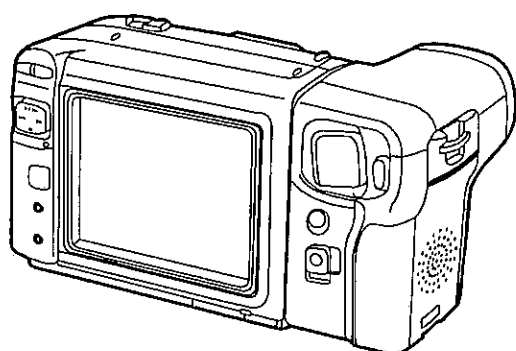


SHARP**SERVICE MANUAL**

S76M6VLDC1U//

**LIQUID CRYSTAL DIGITAL VIDEO CAMERA****MODEL VL-DC1U**

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP ELECTRONICS CORPORATION

Service Headquarters: Sharp Plaza, Mahwah, New Jersey 07430-2135 Phone; 1-800-BE SHARP

SHARP ELECTRONICS OF CANADA LTD.

335 Britannia Road East Mississauga, Ontario L4Z 1W9 Canada

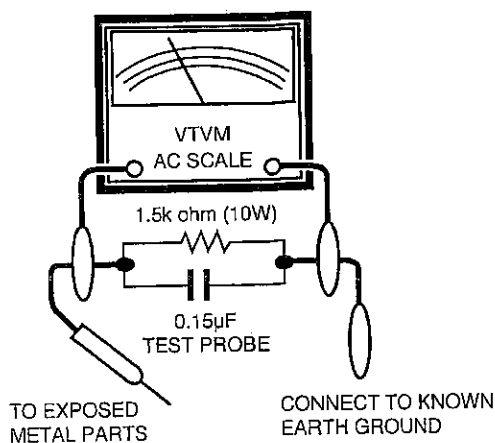
1. IMPORTANT SERVICE NOTES

BEFORE RETURNING THE VIDEO CAMERA RECORDER

Before returning the video camera recorder to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the video camera recorder.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor/capacitor networks, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
 - Plug the AC line cord directly into a 120 volt AC outlet (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in series with all exposed metal cabinet parts and a known ground, such as a water pipe or conduit.
 - Use a VTVM or VOM with 1000 ohm per volt, or higher sensitivity or measure the AC voltage drop across the resistor (See Diagram).
 - Move the resistor connection to all exposed metal parts having a return path to the chassis (antenna connec-

tions, metal cabinet, screw heads, knobs and control shafts, etc.) and measure the AC voltage drop across the resistor. Reverse the AC plug (a non polarized adaptor plug must be used but only for the purpose of completing these checks) on the set and repeat the AC voltage measurements for each exposed metallic part. Any reading of 0.45V rms (this corresponds to 0.3mA rms AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the video camera recorder to the user.



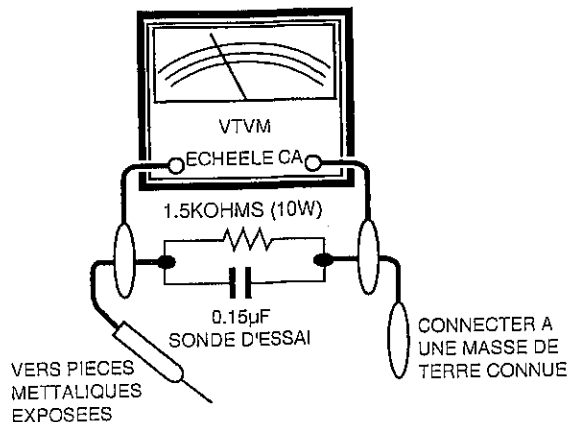
1. NOTES DE SERVICE IMPORTANTES

AVANT DE RENDRE LE MAGNETOSCOPE

Avant de rendre le magnétoscope à l'utilisateur, effectuer les vérifications de sécurité suivantes.

1. Vérifier toutes les gaines de fil pour être sûr que les fils ne sont pas pincés ou que le matériel n'est pas coincé entre le châssis et les autres pièces métalliques dans le magnétoscope.
2. Vérifier tous les dispositifs de protection tels que les boutons de commande non métalliques, les matériaux d'isolement, le dos du coffret, les couvercles de compartiment et ajustement ou les boudriers, les réseaux de résistance/condensateur d'isolement, les isolateurs mécaniques, etc.
3. Pour être sûr qu'il n'y a aucun risque de choc électrique, vérifier le courant de fuite de la manière suivante.
 - Brancher le cordon d'alimentation secteur directement dans une prise de courant de 120 volts. (Ne pas utiliser de transformateur d'isolement pour cet essai).
 - Utiliser deux fils à pinces et connecter une résistance de 10 watts 1,5kohm en parallèle avec un condensateur de 0,15 μ F en série avec des pièces du coffret métallique exposées et une masse de terre connue telle qu'un tuyau ou un conduit d'eau.
 - Utiliser un VTVM ou VOM avec une sensibilité de 1000 ohms par volt ou plus ou mesurer la chute de tension CA entre la résistance (voir diagramme).
 - Déposer la connexion de la résistance à toutes les

pièces métalliques exposées ayant un parcours de retour au châssis (connexions d'antenne, coffret métallique, têtes de vis, boutons et arbres de commande, etc.) et mesurer la chute de tension CA entre la résistance. Inverser la fiche CA (une fiche intermédiaire non polarisée doit être utilisée à seule fin de faire ces vérifications.) sur l'appareil et répéter les mesures de tension CA pour chaque pièce métallique exposée. Toute lecture de 0,45 V rms (ceci correspond à 0,3 mA rms CA) ou plus est excessive et signale un danger de choc qui doit être corrigé avant de rendre le magnétoscope à son utilisateur.



WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO WET LOCATIONS.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol warns the user of uninsulated voltage within the unit that can cause dangerous electric shocks.



This symbol alerts the user that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION

This symbol mark means following.
For continued protection against fire hazard, replace only with same type fuse.
(CP900; 2.5A 72V; CP901; 2.5A 72V,
CP902; 2.5A 72V; CP905; 2.5A 72V)

Camcorder
only



ATTENTION: POUR REDUIRE LES RISQUES D'INCENDIE OU DE CHOC ELECTRIQUE, NE PAS EXPOSER CET APPAREIL A LA PLUIE OU A L'HUMIDITE.



ATTENTION

RISQUE DE CHOC ELECTRIQUE
NE PAS OUVRIR



ATTENTION: AFIN DE REDUIRE LES RISQUES DE CHOC ELECTRIQUE, NE PAS RETIRER LE COUVERCLE, AUCUN ORGANE INTERNE NE PEUT ETRE REPARÉ PAR L'UTILISATEUR, CONFIER L'APPAREIL A UN DEPANNEUR QUALIFIE.



Ce symbole signale à l'utilisateur la présence d'une tension non isolée à l'intérieur de l'appareil qui peut être la cause de secousses électriques dangereuses.

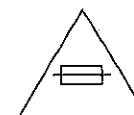


Ce symbole avertit l'utilisateur que des instructions importantes relatives à l'utilisation et à l'entretien se trouvent dans le manuel accompagnant l'appareil.

RECAUTION

Cette marque indique comme suit. Pour la protection continue contre le risque d'incendie, ne remplacer que par le fusible de même type.
(CP900; 2.5A 72V; CP901; 2.5A 72V,
CP902; 2.5A 72V; CP905; 2.5A 72V)

Caméscope
seulement



 **CAUTION**
BEFORE BATTERY DESTROY

■ NICKEL-CADMIUM BATTERY

The following program is available in the United States. Please consult local environmental authorities concerning the availability of this or other programs in your area.

The RBRC™ Seal

SHARP participates in the RBRC™ Nickel-Cadmium Battery Recycling Program in the United States. The RBRC™ Seal on our battery pack contained in our product indicates that SHARP is voluntarily participating in an industry program to collect and recycle these batteries. The RBRC™ program provides you with a convenient alternative to placing spent Nickel-Cadmium battery packs into the trash or municipal waste stream, which is illegal in some areas. At the end of their useful life, the Nickel-Cadmium battery can be dropped off at the nearest collection center for recycling. For information on the nearest collection center, call 1-800-8-BATTERY or your local recycling center. If you are located outside the United States, contact your local authorities for information concerning proper disposal and/or recycling of this battery. SHARP's involvement in this program is part of our commitment to protecting our environment and conserving natural resources.

[Footnote] RBRC™ is a trademark of the Rechargeable Battery Recycling Corporation.

■ NICKEL-METAL HYDRIDE BATTERY

■ LITHIUM or LITHIUM-ION BATTERY

■ SEALED LEAD BATTERY

Battery disposal

Contains the above (Rechargeable) Battery. Must be recycled or disposed of properly. Remove the Battery from the products and contact Federal or State Environmental Agencies for information on recycling and disposal options.

2. SPECIFICATIONS

Signal System: NTSC standard
 Recording System: 2 rotary heads, helical scanning system
 Cassette: Digital VCR Mini DV video cassette
 Recording/Playback Time: 60 minutes (DVM60)
 Tape Speed: 18.81 mm/second
 Pickup Device: 1/4" (6.4mm, effective size: 4.5 mm) CCD image sensor (with approx. 410,000 pixels including optical black)
 Lens: 12 × power zoom lens (F1.8, f=4.2-50.4 mm), full-range auto focus
 Lens Filter Diameter: 37 mm
 Monitor: 4" (10.1 cm)—full-color LCD screen (TFT active matrix)
 Microphone: Electret stereo microphone
 Color Temperature Compensation: Auto white balance with white balance lock
 Minimum Illumination: 5 lux* (with gain-up, and digital zoom off)
 Video Output Level: 1.0 Vp-p 75-ohm unbalanced
 Audio Output Level: -8 dBs, impedance less than 2.2k ohms
 Speaker Output: 300 mV
 External Microphone Input: 3.5 mm diameter mini-plug, -66 dBs, output impedance 6.8k ohms, DC4V, for plug-in power microphone use
 Power Requirement: DC 3.6 V
 Power Consumption: 8.9 W (during camera recording in full auto mode with zoom motor off, backlight in normal mode)
 Operating Temperature: 0°C to + 40°C (32°F to 104°F)
 Operating Humidity: 30% to 80%
 Storage Temperature: -20°C to +60°C (-4°F to 140°F)
 Dimensions (approx.): 7 1/8" (W) × 3 7/8" (H) × 3 15/32" (D)
 [181 mm (W) × 99 mm (H) × 88 mm (D)]
 Weight (approx.): 1.52 lbs (690 g)
 (without battery pack, lithium cell, video cassette)

AC Adapter/Battery Charger

Power Requirement: AC 100-240 V, 50/60 Hz
 DC Output: 4.5 V
 Power Consumption: 25 W
 Dimensions (approx.): 4 3/4" (W) × 2" (H) × 4" (D)
 [120 mm (W) × 51 mm (H) × 101.5 mm (D)]
 Weight (approx.): 0.86 lbs (390 g)

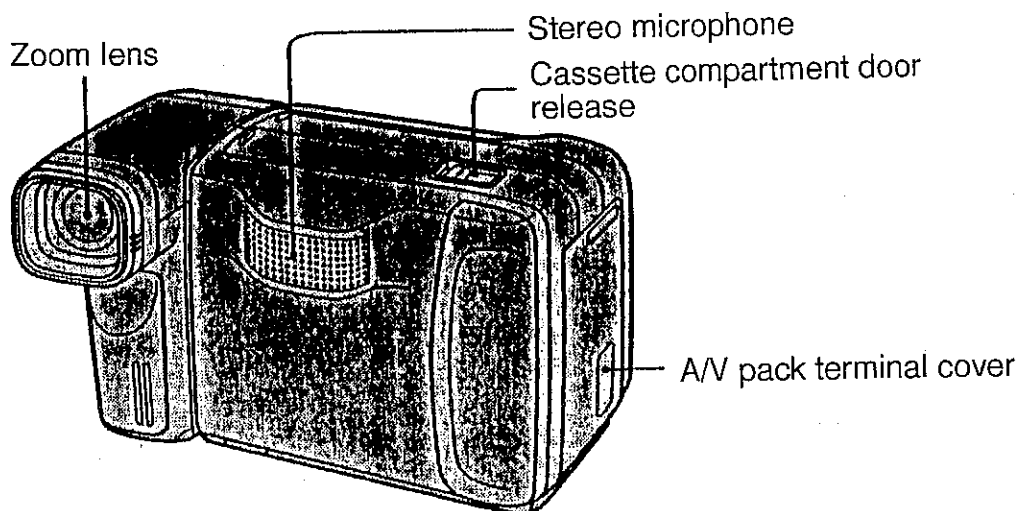
Battery Pack BT-L2

DC Output: 3.6 V
 Dimensions (approx.): 1 1/2" (W) × 1" (H) × 2 13/16" (D)
 [37.4 mm (W) × 25.0 mm (H) × 71.2 mm (D)]
 Weight (approx.): 0.22 lbs (100 g)

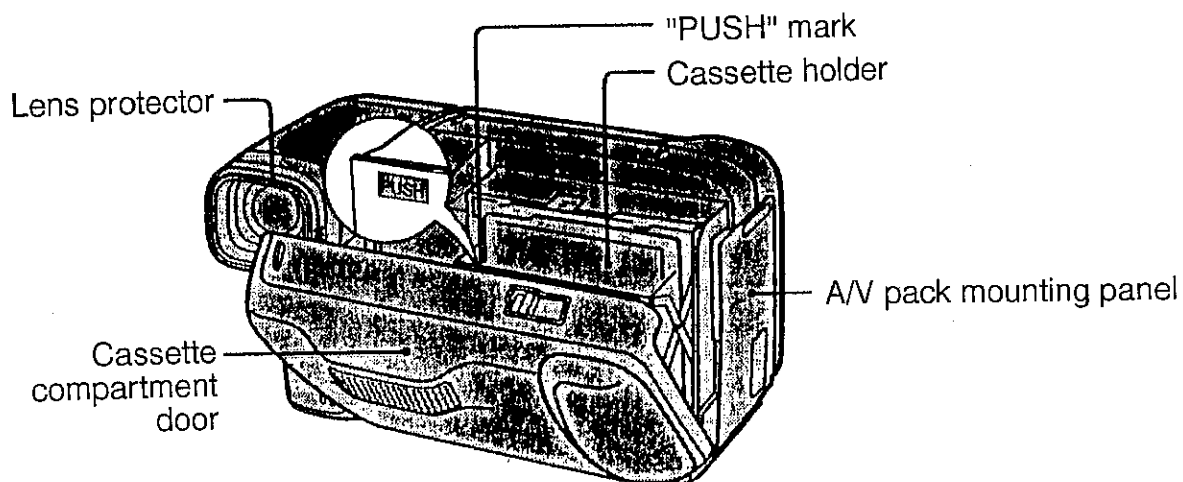
Specifications are subject to change without notice.

