

JVC

SERVICE MANUAL

DVD AUDIO/VIDEO PLAYER

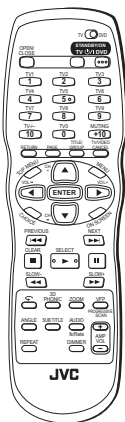
XV-NA70BK, XV-NA77SL

Area Suffix (XV-NA70BK)

J ----- U.S.A.
C ----- Canada

Area Suffix (XV-NA77SL)

J ----- U.S.A.
C ----- Canada
B ----- U.K.
E ----- Continental Europe
EN ----- Northern Europe
EV ----- Eastern Europe
EE ----- Russian Federation
A ----- Australia
UF ----- China
UJ ----- U.S.A. Military
US ----- Singapore
UW ----- Brazil, Mexico, Peru



DVD
AUDIO/VIDEO

DOLBY
DIGITAL

3D
PHONIC

DIGITAL
dts
SURROUND

COMPACT
disc
SUPER VIDEO

AV COMPU LINK

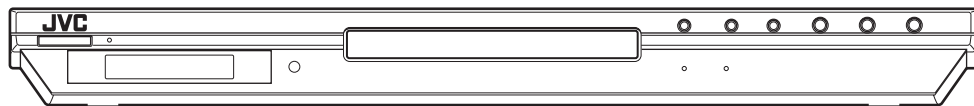


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SPECIFICATION

For U.S.A.

General	Readable discs	DVD AUDIO, DVD VIDEO, DVD-R (Video format), DVD-RW (Video format/VR format), DVD-RAM (VR format), SVCD, Video CD, Audio CD (CD-DA), MP3/WMA format, JPEG, CD-R/RW (CD-DA, SVCD, Video CD, MP3/WMA format, JPEG)
	Video format	REMOTE, 480i (Interlaced scan)/480p (Progressive scan) selectable
Other	Power requirements	AC 120 V ~ , 60 Hz
	Power consumption	16 W (POWER ON), 2.0 W (STANDBY mode)
	Mass	2.1 kg (4.7 lbs)
	Dimensions (W × H × D)	435 mm × 45 mm × 270.5 mm (17-3/16 inch × 2-13/16 inch × 10-11/16 inch)
Video outputs	COMPONENT (pin jacks)	Y Output: 1.0 Vp-p (75 Ω)
		PB/PR Output: 0.7 Vp-p (75 Ω)
	VIDEO OUT (pin jack)	1.0 Vp-p (75 Ω)
	S-VIDEO OUT (S jack)	Y Output: 1.0 Vp-p (75 Ω)
		C Output: 286 mVp-p (75 Ω)
	Horizontal resolution	500 lines or more
Audio outputs	ANALOG OUT (pin jack)	2.0 Vrms (10 kΩ)
	DIGITAL OUT (COAXIAL)	0.5 Vp-p (75 Ω termination)
	DIGITAL OUT (OPTICAL)	-21 dBm to -15 dBm (peak)
Audio characteristics	Frequency response	CD (sampling frequency 44.1 kHz):2 Hz to 20 kHz
		DVD (sampling frequency 48 kHz):2 Hz to 22 kHz(4 Hz to 20 kHz for DTS and Dolby Digital bitstream signals)
		DVD (sampling frequency 96 kHz):2 Hz to 44 kHz
		DVD (sampling frequency 192 kHz/176.4kHz):2 Hz to 88 kHz
	Dynamic range	16 bit: More than 100 dB
		20 bit/24 bit: More than 110 dB
	Wow and flutter	Unmeasurable (less than ± 0.002%)
	Total harmonic distortion	16 bit: less than 0.0018%
		20 bit/24 bit: less than 0.0012%

- Specifications and appearance are subject to change without prior notice.
- Manufactured under license from Dolby Laboratories. "Dolby," "MLP Lossless" and the double-D symbol are trademarks of Dolby Laboratories.
- "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.

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 (Δ) 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.

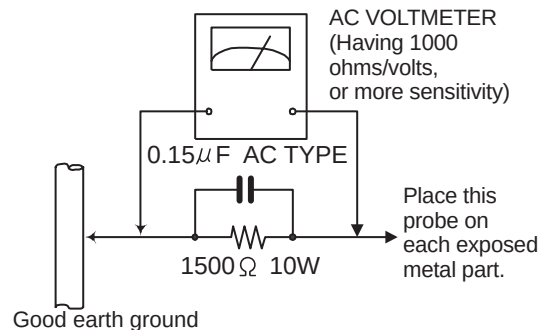
(5) Leakage shock hazard testing

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, 1,000 Ω per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10W resistor paralleled by a 0.15 μ F 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 pre-forming 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 " Δ " 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 DVD players.

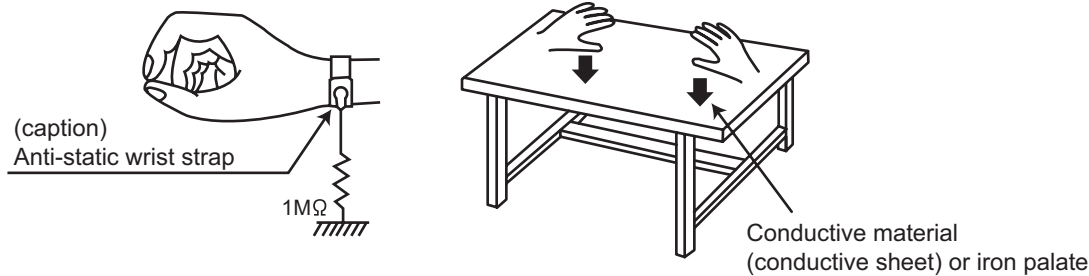
Be careful to use proper grounding in the area where repairs are being performed.

(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)

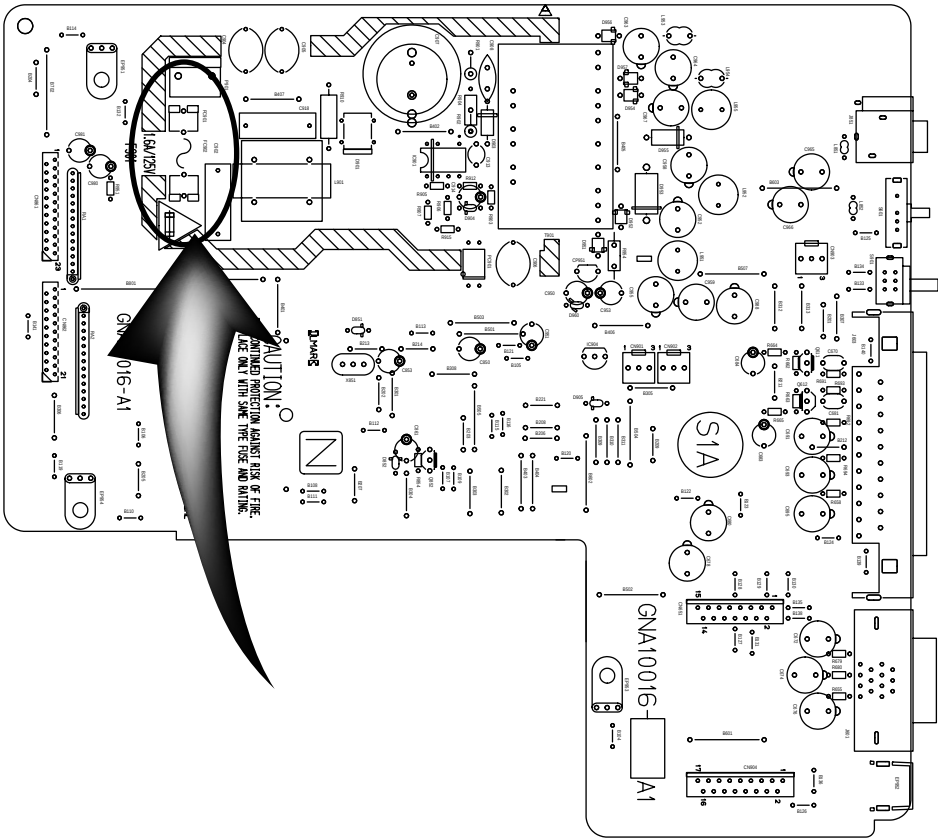
(1) Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.

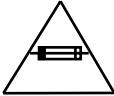
(2) Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.

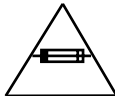
(3) Handle the flexible cable carefully as it may break when subjected to strong force.

(4) It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.7 Importance administering point on the safety



Full Fuse Replacement Marking Graphic symbol mark (This symbol means fast blow type fuse.)  should be read as follows ;
FUSE CAUTION
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATING OF FUSES ; F901 : 1.6 A / 125 V

Marquage Pour Le Remplacement Complet De Fusible Le symbole graphique (Ce symbole signifie fusible de type à fusion rapide.)  doit être interprété comme suit ;
PRECAUTIONS SUR LES FUSIBLES
POUR UNE PROTECTION CONTINUE CONTRE DES RISQUES D'INCENDIE, REMPLACER SEULEMENT PAR UN FUSIBLE DU MEME TYPE ; F901 : 1.6 A / 125 V

1.8 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 compact disc 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 herein 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.

VARNING : Osynlig laserstrålning är denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

VARO : Avattaessa ja suojalukitus ohitettaessa olet alltiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

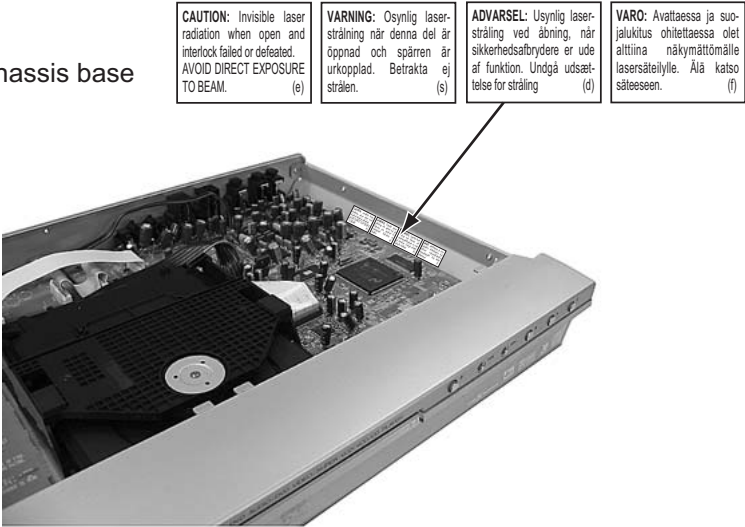
ADVARSEL : Usynlig laserstrålning ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstrålning ved åbning,når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABEL and PRINT

WARNING LABEL and PRINT

The inside of a chassis base



1.9 Precautions for Service

1.9.1 Handling of Traverse Unit and Laser Pickup

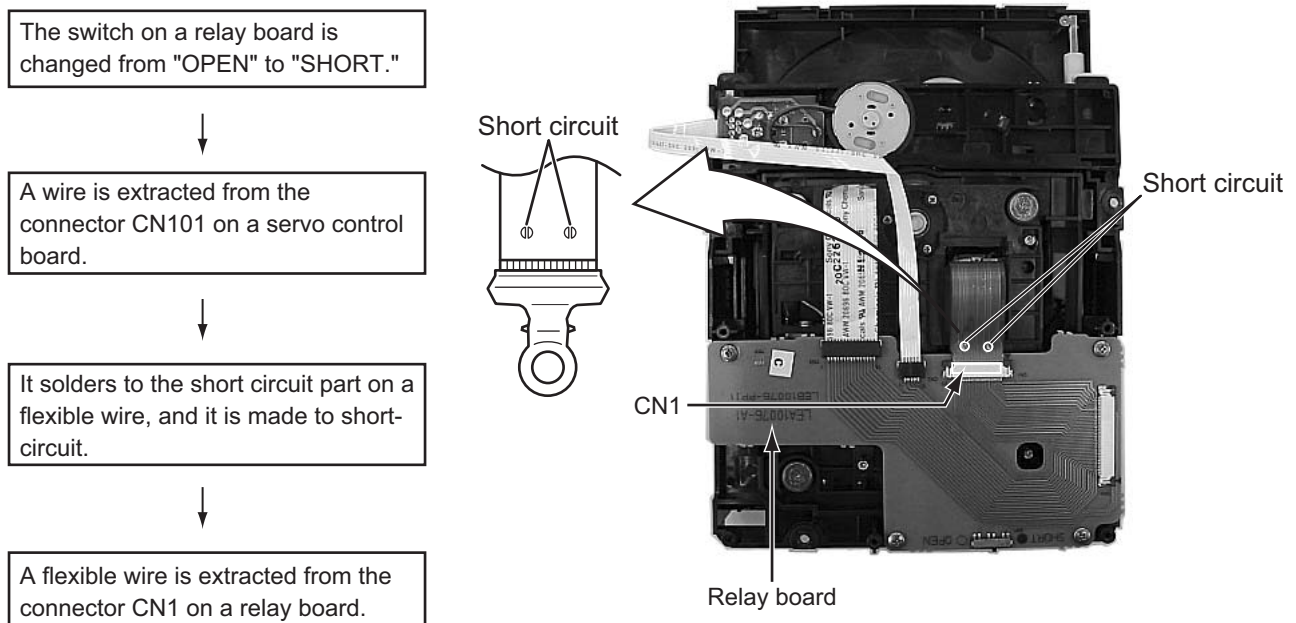
- (1) Do not touch any peripheral element of the pickup or the actuator.
- (2) The traverse unit and the pickup are precision devices and therefore must not be subjected to strong shock.
- (3) Do not use a tester to examine the laser diode. (The diode can easily be destroyed by the internal power supply of the tester.)
- (4) To replace the traverse unit, pull out the metal short pin for protection from charging.
- (5) When replacing the pickup, after mounting a new pickup, remove the solder on the short land which is provided at the center of the flexible wire to open the circuit.
- (6) Half-fixed resistors for laser power adjustment are adjusted in pairs at shipment to match the characteristics of the optical block.
Do not change the setting of these half-fixed resistors for laser power adjustment.

1.9.2 Destruction of Traverse Unit and Laser Pickup by Static Electricity

Laser diodes are easily destroyed by static electricity charged on clothing or the human body. Before repairing peripheral elements of the traverse unit or pickup, be sure to take the following electrostatic protection:

- (1) Wear an antistatic wrist wrap.
- (2) With a conductive sheet or a steel plate on the workbench on which the traverse unit or the pick up is to be repaired, ground the sheet or the plate.
- (3) Please be sure to make the switch of a relay board into the "SHORT" side before drawing out a wire from the connector [CN101](#) on a servo control board, when taking out a mechanism assembly from a main body.
And please be sure to make a switch into the "OPEN" side after connecting a wire to [CN101](#), when it mounts a mechanism assembly in a main body.
- (4) After removing the flexible wire from the connector ([CN1](#)), short-circuit the flexible wire by the metal clip.
- (5) Short-circuit the laser diode by soldering the land which is provided at the center of the flexible wire for the pickup.
After completing the repair, remove the solder to open the circuit.

The procedure for protecting a pickup



In case you assemble, please do all work conversely.

SECTION 2

SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

SECTION 3 DISASSEMBLY

There is a part different from the photograph according to the model and the destination thought explains this disassembly method by using XV-NA77SL for europe.

3.1 Main body section

3.1.1 Removing the top cover (See Figure 1)

- (1) Remove the two screws **A** attaching the top cover on both sides of the main body.
- (2) Remove the three screws **B** attaching the top cover on the back of the main body.
- (3) Raise the both sides and lower part of the rear of the top cover, with opening them slightly in an outward direction. And the top cover will be removed.



Fig.1

3.1.2 Removing the front panel assembly (See Figure 2, Figure 3, Figure 4)

- Prior to performing the following procedure, remove the top cover.
- There is no need to remove the mechanism assembly.
- (1) Insert a kind of screwdriver in a hole located in the right side of mechanism assembly, and push a lever until it cannot be inserted any further.
- (2) And then, a tray will come out. Remove the tray in an upper direction, with slightly opening the lower part of fitting in an outward direction.
- (3) Disconnect the card wire from connector [CN861](#), [CN862](#) on the power supply board.
- (4) Hook **a** and **b** are removed respectively, and the front panel assembly is removed.

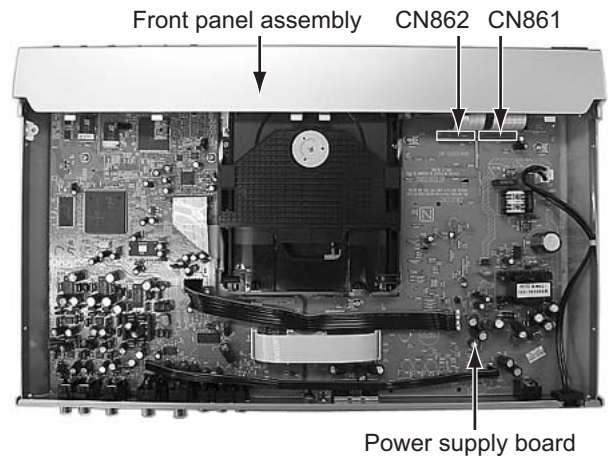


Fig.3

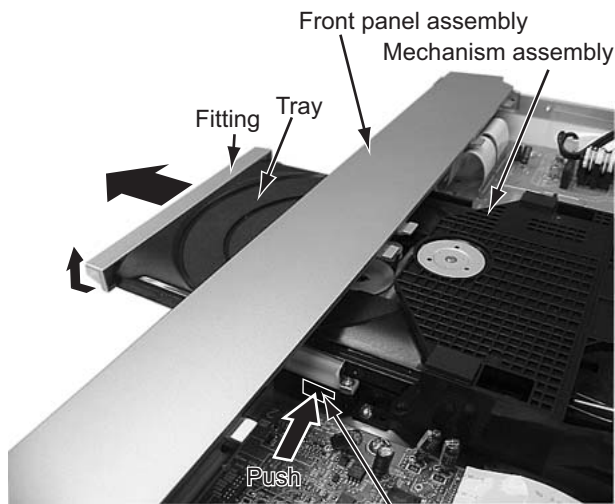


Fig.2

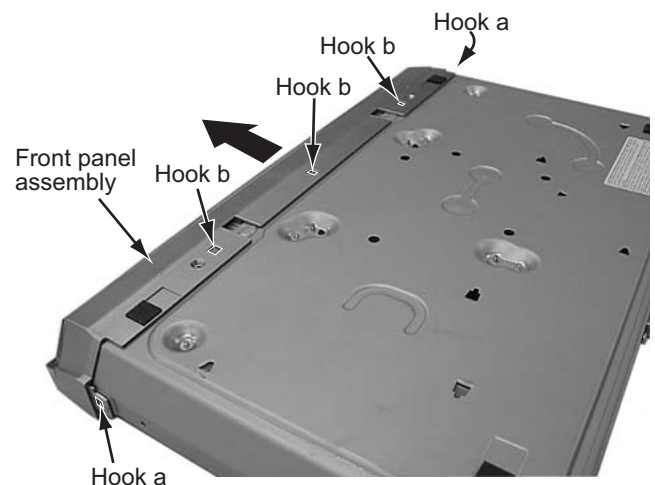


Fig.4

3.1.3 Removing the mechanism assembly (See Figure 2, Figure 5, Figure 6)

- Prior to performing the following procedure, remove the top cover.
- There is no need to remove the front panel assembly.
 - (1) Insert a kind of screwdriver in a hole located in the right side of mechanism assembly, and push a lever until it cannot be inserted any further. (See Figure 2)
 - (2) And then, a tray will come out. Remove the tray in an upper direction, with slightly opening the lower part of fitting in an outward direction. (See Figure 2)
 - (3) Remove the three screws **C** attaching the mechanism assembly.
 - (4) The switch on a relay board is made into the "SHORT" side.
 - (5) Disconnect the card wire from connector **CN101** on the servo control and signal output terminal board.
 - (6) Remove the mechanism assembly by lifting the rear part of the mechanism assembly.

ATTENTION:

Please be sure to make the switch on a relay board into a "SHORT" side before disconnect a card wire from the connector **CN101** on servo control and signal output terminal board. Moreover, please be sure to make a switch into the "OPEN" side after inserting a card wire in a connector **CN101** at the time of an assembly. There is a possibility of destroying the laser diode of a pick-up unit with static electricity.

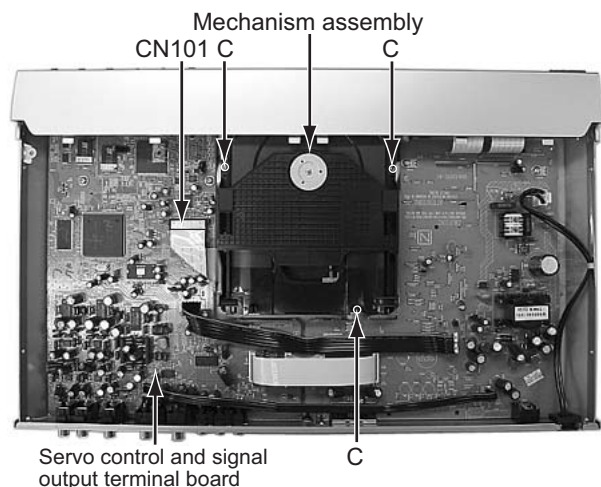
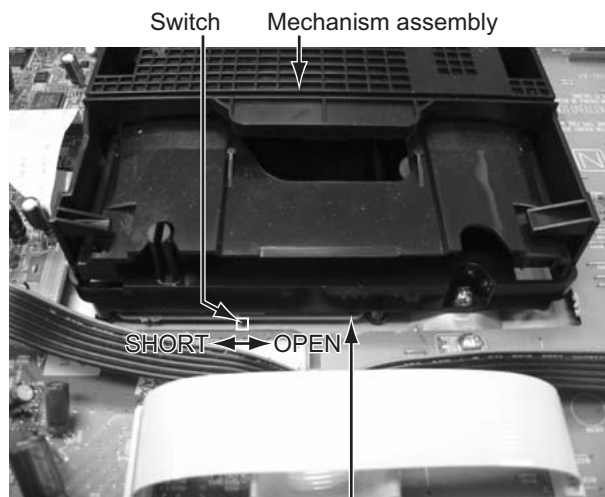


Fig.5



Relay board
Fig.6

3.1.4 Removing the relay board (See Figure 7)

- Prior to performing the following procedure, remove the mechanism assembly.
 - (1) Remove the four screws **D** attaching the relay board.
 - (2) Disconnect the card wire from connector **CN2**, **CN3** on the relay board respectively.
 - (3) Disconnect the flexible wire from connector **CN1** on the relay board from pick-up unit.

ATTENTION:

At this time, please extract the wire after short-circuited of two places on the wire in part **c** with solder. Please remove the solder two places of part **c** after connecting the wire with **CN1** when reassembling. There is a possibility of destroying the laser diode of a pick-up unit with static electricity.

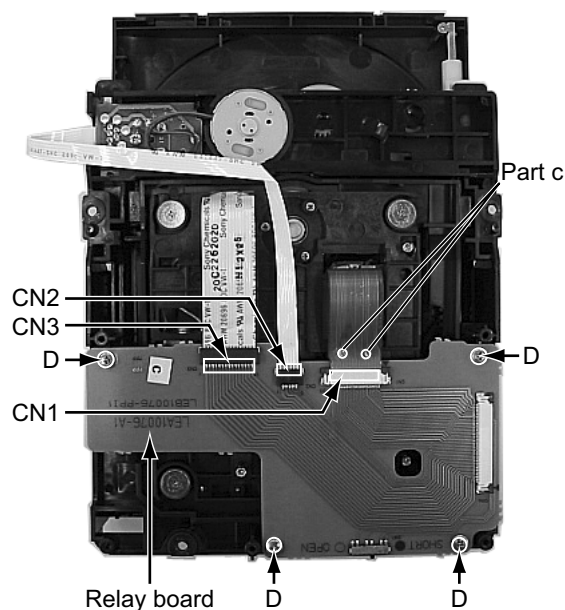
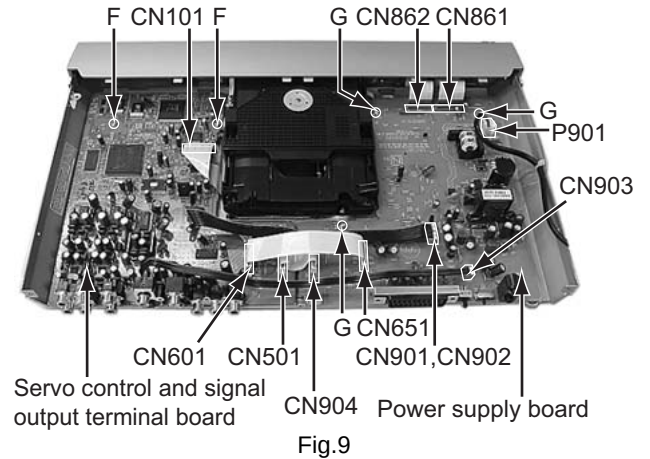
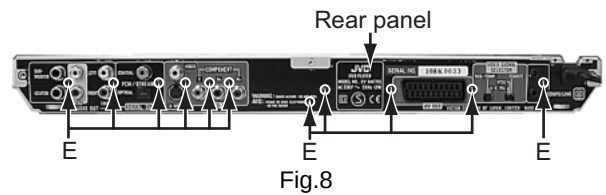


Fig.7

3.1.5 Removing the rear panel (See Figure 8, Figure 9)

- Prior to performing the following procedure, remove the top cover.
 - (1) Remove the eleven screws **E** attaching the rear panel.
 - (2) Disconnect the power cord from connector **P901** on the power supply board
 - (3) Remove tie band.



3.1.6 Removing the servo control and signal output terminal board. (See Figure 9)

- Prior to performing the following procedure, remove the top cover/rear panel.
 - (1) Remove the two screws **F** attaching the servo control and signal output terminal board.
 - (2) Disconnect the card wire from connector [CN101](#), [CN501](#), [CN601](#) on the servo control and signal output terminal board.
 - (3) Disconnect the flat wire from connector [CN901](#), [CN902](#), [CN903](#) on the power supply board.

3.1.7 Removing the power supply board. (See Figure 9)

- Prior to performing the following procedure, remove the top cover/rear panel.
 - (1) Remove the three screws **G** attaching the power supply board.
 - (2) Disconnect the wire from connector [CN901](#), [CN902](#), [CN903](#), [CN904](#), [CN651](#), [CN861](#), [CN862](#) on the power supply board.
 - (3) Disconnect the socket wire from socket P901 on the power supply board.

