

JVC

SERVICE MANUAL

COMPACT VHS CAMCORDER

GR-AX260EG/360EG/460EG



Compact VHS



PAL

SPECIFICATIONS

GENERAL

Format	VHS PAL standard
Power source	DC 6 V
Power consumption	
GR-AX460 light on	8.7 W
GR-AX460 light off	5.7 W
GR-AX360	5.9 W
GR-AX260	5.7 W
Signal system	PAL-type
Video recording system	
Luminance	FM recording
Colour	Converted sub-carrier direct recording
	Conforms to VHS standard
Cassette	VHS-C cassette
Tape speed	23.39 mm/sec
Recording time	
Max.	45 minutes (with EC-45 cassette)
Operating temperature	0°C to +40°C
Operating humidity	35% to 80%
Storage temperature	-20°C to +50°C
Weight	
GR-AX460	Approx. 770 g
GR-AX360	Approx. 750 g
GR-AX260	Approx. 760 g
Dimensions	
GR-AX460/AX260	109 (W) x 113 (H) x 226 (D) mm
GR-AX360	109 (W) x 113 (H) x 206 (D) mm

CAMERA

Pick up	1/4" format CCD
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Minimum required

Illumination	2 lx (F1.2)
Illumination range	2 to 100,000 lx
Lens	F1.2, f = 4.1 to 57.4 mm, 14:1 power zoom lens with auto iris and macro control, filter diameter 46 mm
Viewfinder	Electronic viewfinder with 0.55" colour LCD (GR-AX360) 0.5" black/white CRT (GR-AX460/AX260)

White balance adjustment

	Auto/Manual adjustment
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VIDEO

Output	1 Vp-p/75 ohms, unbalanced (via VIDEO out connector)
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AUDIO

Output	-8 dBs, 1 k-ohm (via AUDIO out connector)
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AAC POWER ADAPTER/BATTERY CHARGER (AA-V11EG) SPECIFICATIONS

Power requirement	AC 110 to 240 V~, 50/60 Hz
Power consumption	23 W
Output	DC 8.5 V, 1.3 A (CHARGE), DC 6.3 V, 1.8 A (VTR)
Charging system	Constant current, peak detection, timer controlled

Dimensions	150 (W) x 42 (H) x 68 (D) mm
Weight	Approx. 350 g

CASSETTE ADAPTER (C-P7U) SPECIFICATIONS

Dimensions	188 (W) x 25 (H) x 104 (D) mm
Weight	Approx. 240 g
Accessory	"R6 (AA)"-size battery x 1

Provided Accessories

pg. 3

Optional Accessories

- Battery Packs BN-V12U, BN-V22U, BN-V25U
- Car Battery Charger BH-V3E
- Battery Charger BH-VC10EG
- Car Battery Cord AP-V7E
- RF Unit RF-V5E
- Wireless Remote Control Unit RM-V704U
- Wired Remote Control Unit RM-V20U
- Compact VHS-C Cassettes EC-45/30
- Active Carrying Bag CB-V7U

* Some accessories are not available in some areas. Please consult your nearest JVC dealer for details on accessories and their availability.

E.O.E. Design and specifications subject to change without notice.

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The following table lists the differing points between
Models (GR-AX260EG, GR-AX360EG and GR-AX460EG) in this series.

	GR-AX260EG	GR-AX360EG	GR-AX460EG
VIEW FINDER	BLACK/WHITE	COLOUR	BLACK/WHITE
REMOTE CONTROLLER	OPTIONAL	—	PROVIDED
DC LIGHT	×	×	○
AUTO PAUSE SWITCH	×	×	○

NOTE: × NOT USED ○ USED
Mark — is same as at left

Important Safety Precautions

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

● Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the $\triangle$ symbol and shaded () parts are critical for safety.

Replace only with specified part numbers.

Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

3. Fuse replacement caution notice.
Caution for continued protection against fire hazard.
Replace only with same type and rated fuse(s) as specified.

4. Use specified internal wiring. Note especially:

- 1) Wires covered with PVC tubing
- 2) Double insulated wires
- 3) High voltage leads

5. Use specified insulating materials for hazardous live parts. Note especially:

- | | | |
|--------------------|--------------------------------------|------------|
| 1) Insulation Tape | 3) Spacers | 5) Barrier |
| 2) PVC tubing | 4) Insulation sheets for transistors | |

6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

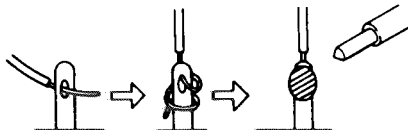


Fig. 1

7. Observe that wires do not contact heat producing parts (heat-sinks, oxide metal film resistors, fusible resistors, etc.)

8. Check that replaced wires do not contact sharp edged or pointed parts.

9. When a power cord has been replaced, check that 10–15 kg of force in any direction will not loosen it.

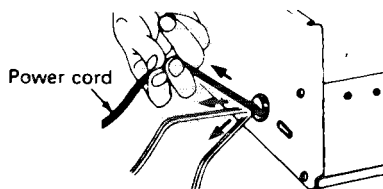


Fig. 2

10. Also check areas surrounding repaired locations.

11. Products using cathode ray tubes (CRTs)

In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

12. Crimp type wire connector

In such cases as when replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.

1) **Connector part number** : E03830-001

2) **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.

3) **Replacement procedure**

(1) Remove the old connector by cutting the wires at a point close to the connector.

Important : Do not reuse a connector (discard it).

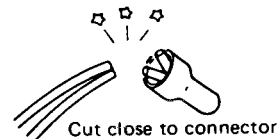


Fig. 3

(2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

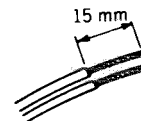


Fig. 4

(3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

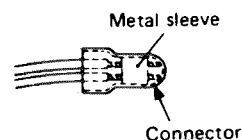


Fig. 5

(4) As shown in Fig. 6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

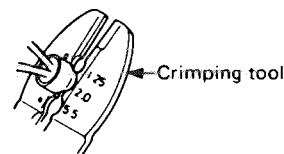


Fig. 6

(5) Check the four points noted in Fig. 7.

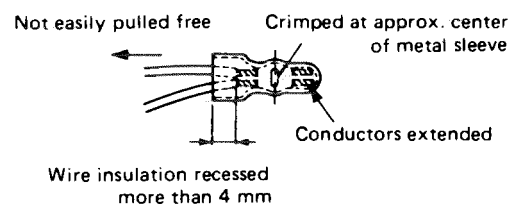


Fig. 7

● Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. Insulation resistance test

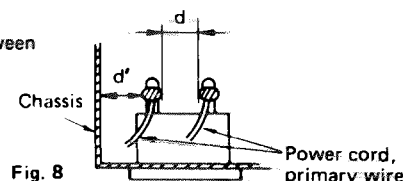
Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

2. Dielectric strength test

Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

3. Clearance distance

When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table 1 below.

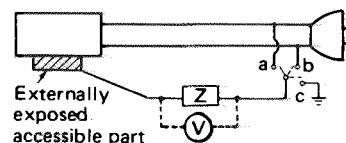


4. Leakage current test

Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

Measuring Method: (Power ON)

Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure 9 and following table 2.

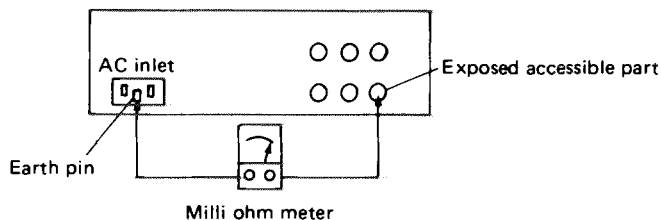


5. Grounding (Class I model only)

Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).

Measuring Method:

Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See figure 10 and grounding specifications.



Grounding Specifications

Region	Grounding Impedance (Z)
USA & Canada	$Z \leq 0.1 \text{ ohm}$
Europe & Australia	$Z \leq 0.5 \text{ ohm}$

AC Line Voltage	Region	Insulation Resistance (R)	Dielectric Strength	Clearance Distance (d), (d')
100 V	Japan	$R \geq 1 \text{ M}\Omega / 500 \text{ V DC}$	AC 1 kV 1 minute	$d, d' \geq 3 \text{ mm}$
100 to 240 V			AC 1.5 kV 1 minute	$d, d' \geq 4 \text{ mm}$
110 to 130 V	USA & Canada	—	AC 1 kV 1 minute	$d, d' \geq 3.2 \text{ mm}$
110 to 130 V	Europe & Australia	$R \geq 10 \text{ M}\Omega / 500 \text{ V DC}$	AC 3 kV 1 minute (Class II)	$d \geq 4 \text{ mm}$
200 to 240 V			AC 1.5 kV 1 minute (Class I)	$d' \geq 8 \text{ mm (Power cord)}$ $d' \geq 6 \text{ mm (Primary wire)}$

Table 1 Specifications for each region

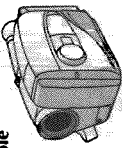
AC Line Voltage	Region	Load Z	Leakage Current (i)	a, b, c
100 V	Japan	$1 \text{ k}\Omega$	$i \leq 1 \text{ mA rms}$	Exposed accessible parts
110 to 130 V	USA & Canada	$0.15 \mu\text{F}$ in series with $1.5 \text{ k}\Omega$	$i \leq 0.5 \text{ mA rms}$	Exposed accessible parts
110 to 130 V	Europe & Australia	$2 \text{ k}\Omega$	$i \leq 0.7 \text{ mA peak}$ $i \leq 2 \text{ mA dc}$	Antenna earth terminals
220 to 240 V		$50 \text{ k}\Omega$	$i \leq 0.7 \text{ mA peak}$ $i \leq 2 \text{ mA dc}$	Other terminals

Table 2 Leakage current specifications for each region

Note: These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

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- Programme AE with Special Effects (pg. 14)
- Intelligent Function Control (pg. 16 - 23)
- 14x Variable-Speed Hyper Zoom (pg. 11)
- EasyEdit (Random Assemble Editing) (pg. 30 - 33)
- Design-Integrated Auto Light (GR-AX460 only) (pg. 13)



REMEMBER

The Logical Choice

Compact VHS



The only compact video cassettes that can be used with your VHS VCR* with Cassette Adapter

PROVIDED ACCESSORIES

- AC Power Adapter/Charger AA-V11EG
- Battery Pack BN-V12U
- Shoulder Strap
- Cable adapter
- Lithium Battery CR2025
- Editing cable
- AUDIO/VIDEO (A/V) cable
- Remote Control Unit RM-V704U (GR-AX460 only)

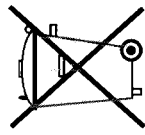
Warning on lithium battery

The battery used in this device may present a fire or chemical burn hazard if mistreated. Do not recharge, disassemble, heat above 100°C or incinerate.

Replace battery with Panasonic (Matsushita Electric), Sanyo or Maxell CR2025; use of another battery may present a risk of fire or explosion.

- Dispose of used battery promptly.
- Keep away from children.
- Do not disassemble and do not dispose of in fire.

Crossed Out Dust Bin Mark



Cd

- The Crossed Out Dust Bin Mark on the battery pack indicates that the product complies with Directives 91/157/EEC and 93/86/EEC.

- Nickel-Cadmium (Ni-Cd) battery pack must be recycled or disposed of properly.

This camcorder is designed to be used with PAL-type colour television signals. It cannot be used for playback with a television of a different standard. However, live recording is possible anywhere. Use the BN-V12U/V22U/V25U battery packs and, to recharge them, the provided multi-voltage AC Power Adapter/Charger. (An appropriate conversion adapter may be necessary to accommodate different designs of AC outlets in different countries.)

NOTES:

- The rating plate (serial number plate) and safety caution are on the bottom and/or the back of the main unit.
- The rating plate (serial number plate) of the AC Power Adapter/Charger is on its bottom.

This unit is produced to comply with Standard IEC Publ. 65.

Dear Customer,
Thank you for purchasing the JVC Compact VHS camcorder. Before use, please read the safety information and precautions contained in the following pages to ensure safe use of your new camcorder.

Using This Instruction Manual

- All major sections and subsections are listed in the Table Of Contents (pg. 3).
- Notes appear after most subsections. Be sure to read these as well.
- Basic and advanced features/operation are separated for easier reference.

It is recommended that you . . .

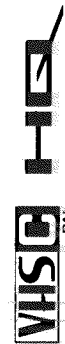
- refer to the Index (pgs. 36, 37) and familiarize yourself with button locations, etc. before use.
- read thoroughly the Safety Precautions that follow and cautions (pgs. 38, 39). They contain extremely important information regarding the safe use of your new camcorder.

SAFETY PRECAUTIONS

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTIONS:

- To prevent shock, do not open the cabinet. No user serviceable parts inside. Refer servicing to qualified personnel.
- When you are not using the AC Power Adapter/Battery charger for a long period of time, it is recommended that you disconnect the power cord from AC outlet.



- Camcorder is designed exclusively for the VHS-C video cassette. Only cassettes marked VHS-C can be used with this unit.
- HQ VHS is compatible with existing VHS equipment.

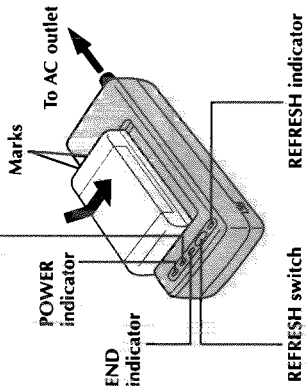
Power

This camcorder's 3-way power supply system lets you choose the most appropriate source of power.

NOTES:

- No function is available without power supply.
- Use only specified power supply.
- Do not use provided power supply units with other equipment.

CHARGING THE BATTERY PACK



1 SUPPLY POWER

Connect the charger's AC power cord to a wall outlet. The power indicator lights.

2 ATTACH BATTERY PACK

Align the marks and slide the battery pack in the direction of the arrow until it locks in place. The CHG. indicator lights.

3 DETACH BATTERY PACK

When charging is completed, the END indicator lights. Slide the battery pack opposite the direction of the arrow.

BATT. PACK	CHARGE	DISCHARGE
BN-V12U	approx. 1 hr. 10 min.	approx. 3 hrs. 30 min.
BN-V22U	approx. 2 hrs. 10 min.	approx. 7 hrs.
BN-V25U	approx. 2 hrs. 40 min.	approx. 10 hrs.

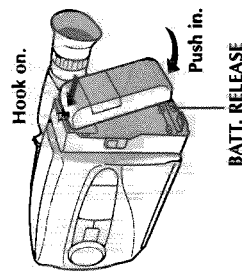
USING THE BATTERY PACK

1 ATTACH BATTERY PACK

Hook its top end to the camcorder and push the battery pack in until it locks in place.

2 DETACH BATTERY PACK

Slide BATT. RELEASE and pull out the battery pack.



BATT. PACK	APPROXIMATE RECORDING TIME	
	GR-AX460/AX260	GR-AX360
BN-V12U	1 hr. 5 min. (3.5 min.)	1 hr.
BN-V22U	2 hrs. 15 min. (1 hr. 25 min.)	2 hrs. 10 min.
BN-V25U	3 hrs. (1 hr. 50 min.)	2 hrs. 50 min.

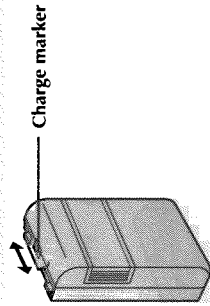
() : when the video light is on (GR-AX460 only).

••REFRESH

The AC power adapter features a REFRESH function that allows you to fully discharge the battery pack before recharging.

To discharge the battery...

..... attach the battery pack to the adapter as shown in the illustration to the left. Then push REFRESH. The REFRESH indicator lights when discharging starts, and goes out when discharging is complete.



••CHARGE MARKER

A charge marker is provided on the battery pack to help you remember whether it has been charged or not. Two colours are provided (red and black)—you choose which one means charged and which means discharged.

NOTES:

- The recording time per charge is affected by such factors as the time spent in Record/Standby mode and the frequency of zooming. It is safer to have spare battery packs.
- Charging times noted on page 4 are for fully discharged battery pack, and discharging times are for fully charged battery pack.
- Charging and discharging times vary according to the ambient temperature and the status of the battery pack.
- Remember to set the charge marker after charging a battery pack or after detaching a discharged one from your camcorder.
- Perform the REFRESH function after no less than 5 chargings.
- High temperatures can damage the battery pack, so use only where good ventilation is available. Don't allow it to discharge in container, such as a bag.
- If you stop recharging or discharging partway through, make sure to remove the battery pack before unplugging the adapter's AC cord.
- Remove the battery pack from the adapter immediately after discharging.
- To avoid interference with reception, do not use the AC Power Adapter/Charger near a radio.
- Make sure you unplug the DC cord before charging or discharging the battery pack.
- A blinking CHG. indicator means that the battery pack has become hot. Wait until it cools down to continue.
- The CHG. indicator may not light properly with a brand new battery pack, or with one that's been stored for an extended period. In this case, remove and reattach the battery pack and recharge it. The CHG. indicator should light during recharging. If not, contact your nearest JVC dealer.

USING A CAR BATTERY

Use the optional Car Battery Cord or Car Battery Charger/Adapter (connect as shown in the illustration to the left).

NOTES:

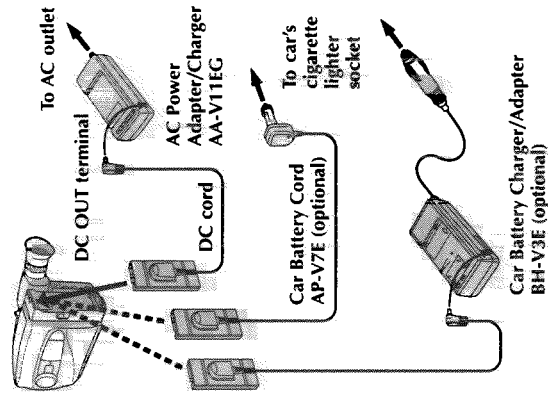
- When using the car battery, leave the engine idling.
- The optional Car Battery Charger (BH-V3E) can also be used to charge the battery pack.
- When using the optional Car Battery Charger or Car Battery Cord (AP-V7E), refer to the respective instruction booklet.

USING AC POWER

Use the AC Power Adapter (connect as shown in the illustration to the left).

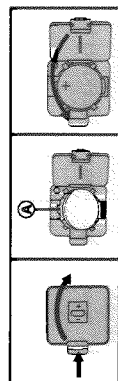
NOTE:

The supplied AC Power Adapter/Charger features automatic voltage selection in the AC range from 110 V to 240 V.



Clock (Lithium) Battery Removal/Insertion

This battery is necessary to operate the clock and to perform date/time settings.



1 SWITCH OFF POWER
Switch off the unit's power and remove the power supply unit.

2 OPEN COVER
Open the clock battery compartment cover while pressing the release tab.

3 REMOVE BATTERY (when replacing)
Insert a pointed, non-metallic object between the battery and the compartment (Ⓐ) and pull the battery out.

4 INSERT BATTERY
Ensuring the plus (+) side is up, insert the supplied lithium battery and push it in.

5 CLOSE COVER
Close the compartment cover until it clicks in place.

NOTE:

See "SAFETY PRECAUTIONS" (pg. 2) for information on safe handling of lithium batteries.

Date/Time Settings

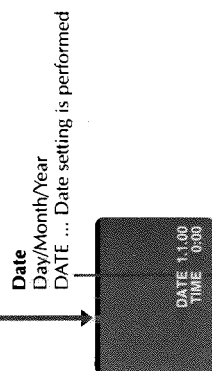
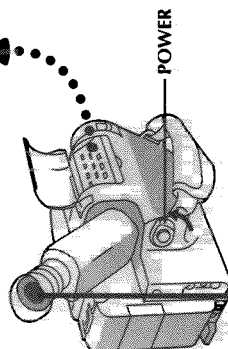
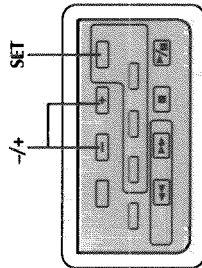
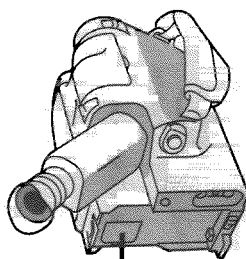
1 SELECT MODE
Set the power switch to CAMERA.

2 SET DATE/TIME
Press SET and the day blinks. Press + or - to set the day. Repeat to set month, year, hour and minute.

3 START CLOCK
Press SET. The blinking stops. The date and time are both displayed for confirmation, then the time display disappears.

NOTE:

The clock does not keep time while the date and time are blinking.



Time
24-hour indication
TIME Time setting is performed

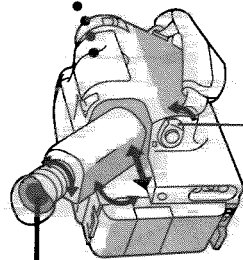
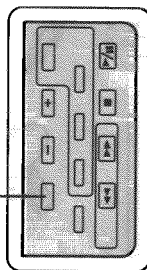
Viewfinder Adjustment

1 POSITION VIEWFINDER
Adjust the viewfinder manually for best viewability (see illustration at left).

2 SELECT MODE
Set the power switch to CAMERA.

3 ADJUST DIOPTR
Turn the diopter adjustment control until the indications in the viewfinder are clearly focused.

TAPE30•45 tape length select button



Set POWER to "CAMERA".

Tape length indicator



Tape Length Setting

1 SET TAPE LENGTH
Set the tape length button according to the length of the tape used. T30 = 30 minutes of recording time and T45 = 45 minutes.

Loading/Unloading A Cassette

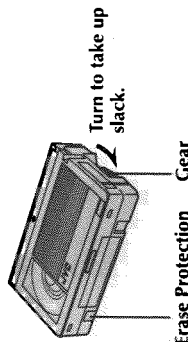
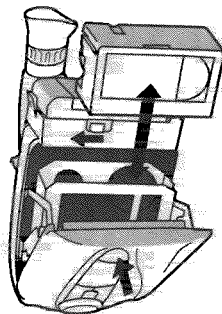
1 OPEN CASSETTE HOLDER
Slide EJECT until holder opens. Do not use force to open.

2 INSERT/REMOVE CASSETTE
Make sure label is facing outward.

3 CLOSE CASSETTE HOLDER
Press PUSH and make sure the holder is closed and locked.

NOTES:

- A cassette holder can't be opened unless a power supply is attached.
- Make sure that the tape is not slack when loading the cassette. If there is any slack, turn the gear on the cassette in the direction of the arrow to take up the slack.
- Make sure the Erase Protection tab is present. If not, cover the hole with adhesive tape. (Some cassettes have sliding tabs – in this case, check the tab's position.)

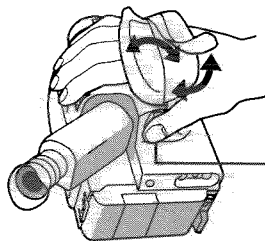


Grip Adjustment

1 EXPAND LOOP
Separate the Velcro strip.

2 INSERT HAND
Pass your right hand through the loop and grasp the grip.

3 ADJUST STRAP LENGTH
Adjust so your thumb and fingers can easily operate the Recording Start/Stop button and Power Zoom switch. Refasten the Velcro strip.



Recording Start/Stop button

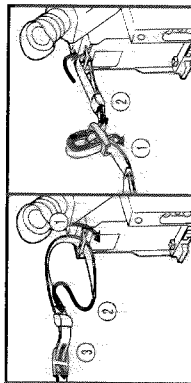
Shoulder Strap Attachment

1 ATTACH STRAP

Following the illustration at left, thread the strap through the top of the eyelet ①, then fold it back and thread it through the keeper ②, and then through the buckle ③. Repeat the procedure to attach the other end of the strap to the other eyelet, making sure the strap isn't twisted.

2 ADJUST LENGTH

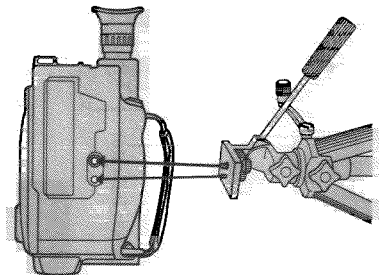
Adjust as shown in the illustration at left ①, then slide both keepers snug against the eyelets to prevent slipping ②.



Tripod Mounting

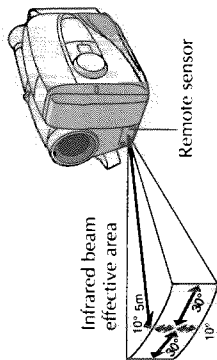
1 ALIGN AND TIGHTEN

Align the screw and camera direction stud on the tripod with the camera's mounting socket and stud hole. Then tighten the screw.



Remote Control Unit

The RM-V704U Full-Function Remote Control Unit can operate this camcorder from a distance as well as the basic operations (PLAY, STOP, PAUSE, FF, and REW) of your VCR. This remote control unit makes additional recording functions possible. To operate, point it at the camcorder's remote sensor. The RM-V704U is provided with GR-AX460, and is available optionally for GR-AX360/AX260.



Remote sensor

The transmitted beam may not be effective or may cause misoperations when the remote sensor is directly exposed to sunlight or powerful lighting.

1 PULL OUT BATTERY HOLDER

Pull out the battery holder according to the type of remote control unit you have.

Type ①: Pull out the battery holder while sliding the lock hole.

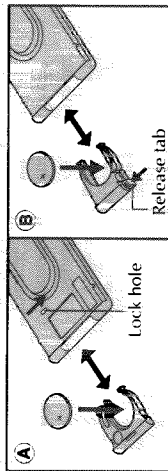
Type ②: Pinch the release tab and pull out the battery holder.

2 INSERT BATTERY

Insert the lithium battery* (CR2025), with its plus (+) side up, into the battery holder.

3 REPLACE BATTERY HOLDER

Replace the battery holder until it clicks in place.
*Read warning on lithium battery (p. 2)

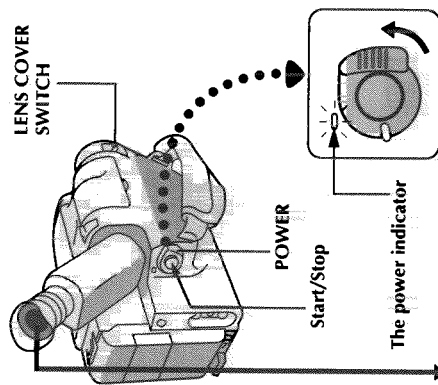


Buttons	Functions
① PAUSE IN connector	With the camcorder's power switch set to "CAMERA".
② Infrared beam transmitting window	Transmits the beam signal.
③ MBR SET button	---
④ INT. TIME button	Self-Timer/Time lapse (p. 24, 25)
⑤ REC TIME button	Animation/Time lapse (p. 25)
⑥ FF button	Retake (Forward) (p. 11)
⑦ REW button	Retake (Rewind) (p. 11)
⑧ PAUSE button	---
⑨ PLAY button	---
⑩ START/STOP button	Functions same as the Recording Start/Stop button of the camcorder.
⑪ VHS button	Index code marking (p. 12)
⑫ ZOOM (T/W) button	Zoom (invariable speed) (p. 11)
⑬ VCR CTL button	---
⑭ A. DUB button	Audio dubbing (p. 35)
⑮ STOP button	Stop (p. 28)
⑯ INSERT button	Insert Editing (p. 34)
⑰ R. A. EDIT button	---

NOTE:

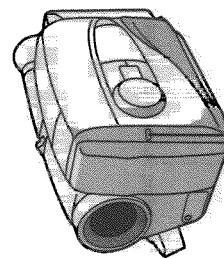
You should already have performed the procedures listed below. If not, do so before continuing.

- Power (pg. 4)
- Tape Length Setting (pg. 7)
- Grip Adjustment (pg. 8)



Tape remaining time indicator

45MIN → 44MIN → ... → 3MIN
 1MIN (Blinking) → 2MIN (Blinking)
 0MIN (Blinking)
 *... MIN..... (Now calculating)



Tally lamp

1 LOAD A CASSETTE

Slide EJECT to open the cassette holder, then insert the cassette with the label facing out. Press PUSH to ensure the holder is closed and locked.

2 ENTER RECORD-STANDBY MODE

Slide the LENS COVER open/close switch to open the lens cover, then set the power switch to CAMERA.

- The power indicator lights and the camcorder enters the Record-Standby Mode.
- The scene you're aimed at appears on the viewfinder screen, with the word "PAUSE" superimposed upon it.

3 START SHOOTING

Press the Recording Start/Stop button.

- The tally lamp lights while recording is in progress, and "REC" appears in the viewfinder.

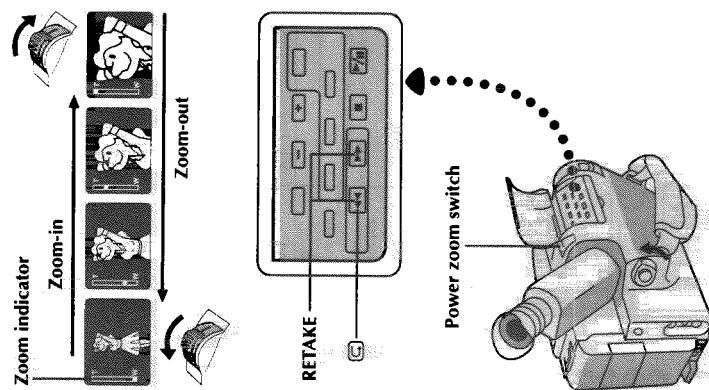
4 STOP RECORDING

Press the Recording Start/Stop button again.

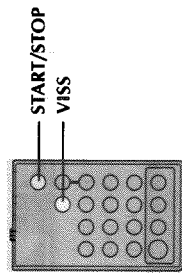
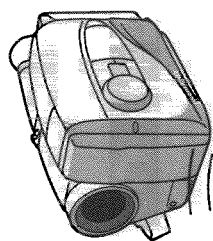
- The camcorder re-enters the Record-Standby mode.

NOTES:

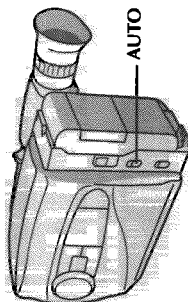
- A cassette holder can't be opened unless a power supply is attached.
- There may be a delay after you slide EJECT until the holder opens. Do not use force.
- The tape's remaining time is displayed in the viewfinder as shown.
- "TAPE END" appears when the tape reaches its end, and the power goes off automatically if left in this condition for 5 minutes. "TAPE END" also appears when a cassette whose tape is already at its end is loaded.
- If the Record-Standby mode continues for 5 minutes, the camcorder's power shuts off automatically. Set the power switch to POWER OFF, and then back to CAMERA to turn the camcorder on again.
- If you're recording on a cassette from the middle, use the RETAKE function (pg. 11) to find the end of the last recording so you don't erase any of it.
- The LENS COVER warning blinks for about 5 seconds when the camcorder is turned on, whether the cover is open or closed.



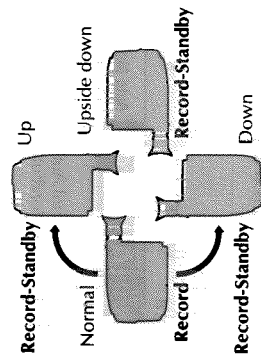
FEATURE: PURPOSE:	Zooming To vary the length of the focal lens and produce zoom in/out effect.
OPERATION:	Zoom In 1) Pull the power zoom switch down toward "T". Zoom Out 2) Push the switch up toward "W". • The further the power zoom switch is pushed or pulled, the faster the zoom speed becomes. • Focusing may become unstable during zooming. In this case, set zoom while in Record-Standby, set manual focus or Focus Lock (pg. 18, 19), then zoom in or out in Record mode.
NOTES:	
FEATURE: PURPOSE:	Quick Review To check end of last recording for confirmation. 1) Press "Q" for less than 2 seconds during Record-Standby mode. • Tape is rewound for about 2 seconds and played back automatically, then pauses in Record Standby mode for next shot. <i>Distortion may occur at start of playback. This is normal.</i>
OPERATION:	
NOTE:	
FEATURE: PURPOSE:	Retake To re-record certain segments. 1) Make sure camcorder is in Record-Standby mode. 2) Press either RETAKE button to reach start point for new recording. 3) Press Recording Start/Stop to start recording. <i>Noise may appear during Retake. This is normal.</i>
OPERATION:	
NOTE:	



RM-V704U
(provided with GR-AX460,
optional for GR-AX360/AX260)



AUTO PAUSE



FEATURE: PURPOSE:	Index Code Marking To give you automatic access to any selected point on a recording. Auto Marking and Manual Marking are available.
OPERATION:	Auto Marking An index code is always marked to start the first recording on a new date after a cassette is inserted. Manual Marking 1) Press VISS once to place index code. INDEX blinks in the viewfinder during marking. • If VISS is pressed during Record-Standby mode, the mark is placed where START/STOP is pressed. • If the date changes during a recording, it becomes the first recording of the new date and an index mark is placed at that point.
NOTES:	
FEATURE: PURPOSE:	AUTO PAUSE SYSTEM (GR-AX460 only) To automatically stop recording when the camcorder is pointed down, preventing accidental recordings of the ground, your feet, etc.
OPERATION:	1) Set AUTO PAUSE to "ON". When the camcorder is tilted down by a large degree from its horizontal position during recording, the Record-Standby mode is automatically engaged. "AUTO PAUSE" appears in the viewfinder. • The Auto Pause System is also effective when the camcorder is pointed up, or is positioned upside down.
NOTES:	• Auto Pause also works when the camcorder is twisted by a large degree to the left or right. • When you want to shoot in any of the aforementioned positions, make sure you set AUTO PAUSE to "OFF".

Video Light (GR-AX460 only)

When natural lighting is too dim, you can brighten the scene by using the built-in video light.

1 SET VIDEO LIGHT

Set the **LIGHT ON/AUTO/OFF** as required.

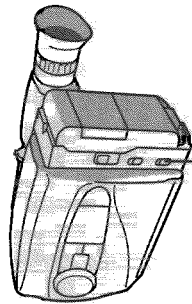
- ON** : Always keeps the light on as long as the camcorder is turned on.
- AUTO** : Automatically turns on the light when the camcorder senses insufficient lighting on the subject.
- OFF** : Turns off the light.
- The video light can be used with the camcorder's power on.
- It is recommended to set the white balance to indoor mode (★) (pg. 15) when you use the video light.
- When not using the video light, turn it off to save battery power.

NOTES:

- Even if the battery indicator (□) does not blink in the viewfinder, if the battery pack's charge is low, the camcorder may turn off automatically when you turn on the video light, or when you start recording with the video light turned on.
- When the **LIGHT ON/AUTO/OFF** is set to "AUTO":
 - Depending on the lighting condition, the video light may not be stably turned on or off. In this case, switch the light on and off manually.
 - While the Sports or High-Speed Shutter mode (pg. 14) is engaged, the light is likely to stay on.
 - While the Twilight mode (pg. 14) is engaged, the light will not activate.

DANGER:

- The video light becomes extremely hot. Do not touch it either while in operation or soon after turning it off, otherwise serious injury may result.
- Do not place the camcorder into the carrying case immediately after using the video light, since it remains extremely hot.
- When operating, keep a distance of about 30 cm between the video light and people or object.
- Do not use near flammable or explosive materials.
- It is recommended that you consult your nearest JVC dealer for replacing the video light.



LIGHT ON/AUTO/OFF

Program AE With Special Effects

All you have to do to access any of the variety of shooting effects is to turn the PROGRAM AE select dial until the desired indication appears in the viewfinder. The mode is activated about 1 second later.

DIAL SYMBOL	VIEWFINDER	MODE
LOCK	A AUTO LOCK	Auto Mode Lock
Auto Mode Lock Locks camcorder in Full Auto mode, preventing accidental misoperation/button pressing during shooting.		
• CINEMA, FADER, FOCUS, EXPOSURE, DISPLAY, TITLES and MWB (Manual White Balance) controls are disabled in this mode.		

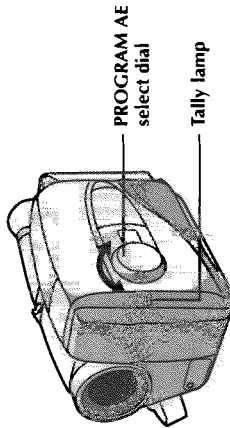
RELEASE	M AUTO RELEASE	Auto Mode Release
Auto Mode Release Re-enables controls that were disabled by Auto Mode Lock.		

FG	FG-FOG	Electronic Fog Filter
Electronic Fog Filter Makes picture look misty white, as when external fog filter is attached to lens. Softens image and gives it "fancy" look.		

ND	ND-ND EFFECT	ND Effect
ND EFFECT Black mist darkens picture, as when ND filter is used. Helps to counter effects of glare on subject.		

	SEPIA	Sepia
Sepia Scene being shot is recorded in sepia-tinted (reddish-brown) monochrome, giving effect of older movie. Use together with Cinema (pg. 17) for authentic look of classic Hollywood movie.		

	TWILIGHT	Twilight
Twilight Disengages auto gain control and auto focus, locks focus to infinity and white balance to "∞" (outdoor) mode. Dusk, twilight scenery, fireworks, etc., look more natural and dramatic.		



DIAL SYMBOL	VIEWFINDER	MODE
	SPORTS	Sports
Sports High shutter speed clearly captures fast-moving action.		

1/2000	S 1/2000	High Speed Shutter
High-Speed Shutter (1/2000s.) Captures faster action than Sports mode.		

	SELF TIMER	15 sec. Self-Timer
15 sec. Self-Timer Lets you delay recording start after Recording Start/Stop is pressed. If camcorder is secured, operator can enter scene before recording starts.		

- 1) Set PROGRAM AE dial to "∞". "15S" appears in viewfinder.
 - 2) Press Recording Start/Stop.
- Recording starts after 15 seconds.
 - Tally lamp begins blinking; blinking speed increases about 5 seconds before recording starts. Blinking stops when recording begins but light stays on.

NOTES:

- Only one effect can be engaged at a time.
- When the PROGRAM AE select dial is switched from one mode to another, the newly selected mode's name and its indication is displayed in the viewfinder for approx. 3 seconds. Then the name disappears, and only the indication remains.
- The screen becomes slightly reddish when the fader (pg. 16) is used in the Sepia mode.
- The screen becomes slightly dark in the High Speed Shutter mode. Use in well-lit situations.
- In the High Speed Shutter or Sports modes, picture colour may be adversely affected if subject is lit by alternating discharge-type light sources such as fluorescent or mercury-vapour lights.

White Balance Adjustment

This camcorder's Automatic Colour Temperature system senses the colour temperature of the ambient lighting for automatic white balance adjustment. However, precise colour adjustment is not possible under the following conditions:

- When an object is in various shades of the same colour.
- When a predominantly red or brown object is being shot outdoors.

In these cases, use the camcorder's built-in preset filters for white balance adjustment.

1 SELECT MODE

Press MWB (Manual White Balance) until the required indication appears in the viewfinder.

"∞"	Outdoors on cloudy day
"☀"	Outdoors on sunny day
"*	Light source is halogen or tungsten lamp
"MWB"	With a memorized personal White Balance setting (see below)

MWB sets the colour temperature for the subject's light source so you can shoot with natural colours that are unaffected by surroundings, even when there are multiple subjects with different colour temperatures.

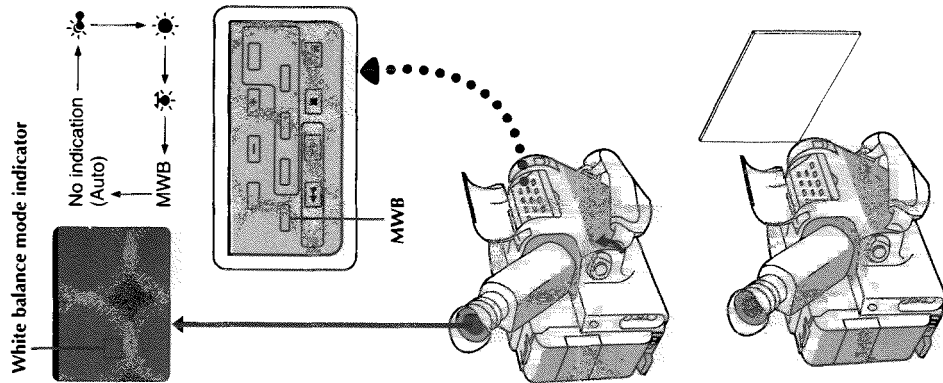
1 ADJUST FOCUS

Point the camcorder at a white, flat object such as a sheet of white paper, and adjust focus manually (pg. 19).

2 ADJUST WHITE BALANCE

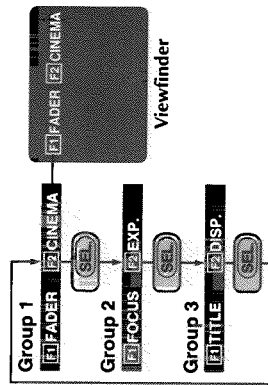
Press MWB until "MWB" appears, then press and hold MWB for more than 3 seconds.

- "MWB" blinks in the viewfinder during adjustment, then stops blinking but stays lit when adjustment is complete.

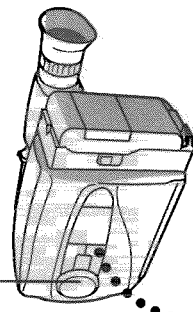


NOTES:

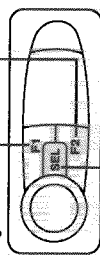
- To switch to automatic white balance adjustment, press MWB until the indication disappears, or turn the PROGRAM AE dial to LOCK.
- Re-adjust the White Balance Mode when the lighting has changed, when the camcorder has been turned on and off again, or when the PROGRAM AE dial's position has been changed.
- It is helpful to connect your camcorder to a colour monitor when adjusting the white balance ("BASIC CONNECTIONS" pg. 27).
- When adjusted by putting coloured paper in front of the subject in step 2, this unit makes its colour temperature standard for automatic white balance. So you can enjoy shooting with different colours. For example, when adjusting with red, blue or yellow colours, the image becomes the colour which approximates to green, orange or purple respectively.



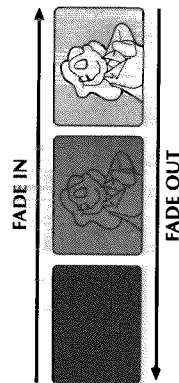
PROGRAM AE select dial



F1 button F2 button



Function SEL. button



INTELLIGENT FUNCTION CONTROL

This feature makes it easier for you to make selections during the following modes: **Fader, Cinema, Manual Focus Adjust, Exposure Control, Display, and Instant Title.**

1 PREPARATION

Set the **PROGRAM AE** dial to any position except **LOCK**.

2 SELECT MODE

Press **Function SEL.** until the required function's indication appears in the viewfinder.

3 ENTER SELECTION

Press either **F1** or **F2** (the one to the immediate left of the desired function name).

NOTE:

If you set the **PROGRAM AE** dial to **LOCK**, **F1** and **F2** disappear from the viewfinder, indicating that **IFC** (Intelligent Function Control) is unusable.

Fader

This feature allows smooth fade-in and fade-out to black blank screen. Fade-in works at recording start, and fade-out works at recording end or when you enter Record-Standby mode.

1 SELECT MODE

Press **Function SEL.** until "FADER" appears to the right of **F1**.

2 ENGAGE FADE-STANDBY MODE

Press **F1** to engage the Fade-Standby mode. "FADER" appears in the viewfinder.

3 START RECORDING

Press Recording Start/Stop to start recording and activate fade-in.

OR . . .

END RECORDING

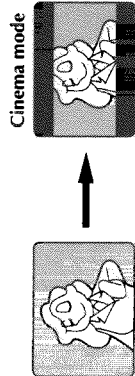
Press Recording Start/Stop to end recording and engage fade-out.

NOTES:

- Pressing and holding the Recording Start/Stop button allows you to record a black blank screen.
- The screen becomes slightly reddish when the Fader is used with Sepia (pg. 14).
- With the Electronic fog filter mode (pg. 14) engaged, the image fades in/out to a white screen.

Cinema

This feature allows you to record black bars at the top and bottom of the screen to produce a cinema-like "wide-screen" effect.



1 SELECT MODE

Press **Function SEL.** until "CINEMA" appears to the right of **F2**.

2 ENGAGE CINEMA MODE

Press **F2**.

3 RESTORE NORMAL SCREEN

Press **F2** again while "CINEMA" appears next to **F2** in the viewfinder.

Focusing

Auto Focus

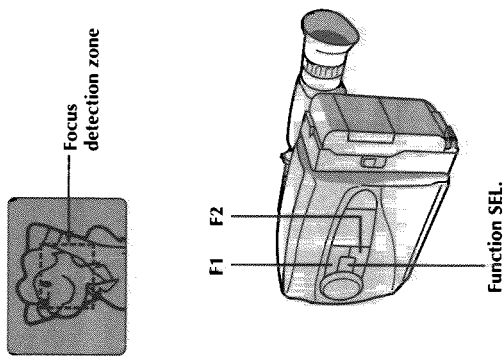
The camcorder's Full Range AF system offers continuous shooting ability from close-up to infinity. However, correct focus may not be obtainable in the situations listed below (in these cases use manual focusing):

- When two subjects overlap in the same scene.
- When illumination is low.*
- When the subject has no contrast (difference in brightness and darkness), such as a flat, one-colour wall, or a clear blue sky.*
- When a dark object is barely visible in the viewfinder.*
- When the scene contains minute patterns or identical patterns that are regularly repeated.
- The low-contrast warning "▲◀▶▲" appears in the viewfinder.

Focus Lock

This feature locks the focus in place, which is especially helpful in the following situations:

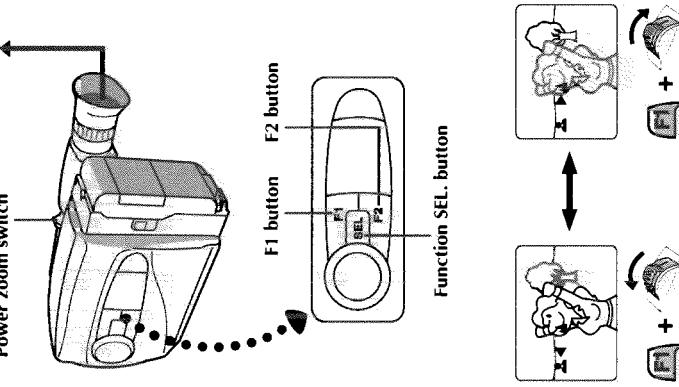
- When things pass between your subject and the camcorder. Engage the focus lock function to lock your subject in before recording.
- When you want your subject to be focused, and to appear in a corner of the screen. First, centre on the subject and focus using auto focus mode. Then engage the focus lock function and move the camcorder until the subject is where you want it.



Manual Focus

NOTE:

You should already have made the necessary viewfinder adjustments (pg. 7). If you haven't, do so before continuing.



1 SELECT MODE

Press **Function SEL**. until "FOCUS" appears to the right of F1.

2 ADJUST FOCUS

▲ TO FARTHER SUBJECT

While holding down **F1**, slide the power zoom switch to T. The Manual Focus indications "▲▶▲" appear and "▶" blinks.

Go to step 3.

▶ TO NEARER SUBJECT

While holding down **F1**, slide the power zoom switch to W. The Manual Focus indications "▲◀▲" appear and "◀" blinks.

Go to step 3.

3 LOCK FOCUS

Release the power zoom switch. The focus indication is replaced by the focus lock indication "◀▶" and the adjusted focus is locked in.

4 RELEASE MANUAL FOCUS MODE

Press **F1**. The Manual Focus mode is immediately released and the focus lock indication disappears.

NOTES:

- Be sure to focus the lens in the maximum telephoto position when you use the Manual Focus mode. If you focus in on a certain subject in the wide-angle position, sharply focused images cannot be obtained when zoomed up because the depth-of-field is reduced at longer focal lengths.
- Two manual focusing speeds are available. For slow-speed, push the switch slightly and hold that position. For fast-speed, push the switch fully.
- When the focus level cannot be adjusted any farther or closer, "▲" or "▶" will blink.

1 SELECT MODE

Press **Function SEL**. until "FOCUS" appears to the right of F1.

2 LOCK FOCUS

Press **F1**. The focus lock indication "◀▶" appears in the viewfinder.

3 RELEASE FOCUS LOCK

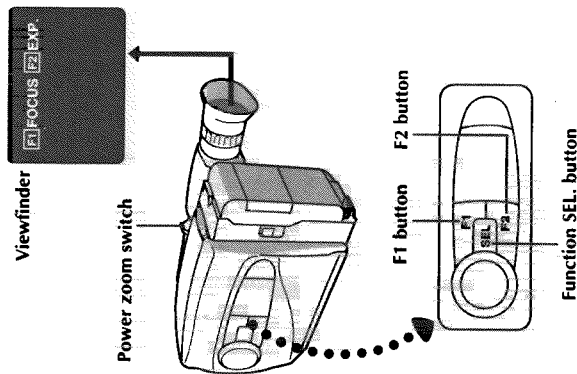
Press **F1**. Focus lock is immediately released. The focus lock indication disappears.

NOTES:

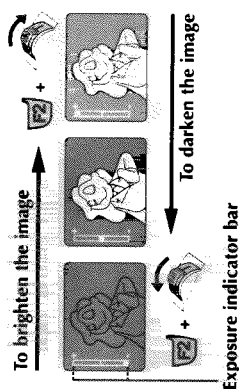
- If the lens is smeared or blurred, accurate focusing is not possible. Keep the lens clean, wiping with a piece of soft cloth if it gets dirty. When condensation occurs, wipe with a soft cloth or wait for it to dry naturally.
- When shooting a subject close to the lens, zoom-out first (pg. 11). If zoomed-in in the auto focus mode, the camcorder could automatically zoom out depending on the distance between the camcorder and the subject.

Exposure Control

This feature automatically adjusts the iris for the best available picture quality, but you can override and make the adjustment manually.



- 1 SELECT MODE**
Press **Function SEL.** until "EXP." appears to the right of F2.
 - 2 BRIGHTEN IMAGE**
While holding down **F2**, slide the power zoom switch to T. The Exposure indicator bar appears in the viewfinder.
OR ...
 - DARKEN IMAGE**
While holding down **F2**, slide the power zoom switch to W. The Exposure indicator bar appears in the viewfinder.
- When you want to return to the factory setting ...**
- 3 RESTORE INITIAL SETTING**
Press **F2**. The standard setting is immediately restored and the Exposure indicator bar disappears.



Date/Time Character Insert

This feature allows you to display date, time and characters in your viewfinder and on a connected colour monitor; record them manually or automatically, and even make your own titles.

NOTE:

You should already have performed the Date/Time Setting procedure (pg. 6). If you haven't, do so before continuing.

DISPLAY

1 SELECT DISPLAY

Press **Function SEL.** until "DISP." appears to the right of F2.

2 CHOOSE DISPLAY MODE

Press **F2** while in Record-Standby to cycle through the modes as shown in the illustration at left.

NOTES:

- The selected display can be recorded.
- If you don't want to record the display, select Date-off mode before shooting.
- If you want to delete the display during shooting, press **F2**.
- If you want to call back a deleted display, engage the Record-Standby mode and then select the desired display mode using **F2**.

AUTO DATE RECORD

Your camcorder automatically records the day, month and year for about 5 seconds after recording is initiated in the following situations:

- After changing the date.
- After loading a cassette.
- After Auto Date Record mode is selected by pressing **F2**. In this mode, the month, day and year are replaced after 5 seconds with "AUTO DATE".

NOTES:

- Setting **PROGRAM AE** to **LOCK** always engages this mode, and disables all other modes.
- In the Auto Date Record mode, if the date changes while you're shooting, the date indication is recorded for about 5 seconds from that point. It is not recorded during any other recordings made on that day.

ON-SCREEN DISPLAY

CONNECT CAMCORDER TO MONITOR

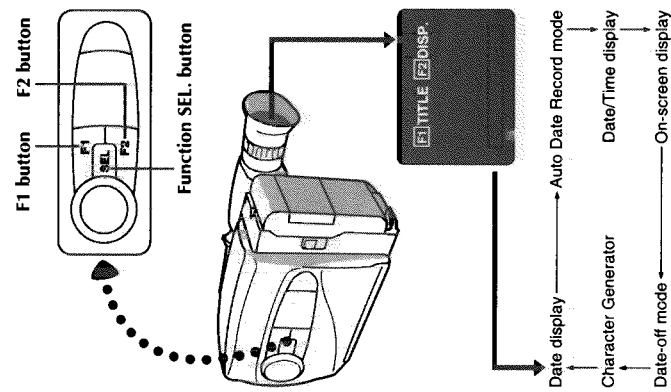
Connect the camcorder to a monitor as instructed in "BASIC CONNECTIONS" (pg. 27).

1 DISPLAY VIEWFINDER INDICATIONS

Press **F2** until the indications appear on the connected monitor.

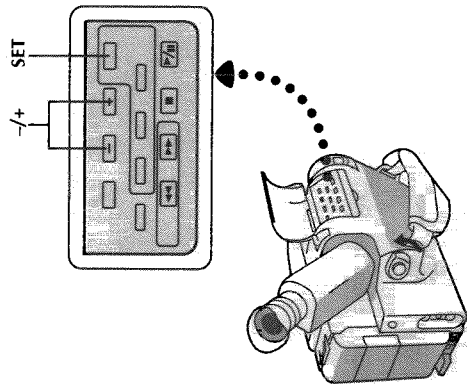
- In the On-Screen Display mode, the date is displayed and recorded.
- The on-screen display is not available during recording.

NOTES:



Date display	Auto Date Record mode
28.12.98	Auto date record mode executed
Date/Time display	Character Generator
28.12.98 10:08	Auto date record mode
	No Characters stored
	Example of stored characters
	IN PARIS FRANCE

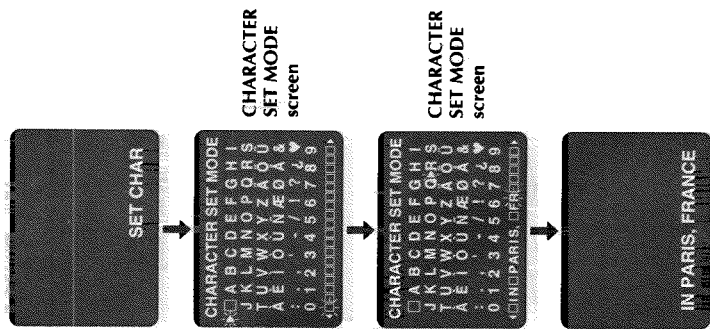
Character Generator



- 1 SELECT MODE**
Press **Function SEL**. until "DISP." appears to the right of F2.
- 2 SET CHARACTER OR TITLE**
Press F2 until "SET CHAR" or a previously stored title appears in the viewfinder.
- 3 ACCESS CHARACTER MODE SCREEN**
Press **SET**. A character grid appears in the viewfinder.
- 4 ENTER DESIRED CHARACTERS**
Press + or - to move the cursor on the character grid to the desired character, then press **SET** to enter. The selected characters appears at the bottom of the screen. When you're done, press **SET** as many times as necessary to exit the screen. The title you made appears at the bottom of the screen.

NOTES:

- You can store up to 18 characters.
- You can only make and store one title at a time. To replace it, repeat the procedure.
- To create a space between two characters in a title you make, choose " " on the CHARACTER SET MODE screen.



Instant Titles

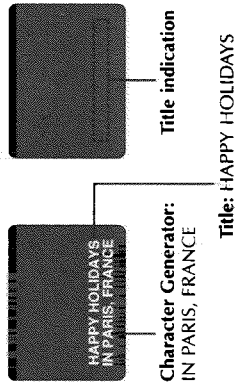
The camcorder has eight preset titles in memory. You can superimpose one of them above a previously stored title as shown in the illustration to the left. The preset titles appear in this order: **HAPPY BIRTHDAY, HAPPY HOLIDAYS, OUR FAMILY, MOVIE STAR, PARTY TIME, MERRY CHRISTMAS, WEDDING DAY, CONGRATULATIONS.**

- 1 SELECT MODE**
Press **Function SEL**. until "TITLE" appears to the right of F1.
- 2 SELECT PRESET TITLE**
Engage the Record-Standby mode, then press **F1** to cycle through the preset titles until the desired title is displayed.

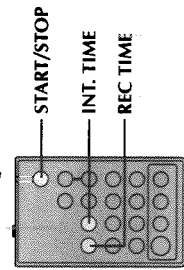
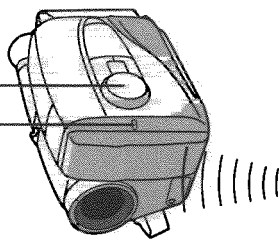
NOTES:

- To delete the Instant Title during recording, press **F1**.
- To recall a title, engage the Record-Standby mode and then press **F1** to select the desired title.
- To display a title you made in the position usually occupied by an Instant Title, cycle through in step 2 above until your title appears (after "CONGRATULATIONS"). You can superimpose two personal titles on the scene being shot.

Example of Character Generator & Title Viewfinder



Tally lamp PROGRAM AE

RM-V704U
(provided with GR-AX460,
optional for GR-AX360/AX260)

Self-Timer

You can set the delay between pressing Recording Start/Stop and the actual start of recording. If you secure the camcorder, you (or whomever is operating the camcorder) can enter the scene before recording starts.

NOTE:

You need the RM-V704U remote control unit to perform this procedure.

ENGAGE RECORD-STANDBY MODE

1 Make sure the lens cover is open, set the power switch to CAMERA.

SET TIME DELAY

2 On the RM-V704U, press **INT. TIME** to set the delay time. There are four choices, and they appear in the viewfinder in the following order (each time **INT. TIME** is pressed): 15S (15 seconds), 30S (30 seconds), 1MIN (1 minute) and 5MIN (5 minutes). Pressing again releases the Self-Timer.

START DELAYED RECORDING

3 Press Recording Start/Stop. The tally lamp begins blinking, and the blinking speed increases about 5 seconds before recording starts. When recording begins, the lamp stops blinking but stays lit.

RELEASE SELF-TIMER MODE

4 To release when the tally lamp is not blinking, press **INT. TIME** continuously until "⌚" disappears. To release when the tally lamp is blinking, press Recording Start/Stop to stop the blinking, then press **INT. TIME** continuously until "⌚" disappears.

NOTE:

If the **PROGRAM AE** dial is set to "⌚", 15S is automatically selected.

Animation

Give stationary scenes or objects an illusion of movement. This function allows you to shoot a series of pictures, each slightly different, of the same object for a brief period of time.

NOTE:

You need the RM-V704U remote control unit to perform the following procedure.

ENGAGE RECORD-STANDBY MODE

1 Make sure the lens cover is open, then set the power switch to CAMERA.

SET RECORDING TIME

2 Press **REC TIME** on the remote control. Three choices are available, and they appear in the following order (each time **REC TIME** is pressed): 1/4S (one-fourth of a second), 1/2S (one-half of a second) and 1S (one full second). Press again to release the Animation mode.

START RECORDING

3 Press Recording Start/Stop after focusing on the subject. The recording stops automatically after the selected period of time.

ASSEMBLE SERIES OF PICTURES

4 Repeat steps 2 and 3 for the desired number of pictures.

CHECK YOUR WORK

5 Play back the series of pictures to see if the results were satisfactory.

RELEASE ANIMATION MODE

6 Press **REC TIME** until "⌚" disappears from the viewfinder.

NOTES:

- For best results, make sure the camcorder is secured when shooting.
- If the **PROGRAM AE** dial is set to Self-Timer mode, Animation is cancelled and Self-Timer mode is engaged with 15S selected.
- Fade-in/out cannot be performed during Animation shooting.

Time-Lapse

You can record sequentially at preset time spans. Leaving the camcorder aimed at a specific subject, you can record subtle changes over an extended period of time.

NOTE:

You need the RM-V704U remote control unit to perform the following procedure.

ENGAGE RECORD-STANDBY MODE

1 Make sure the lens cover is open, then set the power switch to CAMERA.

SET RECORDING TIME

2 Press **REC TIME** on the remote control. There are three choices available, and they appear in the following order (each time **REC TIME** is pressed): 1/4S, 1/2S and 1S. Press again to reset.

SET INTERVAL BETWEEN RECORDINGS

3 Press **INT. TIME** on the remote control. There are four choices available, and they appear in the following order (each time **INT. TIME** is pressed): 15S, 30S, 1MIN, and 5MIN. Press again to reset.

START TIME-LAPSE RECORDING

4 Press Recording Start/Stop. Recording and intervals alternate automatically.

RELEASE TIME-LAPSE MODE

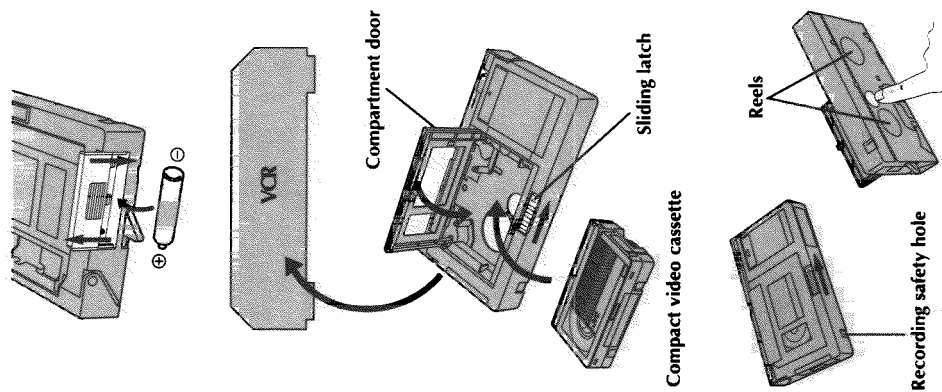
5 To release when the tally lamp is not blinking, press **INT. TIME** and **REC TIME** repeatedly until "⌚" and "⌚" disappear. To release when the tally lamp is blinking, press Recording Start/Stop to stop the blinking, then press **INT. TIME** and **REC TIME** repeatedly until "⌚" and "⌚" disappear.

NOTES:

- Fade-in/out cannot be performed during Time-Lapse shooting.
- For best results, keep the camcorder secured while shooting.
- If, during steps 2 and 3, the **PROGRAM AE** dial is set to the Self-Timer mode, the Self-Timer mode is engaged with 15S selected.

Cassette Adapter

Use this to play back a VHS-C video cassette recorded with this camcorder. It is fully compatible with any VHS video cassette recorder. The C-P7U adapter is battery powered and automatically performs tape loading and unloading.



1 INSERT BATTERY

Slide the battery cover up to remove it, and install one "R6(AA)" size battery as shown in the illustration at left. Then reattach the cover.

2 INSERT CASSETTE IN ADAPTER

Slide the latch to open the adapter compartment door, then insert the cassette and close the compartment door.

3 PLAY BACK ON CONNECTED VCR

Load the cassette adapter into the VCR and play the tape back as you would any other.

4 REMOVE CASSETTE FROM ADAPTER

Slide the latch and the compartment door opens automatically. Then insert your finger in the hole on the underside of the adapter as shown in the illustration at left, push up and remove the cassette.

NOTES:

- During tape loading and unloading, do not touch the reels for safety and tape protection.
- During special-effect playback (slow motion, still frame, etc.), the picture may vibrate or noise bars may appear on the screen.
- To record on a VCR using a compact cassette and the adapter, cover the adapter's recording safety hole with adhesive tape.

There are three basic types of connections. When making the connections, refer also to your VCR and TV instruction manuals.

Connection To A VCR [A] (Editing, Dubbing and Playback)

NOTE:

Use the provided AV cable.

1 CONNECT CAMCORDER TO VCR

As shown in the illustration at left, connect the provided AV cable between the AUDIO and VIDEO connectors on the camcorder and those on the VCR.

2 SUPPLY POWER

Turn on the camcorder, the VCR and the TV.

3 SELECT MODE

Set the VCR to its AUX input mode, and set the TV to its VIDEO mode.

Connection To A TV With A/V Input Connectors [B] (Playback ONLY)

NOTE:

Use the provided AV cable.

1 CONNECT CAMCORDER TO TV

As shown in the illustration at left, connect the provided AV cable between the AUDIO and VIDEO connectors on the camcorder and those on the TV.

2 SELECT MODE

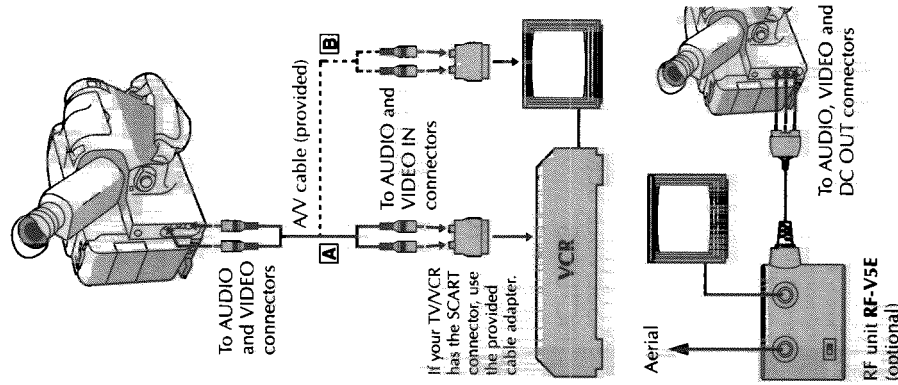
Set the TV to its VIDEO or AV mode (as specified in its instructions).

Connection To A TV With NO A/V Input Connectors (Playback ONLY)

NOTE:

Use the optional RF-V5E RF unit.

- Refer to the RF-V5E instruction manual for connection procedure.

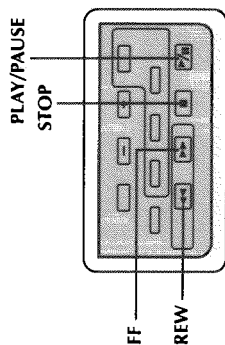


NOTES:

- It is recommended to use the AC Power Adapter/Charger as the power supply instead of the battery pack.
- To monitor the picture and sound from the camcorder without inserting a tape, set the camcorder's power switch to CAMERA, then set your TV to the appropriate input mode.
- If you have a TV or speakers that are not specially shielded, do not place the speakers adjacent to the TV as interference will occur in the camcorder playback picture.

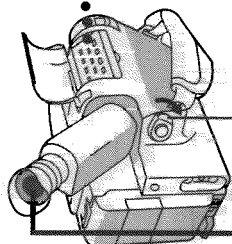
NOTE:

Make sure you connect your camcorder as directed in "BASIC CONNECTIONS" (pg. 27).



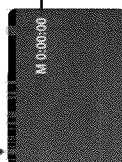
FF

REW

PLAY/PAUSE
STOP

POWER

Tape counter



M 0:00:00

1**LOAD A CASSETTE**

Load as you did in the recording procedure.

2**SELECT MODE**

Set the power switch to **PLAY**. The Power On indicator lights.

3**PLAYBACK**

Press **PLAY/PAUSE**. The playback picture appears in the viewfinder and the connected TV.

4**STOP PLAYBACK**

Press **STOP**.

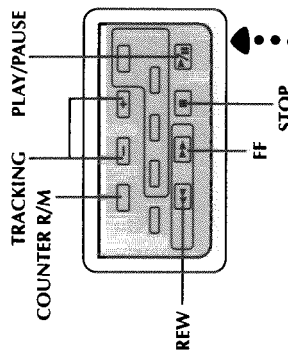
Rewind or Fast-forward the Tape

Press **REW** to rewind, or **FF** to fast-forward the tape during stop mode.

NOTE:

The camcorder shuts off automatically after about 5 minutes in **STOP** mode. To turn on again, set the power switch to **POWER OFF**, then to **PLAY**.

FEATURE: PURPOSE:	Manual Tracking To eliminate noise bars that appear on the screen. 1) Press either TRACKING button as many times as necessary for best picture. • To reset TRACKING to the original preset, press both TRACKING buttons simultaneously. • Manual Tracking may not work with tapes recorded on other VCRs or camcorders.
OPERATION:	
NOTES:	
FEATURE: PURPOSE: OPERATION:	Still Playback To pause during playback. 1) Press PLAY/PAUSE during playback. 2) To resume normal playback, press PLAY/PAUSE again. Noise bars appear and pictures may become monochrome during Still Playback . This is normal.
NOTE:	
FEATURE: PURPOSE: OPERATION:	Shuttle Search To allow high-speed search in either direction. Forward Search 1) Press FF during playback. Reverse Search 1) Press REW during playback. Noise bars appear and pictures may become monochrome in Shuttle Search. This is normal.
NOTE:	
FEATURE: PURPOSE: OPERATION:	Counter Memory Function To make it easier to locate a specific tape segment. 1) Press COUNTER R/M and hold for more than 2 seconds. The counter resets to "0:00:00". 2) Press COUNTER R/M . "M" appears. 3) After recording or playback, press STOP , then REW . The tape automatically stops at or close to 0:00:00. 4) Press PLAY/PAUSE to start playback. • The counter memory functions in the FF and REW modes. • To disable Counter Memory Function, press COUNTER R/M so the "M" disappears.
NOTE:	



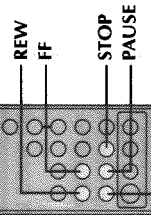
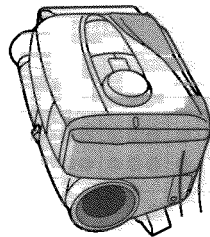
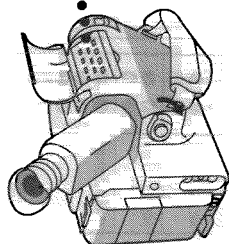
TRACKING

COUNTER R/M

REW

FF

STOP



REW

FF

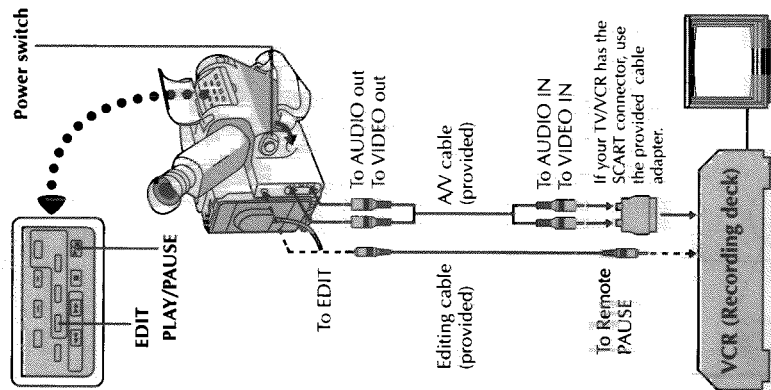
STOP

PAUSE

PLAY

RM-V704U
(provided with GR-AX460,
optional for GR-AX360/AX260)

Tape Dubbing



1 CONNECT EQUIPMENT

Following the illustration at left, connect the camcorder and the VCR. If you have a Remote PAUSE terminal, use the editing cable to connect it to the camcorder and the VCR. (See "NOTES" below for details.)

2 PREPARE FOR DUBBING

Set the camcorder's power switch to PLAY, turn on the VCR's power, and insert the appropriate cassettes in the camcorder and the VCR.

3 SELECT VCR MODE

Engage the VCR's AUX and Record-Pause modes.

4 FIND EDIT-IN POINT

Engage the camcorder's Play mode to find a spot just before the edit-in point. Once it's reached, press PAUSE on the camcorder.

5 START EDITING

Press EDIT on the camcorder and engage the VCR's Record mode.

6 STOP EDITING TEMPORARILY

Engage the VCR's Record-Pause mode and press PAUSE on the camcorder.

7 EDIT MORE SEGMENTS

Repeat steps 4 through 6 for additional editing, then stop the VCR and camcorder when finished.

NOTES:

- When using a Remote PAUSE terminal, pressing EDIT on the camcorder in step 5 automatically engages the VCR's Record mode.
- When using a Remote PAUSE terminal, you can access a function called Master Edit Control System. Before beginning, reset the camcorder's counter to "0:00:00" at an edit-out point. When the tape reaches this point (remember there's a small margin of error) during editing, the camcorder and VCR pause automatically. However, some VCRs are not compatible with the Master Edit Control System.

Random Assemble Editing [R.A.Edit]

Create edited videos easily using your camcorder as the source player. You can select up to 8 "cuts" for automatic editing, in any order you like. R.A. Edit is more easily performed when the RM-V704U* MBR (Multi-Brand Remote) is set to operate with your brand of VCR (see chart on the next page), but can also be performed by operating the VCR manually.

- RM-V704U is provided with GR-AX460, optional for GR-AX360/AX260.

CONTINUED ON NEXT PAGE

SET REMOTE/VCR CODE

1 SET REMOTE TO OPERATE VCR

Turn off the power to the VCR and point the remote toward the VCR's infrared sensor. Then, referring to the chart at left, press and hold **MBR SET**, and press button (A) and then (B).

- The code is automatically set once you release the **MBR SET** button, and the VCR's power comes on.

2 OPERATE THE VCR

Make sure the VCR's power is on. Then, while holding **VCR CTL**, press the button on the remote for the desired function. The functions the remote can control are PLAY, STOP, PAUSE, FF, REW and VCR REC STBY (you don't need to press **VCR CTL** for this one).

You're now ready to try *Random Assemble Editing*.

IMPORTANT

Although the MBR is compatible with JVC VCRs and those of many other makers, it may not work with yours or may offer limited functions.

NOTES:

- If the VCR's power doesn't come on in step 1, try another code from the chart.
- Some brands of VCR don't come on automatically. In this case, turn the power on manually and try step 2.
- If the RM-V704U is not able to control the VCR, use the controls on the VCR.

MAKE CONNECTIONS

CONNECT TO . . .

- JVC VCR EQUIPPED WITH REMOTE PAUSE TERMINAL

Connect the editing cable to the Remote PAUSE terminal.

- JVC VCR NOT EQUIPPED WITH REMOTE PAUSE TERMINAL

Connect the editing cable to the R.A.EDIT connector.

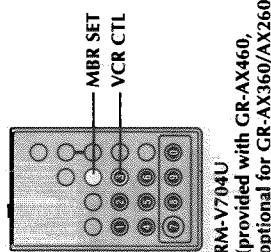
- NON-JVC VCR WITH NEITHER

Connect the editing cable to the RM-V704U's Pause-In jack.

All other connections are as shown in the illustration on page 32.

