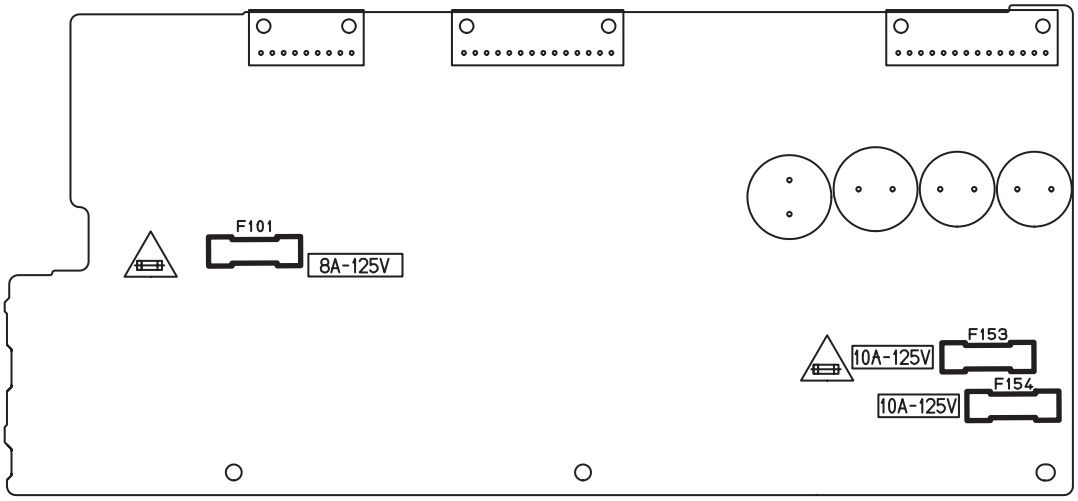


1.8 Importance administering point on the safety

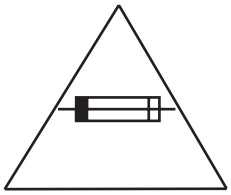
Power supply board
(Center unit)



Mother board
(Subwoofer)



For USA and Canada / pour Etats - Unis d' Amérique et Canada



Caution: For continued protection against risk of fire, replace only with same type 1.6 A/125 V for F901, 8A/125V for F101,10 A/125 V for F153 and F154. This symbol specifies the type of fast operating fuse.

Precáution: Pour la protection continue contre les risques d'incendie, remplacer uniquement par le même type: fusible 1.6 A/125 V pour le F901, 8A/125V pour le F101,10 A/125 V pour le F153 et F154. Ce symbole spécifie le type de fusible a àction rapide.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

SECTION 3
DISASSEMBLY

3.1 Main body section

3.1.1 Removing the metal cover (See Figs. 1 to 4)

(1) From the both sides of the main body, remove the four screws **A** attaching the metal cover. (See Figs. 1 and 2.)
(2) From the back side of the main body, remove the three screws **B** attaching the metal cover. (See Fig. 3.)
(3) Lift the rear section of the metal cover in the direction of the arrow while extending the lower sections of the metal cover, release the seven claws **a** using a longer screwdriver from the inside as required. (See Fig. 4.)

Note:

Do not damage any parts and boards inside the main body when releasing the claws **a** using a longer screwdriver.

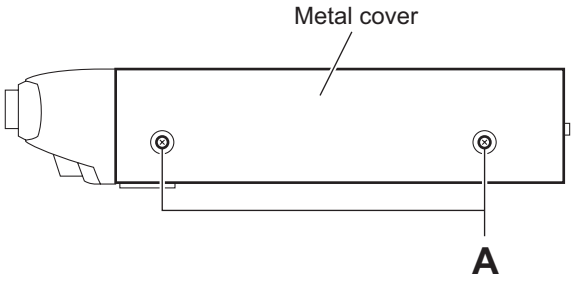


Fig.1

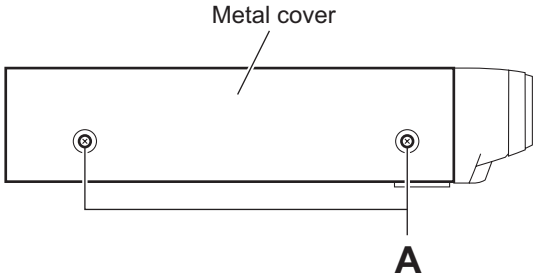


Fig.2

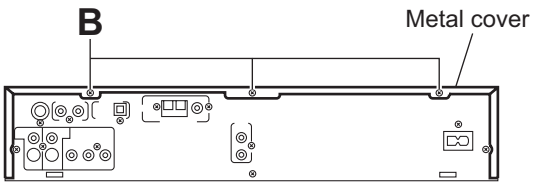


Fig.3

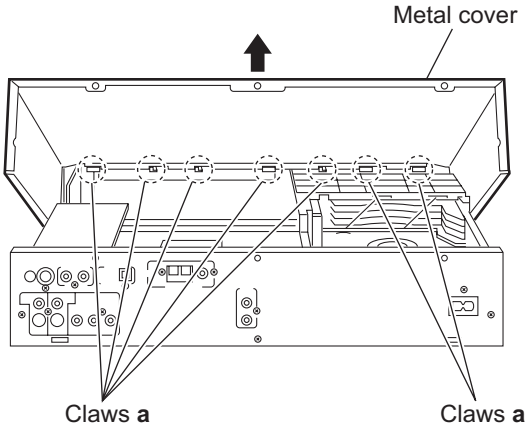


Fig.4

3.1.2 Removing the front panel assembly (See Figs. 5 and 6)

- Prior to performing the following procedures, remove the metal cover.
  (1) From the top side of the main body, disconnect the parallel wires from the connectors (CN456, CN457) on the main board. (See Fig. 5.)
  (2) Disconnect the card wires from the connectors (CN450, CN460) on the main board. (See Fig. 5.)
  (3) Remove the screw **C** attaching the earth wires to the main board. (See Fig. 5.)

  Reference:

  When attaching the screw **C**, attach the earth wires with it. (See Fig. 5.)

  (4) From the bottom side of the main body, remove the three screws **D** attaching the front panel assembly. (See Fig. 6.)
  (5) From the both and bottom sides of the main body, remove the front panel assembly in the direction of the arrow while releasing the joints **b** and **c**. (See Fig. 6.)

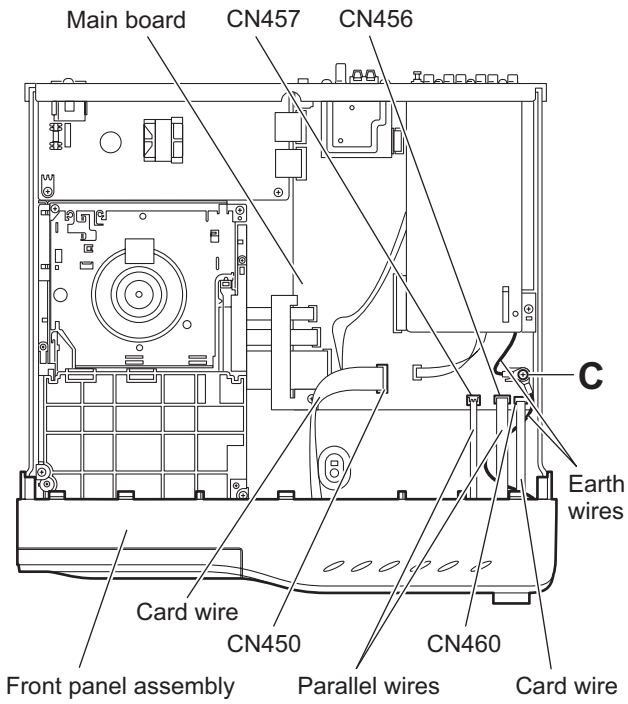


Fig.5

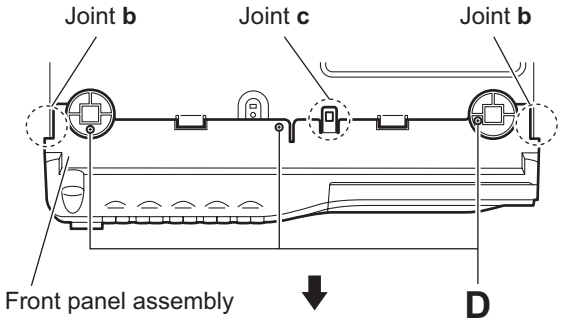


Fig.6

3.1.3 Removing the DVD changer mechanism assembly (See Fig. 7)

- Prior to performing the following procedures, remove metal cover and front panel assembly.
  (1) From the top side of the main body, remove the screw **E** attaching the wire protection board to the main board.
  (2) Take out the wire protection board, and disconnect the card wires from the connectors (CN401 to CN403) on the main board.

  Reference:
  When attaching the wire protection board, attach the wire protection board after connecting the card wires to the connectors (CN401 to CN403) on the main board.
  (3) Remove the four screws **F** attaching the DVD changer mechanism assembly on the bottom chassis.
  (4) Take out the DVD changer mechanism assembly in the upward direction.

Reference:
When attaching the DVD changer mechanism assembly, align the holes of the DVD changer mechanism assembly to the projections **d** on the bottom chassis.

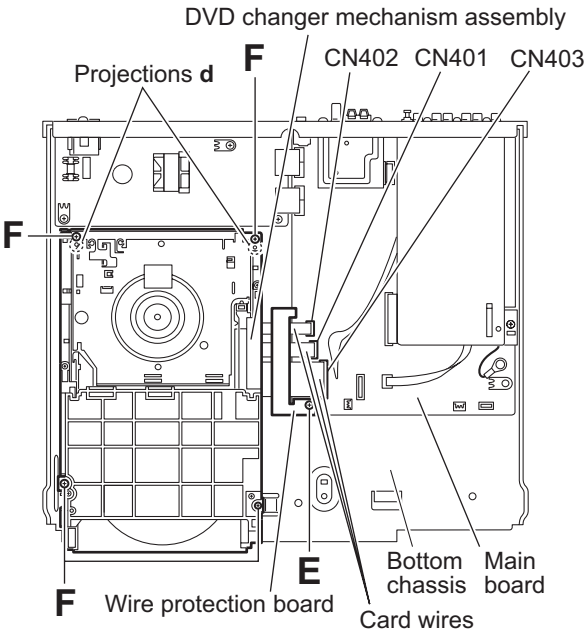


Fig.7

3.1.4 Removing the rear panel (See Fig. 8)

- Prior to performing the following procedures, remove the metal cover.
  (1) From the back side of the main body, remove the screw **G** and eleven screws **H** attaching the rear panel.

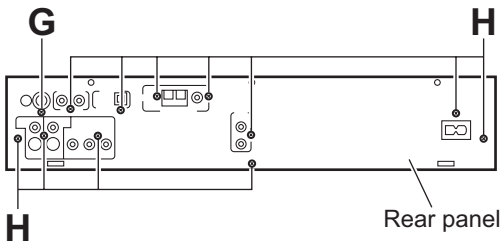


Fig.8

3.1.5 Removing the audio & digital input board (See Figs. 9 and 10)

- Prior to performing the following procedures, remove the metal cover.
  (1) From the top side of the main body, disconnect the card wires from the connectors (CN411, CN412) on the main board. (See Fig. 9.)
  (2) Remove the screw **J** attaching the earth wires to the main board. (See Fig. 9.)

  Reference:
  When attaching the screw **J**, attach the earth wires with it. (See Fig. 9.)
  (3) From the back side of the main body, remove the screw **K** and two screws **L** attaching the audio & digital input board to the rear panel. (See Fig. 10.)
  (4) Move the audio & digital input board in the direction of the arrow, and release the claw **e** of bracket board. (See Fig. 9.)
  (5) Take out the audio & digital input board from the main body.

3.1.6 Removing the tuner (See Figs. 9 and 10)

- Prior to performing the following procedures, remove the metal cover.
  (1) From the top side of the main body, disconnect the card wire from the connector CN1 on the tuner. (See Fig. 9.)
  (2) From the back side of the main body, remove the two screws **M** attaching the tuner to the rear panel. (See Fig. 10.)
  (3) Take out the tuner from the main body.

3.1.7 Removing the power supply board (See Figs. 9 and 10)

- Prior to performing the following procedures, remove the metal cover.
  (1) From the top side of the main body, disconnect the parallel wires from the connectors (CN404 to CN407) on the main board. (See Fig. 9.)
  (2) Remove the three screws **N** attaching the power supply board. (See Fig. 9.)
  (3) From the back side of the main body, remove the screw **P** attaching the power supply board to the rear panel. (See Fig. 10.)
  (4) Take out the power supply board from the main body.

Reference:
Remove the rear panel as required. (See "3.1.4 Removing the rear panel")

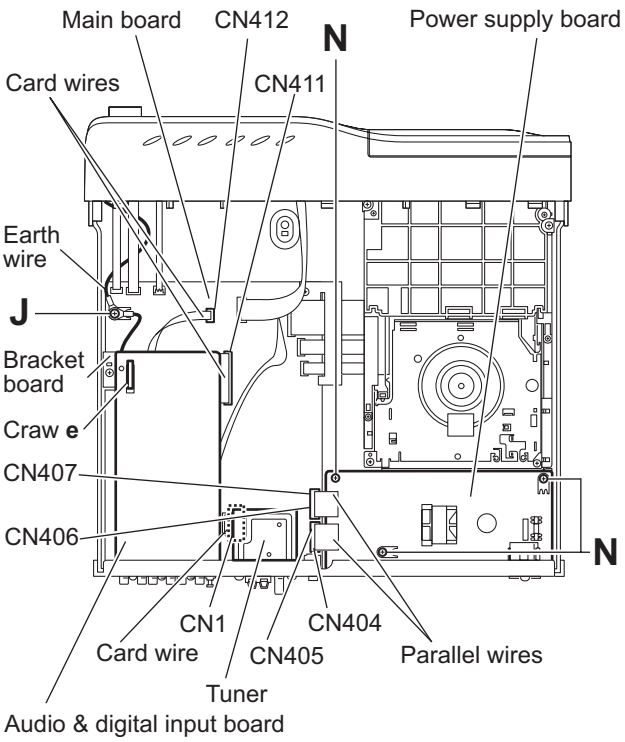


Fig.9

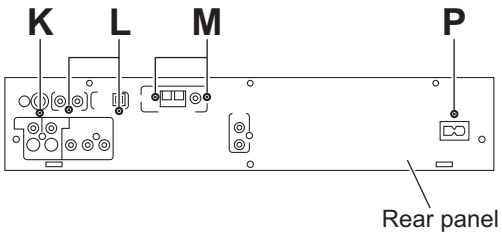


Fig.10

3.1.8 Removing the main board (See Fig. 11)

- Prior to performing the following procedures, remove the metal cover, rear panel, audio & digital input board and tuner.
  (1) From the top side of the main body, remove the screw **Q** attaching the bracket board and take the bracket board.
  (2) Remove the screw **R** and screw **R'** attaching the main board on the bottom chassis.

  Reference:
  When attaching the screw **R'**, attach the wire protection board with it.

  (3) Take out the wire protection board, and disconnect the card wires from the connectors (CN401 to CN403) on the main board.

  Reference:
  When attaching the wire protection board, attach the wire protection board after connecting the card wires to the connectors (CN401 to CN403) on the main board.

  (4) Disconnect the card wires from the connectors (CN450 and CN460) on the main board.
  (5) Disconnect the parallel wires from the connectors (CN404 to CN407, CN456 and CN457) on the main board.
  (6) Take out the main board from the main body.

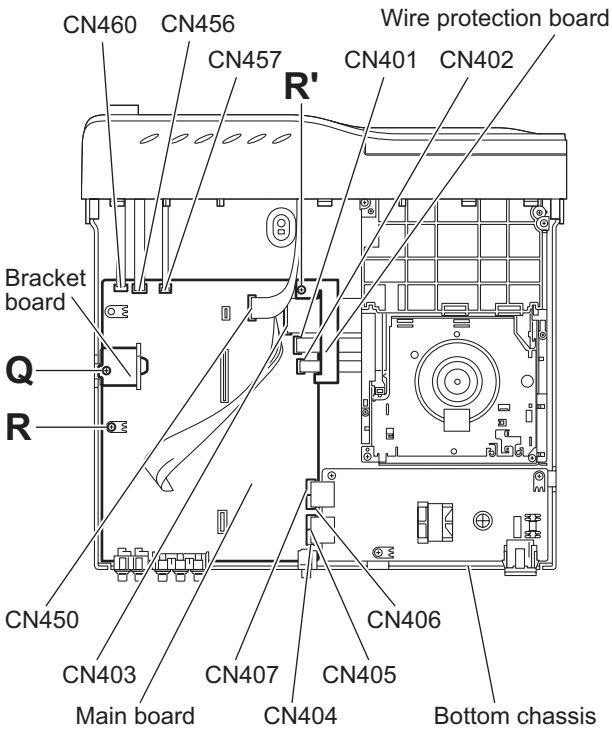


Fig.11

3.2 Front panel assembly section

- Prior to performing the following procedures, remove the front panel assembly from the main body. (See "Removing the front panel assembly")

3.2.1 Removing the phone jack board (See Fig. 1)

(1) From the inside of the front panel assembly, remove the screw **A** attaching the phone jack board.
(2) Take out the phone jack board from the front panel assembly.

3.2.2 Removing the bracket board (See Fig. 1)

(1) From the inside of the front panel assembly, remove the two screws **B** attaching the bracket board.

Reference:

When attaching the connect board, align the projections of the bracket board to the slots **a** and b of the front panel assembly.

(2) Take out the bracket board from the front panel assembly.

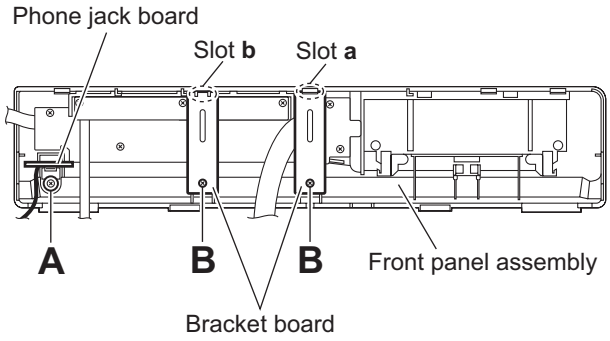


Fig.1

3.2.3 Removing the operation board (See Fig. 2)

- Prior to performing the following procedures, remove the bracket board.

(1) From the inside of the front panel assembly, remove the three screws **C** attaching the operation board.

Reference:

When attaching the operation board, align the projections **c** of the front panel assembly to the holes of the operation board.

(2) Take out the operation board.

3.2.4 Removing the power key board (See Fig. 2)

- Prior to performing the following procedures, remove the bracket board.

(1) From the inside of the front panel assembly, remove the two screws **D** attaching the power key board.
(2) Take out the power key board and remove the solder from the soldered point **d** to remove the parallel wire.

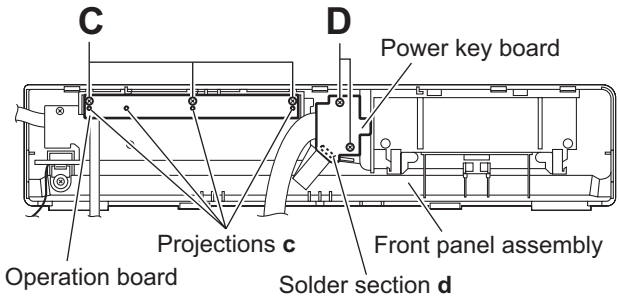


Fig.2

3.2.5 Removing the front board (See Figs. 3 and 4)

- Prior to performing the following procedures, remove the phone jack board, bracket board and operation board.
  (1) From the front side of the front panel assembly, pull out the volume knob in the direction of the arrow. (See Fig. 3.)
  (2) From the inside of the front panel assembly, remove the six screws **E** attaching the front board. (See Fig. 4.)
  (3) Take out the front board and remove the solder from the soldered point **e** to remove the parallel wire. (See Fig. 4.)

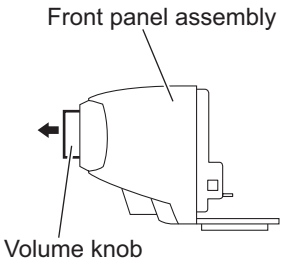


Fig.3

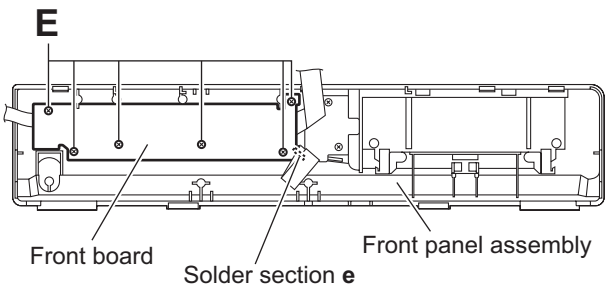


Fig.4

3.3 DVD changer mechanism assembly section

Remove the DVD changer mechanism assembly from the main body. (See "Removing the DVD changer mechanism assembly".)

3.3.1 Removing the tray assemblies (See Figs.1 to 5)

(1) From the top side of the main body, remove the two screws **A** from the top cover and release the two joints **a** on the both sides of the DVD changer mechanism assembly. (See Figs.1 and 2.)
(2) Remove the two rods from the top cover and remove the top cover from the lifter assembly. (See Figs.1 and 2.)
(3) Remove the open det. lever on the left side of the DVD changer mechanism assembly. (See Fig.3.)
(4) From the right side of the DVD changer mechanism assembly, draw out the tray assemblies toward the front while pushing the part **b** of the side (R) assembly. (See Figs.4 and 5.)

Note:
The tray can be locked if all tray assemblies are attached.

(5) From the topside of the DVD changer mechanism assembly, move the stopper tabs **c** in the direction of the arrow and release them. Pull out the tray assemblies from the DVD changer mechanism assembly. (See Fig. 5.)

Note:
Remove the tray assembly from top tray 5 in order.

Reference:
When reattaching the tray assembly, or when removing the disc remaining inside, refer to another section "3.3.15 Taking out the disc in the play mode".

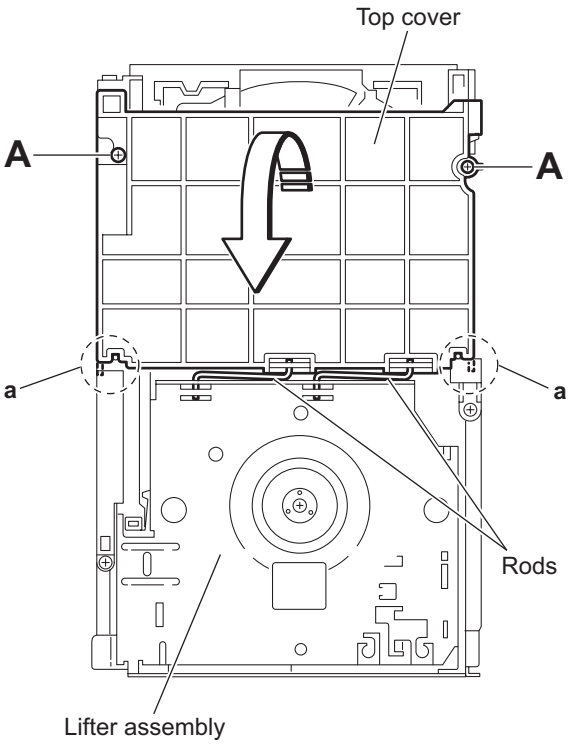


Fig.1

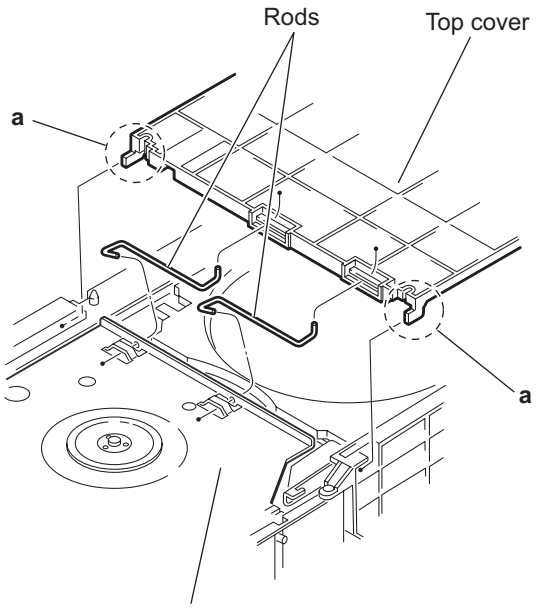


Fig.2

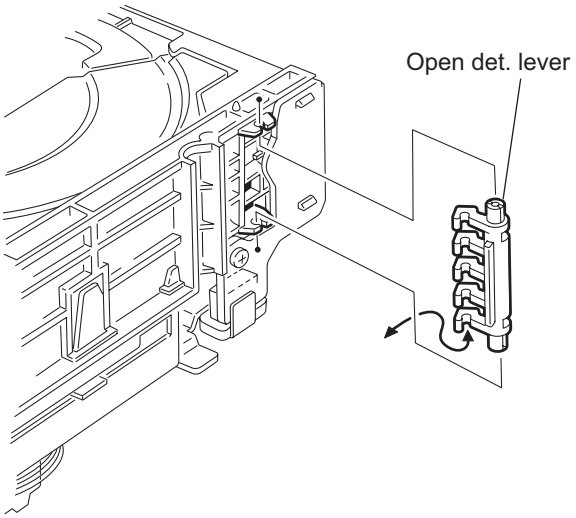


Fig.3

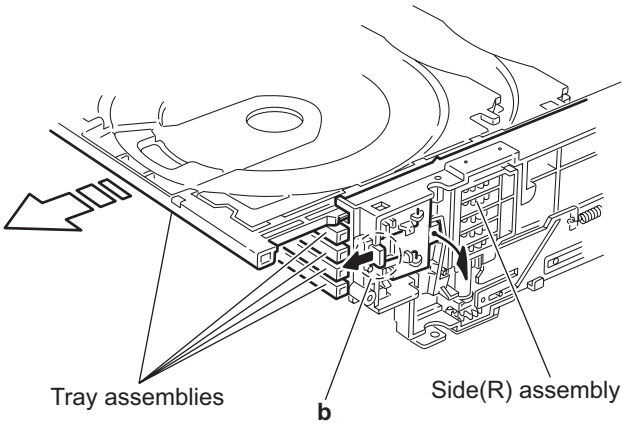


Fig.4

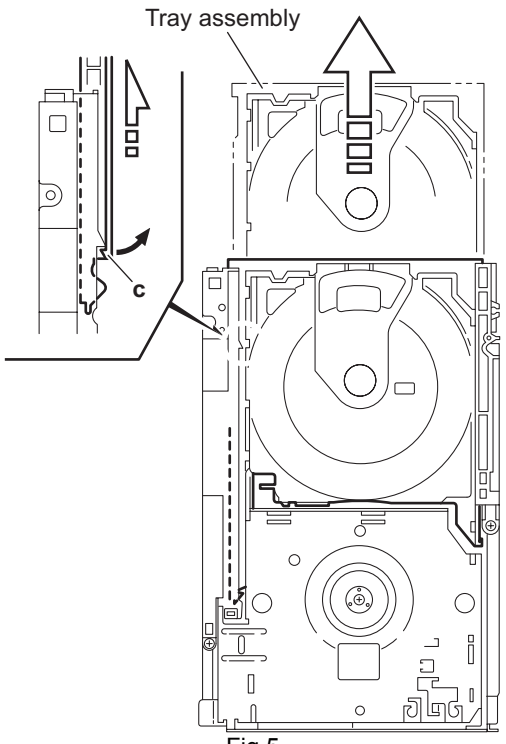


Fig.5

3.3.2 Removing the DVD servo board (See Figs.6 to 8)

Caution:

Solder the short land sections **d** on the DVD pickup before disconnecting the card wire extending from the DVD pickup. If you do not follow this instruction, the DVD pickup may be damaged.

(1) From the topside of the DVD changer mechanism assembly, solder the short land sections **d** on the DVD pick up. (See Fig.6.)

(2) From the bottom side of the DVD changer mechanism assembly, disconnect the card wire from the connectors (CN201, CN451) on the DVD servo board. (See Fig.7.)

Reference:

When connecting the card wire to the connector CN451, pass it through the sections **e** on the DVD traverse mechanism assembly. (See Fig.7.)