3.2 Loading mechanism assembly

3.2.1 Removing the tray (See Figure 1, Figure 2, Figure 3, Figure 4, Figure 5, Figure 6)

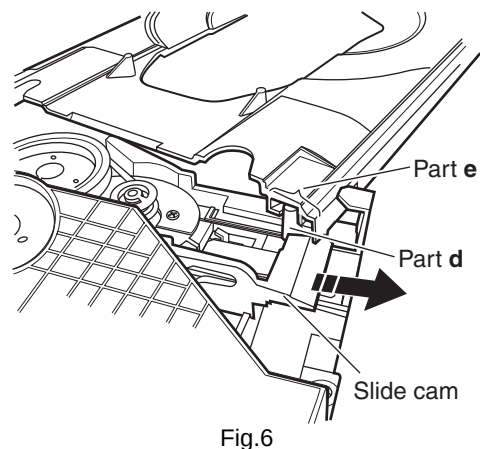
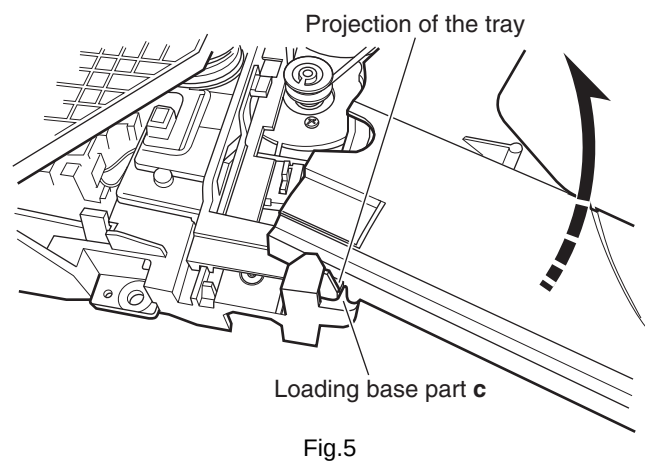
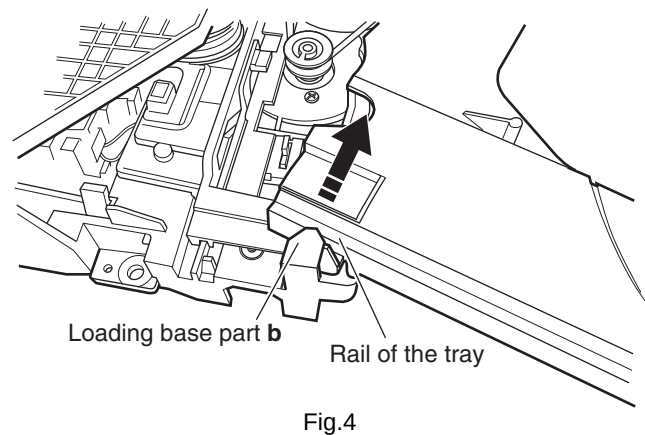
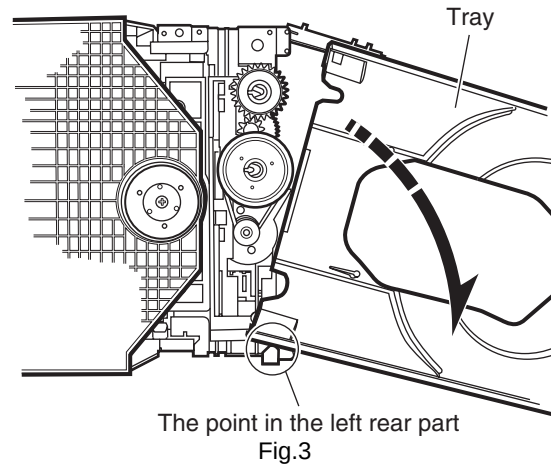
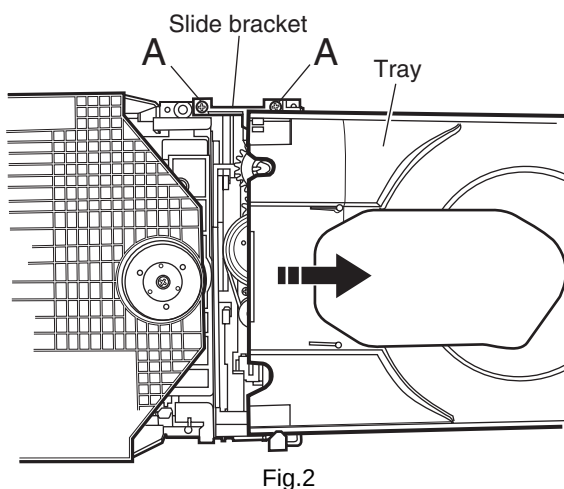
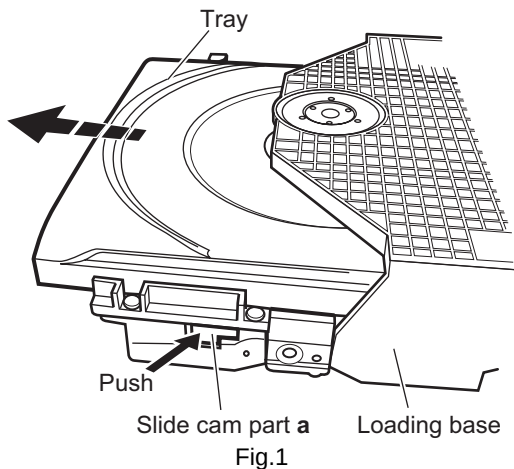
- (1) Push **a** of the slide cam on the hole in the right side of the loading base by using a driver until it stops. (See Figure 1.)
- (2) The tray comes out. Pull the tray in a front direction until it stops.
- (3) Remove the two screws **A** attaching the slide bracket. (See Figure 2.)
- (4) Tilt the tray in a direction of the arrow around the point in the left rear part of the tray. (See Figure 3.)
- (5) The rail of the tray is removed from **b** of the loading base. Then, remove the tray upward. (See Figure 4.)

Attaching the tray:

Engage **c** of the loading base to the projection of the tray while tilting the tray to the left. Turn the tray in a direction of the arrow, and attach the slide bracket. (See Figure 5.)

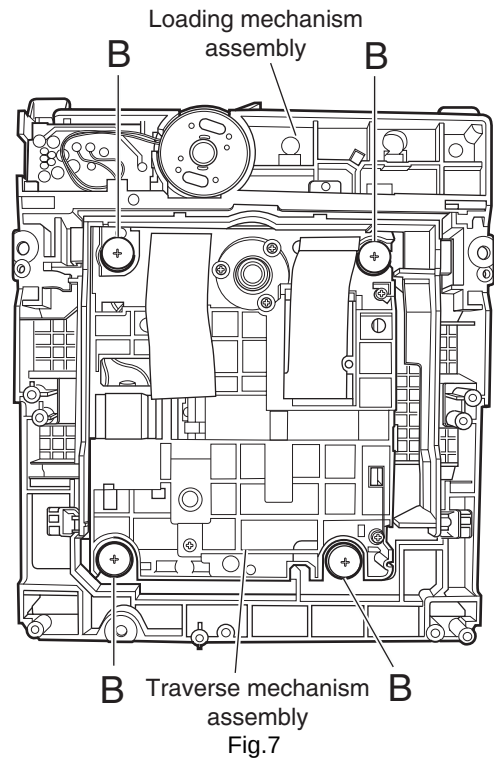
Note:

Prior to the procedure above, move the slide cam in a direction of the arrow so that **d** of the slide cam can be inserted in **e** of the tray. (See Figure 6.)



3.2.2 Removing the traverse mechanism assembly (See Figure 7)

Reverse the loading mechanism assembly. Remove the four screws **B** attaching the traverse mechanism assembly. Remove the traverse mechanism assembly upward.

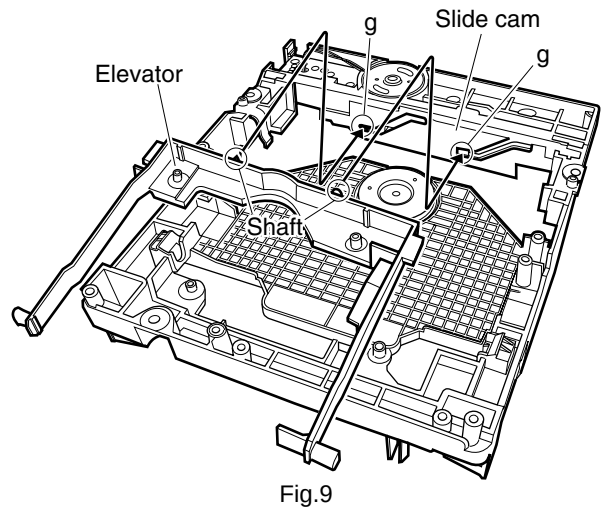
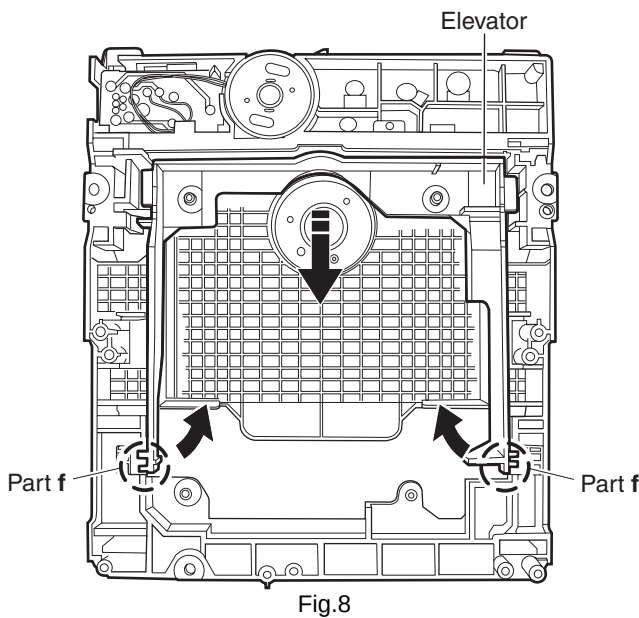


3.2.3 Removing the elevator (See Figure 8 and Figure 9)

- Prior to the following procedure, remove the traverse mechanism assembly.
- (1) Remove the two arms of the elevator from the two parts **f** by moving the arms in a direction of the arrow.
- (2) Pull out the elevator in a rear direction.

Attaching the elevator:

Engage the two holes **g** to the two shafts on the front part of the elevator. And then, attach the elevator.



3.2.4 Removing the loading motor (See Figure 10 and Figure 11)

- Prior to the following procedure, remove the tray, the traverse mechanism assembly, and the elevator.

- (1) Remove the belt from the pulley.
- (2) Remove two screws **C** attaching the loading motor.
- (3) Remove two solders **h** on the switch board.

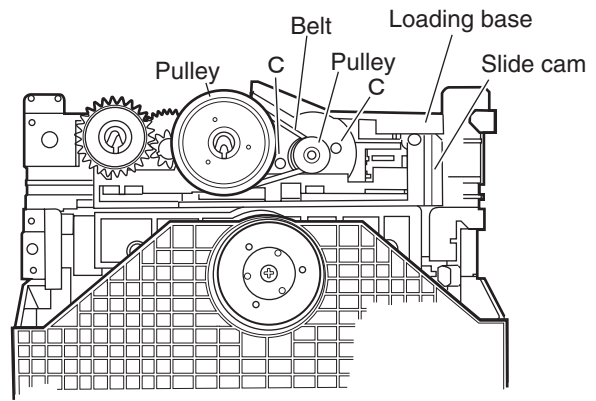


Fig.10

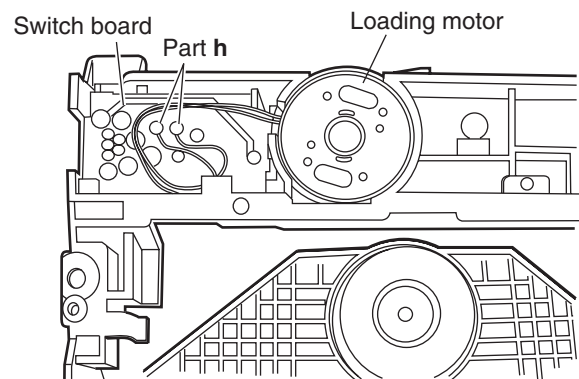


Fig.11

3.3 Traverse mechanism assembly

3.3.1 Removing the pickup (See Figure 12, Figure 13, and Figure 14)

- Prior to the following procedure, remove the traverse mechanism assembly.
 - (1) Remove one screw **D** attaching the plate.
 - (2) Remove the plate and the leaf spring.
 - (3) Lift **i** of the shaft **1**, and pull out the shaft **1** from **j**.
 - (4) Remove **k** of the pickup from the shaft **2**.

Attaching the pickup:

- (1) Engage **k** of the pickup to the shaft **2**.

Note:

- As Figure 14 shows, the spring must come under the shaft **2**.
- (2) Insert the shaft **1** in **j**, and attach the shaft 1 to **i**.
 - (3) Attach the leaf spring, and then attach the plate. Fix the leaf spring and the plate by using the screw **D**.

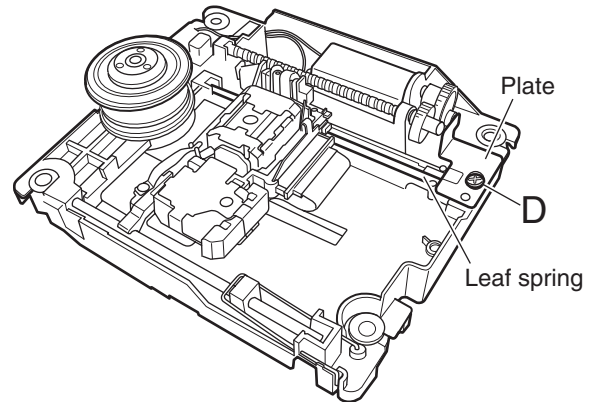


Fig.12

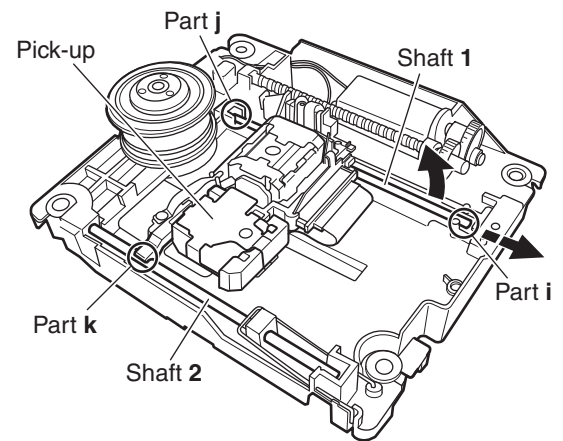


Fig.13

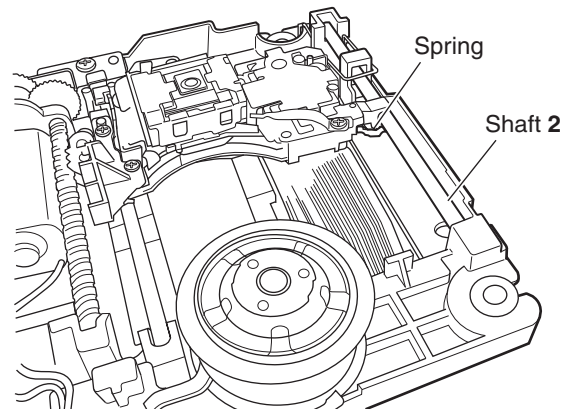


Fig.14

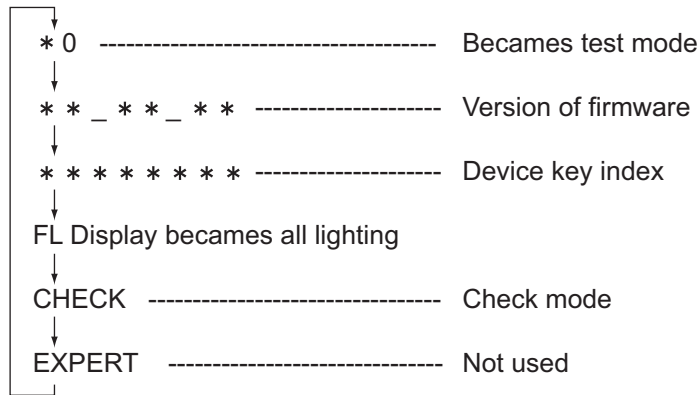
SECTION 4 ADJUSTMENT

4.1 Test mode setting method

- (1) Unplug the power plug.
- (2) Insert power plug into outlet while pressing both "PLAY" key and "STOP" key of the main body.
- (3) The FL display shows "*0", and the main body turns to test mode. "*" means the destination, and "0" means parameter adjustment status.
- (4) To release test mode, press "POWER" key of the main body.

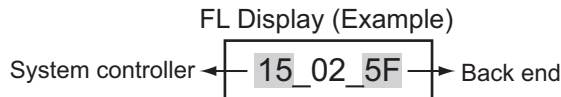
NOTE:

Each pressing of "CHOICE" key of the remote controller in test mode changes the mode as follows.



4.2 Method of displaying version of firmware

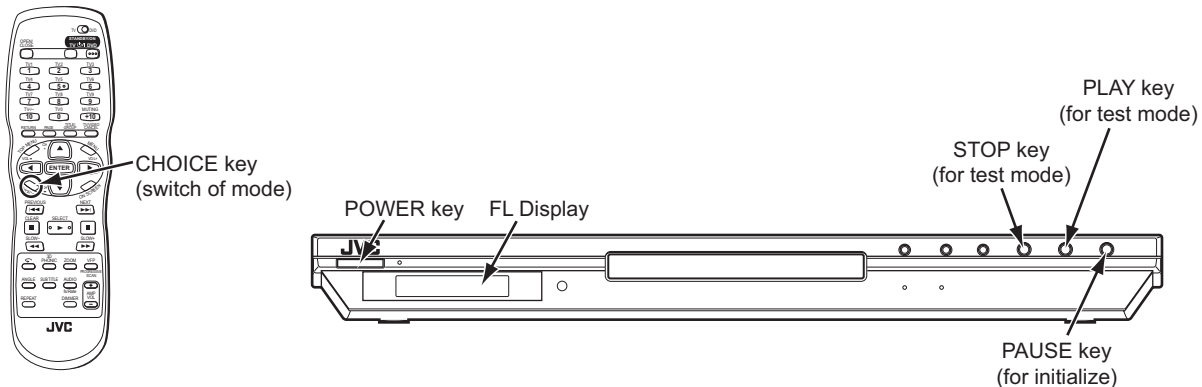
- (1) Set the main body at test mode.
- (2) Press "CHOICE" key of the remote controller once. Then, version number and alphabetical letter of the system controller and the back end are displayed in the FL display as follows:



4.3 Initialization method

Please initialize according to the following procedures in the following case:

- Just after you upgrade the firmware.
 - After you confirm the symptoms that a customer points out. First Initialize, and then confirm whether the symptoms are improved or not.
 - After servicing, before returning the main body to a customer. (Initialized main body should be returned to a customer.)
- (1) Set the main body at test mode.
 - (2) Press "PAUSE" key of the main body.
 - (3) When initialization is completed, the FL display changes from "*0" to "*00".
(The left "0" of "00" is not always "0". It shows parameter adjustment status.)



4.4 All-initialization method

Please perform all-initialization according to the following procedures in the following case:

- Just after you exchange the pick-up.
- Just after you exchange the spindle motor.
- Just after you exchange the traverse mechanism base.

NOTE:

Please perform all-initialization when you exchange the parts above and also when you remove the parts above.

- Just after the flap adjustment of the pick-up guide shaft

- (1) Set the main body at test mode.
- (2) Press and hold "BACKWARD SKIP" key of the main body for more than 2 seconds.
- (3) When all-initialization is completed, the FL display changes from "*0" to "*33".

NOTE:

After all-initialization, be sure to perform optimization adjustment of Front End parameter.

4.5 Optimization adjustment of Front End parameter

Adjustment to optimize Front End parameter must be performed in each mechanism assembly of this model for high-speed starting. Please perform optimization according to the following procedures just after all-initialization is completed and when FL display shows anything except "*0" (For example when FL display shows "*1", "*2", and "*3") at test mode.

- (1) Press "POWER" key of the main body to turn the main body on (not to set the main body at test mode).
- (2) Insert the test disc VT-501 or commercial dual-layer DVD software.
- (3) Remove the disc when the FL display changes from "READING" to disc information.
- (4) Perform the same procedures as in (2) and (3) above by using the test disc CTS-1000 or commercial CD-DA software.
- (5) Set the main body at test mode, and check that the FL display shows "*0".

NOTE:

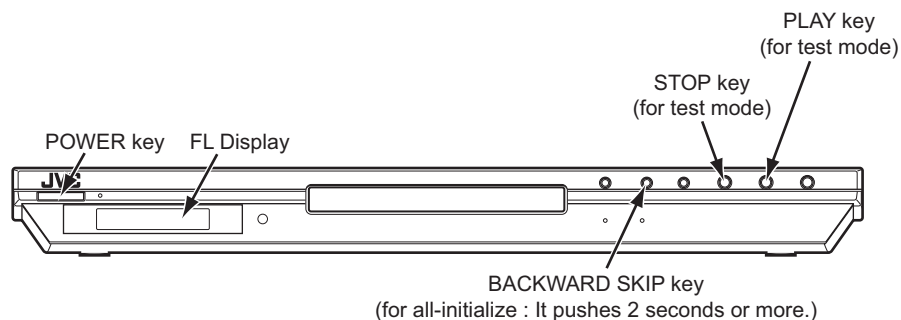
Status of this adjustment can be judged by the number displayed at test mode as follows:

DVD adjustment	CD adjustment	FL display at test mode
Adjusted	Adjusted	*0
Not adjusted	Adjusted	*1
Adjusted	Not adjusted	*2
Not adjusted	Not adjusted	*3

NOTE:

As for a disc used for adjustment,

- Disc should be mounted. ("Mounting" means to display "READING" after the disc is inserted and then display the disc information.) Disc need not be played.
- If you do not have test disc either VT-501 (DVD) or CTS-1000 (CD-DA), use a commercial disc (for DVD, dual-layer software) after seeing and checking that the disc is neither curved nor foreseen that it may shake at the time of playback. If you use a disc with bad features, starting time may be slow or disc may not be read.



4.6 Display of current value of laser

- (1) Set the main body at test mode.
- (2) Press "CHOICE" key of the remote controller four times. Then, FL display is displayed "CHECK".
- (3) The laser current value can be switched between the value of CD and that of DVD by pressing the following key of the remote controller.

FL Display (Example)

2530 0000

Remote controller "4" key --- Laser of CD

Remote controller "5" key --- Laser of DVD

The number shown in the FL display shows mA of current value of laser.

The first two numbers ("25" in "2530") shows current value of laser at the time of adjustment after the latest all-initialization, 25mA in this example.

The last two numbers ("30" in "2530") shows the present current value of laser, 30mA in this example.

The first two numbers ("25" in "2530") usually shows current value of laser at the time of shipment, so you can see how the product has been deteriorated by comparing the first two numbers ("25" in "2530") and the last two numbers ("30" in "2530").

CD:

The laser current value of 49 mA or less is normal.

The laser current value of over 50 mA is not normal. Laser diode of the pickup has been deteriorated.

DVD:

The laser current value of 64 mA or less is normal.

The laser current value of over 65 mA is not normal. Laser diode of the pickup has been deteriorated.

To return to test mode, press "STOP" key of the main body.

4.7 Flap adjustment of the pick-up guide shaft

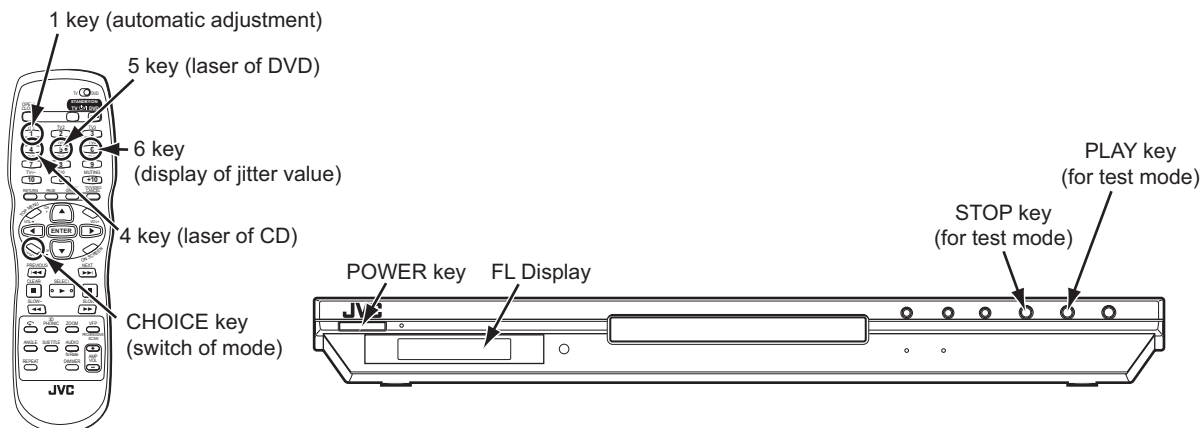
Please perform flap adjustment of the pick-up guide shaft in the following case:

- Just after you exchange the pick-up.
- Just after you exchange the spindle motor.
- Just after you exchange the traverse mechanism base.

NOTE:

Please perform flap adjustment of the pick-up guide shaft when you exchange the parts above and also when you remove the parts above.

- When the reading accuracy of the signal is bad (There is a block noise in the screen, Screen stops in the outer circumference of a disc, etc.)



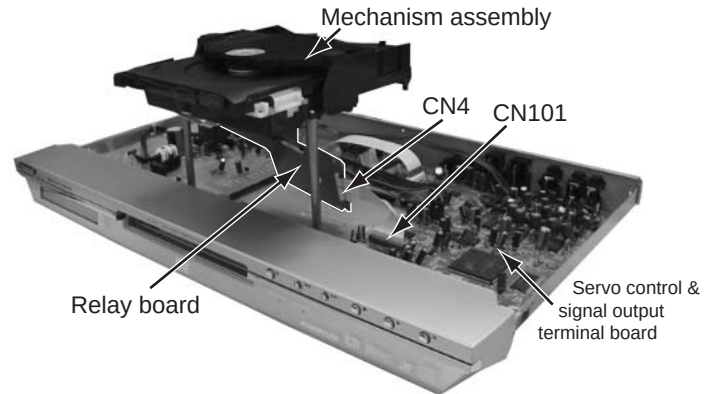
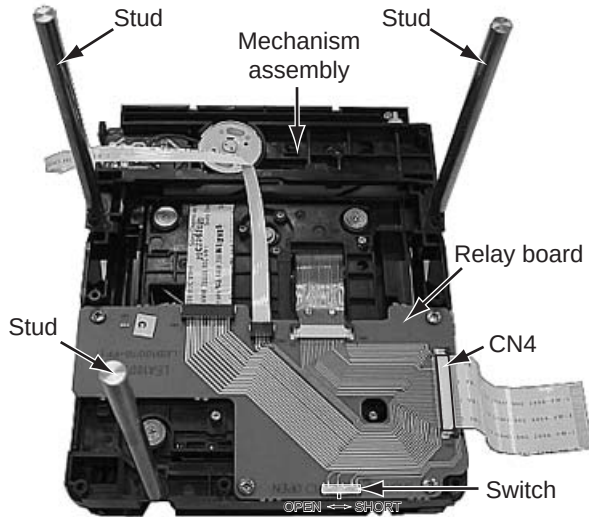
4.7.1 Tool for adjustment

*Stud: One set (four studs), Part number: JIGXVS40 (Note: One of the four studs is not used here.)



4.7.2 Preparation for adjustment

- (1) See the disassembly procedure, and remove the Mechanism assembly from the main body.
- (2) Remove the relay board attached to the mechanism assembly.
(If you disconnect the wires connected to the Relay board, connect them again.)
- (3) Attach the three studs to the Mechanism assembly.
- (4) Put the Mechanism assembly in the center of the main body, and connect the 50 pin wire from the connector **CN4** on the Relay board to the connector **CN101** on the Servo control & signal output terminal board.



4.7.3 Adjustment

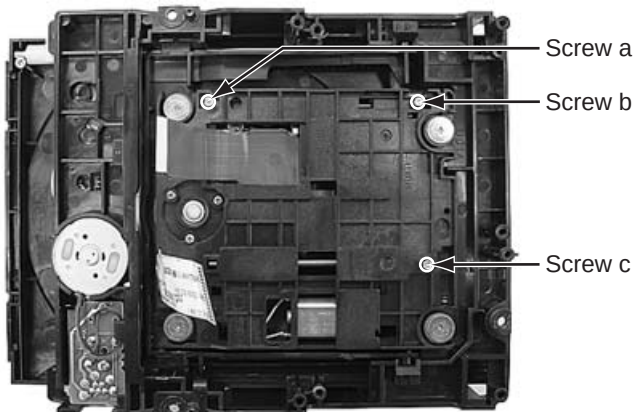
- (1) Set the unit to test mode.
- (2) Press the "CHOICE" key of the remote controller four times, and the FL display is displayed "CHECK".
- (3) Insert a test disc (VT-501), and press the numeric key "1" of the remote controller for automatic adjustment.
- (4) After a few seconds, press the numeric key "6" of the remote controller. Then, the FL display displays a jitter value.
- (5) Turn the adjustment screws on the underside of the traverse mechanism with phillips screw driver until the **maximum** jitter value is displayed on the FL display. (In this model, a bigger jitter value means a better result.)

FL Display (Example)

Jitter value → 0810_3633

NOTE:

During operation, the switch on the Relay board should be switched to "OPEN".
Reference values to judge whether the jitter is allowable or not are displayed, instead of actual jitter values.



POINT:

Turn the adjustment screws **a** and **b** to the same angle in the right direction. And turn the adjustment screws **a** and **b** to the same angle in the left direction. Then, turn the screws **a** and **b** in either the right or the left direction to increase the number of jitter. Don't turn the adjustment screw **c**.

4.8 Upgrading of firmware

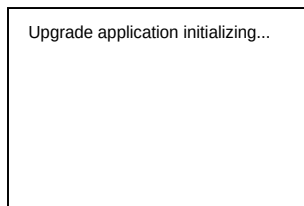
The latest firmware for upgrading is updated in "Optical disc CSG" page in JS-net.

