JVC

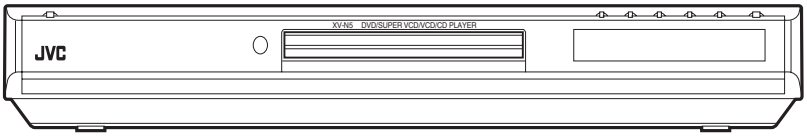
SERVICE MANUAL

DVD VIDEO PLAYER

XV-N5SL

Area Suffix

A ---------- Australia
B ---------- U.K.
E --- Continental Europe
EN ---- Northern Europe
EV ------ Eastern Europe
EE -- Russian Federation
UG --------- Turkey,Egypt, South Africa
US ---------- Singapore
UW --- Brazil,Mexico,Peru
UB ---------- Hong Kong



AV COMPU LINK For only ver.UG,US,UW,UB

No.A0033
Jul. 2002

TABLE OF CONTENTS

SECTION 1
Important Safety Precautions

1.1 Safety Precautions

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

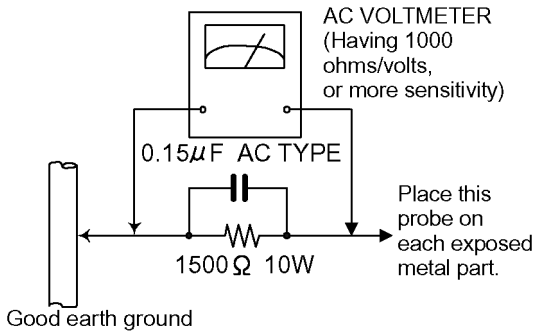
(2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage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

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

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

(5) Leakage shock hazard testing)
After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method
  Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 ohm 10W resistor paralleled by a 0.15 µF AC-type capacitor between an exposed metal part and a known good earth ground.
  Measure the AC voltage across the resistor with the AC voltmeter.
  Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



1.2 Warning

(1) This equipment has been designed and manufactured to meet international safety standards.

(2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.

(3) Repairs must be made in accordance with the relevant safety standards.

(4) It is essential that safety critical components are replaced by approved parts.

(5) If mains voltage selector is provided, check setting for local voltage.

1.3 Caution

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

1.4 Critical parts for safety

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

1.5 Preventing static electricity

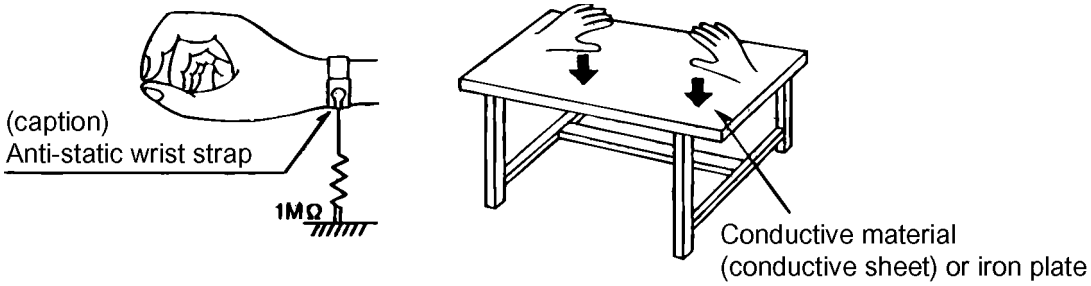
Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

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)I t is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.7 Important for laser products

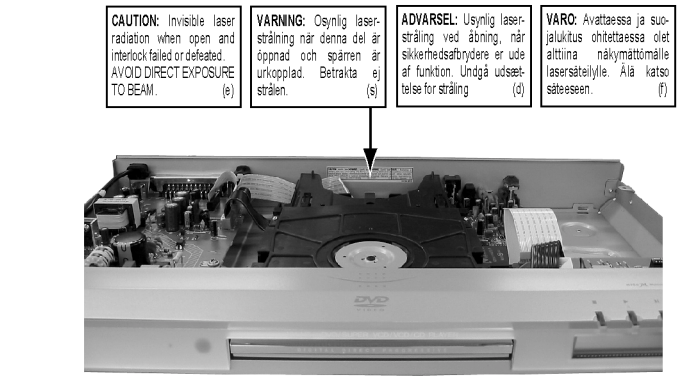
(1) **CLASS 1 LASER PRODUCT**
(2) **DANGER :** Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.
(3) **CAUTION :** There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.
(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 de feated.
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.

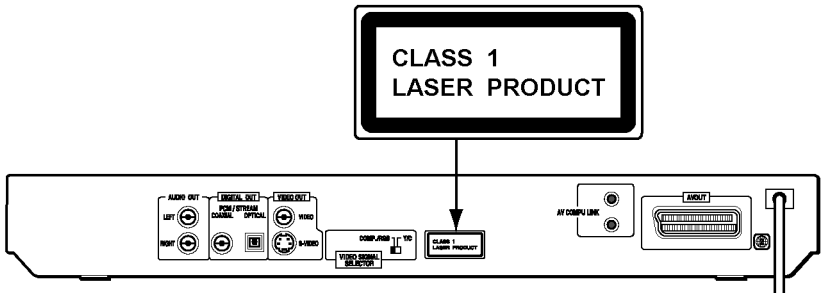
⚠CAUTION
Please use enough caution not to see the beam directly or touch it in case of anadjustment or operation check.

VARNING Osynlig laserstrålning är denna del är öppnasd och spårren är urkopplad. Betrakta ej strålen.	**ADVARSEL** Usynlig laserstrling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsasttelse for stråling.
VARO Avattaessa ja suojalulitus ohitettaessa olet alttiina näkymät-tömälle lasersateilylle. Älä katso säteeseen.	**ADVARSEL** Usynlig laserstråling ved åpning, når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABEL and PRINT

WARNING LABEL and PRINT





1.8 Precautions for Service

1.8.1 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.

1.8.2 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:

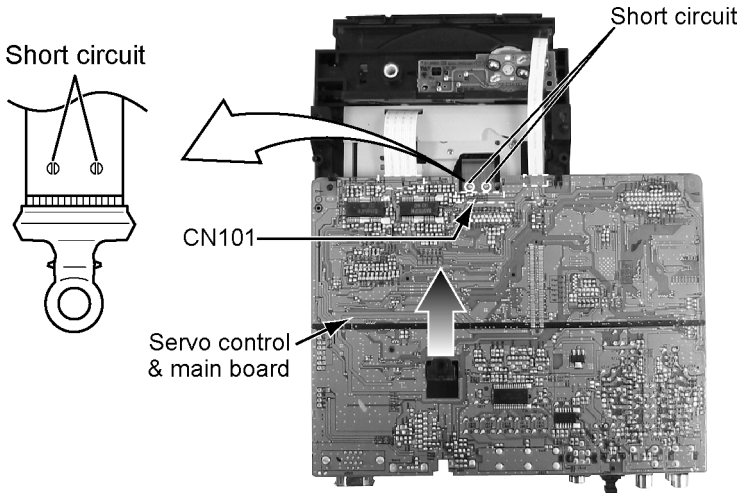
(1) Wear an antistatic wrist wrap.

(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) After removing the flexible wire from the connector (CN101), short-circuit the flexible wire by the metal clip.

(4) 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.

Please refer to "Fig.8" of "Disassembly method" for details.



SECTION 2
Disassembly method

There is a part different from the photograph according to the model and the destination though explains this disassembly method by using version U.K.

2.1 Main body section

2.1.1 How to remove a top cover (See Figure 1)

(1) Screw A attaches a top cover to the main part. Remove the two screws A from the both sides of the main part.
(2) Screw B attaches the top cover to the main part. Remove the three screws B from the rear side of the main part.
(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.

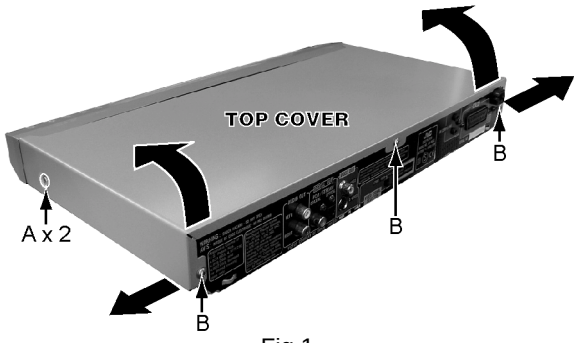


Fig.1

2.1.2 How to remove a front panel assembly (See Figure 2, 3, and 4.)

- Please remove a top cover before removing a front panel assembly.
- Front panel assembly can be removed without removing mechanism assembly.

(1) Insert a kind of screwdriver in a hole located in the left 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) Screw C attaches LCD display & operation switch board to the main part. Remove the screw C.
(4) Extract a card wire from connector CN1 on LCD display & operation switch board.
(5) Remove I screw that attach the front panel assembly to the main part.
(6) Remove two hook "a"s and two "b"s. Remove front panel assembly in a front direction.

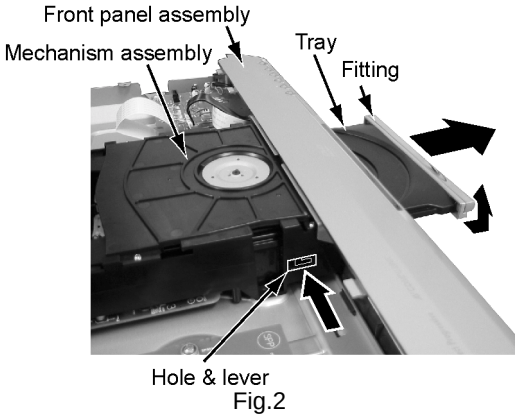


Fig.2

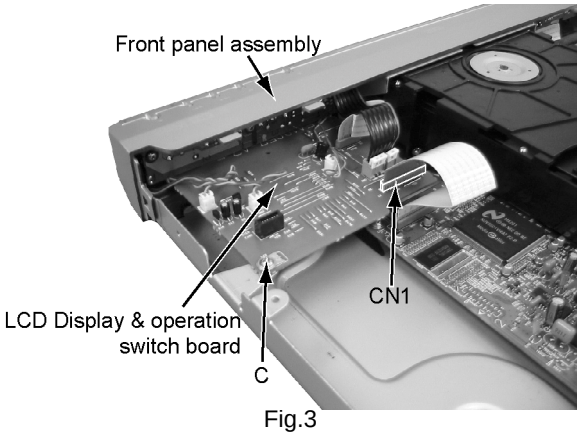


Fig.3

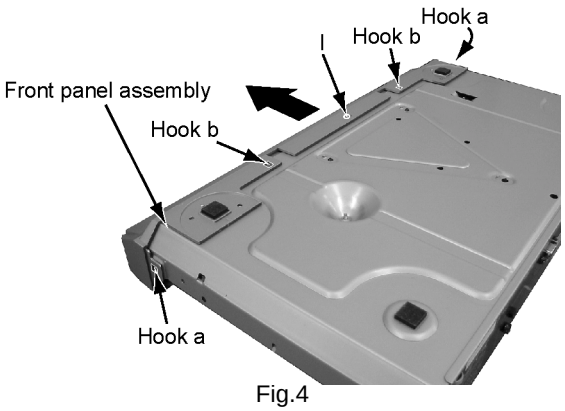


Fig.4

2.1.3 How to remove a rear panel (See Figure 5 and 6)

- Please remove a top cover before removing a rear panel.
  (1) Screw D attaches a rear panel to the main part. Remove the nine screws D.
  (2) Extract a power cord from socket P901 on a power supply board.
  (3) Remove two tie bands.

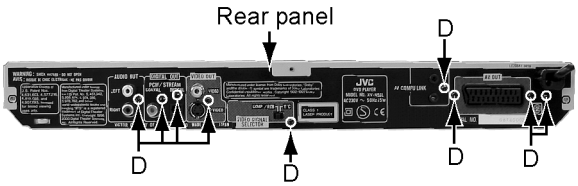


Fig.5

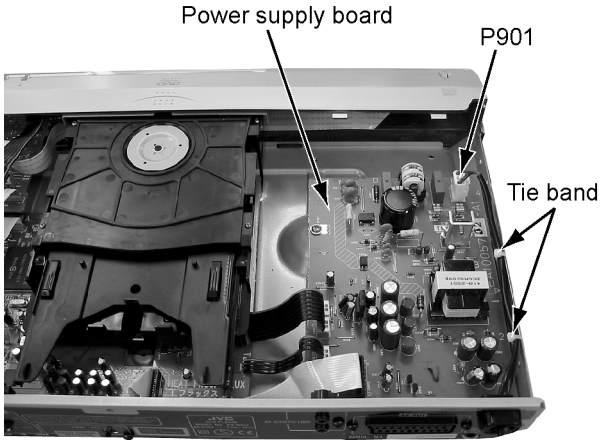


Fig.6

2.1.4 How to remove a mechanism assembly & servo control board (See Figure 7 and 8)

- Please remove a top cover, a front panel assembly, and a rear panel before removing a mechanism assembly & servo control board.
  (1) Extract flat wire from connector JT911, JT912, and JT913 on a power supply board.
  (2) Extract card wire from connector CN902 on a power supply board.
  (3) Screw E attaches servo control & main board to the main part. Remove one screw E.
  (4) Screw F attaches a mechanism assembly. Remove three screws F.
  (5) Remove two hook "c"s. And then, remove servo control & main board with sliding it in a front direction.
  (6) Two card wires are connected to servo control & main board. Extract this card wire from CN201 and CN202 respectively.
  (7) A wire is connected to servo control & main board from a pickup. Extract it from CN101.

  ATTENTION:
  At this time, please extract the wire after short-circuited of two places on the wire in part d with solder.
  Please remove the solder two places of part d after connecting the wire with CN101 when reassembling.

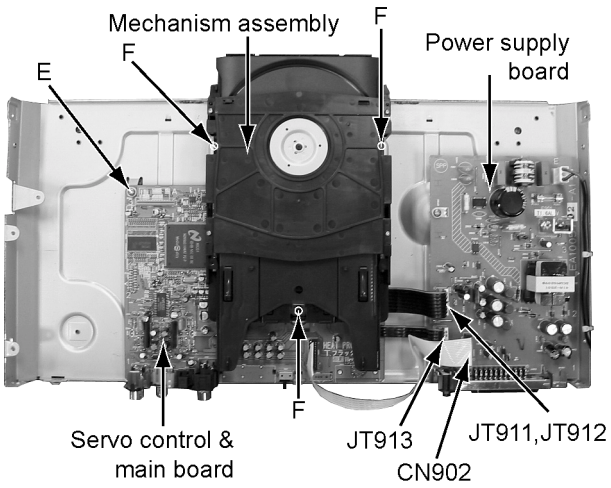


Fig.7

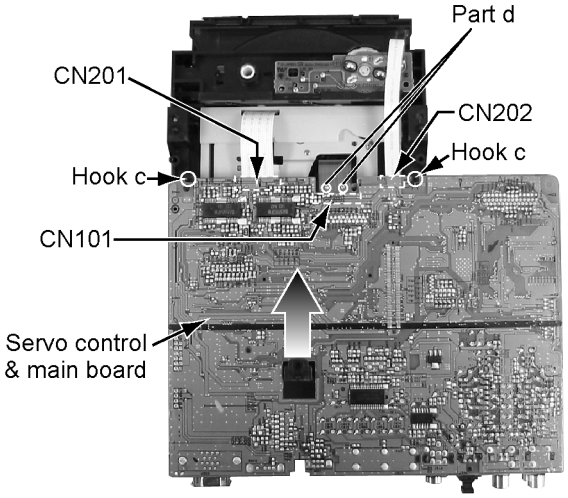


Fig.8

2.1.5 How to remove a power supply board (See Figure 9 and 5)

- Please remove a top cover before removing a power supply board.
  (1) Extract flat wire from connector JT911, JT912, and JT913 on a power supply board.
  (2) Extract card wire from connector CN902 on apower supply board.
  (3) Extract power supply cord from socket P901 on a power supply board.
  (4) Remove one screw G that attaches a power supply board and four screws D that attaches a power supply board from the rear side.

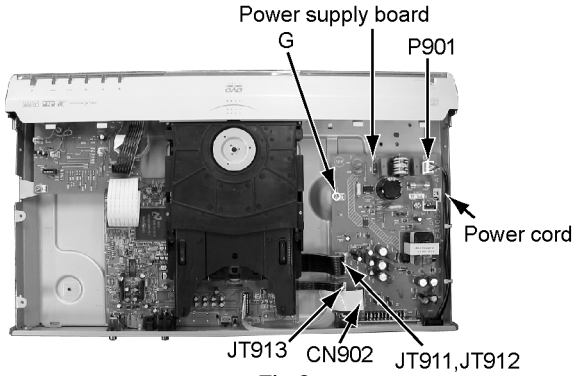


Fig.9

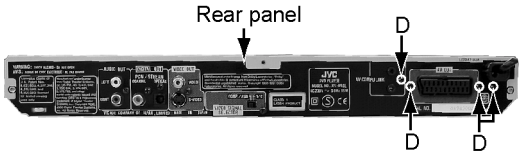


Fig.5

2.1.6 How to remove LCD display & operation switch board (See Figure 10, 11, and 12)

- Please remove a top cover and a front panel assembly before removing LCD display & operation switch board.
  (1) Extract card wire and flat wire from connector CN2, CN3, and CN8 on LCD display board.
  (2) Remove four screws H that attach an operation switch board, and then operation switch board.
  (3) Remove support button, LCD display board, and push button in this order.
- **When the main part is assembled, parts must be assembled in the following order:**
  Push button ⟶ LCD display board ⟶ Side LED board ⟶ Support button ⟶ Operation switch board.
- **After the operation switch board is attached to its place, let a card wire through a slit on the operation switch board, and then insert it in CN2. (See Figure 10.)**

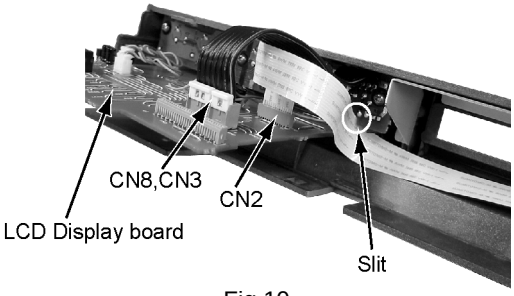


Fig.10

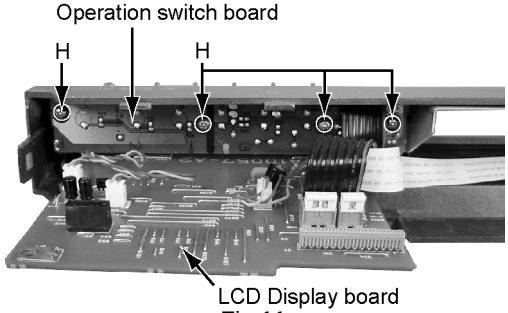


Fig.11

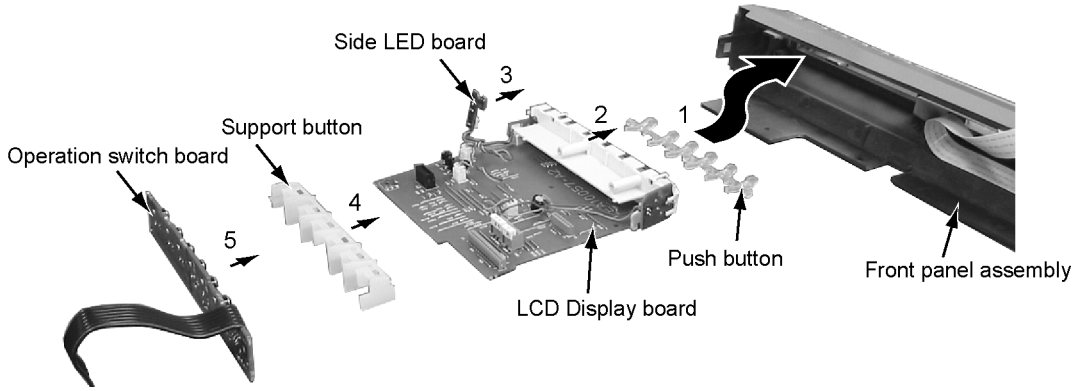


Fig.12

SECTION 3
Mechanism

3.1 Loading assembly section

3.1.1 Removing the clamper assembly (See Fig.1)

(1) Remove the four screws **A** attaching the clamper assembly.

(2) Move the clamper in the direction of the arrow to release the two joints **a** on both sides.

ATTENTION:
When reattaching, fit the clamper to the two joints a.

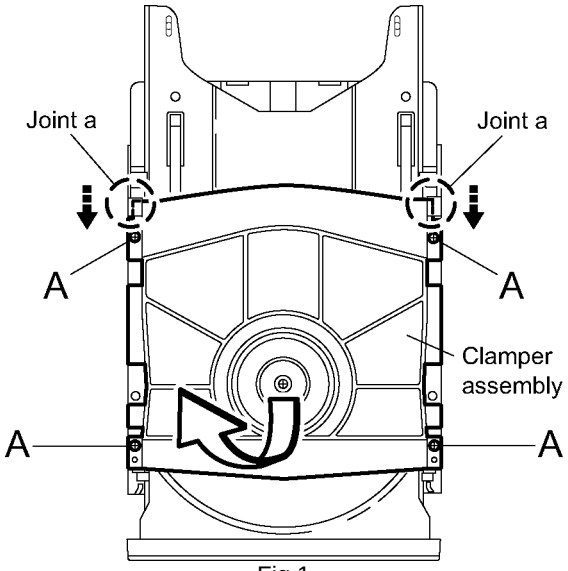


Fig.1

3.1.2 Removing the tray (See Fig2. and 3)

- Prior to performing the following procedure, remove the clamper assembly.

(1) Push **b** of the slide cam into the slot on the left side of the loading base until it stops.

(2) Draw out the tray toward the front.

ATTENTION:
Before reattaching the tray, slide the part c of the slide cam to the right as shown in Fig.3.

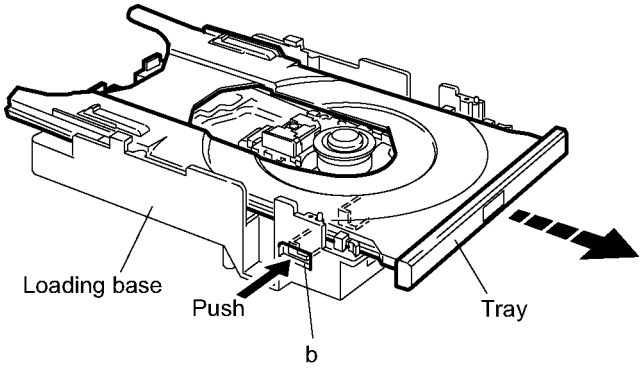


Fig.2

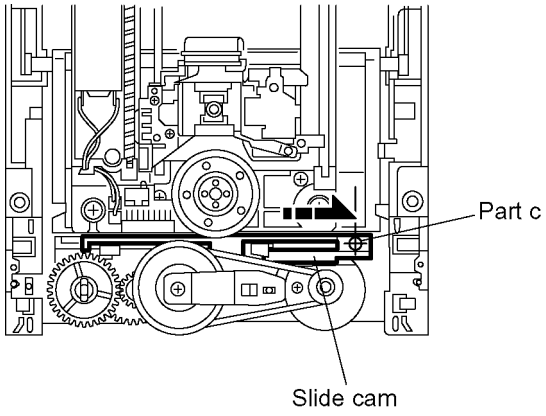


Fig.3

3.1.3 Removing the traverse mechanism assembly (See Fig.4 and 5)

- Prior to performing the following procedure, remove the clamper assembly and the tray.

  (1) Remove the four screws **B** attaching the traverse mechanism assembly.

  ATTENTION:
  Before reattaching the traverse mechanism assembly, pass the card wire extending from the spindle motor board through the notch d of the elevator.

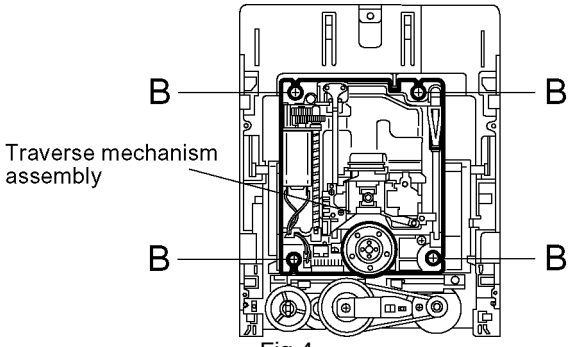


Fig.4

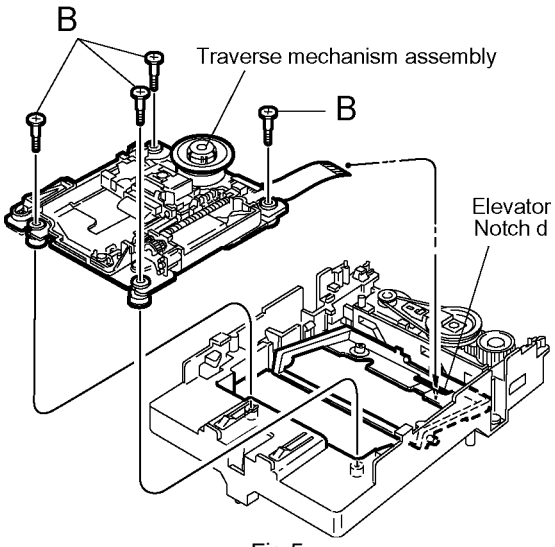


Fig.5

3.1.4 Removing the elevator (See Fig.6)

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

  (1) Extend each bar **e** inside of the loading base outward and detach the elevator shaft.

  ATTENTION:
  When reattaching, first fit the two shafts on the front of the elevator to the slots f of the slide cam.

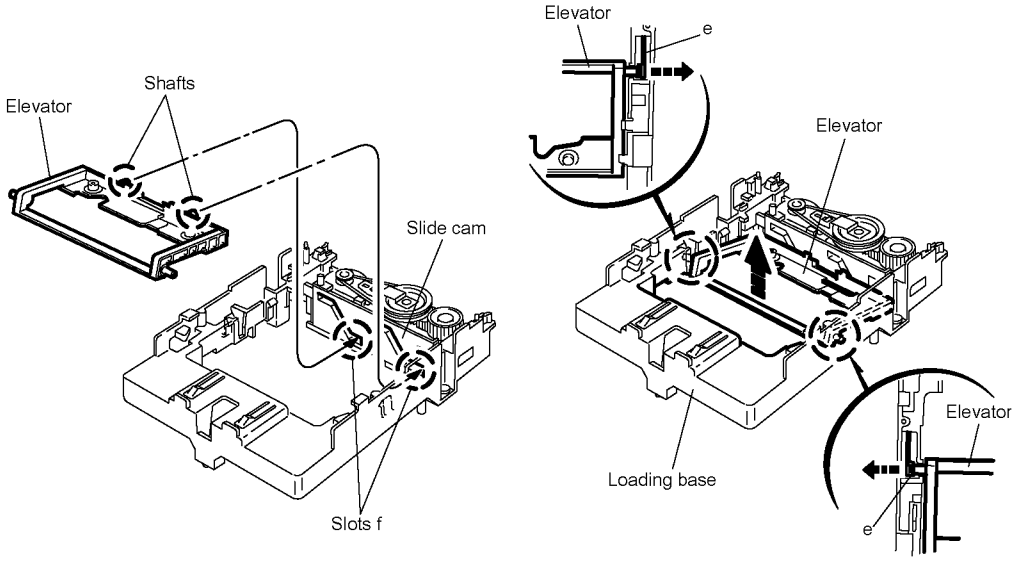


Fig.6

3.1.5 Removing the motor assembly (See Fig.7 and 8)

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

(1) Remove the belt from the pulley.

(2) Remove the screw **C** attaching the motor assembly.

(3) Turn over the body and remove the screw **D** attaching the motor assembly.

(4) Release the two tabs **g** retaining the motor board.

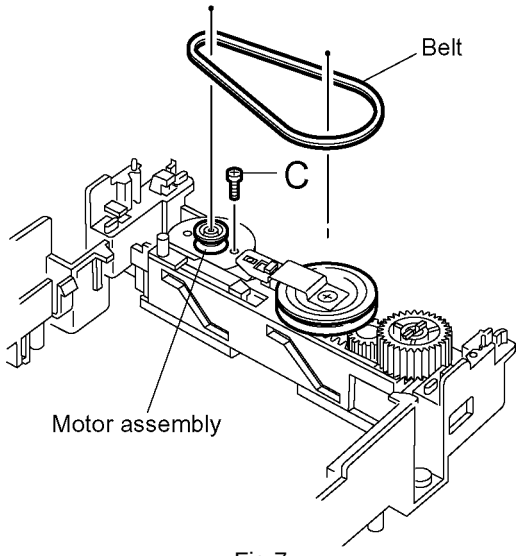


Fig.7

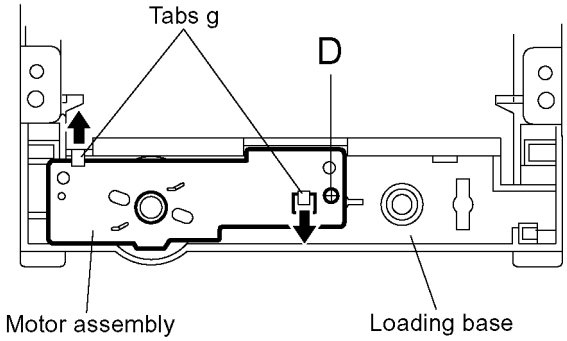


Fig.8

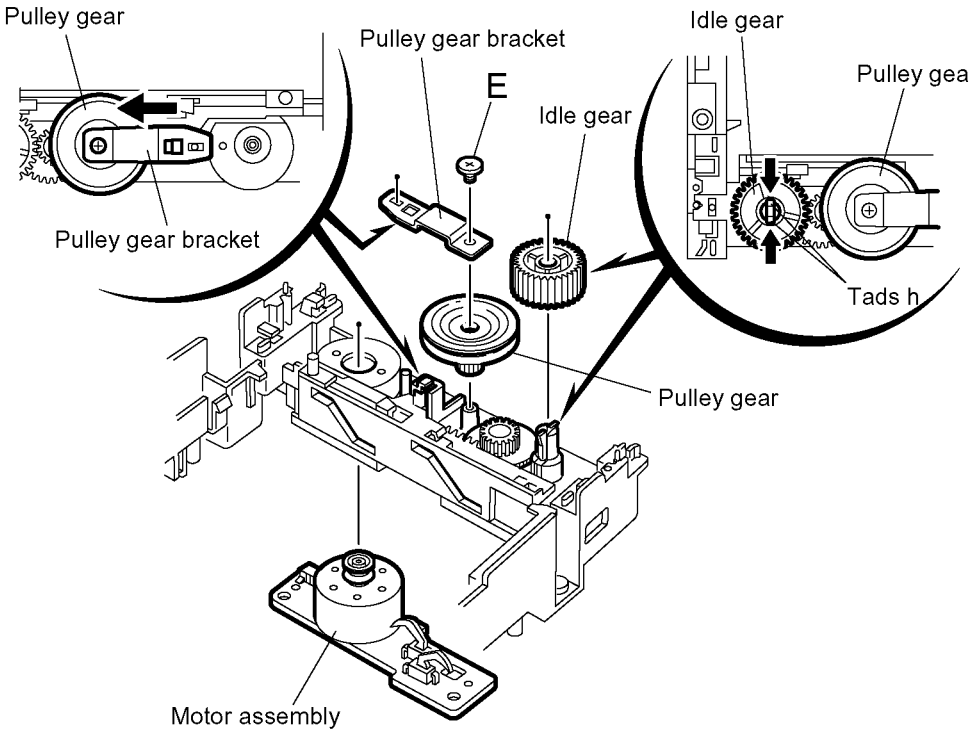


Fig.9

3.1.6 Removing the Idle gear/pully gear/ middle gear/slitecam (See Fig.9 to 11)

- Prior to performing the followong procedure,remove the clamper assembly,the tray,the traverse mechanism assembly,the elevator and the motor assembly.

  (1) Press the two tabs **h** inward and pull out idle gear.

  (2) Remove the screw **E** attaching the pulley gear bracket. Slide the pulley gear bracket in the direction of the arrow and pull out the pulley gear.

  (3) Slide the side cam in the direction of the arrow to release the two joints **i** and remove upward.

  (4) Remove the middle gear.

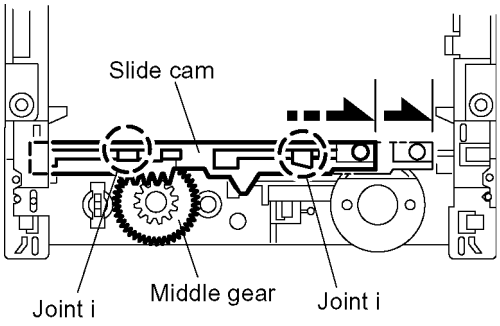


Fig.10

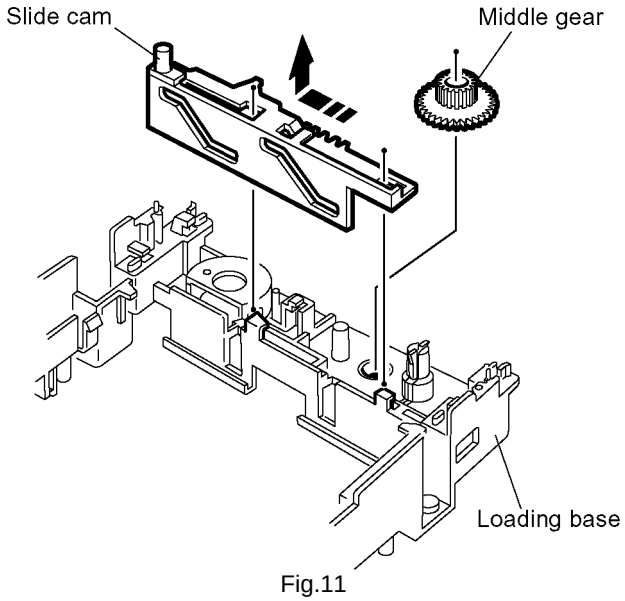


Fig.11

3.2 Traverse mechanism assembly section

3.2.1 Removing the feed motor assembly (See Fig.12)

(1) Unsolder the two soldering **j** on the spindle motor board.

(2) Remove the four screws **F** attaching the feed motor assembly.