(3) Disconnect the wires from the connectors (CN452, CN453) on the DVD servo board. (See Fig.7.)

(4) Remove the two screws **B** attaching the DVD servo board. (See Fig.7.)

(5) From the reverse side of the DVD servo board, release the lock of the connector CN101 in the direction of the arrow and disconnect the card wire. (See Fig.8.)

Caution:

Unsolder the solders from the short land sections **d** after reassembling. (See Fig.6.)

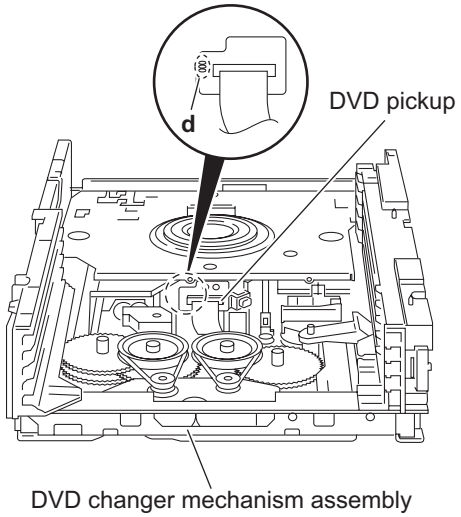


Fig.6

3.3.3 Removing the switch board (See Fig.7)

(1) From the bottom side of the DVD changer mechanism assembly, remove the screw **C** attaching the switch board on the DVD changer mechanism assembly.

(2) Disconnect the wires from the connectors (CN452, CN453) on the DVD servo board.

(3) Release the wires from the section **f** and remove the switch board.

(4) Release the wires from the sections **g** and remove the switch board.

Reference:

When reassembling, pass the wires through the sections (**f**, **g**) as before.

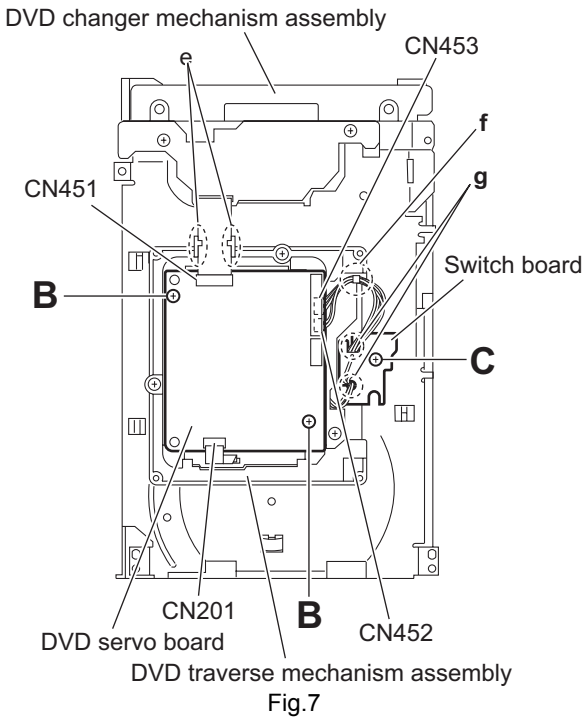


Fig.7

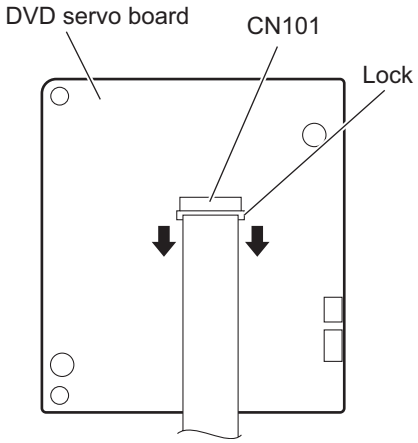


Fig.8

3.3.4 Removing the motor board (See Figs.9 and 10)

(1) From the top side of the DVD changer mechanism assembly, remove the two belts from the motor pulleys. (See Fig.9.)

Note:
Take care not to attach grease on the belt.

(2) Remove the two screws **D** attaching the motors to the loader assembly. (See Fig.9.)

(3) From the bottom side of the DVD changer mechanism assembly, remove the two screws **E**. (See Fig.10.)

(4) Disconnect the connector CN2 on the motor board from the tray switch board and remove the motor board. (See Fig.10.)

(5) Disconnect the card wire from the connector CN1 on the forward side of the motor board. (See Fig.10.)

Note:
When connecting the card wire, let the card wire through the slots **h** of the motor board. (See Fig.10.)

Reference:
You need not to remove the tray assemblies, and in such case, move it.

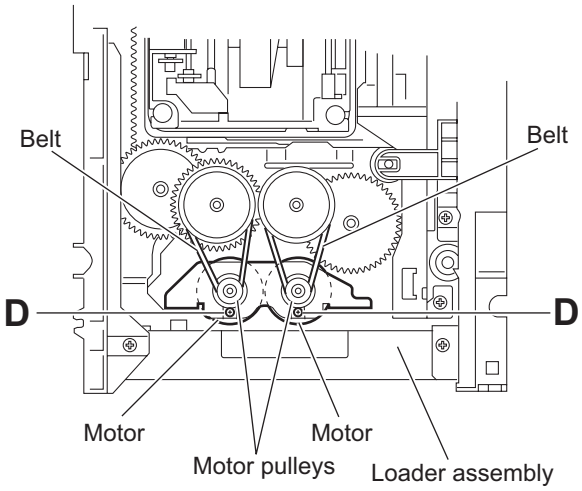


Fig.9

3.3.5 Removing the motor (See Fig. 10)

• Remove the motor board.

(1) From the reverse side of the motor board, unsolder the four soldered sections **i** on the motor board.

(2) From the forward side of the motor board, remove the motors.

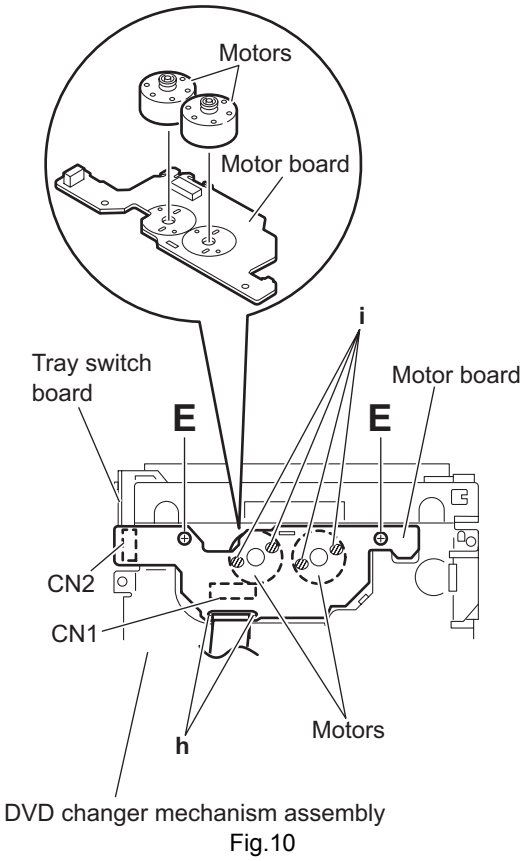


Fig.10

3.3.6 Removing the DVD traverse mechanism assembly (See Fig.11)

- Remove the tray assemblies and DVD servo board.
  (1) From the bottom side of the DVD changer mechanism assembly, remove the three screws **F** attaching the DVD traverse mechanism assembly.
  (2) Remove the wires from the section **j**.
  (3) Take out the DVD traverse mechanism assembly from the DVD changer mechanism assembly.

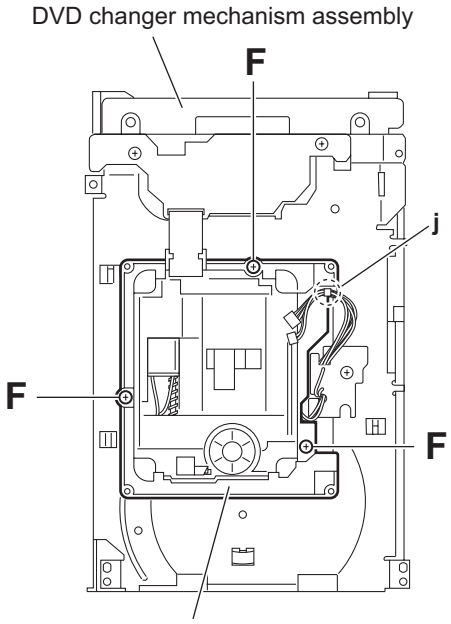


Fig.11

3.3.7 Removing the DVD pickup (See Figs.12 to 14)

- Remove the tray assemblies, DVD servo board and DVD traverse mechanism assembly.
  (1) From the top side of the DVD traverse mechanism assembly, release the lock of the connector on the DVD pickup and disconnect the card wire in the direction of the arrow. (See Fig.12.)
  (2) Turn the screw shaft gear in the direction of the arrow 1 to move the DVD pickup in the direction of the arrow 2. (See Fig.12.)
  (3) Remove the screw **G** attaching the feed bracket and remove the feed bracket from the sections **k**. (See Fig.12.)
  (4) Release the claw **m** of the thrust spring in the direction of the arrow and remove the thrust spring. (See Fig.12.)
  (5) Remove the guide shaft from the sections (**n**, **p**) on the C.TM chassis. (See Fig.13.)
  (6) Remove the section **q** of the DVD pickup. (See Fig.13.)
  (7) Remove the two screws **H** attaching the rack arm spring and rack arm. (See Fig.14.)
  (8) Pull the guide shaft from the DVD pickup in the direction of the arrow. (See Fig.14.)

3.3.8 Attaching the DVD pickup (See Figs.12 to 14)

(1) Attach the guide shaft to the DVD pickup and attach the rack arm spring and rack arm with the screws **H**. (See Fig.14.)
(2) Attach the section **q** of the DVD pickup to the C.TM chassis first and attach the guide shaft to the sections (**n**, **p**). (See Fig.13.)

Reference:

When attaching the guide shaft to the section **p**, attach it under the rod spring. (See Fig.13.)

(3) Attach the thrust spring and feed bracket with the screw **G**. (See Fig.12.)
(4) Turn the screw shaft gear in the direction of the arrow 1 to move the DVD pickup in the direction of the arrow 2. (See Fig.15.)
(5) Connect the card wire to the connector on the DVD pickup. (See Fig.15.)

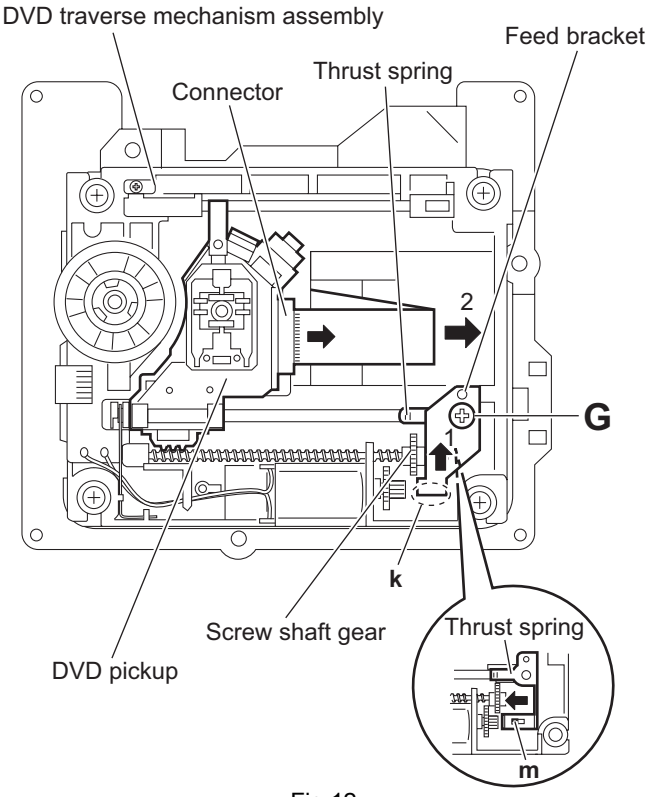


Fig.12

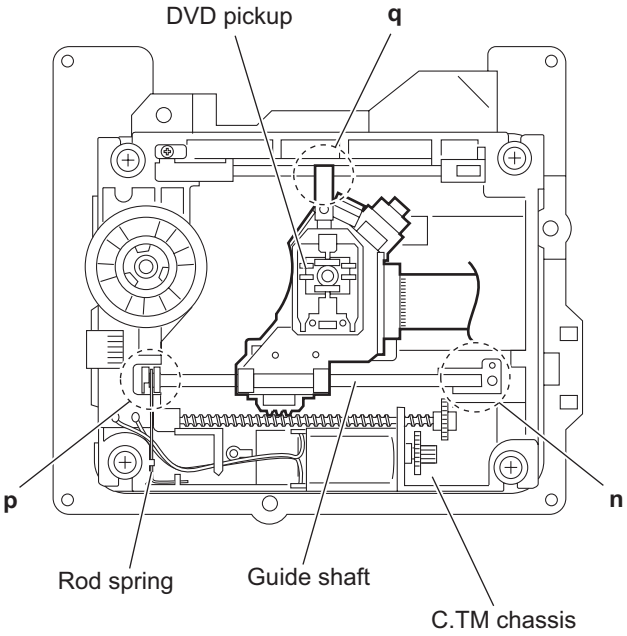
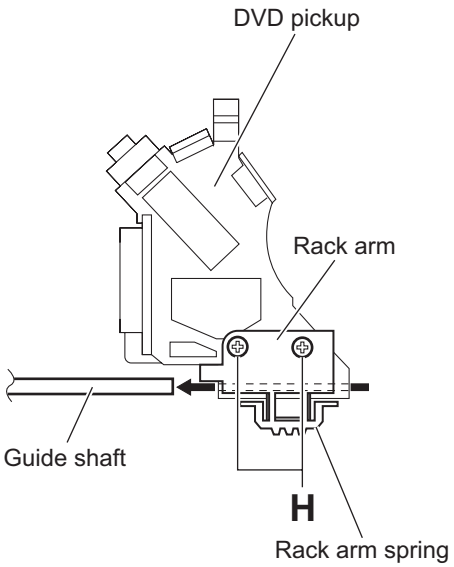
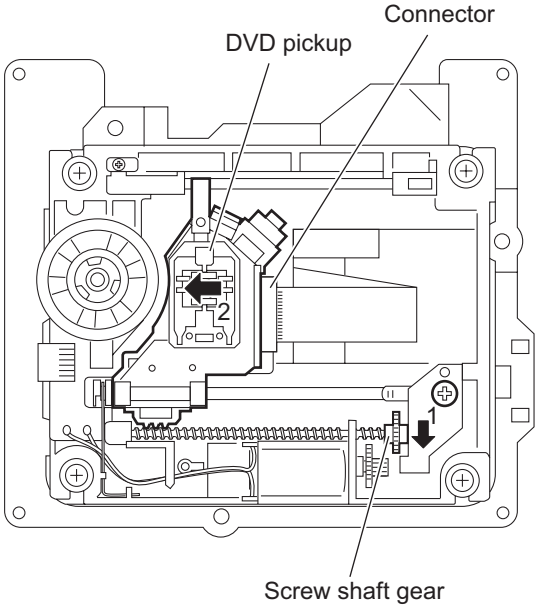


Fig.13


DVD pickup
Rack arm
Guide shaft
H
Rack arm spring
Fig.14


Connector
DVD pickup
2
1
Screw shaft gear
Fig.15

3.3.9 Removing the spindle motor board (See Figs.16 and 17)

- Remove the tray assemblies, DVD servo board and DVD traverse mechanism assembly.
  (1) From the top side of the DVD traverse mechanism assembly, remove the wires from the soldered sections **r** on the spindle motor board. (See Fig.16.)
  (2) From the bottom side of the DVD traverse mechanism assembly, remove the three screws **J** attaching the spindle motor board. (See Fig.17.)

Reference:

When attaching the spindle motor board, let the card wire through the hole **s** on the C.TM chassis. (See Fig.17.)

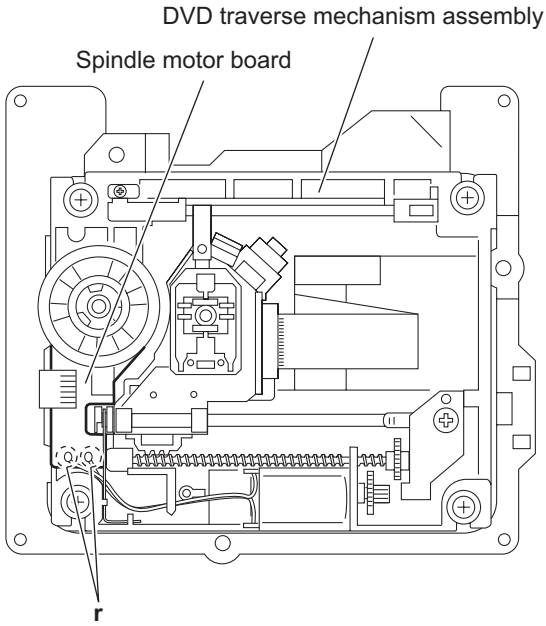


Fig.16

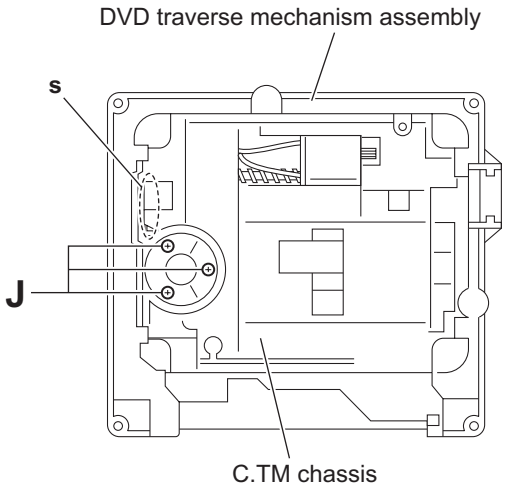


Fig.17

3.3.10 Removing the feed motor (See Figs.18 and 19)

- Remove the tray assemblies and DVD traverse mechanism assembly.
  (1) From the top side of the DVD traverse mechanism assembly, remove the screw **K** attaching the feed bracket and remove the feed bracket from the sections **t**. (See Fig.18.)
  (2) Release the claw **u** of the thrust spring in the direction of the arrow and remove the thrust spring. (See Fig.18.)
  (3) Remove the screw shaft from the section **v** and remove it in the direction of the arrow. (See Fig.19.)
  (4) Remove the middle gear. (See Fig.19.)
  (5) Remove the screw **L** attaching the feed motor to the C.TM chassis. (See Fig.19.)
  (6) Remove the wires from the soldered sections **w** on the spindle motor board. (See Fig.19.)
  (7) Take out the feed motor from the motor base.

Reference:

After attaching the feed motor, pass the wires through the sections **x** on the C.TM chassis as before. (See Fig.19.)

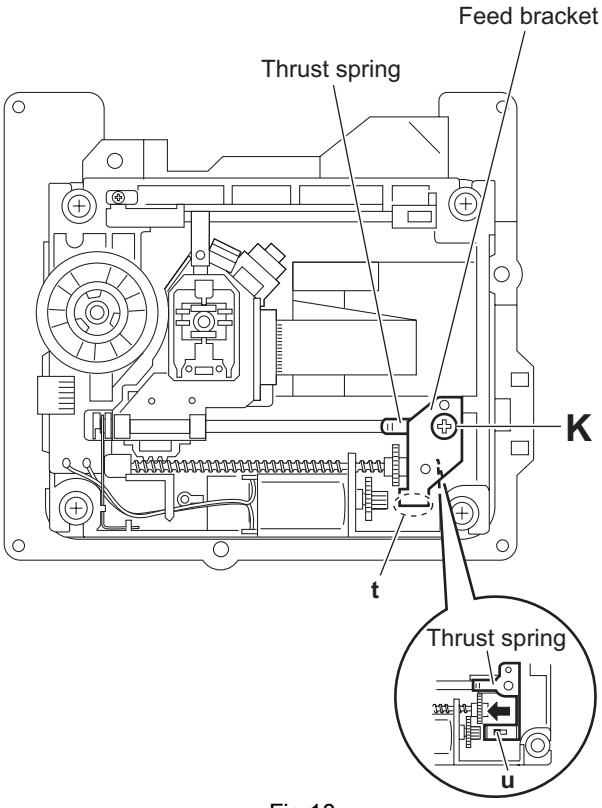


Fig.18

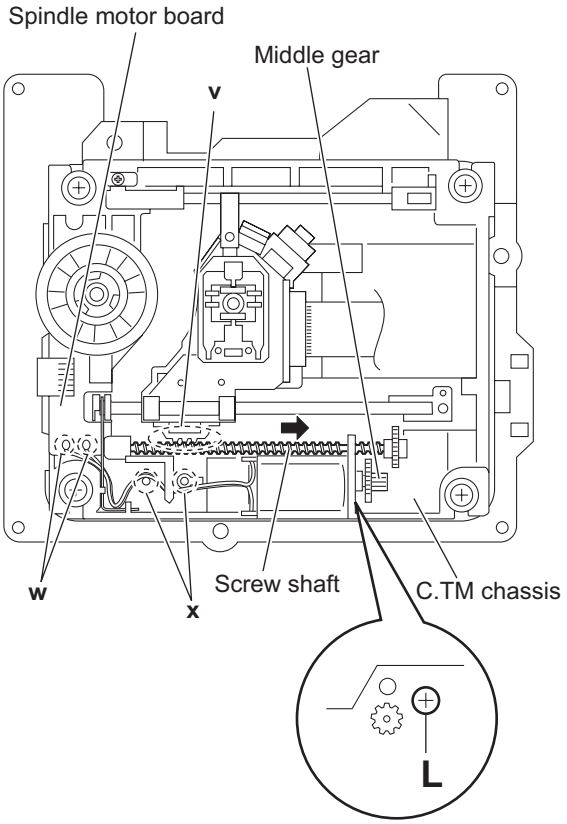


Fig.19

3.3.11 Removing the side (L) and tray switch board (See Figs.20 to 22)

- Remove the tray assemblies.
  (1) From the topside of the DVD changer mechanism assembly, remove the two screws **M** attaching the side (L). (See Fig.20.)
  (2) From the left side of the DVD changer mechanism assembly, disconnect the connector CN3 on the tray switch board from the motor board and detach the side (L) in an upward direction. (See Fig.21.)
  (3) Remove the screw **N** attaching the tray switch board to the side (L). (See Fig.22.)
  (4) Release the joint tab **y** of the side (L) in the direction of the arrow 1 and release the joint tab **z** while removing the tray switch board in the direction of the arrow 2. (See Fig.22.)

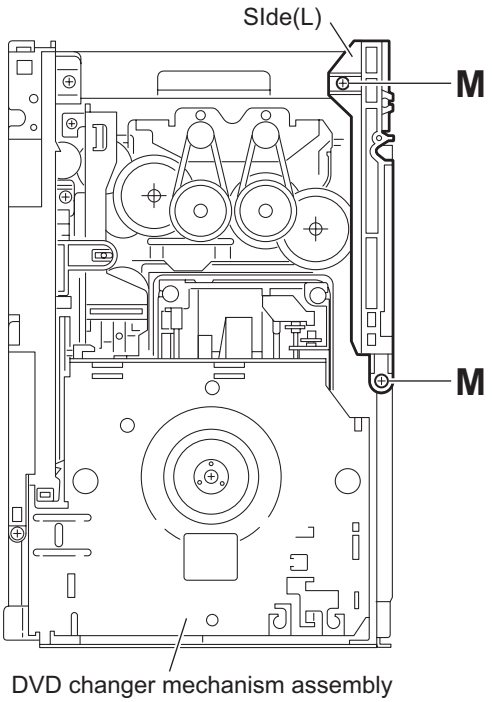


Fig.20

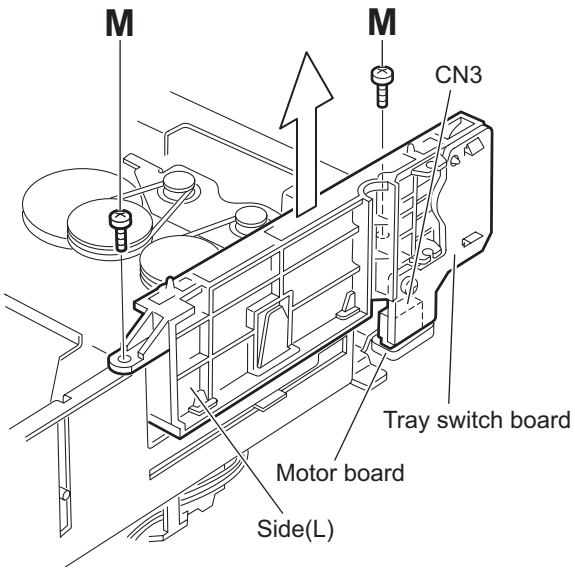


Fig.21

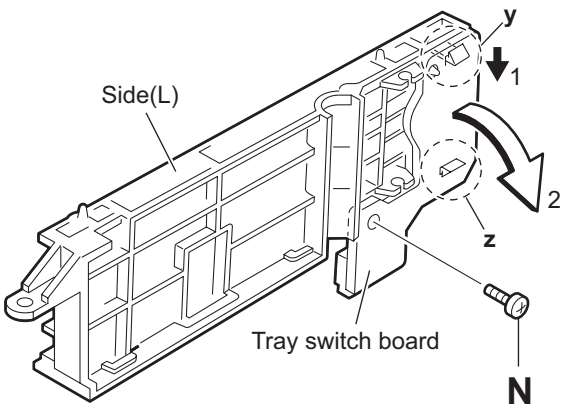


Fig.22

3.3.12 Removing the side (R) assembly (See Fig.23 to 27)

- Remove the tray assemblies and DVD servo board.
  (1) From the inside of the side (R) assembly, release the two tabs **aa** of the gear cover and remove the gear cover outward. (See Figs.23 and 24.)
  (2) From the right side of the DVD changer mechanism assembly, remove the elevator spring attached to the hook **ab** of the loader assembly. (See Figs.24 and 25.)
  (3) From the top side of the DVD changer mechanism assembly, turn the gear 1 clockwise to move the elevator cam rearward. (See Fig.25.)
  (4) Move the two slots **ac** and joint **ad** of the elevator cam and remove the elevator cam outward. (See Fig.25.)
  (5) Remove the three screws **P** and detaches the side (R) assembly upward. (See Figs.26 and 27.)

Note:

When reattaching the side (R) assembly, make sure to fit the shaft (part **ae**) into the slot of the select lever. (See Fig.26.)