*Minimum illumination: Since there is no widely accepted testing procedure for detaining minimum illumination capability, lux ratings are comparable only between models from the same manufacture.

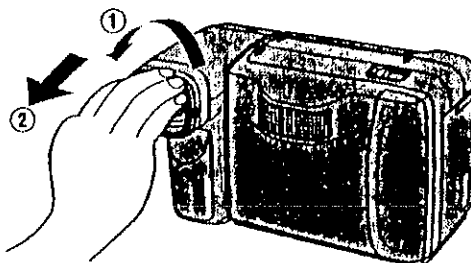
3. NAMES OF PARTS

Front view

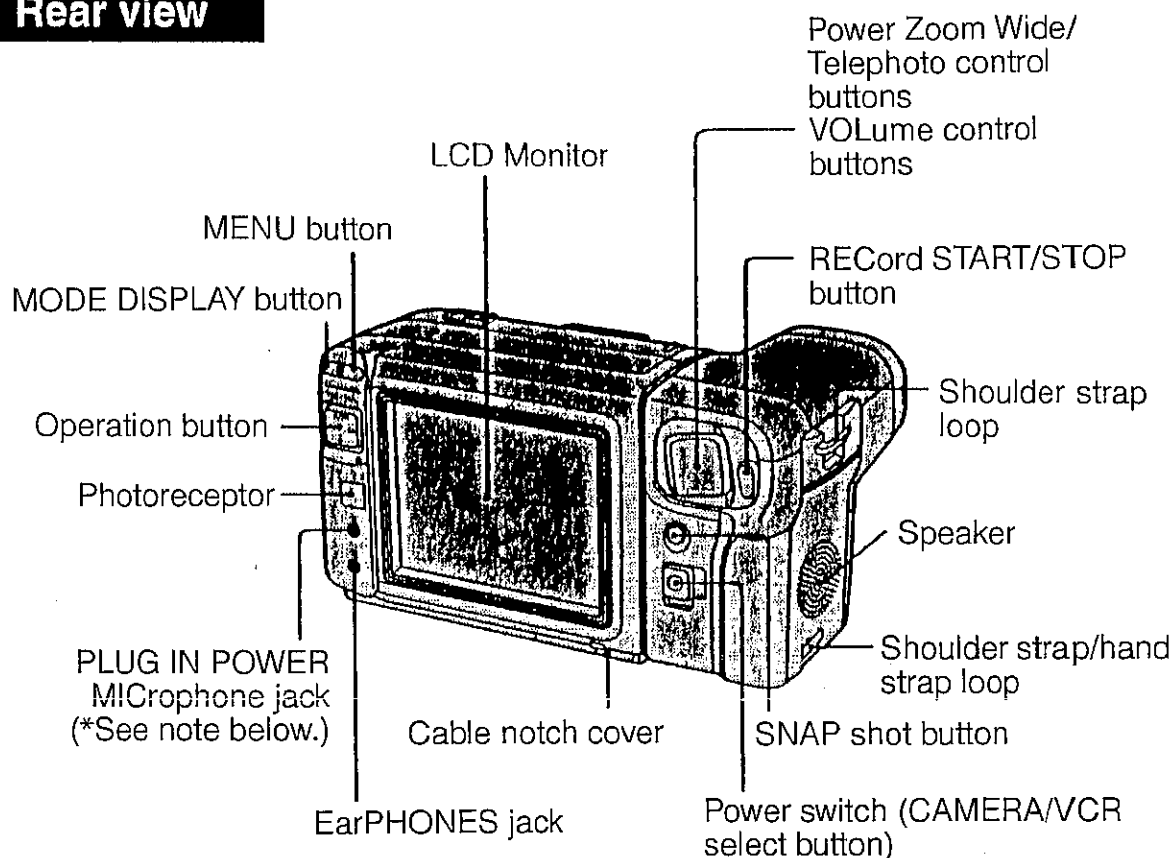
When the cassette compartment door is opened

**Removing the Lens Protector**

Before mounting the optional wide or telephoto conversion lens, remove the lens protector by turning it counter-clockwise.



Rear view



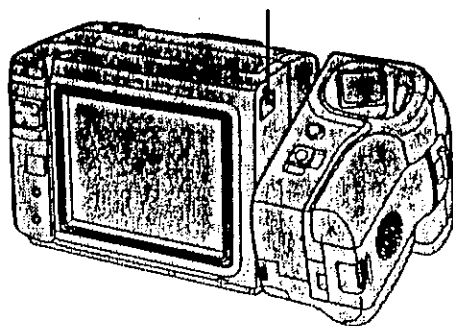
*About the PLUG IN POWER MIC jack

This external microphone jack outputs a DC voltage of 4.0V. It is for use with the microphone supplied with sports case optional accessory for this VIEWCAM, or with any 2.5 – 4.0 volt DC use condensertype microphone with a 3.5 mm diameter plug. The use of other types of microphones may result in damage to the microphone or the VIEWCAM.

Side view

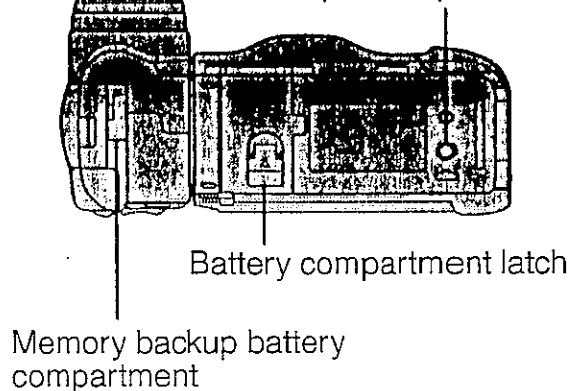
When camera module is rotated

Fluorescent lamp compartment



Bottom view

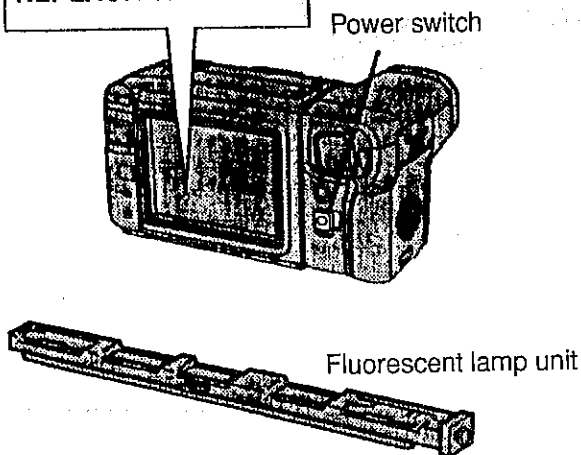
Tripod adaptor socket



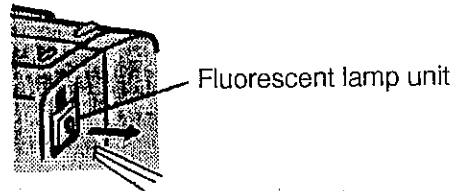
Fluorescent Lamp Backlight

The fluorescent lamp backlight used in this VIEWCAM will eventually need replacing. If you continue to use the VIEWCAM when the fluorescent lamp has almost reached the end of its service life, the "REPLACE THE LAMP" indicator will be displayed on the monitor for approximately one minute. When this occurs, purchase a replacement lamp (KLAMPV0018TAZZ) from your dealer or SHARP Full Line Parts Distributor, and replace the old lamp.

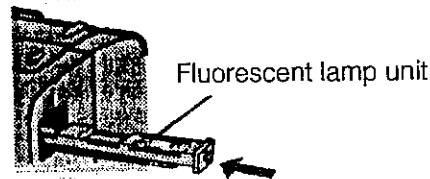
REPLACE THE LAMP.



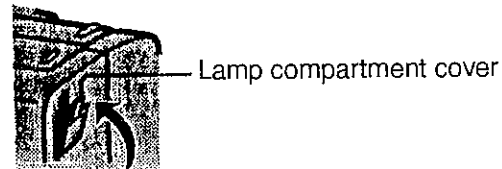
- 4 Carefully hold the end (white knob) of the lamp unit with tweezers, and pull it out.



- 5 Insert the replacement lamp unit into the compartment. See note below.

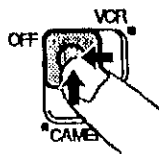


- 6 Replace the fluorescent lamp compartment cover.

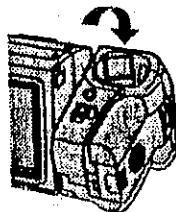


Replacing the Fluorescent Lamp Backlight

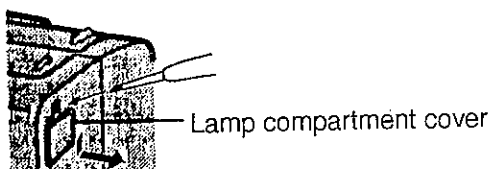
- 1 Set the Power switch to OFF to turn off the VIEWCAM, and wait about 15 minutes for the lamp unit cool down.



- 2 Rotate the camera module of the VIEWCAM halfway forward as shown.



- 3 Remove the lamp compartment cover: insert a pointed object such as the point of a pen into the opening above the cover, push the cover release "□" down, and then pull off the cover.



Notes:

- In step 5 above, be sure to insert the replacement fluorescent lamp straight in, in the direction of the arrow, into the compartment. Do not press diagonally as it may cause contact failure.
- The fluorescent light may flicker when first turned on. Should this occur, turn off the VIEWCAM, and then turn it on again.
- When used in cold locations, the fluorescent lamp may lose some of its brightness.
- Remove the battery pack before replacing the fluorescent lamp.

Caution:

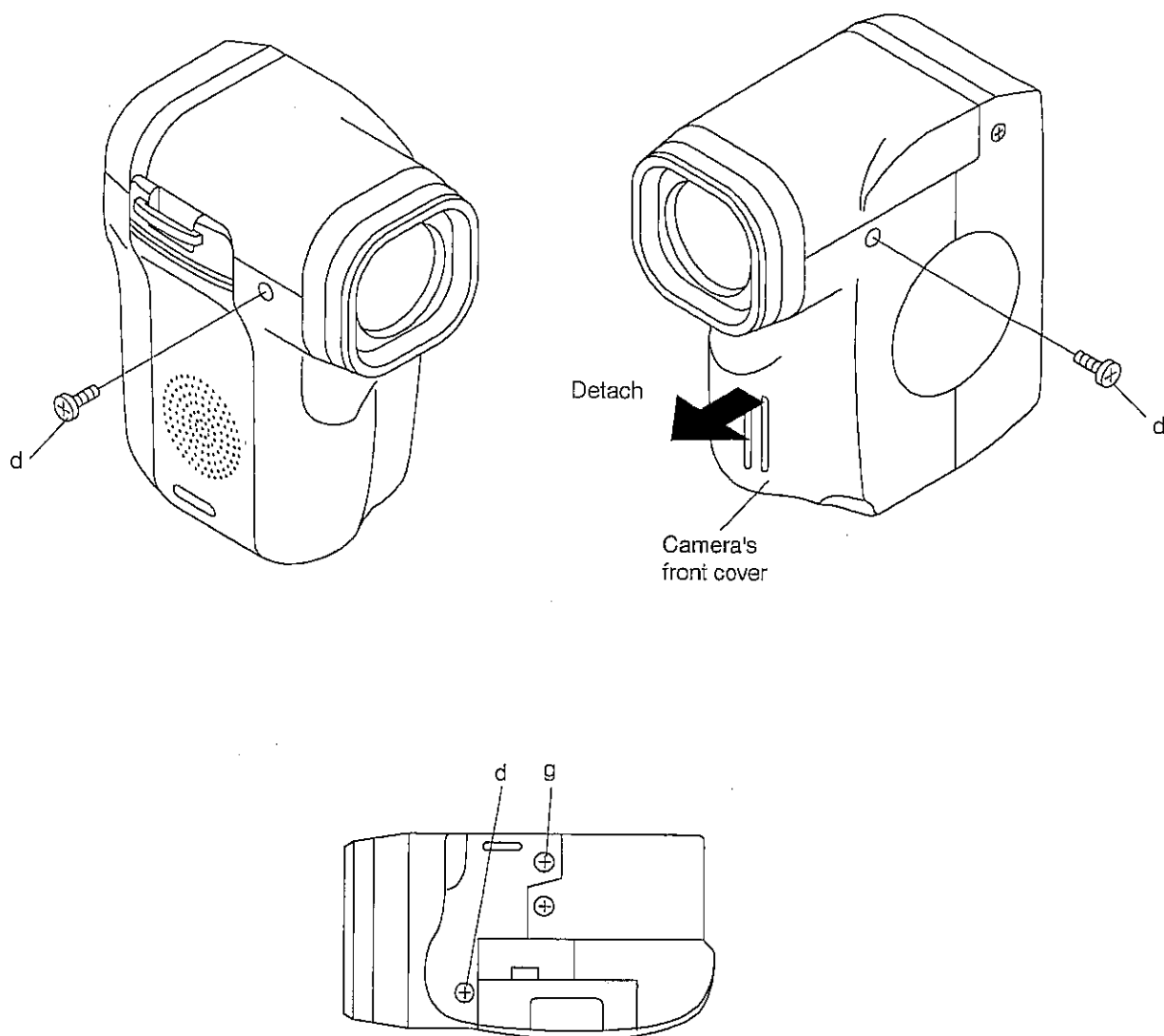
- The fluorescent lamp is hot during and immediately after use of the VIEWCAM. Wait at least 15 minutes after turning the power off before attempting to change the lamp, to allow time for it to cool down. Attempting to change the lamp unit while it is still hot may result in burns or other injuries.