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 "POWER" key of the main body to turn the main body on
- (2) Insert the upgrade disc.
- (3) When FL display of the main body changes from "READING" to "UPGRADE", press "cursor UP" key (▲) of the remote controller.
- (4) The entire screen becomes blue, and upgrading starts.
- (5) The tray opens automatically. Remove the upgrade disc.
- (6) The screen returns to the normal screen. Then, press "POWER" key of the main body. When the stand-by indicator is lighted, upgrading is completed.
- (7) Set the main body at test mode, and perform initialization. Then, confirm the version of the firmware.



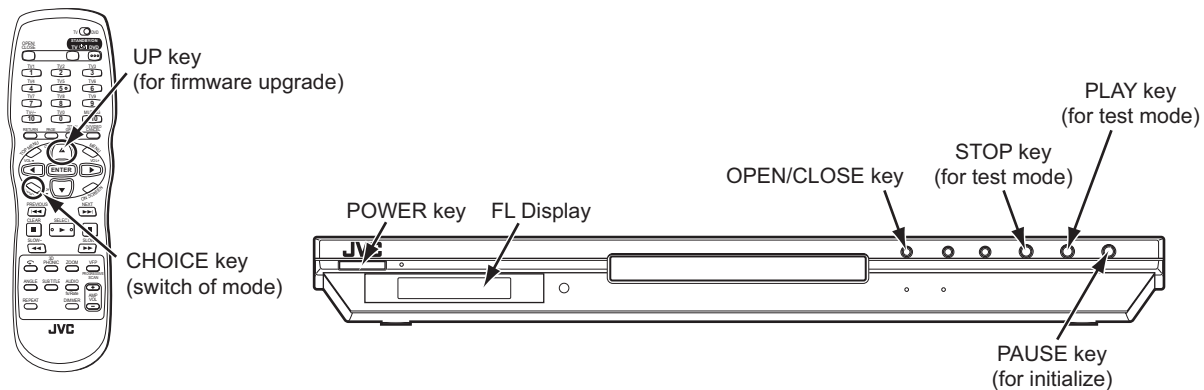
After inserting the up-grade disc



While upgrading (blue screen)



When up-grade is completed



4.9 Attention when pick-up is exchanged

- (1) Flexible wire, pick-up spring, switch actuator, and lead spring are removed from an old pick-up (broken the one).

Guide:

Flexible wire, pick-up spring and switch actuator, lead spring are removed without each decomposing while assembled.

- (2) The above-mentioned parts are installed in a new pick-up (non-defective article).
- (3) A flexible wire is inserted in the connector which has taken side with the pick-up, and solder is put up to short land part "a" two places on a flexible wire.
- (4) The electrostatic breakdown protection circuit attached to the pick-up is cut.

ATTENTION:

Please cut the electrostatic breakdown protection circuit attached to the pick-up after solder is put up to two places on a flexible wire short land part "a" of the insertion of a flexible wire this time in the connector without fail.

The procedure might be mistaken and if solder has not surely adhered to two places on a flexible wire short land part "a", the laser diode in the pick-up be destroyed again.

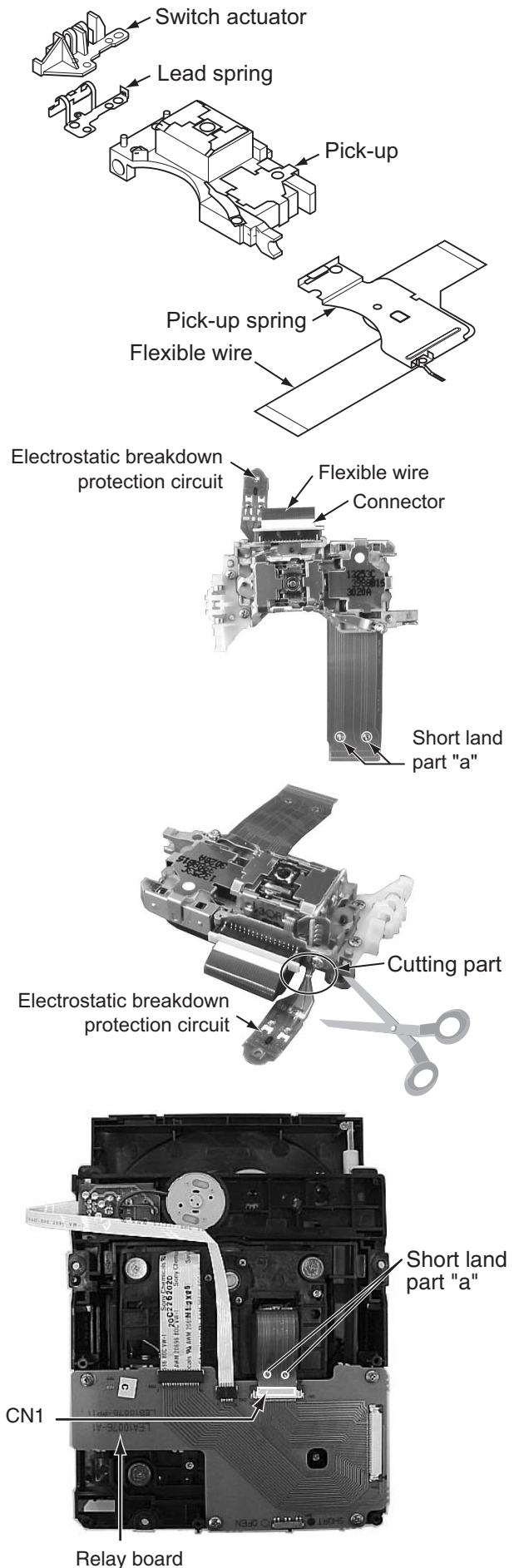
- (5) The pick-up is installed in the traverse mechanism.
- (6) A flexible wire is connected with connector [CN101](#) on the servo control board by installing the traverse mechanism in the loading mechanism.
- (7) Solder in two places on a flexible wire in part "a" is removed.

ATTENTION :

Please remove solder in two places in part "a" after connecting a flexible wire with connector [CN1](#) on the relay board without fail this time.

When the procedure is mistaken, the laser diode in the pick-up might be destroyed.

Please remove solder in two places in part "a" surely.



4.10 Confirm method of operation

Please confirm the operation of the undermentioned item after doing the repair and the upgrade of the firmware.

Initialize	Refer to the initialization method.
All-initialize	Refer to the All-initialization method.
Parameter adjustment status	Set the main body at test mode, and check that the FL display shows "*0".
Opening picture check (Power ON)	It should be display "JVC"
Muting working	The noise must not be had to the performance beginning when you push "PLAY" button or at ON/STANDBY.
FL Display	The mark and the logo, etc. displayed by each operation must be displayed correctly. FL Display should light correctly without any unevenness.
All Function button	All function buttons should worked correctly with moderate click feeling.
Open and close movement of tray	When press OPEN/CLOSE button the tray should move smoothly without any noise.
Remote controller unit working	Check the correctly operation in use of remote controller unit.
Reading of TOC	Be not long in the malfunction.
Search	Both forward-searches and backward-searches should be able to be done. Do not stop be searching or after the search.
Skip	Both forward-skip and backward-skip should be able to be done. Do not stop be after the skip.
Playback	Do not find abnormality etc. of tone quality and the picture quality.
Most outside TITLE playback check	Play VT-501 TITLE 59 CHAPTER 1 , check normal playback.

SECTION 5 TROUBLESHOOTING

5.1 Servo volume

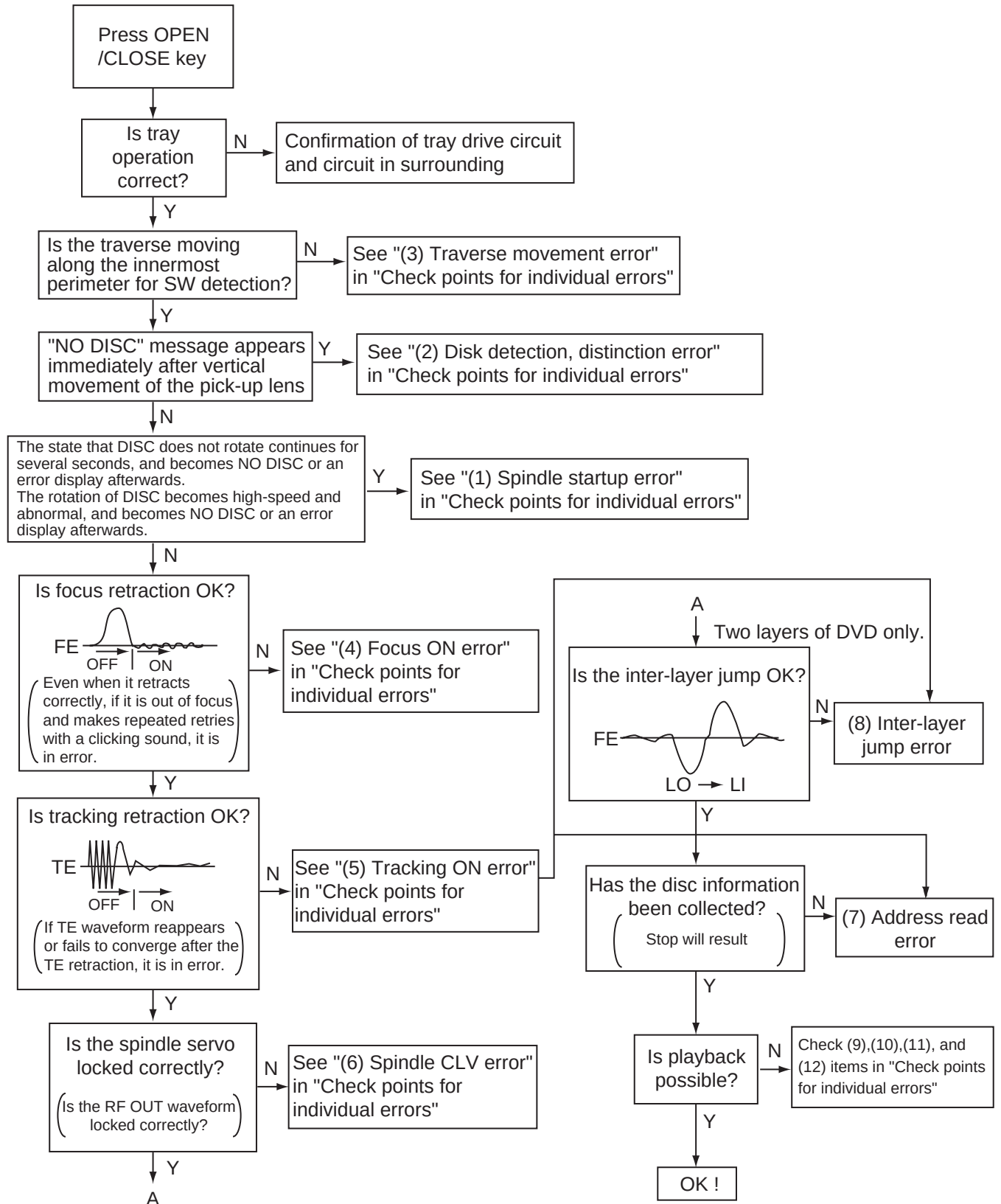


Fig.1

5.2 Check points for each error

5.2.1 Spindle start error

- (1) Defective spindle motor
 - Are there several ohms resistance between each pin of [CN101](#) "5-6", "6-7", "5-7"?
(The power supply is turned off and measured.)
 - Is the sign wave of about 100mVp-p in the voltage had from each terminal?
[[CN101](#) "9"(H1+), "10"(H1-), "11"(H2+), "12"(H2-), "13"(H3+), "14"(H3-)]
- (2) Defective spindle motor driver ([IC251](#))
 - Has motor drive voltage of a sine wave or a rectangular wave gone out to each terminal(SM1~3) of [CN101](#) "5,6,7" and [IC251](#) "2,4,7"?
 - Is FG pulse output from the terminal of [IC251](#) "24"(FG) according to the rotation of the motor?
 - Is it "L(about 0.9V)" while terminal of [IC251](#) "15"(VH) is rotating the motor?
- (3) Has the control signal come from servo IC or the microcomputer?
 - Is it "L" while the terminal of [IC251](#) "18"(SBRK) is operating?
 - Is it "H" while the terminal of [IC251](#) "23"(SPMUTE) is operating?
 - Is the control signal input to the terminal of [IC251](#) "22"(EC)?
(changes from VHALF voltage while the motor is working.)
 - Is the VHALF voltage input to the terminal of [IC251](#) "21"(ECR)?
- (4) Is the FG signal input to the servo IC?
 - Is FG pulse input to the terminal of [IC301](#) "69"(FG) according to the rotation of the motor?

5.2.2 Disc Detection, Distinction error (no disc, no RFENV)

- Laser is defective.
- Front End Processor is defective ([IC101](#)).
- APC circuit is defective. --- [Q101](#), [Q102](#).
- Pattern is defective. --- Lines for [CN101](#) - All patterns which relate to pick-up and patterns between [IC101](#)
- [IC101](#) --- For signal from [IC101](#) to [IC301](#), is signal output from [IC101](#) "20" (ASOUT) and [IC101](#) "41"(RFENV) and [IC101](#) "22" (FEOUT)?
- Servo IC is defective ([IC301](#)).

5.2.3 Traverse movement NG

- (1) Defective traverse driver
 - Has the voltage come between terminal of [CN101](#) "49" and "50" ?
- (2) Defective BTL driver ([IC201](#))
 - Has the motor drive voltage gone out to [IC201](#) "17" or "18"?
- (3) Has the control signal come from servo IC or the microcomputer?
 - Is it "H" while the terminal of [IC201](#) "9"(STBY1) ?
 - TRSDRV Is the signal input? ([IC301](#) "67")
- (4) TRVSW is the signal input from microcomputer? ([IC301](#) "56")

5.2.4 Focus ON NG

- Is FE output ? --- Pattern, [IC101](#)
- Is FODRV signal sent ? ([R209](#)) --- Pattern, [IC301](#) "115"
- Is driving voltage sent ?
- [IC201](#) "13", "14" --- If NG, pattern, driver, mechanical unit .
- Mechanical unit is defective.

5.2.5 Tracking ON NG

- When the tracking loop cannot be drawn in, TE shape of waves does not settle.
- Mechanical unit is defective.
Because the self adjustment cannot be normally adjusted, the thing which cannot be normally drawn in is thought.
- Periphery of driver ([IC201](#))
Constant or IC it self is defective.
- Servo IC ([IC301](#))
When improperly adjusted due to defective IC.

5.2.6 Spindle CLV NG

- [IC101](#) -- "30"(ARF-), "31"(ARF+).
- Does not the input or the output of driver's spindle signal do the grip?
- Has the tracking been turned on?
- Spindle motor and driver is defective.
- Additionally, "[IC101](#) and [IC301](#)" and "Mechanism is defective(jitter)", etc. are thought.

5.2.7 Address read NG

- Besides, the undermentioned cause is thought though specific of the cause is difficult because various factors are thought.
Mechanism is defective. (jitter)
[IC301](#)
The disc is dirty or the wound has adhered.

5.2.8 Between layers jump NG (double-layer disc only)

Mechanism defective
Defect of driver's IC([IC201](#))
Defect of servo control IC([IC301](#))

5.2.9 Neither picture nor sound is output

(1) It is not possible search

- Has the tracking been turned on?
- To "(5) Tracking ON NG" in "Check points for each error" when the tracking is not normal.
- Is the feed operation normal?
To "(3) traverse movement NG" in "Check points for each error" when it is not normal.
Are not there caught of the feeding mechanism etc?

5.2.10 Picture is distorted or abnormal sound occurs at intervals of several seconds.

Is the feed operation normal?
Are not there caught of the feeding mechanism etc?

5.2.11 Others

- The image is sometimes blocked, and the image stops.
- The image is blocked when going to outer though it is normal in surroundings in the disk and the stopping symptom increases.

There is a possibility with bad jitter value for such a symptom.

5.2.12 CD During normal playback operation

(1) Is TOC reading normal?

- Displays total time for CD-DA.
- Shifts to double-speed mode for V-CD

(2) Is playback afterwards possible?

(3) When can not do a normal playback

- --:-- is displayed during FL search.
According to [It is not possible to search] for DVD(9), check the feed and tracking systems.
- No sound is output although the time is displayed.(CA-DA)
DAC, etc, other than servo.
- The passage of time is not stable, or picture is abnormal.(V-CD)
- The wound of the disc and dirt are confirmed.



VICTOR COMPANY OF JAPAN, LIMITED
AV & MULTIMEDIA COMPANY OPTICAL DISC CATEGORY 1644, Shimotsuruma, Yamato, Kanagawa 242-8514, Japan

(No.XA011)



Printed in Japan
WPC

JVC

SCHEMATIC DIAGRAMS

DVD AUDIO/VIDEO PLAYER

XV-NA70BK, XV-NA77SL

CD-ROM No.SML200310



Area Suffix (XV-NA70BK)

J ----- U.S.A.
C ----- Canada

Area Suffix (XV-NA77SL)

J ----- U.S.A.
C ----- Canada
B ----- U.K.
E ----- Continental Europe
EN ----- Northern Europe
EV ----- Eastern Europe
EE ----- Russian Federation
A ----- Australia
UF ----- China
UJ ----- U.S.A.Military
US ----- Singapore
UW ----- Brazil, Mexico, Peru

DVD
AUDIO/VIDEO

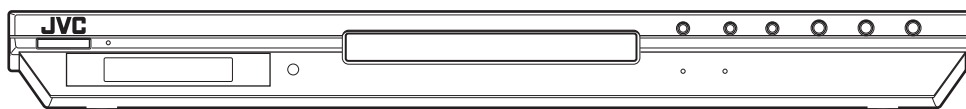
DOLBY
DIGITAL

3D
PHONIC

DIGITAL
dts
SURROUND

COMPACT
disc
SUPER VIDEO

AV COMPU LINK



Contents

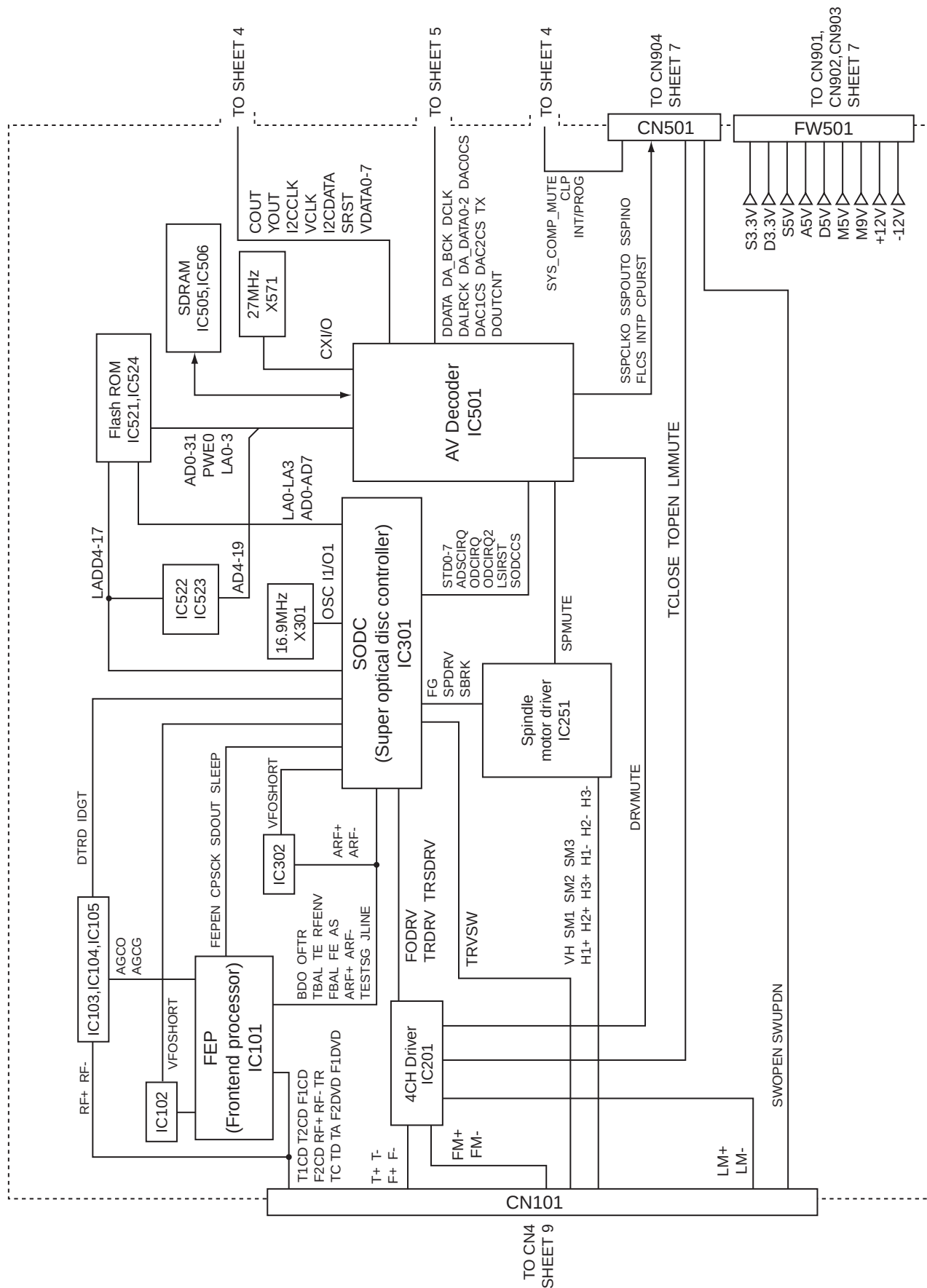
Safety precaution	2-2
Block diagrams	2-3
Standard schematic diagrams	2-8
Printed circuit boards	2-26

Safety precaution

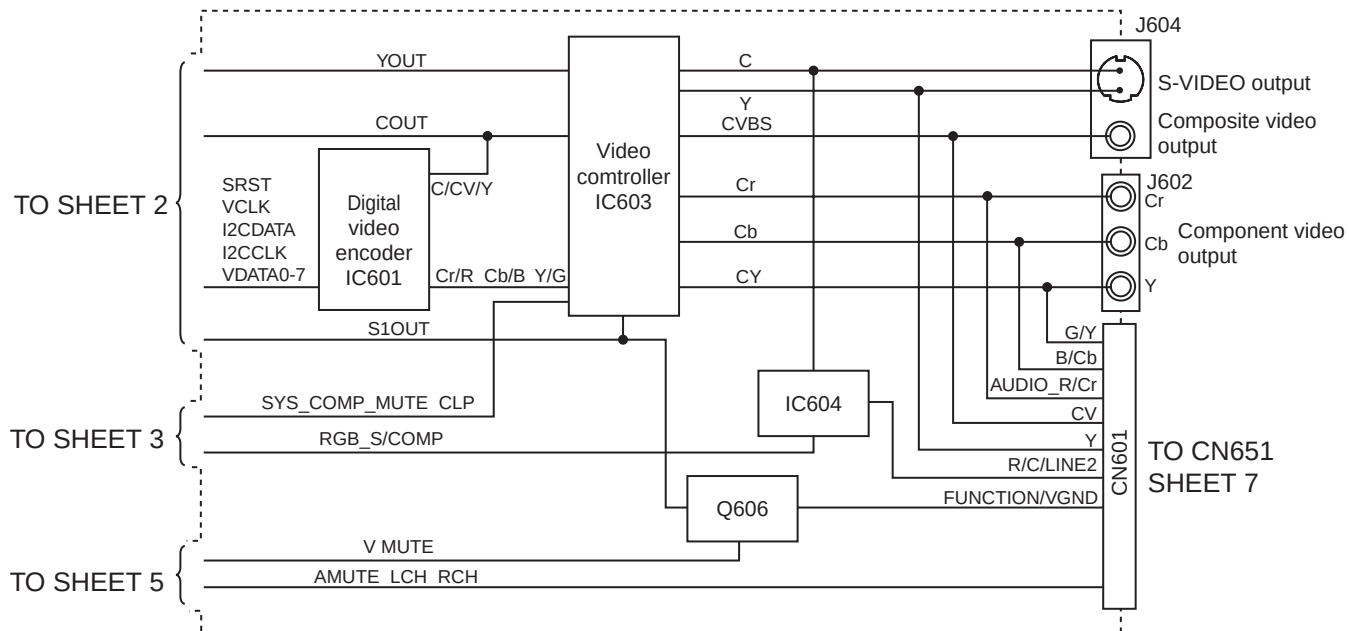
In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (■), diode (⬤) and ICP (●) or identified by the "⚠" mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (Except the JC version)

Block diagrams

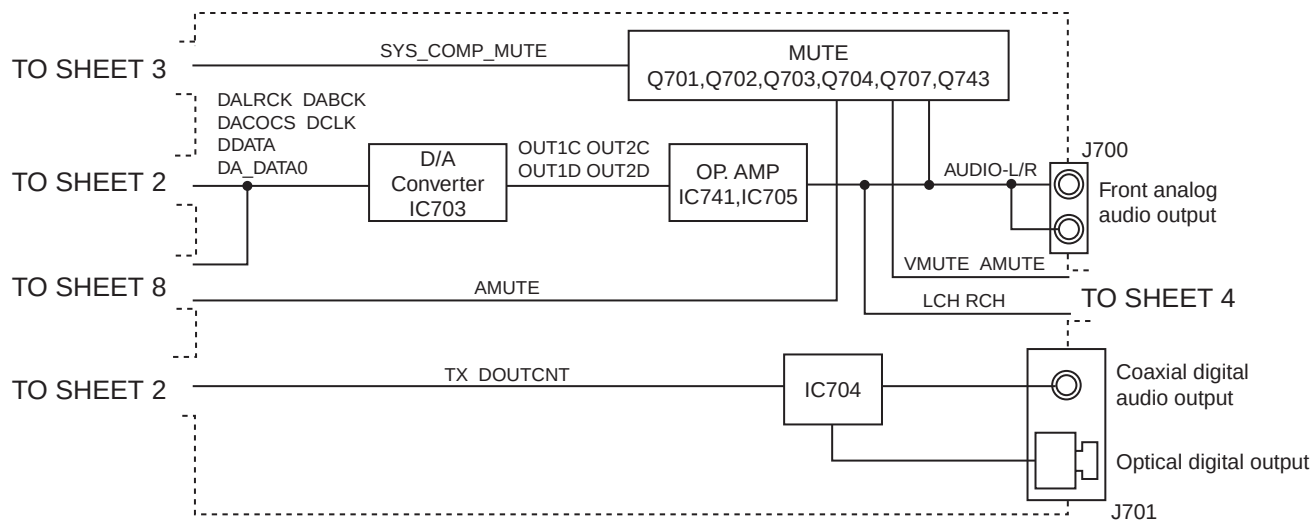
■ DVD Servo control & AV decoder section (SHEET 1,2,3)



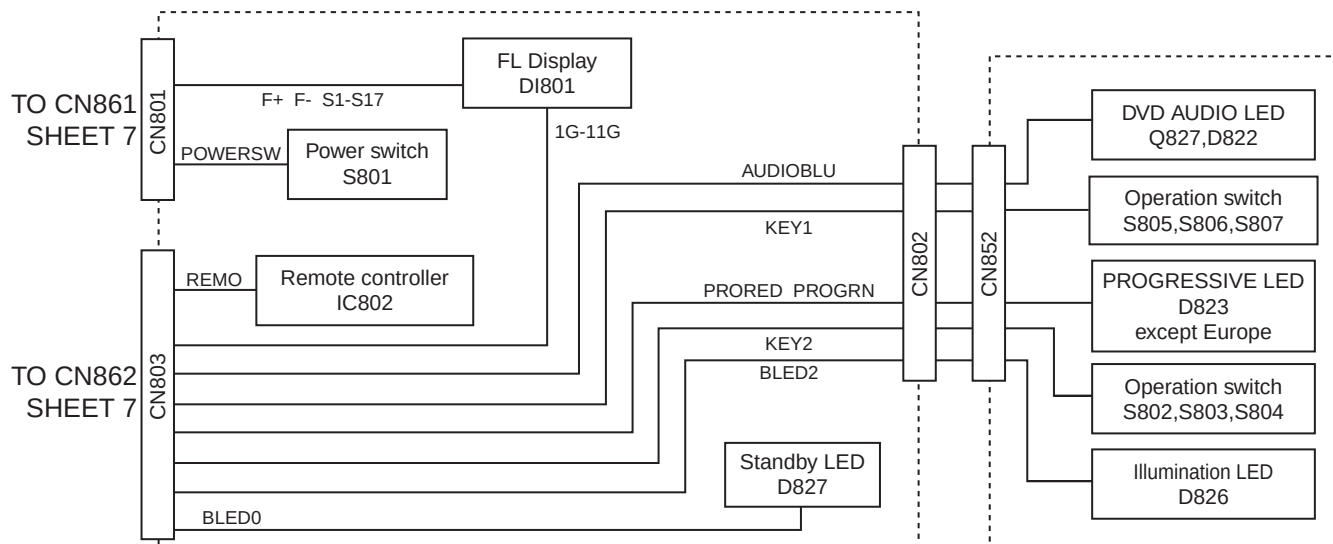
■ Video signal control and output terminal section (SHEET 4)