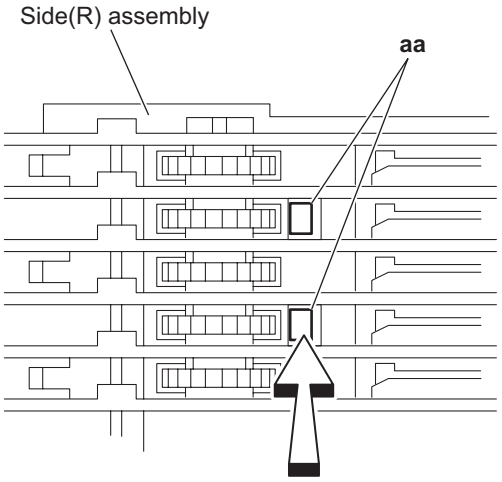


Fig.23

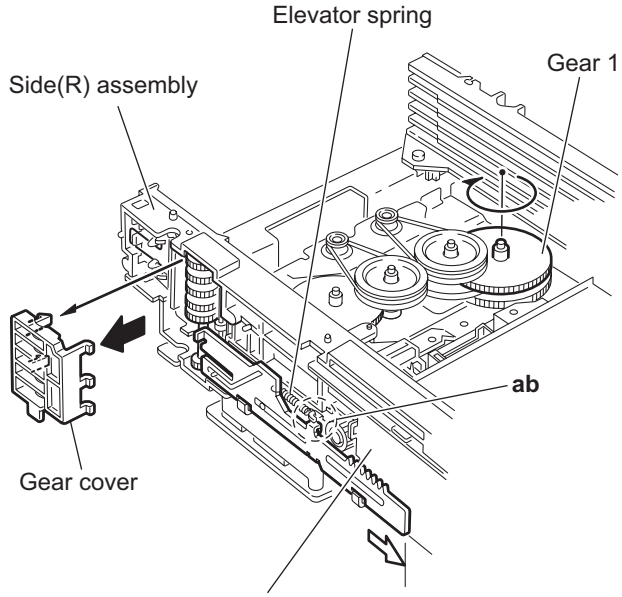


Fig.24

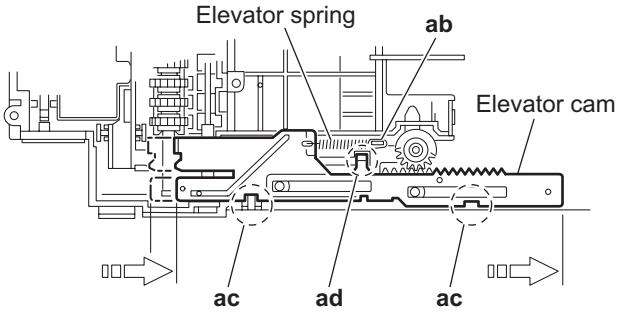


Fig.25

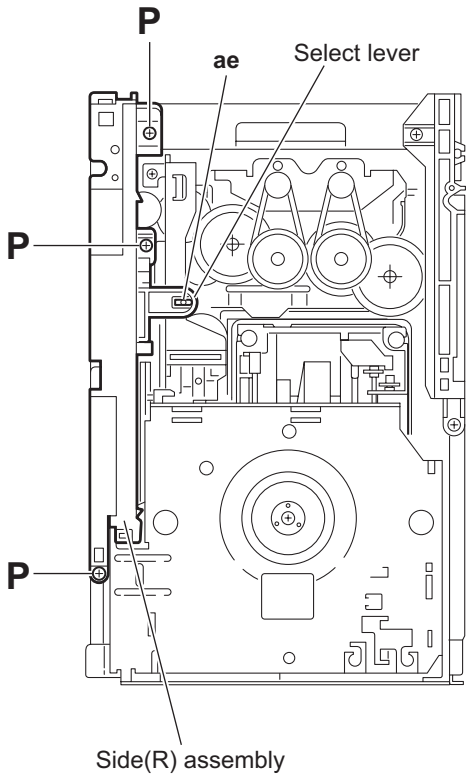


Fig.26

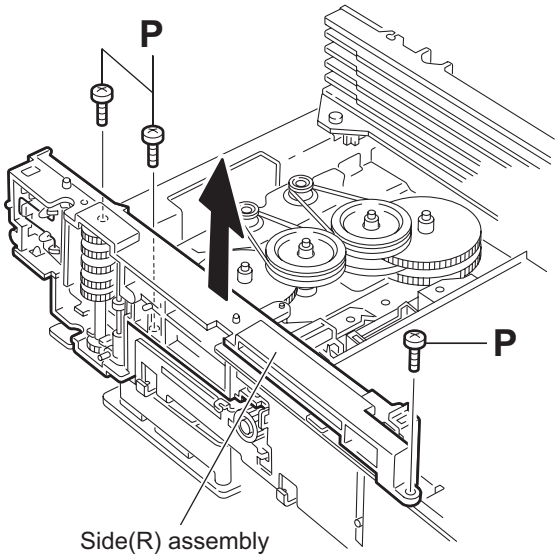


Fig.27

3.3.13 Removing the lifter assembly (See Figs.28 to 32)

- Remove the tray assemblies, DVD servo board, side (L) and side (R) assembly.
  (1) (1) From the top side of the DVD changer mechanism assembly, turn the gear 1 clockwise to move the lifter assembly upward. (See Figs.28 and 29.)
  (2) Turn the gear 2 clockwise to move the hook toward the front until it stops. (See Figs.28 and 29.)
  (3) Move the hook stopper in the direction of the arrow 2 while pushing the tab **af** of the hook stopper to unlock it in the direction of the arrow 1 and release four joints **ag** to detach from the rack holder. (See Fig.30.)
  (4) Release the rod (L) from part **ah**. (See Fig.30.)
  (5) Turn the gear 1 clockwise again to move the lifter assembly upward. (See Fig.31.)
  (6) Remove the lifter assembly from the DVD changer mechanism assembly upward at the positions ai where the four pins on the both sides of the lifter assembly fit to the notches of the loader assembly. (See Fig.31.)
  (7) Move the lifter assembly in the direction of the arrow and release it from the hook. (See Fig.32.)

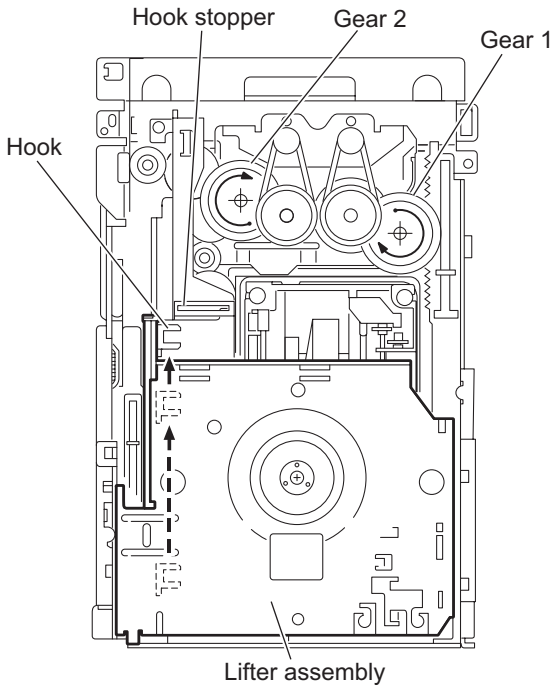


Fig.28

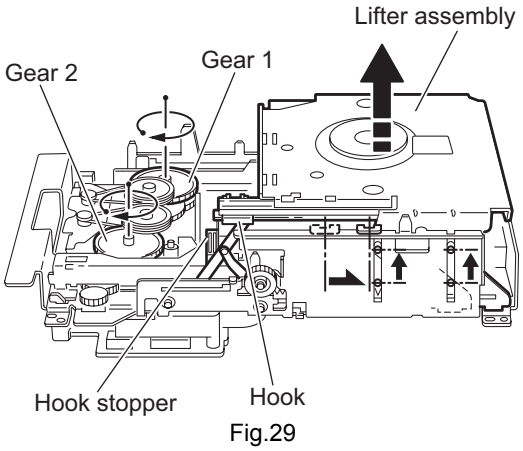


Fig.29

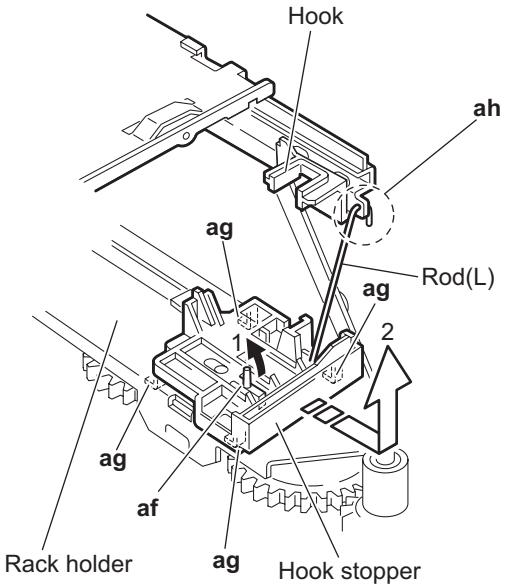


Fig.30

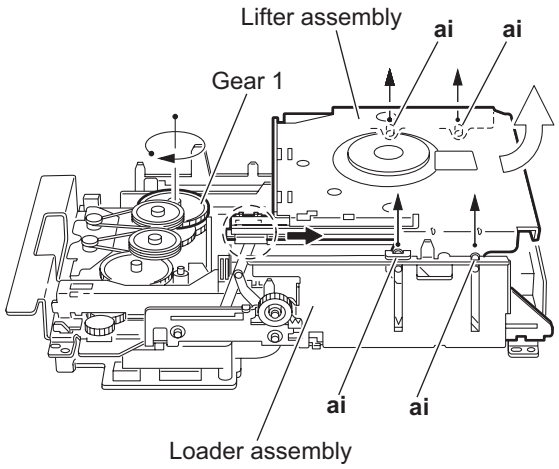


Fig.31

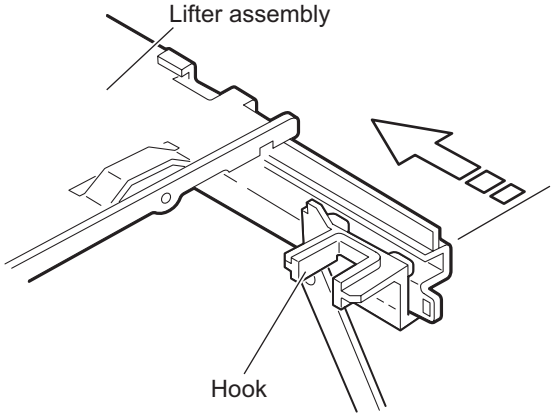


Fig.32

3.3.14 Removing the sensor board and SV resistor (See Fig.33)

- Remove the tray assemblies, side (L), side (R) assembly and lifter assembly.
  (1) Remove the solders from the soldered sections **aj** on the sensor board and remove the wires.
  (2) Remove the two screws **Q** and take out the sensor board with the SV resistor.

Reference:

- Remove the soldered section **ap** on the sensor board as required.
- When reassembling, pass the wires through the slot **ak** of the sensor board as before.

Note:

When reattaching the SV. resister, fit the projection am on the bottom of the SV. resister into slot **an** of the sensor slider.

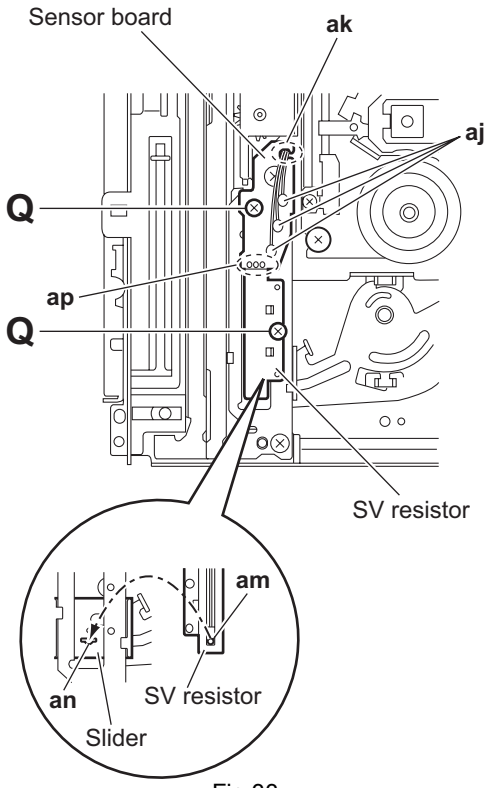


Fig.33

3.3.15 Taking out the disc in the play mode (See Fig.34 to 37)

Reference:

Refer to "3.3.1 Removing the tray assemblies".

(1) From the top side of the DVD changer mechanism assembly, remove the top cover.
(2) Unlock the tray assemblies and draw out the tray assemblies toward the front.
(3) From the top side of the DVD changer mechanism assembly, turn the gear 1 clockwise to move the lifter assembly upward. (See Fig.34.)
(4) Turn the gear 2 clockwise to move the sub tray remaining inside the lifter assembly toward the front, then pull out. (See Fig.34.)
(5) Take out the disc on the sub tray. (See Fig.35.)
(6) After clearing away the disc, insert the sub tray into the main tray. (See Fig.36.)

Note:

When reattaching the sub tray, move the tray stopper on the bottom of the main tray in the direction of the arrow to lock the sub tray certainly. (See Figs.36 and 37.)

(7) Push the tray assembly toward the DVD changer mechanism assembly and reattach.

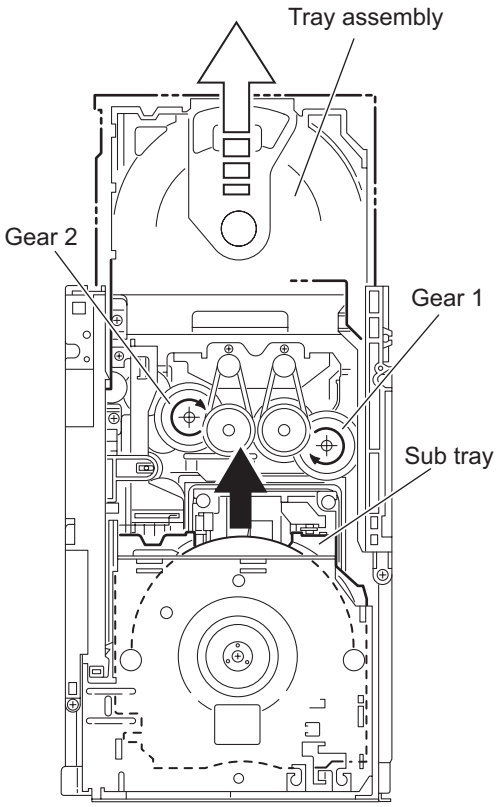


Fig.34

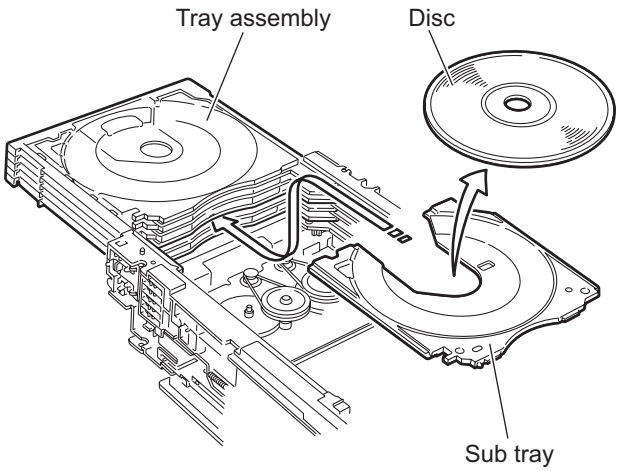


Fig.35

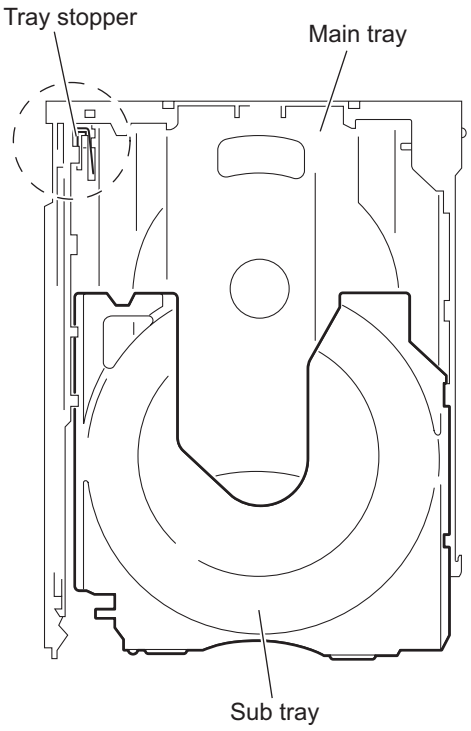


Fig.36

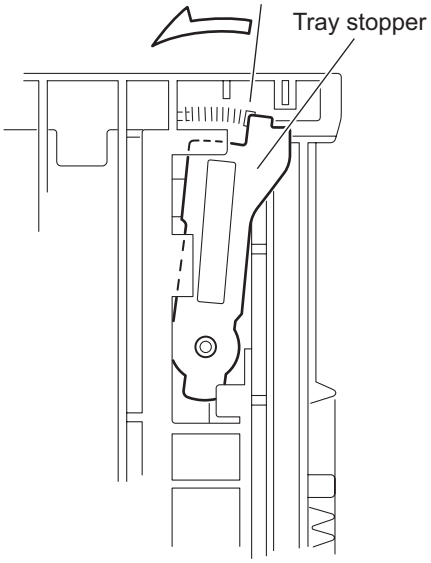


Fig.37

SECTION 4
ADJUSTMENT

4.1 Special mode

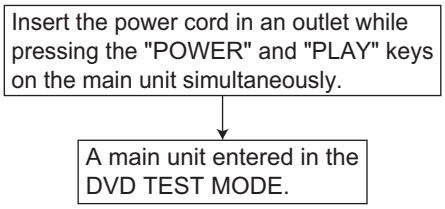
4.1.1 Outline

The contents in the special mode of operation, and the definition of a key (remote controller or main unit)

4.1.2 Special mode

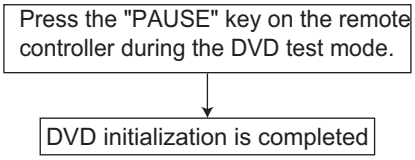
1.DVD TEST MODE

It goes into the TEST mode of DVD.
DVD TEST mode is canceled by except DVD source, and POWER OFF.
It is referring to the "4.2 DVD test mode" for details.



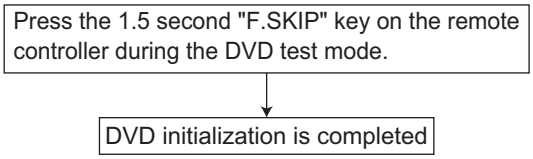
2.DVD NORMAL INITIALIZE

Initialize DVD backend memory.
<RDS> segment of FL will light up if successful.
It is referring to the "4.2 DVD test mode" for details.



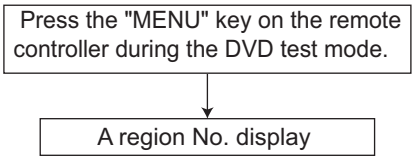
3.DVD FULL INITIALIZE

It is referring to the "4.2 DVD test mode" for details.



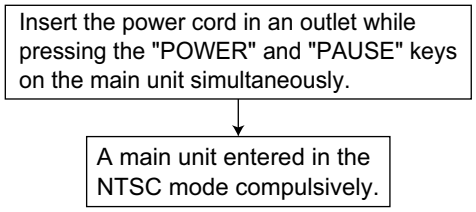
4.DVD REGION CHECK

FL display in DVD TEST MODE.
It is referring to the "4.2 DVD test mode" for details.



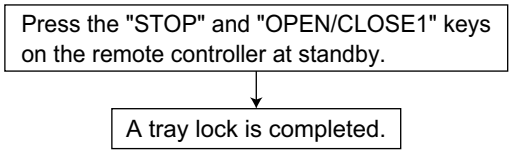
5.FORCED NTSC MODE

It is made compulsive NTSC mode.
From this, with regards to the input of NTSEL_SW, there is nothing only at the time of 1st power on, and it performs NTSC starting.
(Command specification is performed to a module.)
A mode clearance is performed by power off.
VIDEO FORMAT change is prohibited during Forced NTSC mode.



6.TRAY LOCK

A loader mechanism's tray lock is carried out. In the tray lock function ON state,
EJECT processing is not performed to the EJECT key.
And , a LOCK display is performed at this time.
When it turns off a tray lock function, STOP and EJECT KEY are pushed simultaneously again.
Back up ON/OFF of a tray lock.



4.1.3 Upgrading of firmware (DVD UPGRADE)

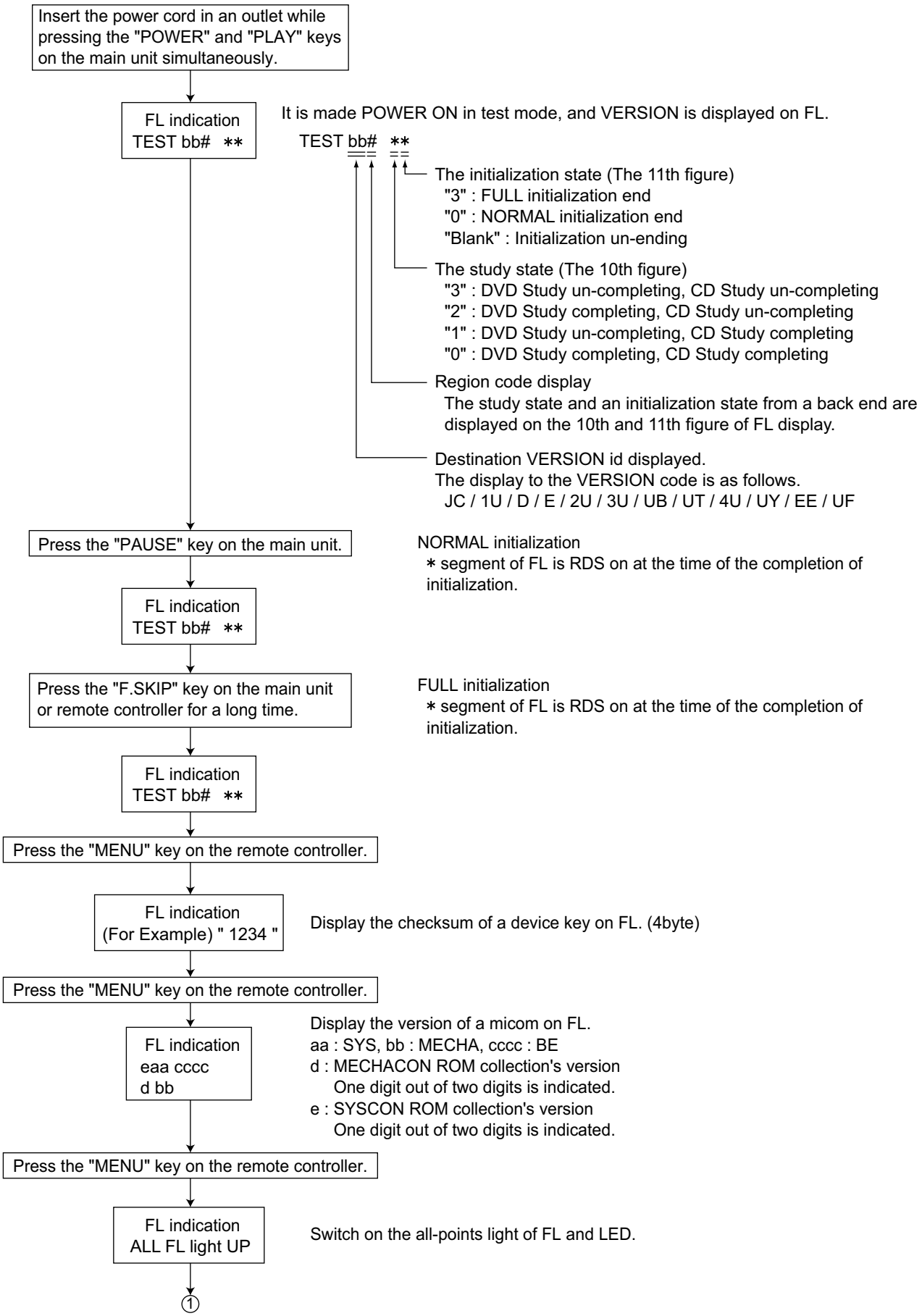
The latest firmware for upgrading is updated in "Optical disc CSG" page in JS-net. At the time of service, compare the version of the product and the latest version, and upgrade the old version into the latest version.

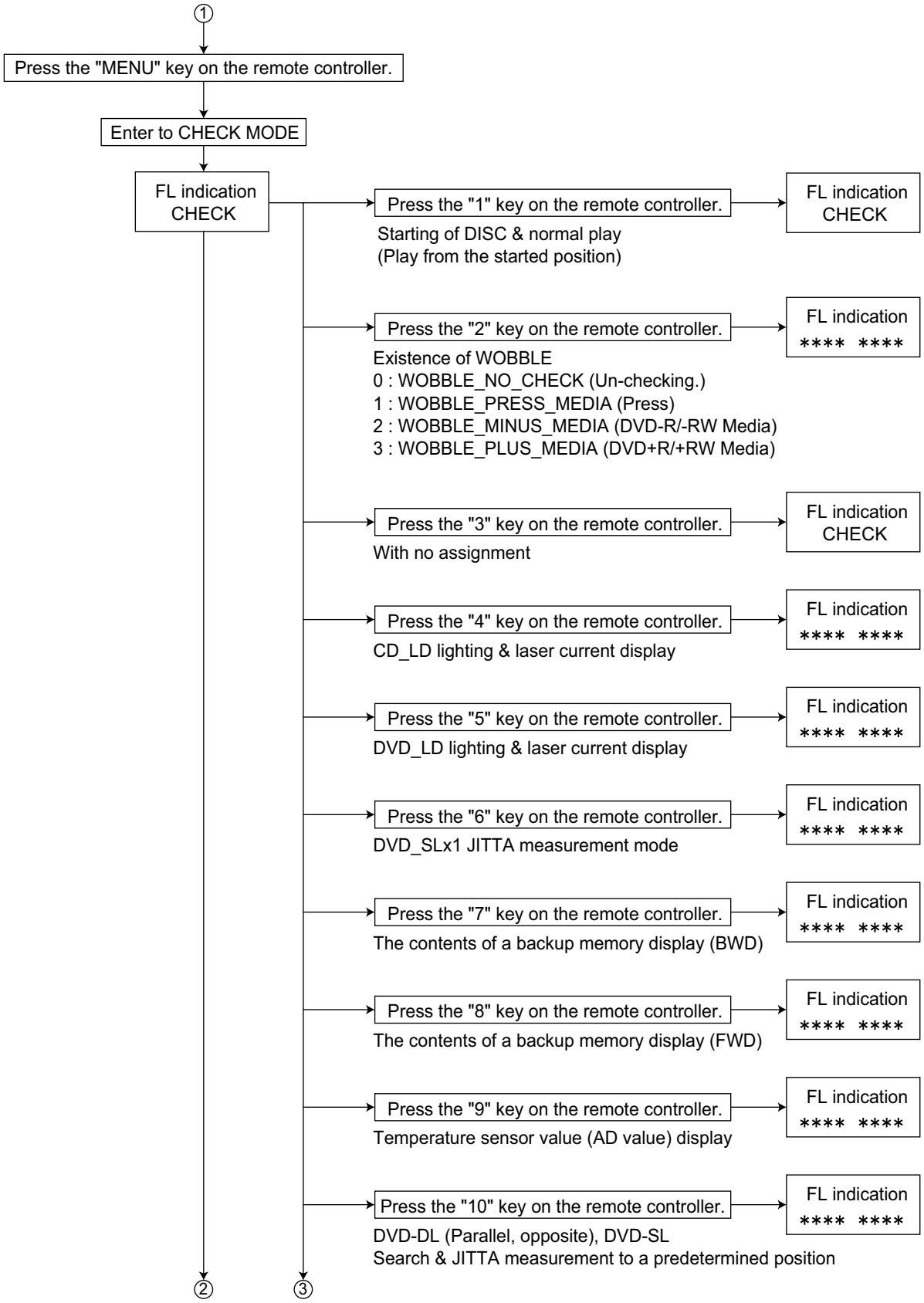
(1) Press "STANDBY/ON" key of the main body to turn it on.
(2) Push "OPEN/CLOSE" key of the main body, and insert the upgrade disc in the tray.
(3) When reading the data of the disc, the OSD screen is displayed "VERSION UP DISC", "PROGRAM & DESTINATION MODE" and "READING..".
(4) When the screen changes from "READING.." to "WRITING..", upgrading starts.
(5) After writing the data of the disc, the screen is displayed "OPEN".
(6) Take out the disc, and press "STANDBY/ON" key of the main body.
(7) When the stand-by indicator is lighted, upgrading is completed.
(8) Set the main body at test mode, and confirm the version of the firmware. (Refer to "4.2 Method of displaying version firmware".)