CONTINUED ON NEXT PAGE

VCR BRAND NAME		BUTTONS (A) (B)		VCR BRAND NAME		BUTTONS (A) (B)	
AKAI		1	2	PHILIPS		1	2
		3	4			3	4
BLAUPUNKT		5	6			5	6
		7	8			7	8
FERGUSON		9	0			9	0
		1	2			1	2
		3	4			3	4
GRUNDIG		5	6	SANYO		5	6
		7	8			7	8
HITACHI		9	0	SELECO, REX		9	0
		1	2			1	2
JVC A B C		3	4	SHARP		3	4
		5	6			5	6
		7	8			7	8
MITSUBISHI		9	0	SONY		9	0
		1	2			1	2
		3	4			3	4
NEC		5	6	THOMSON, TELEFUNKEN, SABA, NORDMÄNDE		5	6
		7	8			7	8
PANASONIC		9	0	TOSHIBA		9	0
		1	2			1	2
		3	4			3	4
		5	6			5	6



RM-V704U
(provided with GR-AX460,
optional for GR-AX360/AX260)

PREPARE CAMCORDER

Insert a recorded tape and set the power switch to **PLAY**.

PREPARE VCR

Turn the power on, insert a recordable tape and engage the AUX mode (refer to VCR's instructions).

SELECT SCENES

ACCESS R.A. EDIT COUNTER DISPLAY

Press **PLAY/PAUSE**, then press **R.A. EDIT** and the counter display appears in the viewfinder and the screen of the connected TV.

REGISTER BEGINNING OF SCENE

Press **REW** or **FF** to locate the beginning of a scene you want, then press **IN/OUT** to register that point. The data appears under **IN** on the display.

REGISTER END OF SCENE

Press **REW** or **FF** to locate the end of the scene and press **IN/OUT** to register it. The data appears under **OUT** on the display. The total time of the registered scene(s) is displayed at the bottom of the screen.

REGISTER ADDITIONAL SCENES

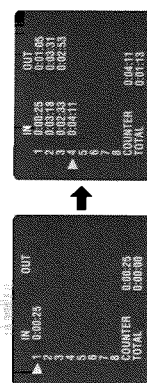
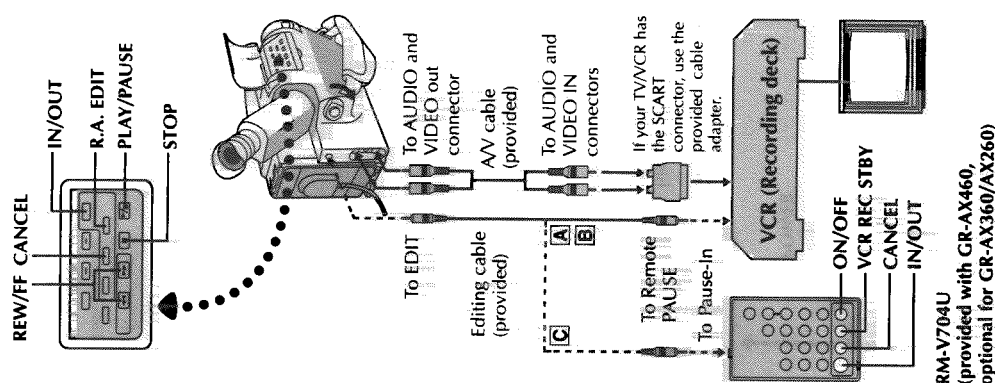
Repeat steps 2 and 3 for each additional scene as many as 8).

MAKE CORRECTIONS

Press **CANCEL** during steps 2 and 3 to erase the most recently registered point.

NOTES:

- The RM-V704U can be used to operate other camcorder functions as well. Point the RM-V704U at the camcorder's remote sensor and press any of the following buttons (function appears in parentheses):
- ON/OFF (camcorder R.A. EDIT)
 - IN/OUT (camcorder IN/OUT)
 - CANCEL (camcorder CANCEL)
- There must be at least one second between an in-point and its corresponding out-point.
- The camcorder prerolls during R.A. Edit, so there must be at least 15 seconds of recording material prior to any in-point. Blank portions of tape cannot be registered as in-points or out-points.
- If it takes more than 5 minutes to search for an in-point, the VCR's Record-Pause mode is cancelled and editing doesn't take place.
- Pressing **R.A. EDIT** clears all in- and out-points from memory. Leave a small margin for error around each in-point to ensure the scene is recorded in its entirety.



AUTOMATIC EDITING TO VCR

ENGAGE VCR'S RECORD-PAUSE MODE

Point the remote control toward the VCR's infrared sensor and press VCR REC STBY, or manually engage the VCR's Record-Pause mode.

BEGIN AUTOMATIC EDITING

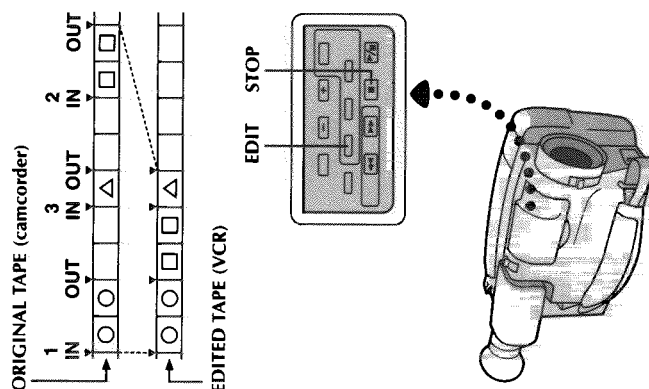
Press **EDIT** on the camcorder, and the previously selected scenes are copied to the VCR in the specified order.

END AUTOMATIC EDITING

When all selected scenes have been copied, the camcorder and VCR enter the still or pause mode. Press **STOP** on both units.

NOTES:

- ▶ If you performed step **1C** on page 31, keep the remote control pointed at the VCR during editing.
- ▶ The on-screen display only appears while the camcorder searches for each scene.
- ▶ To dub a copy of the camcorder's (source) tape, perform R.A. EDIT by specifying only one in-point (and no out-point). The contents of the tape from the specified in-point to the end of the tape are automatically copied.
- ▶ There may be noise at in- or out-points on the edited tape with certain VCRs.



SUPPLEMENTAL INFORMATION ON THE REMOTE CONTROL

Using the RM-V704U remote control, it is also possible to perform deck-to-deck Random Assemble Editing. The playback deck must be an R.A. Edit-capable JVC VCR. The recording deck can be...

- a VCR other than JVC, or
- a JVC VCR which has **neither** a Remote PAUSE nor an R.A. EDIT connector

How to use:

- Connect the playback deck and RM-V704U as shown on the left.
- Set the RM-V704U to correspond to the brand of the recording deck. (ℳ P. 31)
- For Random Assemble Editing procedure, please refer to the instruction manual of the IVC VCR you are using as the playback deck.

Position

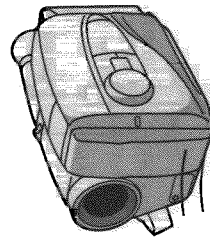
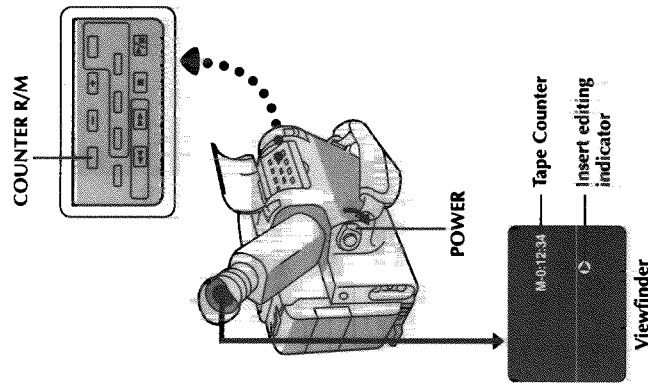
- **RM-V704U** cannot be used to control the playback deck.
- **RM-V704U** is capable of controlling basic operations of the recording deck. While pressing VCR CTL, press **PLAY**, **STOP**, **PAUSE**, **FF** or **REW** for these functions. (Not possible with some brands and models). Other buttons cannot be used.
- To put the recording deck in the Record-Pause mode, use the controls on the recording deck itself.

Insert Editing

You can record a new scene into a previously recorded tape, replacing a section of the original recording with minimal picture distortion at the in- and out-points. The original audio remains unchanged.

NOTE:

You need the RM-V704U remote control unit to perform the following procedure.



RM-V704U
(provided with GR-AX460,
optional for GR-AX360/AX260)

1 SELECT MODE

Set the power switch to PLAY.

2 FIND EDIT-OUT POINT

Locate the point and press **PAUSE** on the camcorder or the remote control.

3 RESET COUNTER

Press and hold **COUNTER R/M** for more than 2 seconds to reset the tape counter, then press for less than 1 second and make sure "M" appears in the viewfinder.

4 FIND EDIT-IN POINT

Press **REW** to go a little beyond the beginning of the scene you want to replace, press **PLAY** to view the recorded tape, and press **PAUSE** at exactly at the point where the new scene should start.

5 ENGAGE INSERT EDITING MODE

Press and hold **INSERT**, and press **PAUSE**. The Insert mode is engaged, and the scene the camcorder is aimed at appears on the screen.

6 BEGIN INSERT EDITING

Press Recording Start/Stop. When the counter reaches "0:00:00", editing stops automatically and the camcorder enters the playback mode.

NOTES:

- Insert Editing may not work correctly if a blank segment exists in the recorded tape.
- The tape may stop slightly before or after the designated end point, and noise bars may appear. Neither indicates a defect in the unit.
- To edit onto a tape with the recording safety tab removed, cover the hole with adhesive tape.
- Only video signal is recorded in the Insert Editing mode. When the sound is to be recorded, press **A. DUB** and **PAUSE** simultaneously after Step 5. When **INSERT** and **PAUSE** are pressed simultaneously again, the unit re-enters the Video-signal-only Recording mode.
- If the camcorder's mike is too close to the TV, or if the TV's volume is too high, whistling or howling may occur.

Audio Dubbing

You can record a new soundtrack on a prerecorded tape (normal audio only).

** Perform steps 1, 2 and 3 of the Insert Editing procedure (icf pg. 34) before continuing.

1 FIND EDIT-IN POINT

Press **REW** to go a little beyond the beginning of the scene onto which you want to dub new audio, press **PLAY** to view the recorded tape, then press **PAUSE** at exactly the point where dubbing should start.

2 ENGAGE AUDIO DUB STANDBY MODE

Press and hold **A. DUB**, and press **PAUSE**.

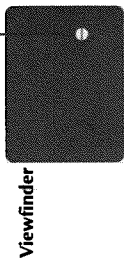
3 BEGIN AUDIO DUBBING

Press **PLAY**. When the counter reaches "0:00:00", Audio Dubbing stops automatically and the camcorder enters the playback mode.

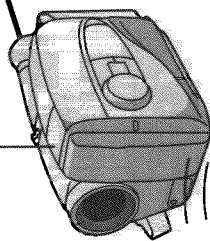
NOTES:

- Audio Dubbing may not work correctly if the tape contains blank segments.
- If the camcorder's mike is too close to the TV, or if the TV's volume is too high, whistling or howling may occur.

Audio dubbing indicator



Mic



RM-V704U

(provided with GR-AX460,
optional for GR-AX360/AX260)

Controls

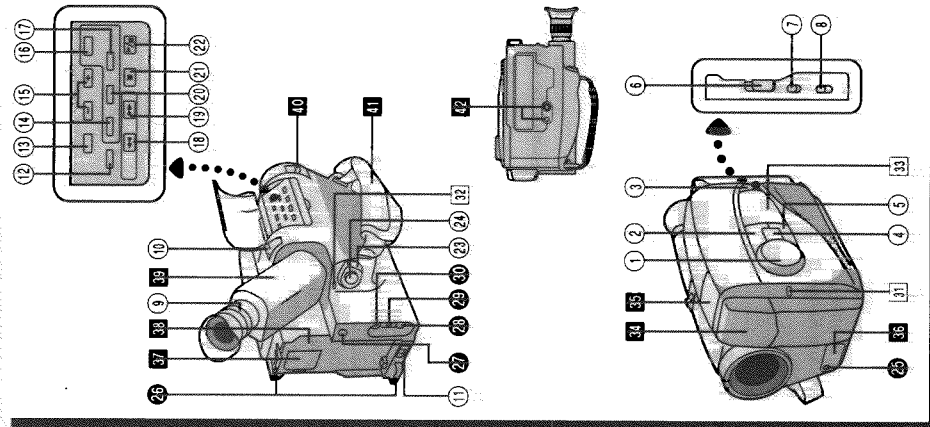
- ① PROGRAM AE Select Dial [pg. 14](#)
- ② F1 [Function 1] Button [pg. 16](#)
- ③ PUSH Button [pg. 7](#)
- ④ Function SEL. Button [pg. 16](#)
- ⑤ F2 [Function 2] Button [pg. 16](#)
- ⑥ EJECT Switch [pg. 7](#)
- ⑦ AUTO PAUSE ON/OFF Switch
(GR-AX460 only) [pg. 12](#)
- ⑧ LIGHT ON/AUTO/OFF Switch
(GR-AX460 only) [pg. 13](#)
- ⑨ Diopter Adjustment [pg. 7](#)
- ⑩ Power Zoom Switch [pg. 11](#)
- ⑪ BATT. [Battery] RELEASE Switch [pg. 4](#)
- ⑫ MWB [Manual White Balance]
Button [pg. 15](#)
- ⑬ Tape Length [TAPE30•45]
Select Button [pg. 7](#)
- ⑭ COUNTER R [Reset]/M [Memory]
Button [pg. 29](#)
- ⑮ EDIT Button [pg. 30](#)
- ⑯ DATE/TIME +/- Buttons [pg. 6](#)
- ⑰ CHAR. [Character] SET +/- Buttons [pg. 22](#)
- ⑱ TRACKING +/- Buttons [pg. 29](#)
- ⑲ DATE/TIME SET Button [pg. 6](#)
- ⑳ CHAR. SET Button [pg. 22](#)
- ㉑ R.A.EDIT IN/OUT Button [pg. 32](#)
- ㉒ R.A.EDIT Button [pg. 32](#)
- ㉓ REW Button [pg. 28](#)
- ㉔ RETAKE R [Quick Review] Button [pg. 11](#)
- ㉕ FF Button [pg. 28](#)
- ㉖ RETAKE F Button [pg. 11](#)
- ㉗ R.A.EDIT CANCEL Button [pg. 32](#)
- ㉘ STOP Button [pg. 28](#)
- ㉙ PLAY/PAUSE Button [pg. 28](#)
- ㉚ POWER Switch [pg. 6](#)
- ㉛ Recording Start/Stop Button [pg. 8](#)

Connectors

- ㉜ REMOTE Jack (For connection of the RM-V20U
wired remote control unit (optional).) [pg. 8](#)
- ㉝ Shoulder Strap Eyelets [pg. 30](#)
- ㉞ EDIT Jack [pg. 27](#)
- ㉟ VIDEO Out Jack [pg. 27](#)
- ㊱ RF DC OUT Jack [pg. 27](#)
- ㊲ AUDIO Out Jack [pg. 27](#)

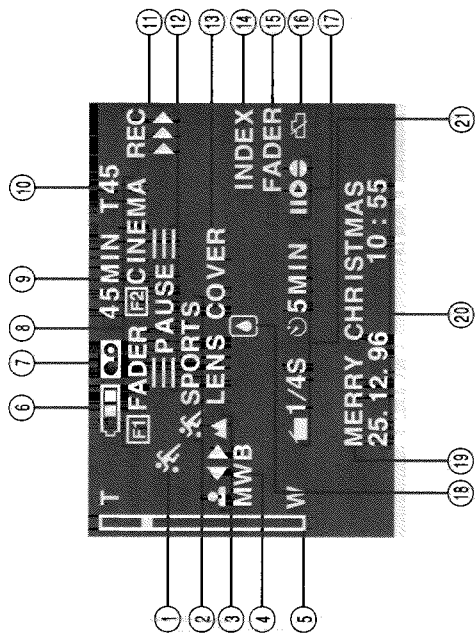
Indicators

- ㊳ Tally Lamp [pg. 10](#)
- ㊴ Power On Indicator [pg. 10](#)
- ㊵ LCD window (GR-AX460 only) [pg. 8](#)



Other Parts

- ㉜ Video light (GR-AX460 only) [pg. 13](#)
- ㉝ Microphone [pg. 9](#)
- ㉞ Remote Sensor
(Be careful not to cover this area; built-in here is
the sensor necessary for shooting.) [pg. 6](#)
- ㉟ Clock Battery Compartment [pg. 4](#)
- ㊱ Battery Pack Mount [pg. 7](#)
- ㊲ Electronic Viewfinder [pg. 10](#)
- ㊳ LENS COVER Switch [pg. 8](#)
- ㊴ Grip Strap [pg. 8](#)
- ㊵ Tripod Mounting Socket [pg. 8](#)



Viewfinder Indications

- ① PROGRAM AE Indicator [pg. 14](#)
Displayed at ② for approx. 3 seconds when the
PROGRAM AE select dial is switched from one
position to another. Then only the indicator
remains at ①.
- ② Focus Indicator [pg. 18](#)
- ③ White Balance Mode Indicator [pg. 15](#)
- ④ Zoom Level Indicator [pg. 11](#)
Exposure Indicator Bar [pg. 20](#)
- ⑤ Battery Pack Remaining Power Indicator
Changes as follows according to the battery
pack's remaining power level:
- **Full**: When the power is
almost gone, the indicator blinks, then the unit
shuts off. Replace the battery pack with a fully
charged one [pg. 4](#)
- ⑥ Cassette Warning [pg. 7](#)
Blinks when no cassette or a cassette with the
Erase Protection tab removed is loaded.
- ⑦ Intelligent Function Control
Indicator [pg. 16](#)
- ⑧ Remaining Tape Time [pg. 10](#)
- ⑨ Tape Length Indicator [pg. 7](#)
- ⑩ Recording Indicator [pg. 10](#)
- ⑪ Record-Standby Indicator [pg. 10](#)
- ⑫ Lens Cover Warning [pg. 12](#)
- ⑬ Index Code Marking [pg. 16](#)
- ⑭ Fade-Standby Indicator [pg. 16](#)
- ⑮ Clock Battery Warning
Appears when the clock (lithium) battery is not
in place or exhausted.
For inserting or replacing
the clock battery [pg. 6](#)
- ⑯ Insert Editing Indicator [pg. 34](#)
- ⑰ Audio Dubbing Indicator [pg. 35](#)
- ⑱ Condensation Warning
When this indicator appears, all functions are
disabled. Turn the unit off for a few hours, and
when you turn it on again the indicator should
disappear.
- ⑲ Instant Title [pg. 23](#)
- ⑳ Date/Time/Character [pg. 21](#)
- ㉑ Interval
Time/Recording Time Indicator [pg. 24](#)

DANGER:

- The video light becomes extremely hot. Do not touch it either while in operation or soon after turning it off, otherwise serious injury may result.
- Do not place the camcorder into the carrying case immediately after using the video light, since it remains extremely hot.
- When operating, keep a distance of about 30 cm between the video light and people or object.
- Do not use near flammable or explosive materials.
- Consult your nearest JVC dealer for replacing the video light unit.

General Battery Precautions

- When the RM-V20U (remote control), C-P6U or C-P7U (cassette adapter) are not functioning even when correctly operated, the batteries are exhausted. Replace them with fresh ones.
- Use only the following batteries:

RM-V20U R03 (AAA) size
C-P6U or C-P7U R6 (AA) size

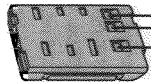
Please make note of the following rules for battery use. When misused, batteries can leak or explode.

1. Refer to the RM-V20U and C-P6U/C-P7U instructions when replacing batteries.
2. Do not use old and new batteries together.
3. Do not use two different kinds of batteries. Although sizes may be the same, voltages may differ.
4. Do not expose batteries to excessive heat as they can leak or explode.
5. Do not dispose of batteries in a fire.
6. Remove batteries from the unit if it is to be stored for an extended period to avoid battery leakage which can cause malfunctions.

Battery Packs

The supplied battery pack is a nickel-cadmium battery. Before using the supplied battery pack or an optional battery pack, be sure to read the following cautions:

1. To avoid hazard . . .
 - do not burn.
 - do not short-circuit the terminals.
 - do not modify or disassemble.
 - use only specified chargers.
2. To prevent damage and prolong service life . . .
 - do not subject to unnecessary shock.
 - avoid repeated charging without fully discharging.



Terminals

.... charge in an environment where temperatures are within the tolerances shown in the chart below. This is a chemical reaction type battery—cooler temperatures impede chemical reaction, while warmer temperatures can prevent complete charging. store in a cool, dry place. Extended exposure to high temperatures will increase natural discharge and shorten service life.

.... avoid prolonged uncharged storage.

.... remove from charger or powered unit when not in use, as some machines use current even when switched off.

3. To prevent damage to the camcorder . . .
 - replace the battery pack when it begins to deliver less recording time per charge.

NOTE:

It is normal for the battery pack to be warm after charging, or after use.

Temperature Ranges

Charging 10°C to 35°C
Operation 0°C to 40°C
Storage -10°C to 30°C

NOTES:

- Recharging time is based on room temperature of 20°C.
- The lower the temperature, the longer recharging takes.

Cassettes

To properly use and store your cassettes, be sure to read the following cautions:

1. During use . . .
 - make sure the cassette bears the VHS-C mark.
 - be aware that recording onto prerecorded tapes automatically erases the previously recorded video and audio signals.
 - make sure the cassette is positioned properly when inserting.
 - do not load and unload the cassette repeatedly without allowing the tape to run at all. This slackens the tape and can result in damage.
 - do not open the front tape cover. This exposes the tape to fingerprints and dust.
2. Store cassettes . . .
 - away from heaters or other heat sources.
 - out of direct sunlight.
 - where they won't be subject to unnecessary shock or vibration.
 - where they won't be exposed to strong magnetic fields (such as those generated by motors, transformers or magnets).
 - vertically, in their original cases.

Main Unit**1. For safety, DO NOT . . .**

- open the camcorder's chassis.
- disassemble or modify the unit.
- short-circuit the terminals of the battery pack. Keep it away from metallic objects when not in use.
- allow inflammables, water or metallic objects to enter the unit.
- remove the battery pack or disconnect the power supply while the power is on.
- leave the battery pack attached when the camcorder is not in use.

2. Avoid using the unit . . .

- in places subject to excessive humidity or dust.
 - in places subject to soot or steam such as near a cooking stove.
 - in places subject to excessive shock or vibration.
 - near a television set.
 - near appliances generating strong magnetic or electric fields (speakers, broadcasting antennas, etc.).
 - in places subject to extremely high (over 40°C) or extremely low (under 0°C) temperatures.
- 3. DO NOT leave the unit . . .**
- in places of over 50°C.
 - in places where humidity is extremely low (below 35%) or extremely high (above 80%).
 - in direct sunlight.
 - in a closed car in summer.
 - near a heater.

4. To protect the unit, DO NOT . . .

- allow it to become wet.
- drop the unit or strike it against hard objects.
- subject it to shock or excessive vibration during transportation.
- keep the lens directed at extremely bright objects for long periods.
- direct the eyepiece of the viewfinder at the sun.
- carry it by holding the viewfinder.
- swing it excessively when using the shoulder strap.

5. This camcorder features a built-in head cleaner which automatically cleans the heads and head drum when a cassette is loaded or unloaded. If, however, the heads become dirty and cause blurriness or interruption in the playback picture, consult your nearest JVC dealer.

About moisture condensation . . .

- You have observed that pouring a cold liquid into a glass will cause drops of water to form on the glass' outer surface. This same phenomenon occurs on the head drum of a camcorder when it is moved from a cool place to a warm place, after heating a cold room, under extremely humid conditions or in a place directly subjected to the cool air from an air conditioner.
- Moisture on the head drum can cause severe damage to the video tape, and can lead to internal damage to the camcorder itself.

Serious malfunctioning

If malfunctioning occurs, stop using the unit immediately and consult your local JVC dealer.

For Your Maintenance**1. After Use**

- ① Set the power switch to POWER OFF to turn off the camcorder.
- ② Slide EJECT to open the cassette holder, then remove the cassette.
- ③ Close and lock the cassette holder by pressing PUSH.
- ④ Press BATT. RELEASE to remove the battery pack.
- ⑤ Slide the LENS COVER open/close switch to close the lens cover.

2. Cleaning The Camcorder

- ① **CLEAN EXTERIOR**
Wipe gently with a soft cloth.
- ② **CLEAN LENS**
Blow it with a blower brush, then wipe gently with lens cleaning paper.
- ③ **REMOVE EYEPIECE**
Turn the eyepiece counterclockwise and pull it out.
- ④ **CLEAN VIEWFINDER**
Remove dust using a blower brush.
- ⑤ **RE-ATTACH EYEPIECE**
Align the marks, re-attach the eyepiece and turn it clockwise.

NOTES:

- Avoid using strong cleaning agents such as benzine or alcohol.
- Cleaning should be done only after the battery pack has been removed or other power units have been disconnected.
- Mold may form if the lens is left dirty.

SYMPTOM	POSSIBLE CAUSE(S)
POWER	
No power is supplied.	• The battery pack has not been attached correctly (☞ pg. 4). • The battery pack is not charged (☞ pg. 4). • The power supply has not been correctly connected (☞ pg. 5).
RECORDING	
Recording cannot be performed.	• The recording tape's Erase Protection tab is missing. Cover the hole with adhesive tape. (Some tapes have sliding tabs. In this case, check the position of the tab.)
Recording does not start.	• The camcorder power switch has not been set to CAMERA (☞ pg. 10).
PLAYBACK	
The tape is running, but there's no playback picture.	• The TV has not been set to its VIDEO mode. • If A/V connection is used, the TV's VIDEO/TV switch has not been set to VIDEO. • The RF unit has not been set to the correct channel. • Manual Tracking has not been performed (☞ pg. 29).
Noise bars appear in the playback picture.	• The video heads are dirty or worn out. Consult your nearest JVC dealer for head cleaning or replacement.
Playback picture is blurred or interrupted.	• This is normal.
The counter indication is blurred during Still playback.	• The Counter Memory Function has been activated (☞ pg. 29).
TAPE TRANSPORT	
The tape stops during fast-forward or rewind.	• The tape is already fully wound on one reel or the other.
Rewinding or fast-forwarding cannot be performed.	
OTHER	
The tape won't eject.	• The battery pack is running low.
Some functions are not available.	• The PROGRAM AE dial is set to LOCK (☞ pg. 14).
Vertical white lines appear when shooting a very bright object.	• This sometimes occurs when the contrast between the background and the object is great. It is not a defect of the camcorder.
Bright, crystal-shaped spots appear in the viewfinder.	• Sunlight is directly entering the lens.
An error number (E01, etc.) appears in the viewfinder.	• Consult your nearest JVC dealer.

The camcorder is a microcomputer-controlled device. External noise and interference (from a TV, a radio, etc.) might prevent it from functioning properly. In such cases, first disconnect its power supply unit (battery pack, AC Power Adapter/Battery Charger, etc.) and clock battery; and then re-connect it and proceed as usual from the beginning.

GENERAL	
Format	: VHS PAL standard
Power source	: DC 6 V ---
Power consumption	
GR-AX460 light on	: 8.7 W
GR-AX460 light off	: 5.7 W
GR-AX360	: 5.9 W
GR-AX260	: 5.7 W
Signal system	: PAL-type
Video recording system	: FM recording
Luminance	: Converted sub-carrier
Colour	: Direct recording
	: Conforms to VHS standard
Cassette	: VHS cassette
Tape speed	: 23.39 mm/sec
Recording time	
Max.	: 45 minutes (with EC-45 cassette)
Operating temperature	: 0°C to +40°C
Operating humidity	: 35% to 80%
Storage temperature	: -20°C to +50°C
Weight	
GR-AX460	: Approx. 770 g
GR-AX360	: Approx. 750 g
GR-AX260	: Approx. 760 g
Dimensions	
GR-AX460/AX260	: 109 (W) x 113 (H) x 226 (D) mm
GR-AX360	: 109 (W) x 113 (H) x 206 (D) mm

CAMERA

Pick up	: 1/4" format CCD
Minimum required illumination	: 2 lx (F1.2)
Illumination range	: 2 to 100,000 lx
Lens	: F1.2, f = 4.1 to 57.4 mm, 14:1 power zoom lens with auto iris and macro control, filter diameter 46 mm
Viewfinder	: Electronic viewfinder with
	• 0.55" colour LCD (GR-AX360)
	• 0.5" black/white CRT (GR-AX460/AX260)
White balance adjustment	: Auto/Manual adjustment

VIDEO

Output	: 1 Vp-p, 75 ohms, unbalanced (via VIDEO out connector)
--------	---

AUDIO

Output	: -8 dBs, 1 k-ohm (via AUDIO out connector)
--------	---

AAC POWER ADAPTER/BATTERY CHARGER (AA-V11EG) SPECIFICATIONS

Power requirement	: AC 110 to 240 V~, 50/60 Hz
Power consumption	: 23 W
Output	: DC 8.5 V --- , 1.3 A (CHARGE), DC 6.3 V --- , 1.8 A (VTR)
Charging system	: Constant current, peak detection, timer controlled
Dimensions	: 150 (W) x 42 (H) x 68 (D) mm
Weight	: Approx. 350 g

CASSETTE ADAPTER (C-P7U) SPECIFICATIONS

Dimensions	: 188 (W) x 25 (H) x 104 (D) mm
Weight	: Approx. 240 g
Accessory	: "R6 (AA)"-size battery x 1

Provided Accessories ☞ **pg. 3****Optional Accessories**

- Battery Packs BN-V12U, BN-V22U, BN-V25U
- Car Battery Charger BH-V3E
- Battery Charger BH-VC10EG
- Car Battery Cord AP-V7E
- RF Unit RF-V5E
- Wireless Remote Control Unit RM-V704U
- Wired Remote Control Unit RM-V20U
- Compact VHS-C Cassettes EC-45/30
- Active Carrying Bag CB-V7U

* Some accessories are not available in some areas. Please consult your nearest JVC dealer for details on accessories and their availability.

E&O.E. Design and specifications subject to change without notice.

SECTION 1 DISASSEMBLY

1.1 SERVICE CAUTIONS

1.1.1 Precautions

1. Before disassembling/re-assembling the set as well as soldering parts, make sure to disconnect the power cable.
2. When disconnecting/connecting connectors, pay enough attention to wiring not to damage it.
3. In general, chip parts such as resistor, shorting jumpers (0-ohm resistor), ceramic capacitors, diodes, etc. can not be reused after they were once removed.
4. When installing parts, be careful not to do with other parts as well as not to damage others.
5. When removing ICs, be careful not to damage circuit patterns.

1.1.2 How to read the disassembly and assembly (For Cabinet Parts)

STEP /LOC NO.	PART	Fig. No.	REMOVAL	
			*UNLOCK/RELEASE/ UNPLUG/UNCLAMP/ UNSOLDER	Note
①	CASSETTE COVER ASSY	C1	(S1), (L1), 2(L2) *CONNECTOR(A)	<NOTE 1> <NOTE 2>
②	TOP COVER	C2	(S2), 2(L3)	-
③	REAR CASE ASSY	C3	6(S2), (L4), 2(L5) *JACK COVER *CAP (LITIUM)	<NOTE 3>
④	LOWER CASE ASSY	C4	(S1), 4(S2), 4(L6), (S9) *CONNECTOR(B)	<NOTE 2> <NOTE 4>

① ② ③ ④ ⑤

- ① : Order of steps in Procedure
When reassembling, preform the step(s) in the reverse order. These numbers are also used as the identification (location) No. of parts Figures.
- ② : Part to be removed or installed.
- ③ : Fig. No. showing Procedure or Part Location.
C = Cabinet
CA = Camera
D = Deck
- ④ : Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped or unsoldered.
P = Spring
W = Washer
S = Screw
* = Unhook, unlock, release, unplug or unsolder.
6(S2) = 6 Screws (S2)
- ⑤ : Adjustment information for installation.

1.1.3 Connection of the wires

1. Pull the connector structure upward to release the clamp when removing or inserting the flat wire cable.

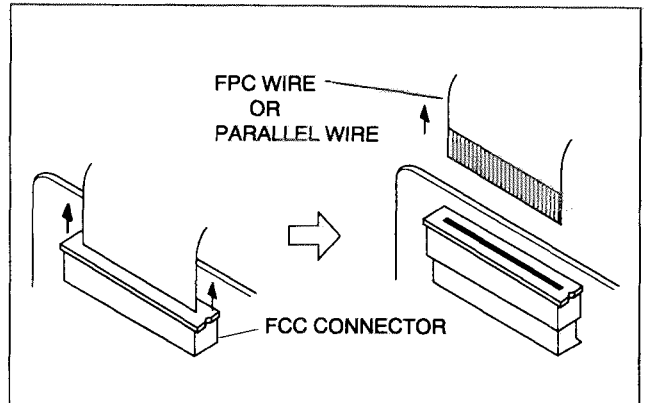


Fig. 1 TYPE A

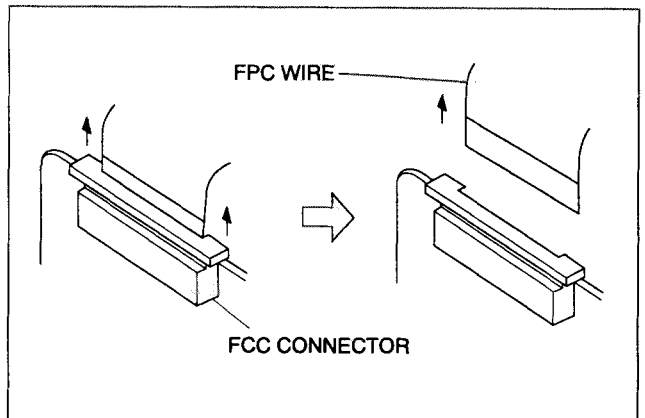


Fig. 2 TYPE B

2. Depress the connector structure downward to release the clamp when removing or inserting the flat wire cable, as indicated below.

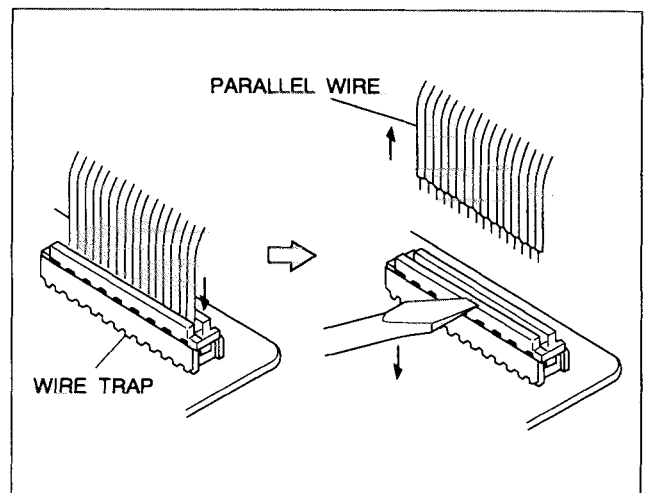


Fig. 3 TYPE C

1.1.4 Main screws to deal with disassembly/assembly

Table 1-1-1 lists screws by their symbols correspond to those shown in figures of this section "Disassembly".

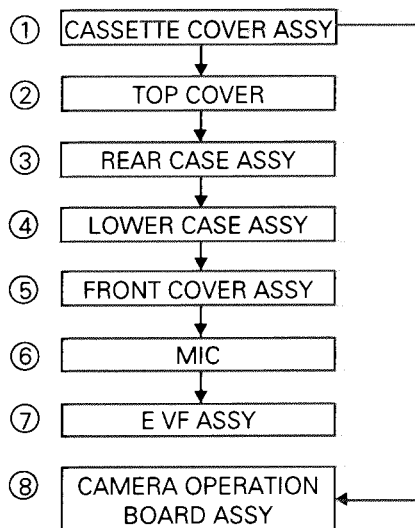
SYMBOL OF SCREW	SHAPE	PART NUMBER
S1		YQM30032-59
S2		YQM30032-4-2
S3		YQ43762-3
S4		YQ43545
S5		YQ44457-3
S6		YQM30032-2-2
S7		SPSP2006Z
S8		YQ44457-2
S9		YQM30032-8

Table 1-1-1

1.2 DISASSEMBLY/ASSEMBLY OF CABINET PARTS

1.2.1 Disassembly flow chart

This flowchart indicates the disassembly step for the cabinet parts and P.C. boards in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order. Bend, route and dress the flat cables as they were originally.



1.2.2 Disassembly method

STEP /LOC NO.	PART	Fig. No.	REMOVAL	
			*UNLOCK/RELEASE/ UNPLUG/UNCLAMP/ UNSOLDER	Note
①	CASSETTE COVER ASSY	C1	(S1), (L1), 2(L2) *CONNECTOR(A)	<NOTE 1> <NOTE 2>
②	TOP COVER	C2	2(S2), 2(L3)	—
③	REAR CASE ASSY	C3	6(S2), (L4), 2(L5) *CAP (LITHIUM) *JACK COVER	<NOTE 3>
④	LOWER CASE ASSY	C4	(S1), 4(S2), 6(L6), (S9) *CONNECTOR(B)	<NOTE 2> <NOTE 4>
⑤	FRONT COVER ASSY	C5	2(S2), 2(L7) *LENS, LAMP REFLECTOR	—
⑥	MIC	C6	(L8), (L9) *CONNECTOR(C)	<NOTE 2>
⑦	EVF ASSY	C7	2(S3), 2(L10) *BRACKET	—
⑧	CAMERA OPERATION BOARD ASSY	C8	4(S6)	—

List of Abbreviations:

(S1) = 1 Screw (S1)

6(S2) = 6 Screws (S2)

2(L5) = 2 Locking Tabs (L5)

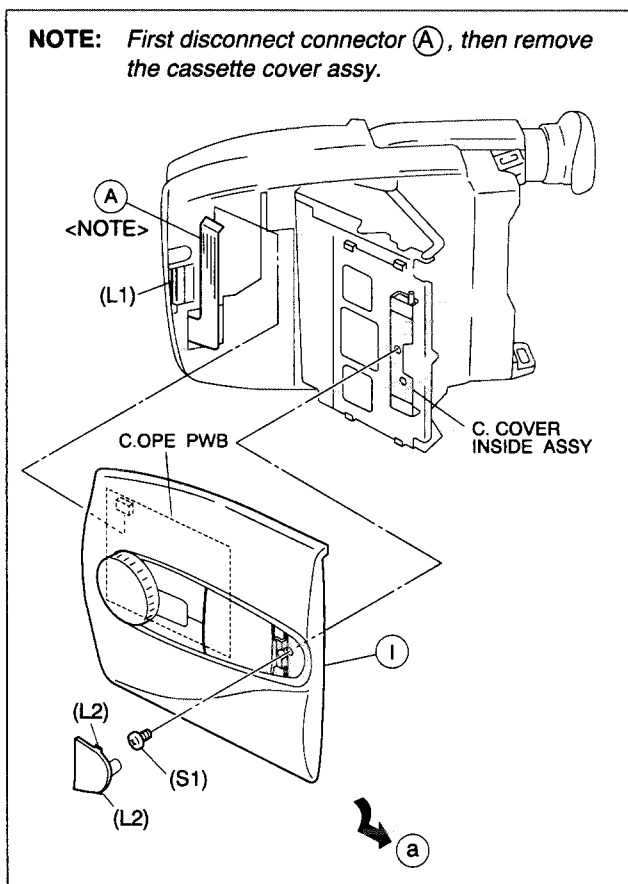


Fig. C1

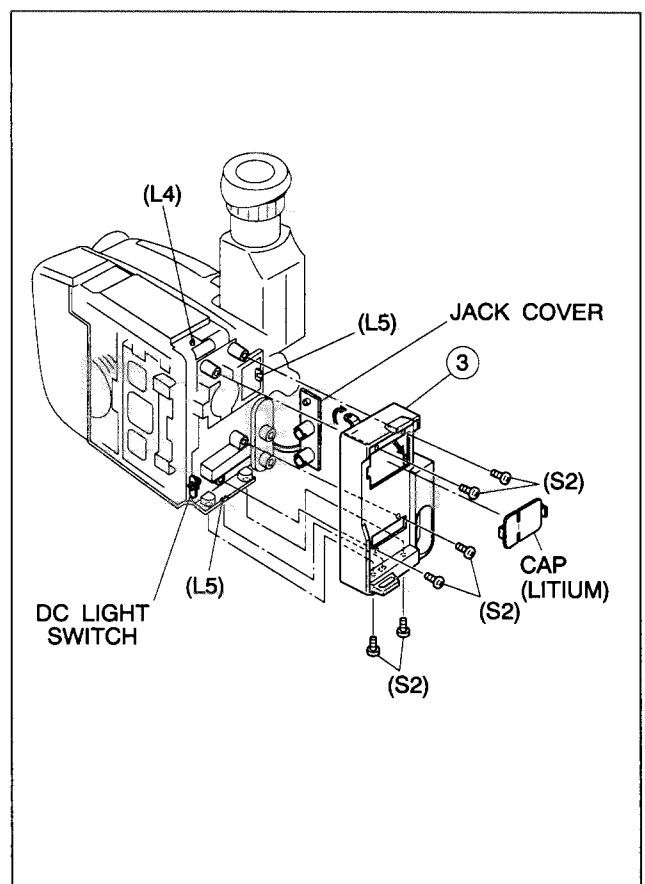


Fig. C3

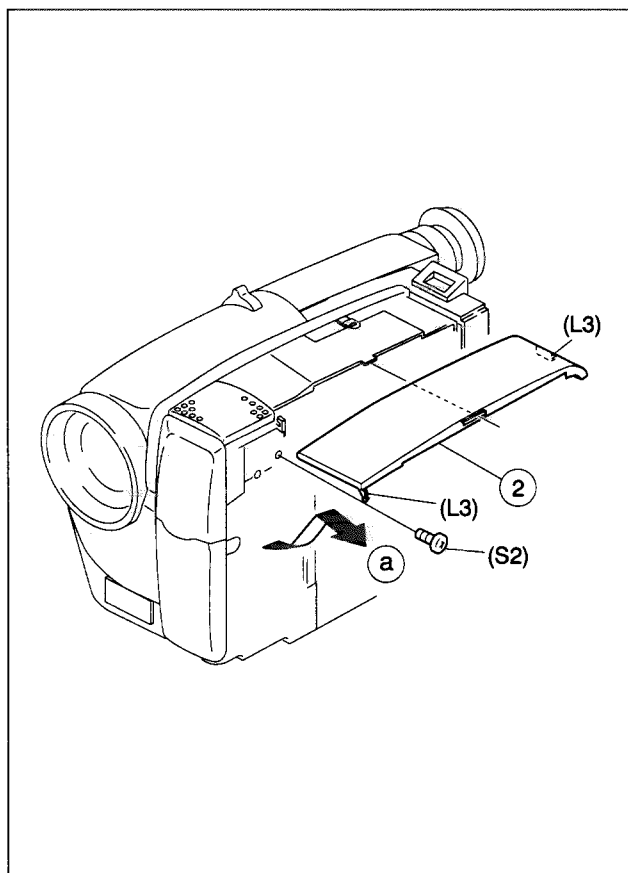


Fig. C2

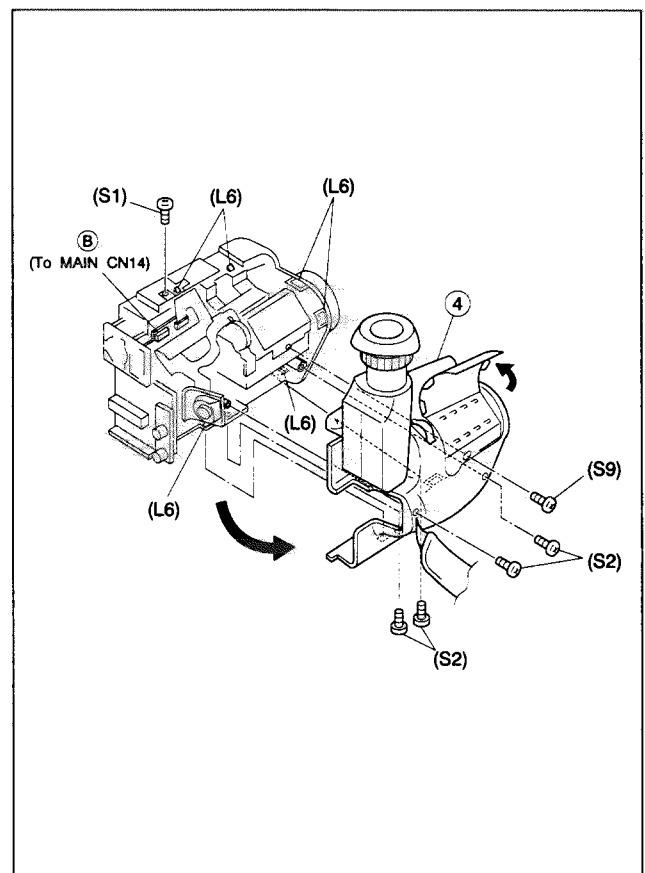


Fig. C4

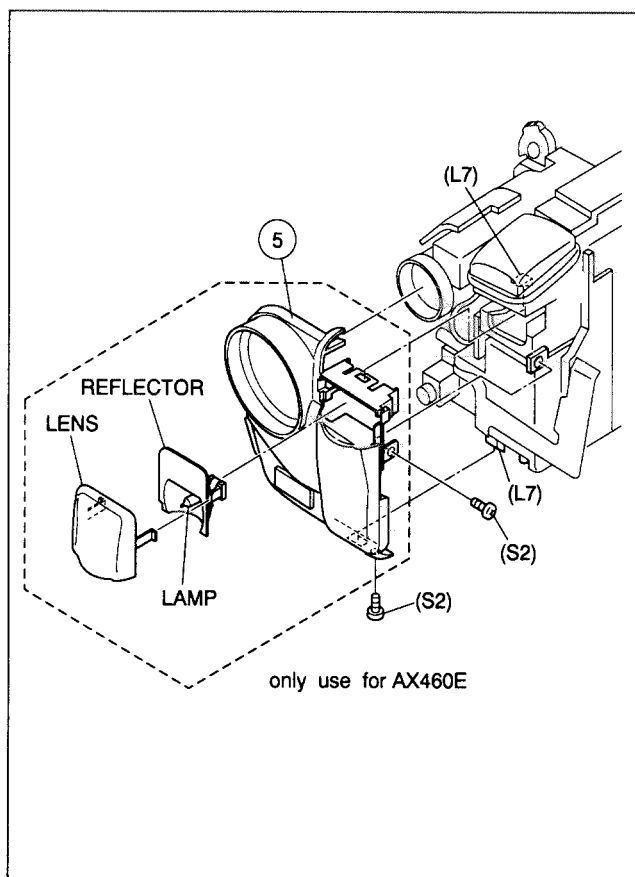


Fig. C5

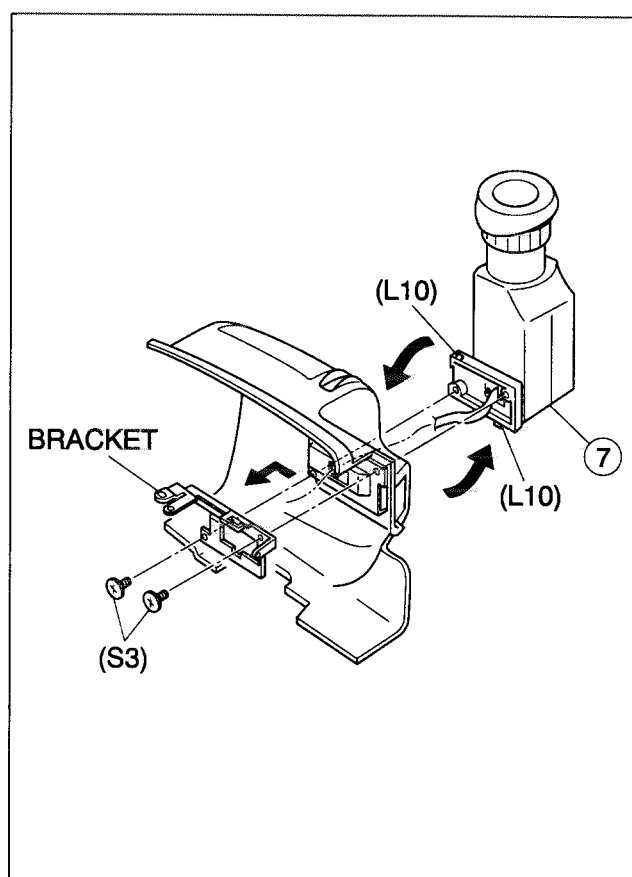


Fig. C7

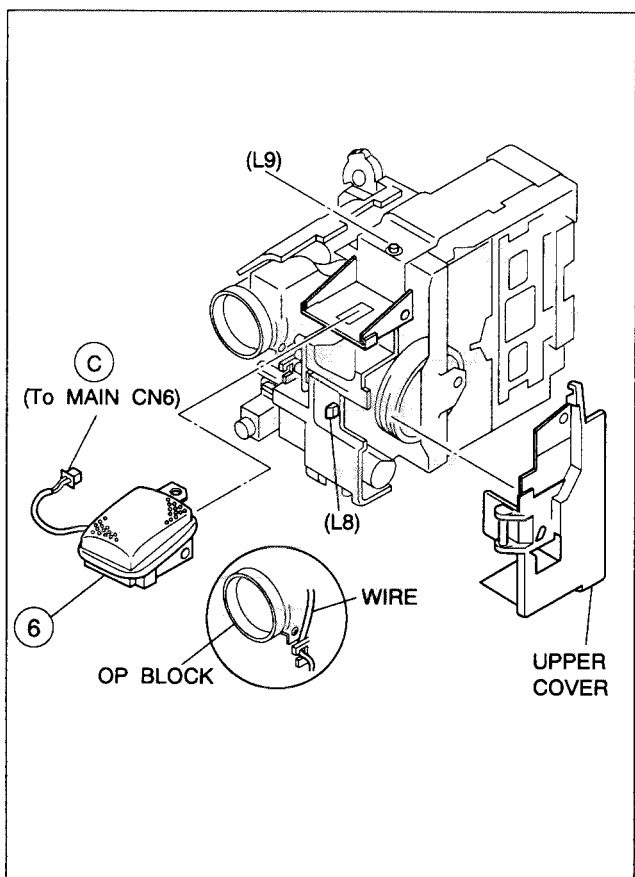


Fig. C6

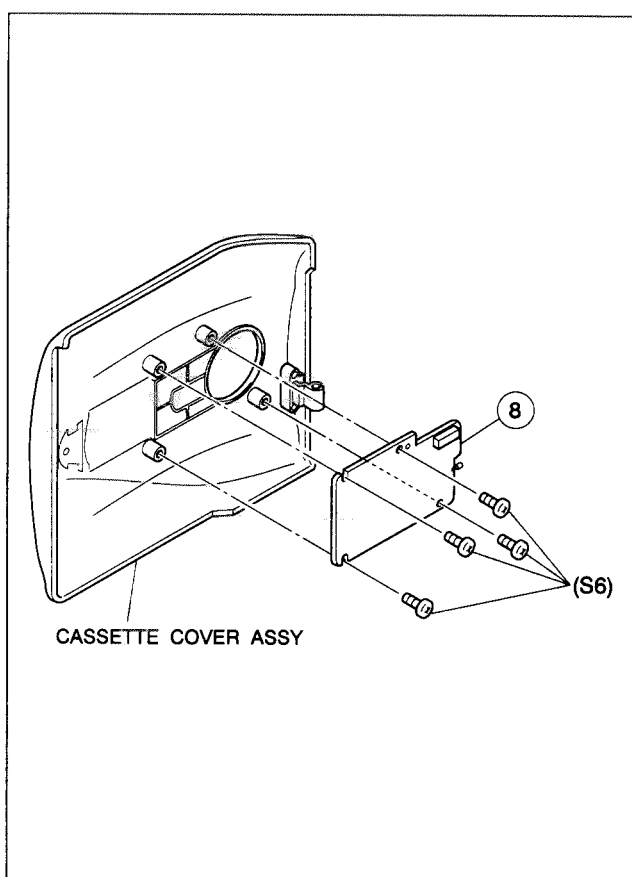


Fig. C8

Reference Notes:

<NOTE 1>

1. Use the AC Power Adaptor (DC6V TYPE) and supply the DC power to the unit.
Open the cassette cover by pressing the EJECT switch.
2. Disconnect the DC power source.
3. First disconnect connector ①, then remove the push button assy and screw (S1).
Remove ① from C. Cover inside assy in direction of arrow ①.

<NOTE 2>

Destination of connectors

Note: Three kinds of double-arrows in connection tables respectively show kinds of connector/wires.

↔ : Board to Board connector

↔ : Flat wire

↔ : Wire

Con- nector	No. of Pins	Connector
①	11	OPERATION (CAMERA) ↔ MAIN CN7
②	10	E VF ↔ MAIN CN14
③	2	MIC ↔ MAIN CN6

<NOTE 3>

First remove the JACK COVER, then remove ③.

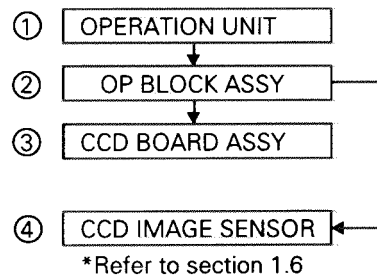
<NOTE 4>

First remove the grip strap, then remove ④.

1.3 DISASSEMBLY/ASSEMBLY OF CAMERA PARTS

1.3.1 Disassembly flow chart

This flowchart indicates the disassembly step for the CAMERA parts and P.C. boards in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order. Bend, route and dress the flat cables as they were originally.



1.3.2 Disassembly method

STEP /LOC NO.	PART	Fig. No.	REMOVAL	
			*UNLOCK/RELEASE/ UNPLUG/UNCLAMP/ UNSOLDER	Note
①	OPERATION UNIT	CA1	2(S2), 3(L1) *CONNECTOR ①	<NOTE 1>
②	OP BLOCK ASSY	CA1	2(S2) *CONNECTOR ②	<NOTE 1>
③	CCD BOARD ASSY	CA1	2(S7), *SHILD PLATE *CONNECTORS ③, ④, ⑤	<NOTE 1> <NOTE 2>

List of Abbreviations:

2(S2) = 2 Screws (S2)

(L1) = 1 Locking (L1)

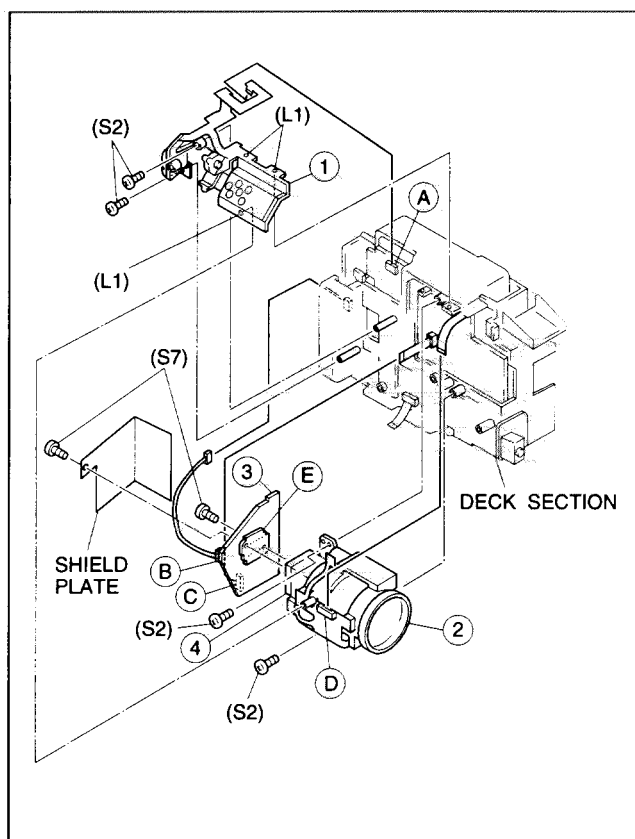


Fig. CA1

Reference Notes:

<NOTE 1>

Destination of connectors

Note: Three kinds of double-arrows in connection tables respectively show kinds of connector/wires.

↔: Board to Board connector

↔: Flat wire

↔: Wire

Con- nector	No. of Pins	Connector
(A)	13	OPERATION UNIT ↔ MAIN CN13
(B)	4	CCD CN203 ↔ REAR CN3
(C)	28	CCD CN202 ↔ MAIN CN12
(D)	22	OP BLOCK ↔ MAIN CN11
(E)	14	CCD CN201 ↔ CCD SOCKET

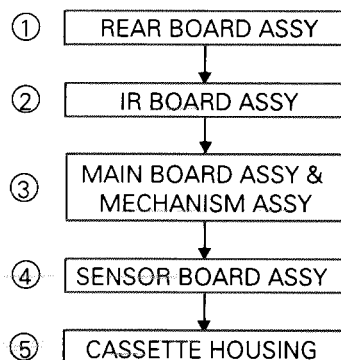
<NOTE 2>

1. Remove two screws (S7).
2. Disconnect connectors (B) and (C).
3. Move the CCD board in the direction of the rear side. At that time, pay careful attention to pins (connector (E)) of the CCD image sensor so as not to damage them.

1.4 DISASSEMBLY/ASSEMBLY OF DECK PARTS

1.4.1 Disassembly flow chart

This flowchart indicates the disassembly step for the DECK parts and P.C. boards in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order. Bend, route and dress the flat cables as they were originally.



1.4.2 Disassembly method

STEP /LOC NO.	PART	Fig. No.	REMOVAL	Note
			*UNLOCK/RELEASE/ UNPLUG/UNCLAMP/ UNSOLDER	
①	REAR BOARD ASSY	D1	3(L1) *CONNECTOR(A), (J)	<NOTE 1>
②	IR BOARD ASSY	D1	(L2) *CONNECTOR(B)	<NOTE 1>
③	MAIN BOARD ASSY	D1	3(S4), (S5), (L3) *FRAME ASSY *CONNECTORS (C), (H)	<NOTE 1>
④	SENSOR BOARD ASSY	D2	2(S5), 4(S8) *BRACKET	<NOTE 1>
⑤	CASSETTE HOUSING	D3	2(S4), 4(S5)	

List of Abbreviations:

3(S4) = 3 Screws (S4)

(L3) = 1 Locking Tab (L3)

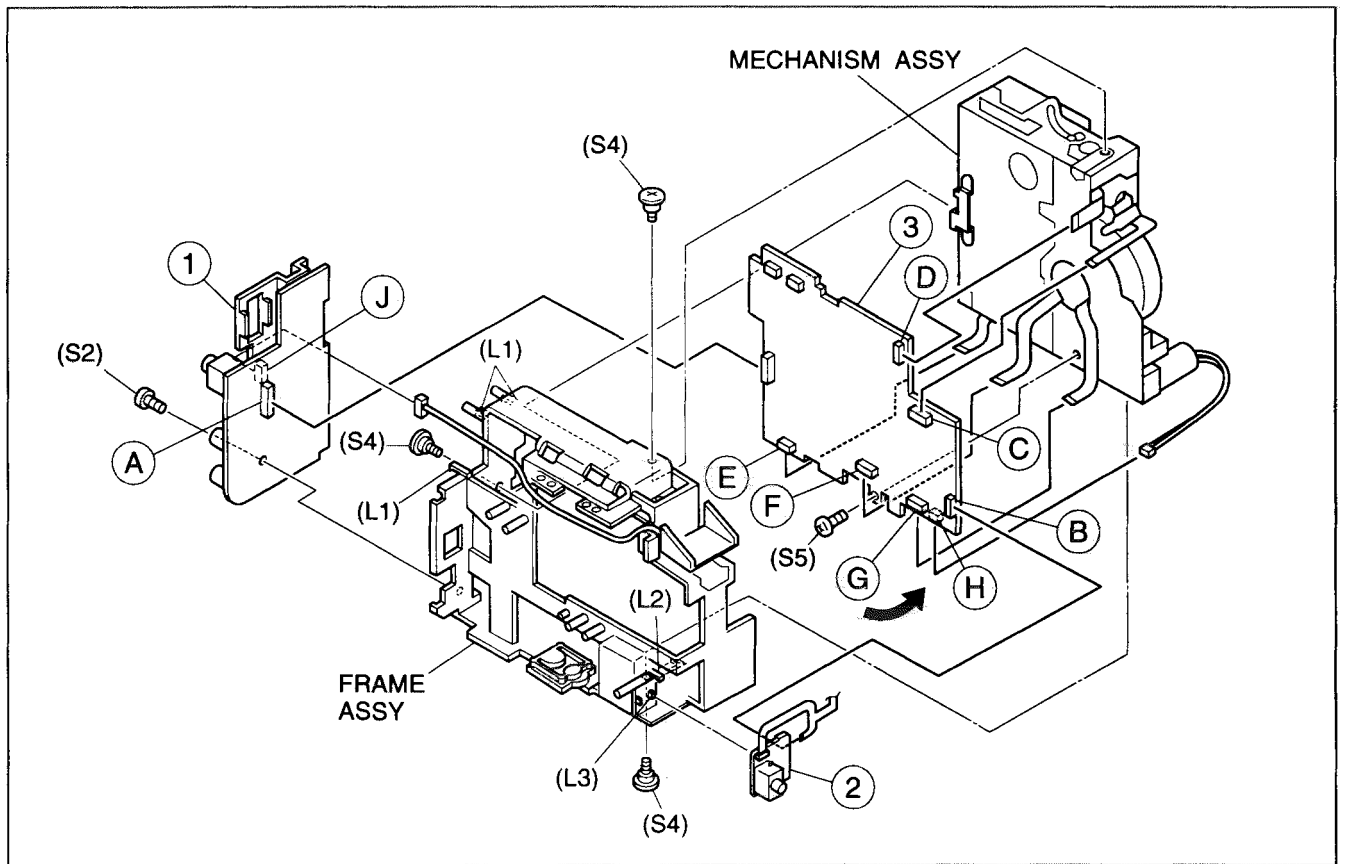


Fig. D1

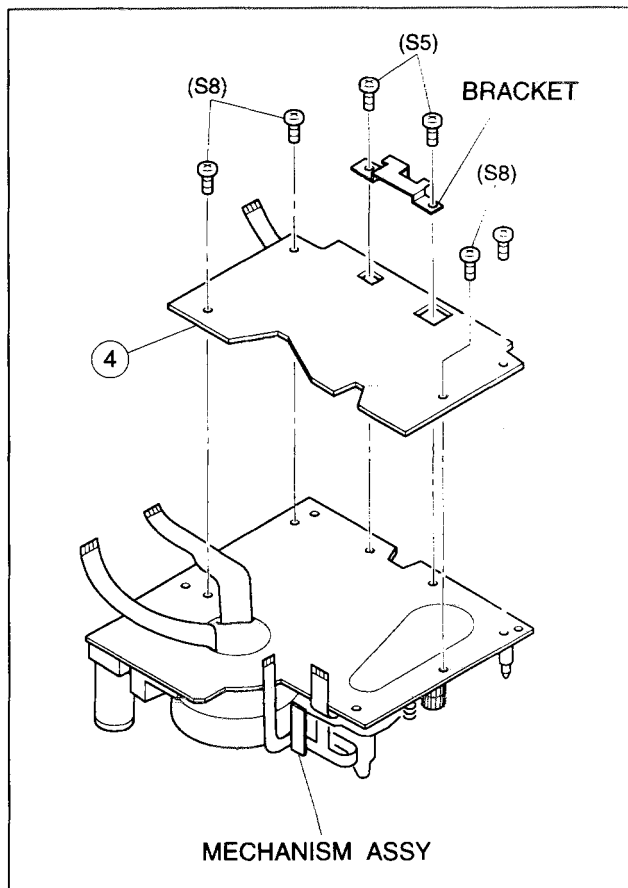


Fig. D2

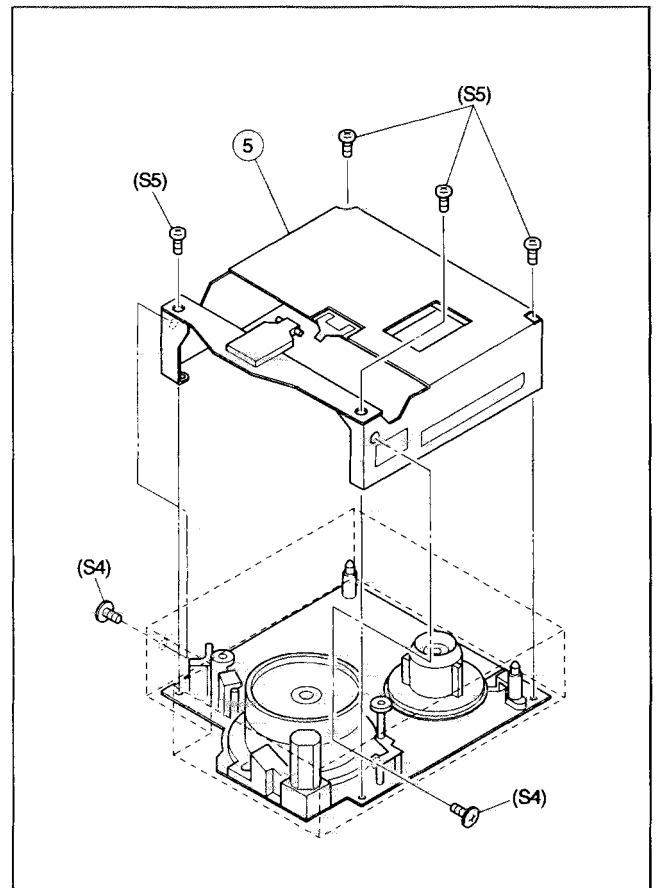


Fig. D3

Reference Notes:

<NOTE 1>

Destination of connectors

Note: Three kinds of double-arrows in connection tables respectively show kinds of connector/wires.

↔ : Board to Board connector

↔ : Flat wire

↔ : Wire

Con- nector	No. of Pins	Connector	
(A)	48	MAIN CN15	↔ REAR CN1
(B)	8	MAIN CN7	↔ IR
(C)	11	MAIN CN8	↔ A/C HEAD
(D)	18	MAIN CN10	↔ CAPSTAN MOTOR
(E)	14	MAIN CN1	↔ SENSOR
(F)	11	MAIN CN2	↔ VIDEO HEAD
(G)	18	MAIN CN3	↔ DRUM MOTOR
(H)	2	MAIN CN4	↔ LOADING MOTOR
(J)	2	REAR CN4	↔ DC LIGHT

1.5 TO TAKE OUT CASSETTE TAPE

In the event that the set enters the emergency mode as it is loaded with a cassette tape and the cassette tape cannot be ejected with the EJECT button, manually, take it out of the set according to the following procedure.

Note:

- First disconnect connector (A), remove the cassette cover assy.
- If the mechanism comes into the unloading mode as the cassette tape is not held by hand, it results in tape damage.

1. Disconnect the set from the power source.
2. To detach the push button, release it from locking by two pawls by using (–) screw driver as shown in the magnified view (B) and move it. (Fig. 1-5-1)
3. Remove one screw, open the cassette cover assy and disconnect connector (A).
4. Remove cassette cover assy.
5. Connect a jumper wire to each pole of the loading motor as shown by the magnified view (C) (Fig. 1-5-2).
6. While holding down the cassette housing by hand, connect the jumper wires to a battery to run the mechanism to the EJECT position for unloading. If this unloading operation is performed as the cassette housing is not held down by hand, the front lid of the cassette may damage the tape when it is ejected.
7. For taking in the slack of the tape, run the mechanism to the EJECT position as the front lid of the cassette is left open, and turn the take-up reel in the forward direction to wind up the tape. After confirming that the tape has completely been wound up and the supply reel is idling, take the cassette tape out of the cassette housing.

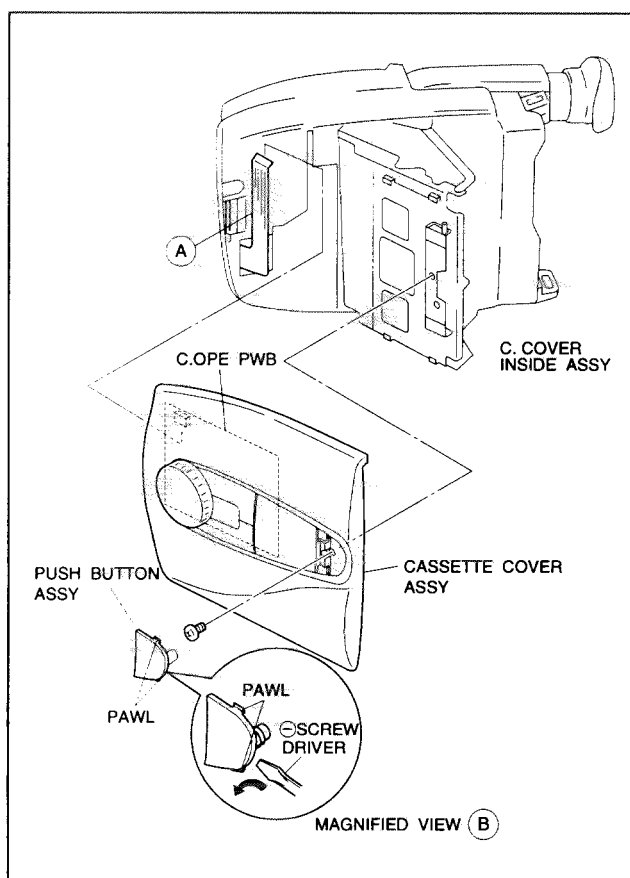


Fig. 1-5-1

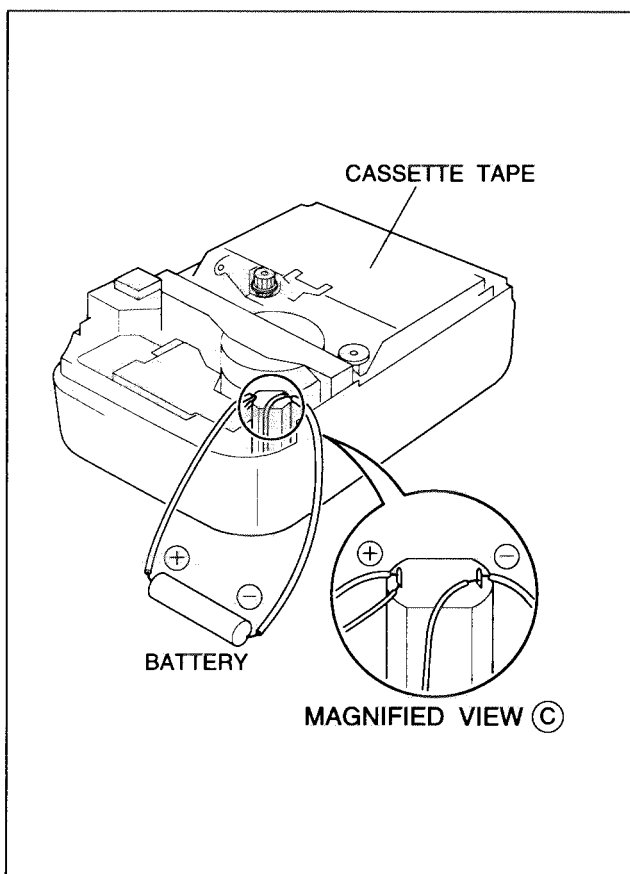


Fig. 1-5-2 CASSETTE TAPE

1.6 REPLACEMENT OF CCD IMAGE SENSOR

Notes:

- Pay the most careful attention to the transparent glass and optical LPF of the CCD image sensor so as not to soil and damage them. If something is soiled with finger-prints, etc., gently clean it with silicon-processed paper/cloth or chamois.
- When the CCD image sensor is shipped from the factory, there are protection seals applied onto the transparent glass. Leave the protector as it is, and take it off just before assembling the CCD image sensor to the OP block.

1.6.1 Removal of CCD image sensor

1. Remove two screws (A) securing the CCD base, and disassemble the CCD spacer, the optical LPF, spacer rubber.

1.6.2 Installation of new CCD image sensor

1. Remove the protection seal from a new CCD image sensor. Next, put the spacer rubber, optical LPF, CCD spacer on the CCD image sensor as they are piled up in this order. At that time, make sure of orientation of each item referring to the following table (see Fig. 1-6-1).

Part Name	Orientation
CCD image sensor	Mark is on the right viewed as indicated by the arrow (a).
Spacer rubber	IC side is horizontal.
Optical LPF	Marks are on the left and bottom viewed as indicated by the arrow (a).

2. Fix the CCD base to OP block with the two screws (A). At that time, be careful of the orientation.
3. After completion of all P.C. boards to the camera section, observe the monitor to confirm no vignetting caused by the bodytube, rings, lens hood, etc. If no vignetting is observed, it can be said that image's parallel, horizontality and centering are correct.