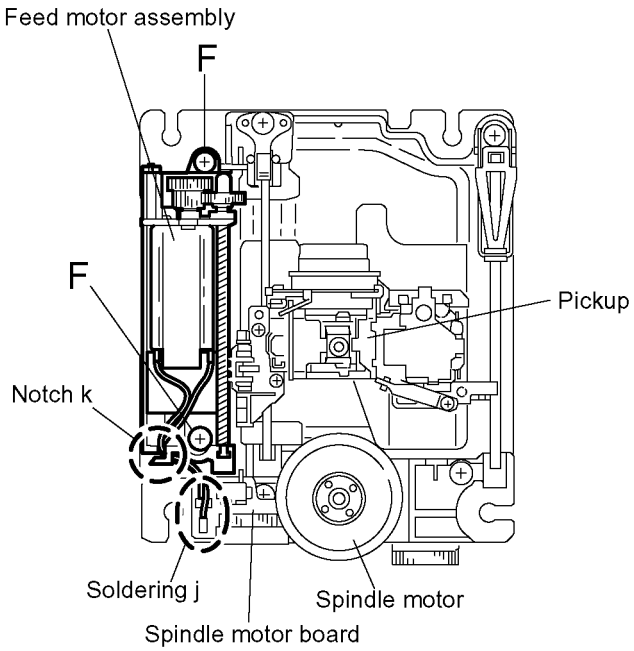


Fig.12

3.2.2 Removing the feed motor (See Fig.12 to 14)

- Prior to performing the following procedure, remove the feed motor assembly.

(1) Remove the screw **G** attaching the thrust spring.

ATTENTION:
When reattaching the thrust spring, make sure that the thrust spring presses the feed gear (M) and the feed gear (E) reasonably.

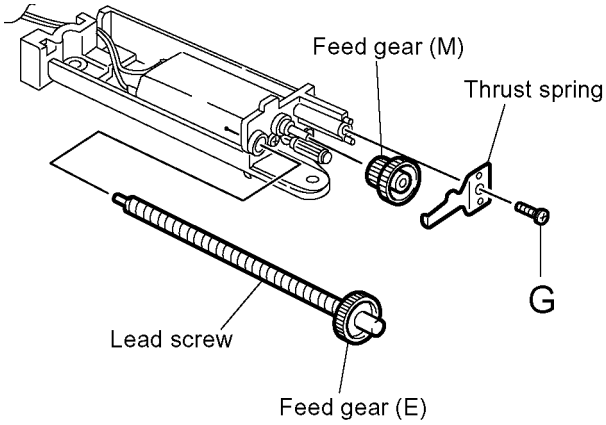


Fig.13

(2) Remove the feed gear (M).

(3) Pull out the feed gear (E) and the lead screw.

(4) Remove the two screws **H** attaching the feed motor.

ATTENTION:
When reattaching, pass the two cables extending from the feed motor through the notch k of the feed holder as shown in Fig13.

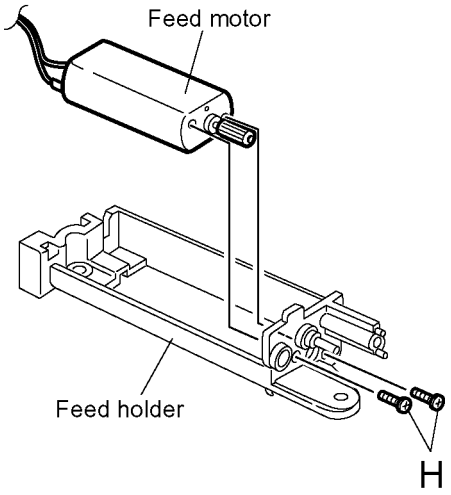


Fig.14

3.2.3 Removing the pickup (See Fig.16 and 18)

(1) Remove the screw **I** attaching the **T** spring (S) and the shaft holder. Remove also the plate.

ATTENTION:
When reattaching,make sure that the T spring (S) presses the shaft.

(2) Pull out the part **l** of the shaft upward. Move the part **m** in the direction of the arrow and detach from the spindle base.

(3) Disengage the joint **n** of the pickup and the shaft in the direction of the arrow.

(4) Pull out the shaft from the pickup.

(5) Remove the two screws **J** attaching the actuator.

(6) Disengage the joint of the actuator and the lead spring. Pull out the lead spring.

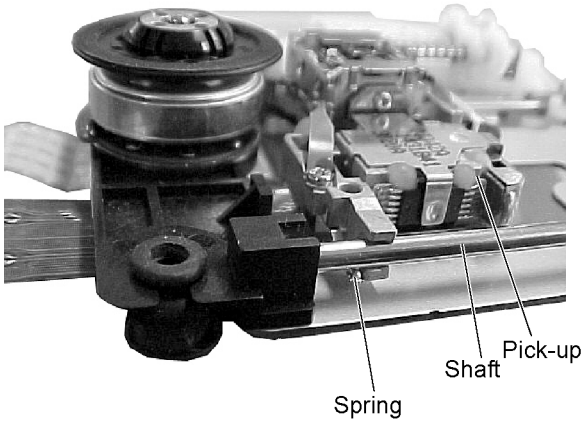


Fig.15

The spring must be under the shaft when you install pick-up.

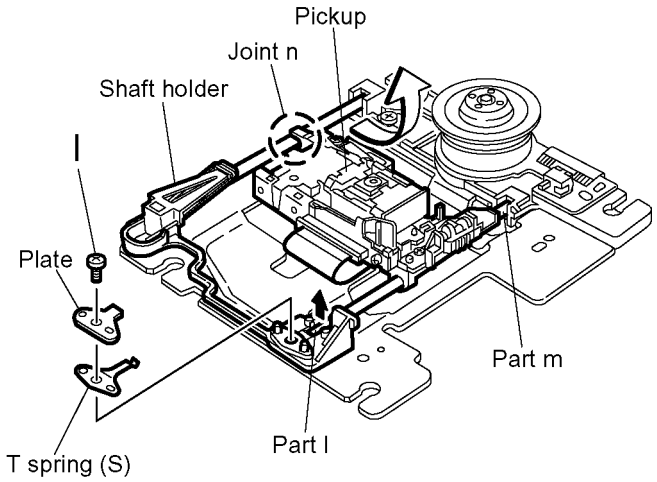


Fig.16

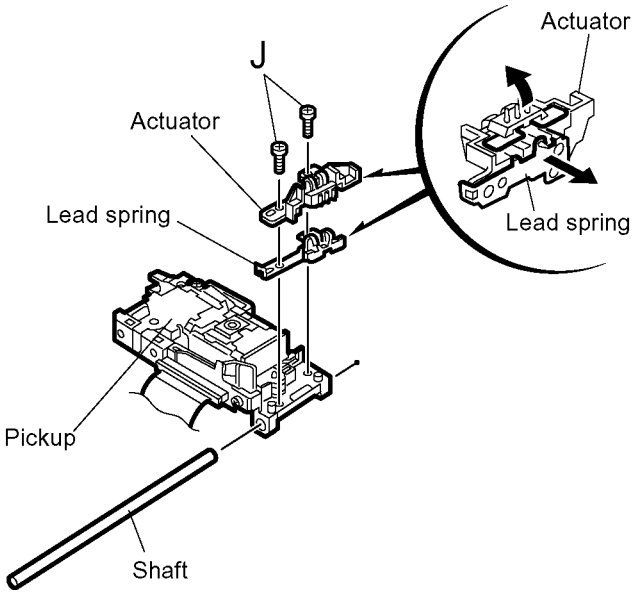


Fig.17

3.2.4 Removing the shaft holder / shaft (See Fig.18)

(1) Remove the screw **K** attaching the shaft holder.

(2) Remove the shaft.

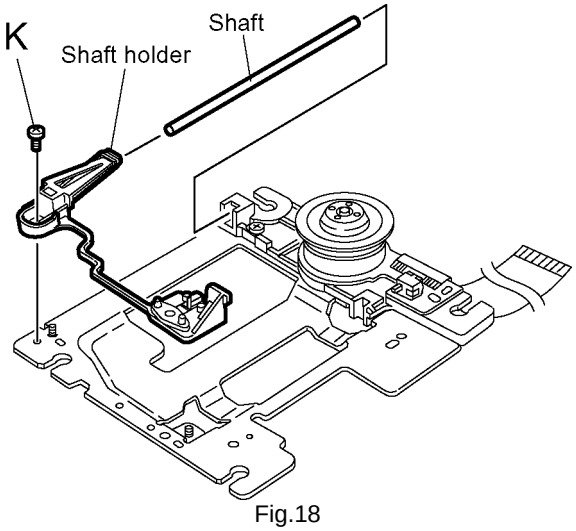


Fig.18

3.2.5 Removing the spindle motor assembly (See Fig.19 to 21)

(1) Remove the three screws **L** attaching the spindle motor on the bottom of the mechanism base.

ATTENTION:
When reattaching, pass the card wire extending from the spindle motor board through the notch of the spindle base.

(2) Remove the three screws **M** attaching the spindle base.

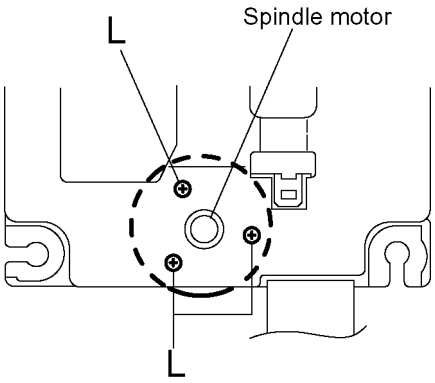


Fig.19

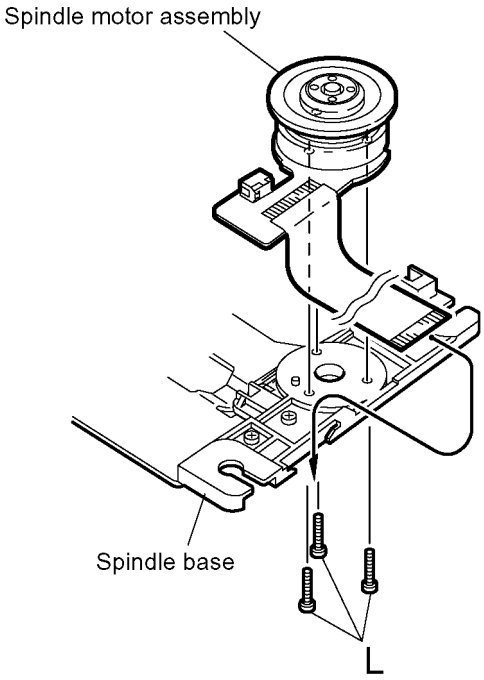


Fig.20

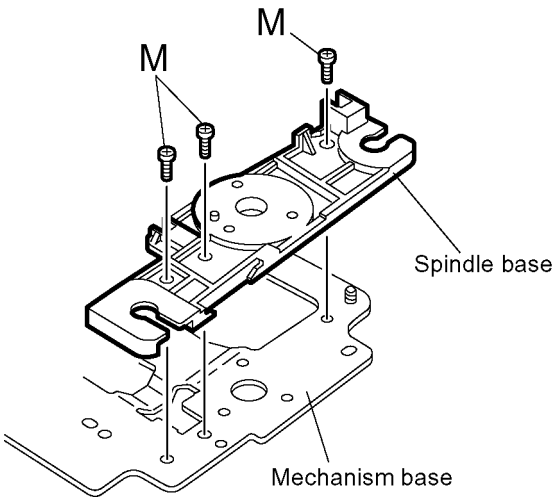


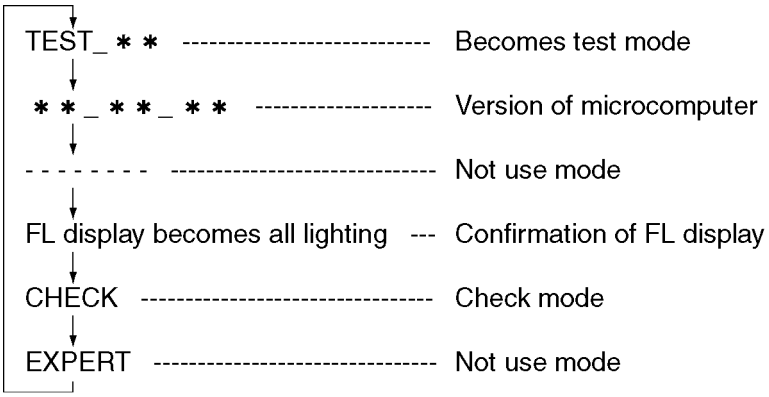
Fig.21

SECTION 4
Adjustment method

4.1 Test mode setting method

(1) Take out the disc and close the tray.
(2) Unplug the power plug.
(3) Insert power plug into outlet while pressing both "PLAY" key and "STOP" key of the main body.
(4) The player displays " TEST ＊ ＊" on the LCD display. "＊ ＊" means the player version.
(5) When the power supply is turned off, test mode is released.

The mode changes as follows whenever the "CHOICE" key of remote controller is pushed in test mode.



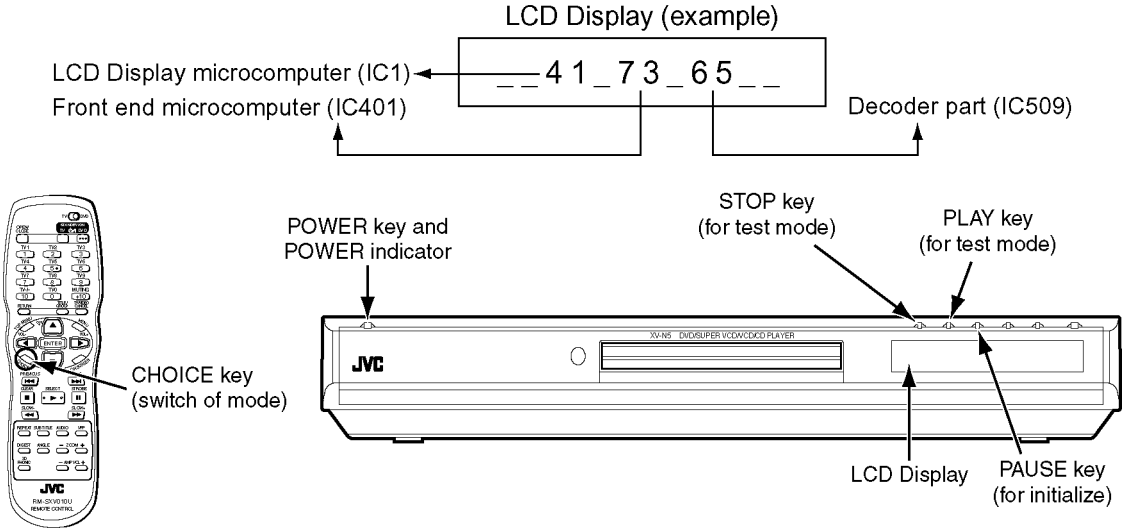
4.2 Initialization method

Please initialize according to the following procedures when microprocessor or pick-up is exchanged and when the up-grade is done.

(1) Makes to test mode.
(2) "PAUSE" key of the main body is pushed.
(3) The power indicator changes from green into orange.

4.3 Method of displaying version of microcomputer

(1) Makes to test mode and initializes
(2) When "CHOICE" key of remote controller is pushed once, the figure is displayed on the LCD display as follows.



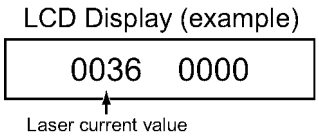
4.4 Display of current value of laser

(1) Makes to test mode and initializes.

(2) When "CHOICE" key of remote controller is pushed four times, It is displayed on the LCD display, "CHECK".

(3) Afterwards, the laser current value can be switched by pushing the key to remote controller without turning on the disc.

Remote controller "4" key --- Laser of CD
Remote controller "5" key --- Laser of DVD



As for the current value of the laser, the figure displayed on the LCD display becomes a current value as it is by "mA" unit. becomes 36 mA if displayed as 36.

(4) The laser output stops if the "STOP" key to remote controller is pushed.

It can be judged it is simply good if the displayed current value of the laser is smaller than that of the undermentioned value. Moreover, there must be a deteriorated possibility and the pick-up must exchange the pick-up more than the undermentioned value.

Laser current value of CD ------ 49 mA or less
Laser current value of DVD ---- 64 mA or less

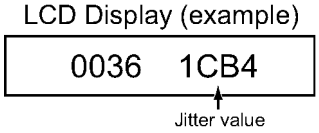
4.5 Display of jitter value

(1) Makes to test mode and initializes.

(2) When "CHOICE" key of remote controller is pushed four times, It is displayed on the LCD display, "CHECK".

(3) The test disk (VT-501) is inserted, and the "PLAY" key to the main body is pushed.

(4) The jitter value is displayed on the LCD display as follows.

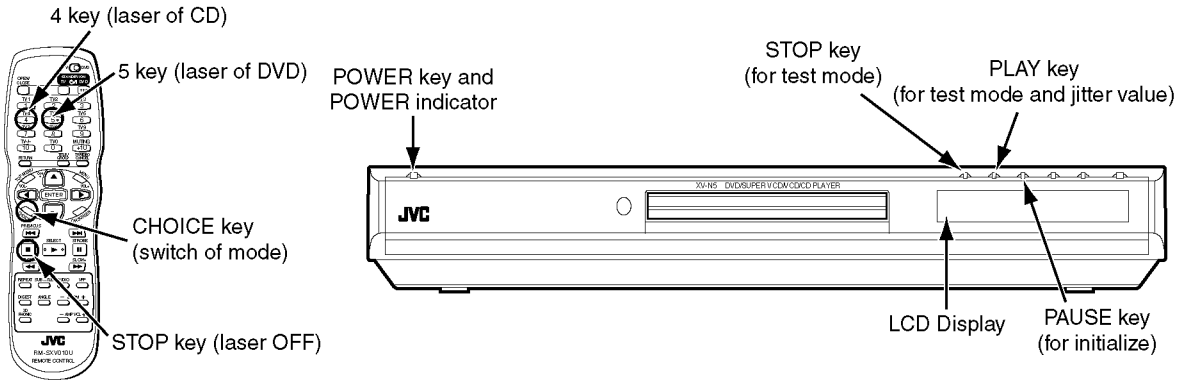


Values to judge whether the jitter is allowable or not is displayed, instead of actual jitter values.The displayed values are expressed in hexadecimal numbers.

In the following cases, please "Flap adjustment of the pick-up guide shaft" referring to the following page.
Before using the TEST disc VT-501, careful check it if there is neither damage nor dirt on the read surface.

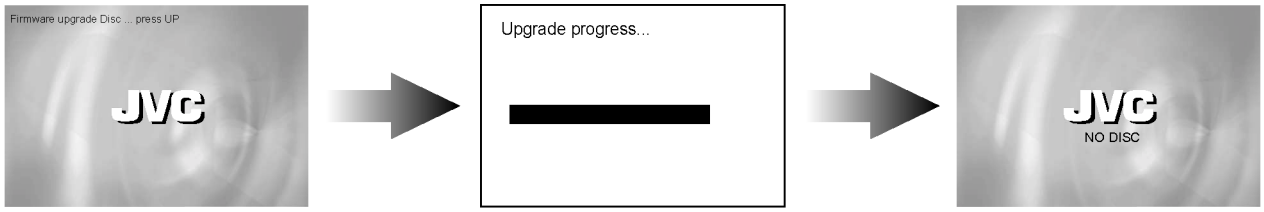
< In the following cases, please adjustment >

- **When you exchange the pick-up**
- **When you exchange the spindle motor**
- **When the reading accuracy of the signal is bad (There is a block noise in the screen etc..)**



4.6 Upgrading of firmware

(1) The power supply is turned on pushing the "POWER" key.
(2) The up-grade disc is inserted.
(3) When LCD display of the main body changes from "READING" into "UPGRADE", cursor "UP" key (▲) of remote controller is pushed.
(4) The up-grade starts if the entire screen becomes blue and it is displayed, "Upgrade progress".
(5) The tray opens automatically, the up-grade disc is removed.
(6) The up-grade ends if the tray closes automatically, and the screen returns to the normal screen.
(7) Please confirm the version of the microcomputer after makes to test mode and initializes.



After inserting the up-grade disc　　Upgrading (blue screen)　　When up-grade is completed

The disc for the up-grade is usually one piece. The disc becomes two pieces according to the version. In that case, please note the undermentioned content.

*The up-grade is done by using the STEP1 disc according to "1)" and "4)" of the above-mentioned procedure.
*The tray opens automatically after a few seconds and exchange for the disc of STEP2, please.
* The tray closes automatically. There is only about five second time that the tray opens this time, and replace the disc quickly between those, please.

ATTENTION

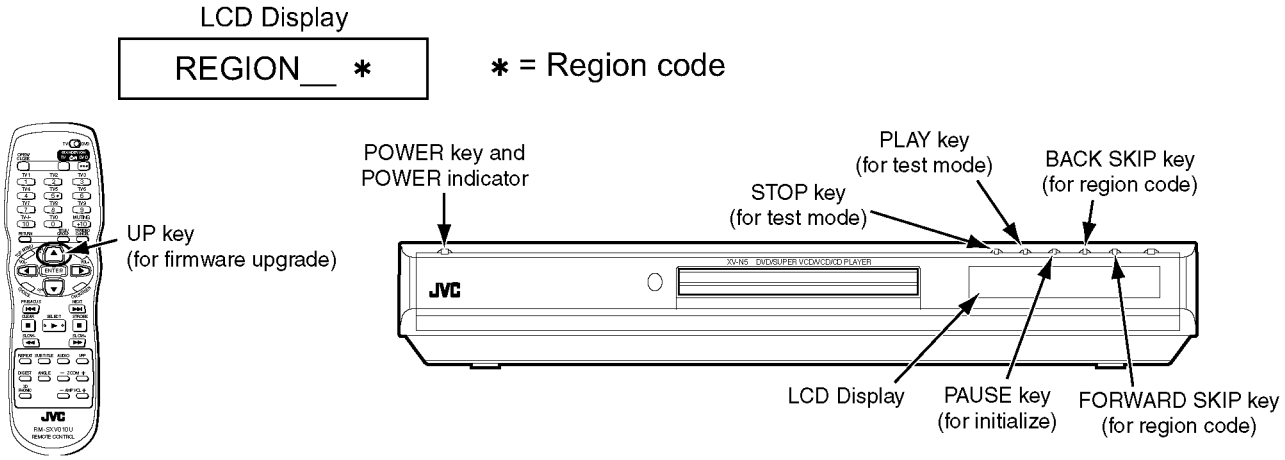
- When the tray shuts with the STEP1 disc left for the tray
  The up-grade starts again and exchange for the STEP2 disc, please when the tray opens automatically.
- When the tray closes with there no disc in the tray
  Because the tray opens automatically, the disc of STEP2 is put on the tray.
  The power supply is turned off once pushing the "POWER" key.
  The up-grade starts when the "POWER" key is pushed afterwards.

* After the up-grade ends, the STEP2 disc is removed because the tray opens automatically.

* Afterwards, it is the same as 6),7) of the above-mentioned procedures.

4.7 Display of region code

(1) Makes to the stand-by state.
(2) The "POWER" key is pushed while pushing the "BACK SKIP" key and the "FORWARD SKIP" key to the main body.
(3) Region code is displayed on the LCD display as follows.



4.8 Flap adjustment of the pick-up guide shaft

4.8.1 Tool list for adjustment

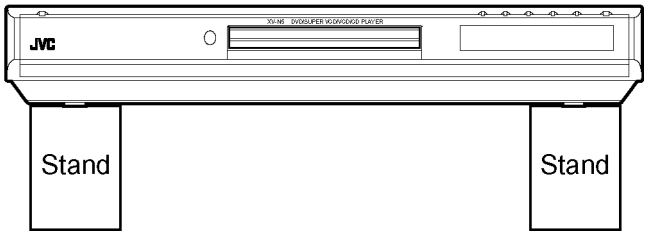
Hex wrench for adjustment
Off-the-shelf (1.3mm)

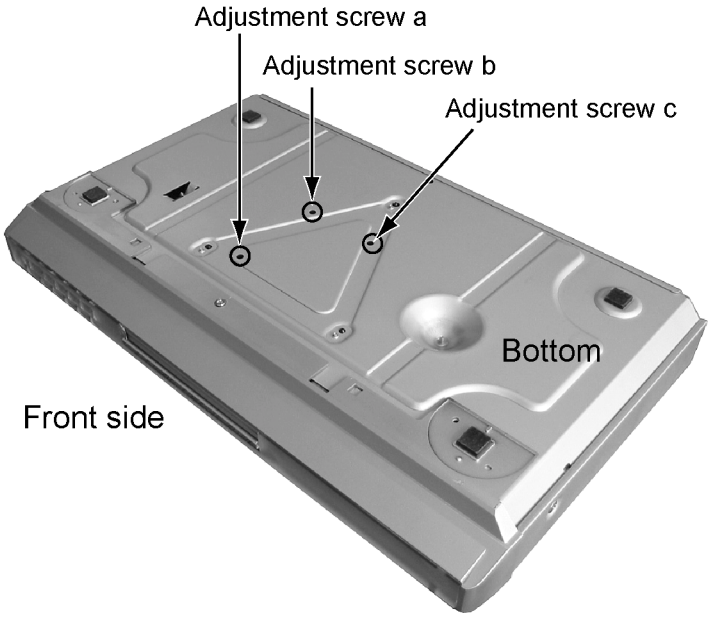
Test disc
VT-501 or VT-502

Stand of about 150mm in height
2 pcs

(1) Puts into the state to display the jitter value on the LCD display referring to "3.5 Display of the jitter value".
(2) A hex-head wrench is inserted in the hole three places for the adjustment in the main body bottom, and the adjustment screw is turned, and matches so that the jitter value displayed on the LCD display mey become **maximum** value.

As this value is bigger, the jitter is more allowable in this model.





<POINT>

(1) Turns in the forward or the opposite direction, and makes to the position where the jitter value is good the half rotation of adjustment screw a and b(180 degrees) respectively.
(2) Afterwards, adjustment screw b and c are turned in the same way, and makes to the best position.

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.

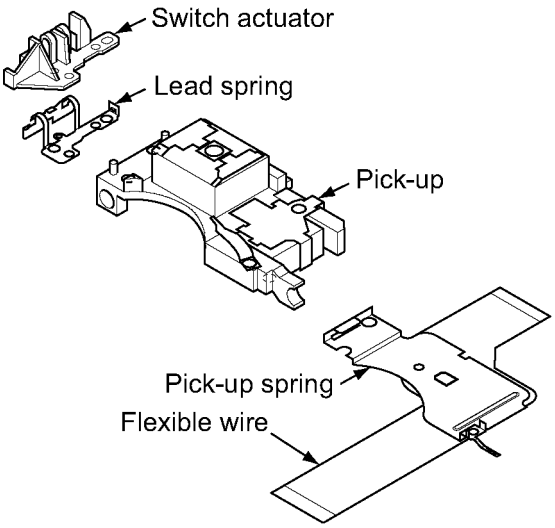
(7) Solder in two places on a flexible wire in part "a" is removed.

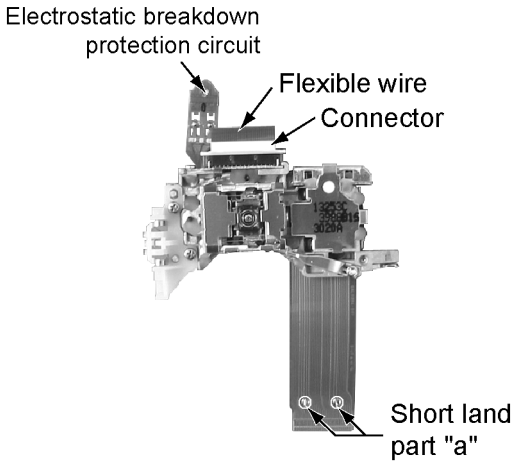
< ATTENTION >

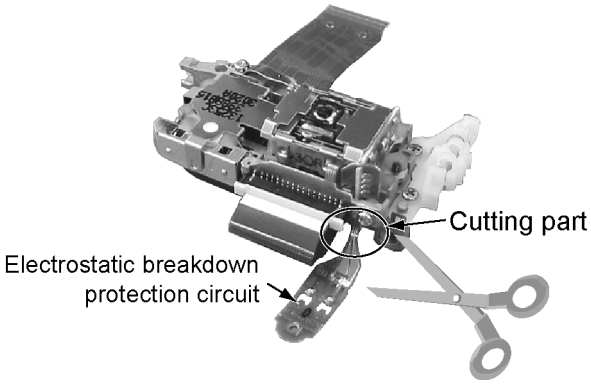
Please remove solder in two places in part "a" after connecting a flexible wire with connector CN101 on the servo control board without fail this time.

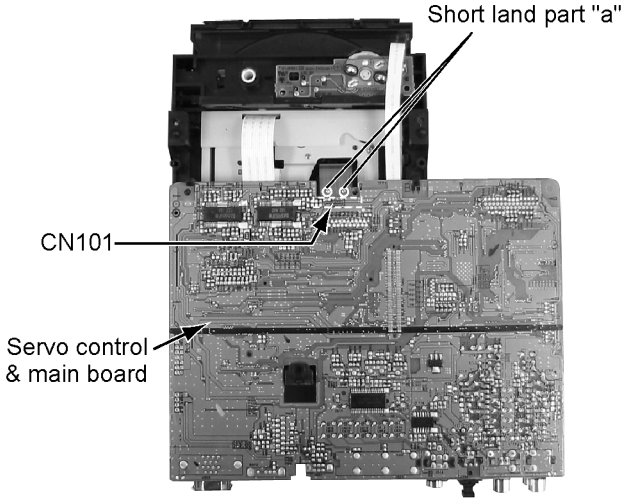
When the procedure is mistaken, the laser diode in the pick-up might be destroyed.

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









4.10Confirm method of operation

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

The EEPROM is initialized.

Refer to the initialization method.

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.

4.11Troubleshooting

4.11.1 Servo volume

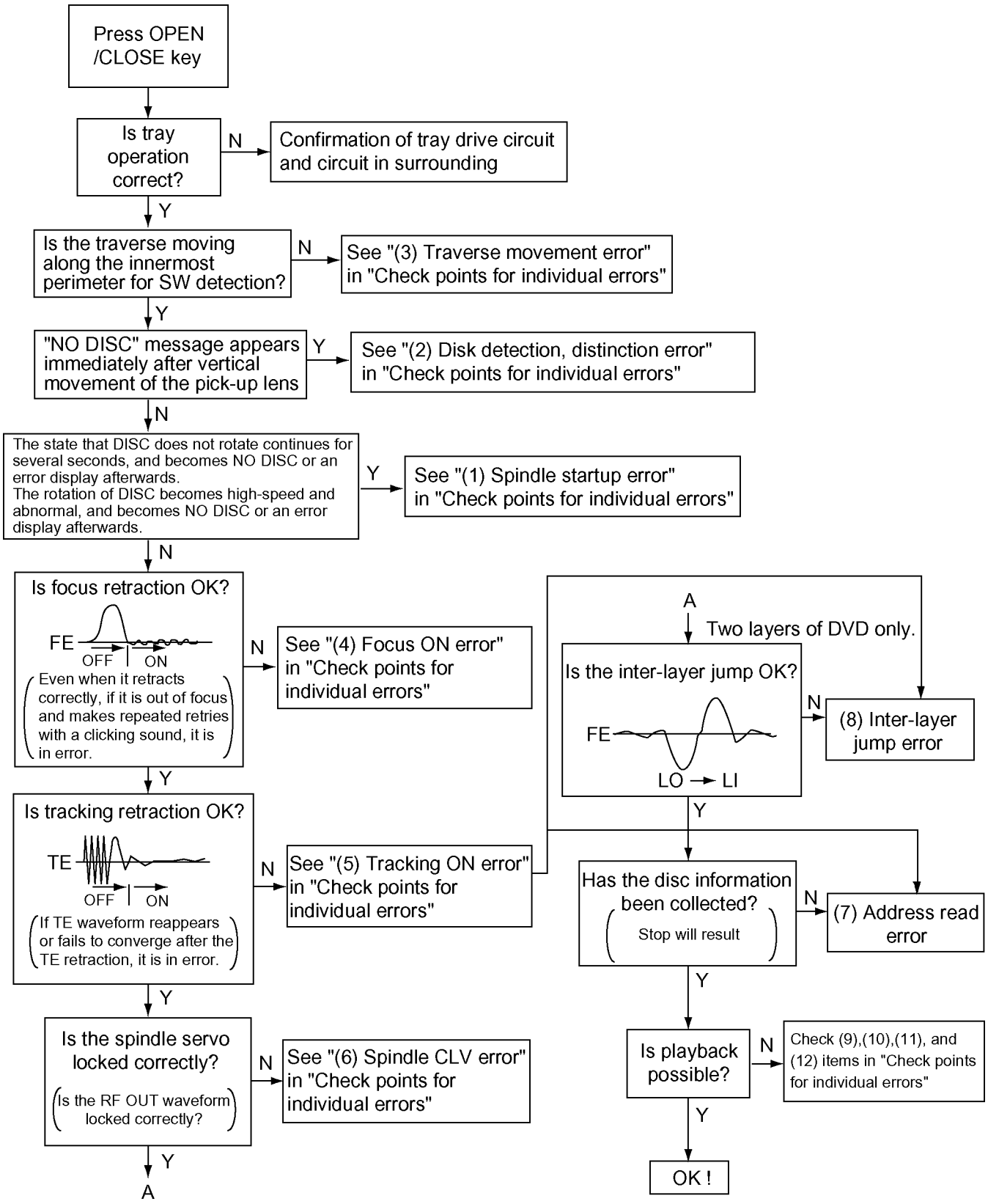


Fig.1

4.12Check points for each error

4.12.1 Spindle start error

(1) Defective spindle motor

- Are there several ohms resistance between each pin of CN201 "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?
  [CN201"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 CN201"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?

4.12.2 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)?

4.12.3 Traverse movement NG

(1) Defective traverse driver
- Has the voltage come between terminal of CN101 "1" and "2" ?

(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? (IC401 "50")

4.12.4 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.

4.12.5 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.

4.12.6 Spindle CLV NG

•IC101 -- "35"(RF OUT), "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.

4.12.7 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, IC401.
The disc is dirty or the wound has adhered.

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

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

4.12.9 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?

4.12.10 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?

4.12.11 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 sympton increases.