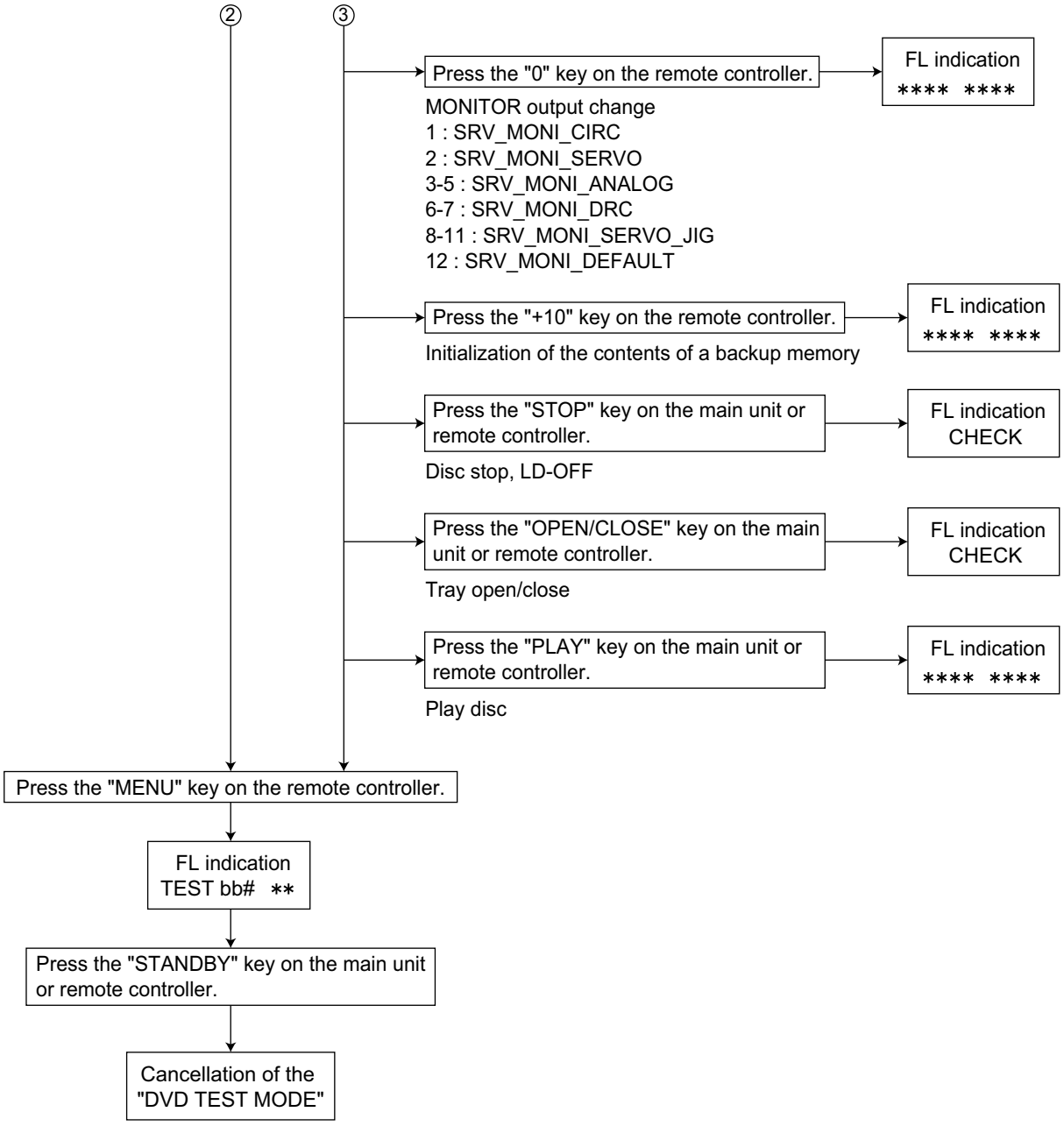
4.1.4 Upgrading of system microcomputer (ROM CORRECTION)

(1) Press "STANDBY/ON" key of the main body to turn it on.
(2) Push "OPEN/CLOSE" key of the main body, and insert the upgrade disc in the tray.
(3) When reading the data of the disc, the OSD screen is displayed "VERSION UP DISC", "SYSCON UPG MODE" and "READING..".
(4) When the screen changes from "READING.." to "WRITING..", system data is written.
(5) After writing the data of the disc, the FL display of the main body is displayed "COMPLETE".
(6) Take out the disc, and press "STANDBY/ON" key of the main body.
(7) When the stand-by indicator is lighted, upgrading is completed.
(8) Set the main body at test mode, and confirm the version of the system microcomputer. (Refer to "4.2 Method of displaying version firmware".)

4.2 DVD TEST MODE




①
Press the "MENU" key on the remote controller.
Enter to CHECK MODE
FL indication
CHECK
Press the "1" key on the remote controller.
FL indication
CHECK
Starting of DISC & normal play
(Play from the started position)
Press the "2" key on the remote controller.
FL indication
**** ****
Existence of WOBBLE
0 : WOBBLE_NO_CHECK (Un-checking.)
1 : WOBBLE_PRESS_MEDIA (Press)
2 : WOBBLE_MINUS_MEDIA (DVD-R/-RW Media)
3 : WOBBLE_PLUS_MEDIA (DVD+R/+RW Media)
Press the "3" key on the remote controller.
FL indication
CHECK
With no assignment
Press the "4" key on the remote controller.
FL indication
**** ****
CD_LD lighting & laser current display
Press the "5" key on the remote controller.
FL indication
**** ****
DVD_LD lighting & laser current display
Press the "6" key on the remote controller.
FL indication
**** ****
DVD_SLx1 JITTA measurement mode
Press the "7" key on the remote controller.
FL indication
**** ****
The contents of a backup memory display (BWD)
Press the "8" key on the remote controller.
FL indication
**** ****
The contents of a backup memory display (FWD)
Press the "9" key on the remote controller.
FL indication
**** ****
Temperature sensor value (AD value) display
Press the "10" key on the remote controller.
FL indication
**** ****
DVD-DL (Parallel, opposite), DVD-SL
Search & JITTA measurement to a predetermined position
②
③


②
③
Press the "0" key on the remote controller.
FL indication
**** ****
MONITOR output change
1 : SRV_MONI_CIRC
2 : SRV_MONI_SERVO
3-5 : SRV_MONI_ANALOG
6-7 : SRV_MONI_DRC
8-11 : SRV_MONI_SERVO_JIG
12 : SRV_MONI_DEFAULT
Press the "+10" key on the remote controller.
FL indication
**** ****
Initialization of the contents of a backup memory
Press the "STOP" key on the main unit or remote controller.
FL indication
CHECK
Disc stop, LD-OFF
Press the "OPEN/CLOSE" key on the main unit or remote controller.
FL indication
CHECK
Tray open/close
Press the "PLAY" key on the main unit or remote controller.
FL indication
**** ****
Play disc
Press the "MENU" key on the remote controller.
FL indication
TEST bb# **
Press the "STANDBY" key on the main unit or remote controller.
Cancellation of the "DVD TEST MODE"

SECTION 5
TROUBLESHOOTING

This service manual does not describe TROUBLESHOOTING.

JVC
Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY AUDIO/VIDEO SYSTEMS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MB415)

Printed in Japan
VPT

JVC

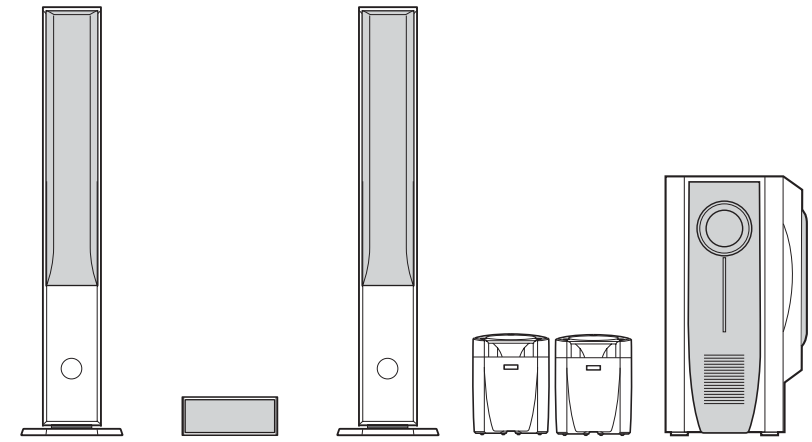
SCHEMATIC DIAGRAMS

DVD DIGITAL THEATER SYSTEM

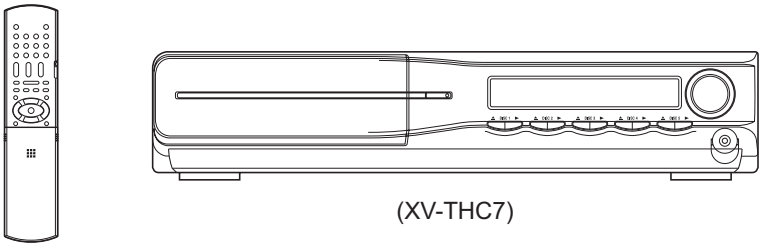
TH-C7

CD-ROM No.SML200507

Area suffix
J ---------- U.S.A.



(SP-THC7F) (SP-THC7C) (SP-THC7F) (SP-THC5S) (SP-PWC7)



(XV-THC7)

Digital Direct Progressive Scan

AV COMPU LINK

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

Contents

Block diagram ---------- 2-1
Standard schematic diagrams ---------- 2-3
Printed circuit boards ---------- 2-23 to 32

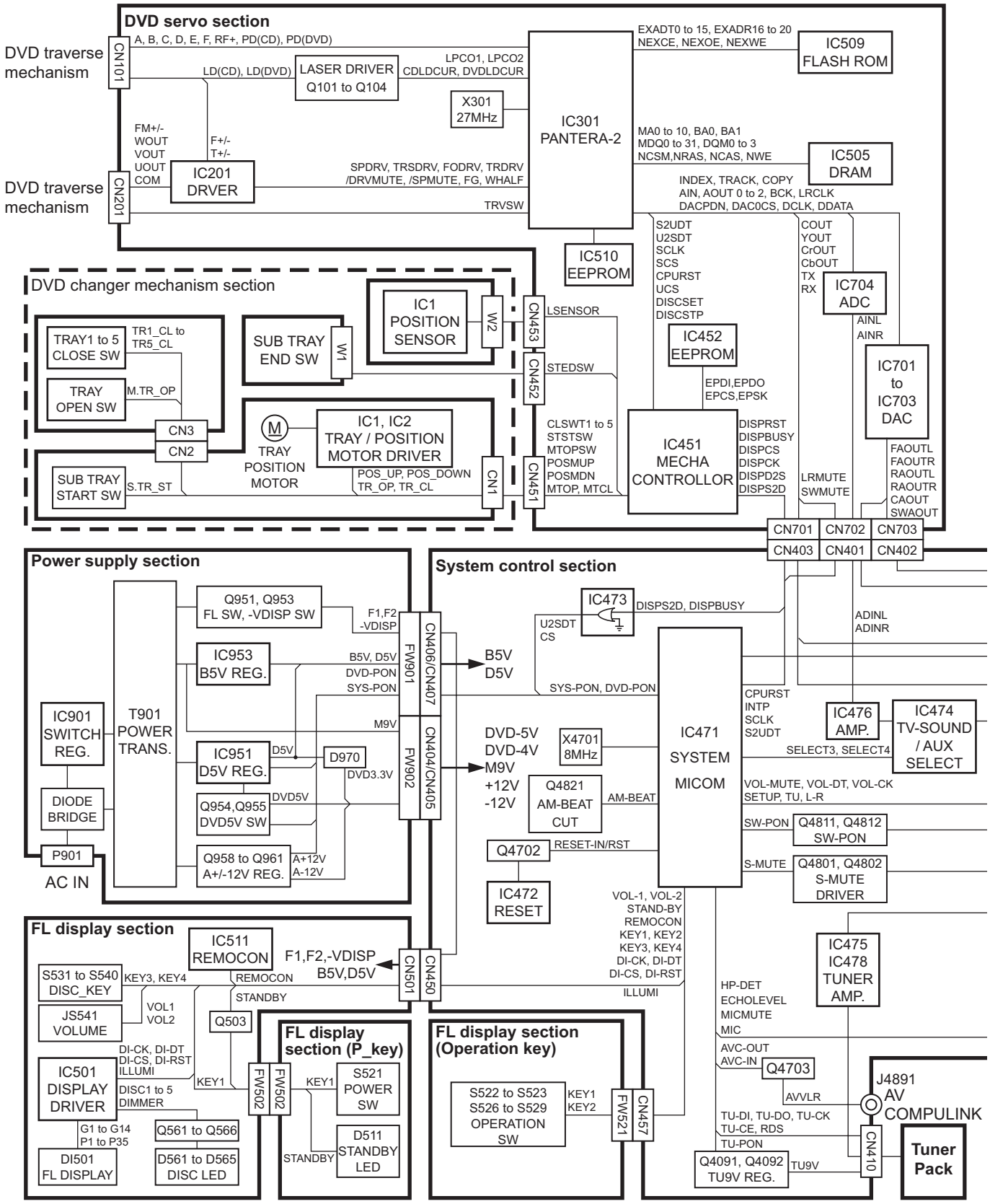
No.MB415SCH
2005/7

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▬) and ICP (⬤) or identified by the "⚠" mark nearby are critical for safety.

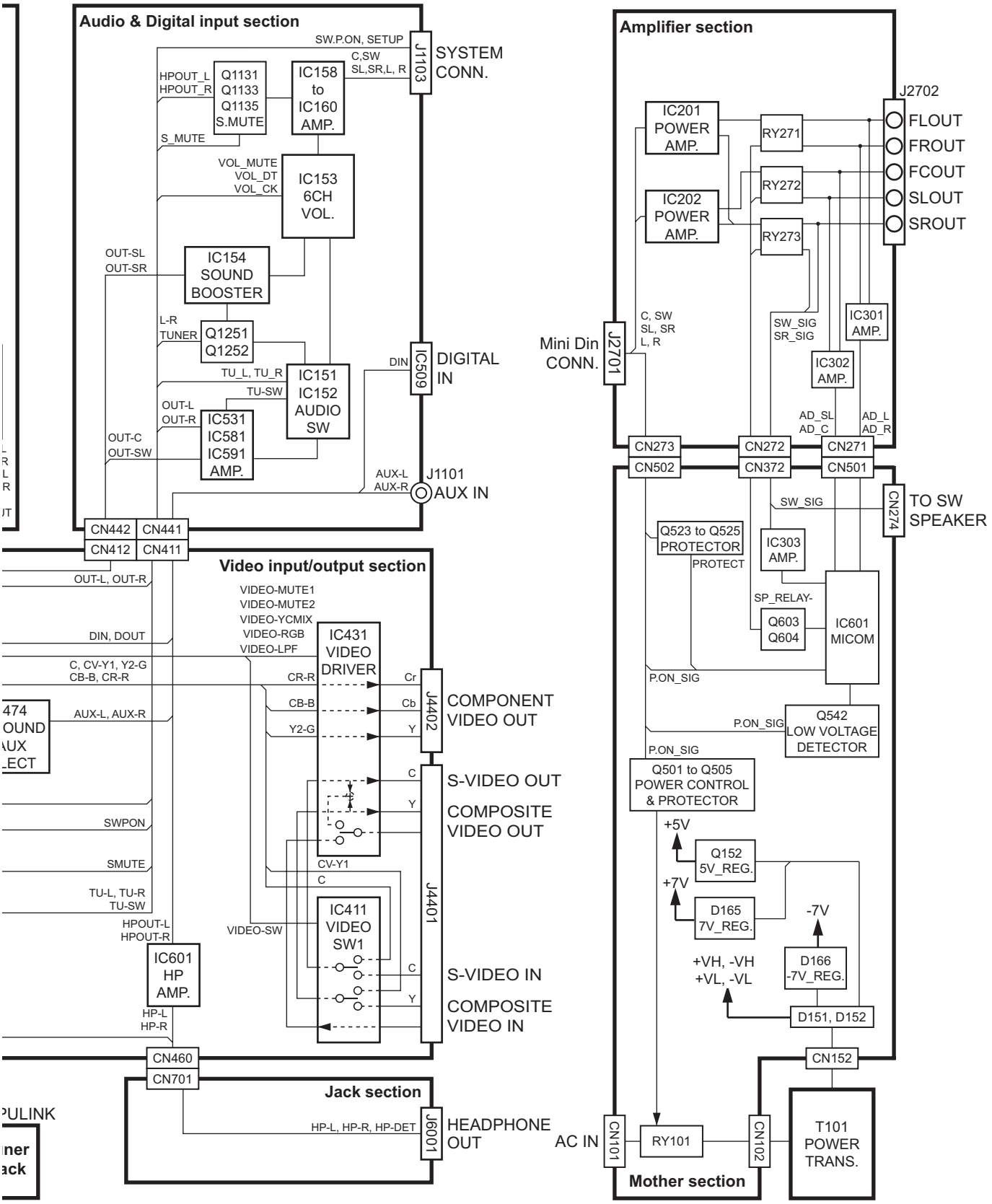
< MEMO >

Block diagram

<Main body section>



<Subwoofer section>

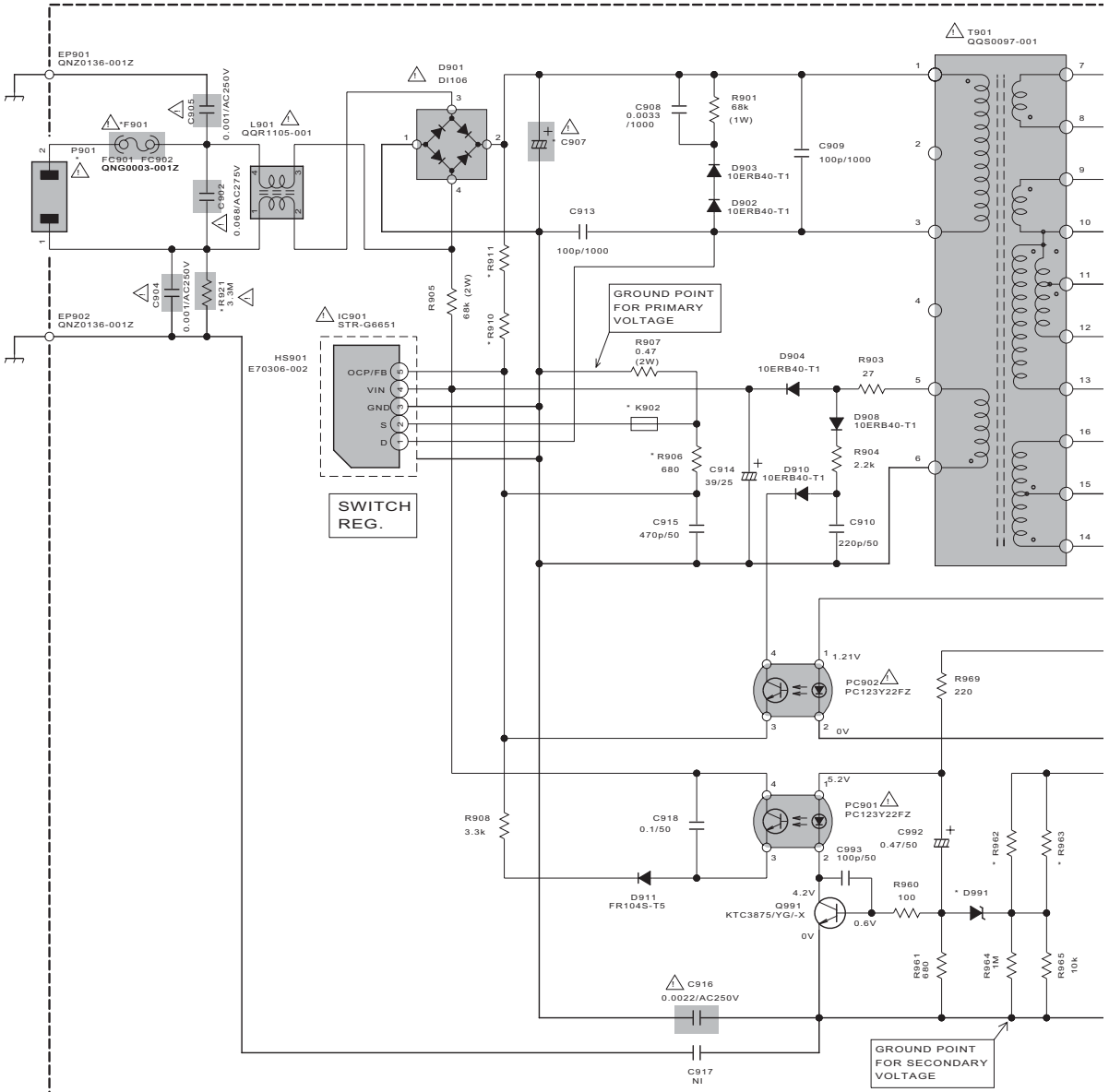


Standard schematic diagrams

<Main body section>

■ Power supply section

Ver.J/C
120V 60Hz
Ver.B
230V 50Hz
Ver.UW/UJ/UY/UN
US/UX/UG/UT
110-240V 50/60Hz
Ver.A
240V 50Hz



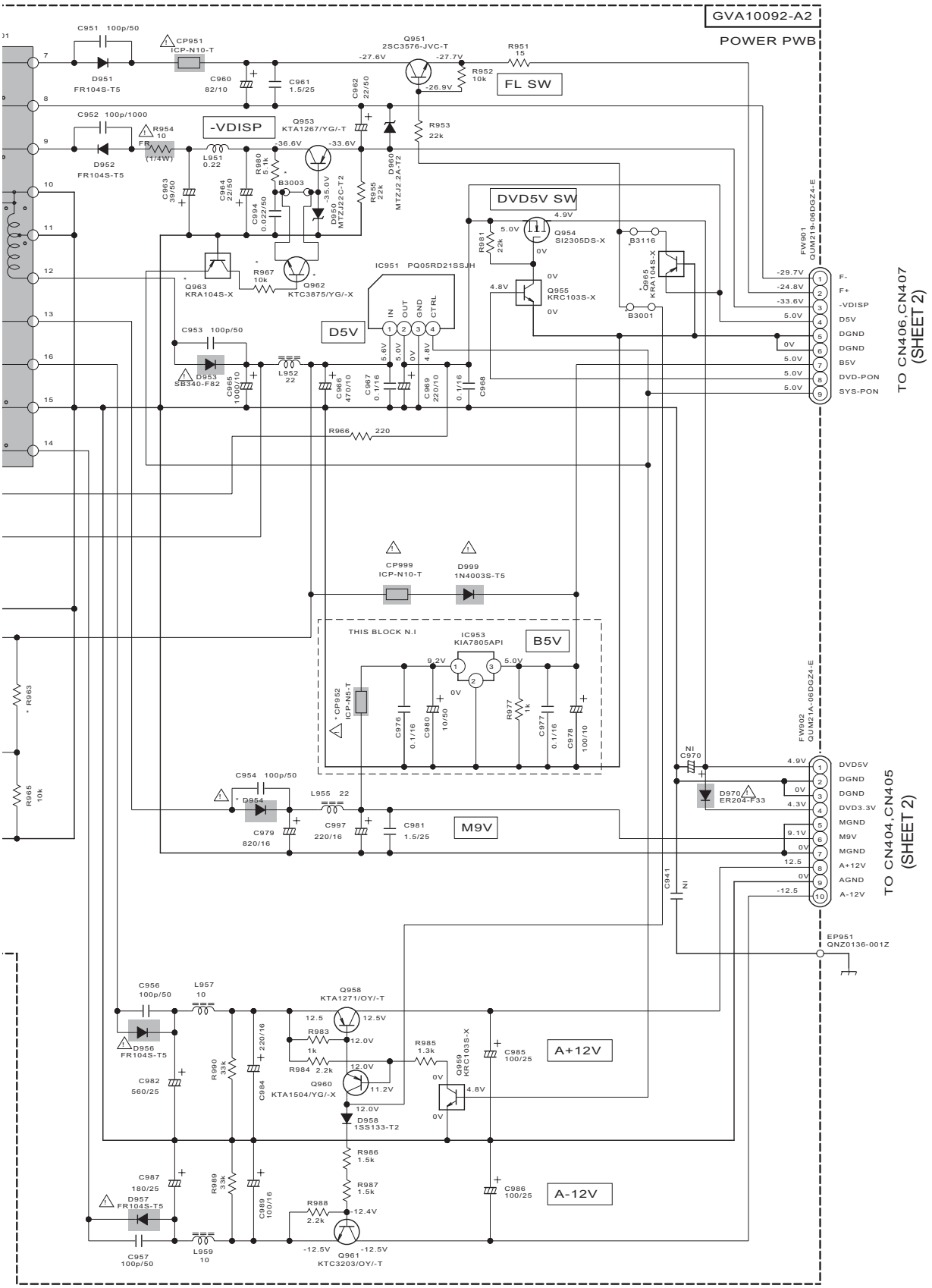
REF No. \ Ver.	ADDRESS	D	J/C	B	UY/UW/UJ/A US/UN/UX/UG/UT
*F901	(A-3)	QMF51U1-1R6-J8 (1.6A/125V)	QMF51U1-1R6-J8 (1.6A/125V)	QMF51W2-1R6-J8 (T1.6AL)	QMF51W2-1R6-J8 (T1.6AL)
*R962	(E-7)	1M	1M	NONE	NONE
*R963	(E-8)	100	100	180	180
*D991	(F-7)	MTZJ5.1C-T2	MTZJ5.1C-T2	MTZJ5.1B-T2	MTZJ5.1B-T2
*K902	(C-5)	QQR0779-001Z	QQR0779-001Z	0 (B3199)	0 (B3199)
*R921	(B-3)	NONE	3.3M	NONE	NONE
*P901	(B-2)	QNC0081-001	QNC0082-001	QNC0081-001	QNC0081-001
*R910 *R911	(B-5)	750k	750k	470k	470k
*CP952	(F-10)	0 (B3198)	ICP-N5-T	ICP-N5-T	ICP-N5-T

REF No. \ Ver.	ADDRESS	D	J/C	B	UY/UW/UJ/A US/UN/UX/UG/UT
*C907	(B-5)	QETM2DM-157 (150/200)	QETM2DM-157 (150/200)	QETM2GM-686 (68/400)	QETM2GM-107 (100/400)
*D954	(F-9)	FR104S-T5	10ERB40-T1	FR104S-T5	FR104S-T5
*B3003	(B-10)		SHORT	OPEN	SHORT

VERSION CODES
J :U.S.A.
C :CANADA
B :GREAT BRITAIN
UW:BRAZIL/MEXICO/PERU
UY:ARGENTINE
UJ:USA MILITALY BASE
A :AUSTRALIA
US :SINGAPORE
UG:TURKEY/EGYPT/SOUTH AFRICA
UN:INDONESIA
UX:SAUDI ARABIA
UT:TAIWAN

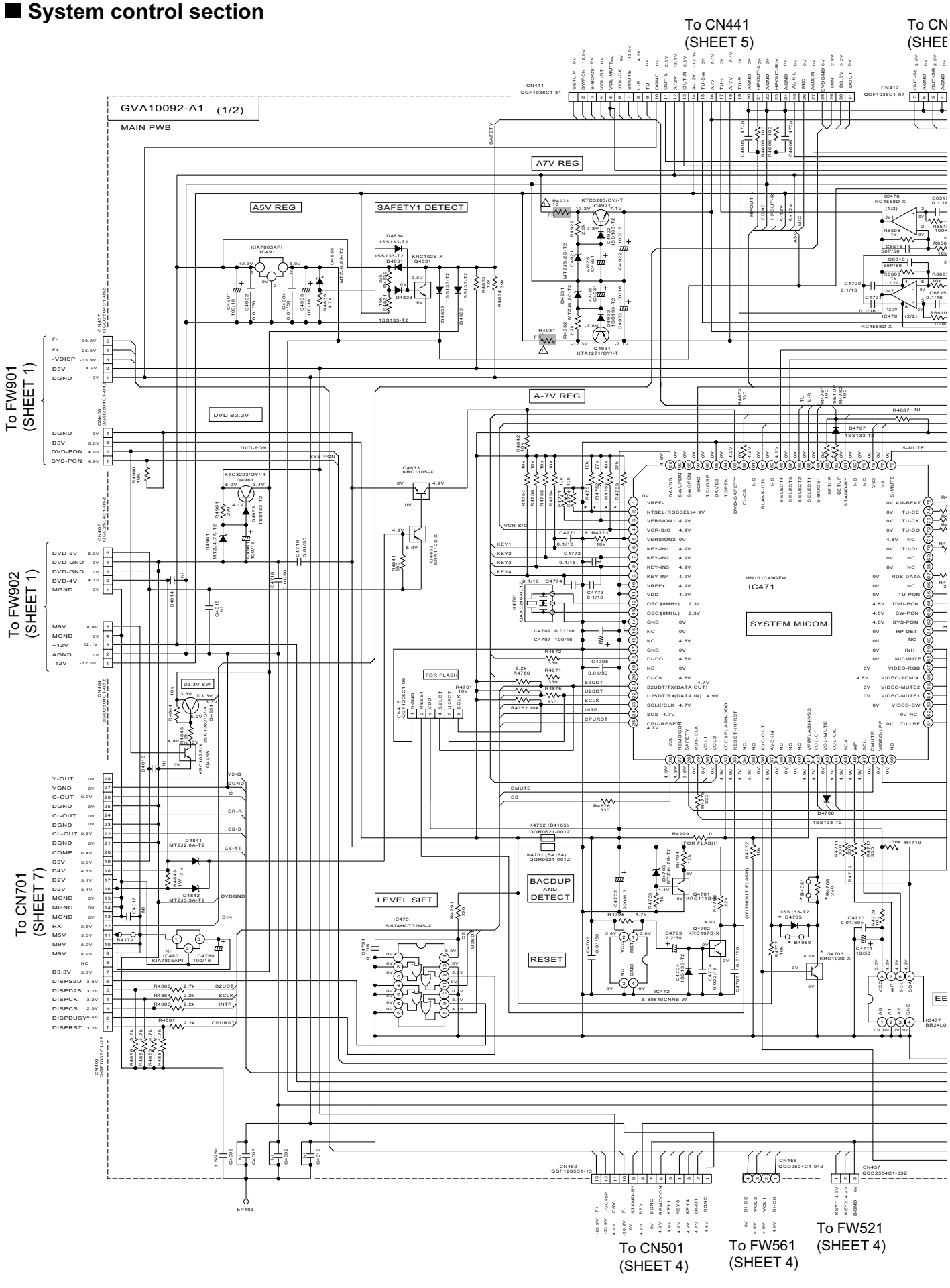
* FOR POWER CONSUMPTION C/M:
Q962, Q963, R967 USED FOR B VERSION ONLY OTHERS USE B3003
Q965 & B3116 USED FOR B VERSION ONLY OTHERS USE B3001