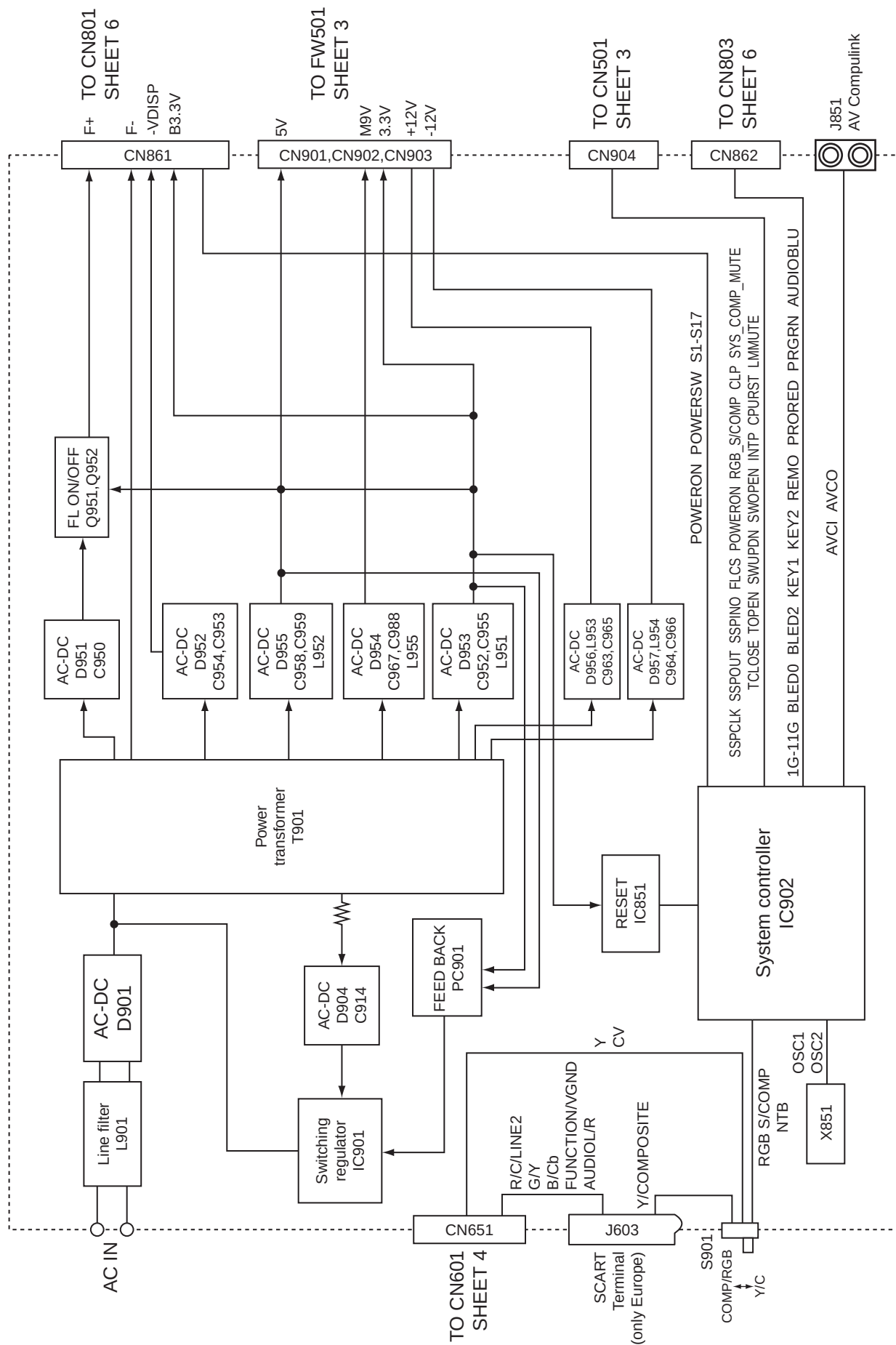
■ Audio signal output terminal section (SHEET 5)



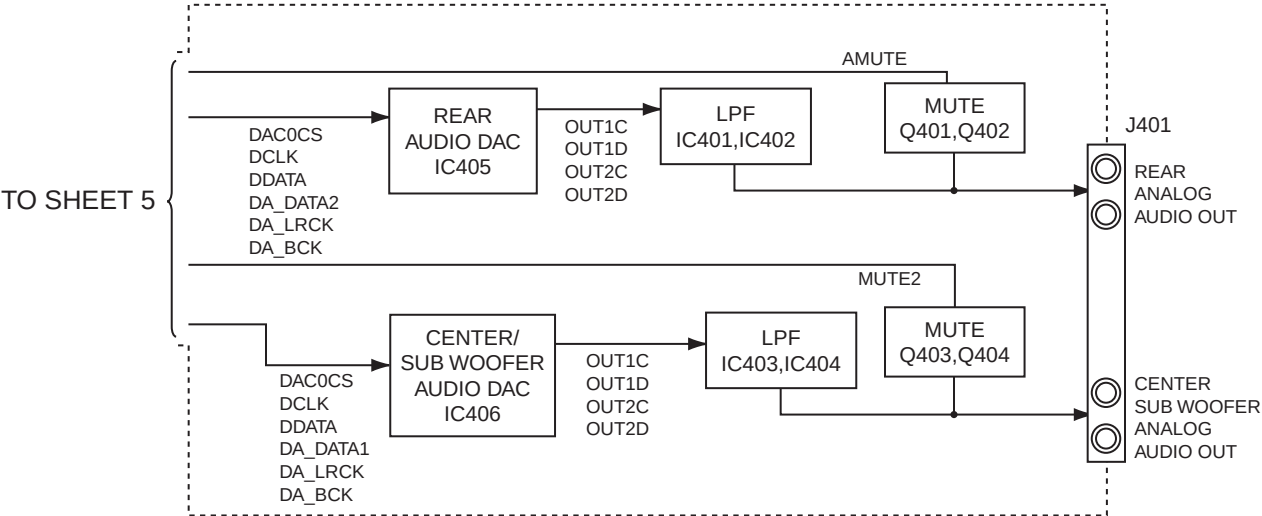
■ FL Display and operation switch section (SHEET 6)



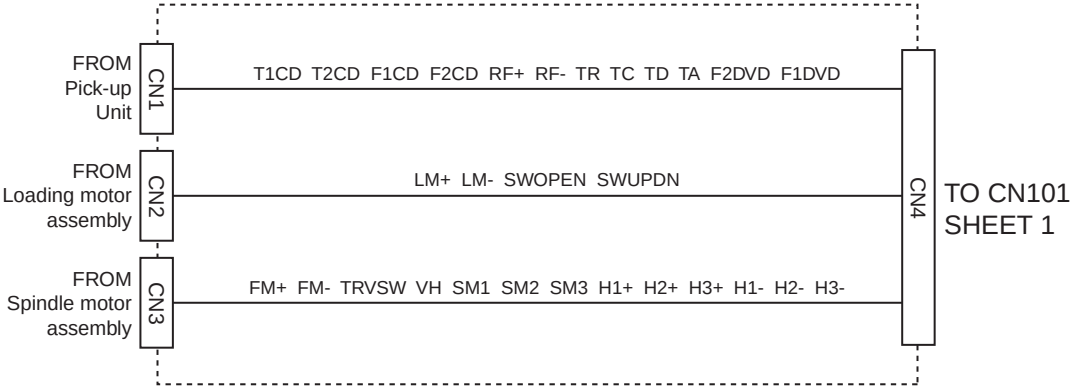
■ Power supply and system controller section (SHEET 7)



■ Surround audio signal output terminal section (SHEET 8)



■ Relay board section (SHEET 9)



<< MEMO >>

■ Servo control section



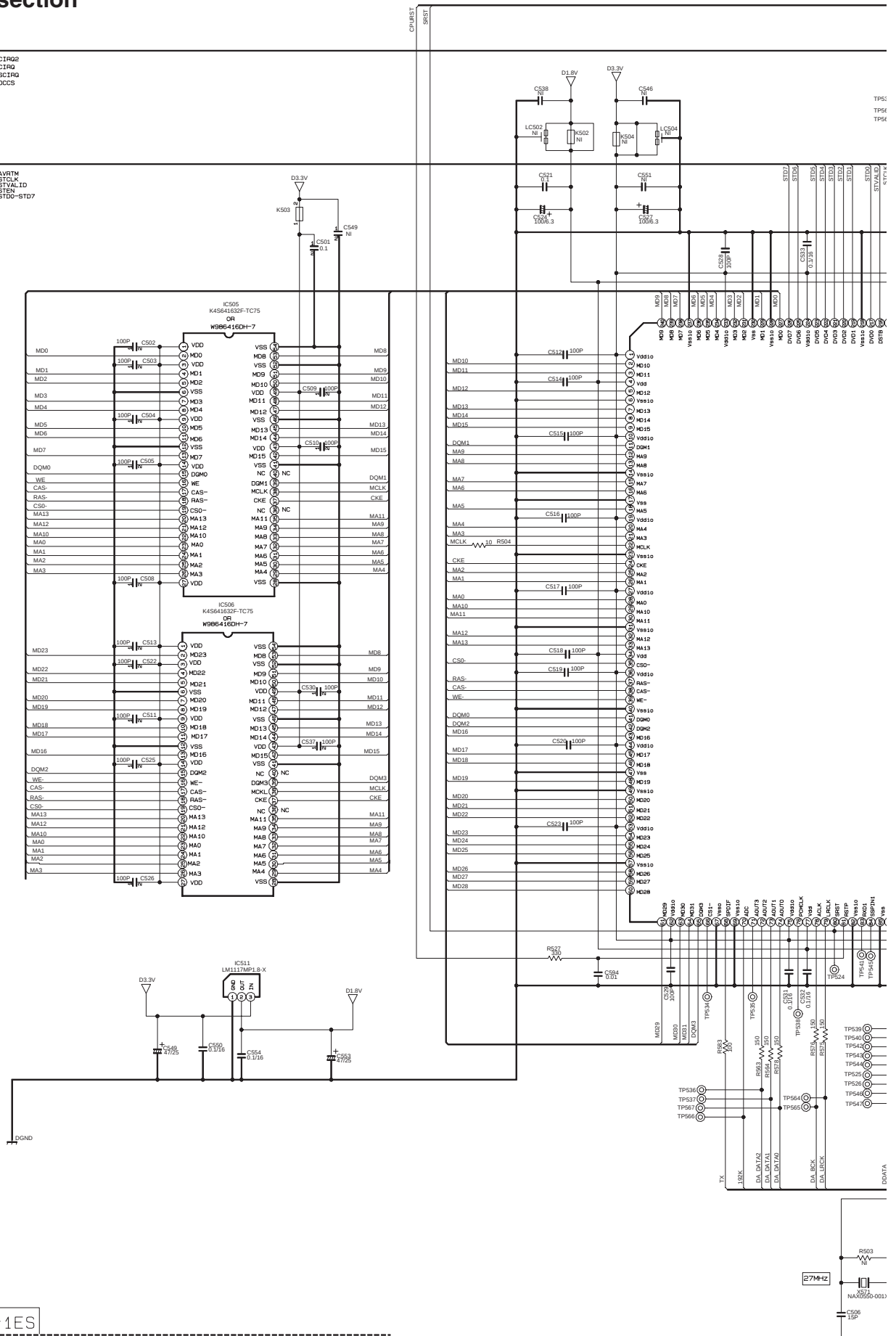
■ AV Decoder section

TO SHEET 1

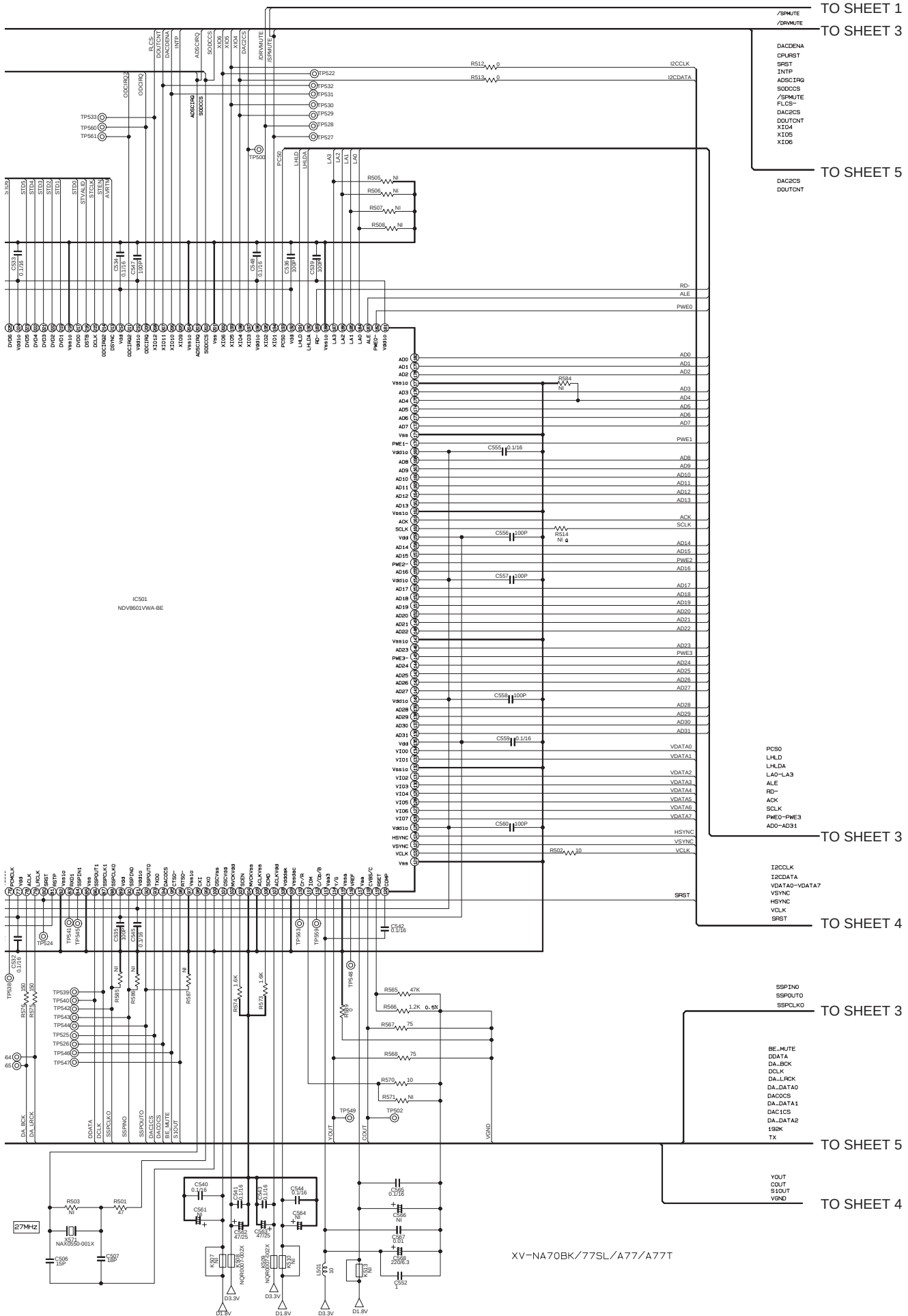
00C1P02
00C1P03
A0C0C1P03
S00C0C5

TO SHEET 1

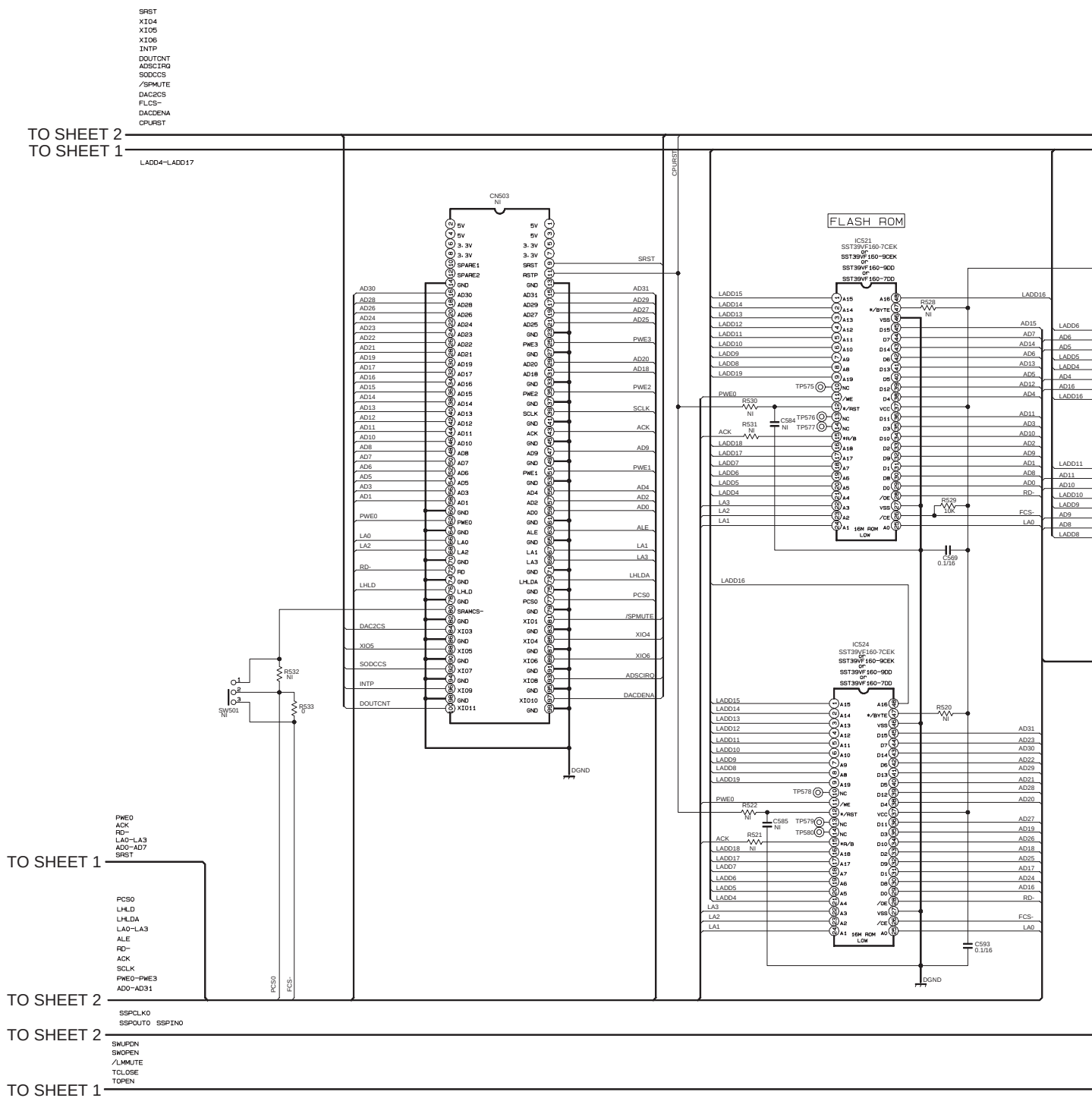
AVRTM
STCLK
STVALD
STEN
STDO-STD7



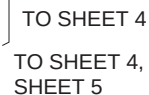
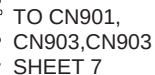
GNA10017-1ES



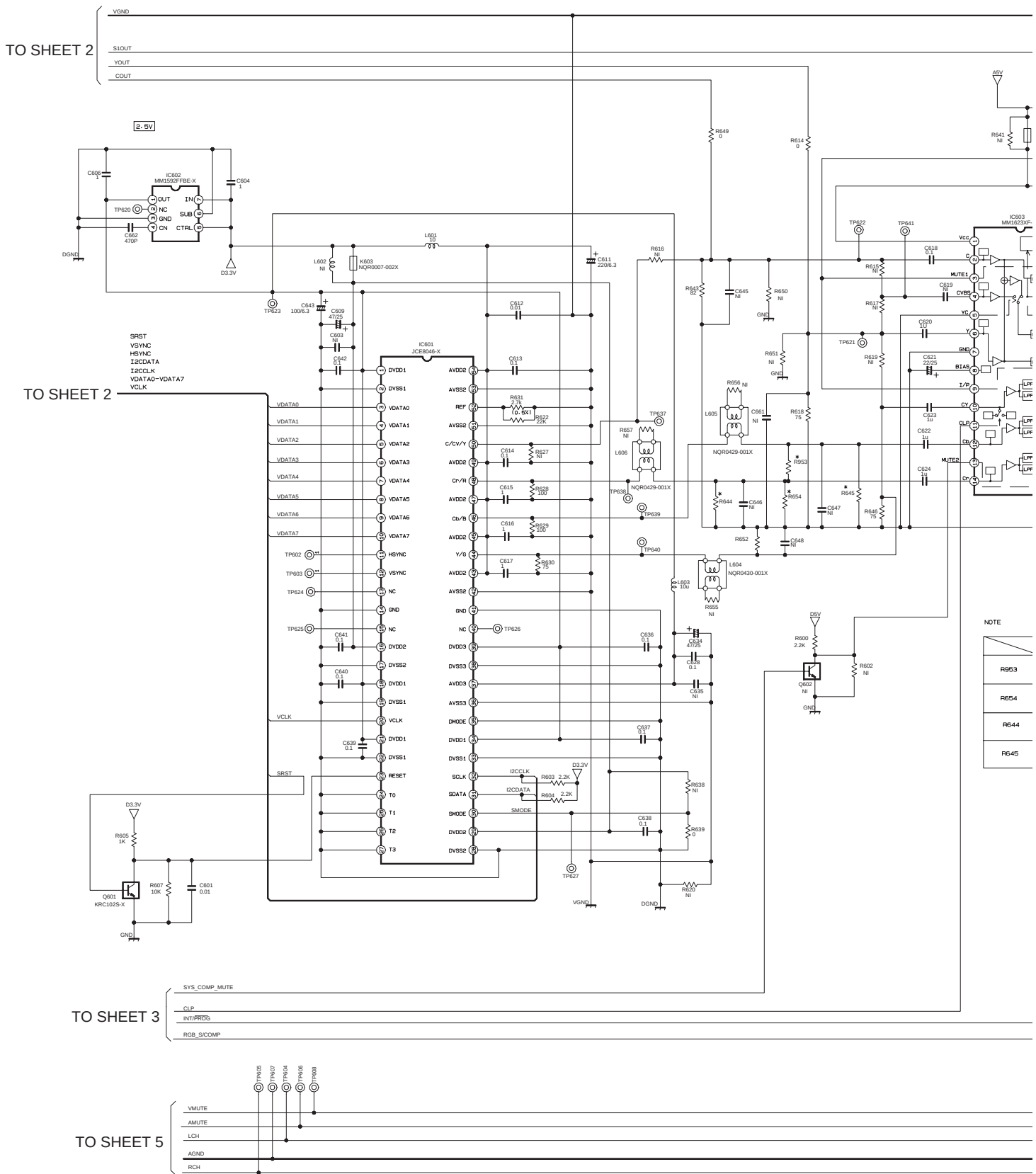
■ FLASH-ROM section



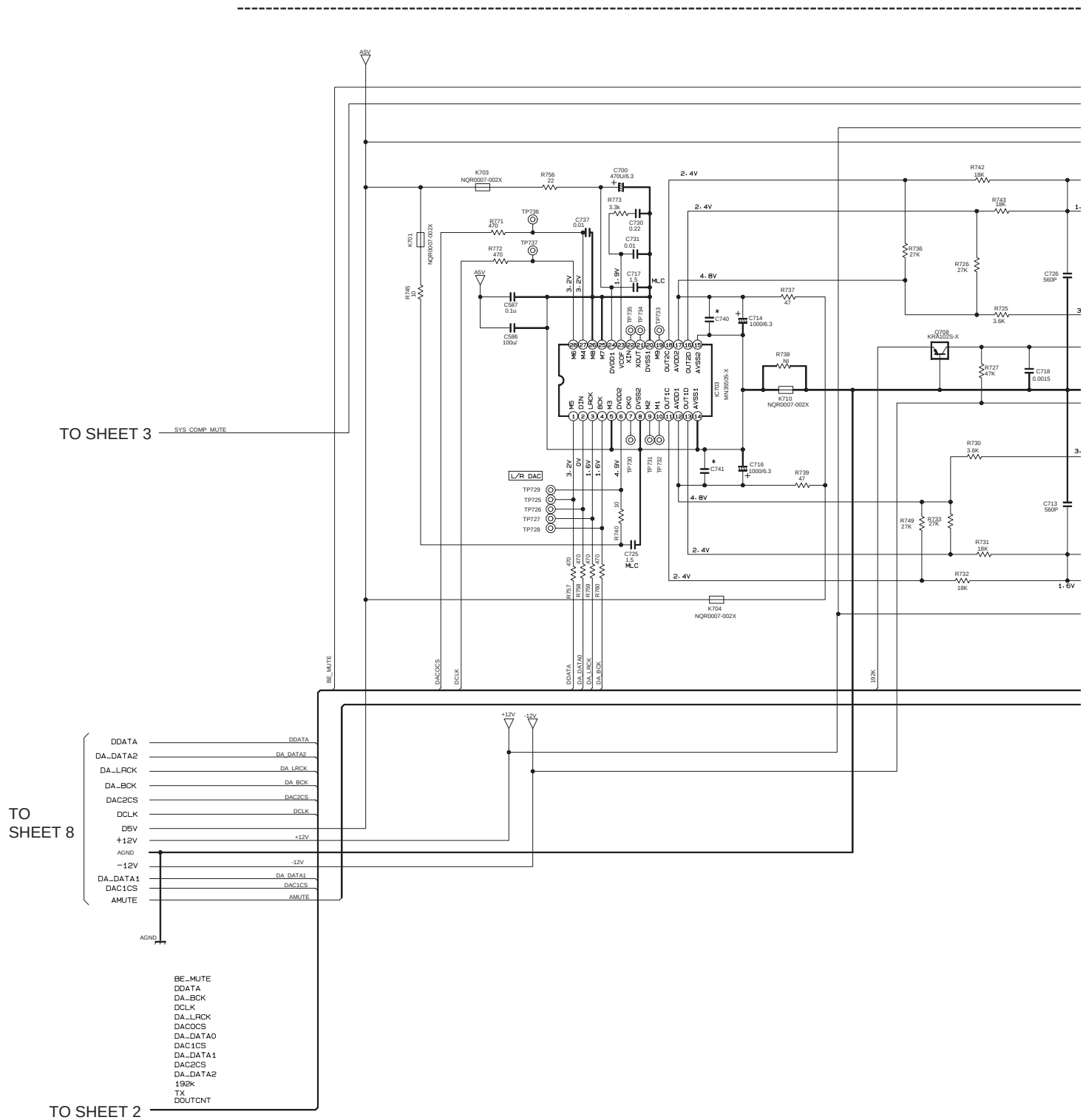
GNA10017-1ES



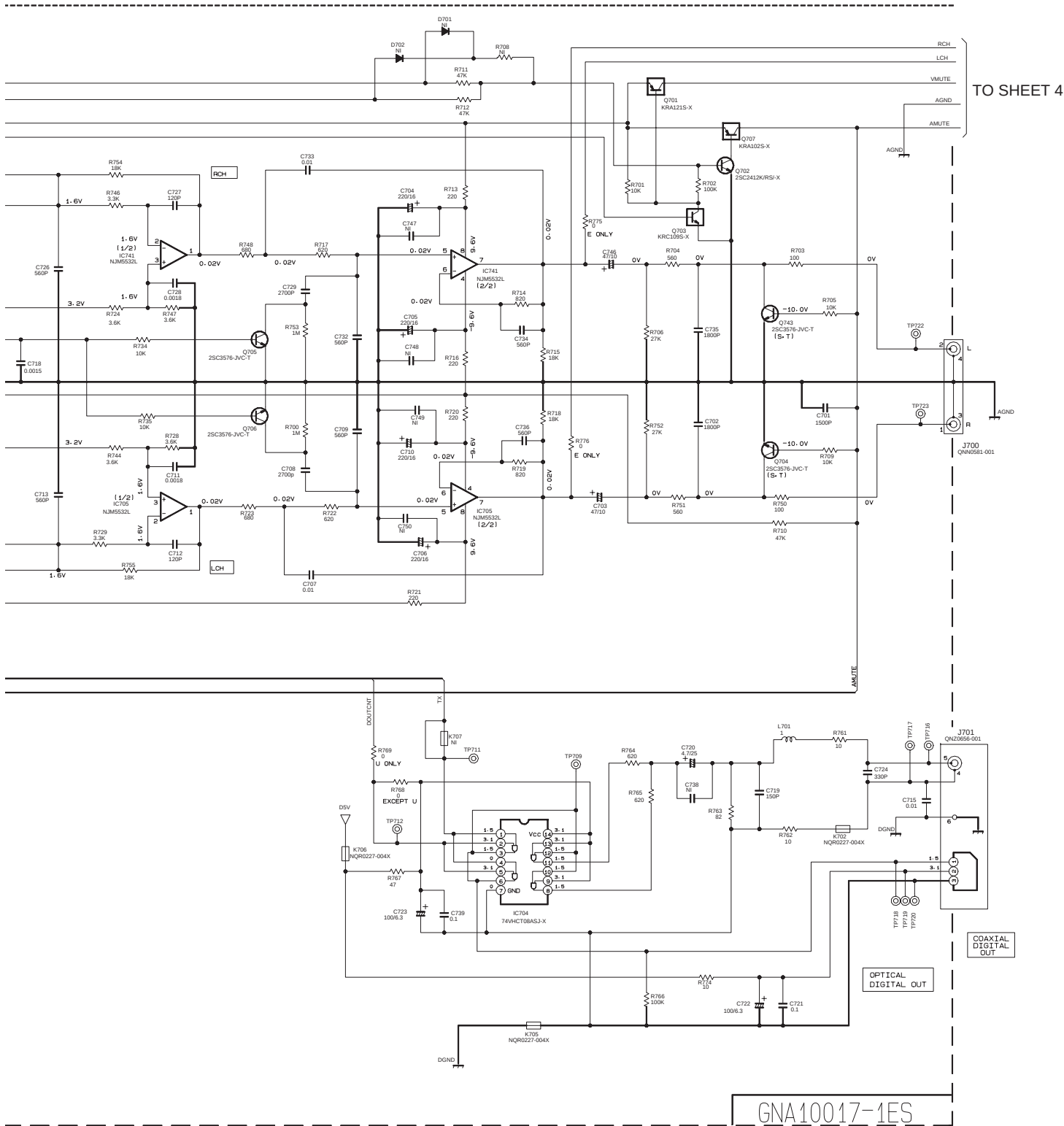
■ Video signal control and output terminal section