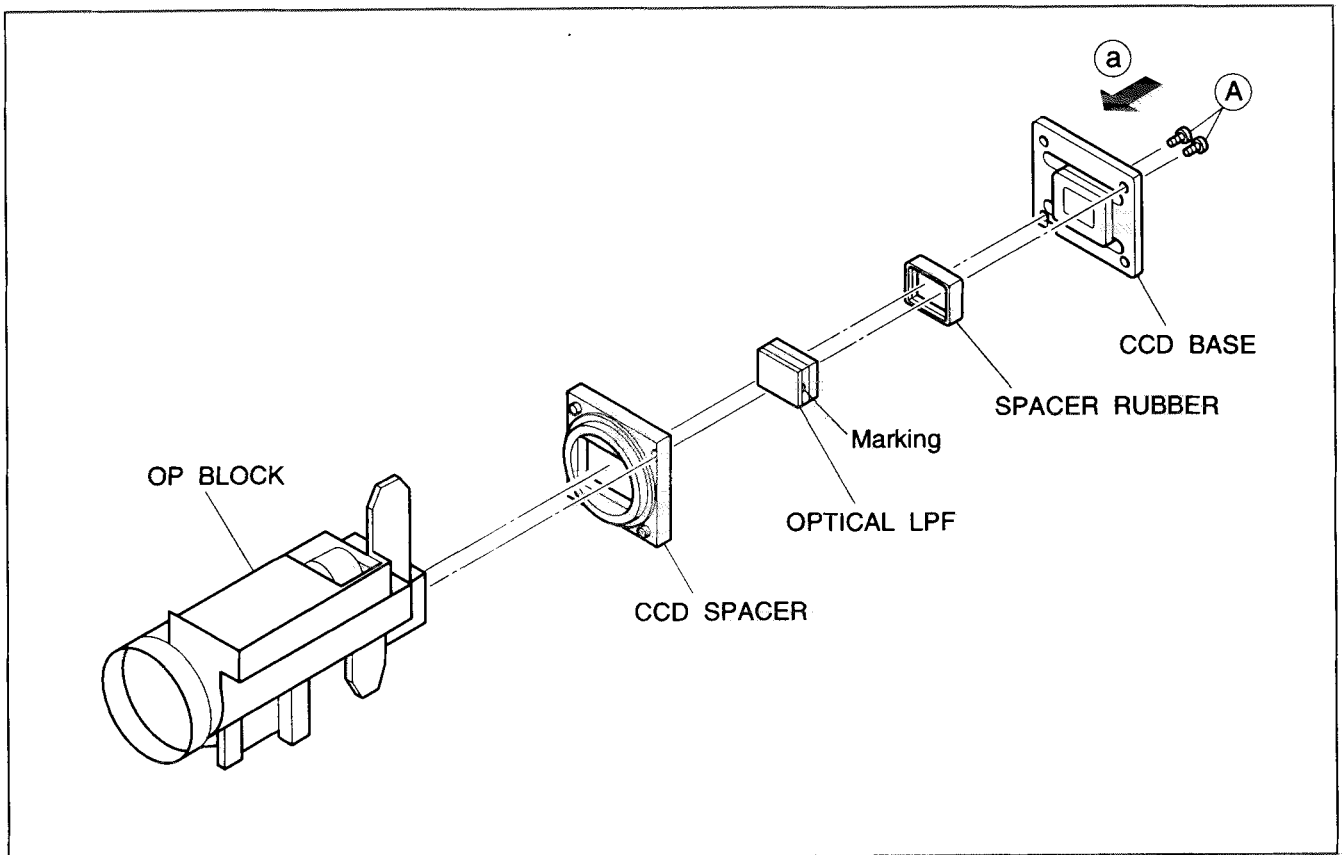


Fig. 1-6-1 CCD image sensor

1.7 EXTENSION CABLE CONNECTION

Connector	Pins	Connection	Part Number	Description
①	11	MAIN CN8 ↔ A/C HEAD	YTU94077-11 YTU94074-11	—
②	18	MAIN CN10 ↔ CAPSTAN MOTOR	YTU94077-18 YTU94074-18	—
③	10	MAIN CN14 ↔ E. VF	YTU94077-10 YTU94074-10	—
④	13	MAIN CN13 ↔ OPERATION UNIT	YTU94077-13 YTU94074-13	—
⑤	48	MAIN CN15 ↔ REAR CN1	PEMCJ0987-048	—
⑥	22	MAIN CN11 ↔ OP BLOCK	YTU94077-22 YTU94074-22	—
⑦	28	MAIN CN12 ↔ CCD CN202	YTU94077-28	—
⑧	4	CCD CN203 ↔ REAR CN3	YUJ40095A-4	—
⑨	11	MAIN CN7 ↔ C. COVER	YTU94032A-11 YUJ41355B-11	—
⑩	8	MAIN CN7 ↔ IR	YTU94077-8 YTU94074-8	—
⑪	2	MAIN CN6 ↔ MIC	YUJ40095A-2	—

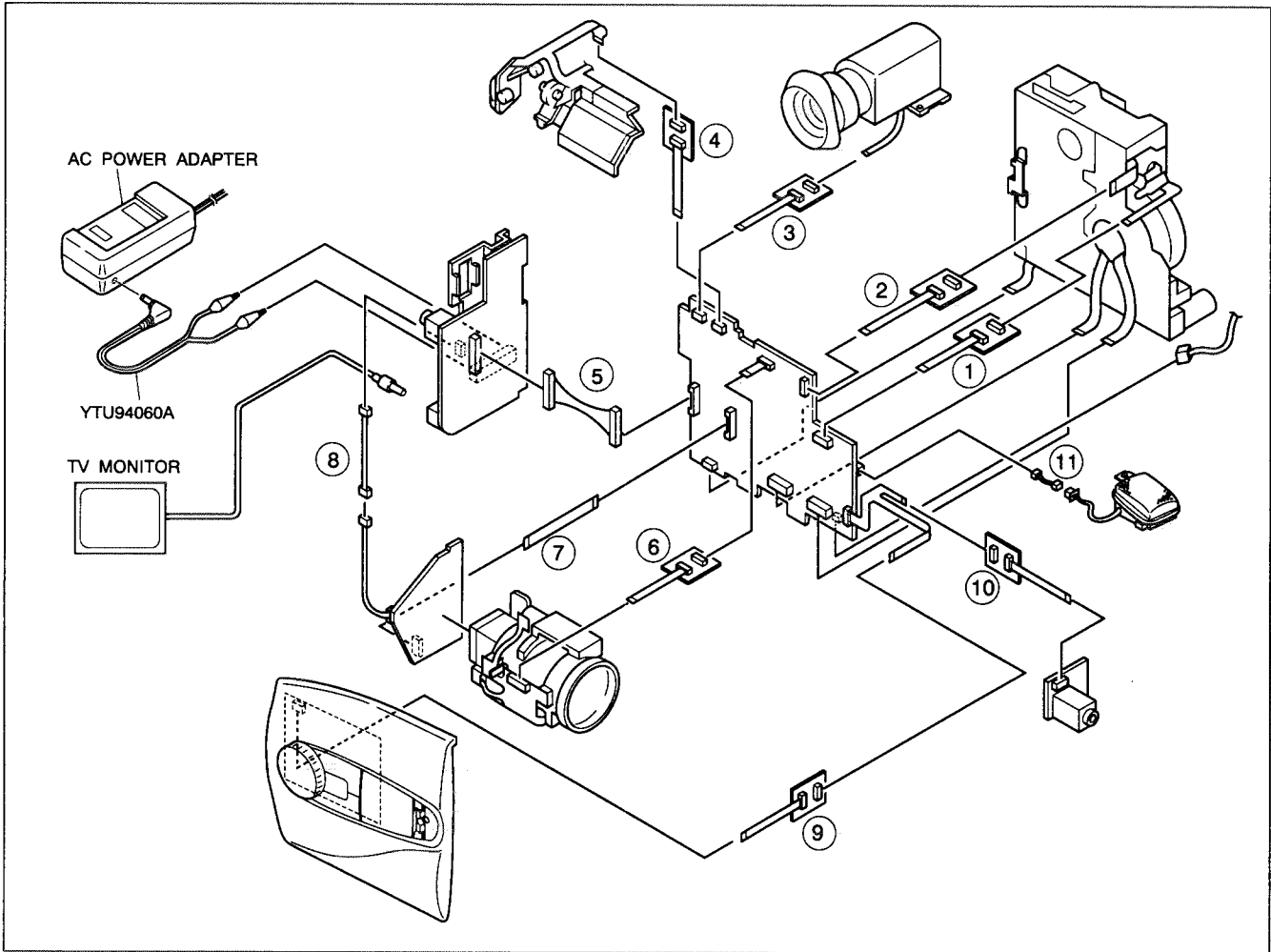


Fig. 1-7-1 EXTENSION CABLE CONNECTION

SECTION 2 MECHANISM ADJUSTMENT

2.1 SERVICE CAUTIONS

2.1.1 Precautions

1. Before disassembling/re-assembling the set as well as soldering parts, make sure to disconnect the power cable.
2. When disconnecting/connecting connectors, pay enough attention to wiring not to damage it.
3. When installing parts, be careful not to do with other parts as well as not to damage others. (Pay the most careful attention to the upper drum assy and tape transport mechanism.)

2.1.2 How to read the disassembly and assembly (For Mechanism Parts)

- ① : Order of steps in Procedure
When reassembling, perform the step(s) in the reverse order. These numbers are also used as the identification (location) No. of parts Figures.
- ② : Part to be removed or installed.
- ③ : Location of part.
T = Top
B = Bottom
- ④ : Fig. No. showing Procedure or Part Location.
M = Mechanism
- ⑤ : Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped or unsoldered.
P = Spring
W = Washer
S = Screw
* = Unhook, unlock, release, unplug or unsolder.
- ⑥ : Adjustment information for installation.
(+) = Refer to Exploded Views for Lubrication information.

2.1.3 Main screws and washers to deal with disassembly/assembly

Table 2-1-1 lists screws and washers by their symbols which correspond to those shown in figures of this section "Disassembly and Assembly".

SYMBOL OF SCREW	SHAPE	PART NUMBER
S1		YQ44457
S2		YQ44457-3
S3		YQ44457-2
S4		SPSN1750Z
S5		YQ444304
S6		YQ44460
S7		YQ44458
S8		YQ44457-4
S9		YQ44457-5

SYMBOL OF WASHER	SHAPE	PART NUMBER
W1		PQM30017-27
W2		Q03093-835
W3		PQM30017-25

Table 2-1-1

(For Mechanism Parts)

STEP/LOC. No.	PART		Fig. No.	REMOVAL	INSTALLATION
				*UNHOOK/UNLOCK /RELEASE/UNPLUG /UNSOLDER	ADJUSTMENT CONDITION NOTE
①	ROLLER BASE ASSY	T	M1	(S1)	-
②	TENSION ARM ASSY	T	M1	(P1), (W1)	-
③	REEL DISK (SUP)	T	M1	(W1), (W2)	-
④	SLANT ARM ASSY	T	M1	(W1)	-
⑤	CANCEL LEVER ASSY	T	M2	(W1)	-
⑥	EJECT LEVER ASSY	T	M2	(W1)	-
⑦	CASSETTE GUIDE (L) ASSY	T	M2	(S1)	-

↑
①

↑
②

↑
③

↑
④

↑
⑤

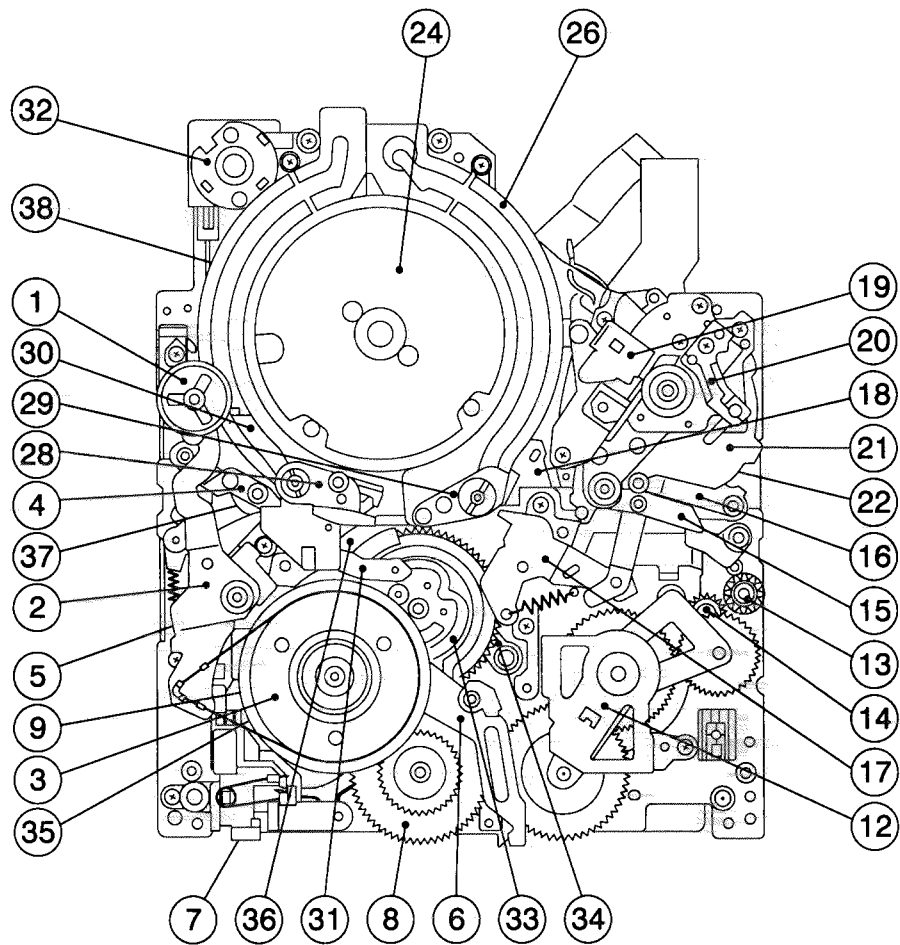
↑
⑥

2.2 DISASSEMBLY/ASSEMBLY OF MECHANISM PARTS

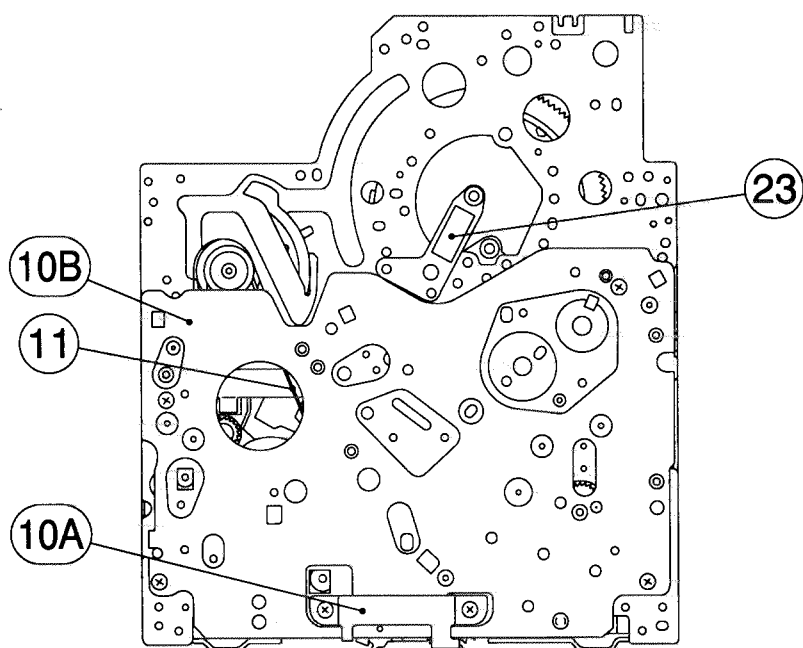
This procedure starts with the condition that the cabinet parts and deck parts. Also, all the following procedures for adjustment and parts replacement should be performed in STOP mode. When reassembling, perform the step(s) in the reverse order.

STEP/LOC. No.	PART		Fig. No.	REMOVAL	INSTALLATION
				*UNHOOK/UNLOCK /RELEASE/UNPLUG /UNSOLDER	ADJUSTMENT CONDITION NOTE
①	ROLLER BASE ASSY	T	M1	(S1)	-
②	TENSION ARM ASSY	T	M1	(P1), (W1)	-
③	REEL DISK (SUP)	T	M1	(W1), (W2)	-
④	SLANT ARM ASSY	T	M1	(W1)	-
⑤	CANCEL LEVER ASSY	T	M2	(W1)	-
⑥	EJECT LEVER ASSY	T	M2	(W1)	-
⑦	CASSETTE GUIDE (L) ASSY	T	M2	(S1)	-
⑧	SUPPLY CLUTCH ASSY	T	M2	(W1)	-
⑨	WHEEL GEAR	T	M2	(W1)	See, Adjustment procedure for Section 2.4
⑩A	BRACKET	B	M3	2(S2)	-
⑩B	SENS BOARD ASSY (R. ENCODER)	B	M3	4(S3)	-
⑪	TIMING BELT	B	M3	-	-
⑫	CENTER PULLEY UNIT	T/B	M3	2(S3)	-
⑬	TU GEAR	T	M3	(W1)	-
⑭	BRAKE SUB GEAR	T	M3	(W1)	-
⑮	P.R ARM ASSY	T	M3	(W3)	-
⑯	TU GUIDE ARM ASSY	T	M3	(W1)	-
⑰	LINK ARM ASSY	T	M4	(W3)	-
⑱	LED GUIDE	T	M4	(S1)	-
⑲	A/C HEAD UNIT	T	M4	2(S4)	-
⑳	SLANT POLE BASE ASSY	T	M5	(S5)	-
㉑	CAP MOTOR ASSY	T	M5	3(S5)	-
㉒A	MOTOR BASE	T	M5	2(S1), (S6)	-
㉒B	CLEANER ASSY	T/B	M5	2(S7), (L1)	-
㉓	BRUSH	B	M6	(S3)	-
㉔	DRUM FINAL	T/B	M6	2(S1), 2(S8), *CATCHER	-
㉖	GUIDE RAIL	T	M6	8(S9)	-
㉘	POLE BASE (SUP)	T	M6	-	-
㉙	POLE BASE (TU)	T	M6	-	-
㉚	COVER PLATE	T	M7	-	-
㉛	DRIVE LEVER ASSY	T	M7	-	-
㉜	MOTOR BRACKET ASSY	T	M7	3(S1)	-
㉝	CONTROL CAM	T	M8	(W3)	See, Adjustment procedure for Section 2.4
㉞	LINK LEVER	T	M8	-	-
㉟	MIDDLE GEAR	T	M8	-	-
㊱	LOADING GEAR(T) ASSY	T	M8	(W1)	See, Adjustment procedure for Section 2.4
㊲	LOADING GEAR(S) ASSY	T	M8	(W1)	-
㊳	LOADING RING ASSY	T	M8	4(S1)	See, Adjustment procedure for Section 2.4

TOP VIEW



BOTTOM VIEW



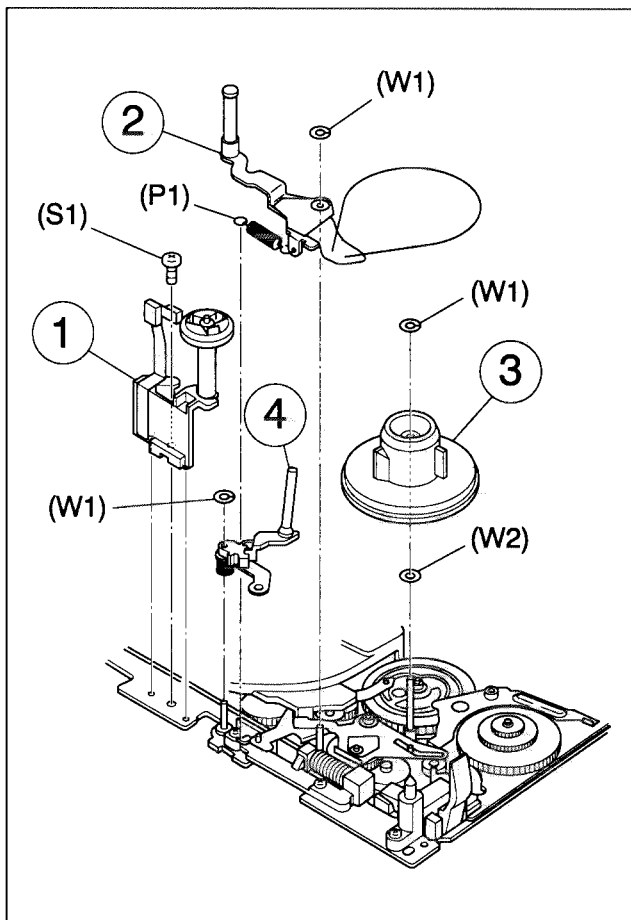


Fig. M1

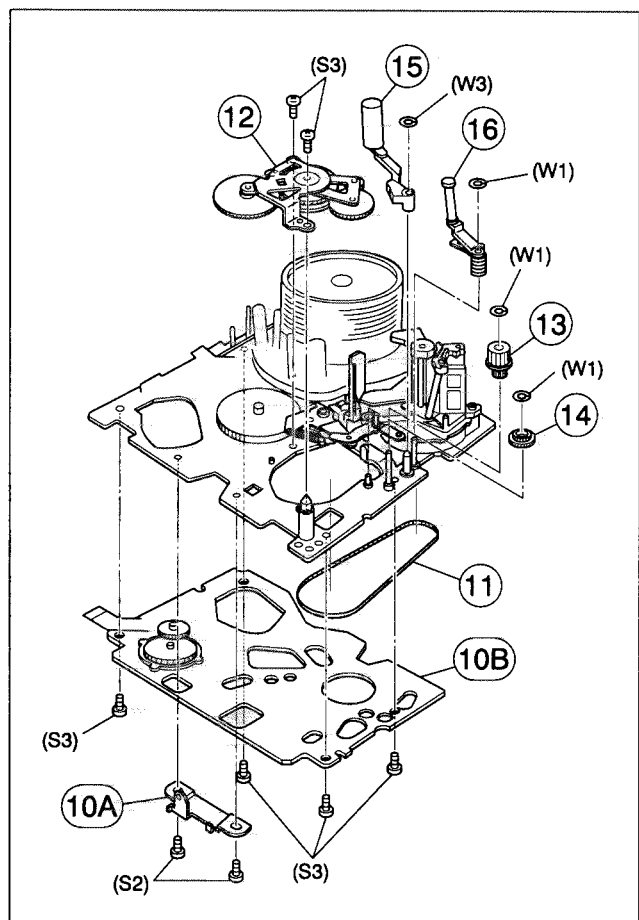


Fig. M3

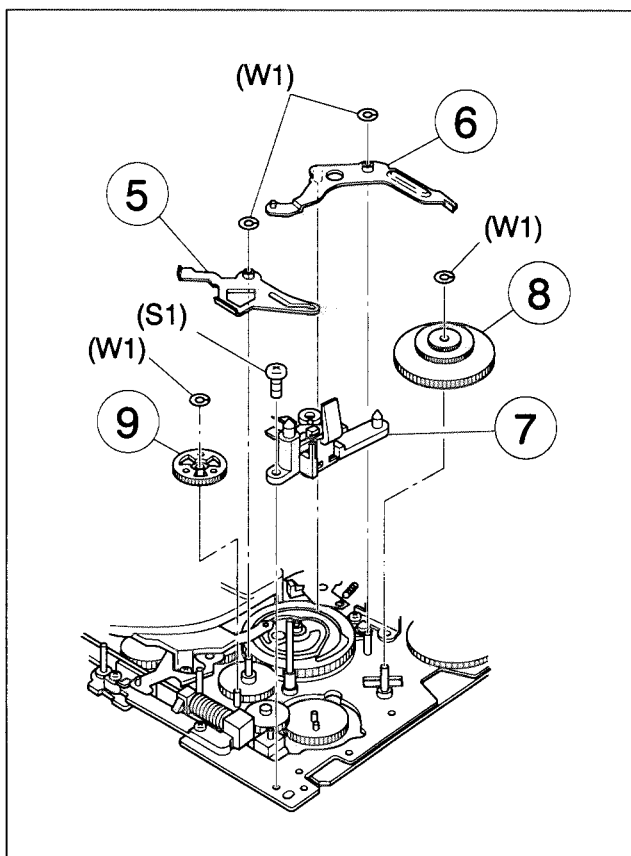


Fig. M2

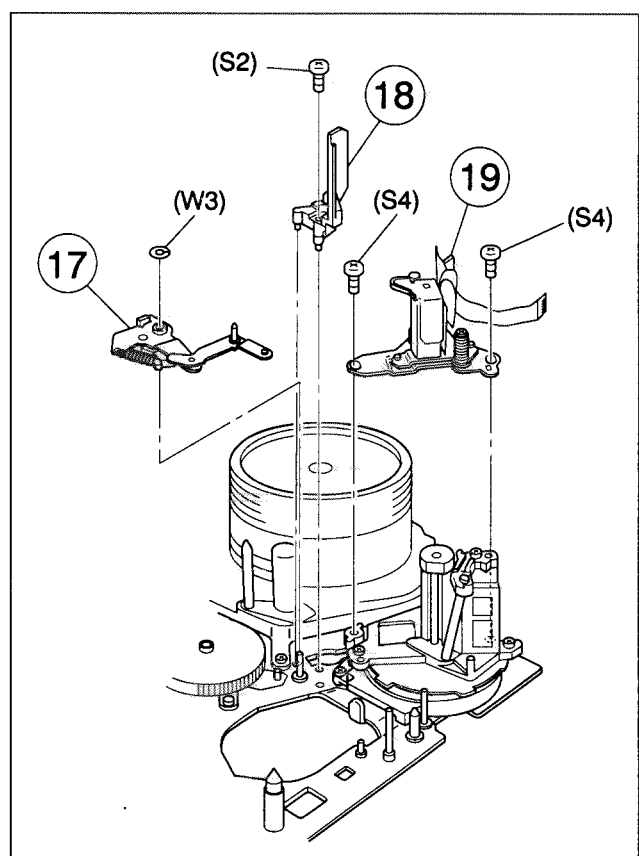


Fig. M4

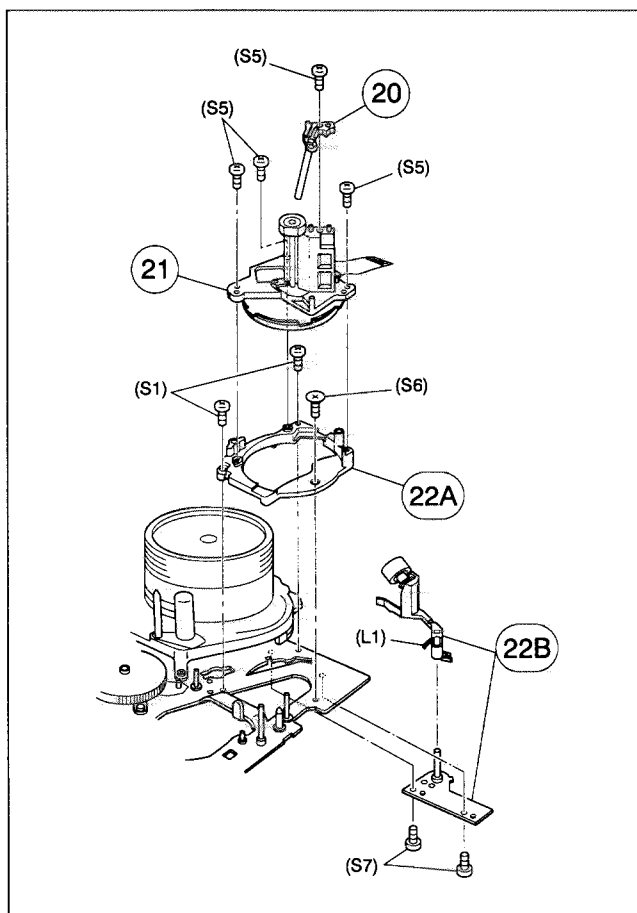


Fig. M5

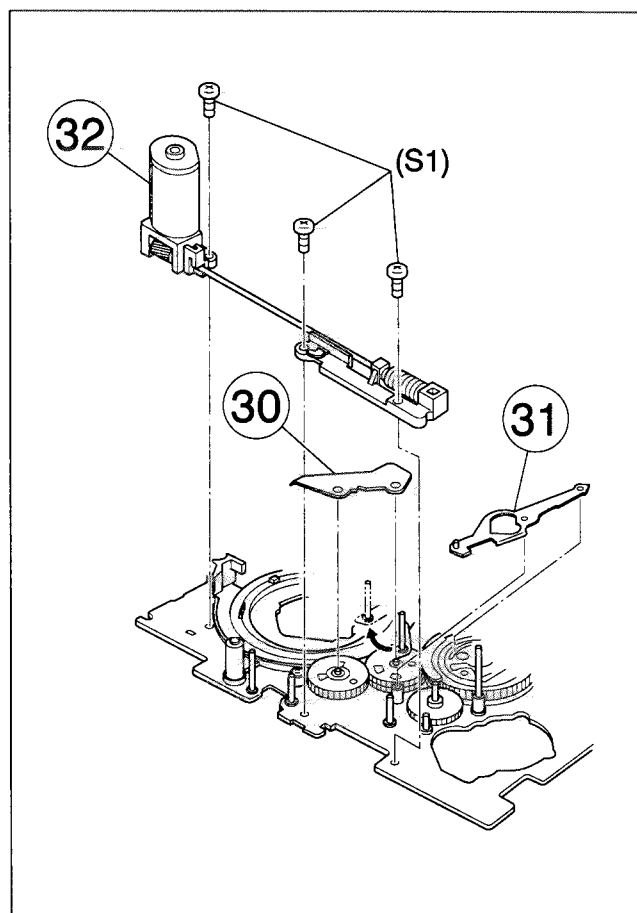


Fig. M7

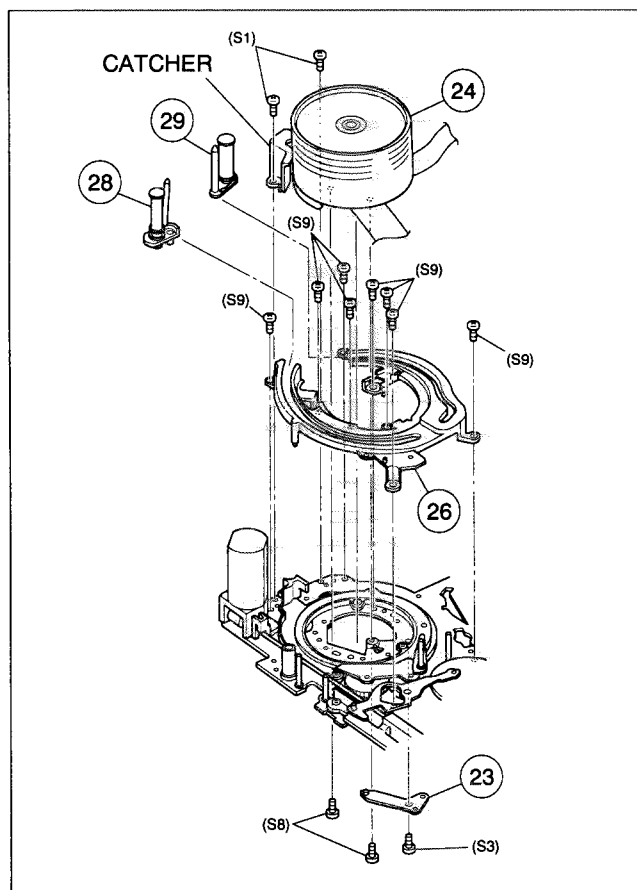


Fig. M6

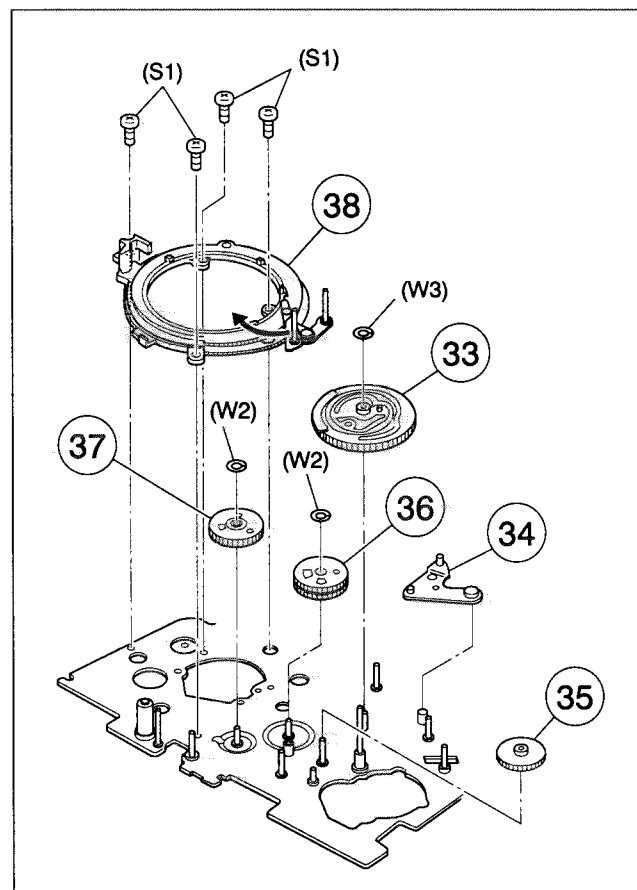


Fig. M8

2.3 REPLACEMENT OF UPPER DRUM

Note: Be very careful not to touch any hand of a new upper drum as well as not to damage the drum.

2.3.1 Removal of upper drum

1. Carefully unsolder at 10 points shown in Fig. 2-3-1 on the UPPER DRUM board.

Note: If solder is not completely removed, it may cause damage of the head pins when the upper drum is removed.

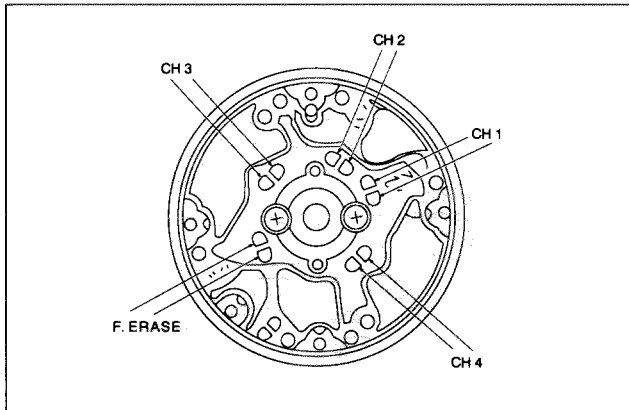


Fig. 2-3-1 Upper drum replacement (1)

2. Remove two screws and draw out the upper drum in the direction of the arrow.

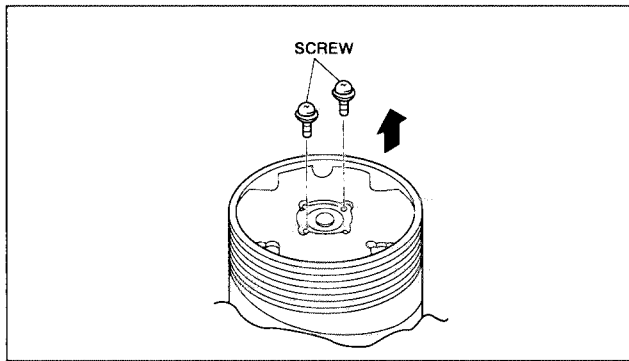


Fig. 2-3-2 Upper drum replacement (2)

3. When it is hard to remove the upper drum, set the upper drum removal tool (YTU94031A) with the screws which are once removed in the step 2, and tighten the center screw to remove it easily.

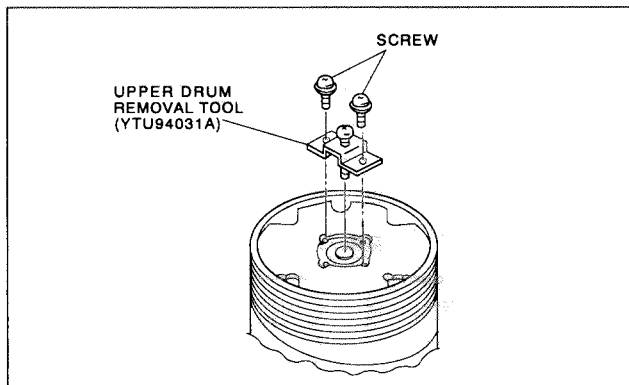


Fig. 2-3-3 Upper drum replacement (3)

2.3.2 Installation of new upper drum

1. Before installing a new upper drum, insert a soldering iron (50 W) into the hole of the upper drum and heat it for about 3 to 5 minutes to expand it.

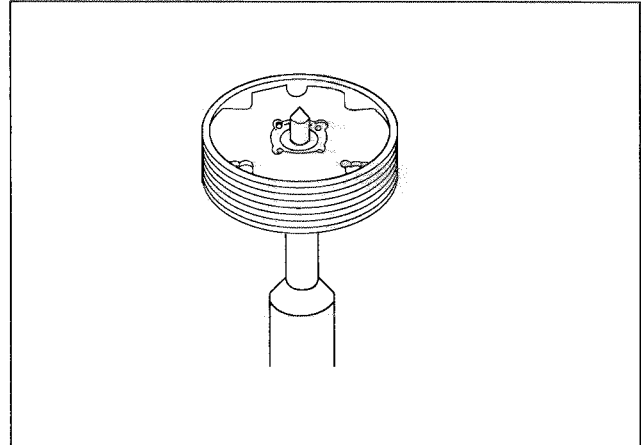


Fig. 2-3-4 Upper drum replacement (4)

2. Install the new upper drum so that its arrow marking is positioned at an angle of 140° to the rotary transformer's mold (having no relay pin) of the lower drum.

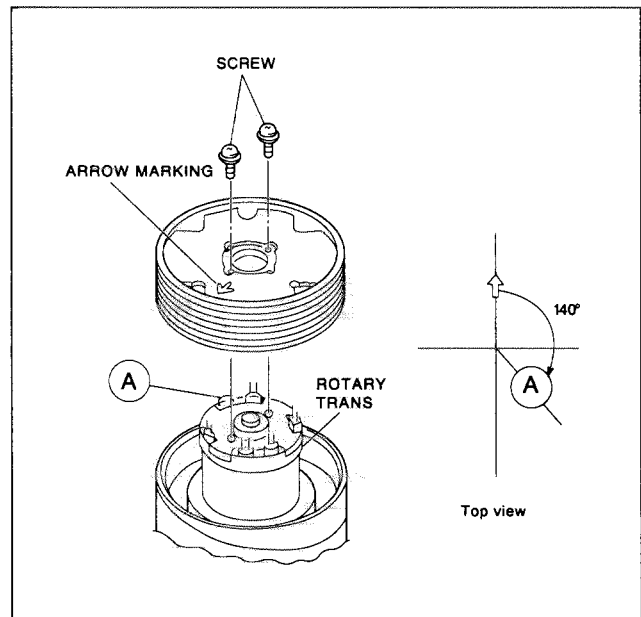


Fig. 2-3-5 Upper drum replacement (5)

3. Tighten the screws lightly first, then, alternately tighten them gradually as the upper drum is cooled.
4. After replacement finishes, make sure to check up and deck section adjust.

2.4 CHECKUP AND ADJUSTMENT OF MECHANISM PHASE

Note: Pay careful attention to the installing order and phase of mechanism parts of the loading system.

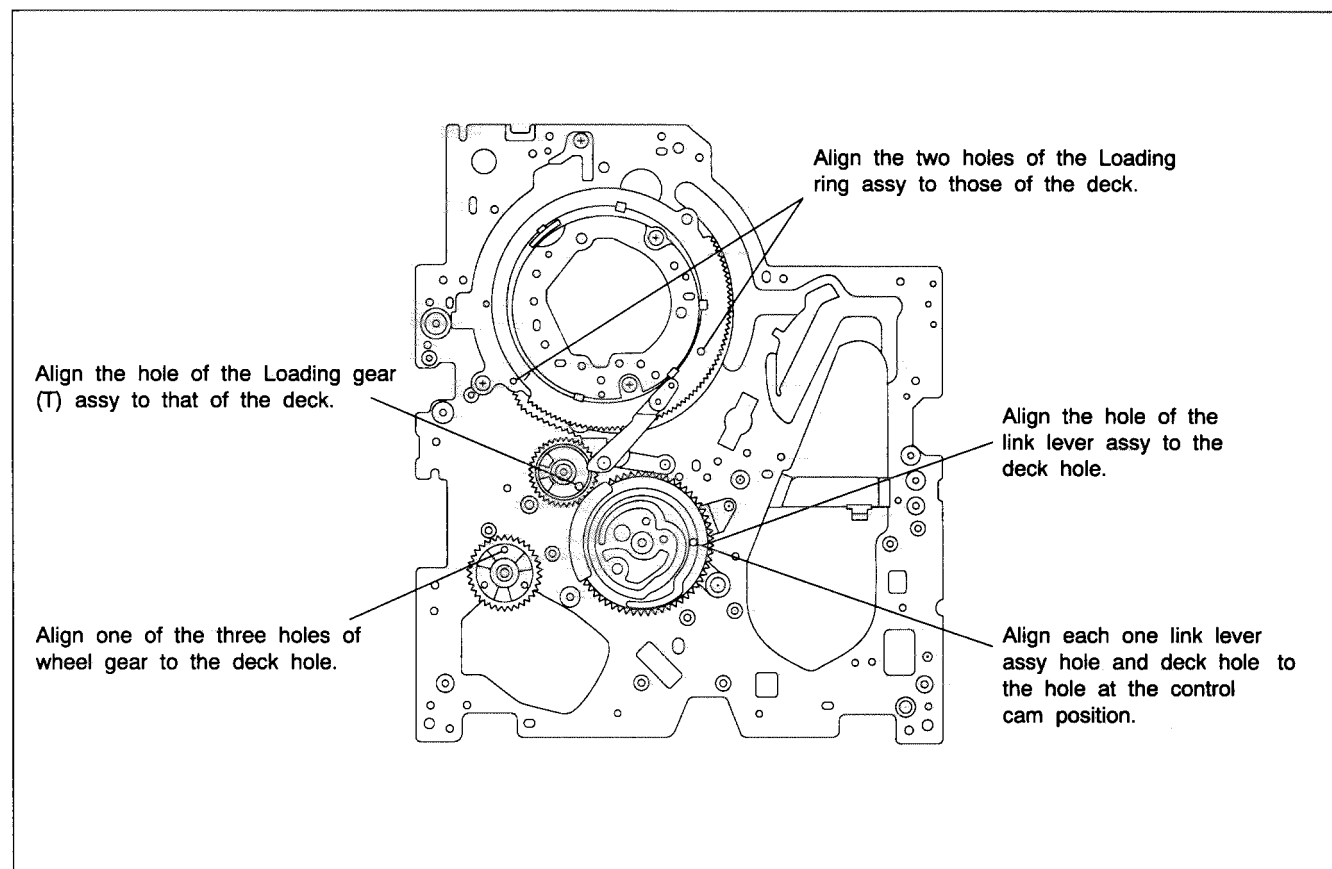


Fig. 2-4-1 TOP OF MAIN DECK

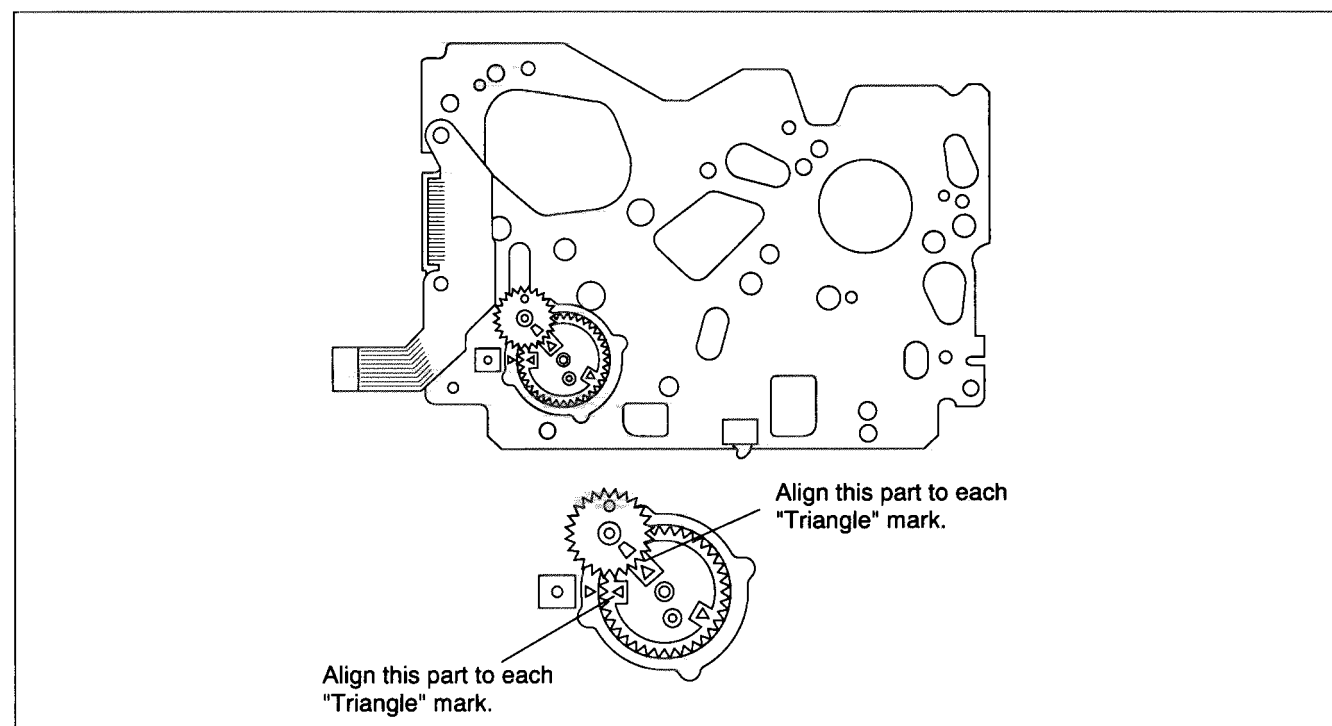


Fig. 2-4-2 SENSOR BOARD

2.5 TAPE TRANSPORT ADJUSTMENT

In most cases the deck section is in need electrical adjustment, it results from replacement of worm mechanical parts or video heads. In the event of malfunction with electrical circuits, troubleshooting with the aid of proper test instruments must be done first, and then commence necessary repair, replacement and adjustment, etc.

2.5.1 Required adjustment tools

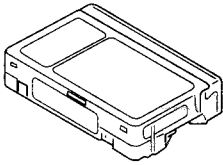
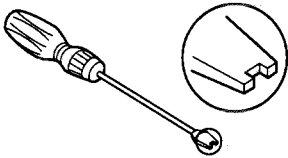
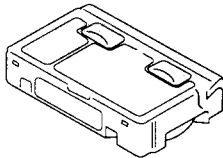
Alignment tape for SP interchangeability (MHPE-C)	Roller driver PTU94002
	
Cassette torque meter PUJ50431-2	
	

Table 2-5-1

2.5.2 Back tension

1. Set a cassette torque meter onto the deck and measure the back tension in standard REC mode to confirm that the back tension is 9.5 – 17.5 gf·cm.
2. If not, replace the tension band.
When the value widely fluctuates in the measurement, replace the supply reel disk.
3. With the cassette torque meter, confirm that the play torque is 15 – 25 gf·cm.
If necessary, replace the center pully unit.

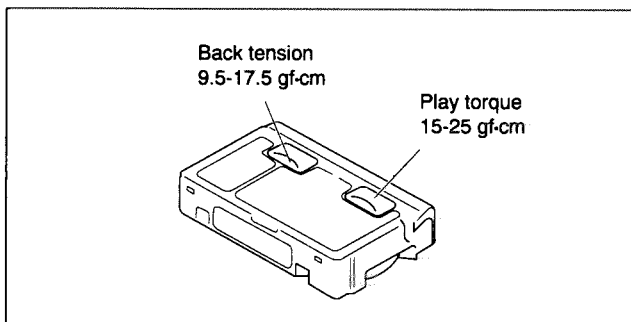


Fig. 2-5-1 Cassette torque meter

2.5.3 Tape pattern

1. Observe signal at pin 2 of CN20 (V. TP FM) with external trigger from pin 5 of CN20 (V. H. FF) on the MAIN board.
2. Play back the SP stairstep signal of the alignment tape, and maximize the FM waveform by the tracking button.
3. Set the tracking control to the center position by simultaneously pressing the tracking (–) and (+) buttons and maximize the FM waveform by the tracking button.
4. If the observed FM waveform is not flat, adjust the height of the supply of take-up guide roller with the roller driver (PTU94002).

Note: To prevent the tape from damage, turn the guide rollers slowly.

5. By operating the tracking button (both in + and – directions) in the manual tracking mode, vary the output level of the FM waveform from maximum to minimum and vice versa to confirm that the waveform varies nearly in a flat shape.
6. When the FM waveform breaks in the level varying process, subtly adjust the height of guide rollers at every breaking point so that the waveform varies as flat as possible.

Repeat the above steps 5. and 6. several times to confirm that the waveform is flat as a whole.

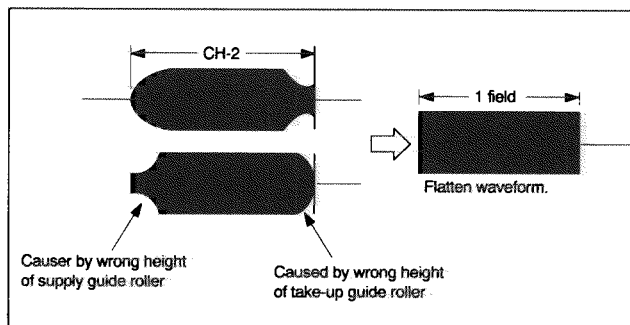


Fig. 2-5-2 FM waveform-1

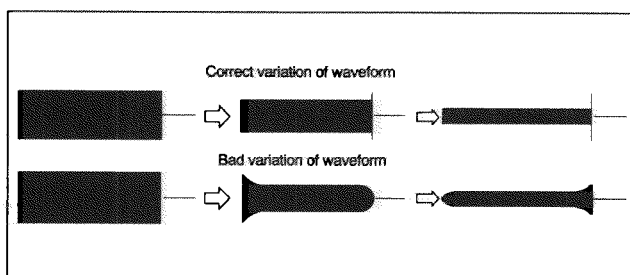


Fig. 2-5-3 FM waveform-2

7. Through the above steps, confirm that there occur no wrinkling and damage in the tape around the pinch roller and TU guide pole whenever the deck is in operation of Loading/Unloading, Search Rewind and at mode change from Search Rewind to play mode. If wrinkling or damage in the tape occurs around the TU guide pole, adjust the angle (slant) of the A/C head to the tape. So that the tape normally runs along the lower flange of the guide pole.

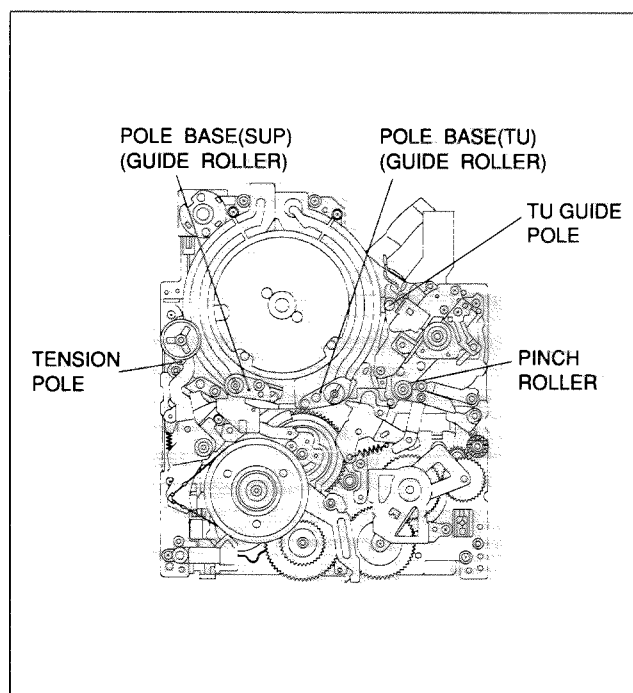


Fig. 2-5-4 Tape transport system

2.5.4 A/CTL head height & azimuth

1. Play back the SP 6 kHz segment of the alignment tape and observe waveform at AUDIO OUT.
2. Turn the screw (A), (B) (tilt) and (C) (azimuth) gradually (at an angle of 45° approx.) in the same direction to obtain the maximum output level.
3. As final fine adjustment, adjust the screw (B) for minimum level fluctuation and the screw (C) for maximum output level.

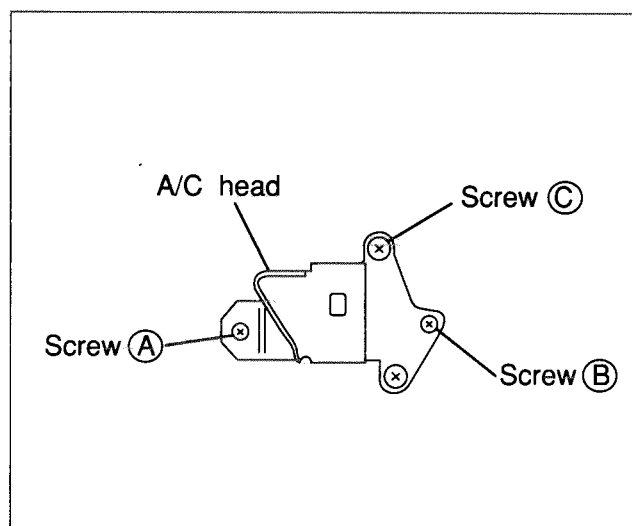


Fig. 2-5-5 A/C head

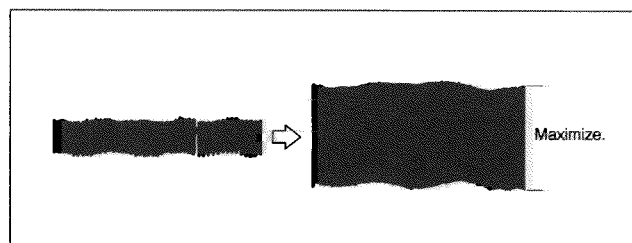


Fig. 2-5-6 Audio signal

2.5.5 Phase of control head (X value)

1. Play back the SP stairstep signal of the alignment tape and observe signal at pin 2 of CN20 (V.TP FM) with external trigger from pin 5 of CN20 (V.H.FF) on the MAIN board.
2. Operate the tracking button in the center and manual tracking mode by pressing the tracking (+) and (-) buttons and confirm that the FM output level is maximum at the center position as shown in Fig. 2-5-8.
3. If necessary, slightly loosen the setscrews (D) and (E) and insert the Tweezers into the notch and guide hole to move the A/C head fully in the direction of the capstan to the extent.
4. Gradually move the A/C head toward the drum to find the position where the FM output level maximum for the first time (a' - b' in Fig. 2-5-8).
5. Fine adjust the phase of the A/C head and tighten the screws (D) and (E) at the point a.
6. Confirm that the above steps 2. and 5. are satisfactory at the same time.
If not, repeat the steps 3. through 5..

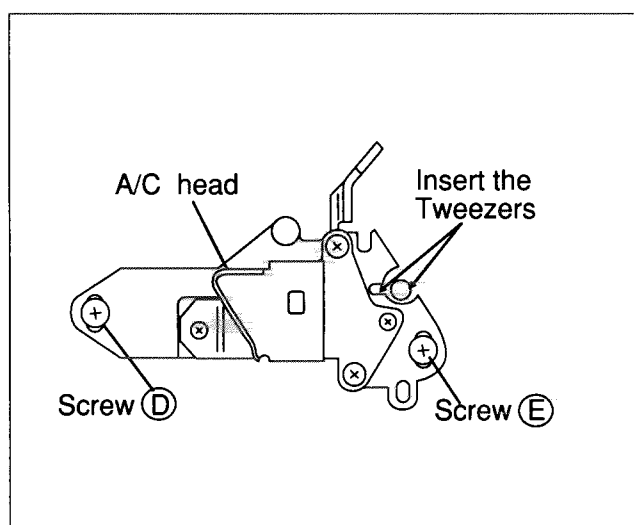


Fig. 2-5-7 Phase of control head

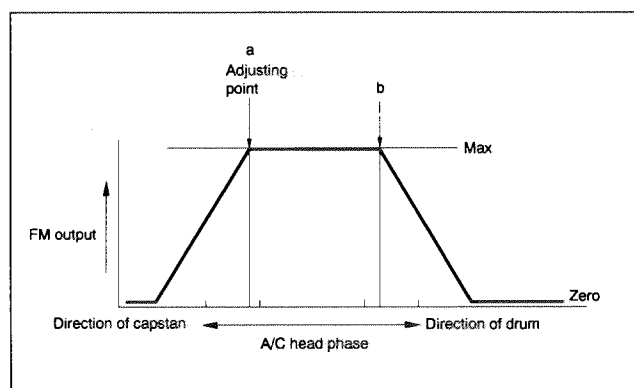


Fig. 2-5-8 Phase adjustment point of control head

2.6 REMARKS

2.6.1 Cleaning

1. For cleaning of the upper drum (particularly video heads), use fine-woven cotton cloth or Kimwipe with alcohol soaks through. Do not move the cloth but turn the upper drum counterclockwise.

Note: Make sure not to move the cloth in the vertical direction to the video head, since it may cause damage of the video heads.

2. For cleaning of parts of the tape transport system except the upper drum, use fine-woven cotton cloth or cotton swab soaked alcohol.
3. After cleaning, confirm that the cleaned parts are completely dry before loading the deck with cassette tape.

2.6.2 Applying oil and grease

1. Periodical oiling and greasing are not required but should be done to new parts when replacing. If oil and grease on the other parts of the other party are old and dirty, wipe them clean and apply new oil or grease.
2. For parts and points to apply oil and grease, refer to the exploded view of the mechanism assembly (M3). Table 2-6-1 specifies oil and grease to be used.
3. When oiling, clean the objective parts with alcohol first and apply one or two drop(s) of oil. Too much oiling causes rotary parts to slip because of oil leakage.

Classification	Name	Part No.	Symbol in drawing
Grease	Grease	KYODO-SH-P	AA
Oil	Cosmo Hydro HV100	YTU94027	BB

Table 2-6-1 Specific oil and grease to be used

2.6.3 Checkup

After replacement of the supply reel disk and tension band, make sure to inspect beck tension according to the adjustment procedure of MECHANISM ADJUSTMENT section.

SECTION 3 ELECTRICAL ADJUSTMENT

3.1 ELECTRICAL ADJUSTMENT

3.1.1 PREPARATION

1. Precaution

This model does not contain adjustment controls (VR). General deck system and camera system adjustment are not required. However, if MAIN board need replacement, please use original E²PROM on to new board. Then adjustment are not required. And if parts such as the following need replacement, special computerized adjustment are required (Refer to sec. 3.1.1-5). Please contact to JVC service for details information.

- OP block
- E²PROM (IC903 of MAIN board)

In the event of malfunction with electrical circuits, troubleshooting with the aid of proper test instruments must be done first, and then commence necessary repair, replacement and adjustment, etc.

1. In case of wiring to chip test points for measurement, use IC clips, etc. to avoid any stress.
2. Since connectors are fragile, carefully handle them in disconnecting and connecting.
3. Shortcircuit between operation unit and DECK chassis.

2. Required test equipment

1. Color TV monitor.
2. AC power adapter (AA-V11 and AA-V6 or equivalent).
3. Oscilloscope (dual-trace type, for more than 20 MHz).
4. Digital voltmeter
5. Personal computer

3. Required adjustment tools

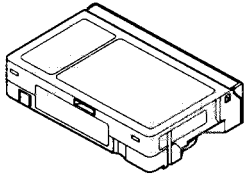
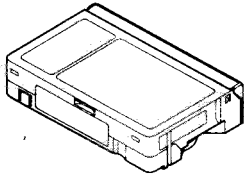
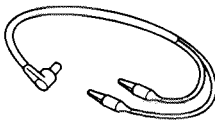
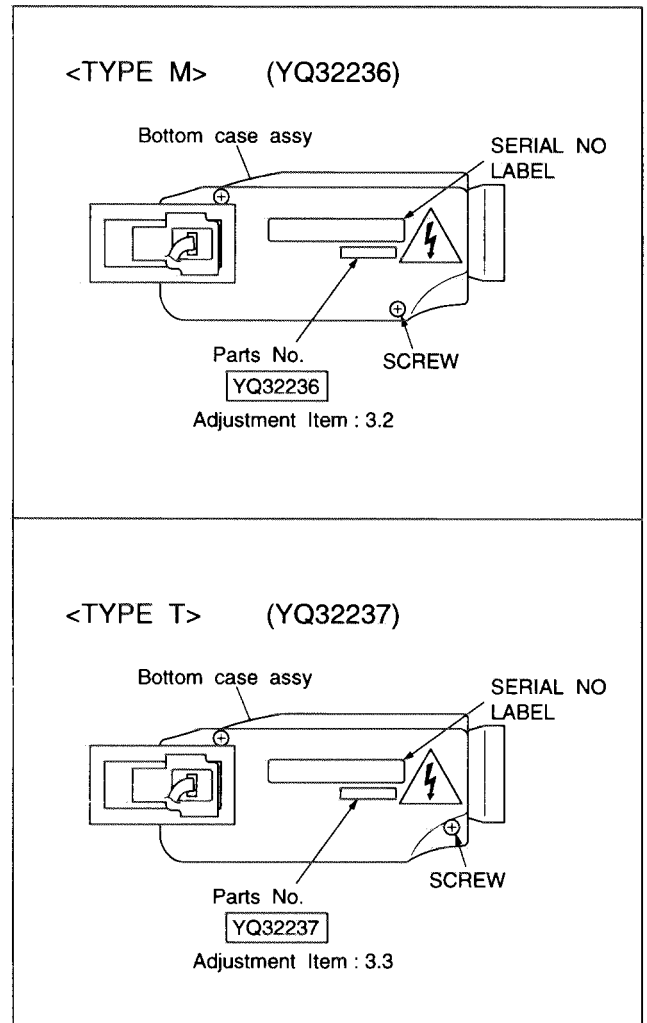
Alignment tape for SP Interchangeability (MHPE-C)	Alignment tape for N, SP PB Y/C level (MHVE-2C)
	
Power cord YTU94060A	
	

Table 3-1-1 Required adjustment tools

4. Setup for E. VF section adjustment

Note:

- There are two types of E. VFs for this model.
- The adjustment procedure of them are different. For performing the adjustment, please follow the item mentioned on the figure below.



- Referring to "sec. 1. DISASSEMBLE" and connect the E. VF connector of the E. VF board to CN14 of the MAIN board of deck section.

5. Required adjustment tools for Service support system

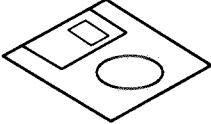
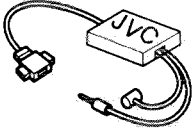
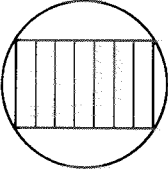
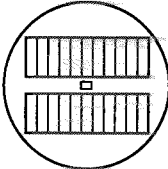
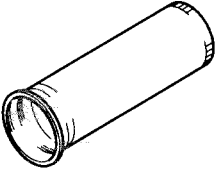
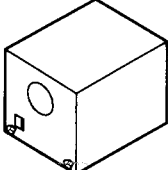
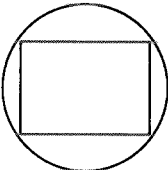
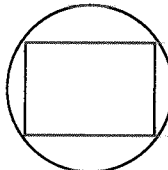
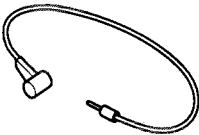
service suport system software YTU94057-17	Interface cable YTU93063	Color bar chart YTU92001-051	Gray scale chart YTU92001-052
			
Infinity adjustment lens YTU92001B	Light box YTU93072	White balance chart YTU92001-053	Skintone chart YTU92001-054
			
Adapter cable YTU94066			
			

Table 3-1-2 Required adjustment tools for Service support system

6. Connections for Service support system

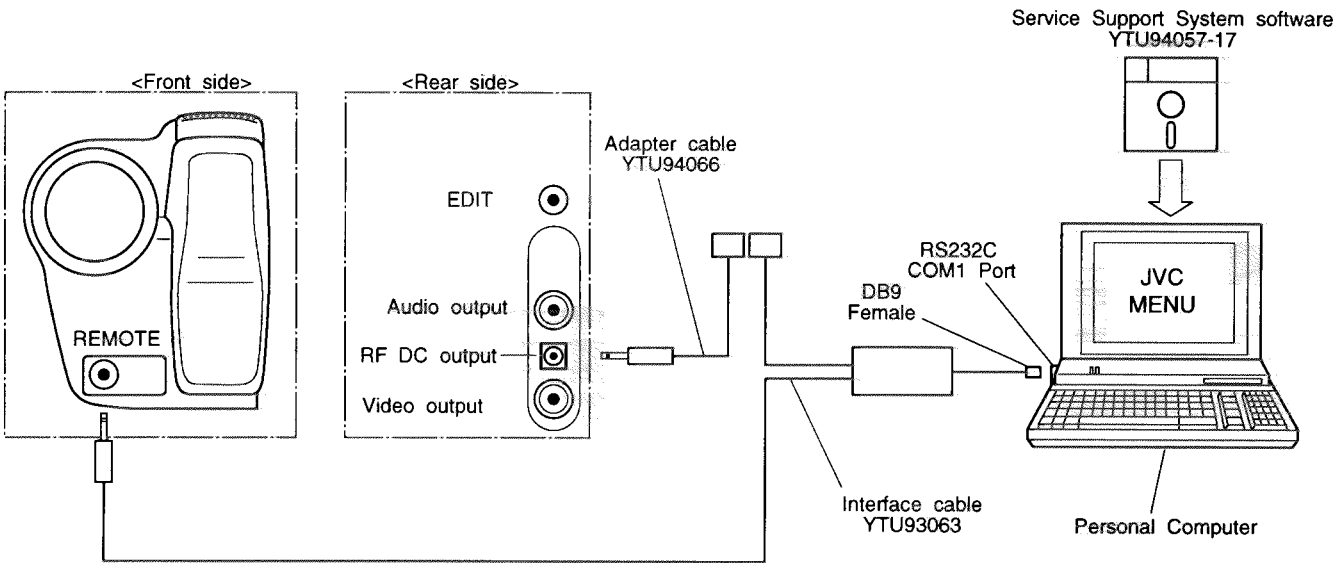


Fig. 3-1-1 Connection for Service support system

■ CIRCUIT PROTECTOR AND BATTERY TERMINAL LOCATION FOR REAR BOARD

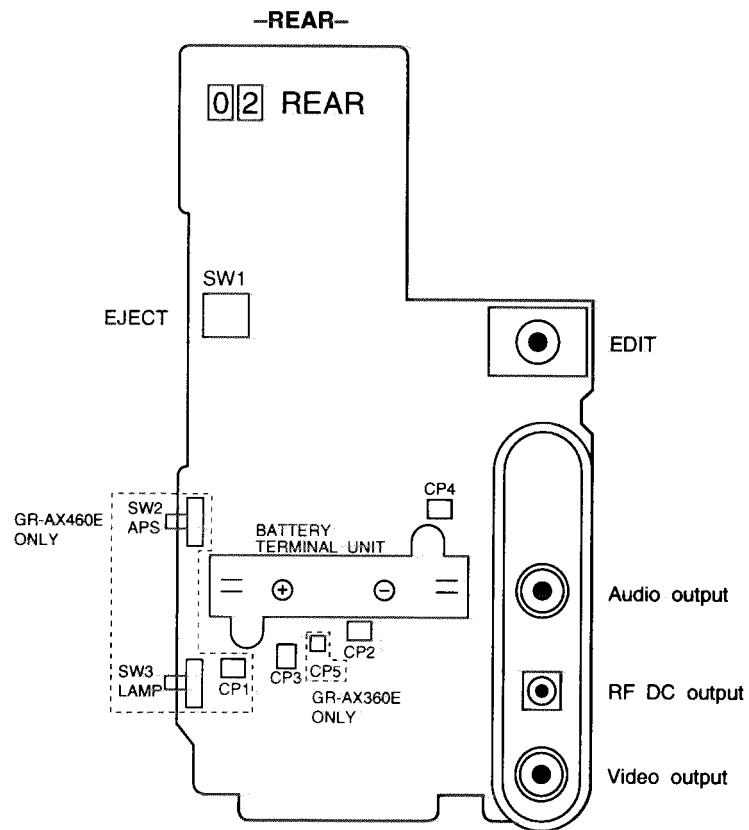


Fig. 3-1-2 Circuit protector and battery terminal location for REAR board assembly

■ ADJUSTMENT ELEMENT LOCATION FOR CAMERA SECTION

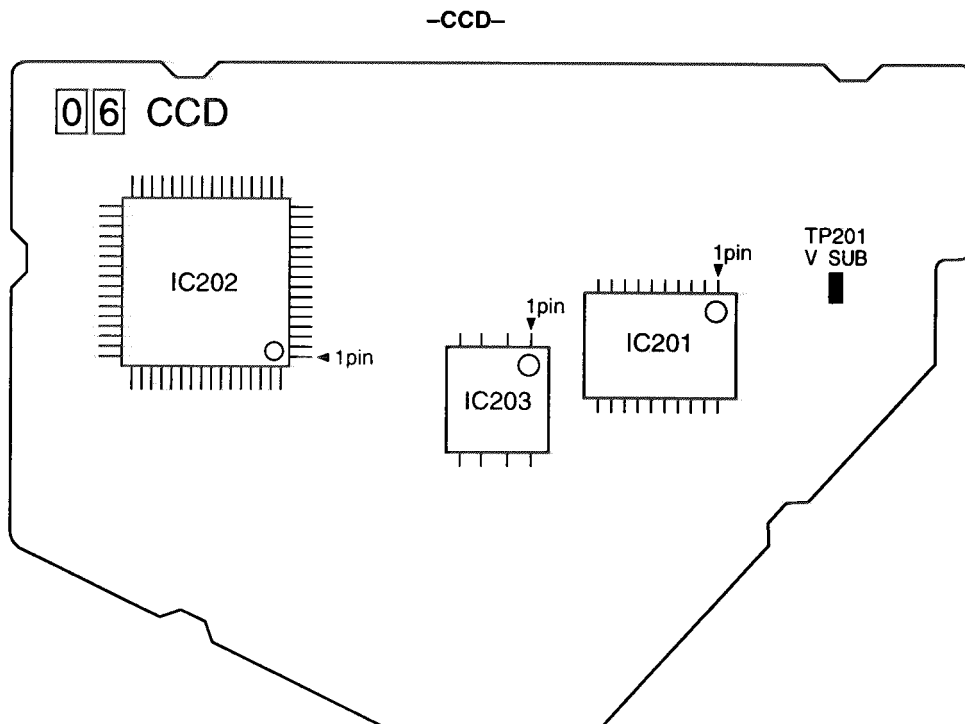


Fig. 3-1-3 Adjustment element location for CCD board assembly

3.2 ELECTRONIC VIEWFINDER (E. VF) ADJUSTMENT <TYPE M> (For GR-AX260E, AX460E)

Notes: Unless otherwise specified, all measurement points and adjustment parts are located on E. VF board.

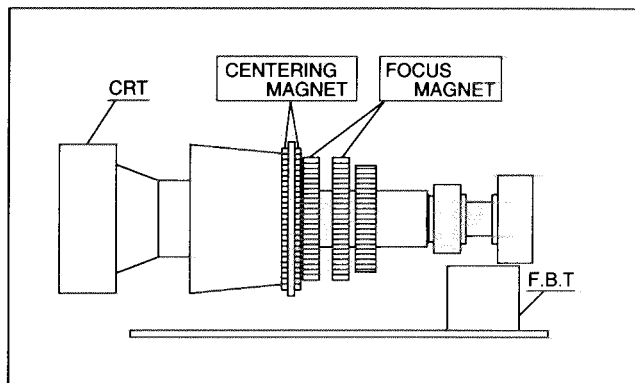


Fig. 3-2-1 E. VF

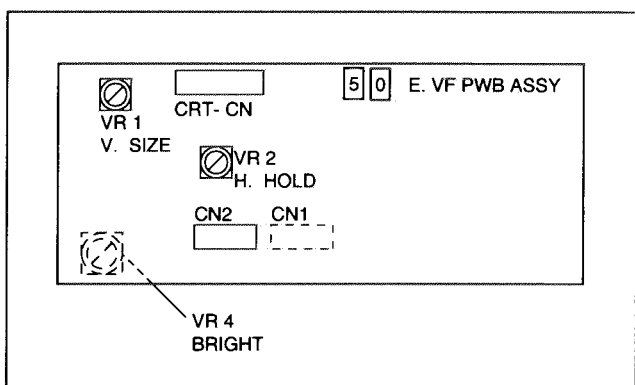


Fig. 3-2-2 E. VF board

3.2.1 Horizontal sync.

Subject	• Alignment tape [MHPE-C] • Stairstep
Mode	• PB
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• VR2 (H. HOLD)
Specification	• The midpoint of the two markings

- 1) Observing the viewfinder screen, turn VR2 fully clockwise to make the picture unstable.
- 2) Slowly return VR2 counterclockwise to find a point where the picture becomes stable, and mark this position.
- 3) Turn VR2 fully counterclockwise to make the picture unstable in the same manner as 1) above.
- 4) Slowly return VR2 clockwise until the picture becomes stable, and mark this position.
- 5) Finally set VR2 to the midpoint between the two markings of 2) and 4).

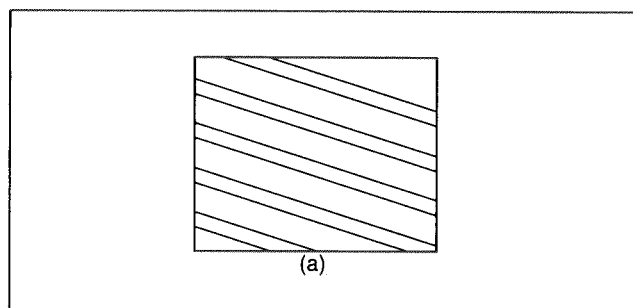


Fig. 3-2-3 Horizontal sync. 1

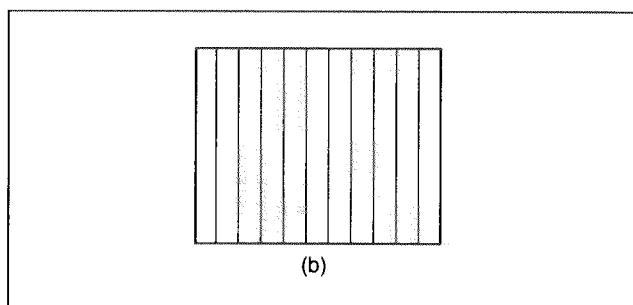


Fig. 3-2-4 Horizontal sync. 2

3.2.2 PLL adjustment

Subject	• Camera picture
Mode	• EE
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• VR1 (V. SIZE)
Specification	• Normal picture amplitude

- 1) Observing the viewfinder screen, adjust VR1 for normal picture amplitude.

3.2.3 Centering

Subject	• Alignment tape [MHPE-C] • Stairstep
Mode	• PB
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• Centering magnet (CRT assy)
Specification	• The center of the E. VF screen

- 1) While observing the viewfinder screen, adjust the centering magnet to locate the stairstep in the center of the viewfinder screen.

3.2.4 Focus

Subject	• Camera picture
Mode	• EE
Equipment	• E. VF
Measurement point	• E. VF screen
Adjustment part	• Focus magnet (CRT assy)
Specification	• The centre area is clear and defined

- 1) While observing the viewfinder screen, adjust the focus magnet for the deflecting yoke so that the picture at the central area of the screen is clear and defined.