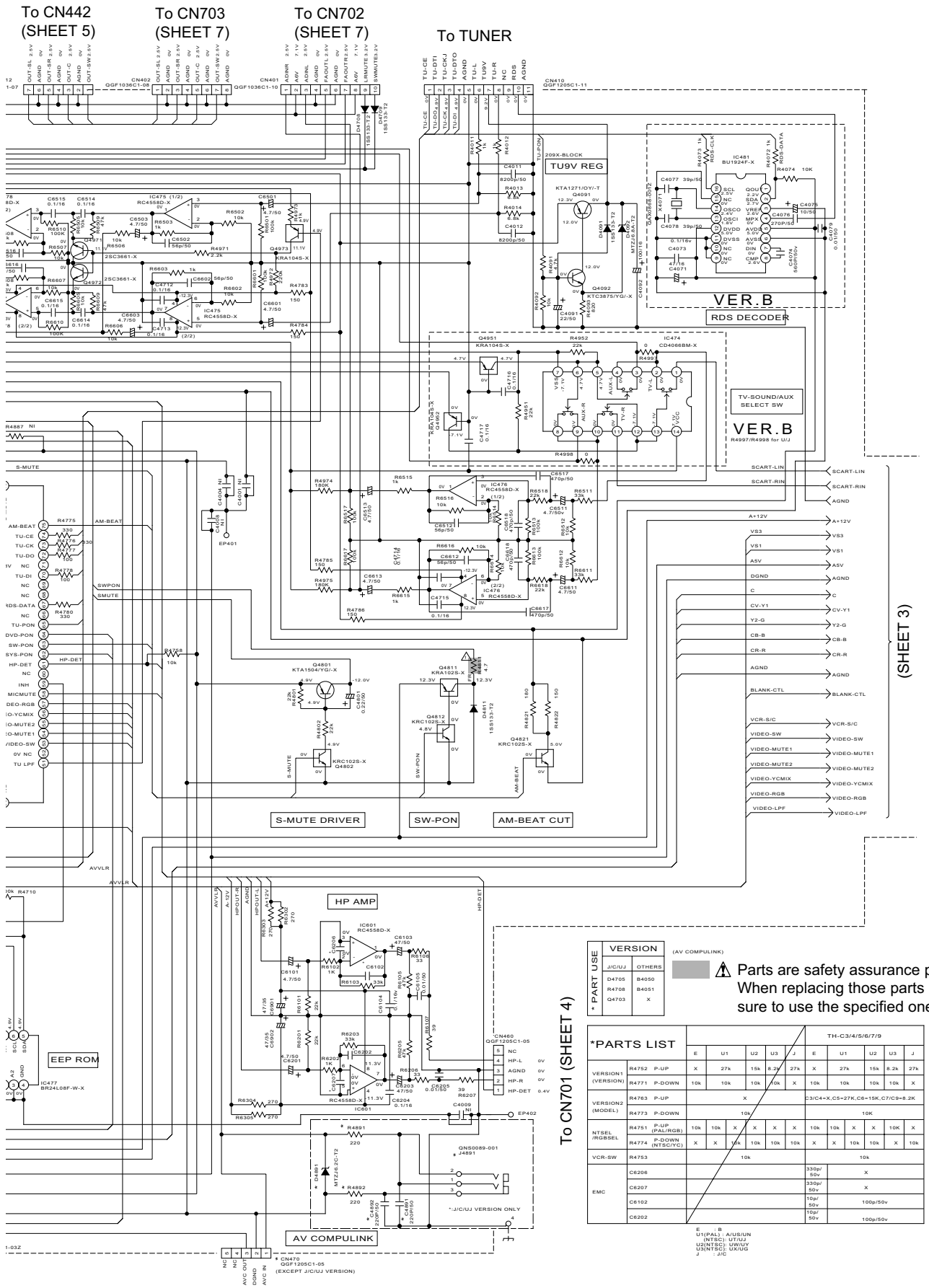
⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.


GVA10092-A2
POWER PWB
FL SW
-VDISP
DVD5V SW
D5V
B5V
M9V
A+12V
A-12V
THIS BLOCK N.I
IC951 PQ05RD21SSJH
IC953 KIA7805API
TO CN406,CN407 (SHEET 2)
TO CN404,CN405 (SHEET 2)
EP951 QNZ0136-001Z

SHEET 1

■ System control section





* PART USE	VERSION	
	J/C/UJ	OTHERS
D4705		B4050
R4708		B4051
Q4703		X

(AV COMPULINK)

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

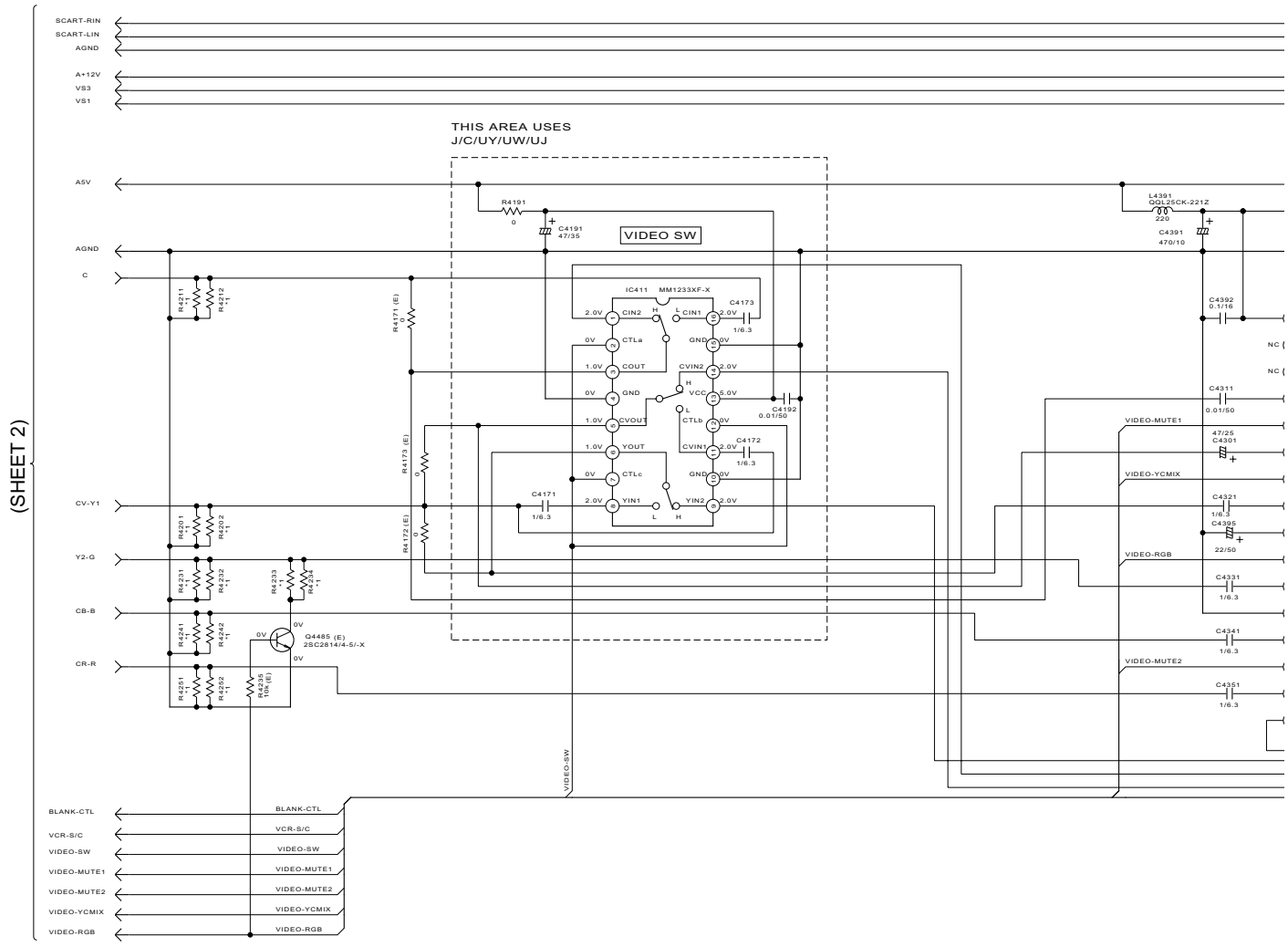
*PARTS LIST			TH-C3/4/5/6/7/9									
			E	U1	U2	U3	J	E	U1	U2	U3	J
VERSION1 (VERSION)	R4752	P-UP	X	27k	15k	8.2k	27k	X	27k	15k	8.2k	27k
	R4771	P-DOWN	10k	10k	10k	10k	X	10k	10k	10k	10k	X
VERSION2 (MODEL)	R4763	P-UP	X					C3/C4=X,C5=27K,C6=15K,C7/C9=8.2K				
	R4773	P-DOWN	10K					10K				
NTSEL /RGBSEL	R4751	P-UP (PAL/RGB)	10k	10k	X	X	X	X	10k	10k	X	X	10K	X
	R4774	P-DOWN (NTSC/YC)	X	X	10k	10k	10k	10k	X	X	10k	10k	X	10k
VCR-SW	R4753		10k					10k				
EMC	C6206							330p/50v	X			
	C6207							330p/50v	X			
	C6102							10p/50v	100p/50v			
	C6202							10p/50v	100p/50v			

E : B
U1(PAL) : A/US/UN
(NTSC): UT/UJ
U2(NTSC): UW/UY
U3(NTSC): UX/UG
J : J/C

SHEET 2

■ Video input / output section

GVA10092-A1

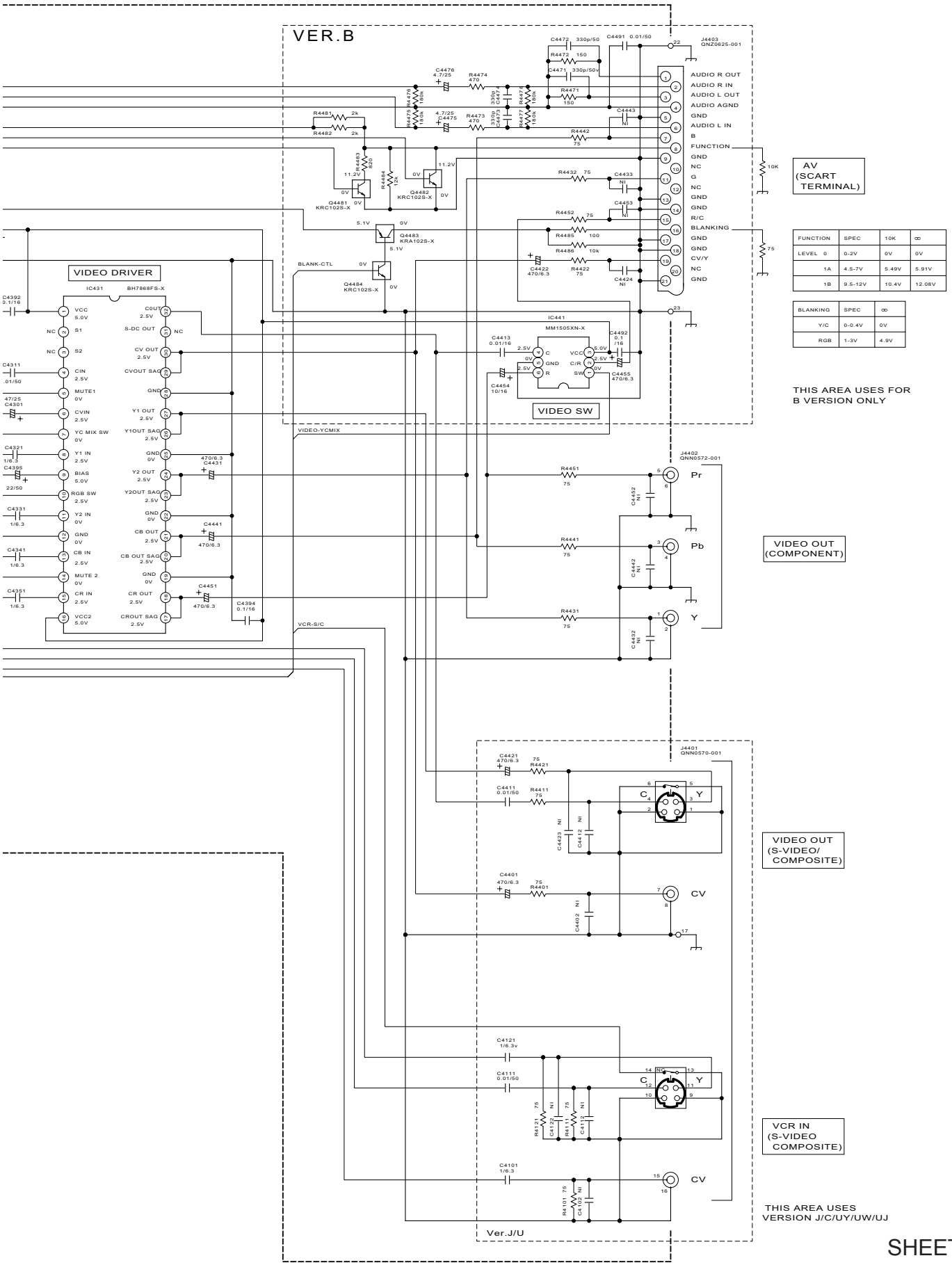


*1 PARTS LIST

		B	U/J
CV-Y1	R4201	560	510
	R4202	330	330
C	R4211	240	560
	R4212	X	560
Y2-G	R4231	560	510
	R4232	330	330
	R4233	820	X
	R4234	220	X
Cb-B	R4241	470	560
	R4242	120	120
Cr-R	R4251	470	560
	R4252	120	120

U : UJ/UW/UY/US/UN/UX/UG/UT/A

J : J/C

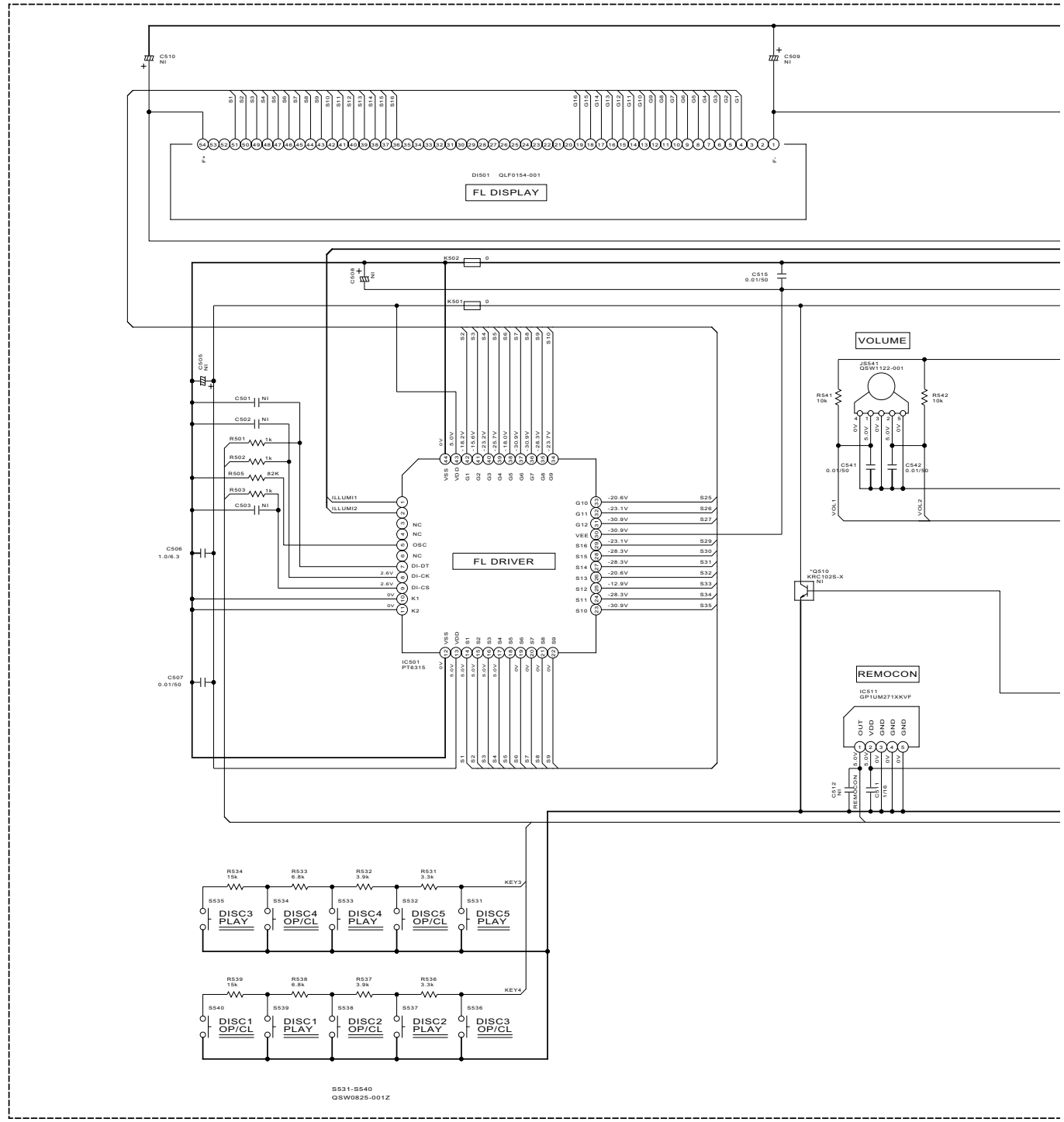


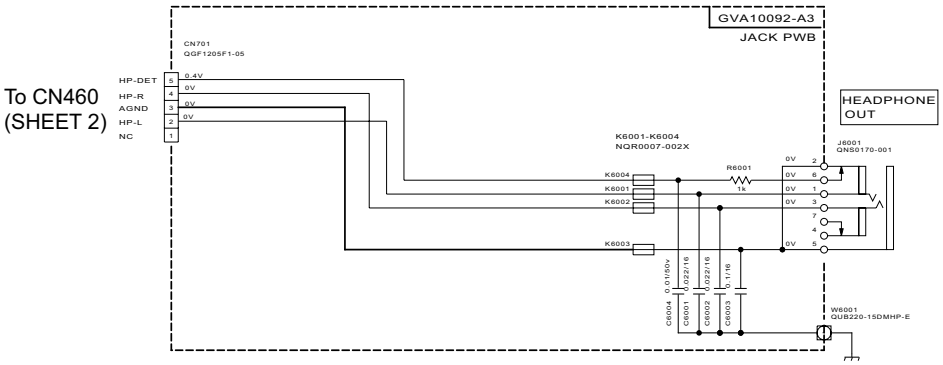
FUNCTION	SPEC	10K	∞
LEVEL 0	0-2V	0V	0V
1A	4.5-7V	5.49V	5.91V
1B	9.5-12V	10.4V	12.08V

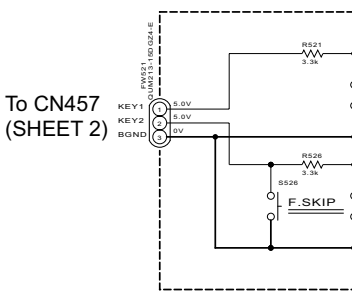
BLANKING	SPEC	∞
Y/C	0-0.4V	0V
RGB	1-3V	4.9V