4. DISASSEMBLING THE SET

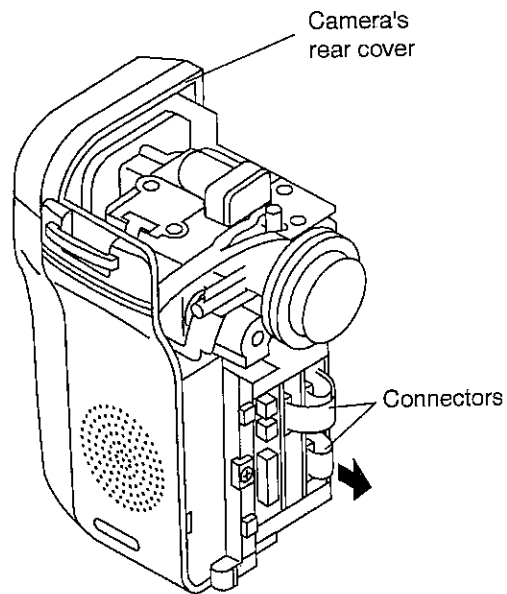
4-1. Removing the camera unit

Caution: Before detaching the covers, be sure to turn off the power and make sure that there is no battery inside.

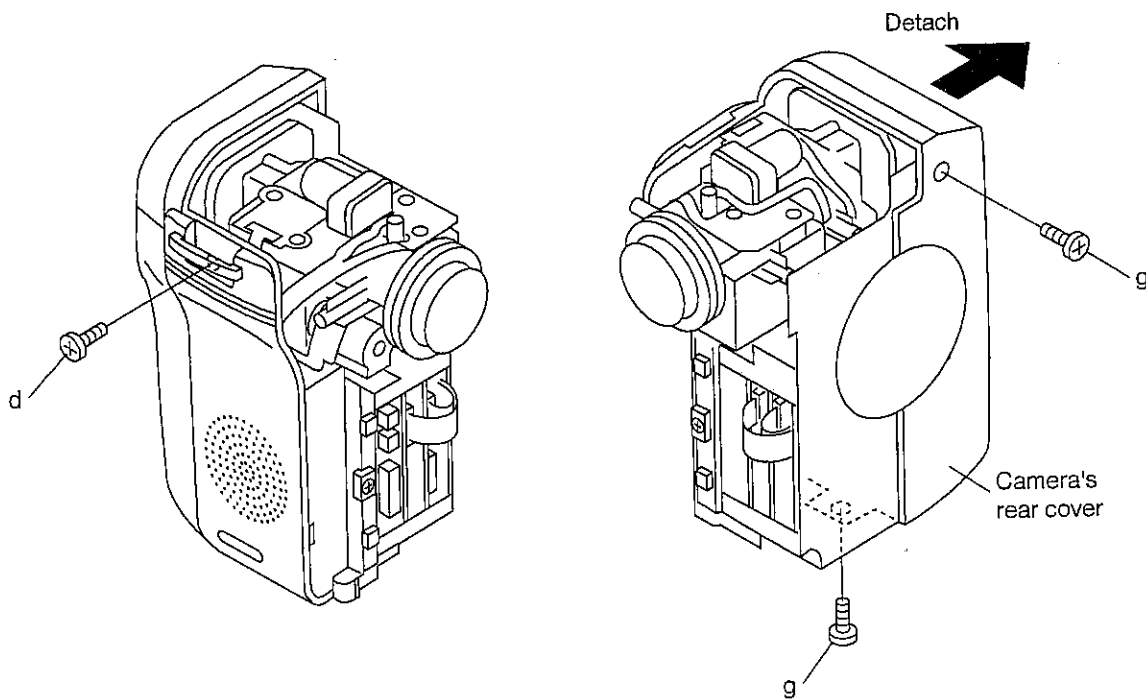
- 1) Remove the four screws and detach the camera's front cover.



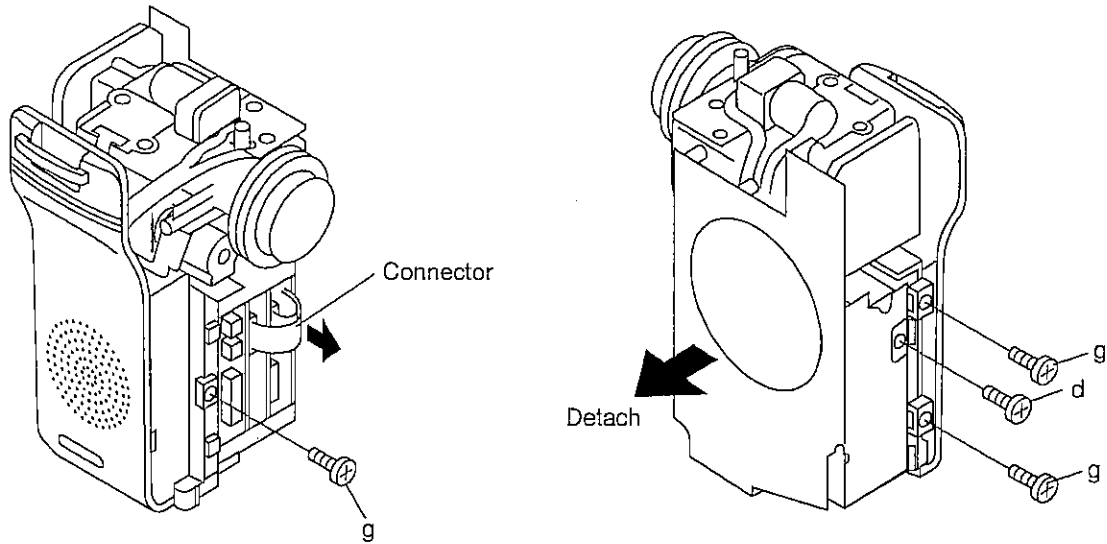
2) Disconnect the lower connector.



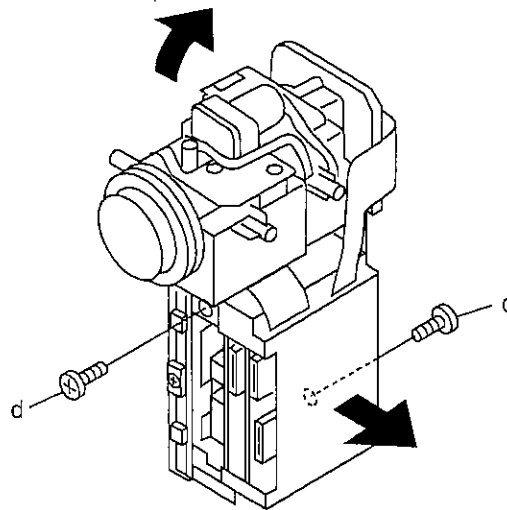
3) Remove the three screws and detach the camera's rear cover.



- 4) Disconnect the upper connector and the four screws.
Detach the side cover off the tilt frame C.



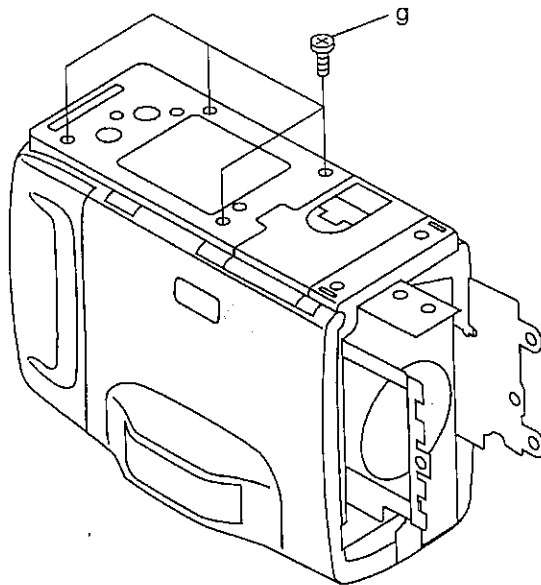
- 5) Remove the two screws, and take out the camera PWB unit and the lens unit together.



4-2. Disassembling the body

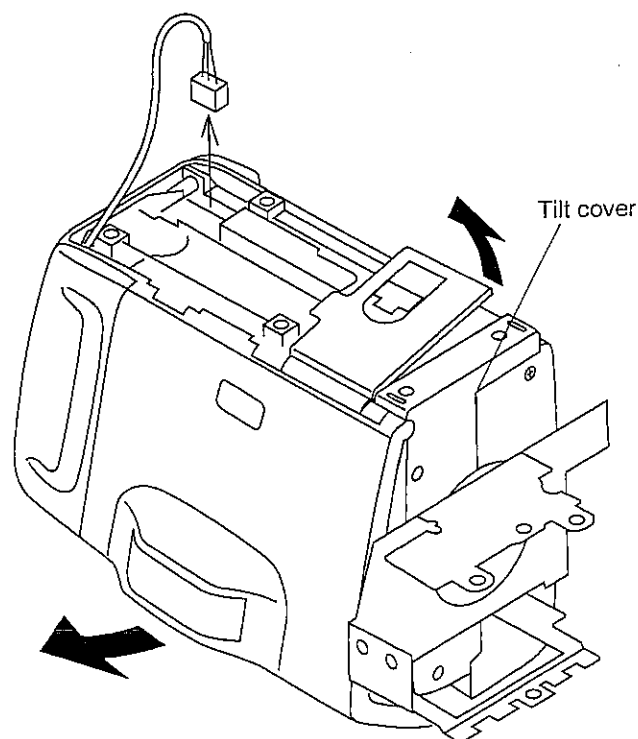
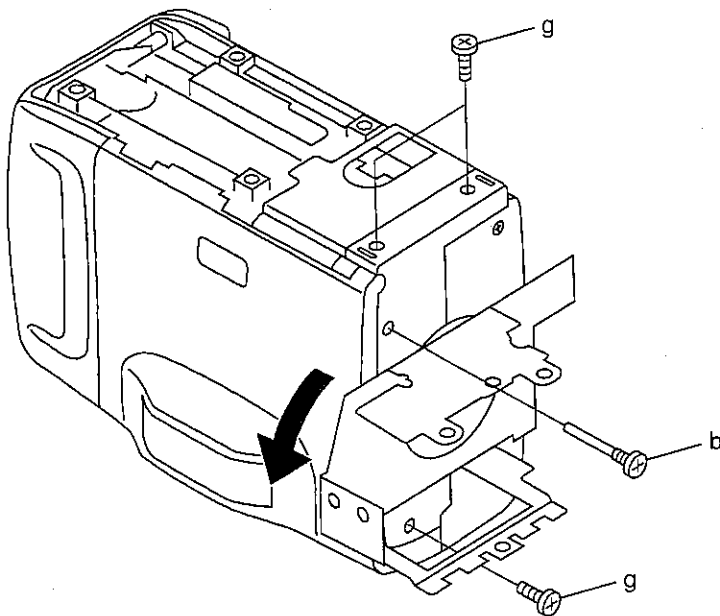
4-2-1. Removing the bottom cover

- 1) Remove the four screws and take the bottom cover assembly out of the body.

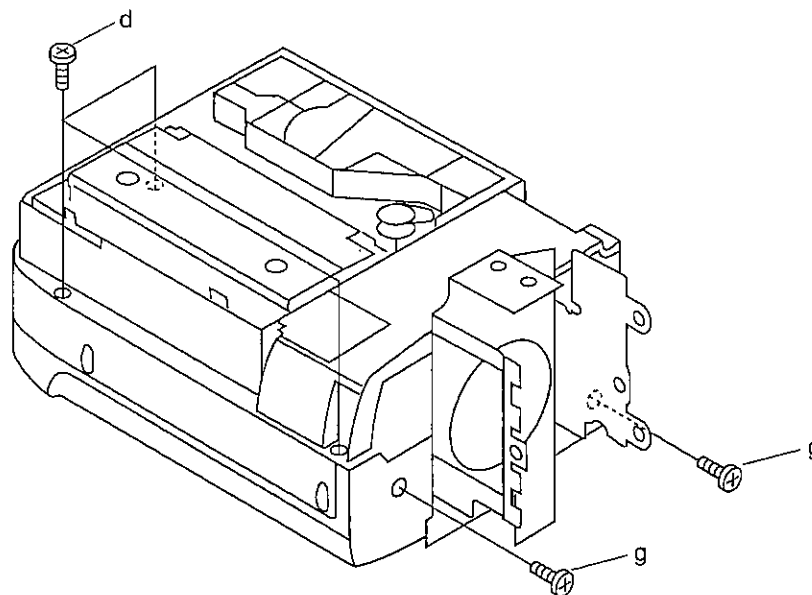


4-2-2. Removing the cabinet L

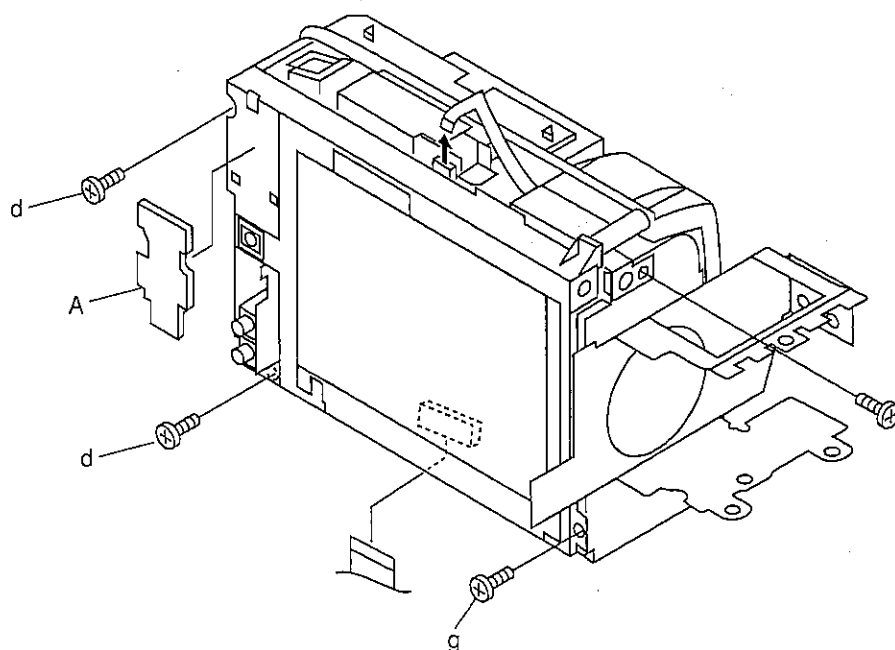
- 1) Remove the four screws, disconnect the connector, and open the VCR cover and the battery cover. Now detach the tilt cover.