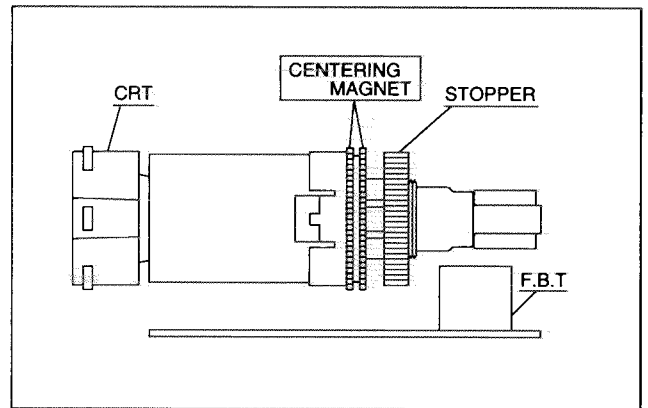


Fig. 3-3-2 E. VF

3.2.5 Brightness

Subject	• -
Mode	• EE • Lens closed
Equipment	• E. VF
Measurement point	• E. VF screen
Adjustment part	• VR4 (BRIGHT)
Specification	• The CRT raster is just barely visible

- 1) Close the lens with the cap and adjust VR4 so that the raster of the CRT is just visible in the E. VF.

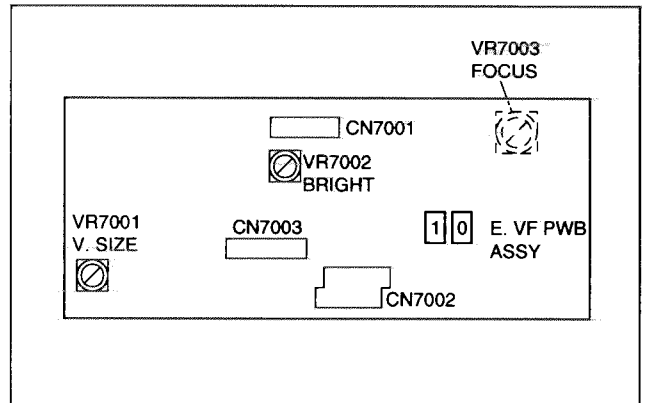


Fig. 3-3-3 E. VF board

3.3 ELECTRONIC VIEWFINDER (E. VF) ADJUSTMENT <TYPE T> (For GR-AX260E, AX460E)

Notes:

- Unless otherwise specified, all measurement points and adjustment parts are located on E. VF board.
- After adjustment or replacement of the deflection yoke or the centering magnet, fix it by the band as shown the figure below.

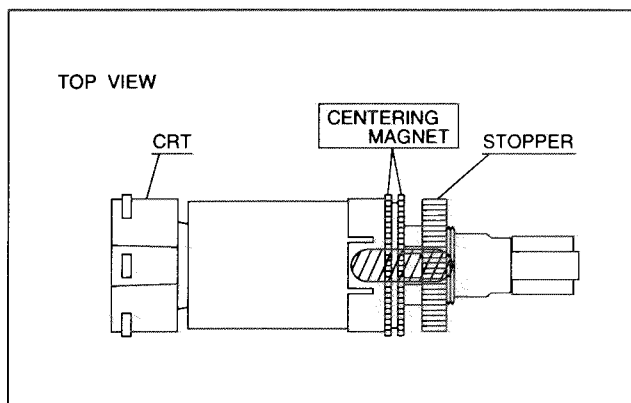


Fig. 3-3-1 E. VF

- After adjustment is completed, compare the picture on the E. VF screen with the monitor TV.

3.3.1 Tilt

Subject	• Alignment tape [MHPE-C] • Stairstep
Mode	• PB
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• Deflection yoke
Specification	• The picture is visible as same as monitor TV.

- 1) Put the deflection yoke to the most inner side of CRT neck first. Then fix the stopper temporary.
- 2) Adjust the tilt of picture on the E. VF screen by tilting the deflection yoke.
- 3) Fix the stopper completely.

3.3.2 Centering

Subject	• Alignment tape [MHPE-C] • Stairstep
Mode	• PB
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• Centering magnet (CRT assy)
Specification	• The centre of the E. VF screen

- 1) While observing the viewfinder screen, adjust the centering magnet to locate the stairstep in the centre of the viewfinder screen.

3.3.3 Vertical scanning

Subject	• Camera picture
Mode	• EE
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• VR7001 (V. SIZE)
Specification	• Normal picture amplitude

- 1) Observing the viewfinder screen, adjust VR7001 for normal picture amplitude.

3.3.4 Brightness

Subject	• –
Mode	• EE • Lens closed
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• VR7002 (BRIGHT)
Specification	• The CRT raster is just barely visible

- 1) Close the lens with the cap and adjust VR7002 so that the raster of the CRT is just visible in the E. VF.

3.3.5 Focus

Subject	• Camera picture
Mode	• EE
Equipment	• E. VF
Measurement point	• E. VF screen
Adjusting part	• VR7003 (FOCUS)
Specification	• The centre area is clear and defined

- 1) While observing the viewfinder screen, adjust VR7003 so that the picture at the central area of the screen is clear and defined.

3.4 COLOR VIEWFINDER SECTION ADJUSTMENT (FOR GR-AX360EG)

Notes: Unless otherwise specified, all measurement points and adjustment parts are located on CLD board.

■ ADJUSTMENT ELEMENT LOCATION FOR COLOR VIEWFINDER SECTION

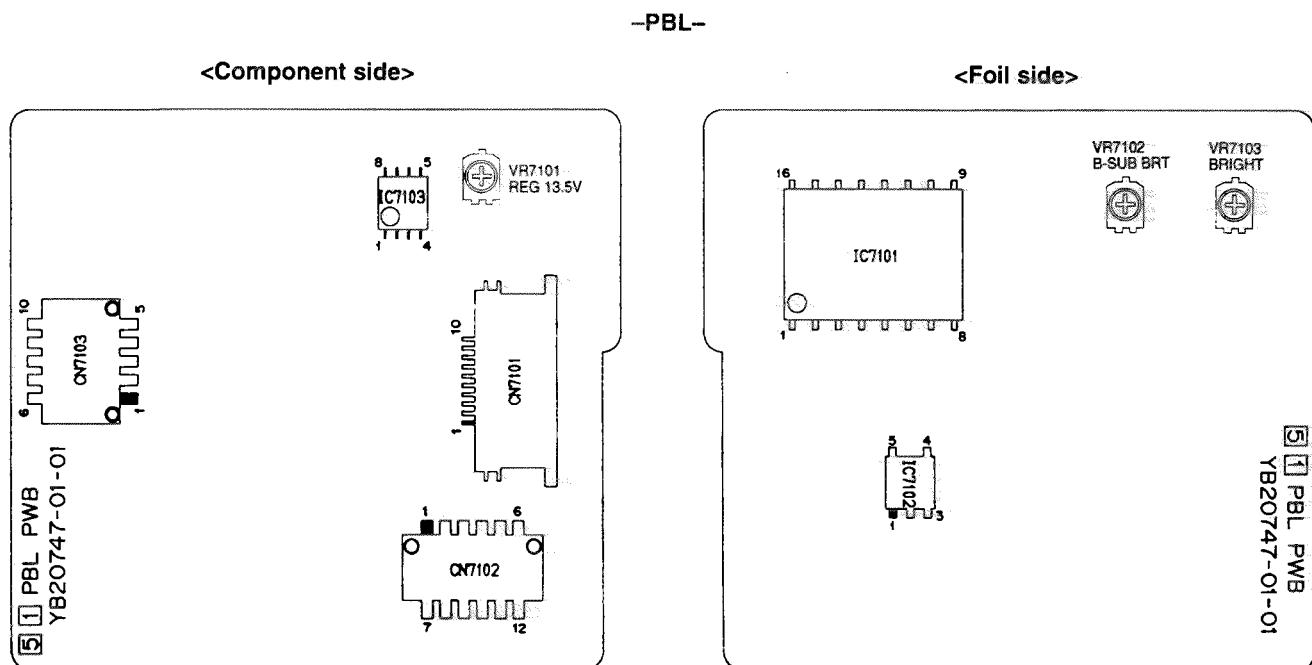


Fig. 3-4-1 Adjustment element location for PBL board assembly

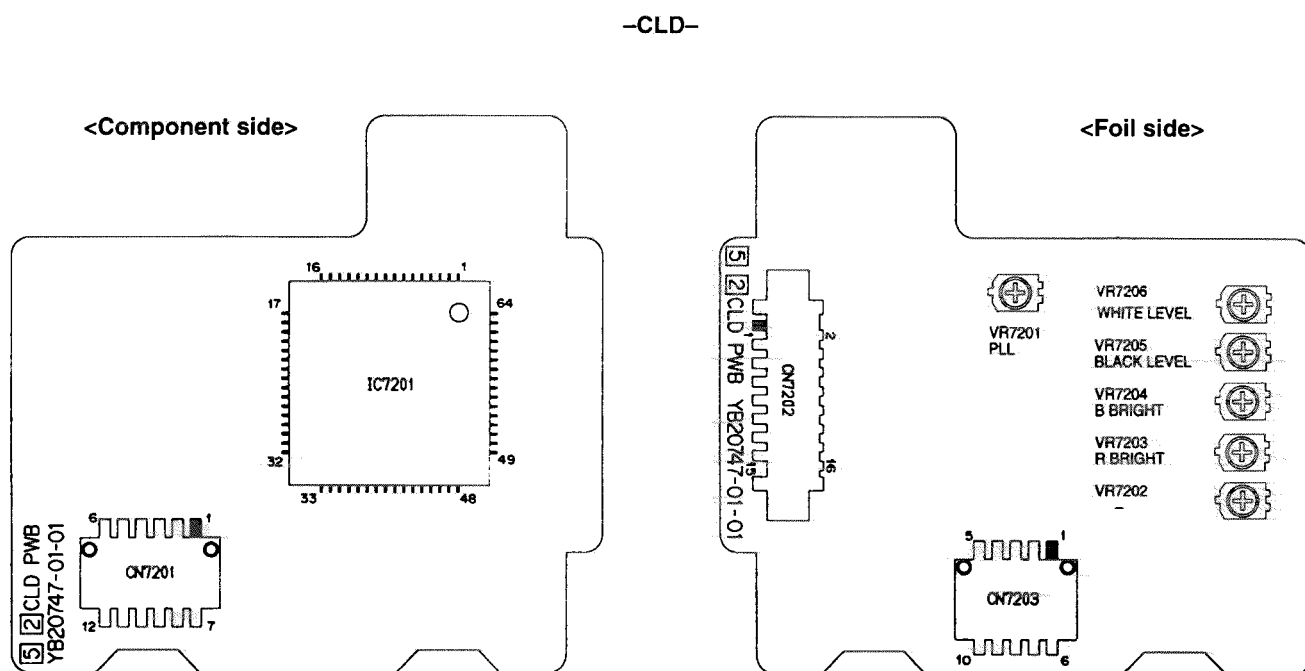


Fig. 3-4-2 Adjustment element location for CLD board assembly

3.4.1 REG 13.5 V

Subject	• -
Mode	• EE
Equipment	• Digital voltmeter
Measurement point	• CN7203 pin 6
Adjustment part	• VR7101 (REG 13.5 V) (PBL board)
Specification	• 13.5 ± 0.1 V DC

- 1) Connect a digital voltmeter to pin 4 of the CN7203.
- 2) Adjust VR7101 for 13.5 V DC.

3.4.2 PLL

Subject	• -
Mode	• EE
Equipment	• Oscilloscope
Measurement point	• CN7203 pin 4 (RPD)
Adjustment part	• VR7201 (PLL)
Specification	• "A" = 2.4 ± 0.1 V DC

- 1) Obvserve waveform at pin 4 of the IC7203.
- 2) Adjust VR7201 so that DC level of "A" (between the waveform center and GND, see Fig. 3-4-3) of a waveform becomes 2.4 V DC.

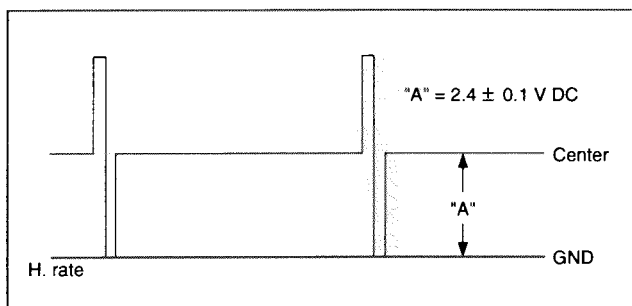


Fig. 3-4-3 PLL

3.4.3 WHITE LEVEL

Subject	• Alignment tape [MHPE-C] • SP stairstep
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin 3 (G OUT)
Adjustment part	• VR7206
Specification	• "A" = 1.7 ± 0.1 V DC

- 1) Obvserve waveform at pin 3 of the CN7203.
- 2) Adjust VR7206 so that DC level of "A" (between the waveform GND and TOP, see Fig. 3-4-4) of a waveform becomes 1.7 V DC.

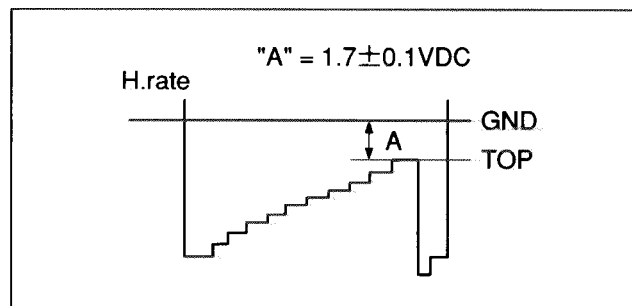


Fig. 3-4-4 WHITE LEVEL

3.4.4 BLACK LEVEL

Subject	• Alignment tape [MHPE-C] • SP stairstep
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin 3 (G OUT)
Adjustment part	• VR7205
Specification	• "A" = 4.0 ± 0.1 V DC

- 1) Obvserve waveform at pin 3 of the IC7203.
- 2) Adjust VR7205 so that DC level of "A" (between the waveform GND and Bottom, see Fig. 3-4-5) of a waveform becomes 4.0 V DC.

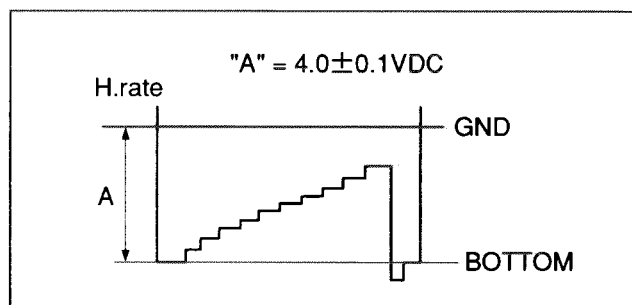


Fig. 3-4-5 BLACK LEVEL

3.4.5 R BRIGHT (WHITE BAL. R)

Subject	• Alignment tape [MHPE-C] • SP stairstep
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin ③ (G OUT) • pin ⑦ (R OUT)
Adjustment part	• VR7203
Specification	• "A" = 0.0 ± 0.1 Vp-p

- 1) Connect channel 1 of the oscilloscope at pin 3 of CN7203.
- 2) Connect channel 12 of the oscilloscope at pin ⑦ of CN7203 in invert mode.
- 3) Observe two waveforms in add mode, then adjust VR7203 so that the signal level of "A" (the third step of stairstep signal) becomes 0.0 Vp-p.

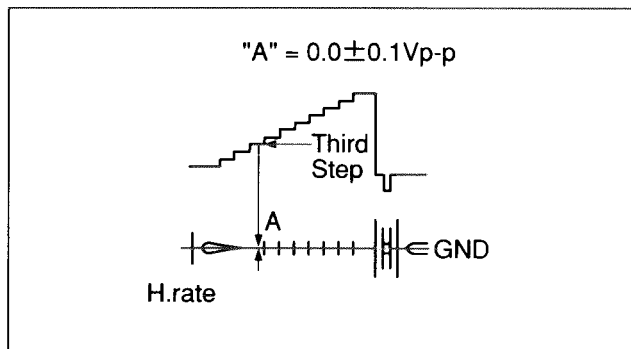


Fig. 3-4-6 R BRIGHT (WHITE BAL. R)

3.4.6 B BRIGHT (WHITE BAL B)

Subject	• Alignment tape [MHPE-C] • SP staircase
Mode	• PB
Equipment	• Oscilloscope
Measurement point	• CN7203 pin ③ (G OUT) • pin ⑧ (B OUT)
Adjustment part	• VR7204
Specification	• "A" = 0.3 ± 0.1 Vp-p

- 1) Connect channel 1 of the oscilloscope at pin 3 of CN7203.
- 2) Connect channel 12 of the oscilloscope at pin ⑧ of CN7203 in invert mode.
- 3) Observe two waveforms in add mode, then adjust VR7204 so that the signal level of "A" (the third step of staircase signal) becomes 0.3 Vp-p.

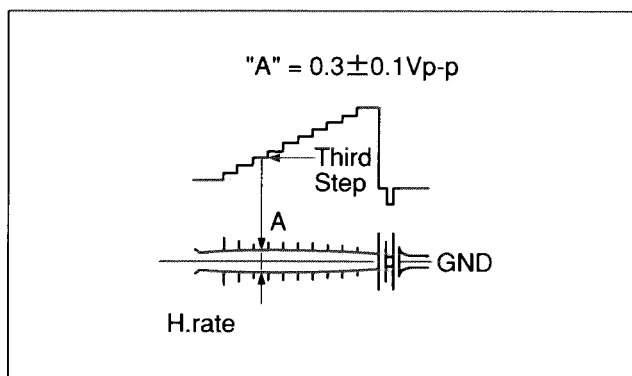


Fig. 3-4-7 B BRIGHT (WHITE BAL. B)

SECTION 4 CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions

The Components identified by the symbol  are critical for safety. For continued safety, replace safety critical components only with manufactures recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

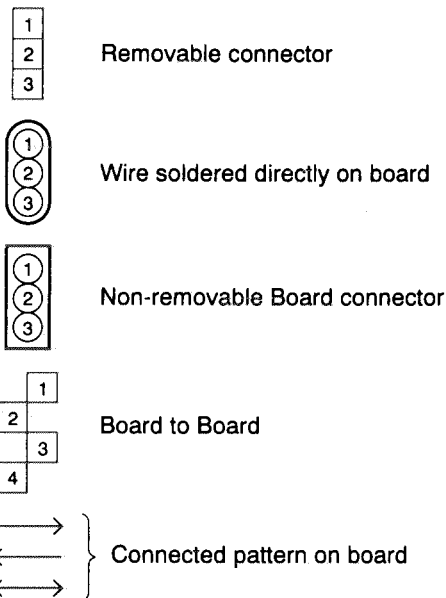
- 1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
Chip resistors are 1/16 W.
K: K Ω (1000 Ω), M: M Ω (1000K Ω)
- 2) All capacitance values are in μ F, (P: PF).
- 3) All inductance values are in μ H, (m: mH).
- 4) All diodes are 1SS133, MA165 or IN4148M (refer to parts list).

2. Indications of control voltage

AUX : Active only at high.

AUX or AUX(L) : Active at low.

3. Interpreting Connector Indications

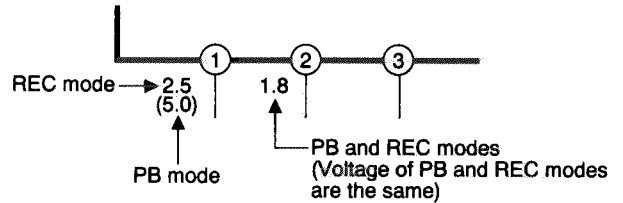


4. Voltage measurement

- 1) Video circuits
REC : Colour bar signal in SP mode, normal VHS mode.
PB : Alignment tape, colour bar SP mode, normal VHS mode.
— : Unmeasurable or unnecessary to measure.
- 2) Audio circuits
REC : 1KHz, -8 dBs sine wave signal in SP mode, Normal VHS mode.
PB : REC then playback it.
- 3) Movie Camera circuits
Measured using a correctly illuminated grey scale or colour bar test charts in the E-E mode.

4) Indication on schematic diagram

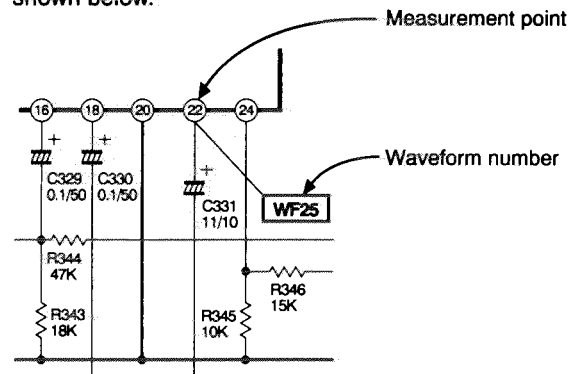
Voltage Indications for REC and PB mode on the schematic diagram are as shown below.



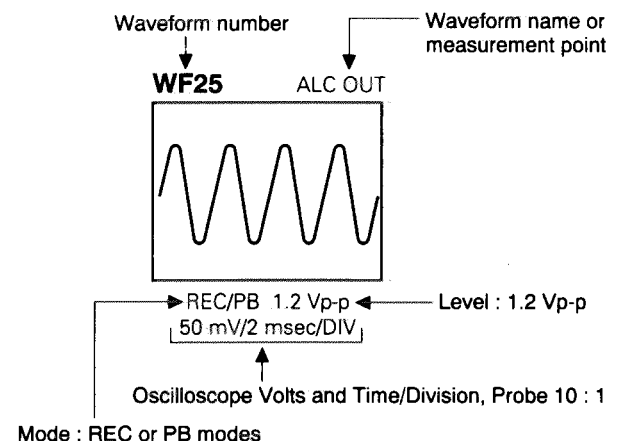
Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

5. Waveform measurement

- 1) Video circuits
REC : Colour bar signal in SP mode, normal VHS mode.
PB : Alignment tape, colour bar SP mode, normal VHS mode.
- 2) Audio circuits
REC : 1KHz, -8 dBs sine wave signal in SP mode, normal VHS mode.
PB : REC then playback it.
- 3) Movie Camera circuits
Measured using a correctly illuminated grey scale or colour bar test charts in the E-E mode.
- 4) Indication on schematic diagram
Waveform indications on the schematic diagram are as shown below:



5) Waveform indications



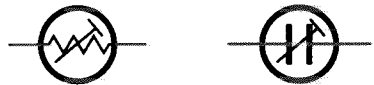
6. Signal path Symbols

The arrows indicate the signal path as follows.

-  Playback signal path
-  Playback and recording signal path
-  Recording signal path (including E-E signal path)
-  Y signal path
-  Colour (Chroma) signal path
-  R or R-Y signal path
-  B or B-Y signal path
-  Capstan servo path
-  Drum servo path
-  Reel servo path

7. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



8. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.

Or the symbol number is struck off by two lines as below.



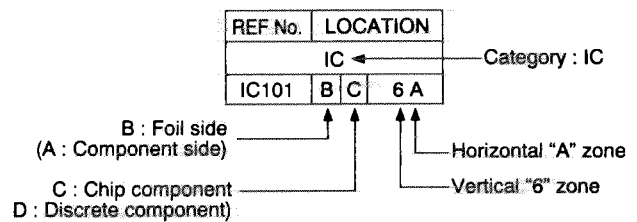
CIRCUIT BOARD NOTES

1. Foil and Component sides

- 1) Foil side (B side) :
Parts on the foil side seen from foil face (pattern face) are indicated.
- 2) Component side (A side) :
Parts on the component side seen from component face (parts face) indicated.

2. Parts location guides

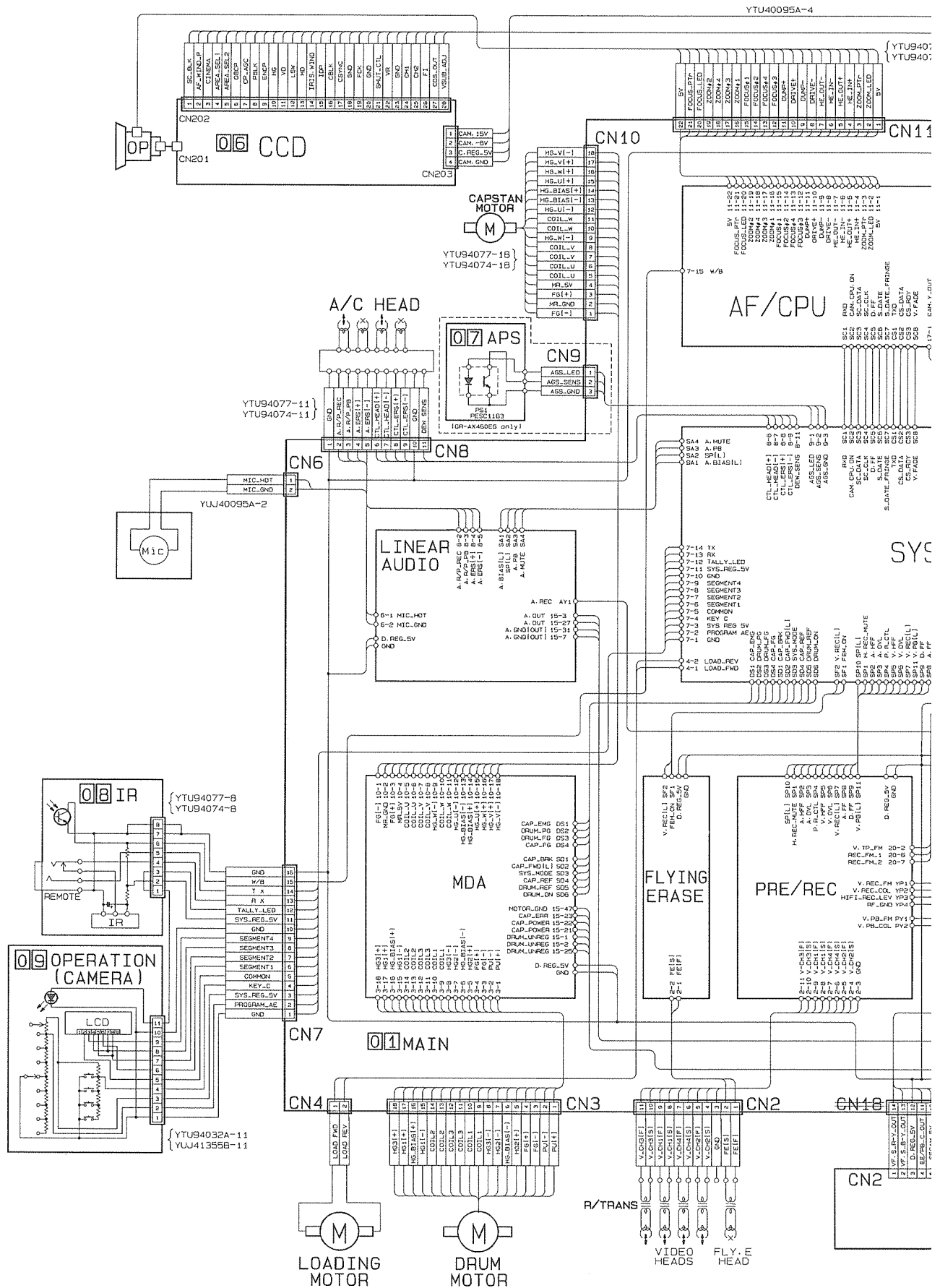
Parts location are indicated by guide scale on the circuit board.

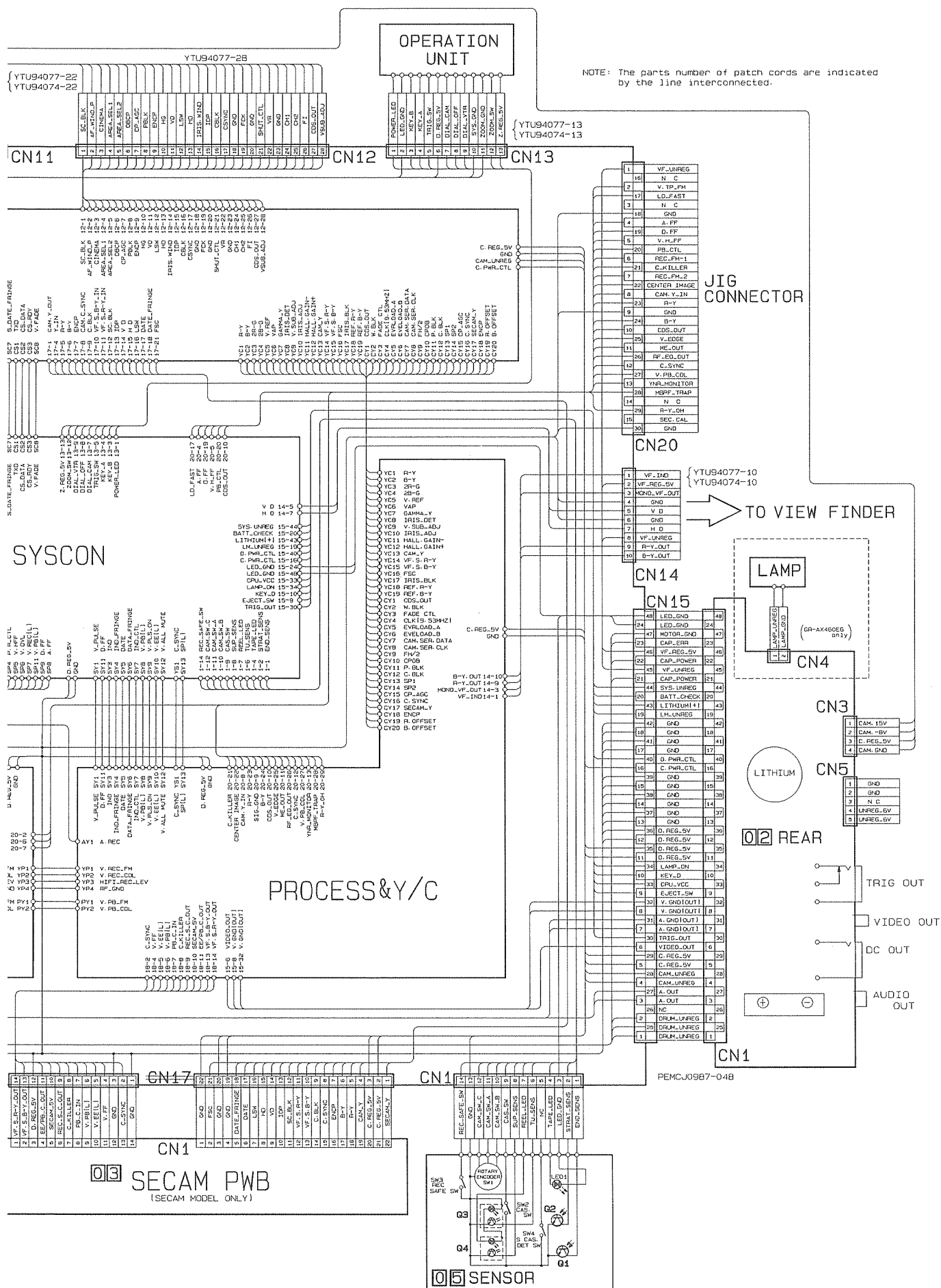


Notes:

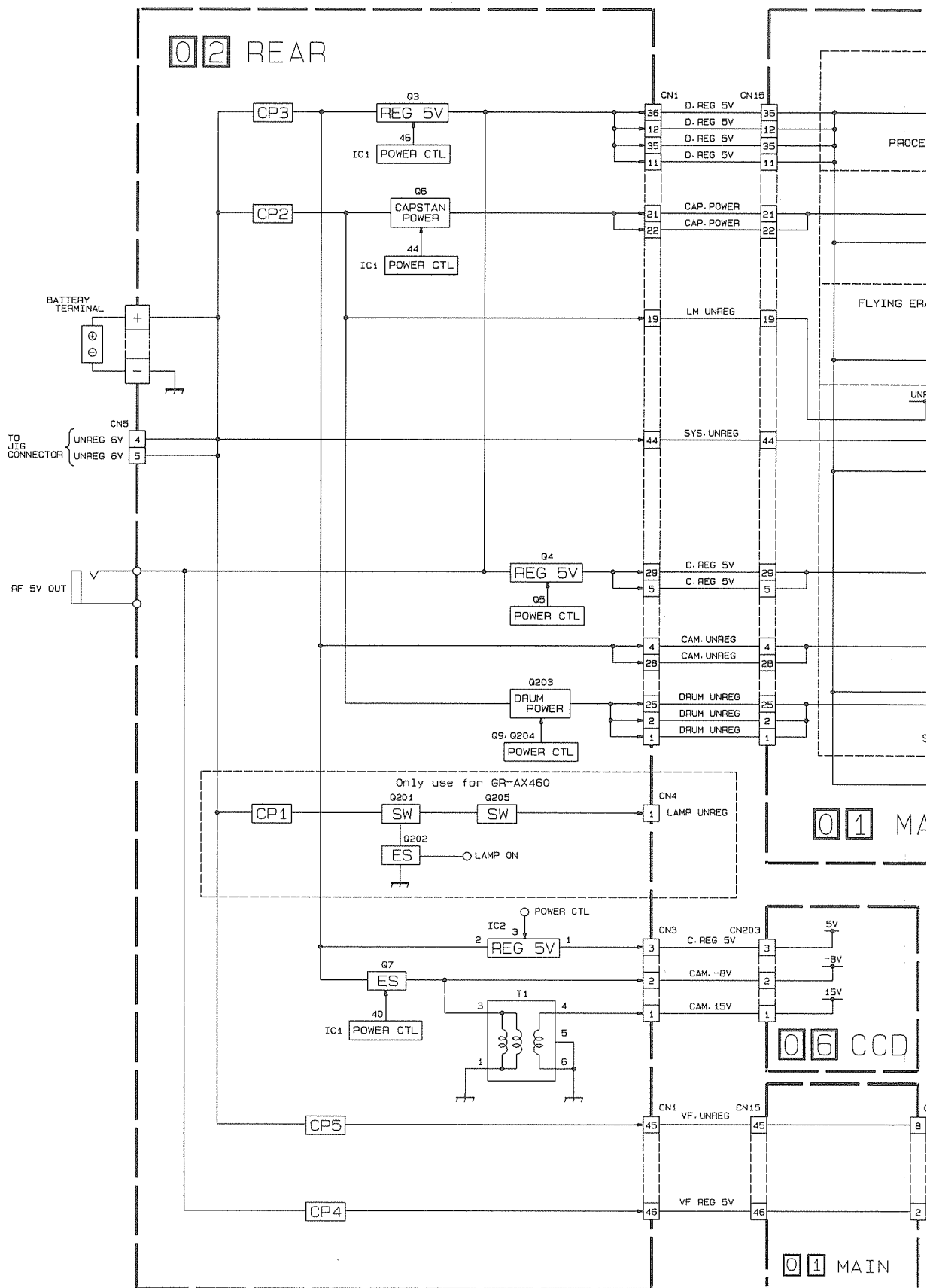
- 1) For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).
- 2) For repairing SMC (Surface Mounted Components), please refer to the VIDEO SERVICE GUIDE No. VTS81001.

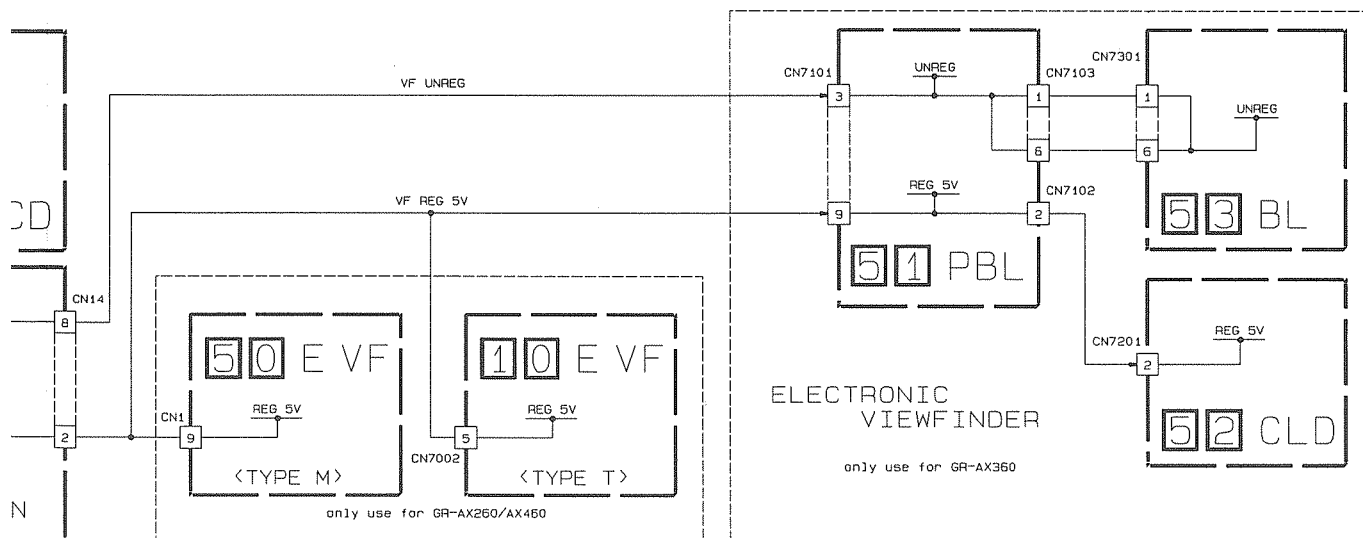
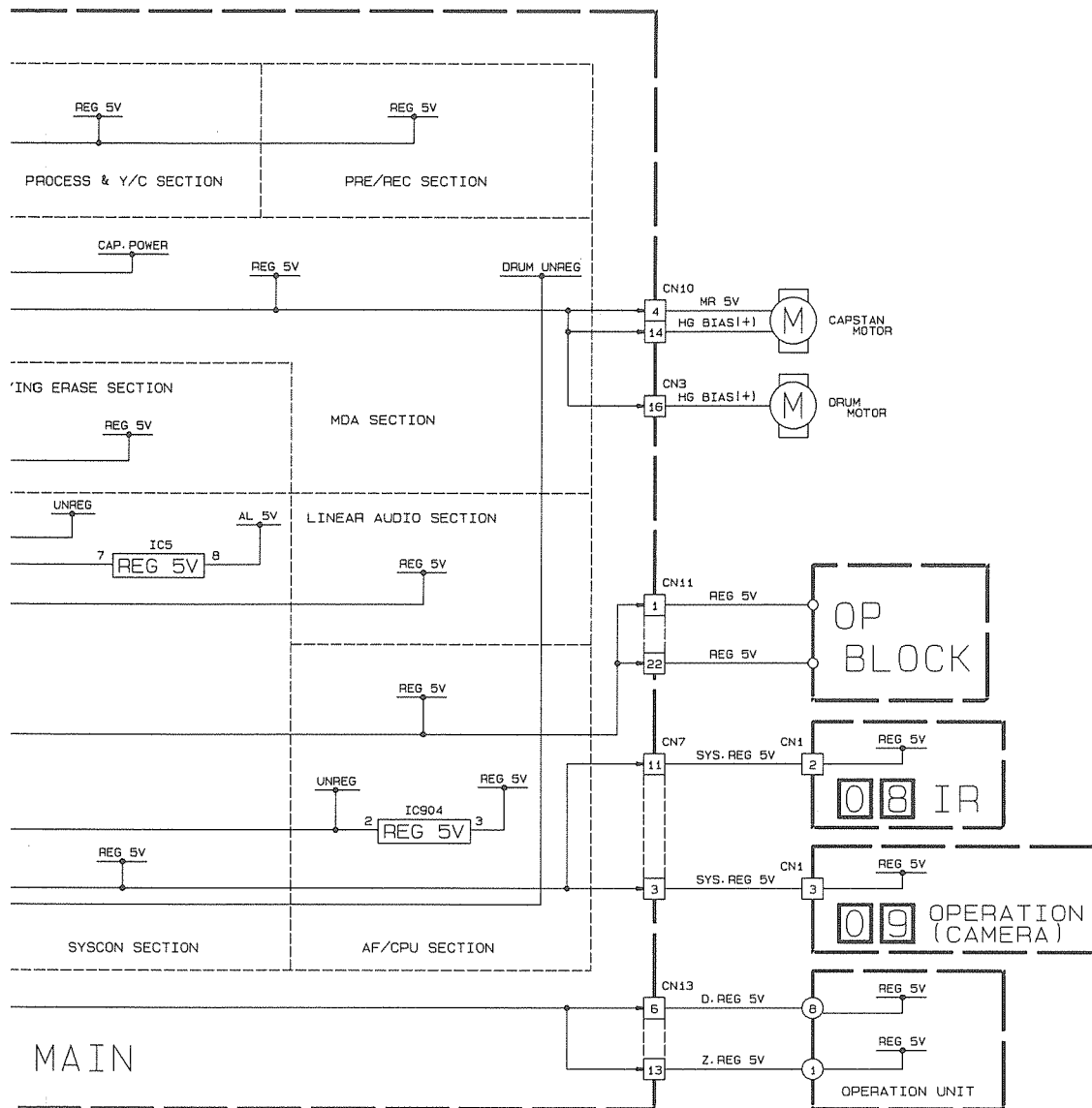
4.1 BOARD INTERCONNECTIONS



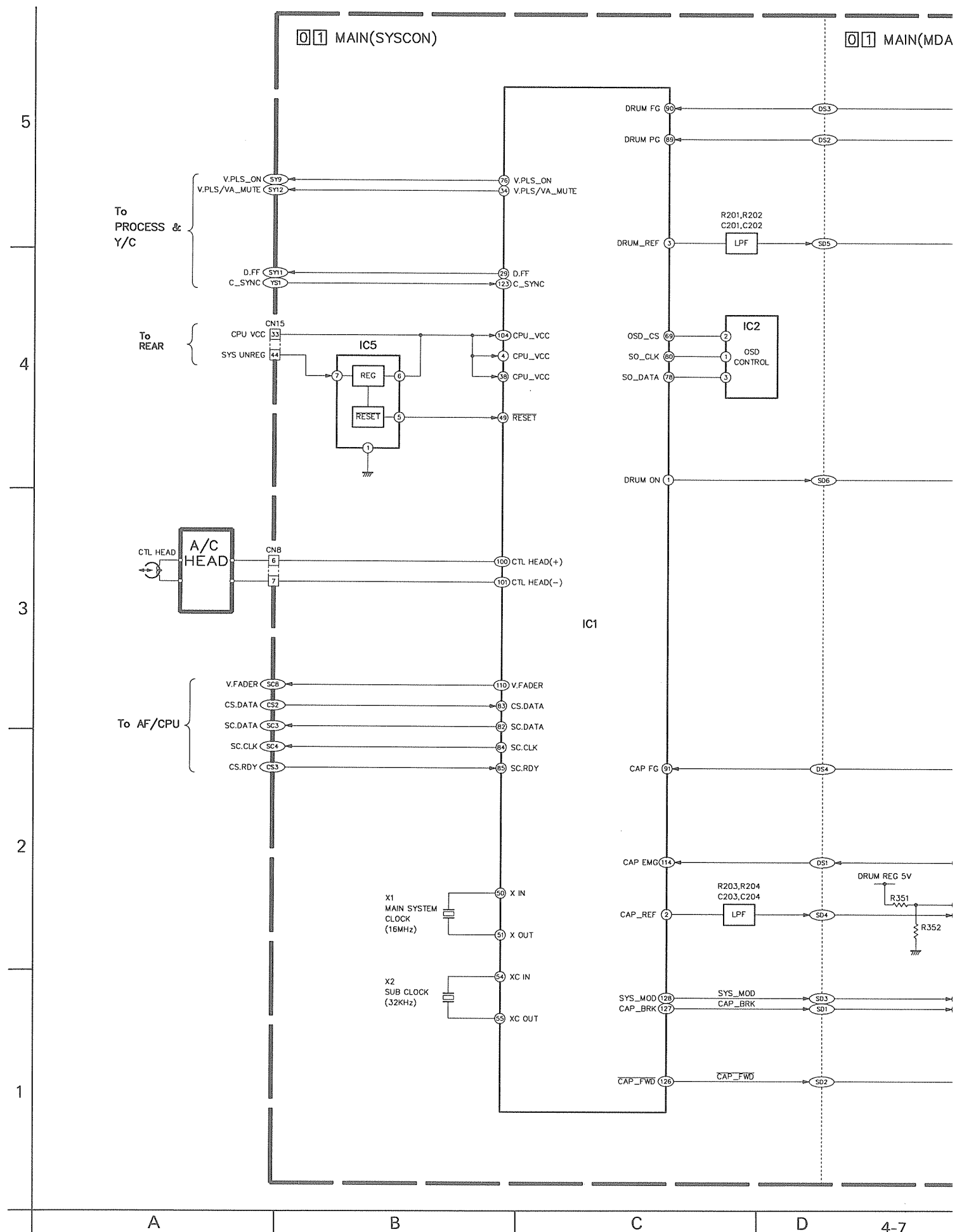


4.2 POWER SYSTEM BLOCK DIAGRAM

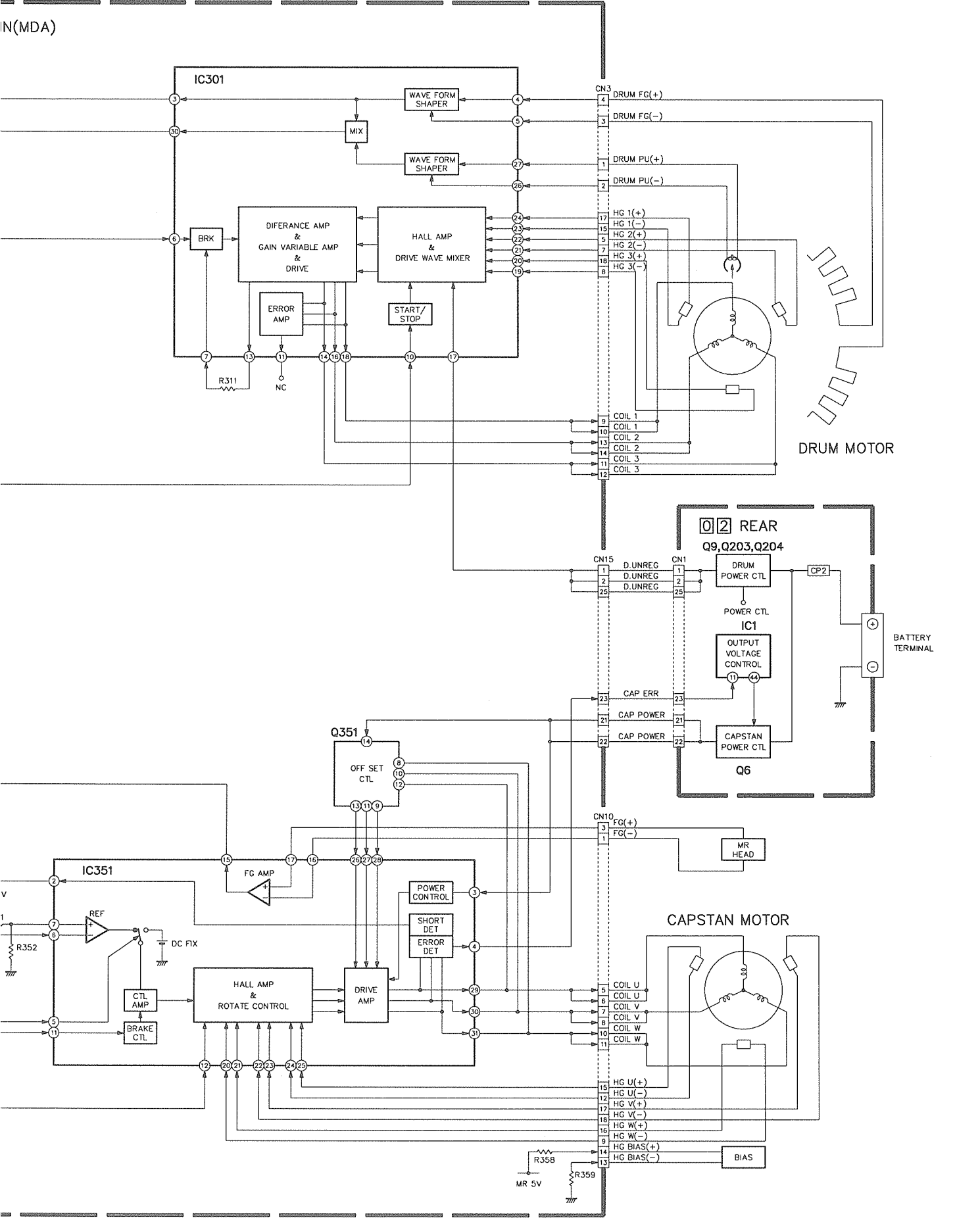




4.3 SYSCON/MDA BLOCK DIAGRAM



N(MDA)



4-8

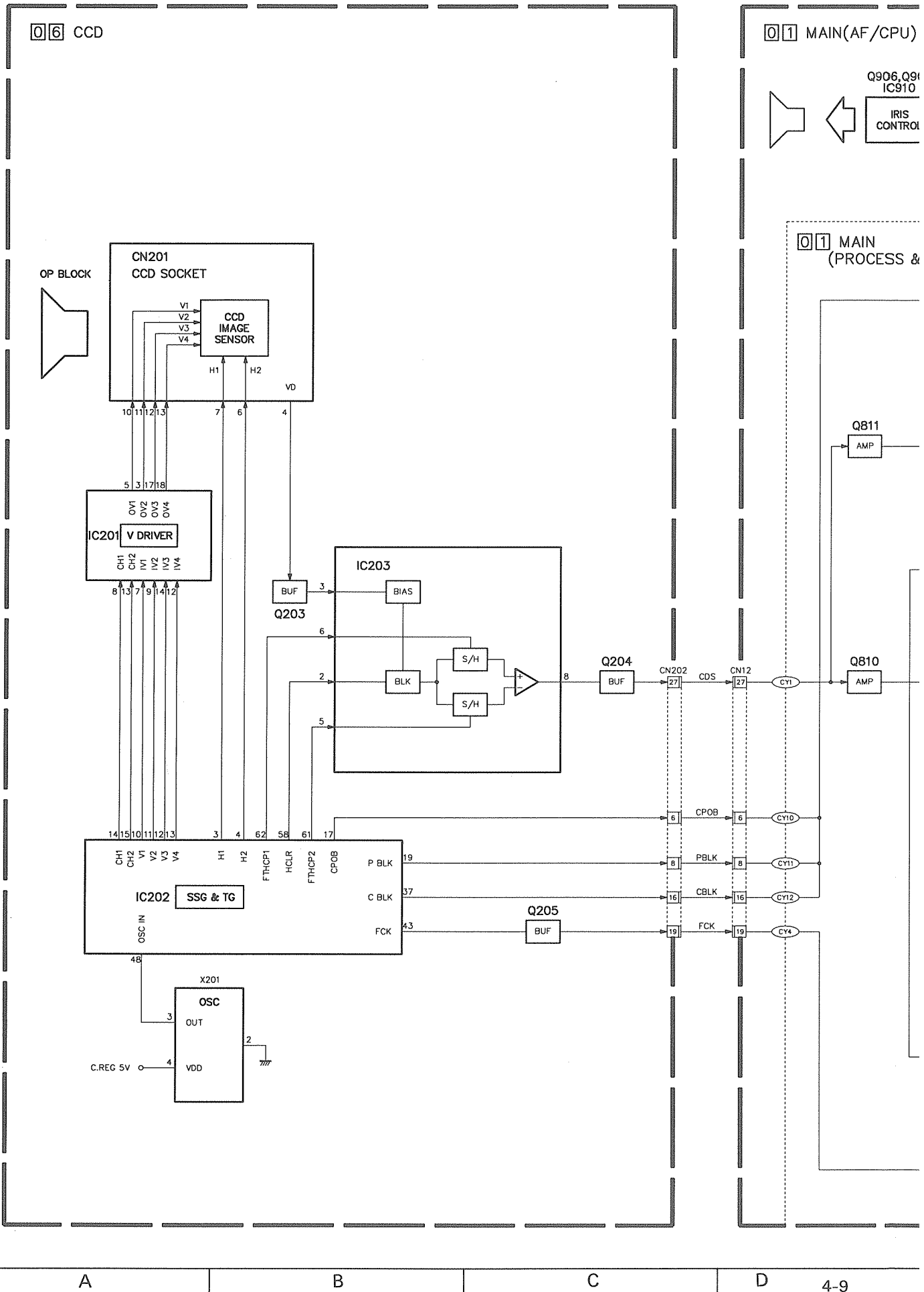
E

F

G

H

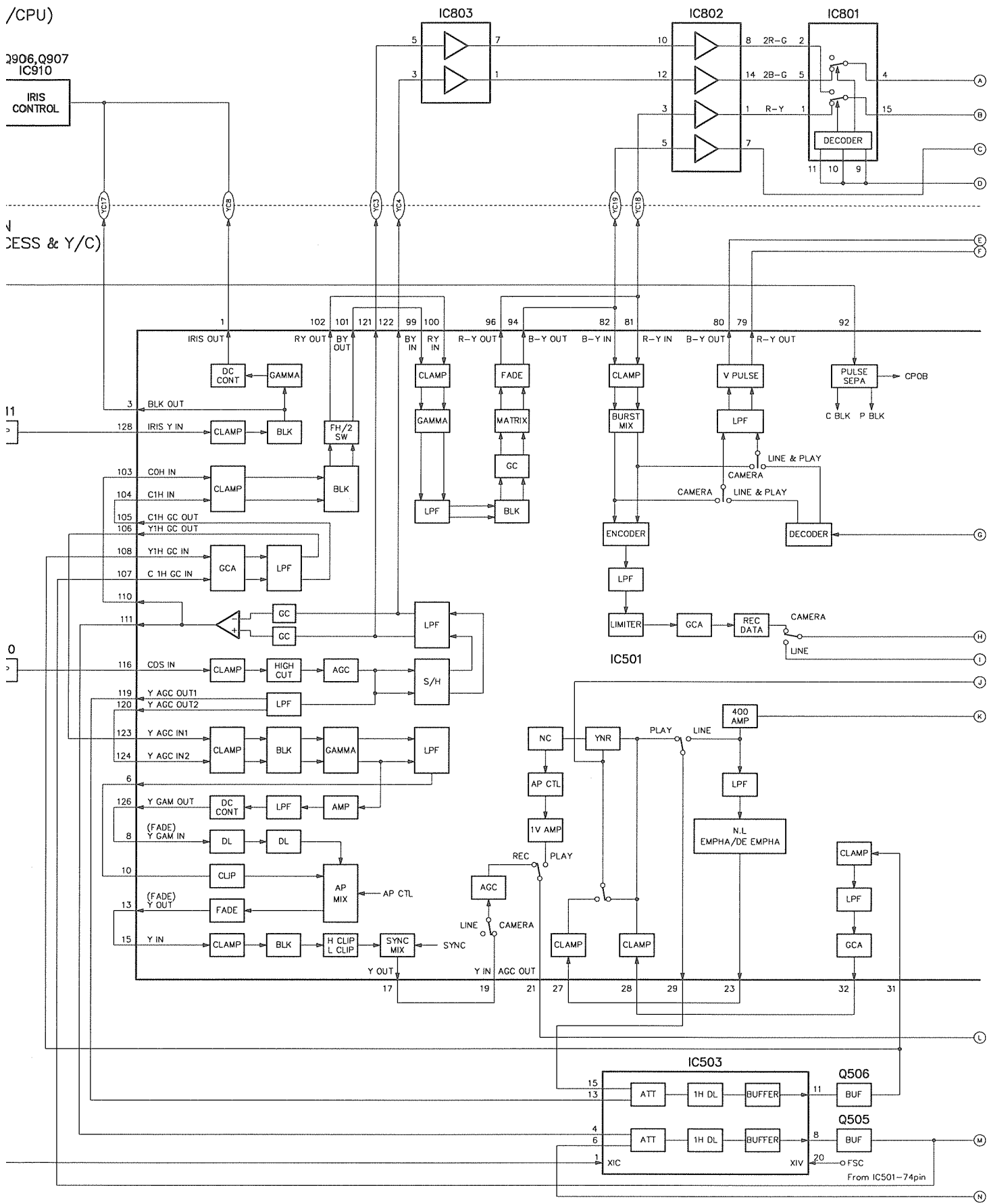
4.4 Y/C AND PROCESS BLOCK DIAGRAM



2906, Q907
IC910

IRIS
CONTROL

↓
CESS & Y/C)



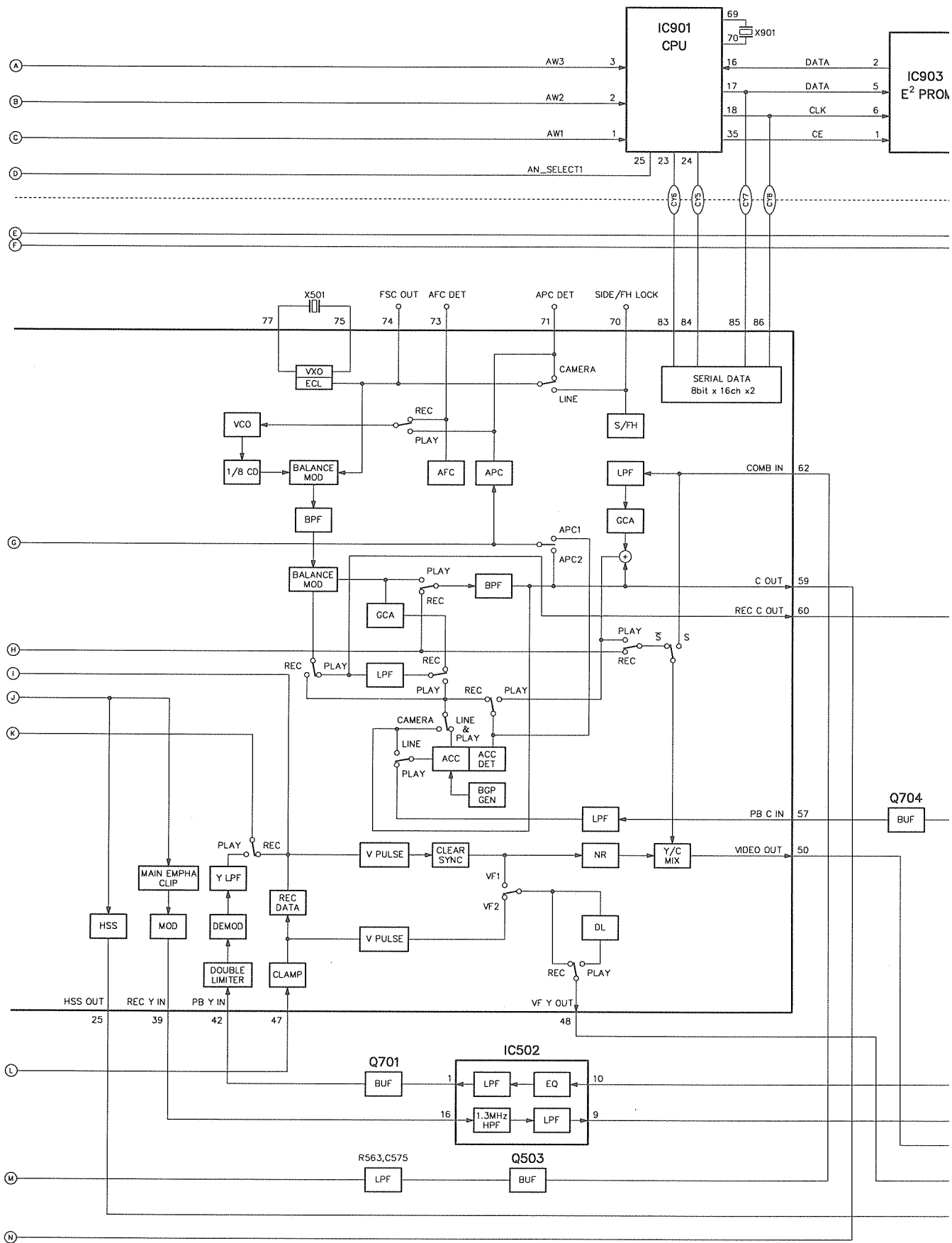
4-10

E

F

G

H



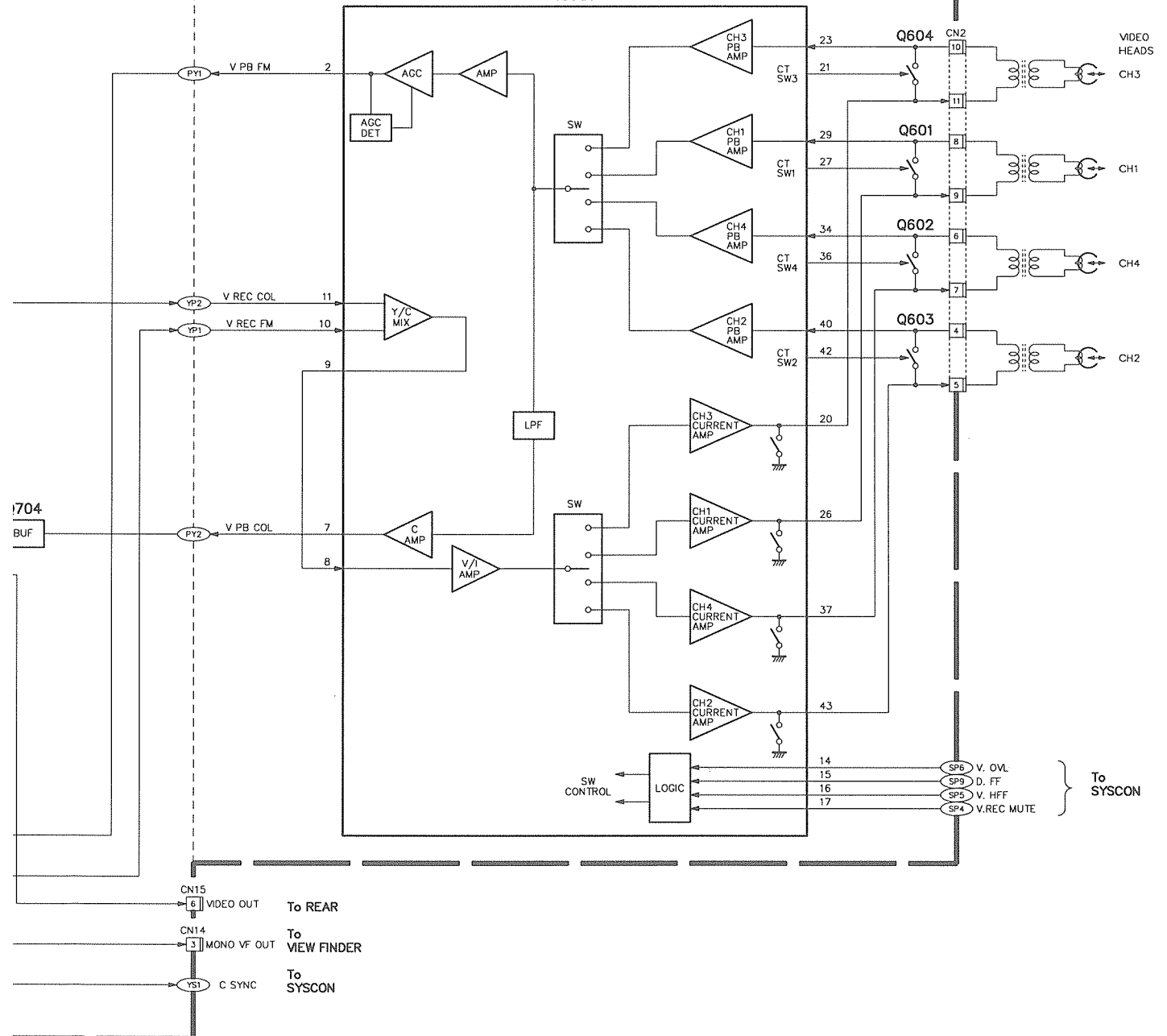
IC903
E² PROM

(only use for GR-AX360)

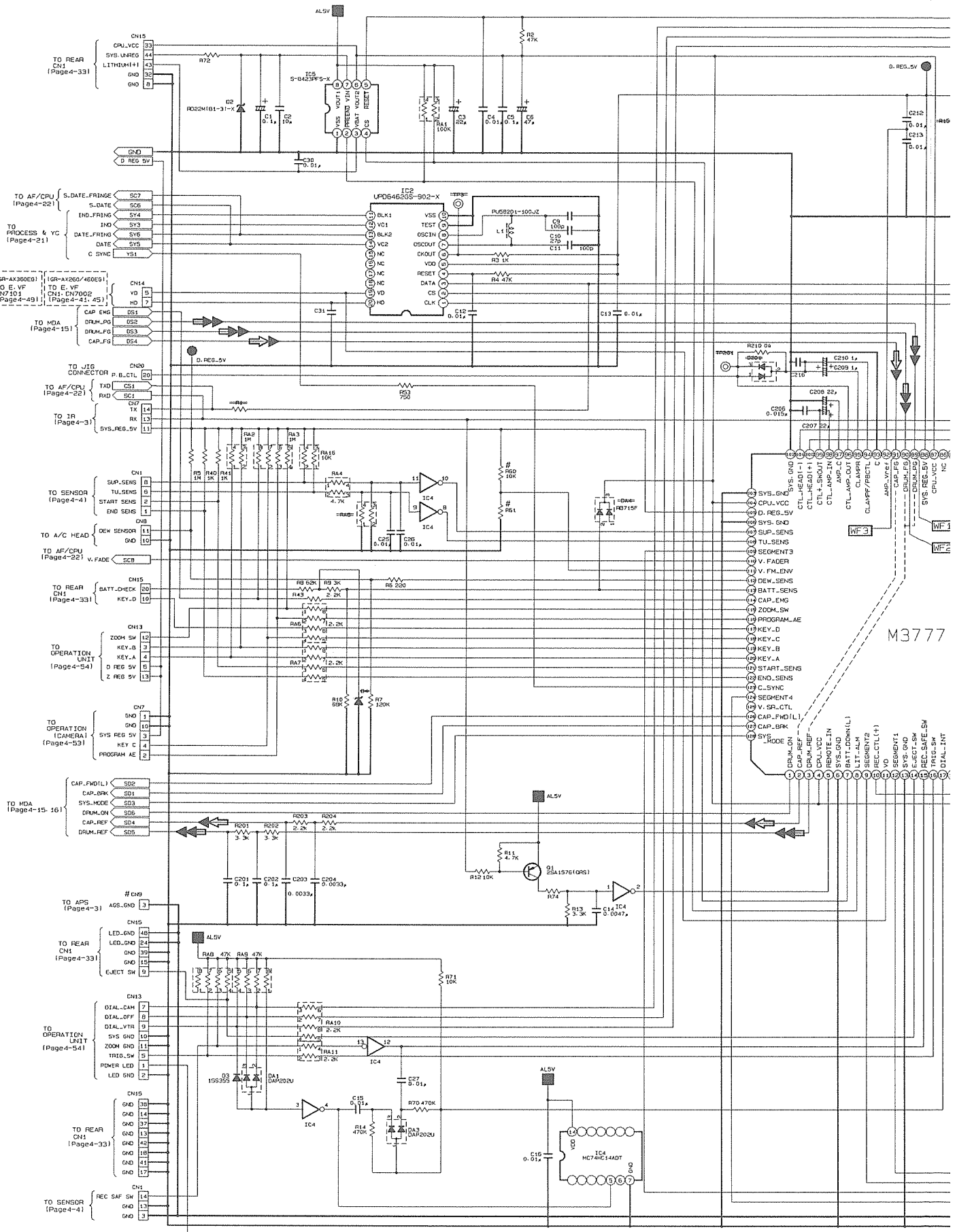
CN14
10 B-Y OUT
9 R-Y OUT } To VIEW FINDER

01 MAIN(PRE/REC)

IC601



4.5 SYSCON SCHEMATIC DIAGRAM

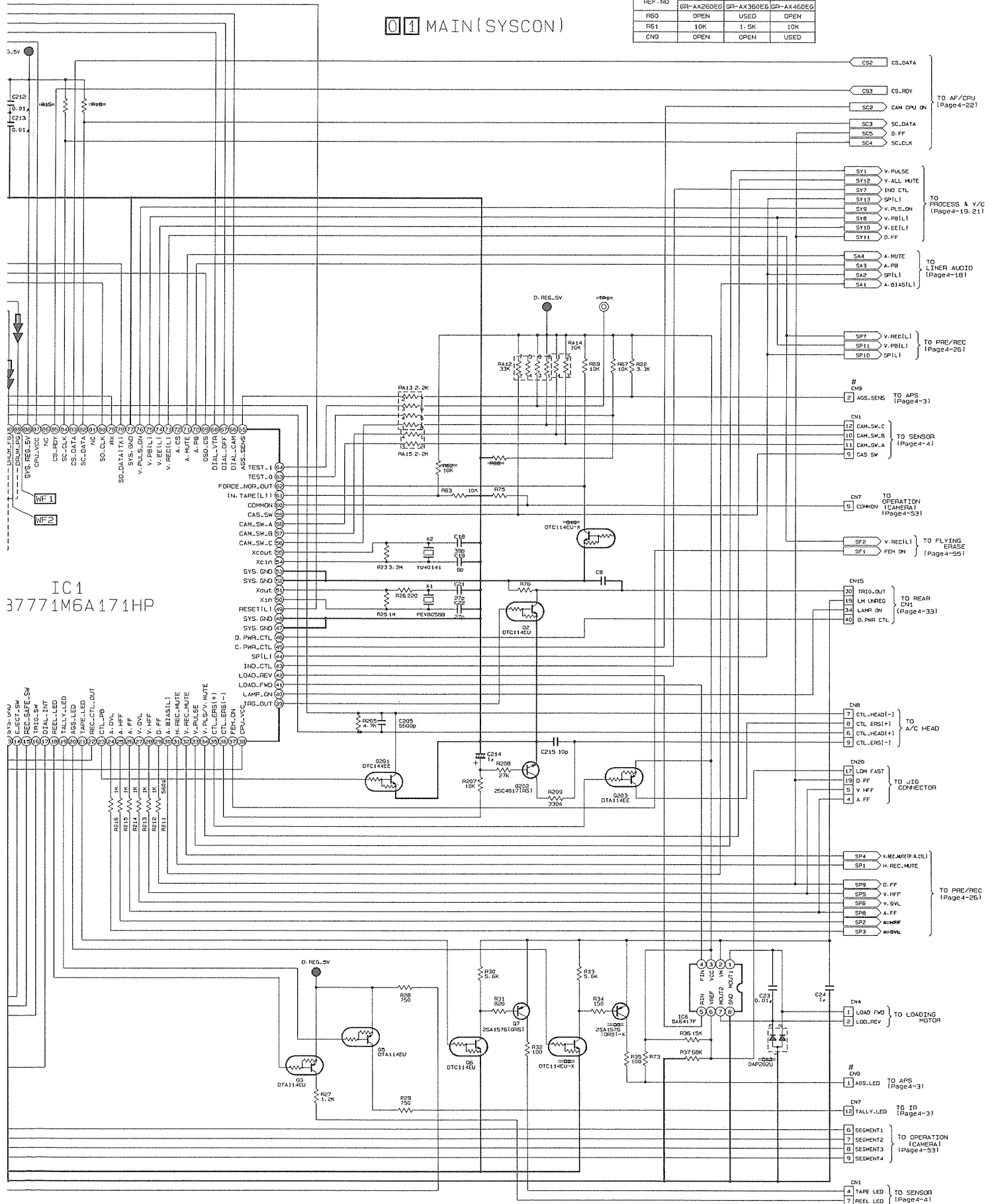


M3777

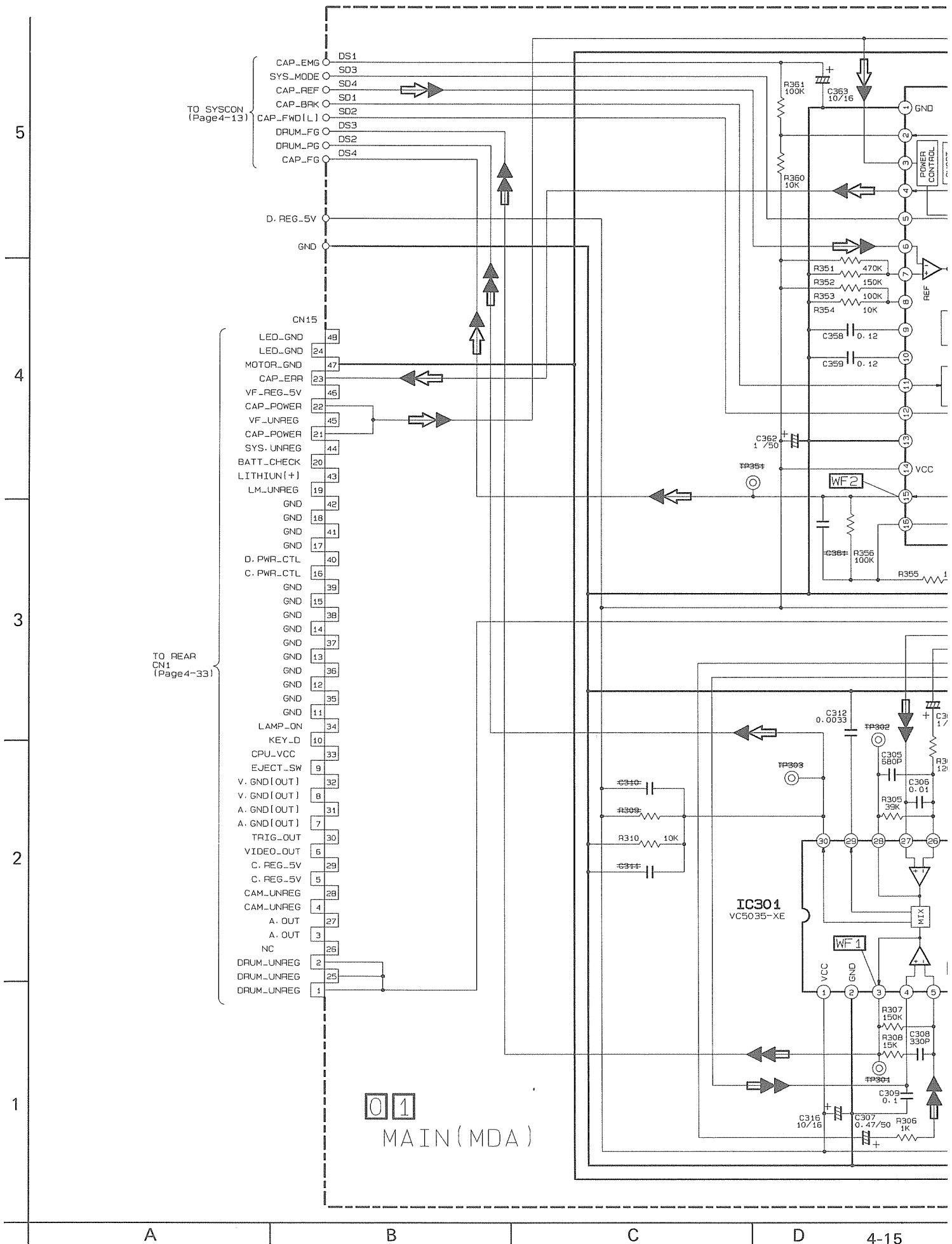
NOTE : COMPARISON CHART OF MODELS & MARKS(#)