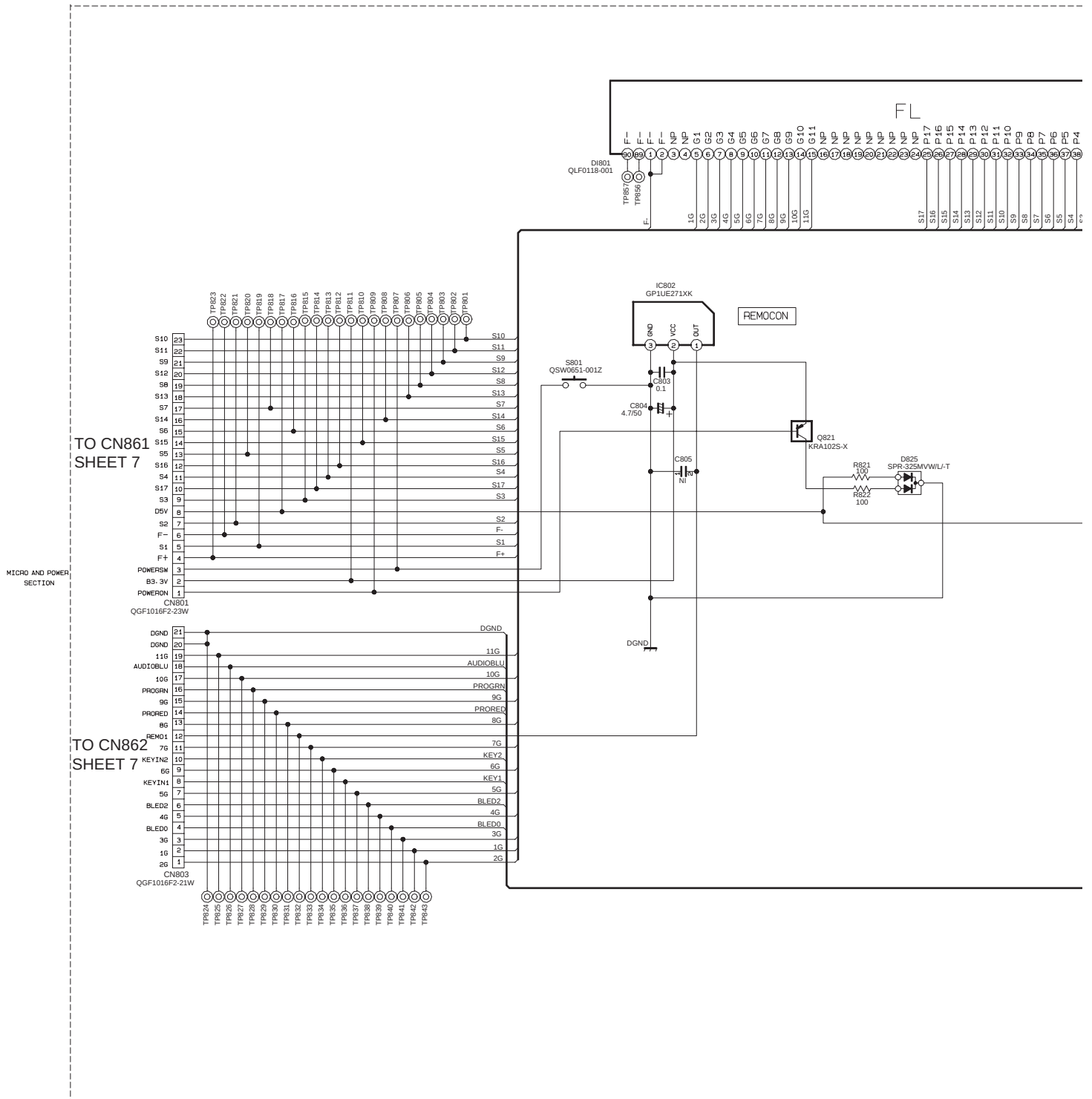
■ Audio signal output terminal section

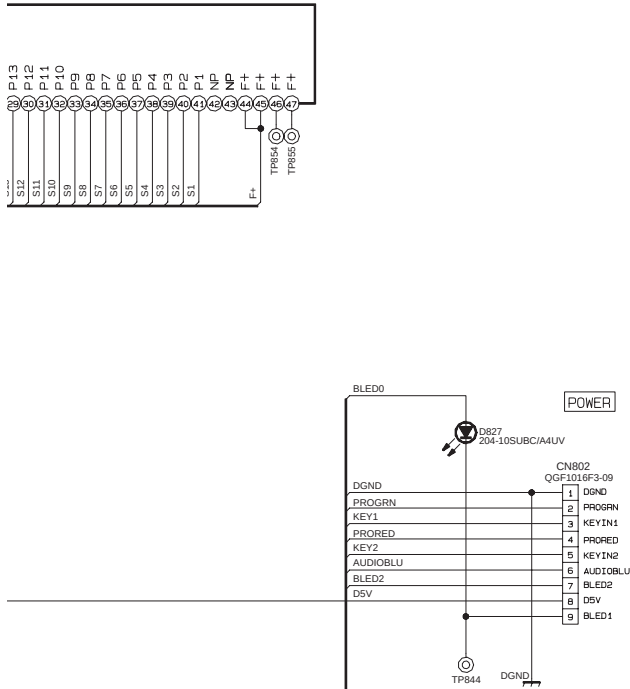


VER	D	OTHER
REF	NO	VERSION
C740	NI	1.5U
C741	NI	1.5U

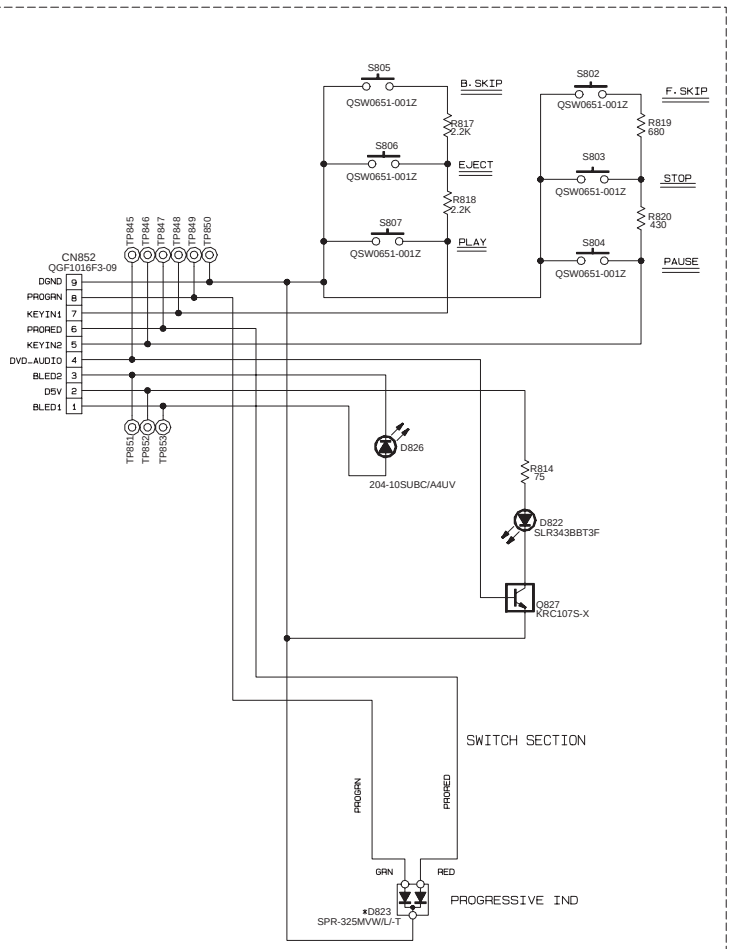


FL Display and operation switch section





GNA10017-2ES



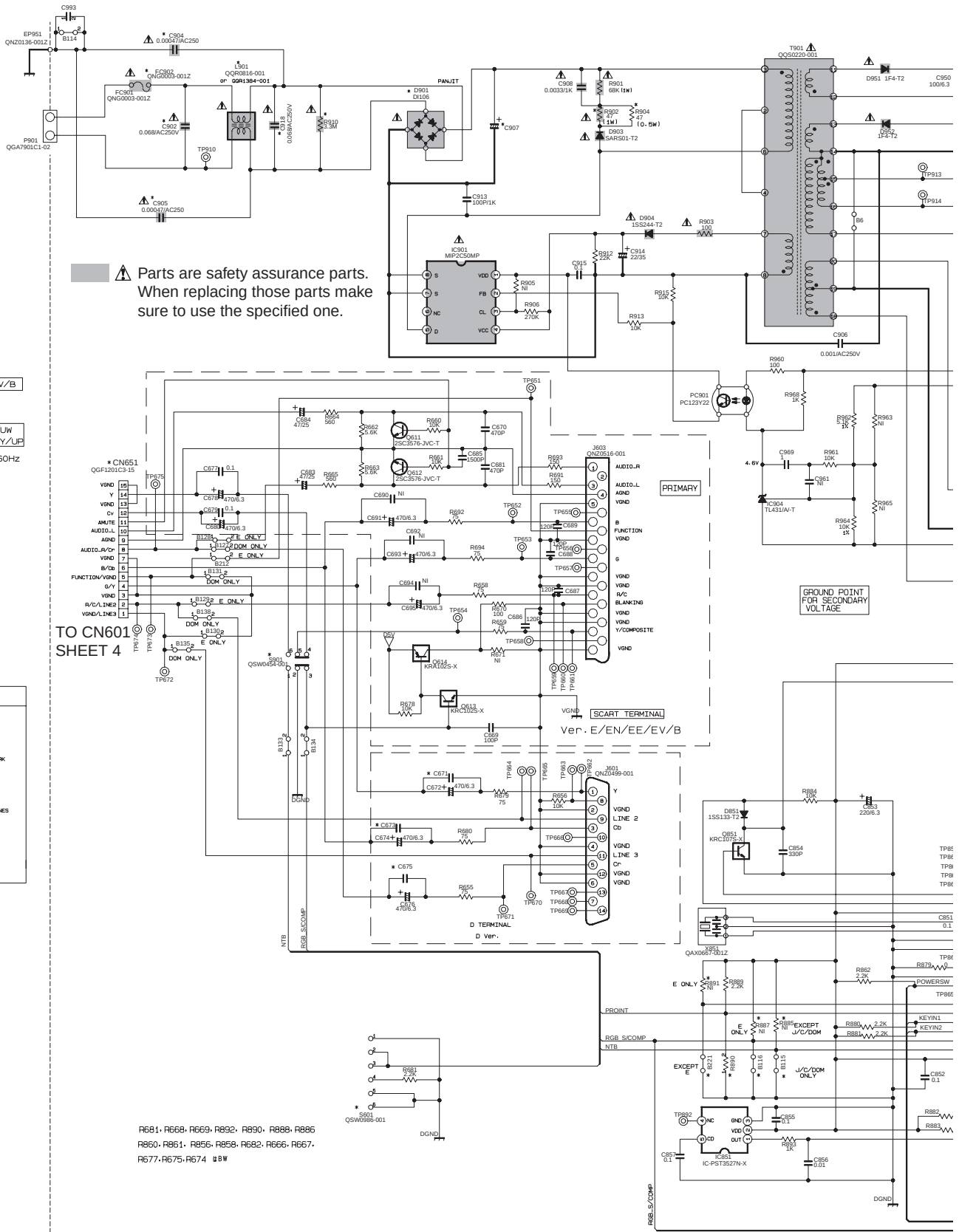
GNA-2B-ES

SHEET 6

XV-NA70BK/77SL/A77/A77T

(No.XA011SCH) 2-19

■ Power supply and system controller section



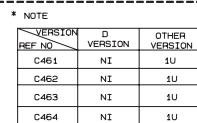
NOTE				
REF.	Ver	J/C DOM	B/E/EN/VE/EE	UF/US/UJ/UN/A
F901	GMP51U1-1R2-JB 1.6A-125V		GMP51E2-1R2-J1 1.6A-250V	GMP51E2-1R2-J1 1.6A-250V
C907	100/200		6B/400	6B/400
R902	NI		USE	USE
F904	USE		NI	NI
C918				
R910				

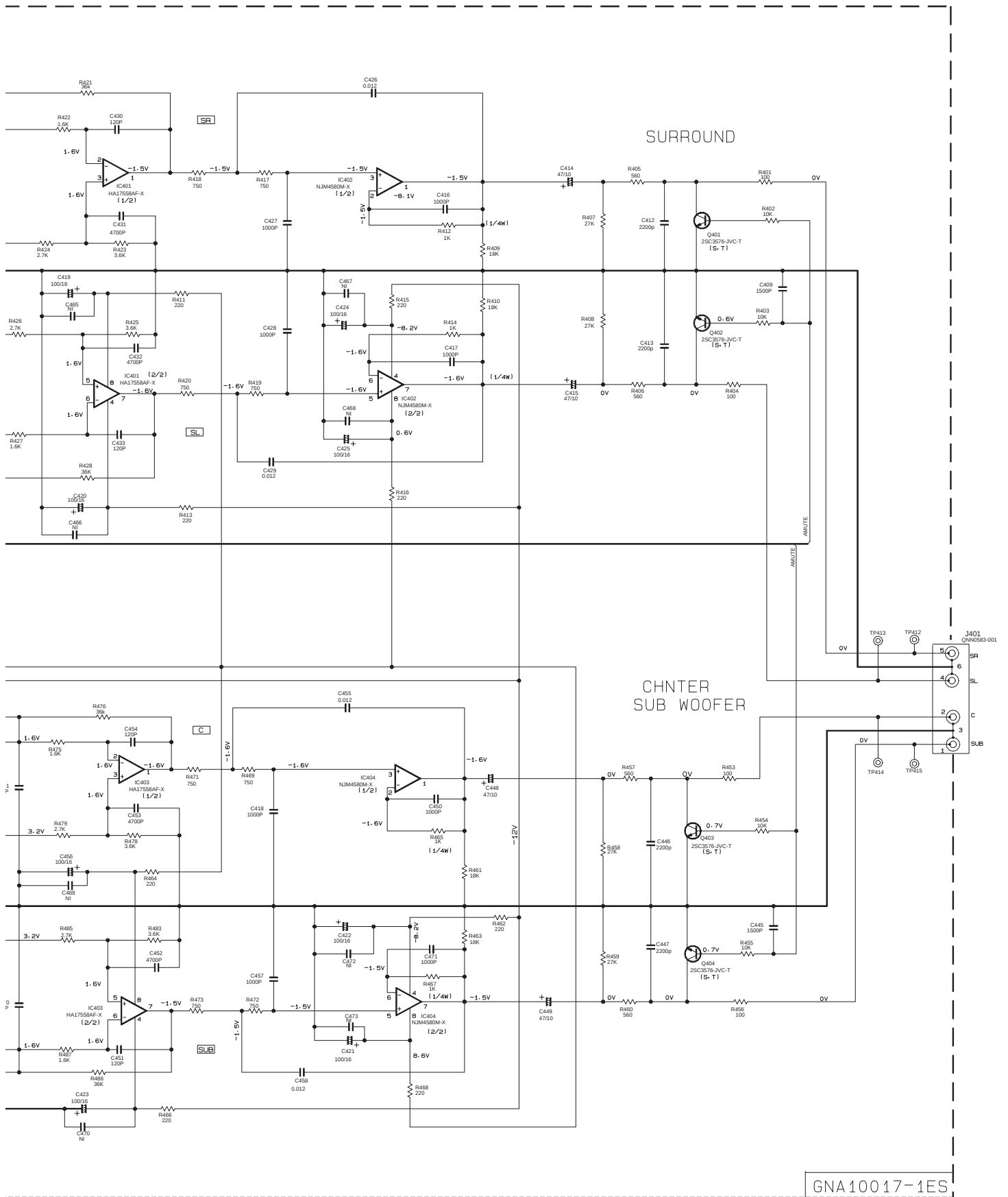
REF. NO.	Ver	D, E	J, C, U
C905		230U/16V	100U/16V
C906		230U/16V	100U/16V

*MARK						
Ver		J/C	D	UJ	B/E/EN/VE/EE	UF/UN/US/A
REF NO						
9601		USE	NI	USE	USE	USE
9901		NI	NI	NI	USE	USE
CN651		NI	USE	NI	USE	NI

*NOTE					
REF. NO	Ver.	J/C	B/E/DN/EV/EE	UF/UW/US/UW	D Ver.
B115	NI		BW	NI	NI
B116	BW	NI		BW	BW
B118	BW	NI		BW	BW
RB95	2- 2K	NI		2- 2K	2- 2K
RB97	NI	1K		NI	NI
RB91	NI	2- 2K		NI	NI
RB90	NI	NI		NI	2- 2K

TO SHEET 5





GNA10017-1ES

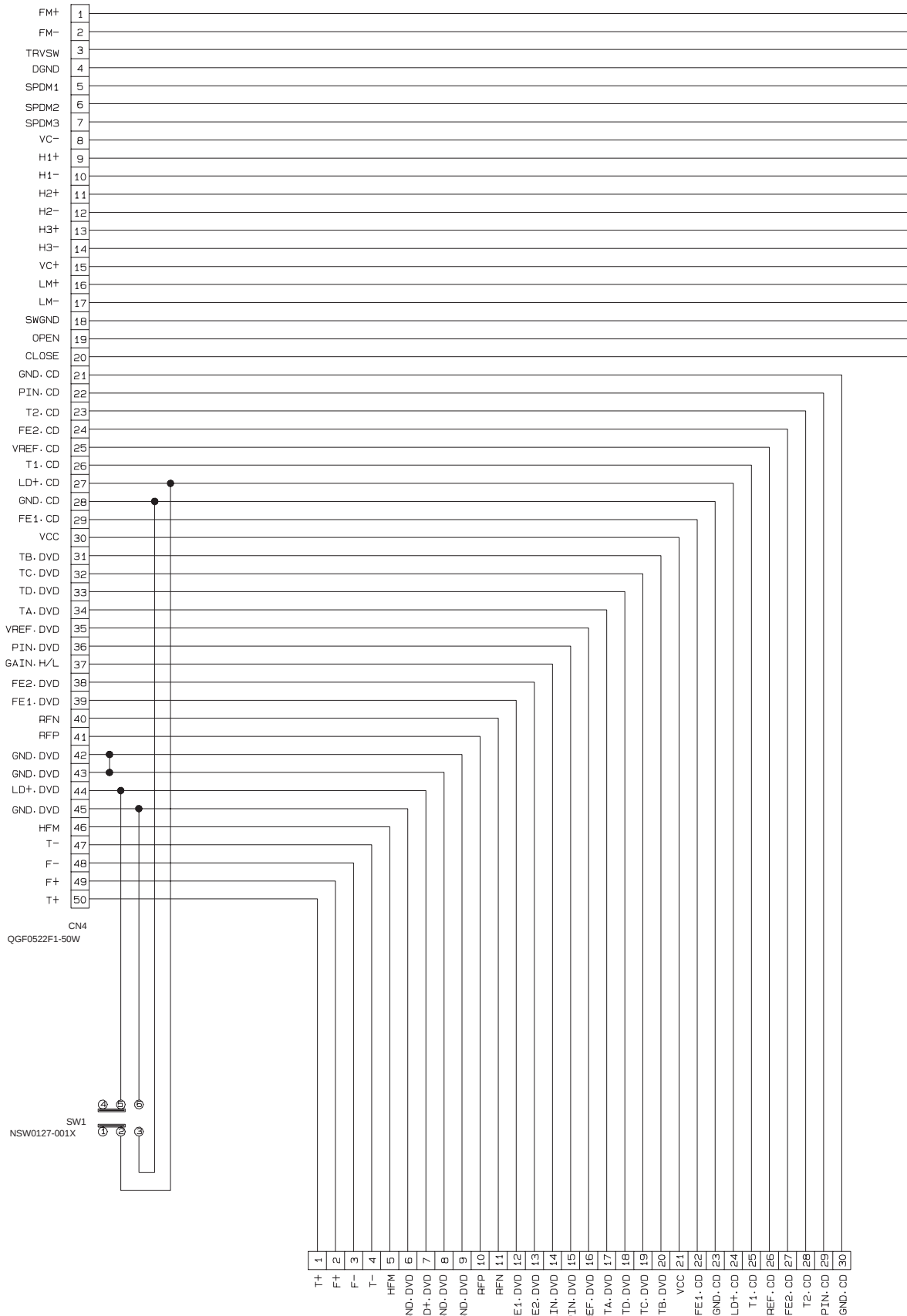
XV-NA70BK/77SL/A77/A77T

SHEET 8

(No.XA011SCH) 2-23

Relay board section

TO CN101
SHEET 1



LEA10076-ES1

To pick-up unit

CN1
QGF0522F1-30W

Tc

FE2-DVD	13
GAIN-DVD	14
PIN-DVD	15
VREF-DVD	16
TA-DVD	17
TD-DVD	18
TC-DVD	19
TB-DVD	20
VCC	21
FE1-CD	22
GND-CD	23
LDH-CD	24
T1-CD	25
VREF-CD	26
FE2-CD	27
T2-CD	28
PIN-CD	29
GND-CD	30

CN1
QGF0522F1-30W

to pick-up unit

CLOSE	5
OPEN	4
SWGND	3
LM+	2
LM-	1

CN2
QGF1016F2-05W

To loading motor
assembly

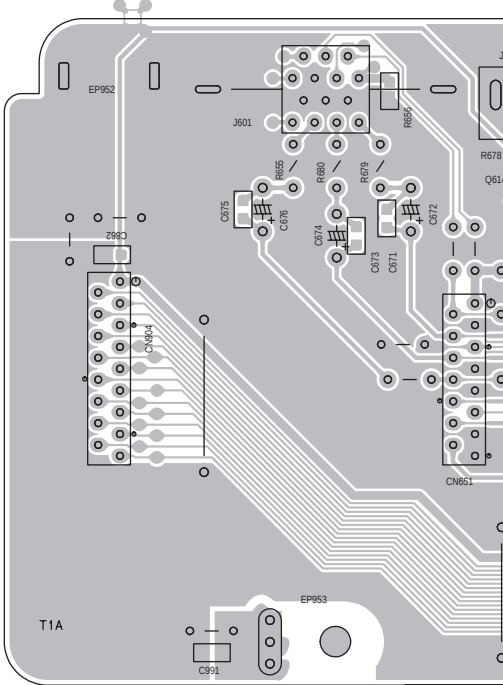
VC+	15
H3-	14
H3+	13
H2-	12
H2+	11
H1-	10
H1+	9
VC-	8
SPDM3	7
SPDM2	6
SPDM1	5
DGND	4
TRVSW	3
FM-	2
FM+	1

CN3
QGF1016F2-15W

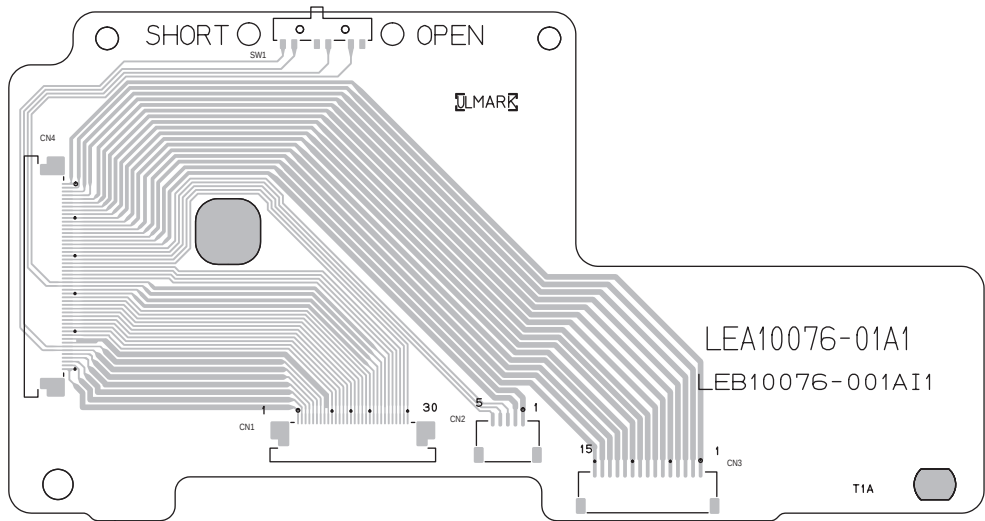
To spindle motor
assembly

Printed circuit boards

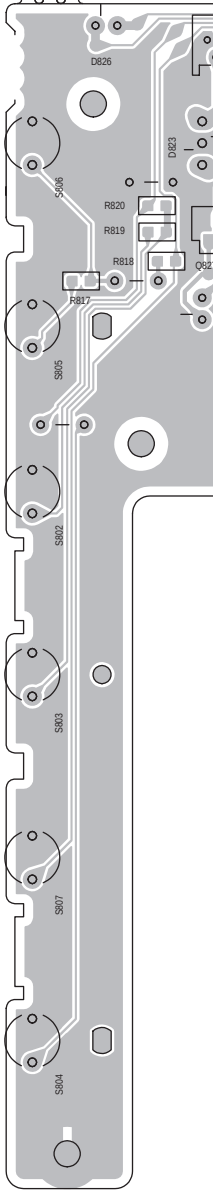
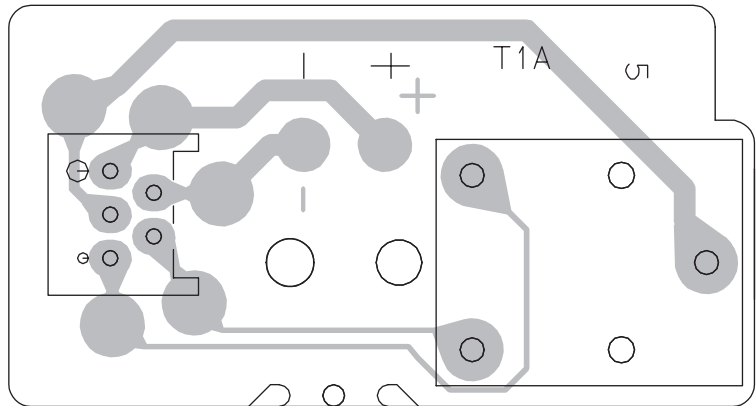
■ Power supply & system contro