2) Remove the five screws and detach the cabinet L.

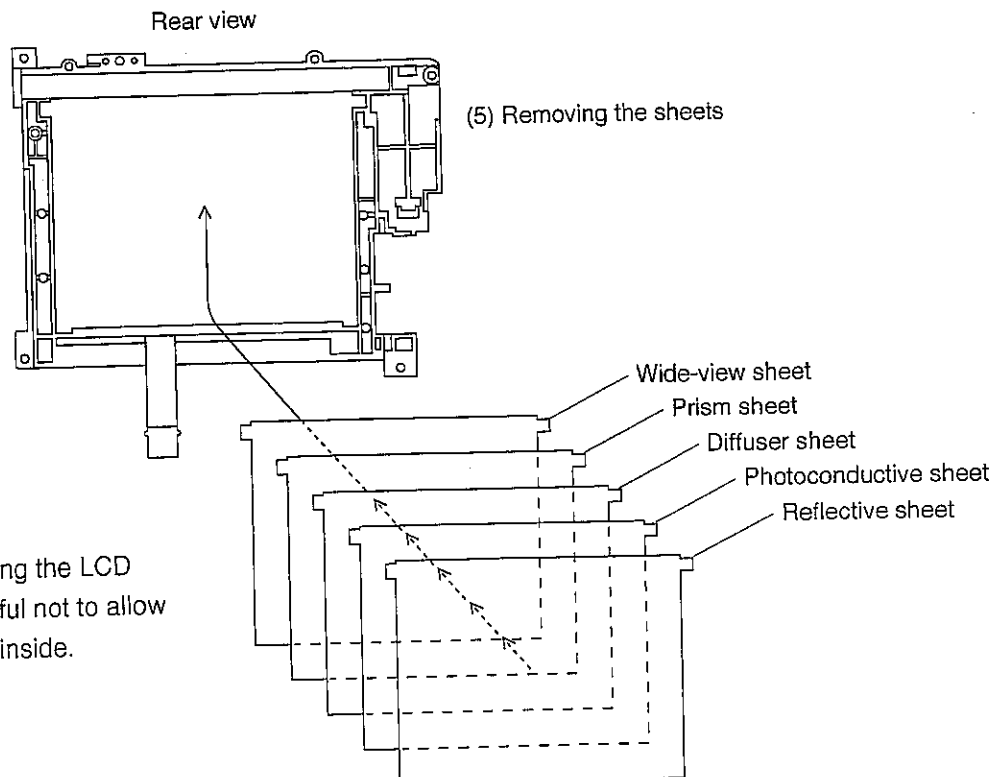
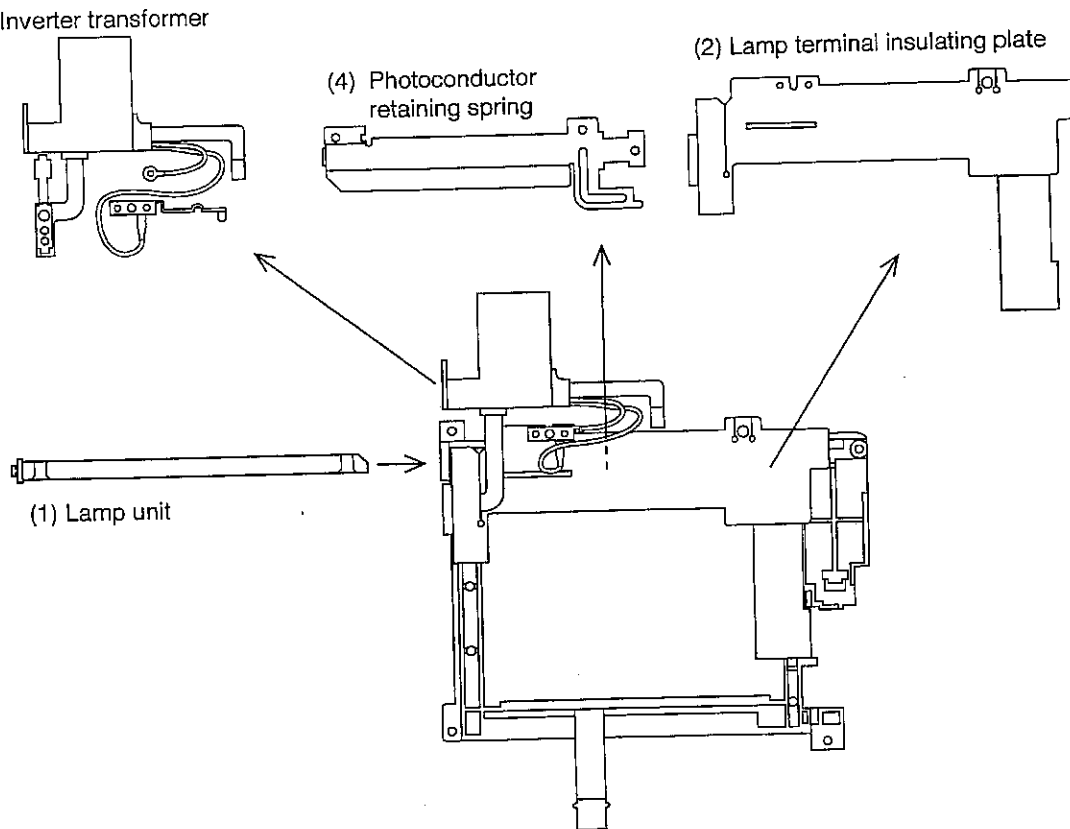


3) Detach the part A, remove the three screws, and disconnect the flexible cable connector. The LCD unit can now be taken out.



Removing the LCD unit

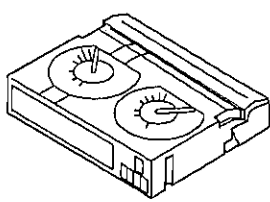
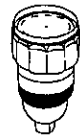
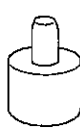
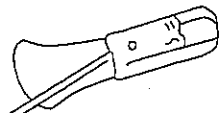
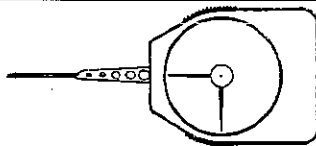
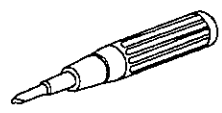
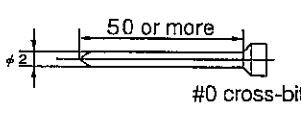
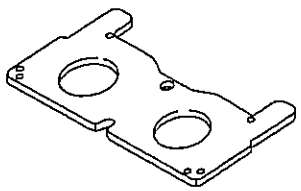
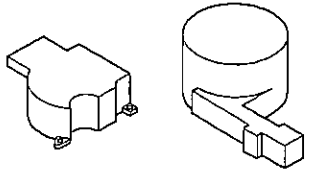
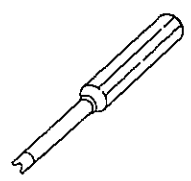
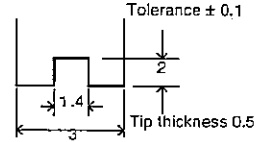
1. Draw the lamp unit out of the holder.
2. Remove the two screws (LX-HZ0031TAFF) and detach the lamp terminal insulating plate.
3. Remove the screw (LX-HZ0031TAFF) and detach the inverter transformer.
4. Remove the screw (LX-HZ0031TAFF) and detach the photoconductor retaining spring.
5. Finally detach all the sheets and photoconductor off the holder.

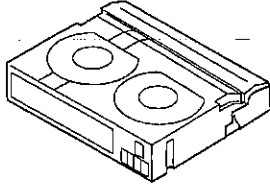


Caution: When reassembling the LCD unit, be very careful not to allow any dust and dirt inside.

5. MECHANISM ADJUSTMENT JIGS AND PARTS

5-1. Mechanism check adjustment jigs

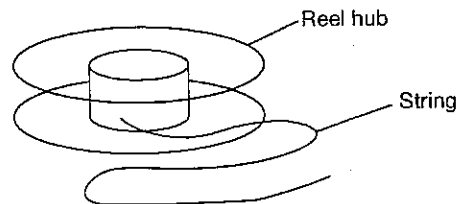
No.	Name	Part code	Shape	Model number and use
1.	PB-use cassette Torque meter	9DASD-1015		• SD-1015
2.	Torque gauge	JiGTG0045		• For use in VS-REW take up torque measurement
3.	Torque gauge head	9EQTGH-DH5000		• For use with the above torque gauge
4.	Tension gauge 4N (400gf)	JiGSG0400		• For measurement of pinch roller pressure.
5.	Dial tension gauge	9DAPTG-10-10W		• PTG-10
6.	Torque screwdriver 150mN•m (1.5kg•cm)	JiGTD1500RTDH		
7.	Master plane	9EQMP-DH5000		• For checking reel base height
8.	Height adjustment jig	9EQHG-DH5000		• For adjusting Tu guide height • For adjusting SI roller height
9.	Height adjustment screwdriver	9EQDRIVER-DH5		• For SI roller adjustment • For guide roller adjustment • For Tu guide adjustment • For reel base adjustment • Bit shape (see figure below) 

No.	Name	Part code	Shape	Model number and use
11.	Alignment tape	90ADV-C-TAPE		• For tape running adjustment (color bar)
12.	Miscellaneous (1) Slide caliper (2) Precision screwdrivers (Phillips head and slotted) (3) Radio needle-nose pliers (4) Tweezers			

<How to make jigs for mechanism checking and adjustment>

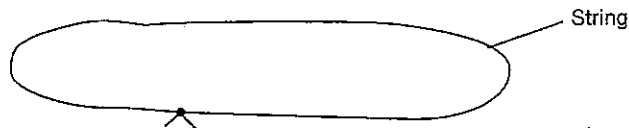
(1) Reel hub for back tension measurement

- 1) Obtain a commercially available cassette tape reel hub. (Disassemble the cassette tape and remove the tape from the reel hub.)
- 2) Paste one end of a string (about 20cm long) to the reel hub with (for example) cellophane tape.

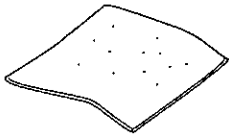
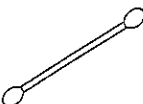


(2) String for use in pinch roller snap-fit force measurement.

- 1) Obtain an approximately 20cm length of commercially available string (diameter about 0.3mm).
- 2) Tie the 2 ends together to form a loop.



5-2. Parts for regular periodic inspection and maintenance

No.	Name	Part code	Shape	Model number and use
1.	Oil (1) Cosmo Hydro HV22	9EQ-OIL-HV22		* Cosmo Petroleum K.K.
2.	Cleaning paper	JIGDUSPER		• DUSPER (SIGMA) (Ozu Co., LTD.)
3.	Extremely thin cotton swab			• Commercially available item
4.	Grease: Moly Coat YM-103	99FGREASE-YM103		• Dow Corning
5.	Screw lock (1401B)			• Three Bond
6.	Cleaning liquid: industrial-use ethyl alcohol			• Commercially available item

6. INSPECTION AND MAINTENANCE ITEMS AND INTERVALS

In order to keep the mechanical section always in good condition, perform the following inspection and maintenance at regular intervals. In addition, after repair, perform the following maintenance items regardless of how long the user has been using the unit.

6-1. List of inspection and maintenance items

	Inspection and maintenance location	Time of use (h)					Symptoms that indicate need for maintenance	Remarks
		500	1,000	1,500	2,000	3,000		
Tape running system	Tape running section (see section 8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> Block-type noise Head hole clogging Tape damage 	<Rollers> <ul style="list-style-type: none"> Replace if there is anything abnormal in the rotation, or if there is run-out (that becomes large).
	Drum section, Video head (see section 8-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Note: Replace the drum ass'y if the video is cleaned head but its hole is still clogged.	<Other than the above> <ul style="list-style-type: none"> Clean the section that contacts the tape (especially the lower drum helical section). Use the specified cleaning liquid.
Drive system	Timing belt	—	★	—	★	★	<ul style="list-style-type: none"> The tape fails to run. The tape becomes slack. Block-type noise Abnormal noise 	<ul style="list-style-type: none"> Replace if there is anything abnormal.
	Pinch roller	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Capstan motor	—	○	—	○	○		
	Swing arm S and T reel bases	—	★○	—	★○	★○		
	Center gear shaft PLAY gear shaft Fast gear shaft	—	△	—	△	△	<ul style="list-style-type: none"> Abnormal noise 	<ul style="list-style-type: none"> Lubricate with oil. [Oil] Cosmo Hydro HV22 Note: Apply oil to the drive gear shaft, then wipe lightly with a cloth.
	Tension-arm shaft	—	△	—	△	△	<ul style="list-style-type: none"> Tape damage Abnormal played-back image 	
	Loading motor Mode switch	—	★○	—	★○	★○	<ul style="list-style-type: none"> Cannot eject. Fails to enter a mode. 	
Performance checks	Abnormal noise	★	★	★	★	★	<ul style="list-style-type: none"> The tape fails to run. The tape becomes slack. Tape damage The play-back image is abnormal. 	<ul style="list-style-type: none"> Replace any part that fails to perform within the standard.
	PB• VS/REW takeup torque	—	★	—	★	★		
	PB• VS/REW• FF• REW• loading back tension	—	★	—	★	★		
	Head cleaner	—	○	—	○	○		

[Oil] Cosmo Hydro HV22
 [Grease] Moly Coat YM-103

[Screw lock] Three Bond 1401B
 [Cleaning liquid] Industrial-use ethyl alcohol

○... Replace. □... Clean. △... Lubricate. ★... Check.