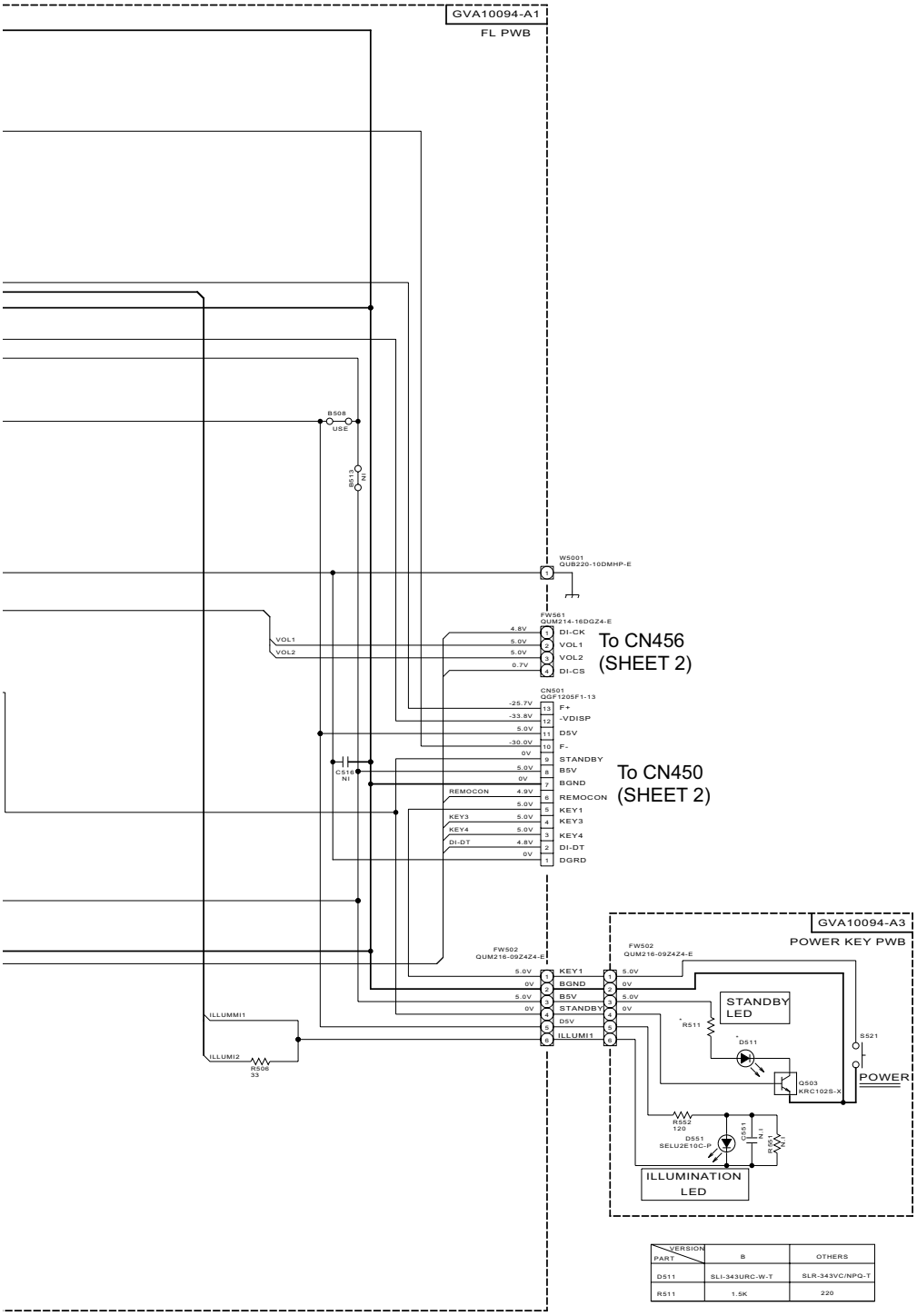
SHEET 3

■ FL display section

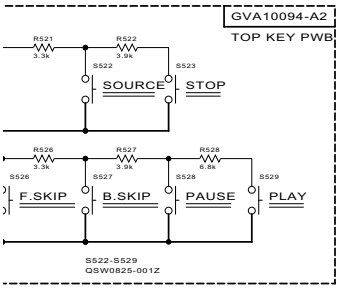






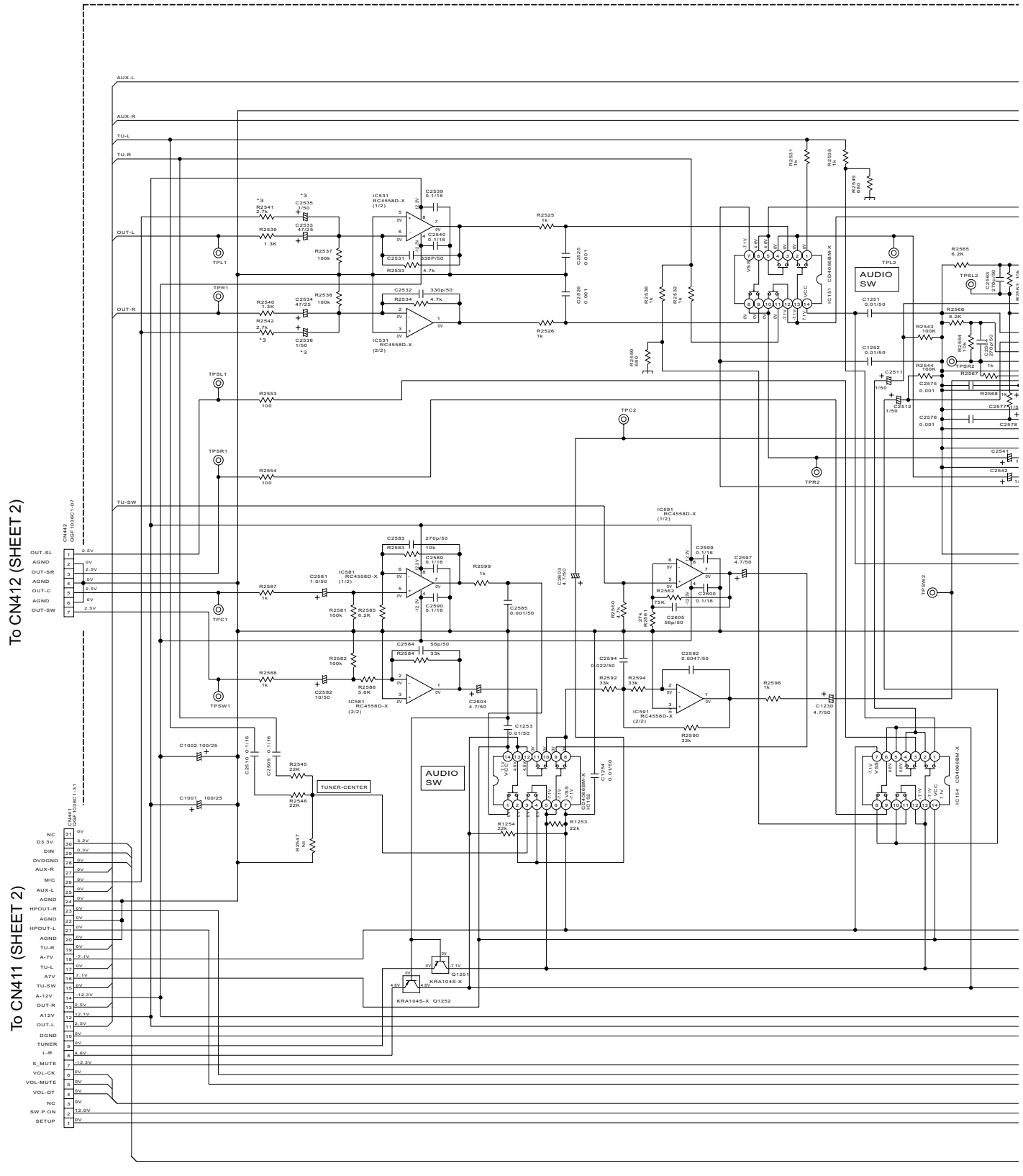


VERSION / PART	B	OTHERS
D511	SLI-343URC-W-T	SLR-343VC/NPQ-T
R511	1.5K	220



SHEET 4

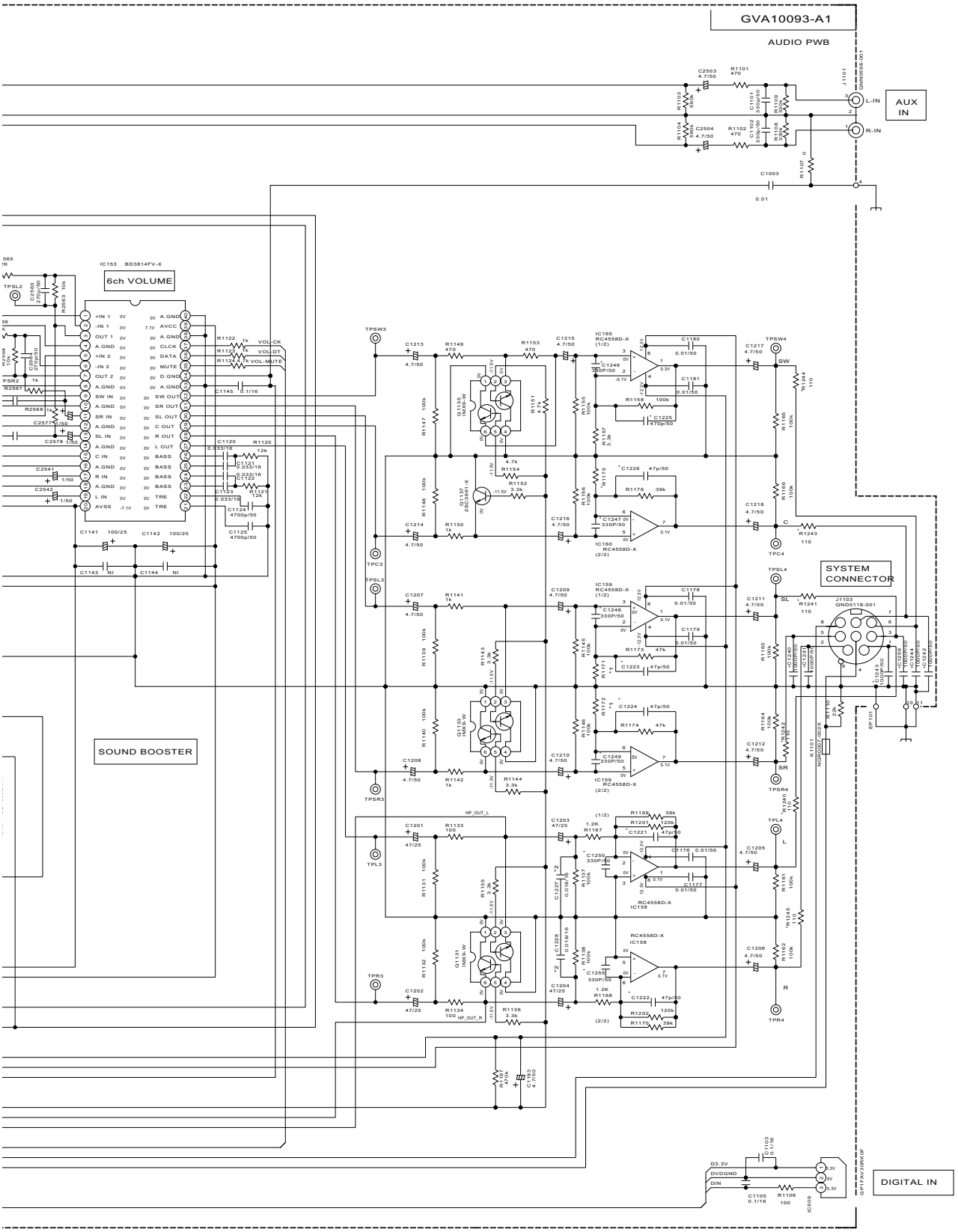
■ Audio & Digital input section



*3 USE U seri. With MIC.

*1

VERSION
XV-THC3/4
XV-THC5
XV-THC6
XV-THC7/9

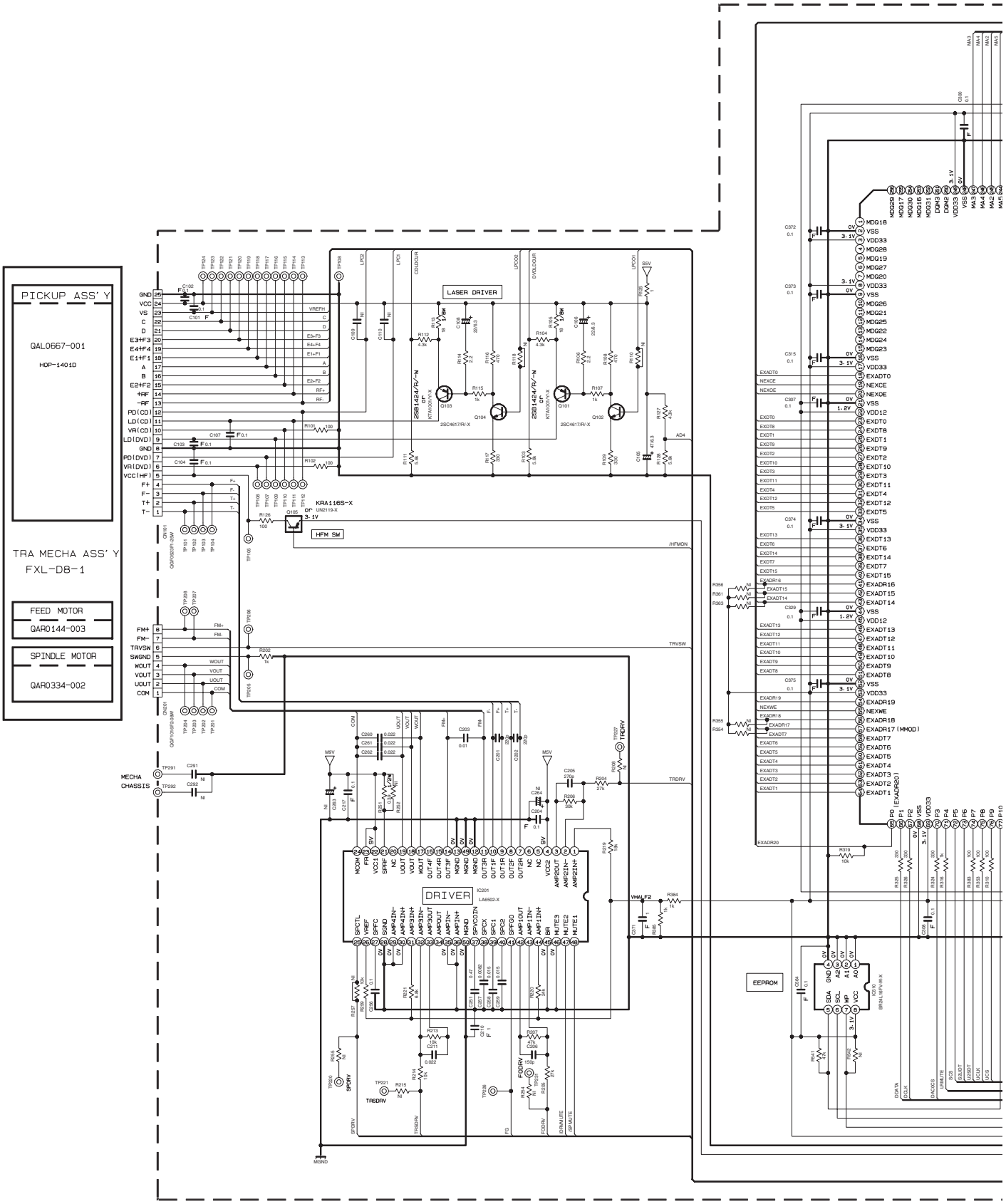


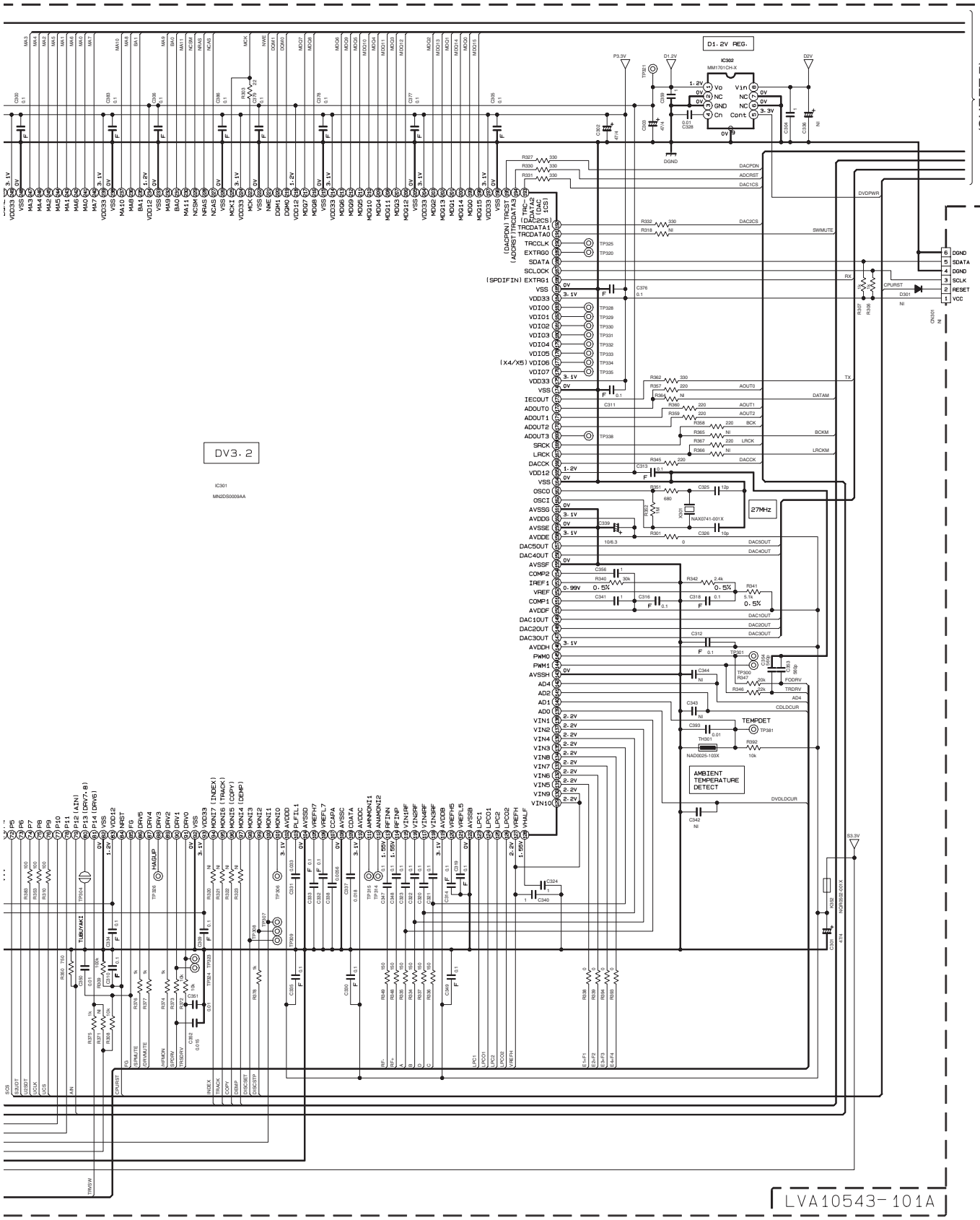
SION	R1171 R1172	R1175
4	1.5k	2K
	2K	1.8k
	2K	2K
9	1.8K	2K

* EMC C/M		
PART	B	OTHERS
C1246 , C1248 , C1247 C1249 , C1250 , C1255	330p	NONE
R1240 , R1241 , R1242 R1243 , R1244 , R1245	100 ohm	0 ohm
C1240 , C1241 , C1242 C1243 , C1244 , C1256	1000p	NONE
C1221 , C1222 , C1223 C1224 , C1225 , C1226	NONE	USE

SHEET 5

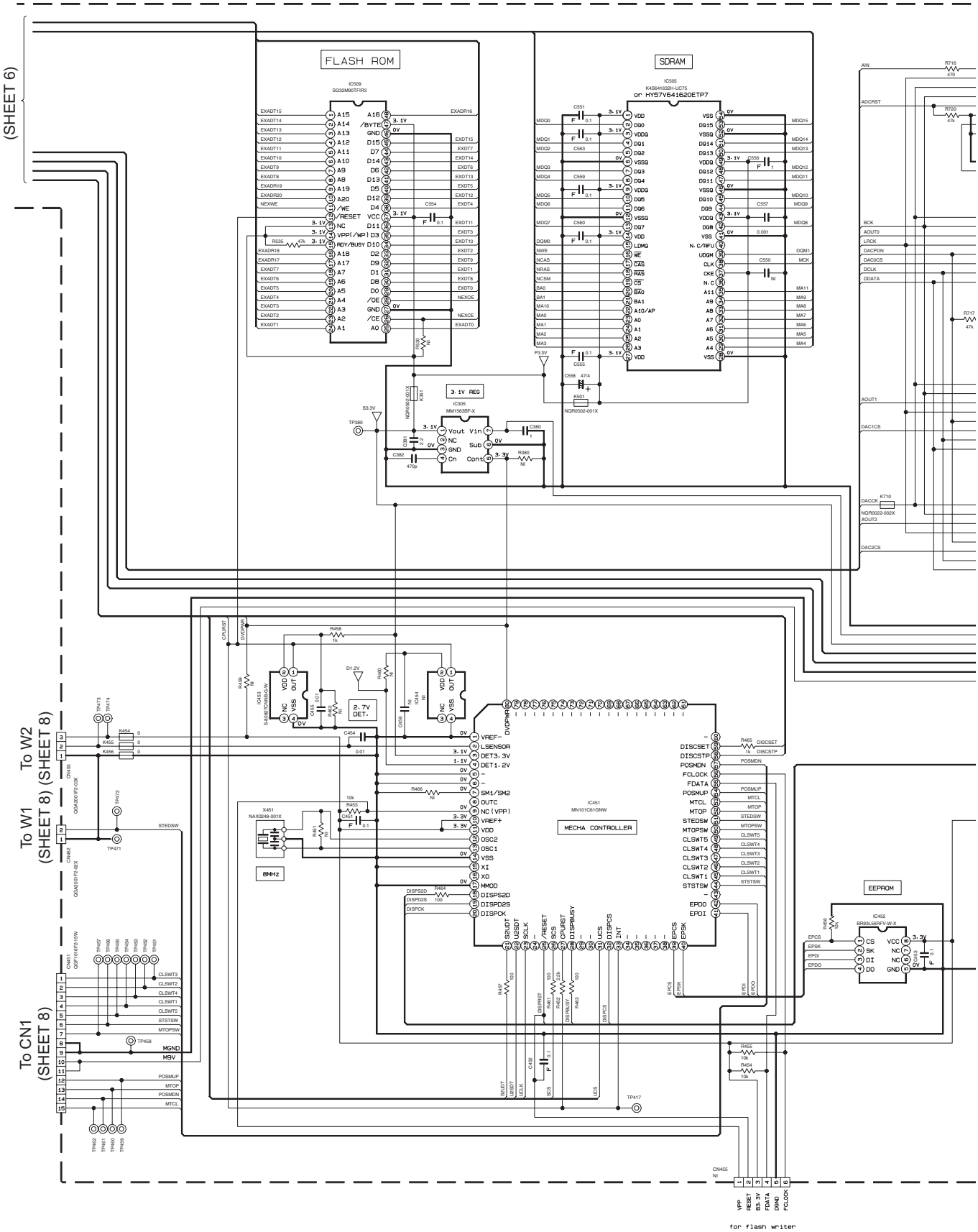
■ DVD servo section (1/2)

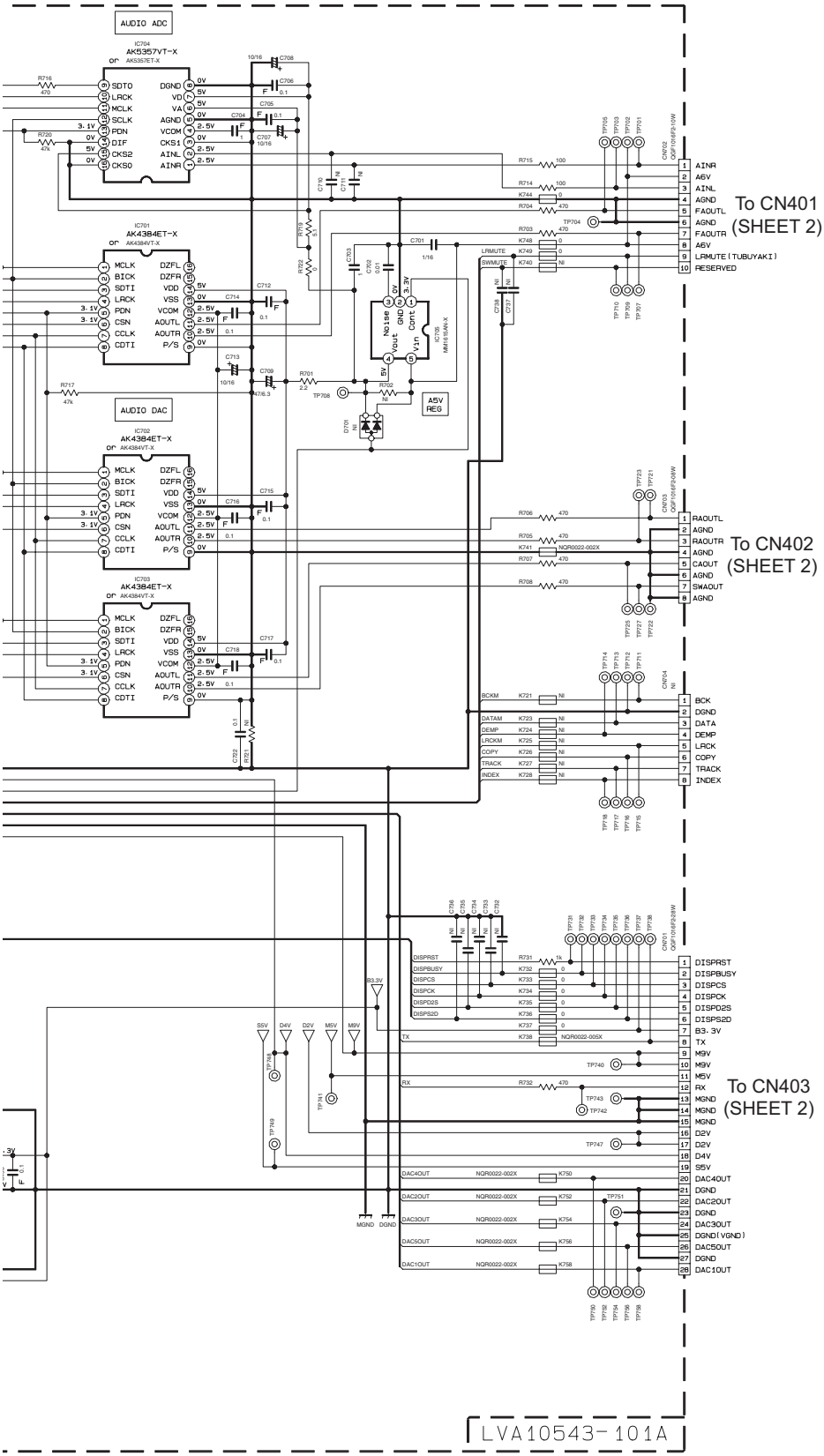



(SHEET 7)
D1.2V REG.
IC302
MM1701CH-X
DV3.2
IC301
MN2DS0009AA
27MHz
NAX0741-001X
DACPDN
ADCRST
DAC1CS
DVDPWR
DAC2CS
SWMUTE
TRCCLK
EXTRG0
SDATA
SCLOCK
EXTRG1
VDIO0
VDIO1
VDIO2
VDIO3
VDIO4
VDIO5
VDIO6
VDIO7
IECOUT
ADOUT0
ADOUT1
ADOUT2
ADOUT3
SRCK
LRCK
DACCK
OSCO
OSCI
DAC5OUT
DAC4OUT
DAC1OUT
DAC2OUT
DAC3OUT
PWM0
PWM1
AD4
AD2
AD1
AD0
VIN1
VIN2
VIN4
VIN3
VIN8
VIN7
VIN6
VIN5
VIN9
VIN10
TEMPDET
AMBIENT TEMPERATURE DETECT
DVOLDCUR
CDLDCUR
TRDRV
FODRV
DGND
SDATA
SCLK
RESET
VCC
for ICE
LVA10543-101A

SHEET 6

■ DVD servo section (2/2)





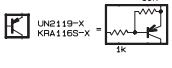
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION --- A DVD disc in the Tray 1. and STOP mode.

2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/16W ±5% METAL GLAZE RESISTOR. OR 0.5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V. 25V. 16V. 10V or 6.3V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(p=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).

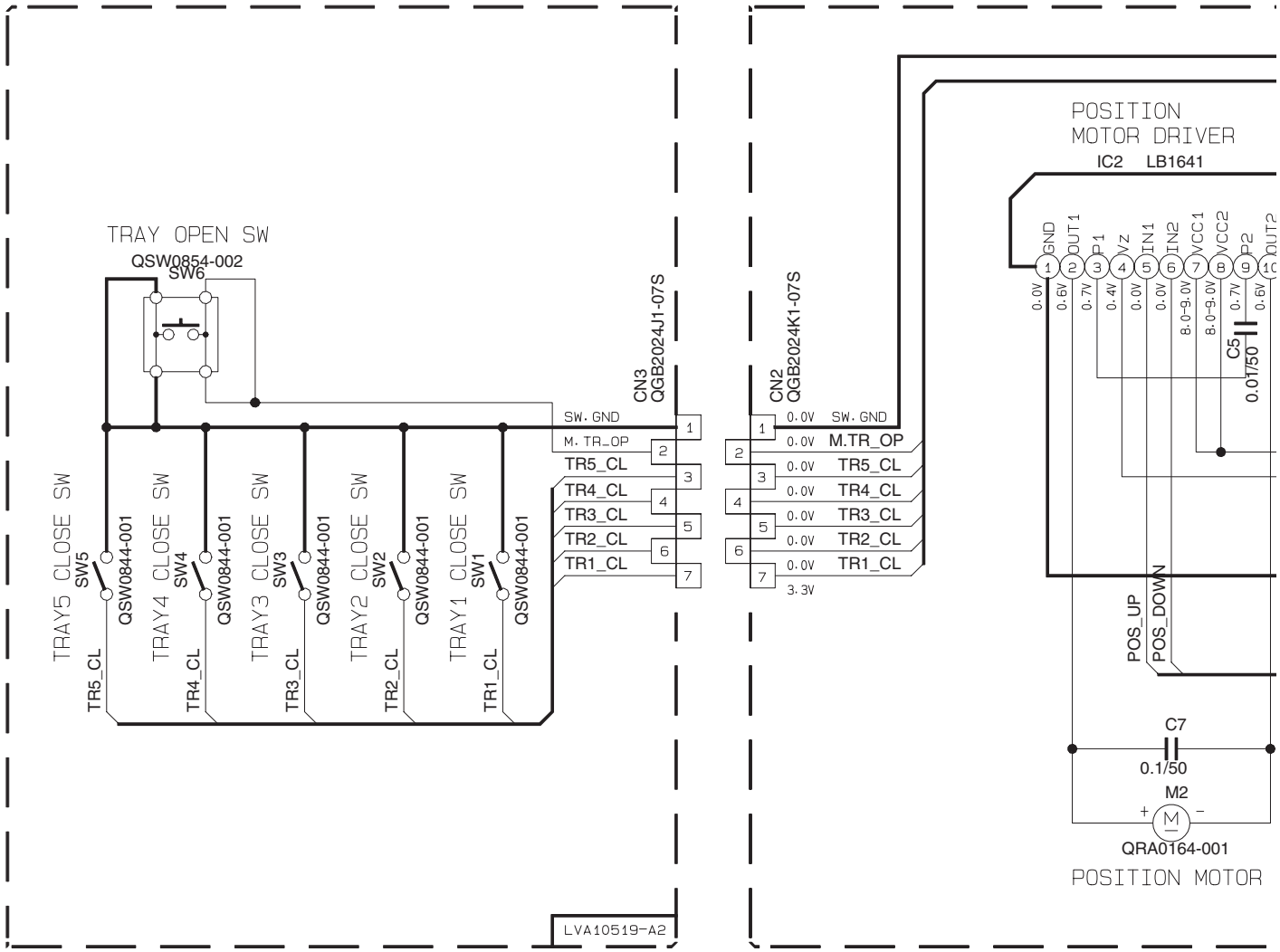
3. NI STANDS FOR NOT INSERTED PARTS.