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

4.12.12CD During normal playback operation

a) Is TOC reading normal?
Displays total time
for CD-DA.
Shifts to double-speed
mode for V-CD

↓ YES

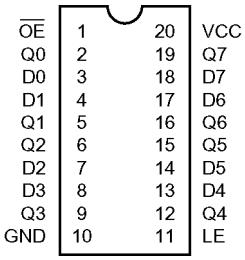
b) Playback possible? → NO

- --:-- 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.

SECTION 5
Description of major ICs

5.1 74LCX373MTC-X(IC512,IC513)

5.1.1 Pin layout



5.1.2 Pin function

Symbol	Description
D0~D7	Data inputs
LE	Latch enable input
$\overline{OE}$	Output enable input
Q0~Q7	3-State latch outputs

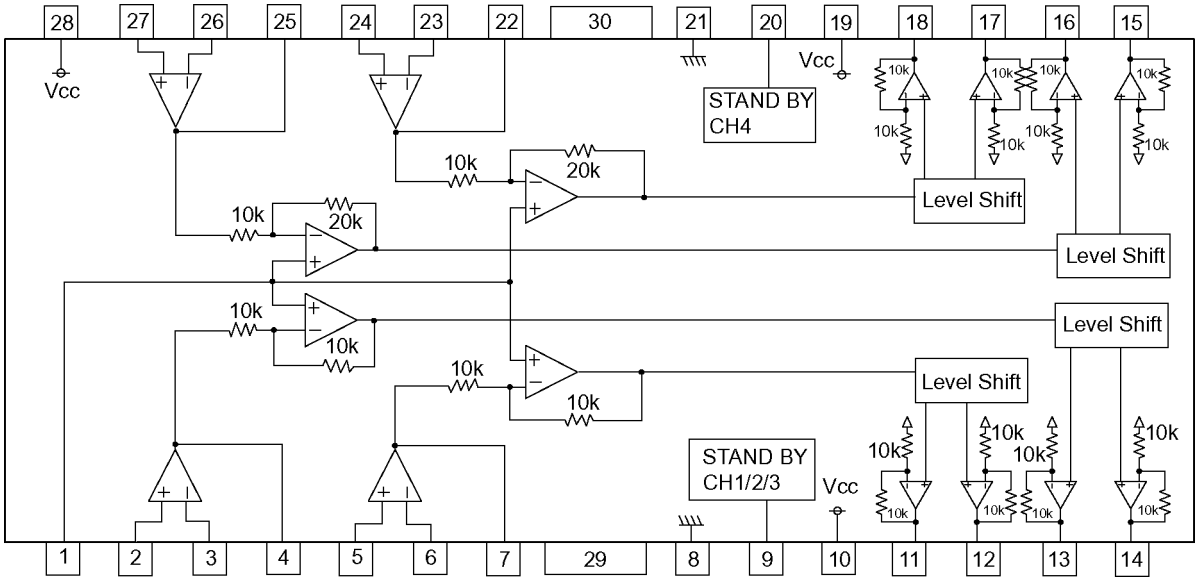
5.1.3 Truth table

INPUTS			OUTPUTS
LE	$\overline{OE}$	Dn	Qn
X	H	X	Z
H	L	L	L
H	L	H	H
L	L	X	Q0

H = HIGH Voltage level
L = LOW Voltage level
Z = High impedance
X = Immaterial
Q0 = Previous Q0 before HIGH to LOW transition of latch enable

5.2 BA5983FM-X (IC201) : 4CH Driver

5.2.1 Block diagram

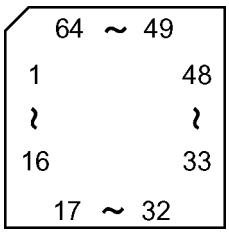


5.2.2 Pin function

Pin No.	Symbol	I/O	Description	Pin No.	Symbol	I/O	Description
1	BIAS IN	I	Input for Bias-amplifier	16	VO4(-)	O	Inverted output of CH4
2	OPIN1(+)	I	Non inverting input for CH1 OP-AMP	17	VO3(+)	O	Non inverted output of CH3
3	OPIN1(-)	I	Inverting input for CH1 OP-AMP	18	VO3(-)	O	Inverted output of CH3
4	OPOUT1	O	Output for CH1 OP-AMP	19	PowVcc2	-	Vcc for CH3/4 power block
5	OPIN2(+)	I	Non inverting input for CH2 OP-AMP	20	STBY2	I	Input for Ch4 stand by control
6	OPIN2(-)	I	Inverting input for CH2 OP-AMP	21	GND	-	Substrate ground
7	OPOUT2	O	Output for CH2 OP-AMP	22	OPOUT3	O	Output for CH3 OP-AMP
8	GND	-	Substrate ground	23	OPIN3(-)	I	Inverting input for CH3 OP-AMP
9	STBY1	I	Input for CH1/2/3 stand by control	24	OPIN3(+)	I	Non inverting input for CH3 OP-AMP
10	PowVcc1	-	Vcc for CH1/2 power block	25	OPOUT4	O	Output for CH4 OP-AMP
11	VO2(-)	O	Inverted output of CH2	26	OPIN4(-)	I	Inverting input for CH4 OP-AMP
12	VO2(+)	O	Non inverted output of CH2	27	OPIN4(+)	I	Non inverting input for CH4 OP-AMP
13	VO1(-)	O	Inverted output of CH1	28	PreVcc	-	Vcc for pre block
14	VO1(+)	O	Non inverted output of CH1	29		-	Connect to ground
15	VO4(+)	O	Non inverted output of CH4	30		-	Connect to ground

5.3 AN8703FH-V (IC101) : Frontend processor

5.3.1 Pin layout

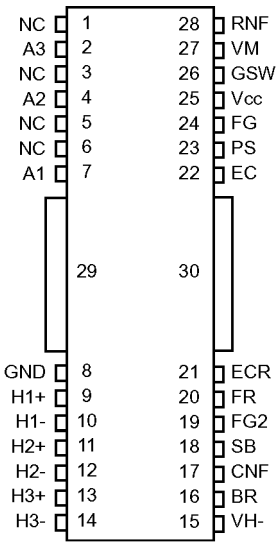


5.3.2 Pin function

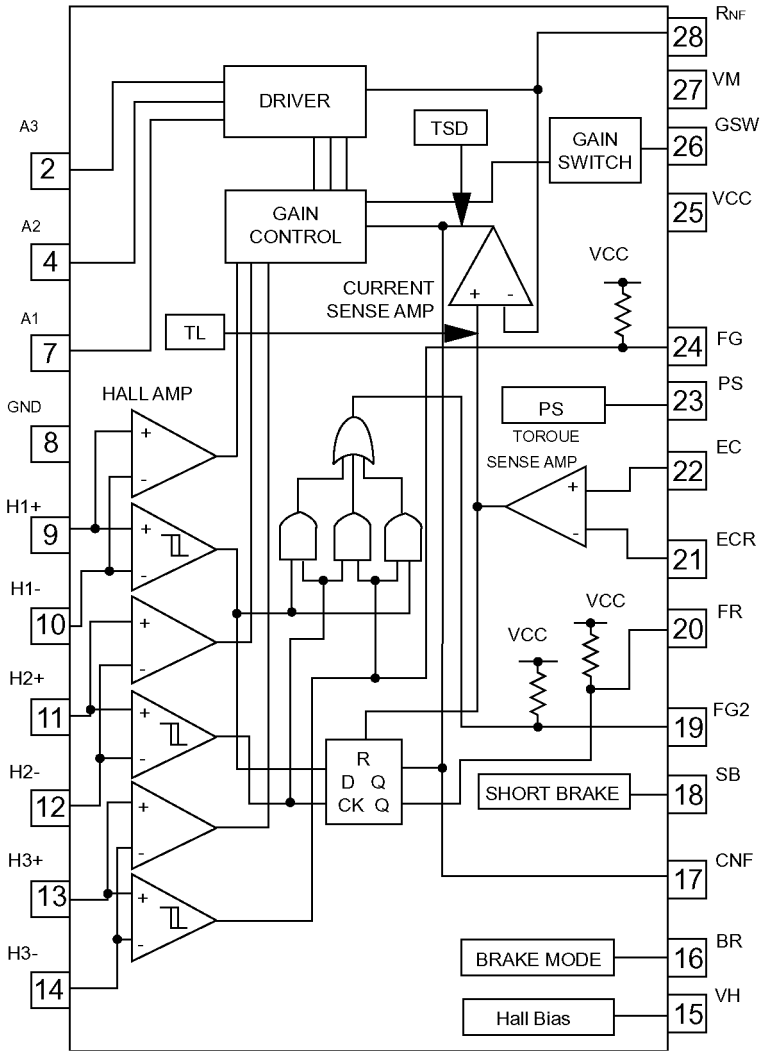
Pin No.	Symbol	I/O	Description	Pin No.	Symbol	I/O	Description
1	LPC1	I	Laser input terminal (DVD)	34	RFDIFO	-	Non connect
2	LPC01	O	Laser drive signal output terminal (DVD)	35	RFOUT	-	Connect to TP103
3	LPC2	I	Laser input terminal (CD)	36	VCC3	-	Power supply terminal 3.3V
4	LPC02	O	Laser drive signal output terminal (CD)	37	RFC	O	Filter for RF delay correction AMP.
5	VFOSHORT	I	VFOSHORT control terminal	38	DCRF	O	All addition amplifier capacitor terminal
6	TBAL	I	Tracking balance control terminal	39	OFTR	O	OFTR output terminal
7	FBAL	I	Focus balance control terminal	40	BDO	O	BDO output terminal
8	POFLT	O	Track detection threshold level terminal	41	RFENV	O	RF envelope output terminal
9	DTRD	I	Data slice part data read signal input terminal(For RAM)	42	BOTTOM	O	Bottom envelope detection filter terminal
				43	PEAK	O	Peak envelope detection filter terminal
10	IDGT	I	Data slice part address part gate signal input terminal(For RAM)	44	AGCG	O	AGC amplifier gain control terminal
				45	AGCO	O	AGC amplifier level control terminal
11	STANDBY	I	Standby mode control terminal	46	TESTSG	I	TEST signal input terminal
12	SEN	I	SEN(Serial data input terminal)	47	RFINP	I	RF signal positive input terminal
13	SCK	I	SCK(Serial data input terminal)	48	RFINN	I	RF signal negative input terminal
14	STDI	I	STDI(Serial data input terminal)	49	VIN5	I	Internal four-partition (CD) RF input 1
15	RSCL	I	Standard electric current terminal	50	VIN6	I	Internal four-partition (CD) RF input 2
16	JLINE	I	Electric current setting terminal of JLine	51	VIN7	-	Internal four-partition (CD) RF input 3
17	TEN	I	Reversing input terminal of tracking error output AMP.	52	VIN8	-	Internal four-partition (CD) RF input 4
18	TEOUT	O	Tracking error signal output terminal	53	VIN9	I	External two-partition (DVD) RF input 2
19	AGCBAL	I	Offset adjusting terminal 1	54	VIN10	I	External two-partition (DVD) RF input 1
20	ASOUT	O	Full adder signal output terminal	55	VCC1	-	Power supply terminal 5V
21	FEN	I	Focus error output amplifier reversing input terminal	56	VREF1	O	VREF1 voltage output terminal
22	FEOUT	O	Focus error signal output terminal	57	VIN1	I	Internal four-partition (DVD) RF input 1
23	AGCOFST	I	Offset adjusting terminal 2				
24	MON	-	Non connect	58	VIN2	I	Internal four-partition (DVD) RF input 2
25	AGCLVL	O	Output amplitude adjustment for DRC				
26	GND2	-	Connect to GND	59	VIN3	I	Internal four-partition (DVD) RF input 3
27	VREF2	O	VREF2 voltage output terminal				
28	VCC2	-	Power supply terminal 5V	60	VIN4	I	Internal four-partition (DVD) RF input 4
29	VHALF	O	VHALF voltage output terminal				
30	DFLTON	O	Reversing output terminal of filter AMP.	61	GND1	-	Connect to GND
31	DFLTOP	O	Filter AMP. output terminal	62	VIN11	I	3 beam sub input terminal 2 (CD)
32	DCFLT	I	Capacity connection terminal for filter output	63	VIN12	I	3 beam sub input terminal 1 (CD)
33	GND3	-	Connect to GND	64	HDTYPE	O	HD Type selection

5.4 BA6664FM-X (IC251) : 3Phase Motor Driver

5.4.1 Pin layout



5.4.2 Block diagram

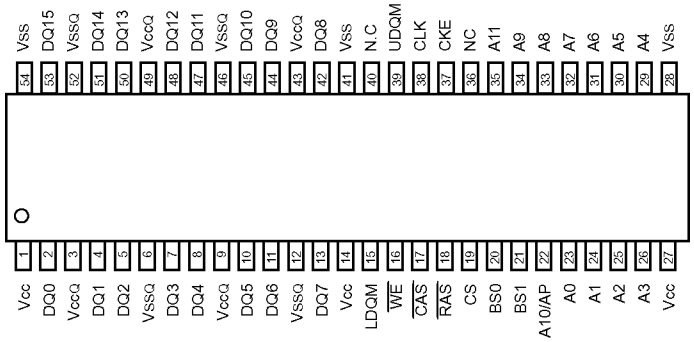


5.4.3 Pin function (BA6664FM-X)

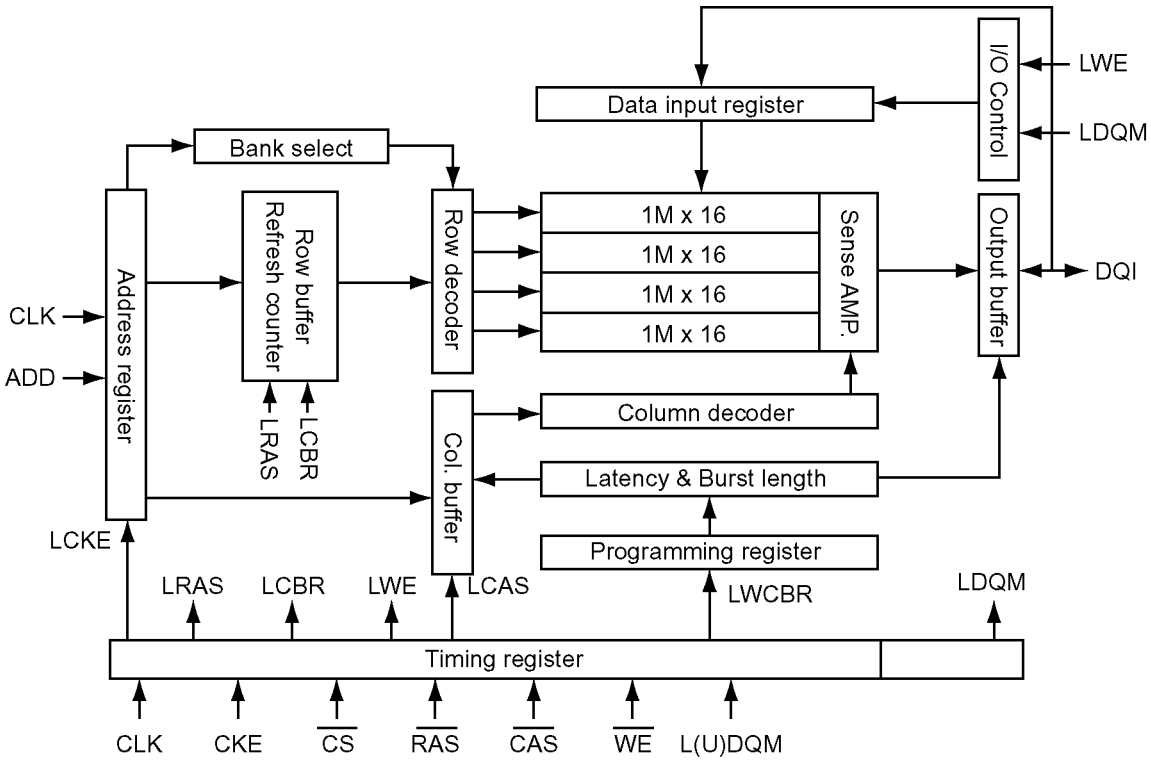
Pin No.	Symbol	I/O	Description
1	NC	-	Non connect
2	A3	O	Output 3 for spindle motor
3	NC	-	Non connect
4	A2	O	Output 2 for spindle motor
5	NC	-	Non connect
6	NC	-	Non connect
7	A1	O	Output 1 for spindle motor
8	GND	-	Connect to ground
9	H1+	I	Positive input for hall input AMP 1
10	H1-	I	Negative input for hall input AMP 1
11	H2+	I	Positive input for hall input AMP 2
12	H2-	I	Negative input for hall input AMP 2
13	H3+	I	Positive input for hall input AMP 3
14	H3-	I	Negative input for hall input AMP 3
15	VH	I	Hall bias terminal
16	BR	-	Non connect
17	CNF	-	Capacitor connection pin for phase compensation
18	SB	I	Short brake terminal
19	FG2	-	Non connect
20	FR	-	Non connect
21	ECR	I	Torque control standard voltage input terminal
22	EC	I	Torque control voltage input terminal
23	PS	O	Start/stop switch (power save terminal)
24	FG	O	FG signal output terminal
25	VCC	-	Power supply for signal division
26	GSW	O	Gain switch
27	VM	-	Power supply for driver division
28	RNF	O	Resistance connection pin for output current sense
29		-	Connect to ground
30		-	Connect to ground

5.5 K4S641632F-TC75 (IC506) :CMOS SDRAM

5.5.1 Pin layout



5.5.2 Block diagram



5.5.3 Pin functions

Symbol	Description
CLK	System clock
$\overline{CS}$	Chip select
CKE	Clock enable
A0~A11	address
BS0,1	Bank address strobe
$\overline{RAS}$	Row address strobe
$\overline{CAS}$	column address strobe
$\overline{WE}$	Write enable
LDQM	Data input/output mask
DQ0~15	Data input/output
Vcc/Vss	Power supply/ground
Vccq/Vssq	Data output power/ground
N.C	Non connect

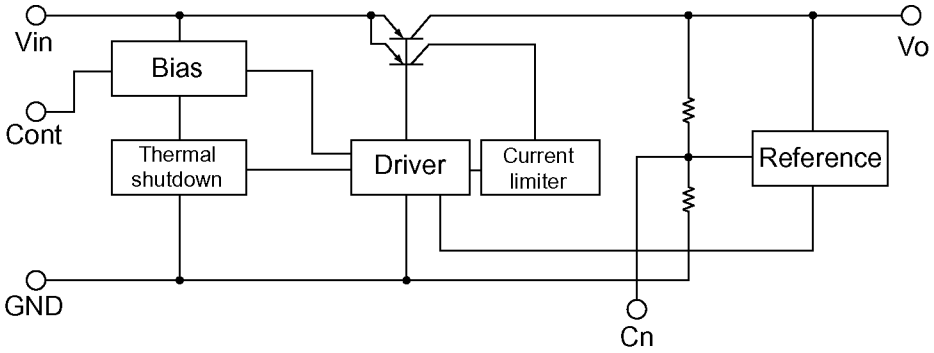
5.6 MN101C57DLR(IC1):System controller

5.6.1 Pin function

Pin No.	Symbol	I/O	Description
1	VLC1	-	LCD Power supply terminal 1 (B5V)
2	VLC2	-	LCD Power supply terminal 2 (B5V divide voltage)
3	VLC3	-	LCD Power supply terminal 3 (B5V divide voltage)
4,5	NC	-	Non connect
6	P.ON	O	Indicator control signal output for STANDBY
7	PRORED	O	Indicator control signal output for PROGRESSIVE (red)
8	PROGRN	O	Indicator control signal output for PROGRESSIVE (green)
9	DVDAUDIO	O	Indicator control signal output for DVD AUDIO
10	N5/NA7	O	Indicator control signal output for PLAY
11	VSS	-	Connect to ground
12,13	OSC1,2	I/O	System clock signal oscillation terminal
14	MMOD	I	Memory enhancing switching
15	XI	-	Connect to ground
16	XO	-	Non connect
17	VDD	-	Power supply terminal (B5V)
18	NRST	I	Reset input
19	VDD	-	Power supply terminal (B5V)
20	TXD	O	Serial transmission data output
21	RXD	I	Serial receive data input
22	SCK	I	Serial communication clock input
23	INT	O	Serial transmission interrupt output
24	CLP	O	RGB/CMP switching signal output
25	AVCO	O	AV Compulink output terminal
26	AVCI	I	AV Compulink input terminal
27	BL	O	LCD Back lamp drive signal output
28	TCLOSE	O	Tray open signal output
29	TOPEN	O	Tray close signal output
30	LMMUTE	O	4 ch driver MUTE signal output L:MUTE
31	DISCSET	I	Disc catch status input H:SET
32	DISCSTP	I	Disc stop status input H:STOP
33	SWOPEN	I	Tray open status input H:OPEN L:CLOSE
34	SWUPDN	I	Tray close status input L:OPEN H:CLOSE
35	REMO	I	Remote control signal input
36	RGB	I	RGB/ S video switch signal input
37	CS	I	Serial receive chip select input
38	POWERSW	I	Power button input
39	VDD	-	Power supply terminal (B5V)
40	VREF+	-	Power supply terminal (B5V)
41	KEYI0	I	Key control signal input 0
42	KEYI1	I	Key control signal input 1
43	NTB	I	NTSC/PAL switch signal input
44	PROINT	I	INT/PROG switch signal input
45	MUTE	O	Audio muting output
46	INT/PROG	O	INT/PROG switch signal output
47	EMODEL	O	Indicator control signal output for PAUSE
48	CPURST	O	LSI Reset output
49	VREF-	-	Connect to ground
50~96	SEG46~0	O	LCD Segment control signal output 46~0
97~100	COM0~3	O	LCD Common signal output 0~3

5.7 MM1565AF-X (IC951) : 500mA Regulator

5.7.1 Block diagram



5.7.2 Pin function

Pin No.	Symbol	Function
1	Vout	Output terminal
2	NC	Non connect
3	GND	Connect to ground
4	Cn	Noise decrease terminal
5	Cout	Control terminal
6	Sub	Substrate (Connect to ground)
7	Vin	Input terminal

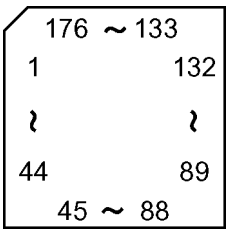
5.8 MN102L62GLF3 (IC401) : Unit CPU

5.8.1 Pin function

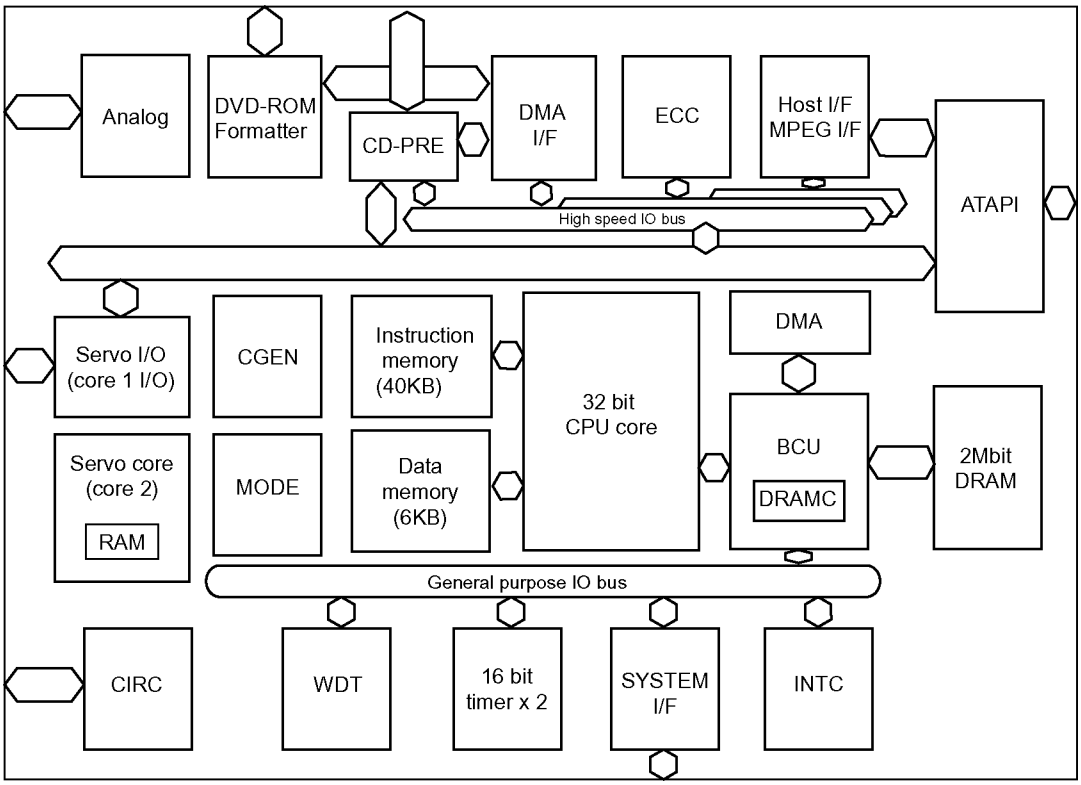
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	WAIT	I	Micon wait signal input	51	SWUPDN	-	Non connect
2	RE	O	Read enable	52	MECHA_H/V	-	Connect to ground
3	SPMUTE	O	Spindle muting output to IC251	53	DISCSET	I	Mechanism state signal input
4	WEN	O	Write enable	54	VDD	-	Power supply
5	LMMUTE	-	Non connect	55	FEPEN	O	Serial enable signal for FEP
6	CS1	O	Chip select for ODC	56	SLEEP	O	Standby signal for FEP
7	CS2	-	Non connect	57	BUSY	-	Non connect
8	HDTYPE	O	HD Type selection	58	REQ	O	Communication request
9	DRVMUTE	O	Driver mute	59	-	-	Connect to TP405
10	SBRK	O	Short brake terminal	60	-	-	Non connect
11	LSIRST	O	LSI reset	61	VSS	-	Ground
12	WORD	I	Bus selection input	62	EPCS	O	EEPROM chip select
13	A0	O	Address bus 0 for CPU	63	EPSK	O	EEPROM clock
14	A1	O	Address bus 1 for CPU	64	EPDI	I	EEPROM data input
15	A2	O	Address bus 2 for CPU	65	EPDO	O	EEPROM data output
16	A3	O	Address bus 3 for CPU	66	VDD	-	Power supply
17	VDD	-	Power supply	67	SCLKO	O	Communication clock
18	SYSCLK	-	Non connect	68	S2UDT	I	Communication input data
19	VSS	-	Ground	69	U2SDT	O	Communication output data
20	XI	-	Not use (Connect to vss)	70	CPSCK	O	Clock for ADSC serial
21	XO	-	Non connect	71	P74/SBI1	I	Not use (Pull down)
22	VDD	-	Power supply	72	SDOUT	O	ADSC serial data output
23	OSCI	I	Clock signal input(13.5MHz)	73	-	I	Not use (Pull up)
24	OSCO	O	Clock signal output(13.5MHz)	74	-	I	Not use (Pull up)
25	MODE	I	CPU Mode selection input	75	NMI	I	NMI Terminal
26	A4	O	Address bus 4 for CPU	76	ADSCIRQ	I	Interrupt input of ADSC
27	A5	O	Address bus 5 for CPU	77	ODCIRQ	I	Interrupt input of ODC
28	A6	O	Address bus 6 for CPU	78	DECIRQ	I	Interrupt input of ZIVA
29	A7	O	Address bus 7 for CPU	79	CSSIRQ	I	Not use (Pull down)
30	A8	O	Address bus 8 for CPU	80	ODCIRQ2	I	Interruption of system control
31	A9	O	Address bus 9 for CPU	81	ADSEP	I	Address data selection input
32	A10	O	Address bus 10 for CPU	82	RST	I	Reset input
33	A11	O	Address bus 11 for CPU	83	VDD	-	Power supply
34	VDD	-	Power supply	84	TEST1	I	Test signal 1 input
35	A12	O	Address bus 12 for CPU	85	TEST2	I	Test signal 2 input
36	A13	O	Address bus 13 for CPU	86	TEST3	I	Test signal 3 input
37	A14	O	Address bus 14 for CPU	87	TEST4	I	Test signal 4 input
38	A15	O	Address bus 15 for CPU	88	TEST5	I	Test signal 5 input
39	A16	O	Address bus 16 for CPU	89	TEST6	I	Test signal 6 input
40	A17	O	Address bus 17 for CPU	90	TEST7	I	Test signal 7 input
41	A18	-	Non connect	91	TEST8	I	Test signal 8 input
42	A19	-	Non connect	92	VSS	-	Ground
43	VSS	-	Ground	93	D0	I/O	Data bus 0 of CPU
44	A20	-	Non connect	94	D1	I/O	Data bus 1 of CPU
45	DISCSTP	O	Mechanism state signal output	95	D2	I/O	Data bus 2 of CPU
46	HUGUP	O	Connect to pick-up	96	D3	I/O	Data bus 3 of CPU
47	TCLOSE	-	Non connect	97	D4	I/O	Data bus 4 of CPU
48	WOBBLEF1L			98	D5	I/O	Data bus 5 of CPU
49	HFMON	O	HFM Control output to Q103	99	D6	I/O	Data bus 6 of CPU
50	TRVSW	I	Detection switch of traverse inside	100	D7	I/O	Data bus 7 of CPU

5.9 MN103S26EGA (IC301) : Super optical disc controller

5.9.1 Terminal layout



5.9.2 Block diagram



5.9.3 Pin function (1/4)

Pin No.	Symbol	I/O	Description
1,2	NINT0,1	O	Interruption of system control 0,1
3	VDD3	-	Power supply terminal for I/O(3.3V)
4	VSS	-	Connect to ground
5	NINT2	O	Interruption of system control 2
6	WAITDOC	O	Wait control of system control
7	NMPST	O	Reset of system control (Non connect)
8	DASPST	I	Setting of initial value of DASP signal
9~17	CPUADR17~9	I	System control address
18	VDD18	-	Power supply terminal for I/O (1.8V)
19	VSS	-	Connect to ground
20	DRAMVDD18	-	Power supply terminal for DRAM (1.8V)
21	DRAMVSS	-	Connect to ground for DRAM
22~30	CPUADR8~0	I	System control address
31	VDD3	-	Power supply terminal for I/O (3.3V)
32	VSS	-	Connect to ground
33	DRAMVDD3	-	Power supply terminal for DRAM (3.3V)
34	NCS	I	System control chip select
35	NWR	I	Writing system control

5.9.4 Pin function (MN103S28EGA : 2/4)

Pin No.	Symbol	I/O	Description
36	NRD	I	Read signal input from system controller
37~44	CPUDT7~0	I/O	System control data
45	CLKOUT1	-	Non connect
46	MMOD	I	Test mode switch signal
47	NRST	I	System reset
48	MSTPOL	I	Master terminal polarity switch input
49	SCLOCK	-	Non connect
50	SDATA	-	Non connect
51	OFTR	I	Off track signal input
52	BDO	I	Drop out signal input
53~56	PWM1~4	-	Non connect
57	VDD3	-	Power supply terminal for I/O (3.3V)
58	DRAMVDD18	-	Power supply terminal for DRAM (1.8V)
59	DRAMVSS	-	Connect to ground for DRAM
60	VSS	-	Connect to ground
61~64	PWM5~8	-	Non connect
65	TBAL	O	Tracking balance adjustment output
66	FBAL	O	Focus balance adjustment output
67	TRSDRV	O	Traverse drive output
68	SPDRV	O	Spindle drive output
69	FG	I	Motor FG input
70	TILTP	-	Non connect
71	TILT	-	Non connect
72	TILTN	-	Non connect
73	TX	O	Digital output signal
74	DTRD	-	Non connect
75	IDGT	-	Non connect
76	VDD18	-	Power supply terminal for I/O (1.8V)
77	VSS	-	Connect to ground
78	VDD3	-	Power supply terminal for I/O (3.3V)
79	OSCI1	I	Oscillation input 16.9MHz
80	OSCO1	O	Oscillation output 16.9MHz
81	VSS	-	Connect to ground
82	TSTSG	O	Calibration signal
83	VFOSHORT	O	VFO short output
84	JLINE	O	J-line setting output
85	AVSSD	-	Connect to ground for analog circuit
86	ROUT	-	Non connect
87	LOUT	-	Non connect
88	AVDD	-	Power supply terminal for analog circuit (3.3V)
89	VCOF	I	JFVCO control voltage
90	TRCRS	I	Input signal for track cross formation
91	CMPIN	-	Non connect
92	LPFOUT	-	Non connect
93	LPFIN	I	Pull-up to VHALF
94	AVSS	-	Connect to ground for analog circuit
95	HPFOUT	-	Non connect
96	FPFIN	I	HPF input
97	CSLFLT	I	Pull-up to VHALF
98	RFDIF	-	Non connect
99	AVDDC	-	Power supply terminal for analog circuit (3.3V)
100	PLFLT2	I	Connect to capacitor 2 for PLL

5.9.5 Pin function (MN103S28EGA : 3/4)

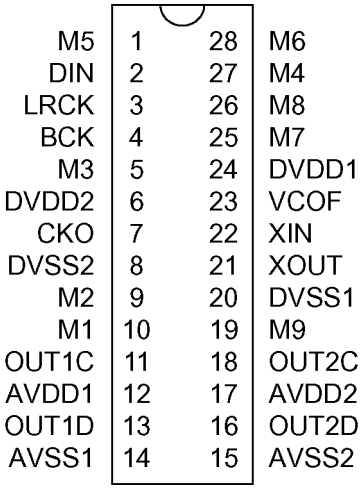
Pin No.	Symbol	I/O	Description
101	PLFLT1	I	Connect to capacitor 1 for PLL
102	AVSS	-	Connect to ground for analog circuit
103	RVI	I	Connect to resistor for VREF reference current source
104	VREFH	I	Reference voltage input (2.2V)
105	PLPG	-	Non connect
106	VHALF	I	Reference voltage input (1.65V)
107,108	DSLF2,1	I	Connect to capacitor 2,1 for DSL
109	AVDD	-	Power supply terminal for analog circuit (3.3V)
110	NARF	I	Equivalence RF-
111	ARF	I	Equivalence RF+
112	JITOUT	O	Output for jitter signal monitor
113	AVSS	-	Connect to ground for analog circuit
114	DAC0	O	Tracking drive output
115	DAC1	O	Focus drive output
116	AVDD	-	Power supply terminal for analog circuit (3.3V)
117	AD0	I	Focus error input
118	AD1	I	Phase difference/3 beams tracking error
119	AD2	I	AS : Full adder signal
120	AD3	I	RF envelope input
121	AD4	I	DVD laser current control terminal
122	AD5	I	
123	AD6	I	CD laser current control terminal
124	TECAPA	-	Non connect
125	VDD3	-	Power supply terminal for I/O (3.3V)
126	VSS	-	Connect to ground
127	MONI0	-	Connect to TP306
128	MONI1	-	Connect to TP307
129	MONI2	-	Connect to TP308
130	MONI3	-	Connect to TP309
131	NEJECT	I/O	Eject detection
132	NTRYCTL	I/O	Tray close detection
133	NDASP	I/O	ATAPI drive active / slave connect I/O
134	NCS3FX	I	ATAPI host chip select
135	NCS1FX	I	ATAPI host chip select
136,137	DA2	I/O	ATAPI host address 2,0
138	NPDIAG	I/O	ATAPI slave master diagnosis input
139	DA1	I/O	ATAPI host address 1
140	NIOCS16	-	Non connect
141	INTRQ	O	ATAPI host interruption output
142	NDMACK	I	ATAPI host DMA characteristic
143	VDD3	-	Power supply terminal I/O (3.3V)
144	VSS	-	Connect to ground
145	IORDY	-	Non connect
146	NIORD	I/O	ATAPI host read
147	NIOWR	-	Non connect
148	DMARQ	-	Non connect
149	HDD15	I/O	ATAPI host data 15
150	HDD0	I/O	ATAPI host data 0
151	HDD14	I/O	ATAPI host data 14
152	VDD18	-	Power supply terminal for I/O (1.8V)
153	PO	I	Connect to ground
154	UATASEL	I	Connect to ground