6-2. Precautions

- (1) When replacing any part, always replace the cut washer that was removed with a new one.
- (2) This mechanism does not have control adjustment. If the control cannot be set as required, clean and/or replace parts.
- (3) On the oil
 - a) Always use the specified oil. (Using another kind of oil can cause various kinds of trouble.)
 - b) Always use clean oil, without any mixed-in dirt, to lubricate bearings. (Using oil with dirt mixed in can cause the bearings to wear or to stick.)
 - c) One drop of oil is the amount shown in the figure below, on the point of a pin.
- (4) Perform circuit repair, tape running adjustment, etc. with the mechanism attached to the VCR frame.
- (5) To operate the mechanical section alone, apply voltage to the loading motor to drive it. The voltage between terminals must be DC3V or less. (Forcing the gears to turn by hand entails danger of breakage.)
- (6) To install the cassette control, push section A in the figure below. Do not push anything else.
- (7) Do not deform any of the mechanical parts.

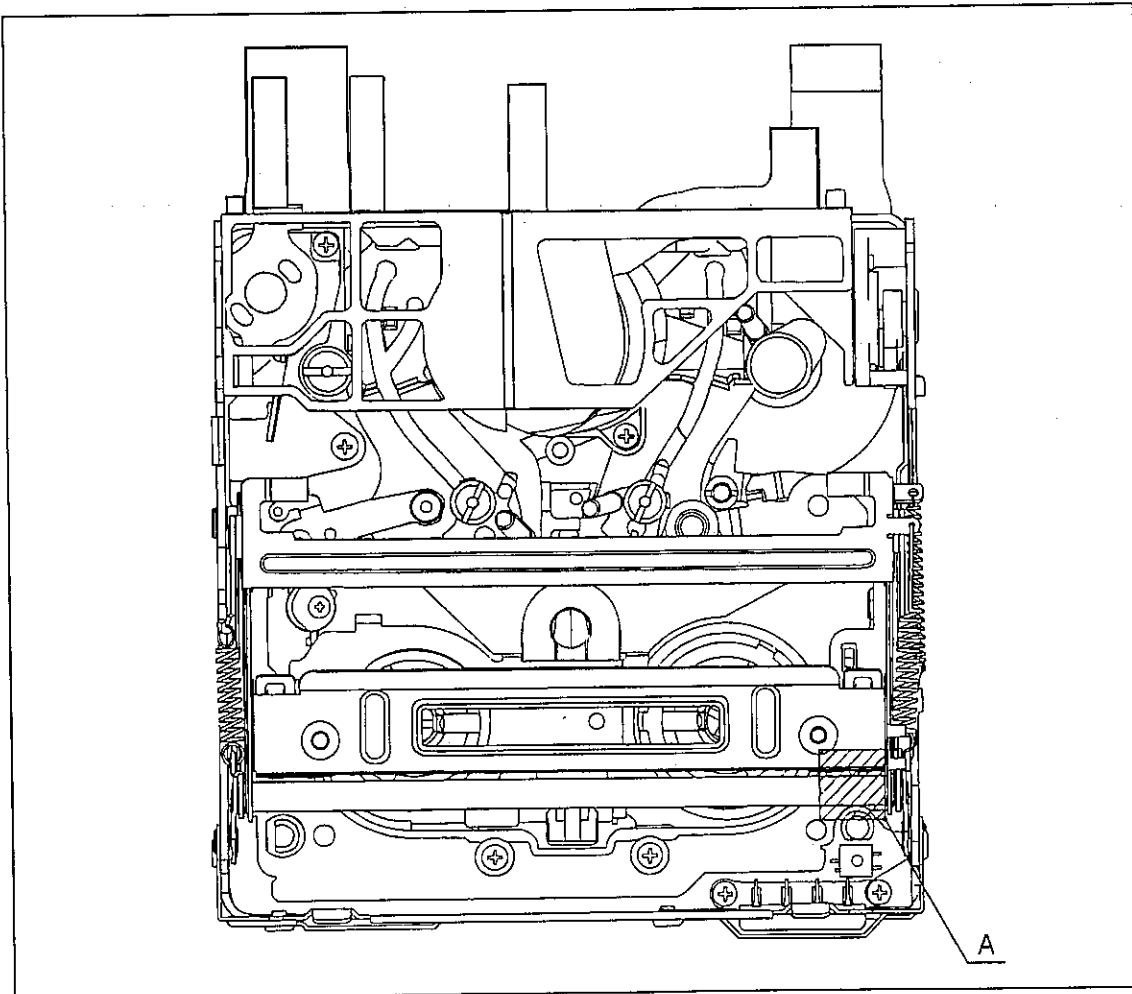
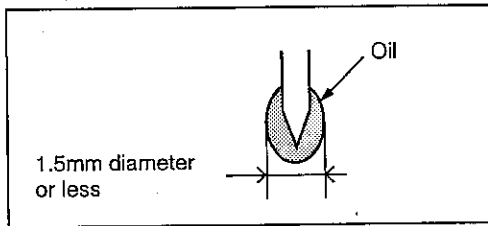


Fig. 1.

7. MECHANICAL ADJUSTMENTS AND CHECKS

The items discussed here relate to general on-site servicing (field servicing). Adjustments and replacements that require sophisticated facilities, jigs and technology are omitted.

In addition, in order to maintain the characteristics that the unit has when it is new, not only are inspection and maintenance necessary, but it is absolutely necessary that, for example, the tape not be damaged, and always use jigs for adjustments that require them.

<Precautions>

- (1) Always set the power supply and state of the unit as follows for mechanism adjustments and checks.

AC adapter used, with cassette control assembly

- 7-1 Check of takeup torque during playback (recording)
- 7-2 Check and adjustment of back tension torque during playback (recording)

AC adapter used, without cassette control assembly (Independent Mechanism)

- 7-3 Check of reverse search (VS-REW) takeup torque

DC3V, without cassette control assembly (Independent Mechanism)

- 7-4 Check of reel base height
- 7-5 Check of tension post position
- 7-6 Check of FF back tension
- 7-7 Check of REW back tension
- 7-8 Check of loading back tension
- 7-9 Check of pinch snap-fit force

- (2) When performing checks with a DC3V power supply and independent mechanism, disconnect the loading motor FPC from the connector.

- (3) Always run the tape with the cassette control assembly attached.

7-1. Check of takeup torque during playback (recording)

- (1) Set the torque cassette with the cassette control assembly attached, then, in recording mode (playback mode if a signal has already been recorded on the tape), confirm that the torque on the takeup side is within the standard.

Takeup Torque Standard During Recording (Playback)

$0.65 \pm 0.35 \text{mN}\cdot\text{m}$ ($6.5 \pm 3.5 \text{gf}\cdot\text{cm}$),
ripple $0.2 \text{mN}\cdot\text{m}$ ($2 \text{gf}\cdot\text{cm}$) or less

(If there is torque ripple, read the center value.)

7-2. Check and adjustment of back tension torque during playback (recording)

(1) Checks

With the cassette control assembly attached, set the torque cassette in place; then, in recording mode (in playback mode if a signal has already been recorded on the tape), confirm that the supply side torque is within the standard.

Torque standard $0.54 \pm 0.12 \text{mN}\cdot\text{m}$ ($5.4 \pm 1.2 \text{gf}\cdot\text{cm}$)
(If there is torque ripple, read its center value.)

(2) Adjustment

If the torque is not within the standard, adjust the position at which the tension spring is attached in Fig. 5.

When the back tension torque is too high, move the spring attachment position in the A direction.

When the back tension torque is too low, move the spring attachment position in the B direction.

<Caution>

After adjusting the back tension torque, always check the tension post position.

7-3. Check of reverse search (VS-REW) takeup torque

(1) Remove the cassette control assembly; then, referring to 9-3 (3) thru (5), insert thick paper between the DOWN switch and the Tu lock release lever; then run the unit in test mode and set the system into reverse search (VS-REW) modes.

(2) Set a torque gauge on the S reel base, then move the tension post tip in the direction of arrow A with a finger. With the tension post released, confirm that the takeup torque is within the standard. (Measure without rotating the torque gauge.)

Reverse search (VS-REW) takeup torque standard

$2.0 \pm 0.6 \text{ mN}\cdot\text{m}$ ($20 \pm 6 \text{ gf}\cdot\text{cm}$),
ripple $0.4 \text{ mN}\cdot\text{m}$ ($4 \text{ gf}\cdot\text{cm}$) or less

(If there is torque ripple, read its center value.)

(3) After checking the takeup torque, remove the torque gauge, then remove the thick paper (refer to 8-3) that was inserted in (1). The system will automatically go into standby mode. (Absolutely do not press the EJECT lever on the VCR frame. There is danger that doing so will deform the lever and cams.)

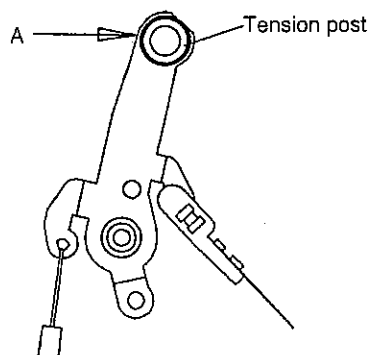


Fig. 2. How to release the tension band when measuring the reverse search (VS-REW) takeup torque.

7-4. Check of reel base height

(1) Remove the cassette control assembly (refer to 9-2).

(2) Referring to 9-1, apply DC3V to the loading motor and put the system into FF (REW) mode.

(3) Taking adequate care so that the master plane does not contact drum, running parts (guide roller, etc.), or the MIC contacts. Fit the master plane holes to the 2 guides (A and B) in Fig. 3.

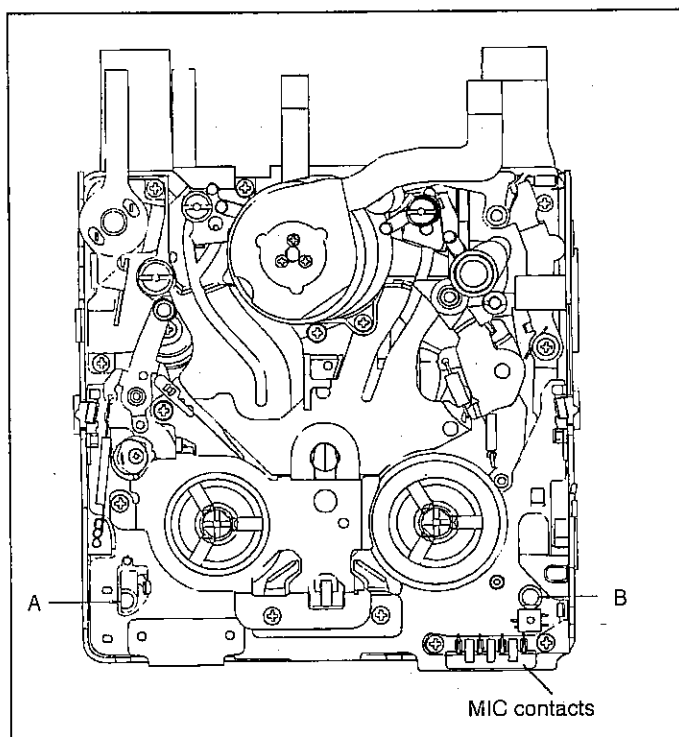


Fig. 3.

(4) Confirm that the heights of the S reel base reel receiving surface and the Tu reel base reel receiving surface below the master plane top surface are within the set values, using, for example, a slide calliper (Fig. 4).

(5) If these heights are not within the set values, turn the reel cap with a height adjustment screwdriver to adjust until they are within the set values.

Note: After the adjustment, make sure that the reel bases rotate smoothly. (To check the Tu reel base, release the down switch and take-up lock release lever, referring to 9-3-(3) thru (5).)

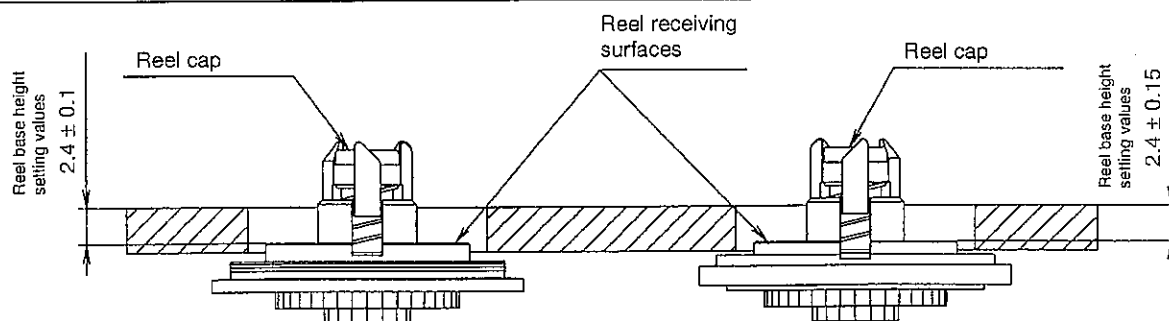


Fig. 4.

7-5. Check of tension post position

- (1) Remove the cassette control assembly, then apply DC3V to the loading motor and put the system into PB mode (without tape).
Confirm that the tension post is $8.5_{-0.5}^0$ mm from the inner wall of the main chassis, as shown in Fig. 5.
- (2) If it is not at the prescribed position, adjust by turning the eccentric pin.
When the tension post is too far toward the outside, turn the eccentric pin clockwise.
When the tension post is too far toward the mechanism center, turn the eccentric pin counterclockwise.

Distance from the main chassis inner wall to the outer circumference of the tension post upper flange

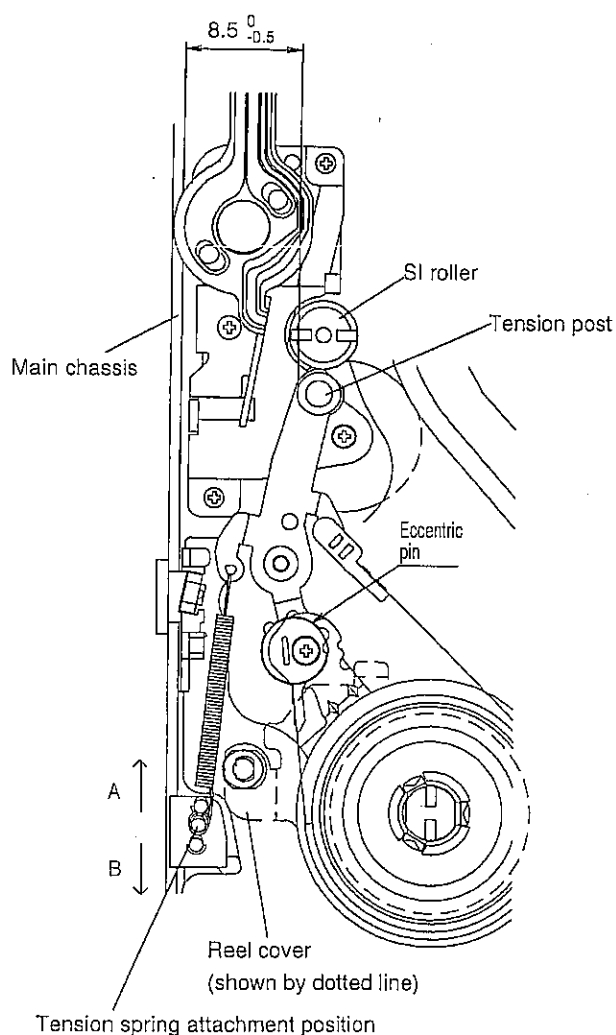


Fig. 5.