4. DIGITAL TRANSISTOR



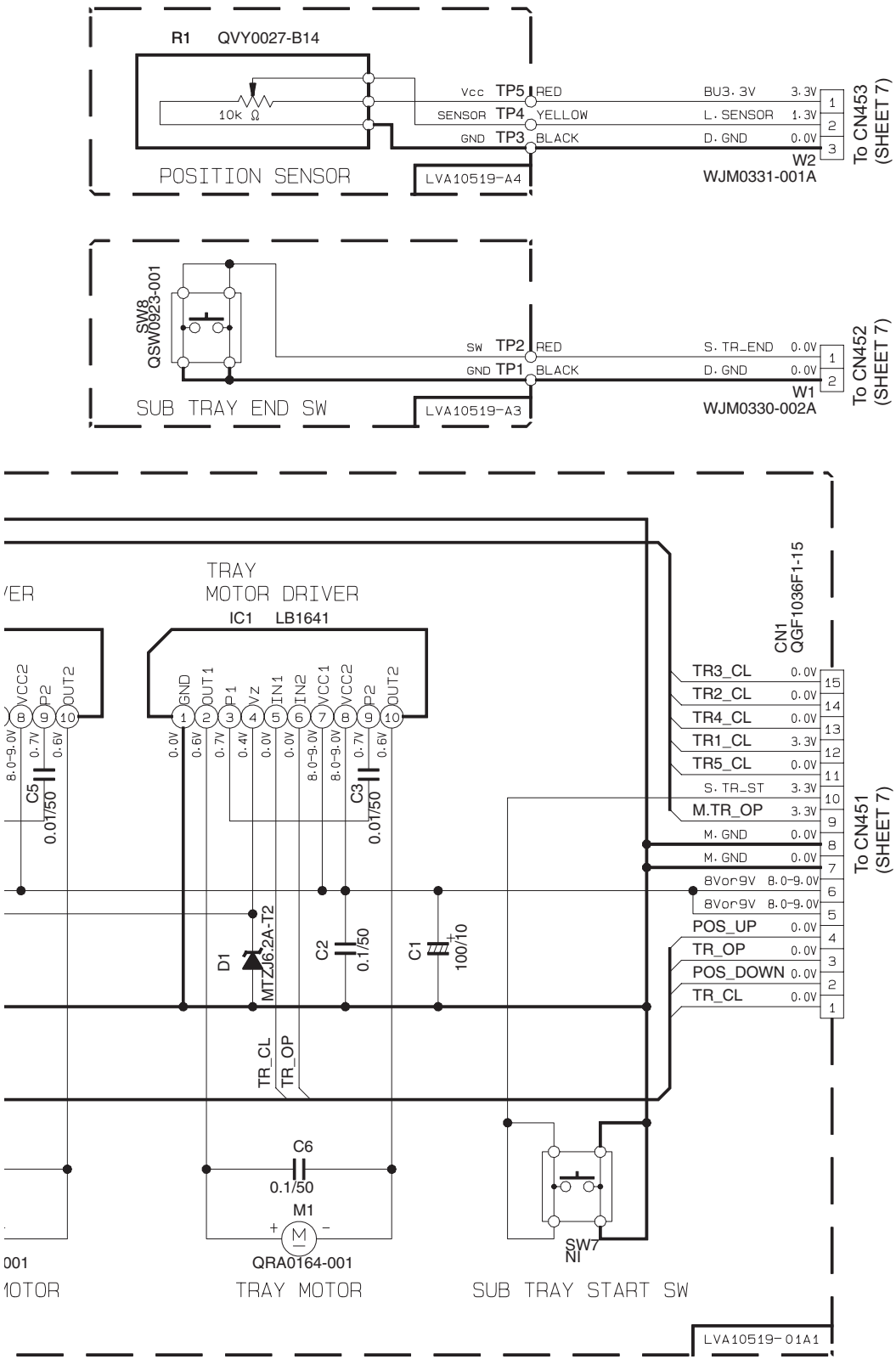
SHEET 7

■ DVD changer mechanism section



NOTES

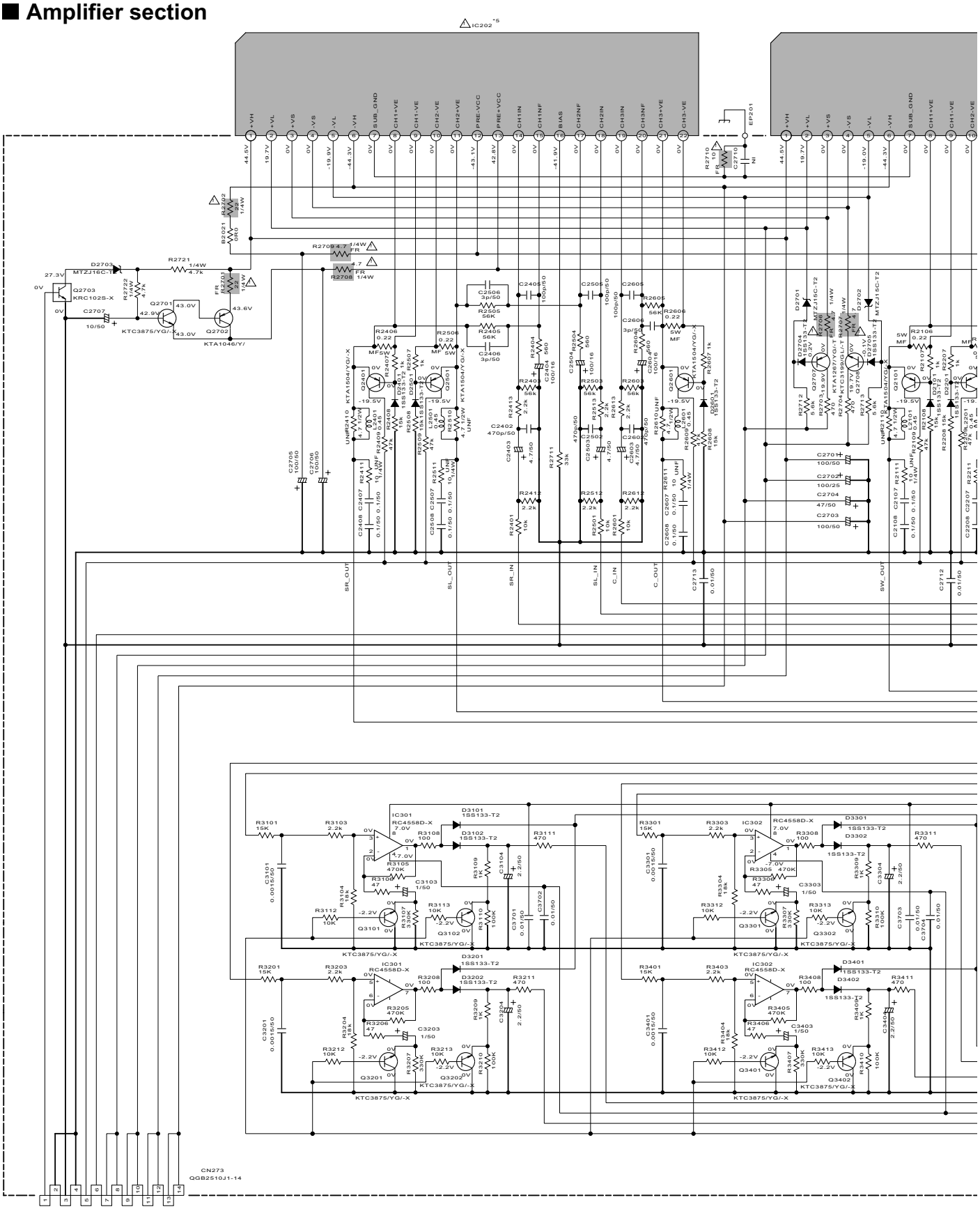
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
   CONDITION:DISC1 STOP
2. UNLESS OTHERWISE SPECIFIED.
   ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V).
3. NI STANDS FOR NOT INSERTED PARTS.


R1 QVY0027-B14
10k Ω
Vcc TP5 RED
SENSOR TP4 YELLOW
GND TP3 BLACK
BU3.3V 3.3V
L.SENSOR 1.3V
D.GND 0.0V
W2
WJM0331-001A
To CN453 (SHEET 7)
POSITION SENSOR
LVA10519-A4
SW8
QSW0923-001
SW TP2 RED
GND TP1 BLACK
S.TR_END 0.0V
D.GND 0.0V
W1
WJM0330-002A
To CN452 (SHEET 7)
SUB TRAY END SW
LVA10519-A3
TRAY
MOTOR DRIVER
IC1 LB1641
CN1
QGF1036F1-15
TR3_CL 0.0V
TR2_CL 0.0V
TR4_CL 0.0V
TR1_CL 3.3V
TR5_CL 0.0V
S.TR_ST 3.3V
M.TR_OP 3.3V
M.GND 0.0V
M.GND 0.0V
8Vor9V 8.0-9.0V
8Vor9V 8.0-9.0V
POS_UP 0.0V
TR_OP 0.0V
POS_DOWN 0.0V
TR_CL 0.0V
To CN451 (SHEET 7)
C5 0.01/50
C3 0.01/50
D1 MTZJ6.2A-T2
C2 0.1/50
C1 100/10
TR_CL
TR_OP
C6 0.1/50
M1
QRA0164-001
TRAY MOTOR
SW7
SUB TRAY START SW
LVA10519-01A1

SHEET 8

<subwoofer section>

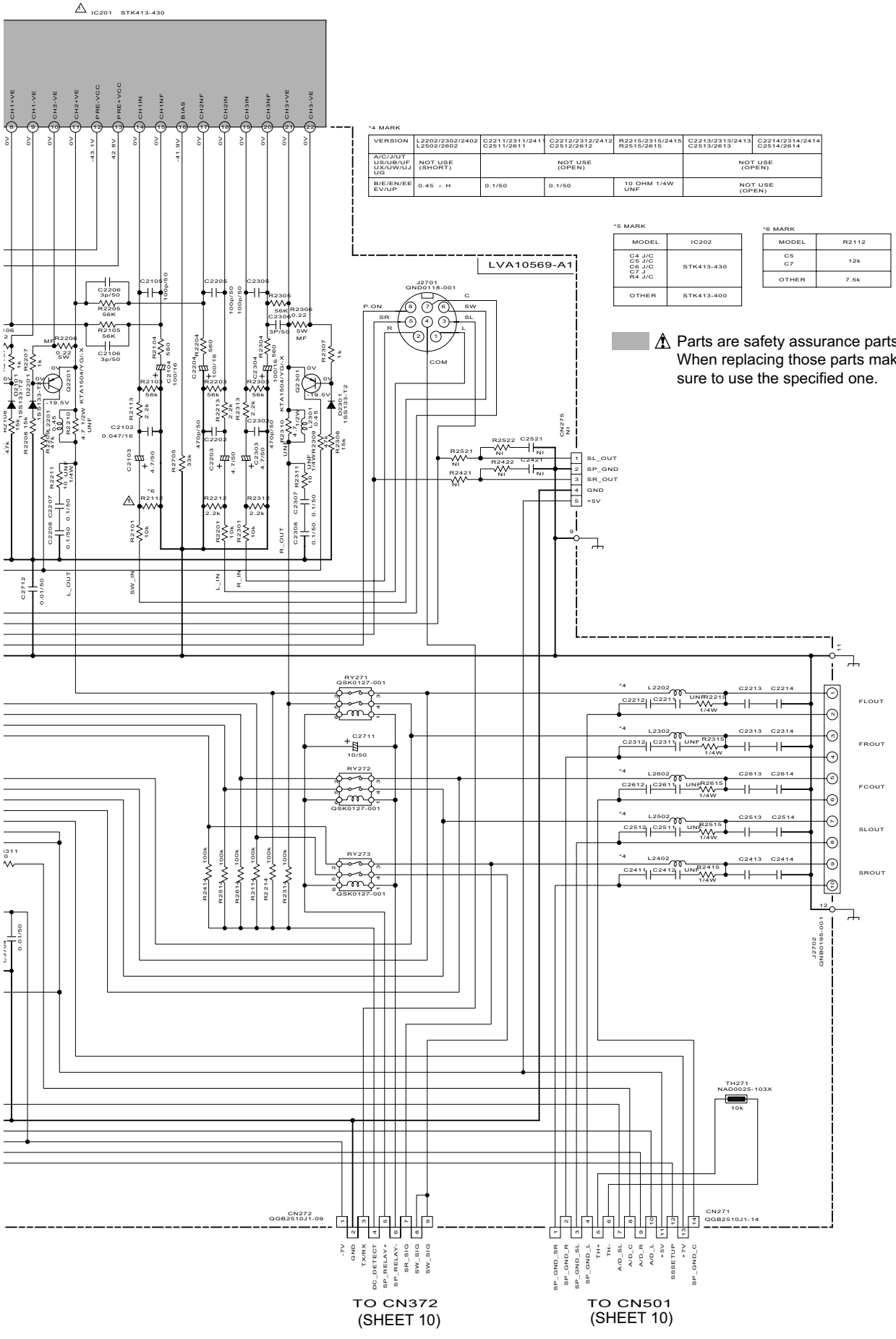
■ Amplifier section



TO CN502
(SHEET 10)

NOTES:UNLESS OTHERWISE SPECIFIED
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF. (p=pF)
ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V).

VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.

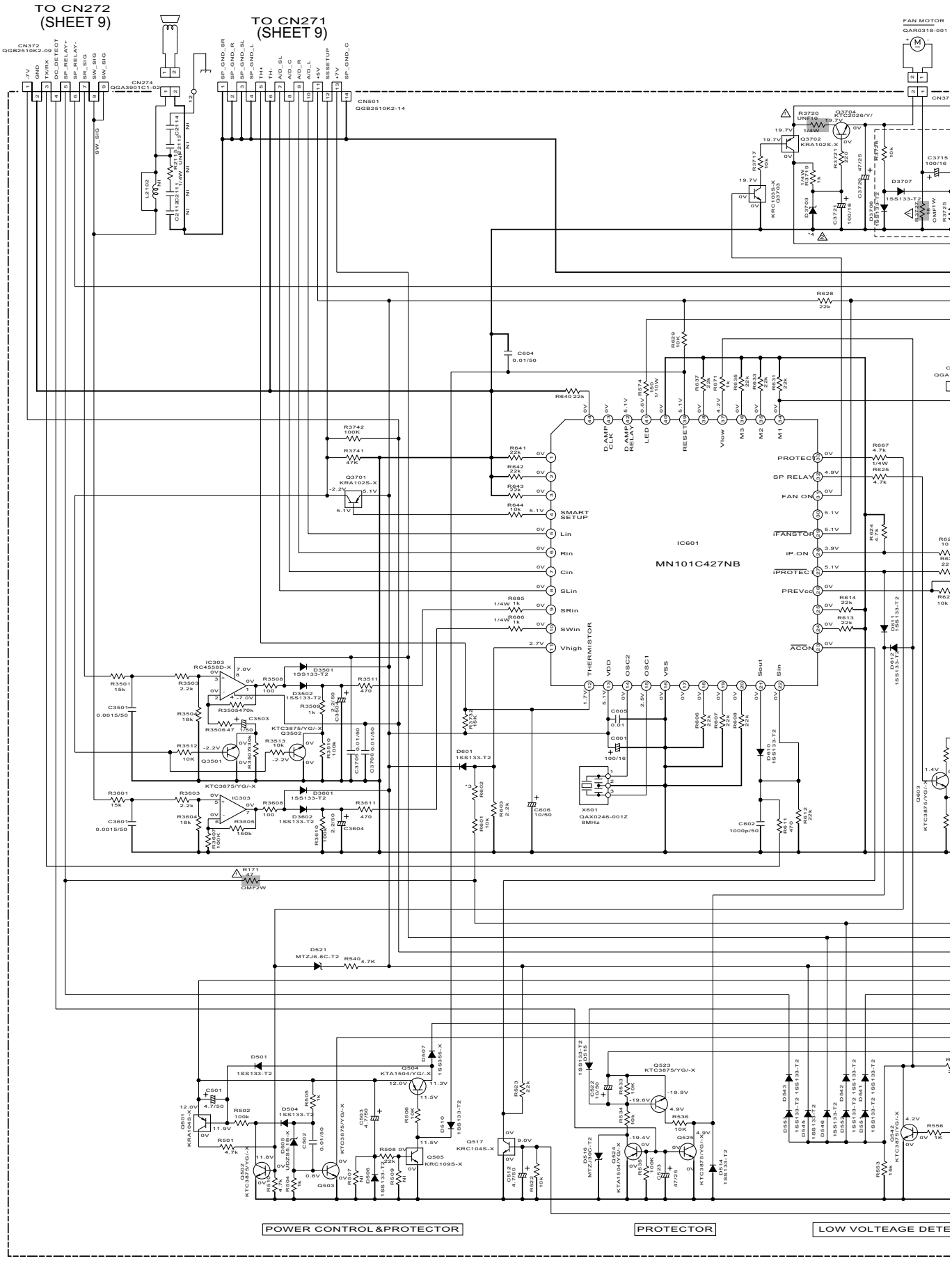


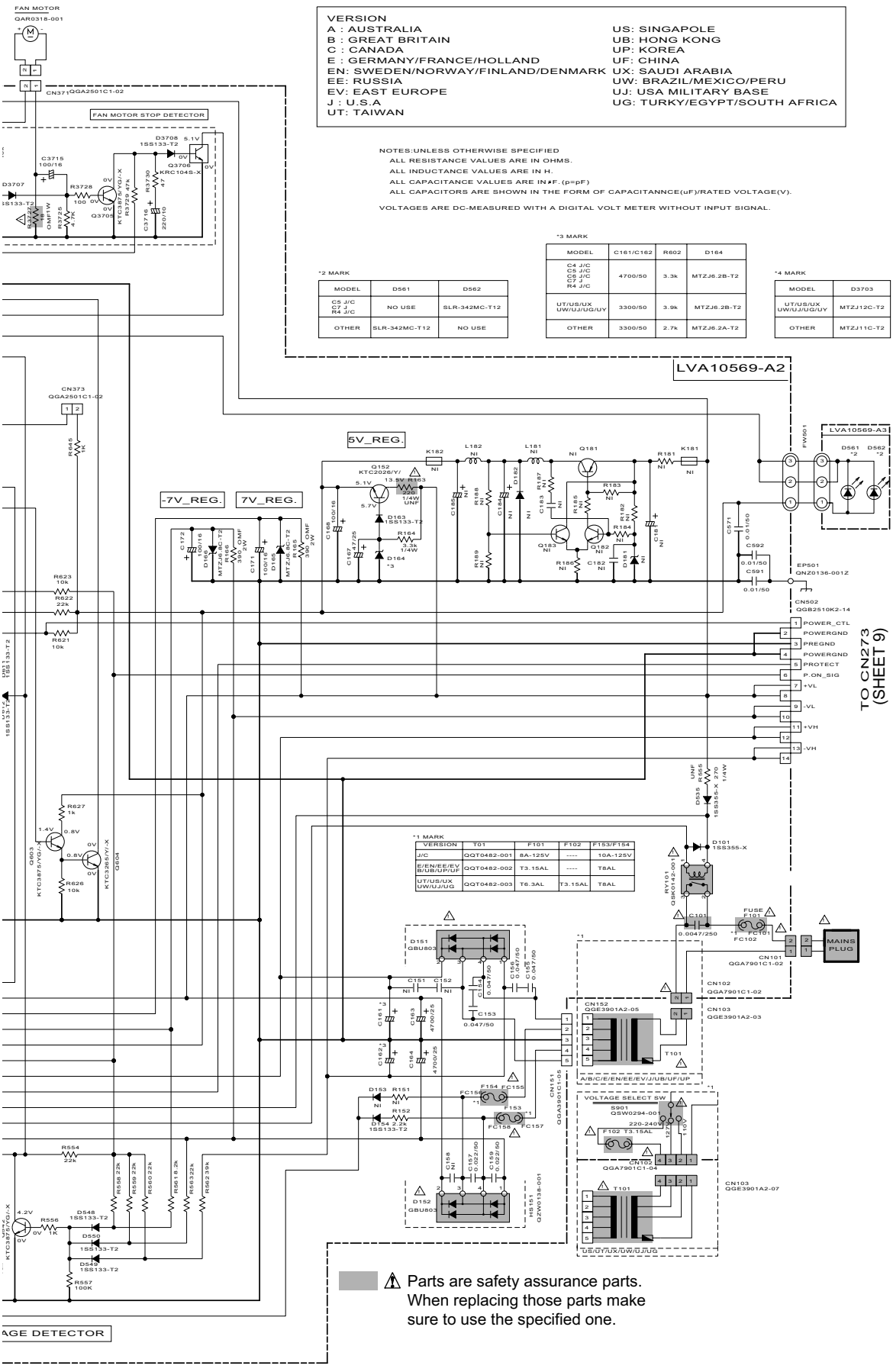
TO CN372 (SHEET 10)

TO CN501 (SHEET 10)

SHEET 9

■ Mother section




VERSION
A : AUSTRALIA
B : GREAT BRITAIN
C : CANADA
E : GERMANY/FRANCE/HOLLAND
EN: SWEDEN/NORWAY/FINLAND/DENMARK
EE: RUSSIA
EV: EAST EUROPE
J : U.S.A
UT: TAIWAN
US: SINGAPOLE
UB: HONG KONG
UP: KOREA
UF: CHINA
UX: SAUDI ARABIA
UW: BRAZIL/MEXICO/PERU
UJ: USA MILITARY BASE
UG: TURKY/EGYPT/SOUTH AFRICA
NOTES:UNLESS OTHERWISE SPECIFIED
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF. (p=pF)
ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANNCE(uF)/RATED VOLTAGE(V).
VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
*2 MARK
MODEL | D561 | D562
C5 J/C C7 J R4 J/C | NO USE | SLR-342MC-T12
OTHER | SLR-342MC-T12 | NO USE
*3 MARK
MODEL | C161/C162 | R602 | D164
C4 J/C C5 J/C C6 J/C C7 J R4 J/C | 4700/50 | 3.3k | MTZJ6.2B-T2
UT/US/UX UW/UJ/UG/UY | 3300/50 | 3.9k | MTZJ6.2B-T2
OTHER | 3300/50 | 2.7k | MTZJ6.2A-T2
*4 MARK
MODEL | D3703
UT/US/UX UW/UJ/UG/UY | MTZJ12C-T2
OTHER | MTZJ11C-T2
*1 MARK
VERSION | T01 | F101 | F102 | F153/F154
J/C | QQT0482-001 | 8A-125V | ---- | 10A-125V
E/EN/EE/EV B/UB/UP/UF | QQT0482-002 | T3.15AL | ---- | T8AL
UT/US/UX UW/UJ/UG | QQT0482-003 | T6.3AL | T3.15AL | T8AL
FAN MOTOR
QAR0318-001
FAN MOTOR STOP DETECTOR
LVA10569-A2
LVA10569-A3
5V_REG.
-7V_REG.
7V_REG.
TO CN273 (SHEET 9)
POWER_CTL
POWERGND
PREGND
POWERGND
PROTECT
P.ON_SIG
+VL
-VL
+VH
-VH
MAINS PLUG
VOLTAGE SELECT SW
S901 QSW0294-001
220-240V
F102 T3.15AL
Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

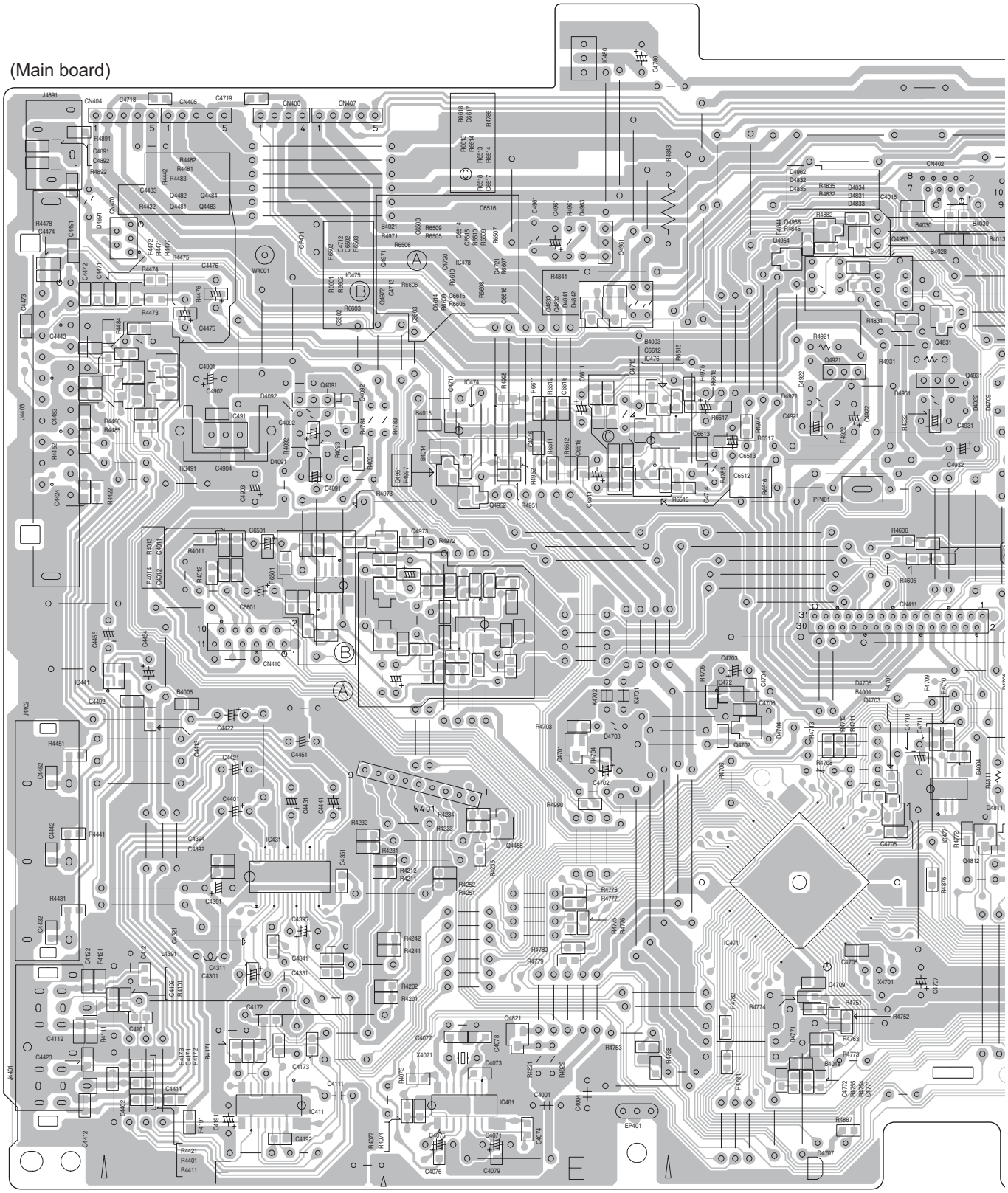
Printed circuit boards

<Main body section>

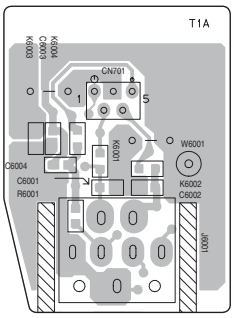
■ Main board

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

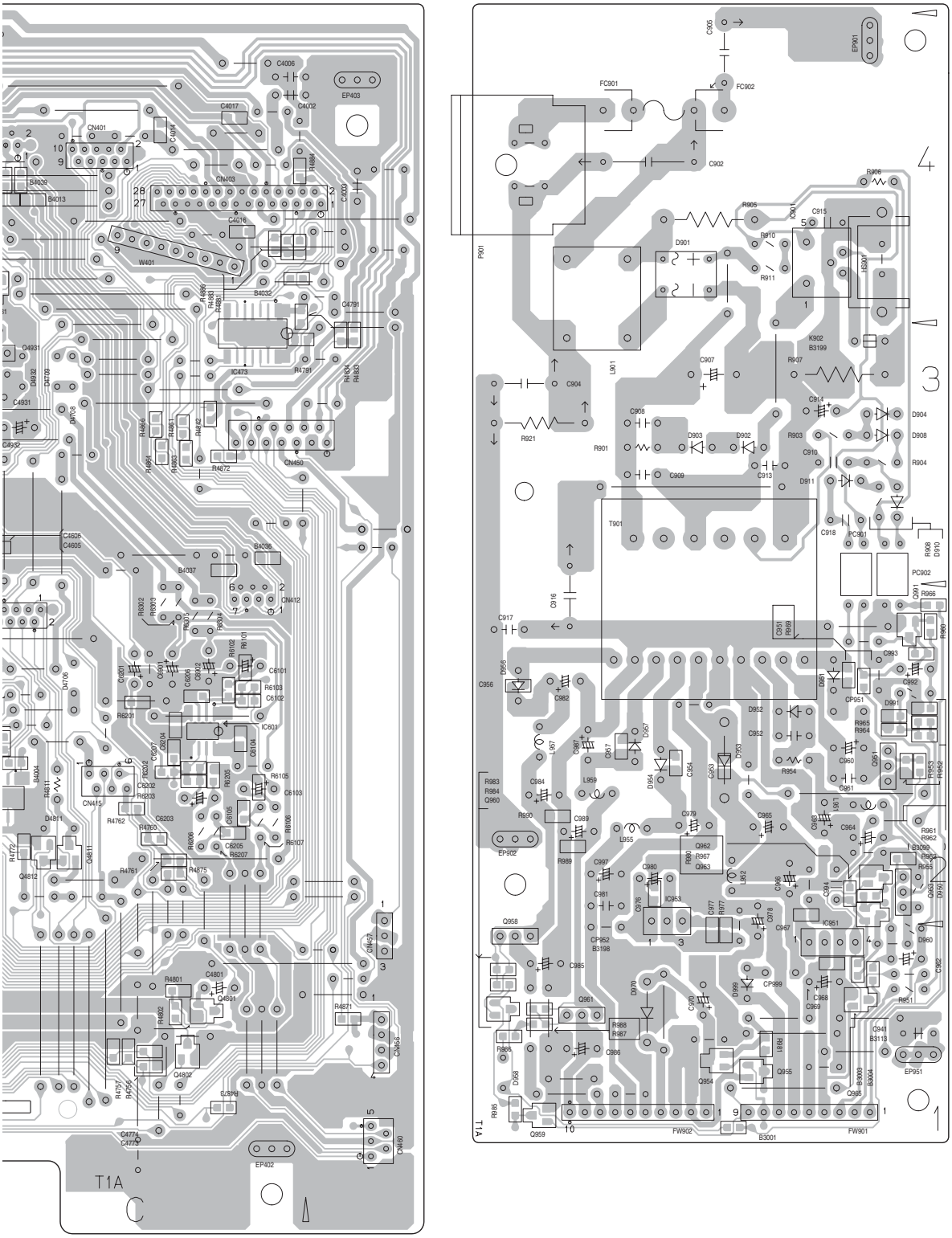
(Main board)