5.9.6 Pin function (MN103S28EGA : 4/4)

Pin No.	Symbol	I/O	Description
155	VSS	-	Connect to ground
156	VDD3	-	Power supply terminal for I/O (3.3V)
157	HDD1	I/O	ATAPI host data 1
158	HDD13	I/O	ATAPI host data 13
159	HDD2	I/O	ATAPI host data 2
160	HDD12	I/O	ATAPI host data 12
161	HDD3	I/O	ATAPI host data 3
162	VDD3	-	Power supply terminal for I/O (3.3V)
163	VSS	-	Connect to ground
164	HDD11	I/O	ATAPI host data 11
165	HDD4	I/O	ATAPI host data 4
166	HDD10	I/O	ATAPI host data 10
167	HDD5	I/O	ATAPI host data 5
168	HDD9	I/O	ATAPI host data 9
169	VDD3	-	Power supply terminal for I/O (3.3V)
170	VSS	-	Connect to ground
171~173	HDD6~8	I/O	ATAPI host data 6~8
174	VDDH	-	Reference power supply for ATAPI (5.0V)
175	NRESET	I	ATAPI host reset input
176	MASTER	I	ATAPI master / slave select

5.10 MN35505-X (IC703) : DAC

5.10.1 Terminal layout

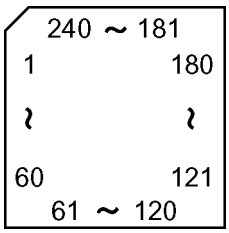


5.10.2 Pin function

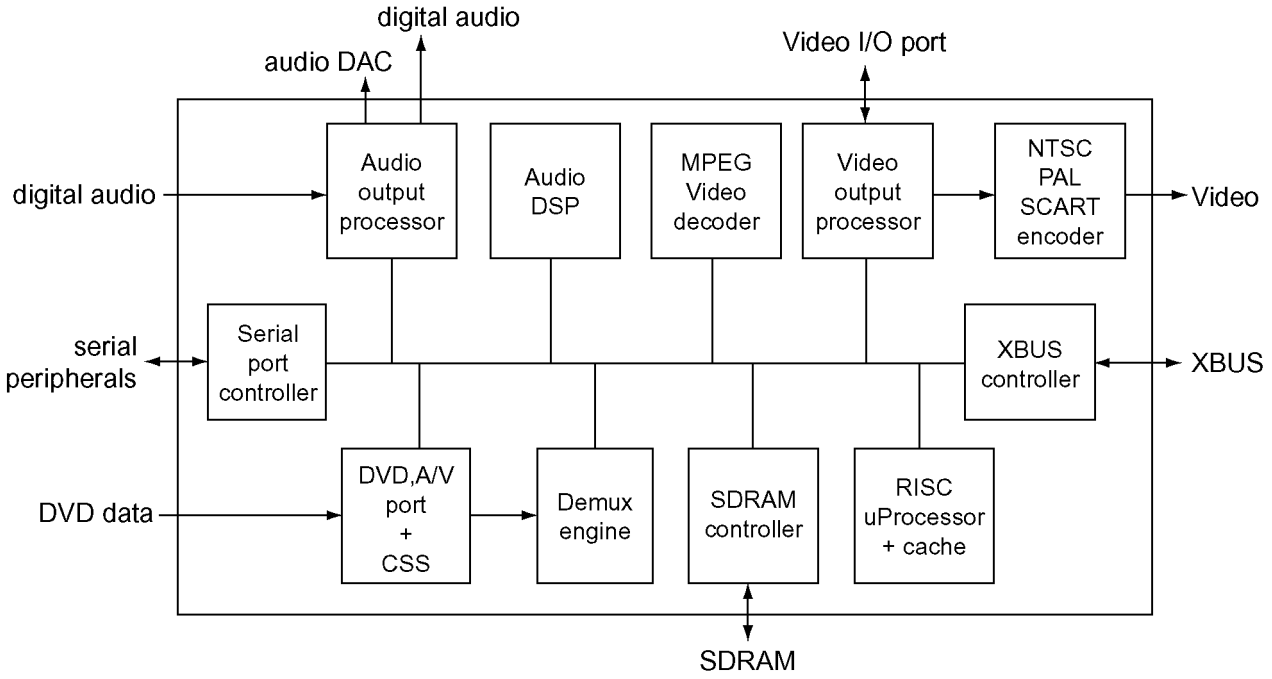
Pin No.	Symbol	I/O	Description
1	M5	I	Control signal for DAC
2	DIN	I	Digital data input
3	LRCK	I	L and R clock for DAC
4	BCK	I	Bit clock for DAC
5	M3	I	Control signal for DAC
6	DVDD2	-	Power supply terminal
7	CKO	-	Non connect
8	DVSS2	-	Connect to ground
9	M2	I	Control signal for DAC
10	M1	I	Control signal for DAC
11	OUT1C	O	Analog output 1
12	AVDD1	-	Power supply terminal
13	OUT1D	O	Analog output 1
14	AVSS1	-	Connect to ground
15	AVSS2	-	Connect to ground
16	OUT2D	O	Analog output 2
17	AVDD2	-	Power supply terminal
18	OUT2C	O	Analog output 2
19	M9	I	Control signal for DAC
20	DVSS1	-	Connect to ground
21	XOUT	-	Non connect
22	XIN	-	Non connect
23	VCOF	I	VCO Frequency
24	DVDD1	-	Power supply D+5V
25	M7	-	Connect to ground
26	M8	-	Connect to ground
27	M4	I	Control signal for DAC
28	M6	I	Clock for control signal

5.11 NDV8601VWA-BE(IC501):AV Decoder

5.11.1 Pin layout



5.11.2 Block diagram



5.11.3 Pin function (1/4)

Pin No.	Symbol		Description
1	VDDio	-	Power supply terminal 3.3V
2,3	MD10,11	I/O	SDRAM Data bus terminal
4	VDD	-	Power supply terminal 1.8V
5	MD12	I/O	SDRAM Data bus terminal
6	VSSio	-	Connect to ground
7~9	MD13~15	I/O	SDRAM Data bus terminal
10	VDDio	-	Power supply terminal 3.3V
11	DQM1	O	SDRAM Data byte enable
12,13	MA9,8	O	SDRAM Address bus terminal
14	VSSio	-	Connect to ground
15,16	MA7,6	O	SDRAM Address bus terminal
17	VSS	-	Connect to ground
18	MA5	O	SDRAM Address bus terminal
19	VDDio	-	Power supply terminal 3.3V
20,21	MA4,3	O	SDRAM Address bus terminal
22	MCLK	O	SDRAM Clock output
23	VSSio	-	Connect to ground
24	CKE	O	SDRAM Clock enable output
25,26	MA2,1	O	SDRAM Address bus terminal
27	VDDio	-	Power supply terminal 3.3V
28	MA0	O	SDRAM Address bus terminal
29	MA10	O	SDRAM Address bus terminal

5.11.4 Pin function (NDV8601VWA-BE 2/4)

Pin No.	Symbol	I/O	Description
30	MA11	-	Non connect
31	VSSio	-	Connect to ground
32,33	MA12,13	O	SDRAM Address bus, reserved for terminal compatibility with 64Mb SDRAM
34	VDD	-	Power supply terminal 1.8V
35	CS0	O	SDRAM Primary bank chip select
36	VDDio	-	Power supply terminal 3.3V
37	RAS	O	SDRAM Command bit
38	CAS	O	SDRAM Command bit
39	WE	O	SDRAM Command bit
40	VSSio	-	Connect to ground
41	DQM0	O	SDRAM Data byte enable
42	DQM2	O	SDRAM Data byte enable
43	MD16	I/O	SDRAM Data bus terminal
44	VDDio	-	Power supply terminal 3.3V
45,46	MD17,18	I/O	SDRAM Data bus terminal
47	VSS	-	Connect to ground
48	MD19	I/O	SDRAM Data bus terminal
49	VSSio	-	Connect to ground
50~52	MD20~22	I/O	SDRAM Data bus terminal
53	VDDio	-	Power supply terminal 3.3V
54~56	MD23~25	I/O	SDRAM Data bus terminal
57	VSSio	-	Connect to ground
58~61	MD26~29	I/O	SDRAM Data bus terminal
62	VDDio	-	Power supply terminal 3.3V
63,64	MD30,31	I/O	SDRAM Data bus terminal
65	DQM3	O	SDRAM Data byte enable
66	CS1	O	SDRAM Extension bank chip select
67	VSSD	-	Connect to ground
68	SPDIF	O	S/PDIF Digital audio output terminal
69	VSSio	-	Connect to ground
70	AIN	I	Digital audio input for digital micro; can be used as GPIO
71	AOUT3	O	Serial audio output data to audio DAC for left and right channels for down-mix
72	AOUT2	O	Serial audio output data to audio DAC for surround left and right channels
73	AOUT1	O	Serial audio output data to audio DAC for center and LFE channels
74	AOUT0	O	Serial audio output data to audio DAC for left and right channels
75	VDDio	-	Power supply terminal 3.3V
76	PCMCLK	O	Audio DAC PCM sampling clock frequency, common clock for DACs and ADC
77	VDD	-	Power supply terminal 1.8V
78	ACLK	O	Audio interface serial data clock, common clock for DACs and AD converter
79	LRCLK	O	Left / right channel clock, common clock for DACs and ADC
80	SRST	O	Active low RESET signal for peripheral reset
81	RSTP	I	RESET_Power : from system, used to reset frequency synthesizer and rest of chip
82	VSSio	-	Connect to ground
83	RXD1	I	UART1 Serial data input from external serial device, used for IR receiver
84	SSPIN1	I/O	SSP1 Data in or 16X clock for USART function in UART1
85	VSS	-	Connect to ground
86	SSPOUT1	I/O	SSP1 Data out or UART1 data-terminal-ready signal
87	SSPCLK1	I/O	SSP1 Clock or UART1 clear-to -send signal
88	SSPCLK0	I/O	SSP0 Clock or request-to-send function in UART1
89	VDD	-	Power supply terminal 1.8V
90	SSPIN0	I/O	SSP0 Data in or 16X clock for USART function in UART0

5.11.5 Pin function (NDV8601VWA-BE 3/4)

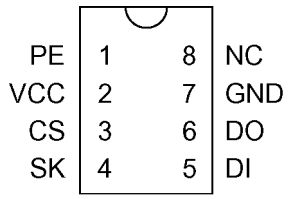
Pin No.	Symbol	I/O	Description
91	VDDio	-	Power supply terminal 3.3V
92	SSPOUT0	I/O	SSP0 Data out or UART0 data-terminal-ready signal
93	TXD0	I/O	UART0 Serial data output to an external serial device
94	RXD0	I	UART0 Serial data input from external serial device
95	CTS0	I/O	UART0 Clear-to-send signal
96	RTS0	I/O	UART0 Request-to-send signal
97	VSSio	-	Connect to ground
98	CXI	I	Crystal input terminal for on-chip oscillator or system input clock
99	CXO	O	Crystal output terminal for on-chip oscillator
100	OSCVSS	-	Connect to ground for oscillator
101	OSCVDD	-	Power supply terminal for oscillator 1.8V
102	MVCKVDD	-	Power supply terminal for main and video clock PLL 3.3V
103	SCEN	I	Scan chain test enable
104	MVCKVSS	-	Connect to ground for main and video clock PLL
105	ACLKVSS	-	Connect to ground for audio clock PLL
106	SCMD	I	Scan chain test mode
107	ACLKVDD	-	Power supply terminal for audio clock PLL 3.3V
108	VDDDAK	-	Power supply terminal for DAC digital 1.8V
109	VSSDAC	-	Connect to ground for DAC digital
110	Cr/R	O	Video signal output (Cr output : composite/component Red output)
111	IOM	O	Cascaded DAC differential output used to dump current into external resistor for power
112	C/Cb/B	O	Video signal output (Chrominance output for NTSC/PAL S-Video
113	VAA3	-	Cb output for component Blue output)
114	Y/G	O	Power supply terminal for DAC analog 3.3V
115	VSSA	-	Video signal output (Luminance for S-Video and component Green output)
116	VREF	-	Connect to ground for DAC analog
117	VAA	-	Non connect
118	CVBS/C	O	Video signal output (Composite video Chrominance output for S-Video)
119	RSET	O	Current setting resistor of output DACs
120	COMP	O	Compensation capacitor connection
121	VSS	-	Connect to ground
122	VCLK	-	Non connect
123	VSYNC	-	Non connect
124	HSYNC	-	Non connect
125	VDDio	-	Power supply terminal 3.3V
126~131	VI07~02	-	Non connect
132	VSSio	-	Connect to ground
133,134	VI01,00	-	Non connect
135	VDD	-	Power supply terminal 1.8V
136~139	AD31~28	I/O	Multiplexed address / data bus terminal
140	VDDio	-	Power supply terminal
141~144	AD27~24	I/O	Multiplexed address / data bus terminal
145	PWE3	I/O	Byte write enable for FLASH,EEPROM,SRAM or peripherals terminal
146	AD23	I/O	Multiplexed address / data bus terminal
147	VSSio	-	Connect to ground
148~153	AD22~17	I/O	Multiplexed address / data bus terminal
154	VDDio	-	Power supply terminal 3.3V
155	AD16	I/O	Multiplexed address / data bus terminal
156	PWE2	I/O	Byte write enable for FLASH,EEPROM,SRAM or peripherals terminal
157,158	AD15,14	I/O	Multiplexed address / data bus terminal
159	VDD	-	Power supply terminal 1.8V

5.11.6 Pin function (NDV8601VWA-BE 4/4)

Pin No.	Symbol	I/O	Description
160	SCLK	O	External bus clock used for programmable host peripherals
161	ACK	I/O	Programmable WAIT/ACK/RDY control
162	VSSio	-	Connect to ground
163~168	AD13~8	I/O	Multiplexed address / data bus terminal
169	VDDio	-	Power supply terminal 3.3V
170	PWE1	I/O	Byte write enable for FLASH,EEPROM,SRAM or peripherals terminal
171	VSS	-	Connect to ground
172~176	AD7~3	I/O	Multiplexed address / data bus terminal
177	VSSio	-	Connect to ground
178~180	AD2~0	I/O	Multiplexed address / data bus terminal
181	VDDio	-	Power supply terminal 3.3V
182	PWE0	I/O	Byte write enable for FLASH,EEPROM,SRAM or peripherals terminal
183	ALE	I/O	Address latch enable
184~187	LA0~3	I/O	Latched address 0~3
188	VSSio	-	Connect to ground
189	RD	I/O	Read terminal
190	LHLDA	O	Bus hold acknowledge in slave mode
191	LHLD	I	Bus hold request from external master in slave mode
192	VDD	-	Power supply terminal 1.8V
193	PCS0	O	Peripheral chip select 0, generally used for enabling the program store ROM/FLASH
194,195	XI01,02	I/O	Programmable general purpose external input/output
196	VDDio	-	Power supply terminal 3.3V
197~200	XI03~06	I/O	Programmable general purpose external input/output
201	VSS	-	Connect to ground
202,203	XI07,08	I/O	Programmable general purpose external input/output
204	VSSio	-	Connect to ground
205	XI09	I/O	Programmable general purpose external input/output
206~209	XID10~13	I/O	Programmable general purpose external input/output
210	VDDio	-	Power supply terminal 3.3V
211	XID14	I/O	Programmable general purpose external input/output
212	VDD	-	Power supply terminal 1.8V
213	DSYNC	I	DVD Parallel mode sector sync
214	DREQ	O	DVD Parallel mode data request
215	DCLK	I	Data sampling clock
216	DSTB	I	Parallel mode data valid, serial mode left/right clock
217	DVD0	I	DVD Drive parallel data port
218	VSSio	-	Connect to ground
219~223	DVD1~5	I	DVD Drive parallel data port
224	VDDio	-	Power supply terminal 3.3V
225,226	DVD6,7	I	DVD Drive parallel data port
227	MD0	I/O	SDRAM Data bus terminal
228	VSSio	-	Connect to ground
229	MD1	I/O	SDRAM Data bus terminal
230	VSS	-	Connect to ground
231,232	MD2,3	I/O	SDRAM Data bus terminal
233	VDDio	-	Power supply terminal 3.3V
234~236	MD4~6	I/O	SDRAM Data bus terminal
237	VSSio	-	Connect to ground
238~240	MD7~9	I/O	SDRAM Data bus terminal

5.12 S-93C66AFJ-X (IC451,IC510) : EEPROM

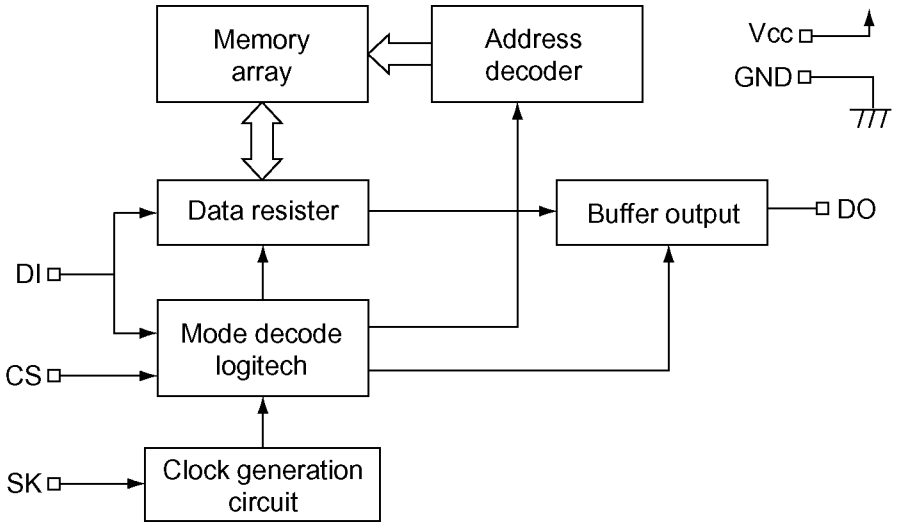
5.12.1 Pin layout



5.12.2 Pin function

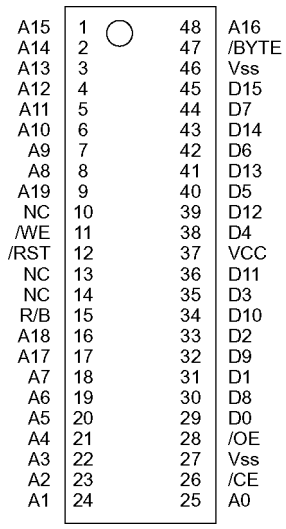
Pin No.	Symbol	I/O	Description
1	PE	-	Non connect
2	VCC	-	Power supply terminal
3	CS	I	Chip select input
4	SK	I	Serial clock input
5	DI	I	Serial data input
6	DO	O	Serial data output
7	GND	-	Connect to ground
8	NC	-	Non connect

5.12.3 Block diagram

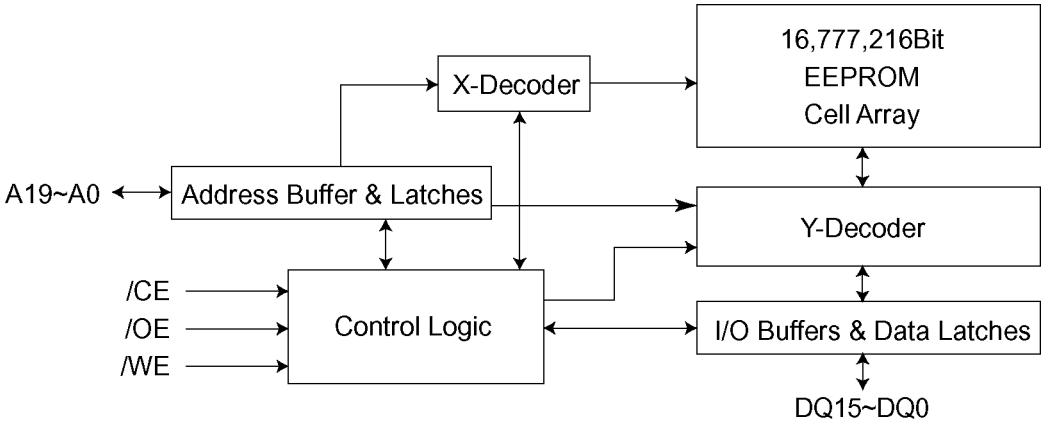


5.13 SST39VF160-7CEK (IC509) : 16M EEPROM

5.13.1 Pin layout



5.13.2 Block diagram

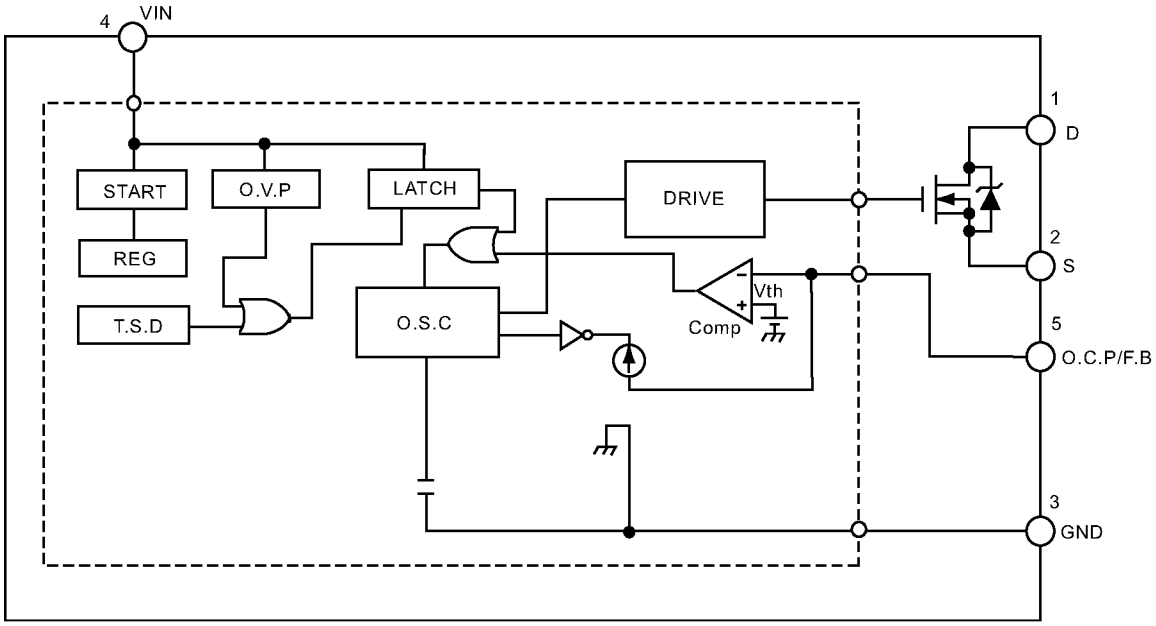


5.13.3 Pin function

Symbol	Pin name	Function
A19~A0	Address Inputs	To provide memory addresses. During sector erase A19~A11 address lines will select the sector. During block erase A19~A15 address lines will select the block.
DQ15~DQ0	Data Input/Output	To output data during read cycles and receive input data during write cycles. Data is internally latched during a write cycle. The outputs are in tri-state when /OE or /CE is high.
/CE	Chip Enable	To activate the device when /CE is low.
/OE	Output Enable	To gate the data output buffers.
/WE	Write Enable	To control the write operations.
VCC	Power Supply	To provide 3-volt supply (2.7V-3.6V).
Vss	Ground	
NC	No Connection	

5.14 STR-G6551-F8 (IC901) : Switch regulator

5.14.1 Block diagram

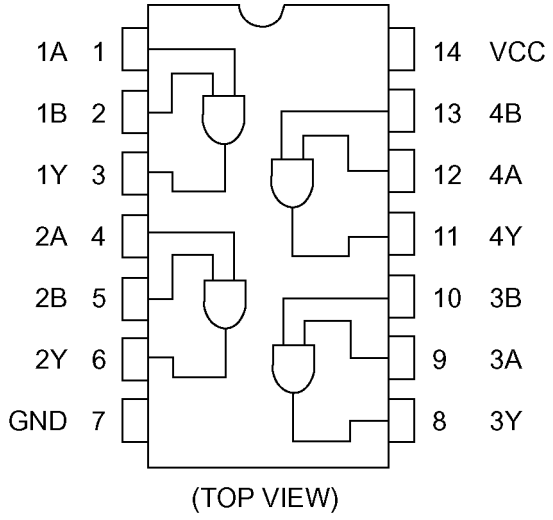


5.14.2 Pin function

Pin No.	Symbol	Description	Function
1	D	Drain terminal	MOS FET drain
2	S	Source terminal	MOS FET source
3	GND	Ground terminal	Ground
4	Vin	Power supply terminal	Input of power supply for control circuit
5	O.C.P/F.B	Over current / Feedback terminal	Input of over current detection signal and constant voltage control signal

5.15 TC74HC08AF-X(IC704) : 2-input and gate

5.15.1 Pin layout



(TOP VIEW)

5.15.2 Truth table

A	B	Y
L	L	L
L	H	L
H	L	L
H	H	H

SECTION 6
Glossary of term and abbreviations(for AV Decoder section)

3D	3-dimension
A/V	1)audio/video 2)audio/visual
ac	alternating current
ACLK	audio serial-data (bit) clock
AD	multiplexed address / data bus
ADC	analog-to-digital converter
AIN	digital audio input
ALE	address latch enable
ANSI/SMPTE	American National Standards Institute / Society of Motion Pictures and Television Engineers
AOP	Audio Output Processor
AXCLK	test-mode audio-PLL clock output
baud	unit of signaling speed equal to one code element per second
Cb	blue color difference component (in accordance with the CCIR 601 specifications)
CCIR	Consultative Committee on International Radio
CD	compact disc
CD-DA	compact disc-digital audio
CMOS	Complementary Metal Oxide Semiconductor
CPU	Central Processing Unit
Cr	red color difference component (in accordance with the CCIR 601 specifications)
CSS	Content Scrambling System
CTS	Clear To Send
CVBS	Composite Video Blank and Sync
DAC	Digital-to-Analog Converter
dc	direct current
DEMUX	DEMUX Engine
DSP	Digital Signal Processing
DTS	Digital Theater System
DVD	Digital Versatile Disc
EAV	End Active Video
EAV/SAV	End Active Video / Start Active Video
EEI	Enable Error Interrupt
EEPROM	Electrically Erasable Programmable Read-Only Memory
FS	FIFO Status
GPIO	General Purpose Input/Output
HDCD	High Definition Compatible Digital
HDTV	High-Definition television
HSYNC	Horizontal sync
I/O	Input/Output
IEC	International Electrotechnical Commission
IOM	Current (I) Output Minus (complementary shared current path to Video DAC current paths)
IR	infrared
ITU	International Telecommunications Union
LA	Latched Address Bus
LCLK	oscillator clock (derived from internal crystal oscillator)
Lfe	Low-frequency effect
LRCLK	Left/Right clock
LSB	Least Significant Bit
Mb	Megabit
MB	Megabyte

MCLK	primary or master clock
MHz	Megahertz
MIPS	Million Instructions Per Second
MmCPU	Mediamatics CPU (synonym for internal RISC CPU)
MP3	Moving Picture Experts Group Layer-3 Audio (audio file format / extension)
MPEG1 audio	A digital audio format mainly used in video CDs. It is based on the moving picture expert group (MPEG1) format, a data compression technology.
MPEG2 audio	A digital audio format mainly used in Europe and Australia. It provides high quality, multi-channel audio of up to eight channels in the same was as Dolby Digital and DTS. It is based on the MPEG2 format, a data compression technology more improved than MPEG1
NOP	No Operation
NTSC	1)National Television System Committee 2)Worldwide video standard in North America and Japan
NTSC-M	Version of NTSC used in certain parts of the world (Brazil)
OSD	On-screen display
PAL	Phase alteration by line
PCM	Pulse Code Modulation
PCMCLK	PCM audio-data over-sampling clock
PCS	1)Picture Control and Size 2)Perpheral Chip Select
PLL	Phase Lock Loop
PQFP	Plastic Quad Flat Pack (Package)
PWM	Pulse Width Modulator
r/w	Read/Write access
RAM	Random Access Memory
RGB	Red-Green-Blue (color model)
RISC	Reduced Instruction Set Computer
ROM	Read-Only Memory
RXD	Receive signal
RW	Readable / Write able
SAV	Start Active Video
SCART	Syndicat des Constructeurs d'Appareils Radiorecepteurs et Televiseurs (connector used in Europe to connect many kinds of audiovisual equipment)
SCLK	Secondary or slave clock
SDRAM	Synchronous Dynamic Random Access Memory
S/PDIF	Sony / Philips Digital Interface
S/PDIFCLK	clock associated with the S/PDIF output
SRAM	Static Random Access Memory
SSP	Synchronous Serial Port
TXD	transmit signal
UART	Universal Asynchronous Receiver-transmitter
USART	Universal Synchronous / Asynchronous Receiver / Transmitter
VGA	Video Graphics Array
VIO	Video Input / Output
VREF	Voltage REFerence
Vref	Vertical reference
VSSA	quiet analog ground
VSYNC	Vertical sync
XBUS	External peripheral bus
XIO	External Input / Output
Y	Luminance component (in accordance with the CCIR 601 specifications)
YCbCr	Luminance component, blue color difference component, red color difference component (in accordance with the CCIR 601 specifications)

JVC

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No.A0033

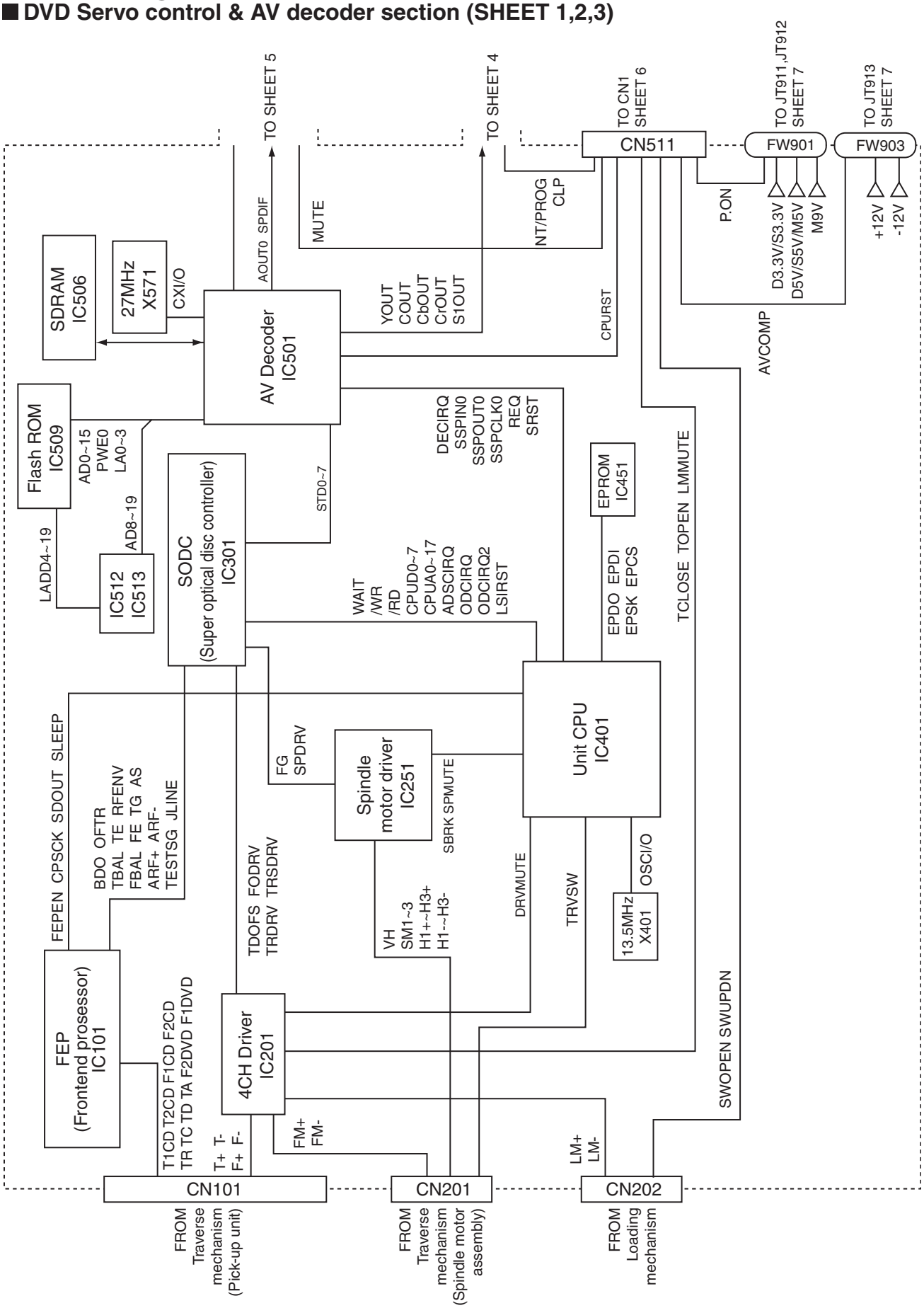
200207

Safety precaution

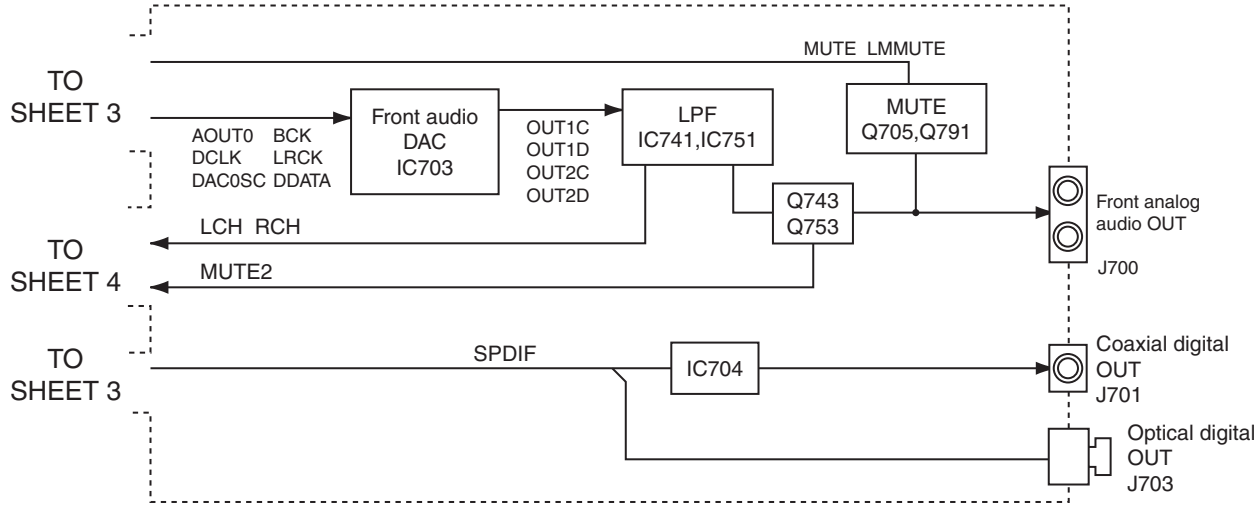
In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▬) and ICP (●) or identified by the "⚠" mark nearby are critical for safety.
When replacing them, be sure to use the parts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