7-6. Check of FF back tension

- (1) Remove the cassette control assembly, then apply DC3V to the loading motor and put the system into FF mode (refer to 9-1).
- (2) Turn the mechanism over, then move the swing arm to the Tu reel base side, for example by using the tip of a screwdriver (refer to Fig. 7).
- (3) Set a back tension measurement reel hub on the S reel base.
- (4) Using a dial tension gauge, pull the string in the A direction, then confirm that the tension is within the standard.

FF back tension standard

$$17 \pm 12 \text{ mN } (1.7 \pm 1.2 \text{ gf})$$

(If the tension fluctuates, read its center value.)

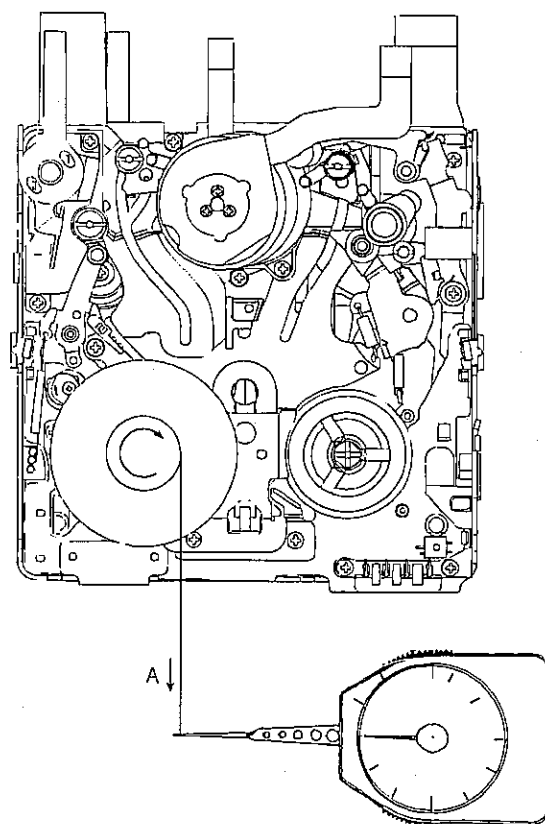


Fig. 6. How to measure the FF back tension.

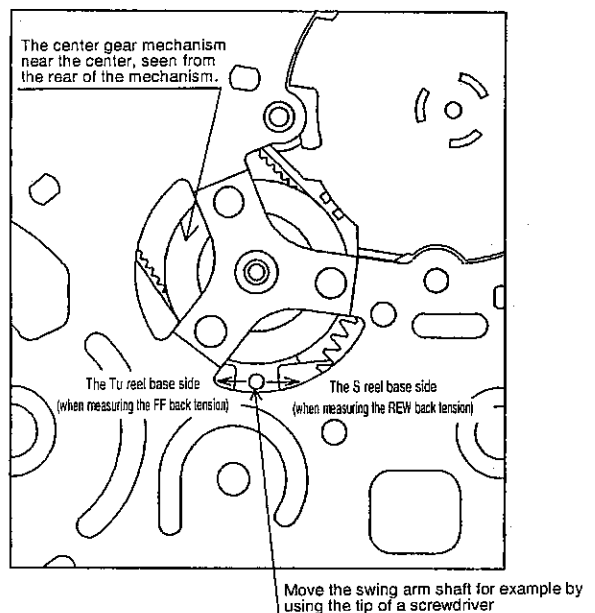


Fig. 7. The swing arm shaft position (seen from the rear of the mechanism) when measuring the FF • REW back tension.

7-7. Check of REW back tension

- (1) Remove the cassette control assembly, then apply DC3V to the loading motor and put the system into REW mode (refer to 9-1).
- (2) Referring to 9-3 (3) thru (5), insert thick paper, then release the DOWN switch and the Tu lock release lever.
- (3) Turn the mechanism over, then move the swing arm toward the S reel base side, using for example the tip of a screwdriver (see Fig. 7).
- (4) Set a back tension measurement reel hub on the Tu reel base.
- (5) Using a dial tension gauge, pull the string in the A direction, then confirm that the tension is within the standard.
- (6) Remove the paper that was inserted in (2).

REW back tension standard

$$17 \pm 12\text{mN} (1.7 \pm 1.2\text{gf})$$

(If the tension fluctuates, read its center value.)

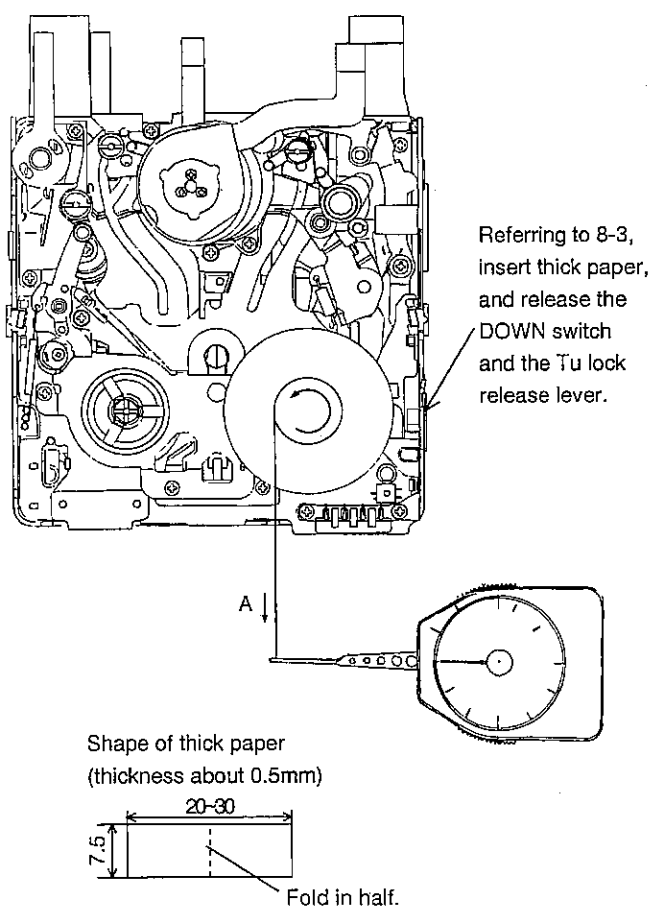


Fig. 8. How to measure the REW and loading back tension.

7-8. Check of loading back tension

- (1) Remove the cassette control assembly, then apply DC3V to the loading motor and put the system into standby mode (refer to 9-1).
- (2) Referring to 9-3 (3) thru (5), insert thick paper, and release the DOWN switch and the Tu lock release lever.
- (3) Turn the mechanism over, then move the swing arm to the S reel base side, for example with the tip of a screwdriver (see Fig. 7).
- (4) Set a back tension measurement reel hub on the Tu reel base.
- (5) With the dial tension gauge, pull the string in the A direction and confirm that the tension is within the standard. (If the tension fluctuates, read the center value.)
- (6) Remove the paper that was inserted in (2).

Loading back tension standard value

$40 \pm 30\text{mN}$ ($4 \pm 3\text{gf}$)

7-9. Check of pinch snap fit force

- (1) Remove the cassette control Assembly.
- (2) Attach a pinch roller snap fit force measurement string to the pinch roller.
- (3) Apply DC3V to the loading motor and put the system into playback mode, then snap-fit the pinch roller onto the capstan shaft.
- (4) Hook a tension gauge onto the pinch roller snap fit force measurement string, then, as shown in Fig. 9, pull the string in the direction of the light guide to gradually remove the pinch roller from the capstan.
- (5) When the pinch roller has come off of the capstan shaft, read the tension gauge value.

<Standard>

$2.2 \pm 0.6\text{N}$ ($220 \pm 60\text{gf}$)

<Caution>

After making this measurement, quickly release the system from playback mode and remove the pinch roller from the capstan shaft. (If the pinch roller is left fitted onto the capstan shaft for a long time, the pinch roller will be deformed.)

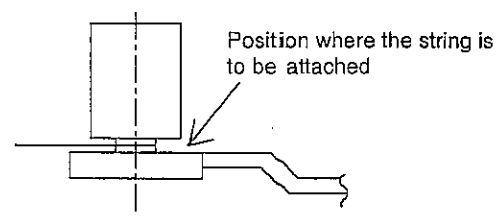
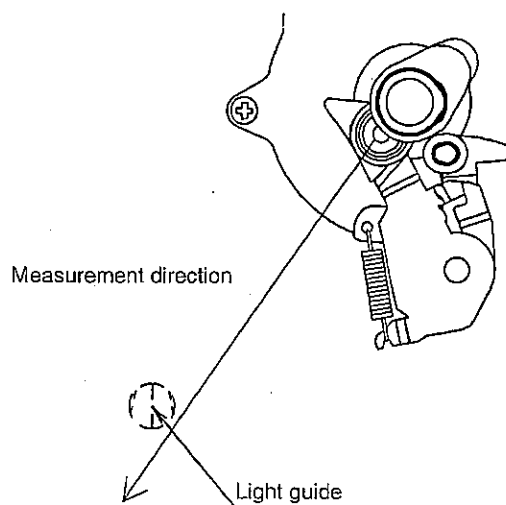


Fig. 9.

8. TAPE RUNNING ADJUSTMENT

Always make the tape running adjustment with the VCR frame and the cassette control ass'y attached to the mechanical section.

8-1. Adjustment locations

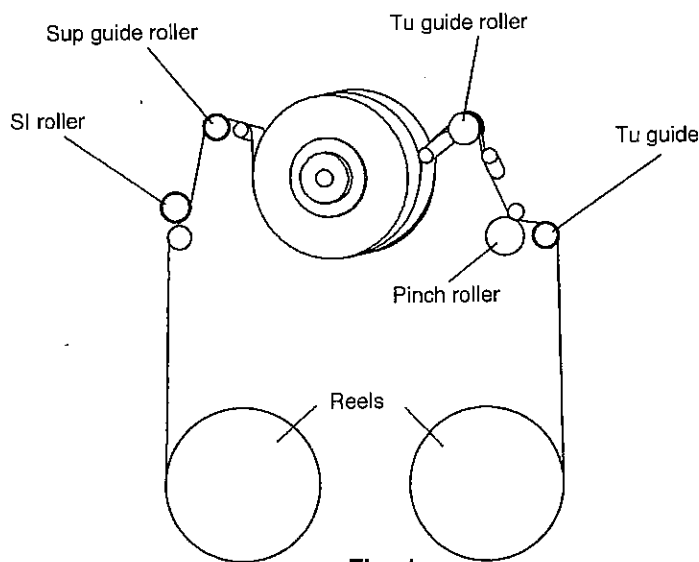
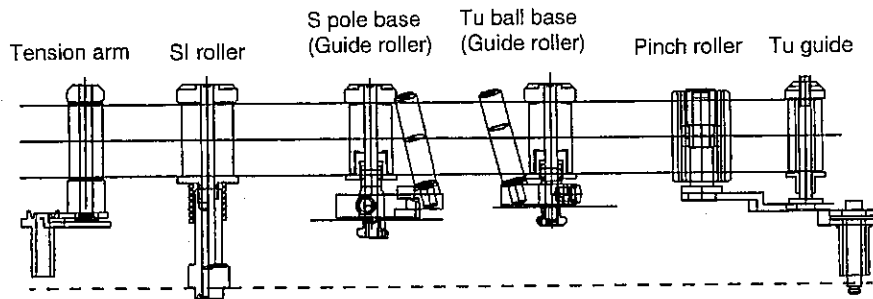
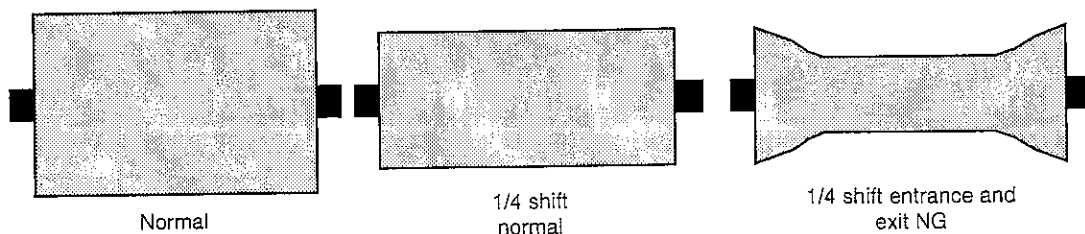


Fig. 1.