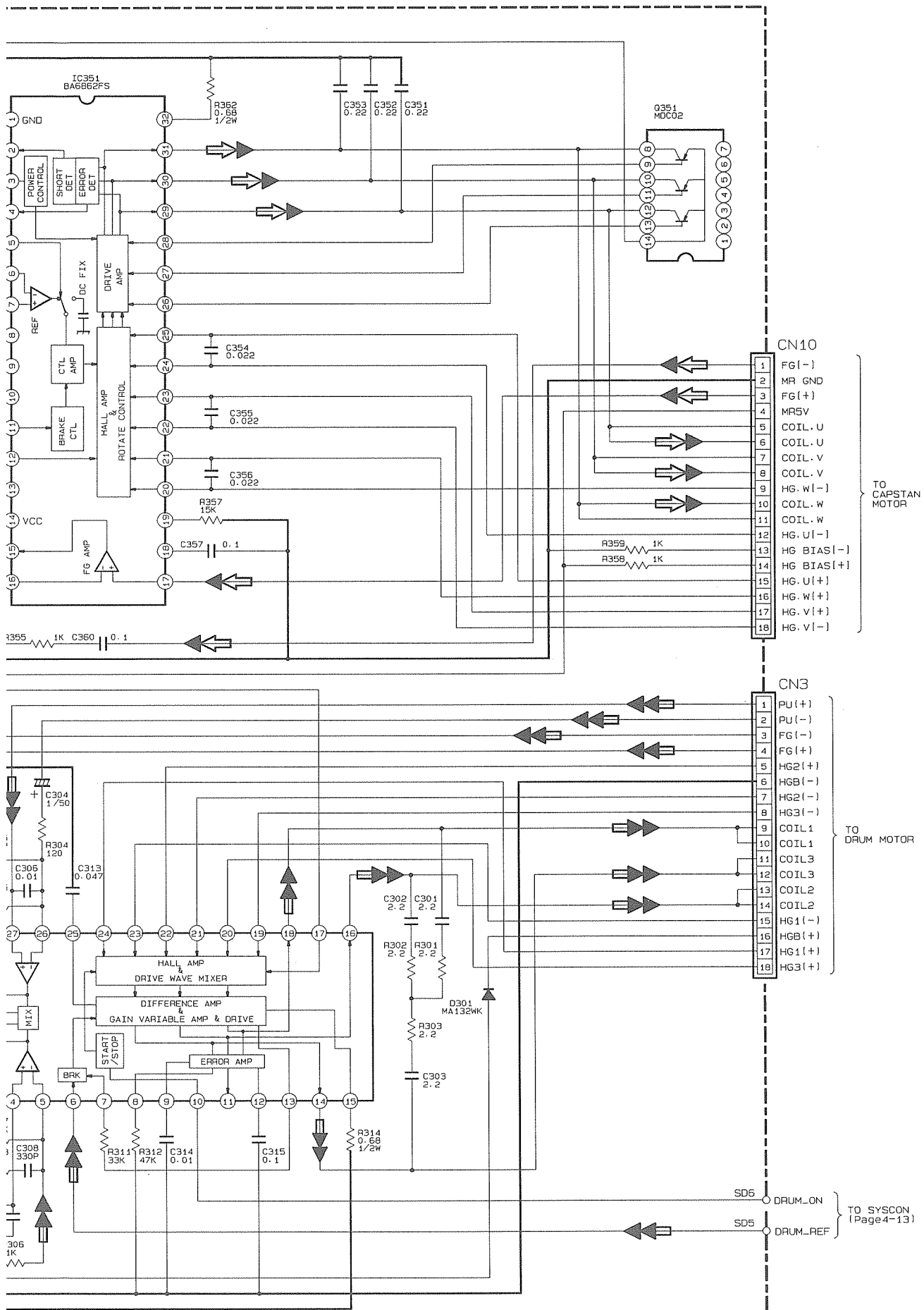
REF. NO	MODELS		
	GR-AX26DEG	GR-AX36DEG	GR-AX46DEG
R60	OPEN	USED	OPEN
R61	10K	1.5K	10K
CN9	OPEN	OPEN	USED

01 MAIN (SYSCON)

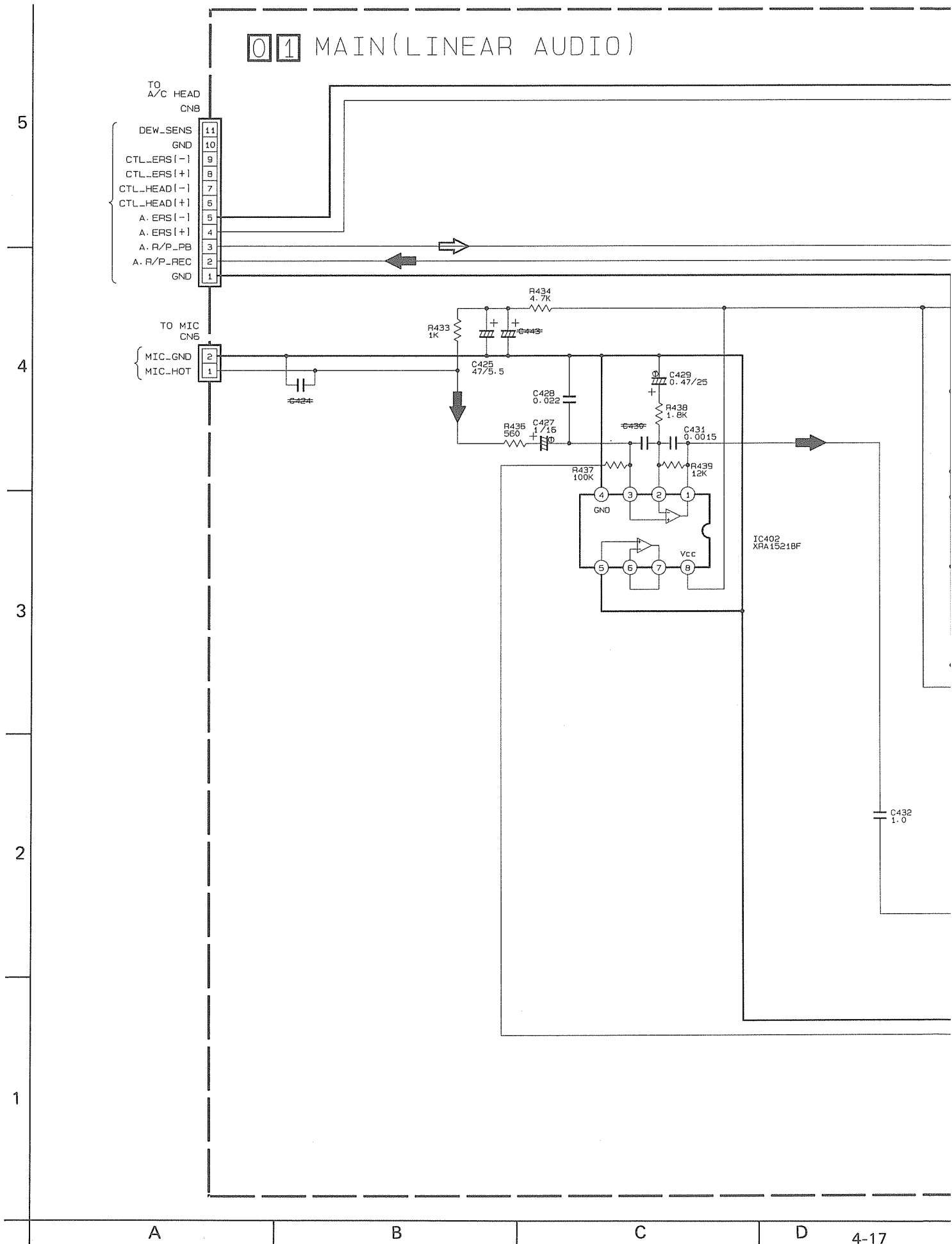


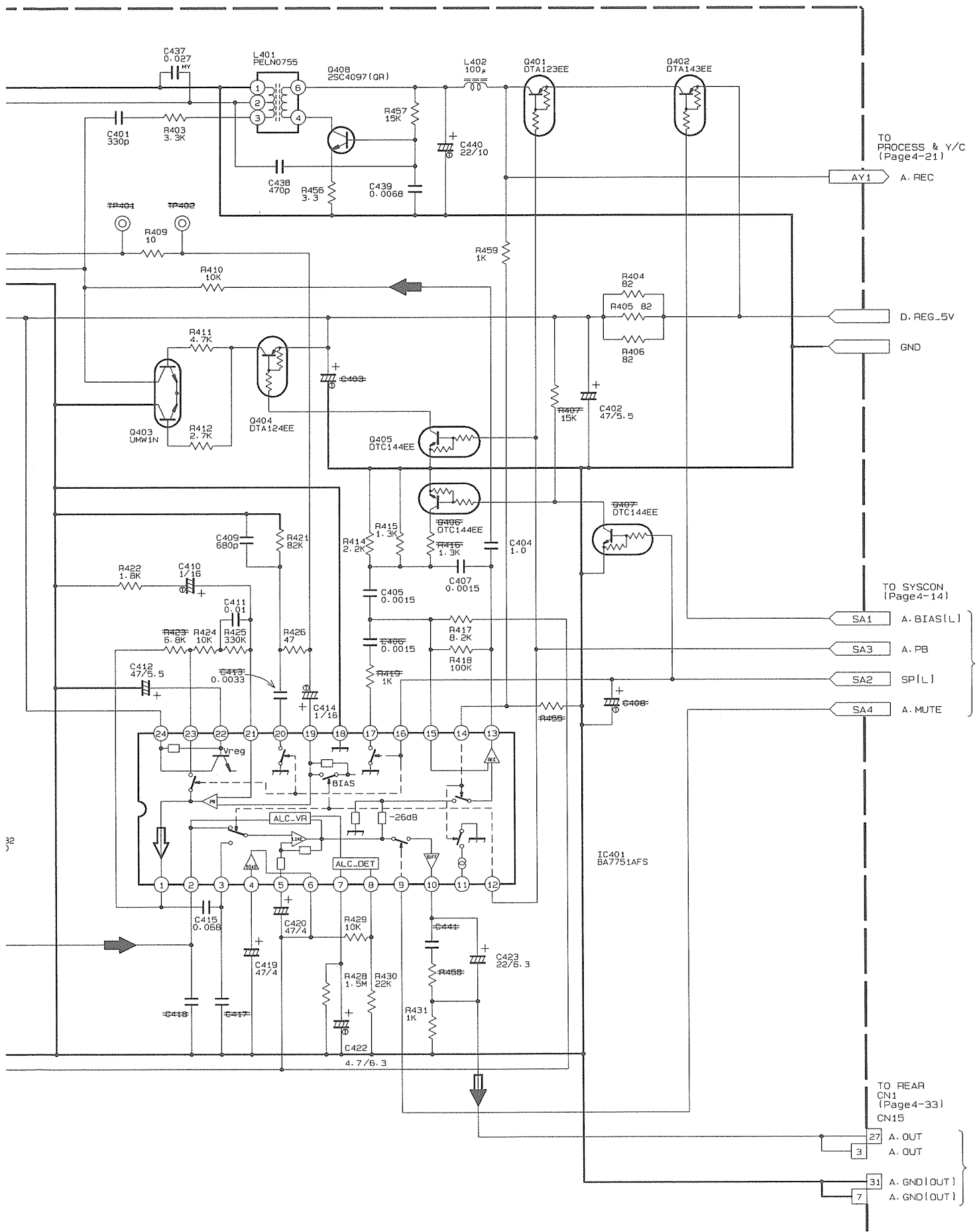
4.6 MDA SCHEMATIC DIAGRAM





4.7 LINEAR AUDIO SCHEMATIC DIAGRAM



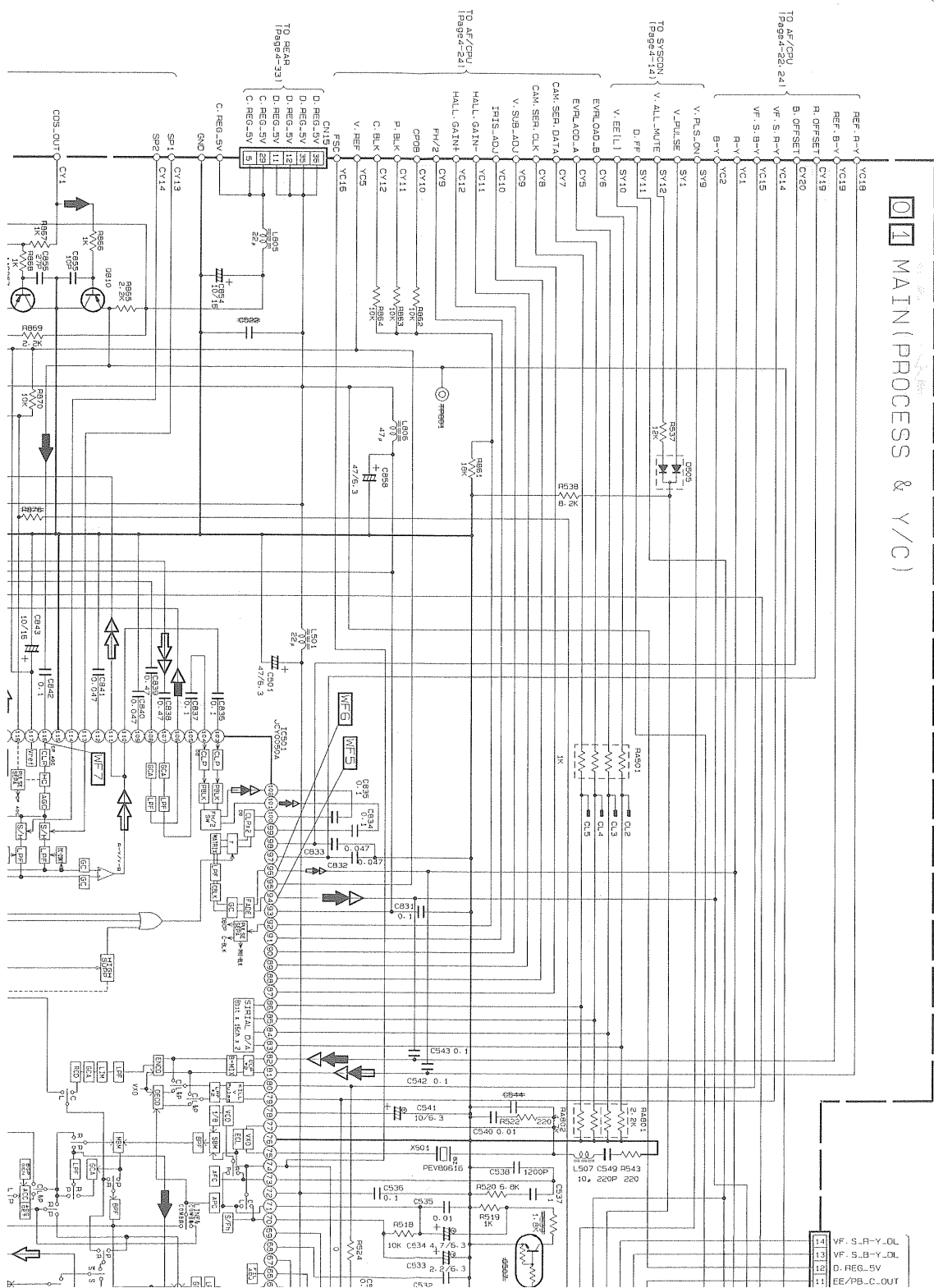


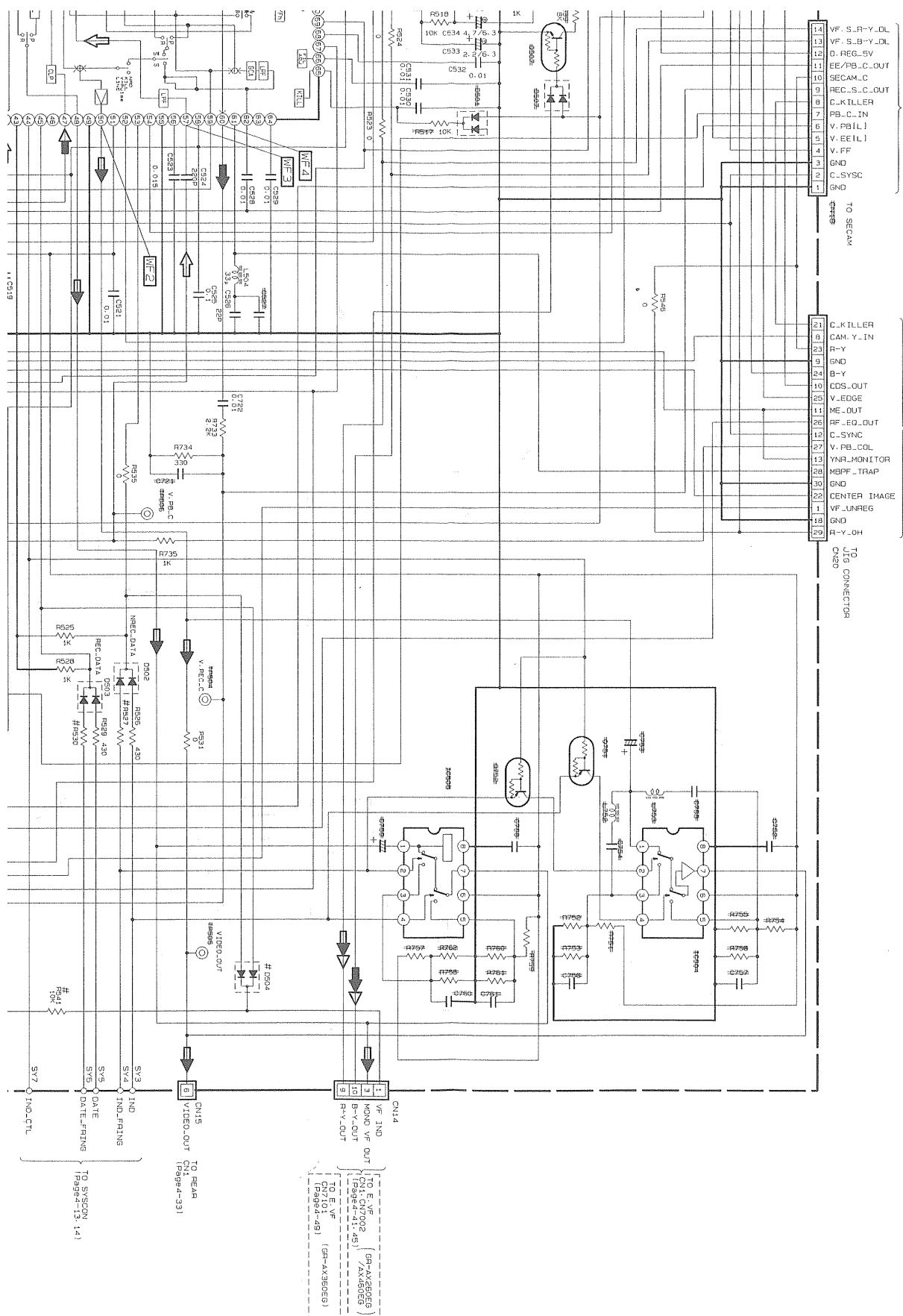
[illegible][illegible]

P4-19,20,21-c	P4-19,20,21-c
---------------	---------------

P4-19,20,21-c	P4-19,20,21-c
---------------	---------------

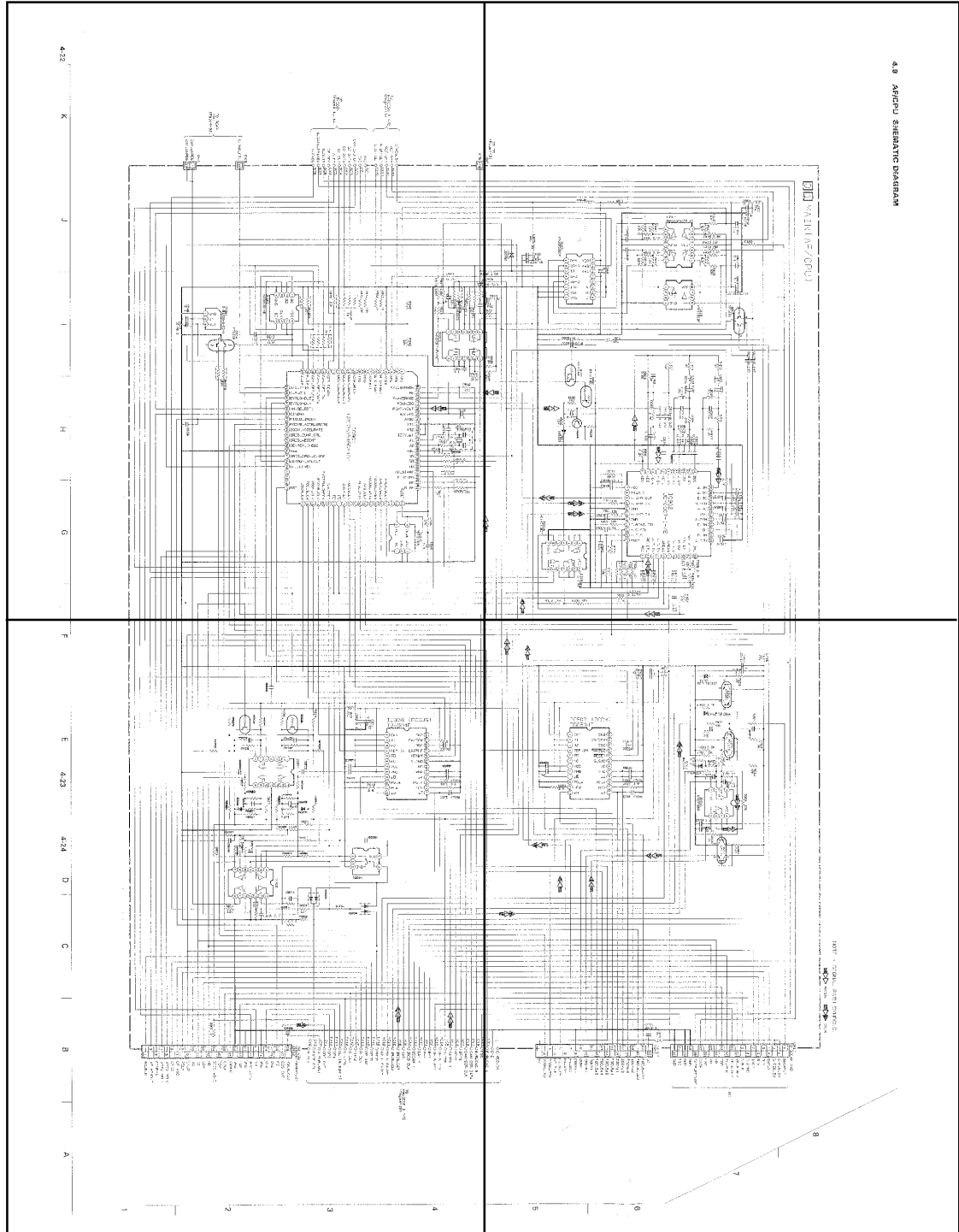
P4-19,20,21-b





P4-22,23,24-a

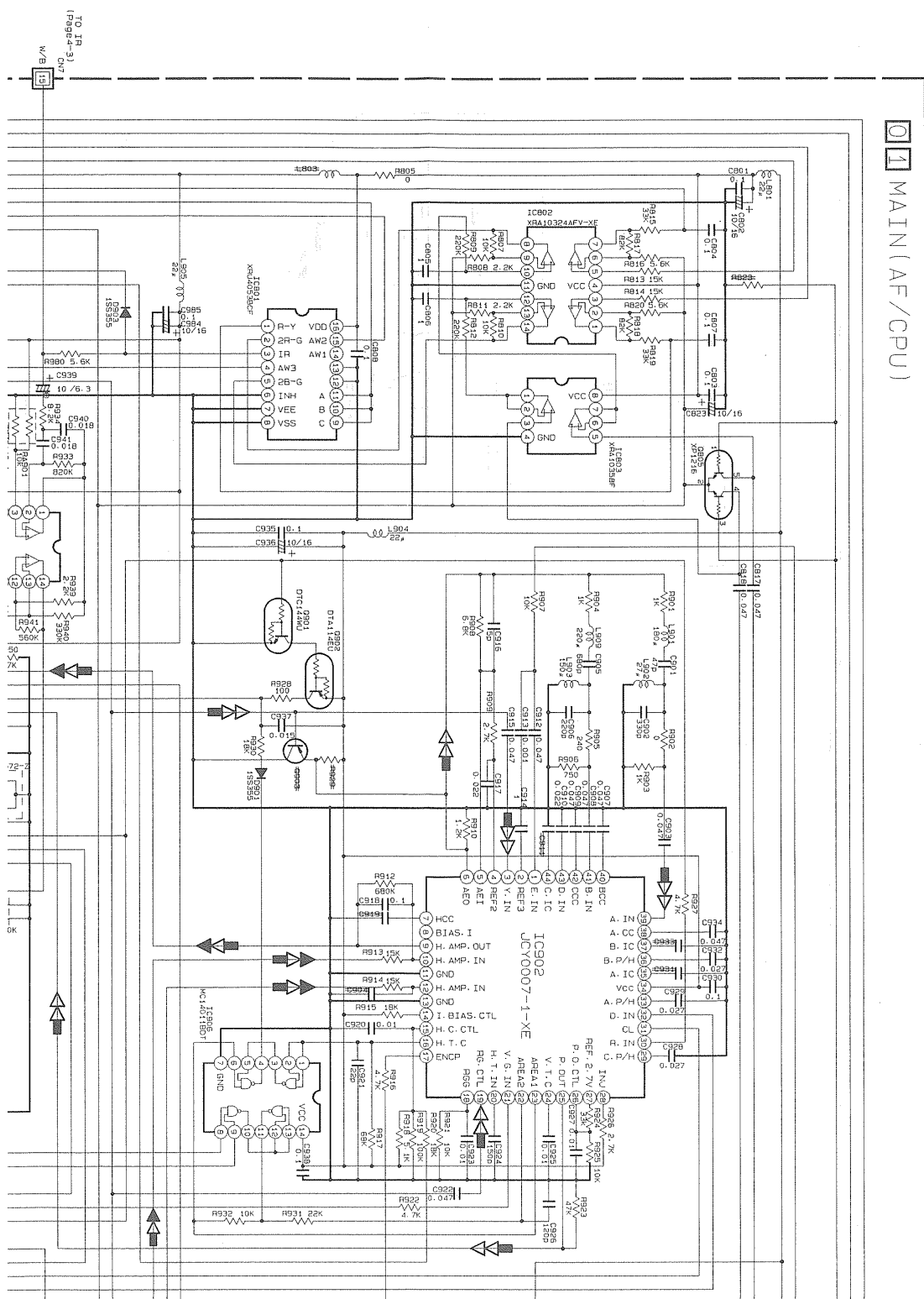
P4-22,23,24-b

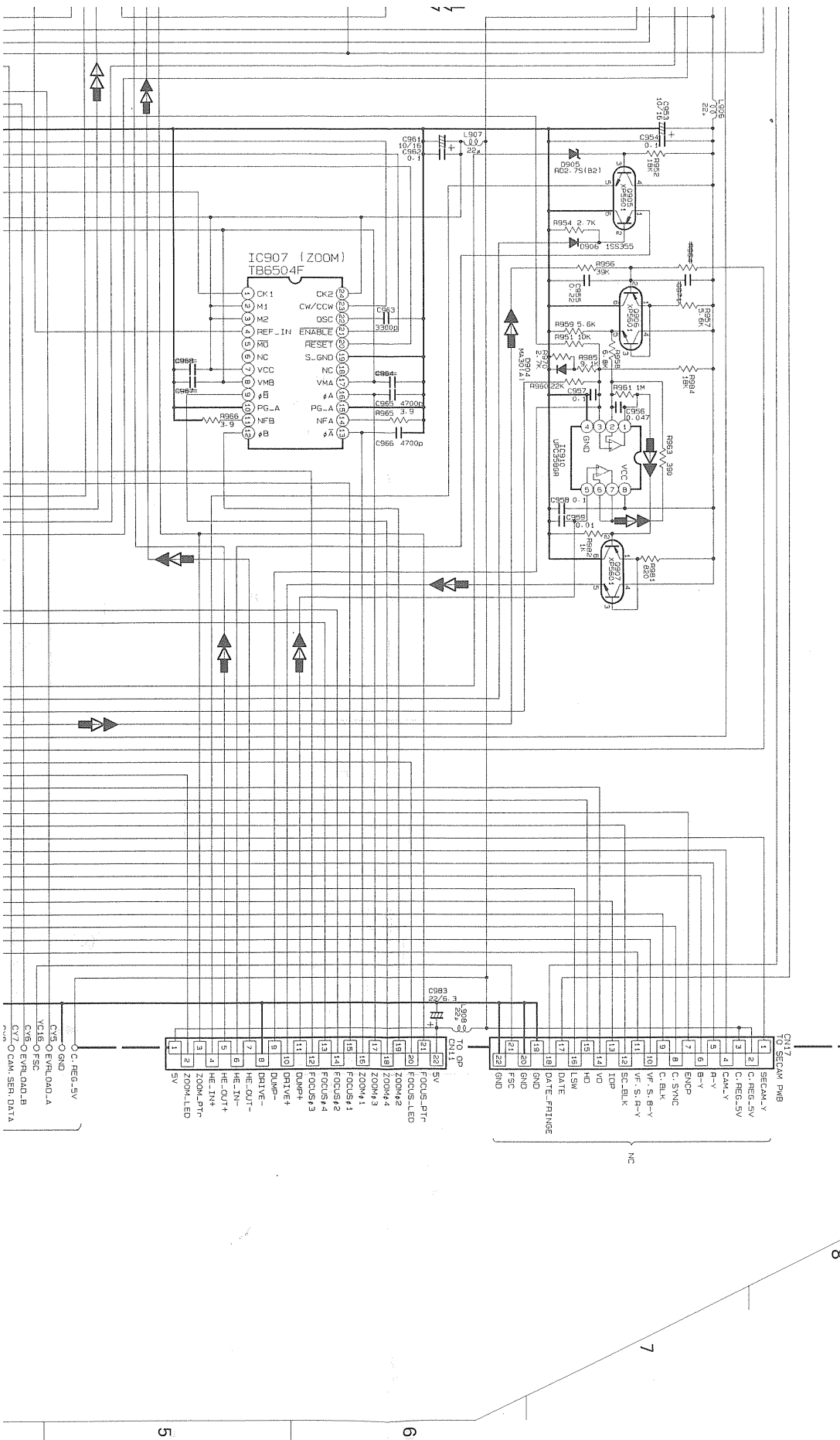


P4-22,23,24-c

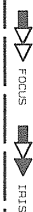
P4-22,23,24-d

P4-22,23,24-b

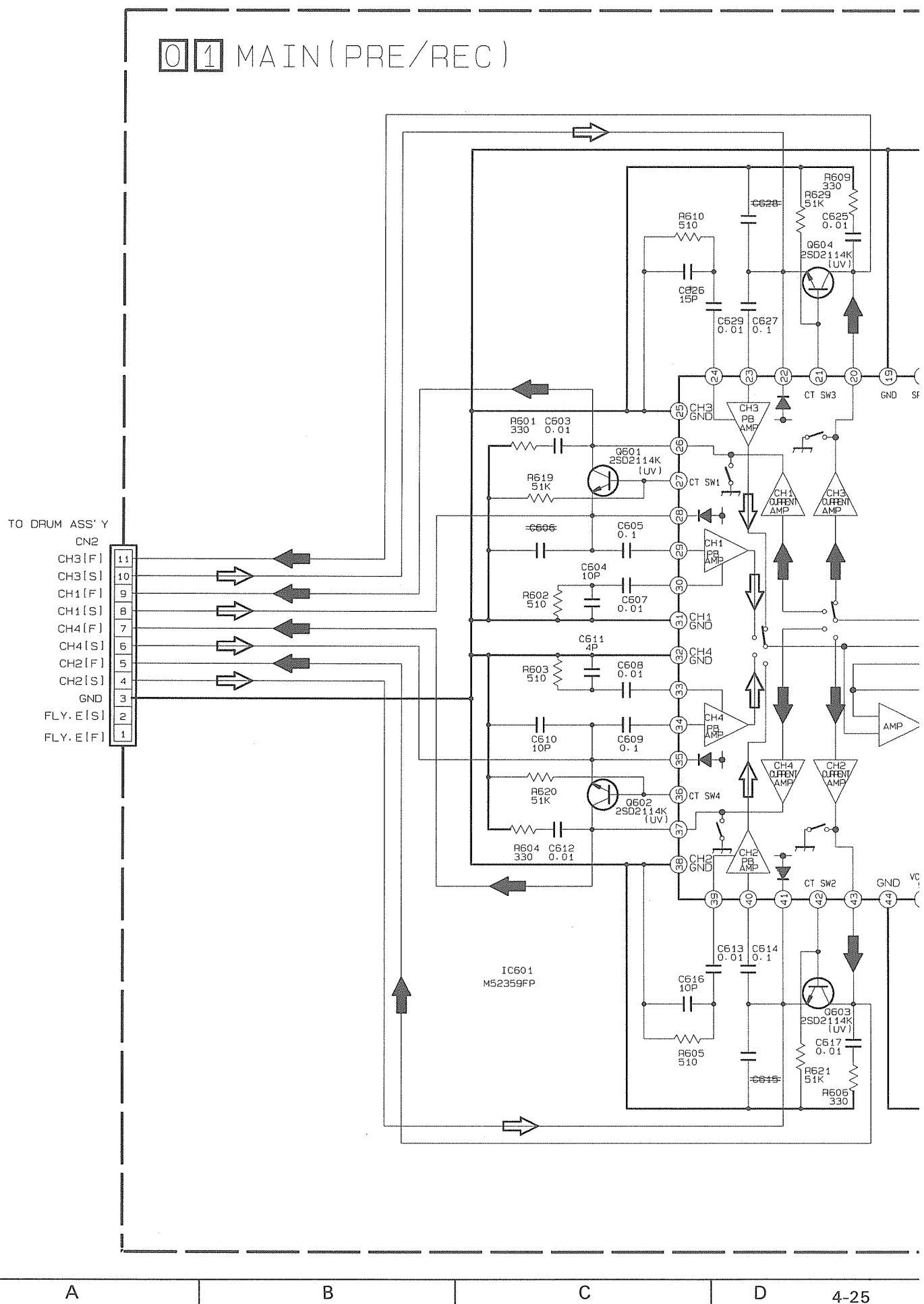


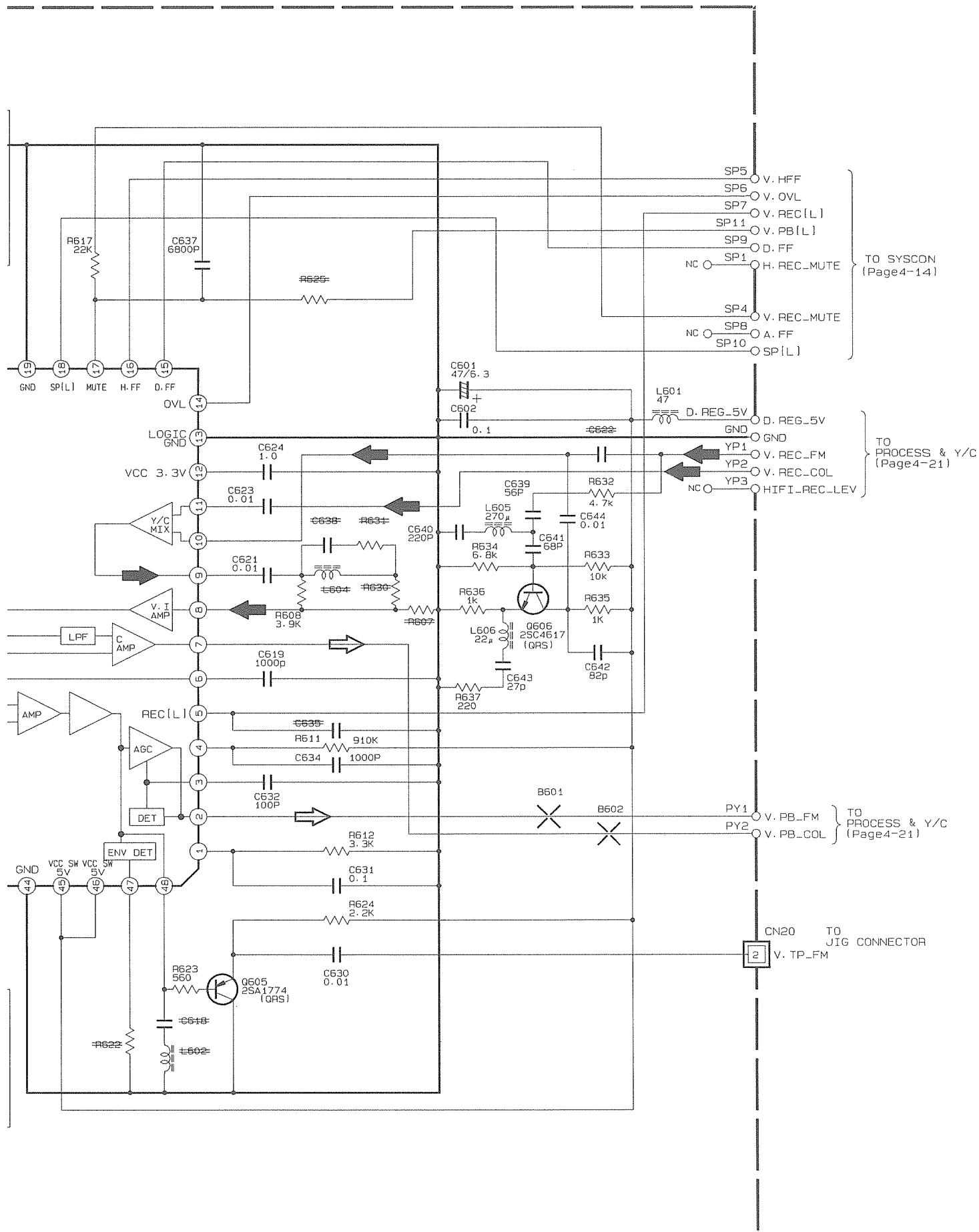


NOTE : SIGNAL PATH SYMBOLS.



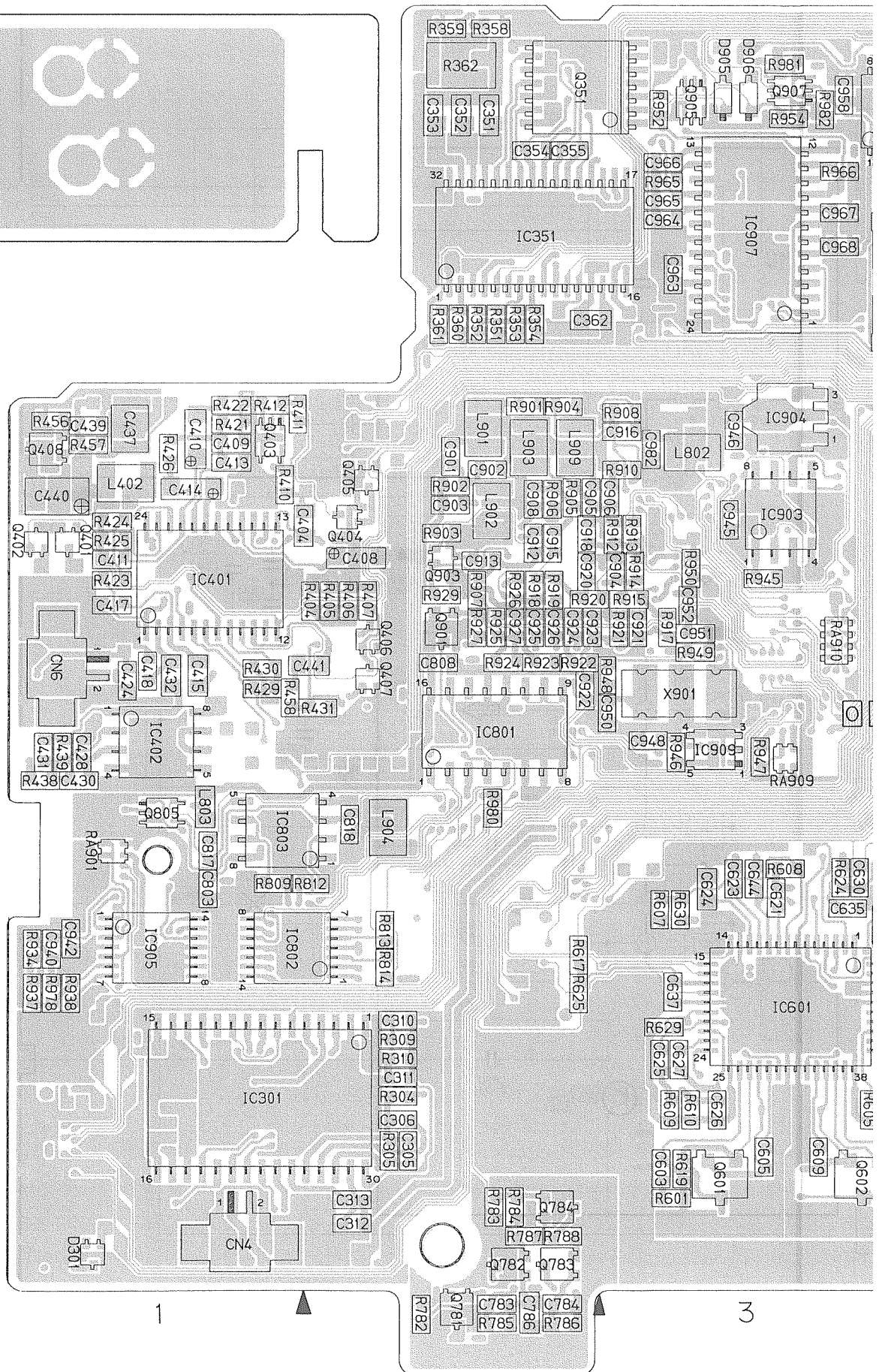
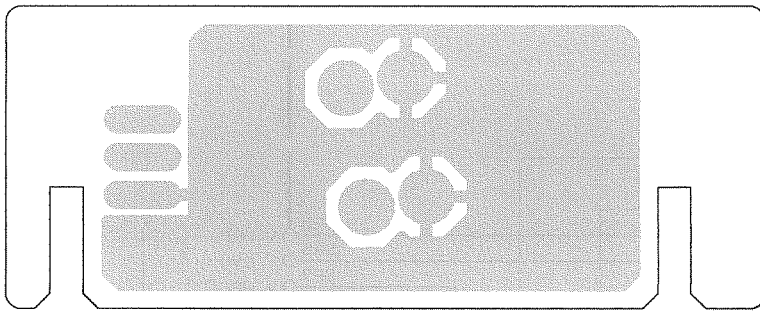
4.10 PRE/REC SCHEMATIC DIAGRAM



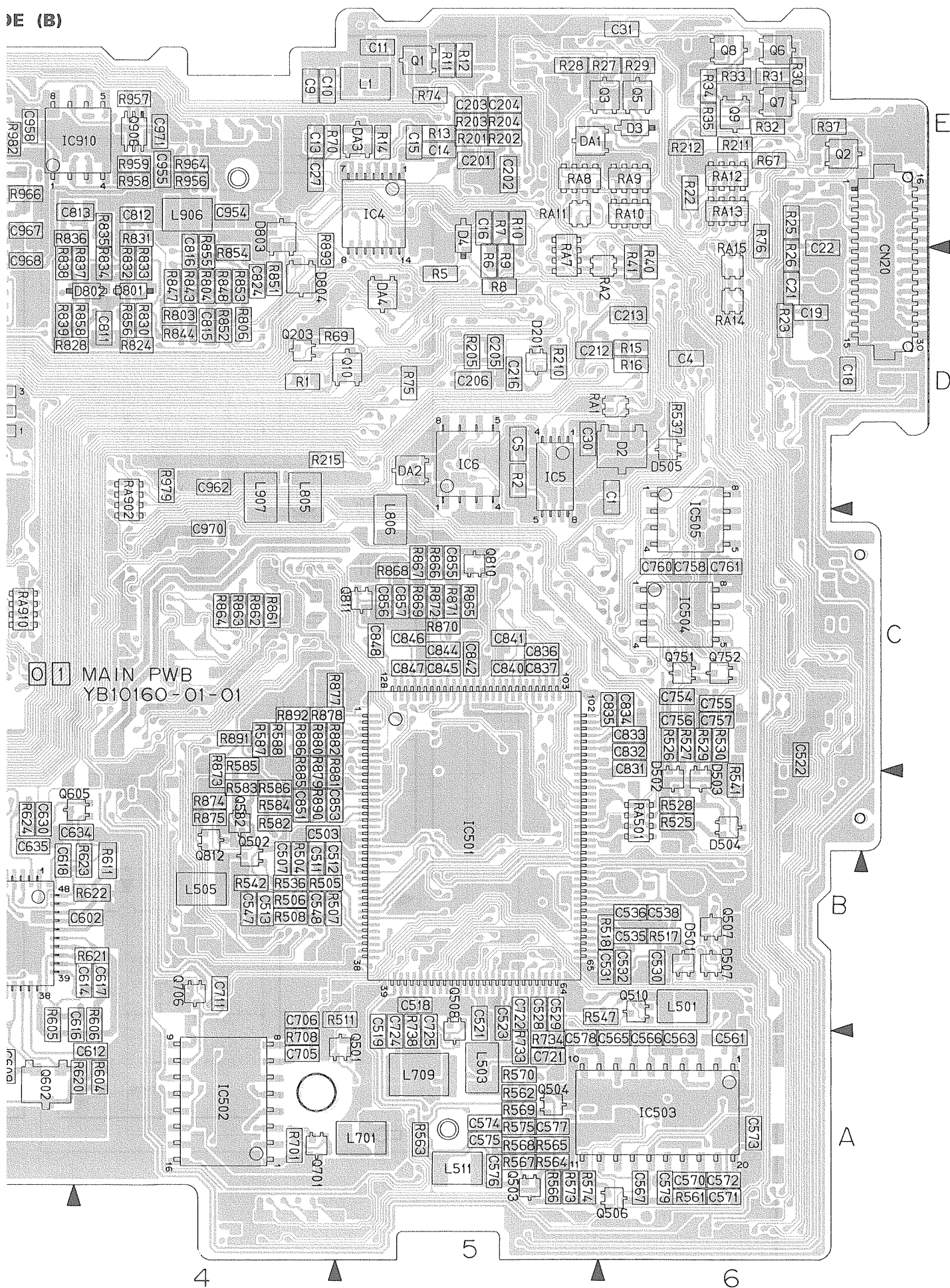


4.11 MAIN AND APS CIRCUIT BOARDS

FOIL SIDE (B)



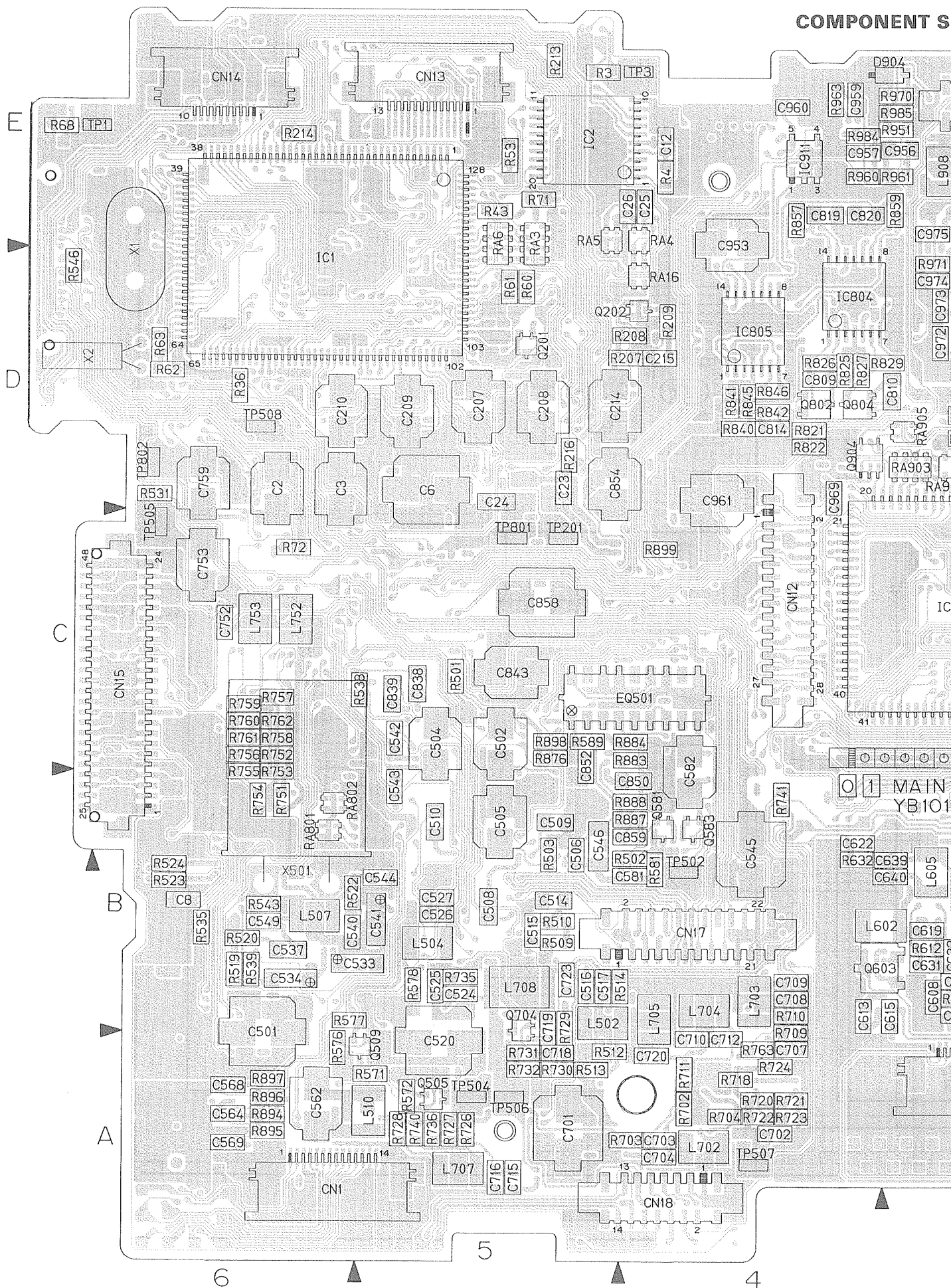
DE (B)



REF.No.	LOCATION	REF.No.	LOCATION	REF.No.	LOCATION	REF.No.	LOCATION	REF.No.	LOCATION	REF.No.	LOCATION	REF.No.	LOCATION	REF.No.	LOCATION
CAPACITOR		C410	B C 1D	C567	B C 6A	C754	B C 6C	C916	B C 3D	D801	B C 4D	L803	B C 1C		
C1	B C 6D	C411	B C 1C	C568	A C 6A	C755	B C 6C	C917	A C 3D	D802	B C 4D	L805	B C 4D		
C2	A C 6D	C412	A C 1C	C569	A C 6A	C756	B C 6C	C918	B C 2D	D803	B C 4E	L806	B C 5D		
C3	A C 6D	C413	B C 1D	C570	B C 6A	C757	B C 6C	C919	A C 3D	D804	B C 4D	L901	B C 2D		
C4	B C 6D	C414	B C 1D	C571	B C 6A	C758	B C 6C	C920	B C 2C	D901	A C 2C	L902	B C 2D		
C5	B C 5D	C415	B C 1C	C572	B C 6A	C759	A C 6D	C921	B C 3C	D902	A C 1B	L903	B C 2D		
C6	A C 5D	C417	B C 1C	C573	B C 6A	C760	B C 6C	C922	B C 2C	D903	A C 2C	L904	B C 2C		
C8	A C 6B	C418	B C 1C	C574	B C 5A	C761	B C 6C	C923	B C 2C	D904	A C 3E	L905	A C 1B		
C9	B C 4E	C419	A C 1C	C575	B C 5A	C781	A C 2A	C924	B C 2C	D905	B C 3E	L906	B C 4E		
C10	B C 4E	C420	A C 2C	C576	B C 5A	C782	A C 2A	C925	B C 2C	D906	B C 3E	L907	B C 4D		
C11	B C 5E	C422	A C 1C	C577	B C 5A	C783	B C 2A	C926	B C 2C	DA1	B C 5E	L908	A C 3E		
C12	A C 4E	C423	A C 2C	C578	B C 5B	C784	B C 2A	C927	B C 2C	DA2	B C 5D	L909	B C 2D		
C13	B C 4E	C424	B C 1C	C579	B C 6A	C785	A C 2A	C928	A C 2C	DA3	B C 5E				
C14	B C 5E	C425	A C 1C	C581	A C 4B	C786	B C 2A	C929	A C 2C	DA4	B C 5D				
C15	B C 5E	C427	A C 1C	C582	A C 4C	C787	A C 2A	C930	A C 2C						
C16	B C 5E	C428	B C 1C	C601	A C 2B	C801	A C 2B	C931	A C 2C						
C18	B C 6D	C429	A C 1C	C602	B C 4B	C802	A C 1C	C932	A C 2D						
C19	B C 6D	C430	B C 1C	C603	B C 3A	C803	B C 1B	C933	A C 2D						
C21	B C 6D	C431	B C 1C	C604	A C 3B	C804	A C 2B	C934	A C 2C						
C22	B C 6E	C432	B C 1C	C605	B C 3A	C805	A C 1B	C935	A C 2D						
C23	A C 5D	C437	B C 1D	C606	A C 3B	C806	A C 1B	C936	A C 2C						
C24	A C 5D	C438	A C 1D	C607	A C 3B	C807	A C 2B	C937	A C 2C						
C25	A C 4E	C439	B C 1D	C608	A C 3B	C808	B C 2C	C938	A C 2C						
C26	A C 4E	C440	B C 1D	C609	B C 3A	C809	A C 4D	C939	A C 1B						
C27	B C 4E	C441	B C 2C	C610	A C 3B	C810	A C 3D	C940	B C 1B						
C30	B C 5D	C443	A C 1C	C611	A C 3B	C811	B C 4D	C941	A C 1B						
C31	B C 6E	C501	A C 6B	C612	B C 4B	C812	B C 4E	C942	B C 1B						
C201	B C 5E	C502	A C 5C	C613	A C 4B	C813	B C 4E	C943	A C 1B						
C202	B C 5E	C503	B C 4B	C614	B C 4B	C814	A C 4D	C944	A C 1B						
C203	B C 5E	C504	A C 5C	C615	A C 3B	C815	B C 4D	C945	B C 3D						
C204	B C 5E	C505	A C 5B	C616	B C 4B										

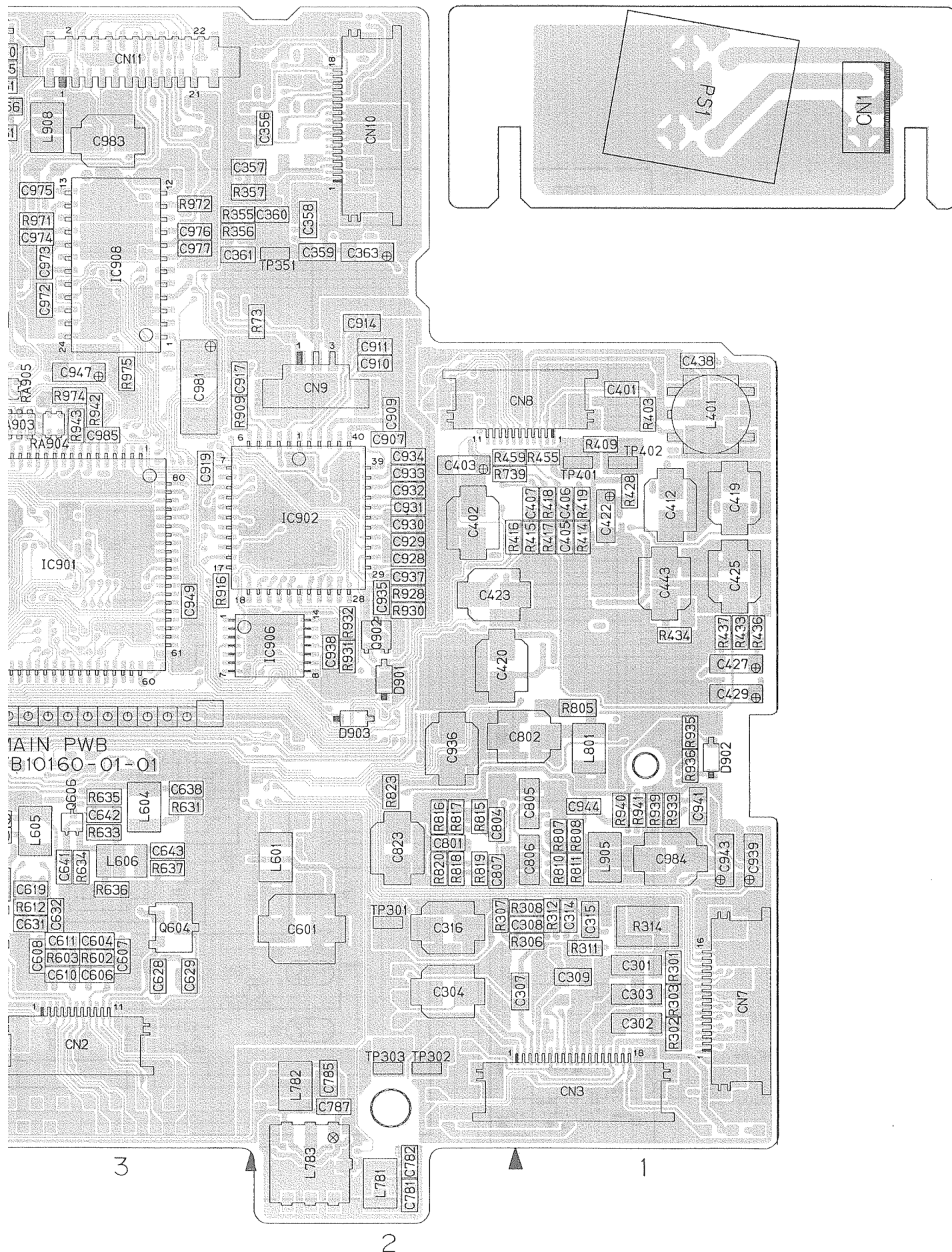
REF.No.	LOCATION			REF.No.	LOCATION			REF.No.	LOCATION			REF.No.	LOCATION			REF.No.	LOCATION			REF.No.	LOCATION						
RESISTOR				R353	B	C	2D	R542	B	C	4B	R732	A	C	5A	R856	B	C	4D	R940	A	C	1B	CN17	A	C	4B
R1	B	C	4D	R354	B	C	2D	R543	A	C	6B	R733	B	C	5B	R857	A	C	4E	R941	A	C	1B	CN18	A	C	4A
R2	B	C	5D	R355	A	C	3E	R546	A	C	7E	R734	B	C	5B	R858	B	C	4D	R942	A	C	3D	CN20	B	C	7E
R3	A	C	5E	R356	A	C	3D	R547	B	C	6B	R735	A	C	5B	R859	A	C	3E	R943	A	C	3D	TEST POINT			
R4	A	C	4E	R357	A	C	3E	R561	B	C	6A	R736	A	C	5A	R861	B	C	4C	R945	B	C	3C	TP1	A	C	7E
R5	B	C	5D	R358	B	C	2E	R562	B	C	5A	R738	B	C	5B	R862	B	C	4C	R946	B	C	3C	TP3	A	C	4E
R6	B	C	5E	R359	B	C	2E	R563	B	C	5A	R739	A	C	2D	R863	B	C	4C	R947	B	C	3C	TP201	A	C	5C
R7	B	C	5E	R360	B	C	2D	R564	B	C	5A	R740	A	C	5A	R864	B	C	4C	R948	B	C	3C	TP301	A	C	2B
R8	B	C	5D	R361	B	C	2D	R565	B	C	5A	R741	A	C	4B	R865	B	C	5C	R949	B	C	3C	TP302	A	C	2A
R9	B	C	5E	R362	B	C	2E	R566	B	C	5A	R751	A	C	6B	R866	B	C	5C	R950	B	C	3C	TP303	A	C	2A
R10	B	C	5E	R403	A	C	1D	R567	B	C	5A	R752	A	C	6C	R867	B	C	5C	R951	A	C	3E	TP351	A	C	2D
R11	B	C	5E	R404	B	C	2C	R568	B	C	5A	R753	A	C	6C	R868	B	C	5C	R952	B	C	3E	TP401	A	C	1D
R12	B	C	5E	R405	B	C	2C	R569	B	C	5A	R754	A	C	6B	R869	B	C	5C	R954	B	C	3E	TP402	A	C	1D
R13	B	C	5E	R406	B	C	2C	R570	B	C	5A	R755	A	C	6C	R870	B	C	5C	R956	B	C	4E	TP502	A	C	4B
R14	B	C	5E	R407	B	C	2C	R571	A	C	5A	R756	A	C	6C	R871	B	C	5C	R957	B	C	4E	TP504	A	C	5A
R15	B	C	6D	R409	A	C	1D	R572	A	C	5A	R757	A	C	6C	R872	B	C	5C	R958	B	C	4E	TP505	A	C	6D
R16	B	C	6D	R410	B	C	1D	R573	B	C	5A	R758	A	C	6C	R873	B	C	4C	R959	B	C	4E	TP506	A	C	5A
R22	B	C	6E	R411	B	C	1D	R574	B	C	5A	R759	A	C	6C	R874	B	C	4B	R960	A	C	4E	TP507	A	C	4A
R23	B	C	6D	R412	B	C	1D	R575	B	C	5A	R760	A	C	6C	R875	B	C	4B	R961	A	C	3E	TP508	A	C	6D
R25	B	C	6E	R414	A	C	1C	R576	A	C	6B	R761	A	C	6C	R876	A	C	5C	R963	A	C	4E	TP801	A	C	5C
R26	B	C	6E	R415	A	C	1C	R577	A	C	6B	R762	A	C	6C	R877	B	C	4C	R964	B	C	3E	TP802	A	C	6D
R27	B	C	6E	R416	A	C	2C	R578	A	C	5B	R763	A	C	4B	R878	B	C	4C	R965	B	C	3E	RESONATOR			
R28	B	C	5E	R417	A	C	1C	R581	A	C	4B	R782	B	C	2A	R879	B	C	4C	R966	B	C	3E	X2	A	D	6D
R29	B	C	6E	R418	A	C	1C	R582	B	C	4B	R783	B	C	2A	R880	B	C	4C	R970	A	C	3E	X501	A	D	6B
R30	B	C	6E	R419	A	C	1C	R583	B	C	4C	R784	B	C	2A	R881	B	C	4C	R971	A	C	3E	X901	B	C	3C
R31	B	C	6E	R421	B	C	1D	R584	B	C	4B	R785	B	C	2A	R882	B	C	4C	R972	A	C	3D	EQUALIZER			
R32	B	C	6E	R422	B	C	1D	R585	B	C	4C	R786	B	C	2A	R883	A	C	4C	R974	A	C	3D	EQ501	A	C	4C
R33	B	C	6E	R423	B	C	1C	R586	B	C	4C	R787	B	C	2A	R884	A	C	4C	R975	A	C	3D				
R34	B	C	6E	R424	B	C	1D	R587	B	C	4C	R788	B	C	2A	R885	B	C	4C	R978	B	C	1B				
R35	B	C	6E	R425	B	C	1D	R588	B	C	4C	R803	B	C	4D	R886	B	C	4C	R979	B	C	4D				
R36	A	C	6D	R426	B	C	1D	R589	A	C	5C	R804	B	C	4D	R887	A	C	4B	R980	B	C	2C				
R37	B	C	6E	R428	A	C	1D	R601	B	C	3A	R805	A	C	1C	R888	A	C	4B	R981	B	C	3E				
R40	B	C	6E	R429	B	C	1C	R602	A	C	3B	R806	B	C	4D	R890	B	C	4B	R982	B	C	3E				
R41	B	C	6E	R430	B	C	1C	R603	A	C	3B	R807	A	C	1B	R891	B	C	4C	R984	A	C	4E				
R43	A	C	5E	R431	B	C	2C	R604	B	C	4A	R808	A	C	1B	R892	B	C	4C	R985	A	C	3E				
R53	A	C	5E	R433	A	C	1C	R605	B	C	3B	R809	B	C	1B	R893	B	C	4E	NETWORK RESISTOR							
R60	A	C	5D	R434	A	C	1C	R606	B	C	4B	R810	A	C	1B	R894	A	C	6A	RA1	B	C	6D				
R61	A	C	5D	R436	A	C	1C	R607	B	C	3B	R811	A	C	1B	R895	A	C	6A	RA2	B	C	6E				
R62	A	C	6D	R437	A	C	1C	R608	B	C	3B	R812	B	C	2B	R896	A	C	6A	RA3	A	C	5E				
R63	A	C	6D	R438	B	C	1C	R609	B	C	3B	R813	B	C	2B	R897	A	C	6A	RA4	A	C	4E				
R67	B	C	6E	R439	B	C	1C	R610	B	C	3B	R814	B	C	2B	R898	A	C	5C	RA5	A	C	5E				
R68	A	C	7E	R455	A	C	1D	R611	B	C	4B	R815	A	C	2B	R899	A	C	4C	RA6	A	C	5E				
R69	B	C	5D	R456	B	C	1D	R612	A	C	3B	R816	A	C	2B	R901	B	C	2D	RA7	B	C	5E				
R70	B	C	4E	R457	B	C	1D	R617	B	C	2B	R817	A	C	2B	R902	B	C	2D	RA8	B	C	5E				
R71	A	C	5E	R458	B	C	1C	R619	B	C	3A	R818	A	C	2B	R903	B	C	2D	RA9	B	C	6E				
R72	A	C	6C	R459	A	C	2D	R620	B	C	4A	R819	A	C	2B	R904	B	C	2D	RA10	B	C	6E				
R73	A	C	2D	R501	A	C	5C	R621	B	C	4B	R820	A	C	2B	R905	B	C	2D	RA11	B	C	5E				
R74	B	C	5E	R502	A	C	4B	R622	B	C	4B	R821	A	C	4D	R906	B	C	2D	RA12	B	C	6E				
R75	B	C	5D	R503	A	C	5B	R623	B	C	4B	R822	A	C	4D	R907	B	C	2C	RA13	B	C	6E				
R76	B	C	6E	R504	B	C	4B	R624	B	C	3B	R823	A	C	2B	R908	B	C	3D	RA14	B	C	6D				
R201	B	C	5E	R505	B	C	4B	R625	B	C	2B	R824	B	C	4D	R909	A	C	3D	RA15	B	C	6E				
R202	B	C	5E	R506	B	C	4B	R629	B	C	3B	R825	A	C	4D	R910	B	C	3D	RA16	A	C	4D				
R203	B	C	5E	R507	B	C	4B	R630	B	C	3B	R826	A	C	4D	R912	B	C	3D	RA501	B	C	6B				
R204	B	C	5E	R508	B	C	4B	R631	A	C	3B	R827	A	C	4D	R913	B	C	3D	RA801	A	C	6B				
R205	B	C	5D	R509	A	C	5B	R632	A	C	4B	R828	B	C	3D	R914	B	C	3C	RA802	A	C	6B				
R207	A	C	4D	R510	A	C	5B	R633	A	C	3B	R829	A	C	3D	R915	B	C	3C	RA901	B	C	1B				
R208	A	C	4D	R511	B	C	5B	R634	A	C	3B	R830	B	C	4D	R916	A	C	3C	RA902	B	C	4D				
R209	A	C	4D	R512	A	C	5B	R635	A	C	3B	R831	B	C	4E	R917	B	C	3C	RA903	A	C	3D				
R210	B	C	5D	R513	A	C	5A	R636	A	C	3B	R832	B	C	4E	R918	B	C	2C	RA904	A	C	3D				
R211	B	C	6E	R514	A	C	4B	R637	A	C	3B	R833	B	C	4E	R919	B	C	2C	RA905	B	C	3C				
R212	B	C	6E	R517	B	C	6B	R701	B	C	4A	R834	B	C	4E	R920	B	C	2C	RA909	B	C	3C				
R213	A	C	5E	R518	B	C	6B	R702	A	C	4A	R835	B	C	4E	R921	B	C	3C	RA910	B	C	3C				
R214	A	C	6E	R519	A	C	6B	R703	A	C	4A	R836	B	C	3E	R922	B	C	2C	CONNECTOR							
R215	B	C	4D	R520	A	C	6B	R704	A	C	4A	R837	B	C	4E	R923	B	C	2C	CN1	A	C	6A				
R216	A	C	5D	R522	A	C	6B	R708	B	C	4B	R838	B	C	3E	R924	B	C	2C	CN2	A	C	3A				
R301	A	C	1B	R523	A	C	6B	R709	A	C	4B	R839	B	C	3D	R925	B	C	2C	CN3	A	C	1A				
R302	A	C	1A	R524	A	C	6B	R710	A	C	4B	R840	A	C	4D	R926	B	C	2C	CN4	B	C	1A				
R303	A	C	1B	R525	B	C	6B	R711	A	C	4A	R841	A	C	4D	R927	B	C	2C	CN6	B	C	1C				
R304	B	C	2B	R526	B	C	6C	R718	A	C	4A	R842	A	C	4D	R928	A	C	2C	CN7	A	C	1A				
R305	B	C	2A	R527	B	C	6C	R720	A	C	4A	R843	B	C	4D	R929	B	C	2C	CN8	A	C	1D				
R306	A	C	1B	R528	B	C	6B	R721	A	C	4A	R844	B	C	4D	R930	A	C	2C	CN9	A	C	2E				
R307	A	C	2B	R529	B	C	6C	R722	A	C	4A	R845	A	C	4D	R931	A	C	2C	CN10	A	C	2D				
R308	A	C	1B	R530	B	C	6C	R723	A	C	4A	R846	A	C	4D	R932	A	C	2C	CN11	A	C	3E				
R309	B	C	2B	R531	A	C	6D	R724	A	C	4A	R847	B	C	4D	R933	A	C	1B	CN12	A	C	4D				
R310	B	C	2B	R535	A	C	6B	R726	A	C	5A	R848	B	C	4D	R934	B	C	1B	CN13	A	C	5E				
R311	A	C	1B	R536	B	C	4B	R727	A	C	5A	R851	B	C	4D	R935	A	C	1C	CN14	A	C	6E				
R312	A	C	1B	R5																							

COMPONENT S

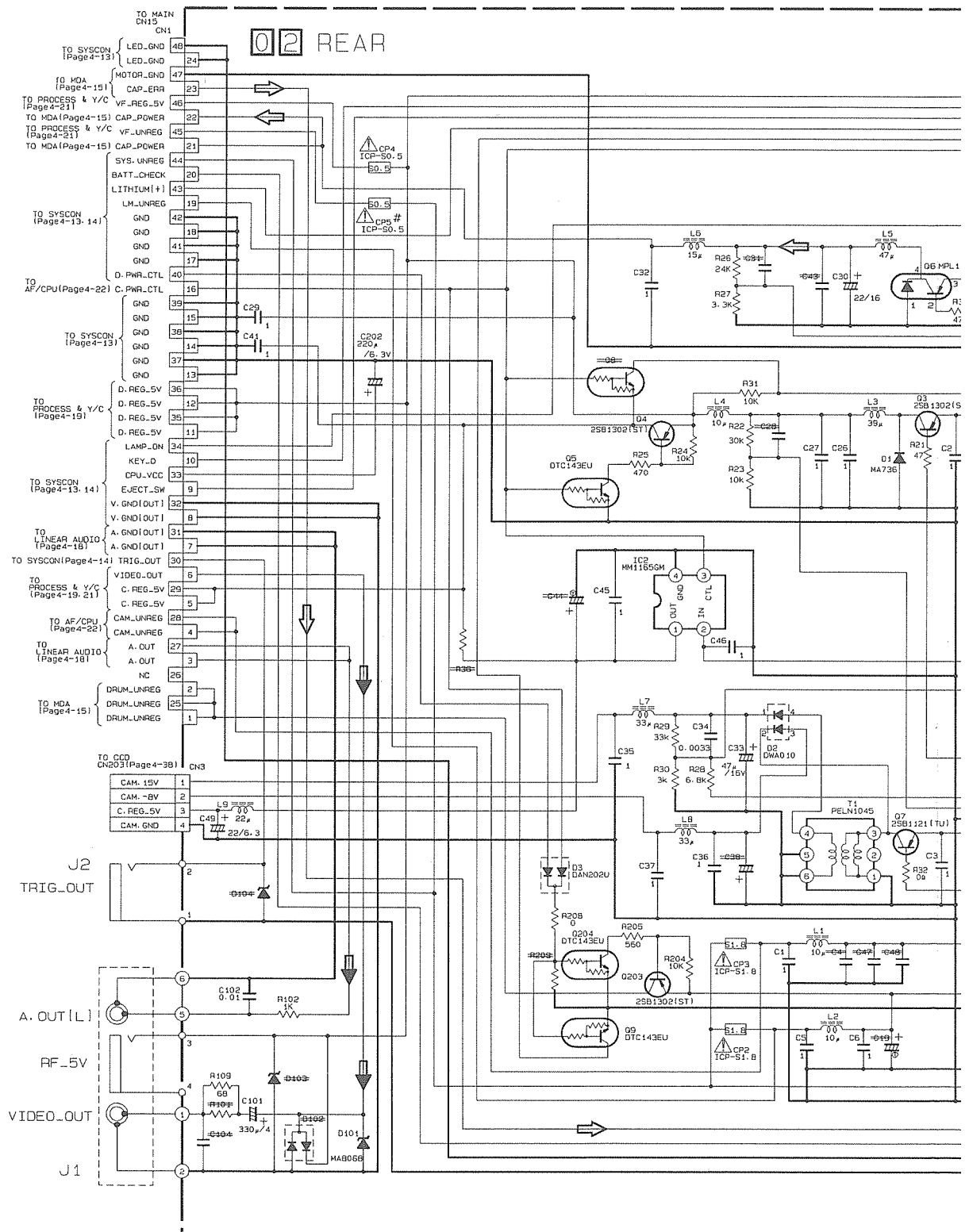


NT SIDE (A)