Block diagrams

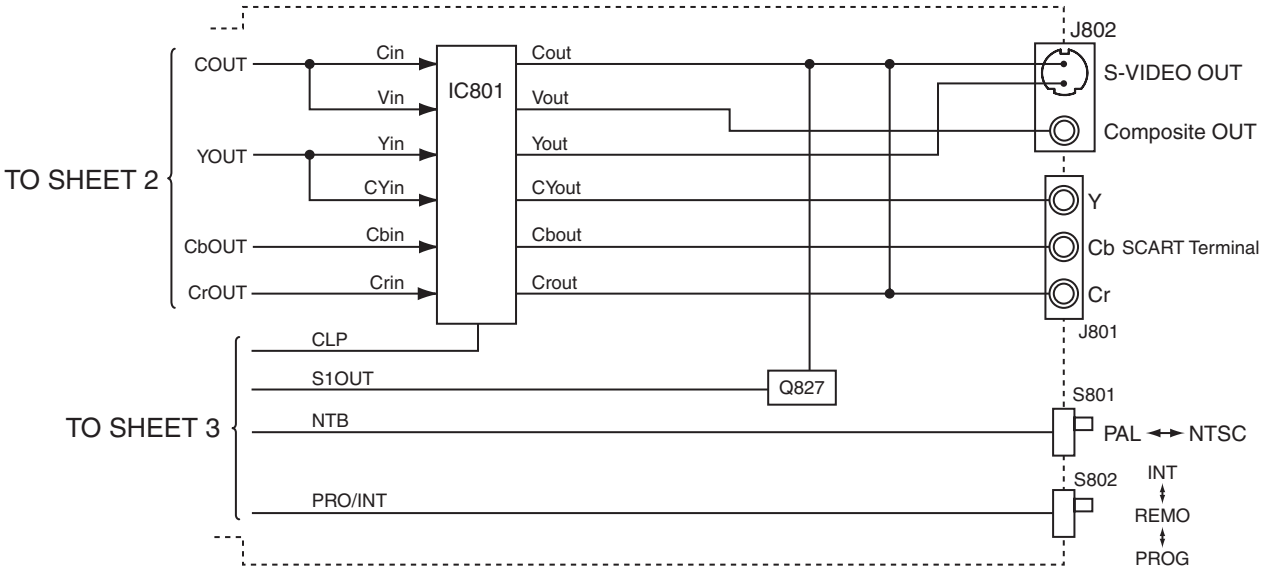
■ DVD Servo control & AV decoder section (SHEET 1,2,3)



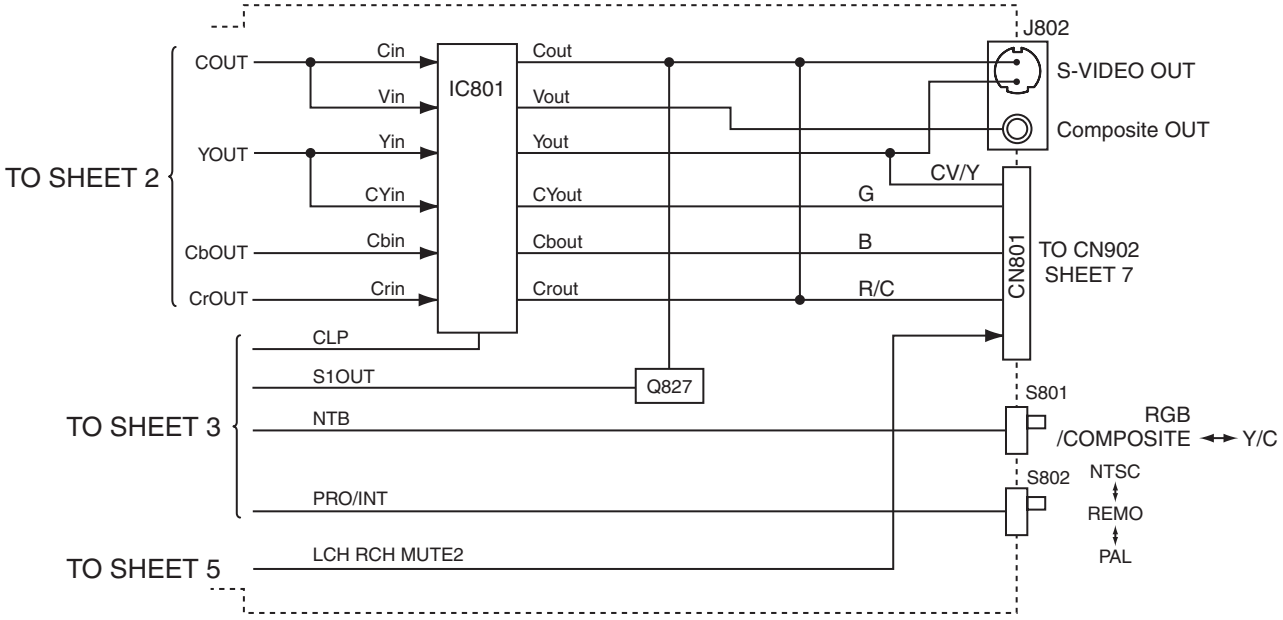
■ DAC & Audio signal output section (SHEET 5)



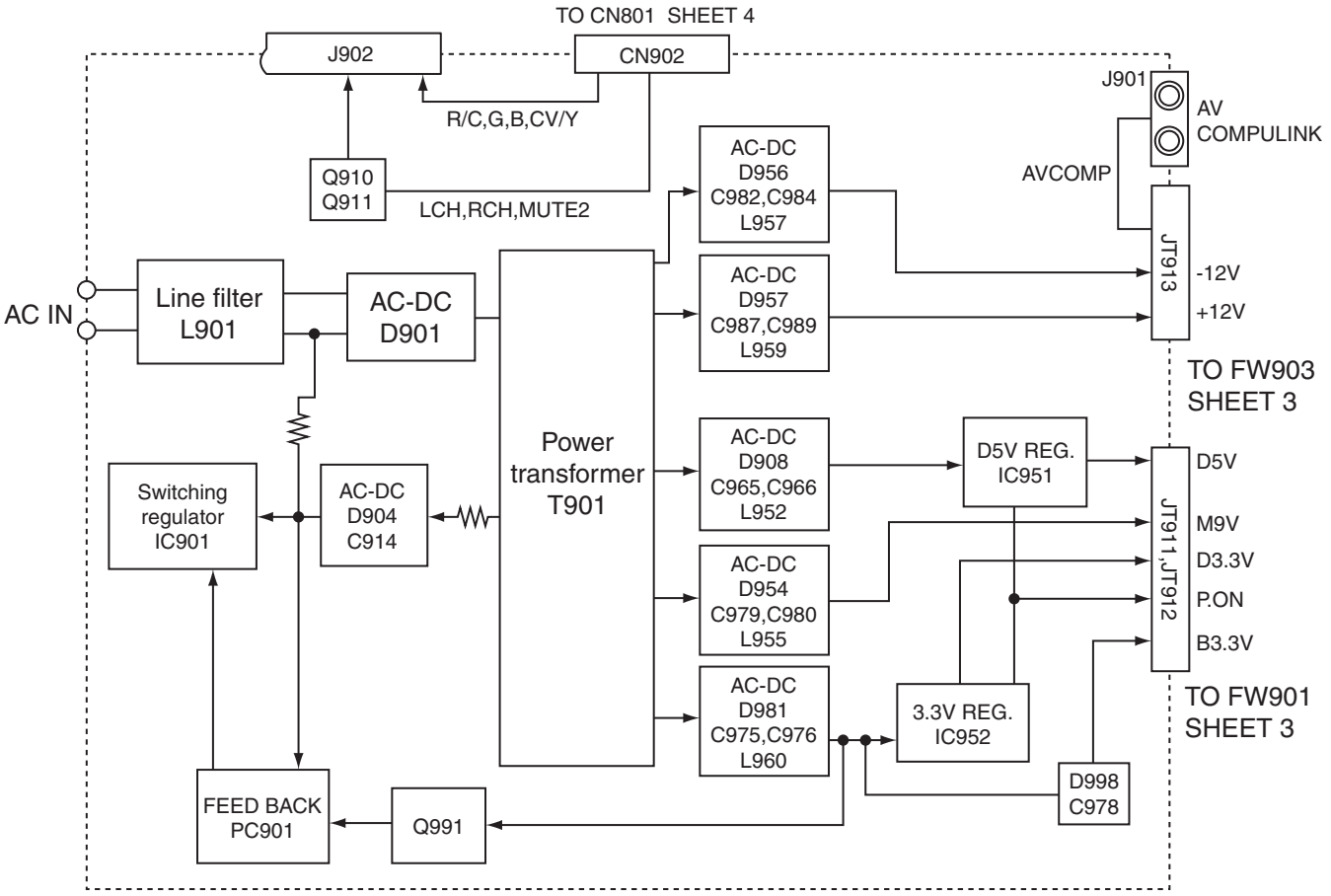
■ Video signal output section (SHEET 4) For Asia



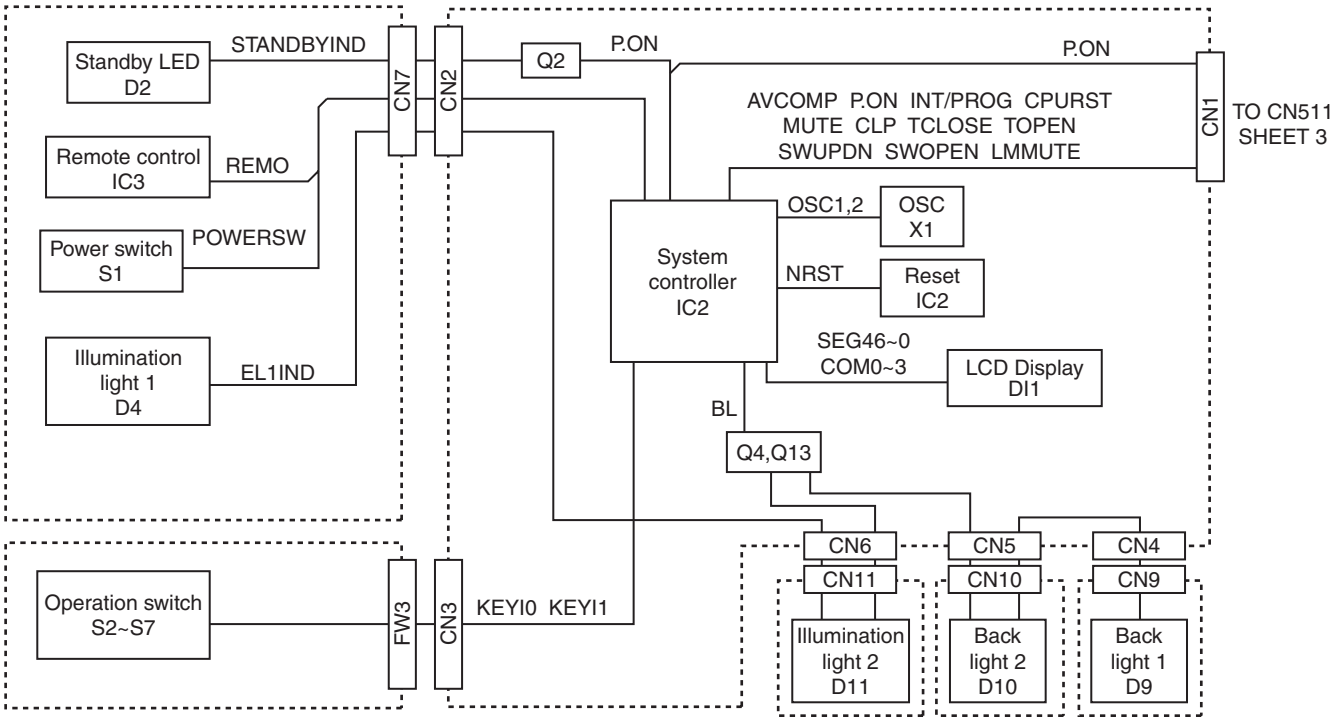
■ Video signal output section (SHEET 4) For Europe



■ Power supply section (SHEET 7)

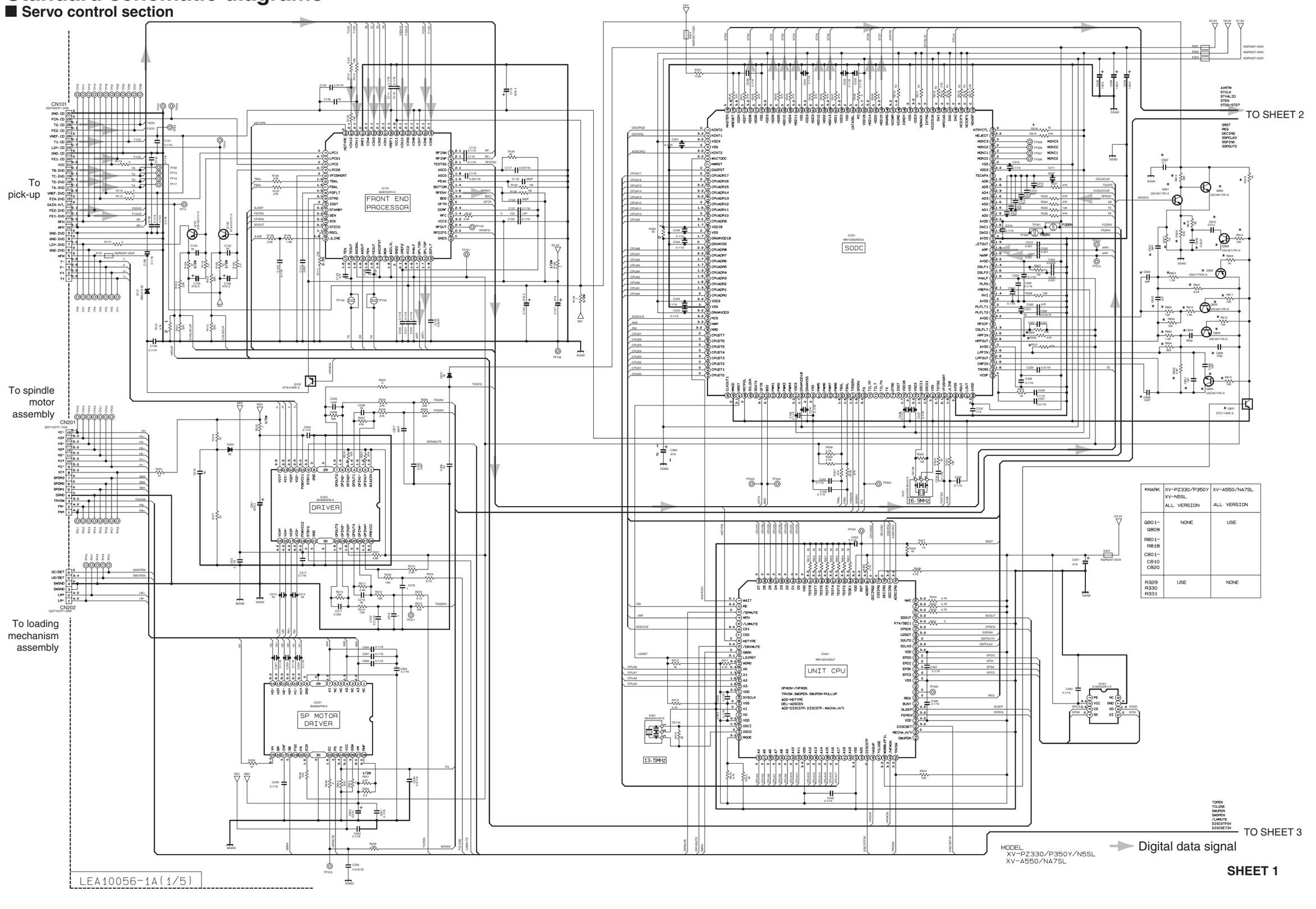


■ System control & LCD display section (SHEET 6)



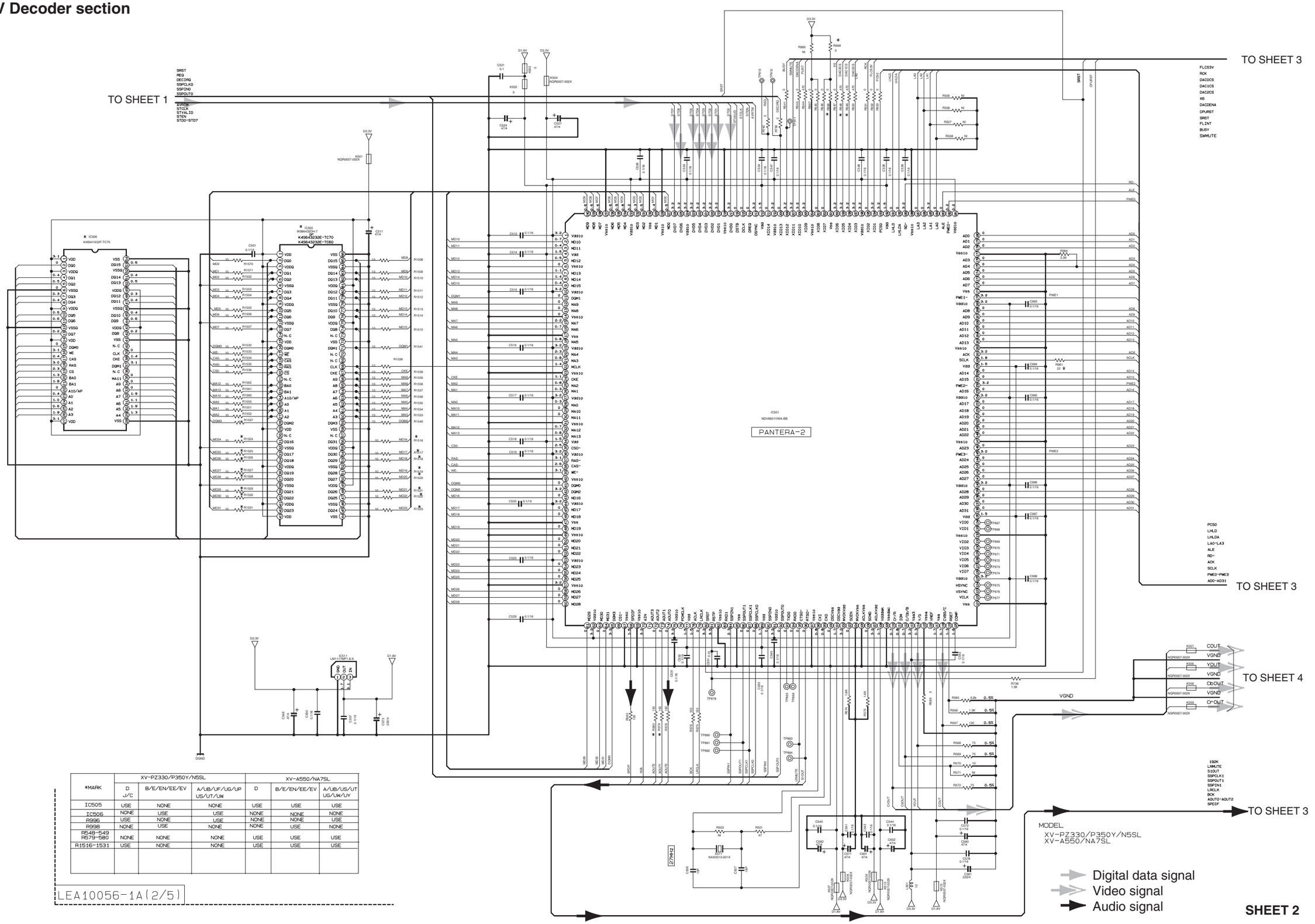
Standard schematic diagrams

■ Servo control section



*MARK	XV-PZ330/P350Y XV-N5SL ALL VERSION	XV-A550/NA7SL ALL VERSION
Q801– Q808	NONE	USE
R801– R818		
C801– C810 C820		
R329 R330 R331	USE	NONE

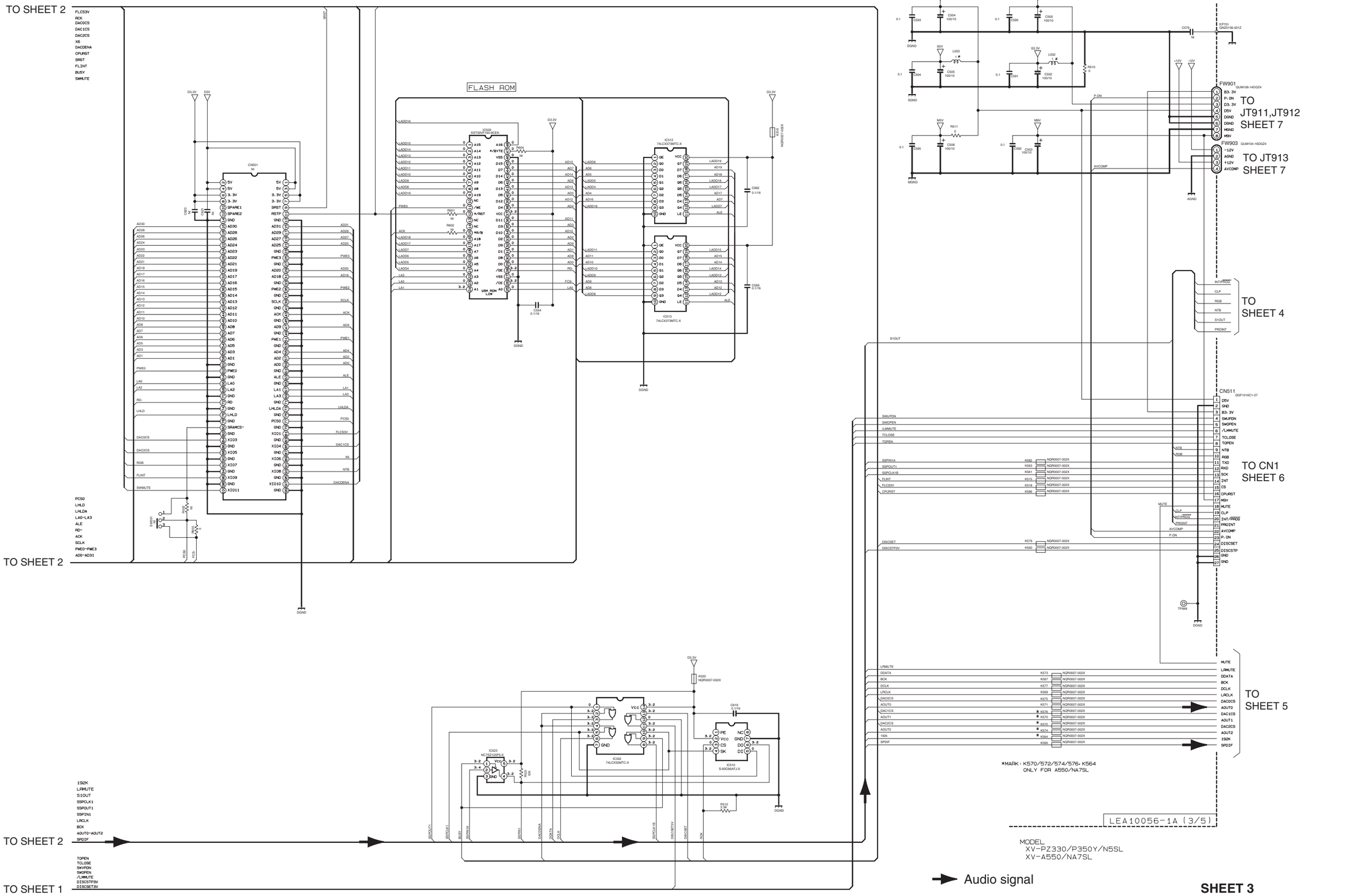
■ AV Decoder section



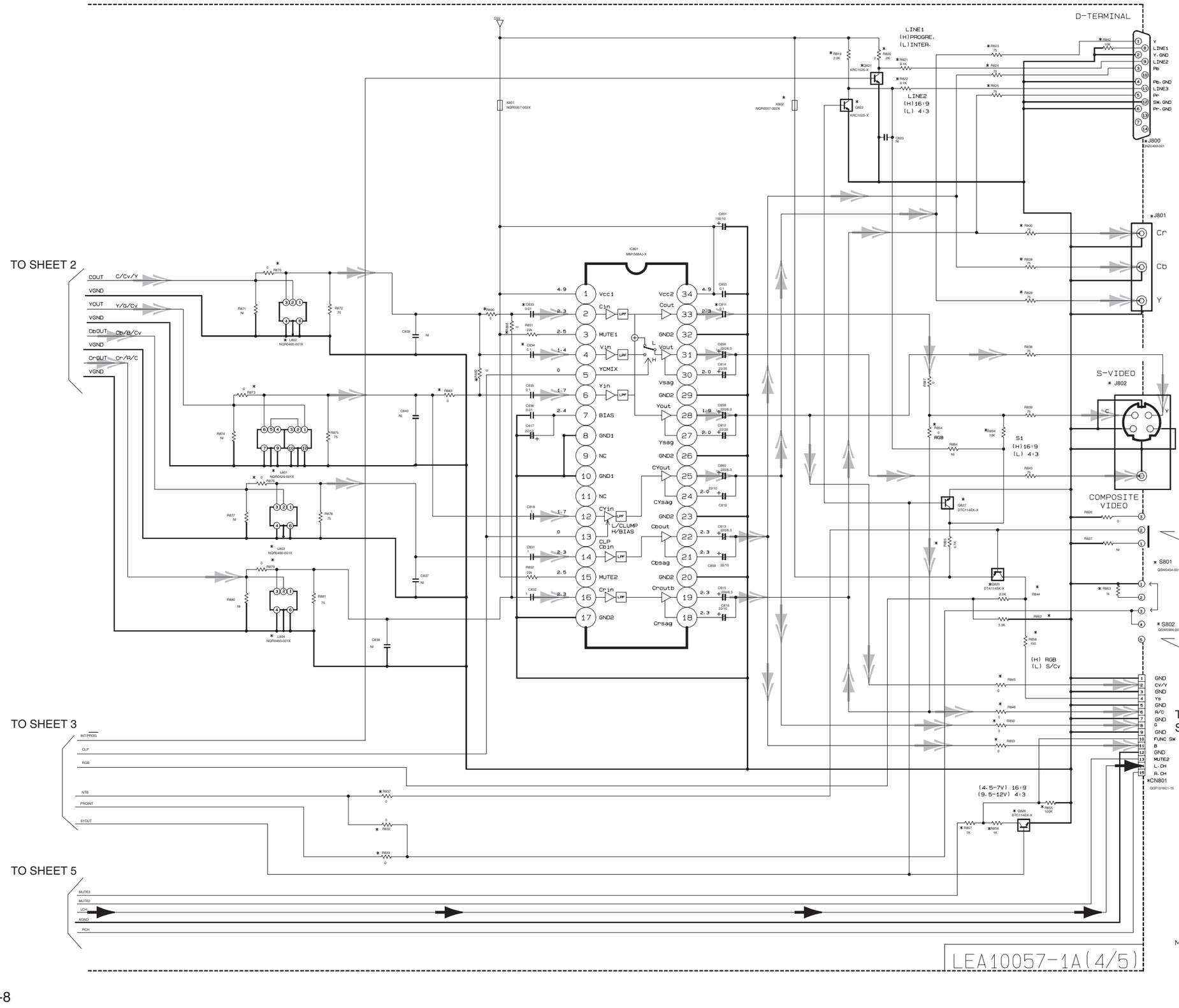
*MARK	XV-PZ330/P350Y/N5SL			XV-A550/NA7SL		
	D J/C	B/E/EN/EE/EV	A/UB/UF/UG/UP US/UT/UW	D	B/E/EN/EE/EV	A/UB/US/UT UG/UW/UY
IC505	USE	NONE	NONE	USE	USE	USE
IC506	NONE	USE	USE	NONE	NONE	NONE
R996	USE	NONE	USE	NONE	NONE	USE
R998	NONE	USE	NONE	NONE	USE	NONE
R548~549 R579~580	NONE	NONE	NONE	USE	USE	USE
R1516~1531	USE	NONE	NONE	USE	USE	USE

LEA10056-1A(2/5)

■ Flash ROM section



■ Video signal output section

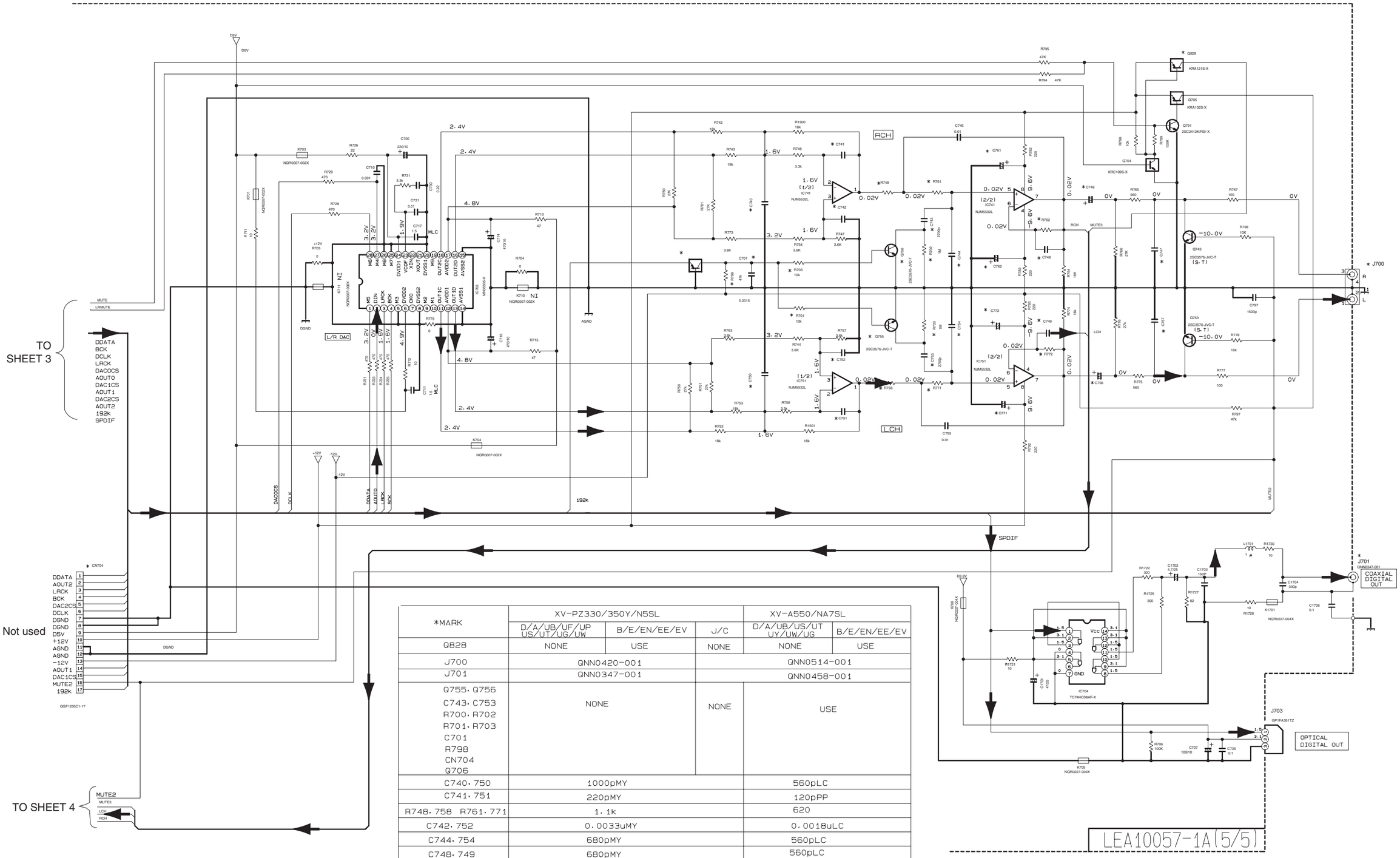


*MARK	XV-PZ330/P350Y/N5SL D	XV-PZ330/P350Y/N5SL B/E/EN EV/EE	XV-PZ330/P350Y/N5SL A/UB/UF/ UP/US/UT/ UG/UW	XV-PZ330/P350Y/N5SL J/C	XV-A550/NA7SL D	XV-A550/NA7SL B/E/EN EV/EE	XV-A550/NA7SL A/UB/US/ UT/UY/UW/UG
J800 R819 R820 R821 R822 R823 R824 R825 R840 Q821 Q822 Q827	USE	NONE	NONE	NONE	USE	NONE	NONE
R844 R845 R846 R850 R852 R853 R856 R857 R858 R862 C834 Q825 Q826 CN801	NONE	USE	NONE	NONE	NONE	USE	NONE
R833	NONE	NONE	USE	USE	NONE	NONE	USE
R837	NONE	NONE	USE	NONE	NONE	NONE	USE
R800 R828 R829 R863	NONE	NONE	USE	USE	NONE	USE	USE
C811 C833 R883 R890	USE	NONE	USE	USE	USE	NONE	USE
R863 S802	NONE	NONE	NONE	USE	NONE	USE	USE
L801 -L804	USE	NONE	NONE	USE	USE	USE	USE
R870 R873 R876 R879 S801	NONE	USE	USE	NONE	NONE	NONE	NONE
J801	NONE		QNN0430 -001		QNN0395 -001		
J802	QNN0434 -001				QNN0454 -001		
R832	NONE	NONE	NONE	NONE	NONE	USE	NONE
R833	NONE	NONE	NONE	USE	NONE	NONE	USE