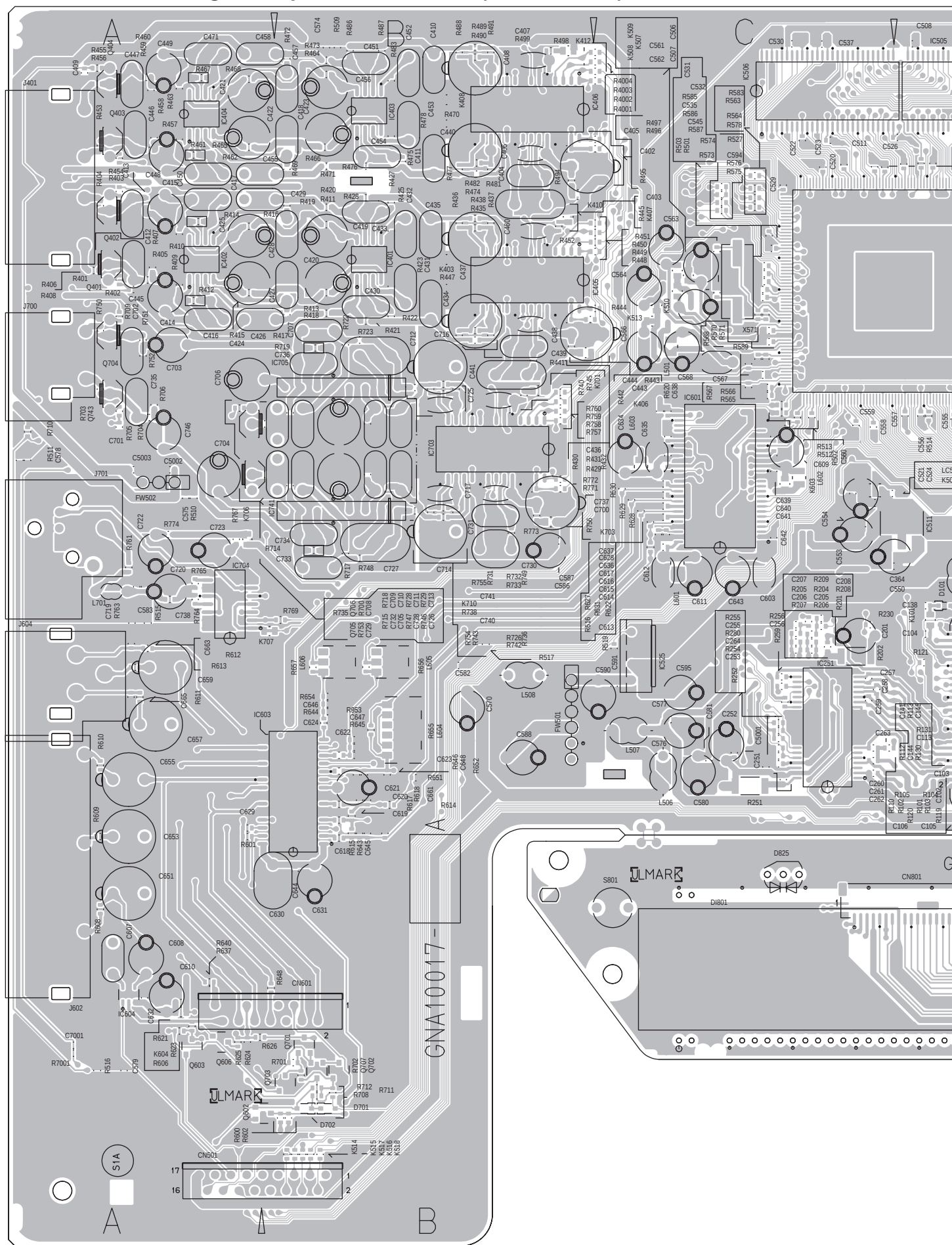
■ Relay board



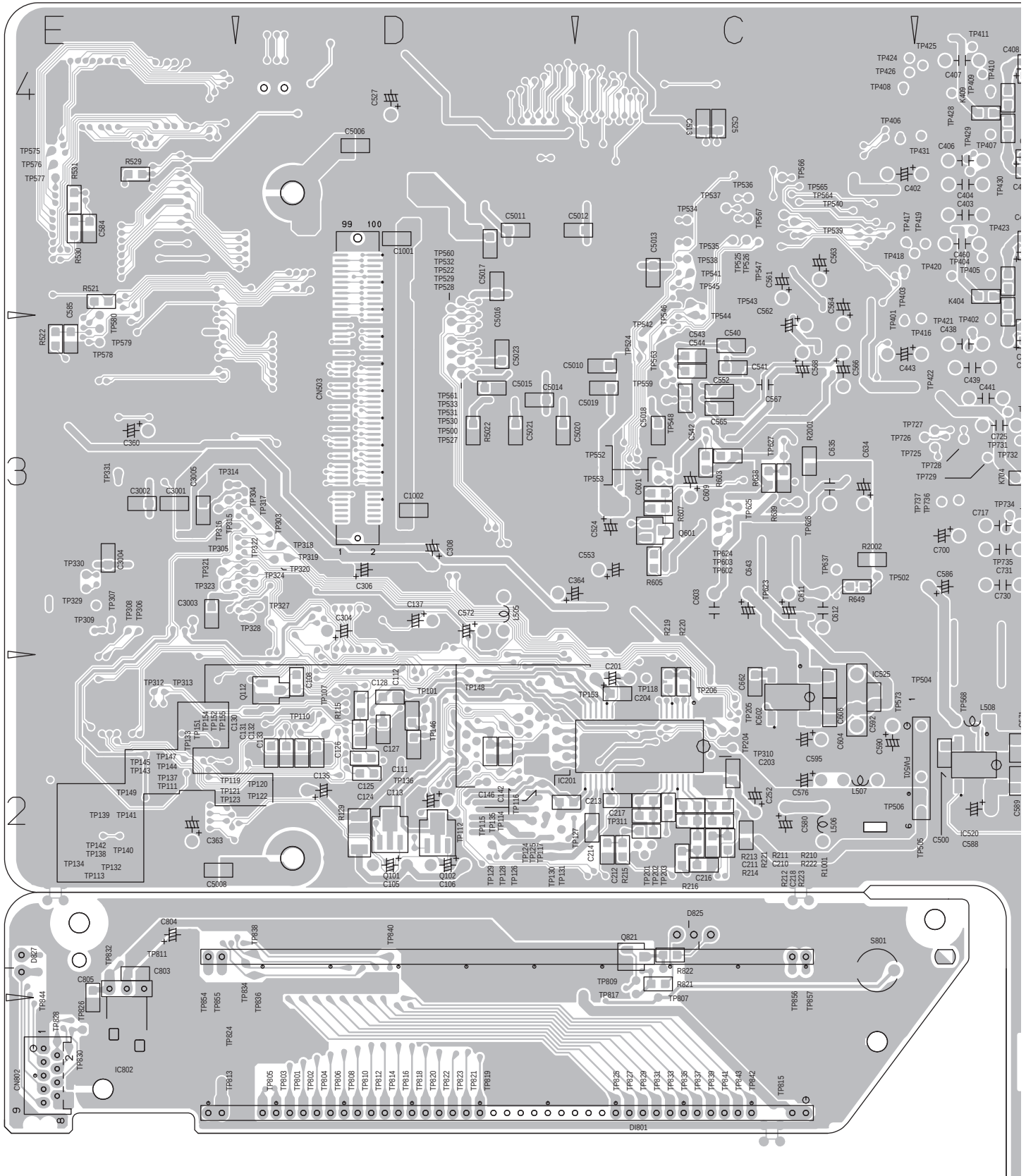
■ Switch board



■ Servo control & signal output terminal board (Forward side)



■ Servo control & signal output terminal board (Reverse side)





VICTOR COMPANY OF JAPAN, LIMITED

AV & MULTIMEDIA COMPANY OPTICAL DISC CATEGORY 1644, Shimotsuruma, Yamato, Kanagawa 242-8514, Japan

PARTS LIST

[XV-NA70BK,XV-NA77SL]

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

* (x_) in a description column shows the number of the used part.

Area Suffix (XV-NA70BK)

J ----- U.S.A.
C ----- Canada

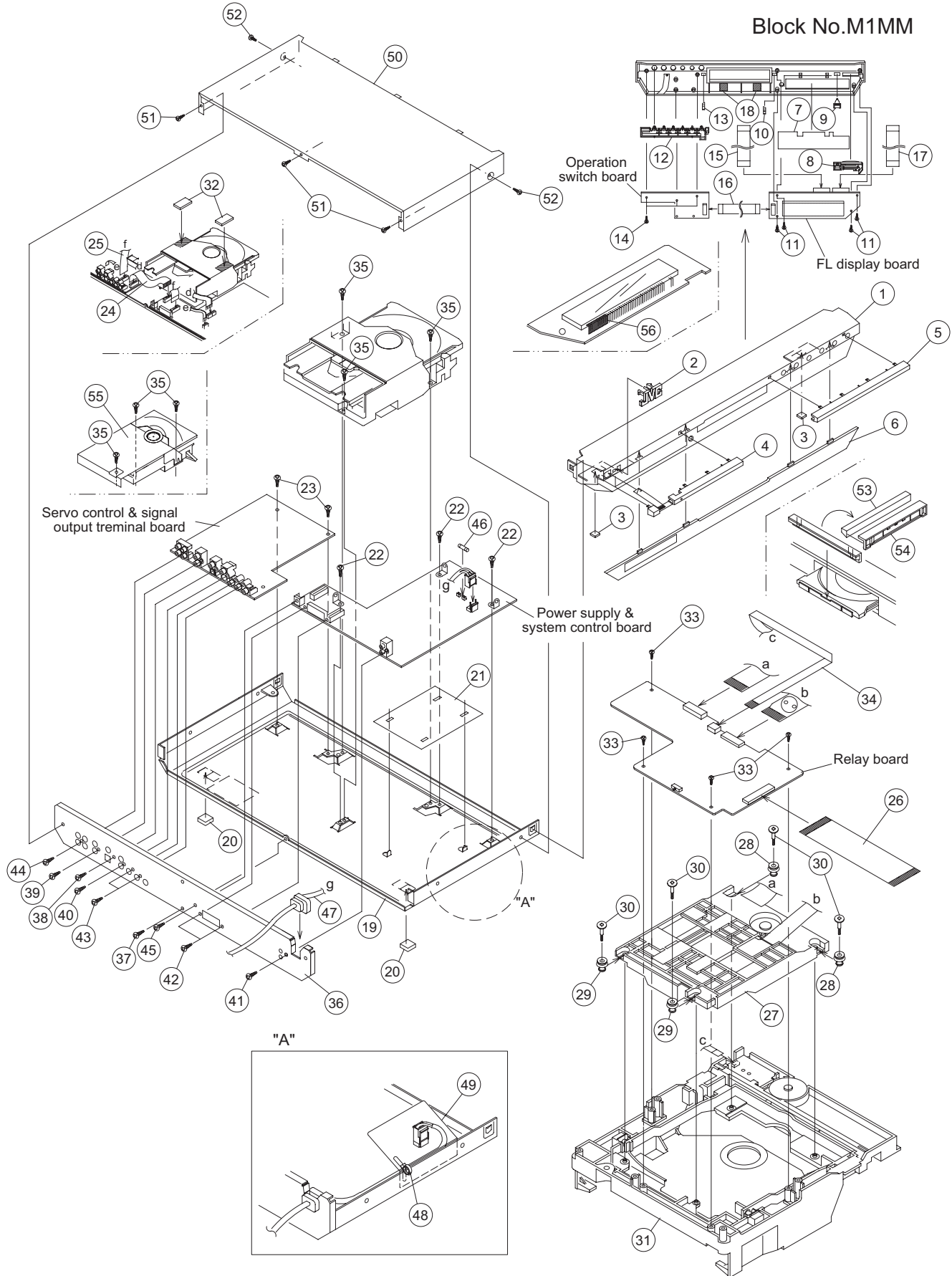
Area Suffix (XV-NA77SL)

J ----- U.S.A.
C ----- Canada
UJ ----- U.S.A Military
B ----- U.K.
E ----- Continental Europe
EN ----- Northern Europe
EV ----- Eastern Europe
EE ----- Russian Federation
US ----- Singapore
UF ----- China
A ----- Australia
UW ----- Brazil,Mexico,Peru

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DVD Traverse mechanism assembly and parts list	3-4
DVD Loading mechanism assembly and parts list	3-6
Electrical parts list	3-8
Packing materials and accessories parts list	3-16

Exploded view of general assembly and parts list



General assembly

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

△ Symbol No.	Part No.	Part Name	Description	Local
1	GN10044-002A	FRONT PANEL		70C,70J
1	GN10044-004A	FRONT PANEL		77C,77J,77UJ
1	GN10044-006A	FRONT PANEL		77A,77B,77E,77EE,77EN,77EV,77UF,77US,77UW
2	GN40020-001A	JVC MARK		70C,70J
2	GN40020-002A	JVC MARK		only XV-NA77SL
3	E75896-002	FELT SPACER	FRONT FOOT(x2)	
4	GN20054-003A	ORNAMENT(L)		70C,70J
4	GN20054-004A	ORNAMENT(L)		only XV-NA77SL
5	GN20055-003A	ORNAMENT(R)		70C,70J
5	GN20055-004A	ORNAMENT(R)		only XV-NA77SL
6	GN20056-008A	WINDOW SCREEN		70C,70J
6	GN20056-013A	WINDOW SCREEN		only Europe
6	GN20056-015A	WINDOW SCREEN		77C,77J,77UJ
6	GN20056-014A	WINDOW SCREEN		77A,77UF,77US,77UW
7	GN30059-002A	FL SCREEN		70C,70J
7	GN30059-004A	FL SCREEN		only XV-NA77SL
8	GN20058-003A	PUSH BUTTON	BK POWER	70C,70J
8	GN20058-005A	PUSH BUTTON	SL POWER	only Europe
8	GN20058-004A	PUSH BUTTON	SL POWER	except Europe
9	GN30057-001A	INDICATOR	POWER	
10	GN30058-001A	LED LENS	LEFT	
11	QYSBSF2608Z	TAPPING SCREW	POWER SW.CB.(x4)	
12	GN20059-003A	PUSH BUTTON	BK PLAY	70C,70J
12	GN20059-004A	PUSH BUTTON	SL PLAY	only XV-NA77SL
13	GN30058-002A	LED LENS	RIGHT	
14	QYSBSF2608Z	TAPPING SCREW	PLAY SW.CB.(x3)	
15	QUQ210-2108BJ	FFC WIRE		
16	QUQ210-0916AJ	FFC WIRE		
17	QUQ210-2308BJ	FFC WIRE		
18	E3400-431	SPACER	(x2)	
19	GN10045-004A	CHASSIS BASE		70C,70J
19	GN10045-003A	CHASSIS BASE		only XV-NA77SL
20	E75896-002	FELT SPACER	REAR FOOT(x2)	
21	GN40037-001A	PROTECT SHEET		
22	QYSBSGG3006E	TAP SCREW	MAIN CB+CHASSIS(x3)	
23	QYSBSGG3006E	TAP SCREW	MAIN CB+CHASSIS(x2)	
24	QUQ412-1708AJ	FFC WIRE		
25	QUQ412-1512AJ	FFC WIRE		only Europe
26	QUQ605-5008AF	FFC WIRE	MECHA+MAIN	
27	-----	TRAVERSE MECHA		
28	LE40900-003A	INSULATOR	(x2)	
29	LE40900-004A	INSULATOR	(x2)	
30	LE40901-001A	SPECIAL SCREW	FOR INSULATOR(x4)	
31	-----	1DISC LOADING B		
32	GN30006-019A	SPACER	(x2)	
33	QYSDSF2608Z	SCREW	FOR CONNECT CB(x4)	
34	QUQ210-0518BJ	FFC WIRE	TRAMEK+CONNECT	
35	QYSBSG3008Z	TAPPING SCREW	MECHA+CHASSIS(x3)	
36	GN20064-064A	REAR PANEL		70C,70J
36	GN20064-071A	REAR PANEL		77A
36	GN20064-069A	REAR PANEL		77EE
36	GN20064-068A	REAR PANEL		77B,77E,77EN,77EV
36	GN20064-065A	REAR PANEL		77C,77J
36	GN20064-074A	REAR PANEL		77UF
36	GN20064-070A	REAR PANEL		77UJ
36	GN20064-072A	REAR PANEL		77US
36	GN20064-073A	REAR PANEL		77UW
37	QYSBSGY3008M	SPECIAL SCREW	REAR+CHASSIS	
38	QYSBSGY3008M	SPECIAL SCREW	OPT/COAXIAL	
39	QYSBSGY3008M	SPECIAL SCREW	AUDIO OUT	
40	QYSBSGY3008M	SPECIAL SCREW	VIDEO OUT	
41	QYSBSGY3008M	SPECIAL SCREW	COMPU LINK	
42	QYSBSGY3008M	SPECIAL SCREW	21P OUT(x2)	only Europe
43	QYSBSGY3008M	SPECIAL SCREW	COMPONENT(x2)	
44	QYSBSGY3008M	SPECIAL SCREW	5.1CH OUT	
45	QYSBSGY3008M	SPECIAL SCREW	BKT	
△ 46	QMF51U1-1R6-J8	FUSE	1.6A AC125V	only ver.J,C
△ 46	QMF51E2-1R6-J1	FUSE	1.6A AC250V	except ver.J,C of XV-NA77SL
△ 47	QMPG100-244-JD	POWER CORD(AST)	2.44m BLACK	77A
△ 47	QMPN230-200-JC	POWER CORD(EK)	2m BLACK	77B
△ 47	QMPD450-200-JN	POWER CORD(US/CA)	2m BLACK	only ver.J,C
△ 47	QMPR470-200-JN	POWER CORD	2m BLACK	77UF
△ 47	QMPK280-200-JN	POWER CORD(EU)	2m BLACK	77E,77EE,77EN,77EV,77UJ,77US,77UW
48	QZW0004-001	WIRE CLAMP		
49	GN30073-001A	PROTECT SHEET(T		
50	GN20063-001A/S/	METAL COVER		70C,70J
50	GN20063-002A/S/	METAL COVER		only XV-NA77SL
51	QYSBSGG3006E	TAP SCREW	REAR(x3)	
52	QYSDSG3008M	SCREW	BK SIDE(x2)	70C,70J
52	QYSDSG3008N	TAPPING SCREW	SL SIDE(x2)	only XV-NA77SL
53	GN20062-004A	LENS		70C,70J
53	GN20062-005A	LENS		only XV-NA77SL
54	GN20060-001A	FITTING BASE		70C,70J
54	GN20060-002A	FITTING BASE		only XV-NA77SL
55	GN30082-001A	SHIELD		only ver.J,C
56	LE30001-031A	SPACER		only Europe

<Local area>

XV-NA70BK C:70 J:70J XV-NA77SL A:77A B:77B C:77C E:77E
EE:77EE EN:77EN EV:77EV J:77J UF:77UF UJ:77UJ US:77US

(No.XA011)3-3

DVD Traverse mechanism assembly and parts list

EXL-V76-1C

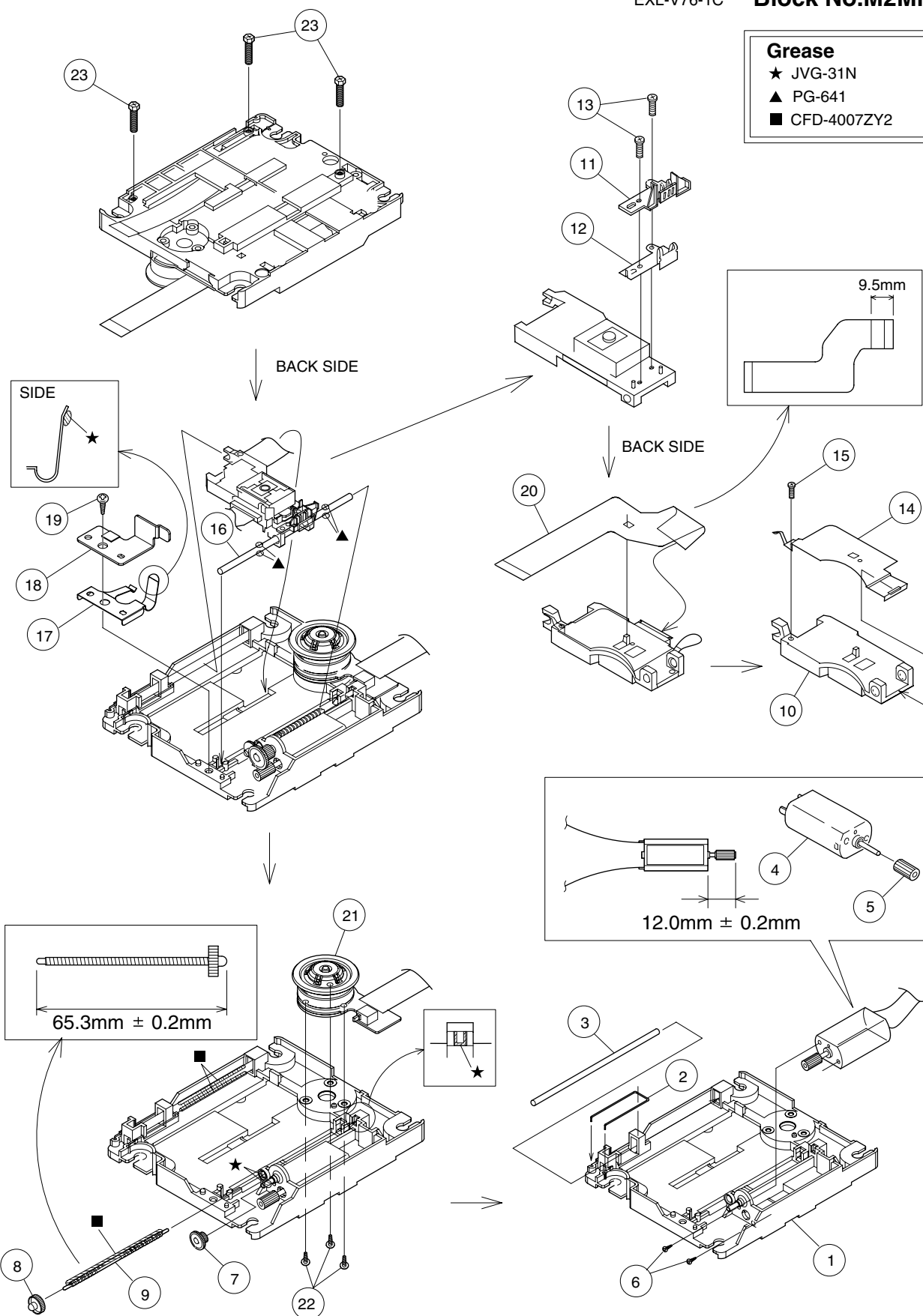
Block No.M2MM

Grease

★ JVG-31N

▲ PG-641

■ CFD-4007ZY2



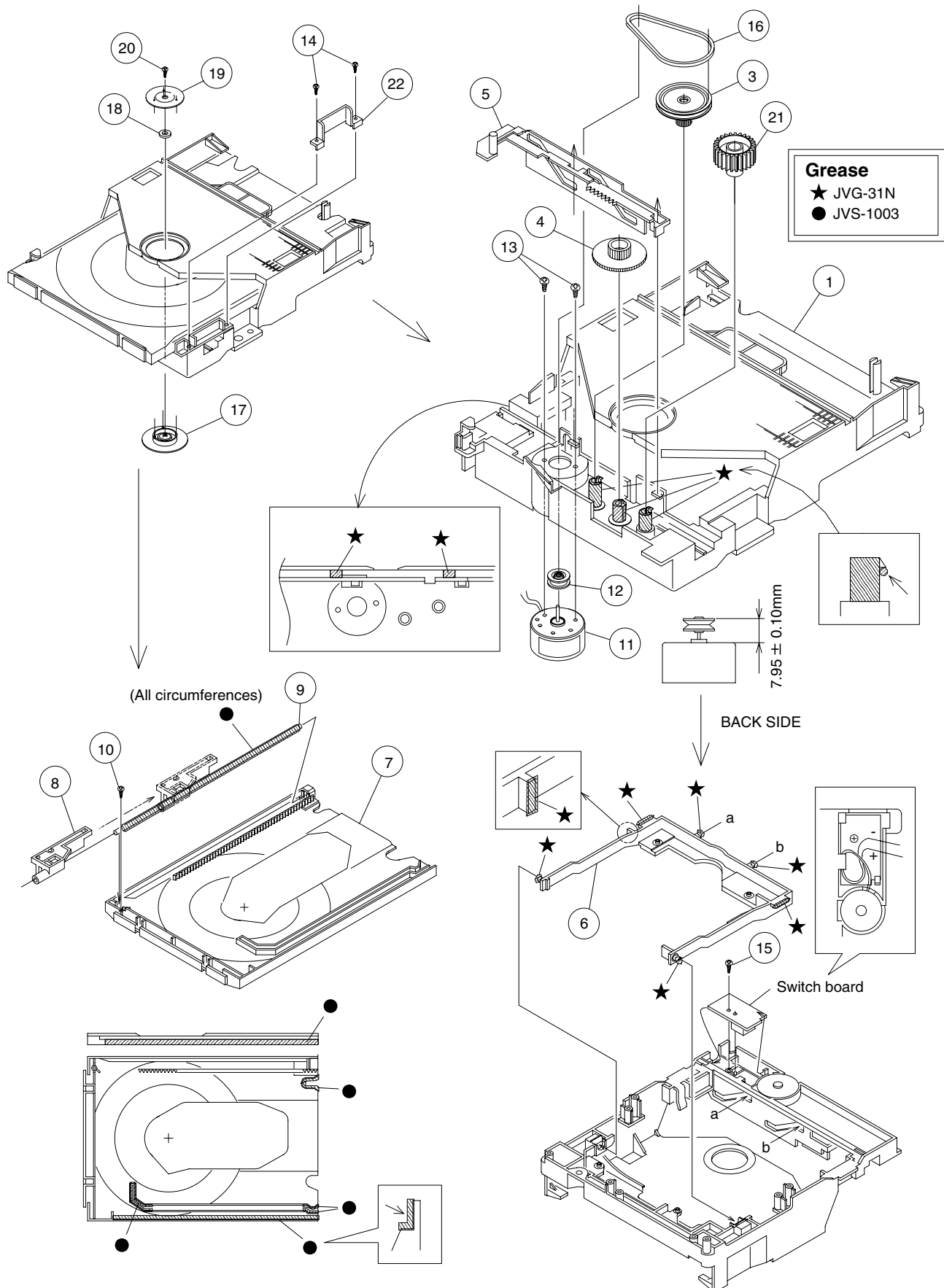
DVD Traverse mechanism

Block No. [M][2][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
1	LE10274-003A	MECHA BASE		
2	LE40896-001A	BAR SPRING		
3	LV41121-002A	SHAFT		
4	QAR0165-001	FEED MOTOR		
5	LV41510-001A	FEED GEAR T		
6	QYSPSPU2040M	SCREW	2mm x 4mm(x2)	
7	LV41511-003A	FEED GEAR M		
8	LV41512-002A	FEED GEAR E		
9	LV41517-003A	LEAD SCREW		
10	QAL0452-001	PICK UP		
11	LE20519-001A	SW ACTUATOR		
12	LE30886-001A	LEAD SPRING		
13	QYSPSFU1740Z	SCREW	1.7mm x 4mm(x2)	
14	LE30888-003A	P.U.SPRING		
15	QYSPSGU1430Z	SCREW	1.4mm x 3mm	
16	LV41121-002A	SHAFT		
17	LE40894-001A	T.SPRING		
18	LE40895-002A	BRACKET		
19	QYSDSF2005Z	SCREW	2mm x 5mm	
20	QAL0284-001	FPC		
21	QAR0268-001	SPINDLE MOTOR		
22	QYSPSPU1760Z	SCREW	1.7mm x 6mm(x3)	
23	LE40858-002A	S.SCREW	(x3)	