8-2. Preparation for adjustment

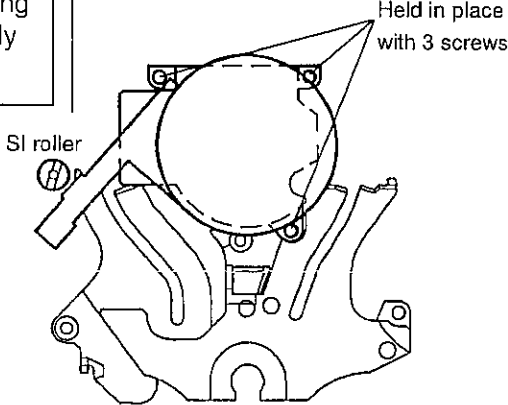
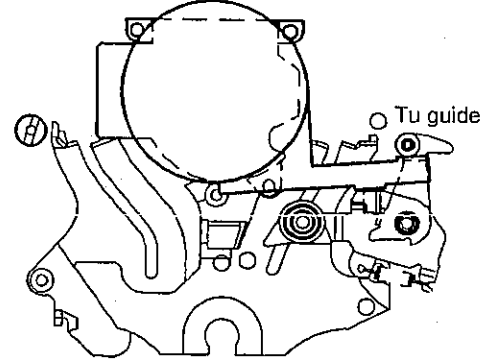
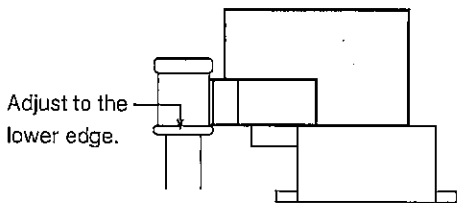
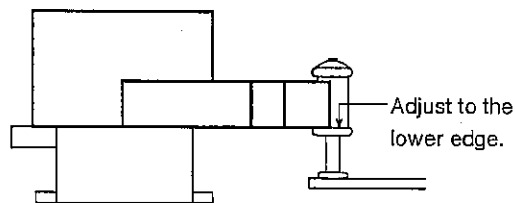
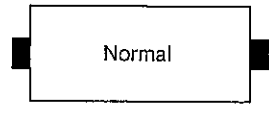
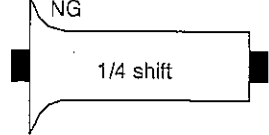
- (1) Clean the tape running surface (Fig. 1) (especially, adequately clean the drum surface and the lower drum helicam surface).
- (2) Connect an oscilloscope to each TP on the relay circuit board.
- (3) Turn the AC adapter power ON.
- (4) Using the adjustment remote control unit, put the system into TEST mode T-05.
- (5) Replay a alignment tape for running adjustment.
- (6) Check the oscilloscope playback envelope, then, at $+1/4$ shift and $-1/4$ shift, check whether all of it is flat. If it is not, perform the following adjustment so that it becomes flat.

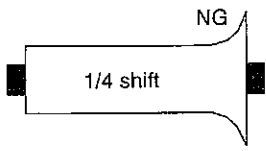
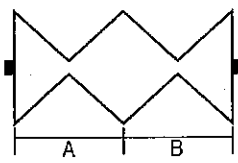
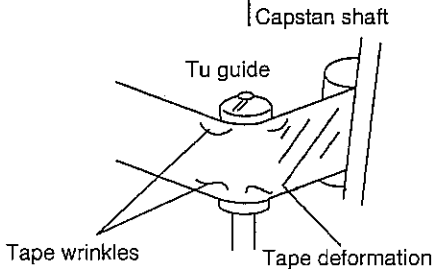


8-3. Steps to perform

- (1) Check and adjust the SI roller and the Tu guide height.
- (2) Adjust the Sup/Tu guide roller height.
- (3) Check the reverse search (VS-REW) envelope waveform.
- (4) Check the tape wrinkles.
- (5) Check the envelope rise.
- (6) Check the playback SWP.

<Checks and Adjustments>

Checks and adjustments	Method	Setting values and precautions	Measuring instruments and jigs
<p>1) SI roller/Tu guide height</p> <p>Note)</p> <p>Perform adjustment 1) only when replacing that part itself; when replacing other parts, perform only the fine adjustment 4).</p>	<p>(1) Using a height adjustment jig, check whether the heights of each part match the preset positions. If they do not match, adjust so that they match the jig.</p>  <p>Fig. 2.</p>	<p>Setting values</p>	<ul style="list-style-type: none"> • Oscilloscope • Height adjustment jig • Height adjustment Screw-driver
<p>When performing the Tu guide adjustment, apply a voltage of 3V to the loading motor, then pull the Tu guide out to the position in Fig. 3.</p>	 <p>Fig. 3.</p>		
	 <p>Adjust to the lower edge.</p>	 <p>Adjust to the lower edge.</p>	
<p>2) Sup guide roller height</p>	<p>(1) Loosen the guide roller lock screw, then tighten loosely so that the roller turns easily.</p> <p>(2) Replay a alignment tape, and adjust the Sup guide roller so that the envelope entrance side is flat.</p> <p>(3) Perform a 1/4 shift, then, as in the above case, adjust until the envelope becomes flat.</p> <p>(4) Tighten up the Sup guide roller lock screw.</p>	<p>Setting values</p> <p>Entrance side Exit side</p>  <p>Normal</p> <p>NG</p>  <p>1/4 shift</p>	<ul style="list-style-type: none"> • Oscilloscope • Adjustment remote control • Height adjustment screw-driver • Alignment tape

Checks and adjustments	Method	Setting values and precautions	Measuring instruments and jigs
Tu guide roller height	(1) As in the case of Sup, adjust the guide roller height so that the envelope becomes flat.	Setting values 	
3) Check of reverse search (VS-REW) envelope waveform	(1) Confirm that the envelope waveform peaks in reverse search (VS-REW) mode are uniform. (2) If they are not uniform, fine-adjust the guide roller and the Tu guide.	Setting values  Adjust so that $A \approx B$.	<ul style="list-style-type: none"> • Oscilloscope • Height adjustment screw-driver • Alignment tape
4) Check of tape wrinkles SI roller height fine adjustment	(1) In PB mode, confirm that there are no wrinkles in the SI roller tape running section. (2) If there are wrinkles, perform fine adjustment of the height.	Setting values	<ul style="list-style-type: none"> • Height adjustment screw-driver • Alignment tape • Screw lock
Tu guide height fine adjustment	(1) In PB mode, check whether tape is being deformed between the Tu guide and the pinch roller, and whether the tape is becoming wrinkled on the upper or lower flange. (2) In reverse search (VS-REW) mode, check for deformation and wrinkles, as above. (3) If the tape is becoming wrinkled, perform fine adjustment of the Tu guide height. (4) Apply screw lock to the Tu guide upper flange.		
5) Check the rising edge of the envelope.	(1) Check the rising edge of the envelope when switching from reverse search (VS-REW) mode to PB mode. (2) Check the rising edge of the envelope when switching from STOP mode to PB mode.	Setting value: Rising edge width within 1 second.	
6) Adjustment of playback SWP	(1) Replay an alignment tape. (2) Using the adjustment remote control unit, enter SWP automatic adjustment mode.		<ul style="list-style-type: none"> • Alignment tape

9. MECHANICAL SECTION ASSEMBLY AND PARTS REPLACEMENT (DISASSEMBLY AND REASSEMBLY)

Mechanical section disassembly and reassembly are explained in this section.

For removal of the cabinet, etc., refer to 4 **DISASSEMBLING THE SET**.

<Precautions>

1. Always replace cut washers that have been removed, for example in parts replacement, with new ones.
2. Turn the mechanical section over; do not place it on, for example, a desk. Deformation and scratching of mechanical parts can cause trouble.
3. When reassembling, be careful not to allow screws, washers or foreign matter to enter. They can cause mechanical misoperation.
4. Use the cleaning liquid, oil, grease and screw lock that are specified below. Use of any other kind can cause mechanical misoperation.

Oil: Cosmo Petroleum : Cosmo Hydro HV22
 Grease: Dow Corning : Moly Coat YM-103
 Screw lock: Three Bond : 1401B
 Cleaning liquid: Industrial-use ethyl alcohol

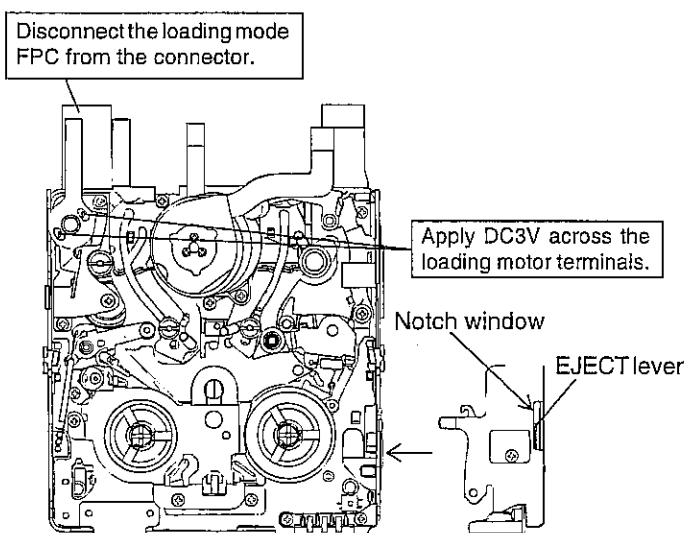
9-1. On the mechanical modes

To operate the mechanism, apply DC3V to the loading motor.

At this time, disconnect the loading motor FPC from the connector.

(1) EJECT mode

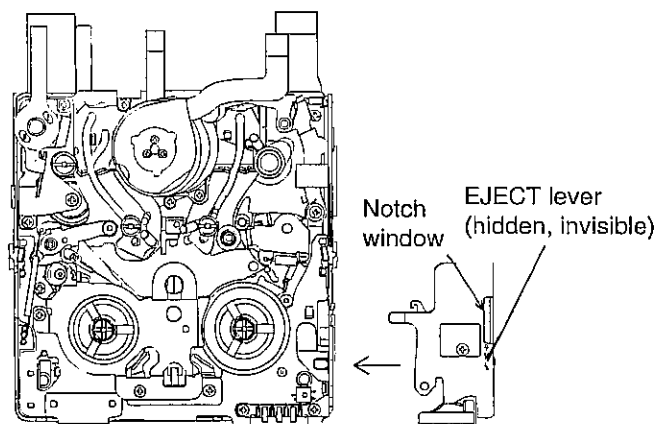
In the mechanical position in which a cassette is ejected, the EJECT lever, which is not visible through the notch window at the bottom of the chassis right side in standby mode, moves to a position where it is visible in this mode.



EJECT mode diagram

(2) STANDBY mode

In the mechanical position in which the cassette is loaded, the EJECT lever, which was in a position where it was visible through the notch window at the bottom of the chassis right side in EJECT mode, becomes invisible in this mode, so that it can be locked when the cassette control assembly is moved down.

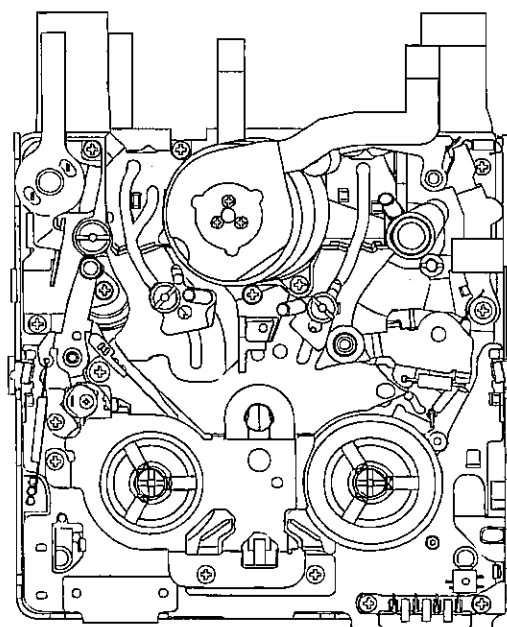


STANDBY mode diagram

(3) MIDDLE POINT mode

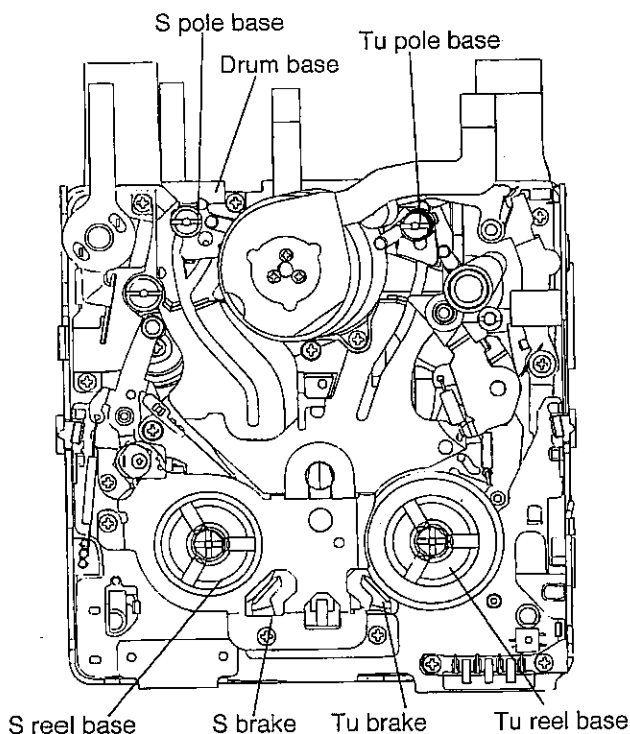
This is the mode where the tape is wound around the take-up reel when a cassette with visible wind start leader tape is loaded.

MIDDLE POINT mode diagram

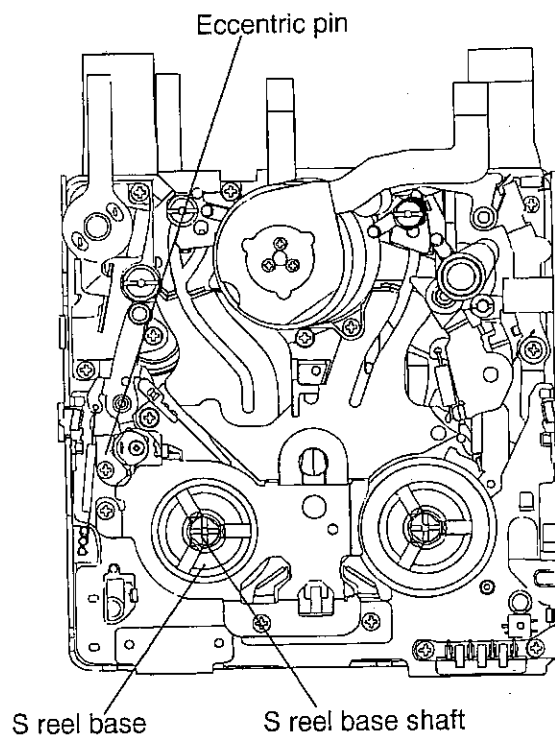


(4) STOP mode

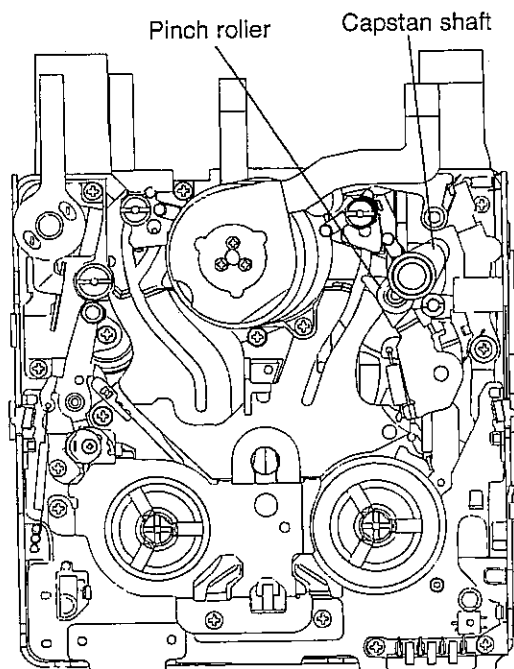
The system is in the STOP (Rec Lock in CAMERA mode) position; the S side and the Tu side pole bases are snap-fitted to the drum base, the S side brake is in contact with the S reel base, and the Tu side brake is in contact with the Tu reel base.