XV-PZ330 /P350Y/N5SL	B/E/EN/EV/EE	A/UB/UF/ UG/UW UP/US/UT/
XV-A550 /NA7	B/E/EN/EV/EE	A/UB/US/ UT/UY/UW/UG
S801	RGB/COMPOSIT ↕ Y/C	NTSC ↕ PAL

XV-A550 /NA7	B/E/EN/EV/EE	A/UB/US/ UT/UY/UW/UG
S802	NTSC REMO PAL	INT REMO PROG

■ DAC & audio signal output section

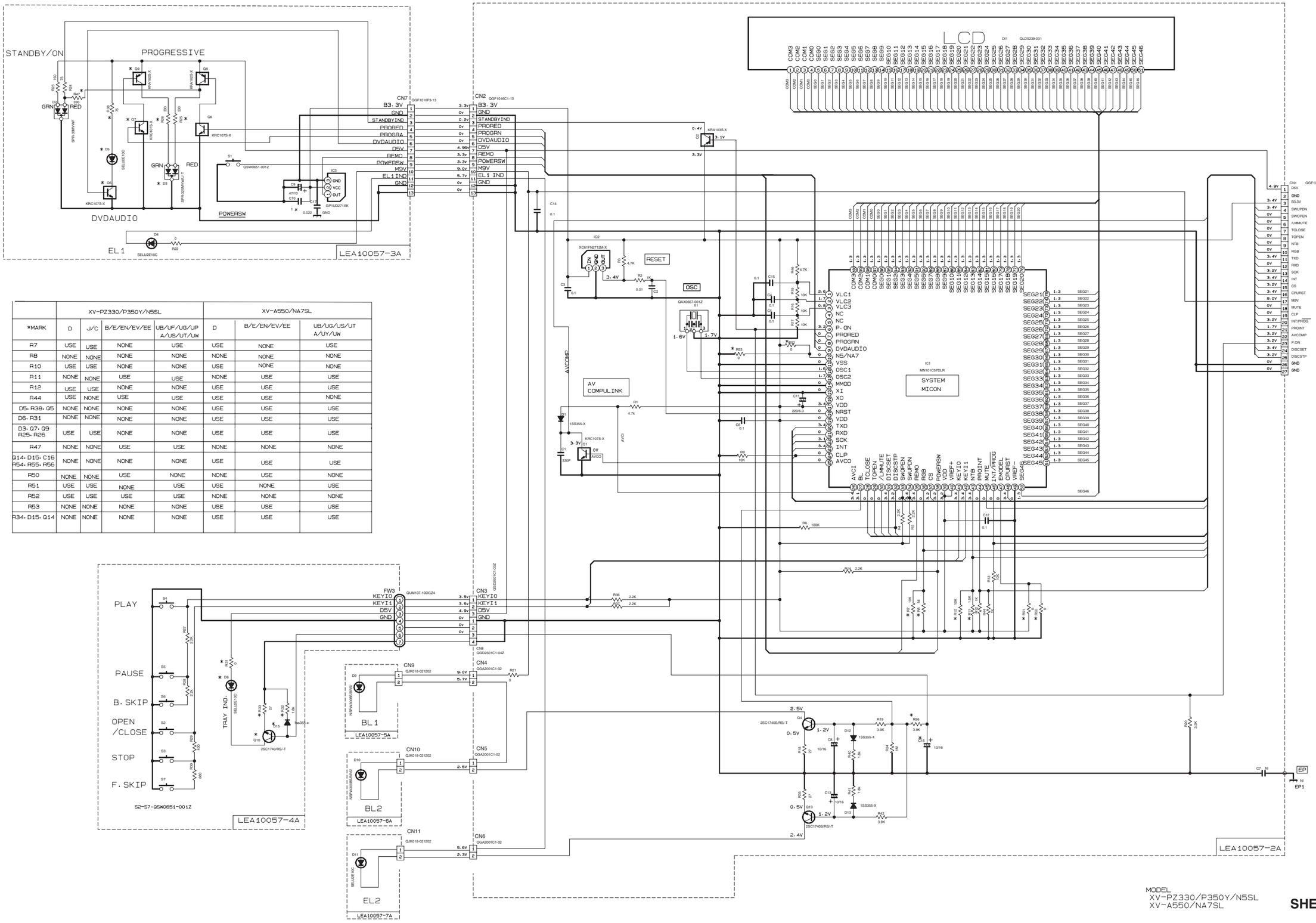


*MARK	XV-PZ330/350Y/N5SL			XV-A550/NA7SL	
	D/A/UB/UF/UP US/UT/UG/UW	B/E/EN/EE/EV	J/C	D/A/UB/US/UT UY/UW/UG	B/E/EN/EE/EV
Q828	NONE	USE	NONE	NONE	USE
J700	QNN0420-001			QNN0514-001	
J701	QNN0347-001			QNN0458-001	
Q755, Q756 C743, C753 R700, R702 R701, R703 C701 R798 CN704 Q706	NONE		NONE	USE	
C740, 750	1000pMY			560pLC	
C741, 751	220pMY			120pPP	
R748, 758 R761, 771	1.1k			620	
C742, 752	0.0033uMY			0.0018uLC	
C744, 754	680pMY			560pLC	
C748, 749	680pMY			560pLC	
R762, 772	1.5k			820	
C746, 756	22/25			47/25 SILMIC	
C747, 757	2200pMY			1800pLC	
C761, 762 C771, 772	100/16			100/16RA2	

MODEL
XV-PZ330/P350Y/N5SL
XV-A550/NA7SL

SHEET 5

■ System control & LCD display section



	XV-PZ330/P350Y/N5SL				XV-A550/NA7SL		
*MARK	D	J/C	B/E/EN/EV/EE	UB/UF/UG/UP A/US/UT/UW	D	B/E/EN/EV/EE	UB/UG/US/UT A/UY/UW
R7	USE	USE	NONE	USE	USE	NONE	USE
R8	NONE	NONE	NONE	NONE	NONE	NONE	NONE
R10	USE	USE	NONE	NONE	USE	NONE	NONE
R11	NONE	NONE	USE	USE	NONE	USE	USE
R12	USE	USE	NONE	NONE	USE	USE	USE
R44	USE	NONE	USE	USE	USE	USE	NONE
D5, R38, Q5	NONE	NONE	NONE	NONE	USE	USE	USE
D6, R31	NONE	NONE	NONE	NONE	USE	USE	USE
D3, Q7, Q9 R25, R26	USE	USE	NONE	NONE	USE	USE	USE
R47	NONE	NONE	USE	USE	NONE	NONE	NONE
Q14, D15, C16 R54, R55, R56	NONE	NONE	NONE	NONE	USE	USE	USE
R50	NONE	NONE	USE	NONE	NONE	USE	NONE
R51	USE	USE	NONE	USE	USE	NONE	USE
R52	USE	USE	USE	USE	NONE	NONE	NONE
R53	NONE	NONE	NONE	NONE	USE	USE	USE
R34, D15, Q14	NONE	NONE	NONE	NONE	USE	USE	USE

MODEL
XV-PZ330/P350Y/N5SL
XV-A550/NA7SL

SHEET 6

■ Power supply section

✱MARK	XV-PZ330/P350Y/A550	XV-N5SL/NA7SL	
	J/C/D	A/UB/UF/UG/UP US/UT/UW/UY	E/EN/EE/EV/B
F901	QMF51U1-1R6-J8 1.6A/125V	QMF51E2-1R6-J1 T1.6AL	QMF51E2-1R6-J1 T1.6AL
HS901	NONE	E70306-006	E70306-006
C907	82/200	68/400	68/400
R910-R915 R951-R954 R909 C910, C911 Q910, Q911 J902, CN902	NONE	NONE	USE
R903	47ohm 1/4W	56ohm 1/4W	56ohm 1/4W

VERSION CODES

J : U.S.A.
C : CANADA
D : JAPAN
B : ENGLAND
E : EUROPE
EN : NORTH EUROPE
EV : EAST EUROPE
EE : RUSSIA
A : AUSTRALIA
UW : BRAZIL/MEXICO/PERU
US : SINGAPOLE/MALAYSIA/PHILIPPINES
UX : SAUDI ARABIA
UF : CHAINA
UT : TAIWAN
UY : ARGENTINA
UJ : USA MILITALY BASE
UP : KOREA
UG : TURKEY/EGYPT/SOUTH AFRICA
UB : HONG KONG

Ver. J/C
120V 60Hz

Ver. E/EN/EE/EV/B
230V 50Hz

Ver. UG/US/UW/UB /UF/UX/UT/UY/UP
110-240V 50/60Hz

Ver. A
240V 50Hz

Ver. D
100V 50/60Hz

TO CN801 SHEET 4

TO FW903 SHEET 3

TO FW901 SHEET 3

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

Video signal
Audio signal

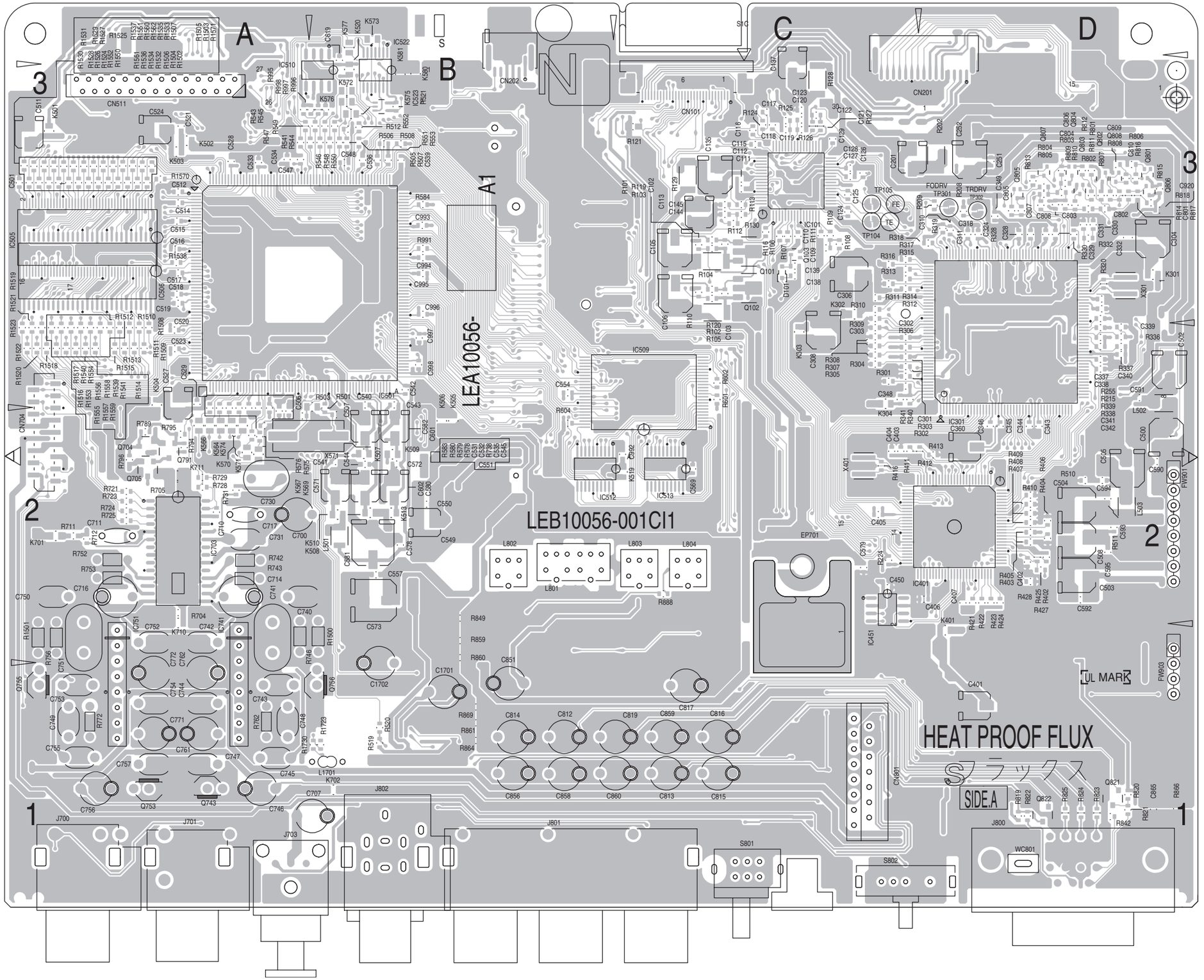
MODEL
XV-PZ330/P350Y/N5SL
XV-A550/NA7SL

LEA10057-A1

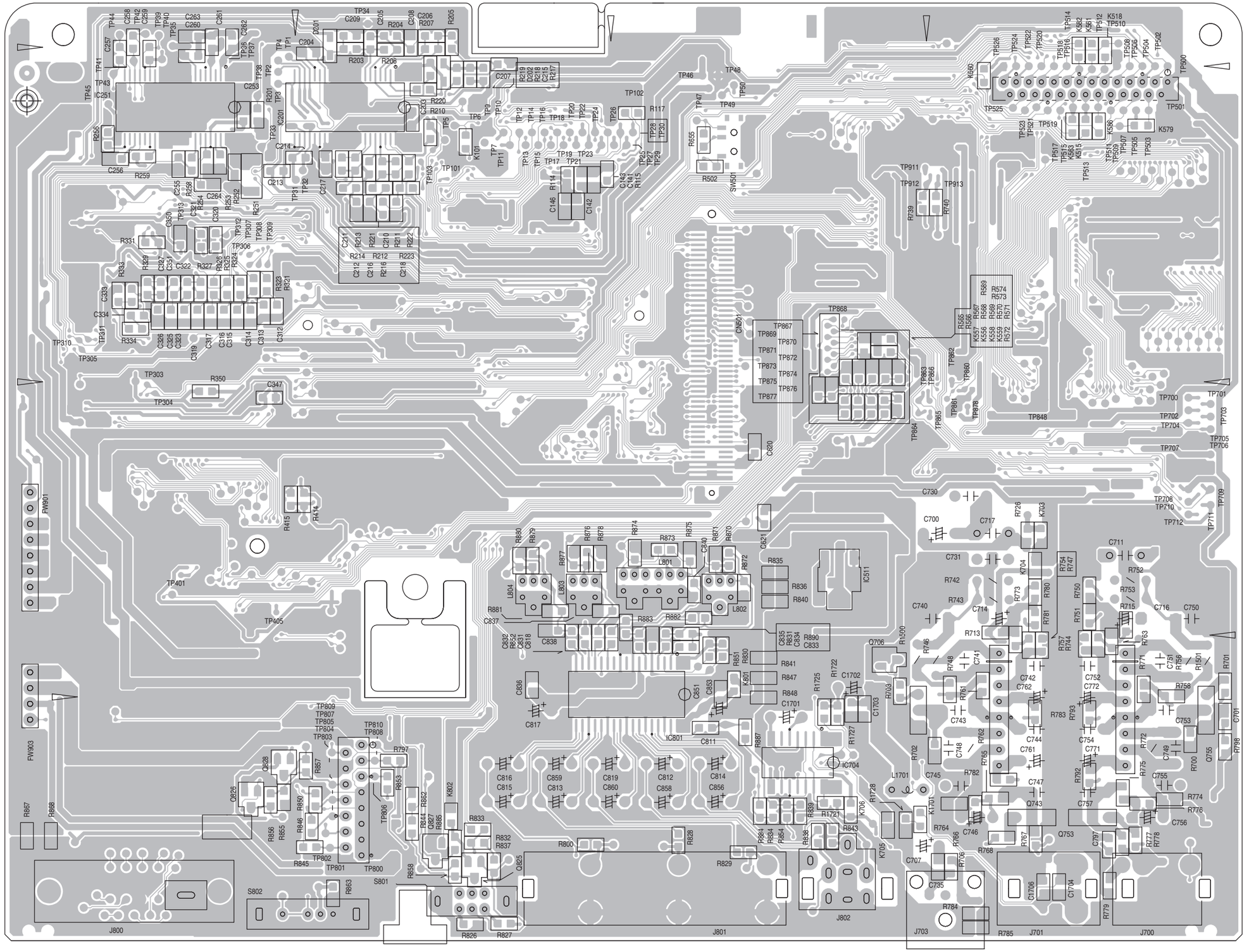
SHEET 7

Printed circuit boards

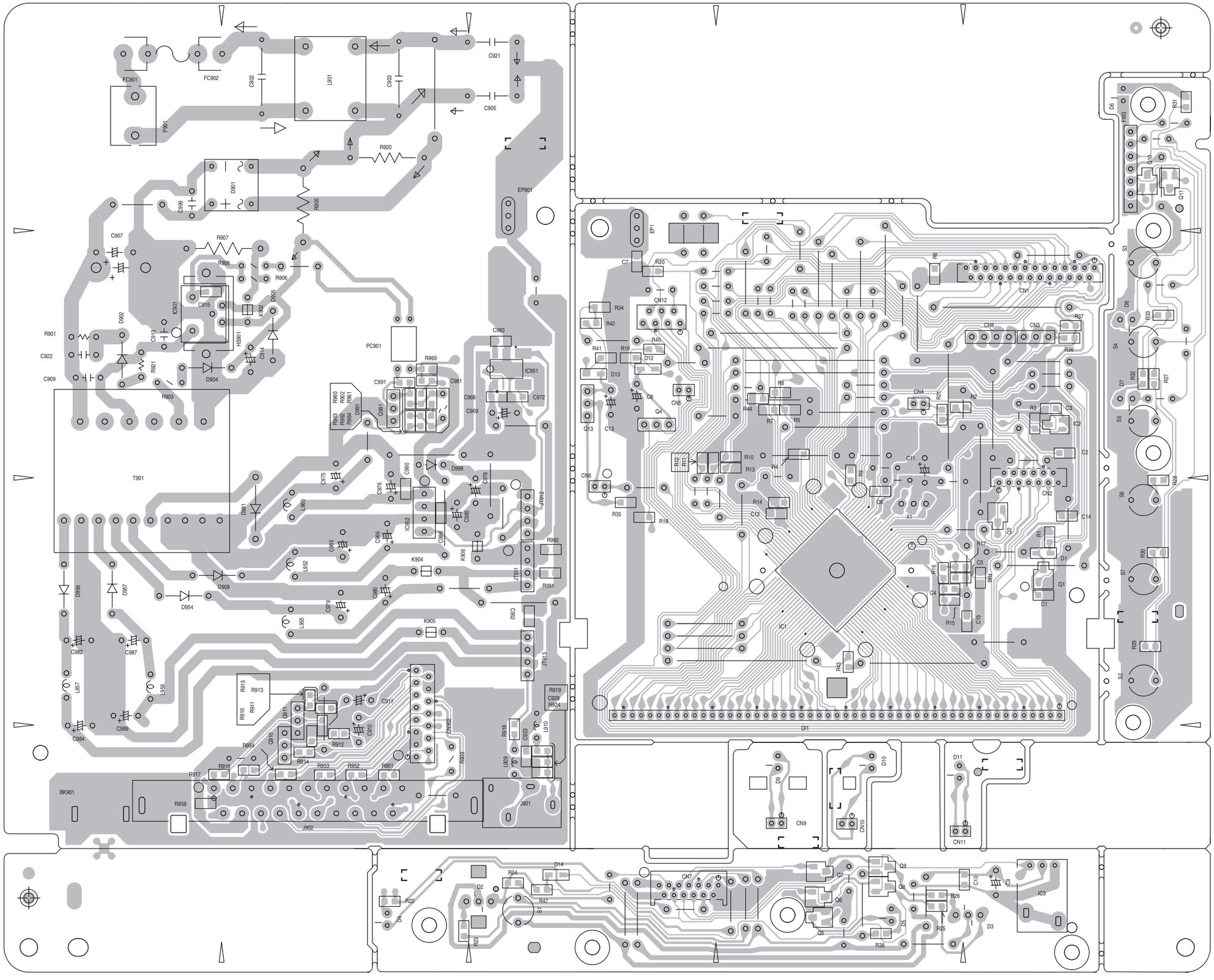
■ Servo control & output terminal board (Forward side)



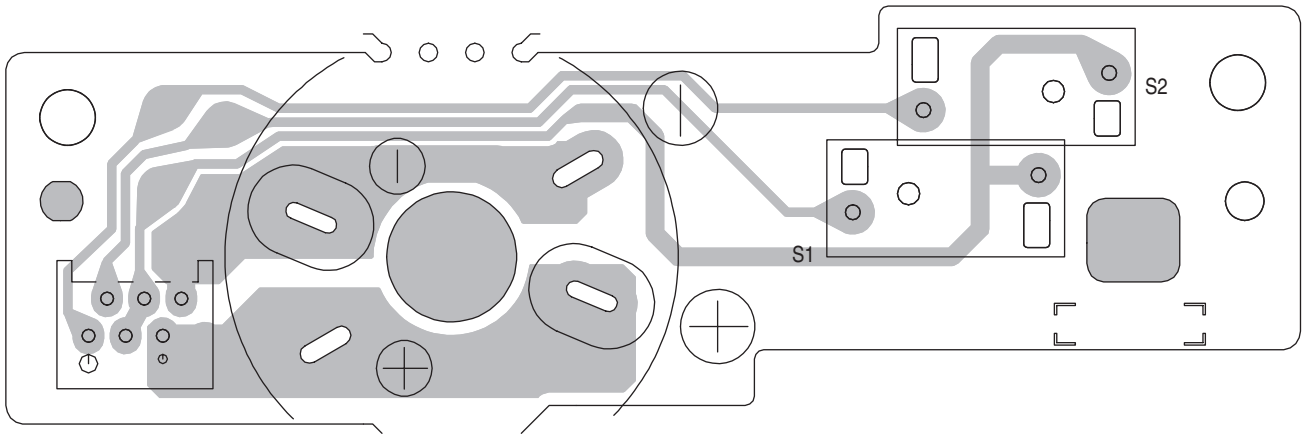
■ Servo control & output terminal board (Reverse side)



■ System control & power supply board



■ Loading motor board



PARTS LIST

[XV-N5SL]

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

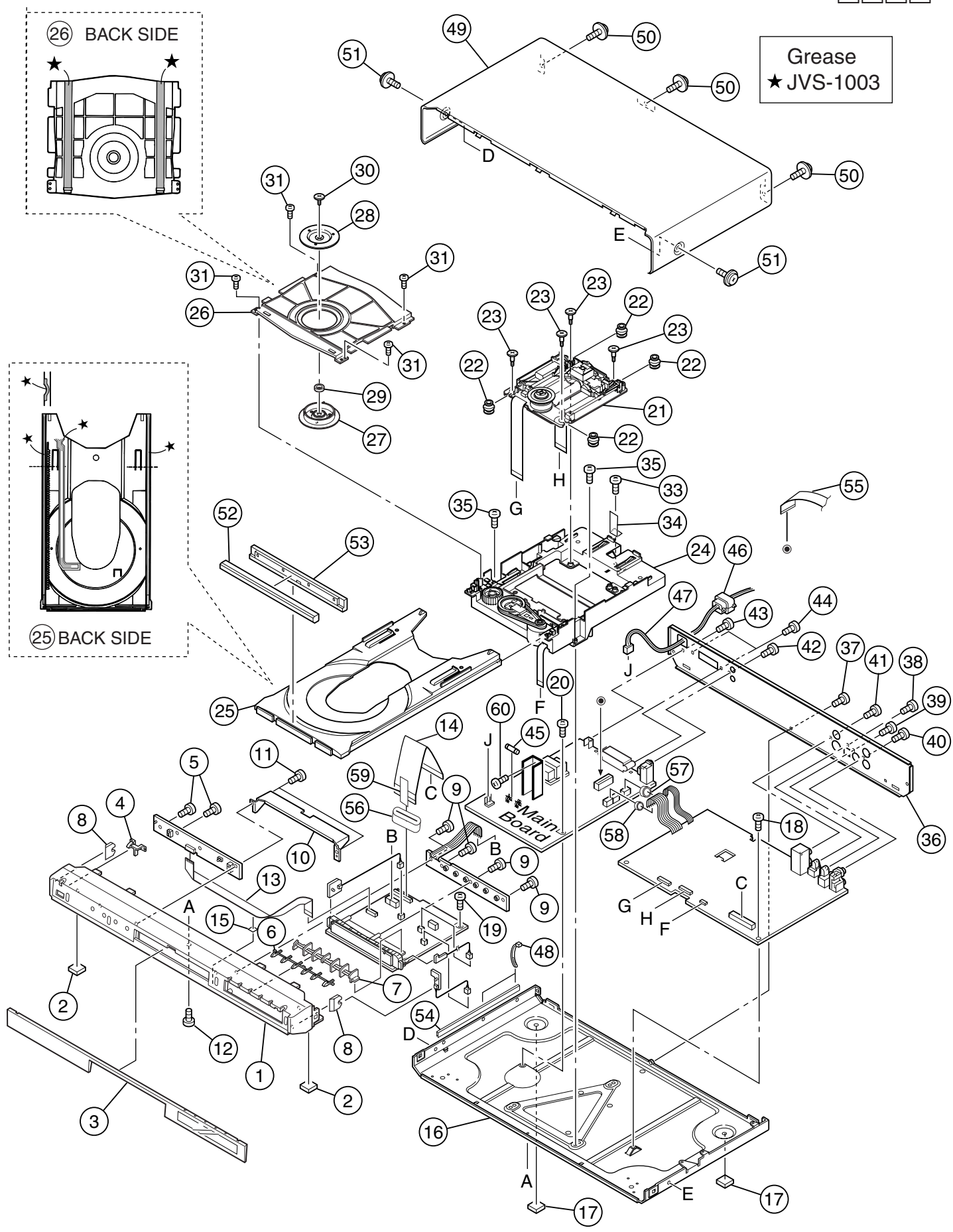
Area Suffix

B ------ U.K.
E ------ Continental Europe
EN ---- Northern Europe
EE ---- Russian Federation
EV ---- Eastern Europe
A ------ Australia
UB ---- Hong Kong
UG --- Turkey, South Africa, Egypt
US ---- Singapore
UW --- Brazil, Mexico, Peru

- Contents -

Exploded view of general assembly and parts list

Block No. M 1 M M



■ Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LE10272-003A	FRONT PANEL	1	except EUROPE	A,UB,UG,US,UW
		LE10272-002A	FRONT PANEL	1	EUROPE	B,E,EE,EN,EV
	2	E75896-001	FELT SPACER	2	FRONT FOOT	
	3	LE20638-005A	WINDOW SCREEN	1		
	4	LE20639-004A	PUSH BUTTON	1	POWER	
	5	QYSBSF2608Z	T.SCREW	2	POWER SW.CB.	
	6	LE20640-002A	PUSH BUTTON	1	PLAY	
	7	LE20641-001A	PUSH BUTTON	1	ASSIST	
	8	LE31030-002A	LED LENS	2	EDGE LIGHT	
	9	QYSBSF2608Z	T.SCREW	4	PLAY SW.CB.	
	10	LE20646-001A	BKT	1	F.PANEL	
	11	QYSBSF2608Z	T.SCREW	2	BKT	
	12	QYSDSG3008N	T.SCREW	1	FRONT+CHASSIS	
	13	QUQ110-1336AJ	FFC WIRE	1		
	14	QUQ110-2711AJ	FFC WIRE	1		
	15	E3400-431	SPACER	1		
	16	LE10273-002A	CHASSIS BASE	1		
	17	E75896-001	FELT SPACER	2	REAR FOOT	
	18	QYSBSGG3008E	T.SCREW	1	MAIN CB+CHASSIS	
	19	QYSBSGG3008E	T.SCREW	1	LCD CB+CHASSIS	
	20	QYSBSGG3008E	T.SCREW	1	PRI CB+CHASSIS	
	21	----------	TRAVERSE MECHANISM	1	see 3-5 page	
	22	LV41659-201A	INSULATOR	4		
	23	LV41424-001A	SPECIAL SCREW	4	FOR INSULATOR	
	24	----------	LOADING MECHANISM	1	see 3-7 page	
	25	LV10582-001A	TRAY LONG TYPE	1		
	26	LV20913-002A	CLAMPER BASE	1		
	27	LV32417-001A	CLAMPER	1		
	28	LV42089-002A	YOKE	1		
	29	LV42930-003A	MAGNET	1		
	30	LV41741-001A	SPECIAL SCREW	1	FOR YOKE	
	31	QYSBSF2008Z	SCREW	4	FOR CLAMPER BAS	
	33	QYSBST3010E	T.SCREW	1	MECHA+CHASSIS	
	34	LE40874-002A	THRUST SPRING	1		
	35	QYSBST3008E	T.SCREW	2	MECHA+CHASSIS	
	36	LE20647-009A	REAR PANEL	1		A
		LE20647-005A	REAR PANEL	1		UB,US
		LE20647-002A	REAR PANEL	1		B,E,EN,EV
		LE20647-003A	REAR PANEL	1		EE
		LE20647-004A	REAR PANEL	1		UG
		LE20647-008A	REAR PANEL	1		UW
	37	QYSBSGY3008M	SPECIAL SCREW	1	REAR+CHASSIS	
	38	QYSBSGY3008M	SPECIAL SCREW	1	OPTICAL OUT	
	39	QYSBSGY3008M	SPECIAL SCREW	1	COAXIAL	
	40	QYSBSGY3008M	SPECIAL SCREW	1	AUDIO OUT	
	41	QYSBSGY3008M	SPECIAL SCREW	1	VIDEO OUT	
	42	QYSBSGY3008M	SPECIAL SCREW	1	COMPU LINK	
	43	QYSBSGY3008M	SPECIAL SCREW	1	EARTH	

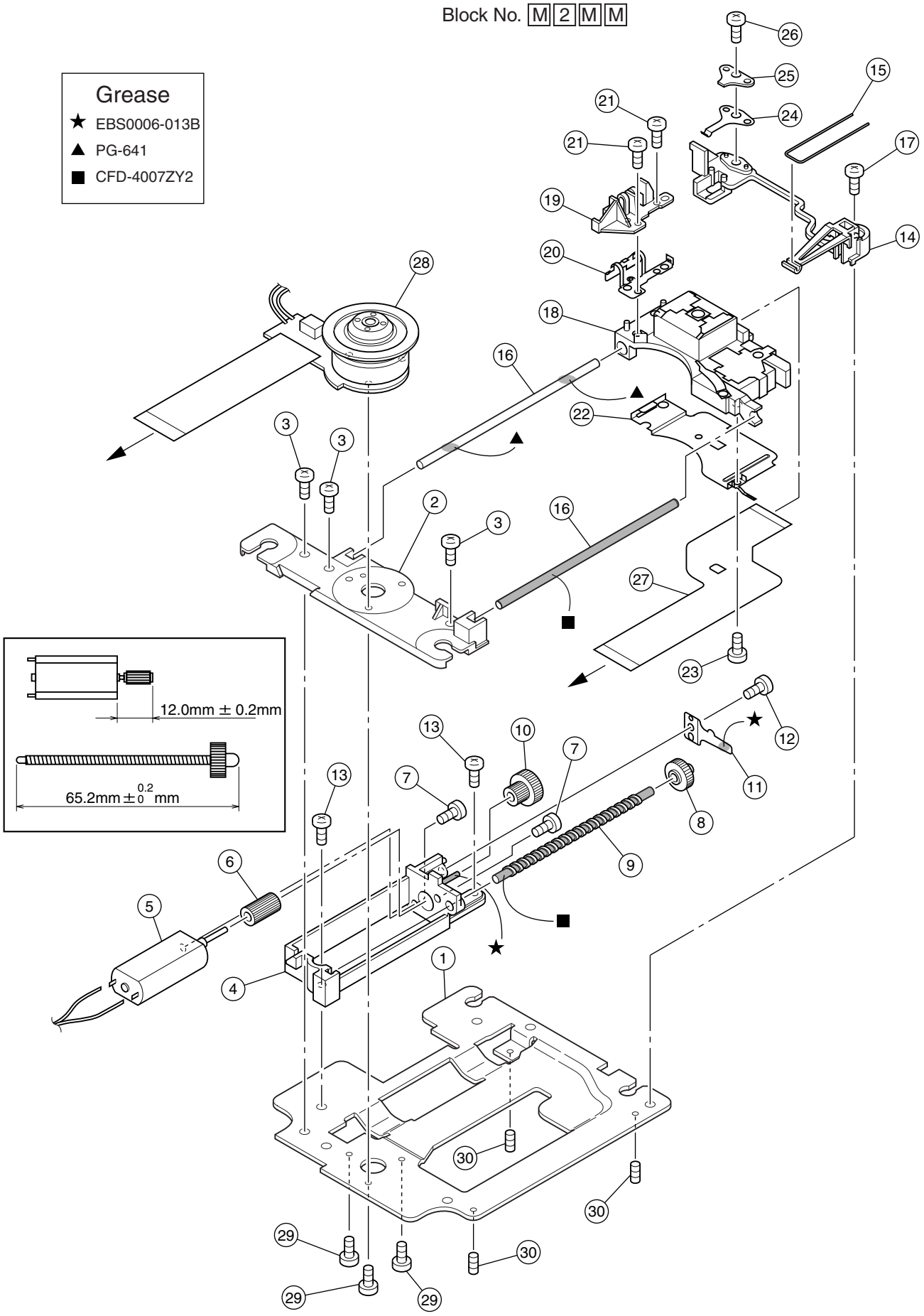
■ Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	44	QYSBSGY3008M	SPECIAL SCREW	2	21P OUT	
⚠	45	QMF51E2-1R6-J1	FUSE	1	U	
	46	QHS3771-108	CORD STOPPER	1		
⚠	47	QMPG070-244-JC	POWER CORD	1		A
⚠		QMPN160-200-JD	POWER CORD	1		B,UB
⚠		QMPK190-200-JC	POWER CORD	1		E,EE,EN,EV,UG,US,UW
	48	QZW0004-001	WIRE CLAMP	2		
	49	LE20645-001A/S/	METAL COVER	1		
	50	QYSBSGG3008E	T.SCREW	3	METAL REAR	
	51	QYSDSG3008N	T.SCREW	2	METAL SIDE	
	52	LE20642-001A	ORNAMENT	1	FOR FITTING	
	53	LE20643-001A	FITTING BASE	1	FOR MECHA	
	54	LE30001-033A	SPACER	1		
	55	QUQ412-1514CJ	FFC WIRE	1		B,E,EE,EN,EV
	56	QQR1349-001	FERRITE CORE	1		B,E,EE,EN,EV
	57	QQR1350-001	FERRITE CORE	1		B,E,EE,EN,EV
	58	QQR1351-001	FERRITE CORE	1		B,E,EE,EN,EV
	59	LV30225-090A	SPACER	1		B,E,EE,EN,EV
	60	QYSBSE3008Z	SCREW	1		