DVD Loading mechanism assembly and parts list

ELM-J3-1C Block No.M3MM



DVD Loading mechanism

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

△ Symbol No.	Part No.	Part Name	Description	Local
1	LE10275-003A	LOADER BASE		
3	LE31043-001A	PULLEY GEAR		
4	LE31044-001A	IDLE GEAR		
5	LE20665-001A	SLIDE CAM		
6	LE20667-002A	ELEVATOR		
7	LE10276-002A	TRAY		
8	LE31045-001A	BUSHING		
9	LE40898-001A	SHAFT		
10	QYSSSF2008Z	SCREW	2mm x 8mm	
11	QAR0197-001	MOTOR		
12	LV42087-002A	MOTOR PULLEY		
13	QYSPSPU1730Z	SCREW	FOR MOTOR(x2)	
14	QYSDSF2008Z	SCREW	2mm x 8mm(x2)	
15	QYSDSF2006Z	SCREW	FOR BOARD	
16	LE40897-001A	BELT		
17	LE31046-001A	CLAMPER		
18	LV42930-003A	MAGNET		
19	LE40899-001A	YOKE		
20	LE40906-001A	S.SCREW		
21	LE31042-001A	MIDDLE GEAR		
22	LE40937-001A	LEAF SPRING		

Electrical parts list

Relay board

Block No. [0][1]				
△ Symbol No.	Part No.	Part Name	Description	Local
CN1	QGF0522F1-30W	CONNECTOR	FFC/FPC (1-30)	
CN2	QGF1016F2-05W	CONNECTOR	FFC/FPC (1-5)	
CN3	QGF1016F2-15W	CONNECTOR	FFC/FPC (1-15)	
CN4	QGF0522F1-50W	CONNECTOR	FFC/FPC (1-50)	
SW1	NSW0127-001X	SLIDE SWITCH		

Servo control &
signal output terminal board

Block No. [0][2]				
△ Symbol No.	Part No.	Part Name	Description	Local
IC101	AN8703FH-V	IC	Frontend processor for DVD	
IC102	SN74AHC1G66HV-X	IC		
IC103	SN74LV4053APW-X	IC		
IC104	NJU7015M-W	IC	Ope. Amp	
IC105	SN74AHC2G66T-X	IC		
IC201	BA5983FM-X	IC	4-channel driver	
IC251	BA6679FM-X	LSI		
IC301	MN103S26EGB-H	IC	Super optical disc controller	
IC302	SN74AHC1G66HV-X	IC		
IC401	HA17558AF-X	IC	Dual Operational Amp	
IC402	NJM4580M-X	IC	Ope. Amp	
IC403	HA17558AF-X	IC	Dual Operational Amp	
IC404	NJM4580M-X	IC	Ope. Amp	
IC405	MN35505-X	IC	DAC	
IC406	MN35505-X	IC	DAC	
IC501	NDV8611VWA	IC	Pantera	
IC505	or HY57V643220CT-5	IC	512K x 32 bit x 4 banks synchronous DRAM	only ver.J,C
IC505	K4S641632F-TC75	IC(DIGITAL)	CMOS SDRAM	
IC505	or HY57643220CT55	IC		
IC505	or K4S643232E-TC60	IC	512K x 32 bit x 4 banks synchronous DRAM	
IC505	or K4S643232F-TC60	IC	512K x 32 bit x 4 banks synchronous DRAM	
IC505	or W986416DH-7	IC	DRAM	
IC506	K4S641632F-TC75	IC(DIGITAL)	CMOS SDRAM	
IC506	or W986416DH-7	IC	DRAM	
IC511	LM1117MP1.8-X	IC	Regulator	
IC520	MM1565AF-X	IC	Regulator	
IC521	SST39VF160H0B06	IC		only ver.J,C
IC521	SST39VF160H0B83	IC		only ver.UJ
IC521	SST39VF160H0BC3	IC		only ver.UW,A
IC521	SST39VF160H0B44	IC		only ver.B,E,EN,EV
IC521	SST39VF160H0B63	IC		only ver.EE
IC521	SST39VF160H0BA3	IC		only ver.US
IC521	SST39VF160H0BE3	IC		only ver.UF
IC522	74LCX373MTC-X	IC(DIGITAL)	Octal D-type latch	
IC522	or 74LVC373APW-X	IC(DIGITAL)	Octal D-type transparent latch	
IC523	74LCX373MTC-X	IC(DIGITAL)	Octal D-type latch	
IC523	or 74LVC373APW-X	IC(DIGITAL)	Octal D-type transparent latch	
IC524	SST39VF160H0B16	IC		only ver.J,C
IC524	SST39VF160H0B93	IC		only ver.UJ
IC524	SST39VF160H0BD3	IC		only ver.UW,A
IC524	SST39VF160H0B54	IC		only ver.B,E,EN,EV
IC524	SST39VF160H0B73	IC		only ver.EE
IC524	SST39VF160H0BB3	IC		only ver.US
IC524	SST39VF160H0BF3	IC		only ver.UF
IC525	PQ3RD23	IC		
IC601	JCE8046-X	IC		
IC602	MM1592FFBE-X	IC		
IC603	MM1623XF-X	IC	Video driver	
IC604	MM1505XN-X	IC		only Europe
IC703	MN35505-X	IC	DAC	
IC704	74VHCT08ASJ-X	IC	2-input AND gate	
IC705	NJM5532L	IC		
IC741	NJM5532L	IC		
IC802	GP1UE271XK	IR DETECT UNIT		

△ Symbol No.	Part No.	Part Name	Description	Local
Q101	KTA1001/Y/-X	TRANSISTOR		
Q102	KTA1001/Y/-X	TRANSISTOR		
Q103	DTA144EE-X	DIGI TRANSISTOR		
Q104	2SC4617/R/-X	TRANSISTOR		
Q105	2SC4617/R/-X	TRANSISTOR		
Q106	2SC4617/R/-X	TRANSISTOR		
Q107	2SA1774/R/-X	TRANSISTOR		
Q108	2SC4617/R/-X	TRANSISTOR		
Q109	2SC4617/R/-X	TRANSISTOR		
Q110	2SC4617/R/-X	TRANSISTOR		
Q111	DTC114EE-X	DIGI TRANSISTOR		
Q112	KRC102S-X	DIGI TRANSISTOR		
Q301	DTC144EE-X	DIGI TRANSISTOR		
Q401	2SC3576-JVC-T	TRANSISTOR		
Q402	2SC3576-JVC-T	TRANSISTOR		
Q403	2SC3576-JVC-T	TRANSISTOR		
Q404	2SC3576-JVC-T	TRANSISTOR		
Q601	KRC102S-X	DIGI TRANSISTOR		
Q606	KRC102S-X	DIGI TRANSISTOR		only Europe
Q701	KRA121S-X	DIGI TRANSISTOR		
Q702	2SC2412K/RS/-X	TRANSISTOR		
Q703	KRC109S-X	TRANSISTOR		
Q704	2SC3576-JVC-T	TRANSISTOR		
Q705	2SC3576-JVC-T	TRANSISTOR		
Q706	2SC3576-JVC-T	TRANSISTOR		
Q707	KRA102S-X	DIGI TRANSISTOR		
Q708	KRA102S-X	DIGI TRANSISTOR		
Q743	2SC3576-JVC-T	TRANSISTOR		
Q821	KRA102S-X	DIGI TRANSISTOR		
D101	RB521S-30-X	SB DIODE		
D825	SPR-325MW/L/-T	LED	GREEN-RED	
D827	204-10SUBC/A4VW	LED		
C105	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C106	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C108	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C109	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C110	NCS31HJ-221X	C CAPACITOR	220pF 50V J	
C111	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C112	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C114	NCB31HK-392X	C CAPACITOR	3900pF 50V K	
C115	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C116	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C117	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C119	NCB31HK-561X	C CAPACITOR	560pF 50V K	
C120	NCB31HK-561X	C CAPACITOR	560pF 50V K	
C121	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C122	NCS31HJ-120X	C CAPACITOR	12pF 50V J	
C123	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C124	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C125	NCB31HK-271X	C CAPACITOR	270pF 50V K	
C126	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C127	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C128	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C129	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C132	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C133	NCB31CK-273X	C CAPACITOR	0.027uF 16V K	
C134	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C135	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C136	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C137	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C138	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C140	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C141	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C142	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C143	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C144	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C146	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C147	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C148	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C150	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C151	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C152	NCB31HK-183X	C CAPACITOR	0.018uF 50V K		C349	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C153	NCB31HK-392X	C CAPACITOR	3900pF 50V K		C350	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C154	NCS31HJ-680X	C CAPACITOR	68pF 50V J		C353	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C155	NCS31HJ-680X	C CAPACITOR	68pF 50V J		C360	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C156	NCS31HJ-120X	C CAPACITOR	12pF 50V J		C362	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C157	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C363	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C158	NCS31HJ-221X	C CAPACITOR	220pF 50V J		C402	QTE0J28-477Z	E CAPACITOR	470uF 6.3V	
C159	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C403	QFVJ1HJ-224Z	MF CAPACITOR	0.22uF 50V J	
C160	NCS31HJ-820X	C CAPACITOR	82pF 50V J		C404	QFN31HJ-103Z	M CAPACITOR	0.01uF 50V J	
C161	NCS31HJ-180X	C CAPACITOR	18pF 50V J		C405	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C162	NCS31HJ-181X	C CAPACITOR	180pF 50V J		C406	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
C203	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C407	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
C204	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C408	QTE0J46-477Z	E CAPACITOR	470uF 6.3V	
C205	NCS31HJ-121X	C CAPACITOR	120pF 50V J		C409	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C207	NCS31HJ-391X	C CAPACITOR	390pF 50V J		C410	QFLC1HJ-122Z	M CAPACITOR	1200pF 50V J	
C208	NCS31HJ-391X	C CAPACITOR	390pF 50V J		C411	QFLC1HJ-122Z	M CAPACITOR	1200pF 50V J	
C211	NCB31HK-223X	C CAPACITOR	0.022uF 50V K		C412	QFLC1HJ-222Z	M CAPACITOR	2200pF 50V J	
C212	NCB31CK-103X	C CAPACITOR	0.01uF 16V K		C413	QFLC1HJ-222Z	M CAPACITOR	2200pF 50V J	
C216	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C414	QTE1E28-476Z	E CAPACITOR	47uF 25V	
C217	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C415	QTE1E28-476Z	E CAPACITOR	47uF 25V	
C218	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C416	QFLC1HJ-102Z	M CAPACITOR	1000pF 50V J	
C251	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C417	QFLC1HJ-102Z	M CAPACITOR	1000pF 50V J	
C253	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C418	QFLC1HJ-102Z	M CAPACITOR	1000pF 50V J	
C255	NCB31CK-153X	C CAPACITOR	0.015uF 16V K		C419	QTE1C46-107Z	E CAPACITOR	100uF 16V	
C256	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C420	QTE1C46-107Z	E CAPACITOR	100uF 16V	
C257	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C421	QTE1C46-107Z	E CAPACITOR	100uF 16V	
C258	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C422	QTE1C46-107Z	E CAPACITOR	100uF 16V	
C259	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C423	QTE1C46-107Z	E CAPACITOR	100uF 16V	
C260	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C424	QTE1C46-107Z	E CAPACITOR	100uF 16V	
C261	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C425	QTE1C46-107Z	E CAPACITOR	100uF 16V	
C262	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C426	QFLC1HJ-123Z	M CAPACITOR	0.012uF 50V J	
C263	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C427	QFLC1HJ-102Z	M CAPACITOR	1000pF 50V J	
C264	NCB31CK-103X	C CAPACITOR	0.01uF 16V K		C428	QFLC1HJ-102Z	M CAPACITOR	1000pF 50V J	
C301	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C429	QFLC1HJ-123Z	M CAPACITOR	0.012uF 50V J	
C302	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C430	QFLC1HJ-121Z	M CAPACITOR	120pF 50V J	
C303	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C431	QFLC1HJ-472Z	M CAPACITOR	4700pF 50V J	
C304	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C432	QFLC1HJ-472Z	M CAPACITOR	4700pF 50V J	
C306	QETN0JM-227Z	E CAPACITOR	220uF 6.3V M		C433	QFLC1HJ-121Z	M CAPACITOR	120pF 50V J	
C308	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M		C434	QFLC1HJ-122Z	M CAPACITOR	1200pF 50V J	
C310	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C435	QFLC1HJ-122Z	M CAPACITOR	1200pF 50V J	
C311	NCS31HJ-561X	C CAPACITOR	560pF 50V J		C436	QTE0J46-477Z	E CAPACITOR	470uF 6.3V	
C312	NCS31HJ-561X	C CAPACITOR	560pF 50V J		C437	QTE0J46-477Z	E CAPACITOR	470uF 6.3V	
C313	NCS31HJ-561X	C CAPACITOR	560pF 50V J		C438	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
C314	NCS31HJ-331X	C CAPACITOR	330pF 50V J		C439	QFN31HJ-103Z	M CAPACITOR	0.01uF 50V J	
C315	NCS31HJ-471X	C CAPACITOR	470pF 50V J		C440	QTE0J46-477Z	E CAPACITOR	470uF 6.3V	
C316	NCS31HJ-271X	C CAPACITOR	270pF 50V J		C441	QFVJ1HJ-224Z	MF CAPACITOR	0.22uF 50V J	
C317	NCS31HJ-121X	C CAPACITOR	120pF 50V J		C443	QTE0J28-477Z	E CAPACITOR	470uF 6.3V	
C318	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C444	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C319	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C445	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C320	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C446	QFLC1HJ-222Z	M CAPACITOR	2200pF 50V J	
C321	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C447	QFLC1HJ-222Z	M CAPACITOR	2200pF 50V J	
C322	NCB31HK-562X	C CAPACITOR	5600pF 50V K		C448	QTE1E28-476Z	E CAPACITOR	47uF 25V	
C323	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C449	QTE1E28-476Z	E CAPACITOR	47uF 25V	
C324	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C450	QFLC1HJ-102Z	M CAPACITOR	1000pF 50V J	
C325	NCS31HJ-470X	C CAPACITOR	47pF 50V J		C451	QFLC1HJ-121Z	M CAPACITOR	120pF 50V J	
C326	NCB31CK-183X	C CAPACITOR	0.018uF 16V K		C452	QFLC1HJ-472Z	M CAPACITOR	4700pF 50V J	
C327	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C453	QFLC1HJ-472Z	M CAPACITOR	4700pF 50V J	
C328	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C454	QFLC1HJ-121Z	M CAPACITOR	120pF 50V J	
C329	NCB31CK-103X	C CAPACITOR	0.01uF 16V K		C455	QFLC1HJ-123Z	M CAPACITOR	0.012uF 50V J	
C330	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C456	QTE1C46-107Z	E CAPACITOR	100uF 16V	
C331	NCB31CK-103X	C CAPACITOR	0.01uF 16V K		C457	QFLC1HJ-102Z	M CAPACITOR	1000pF 50V J	
C332	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C458	QFLC1HJ-123Z	M CAPACITOR	0.012uF 50V J	
C333	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C460	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
C334	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C461	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C335	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C462	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C336	NCB31HK-472X	C CAPACITOR	4700pF 50V K		C463	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C337	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C464	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C338	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C471	QFLC1HJ-102Z	M CAPACITOR	1000pF 50V J	
C339	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C500	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C340	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C501	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C341	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C502	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C342	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C503	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C343	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C504	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C344	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C505	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C345	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C506	NDC31HJ-150X	C CAPACITOR	15pF 50V J	
C346	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C507	NDC31HJ-180X	C CAPACITOR	18pF 50V J	
C347	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C508	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C348	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C509	NCS31HJ-101X	C CAPACITOR	100pF 50V J	

<Local area>

XV-NA70BK C:70 J:70J XV-NA77SL A:77A B:77B C:77C E:77E
EE:77EE EN:77EN EV:77EV J:77J UF:77UF UJ:77UJ US:77US

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△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C510	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C608	QETN1HM-106Z	E CAPACITOR	10uF 50V M	only Europe
C511	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C609	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C512	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C610	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M	only Europe
C513	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C611	QTE0J24-227Z	E CAPACITOR	220uF 6.3V	
C514	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C612	QFN31HJ-103Z	M CAPACITOR	0.01uF 50V J	
C515	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C613	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C516	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C614	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C517	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C615	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C518	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C616	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C519	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C617	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C520	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C618	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C521	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C620	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C522	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C621	QETN1EM-226Z	E CAPACITOR	22uF 25V M	
C523	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C622	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C524	QEZ0653-107Z	E CAPACITOR	100uF		C623	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C525	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C624	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C526	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C628	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C527	QEZ0653-107Z	E CAPACITOR	100uF		C629	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C528	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C630	QFN31HJ-104Z	M CAPACITOR	0.1uF 50V J	
C529	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C631	QTE0J24-227Z	E CAPACITOR	220uF 6.3V	
C530	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C634	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
C531	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C636	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C532	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C637	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C533	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C638	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C534	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C639	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C535	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C640	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C536	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C641	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C537	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C642	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C539	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C643	QEZ0653-107Z	E CAPACITOR	100uF	
C540	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C645	NCB31HK-221X	C CAPACITOR	220pF 50V K	
C541	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C651	QTE1A46-477Z	E CAPACITOR	470uF 10V	
C542	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C653	QTE1A46-477Z	E CAPACITOR	470uF 10V	
C543	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C655	QTE1A46-477Z	E CAPACITOR	470uF 10V	
C544	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C657	QTE1A46-477Z	E CAPACITOR	470uF 10V	
C545	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C659	QTE1A46-477Z	E CAPACITOR	470uF 10V	
C547	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C661	NCB31HK-221X	C CAPACITOR	220pF 50V K	
C548	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C662	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C550	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C663	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C552	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C664	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C553	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C665	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C554	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C666	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C555	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C667	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C556	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C668	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C557	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C700	QTE0J28-477Z	E CAPACITOR	470uF 6.3V	
C558	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C701	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C559	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C702	QFLC1HJ-182Z	M CAPACITOR	1800pF 50V J	
C560	NCS31HJ-101X	C CAPACITOR	100pF 50V J		C703	QTE1E28-476Z	E CAPACITOR	47uF 25V	
C562	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C704	QTE1C46-227Z	E CAPACITOR	220uF 16V	
C563	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C705	QTE1C46-227Z	E CAPACITOR	220uF 16V	
C565	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C706	QTE1C46-227Z	E CAPACITOR	220uF 16V	
C567	QFN31HJ-103Z	M CAPACITOR	0.01uF 50V J		C707	QFLC1HJ-103Z	M CAPACITOR	0.01uF 50V J	
C568	QTE0J24-227Z	E CAPACITOR	220uF 6.3V		C708	QFLC1HJ-272Z	M CAPACITOR	2700pF 50V J	
C569	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C709	QFLC1HJ-561Z	M CAPACITOR	560pF 50V J	
C570	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C710	QTE1C46-227Z	E CAPACITOR	220uF 16V	
C571	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C711	QFLC1HJ-182Z	M CAPACITOR	1800pF 50V J	
C572	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C712	QFLC1HJ-121Z	M CAPACITOR	120pF 50V J	
C573	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C713	QFLC1HJ-561Z	M CAPACITOR	560pF 50V J	
C575	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C714	QTE0J46-108Z	E CAPACITOR	1000uF 6.3V	
C576	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C715	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C577	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C716	QTE0J46-108Z	E CAPACITOR	1000uF 6.3V	
C580	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C717	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
C581	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C718	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C582	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C719	NCS31HJ-151X	C CAPACITOR	150pF 50V J	
C586	QTE0J28-107Z	E CAPACITOR	100uF 6.3V		C720	QETN1EM-475Z	E CAPACITOR	4.7uF 25V M	
C588	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C721	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C589	NCF31AZ-105X	C CAPACITOR	1uF 10V Z		C722	QEZ0653-107Z	E CAPACITOR	100uF	
C590	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C723	QEZ0653-107Z	E CAPACITOR	100uF	
C591	NCB31AK-334X	C CAPACITOR	0.33uF 10V K		C724	NCS31HJ-331X	C CAPACITOR	330pF 50V J	
C592	NCB31AK-334X	C CAPACITOR	0.33uF 10V K		C725	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
C593	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C726	QFLC1HJ-561Z	M CAPACITOR	560pF 50V J	
C594	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C727	QFLC1HJ-121Z	M CAPACITOR	120pF 50V J	
C595	QETN1EM-476Z	E CAPACITOR	47uF 25V M		C728	QFLC1HJ-182Z	M CAPACITOR	1800pF 50V J	
C598	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C729	QFLC1HJ-272Z	M CAPACITOR	2700pF 50V J	
C599	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		C730	QFVJ1HJ-224Z	MF CAPACITOR	0.22uF 50V J	
C600	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	only Europe	C731	QFN31HJ-103Z	M CAPACITOR	0.01uF 50V J	
C601	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C732	QFLC1HJ-561Z	M CAPACITOR	560pF 50V J	
C604	NCF31AZ-105X	C CAPACITOR	1uF 10V Z		C733	QFLC1HJ-103Z	M CAPACITOR	0.01uF 50V J	
C606	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C734	QFLC1HJ-561Z	M CAPACITOR	560pF 50V J	

<Local area>

XV-NA70BK C:70 J:70J XV-NA77SL A:77A B:77B C:77C E:77E
EE:77EE EN:77EN EV:77EV J:77J UF:77UF UJ:77UJ US:77US

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C735	QFLC1HJ-182Z	M CAPACITOR	1800pF 50V J		R219	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
C736	QFLC1HJ-561Z	M CAPACITOR	560pF 50V J		R220	NRSA63J-243X	MG RESISTOR	24kΩ 1/16W J	
C737	NCB31CK-103X	C CAPACITOR	0.01uF 16V K		R221	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
C739	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		R222	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C740	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z		R223	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J	
C741	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z		R230	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C746	QTE1E28-476Z	E CAPACITOR	47uF 25V		R251	NRS125J-R47X	MG RESISTOR	0.47Ω 1/2W J	
C803	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		R252	NRSA63J-2R2X	MG RESISTOR	2.2Ω 1/16W J	
C804	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		R254	NRSA63J-203X	MG RESISTOR	20kΩ 1/16W J	
C5001	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		R255	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C5004	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z		R256	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
C5005	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R259	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C5006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R280	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C5007	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R301	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C5008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R302	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
					R303	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R101	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R304	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R102	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R305	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R103	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R306	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R104	NRS125J-270X	MG RESISTOR	27Ω 1/2W J		R307	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R105	NRS125J-270X	MG RESISTOR	27Ω 1/2W J		R308	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R106	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R309	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R107	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R313	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R108	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R317	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R109	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J		R320	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R110	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R321	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R111	NRVA63D-243X	CMF RESISTOR	24kΩ 1/16W D		R323	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R112	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R324	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R113	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R325	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R115	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R326	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R119	NRSA63J-2R2X	MG RESISTOR	2.2Ω 1/16W J		R327	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R120	NRSA63J-2R2X	MG RESISTOR	2.2Ω 1/16W J		R328	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R121	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R329	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R125	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J		R330	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R126	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J		R331	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R127	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R332	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R128	NRS125J-1R0X	MG RESISTOR	1Ω 1/2W J		R333	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R129	NRS125J-1R0X	MG RESISTOR	1Ω 1/2W J		R334	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R130	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J		R336	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R131	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R337	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R132	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R338	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R133	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R339	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R134	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J		R340	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R135	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J		R341	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R136	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R342	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R140	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R344	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R141	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R345	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R142	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J		R347	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R143	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R348	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R144	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R401	NRVA63D-101X	CMF RESISTOR	100Ω 1/16W D	
R145	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R402	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R146	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R403	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R147	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R404	NRVA63D-101X	CMF RESISTOR	100Ω 1/16W D	
R148	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J		R405	NRVA63D-561X	CMF RESISTOR	560Ω 1/16W D	
R149	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R406	NRVA63D-561X	CMF RESISTOR	560Ω 1/16W D	
R150	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R407	NRVA63D-273X	CMF RESISTOR	27kΩ 1/16W D	
R151	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R408	NRVA63D-273X	CMF RESISTOR	27kΩ 1/16W D	
R152	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R409	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D	
R153	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R410	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D	
R154	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		R411	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R155	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R412	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R156	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R413	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R157	NRSA63J-242X	MG RESISTOR	2.4kΩ 1/16W J		R414	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R201	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R415	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R202	NRS125J-1R0X	MG RESISTOR	1Ω 1/2W J		R416	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R204	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R417	NRVA63D-751X	CMF RESISTOR	750Ω 1/16W D	
R205	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R418	NRVA63D-751X	CMF RESISTOR	750Ω 1/16W D	
R206	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J		R419	NRVA63D-751X	CMF RESISTOR	750Ω 1/16W D	
R207	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R420	NRVA63D-751X	CMF RESISTOR	750Ω 1/16W D	
R208	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R421	NRVA63D-363X	CMF RESISTOR	36kΩ 1/16W D	
R209	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R422	NRVA63D-162X	CMF RESISTOR	1.6kΩ 1/16W D	
R210	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J		R423	NRVA63D-362X	CMF RESISTOR	3.6kΩ 1/16W D	
R211	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J		R424	NRVA63D-272X	CMF RESISTOR	2.7kΩ 1/16W D	
R212	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R425	NRVA63D-362X	CMF RESISTOR	3.6kΩ 1/16W D	
R213	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R426	NRVA63D-272X	CMF RESISTOR	2.7kΩ 1/16W D	
R214	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R427	NRVA63D-162X	CMF RESISTOR	1.6kΩ 1/16W D	
R215	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R428	NRVA63D-363X	CMF RESISTOR	36kΩ 1/16W D	
R216	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J		R429	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D	

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XV-NA70BK C:70 J:70J XV-NA77SL A:77A B:77B C:77C E:77E
EE:77EE EN:77EN EV:77EV J:77J UF:77UF UJ:77UJ US:77US

(No.XA011)3-11

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R430	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		R527	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R431	NRVA63D-303X	CMF RESISTOR	30kΩ 1/16W D		R529	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R432	NRVA63D-303X	CMF RESISTOR	30kΩ 1/16W D		R533	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R433	NRVA63D-272X	CMF RESISTOR	2.7kΩ 1/16W D		R563	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R434	NRVA63D-272X	CMF RESISTOR	2.7kΩ 1/16W D		R564	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R435	NRVA63D-303X	CMF RESISTOR	30kΩ 1/16W D		R565	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R436	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		R566	NRVA63D-122X	CMF RESISTOR	1.2kΩ 1/16W D	
R437	NRVA63D-303X	CMF RESISTOR	30kΩ 1/16W D		R567	NRSA63F-820X	MG RESISTOR	82Ω 1/16W F	
R438	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		R568	NRSA63F-750X	MG RESISTOR	75Ω 1/16W F	
R439	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R570	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R440	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R573	NRSA63J-162X	MG RESISTOR	1.6kΩ 1/16W J	
R441	NRVA63D-332X	CMF RESISTOR	3.3kΩ 1/16W D		R574	NRSA63J-162X	MG RESISTOR	1.6kΩ 1/16W J	
R442	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J		R575	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R443	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R576	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R444	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R578	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R445	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		R583	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R448	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R589	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R449	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R600	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R450	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R603	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R451	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R604	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R452	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		R605	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R453	NRVA63D-101X	CMF RESISTOR	100Ω 1/16W D		R607	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R454	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R608	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R455	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R609	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R456	NRVA63D-101X	CMF RESISTOR	100Ω 1/16W D		R610	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R457	NRVA63D-561X	CMF RESISTOR	560Ω 1/16W D		R611	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R458	NRVA63D-273X	CMF RESISTOR	27kΩ 1/16W D		R612	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R459	NRVA63D-273X	CMF RESISTOR	27kΩ 1/16W D		R613	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R460	NRVA63D-561X	CMF RESISTOR	560Ω 1/16W D		R614	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R461	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		R618	NRSA63F-750X	MG RESISTOR	75Ω 1/16W F	
R462	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R622	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R463	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		R624	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	only Europe
R464	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R625	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	only Europe
R465	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R626	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	only Europe
R466	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R628	NRSA63F-101X	MG RESISTOR	100Ω 1/16W F	
R467	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R629	NRSA63F-101X	MG RESISTOR	100Ω 1/16W F	
R468	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R630	NRSA63F-750X	MG RESISTOR	75Ω 1/16W F	
R469	NRVA63D-751X	CMF RESISTOR	750Ω 1/16W D		R631	NRVA63D-272X	CMF RESISTOR	2.7kΩ 1/16W D	
R471	NRVA63D-751X	CMF RESISTOR	750Ω 1/16W D		R632	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	only Europe
R472	NRVA63D-751X	CMF RESISTOR	750Ω 1/16W D		R637	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	only Europe
R473	NRVA63D-751X	CMF RESISTOR	750Ω 1/16W D		R639	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R474	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		R643	NRSA63F-820X	MG RESISTOR	82Ω 1/16W F	
R475	NRVA63D-162X	CMF RESISTOR	1.6kΩ 1/16W D		R644	NRSA63F-620X	MG RESISTOR	62Ω 1/16W F	only Europe
R476	NRVA63D-363X	CMF RESISTOR	36kΩ 1/16W D		R644	NRSA63F-680X	MG RESISTOR	68Ω 1/16W F	except Europe
R477	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		R645	NRSA63F-620X	MG RESISTOR	62Ω 1/16W F	only Europe
R478	NRVA63D-362X	CMF RESISTOR	3.6kΩ 1/16W D		R645	NRSA63F-680X	MG RESISTOR	68Ω 1/16W F	except Europe
R479	NRVA63D-272X	CMF RESISTOR	2.7kΩ 1/16W D		R646	NRSA63F-750X	MG RESISTOR	75Ω 1/16W F	
R480	NRVA63D-272X	CMF RESISTOR	2.7kΩ 1/16W D		R649	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R481	NRVA63D-303X	CMF RESISTOR	30kΩ 1/16W D		R654	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	except Europe
R482	NRVA63D-303X	CMF RESISTOR	30kΩ 1/16W D		R700	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R483	NRVA63D-362X	CMF RESISTOR	3.6kΩ 1/16W D		R701	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R484	NRVA63D-272X	CMF RESISTOR	2.7kΩ 1/16W D		R702	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R485	NRVA63D-272X	CMF RESISTOR	2.7kΩ 1/16W D		R703	NRVA63D-101X	CMF RESISTOR	100Ω 1/16W D	
R486	NRVA63D-363X	CMF RESISTOR	36kΩ 1/16W D		R704	NRVA63D-561X	CMF RESISTOR	560Ω 1/16W D	
R487	NRVA63D-162X	CMF RESISTOR	1.6kΩ 1/16W D		R705	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R488	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		R706	NRVA63D-273X	CMF RESISTOR	27kΩ 1/16W D	
R489	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		R709	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R490	NRVA63D-303X	CMF RESISTOR	30kΩ 1/16W D		R710	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R491	NRVA63D-303X	CMF RESISTOR	30kΩ 1/16W D		R711	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R492	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R712	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R493	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R713	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R494	NRVA63D-332X	CMF RESISTOR	3.3kΩ 1/16W D		R714	QRE141J-821Y	C RESISTOR	820Ω 1/4W J	
R495	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J		R715	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D	
R496	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R716	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R497	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R717	NRVA63D-621X	CMF RESISTOR	620Ω 1/16W D	
R498	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		R718	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D	
R499	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		R719	QRE141J-821Y	C RESISTOR	820Ω 1/4W J	
R501	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R720	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R502	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		R721	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R504	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		R722	NRVA63D-621X	CMF RESISTOR	620Ω 1/16W D	
R510	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R723	NRVA63D-681X	CMF RESISTOR	680Ω 1/16W D	
R511	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R724	NRVA63D-362X	CMF RESISTOR	3.6kΩ 1/16W D	
R512	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R725	NRVA63D-362X	CMF RESISTOR	3.6kΩ 1/16W D	
R513	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R726	NRVA63D-273X	CMF RESISTOR	27kΩ 1/16W D	
R515	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R727	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R516	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R728	NRVA63D-362X	CMF RESISTOR	3.6kΩ 1/16W D	
R517	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R729	NRVA63D-332X	CMF RESISTOR	3.3kΩ 1/16W D	
R519	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R730	NRVA63D-362X	CMF RESISTOR	3.6kΩ 1/16W D	