[for AX460EG]



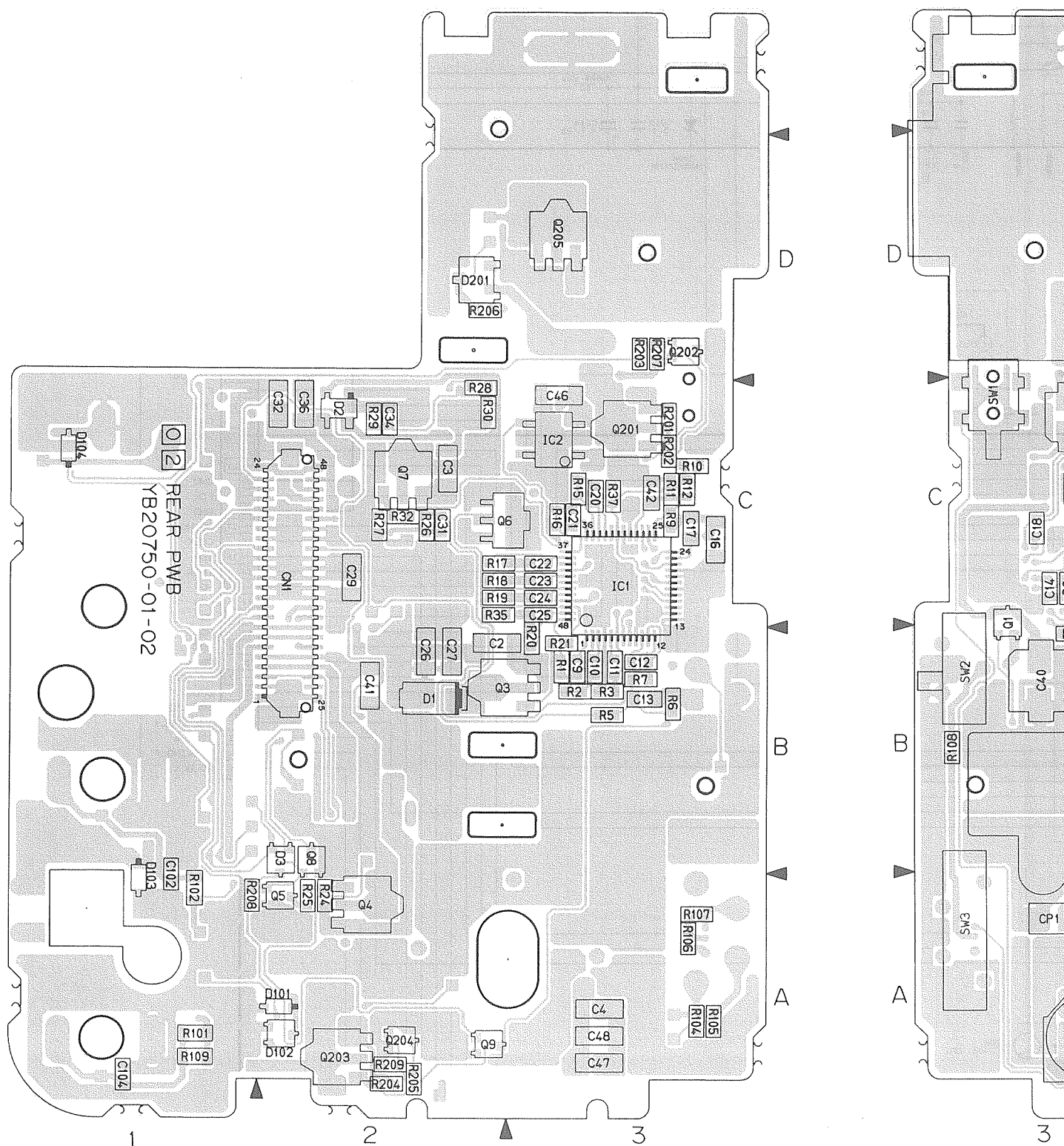
4.12 REAR SCHEMATIC DIAGRAM



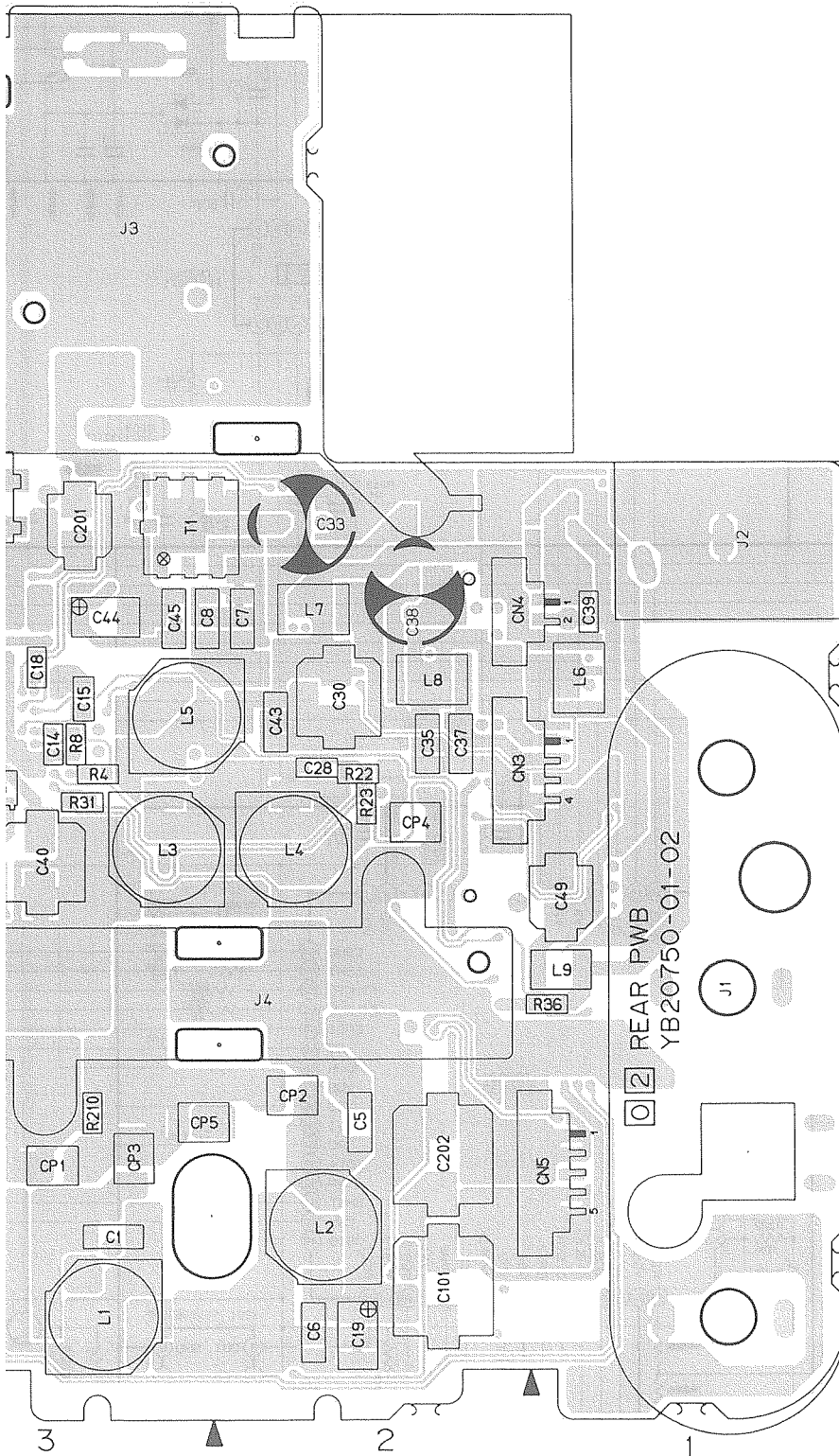
REF. NO	MODELS			REF. NO	MODELS		
	GR-AX260EG	GR-AX360EG	GR-AX460EG		GR-AX260EG	GR-AX360EG	GR-AX460EG
CP5	OPEN	USED	OPEN	C201	OPEN	OPEN	USED
R104	OPEN	OPEN	USED	Q201	OPEN	OPEN	USED
R105	OPEN	OPEN	USED	Q202	OPEN	OPEN	USED
R106	0R	0R	1.5K	Q205	OPEN	OPEN	USED
R108	OPEN	OPEN	USED	CP1	OPEN	OPEN	USED
R201	OPEN	OPEN	USED	CN4	OPEN	OPEN	USED
R202	OPEN	OPEN	USED	SW2	OPEN	OPEN	USED
R203	OPEN	OPEN	USED	SW3	OPEN	OPEN	USED



FOIL SIDE (B)



COMPONENT SIDE (A)



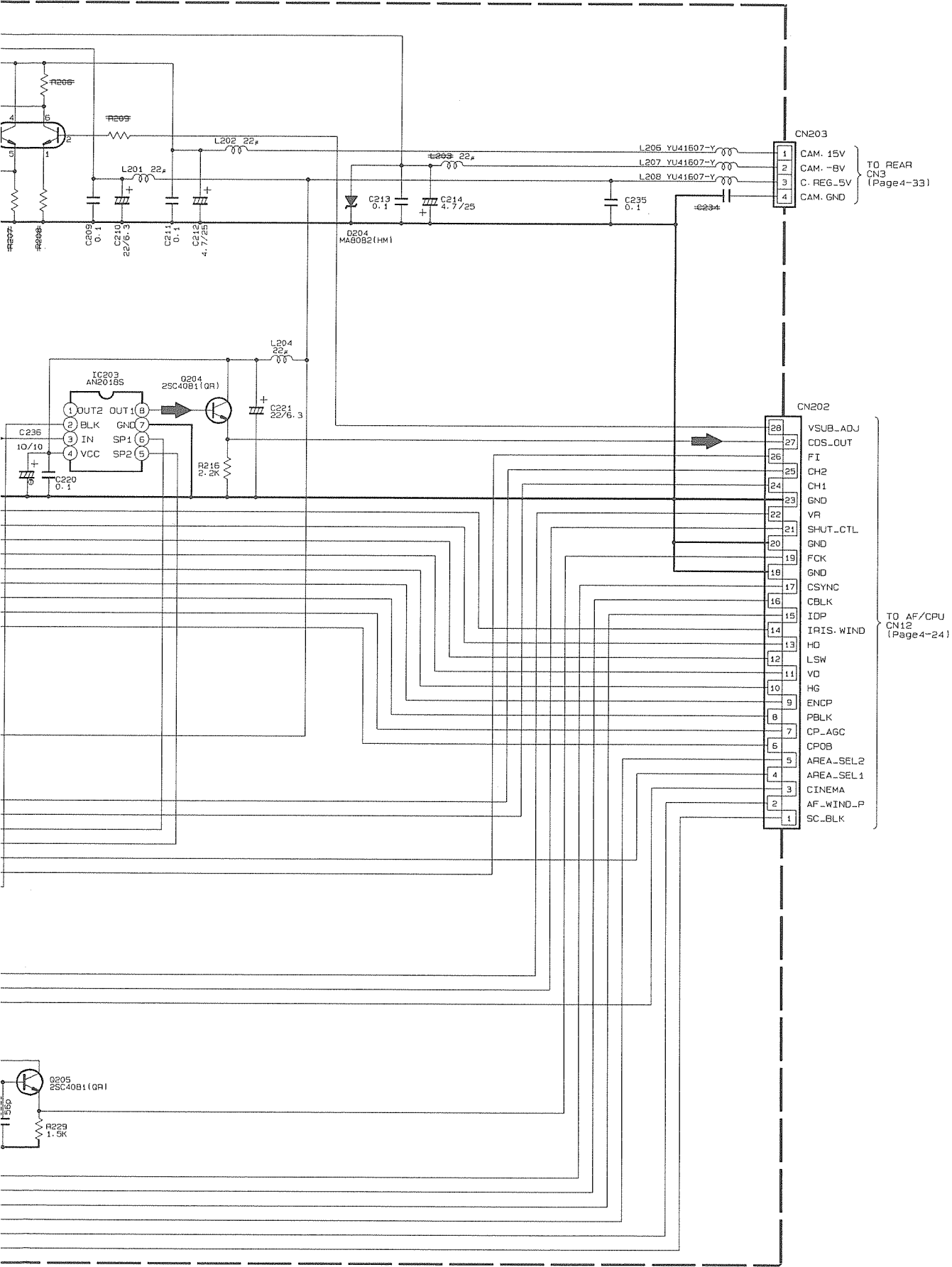
COMPONENT PARTS LOCATION GUIDE

REF.No.	LOCATION			REF.No.	LOCATION		
CAPACITOR				L7	A	C	2C
C1	A	C	3A	L8	A	C	2C
C2	B	C	2B	L9	A	C	1B
C3	B	C	2C	TRANSISTOR			
C4	B	C	3A	Q1	A	C	3C
C5	A	C	2A	Q3	B	C	2B
C6	A	C	2A	Q4	B	C	2A
C7	A	C	2C	Q5	B	C	2A
C8	A	C	3C	Q6	B	C	2C
C9	B	C	3B	Q7	B	C	2C
C10	B	C	3B	Q8	B	C	2B
C11	B	C	3B	Q9	B	C	2A
C12	B	C	3B	Q201	B	C	3C
C13	B	C	3B	Q202	B	C	3D
C14	A	C	3C	Q203	B	C	2A
C15	A	C	3C	Q204	B	C	2A
C16	B	C	3C	Q205	B	C	3D
C17	B	C	3C	RESISTOR			
C18	A	C	3C	R1	B	C	3B
C19	A	C	2A	R2	B	C	3B
C20	B	C	3C	R3	B	C	3B
C21	B	C	3C	R4	A	C	3C
C22	B	C	3C	R5	B	C	3B
C23	B	C	3C	R6	B	C	3B
C24	B	C	3C	R7	B	C	3B
C25	B	C	3C	R8	A	C	3C
C26	B	C	2B	R9	B	C	3C
C27	B	C	2B	R10	B	C	3C
C28	A	C	2C	R11	B	C	3C
C29	B	C	2C	R12	B	C	3C
C30	A	C	2C	R15	B	C	3C
C31	B	C	2C	R16	B	C	3C
C32	B	C	2C	R17	B	C	2C
C33	A	D	2C	R18	B	C	2C
C34	B	C	2C	R19	B	C	2C
C35	A	C	2C	R20	B	C	3B
C36	B	C	2C	R21	B	C	3B
C37	A	C	2C	R22	A	C	2C
C38	A	D	2C	R23	A	C	2B
C39	A	C	1C	R24	B	C	2A
C40	A	C	3B	R25	B	C	2A
C41	B	C	2B	R26	B	C	2C
C42	B	C	3C	R27	B	C	2C
C43	A	C	2C	R28	B	C	2C
C44	A	C	3C	R29	B	C	2C
C45	A	C	3C	R30	B	C	2C
C46	B	C	3C	R31	A	C	3B
C47	B	C	3A	R32	B	C	2C
C48	B	C	3A	R35	B	C	2C
C49	A	C	1B	R36	A	C	1B
C101	A	C	2A	R37	B	C	3C
C102	B	C	1A	R101	B	C	1A
C104	B	C	1A	R102	B	C	1A
C201	A	C	3C	R104	B	C	3A
C202	A	C	2A	R105	B	C	3A
CONNECTOR				R106	B	C	3A
CN1	B	C	2B	R107	B	C	3A
CN3	A	C	1C	R108	A	C	3B
CN4	A	C	1C	R109	B	C	1A
CN5	A	C	1A	R201	B	C	3C
CP				R202	B	C	3C
CP1	A	C	3A	R203	B	C	3D
CP2	A	C	2B	R204	B	C	2A
CP3	A	C	3A	R205	B	C	2A
CP4	A	C	2B	R206	B	C	2D
CP5	A	C	3A	R207	B	C	3D
DIODE				R208	B	C	1A
D1	B	C	2B	R209	B	C	2A
D2	B	C	2C	R210	A	C	3A
D3	B	C	2B	SWITCH			
D101	B	C	2A	SW1	A	C	3C
D102	B	C	2A	SW2	A	D	3B
D103	B	C	1A	SW3	A	D	3A
D104	B	C	1C	SW TRANS			
D201	B	C	2D	T1	A	C	3C
IC							
IC1	B	C	3C				
IC2	B	C	3C				
COIL							
L1	A	C	3A				
L2	A	C	2A				
L3	A	C	3B				
L4	A	C	2B				
L5	A	C	3C				
L6	A	C	1C				

NOTE



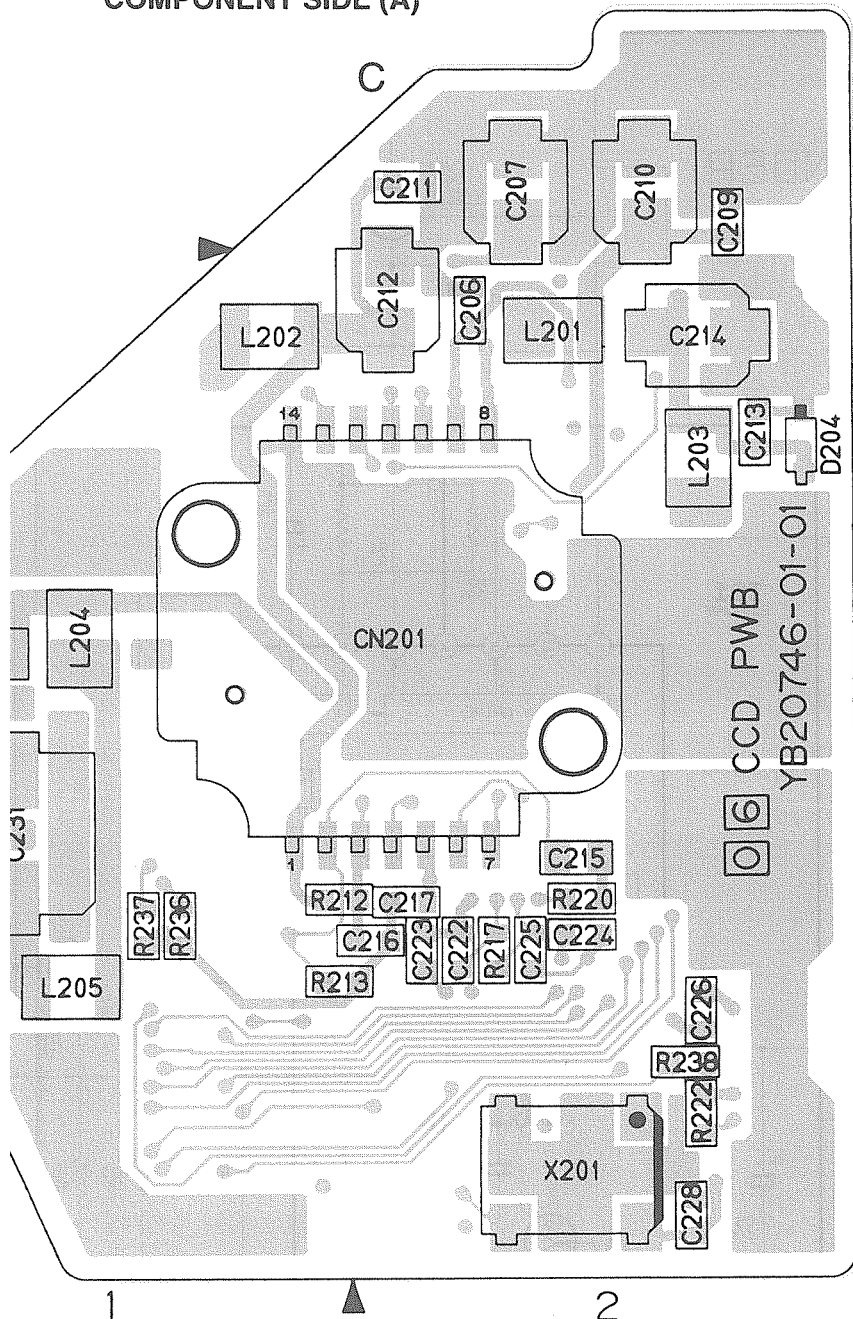
NOTE : A DC-DC converter is included in the IC of this CCD circuit. Use ample care when checking the voltages. Even a brief shorting of the pins can destroy the IC.



-CCD-



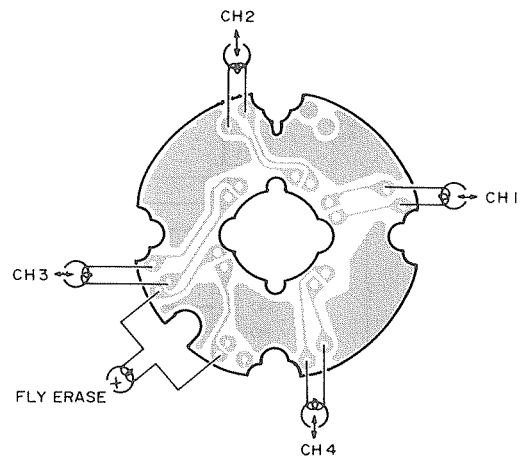
COMPONENT SIDE (A)



COMPONENT PARTS LOCATION GUIDE

REF.No.				LOCATION				REF.No.				LOCATION			
CAPACITOR								TRANSISTOR							
C201	B	C	2B	Q201	B	C	2B								
C202	B	C	1B	Q202	B	C	2B								
C203	B	C	2B	Q203	B	C	2B								
C204	B	C	2B	Q204	B	C	1B								
C205	B	C	2B	Q205	B	C	1A								
C206	A	C	2B	RESISTOR											
C207	A	C	2C												
C208	B	C	2C	R201	B	C	2B								
C209	A	C	2C	R202	B	C	2B								
C210	A	C	2C	R203	B	C	2B								
C211	A	C	2C	R204	B	C	2B								
C212	A	C	2B	R205	B	C	2B								
C213	A	C	2B	R206	B	C	2C								
C214	A	C	2B	R207	B	C	2C								
C215	A	C	2A	R208	B	C	1B								
C216	A	C	2A	R209	B	C	1B								
C217	A	C	2A	R212	A	C	1A								
C218	B	C	1B	R213	A	C	1A								
C219	B	C	2B	R214	B	C	1B								
C220	B	C	2B	R215	B	C	2B								
C221	A	C	1B	R216	B	C	1B								
C222	A	C	2A	R217	A	C	2A								
C223	A	C	2A	R218	B	C	2A								
C224	A	C	2A	R219	B	C	2A								
C225	A	C	2A	R220	A	C	2A								
C226	A	C	2A	R221	B	C	2A								
C227	B	C	2A	R222	A	C	2A								
C228	A	C	2A	R223	B	C	2A								
C229	B	C	2A	R224	B	C	2A								
C230	B	C	1A	R225	B	C	2A								
C231	A	C	1A	R226	B	C	2A								
C232	B	C	1A	R227	B	C	2A								
C233	B	C	1A	R228	B	C	2A								
C234	B	C	1B	R229	B	C	1A								
C235	B	C	1B	R230	B	C	2B								
C236	B	C	2B	R231	B	C	1A								
DIODE				R232	B	C	1B								
				R233	B	C	1B								
D201	B	C	2B	R234	B	C	1A								
D202	B	C	2C	R235	B	C	1A								
D203	B	C	2B	R236	A	C	1A								
D204	A	C	2B	R237	A	C	1A								
IC				R238	A	C	2A								
COIL				CONNECTOR											
				CN201	A	C	2B								
IC201	B	C	2A	CN202	B	C	1A								
IC203	B	C	2B	CN203	B	C	1B								
TEST POINT															
				TP201	B	C	2C								
L201	A	C	2B												
L202	A	C	1B												
L203	A	C	2B												
L204	A	C	1B												
L205	A	C	1A												
L206	B	C	1A												
L207	B	C	1B												
L208	B	C	1B												

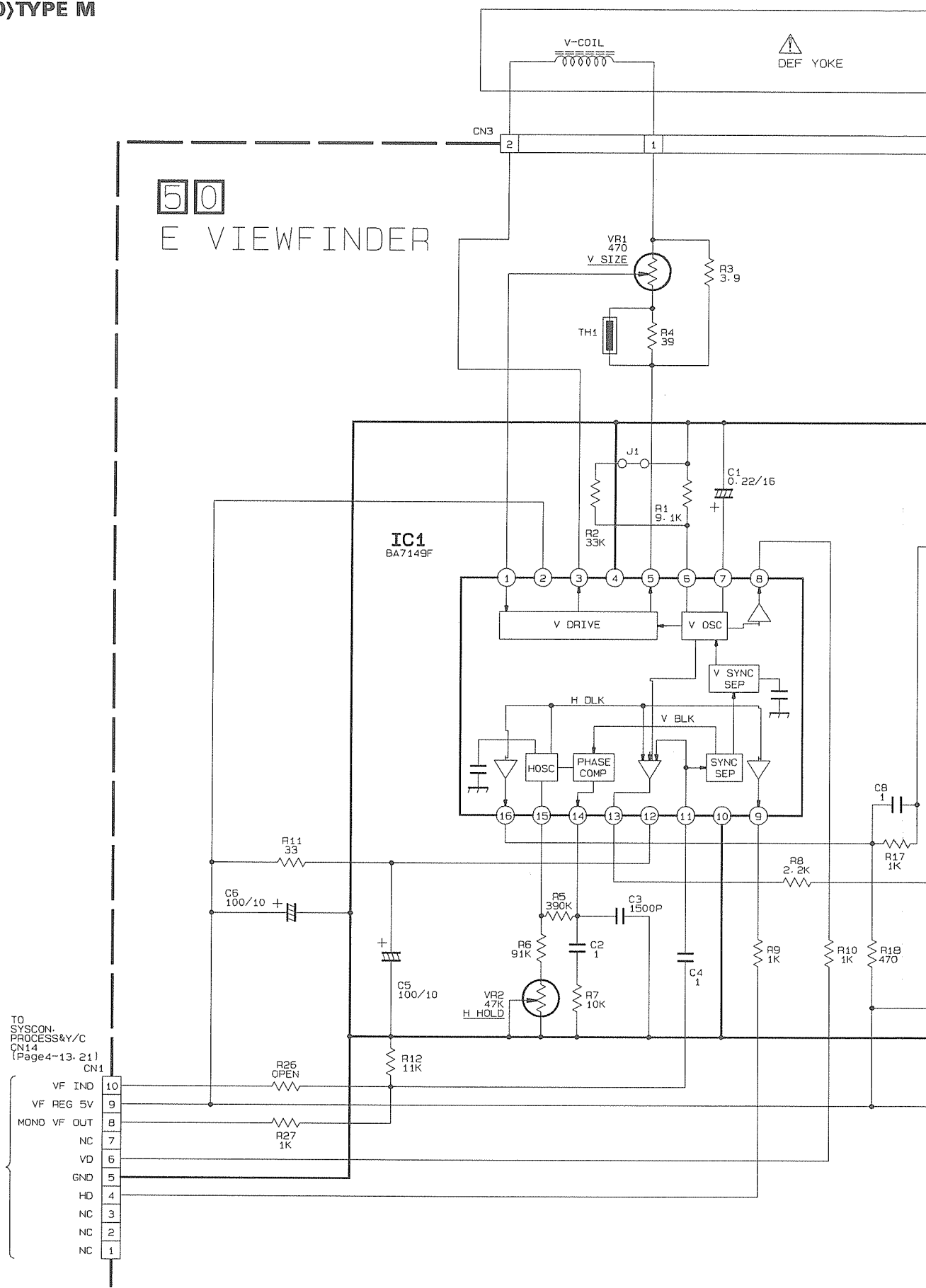
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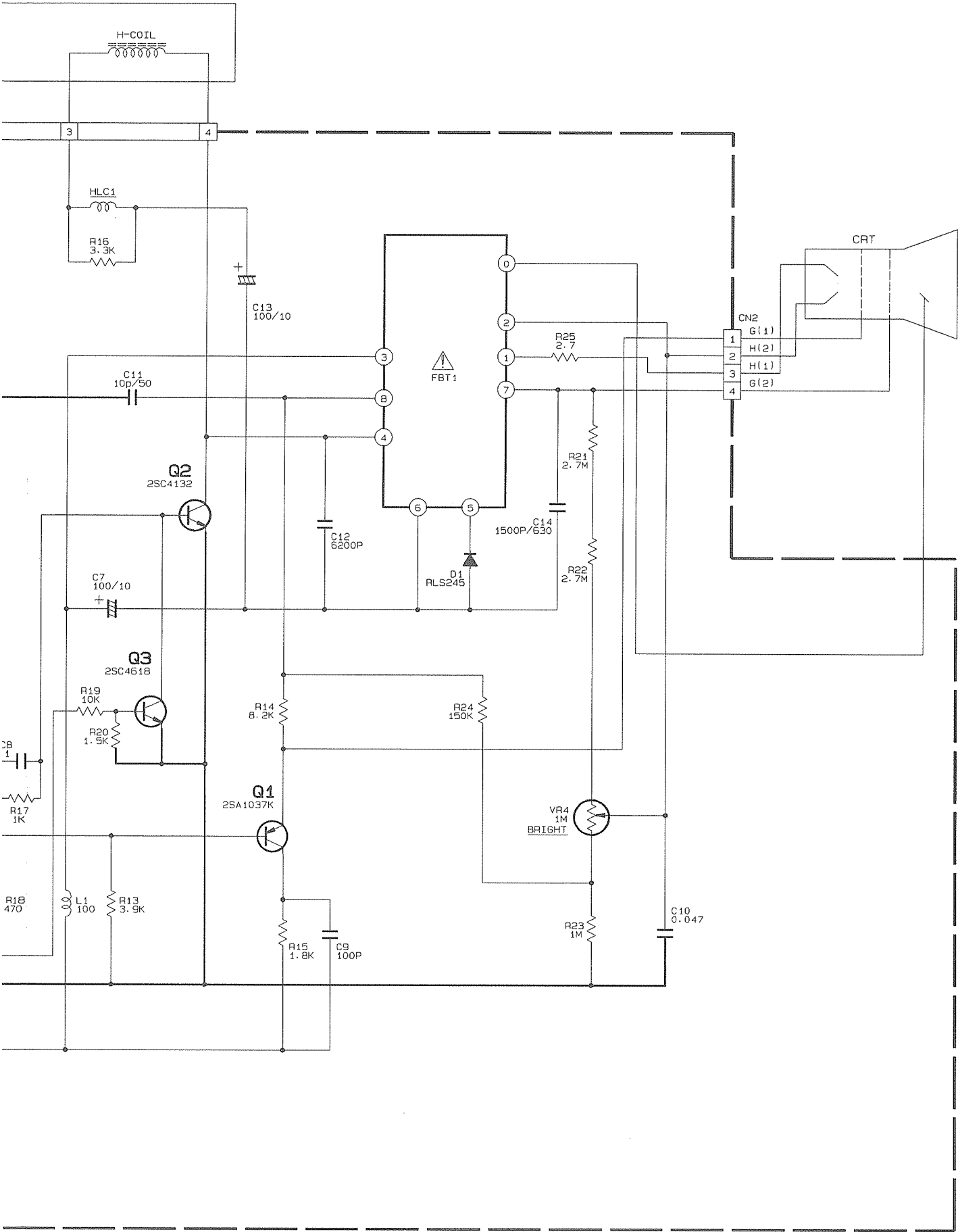
4 0 UPPER DRUM PWB

4.16 ELECTRONIC VIEWFINDER SCHEMATIC DIAGRAM (YQ32236C) [for AX260EG/AX40

(50)TYPE M

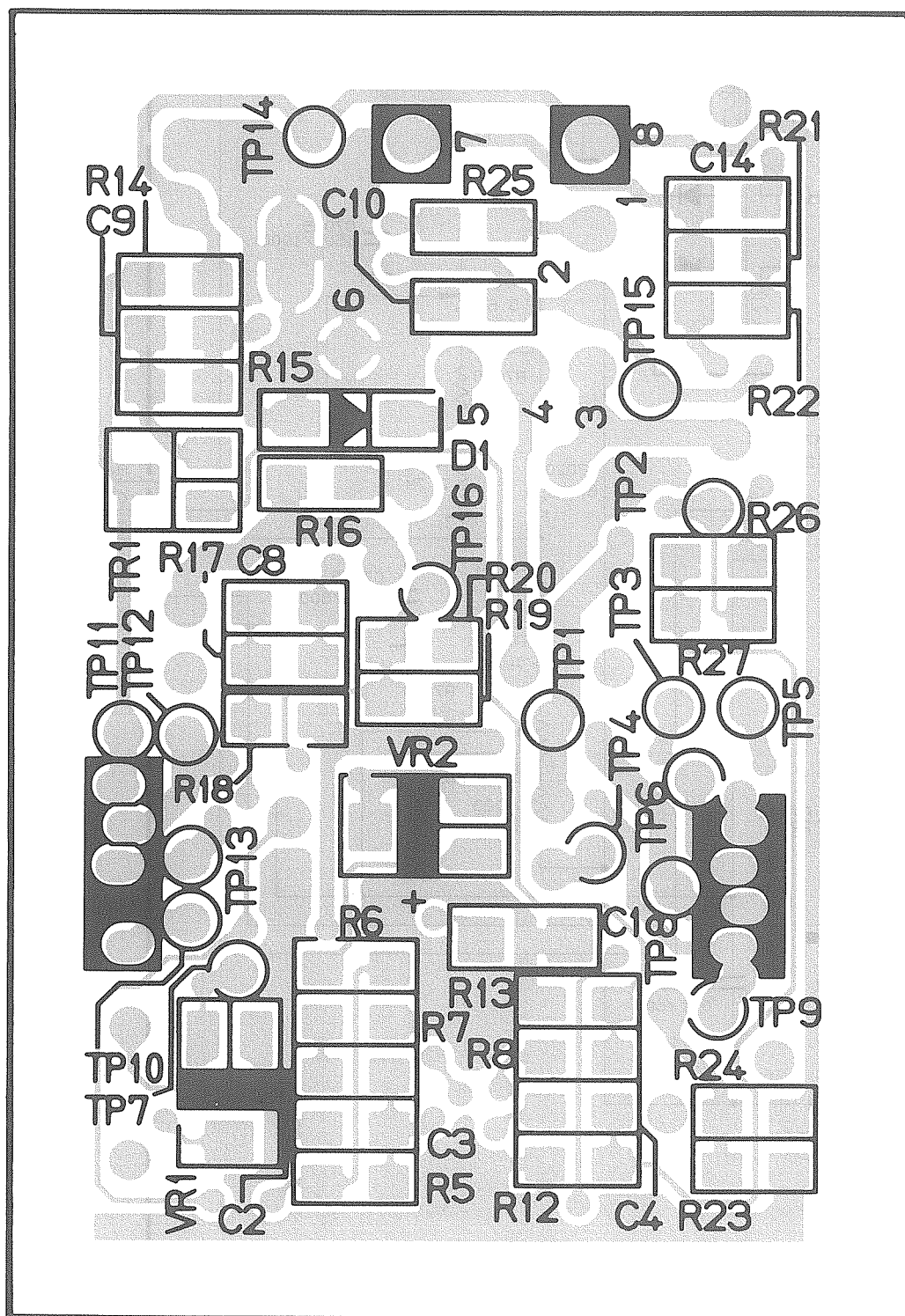


'AX460EG]

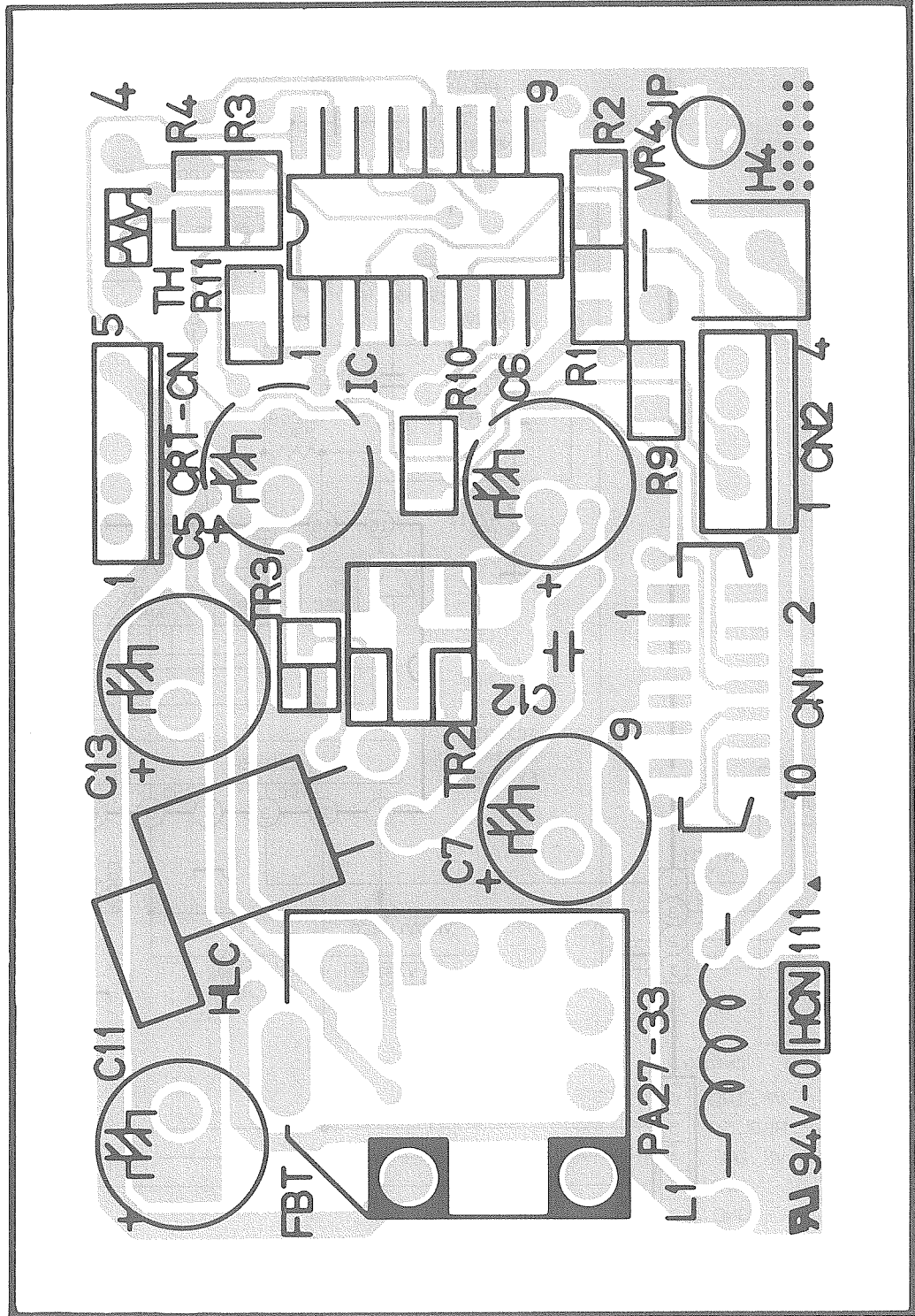


4.17 ELECTRONIC VIEWFINDER CIRCUIT BOARD (TYPE M) [for AX260EG/AX460EG]

FOIL SIDE (B)

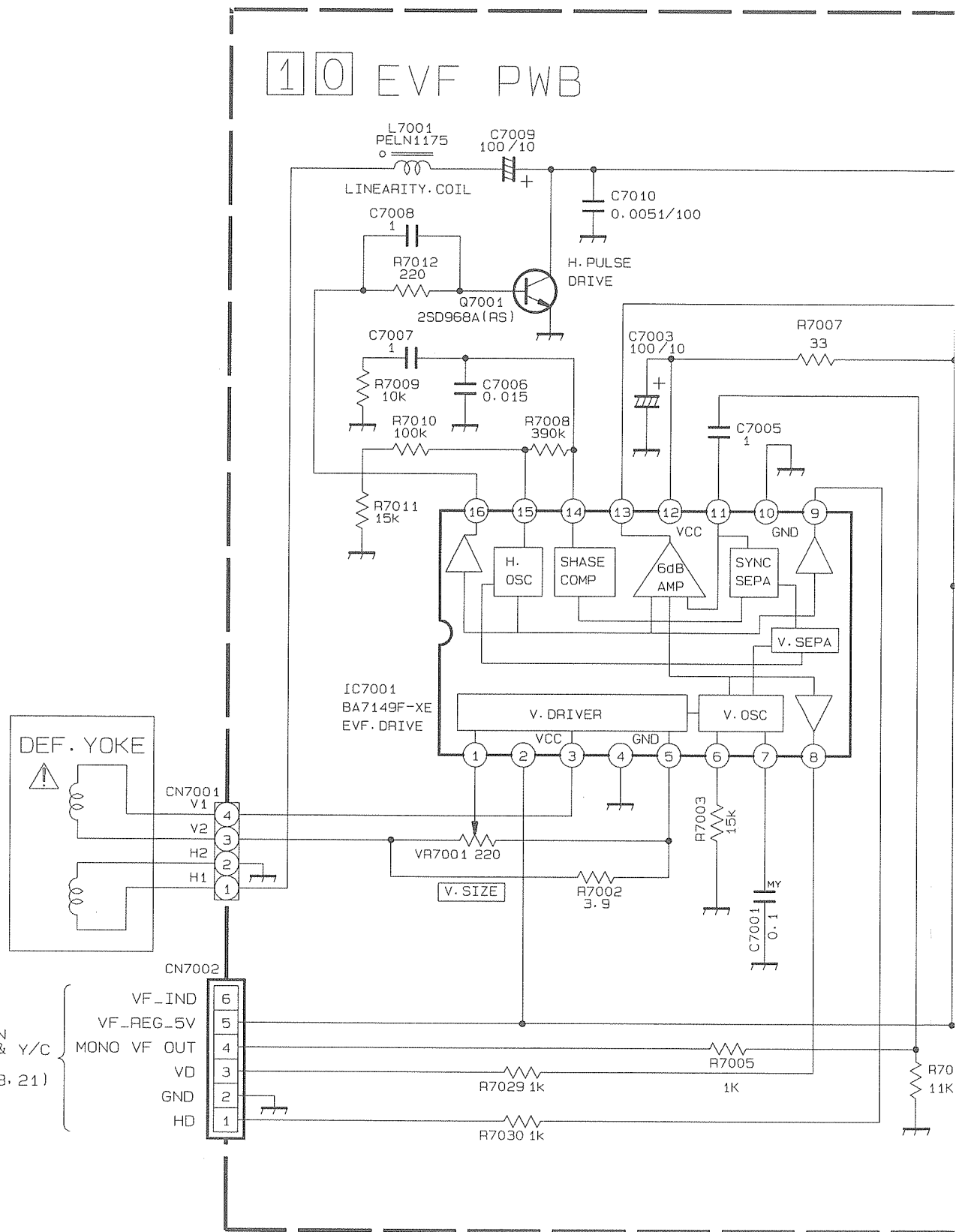


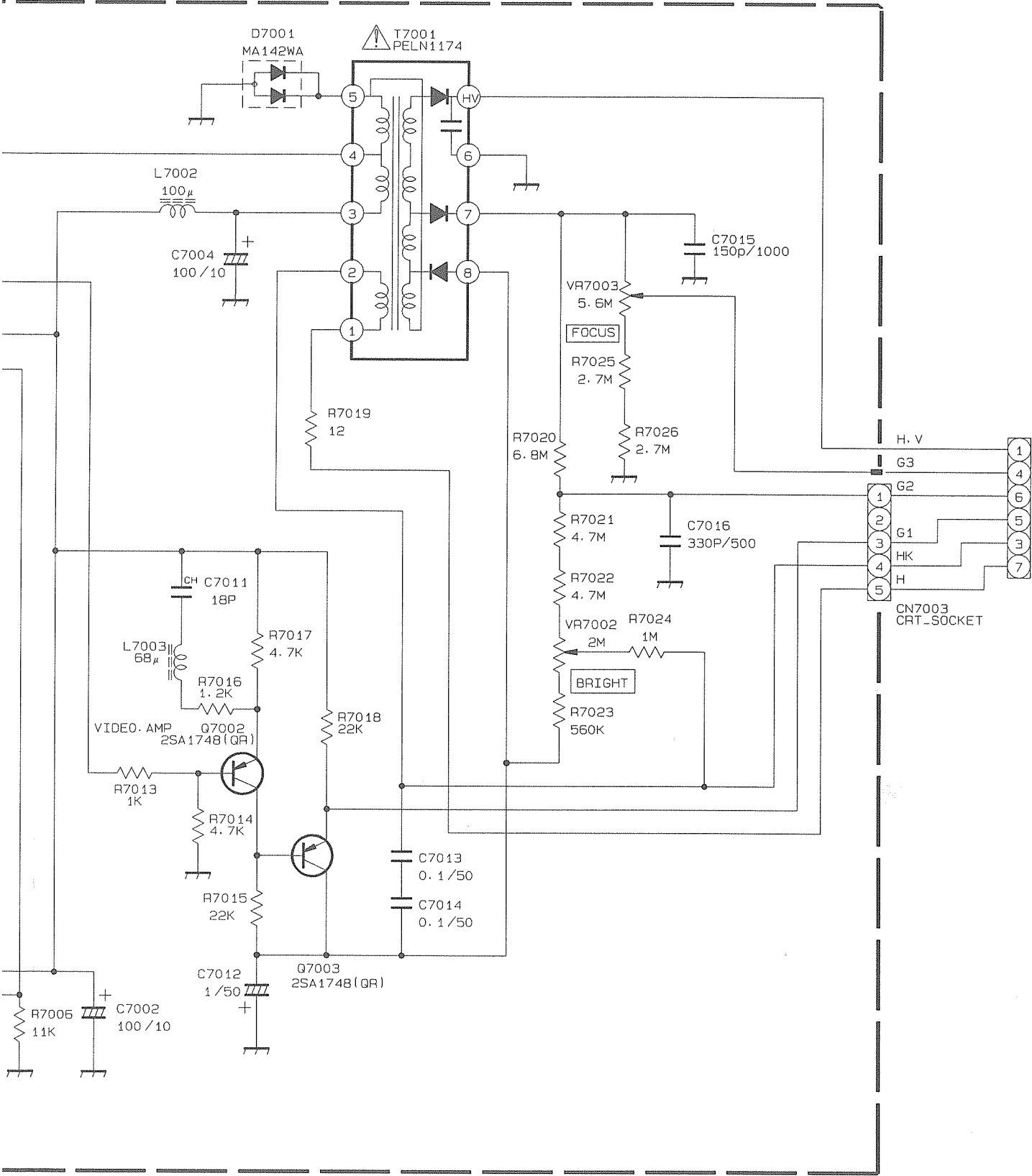
COMPONENT SIDE (A)



4.18 ELECTRONIC VIEWFINDER SCHEMATIC DIAGRAM (YQ32237C) [for AX260EG/AX4

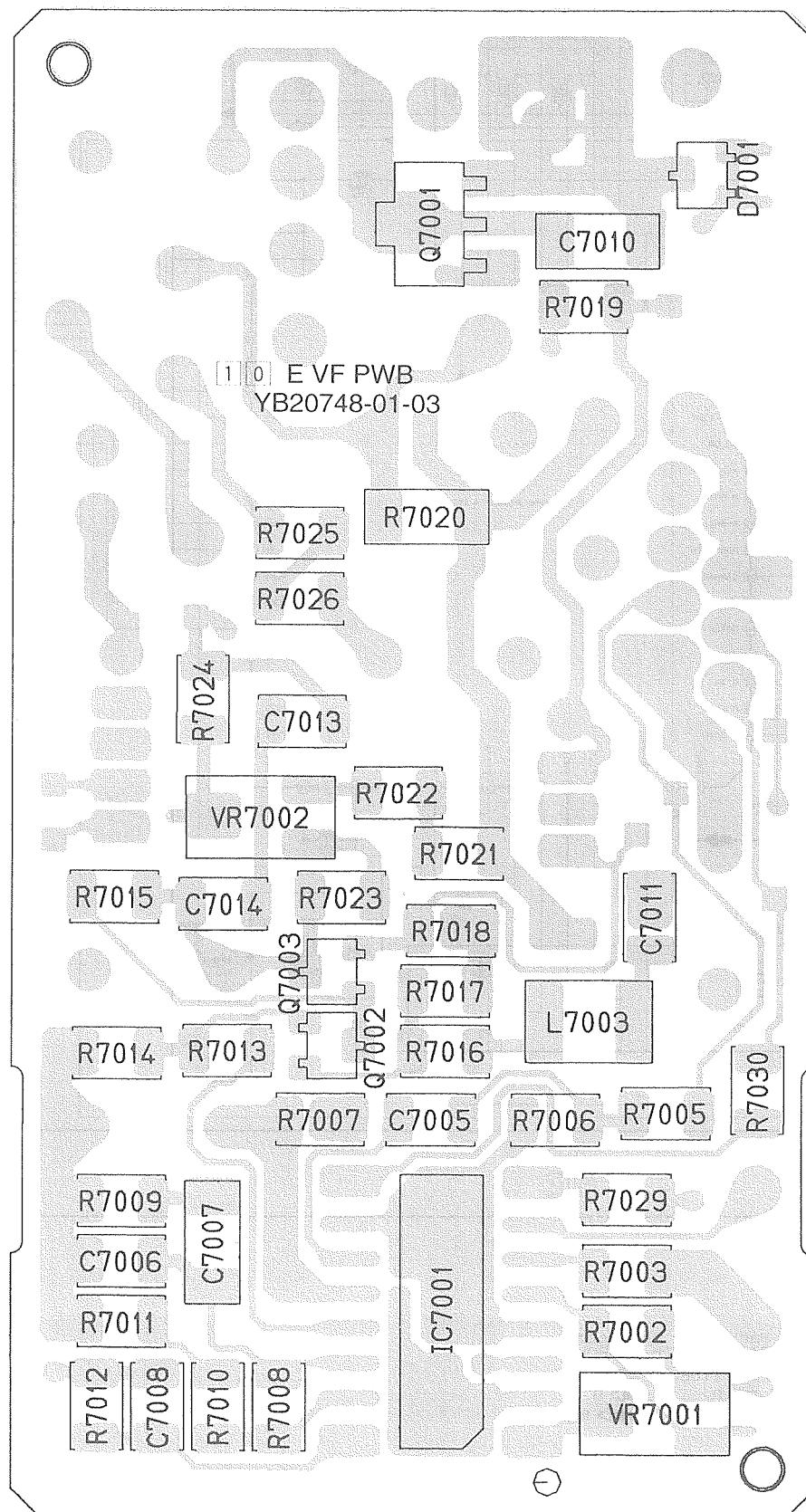
(10)TYPE T



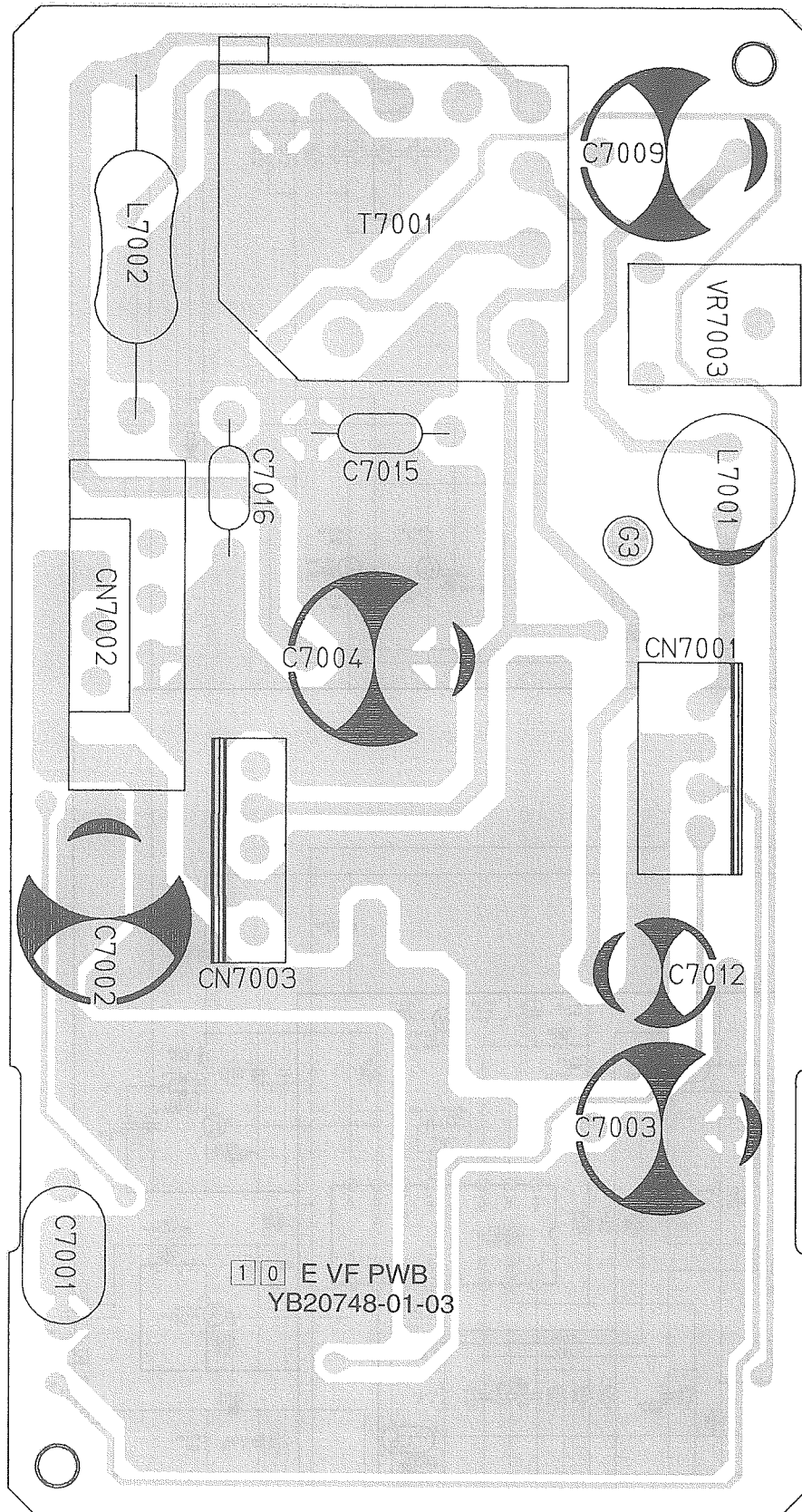


4.19 ELECTRONIC VIEWFINDER CIRCUIT BOARD (TYPE T) [for AX260EG/AX460EG]

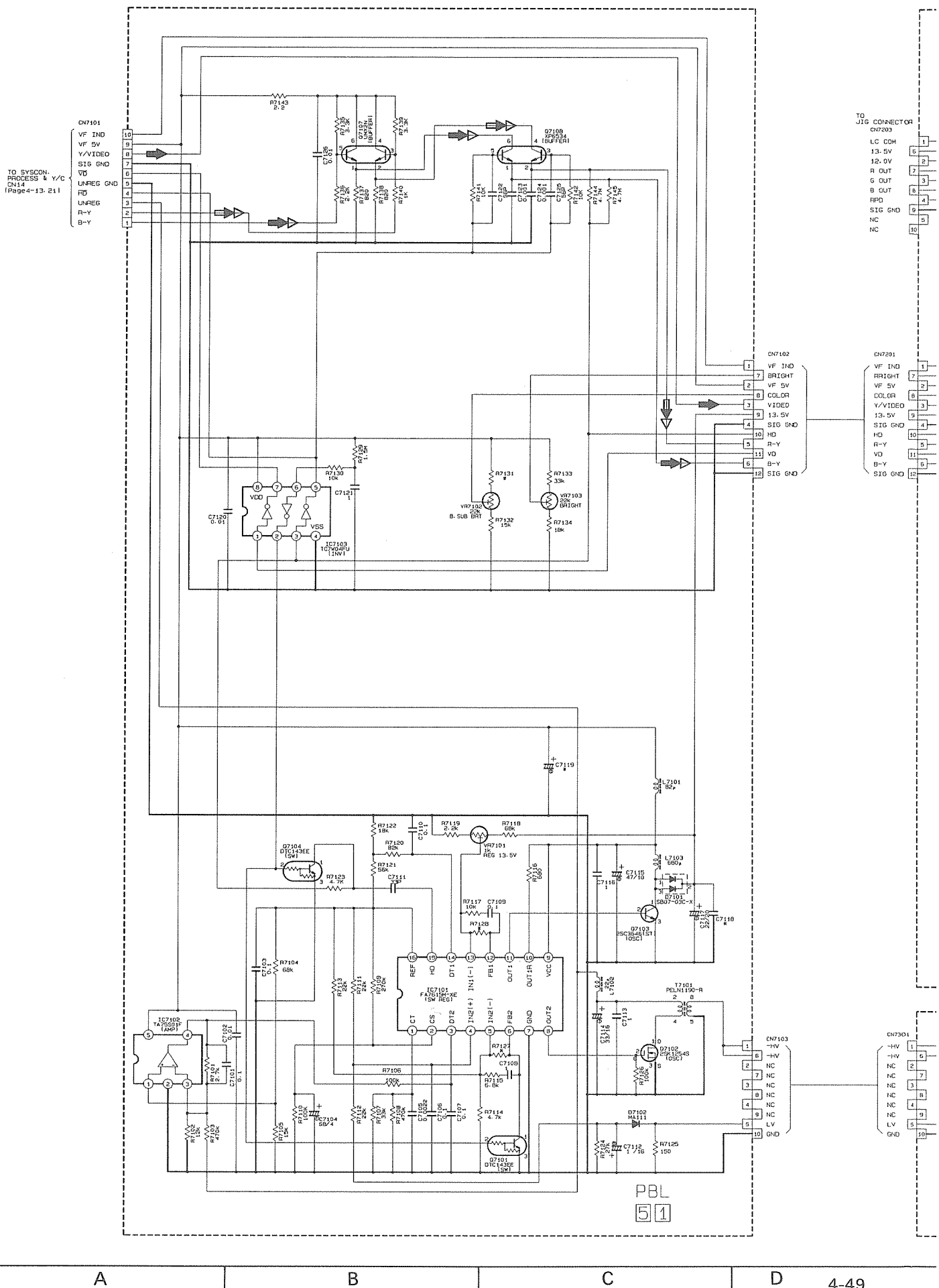
FOIL SIDE (B)

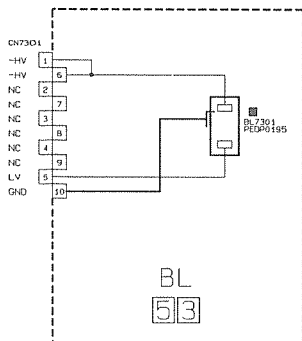
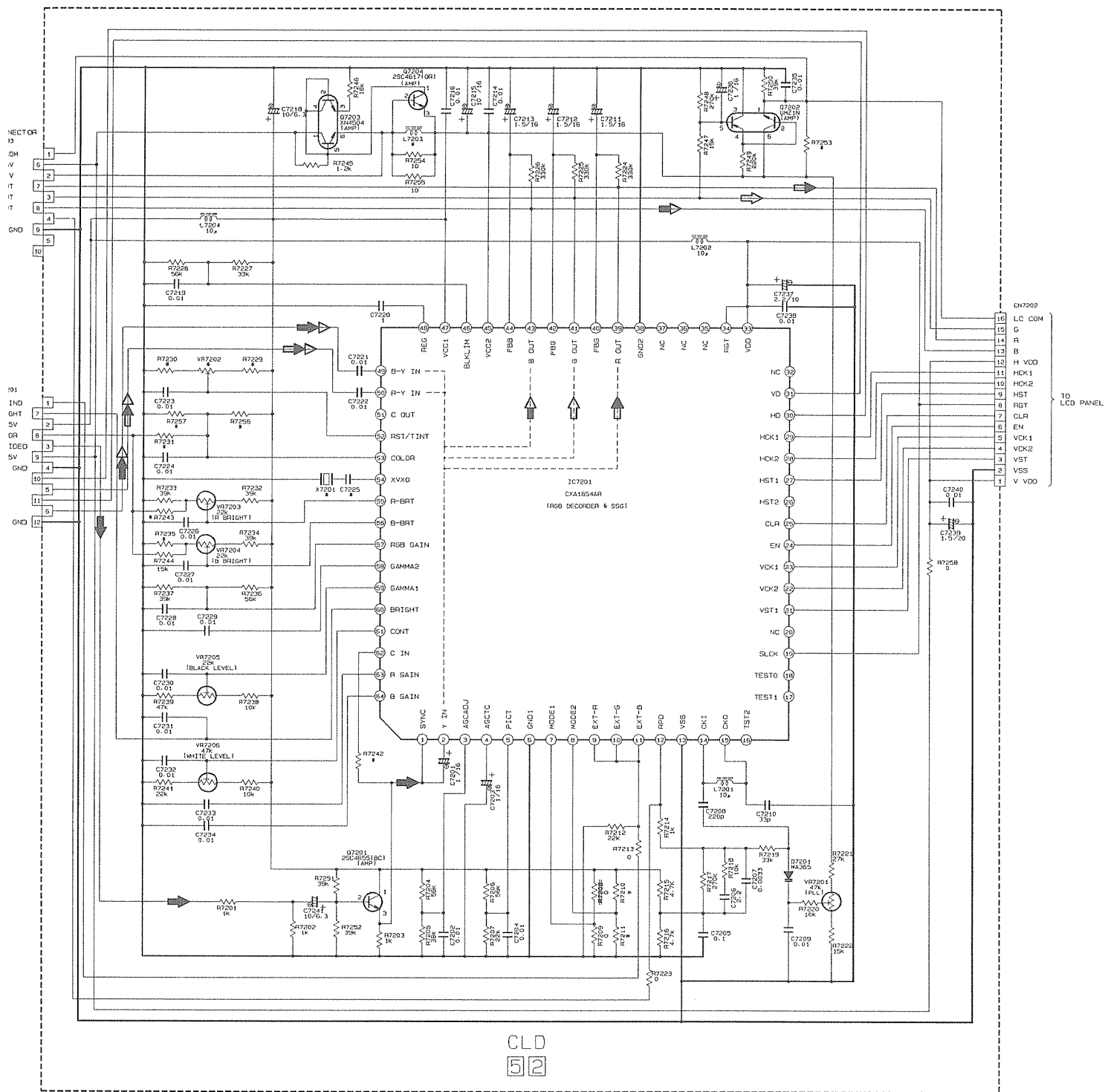


COMPONENT SIDE (A)



4.20 ELECTRONIC VIEWFINDER SCHEMATIC DIAGRAM [for AX360EG]



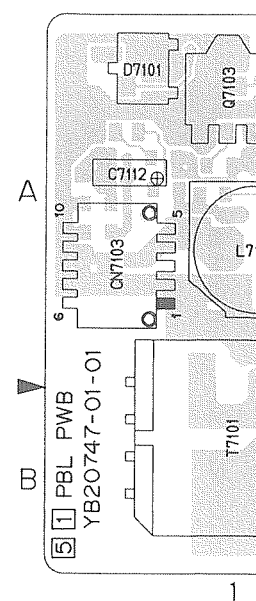


NOTES: 1. Mark(*) is not used.
2. SIGNAL PATH SYMBOLS.

VIDEO → G
R → B
R-Y → B-Y

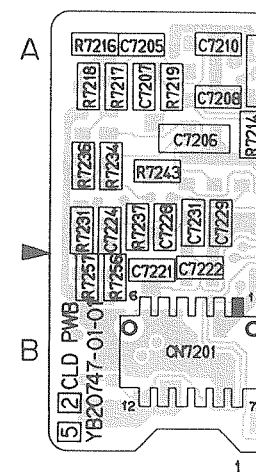
-PBL-

COM



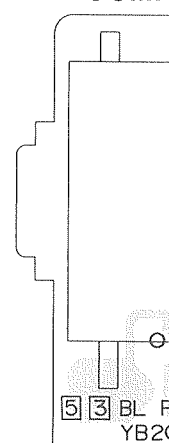
FOIL SIDE (B)

COA

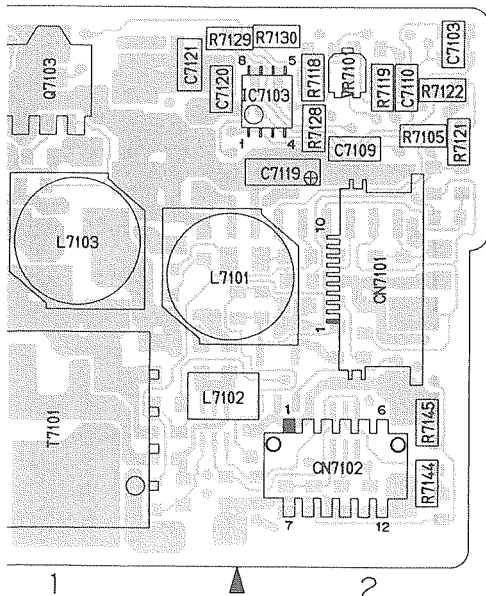


FOIL SIDE (B)

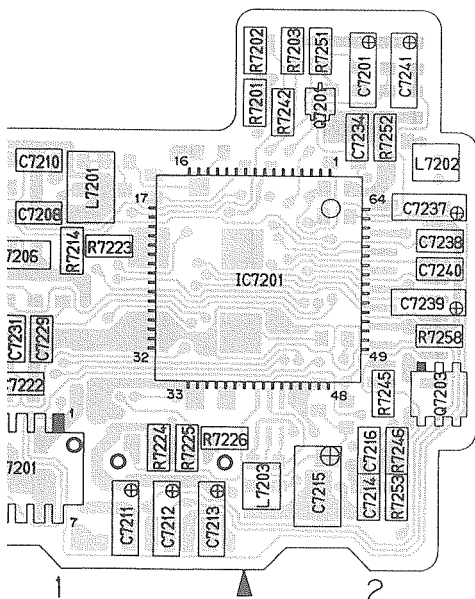
COMP



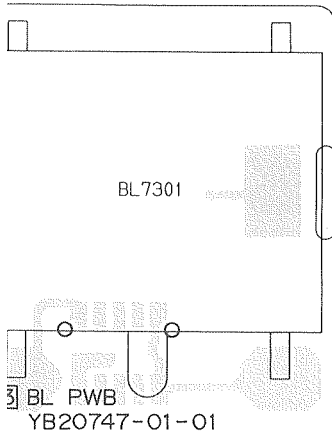
COMPONENT SIDE (A)



COMPONENT SIDE (A)



COMPONENT SIDE (A)



PARTS LOCATION GUIDE <PBL BOARD>

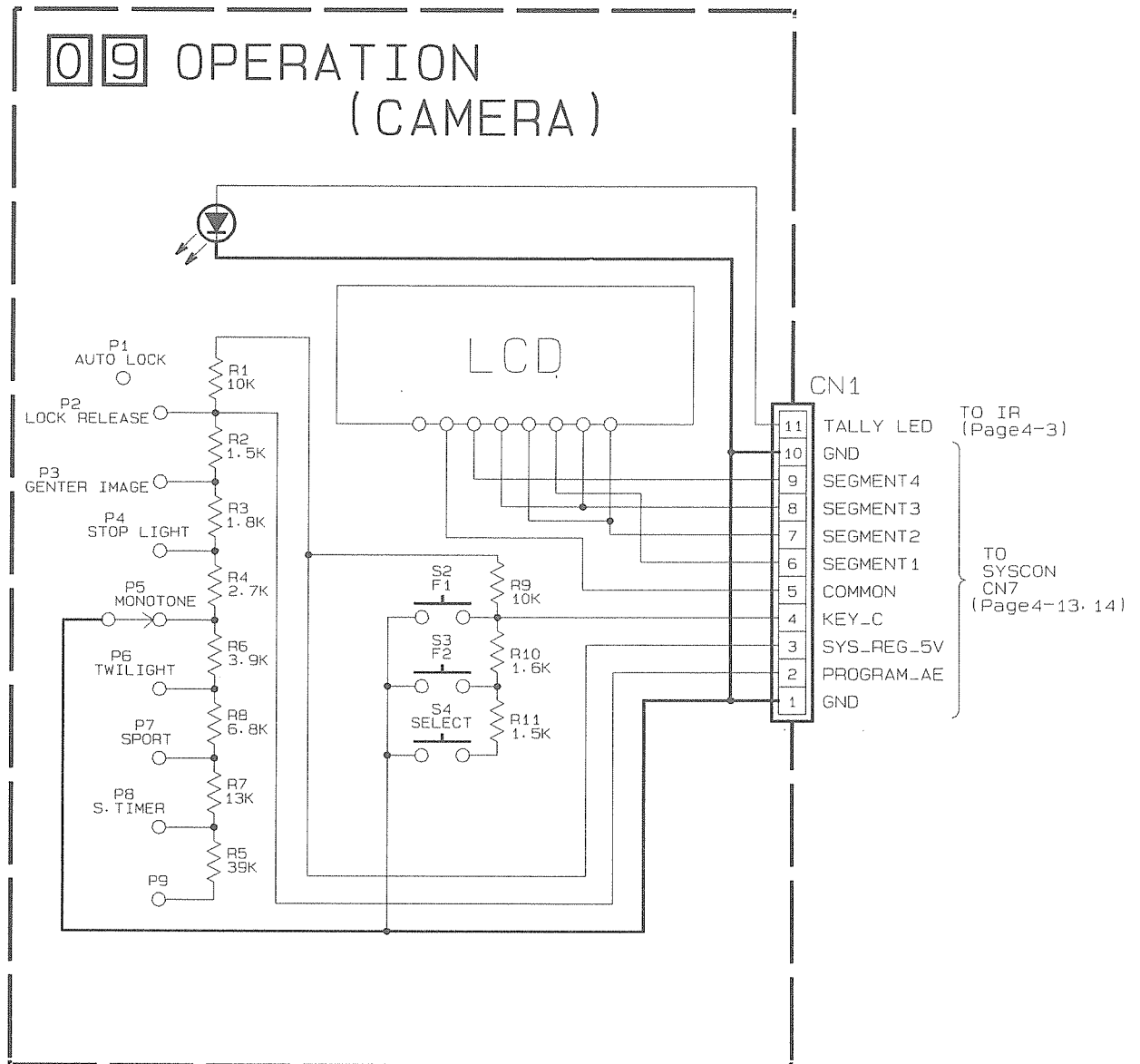
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C7101	B	C	2A	L7101	A	C	1A	R7126	B	C	1B					
C7102	B	C	2A	L7102	A	C	1B	R7127	B	C	2A					
C7103	A	C	2A	L7103	A	C	1A	R7128	A	C	2A					
C7104	B	C	2A	TRANSISTOR			R7129	A	C	1A						
C7105	B	C	2A				R7130	A	C	2A						
C7106	B	C	2A				Q7101	B	C	2A						
C7107	B	C	2A				Q7102	B	C	1B						
C7108	B	C	2A				Q7103	A	C	1A						
C7109	A	C	2A				Q7104	B	C	2A						
C7110	A	C	2A				Q7107	B	C	1B						
C7111	B	C	2A				Q7108	B	C	2B						
C7112	A	C	1A	RESISTOR			R7136	B	C	1B						
C7113	B	C	1A				R7137	B	C	2B						
C7114	B	C	1A				R7138	B	C	1B						
C7115	B	C	1A				R7139	B	C	1B						
C7116	B	C	1A				R7140	B	C	1B						
C7117	B	C	1A				R7141	B	C	2B						
C7118	B	C	1A				R7142	B	C	2B						
C7119	A	C	2A				R7143	B	C	1A						
C7120	A	C	1A				R7144	A	C	2B						
C7121	A	C	1A				R7145	A	C	2B						
C7122	B	C	2B				VOLUM									
C7123	B	C	2B									VR7101	A	C	2A	
C7124	B	C	2B									VR7102	B	C	1A	
C7125	B	C	2B									VR7103	B	C	1A	
C7126	B	C	1A									CONNECTOR				
DIODE																
							CN7102	A	C	2B						
							CN7103	A	C	1A						
IC				TRANS												
									IC7101	B	C	2A				
									IC7102	B	C	2B				
									IC7103	A	C	2A				
									R7120	B	C	2A				
									R7121	A	C	2A				
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									R7123	B	C	2A				
R7124	B	C	1A													

PARTS LOCATION GUIDE <CLD BOARD>

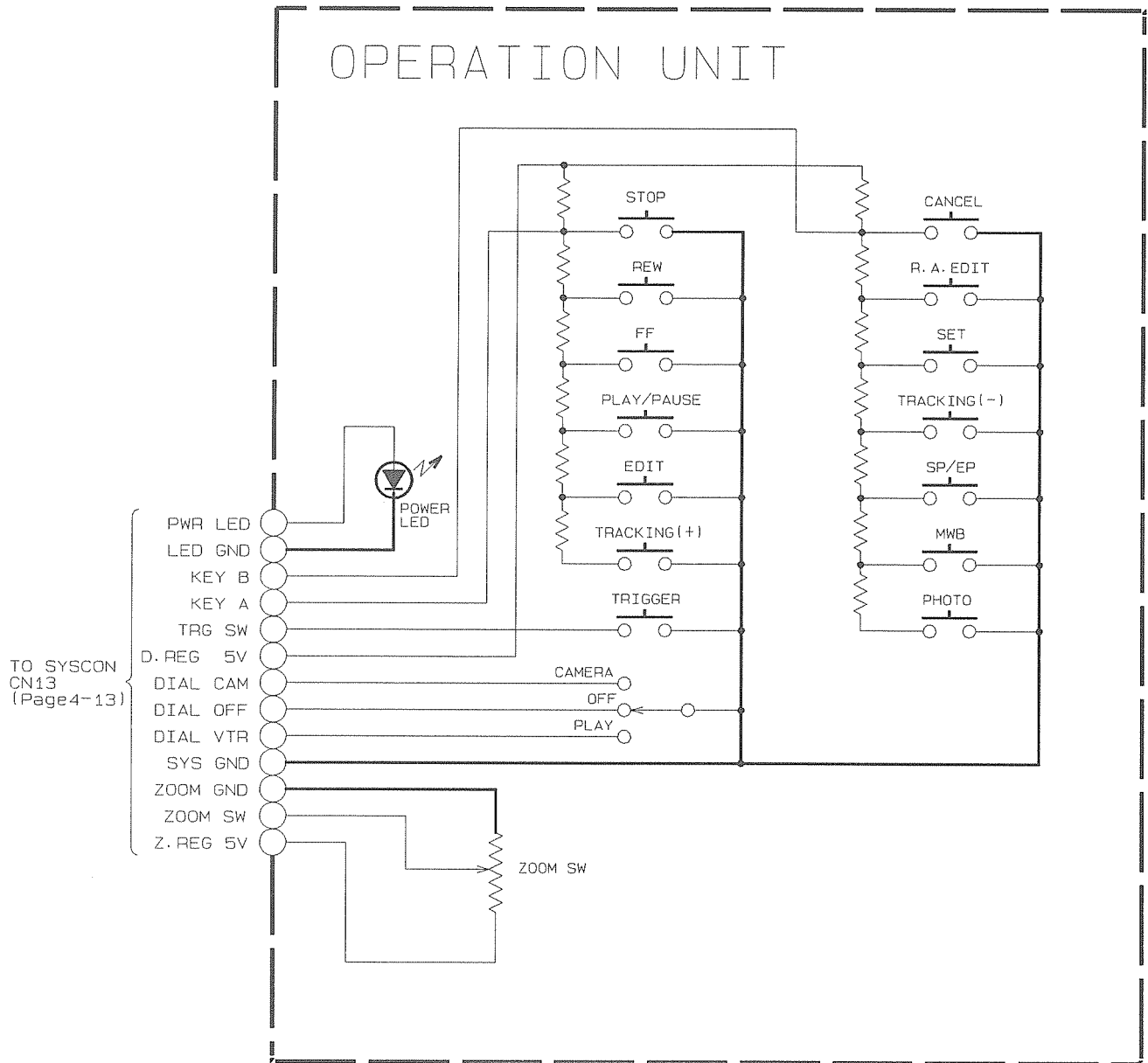
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C7202	B	C	2A		COIL	L7201	A	C	1A	R7232	B	C	1A	
C7203	B	C	2A				L7202	A	C	2A	R7233	B	C	1A
C7204	B	C	2A					L7203	A	C	2A	R7234	A	C
C7205	A	C	1A	L7204					B	C	1B	R7235	B	C
C7206	A	C	1A		TRANSISTOR	Q7201			A	C	2A	R7236	A	C
C7207	A	C	1A				Q7202		B	C	2B	R7237	A	C
C7208	A	C	1A					Q7203	A	C	2B	R7238	B	C
C7209	B	C	1A	Q7204					B	C	2B	R7239	B	C
C7210	A	C	1A		RESISTOR	R7201			A	C	2A	R7240	B	C
C7211	A	C	1B				R7202		B	C	2B	R7241	B	C
C7212	A	C	1B					R7203	A	C	2B	R7242	A	C
C7213	A	C	1B	R7204					B	C	2B	R7243	A	C
C7214	A	C	2B		R7205	B			C	2A	R7244	B	C	1A
C7215	A	C	2B			R7206	B		C	2A	R7245	A	C	2B
C7216	A	C	2B				R7207	B	C	2A	R7246	A	C	2B
C7217	B	C	1B	R7208				B	C	2A	R7247	B	C	2B
C7218	B	C	1B		R7209			B	C	2A	R7248	B	C	2B
C7219	B	C	1B			R7210		B	C	2A	R7249	B	C	2B
C7220	B	C	1B				R7211	B	C	2A	R7250	B	C	2B
C7221	A	C	1B	R7212				B	C	2A	R7251	A	C	2A
C7222	A	C	1B		R7213			B	C	2A	R7252	A	C	2A
C7223	B	C	1A			R7214		B	C	2A	R7253	A	C	2B
C7224	A	C	1A				R7215	B	C	2A	R7254	B	C	2B
C7225	B	C	2A	R7216				A	C	1A	R7255	B	C	2B
C7226	B	C	1A		R7217			A	C	1A	R7256	A	C	1B
C7227	B	C	1A			R7218		A	C	1A	R7257	A	C	1B
C7228	A	C	1A				R7219	A	C	1A	R7258	A	C	2A
C7229	A	C	1A	R7220				B	C	1A	VOLUM			
C7230	B	C	1A		R7221			B	C	1A				
C7231	A	C	1A			R7222		B	C	2A				
C7232	B	C	1A				R7223	A	C	1A				
C7233	B	C	2A	R7224				A	C	1A				
C7234	A	C	2A		R7225			A	C	1B				
C7235	B	C	2B			R7226		A	C	1B				
C7236	B	C	2B				R7227	B	C	1B				
C7237	A	C	2A	R7228				B	C	1B				
C7238	A	C	2A		R7229			B	C	1B				
C7239	A	C	2A			R7230		B	C	1B				
C7240	A	C	2A				R7231	B	C	1B				
C7241	A	C	2A	R7232				B	C	1B				
DIODE					R7233			B	C	1B				
D7201	B	C	1A			R7234		B	C	1A				
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DIODE					R7437			B	C	1A				
DIODE														

4.22 OPERATION (CAMERA) AND OPERATION UNIT SCHEMATIC DIAGRAMS

NOTE: This schematic diagram is only for reference.
Avoid replacing individual parts.
Replace the entire unit only.