DVD Traverse mechanism assembly and parts list

Block No. M2MM

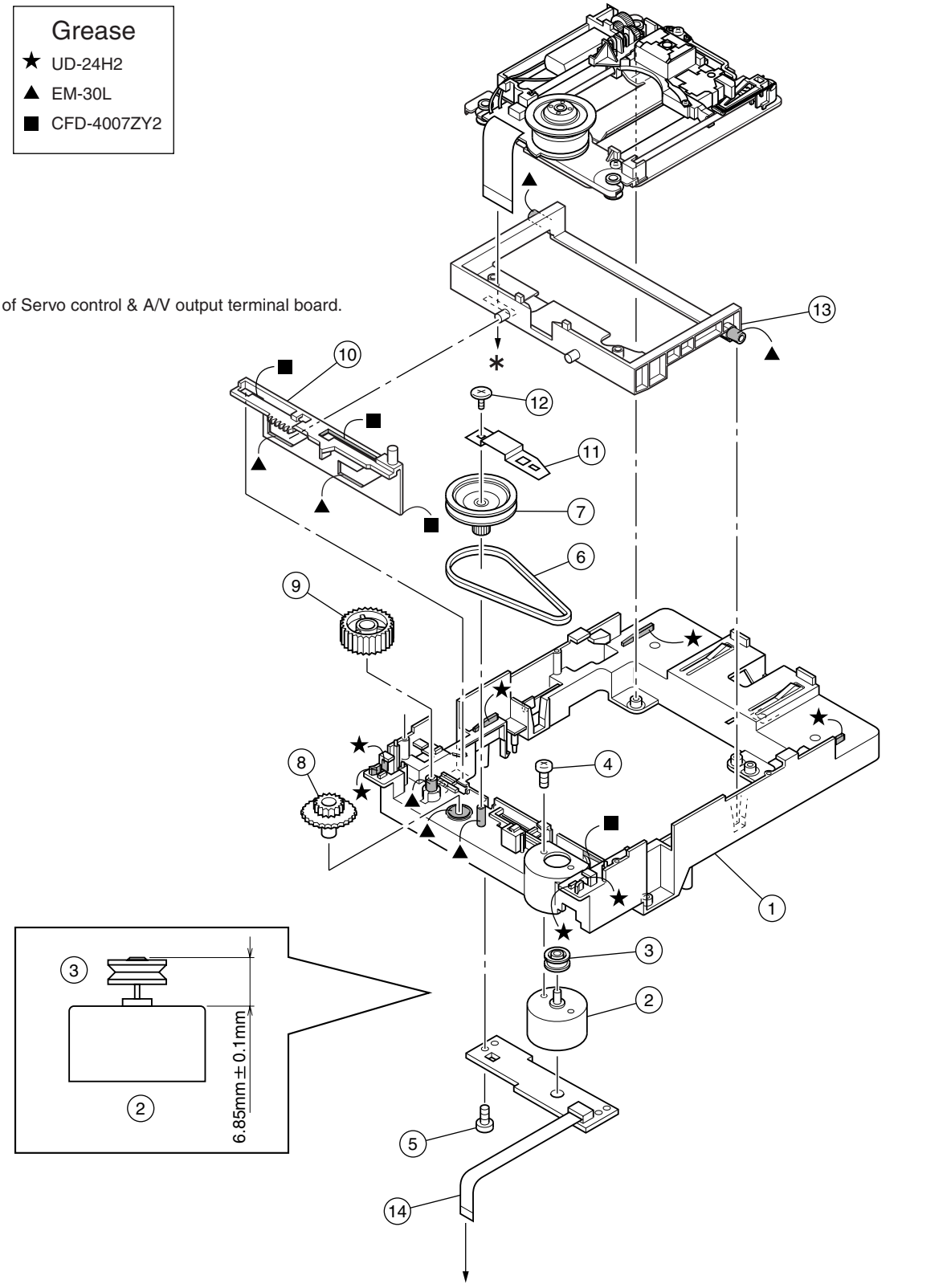


■ **Parts list (DVD Traverse mechanism assembly)** **Block No. M2MM**

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LE20520-002A	MECHA BASE	1		
	2	LE20516-001A	SPINDLE BASE	1		
	3	QYSDST2605M	TAPPING SCREW	3		
	4	LE30909-001A	HOLDER	1		
	5	QAR0165-001	FEED MOTOR	1		
	6	LV41510-001A	FEED GEAR	1		
	7	QYSPSPU2040M	SCREW	2		
	8	LV41512-001A	FEED GEAR	1		
	9	LV41517-003A	LEAD SCREW	1		
	10	LV41511-002A	FEED GEAR	1		
	11	LE40742-001A	TORSION SPRING	1		
	12	QYSDSF2005Z	SCREW	1		
	13	QYSDST2605M	TAPPING SCREW	2		
	14	LE20517-001A	HOLDER	1		
	15	LE40744-001A	SPRING	1		
	16	LV41121-002A	SLIDE SHAFT	2		
	17	QYSDST2605M	TAPPING SCREW	1		
	18	QAL0342-001	OPTICAL PICK-UP	1		
	19	LE20519-001A	ACTUATOR	1		
	20	LE30886-001A	SPRING	1		
	21	QYSPSFU1740Z	SCREW	2		
	22	LE30888-003A	SPRING	1		
	23	QYSPSGU1430Z	SCREW	1		
	24	LE40743-001A	SPRING	1		
	25	LE40774-001A	PLATE	1		
	26	QYSDST2606Z	SCREW	1		
	27	QAL0284-001	F.P.C.WIRE ASSY	1		
	28	QAR0162-001	SPINDLE MOTOR	1		
	29	QYSPSPU1760Z	SCREW	3		
	30	QYYASPF2608N	SCREW	3		

DVD Loading mechanism assembly and parts list

Block No. M 3 M M



■ **Parts list (DVD Loading mechanism assembly)** **Block No. M3MM**

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV10454-007A	LOADING BASE	1		
	2	QAR0164-001	MOTOR	1		
	3	LV42087-001A	MOTOR PULLEY	1		
	4	QYSPSPU1730Z	SCREW	1		
	5	VKZ4777-003	MINI SCREW	1		
	6	LV42209-001A	BELT	1		
	7	LV42084-002A	PULLEY GEAR	1		
	8	LV42085-002A	MIDDLE GEAR	1		
	9	LV42086-001A	IDLE GEAR	1		
	10	LV32514-002A	SLIDE CAM	1		
	11	LV42348-001A	GEAR BRACKET	1		
	12	VKZ4777-003	MINI SCREW	1		
	13	LV20912-002A	ELEVATOR	1		
	14	QUQ110-0610AJ	FFC WIRE	1		

■ **Electrical parts list (Loading motor board)** **Block No. 03**

⚠	Item	Parts number	Parts name	Remarks	Area
	CN 1	QGF1016F3-06	CONNECTOR		
	S 1	QSW0910-002	SWITCH		
	S 2	QSW0910-002	SWITCH		

■ **Electrical parts list (Servo control board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 105	NEA70JM-476X	E.CAPACITOR		
	C 106	NEA70JM-476X	E.CAPACITOR		
	C 109	NCB31CK-104X	C CAPACITOR		
	C 110	NCS31HJ-221X	C.CAPA. C.M		
	C 111	NCB31CK-104X	C CAPACITOR		
	C 112	NCB31CK-104X	C CAPACITOR		
	C 113	NEA70JM-226X	E CAPACITOR		
	C 115	NCB31CK-104X	C CAPACITOR		
	C 116	NCB31CK-104X	C CAPACITOR		
	C 117	NCB31CK-473X	C CAPACITOR		
	C 118	NCB31CK-273X	C CAPACITOR		
	C 119	NCB31HK-561X	C CAPACITOR		
	C 120	NCB31HK-561X	C CAPACITOR		
	C 121	NCB31CK-104X	C CAPACITOR		
	C 122	NCS31HJ-120X	C.CAPA. C.M		
	C 123	NCB31CK-104X	C CAPACITOR		
	C 124	NCS31HJ-470X	C.CAPA. C.M		
	C 125	NCB31HK-271X	C CAPACITOR		
	C 126	NCB31CK-104X	C CAPACITOR		
	C 127	NCB31CK-104X	C CAPACITOR		
	C 128	NCB31CK-104X	C CAPACITOR		
	C 129	NCB31HK-472X	C CAPACITOR		
	C 135	NEA70JM-476X	E.CAPACITOR		
	C 137	NEA70GM-476X	E.CAPA. C.M.		
	C 138	NCB31CK-104X	C CAPACITOR		
	C 139	NCB31CK-104X	C CAPACITOR		
	C 141	NCB31CK-104X	C CAPACITOR		
	C 142	NCB31CK-104X	C CAPACITOR		
	C 143	NCB31CK-104X	C CAPACITOR		
	C 144	NCB31CK-103X	C CAPACITOR		
	C 146	NCB31CK-104X	C CAPACITOR		
	C 201	NEA70JM-226X	E CAPACITOR		
	C 203	NCB31CK-104X	C CAPACITOR		
	C 204	NCB31CK-104X	C CAPACITOR		
	C 205	NCS31HJ-121X	C CAPACITOR		
	C 207	NCB31HK-391X	C CAPACITOR		
	C 208	NCB31HK-391X	C CAPACITOR		
	C 211	NCB31HK-223X	C CAPACITOR		
	C 212	NCB31CK-103X	C CAPACITOR		
	C 216	NCB30JK-105X	C CAPACITOR		
	C 217	NCB31CK-104X	C CAPACITOR		
	C 218	NCB30JK-105X	C CAPACITOR		
	C 251	NCB31CK-104X	C CAPACITOR		
	C 252	NEA71AM-336X	E CAPACITOR		
	C 253	NCB31CK-104X	C CAPACITOR		
	C 255	NCB31CK-153X	C CAPACITOR		
	C 256	NCB31CK-104X	C CAPACITOR		
	C 257	NCB31CK-104X	C CAPACITOR		
	C 258	NCB31CK-104X	C CAPACITOR		
	C 259	NCB31CK-104X	C CAPACITOR		
	C 260	NCB31CK-104X	C CAPACITOR		
	C 261	NCB31CK-104X	C CAPACITOR		
	C 262	NCB31CK-104X	C CAPACITOR		
	C 263	NCB31CK-104X	C CAPACITOR		
	C 264	NCB31CK-103X	C CAPACITOR		
	C 301	NCB31CK-104X	C CAPACITOR		
	C 302	NCB31CK-104X	C CAPACITOR		
	C 303	NCB31CK-104X	C CAPACITOR		
	C 304	NEA70GM-107X	E CAPACITOR		
	C 306	NEA70GM-107X	E CAPACITOR		
	C 308	NEA70GM-107X	E CAPACITOR		
	C 310	NCB31CK-104X	C CAPACITOR		
	C 311	NCB31HK-561X	C CAPACITOR		
	C 312	NCB31HK-561X	C CAPACITOR		
	C 313	NCB31HK-561X	C CAPACITOR		
	C 314	NCB31HK-331X	C CAPACITOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	C 315	NCB31HK-471X	C CAPACITOR		
	C 316	NCB31HK-271X	C CAPACITOR		
	C 317	NCS31HJ-121X	C CAPACITOR		
	C 318	NCB31CK-104X	C CAPACITOR		
	C 319	NCB31HK-102X	C CAPACITOR		
	C 320	NCB31HK-102X	C CAPACITOR		
	C 321	NCB31HK-102X	C CAPACITOR		
	C 322	NCB31HK-562X	C CAPACITOR		
	C 323	NCB31HK-102X	C CAPACITOR		
	C 324	NCB31CK-104X	C CAPACITOR		
	C 325	NCS31HJ-470X	C.CAPA. C.M		
	C 326	NCB31CK-183X	C CAPACITOR		
	C 327	NCB31HK-102X	C CAPACITOR		
	C 328	NCB31CK-104X	C CAPACITOR		
	C 329	NCB31CK-103X	C CAPACITOR		
	C 330	NCB31CK-104X	C CAPACITOR		
	C 331	NCB31CK-103X	C CAPACITOR		
	C 332	NCB21CK-105X	C CAPACITOR		
	C 333	NCB31CK-104X	C CAPACITOR		
	C 334	NCB31CK-104X	C CAPACITOR		
	C 337	NCB31CK-104X	C CAPACITOR		
	C 338	NCB31CK-104X	C CAPACITOR		
	C 339	NCB31CK-104X	C CAPACITOR		
	C 340	NCB31CK-104X	C CAPACITOR		
	C 341	NCB31CK-104X	C CAPACITOR		
	C 342	NCB31CK-104X	C CAPACITOR		
	C 343	NCB31CK-104X	C CAPACITOR		
	C 344	NCB31CK-104X	C CAPACITOR		
	C 345	NCB31CK-104X	C CAPACITOR		
	C 346	NCB31CK-104X	C CAPACITOR		
	C 347	NCB31CK-104X	C CAPACITOR		
	C 348	NCB31CK-104X	C CAPACITOR		
	C 349	NCB31CK-104X	C CAPACITOR		
	C 350	NCB31CK-104X	C CAPACITOR		
	C 401	NEA70GM-476X	E.CAPA. C.M.		
	C 402	NCB31CK-104X	C CAPACITOR		
	C 403	NCB31CK-104X	C CAPACITOR		
	C 404	NCB31CK-104X	C CAPACITOR		
	C 405	NCB31CK-104X	C CAPACITOR		
	C 406	NCB31CK-104X	C CAPACITOR		
	C 407	NCB31CK-104X	C CAPACITOR		
	C 450	NCB31CK-104X	C CAPACITOR		
	C 500	NEA70JM-476X	E.CAPACITOR		
	C 501	NCB31CK-104X	C CAPACITOR		
	C 502	NEA70JM-476X	E.CAPACITOR		
	C 503	NEA71AM-336X	E CAPACITOR		
	C 504	NEA70JM-476X	E.CAPACITOR		
	C 505	NEA70JM-476X	E.CAPACITOR		
	C 506	NDC31HJ-150X	C CAPACITOR		
	C 507	NDC31HJ-180X	C.CAPACITOR		
	C 508	NEA70JM-476X	E.CAPACITOR		
	C 511	NEA70GM-476X	E.CAPA. C.M.		
	C 512	NCB31CK-104X	C CAPACITOR		
	C 514	NCB31CK-104X	C CAPACITOR		
	C 515	NCB31CK-104X	C CAPACITOR		
	C 516	NCB31CK-104X	C CAPACITOR		
	C 517	NCB31CK-104X	C CAPACITOR		
	C 518	NCB31CK-104X	C CAPACITOR		
	C 519	NCB31CK-104X	C CAPACITOR		
	C 520	NCB31CK-104X	C CAPACITOR		
	C 521	NCB31CK-104X	C CAPACITOR		
	C 523	NCB31CK-104X	C CAPACITOR		
	C 524	NEA70GM-476X	E.CAPA. C.M.		
	C 527	NEA70GM-476X	E.CAPA. C.M.		
	C 528	NCB31CK-104X	C CAPACITOR		
	C 529	NCB31CK-104X	C CAPACITOR		

■ **Electrical parts list (Servo control board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 531	NCB31CK-104X	C CAPACITOR		
	C 532	NCB31CK-104X	C CAPACITOR		
	C 533	NCB31CK-104X	C CAPACITOR		
	C 534	NCB31CK-104X	C CAPACITOR		
	C 535	NCB31CK-104X	C CAPACITOR		
	C 536	NCB31CK-104X	C CAPACITOR		
	C 539	NCB31CK-104X	C CAPACITOR		
	C 540	NCB31CK-104X	C CAPACITOR		
	C 541	NCB31CK-104X	C CAPACITOR		
	C 542	NCB31CK-104X	C CAPACITOR		
	C 543	NCB31CK-104X	C CAPACITOR		
	C 544	NCB31CK-104X	C CAPACITOR		
	C 545	NCB31CK-104X	C CAPACITOR		
	C 547	NCB31CK-104X	C CAPACITOR		
	C 548	NCB31CK-104X	C CAPACITOR		
	C 549	NEA70GM-476X	E.CAPA. C.M.		
	C 550	NCB31CK-104X	C CAPACITOR		
	C 551	NCB31CK-103X	C CAPACITOR		
	C 554	NCB31CK-104X	C CAPACITOR		
	C 557	NCB31CK-104X	C CAPACITOR		
	C 569	NCB31CK-104X	C CAPACITOR		
	C 571	NEA70GM-476X	E.CAPA. C.M.		
	C 572	NCB31CK-104X	C CAPACITOR		
	C 573	NEA70GM-227X	E.CAPA, C.M		
	C 578	NCB31CK-104X	C CAPACITOR		
	C 580	NEA70GM-476X	E.CAPA. C.M.		
	C 581	NEA70GM-227X	E.CAPA, C.M		
	C 582	NEA70GM-476X	E.CAPA. C.M.		
	C 590	NCB31CK-104X	C CAPACITOR		
	C 591	NCB31CK-104X	C CAPACITOR		
	C 592	NCB31CK-104X	C CAPACITOR		
	C 593	NCB31CK-104X	C CAPACITOR		
	C 594	NCB31CK-104X	C CAPACITOR		
	C 595	NCB31CK-104X	C CAPACITOR		
	C 601	NEA70GM-476X	E.CAPA. C.M.		
	C 602	NEA70GM-476X	E.CAPA. C.M.		
	C 619	NCB31CK-104X	C CAPACITOR		
	C 700	QETN1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 707	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 710	NCS31HJ-102X	C CAPACITOR		
	C 711	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C 714	QETN1AM-477Z	E CAPACITOR	470MF 20% 10V	
	C 716	QETN1AM-477Z	E CAPACITOR	470MF 20% 10V	
	C 717	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C 730	QFV21HJ-224Z	MF CAPACITOR	.22MF 5% 50V	
	C 731	QFN31HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 735	NCB31CK-104X	C CAPACITOR		
	C 740	QFN31HJ-102Z	M CAPACITOR	1000PF 5% 50V	
	C 741	QFP31HJ-221Z	PP CAPACITOR	220PF 5% 50V	
	C 742	QFN31HJ-332Z	M CAPACITOR	3300PF 5% 50V	
	C 744	QFN31HJ-681Z	M CAPACITOR	680PF 5% 50V	
	C 745	QFN31HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 746	QETN1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 747	QFN31HJ-222Z	M CAPACITOR	2200PF 5% 50V	
	C 748	QFN31HJ-681Z	M CAPACITOR	680PF 5% 50V	
	C 749	QFN31HJ-681Z	M CAPACITOR	680PF 5% 50V	
	C 750	QFN31HJ-102Z	M CAPACITOR	1000PF 5% 50V	
	C 751	QFP31HJ-221Z	PP CAPACITOR	220PF 5% 50V	
	C 752	QFN31HJ-332Z	M CAPACITOR	3300PF 5% 50V	
	C 754	QFN31HJ-681Z	M CAPACITOR	680PF 5% 50V	
	C 755	QFN31HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 756	QETN1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 757	QFN31HJ-222Z	M CAPACITOR	2200PF 5% 50V	
	C 761	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 762	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 771	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	

⚠	Item	Parts number	Parts name	Remarks	Area
	C 772	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 797	NCB31HK-152X	C CAPACITOR		
	C 811	NCB31CK-104X	C CAPACITOR		A,UB,UG,US,UW
	C 812	QETN1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 813	QETN0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 814	QETN1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C 815	QETN0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 816	QETN1AM-226Z	E CAPACITOR	22MF 20% 10V	
	C 817	QETN1AM-226Z	E CAPACITOR	22MF 20% 10V	
	C 818	NCB21CK-105X	C CAPACITOR		
	C 819	QETN1AM-226Z	E CAPACITOR	22MF 20% 10V	
	C 831	NCB21CK-105X	C CAPACITOR		
	C 832	NCB21CK-105X	C CAPACITOR		
	C 833	NCB31HK-103X	C CAPACITOR		A,UB,UG,US,UW
	C 834	NCB31CK-104X	C CAPACITOR		
	C 835	NCB31CK-104X	C CAPACITOR		
	C 836	NCB31CK-103X	C CAPACITOR		
	C 837	NCS31HJ-391X	C CAPACITOR		
	C 838	NCS31HJ-391X	C CAPACITOR		
	C 840	NCS31HJ-391X	C CAPACITOR		
	C 851	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 853	NCB31CK-104X	C CAPACITOR		
	C 856	QETN0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 858	QETN0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 859	QETN1AM-226Z	E CAPACITOR	22MF 20% 10V	
	C 860	QETN0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 865	NCB31CK-103X	C CAPACITOR		
	C 992	NCB31CK-104X	C CAPACITOR		
	C 993	NCB31CK-104X	C CAPACITOR		
	C 994	NCB31CK-104X	C CAPACITOR		
	C 995	NCB31CK-104X	C CAPACITOR		
	C 996	NCB31CK-104X	C CAPACITOR		
	C 997	NCB31CK-104X	C CAPACITOR		
	C 998	NCB31CK-104X	C CAPACITOR		
	C1701	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C1702	QETN1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C1703	NCS31HJ-151X	C CAPACITOR		
	C1704	NCS31HJ-331X	C.CAPA. C.M		
	C1706	NCB31CK-104X	C CAPACITOR		
	CN101	QGF0523F1-30W	FFC/FPC CONNECTOR	PU	
	CN201	QGF1037F1-15W	CONNECTOR	SP&STP	
	CN202	QGF1037F1-06W	W TO B CONNECTOR	LOADER	
	CN511	QGF1016C1-27	CONNECTOR		
	CN801	QGF1205C1-15	CONNECTOR		B,E,EN,EE,EV
	D 101	RB521S-30	MG RESISTOR		
	FW901	QUM138-08DGZ4	PARA RIBON WIRE		
	FW903	QUM134-08DGZ4	PARA RIBON WIRE		
	IC101	AN8703FH-V	IC		
	IC201	BA5983FM-X	IC		
	IC251	BA6664FM-X	LSI		
	IC301	MN103S26EGA	IC		
	IC401	MN102L62GLF3	IC		except B,E
	IC451	S-93C66AFJ-X	IC		
	IC501	NDV8601VWA-BE	IC		
	IC506	K4S641632F-TC75	IC		
	IC509	SST39VF160-9CEK	IC (FLASH)	LSB	
	IC510	S-93C66AFJ-X	IC		
	IC511	LM1117MP1.8-X	IC		
	IC512	74LCX373MTC-X	IC(DIGITAL)		
	IC513	74LCX373MTC-X	IC(DIGITAL)		
	IC522	74LCX32MTC-X	IC(DIGITAL)		
	IC523	NC7SZ125P5-X	IC(DIGITAL)		
	IC703	MN35505-X	IC C M		
	IC704	TC74HC08AF-X	IC		
	IC741	NJM5532L	IC		
	IC751	NJM5532L	IC		

■ **Electrical parts list (Servo control board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	IC801	MM1567AJ-X	IC		
	J 700	QNN0420-001	PIN JACK	FRONT L/R	
	J 701	QNN0347-001	PIN JACK	COAXIAL	
	J 703	GP1FA351TZ	OPT TRANSMITTER	OPT DIGITAL OUT	
	J 801	QNN0430-001	PIN JACK	COMPONENT E,U	A,UB,UG,US,UW
	J 802	QNN0434-001	PIN JACK	S/COMP. ALL	
	K 101	NQR0007-002X	FERRITE BEADS		
	K 301	NQR0007-002X	FERRITE BEADS		
	K 302	NQR0007-002X	FERRITE BEADS		
	K 303	NQR0007-002X	FERRITE BEADS		
	K 304	NQR0007-002X	FERRITE BEADS		
	K 401	NQR0007-002X	FERRITE BEADS		
	K 501	NQR0007-002X	FERRITE BEADS		
	K 502	NRSA02J-0R0X	MG RESISTOR		
	K 503	NRSA02J-0R0X	MG RESISTOR		
	K 504	NQR0007-002X	FERRITE BEADS		
	K 507	NQR0007-002X	FERRITE BEADS		
	K 508	NQR0007-002X	FERRITE BEADS		
	K 509	NQR0007-002X	FERRITE BEADS		
	K 510	NQR0007-002X	FERRITE BEADS		
	K 513	NQR0007-002X	FERRITE BEADS		
	K 515	NQR0007-002X	FERRITE BEADS		
	K 518	NQR0007-002X	FERRITE BEADS		
	K 519	NQR0007-002X	FERRITE BEADS		
	K 520	NQR0007-002X	FERRITE BEADS		
	K 556	NQR0007-002X	FERRITE BEADS		
	K 557	NQR0007-002X	FERRITE BEADS		
	K 558	NQR0007-002X	FERRITE BEADS		
	K 559	NQR0007-002X	FERRITE BEADS		
	K 560	NQR0007-002X	FERRITE BEADS		
	K 561	NQR0007-002X	FERRITE BEADS		
	K 563	NQR0007-002X	FERRITE BEADS		
	K 564	NQR0007-002X	FERRITE BEADS		
	K 566	NQR0007-002X	FERRITE BEADS		
	K 567	NQR0007-002X	FERRITE BEADS		
	K 569	NQR0007-002X	FERRITE BEADS		
	K 571	NQR0007-002X	FERRITE BEADS		
	K 573	NQR0007-002X	FERRITE BEADS		
	K 575	NQR0007-002X	FERRITE BEADS		
	K 577	NQR0007-002X	FERRITE BEADS		
	K 579	NQR0007-002X	FERRITE BEADS		
	K 582	NQR0007-002X	FERRITE BEADS		
	K 586	NQR0007-002X	FERRITE BEADS		
	K 701	NQR0007-002X	FERRITE BEADS		
	K 702	NQR0007-002X	FERRITE BEADS		
	K 703	NQR0007-002X	FERRITE BEADS		
	K 704	NQR0007-002X	FERRITE BEADS		
	K 705	NQR0227-004X	FERRITE BEADS		
	K 706	NQR0227-004X	FERRITE BEADS		
	K 711	NQR0007-002X	FERRITE BEADS		
	K 801	NQR0007-002X	FERRITE BEADS		
	K 802	NQR0007-002X	FERRITE BEADS		
	K1701	NQR0227-004X	FERRITE BEADS		
	L 501	NQL044K-100X	INDUCTOR		
	L 502	NQL044K-100X	INDUCTOR		
	L 503	NQL044K-100X	INDUCTOR		
	L1701	QQL231K-1R0Y	INDUCTOR		
	Q 101	KTA1001/Y/-X	TRANSISTOR		
	Q 102	KTA1001/Y/-X	TRANSISTOR		
	Q 103	DTA144EE-X	DIGI TRANSISTOR		
	Q 704	KRC109S-X	TRANSISTOR		
	Q 705	KRA102S-X	DIGITAL.TR		
	Q 743	2SC3576-JVC-T	TRANSISTOR I/M	LR MUTE	
	Q 753	2SC3576-JVC-T	TRANSISTOR I/M	LR MUTE	
	Q 791	2SC2412K/RS/-X	CHIP TRANSISTOR		
	Q 825	DTA114EKA-X	DIGITAL.TRANSISTOR	E ONLY	B,E,EN,EE,EV
	Q 826	DTC114EKA-X	TRANSISTOR		B,E,EN,EE,EV
	Q 828	KRA121S-X	DIGITAL.TR	D ONLY	B,E,EN,EE,EV
	R 101	NRSA63J-333X	MG RESISTOR		
	R 102	NRSA63J-223X	MG RESISTOR		
	R 103	NRSA63J-223X	MG RESISTOR		
	R 104	NRS125J-270X	MG RESISTOR		
	R 105	NRS125J-270X	MG RESISTOR		
	R 106	NRSA63J-273X	MG RESISTOR		
	R 107	NRSA63J-273X	MG RESISTOR		
	R 108	NRSA63J-222X	MG RESISTOR		
	R 109	NRSA63J-182X	MG RESISTOR		
	R 110	NRSA63J-333X	MG RESISTOR		
	R 111	NRVA63D-243X	RES. C.M		
	R 112	NRSA63J-822X	MG RESISTOR		
	R 113	NRSA63J-103X	MG RESISTOR		
	R 114	NRSA63J-0R0X	MG RESISTOR		
	R 115	NRSA63J-0R0X	MG RESISTOR		
	R 116	NRSA63J-0R0X	MG RESISTOR		
	R 117	NRSA63J-0R0X	MG RESISTOR		
	R 119	NRSA63J-2R2X	MG RESISTOR		
	R 120	NRSA63J-2R2X	MG RESISTOR		
	R 121	NRSA63J-472X	MG RESISTOR		
	R 125	NRSA63J-105X	MG RESISTOR		
	R 126	NRSA63J-105X	MG RESISTOR		
	R 127	NRSA63J-222X	MG RESISTOR		
	R 128	NRS125J-1R0X	MG RESISTOR		
	R 129	NRS125J-1R0X	MG RESISTOR		
	R 130	NRSA63J-182X	MG RESISTOR		
	R 201	NRSA63J-470X	MG RESISTOR		
	R 202	NRS125J-1R0X	MG RESISTOR		
	R 203	NRSA63J-0R0X	MG RESISTOR		
	R 204	NRSA63J-273X	MG RESISTOR		
	R 205	NRSA63J-273X	MG RESISTOR		
	R 206	NRSA63J-303X	MG RESISTOR		
	R 207	NRSA63J-473X	MG RESISTOR		
	R 208	NRSA63J-223X	MG RESISTOR		
	R 209	NRSA63J-223X	MG RESISTOR		
	R 210	NRSA63J-242X	MG RESISTOR		
	R 211	NRSA63J-242X	MG RESISTOR		
	R 212	NRSA63J-103X	MG RESISTOR		
	R 213	NRSA63J-103X	MG RESISTOR		
	R 214	NRSA63J-103X	MG RESISTOR		
	R 215	NRSA63J-103X	MG RESISTOR		
	R 216	NRSA63J-912X	MG RESISTOR		
	R 219	NRSA63J-183X	MG RESISTOR		
	R 220	NRSA63J-243X	MG RESISTOR		
	R 221	NRSA63J-682X	MG RESISTOR		
	R 222	NRSA63J-103X	MG RESISTOR		
	R 223	NRSA63J-912X	MG RESISTOR		
	R 224	NRSA63J-103X	MG RESISTOR		
	R 251	NRS125J-R47X	MG RESISTOR		
	R 252	NRSA63J-2R2X	MG RESISTOR		
	R 253	NRSA63J-0R0X	MG RESISTOR		
	R 254	NRSA63J-203X	MG RESISTOR		
	R 255	NRSA63J-103X	MG RESISTOR		
	R 256	NRSA63J-470X	MG RESISTOR		
	R 258	NRSA63J-0R0X	MG RESISTOR		
	R 259	NRSA63J-103X	MG RESISTOR		
	R 301	NRSA63J-473X	MG RESISTOR		
	R 302	NRSA63J-473X	MG RESISTOR		
	R 303	NRSA63J-473X	MG RESISTOR		
	R 304	NRSA63J-473X	MG RESISTOR		
	R 305	NRSA63J-473X	MG RESISTOR		
	R 306	NRSA63J-473X	MG RESISTOR		
	R 307	NRSA63J-473X	MG RESISTOR		
	R 308	NRSA63J-0R0X	MG RESISTOR		