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XV-NA70BK C:70 J:70J XV-NA77SL A:77A B:77B C:77C E:77E
EE:77EE EN:77EN EV:77EV J:77J UF:77UF UJ:77UJ US:77US

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R731	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		J401	QNN0583-001	PIN JACK		
R732	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		J602	QNN0582-001	PIN JACK		
R733	NRVA63D-273X	CMF RESISTOR	27kΩ 1/16W D		J604	QND0114-001	PIN JACK		
R734	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		J700	QNN0581-001	PIN JACK		
R735	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		J701	QNZ0656-001	PIN+OPT JACK		
R736	NRVA63D-273X	CMF RESISTOR	27kΩ 1/16W D		K101	NQR0007-002X	FERRITE BEADS		
R737	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		K404	NQR0007-002X	FERRITE BEADS		
R739	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		K406	NQR0007-002X	FERRITE BEADS		
R740	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		K407	NQR0007-002X	FERRITE BEADS		
R742	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		K409	NQR0007-002X	FERRITE BEADS		
R743	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		K410	NQR0007-002X	FERRITE BEADS		
R744	NRVA63D-362X	CMF RESISTOR	3.6kΩ 1/16W D		K412	NQR0007-002X	FERRITE BEADS		
R745	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		K508	NQR0007-002X	FERRITE BEADS		
R746	NRVA63D-332X	CMF RESISTOR	3.3kΩ 1/16W D		K509	NQR0007-002X	FERRITE BEADS		
R747	NRVA63D-362X	CMF RESISTOR	3.6kΩ 1/16W D		K514	NQR0129-002X	FERRITE BEADS		
R748	NRVA63D-681X	CMF RESISTOR	680Ω 1/16W D		K515	NQR0129-002X	FERRITE BEADS		
R749	NRVA63D-273X	CMF RESISTOR	27kΩ 1/16W D		K516	NQR0129-002X	FERRITE BEADS		
R750	NRVA63D-101X	CMF RESISTOR	100Ω 1/16W D		K517	NQR0129-002X	FERRITE BEADS		
R751	NRVA63D-561X	CMF RESISTOR	560Ω 1/16W D		K518	NQR0129-002X	FERRITE BEADS		
R752	NRVA63D-273X	CMF RESISTOR	27kΩ 1/16W D		K601	NQR0007-002X	FERRITE BEADS		
R753	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J		K603	NQR0007-002X	FERRITE BEADS		
R754	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		K604	NQR0007-002X	FERRITE BEADS		only Europe
R755	NRVA63D-183X	CMF RESISTOR	18kΩ 1/16W D		K701	NQR0007-002X	FERRITE BEADS		
R756	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J		K702	NQR0227-004X	FERRITE BEADS		
R757	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		K703	NQR0007-002X	FERRITE BEADS		
R758	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		K704	NQR0007-002X	FERRITE BEADS		
R759	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		K705	NQR0227-004X	FERRITE BEADS		
R760	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		K706	NQR0227-004X	FERRITE BEADS		
R761	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		S801	QSW0651-001Z	TACT SWITCH		
R762	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		X301	NAX0566-001X	C RESONATOR	16.934MHz	
R763	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J		X571	NAX0550-001X	CRYSTAL	27.000MHz	
R764	NRSA63J-621X	MG RESISTOR	620Ω 1/16W J		OT1	VPZ4011-003	SERIAL LABEL		77US
R765	NRSA63J-621X	MG RESISTOR	620Ω 1/16W J		OT2	GN30006-020A	SPACER		77US
R766	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		OT3	GN30006-021A	SPACER		77US
R767	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		OT4	VPZ4011-003	SERIAL LABEL		
R768	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	only ver.UF,US,UJ	OT5	VPZ4011-003	SERIAL LABEL		except ver.US
R769	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	77US	OT6	GN30006-020A	SPACER		except ver.US
R769	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	77A,77UF, 77UJ,77UW	OT7	GN30006-021A	SPACER		except ver.US
R771	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J						
R772	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J						
R773	NRVA63D-332X	CMF RESISTOR	3.3kΩ 1/16W D						
R774	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J						
R775	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	only Europe					
R776	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	only Europe					
R821	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J						
R822	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J						
R953	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	except Europe					
R1001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
R2001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
R2002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
R4001	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J						
R4002	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J						
R4003	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J						
R4004	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J						
R7001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
L501	NQL77GM-100X	COIL	10uH M						
L505	QQL244K-100Z	COIL	10uH K						
L506	QQL244K-100Z	COIL	10uH K						
L507	QQL244K-100Z	COIL	10uH K						
L508	QQL244K-100Z	COIL	10uH K						
L601	NQL77GM-100X	COIL	10uH M						
L603	NQL77GM-100X	COIL	10uH M						
L604	NQR0430-001X	COIL							
L605	NQR0429-001X	LPF							
L606	NQR0429-001X	LPF							
L701	QQL232K-1R0Z	COIL	1uH K						
CN101	QGF0529C1-50W	CONNECTOR	FFC/FPC (1-50)						
CN501	QGF1201C3-17	CONNECTOR	FFC/FPC (1-17)						
CN601	QGF1201C3-15	CONNECTOR	FFC/FPC (1-15)	only Europe					
CN801	QGF1016F2-23W	CONNECTOR	FFC/FPC (1-23)						
CN802	QGF1016F3-09	CONNECTOR	FFC/FPC (1-9)						
CN803	QGF1016F2-21W	CONNECTOR	FFC/FPC (1-21)						
DI801	QLF0130-001	FL TUBE							
FW501	QUM106-24DGZ4	PARA RIBON WIRE							
FW502	QUM103-30DGZ4	PARA RIBON WIRE							

<Local area>

XV-NA70BK C:70 J:70J XV-NA77SL A:77A B:77B C:77C E:77E
EE:77EE EN:77EN EV:77EV J:77J UF:77UF UJ:77UJ US:77US

(No.XA011)3-13

Power supply and system control board

Block No. [0][3]

△ Symbol No.	Part No.	Part Name	Description	Local
IC851	IC-PST3527N-X	IC		
△ IC901	MIP2C50MPSCF	IC		
IC902	MN101C35DLT	IC(1-TIME)		
IC904	TL431/A-T	IC		
Q611	2SC3576-JVC-T	TRANSISTOR		only Europe
Q612	2SC3576-JVC-T	TRANSISTOR		only Europe
Q613	KRC102S-X	DIGI TRANSISTOR		only Europe
Q614	KRA102S-X	DIGI TRANSISTOR		only Europe
Q827	KRC107S-X	DIGI TRANSISTOR		
Q851	KRC107S-X	DIGI TRANSISTOR		
Q852	2SC1740S/RS-T	TRANSISTOR		
Q951	2SC3576-JVC-T	TRANSISTOR		
Q952	KRA104S-X	DIGI TRANSISTOR		
D822	SLR343BBT3F	LED		
D823	SPR-325MVWL-T	LED	GREEN-RED	
D826	204-10SUBC/A4VW	LED		
D851	1SS133-T2	DIODE		
D852	1SS133-T2	DIODE		
△ D901	DI106	BRIDGE DIODE		
△ D903	SARS01-T2	SI DIODE		
△ D904	1SS244-T2	SI DIODE		
D905	RB441Q-40-T2	SI DIODE IM		
△ D951	1F4-T2	FR DIODE		
△ D952	1F4-T2	FR DIODE		
△ D953	SB360-F82	SB DIODE		
△ D954	1F4-T2	FR DIODE		
△ D955	ER204-F33	FR DIODE		
D956	1F4-T2	FR DIODE		
D957	1F4-T2	FR DIODE		
D960	MTZJ3.6B-T2	Z DIODE		
PC901	PC123Y22FZ	PHOTO COUPLER	Photo coupler	
C669	NCS31HJ-101X	C CAPACITOR	100pF 50V J	only Europe
C670	QFN31HJ-471Z	M CAPACITOR	470pF 50V J	only Europe
C678	QTE1A46-477Z	E CAPACITOR	470uF 10V	only Europe
C680	QTE1A46-477Z	E CAPACITOR	470uF 10V	only Europe
C681	QFN31HJ-471Z	M CAPACITOR	470pF 50V J	only Europe
C683	QTE1E28-476Z	E CAPACITOR	47uF 25V	only Europe
C684	QTE1E28-476Z	E CAPACITOR	47uF 25V	only Europe
C685	NCB31HK-152X	C CAPACITOR	1500pF 50V K	only Europe
C686	NCS31HJ-121X	C CAPACITOR	120pF 50V J	only Europe
C687	NCS31HJ-121X	C CAPACITOR	120pF 50V J	only Europe
C688	NCS31HJ-121X	C CAPACITOR	120pF 50V J	only Europe
C689	NCS31HJ-121X	C CAPACITOR	120pF 50V J	only Europe
C691	QTE1A46-477Z	E CAPACITOR	470uF 10V	only Europe
C693	QTE1A46-477Z	E CAPACITOR	470uF 10V	only Europe
C695	QTE1A46-477Z	E CAPACITOR	470uF 10V	only Europe
C851	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C852	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C853	QETN0JM-227Z	E CAPACITOR	220uF 6.3V M	
C854	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C855	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C856	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C857	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C858	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C861	QETN1EM-106Z	E CAPACITOR	10uF 25V M	
C862	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
△ C902	QFZ9073-683	MM CAPACITOR	0.068uF AC250V M	
△ C904	QCZ9079-471	C CAPACITOR	470pF AC250V K	
△ C905	QCZ9079-471	C CAPACITOR	470pF AC250V K	
C906	QCZ9079-102	C CAPACITOR	1000pF AC250V M	
C907	QETM2DM-107	E CAPACITOR	100uF 200V M	only ver.J,C
C907	QEZ0590-686	E CAPACITOR	68uF 400V M	77U,77B,77E,77F,77U,77V,77W
C907	QEZ0590-686	E CAPACITOR	68uF 400V M	
△ C908	QCZ0136-332Z	C CAPACITOR	3300pF 1kV K	
C913	QCZ0302-470Z	C CAPACITOR	47pF 1kV J	
C914	QEZ0657-226Z	E CAPACITOR	22uF	
C915	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
△ C918	QFZ9073-683	MM CAPACITOR	0.068uF AC250V M	

△ Symbol No.	Part No.	Part Name	Description	Local
C950	QEZ0653-107Z	E CAPACITOR	100uF	
C951	QETN1EM-226Z	E CAPACITOR	22uF 25V M	
C952	QEZ0592-108Z	E CAPACITOR	1000uF	
C953	QEZ0657-226Z	E CAPACITOR	22uF	
C954	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C955	QTE1A46-477Z	E CAPACITOR	470uF 10V	
C956	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C957	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C958	QEZ0654-477Z	E CAPACITOR	470uF	
C959	QTE1A46-477Z	E CAPACITOR	470uF 10V	
C960	NCS31HJ-331X	C CAPACITOR	330pF 50V J	
C963	QEZ0655-187Z	E CAPACITOR	180uF	
C964	QEZ0655-187Z	E CAPACITOR	180uF	
C965	QTE1C28-227Z	E CAPACITOR	220uF 16V	only Europe
C965	QTE1C28-107Z	E CAPACITOR	100uF 16V	except Europe
C966	QTE1C28-227Z	E CAPACITOR	220uF 16V	only Europe
C966	QTE1C28-107Z	E CAPACITOR	100uF 16V	except Europe
C967	QEZ0655-337Z	E CAPACITOR	330uF	
C969	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C980	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C981	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C982	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z	
C988	QETN1CM-227Z	E CAPACITOR	220uF 16V M	
R658	QRE141J-750Y	C RESISTOR	75Ω 1/4W J	only Europe
R659	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	only Europe
R660	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	only Europe
R661	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	only Europe
R662	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J	only Europe
R663	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J	only Europe
R664	QRE141J-561Y	C RESISTOR	560Ω 1/4W J	only Europe
R665	QRE141J-561Y	C RESISTOR	560Ω 1/4W J	only Europe
R670	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	only Europe
R678	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	only Europe
R681	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R691	QRE141J-151Y	C RESISTOR	150Ω 1/4W J	only Europe
R692	QRE141J-750Y	C RESISTOR	75Ω 1/4W J	only Europe
R693	QRE141J-151Y	C RESISTOR	150Ω 1/4W J	only Europe
R694	QRE141J-750Y	C RESISTOR	75Ω 1/4W J	only Europe
R814	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R817	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R818	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R819	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R820	NRSA63J-431X	MG RESISTOR	430Ω 1/16W J	
R851	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R853	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R854	QRE141J-270Y	C RESISTOR	27Ω 1/4W J	
R856	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R858	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R862	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R879	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R880	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R881	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R882	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R883	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R884	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R885	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	except Europe
R887	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	only Europe
R889	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R891	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	only Europe
R893	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R894	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R895	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
△ R901	QRL01DJ-683X	OMF RESISTOR	68kΩ 1W J	
△ R902	QRL01DJ-470X	OMF RESISTOR	47Ω 1W J	except ver.J,C of XV-NA77SL
△ R903	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R904	QRL127J-470	OMF RESISTOR	47Ω 1/2W J	only ver.J,C
R906	QRE141J-274Y	C RESISTOR	270kΩ 1/4W J	
△ R910	QRZ9037-335	COMP RESISTOR	3.3kΩ 1/2W K	
R912	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R913	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R915	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R950	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R952	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
△ R954	QRZ9005-100X	FUSI RESISTOR	10Ω	
R955	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R956	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

<Local area>

XV-NA70BK C:70 J:70J XV-NA77SL A:77A B:77B C:77C E:77E
EE:77EE EN:77EN EV:77EV J:77J UF:77UF UJ:77UJ US:77US

△ Symbol No.	Part No.	Part Name	Description	Local
R960	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R961	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R962	NRSA63F-512X	MG RESISTOR	5.1kΩ 1/16W F	
R964	NRSA63F-103X	MG RESISTOR	10kΩ 1/16W F	
R968	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
RA1	QRB149J-104	NET RESISTOR	100kΩ J	
RA2	QRB149J-104	NET RESISTOR	100kΩ J	
L851	QQL231K-2R2Y	COIL	2.2uH K	
△ L901	QQR0816-001	LINE FILTER		
L951	QQR1291-001Z	CHOKE COIL		
L952	QQR1291-001Z	CHOKE COIL		
L953	QQL244K-220Z	COIL	22uH K	
L954	QQL244K-220Z	COIL	22uH K	
L955	QQR1291-001Z	CHOKE COIL		
△ T901	QQS0220-001	SW TRANSF		
CN651	QGF1201C3-15	CONNECTOR	FFC/FPC (1-15)	only Europe
CN852	QGF1016F3-09	CONNECTOR	FFC/FPC (1-9)	
CN861	QGF1016C1-23	CONNECTOR	FFC/FPC (1-23)	
CN862	QGF1016C1-21	CONNECTOR	FFC/FPC (1-21)	
CN901	QGD2504C1-03Z	CONNECTOR	(1-3)	
CN902	QGD2504C1-03Z	CONNECTOR	(1-3)	
CN903	QGD2504C1-03Z	CONNECTOR	(1-3)	
CN904	QGF1201C3-17	CONNECTOR	FFC/FPC (1-17)	
△ CP951	ICP-N10-T	IC PROTECTOR	400mA	
EP951	QNZ0136-001Z	EARTH PLATE		
EP952	E409182-001SM	GRAND TERMINAL		
EP953	QNZ0136-001Z	EARTH PLATE		
EP954	QNZ0136-001Z	EARTH PLATE		
FC901	QNG0003-001Z	FUSE CLIP		
FC902	QNG0003-001Z	FUSE CLIP		
J603	QNZ0610-001	RGB CONNECTOR		only Europe
J851	QNS0221-001	3.5 JACK		
K981	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K982	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K983	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K984	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
K985	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
P901	QGA7901C1-02	CONNECTOR	W-B (1-2)	
S601	QSW0986-001	SLIDE SWITCH		
S802	QSW0651-001Z	TACT SWITCH		
S803	QSW0651-001Z	TACT SWITCH		
S804	QSW0651-001Z	TACT SWITCH		
S805	QSW0651-001Z	TACT SWITCH		
S806	QSW0651-001Z	TACT SWITCH		
S807	QSW0651-001Z	TACT SWITCH		
S901	QSW0454-001	SW		77US 77A,77B,77E,77 EE,77EN,77EV, 77UF,77UJ,77UW
S901	QSW0454-001	SW		
X851	QAX0667-001Z	C RESONATOR	8.000MHz	
OT1	LE40845-001A	FUSE LABEL		77US 77A,77B,77E,77E E,77EN,77EV, 77UF,77UJ,77UW
OT2	LE40845-001A	FUSE LABEL		

Switch board

Block No. [0][4]

△ Symbol No.	Part No.	Part Name	Description	Local
CN1	QGF1016F3-05	CONNECTOR	FFC/FPC (1-5)	
S1	QSW1007-001	DETECT SWITCH		

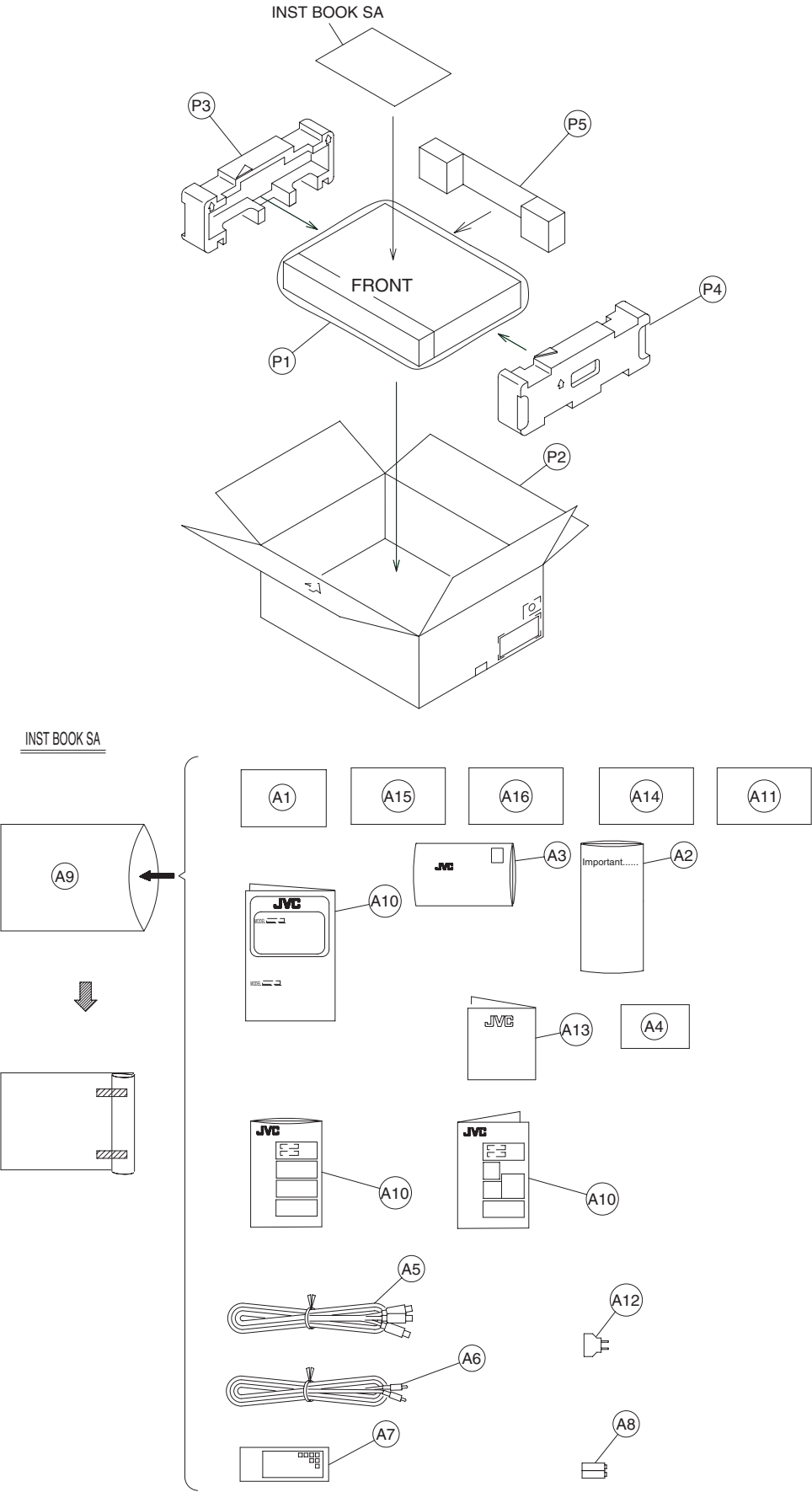
<Local area>

XV-NA70BK C:70 J:70J XV-NA77SL A:77A B:77B C:77C E:77E
EE:77EE EN:77EN EV:77EV J:77J UF:77UF UJ:77UJ US:77US

(No.XA011)3-15

Packing materials and accessories parts list

Block No.M4MM



Packing and accessories

Block No. [M][4][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
A 1	GNT0036-022B	INST BOOK	English French	70C
A 1	GNT0036-001B	INST BOOK	English	70J
A 1	GNT0036-002B	INST BOOK	English	77B
A 1	GNT0036-022B	INST BOOK	English French	77C
A 1	GNT0036-005B	INST BOOK	Dutch	77E
A 1	GNT0036-014A	INST BOOK	Russian	77EE
A 1	GNT0036-003B	INST BOOK	German	77E,77EN
A 1	GNT0036-004B	INST BOOK	French	77E,77EN
A 1	GNT0036-006B	INST BOOK	Spanish	77EN
A 1	GNT0036-007B	INST BOOK	Italian	77EN
A 1	GNT0036-008B	INST BOOK	Swedish	77EN
A 1	GNT0036-009B	INST BOOK	Finnish	77EN
A 1	GNT0036-010B	INST BOOK	Danish	77EN
A 1	GNT0036-011A	INST BOOK	Polish	77EV
A 1	GNT0036-012A	INST BOOK	Hungarian	77EV
A 1	GNT0036-013A	INST BOOK	Czech	77EV
A 1	GNT0036-019A	INST BOOK	Simplified Chinese	77UF
A 1	GNT0036-001B	INST BOOK	English	77J,77UJ
A 1	GNT0036-018B	INST BOOK	Simplified Chinese	77US
A 1	GNT0036-015B	INST BOOK	English	77A,77US,77UW
A 1	GNT0036-016B	INST BOOK	Spanish	77UW
A 1	GNT0036-017B	INST BOOK	Portuguese	77UW
A 2	YU20333	SAFETY INST.		only ver.J,C,UJ
A 3	BT-51028-2	J=REGIST CARD		70J,77J,77UJ
A 3	BT-51034-1	J=REGIST CARD		70J,77J,77UJ
A 4	LE30964-001A	NETFLIX COUPO		70J,77J
A 5	QAM0328-001	AV CORD 3P		
A 6	EWP302-011W	SIGNAL CORD	(x2)	
A 7	RM-SXV045J	REMOCON UNIT		70C,70J
A 7	RM-SXV047E	REMOCON UNIT		only Europe
A 7	RM-SXV046J	REMOCON UNIT		77C,77J
A 7	RM-SXV048U	REMOCON UNIT		77A,77UF,77UJ,77US,77UW
A 8	-----	BATTERY	FOR EXP.(x2)	
A 9	QPC02504015P	POLY BAG	FOR ACC INST	
A10	BT-56012-1	WARRANTY CARD		77A
A10	BT-52006-2	WARRANTY CARD		70C,77C
A10	BT-54008-5	WARRANTY CARD		77B,77E
A10	BT-59019-1	WARRANTY CARD		77UF
A11	LE40932-005A	INSERT SHEET		77UF
△ A12	QAM0112-002	PLUG ADAPTOR		77UJ,77US,77UW
A13	VNA3000-204	REGISTER CARD		77B
A14	BT-56002-2	SVC CENTER LIST		77A
A14	BT-59021-1	S.CENTER LIST		77UF
A15	LE40975-002A	CAUTION SHEET		77EE,77EV
A16	GN30076-001A	SURVEY CARD		77UF
P 1	QPC06005515P	POLY BAG	FOR SET	
P 2	GN10046-013A	PACKING CASE		70C,70J
P 2	GN10046-021A	PACKING CASE		77A
P 2	GN10046-015A	PACKING CASE		77B
P 2	GN10046-017A	PACKING CASE		77EE
P 2	GN10046-016A	PACKING CASE		77E,77EN,77EV
P 2	GN10046-024A	PACKING CASE		77UF
P 2	GN10046-026A	PACKING CASE		77C,77J,77UJ
P 2	GN10046-019A	PACKING CASE		77US
P 2	GN10046-018A	PACKING CASE		77UW
P 3	GN20069-001A	PACKING PAD(L)	LEFT	77UF
P 3	GN20065-001A	PACKING PAD(L)	LEFT	only ver.J,C,UJ
P 3	GN20067-001A	PACKING PAD(L)	LEFT	77A,77B,77E,77EE,77EN,77EV,77US,77UW
P 4	GN20070-001A	PACKING PAD(R)	RIGHT	77UF
P 4	GN20066-001A	PACKING PAD(R)	RIGHT	only ver.J,C,UJ
P 4	GN20068-001A	PACKING PAD(R)	RIGHT	77A,77B,77E,77EE,77EN,77EV,77US,77UW
P 5	GN30068-001A	SHEET ASSY		77A,77B

<Local area>

XV-NA70BK C:70 J:70J XV-NA77SL A:77A B:77B C:77C E:77E
EE:77EE EN:77EN EV:77EV J:77J UF:77UF UJ:77UJ US:77US