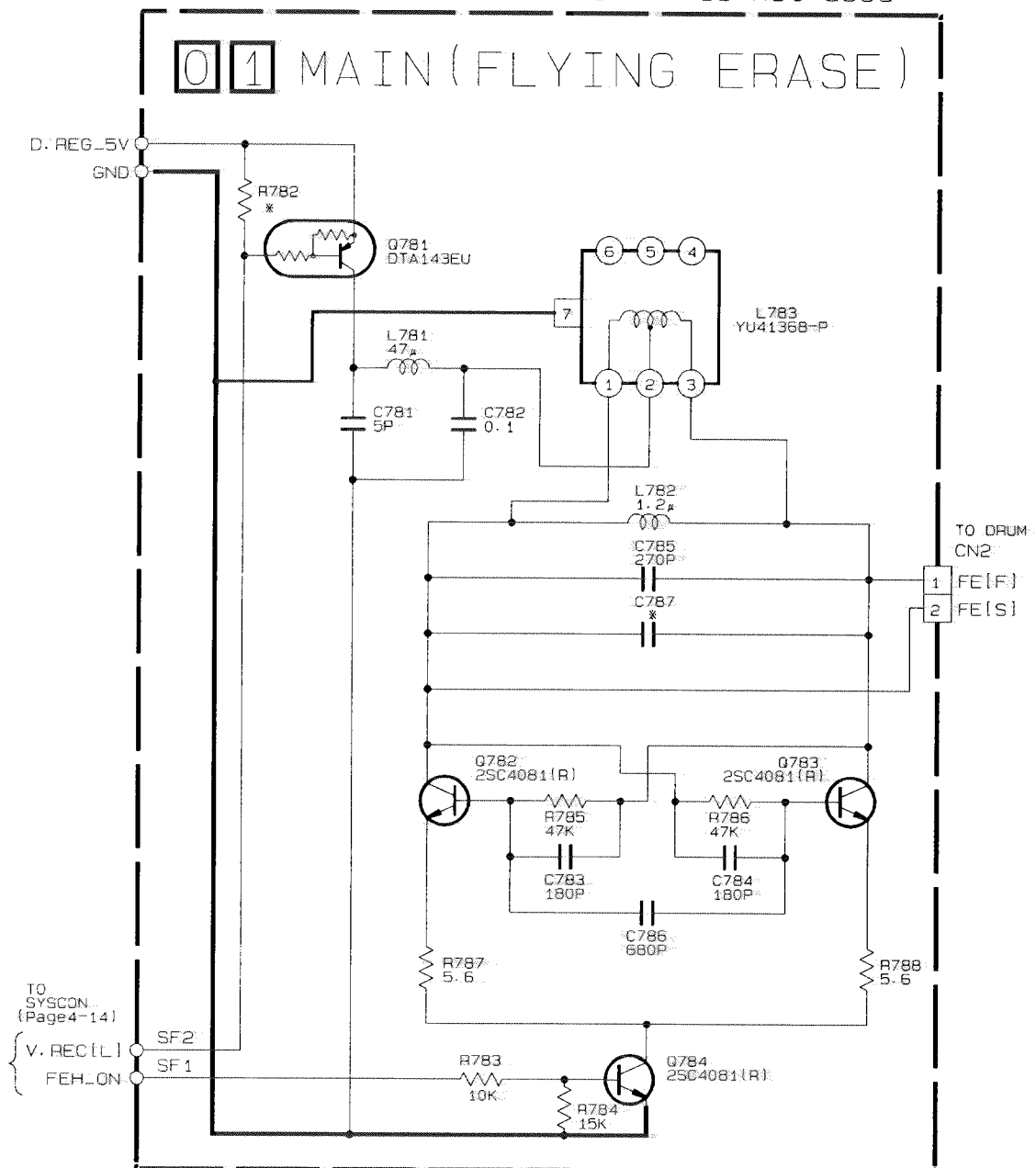


NOTE: This schematic diagram is only for reference.
Avoid replacing individual parts.
Replace the entire unit only.



4.23 FLYING ERASE SCHEMATIC DIAGRAM

NOTE: Mark(*) is not used.



4.24 VOLTAGE CHARTS

<SYSCON>

MODE / PIN	REC	PLAY
IC1		
1	4.9	4.9
2	1.5	1.5
3	1.8	1.8
4	4.9	4.9
5	5.0	5.0
6	0	0
7	4.9	4.9
8	0	0
9	2.4	2.4
10	3.0	3.0
11	4.5	4.5
12	2.5	2.5
13	0	0
14	5.0	5.0
15	0	0
16	4.9	4.9
17	5.0	5.0
18	0	0
19	0	4.9
20	0.5	0
21	0.5	0.5
22	2.9	2.9
23	0	4.9
24	0.5	0.5
25	2.4	2.4
26	2.4	2.4
27	0	0
28	2.4	2.4
29	2.4	2.4
30	0	4.9
31	0	4.9
32	0	0
33	0	0
34	0	0
35	0	4.9
36	4.9	0
37	4.9	0
38	4.9	4.9
39	4.9	0
40	0	0
41	0	0
42	0	0
43	4.9	4.9
44	0	0
45	4.9	4.9
46	4.9	4.9
47	0	0
48	0	0
49	4.9	4.9
50	4.5	2.1
51	4.9	2.0
52	0	0
53	0	0
54	0.7	0.7
55	0.8	0.7
56	4.9	4.4
57	4.9	4.7
58	0	0
59	0	0
60	2.4	2.4
61	0	0
62	4.9	4.9
63	4.9	4.9
64	4.9	4.9
65	4.9	4.9
66	0	4.9
67	4.9	4.9
68	4.9	0
69	3.6	3.6
70	0	4.9
71	0	0
72	0	0
73	0	4.9
74	0	4.9
75	4.9	0
76	0	0
77	0	0
78	4.0	4.0
79	5.0	5.0
80	4.8	4.8
81	0	0
82	-	-
83	0	0
84	4.9	4.9

MODE / PIN	REC	PLAY
85	3.1	3.1
86	0	0.4
87	4.9	4.9
88	4.9	4.9
89	0	-
90	2.4	2.4
91	2.4	2.4
92	2.4	2.4
93	0	0
94	2.6	2.5
95	2.2	2.4
96	2.4	2.4
97	2.4	2.4
98	2.4	2.4
99	0	0
100	2.4	0
101	2.0	0
102	0	0
103	0	0
104	4.9	4.9
105	4.9	4.9
106	0	0
107	-	-
108	-	-
109	2.5	2.4
110	4.4	0
111	0	0
112	0	0
113	3.5	3.6
114	2.6	2.5
115	2.4	2.4
116	4.9	4.9
117	4.9	4.9
118	4.9	4.9
119	4.8	4.9
120	4.8	4.9
121	4.8	4.8
122	4.8	4.8
123	0.4	0.4
124	2.5	2.4
125	0	0
126	0	0
127	0	0
128	0	0
IC2		
1	4.8	4.8
2	3.7	3.6
3	4.0	4.0
4	4.9	4.9
5	4.9	4.9
6	0	0
7	1.7	1.7
8	1.7	1.7
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	4.5	4.5
20	4.3	4.3
IC4		
1	0	0
2	5.0	5.0
3	0.4	0.4
4	5.0	5.0
5	5.0	5.0
6	0	0
7	0	0
8	-	-
9	-	-
10	-	-
11	-	-
12	0	0
13	0	5.0
14	0	5.0
IC5		
1	0	0
2	0	0
3	0	0
4	4.9	4.9

MODE / PIN	REC	PLAY
5	4.9	4.9
6	4.9	4.9
7	6.9	6.9
8	5.0	5.0
IC6		
1	0.4	0
2	0	7.0
3	4.9	4.9
4	0	0
5	0	0
6	4.0	4.0
7	0	0
8	0	0
Q1		
E	5.0	5.0
C	0	0
B	5.0	5.0
Q2		
E	0	0
C	0	0
B	4.9	0
Q3		
E	4.9	4.9
C	4.9	4.9
B	0	0
Q5		
E	4.9	4.9
C	4.8	0
B	0	4.9
Q6		
E	0	0
C	6.9	7.0
B	0	0
Q7		
E	6.9	6.9
C	0	-0.4
B	6.9	6.9
Q201		
E	0	0
C	0	0
B	0	3.9
Q202		
E	0	0
C	0	0
B	0.6	0
Q203		
E	4.9	4.9
C	4.8	0.4
B	0	4.9

<MDA>

MODE / PIN	REC	PLAY
IC301		
1	4.9	4.9
2	0	0
3	0	2.4
4	2.4	2.4
5	2.4	2.4
6	1.8	1.8
7	1.2	1.2
8	3.6	3.7
9	1.1	1.1
10	4.9	4.9
11	0.6	0.6
12	1.5	1.5
13	2.4	2.4
14	1.7	1.7
15	0	0
16	1.7	1.7
17	6.8	6.9
18	1.7	1.7
19	0	2.2
20	2.1	2.1
21	0	0.7
22	0.7	0.7
23	3.6	3.6
24	3.6	3.6
25	4.2	4.3
26	2.4	2.4
27	2.4	2.4
28	2.4	2.4
29	0	0
30	0	0

MODE / PIN	REC	PLAY
IC351		
1	0	0
2	2.3	2.3
3	2.1	2.1
4	1.2	1.2
5	0	0
6	1.5	1.5
7	1.1	1.1
8	0.4	0.4
9	3.9	3.9
10	0.6	0.5
11	0	0
12	0	0
13	0	0
14	4.9	4.9
15	2.4	2.4
16	2.4	2.4
17	2.4	2.4
18	4.1	4.1
19	0	0
20	0	2.4
21	2.4	2.4
22	2.4	2.4
23	2.4	2.4
24	2.4	2.4
25	2.4	2.4
26	1.7	1.6
27	1.7	1.6
28	1.7	1.6
29	0.7	0.8
30	0.7	0.8
31	0.7	0.8
32	0	0
Q351		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0.8	0.7
9	1.7	1.6
10	0.8	0.7
11	1.7	1.6
12	0.8	0.7
13	1.7	1.6
14	2.2	2.1

<AUDIO>

MODE / PIN	REC	PLAY
IC401		
1	1.7	1.7
2	0	2.3
3	0	2.3
4	2.3	2.3
5	2.3	2.3
6	2.3	2.3
7	0	0
8	1.6	1.6
9	0	0
10	2.3	2.3
11	0.8	0
12	0	4.9
13	2.3	0
14	4.2	0
15	2.3	2.3
16	0	0
17	0	0
18	0	0
19	1.7	1.7
20	0	0
21	1.7	1.7
22	4.6	4.6
23	1.7	1.7
24	4.7	4.7
IC402		
1	2.3	2.3
2	2.3	2.3
3	2.3	2.3
4	0	0
5	0	0
6	4.4	4.3
7	4.4	4.3

MODE / PIN	REC	PLAY
8	4.7	4.7
Q401		
E	4.4	4.9
C	4.2	0
B	0	4.9
Q402		
E	4.9	4.9
C	4.9	4.9
B	0	4.9
Q403		
1	-16.6	0.6
2	-10.2	0
3	-16.3	0.6
4	0	0
5	0	0
Q404		
E	4.7	4.7
C	-16.3	4.6
B	4.7	0
Q405		
E	0	0
C	4.6	0
B	0	4.9
Q408		
E	0	0
C	0	0
B	0	0

<PROCESS&Y/C>

MODE / PIN	REC	PLAY
IC501		
1	1.8	0
2	2.4	1.0
3	1.9	3.8
4	3.0	3.6
5	1.8	1.9
6	2.2	3.9
7	0	0
8	1.9	1.1
9	2.7	2.8
10	1.7	1.8
11	1.7	1.8
12	4.7	4.8
13	2.6	2.4
14	2.2	0
15	1.9	1.8
16	2.4	1.4
17	1.9	0.5
18	2.0	2.1
19	2.0	2.1
20	4.8	4.8
21	0	2.5
22	2.1	2.1
23	2.0	2.0
24	0	0
25	0	0
26	2.3	2.2
27	2.2	2.1
28	1.9	2.1
29	0	2.1
30	0	2.7
31	2.3	2.2
32	1.5	2.8
33	0	1.2
34	0	2.6
35	0	2.5
36	2.1	2.2
37	2.4	2.9
38	0	1.5
39	3.2	3.9
40	4.8	4.8
41	0.9	0.9
42	2.5	2.3
43	0	0
44	4.9	4.9
45	0	0
46	0	0
47	2.5	2.5
48	2.4	2.4
49	0	0
50	2.1	3.2
51	4.9	4.9
52	0	0
53	0	0

MODE / PIN	REC	PLAY
54	2.3	2.3
55	0	0
56	3.5	4.1
57	2.8	2.6
58	4.8	4.8
59	2.2	2.9
60	2.9	2.9
61	2.3	2.3
62	3.0	3.1
63	0.9	0.9
64	2.9	2.9
65	1.7	1.6
66	3.1	3.1
67	0.9	2.3
68	0	2.4
69	3.2	3.2
70	2.0	1.9
71	2.0	2.0
72	4.8	4.8
73	2.0	2.0
74	2.7	2.7
75	2.5	2.0
76	0	0
77	2.7	2.7
78	3.4	3.4
79	2.4	2.5
80	2.3	2.5
81	1.8	1.8
82	1.7	1.8
83	0	0
84	0	0
85	0	0
86	3.4	3.4
87	3.2	0.9
88	2.0	0.9
89	2.0	0.9
90	2.2	0.9
91	2.4	1.0
92	0.6	0.8
93	4.7	4.8
94	2.0	3.4
95	1.7	1.8
96	2.1	3.4
97	3.1	0
98	3.0	0
99	1.7	0
100	1.8	0
101	2.4	1.0
102	2.4	0
103	1.8	0
104	1.8	0.4
105	1.8	0
106	1.8	0
107	1.5	1.6
108	1.5	1.6
109	3.1	1.6
110	2.3	0
111	2.3	3.3
112	3.0	3.3
113	0.8	0
114	0.8	1.0
115	0	0
116	1.9	0
117	1.7	1.8
118	3.3	3.0
119	2.1	1.8
120	2.1	0
121	2.2	2.3
122	2.2	2.3
123	1.8	0
124	1.9	0
125	3.3	0
126	1.9	1.7
127	3.0	0
128	1.9	1.0
IC502		
1	4.2	2.1
2	0	0
3	4.4	2.1
4	3.2	3.2
5	3.2	3.2
6	0	0
7	2.0	2.0
8	4.1	4.1
9	2.8	2.8
10	0	2.8

MODE / PIN	REC	PLAY
11	0	2.3
12	0.9	2.3
13	3.4	3.4
14	3.2	3.2
15	4.8	4.8
16	3.6	3.5
IC503		
1	2.0	2.0
2	0	0
3	4.8	4.8
4	2.9	2.9
5	0	0
6	2.9	2.9
7	1.6	1.6
8	2.2	2.3
9	4.8	4.8
10	0	0
11	2.2	2.3
12	2.4	2.4
13	2.9	2.9
14	4.9	0
15	2.7	2.9
16	4.8	4.8
17	0	0
18	0	0
19	0	2.5
20	2.0	2.0
Q503		
E	2.4	2.4
C	4.8	4.8
B	3.0	3.0
Q504		
E	1.7	1.7
C	0	0
B	1.1	1.1
Q505		
E	2.8	2.8
C	0	0
B	2.2	2.3
Q506		
E	2.8	2.8
C	0	0
B	2.2	2.3
Q507		
E	0	0
C	0	0
B	0	0
Q509		
E	2.8	2.9
C	4.8	4.8
B	3.4	3.5
Q701		
E	3.5	1.5
C	4.8	4.8
B	4.2	2.1
Q704		
E	3.6	1.2
C	4.8	4.8
B	4.2	1.8
Q706		
E	0	0
C	0	2.9
B	4.9	0
Q810		
E	1.8	0.4
C	0	0
B	1.2	0
Q811		
E	1.8	0.4
C	0	0
B	1.2	0
<PRE/REC>		
MODE /		
PIN	REC	PLAY
IC601		
1	4.6	0
2	2.7	1.7
3	0.5	1.0
4	1.2	1.1
5	0	4.9
6	2.7	1.2
7	4.2	1.8
8	1.4	0
9	1.7	2.7
10	0	2.5

MODE / PIN	REC	PLAY
11	2.5	2.5
12	3.1	3.1
13	0	0
14	0	0
15	2.3	2.3
16	2.5	2.5
17	0	0
18	0	0
19	0	0
20	3.9	0
21	3.4	0.4
22	0	0
23	0	0.6
24	0	0.8
25	0	0
26	3.9	0
27	3.4	0.5
28	3.9	0
29	0	0.6
30	0	0.8
31	0	0
32	0	0
33	0	0.8
34	0	0.6
35	3.9	0
36	0	0.4
37	0	0
38	0	0
39	0	0.8
40	0	0.6
41	4.0	0
42	3.4	0.4
43	3.9	0
44	0	0
45	4.8	4.8
46	4.8	4.8
47	2.3	4.2
48	3.6	1.8
Q601		
E	3.9	0
C	3.9	0
B	3.4	0.4
Q602		
E	3.9	0
C	3.9	0
B	3.4	0.4
Q603		
E	3.9	0
C	3.9	0
B	3.4	0.5
Q604		
E	3.9	0
C	3.9	0
B	3.4	0.4
Q605		
E	4.2	2.2
C	0	0
B	3.5	1.8
Q606		
E	1.2	1.2
C	3.4	3.4
B	1.9	1.9
<FLYING ERASE>		
MODE /		
PIN	REC	PLAY
Q781		
E	4.9	0
C	4.7	0
B	0	4.9
Q782		
E	0	0.4
C	-0.4	0
B	0.6	0
Q783		
E	0	0.4
C	0	0
B	0.5	0
Q784		
E	0	0
C	0	0.4
B	0.7	0

<AF/CPU>		
MODE / PIN	REC	PLAY
IC801		
1	1.8	1.0
2	1.7	1.3
3	4.9	0.5
4	3.2	1.2
5	1.5	1.3
6	0	0
7	0	0
8	0	0
9	2.5	0
10	2.5	0
11	2.5	0
12	0	0
13	0	0
14	0	0
15	1.8	1.3
16	4.6	1.0
IC802		
1	1.9	1.0
2	1.7	1.7
3	1.8	1.8
4	4.9	0.4
5	1.7	1.8
6	1.7	1.7
7	1.4	1.0
8	1.7	1.3
9	1.7	1.7
10	1.7	0
11	0	0
12	1.7	0
13	1.7	1.7
14	1.5	1.3
IC803		
1	1.7	0
2	0	0
3	1.7	1.3
4	0	0
5	1.7	1.3
6	1.7	0
7	1.7	0
8	4.9	0.4
IC901		
1	1.5	1.0
2	1.8	1.3
3	3.2	1.3
4	0	0
5	3.5	0
6	3.1	0
7	4.9	4.9
8	5.0	5.0
9	-	0
10	5.0	5.0
11	-	-
12	0	0
13	4.9	4.9
14	0	0
15	3.1	3.1
16	0	0
17	0	0
18	4.8	4.9
19	0	0
20	0	0
21	0	0
22	4.9	0
23	0	0
24	0	0
25	2.5	0
26	0	0
27	2.4	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	1.9	0
35	5.0	5.0
36	3.8	0.4
37	0	0
38	0	0
39	0	0
40	5.0	0
41	0	0
42	-	0
43	0	0
44	0	0

MODE / PIN	REC	PLAY
45	2.5	0
46	5.0	0
47	0.4	0
48	0.4	0
49	5.0	0
50	-	0
51	0	0
52	2.6	0
53	0	0
54	1.2	0
55	1.2	0
56	5.0	0
57	0	0
58	0.9	0
59	0	0
60	5.0	5.0
61	2.3	2.3
62	4.9	4.9
63	1.5	1.6
64	0	0
65	0.4	0
66	0	0
67	0	0
68	5.0	5.0
69	3.3	3.2
70	2.7	2.7
71	0	0
72	5.0	5.0
73	0	0
74	5.0	5.0
75	4.9	4.9
76	1.8	0
77	4.6	0
78	1.0	1.1
79	1.9	0
80	0	0
IC902		
1	2.6	0
2	3.3	0
3	2.7	0
4	2.4	0
5	2.2	0
6	1.6	0
7	2.2	0
8	4.3	0
9	1.9	0
10	2.6	0
11	0	0
12	2.6	0
13	0	0
14	1.2	0.4
15	3.8	0.4
16	4.8	0.4
17	0	1.0
18	0.5	0
19	2.9	0
20	2.5	0
21	5.0	0
22	2.0	0
23	2.0	0
24	1.7	0
25	1.8	0
26	0.7	0
27	2.6	0
28	0.6	0.4
29	2.8	0
30	0	0
31	0	0
32	0	0
33	2.5	0
34	4.8	0.4
35	3.2	0
36	2.5	0
37	3.2	0
38	3.2	0
39	2.6	0
40	3.2	0
41	2.6	0
42	3.2	0
43	2.6	0
44	3.2	0
IC903		
1	5.0	5.0
2	0.6	0
3	5.0	5.0
4	0	0

MODE / PIN	REC	PLAY
5	0	0
6	4.1	4.1
7	5.0	5.0
8	5.0	5.0
IC904		
1	0	0
2	6.9	6.9
3	5.0	5.0
IC905		
1	2.4	2.4
2	2.4	2.4
3	2.4	2.4
4	0	4.9
5	1.9	3.4
6	0	2.9
7	0.9	3.8
8	0	0
9	0	0
10	0	0
11	0	0
12	2.4	2.4
13	2.3	2.3
14	0	1.8
IC906		
1	4.7	0.4
2	4.7	0.4
3	0	0
4	4.9	0
5	0	0
6	1.9	0
7	0	0
8	1.9	0
9	5.0	0
10	2.8	0
11	2.0	0
12	2.8	0
13	2.8	0
14	4.8	0.4
IC907		
1	0	0
2	4.9	0.4
3	4.9	0.4
4	0	0
5	4.7	0
6	0	0
7	4.9	0.4
8	6.8	7.0
9	1.0	0
10	0	0
11	0	0
12	1.0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	6.8	7.0
18	0	0
19	0	0
20	5.0	0
21	5.0	0
22	1.9	0.4
23	0	0
24	4.9	0.4
IC908		
1	0	0
2	4.9	0
3	4.9	0
4	0	0
5	4.7	0
6	0	0
7	4.9	0.4
8	6.8	7.0
9	2.9	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	3.0	0
17	6.9	7.0
18	0	0
19	0	0
20	5.0	0
21	0	0
22	1.9	0.4

MODE / PIN	REC	PLAY
23	5.0	0
24	4.9	0.4
IC909		
1	0	0
2	0	0
3	0	0
4	5.0	5.0
5	5.0	5.0
IC910		
1	1.2	0
2	1.9	0
3	1.9	0
4	0	0
5	1.9	0
6	1.9	0
7	1.9	0
8	4.9	0
Q805		
1	0	1.7
2	1.7	1.8
3	0	1.7
4	1.7	1.3
5	1.7	1.3
Q901		
E	0	0
C	4.7	0.4
B	0	0
Q902		
E	4.8	0.4
C	4.6	0
B	4.7	0.4
Q904		
1	0	0
2	0	0
3	0	0
4	4.2	0
5	4.2	0
Q905		
1	2.1	0
2	1.5	0.4
3	3.7	0.4
4	4.9	0.4
5	3.1	0.4
6	0	0
Q906		
1	2.4	0.4
2	1.9	0
3	2.4	0
4	4.9	0.4
5	1.9	0
6	0	0
Q907		
1	1.8	0.4
2	1.2	0
3	1.7	0.4
4	4.9	0.4
5	1.1	0
6	0	0

<REAR>

MODE / PIN	REC	PLAY
IC1		
1	4.3	4.5
2	6.1	6.2
3	6.4	6.4
4	0	0
5	1.4	1.5
6	1.2	1.2
7	1.2	1.1
8	4.9	4.9
9	0	0
10	1.8	1.8
11	0	0
12	0	0
13	6.9	0
14	0	0
15	1.8	1.7
16	1.2	1.2
17	1.5	1.6
18	6.9	6.9
19	2.4	2.4
20	6.8	6.9
21	6.9	7.0
22	5.0	0
23	0	0

MODE / PIN	REC	PLAY
24	1.2	0
25	1.2	1.2
26	1.2	0
27	1.5	2.4
28	1.7	0
29	6.9	6.9
30	0	0
31	2.4	2.4
32	0	0
33	2.4	0
34	5.1	7.0
35	6.5	6.9
36	6.9	7.0
37	6.6	6.6
38	0	0
39	6.9	7.0
40	6.5	6.9
41	2.3	0
42	0	0
43	0.7	0.7
44	6.1	6.1
45	6.9	7.0
46	5.4	6.1
47	2.4	2.4
48	6.0	6.1
IC2		
1	5.0	0
2	6.9	7.0
3	4.9	0
4	0	0
Q1		
E	6.9	6.9
C	6.9	6.9
B	0	0
Q3		
1	6.3	6.4
2	4.3	4.2
3	6.9	6.9
Q4		
1	4.2	4.9
2	4.9	0.4
3	4.9	4.9
Q5		
E	0	0
C	0	0
B	5.0	0
Q6		
1	0	0
2	6.4	6.4
3	6.9	7.0
Q7		
1	6.5	6.9
2	-5.1	0
3	6.9	6.9
Q9		
E	0	0
C	0	0
B	4.4	4.2
Q201		
1	6.1	7.1
2	6.7	0
3	6.8	7.1
Q202		
E	0	0
C	0	7.1
B	3.5	0
Q203		
1	6.2	6.3
2	6.9	7.0
3	6.9	7.0
Q204		
E	0	0
C	0	0
B	0	4.2
Q205		
1	6.0	0
2	6.0	0
3	6.7	0

<CCD>

MODE / PIN	EE
IC201	
1	-7.5
2	-7.4
3	0
4	0
5	0
6	4.9
7	0
8	4.9
9	0
10	4.9
11	0
12	4.6
13	4.9
14	4.6
15	0
16	14.9
17	-7.1
18	-7.2
19	0
20	15.0
IC202	
1	4.9
2	0
3	-9.2
4	-9.8
5	1.6
6	1.6
7	-4.4
8	4.8
9	0
10	0
11	0
12	4.6
13	4.6
14	4.9
15	4.9
16	4.9
17	0
18	0
19	1.0
20	0
21	0
22	2.4
23	0
24	4.9
25	0
26	0.4
27	0
28	3.6
29	1.2
30	0
31	1.9
32	4.9
33	1.7
34	0
35	0
36	0
37	1.1
38	2.6
39	5.0
40	0
41	4.9
42	2.2
43	-6.6
44	4.9
45	4.9
46	0
47	0
48	0.7
49	1.9
50	0
51	5.0
52	0
53	0
54	-4.8
55	-4.9
56	0
57	4.9
58	0.4
59	2.4
60	0
61	-5.1
62	-5.2
63	-2.4
64	-2.4

MODE / PIN	EE
IC203	
1	1.8
2	0.4
3	2.7
4	4.9
5	-4.7
6	-4.8
7	0
8	1.8
Q203	
E	11.2
C	14.9
B	11.9
Q204	
E	1.3
C	4.9
B	1.8
Q205	
E	1.8
C	4.9
B	2.4

<E-VF> AX260/460EG

MODE / PIN	EE
IC7001	
1	2.1
2	4.7
3	2.0
4	0
5	0
6	0
7	2.0
8	4.5
9	4.2
10	0
11	1.9
12	4.4
13	2.7
14	1.8
15	1.8
16	1.6
Q7001	
1	0.5
2	14.7
3	0
Q7002	
E	2.7
C	-25.2
B	2.2
Q7003	
E	-24.6
C	-34.8
B	-25.2

<E-VF> AX360EG

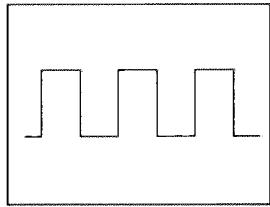
MODE / PIN	EE
IC7101	
1	0.6
2	0.7
3	0.5
4	0.5
5	0.4
6	0.5
7	0
8	0.5
9	4.9
10	3.6
11	0
12	0.5
13	0.5
14	0.5
15	0
16	2.4
IC7102	
1	0.4
2	0
3	0.4
4	0.4
5	4.9
IC7103	
1	0
2	0
3	0.5
4	0
5	4.3
6	4.3
7	4.8
8	4.9
Q7101	
E	0
C	0.5
B	0
Q7102	
1	0.5
2	3.6
3	0
Q7103	
1	0
2	4.6
3	0
Q7104	
E	0
C	0.4
B	0
Q7107	
1	2.8
2	2.4
3	3.0
4	4.9
5	3.4
6	4.9
Q7108	
1	2.8
2	2.4
3	2.8
4	2.4
5	3.2
6	2.8
IC7201	
1	1.5
2	3.2
3	2.1
4	2.7
5	1.6
6	0
7	4.7
8	2.4
9	0
10	0
11	0
12	2.9
13	0
14	2.2
15	-2.7
16	0
17	0
18	0
19	4.8
20	0
21	0
22	2.4
23	2.4

MODE / PIN	EE
24	4.8
25	0
26	0
27	0
28	1.9
29	1.9
30	0.5
31	0
32	0
33	4.8
34	4.8
35	4.8
36	4.8
37	4.8
38	0
39	6.0
40	6.0
41	6.0
42	6.0
43	6.0
44	6.0
45	12.0
46	3.0
47	4.7
48	4.1
49	2.7
50	2.7
51	2.3
52	3.0
53	3.0
54	4.7
55	2.4
56	2.6
57	2.1
58	2.3
59	3.3
60	2.0
61	2.5
62	0.5
63	2.3
64	2.3
Q7201	
E	1.5
C	4.8
B	2.1
Q7202	
1	5.6
2	6.2
3	0
4	6.2
5	5.7
6	12.0
Q7203	
1	13.5
2	12.1
3	12.6
4	12.6
5	12.1
6	12.6
Q7204	
E	12.0
C	12.7
B	12.0

4.25 WAVEFORMS

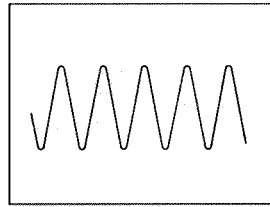
— SYSCON —

WF1 IC1-89



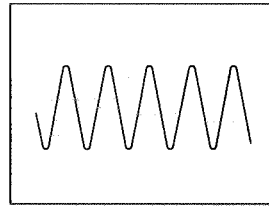
REC/PB 0.2Vp-p
10mV/0.5msec/DIV

WF2 IC1-90



REC/PB 1.5Vp-p
50mV/0.5msec/DIV

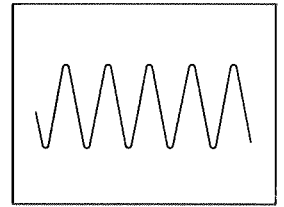
WF3 IC1-91



REC/PB 3.0Vp-p
0.1V/0.5msec/DIV

— MDA —

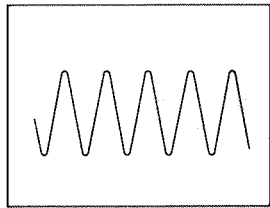
WF1 IC301-3



REC/PB 1.5Vp-p
50mV/0.5msec/DIV

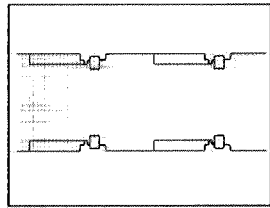
— PROCESS&Y/C —

WF2 IC351-15



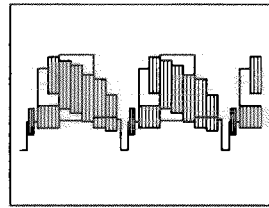
REC/PB 3.0Vp-p
0.1V/0.5msec/DIV

WF1 IC501-39



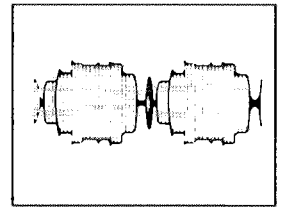
REC 1.2Vp-p
50mV/5msec/DIV

WF2 IC501-50



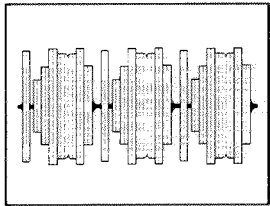
REC 2.4Vp-p, PB 2.0Vp-p
0.1V/20 μ sec/DIV

WF3 IC501-57



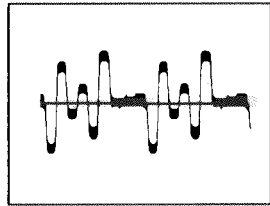
PB 0.1Vp-p
5mV/20 μ sec/DIV

WF4 IC501-60



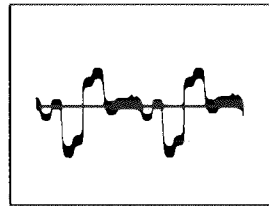
REC 0.6Vp-p
10mV/20 μ sec/DIV

WF5 IC501-94



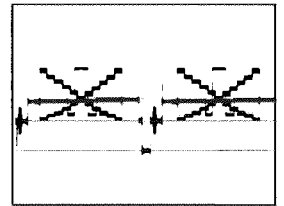
EE 0.5Vp-p
20mV/20 μ sec/DIV

WF6 IC501-96



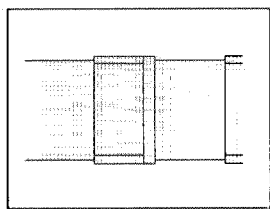
EE 0.6Vp-p
20mV/20 μ sec/DIV

WF7 IC501-116



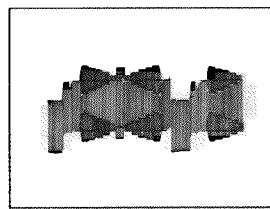
EE 0.7Vp-p
20mV/10 μ sec/DIV

WF8 IC502-10



PB 0.4Vp-p
20mV/1msec/DIV

WF1 CN201-4



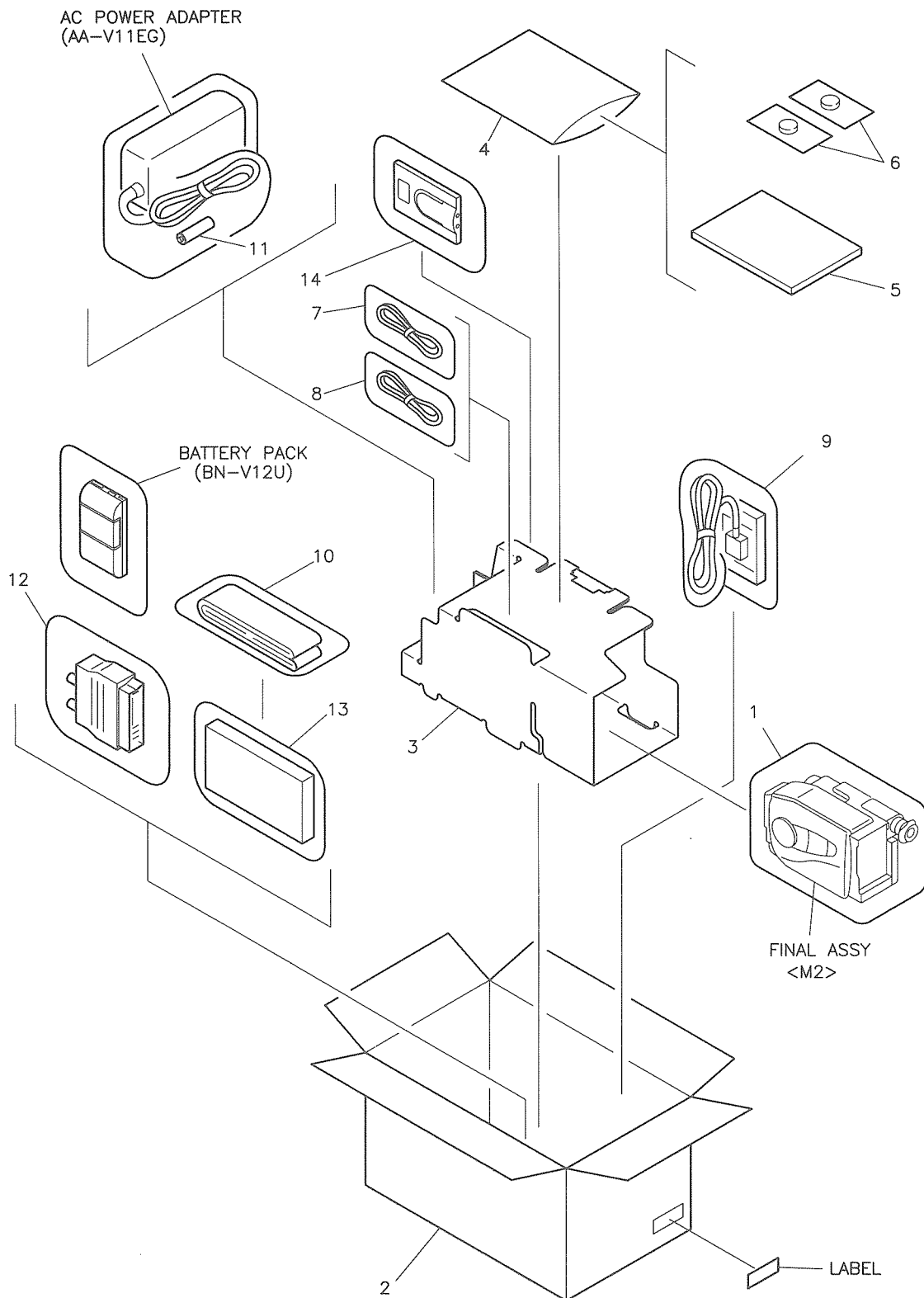
EE 0.9Vp-p
20mV/10 μ sec/DIV

SECTION 5 PARTS LIST

SAFETY PRECAUTION

Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.

5.1 PACKING ASSEMBLY <M1>



#	REF No.	PART No.	PART NAME, DESCRIPTION

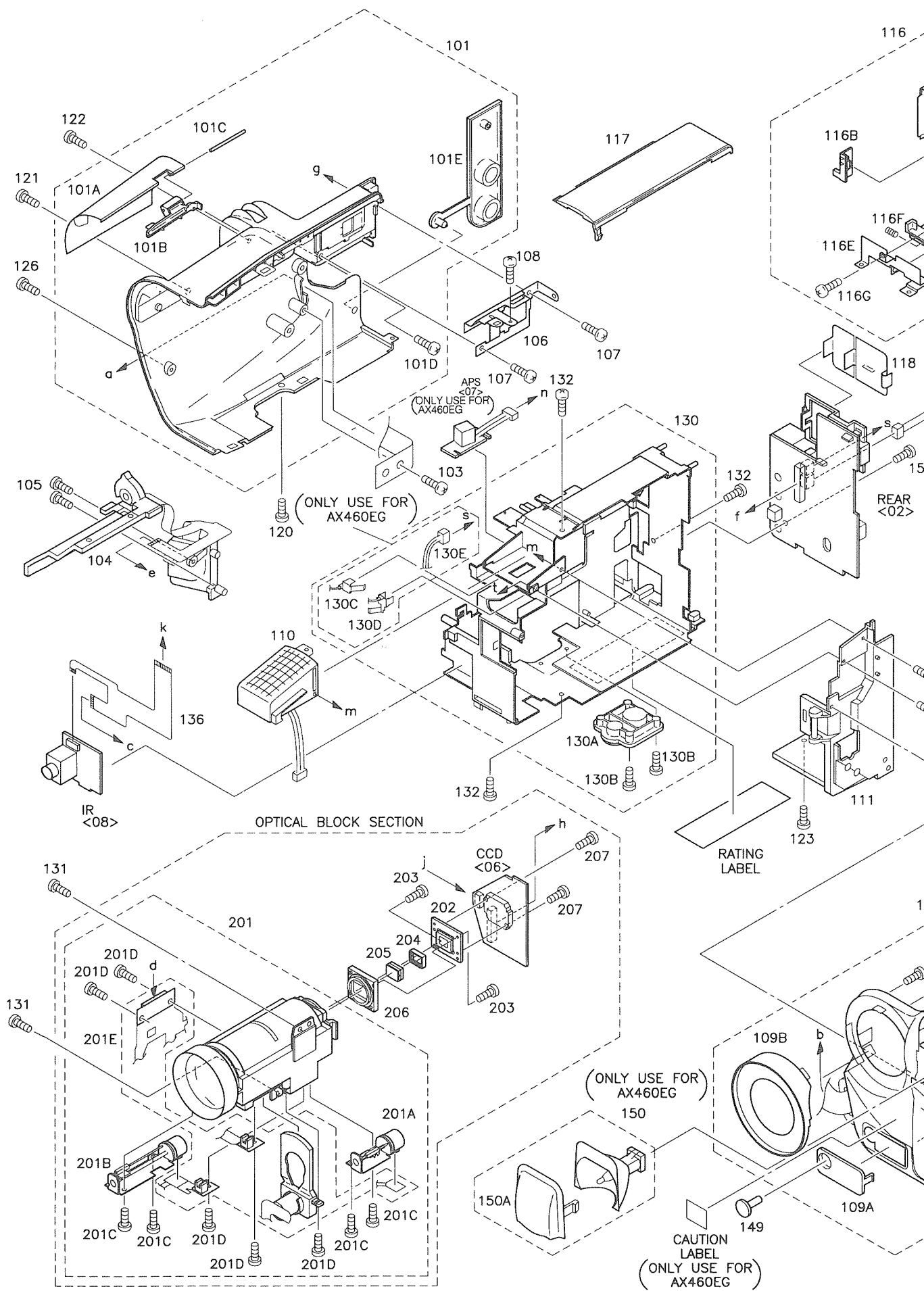
PACKING ASSEMBLY <M1>

1	YQM30021-34	POLY BAG
2	YQ32238-10	PACKING CASE,AX260EG
	YQ32238-12	PACKING CASE,AX360EG
	YQ32238-14	PACKING CASE,AX460EG
3	YQ32239-1-5	CUSHION
4	YQM30061-2	POLY BAG
△ 5	YU30052-562	INSTRUCTIONS,EN,FR
△	YU30052-563	INSTRUCTIONS,GE,DU
△	YU30052-564	INSTRUCTIONS,SP,IT
△	YU30052-565	INSTRUCTIONS,SW,DE
△	YU30052-566	INSTRUCTIONS,FI,NO
△ 6	PECA0903	LI BATTERY,AX260EG/AX360EG
△	PECA0903	LI BATTERY,X2 AX460EG
7	PEAC0362-150	CABLE ASSY,AUDIO/VIDEO
8	PEAC0428-150	CABLE ASSY,EDITING CABLE
9	PEAC0134-01-04	DC PLUG CORD
10	YQ10188A-1	S STRAP ASSY
11	R6PRPA-B	BATTERY
12	PEMC1174	CONNECTOR
13	YQ31963A-3	CASS.ADAPTER ASSY
	or YQ31963B-3	CASS.ADAPTER ASSY
14	YQ20710C	REMOTE CONTROLLER,AX460EG

• INSTRUCTIONS

EN ENGLISH
FR FRENCH
GE GERMAN
DU DUTCH
SP SPANISH
IT ITALIAN
SW SWEDISH
DE DANISH
FI FINNISH
NO NORWEGIAN

5.2 FINAL ASSEMBLY <M2>



#△ REF No. PART No. PART NAME, DESCRIPTION

FINAL ASSEMBLY <M2>

△ 101	YQ10575F	LOWER CASE ASSY
101A	YQ32062-2	COVER(D.OPE)
101B	YQ32224	GUIDE
101C	YQ43795	SHAFT
101D	YQM30032-60	SPECIAL SCREW,M2X5
101E	YQ31850	CAP(JACK)
102	YQ20969-1-1	GRIP BELT
103	YQ43762-4	SCREW
104	YQ10577-1-2	OPERATION UNIT
105	YQM30032-4-2	SPECIAL SCREW,X2 M2X6
106	YQ32067-1-2	BRACKET(VF)
107	YQ43762-4	SCREW,X2
108	YQM30032-37	SPECIAL SCREW,M2X3
109	YQ10606C-2	FRONT PANEL ASSY,AX460EG
	YQ10578B-2	FRONT PANEL ASSY,AX260EG/AX360EG
109A	YQ44262	IR WINDOW
109B	YQ32157-1-1	HOOD
109C	YQ44264	SHUTTER
109D	YQ32069-2	KNOB(RING)
109E	YQ43762	SCREW,X2
109F	YQ44265-1-1	TORSION SPRING
109G	YQM30032-8	SPECIAL SCREW,X2 M1.7X5
110	YQ20901-1-1	MICROPHONE
111	YQ20902-2-2	UPPER COVER
△ 112	YQ10580G-3	CASSETTE COVER ASSY,AX260EG/AX360EG
△ 112A	YQ10580H-3	CASSETTE COVER ASSY,AX460EG
112A	YQ44268	HINGE(C.COVER)
112B	YQM30032-4-2	SPECIAL SCREW,X2 M2X6
113	YQ44269A-3	BUTTON(PUSH)ASSY
113A	YQM30002-51-16	COMPRESSION SPRING
114	YQM30032-37	SPECIAL SCREW,M2X3
115	YQ32074A	CASS.COVER INSIDE ASSY
△ 116	YQ10582B-2	REAR COVER ASSY,AX260EG/AX360EG
△ 116A	YQ10582F-2	REAR COVER ASSY,AX460EG
116A	YQ32077-1-1	KNOB(EJECT)
116B	YQ32078	PLATE(EJECT)
116C	YQM30002-49	COMPRESSION SPRING
116D	YQ32079	KNOB(B.RELEASE)
116E	YQ32080	BKT(B.RELEASE)
116F	YQM30002-48	COMPRESSION SPRING
116G	YQM30032-2-2	SPECIAL SCREW,M2X5
117	YQ32302F	TOP COVER ASSY,AX260EG
	YQ32302H	TOP COVER ASSY,AX360EG
	YQ32302S	TOP COVER ASSY,AX460EG
118	YQ31821-1-2	CAP(LITHIUM)
119	YQM30032-2-2	SPECIAL SCREW,X4 M2X5
120	YQM30032-4-2	SPECIAL SCREW,M2X6
121	YQM30032-8	SPECIAL SCREW,M1.7X5
122	YQM30032-4-2	SPECIAL SCREW,M2X6

#△ REF No.	PART No.	PART NAME, DESCRIPTION
123	YQM30032-4-2	SPECIAL SCREW,M2X6
124	YQM30032-4-2	SPECIAL SCREW,X4 M2X6
125	YQM30032-4-2	SPECIAL SCREW,X2 M2X6
126	YQM30032-4-2	SPECIAL SCREW,M2X6
127	YQM30032-4-2	SPECIAL SCREW,M2X6
128	YQM30032-4-2	SPECIAL SCREW,M2X6,AX260EG/AX360WG
	YQM30032-4-2	SPECIAL SCREW,X2 M2X6 AX460EG
129	YQM30032-4-2	SPECIAL SCREW,M2X6
△ 130	YQ20906A-1	FRAME ASSY,AX460EG
△ 130A	YQ20906B-1	FRAME ASSY,AX260EG/AX360EG
130A	YQ31843	BASE
130B	YQM30032-4-2	SPECIAL SCREW,X2 M2X6
130C	YQ43810	CONTACT(LIGHT),AX460EG
130D	YQ44273	CONTACT(2),AX460EG
130E	ML-Y00718B	LIGHT WIRE,AX460EG
131	YQM30032-4-2	SPECIAL SCREW,X2 M2X6
132	YQ43545	SPECIAL SCREW,X3
133	YQ43544	BRACKET(MECHA)
134	YQ44457-3	SCREW,X2
135	ML-Y00720B	CCD WIRE
136	PEWR0820	FPC
137	PEWR0825	FFC
138	PEWR0821	FFC
139	YQ44027A-6	CLEANER ASSY
139A	YQ44109A-2	CLEANER ROLLER ASSY
140	YQ44458	SCREW,X2
142	YQ44457-3	SCREW
145	YQ31752B-8	CASSETTE HOUSING ASSY
146	YQ44457-3	SCREW,X4
147	SPSH1730M	SCREW,X4
149	YQ43518	CAP(JACK)
150	YQ20898A	DC LIGHT ASSY,AX460EG
150A	YQ20899	LENS,AX460EG
151	YQ32300A	FRONT FRAME ASSY
151A	YQ44144	TAPE GUIDE
152	SPSH1725M	SCREW,X2
153	YQM30032-4-2	SPECIAL SCREW,M2X6

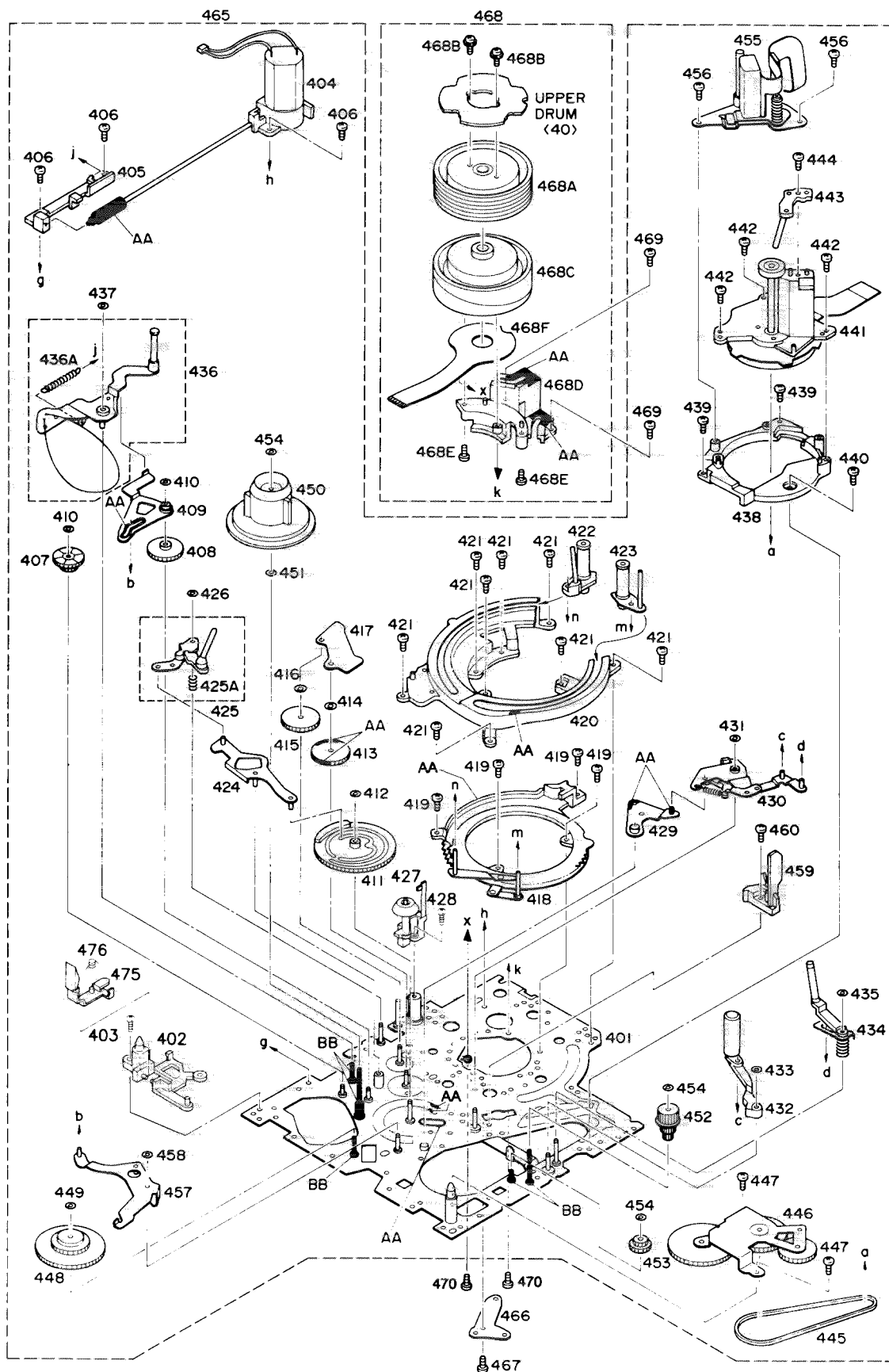
- OPTICAL BLOCK SECTION -

201	YU30822-1-1	OP BLOCK ASSY
201A	YU30822-002	FOCUS MOTOR UNIT
201B	YU30822-001	ZOOM MOTOR UNIT
201C	YU30780-003	SCREW,X4M1.7X4.5
201D	YU30703-016	SCREW,X5 M1.7X3.5
201E	YU30822-006	IRIS UNIT
202	YS40113G	CCD BASE ASSY
203	SPSN2090Z	SCREW,X2
204	YQ32122	SPACER RUBBER
205	YU42099	OP LOW PASS FILTER
206	YQ20823	CCD SPACER
207	SPSP2006Z	SCREW,X2

5.3 MECHANISM ASSEMBLY <M3>

BEWARE OF BOGUS PARTS

Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.



Classifi- cation	Part No.	Symbol in drawing
Grease	KYODO-SH-P	AA
Oil	YTU94027	BB

NOTE: The section marked in AA and BB indicate lubrication and greasing areas.

#△ REF No. PART No. PART NAME, DESCRIPTION

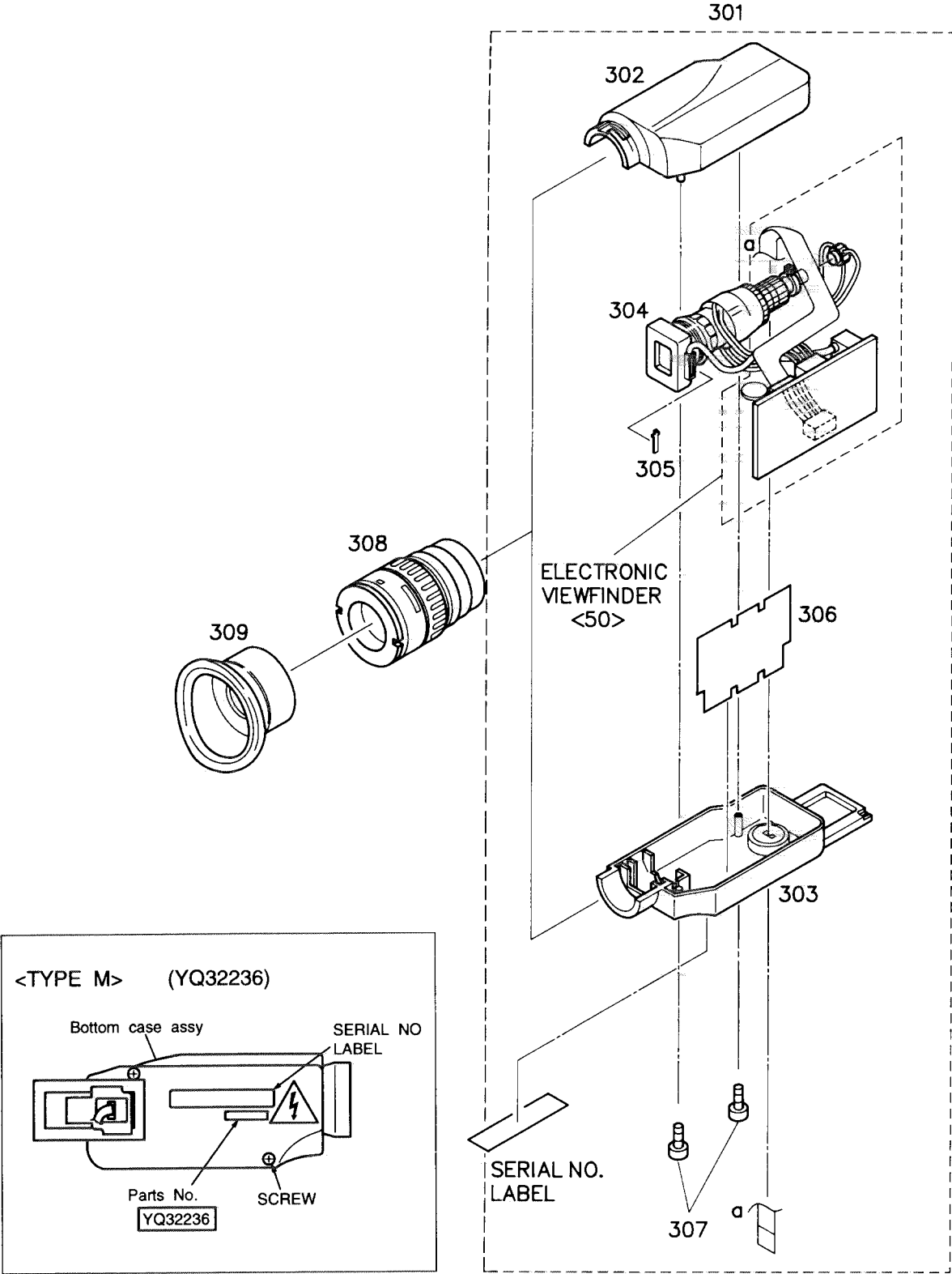
MECHANISM ASSEMBLY <M3>

401	YQ20954A-4	MAIN DECK ASSY
402	YQ32218	CASS.GUIDE(L)
403	YQ44457	SCREW
404	YQ31856A-2	MOTOR BRACKET ASSY
405	YQ20793	WORM BRACKET
406	YQ44457	SCREW,X3
407	YQ31783	WHEEL GEAR
408	YQ44328	MIDDLE GEAR
409	YQ43849B	CANCEL LEVER ASSY
410	PQM30017-27	SLIT WASHER,X2
411	YQ20827-2	CONTROL CAM
412	PQM30017-25	SLIT WASHER
413	YQ43853A	LOADING GEAR(T)ASSY
414	PQM30017-27	SLIT WASHER
415	YQ43852A	LOADING GEAR(S)ASSY
416	PQM30017-27	SLIT WASHER
417	YQ43634	COVER PLATE
418	YQ43635C-7	LOADING RING ASSY
419	YQ44457	SCREW,X4
420	YQ10516-1-11	GUIDE RAIL
421	YQ44457-5	SCREW,X8
422	YQ43646A-4	SUPPLY POLE BASE ASSY
423	YQ43654A-8	TAKE-UP POLE BASE ASSY
424	YQ44439A-1	DRIVE LEVER ASSY
425	YQ43663C	SLANT ARM ASSY
425A	YQ43670	TOR.SPRING(S)
426	PQM30017-27	SLIT WASHER
427	YQ44436A-1	ROLLER BASE ASSY
428	YQ44457	SCREW
429	YQ32230	LINK LEVER
430	YQ43682A-6	LINK ARM ASSY
431	PQM30017-25	SLIT WASHER
432	YQ43691A-4	PINCH ROLLER ARM ASSY
433	PQM30017-25	SLIT WASHER
434	YQ43698A-4	TAKE-UP GUIDE ARM ASSY
435	PQM30017-27	SLIT WASHER
436	YQ44199C-6	TENSION ARM ASSY

#△ REF No. PART No. PART NAME, DESCRIPTION

436A	YQ43848-1-2	TENSION SPRING
437	PQM30017-27	SLIT WASHER
438	YQ20797-1-3	MOTOR BASE
439	YQ44457	SCREW,X2
440	YQ44460	SCREW
441	YU42048-1-2	CAPSTAN MOTOR
442	YQ44304	TAPPING SCREW,X3
443	YQ43708A-2	SLANT POLE BASE ASSY
444	YQ44304	TAPPING SCREW
445	YQ43710	TIMING BELT
446	YQ43711B-6	CENTER PULLEY UNIT
447	YQ44457-2	SCREW,X2
448	YQ43729A	SUPPLY CLUCH ASSY
449	PQM30017-27	SLIT WASHER
450	YQ31861-1-7	REEL DISC
451	Q03093-835	WASHER
452	YQ31787	TAKE-UP GEAR
453	YQ43737	BRAKE SUB GEAR
454	PQM30017-27	SLIT WASHER,X3
455	YQ43738A-8	A/C HEAD UNIT
456	SPSN1750Z	SCREW,X2
457	YQ43743B	EJECT LEVER ASSY
458	PQM30017-27	SLIT WASHER
459	YQ31833-1-1	LED GUIDE
460	YQ44457	SCREW
465	YMA0019A	MECHA(A) ASSY
466	YU42051	BRUSH
467	YQ44457-3	SCREW
468	YDV2066A	DRUM ASSY
468A	YDM2067B	UPPER DRUM ASSY
468B	YDM4031	SCREW,X2
468C	YDM2083A	LOWER DRUM ASSY
468D	YDM1003-1-5	CHATCHER
468E	SPSH1730M	SCREW,X2
468F	YDM2080-1-2	OUT PUT FPC
469	YQ44457	SCREW,X2
470	SPSH1740Z	SCREW,X2
475	YQ32219	SW.LEVER(L)
476	YQ44422-1-1	TORSION SPRING

5.4 ELECTRONIC VIEWFINDER ASSEMBLY <M4> [GR-AX260EG/AX460EG]



#	△	REF No.	PART No.	PART NAME, DESCRIPTION

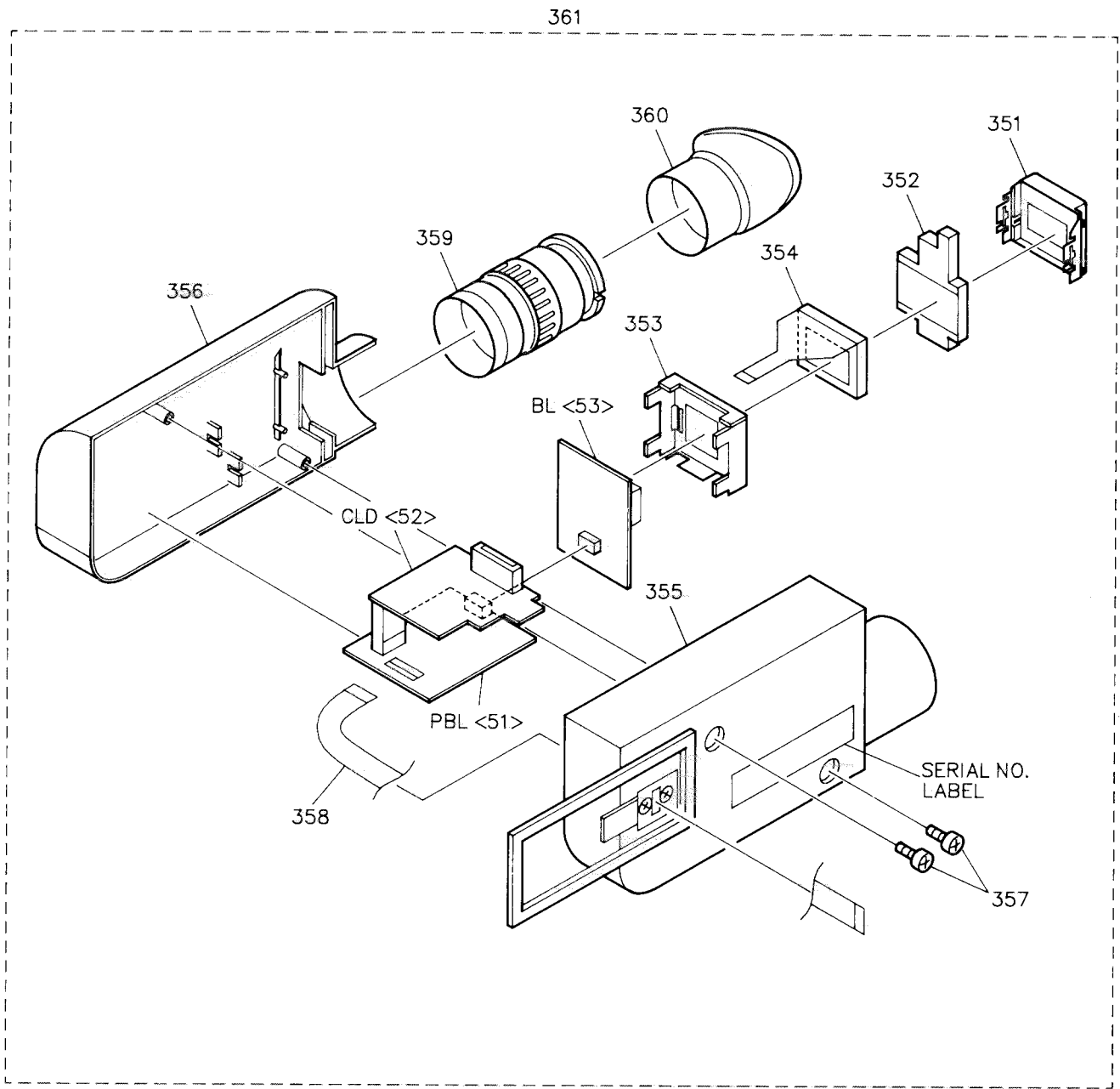
ELECTRONIC VIEWFINDER ASSEMBLY <M4>

△	301	YQ32236C	E.VF ASSY
△	302	YQ32236-001	TOP CASE
△	303	YQ32236-002	BOTTOM CASE ASSY
△	304	YQ31803-001	CRT/DY ASSY

#	△	REF No.	PART No.	PART NAME, DESCRIPTION
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△	305	YU30181-014	HV COVER
△	306	YQ31803-100	INSULATOR
	307	YU30045-014	SCREW,X2 M1.7X5
	308	YQ31803-200	LENS ASSY
	309	YQ31803-201	EYE CAP

5.5 ELECTRONIC VIEWFINDER ASSEMBLY <M4> [GR-AX360EG]



#△ REF No. PART No. PART NAME, DESCRIPTION

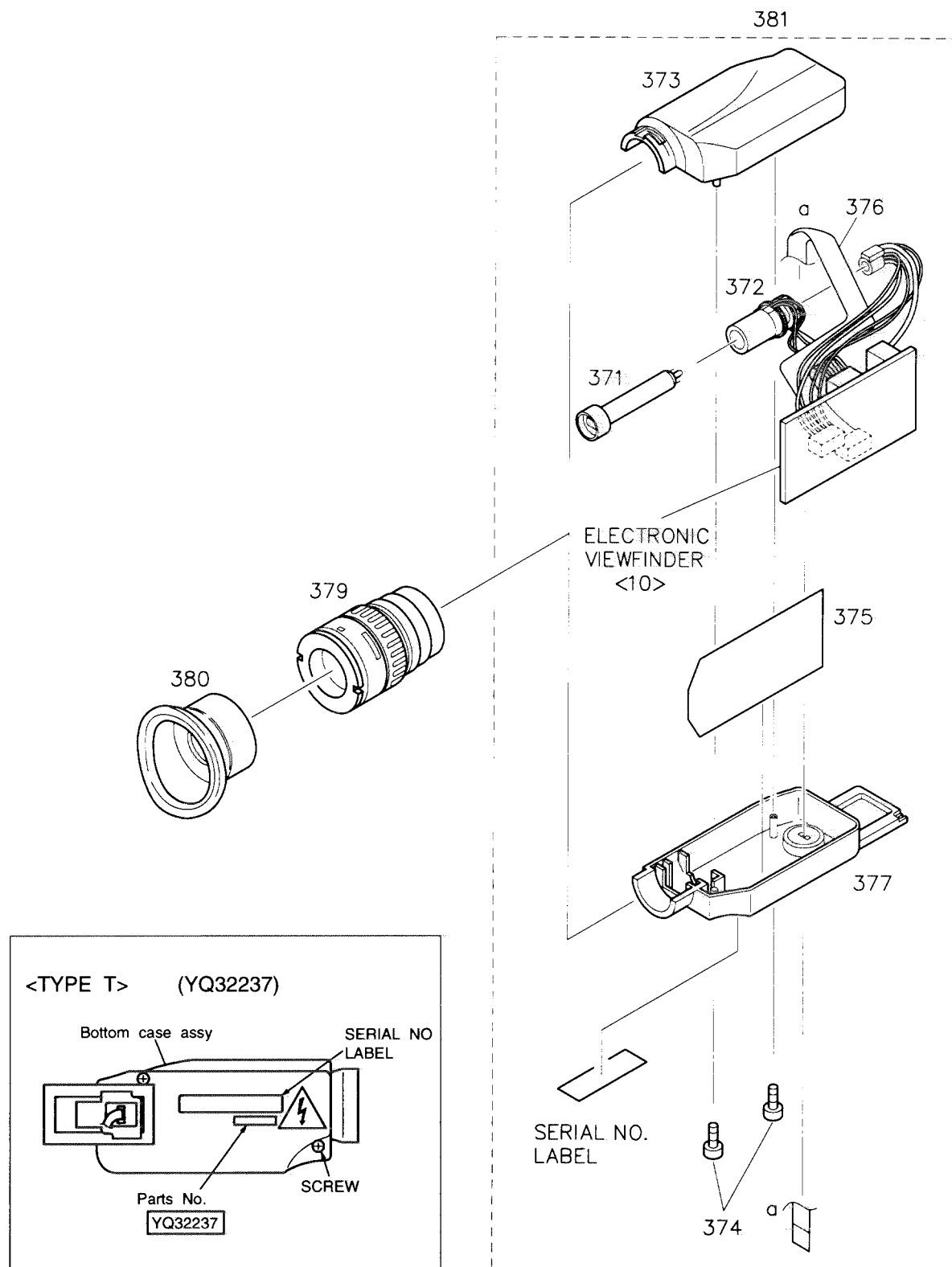
- ELECTRONIC VIEWFINDER ASSEMBLY <M4> -

	351	YQ31801-1-1	HOLDER(LCD)
	352	YQ43792	WINDOW(LCD)
	353	YQ31802	HOLDER(LAMP)
	354	PEDP0191	LCD PANEL
△	355	YQ31958F	BOTTOM CASE ASSY