■ **Electrical parts list (Servo control board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 309	NRSA63J-473X	MG RESISTOR		
	R 313	NRSA63J-473X	MG RESISTOR		
	R 317	NRSA63J-473X	MG RESISTOR		
	R 319	NRSA63J-473X	MG RESISTOR		
	R 320	NRSA63J-105X	MG RESISTOR	C	
	R 321	NRSA63J-473X	MG RESISTOR		
	R 323	NRSA63J-473X	MG RESISTOR		
	R 324	NRSA63J-473X	MG RESISTOR		
	R 325	NRSA63J-123X	MG RESISTOR		
	R 326	NRSA63J-473X	MG RESISTOR		
	R 327	NRSA63J-105X	MG RESISTOR		
	R 328	NRSA63J-183X	MG RESISTOR		
	R 329	NRSA63J-473X	MG RESISTOR		
	R 330	NRSA63J-473X	MG RESISTOR		
	R 331	NRSA63J-473X	MG RESISTOR		
	R 332	NRSA63J-102X	MG RESISTOR		
	R 333	NRSA63J-183X	MG RESISTOR		
	R 334	NRSA63J-102X	MG RESISTOR		
	R 336	NRSA63J-273X	MG RESISTOR		
	R 337	NRSA63J-273X	MG RESISTOR		
	R 338	NRSA63J-472X	MG RESISTOR		
	R 339	NRSA63J-472X	MG RESISTOR		
	R 340	NRSA63J-103X	MG RESISTOR		
	R 341	NRSA63J-562X	MG RESISTOR		
	R 350	NRSA63J-0R0X	MG RESISTOR		
	R 402	NRSA63J-472X	MG RESISTOR		
	R 411	NRSA63J-472X	MG RESISTOR		
	R 413	NRSA63J-472X	MG RESISTOR		
	R 414	NRSA63J-472X	MG RESISTOR		
	R 421	NRSA63J-0R0X	MG RESISTOR		
	R 422	NRSA63J-472X	MG RESISTOR		
	R 423	NRSA63J-472X	MG RESISTOR		
	R 424	NRSA63J-472X	MG RESISTOR		
	R 427	NRSA63J-102X	MG RESISTOR		
	R 428	NRSA63J-472X	MG RESISTOR		
	R 501	NRSA63J-470X	MG RESISTOR		
	R 510	NRSA63J-0R0X	MG RESISTOR		
	R 511	NRSA63J-0R0X	MG RESISTOR		
	R 512	NRSA63J-332X	MG RESISTOR		
	R 519	NRSA63J-0R0X	MG RESISTOR		B,E,EN,EE,EV
	R 520	NRSA63J-0R0X	MG RESISTOR		A,UB,UG,US,UW
	R 521	NRSA63J-103X	MG RESISTOR		
	R 541	NRSA63J-0R0X	MG RESISTOR		
	R 543	NRSA63J-0R0X	MG RESISTOR		
	R 544	NRSA63J-471X	MG RESISTOR		
	R 545	NRSA63J-0R0X	MG RESISTOR		
	R 546	NRSA63J-0R0X	MG RESISTOR		
	R 547	NRSA63J-0R0X	MG RESISTOR		
	R 550	NRSA63J-471X	MG RESISTOR		
	R 551	NRSA63J-0R0X	MG RESISTOR		
	R 552	NRSA63J-0R0X	MG RESISTOR		
	R 553	NRSA63J-0R0X	MG RESISTOR		
	R 565	NRVA63D-622X	CMF RESISTOR		
	R 566	NRVA63D-132X	MG.RESI C.M		
	R 567	NRVA63D-820X	RES. C.M		
	R 568	NRVA63D-750X	RES. C.M		
	R 569	NRVA63D-750X	RES. C.M		
	R 570	NRSA63J-100X	MG RESISTOR		
	R 572	NRVA63D-750X	RES. C.M		
	R 573	NRSA63J-162X	MG RESISTOR		
	R 574	NRSA63J-162X	MG RESISTOR		
	R 575	NRSA63J-151X	MG RESISTOR		
	R 576	NRSA63J-151X	MG RESISTOR		
	R 578	NRSA63J-151X	MG RESISTOR		
	R 583	NRSA63J-101X	MG RESISTOR		
	R 584	NRSA63J-332X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R 589	NRSA63J-0R0X	MG RESISTOR		
	R 655	NRSA63J-0R0X	MG RESISTOR		
	R 704	NRSA63J-0R0X	MG RESISTOR	C	
	R 706	NRSA63J-104X	MG RESISTOR		
	R 711	NRSA63J-100X	MG RESISTOR		
	R 712	NRSA63J-100X	MG RESISTOR		
	R 713	NRSA63J-470X	MG RESISTOR		
	R 715	NRSA63J-470X	MG RESISTOR		
	R 721	NRSA63J-471X	MG RESISTOR		
	R 723	NRSA63J-471X	MG RESISTOR		
	R 724	NRSA63J-471X	MG RESISTOR		
	R 725	NRSA63J-471X	MG RESISTOR		
	R 726	NRSA63J-220X	MG RESISTOR		
	R 728	NRSA63J-471X	MG RESISTOR		
	R 729	NRSA63J-471X	MG RESISTOR		
	R 731	NRSA63J-332X	MG RESISTOR		
	R 738	NRSA63J-152X	MG RESISTOR		
	R 739	NRSA63J-0R0X	MG RESISTOR		
	R 740	NRSA63J-0R0X	MG RESISTOR		
	R 742	QRA14CF-1802Y	MF RESISTOR	18 1/4W	
	R 743	QRA14CF-1802Y	MF RESISTOR	18 1/4W	
	R 744	NRSA63J-362X	MG RESISTOR		
	R 746	QRA14CF-3301Y	MF RESISTOR	33 1/4W	
	R 747	NRSA63J-362X	MG RESISTOR		
	R 748	NRSA63J-112X	MG RESISTOR		
	R 750	NRSA63J-273X	MG RESISTOR		
	R 751	NRSA63J-273X	MG RESISTOR		
	R 752	QRA14CF-1802Y	MF RESISTOR	18 1/4W	
	R 753	QRA14CF-1802Y	MF RESISTOR	18 1/4W	
	R 754	NRSA63J-362X	MG RESISTOR		
	R 756	QRA14CF-3301Y	MF RESISTOR	33 1/4W	
	R 757	NRSA63J-362X	MG RESISTOR		
	R 758	NRSA63J-112X	MG RESISTOR		
	R 761	NRSA63J-112X	MG RESISTOR		
	R 762	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 763	NRSA63J-362X	MG RESISTOR		
	R 764	NRSA63J-183X	MG RESISTOR		
	R 765	NRSA63J-561X	MG RESISTOR		
	R 766	NRSA63J-273X	MG RESISTOR		
	R 767	NRSA63J-101X	MG RESISTOR		
	R 768	NRSA63J-103X	MG RESISTOR		
	R 771	NRSA63J-112X	MG RESISTOR		
	R 772	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 773	NRSA63J-362X	MG RESISTOR		
	R 774	NRSA63J-183X	MG RESISTOR		
	R 775	NRSA63J-561X	MG RESISTOR		
	R 776	NRSA63J-273X	MG RESISTOR		
	R 777	NRSA63J-101X	MG RESISTOR		
	R 778	NRSA63J-103X	MG RESISTOR		
	R 779	NRSA63J-0R0X	MG RESISTOR		
	R 780	NRSA63J-273X	MG RESISTOR		
	R 781	NRSA63J-273X	MG RESISTOR		
	R 782	NRSA63J-221X	MG RESISTOR		
	R 783	NRSA63J-221X	MG RESISTOR		
	R 785	NRSA63J-0R0X	MG RESISTOR		
	R 789	NRSA63J-104X	MG RESISTOR		
	R 792	NRSA63J-221X	MG RESISTOR		
	R 793	NRSA63J-221X	MG RESISTOR		
	R 794	NRSA63J-473X	MG RESISTOR		
	R 795	NRSA63J-473X	MG RESISTOR		
	R 796	NRSA63J-103X	MG RESISTOR		
	R 797	NRSA63J-473X	MG RESISTOR		
	R 800	NRSA63J-750X	MG RESISTOR	U,E	A,UB,UG,US,UW
	R 827	NRSA63J-0R0X	MG RESISTOR		
	R 828	NRSA63J-750X	MG RESISTOR	U,E	A,UB,UG,US,UW
	R 829	NRSA63J-750X	MG RESISTOR		A,UB,UG,US,UW

■ **Electrical parts list (Servo control board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 831	NRSA63J-0R0X	MG RESISTOR		A,UB,UG,US,UW
	R 832	NRSA63J-0R0X	MG RESISTOR	E ONLY	B,E,EN,EE,EV
	R 833	NRSA63J-0R0X	MG RESISTOR	D,U	A,UB,UG,US,UW
	R 836	NRSA63J-0R0X	MG RESISTOR		
	R 837	NRSA63J-0R0X	MG RESISTOR	U ONLY	A,UB,UG,US,UW
	R 838	NRSA63J-750X	MG RESISTOR		
	R 839	NRSA63J-750X	MG RESISTOR		
	R 843	NRSA63J-750X	MG RESISTOR		
	R 844	NRSA63J-222X	MG RESISTOR	U,E	B,E,EN,EE,EV
	R 845	NRSA63J-0R0X	MG RESISTOR		B,E,EN,EE,EV
	R 846	NRSA63J-0R0X	MG RESISTOR		B,E,EN,EE,EV
	R 847	NRSA63J-0R0X	MG RESISTOR		
	R 850	NRSA63J-0R0X	MG RESISTOR		B,E,EN,EE,EV
	R 851	NRSA63J-223X	MG RESISTOR		
	R 852	NRSA63J-223X	MG RESISTOR		
	R 853	NRSA63J-0R0X	MG RESISTOR		B,E,EN,EE,EV
	R 854	NRSA63J-0R0X	MG RESISTOR	RGB E ONLY	B,E,EN,EE,EV
	R 855	NRSA63J-104X	MG RESISTOR	RGB E ONLY	B,E,EN,EE,EV
	R 856	NRSA63J-102X	MG RESISTOR	E ONLY	B,E,EN,EE,EV
	R 857	NRSA63J-102X	MG RESISTOR	E ONLY	B,E,EN,EE,EV
	R 858	NRSA63J-0R0X	MG RESISTOR	U,E	B,E,EN,EE,EV
	R 859	NRSA63J-0R0X	MG RESISTOR		
	R 861	NRSA63J-0R0X	MG RESISTOR		
	R 862	NRSA63J-332X	MG RESISTOR		B,E,EN,EE,EV
	R 863	NRSA63J-102X	MG RESISTOR		
	R 866	NRSA63J-0R0X	MG RESISTOR		
	R 870	NRSA63J-0R0X	MG RESISTOR		
	R 871	NRSA63J-102X	MG RESISTOR		
	R 872	NRSA63J-750X	MG RESISTOR		
	R 873	NRSA63J-0R0X	MG RESISTOR		
	R 874	NRSA63J-102X	MG RESISTOR		
	R 875	NRSA63J-750X	MG RESISTOR		
	R 876	NRSA63J-0R0X	MG RESISTOR		
	R 877	NRSA63J-102X	MG RESISTOR		
	R 878	NRSA63J-750X	MG RESISTOR		
	R 879	NRSA63J-0R0X	MG RESISTOR		
	R 880	NRSA63J-102X	MG RESISTOR		
	R 881	NRSA63J-750X	MG RESISTOR		
	R 882	NRSA63J-0R0X	MG RESISTOR		B,E,EN,EE,EV
	R 883	NRSA63J-0R0X	MG RESISTOR		A,UB,UG,US,UW
	R 884	NRSA63J-0R0X	MG RESISTOR		
	R 887	NRSA63J-0R0X	MG RESISTOR		A,UB,UG,US,UW
	R 888	NRSA63J-0R0X	MG RESISTOR		B,E,EN,EE,EV
	R 890	NRSA63J-0R0X	MG RESISTOR		A,UB,UG,US,UW
	R 991	NRSA63J-220X	MG RESISTOR		
	R 996	NRSA63J-0R0X	MG RESISTOR		A,UB,UG,US,UW
	R 997	NRSA63J-0R0X	MG RESISTOR		
	R 998	NRSA63J-0R0X	MG RESISTOR		B,E,EN,EE,EV
	R1500	QRA14CF-1802Y	MF RESISTOR	18 1/4W	
	R1501	QRA14CF-1802Y	MF RESISTOR	18 1/4W	
	R1502	NRSA63J-100X	MG RESISTOR		
	R1503	NRSA63J-100X	MG RESISTOR		
	R1504	NRSA63J-100X	MG RESISTOR		
	R1505	NRSA63J-100X	MG RESISTOR		
	R1506	NRSA63J-100X	MG RESISTOR		
	R1507	NRSA63J-100X	MG RESISTOR		
	R1508	NRSA63J-100X	MG RESISTOR		
	R1509	NRSA63J-100X	MG RESISTOR		
	R1510	NRSA63J-100X	MG RESISTOR		
	R1511	NRSA63J-100X	MG RESISTOR		
	R1512	NRSA63J-100X	MG RESISTOR		
	R1513	NRSA63J-100X	MG RESISTOR		
	R1514	NRSA63J-100X	MG RESISTOR		
	R1515	NRSA63J-100X	MG RESISTOR		
	R1516	NRSA63J-100X	MG RESISTOR		
	R1517	NRSA63J-100X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R1518	NRSA63J-100X	MG RESISTOR		
	R1519	NRSA63J-100X	MG RESISTOR		
	R1520	NRSA63J-100X	MG RESISTOR		
	R1521	NRSA63J-100X	MG RESISTOR		
	R1522	NRSA63J-100X	MG RESISTOR		
	R1523	NRSA63J-100X	MG RESISTOR		
	R1524	NRSA63J-100X	MG RESISTOR		
	R1525	NRSA63J-100X	MG RESISTOR		
	R1526	NRSA63J-100X	MG RESISTOR		
	R1527	NRSA63J-100X	MG RESISTOR		
	R1528	NRSA63J-100X	MG RESISTOR		
	R1529	NRSA63J-100X	MG RESISTOR		
	R1530	NRSA63J-100X	MG RESISTOR		
	R1531	NRSA63J-100X	MG RESISTOR		
	R1532	NRSA63J-100X	MG RESISTOR		
	R1533	NRSA63J-100X	MG RESISTOR		
	R1534	NRSA63J-100X	MG RESISTOR		
	R1535	NRSA63J-100X	MG RESISTOR		
	R1536	NRSA63J-100X	MG RESISTOR		
	R1537	NRSA63J-100X	MG RESISTOR		
	R1538	NRSA63J-100X	MG RESISTOR		
	R1539	NRSA63J-100X	MG RESISTOR		
	R1540	NRSA63J-100X	MG RESISTOR		
	R1541	NRSA63J-100X	MG RESISTOR		
	R1550	NRSA63J-100X	MG RESISTOR		
	R1551	NRSA63J-100X	MG RESISTOR		
	R1552	NRSA63J-100X	MG RESISTOR		
	R1553	NRSA63J-100X	MG RESISTOR		
	R1554	NRSA63J-100X	MG RESISTOR		
	R1555	NRSA63J-100X	MG RESISTOR		
	R1556	NRSA63J-100X	MG RESISTOR		
	R1557	NRSA63J-100X	MG RESISTOR		
	R1558	NRSA63J-100X	MG RESISTOR		
	R1559	NRSA63J-100X	MG RESISTOR		
	R1560	NRSA63J-100X	MG RESISTOR		
	R1561	NRSA63J-100X	MG RESISTOR		
	R1562	NRSA63J-100X	MG RESISTOR		
	R1570	NRSA63J-100X	MG RESISTOR		
	R1571	NRSA63J-100X	MG RESISTOR		
	R1721	NRSA63J-100X	MG RESISTOR		
	R1722	NRSA63J-301X	MG RESISTOR		
	R1725	NRSA63J-301X	MG RESISTOR		
	R1727	NRSA63J-820X	MG RESISTOR		
	R1728	NRSA63J-100X	MG RESISTOR		
	R1730	NRSA63J-100X	MG RESISTOR		
	S 801	QSW0454-001	SWITCH	PAL/NT U	
	WC801	QZW0038-001	WIRE CLAMP		B,E,EN,EE,EV
	X 301	NAX0542-001X	C RESONATOR		
	X 401	NAX0543-001X	C RESONATOR		
	X 571	NAX0513-001X	CRYSTAL		

■ **Electrical parts list (Main board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	BK901	E409182-001SM	GRAND TERMINAL		
	C 1	NCS31HJ-331X	C.CAPA. C.M		
	C 2	NCB31CK-103X	C CAPACITOR		
	C 3	NCB31CK-104X	C CAPACITOR		
	C 4	NCB31CK-104X	C CAPACITOR		
	C 5	NCB31CK-104X	C CAPACITOR		
	C 6	NCB31CK-104X	C CAPACITOR		
	C 8	QEKC1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 9	QEKC1AM-476Z	E CAPACITOR	47MF 20% 10V	
	C 10	NCB21CK-105X	C CAPACITOR		
	C 11	QEKC0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 12	NCB31CK-104X	C CAPACITOR		
	C 13	QEKC1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 14	NCB31CK-104X	C CAPACITOR		
	C 15	NCB31CK-104X	C CAPACITOR		
	C 17	NCB31CK-223X	C CAPACITOR		
	C 100	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
⚠	C 902	QFZ9075-104	MPP CAPACITOR	.10MF	
⚠	C 903	QFZ9075-104	MPP CAPACITOR	.10MF	
⚠	C 905	QCZ9079-102	C CAPACITOR	1000PF	
⚠	C 907	QEZ0590-686	E.CAPACITOR	E	
	C 910	QETN1EM-226Z	E CAPACITOR	22MF 20% 25V	B,E,EN,EE,EV
	C 911	QETN1EM-226Z	E CAPACITOR	22MF 20% 25V	B,E,EN,EE,EV
	C 913	QCZ0136-101Z	C CAPACITOR	100PF	
	C 914	QEZ0532-396Z	E CAPACITOR	39MF	
	C 915	NCB31HK-471X	C CAPACITOR		
⚠	C 921	QCZ9079-102	C CAPACITOR	1000PF	
	C 922	QCZ0136-332Z	C CAPACITOR	3300PF	
	C 928	NCB31CK-223X	C CAPACITOR	C	
	C 965	QEZ0528-108	E CAPACITOR	1000MF	
	C 966	QETN1AM-477Z	E CAPACITOR	470MF 20% 10V	
	C 968	NCB21CK-105X	C CAPACITOR		
	C 969	QETN0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 972	NCS31HJ-471X	C CAPACITOR		
	C 975	QEZ0528-108	E CAPACITOR	1000MF	
	C 976	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C 978	QETN0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 979	QEZ0528-108	E CAPACITOR	1000MF	
	C 980	QETN1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 981	NCB21CK-105X	C CAPACITOR		
	C 982	QEZ0532-187Z	E CAPACITOR	+12V	
	C 983	NCB21CK-105X	C CAPACITOR		
	C 984	QETN1CM-477Z	E CAPACITOR	+12V	
	C 985	QETN0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 986	NCB21CK-334X	C.CAPA. C.M		
	C 987	QEZ0532-187Z	E CAPACITOR	-12V	
	C 989	QETN1CM-477Z	E CAPACITOR	-12V	
	C 990	NCB21CK-334X	C.CAPA. C.M		
	C 991	NCS31HJ-101X	C.CAPA. C.M		
	CN 1	QGF1016C1-27	CONNECTOR		
	CN 2	QGF1016C1-13	CONNECTOR		
	CN 3	QGD2501C1-03Z	SOCKET		
	CN 4	QGA2001C1-02	2P PLUG ASSY		
	CN 5	QGA2001C1-02	2P PLUG ASSY		
	CN 6	QGA2001C1-02	2P PLUG ASSY		
	CN 7	QGF1016F3-13	CONNECTOR		
	CN 8	QGD2501C1-04Z	SOCKET		
	CN 9	QJK018-021202	SIN CR C-B WIRE		
	CN 10	QJK018-021202	SIN CR C-B WIRE		
	CN 11	QJK018-021202	SIN CR C-B WIRE		
	CN902	QGF1205C1-15	CONNECTOR	PERICONE E	B,E,EN,EE,EV
	D 1	1SS355-X	DIODE C.M		
	D 2	SPR-39MVWF	LED	PROGRESSIVE	
	D 4	SELU2E10C	LED		
	D 9	NSPW300BS/BRS/	LED	BACK LIGHT	
	D 10	NSPW300BS/BRS/	LED	BACK LIGHT	
	D 11	SELU2E10C	LED		

⚠	Item	Parts number	Parts name	Remarks	Area
	D 12	1SS355-X	DIODE C.M		
	D 13	1SS355-X	DIODE C.M		
⚠	D 901	S1WB/A/60-4101	BRIDGE DIODE		
⚠	D 902	SARS01-T2	FR DIODE		
⚠	D 904	F1T4-T2	FR DIODE		
	D 905	F1T4-T2	FR DIODE		
⚠	D 908	EK16-F1	FR DIODE(FOMING		
⚠	D 954	F1T4-T2	FR DIODE		
⚠	D 956	F1T4-T2	FR DIODE		
⚠	D 957	F1T4-T2	FR DIODE		
⚠	D 981	RK34-LFB2	SB DIODE		
	D 991	HZS3CLL-T2	Z DIODE		
	D 998	11ES2-T4	DIODE I.M		
	DI 1	QLD0239-001	LCD MODULE		
	EP901	QNZ0136-001Z	EARTH PLATE	PRIMARY	
	FC901	QNG0003-001Z	FUSE CLIP		
	FC902	QNG0003-001Z	FUSE CLIP		
	FW 3	QUM137-10DGZ4	PARA RIBON WIRE		
	HL 1	LE20644-001A	LCD HOLDER		
	HL 2	LE31029-001A	LED HOLDER		
	HS901	E70306-006	HEAT SINK		
	IC 1	MN101C57DLR	IC	SYSCOM MASK	except US
		MN101C57DLN	IC	SYSCOM MASK	US
	IC 2	XC61FN2712M-X	IC		
	IC 3	GP1UD271XK	RM RECIVER		
⚠	IC901	STR-G6551R-F8	IC(HYBRID)		
	IC951	MM1565AF-X	IC		
	IC952	PQ3RD23	IC		
	J 901	QNS0089-001	3.5 JACK	AV COMPULINK	
	J 902	QNZ0516-001	RGB CONNECTOR	PERICONE E	B,E,EN,EE,EV
	JT911	QGD2501C1-04Z	SOCKET	FW901	
	JT912	QGD2501C1-04Z	SOCKET	FW901	
	JT913	QGD2501C1-04Z	SOCKET	FW903	
	K 902	QQR1183-001Z	FERRITE BEADS		
	K 904	QQR1183-001Z	FERRITE BEADS		
	K 905	QQR1183-001Z	FERRITE BEADS		
	K 906	QQR1183-001Z	FERRITE BEADS		
⚠	L 901	QQR1105-001	LINE FILTER		
	L 909	QQL231K-2R2Y	INDUCTOR		
	L 952	QQR1291-001Z	CHOKE COIL		
	L 955	QQR1291-001Z	CHOKE COIL		
	L 957	QQL244K-100Z	INDUCTOR		
	L 959	QQL244K-100Z	INDUCTOR		
	L 960	QQR1291-001Z	CHOKE COIL		
	LE 2	LE31028-001A	LCD LENS		
	P 901	QGA7901C1-02	CONNECTOR		
⚠	PC901	PC123Y02	IC(PHOTO COUPLE		
	Q 1	KRC107S-X	DIGITAL.TR		
	Q 2	KRA103S-X	DIGITAL.TR		
	Q 4	2SC1740S/RS/-T	TRANSISTOR		
	Q 6	KRC107S-X	DIGITAL.TR		
	Q 8	KRA102S-X	DIGITAL.TR		
	Q 13	2SC1740S/RS/-T	TRANSISTOR		
	Q 910	2SC3576-JVC-T	TRANSISTOR I/M	E MUTE	B,E,EN,EE,EV
	Q 911	2SC3576-JVC-T	TRANSISTOR I/M	E MUTE	B,E,EN,EE,EV
	Q 991	KTC3199/Y/-T	TR I/M		
	R 1	NRSA63J-472X	MG RESISTOR		
	R 2	NRSA63J-102X	MG RESISTOR		
	R 3	NRSA63J-472X	MG RESISTOR		
	R 4	NRSA63J-222X	MG RESISTOR		
	R 5	NRSA63J-222X	MG RESISTOR		
	R 6	NRSA63J-104X	MG RESISTOR		
	R 7	NRSA63J-103X	MG RESISTOR	U	A,UB,UG,US,UW
	R 9	NRSA63J-103X	MG RESISTOR		
	R 11	NRSA63J-152X	MG RESISTOR	U	
	R 13	NRSA63J-103X	MG RESISTOR		

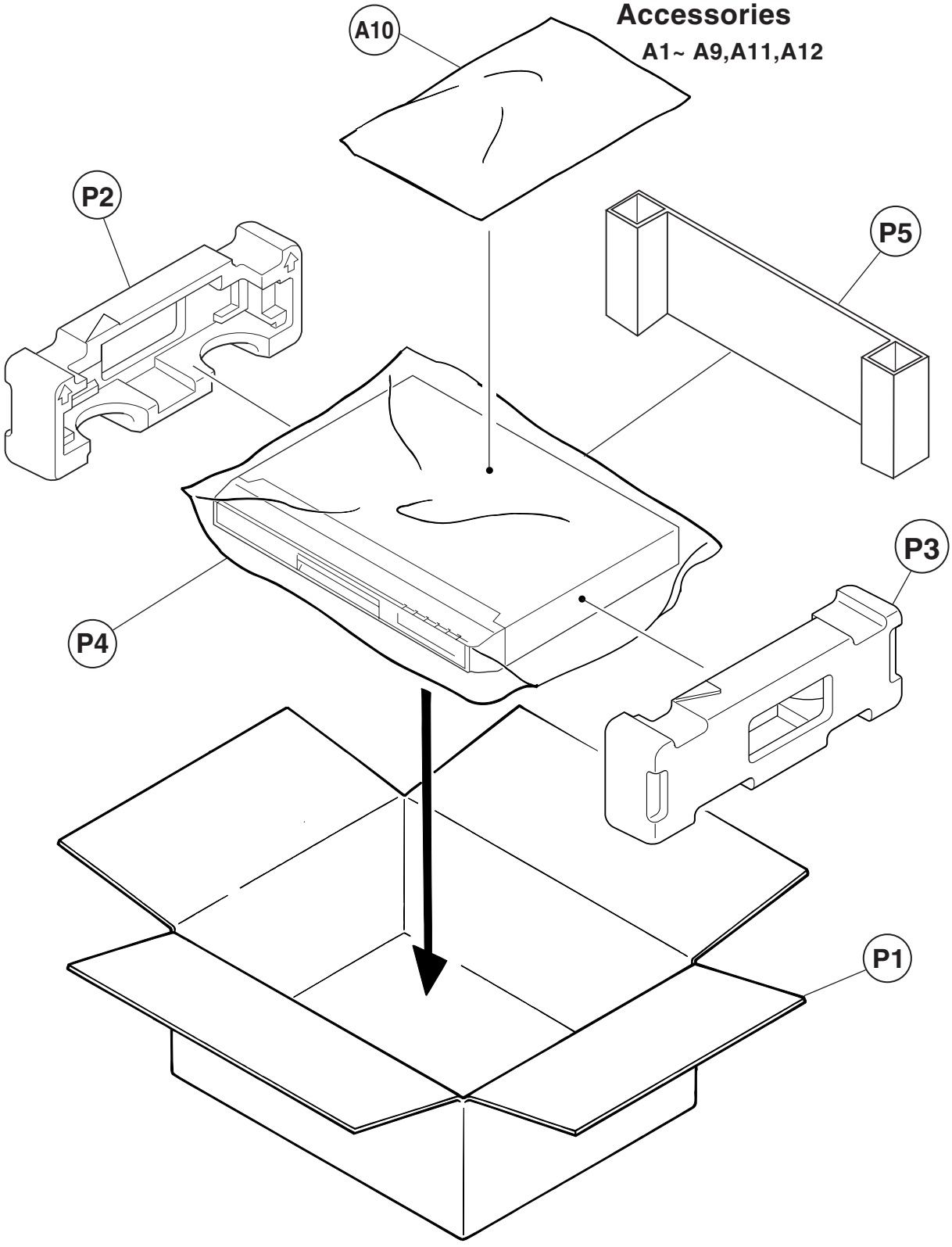
■ **Electrical parts list (Main board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 14	NRSA63J-222X	MG RESISTOR		
	R 15	NRSA63J-103X	MG RESISTOR		
	R 16	NRSA63J-103X	MG RESISTOR		
	R 17	NRSA63J-103X	MG RESISTOR		
	R 18	NRSA63J-270X	MG RESISTOR		
	R 19	NRSA63J-392X	MG RESISTOR		
	R 20	NRSA63J-332X	MG RESISTOR		
	R 21	NRSA63J-0R0X	MG RESISTOR		
	R 22	NRSA63J-0R0X	MG RESISTOR		
	R 23	NRSA63J-151X	MG RESISTOR		
	R 24	NRSA63J-750X	MG RESISTOR		
	R 27	NRSA63J-222X	MG RESISTOR		
	R 28	NRSA63J-222X	MG RESISTOR		
	R 29	NRSA63J-431X	MG RESISTOR		
	R 30	NRSA63J-681X	MG RESISTOR		
	R 34	NRSA63J-105X	MG RESISTOR		
	R 35	NRSA63J-270X	MG RESISTOR		
	R 36	NRSA63J-222X	MG RESISTOR		
	R 37	NRSA63J-222X	MG RESISTOR		
	R 40	NRSA63J-182X	MG RESISTOR		
	R 41	NRSA63J-182X	MG RESISTOR		
	R 42	NRSA63J-392X	MG RESISTOR		
	R 43	NRSA63J-103X	MG RESISTOR		
	R 44	NRSA63J-102X	MG RESISTOR		
	R 46	NRSA63J-472X	MG RESISTOR		
	R 47	NRSA63J-331X	MG RESISTOR		
	R 50	NRSA63J-0R0X	MG RESISTOR	Refer ATTENTION	
	R 51	NRSA63J-0R0X	MG RESISTOR	Refer ATTENTION	
	R 52	NRSA63J-0R0X	MG RESISTOR		
⚠	R 901	QRL01DJ-683X	OMF RESISTOR	68K 5% 1/1W	
	R 902	NRSA63J-390X	MG RESISTOR		
⚠	R 903	QRE141J-560Y	C RESISTOR	56 5% 1/4W	
	R 905	QRL027J-683	OMF RESISTOR	68K 5% 1/2W	
	R 906	QRE141J-681Y	C RESISTOR	680 5% 1/4W	
⚠	R 907	QRT022J-R47	OMF RESISTOR	5% 1/2W	
	R 908	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 909	QRE141J-151Y	C RESISTOR	150 5% 1/4W	B,E,EN,EE,EV
	R 910	NRSA63J-562X	MG RESISTOR	E MUTE	B,E,EN,EE,EV
	R 911	NRSA63J-562X	MG RESISTOR	E MUTE	B,E,EN,EE,EV
	R 912	NRSA63J-561X	MG RESISTOR	E MUTE	B,E,EN,EE,EV
	R 913	NRSA63J-561X	MG RESISTOR	E MUTE	B,E,EN,EE,EV
	R 914	NRSA63J-103X	MG RESISTOR	E MUTE	B,E,EN,EE,EV
	R 915	NRSA63J-103X	MG RESISTOR	E MUTE	B,E,EN,EE,EV
	R 916	NRSA63J-151X	MG RESISTOR	E MUTE	B,E,EN,EE,EV
	R 917	NRSA63J-151X	MG RESISTOR	E MUTE	B,E,EN,EE,EV
	R 918	NRSA63J-101X	MG RESISTOR		
	R 920	QRZ9037-335	F RESISTOR	3.3M 1/0W	
⚠	R 921	QRL01DJ-470X	OMF RESISTOR	47 5% 1/1W	
	R 924	NRSA63J-101X	MG RESISTOR		
	R 951	NRSA63J-750X	MG RESISTOR		B,E,EN,EE,EV
	R 952	NRSA63J-750X	MG RESISTOR		B,E,EN,EE,EV
	R 953	NRSA63J-750X	MG RESISTOR		B,E,EN,EE,EV
	R 954	NRSA63J-750X	MG RESISTOR		B,E,EN,EE,EV
	R 958	NRSA63J-0R0X	MG RESISTOR		
	R 960	NRSA63J-390X	MG RESISTOR		
	R 961	NRSA63J-681X	MG RESISTOR		
	R 962	NRSA63J-151X	MG RESISTOR		
	R 964	NRSA63J-104X	MG RESISTOR		
	R 969	NRSA63J-271X	MG RESISTOR		
	S 1	QSW0651-001Z	TACT SWITCH	POWER SW	
	S 2	QSW0651-001Z	TACT SWITCH	OPEN/CLOSE	
	S 3	QSW0651-001Z	TACT SWITCH	STOP	
	S 4	QSW0651-001Z	TACT SWITCH	PLAY	
	S 5	QSW0651-001Z	TACT SWITCH	PAUSE	
	S 6	QSW0651-001Z	TACT SWITCH	BW SKIP	
	S 7	QSW0651-001Z	TACT SWITCH	FW SKIP	
⚠	T 901	QQS0159-001	SW TRANSF		
	X 1	QAX0667-001Z	RESONATOR I.M		

<ATTENTION>
R50 For only Europe
R51 For only Asia

Packing materials and accessories parts list

Block No. M4MM
Block No. M5MM



■ Parts list (Packing)

Block No. M4MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	LE31032-009A	PACKING CASE	1		A
		LE31032-020A	PACKING CASE	1		B
		LE31032-007A	PACKING CASE	1		UB
		LE31032-019A	PACKING CASE	1		E,EN,EV
		LE31032-021A	PACKING CASE	1		EE
		LE31032-005A	PACKING CASE	1		UG
		LE31032-006A	PACKING CASE	1		US
		LE31032-008A	PACKING CASE	1		UW
	P 2	LE20648-001A	PACKING PAD(L)	1	LEFT	
	P 3	LE20649-001A	PACKING PAD(R)	1	RIGHT	
	P 4	QPC06005515P	POLY BAG	1	FOR SET	
	P 5	LE30920-003A	SHEET ASSY	1		A,B,UB

■ Parts list (Accessories)

Block No. M5MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	LET0204-010A	INST BOOK	1	English	A
		LET0204-004A	INST BOOK	1	English	B
		LET0204-011A	INST BOOK	1	English,Chinese(Beijing)	UB,US
		LET0204-005A	INST BOOK	1	German,French,Dutch	E
		LET0204-008A	INST BOOK	1	Russian	EE
		LET0204-007A	INST BOOK	1	Swedish,Finnish,Danish	EN
		LET0204-006A	INST BOOK	1	German,French,Spanish,Italian	EN
		LET0204-009A	INST BOOK	1	Polish,Hungarian,Czech	EV
		LET0204-013A	INST BOOK	1	English,Arabic	UG
		LET0204-015A	INST BOOK	1	English,Spanish,Porutguese	UW
	A 2	BT-54008-4	WARRANTY CARD	1		E
		BT-54012-2	WARRANTY CARD	1		EE,EV
		BT-56001-2	WARRANTY CARD	1		A
	A 3	LE40902-001A	ERRATA SHEET	1		B
	A 4	VNA3000-204	REGIST.CARD	1		B
	A 5	QAM0328-001	AV CORD 3P	1	AV CORD	
	A 6	RM-SXV010U	REMOCON UNIT	1		A,UB,UG,US,UW
		RM-SXV009E	REMOCON UNIT	1		B,E,EE,EN,EV
	A 7	----------	BATTERY	2	FOR EXP.	
⚠	A 8	QAM0112-001	AC PLUG ADAPTER	1		A,UB,UG,US,UW
	A 9	BT-56002-2	SVC CENTER LIST	1		A
	A 10	QPC02504015P	POLY BAG	1	FOR ACC,INST	
	A 11	QAM0005-002	S-VIDEO CORD	1		A,UB,UG,US,UW
	A 12	LV30258-089A	UB SHEET	1		UB