(Phone jack board)



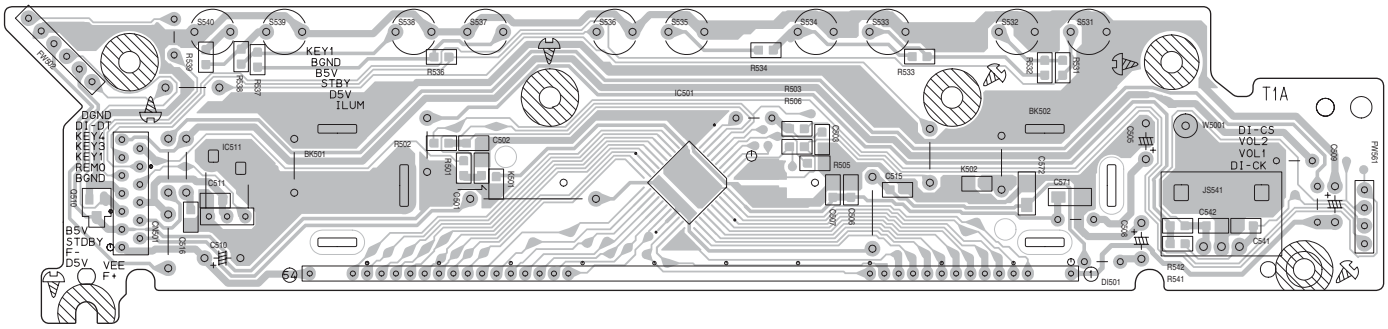
(Power supply board)



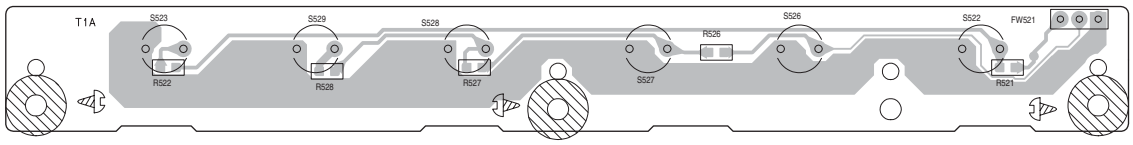
■ Front board

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

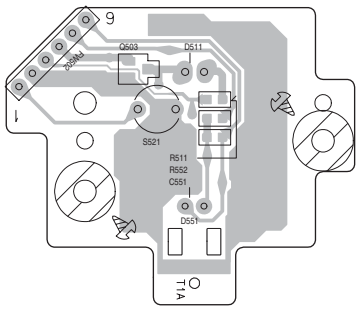
(Front board)



(Operation board)



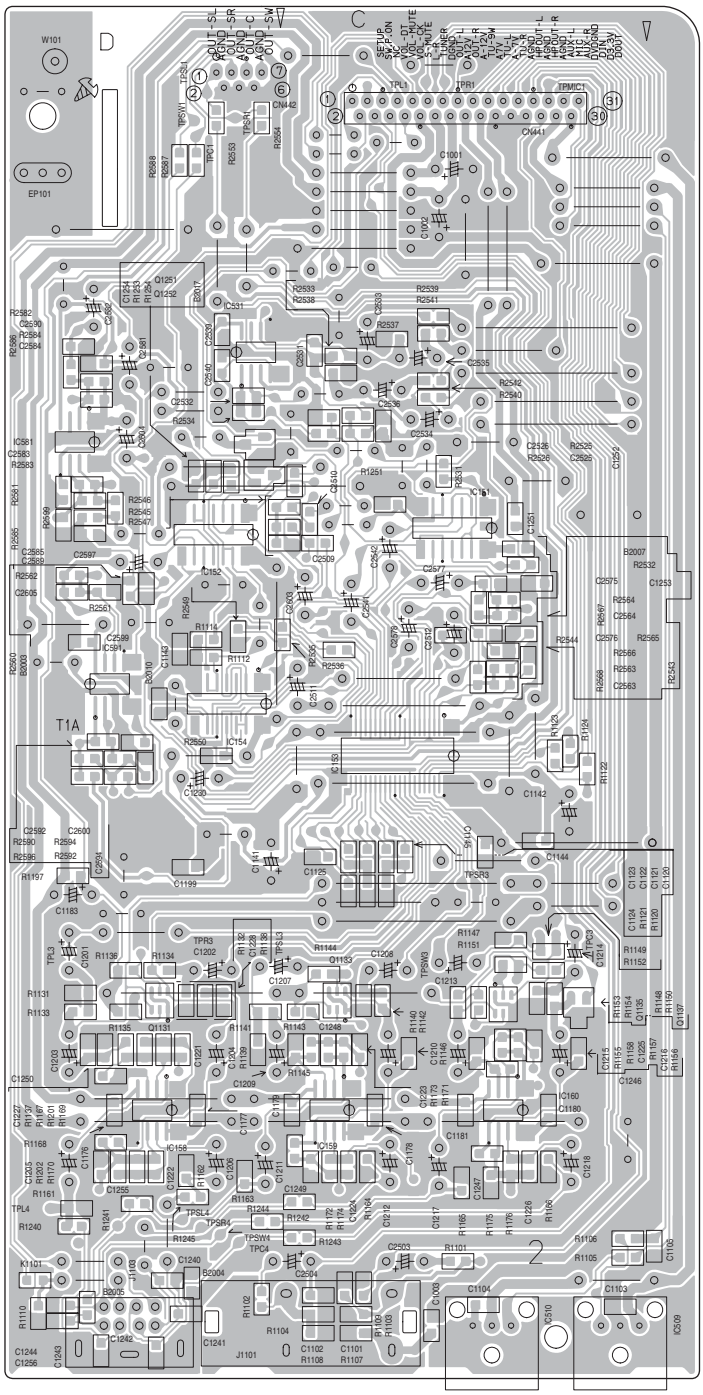
(Power key board)



■ Audio board

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

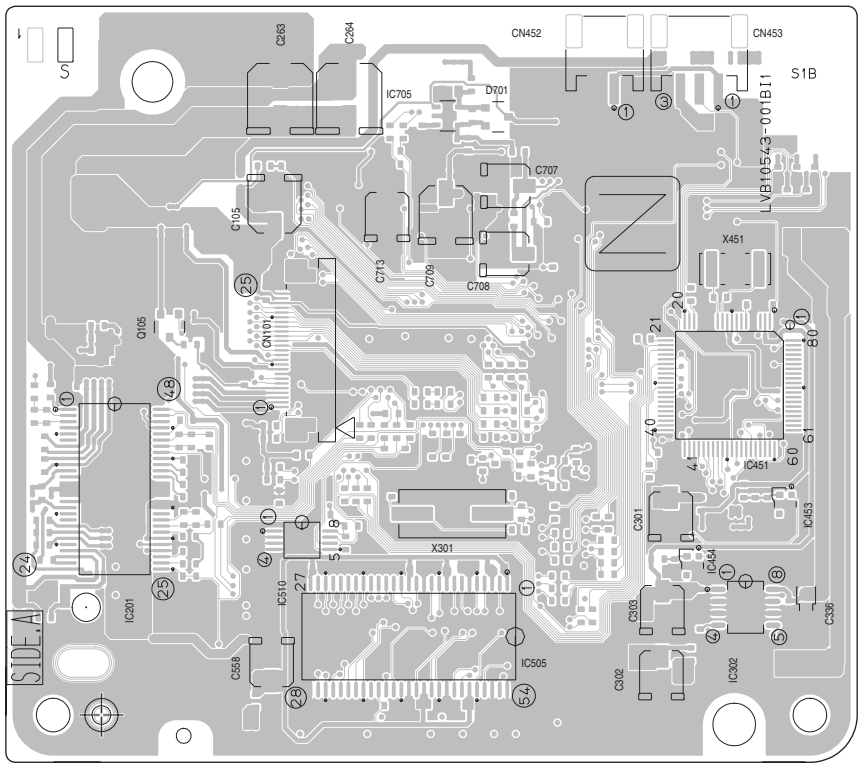
(Audio & Digital input board)



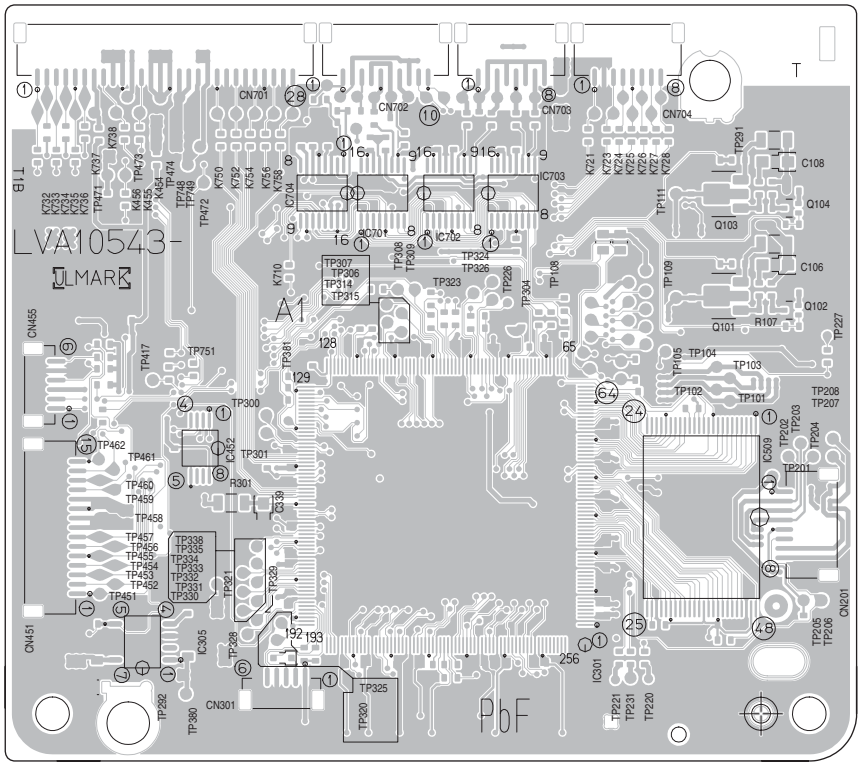
■ DVD servo board

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

Forward side



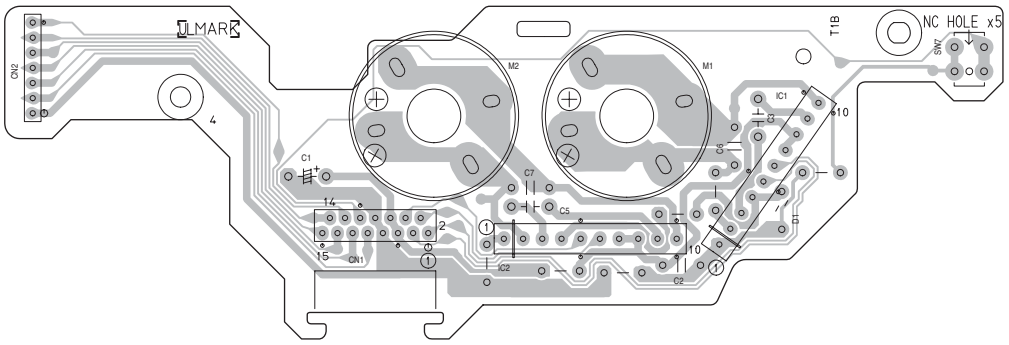
Reverse side



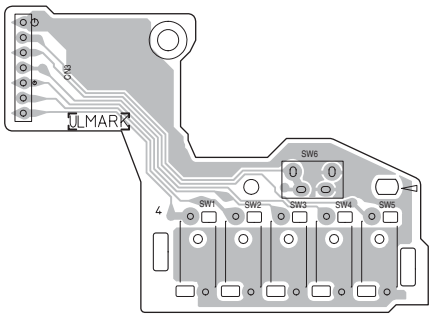
■ Loading board

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

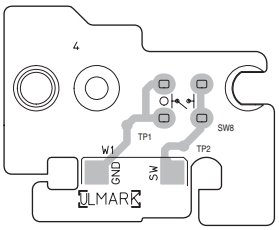
(Motor board)



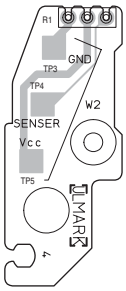
(Tray switch board)



(Switch board)



(Sensor board)

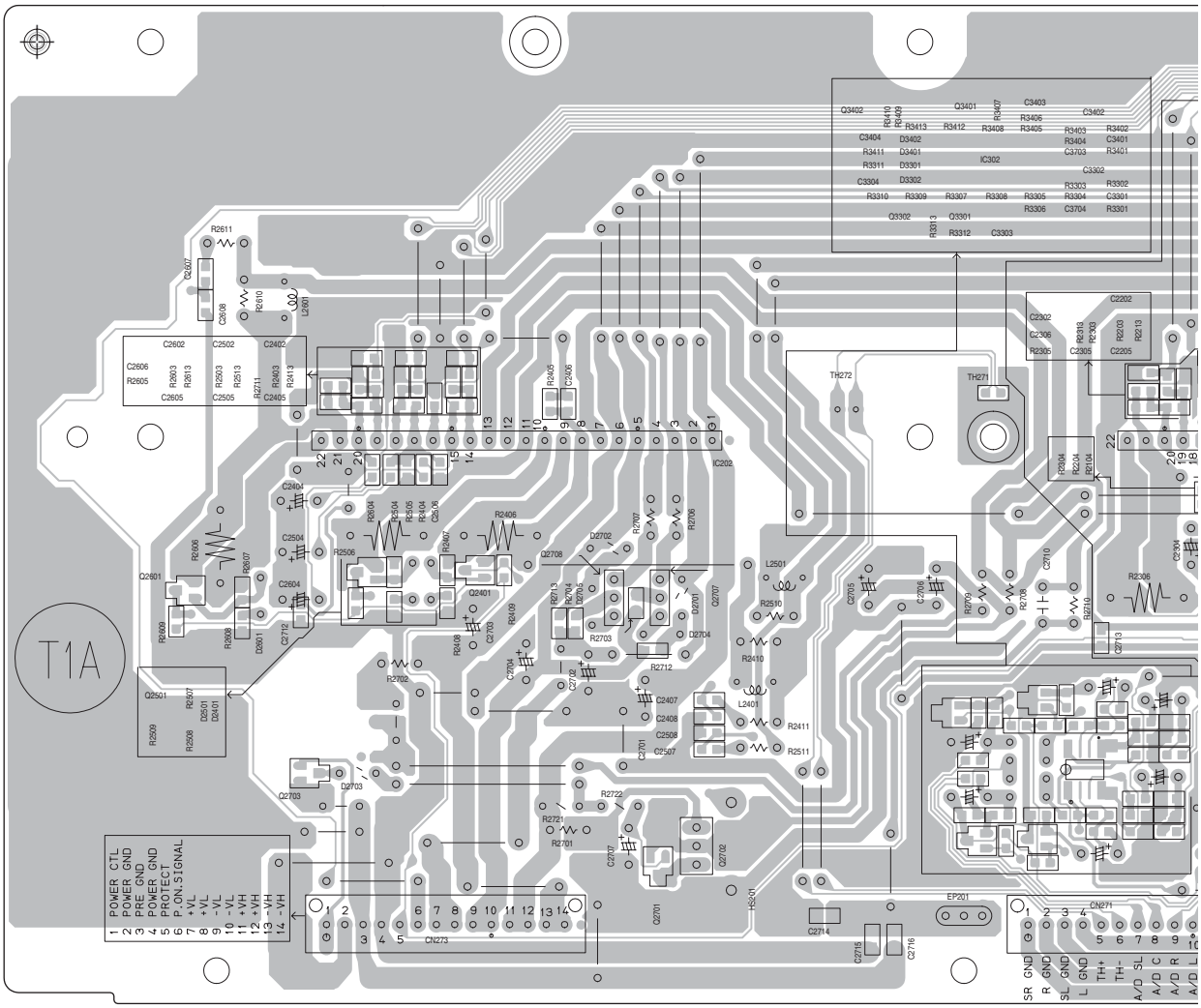


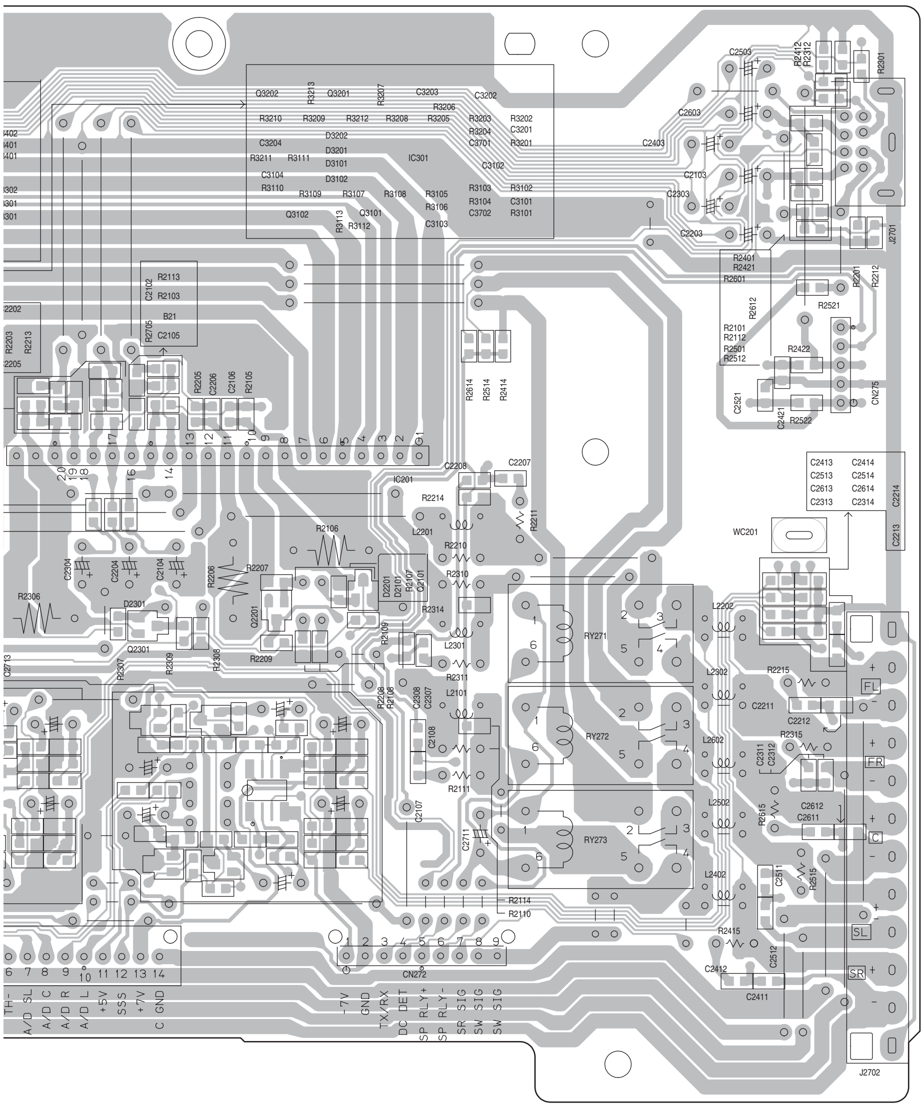
<Subwoofer section>

■ Amp board

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

(Amp board)

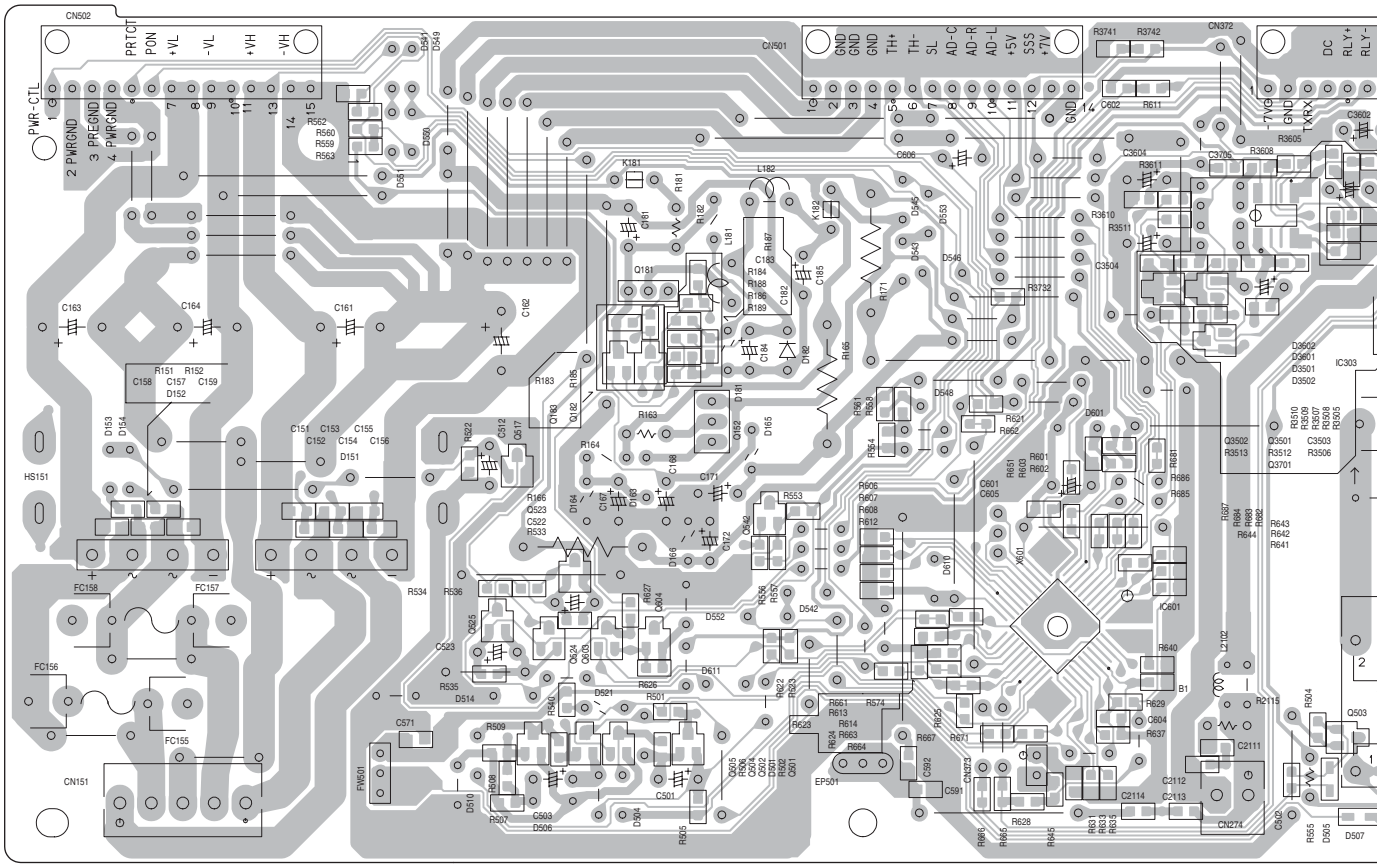


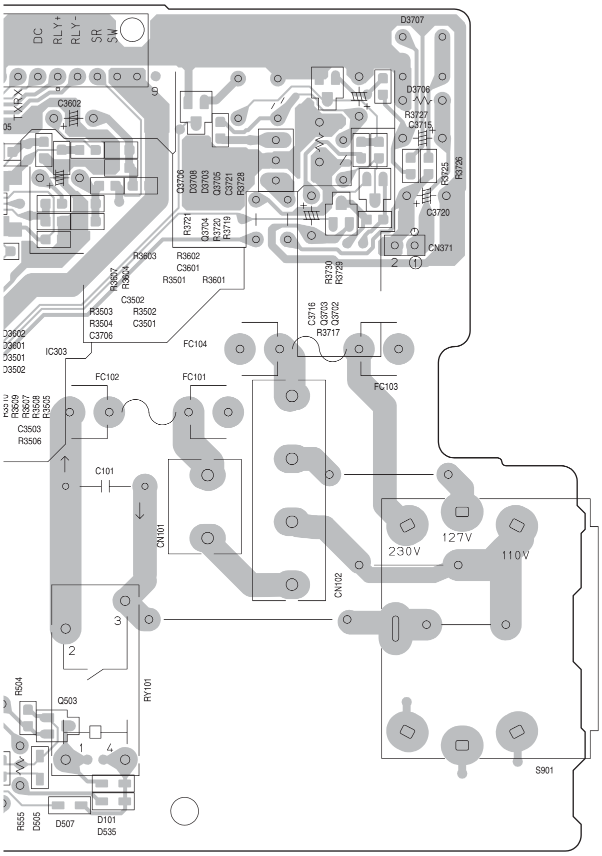

Q3202 R3213 Q3201 R3207 C3203 C3202
R3210 R3209 R3212 R3208 R3205 R3206 R3203 R3204 C3701 R3202 C3201 R3201
C3204 D3202 D3201 D3101 IC301 C3102
R3211 R3111 C3104 R3110 D3102
R3109 R3107 R3108 R3105 R3106 R3103 R3104 C3702 R3102 C3101 R3101
Q3102 R3113 Q3101 R3112 C3103
C2503 R2412 R2312 R2301 C2603 C2403 C2103 C2303 C2203 J2701
R2401 R2421 R2601 R2201 R2212 R2521 R2612 R2101 R2112 R2501 R2512 R2422 C2521 C2421 R2522 CN275
R2113 C2102 R2103 B21 R2705 C2105
R2205 C2206 C2106 R2105 R2614 R2514 R2414
C2413 C2414 C2513 C2514 C2613 C2614 C2313 C2314 C2214 C2213 WC201
C2208 C2207 IC201 R2214 L2201 R2211 R2106 R2210 R2310 R2314 R2207 R2206 C2304 C2204 C2104 R2306 D2301 Q2301 Q2201
D2201 D2101 R2107 C2101 R2109 L2301 R2311 R2209 R2308 R2309 R2307 C2713
RY271 L2202 L2302 R2215 C2211 C2212 FL
RY272 L2602 R2315 C2311 C2312 FR
RY273 L2502 R2615 C2612 C2611 C
L2402 C2511 R2515 SL
R2415 C2412 C2512 C2411 SR J2702
R2208 R2108 C2308 C2307 L2101 C2108 R2111 C2107 C2711 R2114 R2110 CN272
6 7 8 9 10 11 12 13 14
TH- A/D SL A/D C A/D R A/D L +5V SSS +7V C GND
1 2 3 4 5 6 7 8 9
-7V GND TX/RX DC DET SP RLY+ SP RLY- SR SIG SW SIG SW SIG

■ Mother board

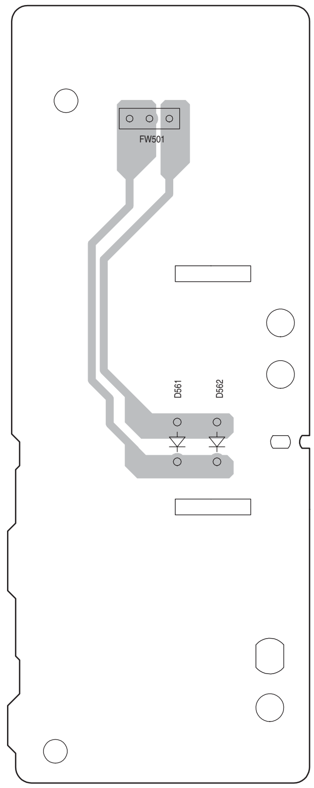
Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

(Mother board)




DC
RLY+
RLY-
SR
SW
TXRX
C3602
D3707
D3706
R3727
C3715
R3725
R3726
C3720
CN371
Q3706
D3708
D3703
Q3705
C3721
R3728
R3721
Q3704
R3720
R3719
R3603
R3602
C3601
R3501
R3601
R3607
R3604
C3502
R3503
R3502
R3504
C3501
C3706
R3730
R3729
C3716
Q3703
Q3702
R3717
IC303
FC104
FC102
FC101
FC103
R3507
R3508
R3505
C3503
R3506
C101
CN101
CN102
230V
127V
110V
RY101
R504
Q503
S901
R555
D505
D507
D101
D535

(LED board)


FW501
D561
D562

JVC

Victor Company of Japan, Limited

AV & MULTIMEDIA COMPANY AUDIO/VIDEO SYSTEMS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MB415SCH)

Printed in Japan
VPT