#△ REF No. PART No. PART NAME, DESCRIPTION

△	356	YQ31932B	TOP CASE ASSY
	357	SPSN2080M	SCREW, X2
	358	PEWR0775	FPC
	359	YQ31803-200	LENS ASSY
	360	YQ31803-201	EYE CAP
△	361	YS20782R	E.VF ASSY

5.6 ELECTRONIC VIEWFINDER ASSEMBLY <M4> [GR-AX260EG/AX460EG]



#△ REF No. PART No. PART NAME, DESCRIPTION

- ELECTRONIC VIEWFINDER ASSEMBLY <M4> -

△ 371	PEDP0193	CRT
△ 372	PELN1179	DEFLECTION YOKE
△ 373	YQ10628-2	TOP CASE
374	SPSN1780M	SCREW,X2

#△ REF No. PART No. PART NAME, DESCRIPTION

△ 375	YQ44473	INSULATOR
376	PEWR0819	FPC
△ 377	YQ32237-002	BOTTOM CASE ASSY
379	YQ31803-200	LENS ASSY
380	YQ31803-201	EYE CAP
△ 381	YQ32237C	E.VF ASSY

5.7 ELECTRICAL PARTS LIST

#△ REF No.	PART No.	PART NAME, DESCRIPTION	#△ REF No.	PART No.	PART NAME, DESCRIPTION

MAIN BOARD ASSEMBLY <01>					
PWBA	YB10160G-01	MAIN BOARD ASSY,AX260EG	Q503	2SC4617(QRS)	TRANSISTOR
	YB10160I-01	MAIN BOARD ASSY,AX360EG	Q504	2SA1774(QRS)	TRANSISTOR
	YB10160J-01	MAIN BOARD ASSY,AX460EG	Q505	2SA1774(QRS)	TRANSISTOR
IC1	M37771M6A171HP	IC	Q506	2SA1774(QRS)	TRANSISTOR
IC2	UPD6462GS-902-X	IC	Q601	2SD2114K(UV)	TRANSISTOR
IC4	MC74HC14ADT	IC	Q602	2SD2114K(UV)	TRANSISTOR
	or TC74VHC14FS	IC	Q603	2SD2114K(UV)	TRANSISTOR
IC5	S-8423PFS-X	IC	Q604	2SD2114K(UV)	TRANSISTOR
IC6	BA6417F	IC	Q605	2SA1774(QRS)	TRANSISTOR
IC301	VC5035-XE	IC	Q606	2SC4617(QRS)	TRANSISTOR
IC351	BA6862FS	IC	Q701	2SC4617(QRS)	TRANSISTOR
IC401	BA7751AFS	IC	Q704	2SC4617(QRS)	TRANSISTOR
IC402	BA15218F	IC	Q706	DTC144EE	TRANSISTOR
	or XRA15218F	IC		or UN9213	TRANSISTOR
IC501	JCY0050A	IC	Q781	DTA143EU	TRANSISTOR
IC502	M52364FP	IC	Q782	2SC4081(R)	TRANSISTOR
IC503	MN3867AS	IC	Q783	2SC4081(R)	TRANSISTOR
	or MN3867S	IC	Q784	2SC4081(R)	TRANSISTOR
IC601	M52359FP	IC	Q805	XP1216	TRANSISTOR
IC801	XRU4053BOF	IC		or UMG3N	PAIR TRANSISTOR
IC802	XRA10324AFV-XE	IC	Q810	2SA1774(QRS)	TRANSISTOR
IC803	XRA10358F	IC	Q811	2SA1774(QRS)	TRANSISTOR
	or UPC358GR	IC	Q901	DTC144WU	TRANSISTOR
IC901	UPD78054GC-164	IC	Q902	DTA114EU	TRANSISTOR
IC902	JCY0007-1-XE	IC	Q904	XP1216	TRANSISTOR
IC903	X25C02S-XE	IC		or UMG3N	PAIR TRANSISTOR
IC904	S-81250HG-RD-X	IC	Q905	XP5601	TRANSISTOR
	or RH5RL50AA-XE	IC	Q906	XP5601	TRANSISTOR
IC905	XRA10324AFV-XE	IC	Q907	XP5601	TRANSISTOR
IC906	MC14011BDT	IC	D2	RD22M(B1-3)-X	ZENER DIODE
	or TC4011BFS	IC	D3	1SS355	DIODE
IC907	TB6504F	IC	D301	MA132WK	DIODE
IC908	TB6504F	IC	D502	DAN222	DIODE
IC909	PST9140N	IC	D503	DAN222	DIODE
IC910	UPC358GR	IC	D504	DAN222	DIODE,AX360EG
Q1	2SA1576(QRS)	TRANSISTOR	D505	DAN222	DIODE
Q2	DTC114EU	TRANSISTOR	D901	1SS355	DIODE
Q3	DTA114EU	TRANSISTOR	D902	1SS355	DIODE
Q5	DTA114EU	TRANSISTOR	D903	1SS355	DIODE
Q6	DTC114EU	TRANSISTOR	D904	MA30(A)	DIODE
Q7	2SA1576(QRS)	TRANSISTOR	D905	RD2.7S(B2)	ZENER DIODE
Q201	DTC144EE	TRANSISTOR	D906	1SS355	DIODE
	or UN9213	TRANSISTOR	DA1	DAP202U	DIODE
Q202	2SC4617(RS)	TRANSISTOR	DA3	DAP202U	DIODE
Q203	DTA114EE	TRANSISTOR	R2	NRSA63J-473X	RESISTOR 47kΩ,1/16W
	or UN9111	TRANSISTOR	R4	NRSA63J-473X	RESISTOR 47kΩ,1/16W
Q351	MDC02	TRANSISTOR	R5	NRSA63J-105X	RESISTOR 1MΩ,1/16W
Q401	DTA123EE	TRANSISTOR	R6	NRSA63J-221X	RESISTOR 220Ω,1/16W
	or UN911V	TRANSISTOR	R7	NRSA63J-124X	RESISTOR 120kΩ,1/16W
Q402	DTA143EE	TRANSISTOR	R8	NRVA63D-623X	CMF RESISTOR 62kΩ,1/16W
	or UN911L	TRANSISTOR	R9	NRSA63J-302X	RESISTOR 3kΩ,1/16W
Q403	UMW1N	PAIR TRANSISTOR	R10	NRVA63D-683X	CMF RESISTOR 68kΩ,1/16W
	or XP1501	TRANSISTOR	R11	NRSA63J-472X	RESISTOR 4.7kΩ,1/16W
Q404	DTA124EE	TRANSISTOR	R12	NRSA63J-103X	RESISTOR 10kΩ,1/16W
	or UN9112	TRANSISTOR	R13	NRSA63J-223X	RESISTOR 22kΩ,1/16W
Q405	DTC144EE	TRANSISTOR	R14	NRSA63J-474X	RESISTOR 470kΩ,1/16W
	or UN9213	TRANSISTOR	R22	NRSA63J-473X	RESISTOR 47kΩ,1/16W
Q408	2SC4097(QR)	TRANSISTOR	R23	NRSA63J-685X	RESISTOR 6.8MΩ,1/16W
			R25	NRSA63J-105X	RESISTOR 1MΩ,1/16W
			R26	NRSA63J-221X	RESISTOR 220Ω,1/16W
			R27	NRSA63J-122X	RESISTOR 1.2kΩ,1/16W

#△ REF No.	PART No.	PART NAME, DESCRIPTION		#△ REF No.	PART No.	PART NAME, DESCRIPTION	
R28	NRSA63J-751X	RESISTOR	750Ω, 1/16W	R406	NRSA63J-820X	RESISTOR	820Ω, 1/16W
R29	NRSA63J-751X	RESISTOR	750Ω, 1/16W	R409	NRSA63J-100X	RESISTOR	10Ω, 1/16W
R30	NRSA63J-562X	RESISTOR	5.6kΩ, 1/16W	R410	NRVA63D-103X	CMF RESISTOR	10kΩ, 1/16W
R31	NRSA63J-821X	RESISTOR	820Ω, 1/16W	R411	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W
R32	NRSA63J-101X	RESISTOR	100Ω, 1/16W	R412	NRSA63J-272X	RESISTOR	2.7kΩ, 1/16W
R36	NRSA63J-153X	RESISTOR	15kΩ, 1/16W	R414	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W
R37	NRSA63J-683X	RESISTOR	68kΩ, 1/16W	R415	NRSA63J-132X	RESISTOR	1.3kΩ, 1/16W
R40	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R417	NRSA63J-822X	RESISTOR	8.2kΩ, 1/16W
R41	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R418	NRSA63J-104X	RESISTOR	100kΩ, 1/16W
R43	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W	R421	NRSA63J-823X	RESISTOR	82kΩ, 1/16W
R53	NRSA63J-751X	RESISTOR	750Ω, 1/16W	R422	NRSA63J-182X	RESISTOR	1.8kΩ, 1/16W
R60	NRSA63J-103X	RESISTOR,AX360EG	10kΩ, 1/16W	R424	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R61	NRSA63J-103X	RESISTOR,AX460EG	10kΩ, 1/16W	R425	NRSA63J-334X	RESISTOR	330kΩ, 1/16W
	NRSA63J-152X	RESISTOR,AX360EG	1.5kΩ, 1/16W	R426	NRSA63J-470X	RESISTOR	47Ω, 1/16W
R63	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R428	NRSA63J-155X	RESISTOR	1.5MΩ, 1/16W
R67	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R429	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R69	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R430	NRSA63J-223X	RESISTOR	22kΩ, 1/16W
R70	NRSA63J-474X	RESISTOR	470kΩ, 1/16W	R431	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R71	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R433	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R72	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W	R434	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W
R73	NRSA63J-391X	RESISTOR	390Ω, 1/16W	R436	NRSA63J-561X	RESISTOR	560Ω, 1/16W
R74	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W	R437	NRSA63J-104X	RESISTOR	100kΩ, 1/16W
R75	NRSA63J-104X	RESISTOR	100kΩ, 1/16W	R438	NRSA63J-182X	RESISTOR	1.8kΩ, 1/16W
R201	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W	R439	NRSA63J-822X	RESISTOR	8.2kΩ, 1/16W
R202	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W	R456	NRSA63J-3R3X	RESISTOR	3.3Ω, 1/16W
R203	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W	R457	NRSA63J-153X	RESISTOR	15kΩ, 1/16W
R204	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W	R459	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R205	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W	R501	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
R207	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R503	NRSA63J-105X	RESISTOR	1MΩ, 1/16W
R208	NRSA63J-273X	RESISTOR	27kΩ, 1/16W	R504	NRSA63J-154X	RESISTOR	150kΩ, 1/16W
R209	NRSA63J-331X	RESISTOR	330Ω, 1/16W	R505	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R210	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W	R506	NRSA63J-431X	RESISTOR	430Ω, 1/16W
R211	NRSA63J-561X	RESISTOR	560Ω, 1/16W	R507	NRSA63J-182X	RESISTOR	1.8kΩ, 1/16W
R212	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R508	NRSA63J-223X	RESISTOR	22kΩ, 1/16W
R213	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R509	NRSA63J-152X	RESISTOR	1.5kΩ, 1/16W
R301	NRSA63J-2R2X	RESISTOR	2.2Ω, 1/16W	R510	NRSA63J-331X	RESISTOR	330Ω, 1/16W
R302	NRSA63J-2R2X	RESISTOR	2.2Ω, 1/16W	R511	NRSA63J-122X	RESISTOR	1.2kΩ, 1/16W
R303	NRSA63J-2R2X	RESISTOR	2.2Ω, 1/16W	R513	NRSA63J-182X	RESISTOR	1.8kΩ, 1/16W
R304	NRSA63J-121X	RESISTOR	120Ω, 1/16W	R518	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R305	NRSA63J-393X	RESISTOR	39kΩ, 1/16W	R519	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R306	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R520	NRSA63J-682X	RESISTOR	6.8kΩ, 1/16W
R307	NRSA63J-154X	RESISTOR	150kΩ, 1/16W	R522	NRVA63D-221X	CMF RESISTOR	220Ω, 1/16W
R308	NRSA63J-153X	RESISTOR	15kΩ, 1/16W	R523	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
R310	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R524	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
R311	NRSA63J-333X	RESISTOR	33kΩ, 1/16W	R525	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R312	NRSA63J-473X	RESISTOR	47kΩ, 1/16W	R526	NRSA63J-431X	RESISTOR	430Ω, 1/16W
R314	NRS12BK-R68X	RESISTOR	0.68Ω, 1/2W	R527	NRSA63J-102X	RESISTOR,AX460EG	1kΩ, 1/16W
R351	NRSA63J-474X	RESISTOR	470kΩ, 1/16W		NRSA63J-821X	RESISTOR,AX360EG	820Ω, 1/16W
R352	NRSA63J-154X	RESISTOR	150kΩ, 1/16W	R528	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R353	NRSA63J-104X	RESISTOR	100kΩ, 1/16W	R529	NRSA63J-431X	RESISTOR	430Ω, 1/16W
R354	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R530	NRSA63J-102X	RESISTOR,AX460EG	1kΩ, 1/16W
R355	NRSA63J-102X	RESISTOR	1kΩ, 1/16W		NRSA63J-821X	RESISTOR,AX360EG	820Ω, 1/16W
R356	NRSA63J-104X	RESISTOR	100kΩ, 1/16W	R531	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
R357	NRSA63J-153X	RESISTOR	15kΩ, 1/16W	R535	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
R358	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R536	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R359	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R537	NRSA63J-123X	RESISTOR	12kΩ, 1/16W
R360	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R538	NRSA63J-822X	RESISTOR	8.2kΩ, 1/16W
R361	NRSA63J-104X	RESISTOR	100kΩ, 1/16W	R541	NRSA63J-103X	RESISTOR,AX360EG	10kΩ, 1/16W
R362	NRS12BK-R68X	RESISTOR	0.68Ω, 1/2W	R543	NRVA63D-221X	CMF RESISTOR	220Ω, 1/16W
R403	NRSA63J-332X	RESISTOR	3.3kΩ, 1/16W	R546	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
R404	NRSA63J-820X	RESISTOR	82Ω, 1/16W	R561	NRSA63J-821X	RESISTOR	820Ω, 1/16W
R405	NRSA63J-820X	RESISTOR	82Ω, 1/16W	R563	NRSA63J-471X	RESISTOR	470Ω, 1/16W

#△ REF No.	PART No.	PART NAME, DESCRIPTION		#△ REF No.	PART No.	PART NAME, DESCRIPTION	
R564	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W	R808	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W
R565	NRSA63J-391X	RESISTOR	390Ω, 1/16W	R809	NRSA63J-224X	RESISTOR	220kΩ, 1/16W
R566	NRSA63J-471X	RESISTOR	470Ω, 1/16W	R810	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R567	NRSA63J-272X	RESISTOR	2.7kΩ, 1/16W	R811	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W
R568	NRSA63J-471X	RESISTOR	470Ω, 1/16W	R812	NRSA63J-224X	RESISTOR	220kΩ, 1/16W
R569	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W	R813	NRSA63J-153X	RESISTOR	15kΩ, 1/16W
R570	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W	R814	NRSA63J-153X	RESISTOR	15kΩ, 1/16W
R571	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W	R815	NRSA63J-333X	RESISTOR	33kΩ, 1/16W
R573	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W	R816	NRSA63J-562X	RESISTOR	5.6kΩ, 1/16W
R576	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W	R817	NRSA63J-823X	RESISTOR	82kΩ, 1/16W
R577	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W	R818	NRSA63J-823X	RESISTOR	82kΩ, 1/16W
R601	NRSA63J-331X	RESISTOR	330Ω, 1/16W	R819	NRSA63J-333X	RESISTOR	33kΩ, 1/16W
R602	NRSA63J-511X	RESISTOR	510Ω, 1/16W	R820	NRSA63J-562X	RESISTOR	5.6kΩ, 1/16W
R603	NRSA63J-511X	RESISTOR	510Ω, 1/16W	R821	NRSA63J-105X	RESISTOR	1MΩ, 1/16W
R604	NRSA63J-331X	RESISTOR	330Ω, 1/16W	R822	NRSA63J-105X	RESISTOR	1MΩ, 1/16W
R605	NRSA63J-511X	RESISTOR	510Ω, 1/16W	R853	NRSA63J-333X	RESISTOR	33kΩ, 1/16W
R606	NRSA63J-331X	RESISTOR	330Ω, 1/16W	R854	NRSA63J-153X	RESISTOR	15kΩ, 1/16W
R608	NRSA63J-392X	RESISTOR	3.9kΩ, 1/16W	R855	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R609	NRSA63J-331X	RESISTOR	330Ω, 1/16W	R861	NRSA63J-183X	RESISTOR	18kΩ, 1/16W
R610	NRSA63J-511X	RESISTOR	510Ω, 1/16W	R862	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R611	NRVA02D-914X	CMF RESISTOR	910kΩ, 1/10W	R863	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R612	NRSA63J-332X	RESISTOR	3.3kΩ, 1/16W	R864	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R617	NRSA63J-223X	RESISTOR	22kΩ, 1/16W	R865	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W
R619	NRSA63J-513X	RESISTOR	51kΩ, 1/16W	R866	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R620	NRSA63J-513X	RESISTOR	51kΩ, 1/16W	R867	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R621	NRSA63J-513X	RESISTOR	51kΩ, 1/16W	R868	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R623	NRSA63J-561X	RESISTOR	560Ω, 1/16W	R869	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W
R624	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W	R870	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R629	NRSA63J-513X	RESISTOR	51kΩ, 1/16W	R871	NRSA63J-152X	RESISTOR	1.5kΩ, 1/16W
R632	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W	R877	NRSA63J-182X	RESISTOR	1.8kΩ, 1/16W
R633	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R878	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W
R634	NRSA63J-682X	RESISTOR	6.8kΩ, 1/16W	R879	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R635	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R880	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R636	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R881	NRSA63J-273X	RESISTOR	27kΩ, 1/16W
R637	NRSA63J-221X	RESISTOR	220Ω, 1/16W	R882	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R701	NRSA63J-821X	RESISTOR	820Ω, 1/16W	R883	NRSA63J-561X	RESISTOR	560Ω, 1/16W
R702	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R885	NRSA63J-122X	RESISTOR	1.2kΩ, 1/16W
R703	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W	R887	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
R708	NRSA63J-203X	RESISTOR	20kΩ, 1/16W	R891	NRSA63J-243X	RESISTOR	24kΩ, 1/16W
R711	NRSA63J-122X	RESISTOR	1.2kΩ, 1/16W	R892	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R720	NRSA63J-822X	RESISTOR	8.2kΩ, 1/16W	R893	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
R721	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W	R894	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R726	NRSA63J-152X	RESISTOR	1.5kΩ, 1/16W	R895	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R727	NRSA63J-122X	RESISTOR	1.2kΩ, 1/16W	R896	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R729	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W	R897	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R730	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W	R898	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W
R731	NRSA63J-821X	RESISTOR	820Ω, 1/16W	R899	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
R732	NRSA63J-821X	RESISTOR	820Ω, 1/16W	R901	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R733	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W	R902	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
R734	NRSA63J-331X	RESISTOR	330Ω, 1/16W	R903	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R735	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R904	NRSA63J-102X	RESISTOR	1kΩ, 1/16W
R736	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R905	NRSA63J-241X	RESISTOR	240Ω, 1/16W
R741	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W	R906	NRSA63J-751X	RESISTOR	750Ω, 1/16W
R763	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	R907	NRSA63J-103X	RESISTOR	10kΩ, 1/16W
R783	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R908	NRSA63J-682X	RESISTOR	6.8kΩ, 1/16W
R784	NRSA63J-153X	RESISTOR	15kΩ, 1/16W	R909	NRSA63J-272X	RESISTOR	2.7kΩ, 1/16W
R785	NRSA63J-473X	RESISTOR	47kΩ, 1/16W	R910	NRSA63J-122X	RESISTOR	1.2kΩ, 1/16W
R786	NRSA63J-473X	RESISTOR	47kΩ, 1/16W	R912	NRSA63J-684X	RESISTOR	680kΩ, 1/16W
R787	NRSA63J-5R6X	RESISTOR	5.6Ω, 1/16W	R913	NRSA63J-153X	RESISTOR	15kΩ, 1/16W
R788	NRSA63J-5R6X	RESISTOR	5.6Ω, 1/16W	R914	NRSA63J-153X	RESISTOR	15kΩ, 1/16W
R805	NRSA02J-0R0X	RESISTOR	0Ω, 1/10W	R915	NRSA63J-183X	RESISTOR	18kΩ, 1/16W
R807	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	R916	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W

#△ REF No.	PART No.	PART NAME, DESCRIPTION		#△ REF No.	PART No.	PART NAME, DESCRIPTION	
R917	NRSA63J-683X	RESISTOR	68kΩ, 1/16W	RA9	NRZ0014-104X	NETWORK RESISTOR	100kΩ
R918	NRSA63J-512X	RESISTOR	5.1kΩ, 1/16W	RA10	NRZ0014-222X	NETWORK RESISTOR	2.2kΩ
R919	NRSA63J-104X	RESISTOR	100kΩ, 1/16W	RA11	NRZ0011-222X	NETWORK RESISTOR	2.2kΩ
R920	NRSA63J-183X	RESISTOR	18kΩ, 1/16W	RA12	NRZ0014-103X	NETWORK RESISTOR	10kΩ
R921	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	RA13	NRZ0014-222X	NETWORK RESISTOR	2.2kΩ
R922	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W	RA14	NRZ0011-103X	NETWORK RESISTOR	10kΩ
R923	NRSA63J-473X	RESISTOR	47kΩ, 1/16W	RA15	NRZ0011-222X	NETWORK RESISTOR	2.2kΩ
R924	NRSA63J-333X	RESISTOR	33kΩ, 1/16W	RA16	NRZ0011-103X	NETWORK RESISTOR	10kΩ
R925	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	RA501	NRZ0014-102X	NETWORK RESISTOR	1kΩ
R926	NRSA63J-272X	RESISTOR	2.7kΩ, 1/16W	RA801	NRZ0011-222X	NETWORK RESISTOR	2.2kΩ
R927	NRSA63J-472X	RESISTOR	4.7kΩ, 1/16W	RA802	NRZ0011-472X	NETWORK RESISTOR	4.7kΩ
R928	NRSA63J-101X	RESISTOR	100Ω, 1/16W	RA901	NRZ0011-103X	NETWORK RESISTOR	10kΩ
R930	NRSA63J-183X	RESISTOR	18kΩ, 1/16W	RA902	NRZ0014-102X	NETWORK RESISTOR	1kΩ
R931	NRSA63J-223X	RESISTOR	22kΩ, 1/16W	RA903	NRZ0014-102X	NETWORK RESISTOR	1kΩ
R932	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	RA904	NRZ0011-473X	NETWORK RESISTOR	47kΩ
R933	NRSA63J-824X	RESISTOR	820kΩ, 1/16W	RA905	NRZ0011-331X	NETWORK RESISTOR	330Ω
R934	NRSA63J-822X	RESISTOR	8.2kΩ, 1/16W	RA909	NRZ0011-103X	NETWORK RESISTOR	10kΩ
R935	NRSA63J-152X	RESISTOR	1.5kΩ, 1/16W	RA910	NRZ0014-472X	NETWORK RESISTOR	4.7kΩ
R936	NRSA63J-223X	RESISTOR	22kΩ, 1/16W	C1	NCF31CZ-104X	CAPACITOR	0.1μF, 16V
R937	NRSA63J-104X	RESISTOR	100kΩ, 1/16W	C2	NEA71CM-106X	E CAPACITOR	10μF, 16V
R938	NRSA63J-154X	RESISTOR	150kΩ, 1/16W	C3	NEA70JM-226X	E CAPACITOR	22μF, 6.3V
R939	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W	C4	NCB31EK-103X	CAPACITOR	0.01μF, 25V
R940	NRSA63J-334X	RESISTOR	330kΩ, 1/16W	C5	NCF31CZ-104X	CAPACITOR	0.1μF, 16V
R941	NRSA63J-564X	RESISTOR	560kΩ, 1/16W	C6	NEA70JM-476X	E CAPACITOR	47μF, 6.3V
R942	NRSA63J-223X	RESISTOR	22kΩ, 1/16W	C8	NCB31HK-102X	CAPACITOR	0.001μF, 50V
R945	NRSA63J-104X	RESISTOR	100kΩ, 1/16W	C9	NDC31HJ-101X	CAPACITOR	100pF, 50V
R946	NRSA63J-473X	RESISTOR	47kΩ, 1/16W	C10	NDC31HJ-270X	CAPACITOR	27pF, 50V
R947	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	C11	NDC31HJ-101X	CAPACITOR	100pF, 50V
R948	NRSA63J-101X	RESISTOR	100Ω, 1/16W	C12	NCB31EK-103X	CAPACITOR	0.01μF, 25V
R949	NRSA63J-105X	RESISTOR	1MΩ, 1/16W	C14	NCB31EK-472X	CAPACITOR	0.0047μF, 25V
R950	NRSA63J-473X	RESISTOR	47kΩ, 1/16W	C15	NCB31EK-103X	CAPACITOR	0.01μF, 25V
R951	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	C18	NDC31HJ-180X	CAPACITOR	18pF, 50V
R952	NRSA63J-183X	RESISTOR	18kΩ, 1/16W	C19	NDC31HJ-180X	CAPACITOR	18pF, 50V
R954	NRSA63J-272X	RESISTOR	2.7kΩ, 1/16W	C21	NDC31HJ-100X	CAPACITOR	10pF, 50V
R956	NRSA63J-393X	RESISTOR	39kΩ, 1/16W	C22	NDC31HJ-120X	CAPACITOR	12pF, 50V
R957	NRSA63J-562X	RESISTOR	5.6kΩ, 1/16W	C24	NCF21CZ-105X	CAPACITOR	1μF, 16V
R958	NRSA63J-682X	RESISTOR	6.8kΩ, 1/16W	C25	NCB31EK-103X	CAPACITOR	0.01μF, 25V
R959	NRSA63J-562X	RESISTOR	5.6kΩ, 1/16W	C26	NCB31EK-103X	CAPACITOR	0.01μF, 25V
R960	NRSA63J-223X	RESISTOR	22kΩ, 1/16W	C27	NCB31EK-103X	CAPACITOR	0.01μF, 25V
R961	NRSA63J-105X	RESISTOR	1MΩ, 1/16W	C30	NCB31HK-102X	CAPACITOR	0.001μF, 50V
R963	NRSA63J-391X	RESISTOR	390Ω, 1/16W	C201	NCF21CZ-474X	CAPACITOR	0.47μF, 16V
R965	NRSA63J-3R9X	RESISTOR	3.9Ω, 1/16W	C203	NCB31CK-333X	CAPACITOR	0.033μF, 16V
R966	NRSA63J-3R9X	RESISTOR	3.9Ω, 1/16W	C205	NCB31HK-562X	CAPACITOR	0.0056μF, 50V
R970	NRSA63J-222X	RESISTOR	2.2kΩ, 1/16W	C206	NCB21CK-154X	CAPACITOR	0.15μF, 16V
R971	NRSA63J-3R9X	RESISTOR	3.9Ω, 1/16W	C207	NEA70JM-226X	E CAPACITOR	22μF, 6.3V
R972	NRSA63J-3R9X	RESISTOR	3.9Ω, 1/16W	C208	NEA70JM-226X	E CAPACITOR	22μF, 6.3V
R974	NRSA63J-331X	RESISTOR	330Ω, 1/16W	C209	NEA71HM-105X	E CAPACITOR	1μF, 50V
R975	NRSA63J-331X	RESISTOR	330Ω, 1/16W	C210	NEA71HM-105X	E CAPACITOR	1μF, 50V
R978	NRSA63J-334X	RESISTOR	330kΩ, 1/16W	C212	NCB21EK-104X	CAPACITOR	0.1μF, 25V
R979	NRSA63J-103X	RESISTOR	10kΩ, 1/16W	C213	NCB21EK-104X	CAPACITOR	0.1μF, 25V
R980	NRSA63J-562X	RESISTOR	5.6kΩ, 1/16W	C214	NEA71CM-106X	E CAPACITOR	10μF, 16V
R981	NRSA63J-821X	RESISTOR	820Ω, 1/16W	C215	NDC31HJ-101X	CAPACITOR	100pF, 50V
R982	NRSA63J-102X	RESISTOR	1kΩ, 1/16W	C301	NCF11CZ-225X	CAPACITOR	2.2μF, 16V
R984	NRSA63J-183X	RESISTOR	18kΩ, 1/16W	C302	NCF11CZ-225X	CAPACITOR	2.2μF, 16V
R985	NRSA63J-912X	RESISTOR	9.1kΩ, 1/16W	C303	NCF11CZ-225X	CAPACITOR	2.2μF, 16V
RA1	NRZ0011-104X	NETWORK RESISTOR	100kΩ	C304	NEA71HM-105X	E CAPACITOR	1μF, 50V
RA2	NRZ0011-105X	NETWORK RESISTOR	1MΩ	C305	NCB31HK-681X	CAPACITOR	680pF, 50V
RA3	NRZ0014-105X	NETWORK RESISTOR	1MΩ	C306	NCB31EK-103X	CAPACITOR	0.01μF, 25V
RA4	NRZ0011-472X	NETWORK RESISTOR	4.7kΩ	C307	NCF21CZ-105X	CAPACITOR	1μF, 16V
RA6	NRZ0014-222X	NETWORK RESISTOR	2.2kΩ	C308	NCB31HK-331X	CAPACITOR	330pF, 50V
RA7	NRZ0014-222X	NETWORK RESISTOR	2.2kΩ	C309	NCB21EK-104X	CAPACITOR	0.1μF, 25V
RA8	NRZ0014-473X	NETWORK RESISTOR	47kΩ	C312	NCB31HK-332X	CAPACITOR	0.0033μF, 50V

#△ REF No.	PART No.	PART NAME, DESCRIPTION		#△ REF No.	PART No.	PART NAME, DESCRIPTION	
C313	NCB31CK-473X	CAPACITOR	0.047μF,16V	C525	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C314	NCB31EK-103X	CAPACITOR	0.01μF,25V	C526	NDC31HJ-220X	CAPACITOR	22pF,50V
C315	NCB21EK-104X	CAPACITOR	0.1μF,25V	C528	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C316	NEA71CM-106X	E CAPACITOR	10μF,16V	C529	NCB31EK-103X	CAPACITOR	0.01μF,25V
C351	NCF21EZ-224X	CAPACITOR	0.22μF,25V	C530	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C352	NCF21EZ-224X	CAPACITOR	0.22μF,25V	C531	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C353	NCF21EZ-224X	CAPACITOR	0.22μF,25V	C532	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C354	NCB31EK-223X	CAPACITOR	0.022μF,25V	C533	NBE20JM-225X	E CAPACITOR	2.2μF,6.3V
C355	NCB31EK-223X	CAPACITOR	0.022μF,25V	C534	NBE20JM-475X	E CAPACITOR	4.7μF,6.3V
C356	NCB31EK-223X	CAPACITOR	0.022μF,25V	C535	NCB31EK-103X	CAPACITOR	0.01μF,25V
C357	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C536	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C358	NCB21CK-124X	CAPACITOR	0.12μF,16V	C537	NCF21CZ-105X	CAPACITOR	1μF,16V
C359	NCB21CK-124X	CAPACITOR	0.12μF,16V	C538	NCB31HK-122X	CAPACITOR	0.0012μF,50V
C360	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C540	NCB31EK-103X	CAPACITOR	0.01μF,25V
C363	NBE20JM-475X	E CAPACITOR	4.7μF,6.3V	C541	NBE20JM-106X	E CAPACITOR	10μF,6.3V
C401	NDC31HJ-331X	CAPACITOR	330pF,50V	C542	NCB31CK-104X	CAPACITOR	0.1μF,16V
C402	NEZ0012-476X	E CAPACITOR	47μF	C543	NCB31CK-104X	CAPACITOR	0.1μF,16V
C404	NCF21CZ-105X	CAPACITOR	1μF,16V	C549	NDC31HG-221X	CAPACITOR	220pF,50V
C405	NCB31HK-152X	CAPACITOR	0.0015μF,50V	C561	NCB31HK-102X	CAPACITOR	0.001μF,50V
C407	NCB31HK-152X	CAPACITOR	0.0015μF,50V	C562	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C409	NCB31HK-681X	CAPACITOR	680pF,50V	C563	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C410	NBE21CM-105X	E CAPACITOR	1μF,16V	C564	NCB31CK-104X	CAPACITOR	0.1μF,16V
C411	NCB31EK-103X	CAPACITOR	0.01μF,25V	C565	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C412	NEZ0012-476X	E CAPACITOR	47μF	C566	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C414	NBE21CM-105X	E CAPACITOR	1μF,16V	C567	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C415	NCB21EK-683X	CAPACITOR	0.068μF,25V	C568	NCB31CK-104X	CAPACITOR	0.1μF,16V
C419	NEA70GM-476X	E CAPACITOR	47μF,4.0V	C569	NCB31CK-104X	CAPACITOR	0.1μF,16V
C420	NEA70GM-476X	E CAPACITOR	47μF,4.0V	C570	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C422	NBE20JM-475X	E CAPACITOR	4.7μF,6.3V	C571	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C423	NEA70JM-226X	E CAPACITOR	22μF,6.3V	C572	NCB31HK-102X	CAPACITOR	0.001μF,50V
C425	NEZ0012-476X	E CAPACITOR	47μF	C573	NCB31HK-102X	CAPACITOR	0.001μF,50V
C427	NBE21CM-105X	E CAPACITOR	1μF,16V	C574	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C428	NCB31EK-223X	CAPACITOR	0.022μF,25V	C575	NDC31HJ-220X	CAPACITOR	22pF,50V
C429	NBE21DM-474X	E CAPACITOR	0.47μF,20V	C576	NDC31HJ-5R0X	CAPACITOR	5pF,50V
C431	NCB31EK-472X	CAPACITOR	0.0047μF,25V	C577	NDC31HJ-121X	CAPACITOR	120pF,50V
C432	NCF21CZ-105X	CAPACITOR	1μF,16V	C578	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C437	NFV41HJ-273X	F CAPACITOR	0.027μF,50V	C579	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C438	NDC31HJ-471X	CAPACITOR	470pF,50V	C601	NEA70JM-476X	E CAPACITOR	47μF,6.3V
C439	NCB31EK-682X	CAPACITOR	0.0068μF,25V	C602	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C440	NBE41AM-226X	E CAPACITOR	22μF,10V	C603	NCB31EK-103X	CAPACITOR	0.01μF,25V
C501	NEA70JM-476X	E CAPACITOR	47μF,6.3V	C604	NDC31HJ-100X	CAPACITOR	10pF,50V
C502	NEA71HM-335X	E CAPACITOR	3.3μF,50V	C605	NCB31CK-104X	CAPACITOR	0.1μF,16V
C503	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C607	NCB31EK-103X	CAPACITOR	0.01μF,25V
C504	NEA71HM-225X	E CAPACITOR	2.2μF,50V	C608	NCB31EK-103X	CAPACITOR	0.01μF,25V
C505	NEA70GM-476X	E CAPACITOR	47μF,4.0V	C609	NCB31CK-104X	CAPACITOR	0.1μF,16V
C506	NCB31CK-104X	CAPACITOR	0.1μF,16V	C610	NDC31HJ-100X	CAPACITOR	10pF,50V
C507	NCB31HK-332X	CAPACITOR	0.0033μF,50V	C611	NDC31HJ-4R0X	CAPACITOR	4pF,50V
C508	NCF21CZ-105X	CAPACITOR	1μF,16V	C612	NCB31EK-103X	CAPACITOR	0.01μF,25V
C509	NCF21CZ-105X	CAPACITOR	1μF,16V	C613	NCB31EK-103X	CAPACITOR	0.01μF,25V
C510	NCF21CZ-105X	CAPACITOR	1μF,16V	C614	NCB31CK-104X	CAPACITOR	0.1μF,16V
C511	NCF31HZ-103X	CAPACITOR	0.01μF,50V	C616	NDC31HJ-100X	CAPACITOR	10pF,50V
C512	NDC31HJ-330X	CAPACITOR	33pF,50V	C617	NCB31EK-103X	CAPACITOR	0.01μF,25V
C513	NCS31HJ-561X	CAPACITOR	560pF,50V	C619	NCB31HK-102X	CAPACITOR	0.001μF,50V
C514	NCS21HJ-561X	CAPACITOR	560pF,50V	C621	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C515	NDC31HJ-560X	CAPACITOR	56pF,50V	C623	NCF31HZ-103X	CAPACITOR	0.01μF,50V
C516	NDC31HJ-150X	CAPACITOR	15pF,50V	C624	NCF21CZ-105X	CAPACITOR	1μF,16V
C518	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C625	NCB31EK-103X	CAPACITOR	0.01μF,25V
C519	NCF31HZ-103X	CAPACITOR	0.01μF,50V	C626	NDC31HJ-150X	CAPACITOR	15pF,50V
C520	NEA70JM-476X	E CAPACITOR	47μF,6.3V	C627	NCB31CK-104X	CAPACITOR	0.1μF,16V
C521	NCF31HZ-103X	CAPACITOR	0.01μF,50V	C629	NCB31EK-103X	CAPACITOR	0.01μF,25V
C523	NCB31EK-153X	CAPACITOR	0.015μF,25V	C630	NCB31EK-103X	CAPACITOR	0.01μF,25V
C524	NDC31HJ-221X	CAPACITOR	220pF,50V	C631	NCB31CK-104X	CAPACITOR	0.1μF,16V

#△ REF No.	PART No.	PART NAME, DESCRIPTION		#△ REF No.	PART No.	PART NAME, DESCRIPTION	
C632	NDC31HJ-101X	CAPACITOR	100pF,50V	C854	NEA71CM-106X	E CAPACITOR	10μF,16V
C634	NCB31HK-102X	CAPACITOR	0.001μF,50V	C855	NDC31HJ-100X	CAPACITOR	10pF,50V
C637	NCB31HK-682X	CAPACITOR	0.0068μF,50V	C856	NDC31HJ-270X	CAPACITOR	27pF,50V
C639	NDC31HJ-560X	CAPACITOR	56pF,50V	C857	NDC31HJ-330X	CAPACITOR	33pF,50V
C640	NDC31HJ-221X	CAPACITOR	220pF,50V	C858	NEA70JM-476X	E CAPACITOR	47μF,6.3V
C641	NDC31HJ-680X	CAPACITOR	68pF,50V	C859	NDC31HJ-121X	CAPACITOR	120pF,50V
C642	NDC31HJ-820X	CAPACITOR	82pF,50V	C901	NDC31HJ-470X	CAPACITOR	47pF,50V
C643	NDC31HJ-270X	CAPACITOR	27pF,50V	C902	NDC31HJ-331X	CAPACITOR	330pF,50V
C644	NCF31HZ-103X	CAPACITOR	0.01μF,50V	C903	NCB31CK-473X	CAPACITOR	0.047μF,16V
C701	NEA70JM-476X	E CAPACITOR	47μF,6.3V	C905	NCB31HK-681X	CAPACITOR	680pF,50V
C702	NCF31HZ-103X	CAPACITOR	0.01μF,50V	C906	NDC31HJ-221X	CAPACITOR	220pF,50V
C703	NDC31HJ-270X	CAPACITOR	27pF,50V	C907	NCB31CK-473X	CAPACITOR	0.047μF,16V
C705	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C908	NCB31CK-473X	CAPACITOR	0.047μF,16V
C706	NCF31HZ-103X	CAPACITOR	0.01μF,50V	C909	NCB31CK-473X	CAPACITOR	0.047μF,16V
C710	NDC31HJ-330X	CAPACITOR	33pF,50V	C910	NCB31EK-223X	CAPACITOR	0.022μF,25V
C711	NCF31HZ-103X	CAPACITOR	0.01μF,50V	C912	NCB31CK-473X	CAPACITOR	0.047μF,16V
C712	NDC31HJ-100X	CAPACITOR	10pF,50V	C913	NCB31HK-102X	CAPACITOR	0.001μF,50V
C715	NCF31HZ-103X	CAPACITOR	0.01μF,50V	C914	NCF21CZ-105X	CAPACITOR	1μF,16V
C718	NDC31HJ-101X	CAPACITOR	100pF,50V	C915	NCB31CK-473X	CAPACITOR	0.047μF,16V
C719	NDC31HJ-680X	CAPACITOR	68pF,50V	C916	NDC31HJ-5R0X	CAPACITOR	5pF,50V
C720	NDC31HJ-181X	CAPACITOR	180pF,50V	C917	NCB31EK-223X	CAPACITOR	0.022μF,25V
C722	NCF31HZ-103X	CAPACITOR	0.01μF,50V	C918	NCB31CK-104X	CAPACITOR	0.1μF,16V
C781	NDC31HJ-5R0X	CAPACITOR	5pF,50V	C920	NCB31EK-103X	CAPACITOR	0.01μF,25V
C782	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C921	NDC31HJ-220X	CAPACITOR	22pF,50V
C783	NDC31HJ-181X	CAPACITOR	180pF,50V	C922	NCB31CK-473X	CAPACITOR	0.047μF,16V
C784	NDC31HJ-181X	CAPACITOR	180pF,50V	C923	NCB31EK-103X	CAPACITOR	0.01μF,25V
C785	NDC21HJ-271X	CAPACITOR	270pF,50V	C924	NDC31HJ-151X	CAPACITOR	150pF,50V
C786	NDC21HJ-681X	CAPACITOR	680pF,50V	C925	NCB31EK-103X	CAPACITOR	0.01μF,25V
C801	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C926	NDC31HJ-121X	CAPACITOR	120pF,50V
C802	NEA71CM-106X	E CAPACITOR	10μF,16V	C927	NCB31EK-103X	CAPACITOR	0.01μF,25V
C803	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C928	NCB31CK-273X	CAPACITOR	0.027μF,16V
C804	NCB31CK-104X	CAPACITOR	0.1μF,16V	C929	NCB31CK-273X	CAPACITOR	0.027μF,16V
C805	NCB11CK-105X	CAPACITOR	1μF,16V	C930	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C806	NCB11CK-105X	CAPACITOR	1μF,16V	C932	NCB31CK-273X	CAPACITOR	0.027μF,16V
C807	NCB31CK-104X	CAPACITOR	0.1μF,16V	C934	NCB31CK-473X	CAPACITOR	0.047μF,16V
C808	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C935	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C816	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C936	NEA71CM-106X	E CAPACITOR	10μF,16V
C817	NCB31CK-473X	CAPACITOR	0.047μF,16V	C937	NCB31EK-153X	CAPACITOR	0.015μF,25V
C818	NCB31CK-473X	CAPACITOR	0.047μF,16V	C938	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C823	NEA71CM-106X	E CAPACITOR	10μF,16V	C939	NBE20JM-106X	E CAPACITOR	10μF,6.3V
C831	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C940	NCB31EK-183X	CAPACITOR	0.018μF,25V
C832	NCB31CK-473X	CAPACITOR	0.047μF,16V	C941	NCB21EK-183X	CAPACITOR	0.018μF,25V
C833	NCB31CK-473X	CAPACITOR	0.047μF,16V	C942	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C834	NCB31CK-104X	CAPACITOR	0.1μF,16V	C943	NBE20JM-106X	E CAPACITOR	10μF,6.3V
C835	NCB31CK-104X	CAPACITOR	0.1μF,16V	C944	NCB31CK-104X	CAPACITOR	0.1μF,16V
C836	NCB31CK-104X	CAPACITOR	0.1μF,16V	C945	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C837	NCB31CK-104X	CAPACITOR	0.1μF,16V	C946	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C838	NCF21CZ-474X	CAPACITOR	0.47μF,16V	C947	NBE20JM-106X	E CAPACITOR	10μF,6.3V
C839	NCF21CZ-474X	CAPACITOR	0.47μF,16V	C948	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C840	NCB31CK-473X	CAPACITOR	0.047μF,16V	C949	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C841	NCB31CK-473X	CAPACITOR	0.047μF,16V	C952	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C842	NCB31CK-104X	CAPACITOR	0.1μF,16V	C953	NEA71CM-106X	E CAPACITOR	10μF,16V
C843	NEA71CM-106X	E CAPACITOR	10μF,16V	C954	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C844	NCB31CK-104X	CAPACITOR	0.1μF,16V	C955	NCB21CK-224X	CAPACITOR	0.22μF,16V
C845	NCB31CK-104X	CAPACITOR	0.1μF,16V	C956	NCB21CK-473X	CAPACITOR	0.047μF,16V
C846	NCB31CK-473X	CAPACITOR	0.047μF,16V	C957	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C847	NCB31CK-473X	CAPACITOR	0.047μF,16V	C958	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C848	NCB31CK-104X	CAPACITOR	0.1μF,16V	C959	NCB31EK-103X	CAPACITOR	0.01μF,25V
C850	NCF21CZ-105X	CAPACITOR	1μF,16V	C961	NEA71CM-106X	E CAPACITOR	10μF,16V
C851	NCB31CK-104X	CAPACITOR	0.1μF,16V	C962	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C852	NCF31CZ-104X	CAPACITOR	0.1μF,16V	C963	NCB31HK-332X	CAPACITOR	0.0033μF,50V
C853	NCB31CK-104X	CAPACITOR	0.1μF,16V	C965	NCB31EK-472X	CAPACITOR	0.0047μF,25V

[illegible]

#△ REF No.	PART No.	PART NAME, DESCRIPTION	
	NRSA63J-152X	RESISTOR,AX460EG	1.5kΩ,1/16W
R107	NRSA63J-203X	RESISTOR	20kΩ,1/16W
R108	NRSA63J-152X	RESISTOR,AX460EG	1.5kΩ,1/16W
R109	NRVA02D-680X	CMF RESISTOR	68Ω,1/10W
R201	NRSA63J-103X	RESISTOR,AX460EG	10kΩ,1/16W
R202	NRSA63J-122X	RESISTOR,AX460EG	1.2kΩ,1/16W
R203	NRSA63J-103X	RESISTOR,AX460EG	10kΩ,1/16W
R204	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R205	NRSA63J-561X	RESISTOR	560Ω,1/16W
△ R206	NRSA63J-102X	RESISTOR	1kΩ,1/16W
R208	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
C1	NCB11CK-105X	CAPACITOR	1μF,16V
C2	NCB11CK-105X	CAPACITOR	1μF,16V
C3	NCB11CK-105X	CAPACITOR	1μF,16V
C5	NCB11CK-105X	CAPACITOR	1μF,16V
C6	NCB11CK-105X	CAPACITOR	1μF,16V
C7	NCB11CK-105X	CAPACITOR	1μF,16V
C8	NCB11CK-105X	CAPACITOR	1μF,16V
C9	NCS31HJ-561X	CAPACITOR	560pF,50V
C10	NCB31HK-102X	CAPACITOR	0.001μF,50V
C11	NCB31HK-472X	CAPACITOR	0.0047μF,50V
C12	NCB31EK-103X	CAPACITOR	0.01μF,25V
C13	NCB21CK-224X	CAPACITOR	0.22μF,16V
C14	NDC31HJ-431X	CAPACITOR	430pF,50V
C15	NCF21EZ-104X	CAPACITOR	0.1μF,25V
C17	NCB21EK-104X	CAPACITOR	0.1μF,25V
C18	NCB31EK-103X	CAPACITOR	0.01μF,25V
C20	NCS31HJ-561X	CAPACITOR	560pF,50V
C23	NCB31HK-472X	CAPACITOR	0.0047μF,50V
C24	NCB31EK-103X	CAPACITOR	0.01μF,25V
C25	NCB31EK-223X	CAPACITOR	0.022μF,25V
C26	NCB11CK-105X	CAPACITOR	1μF,16V
C27	NCB11CK-105X	CAPACITOR	1μF,16V
C29	NCB11CK-105X	CAPACITOR	1μF,16V
C30	NEH81CM-226X	E CAPACITOR	22μF,16V
C32	NCB11CK-105X	CAPACITOR	1μF,16V
C33	QEDL1CM-476	E CAPACITOR	47μF,16V
C34	NCB31HK-332X	CAPACITOR	0.0033μF,50V
C35	NCB11CK-105X	CAPACITOR	1μF,16V
C36	NCB11CK-105X	CAPACITOR	1μF,16V
C37	NCB11CK-105X	CAPACITOR	1μF,16V
C40	NEH81CM-226X	E CAPACITOR	22μF,16V
C41	NCB11CK-105X	CAPACITOR	1μF,16V
C42	NCB21EK-104X	CAPACITOR	0.1μF,25V
C45	NCB11CK-105X	CAPACITOR	1μF,16V
C46	NCB11CK-105X	CAPACITOR	1μF,16V
C49	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C101	NEA50GM-337X	E CAPACITOR	330μF,4.0V
C102	NCB31EK-103X	CAPACITOR	0.01μF,25V
C201	NEA71CM-106X	E CAPACITOR,AX460EG	10μF,16V
C202	NEA50JM-227X	E CAPACITOR	220μF,6.3V
L1	PELN1099-100MP	COIL	10μH
L2	PELN1099-100MP	COIL	10μH
L3	PELN1099-390MP	COIL	39μH
L4	PELN1099-100MP	COIL	10μH
L5	PELN1099-470MP	COIL	47μH
L6	PELN0325-150KZ	COIL	15μH
L7	PELN0325-330KZ	COIL	33μH
L8	PELN0325-330KZ	COIL	33μH
L9	YU40740-220K	COIL	22μH
SW1	PESW0605-02-R	PUSH SWITCH	
SW2	PESW0675	SLIDE SWITCH,AX460EG	

#△ REF No.	PART No.	PART NAME, DESCRIPTION
SW3	PESW0662	SLIDE SWITCH,AX460EG
T1	PELN1045-Z	SW TRANS
J1	YQ32226	PIN JACK
J2	PEMC1091	MINI JACK
OT1	YQ43087	KNOB(APS),AX460EG
OT2	YQ43806-2	KNOB(LIGHT),AX460EG
△ TML1	YQ31792	BATTETY TERMINAL UNIT
TML2	YQ31793	BATTERY TERMINAL UNIT
CN1	PEMC0988-048-X	CONNECTOR
CN3	PEMC1073-004-R	CONNECTOR
CN4	PEMC1073-002-P	CONNECTOR,AX460EG
CN5	PEMC1073-005-R	CONNECTOR
△ CP1	ICP-S1.8-X	CIRCUIT PROTECTOR,AX460EG
△ CP2	ICP-S1.8-X	CIRCUIT PROTECTOR
△ CP3	ICP-S1.8-X	CIRCUIT PROTECTOR
△ CP4	ICP-S0.5-X	CIRCUIT PROTECTOR
△ CP5	ICP-S0.5-X	CIRCUIT PROTECTOR,AX360EG

SENSOR BOARD ASSEMBLY <05>

PWBA YU42052-1-6 SENSOR BOARD ASSY

CCD BOARD ASSEMBLY <06>

PWBA YB20746B-01-SS CCD BOARD ASSY

IC201	UPD16510GR	IC	
IC202	JCY0035	IC	
	or JCY0035-NS	IC	
IC203	AN2018S	IC	
Q203	2SC3931(CD)	TRANSISTOR	
Q204	2SC4081(QR)	TRANSISTOR	
	or 2SC4116(YG)	TRANSISTOR	
Q205	2SC4081(QR)	TRANSISTOR	
	or 2SC4116(YG)	TRANSISTOR	
D201	1SS355	DIODE	
D204	MA8082(HM)	ZENER DIODE	
R201	NRSA63J-153X	RESISTOR	15kΩ,1/16W
R204	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R205	NRSA63J-104X	RESISTOR	100kΩ,1/16W
R212	NRSA63J-332X	RESISTOR	3.3kΩ,1/16W
R213	NRSA63J-105X	RESISTOR	1MΩ,1/16W
R214	NRSA63J-100X	RESISTOR	10Ω,1/16W
R215	NRSA63J-562X	RESISTOR	5.6kΩ,1/16W
R216	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W
R217	NRSA63J-101X	RESISTOR	100Ω,1/16W
R218	NRSA63J-560X	RESISTOR	56Ω,1/16W
R219	NRSA63J-560X	RESISTOR	56Ω,1/16W
R220	NRSA63J-101X	RESISTOR	100Ω,1/16W
R221	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R222	NRSA63J-103X	RESISTOR	10kΩ,1/16W
R223	NRSA63J-223X	RESISTOR	22kΩ,1/16W
R226	NRSA63J-0R0X	RESISTOR	0Ω,1/16W

#△ REF No.	PART No.	PART NAME, DESCRIPTION	
R228	NRSA63J-332X	RESISTOR	3.3kΩ,1/16W
R229	NRSA63J-152X	RESISTOR	1.5kΩ,1/16W
R230	NRSA63J-0R0X	RESISTOR	0Ω,1/16W
R231	NRSA63J-101X	RESISTOR	100Ω,1/16W
R232	NRSA63J-220X	RESISTOR	22Ω,1/16W
R233	NRSA63J-220X	RESISTOR	22Ω,1/16W
R234	NRSA63J-101X	RESISTOR	100Ω,1/16W
R235	NRSA63J-101X	RESISTOR	100Ω,1/16W
R238	NRSA63J-103X	RESISTOR	10kΩ,1/16W
C201	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C202	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C205	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C206	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C209	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C210	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C211	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C212	NEA71EM-475X	E CAPACITOR	4.7μF,25V
C213	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C214	NEA71EM-475X	E CAPACITOR	4.7μF,25V
C215	NCB21EK-104X	CAPACITOR	0.1μF,25V
C216	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C217	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C218	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C219	NBE21CM-105X	E CAPACITOR	1μF,16V
C220	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C221	NEA70JM-226X	E CAPACITOR	22μF,6.3V
C223	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C224	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C225	NDC31HJ-470X	CAPACITOR	47pF,50V
C226	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C227	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C228	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C229	NDC31HJ-560X	CAPACITOR	56pF,50V
C230	NDC31HJ-101X	CAPACITOR	100pF,50V
C231	NEA70JM-107X	E CAPACITOR	100μF,6.3V
C235	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C236	NBE41AM-106X	E CAPACITOR	10μF,10V
C237	NCB31HK-102X	CAPACITOR	0.001μF,50V
L201	YU40740-220K	COIL	22μH
L202	YU40740-220K	COIL	22μH
L203	YU40740-220K	COIL	22μH
L204	YU40740-220K	COIL	22μH
L205	YU40740-220K	COIL	22μH
L206	YU41607-Y	CHIP FERR.B	
L207	YU41607-Y	CHIP FERR.B	
L208	YU41607-Y	CHIP FERR.B	
X201	PEVB0638-P	CXO	
CN201	PEMC1071	CCD SOCKET	
CN202	PEMC0880-028-X	CONNECTOR	
CN203	YU41356-4-R	CONNECTOR	

APS BOARD ASSEMBLY<GR-AX460EG><07>

PWBA	YB20750A2-02	APS BOARD ASSY
ML1	ML-Y00719A	WIRE
PS1	PESC1163	PH INTERRUPTER

#△ REF No. PART No. PART NAME, DESCRIPTION

IR BOARD ASSEMBLY <08>

PWBA	PEAS2183-02	IR BOARD ASSY
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OPERATION BOARD ASSEMBLY <09>

PWBA	YQ20905	OPERATION(CAMERA)BOARD ASSY,AX460EG
	YQ20967	OPERATION(CAMERA)BOARD ASSY,AX260EG/AX360EG

E.VF BOARD ASSEMBLY<GR-AX260EG/AX460EG TYPE T><10>

PWBA	YB20748E-03	EVF BOARD ASSY	
IC7001	BA7149F-XE	IC	
Q7001	2SD968A(RS)	PH TRANSISTOR	
Q7002	2SA1748(QR)	PH TRANSISTOR	
Q7003	2SA1748(QR)	PH TRANSISTOR	
D7001	MA142WA	DIODE	
R7002	QRSA08J-3R9YN	RESISTOR	3.9Ω,1/10W
R7003	NRVA62D-183N	RESISTOR	18kΩ,1/16W
R7005	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
R7006	QRSA08J-113YN	RESISTOR	11kΩ,1/10W
R7007	QRSA08J-330YN	RESISTOR	33Ω,1/10W
R7008	QRSA08J-394YN	RESISTOR	390kΩ,1/10W
R7009	QRSA08J-103YN	RESISTOR	10kΩ,1/10W
R7010	NRVA62D-104N	RESISTOR	100kΩ,1/16W
R7011	NRVA62D-153N	RESISTOR	15kΩ,1/16W
R7012	QRSA08J-221YN	RESISTOR	220Ω,1/10W
R7013	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
R7014	QRSA08J-472YN	RESISTOR	4.7kΩ,1/10W
R7015	QRSA08J-223YN	RESISTOR	22kΩ,1/10W
R7016	QRSA08J-122YN	RESISTOR	1.2kΩ,1/10W
R7017	QRSA08J-472YN	RESISTOR	4.7kΩ,1/10W
R7018	QRSA08J-223YN	RESISTOR	22kΩ,1/10W
R7019	QRSA08J-120YN	RESISTOR	12Ω,1/10W
R7020	QRS188J-685YN	RESISTOR	6.8MΩ,1/8W
R7021	QRSA08J-475YN	RESISTOR	4.7MΩ,1/10W
R7022	QRSA08J-475YN	RESISTOR	4.7MΩ,1/10W
R7023	QRSA08J-564YN	RESISTOR	560kΩ,1/10W
R7024	QRSA08J-105YN	RESISTOR	1MΩ,1/10W
R7025	QRSA08J-275YN	RESISTOR	2.7MΩ,1/10W
R7026	QRSA08J-275YN	RESISTOR	2.7MΩ,1/10W
R7029	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
R7030	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
VR7001	NVP0001-221X	V RESISTOR,V SIZE	
VR7002	NVP0001-225X	V RESISTOR,BRIGHT	
VR7003	PERE0595-565	V RESISTOR,FOCUS	
C7001	QFV21HJ-104AZ	F CAPACITOR	0.1μF,50V
C7002	PECA1131-A107	E CAPACITOR	100μF,10V
C7003	PECA1131-A107	E CAPACITOR	100μF,10V

#△ REF No.	PART No.	PART NAME, DESCRIPTION	
C7004	PECA1132-A107	E CAPACITOR	100μF,10V
C7005	QCFA1CZ-105	CAPACITOR	1μF,16V
C7006	QCYA1EK-153	CAPACITOR	0.015μF,25V
C7007	QCY81CK-105	CAPACITOR	1μF,16V
C7008	QCFA1CZ-105	CAPACITOR	1μF,16V
C7009	PECA1131-A107	E CAPACITOR	100μF,10V
C7010	PECA1135-Y	CAPACITOR	
C7011	QCTA1CH-180	CAPACITOR	18pF,16V
C7012	QEK1HM-105	E CAPACITOR	1μF,50V
C7013	QCFA1HZ-104	CAPACITOR	0.1μF,50V
C7014	QCFA1HZ-104	CAPACITOR	0.1μF,50V
C7015	QCZ0136-151Z	CAPACITOR	150pF,1kV
C7016	PECA1133	CAPACITOR	330pF,500V
L7001	PELN1175	COIL	
L7002	PU49993-101	COIL	100μH
L7003	PELN1101-680JY	COIL	68μH
△ T7001	PELN1174	FB TRANS	
CN7001	PEMC0856-4	CONNECTOR	
CN7002	PEMC1004-006	CONNECTOR	
CN7003	PEMC1172	CONNECTOR	

UPPER DRUM BOARD <40>

PWB YDM3073-2-1 BOARD (UPPER DRUM)

E.VF BOARD ASSEMBLY(GR-AX260EG/AX460EG TYPE M)<50>

PWBA	YQ31803-600	E.VF BOARD ASSY	
IC1	BA7149F	IC	
Q1	2SA1037K	TRANSISTOR,TR1	
	or 2SA1179	TRANSISTOR,TR1	
	or 2SA1235	TRANSISTOR,TR1	
Q2	2SC4132	TRANSISTOR,TR2	
Q3	2SC4618	TRANSISTOR,TR3	
	or 2SC4655	TRANSISTOR,TR3	
D1	RLS245	DIODE	
R1	YQ31803-501	RESISTOR	9.1kΩ,1/10W
R2	QRSA08G-333YN	RESISTOR	33kΩ,1/10W
R3	QRSA08J-3R9YN	RESISTOR	3.9Ω,1/10W
R4	QRSA08J-390YN	RESISTOR	39Ω,1/10W
R5	YU30595-111	RESISTOR	390Ω,1/10W
R6	YU30595-113	RESISTOR	91kΩ,1/10W
R7	QRSA08J-103YN	RESISTOR	10kΩ,1/10W
R8	YQ31803-502	RESISTOR	2.2kΩ,1/10W
R9	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
VR1	YQ31803-504	V RESISTOR,V SIZE	
VR2	YQ31803-505	V RESISTOR,H HOLD	
VR4	YQ31803-506	V RESISTOR,BRIGHT	
R10	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
R11	QRSA08J-330YN	RESISTOR	33Ω,1/10W
R12	QRSA08J-113YN	RESISTOR	11kΩ,1/10W

#△ REF No.	PART No.	PART NAME, DESCRIPTION	
R13	YQ31803-503	RESISTOR	3.9kΩ,1/10W
R14	QRSA08J-822YN	RESISTOR	8.2kΩ,1/10W
R15	QRSA08J-182YN	RESISTOR	1.8kΩ,1/10W
R16	QRSA08J-332YN	RESISTOR	3.3kΩ,1/10W
R17	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
R18	QRSA08J-471YN	RESISTOR	470Ω,1/10W
R19	QRSA08F-103YN	RESISTOR	10kΩ,1/10W
R20	QRSA08F-152YN	RESISTOR	1.5kΩ,1/10W
R21	QRSA08J-275YN	RESISTOR	2.7MΩ,1/10W
R22	QRSA08J-275YN	RESISTOR	2.7MΩ,1/10W
R23	QRSA08J-105YN	RESISTOR	1MΩ,1/10W
R24	QRSA08J-154YN	RESISTOR	150kΩ,1/10W
R25	QRSA08J-2R7YN	RESISTOR	2.7Ω,1/10W
R26	QRSA08J-472YN	RESISTOR	4.7kΩ,1/10W
R27	QRSA08J-102YN	RESISTOR	1kΩ,1/10W
C1	YQ31803-507	CAPACITOR	0.22μF,16V
C2	YQ31304-503	CAPACITOR	1μF,16V
C3	YQ31304-504	CAPACITOR	1500pF,50V
C4	YQ31304-503	CAPACITOR	1μF,16V
C5	YQ31304-506	E CAPACITOR	100μF,10V
C6	YQ31304-506	E CAPACITOR	100μF,10V
C7	YQ31304-506	E CAPACITOR	100μF,10V
C8	YQ31304-503	CAPACITOR	1μF,16V
C9	YQ31392-501	CAPACITOR	100pF,16V
C10	YU30531-163	CAPACITOR	0.047μF
C11	QER61HM-100	E CAPACITOR	10pF,50V
C12	YQ31803-508	F CAPACITOR	6200pF,100V
C13	YQ31304-506	E CAPACITOR	100μF,10V
C14	YQ31304-507	CAPACITOR	1500pF,630V
L1	YQ30723-115	COIL	100μH
TH1	YU30236-110	THERMISTOR	
WR1	YQ31803-580	FPC	
△ FBT1	YQ31803-550	FLY BACK TRANS	
HLC1	YQ31803-560	H.COIL	
CN1	YQ31803-570	CONNECTOR	
CN2	YQ31803-571	CONNECTOR	
CN3	YQ31803-572	CONNECTOR	

PBL BOARD ASSEMBLY(GR-AX360EG)<51>

PWBA1	YB20747B1-01	PBL BOARD ASSY	
IC7101	FA7615M-XE	IC	
IC7102	TA75S01F	IC	
IC7103	TC7W04FU	IC	
Q7101	DTC143EE	TRANSISTOR	
Q7102	2SK1254S	TRANSISTOR	
Q7103	2SC3646(ST)	TRANSISTOR	
Q7104	DTC143EE	TRANSISTOR	
Q7107	UMX2N	TRANSISTOR	
Q7108	XP6534	TRANSISTOR	
D7101	SB07-03C-X	SB DIODE	
D7102	MA111	DIODE	
R7101	NRVA63D-272X	CMF RESISTOR	2.7kΩ,1/16W
R7102	NRVA63D-123X	MF RESISTOR	12kΩ,1/16W
R7103	NRSA63J-474X	RESISTOR	470kΩ,1/16W
R7104	NRVA63D-683X	CMF RESISTOR	68kΩ,1/16W
R7105	NRVA63D-153X	MF RESISTOR	15kΩ,1/16W

#△ REF No.	PART No.	PART NAME, DESCRIPTION		#△ REF No.	PART No.	PART NAME, DESCRIPTION	
R7106	NRSA63J-104X	RESISTOR	100kΩ,1/16W	C7125	NDC31HK-560X	CAPACITOR	56pF,50V
R7107	NRVA63D-333X	CMF RESISTOR	33kΩ,1/16W	C7126	NCB31EK-103X	CAPACITOR	0.01μF,25V
R7108	NRSA63J-474X	RESISTOR	470kΩ,1/16W	L7101	PELN1099-820MP	COIL	82μH
R7109	NRSA63J-274X	RESISTOR	270kΩ,1/16W	L7102	YU41135-220K	COIL	22μH
R7110	NRSA63J-104X	RESISTOR	100kΩ,1/16W	L7103	PELN0999-681MP	COIL	680μH
R7111	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W	T7101	PELN1190-R	SW TRANS	
R7112	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W	SD1	YU42070	SHIELD PLATE	
R7113	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W	CN7101	PEMC0855-010-R	CONNECTOR	
R7114	NRVA63D-472X	MF RESISTOR	4.7kΩ,1/16W	CN7102	PEMC0967-012-P	CONNECTOR	
R7115	NRSA63J-682X	RESISTOR	6.8kΩ,1/16W	CN7103	PEMC0907-010-P	CONNECTOR	
R7116	NRSA63J-681X	RESISTOR	680Ω,1/16W				
R7117	NRSA63J-103X	RESISTOR	10kΩ,1/16W				
R7118	NRSA63J-683X	RESISTOR	68kΩ,1/16W				
R7119	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W				
R7120	NRSA63J-823X	RESISTOR	82kΩ,1/16W				
R7121	NRVA63D-563X	MF RESISTOR	56kΩ,1/16W				
R7122	NRVA63D-183X	MF RESISTOR	18kΩ,1/16W				
R7123	NRSA63J-472X	RESISTOR	4.7kΩ,1/16W				
R7124	NRVA63D-273X	MF RESISTOR	27kΩ,1/16W				
R7125	NRVA63D-151X	MF RESISTOR	150Ω,1/16W				
R7126	NRSA63J-104X	RESISTOR	100kΩ,1/16W				
R7129	NRSA63J-155X	RESISTOR	1.5MΩ,1/16W				
R7130	NRSA63J-103X	RESISTOR	10kΩ,1/16W				
R7132	NRSA63J-153X	RESISTOR	15kΩ,1/16W				
R7133	NRSA63J-333X	RESISTOR	33kΩ,1/16W				
R7134	NRSA63J-183X	RESISTOR	18kΩ,1/16W				
R7135	NRSA63J-332X	RESISTOR	3.3kΩ,1/16W				
R7136	NRSA63J-222X	RESISTOR	2.2kΩ,1/16W				
R7137	NRSA63J-821X	RESISTOR	820Ω,1/16W				
R7138	NRSA63J-821X	RESISTOR	820Ω,1/16W				
R7139	NRSA63J-332X	RESISTOR	3.3kΩ,1/16W				
R7140	NRSA63J-102X	RESISTOR	1kΩ,1/16W				
R7141	NRSA63J-103X	RESISTOR	10kΩ,1/16W				
R7142	NRSA63J-103X	RESISTOR	10kΩ,1/16W				
R7143	NRSA63J-2R2X	RESISTOR	2.2Ω,1/16W				
R7144	NRSA63J-225X	RESISTOR	2.2MΩ,1/16W				
R7145	NRSA63J-225X	RESISTOR	2.2MΩ,1/16W				
VR7101	NVP1202-102N	V RESISTOR,REG13.5V					
VR7102	NVP1202-223N	V RESISTOR,B-SUB BGIGHT					
VR7103	NVP1202-223N	V RESISTOR,BRIGHT					
C7101	NCF31CZ-104X	CAPACITOR	0.1μF,16V				
C7102	NCB31EK-103X	CAPACITOR	0.01μF,25V				
C7103	NCF31CZ-104X	CAPACITOR	0.1μF,16V				
C7104	NBE50GM-686X	E CAPACITOR	68μF,4.0V				
C7105	NDC21HJ-222X	CAPACITOR	0.0022μF,50V				
C7106	NCF31CZ-104X	CAPACITOR	0.1μF,16V				
C7107	NCF31CZ-104X	CAPACITOR	0.1μF,16V				
C7108	NCF21CZ-105X	CAPACITOR	1μF,16V				
C7109	NCB21EK-104X	CAPACITOR	0.1μF,25V				
C7110	NCF31CZ-104X	CAPACITOR	0.1μF,16V				
C7111	NDC31HK-330X	CAPACITOR	33pF,50V				
C7112	NBE21CM-105X	E CAPACITOR	1μF,16V				
C7113	NCF21CZ-105X	CAPACITOR	1μF,16V				
C7114	NBE71CM-336X	E CAPACITOR	33μF,16V				
C7115	NBE71AM-476X	E CAPACITOR	47μF,10V				
C7116	NCF21CZ-105X	CAPACITOR	1μF,16V				
C7117	NBE71DM-226X	E CAPACITOR	22μF,20V				
C7120	NCB31EK-103X	CAPACITOR	0.01μF,25V				
C7121	NCF21CZ-105X	CAPACITOR	1μF,16V				
C7122	NDC31HK-560X	CAPACITOR	56pF,50V				
C7123	NCB31HK-102X	CAPACITOR	0.001μF,50V				
C7124	NCB31HK-102X	CAPACITOR	0.001μF,50V				

#△ REF No.	PART No.	PART NAME, DESCRIPTION	
R7247	NRVA63D-153X	MF RESISTOR	15kΩ, 1/16W
R7248	NRSA63J-274X	RESISTOR	270kΩ, 1/16W
R7249	NRSA63J-224X	RESISTOR	220kΩ, 1/16W
R7250	NRSA63J-393X	RESISTOR	39kΩ, 1/16W
R7251	NRSA63J-393X	RESISTOR	39kΩ, 1/16W
R7252	NRSA63J-393X	RESISTOR	39kΩ, 1/16W
R7254	NRSA63J-100X	RESISTOR	10Ω, 1/16W
R7255	NRSA63J-100X	RESISTOR	10Ω, 1/16W
R7258	NRSA63J-0R0X	RESISTOR	0Ω, 1/16W
VR7201	NVP1202-473N	V RESISTOR, PLL	
VR7203	NVP1202-223N	V RESISTOR, R BRIGHT	
VR7204	NVP1202-223N	V RESISTOR, B BRIGHT	
VR7205	NVP1202-223N	V RESISTOR, BLACK LEVEL	
VR7206	NVP1202-473N	V RESISTOR, WHITE LEVEL	
C7201	NBE21CM-105X	E CAPACITOR	1μF, 16V
C7202	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7203	NBE21CM-105X	E CAPACITOR	1μF, 16V
C7204	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7205	NCF31CZ-104X	CAPACITOR	0.1μF, 16V
C7206	NCF11CZ-225X	CAPACITOR	2.2μF, 16V
C7207	NCB31HK-332X	CAPACITOR	0.0033μF, 50V
C7208	NDC31HK-221X	CAPACITOR	220pF, 50V
C7209	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7210	NDC31HJ-330X	CAPACITOR	33pF, 50V
C7211	NBE21CM-155X	E CAPACITOR	1.5μF, 16V
C7212	NBE21CM-155X	E CAPACITOR	1.5μF, 16V
C7213	NBE21CM-155X	E CAPACITOR	1.5μF, 16V
C7214	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7215	NBE41CM-106X	E CAPACITOR	10μF, 16V
C7216	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7218	NBE20JM-106X	E CAPACITOR	10μF, 6.3V
C7219	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7220	NCF21CZ-105X	CAPACITOR	1μF, 16V
C7221	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7222	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7223	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7224	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7226	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7227	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7228	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7229	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7230	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7231	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7232	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7233	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7234	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7235	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7236	NBE21CM-105X	E CAPACITOR	1μF, 16V
C7237	NBE21AM-225X	E CAPACITOR	2.2μF, 10V
C7238	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7239	NBE21DM-155X	E CAPACITOR	1.5μF, 20V
C7240	NCB31EK-103X	CAPACITOR	0.01μF, 25V
C7241	NBE20JM-106X	E CAPACITOR	10μF, 6.3V
L7201	PELN0865-100KY	COIL	10μH
L7202	PELN0704-100KY	COIL	10μH
L7204	PELN0704-100KY	COIL	10μH
CN7201	YU41358-12-R	CONNECTOR	
CN7202	PEMC0880-016-R	CONNECTOR	
CN7203	YU41361-10-P	CONNECTOR	

#△ REF No. PART No. PART NAME, DESCRIPTION

BL BOARD ASSEMBLY(GR-AX360EG) < 53 >

PWBA3	YB20747B3-01	BL BOARD ASSY
BL7301	PEDP0195	LAMP
CN7301	YU41359-10-P	CONNECTOR

SECTION 6 TECHNICAL INFORMATION

6.1 EMERGENCY DISPLAY

Whenever some abnormal signal is supplied to mechacon CPU, an error number (E 04, for example) displayed in the electronic view finder.

E. VF DISPLAY	Symptom	Mode when observed	Resulting mode
E07	Short circuit of capstan MDA	Power ON	Power OFF
E06	CAPSTAN FG input absent	EDIT	STOP
E04	DRUM FF input absent	DRUM rotation	STOP
E03	SUPPLY REEL FG input absent	REC, PLAY, SEARCH, FF	STOP
E02	Mode control motor rotates for more than 10 sec without shift to next mode.	UNLOADING	Mode continues
E01	Mode control motor rotates for more than 10 sec without shift to next mode.	LOADING	Mode continues
E00	Overtime the programing transaction	REC,PLAY	EJECT

Emergency mode : Indication for 5 minutes, then power OFF
 Port states : Same as Stop mode
 Effective key : POWER
 Shifted mode : Power OFF

JVC

VICTOR COMPANY OF JAPAN, LIMITED



Printed in Japan
9602 (VP-M09A2/A2C/A5)