**STOP mode diagram****(6) FF (REW) mode**

This is the mechanical position for tape fast forward and rewind; compared to STOP mode, the eccentric pin rotates counterclockwise, centered on the S reel base shaft.

**FF (REW) mode diagram****(5) PB-(Rec) mode**

This is the mechanical position for playback and recording; the pinch roller is snap-fitted onto the capstan shaft.

**PB (REC) mode diagram**

9-2. Cassette control assembly

Cassette control assembly (see Fig. 2)

<Removal>

- (1) Remove the cassette control cover.
- (2) Press the EJECT lever of the VCR frame to raise the cassette control. Or, in STANDBY mode, push the lock lever in the direction of the arrow to raise the cassette control. (See Fig. 1; direction (a) or direction (b).)
(When pushing in direction (a), lift the cassette control lightly by hand to release it.)

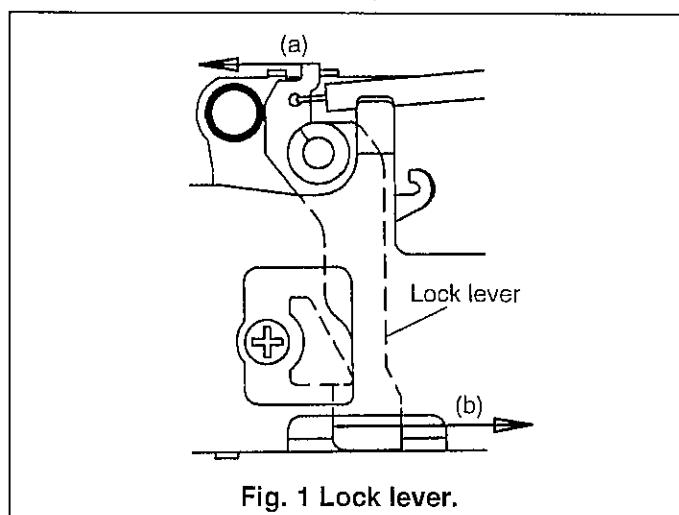


Fig. 1 Lock lever.

- (3) Remove the drum cover.
- (4) Remove the 4 screws (c), then remove the DOWN guide (d).
- (5) Remove the screw (e), then slide the damper (f) to remove it, then remove the auxiliary spring (g) from the main chassis.

- (6) Remove the cassette control outer ring shafts (2 locations (h)) from the main chassis grooves (2 locations (i)), then place them on section (j) (shown by slanting lines).
- (7) While holding the cassette control in the down position, slide the inner arm shaft (k) to the rear of the main chassis groove (round hole (l)). (At this time be careful that the damper lever (m) does not catch on the AHC release spring.)
- (8) While bending the inner arm shaft (k) slightly toward the inside, release it from the main chassis groove. (At this time be careful not to deform the inner arm.)

<How to attach>

- (1) Put the system into STANDBY mode (refer to 9-1 (2)).
- (2) Insert the inner arm shaft (k) into the main chassis groove (l) (as when it was removed, be careful not to deform the inner arm).
- (3) Place the outer link shaft (h) on section (j) of the main chassis, then, while pressing slowly on the cassette control from above, slide the shaft (h) forward and hook it on section (i) of the main chassis.
- (4) Attach the auxiliary spring (g) and the damper (f).
Tightening torque $70 \pm 7 \text{ mN}\cdot\text{m}$ ($0.7 \pm 0.07 \text{ kg}\cdot\text{cm}$)
- (5) Attach the DOWN guide. (When attaching it, press on section (n) while tightening the screw.)
Tightening torque $40 \pm 4 \text{ mN}\cdot\text{m}$ ($0.4 \pm 0.04 \text{ kg}\cdot\text{cm}$)
- (6) Attach the drum cover and the cassette control cover.

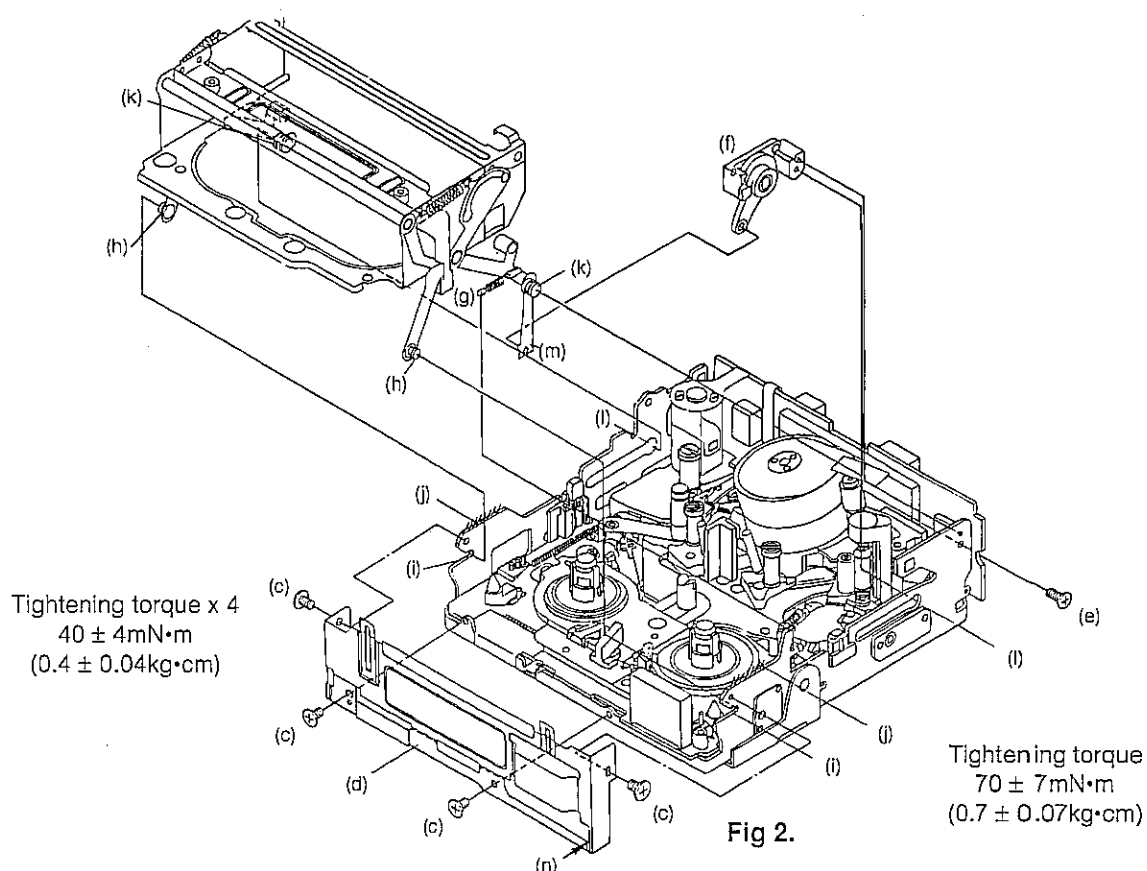


Fig 2.

9-3. How to operate with the circuit board with the cassette control assembly removed

In this method, if the procedure is followed incorrectly there is danger of damaging the mechanism and the tape, so except in special cases, such as when measuring the reverse search (VS-REW) torque, do not perform this procedure. Normally operate this unit with the cassette control assembly attached.

Be sure to follow each caution mentioned.

- (1) Put the system into EJECT mode.
- (2) Connect the mechanical section to the main circuit board with the FPC jig for relay use. (Refer to 10-1.)
- (3) Remove the lock cam (1).

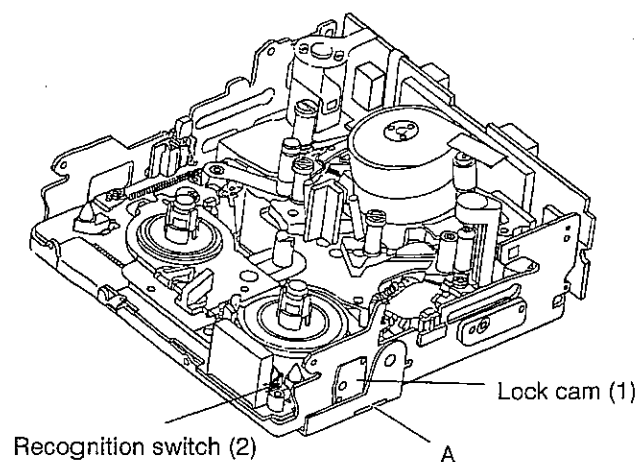
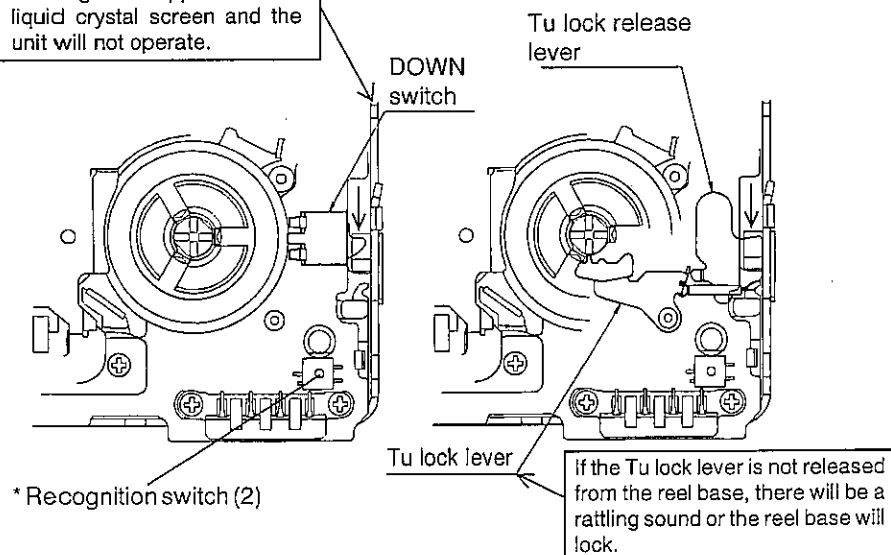


Fig. 3.

If the DOWN switch is not turned ON, a "no cassette" message will appear on the liquid crystal screen and the unit will not operate.



- (4) From the front side of the mechanism, while pushing the DOWN switch and the Tu lock release lever in the direction of the arrow in Fig. 5, for example with a slotted screwdriver, insert the thick paper (about 0.5mm thick) shown in Fig. 4 from the rear side of the mechanism as shown in Fig. 5, then release the DOWN switch and the Tu lock release lever (do this in such a way that the switch will come ON). At this time, be careful not to deform the Tu lock release lever.
- (5) After releasing the Tu lock release lever, confirm that the Tu reel base rotates smoothly in both directions.

Note) If the Tu lock release lever has not been released, There will be a rattling sound; If the tape is loaded in this condition, the reel base will lock, damaging the tape and the mechanism.

Note) When putting the system into REC mode, push the pin (shown by the * mark) of the recognition switch (2) (this is not necessary in other modes).

(6) If the system is put into TEST mode (indicator T-01 lights up) with the adjustment remote control without inserting a tape, it becomes possible to operate the mechanism with the MODE key.

(7) When ejecting, remove the thick paper inserted in step (4).

Note) Absolutely do not press the EJECT lever of the VCR frame. Doing so can damage the lever and the cams. There will be a rattling sound during the ejection, but this is not abnormal.

(Make from paper about 0.5mm thick.)

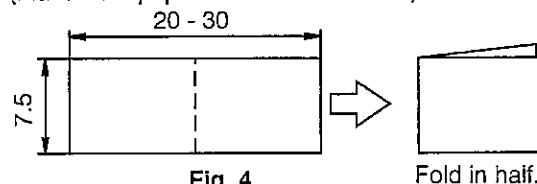


Fig. 4.

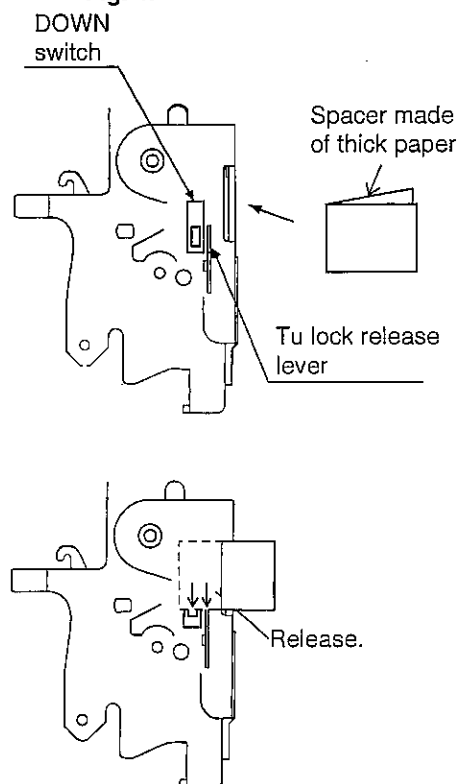


Fig. 5.

9-4. Phase matching

For the parts listed below, match the phases as shown in Fig. 6.

- (1) MODE switch
- (2) Main cam
- (3) Cam coupling gear
- (4) Pinch cam

Note) Before disassembling, check the marker positions carefully.

Note) After phase matching, turn the MODE switch by hand and confirm that it turns almost one complete turn. (After checking, return it to its original position.)

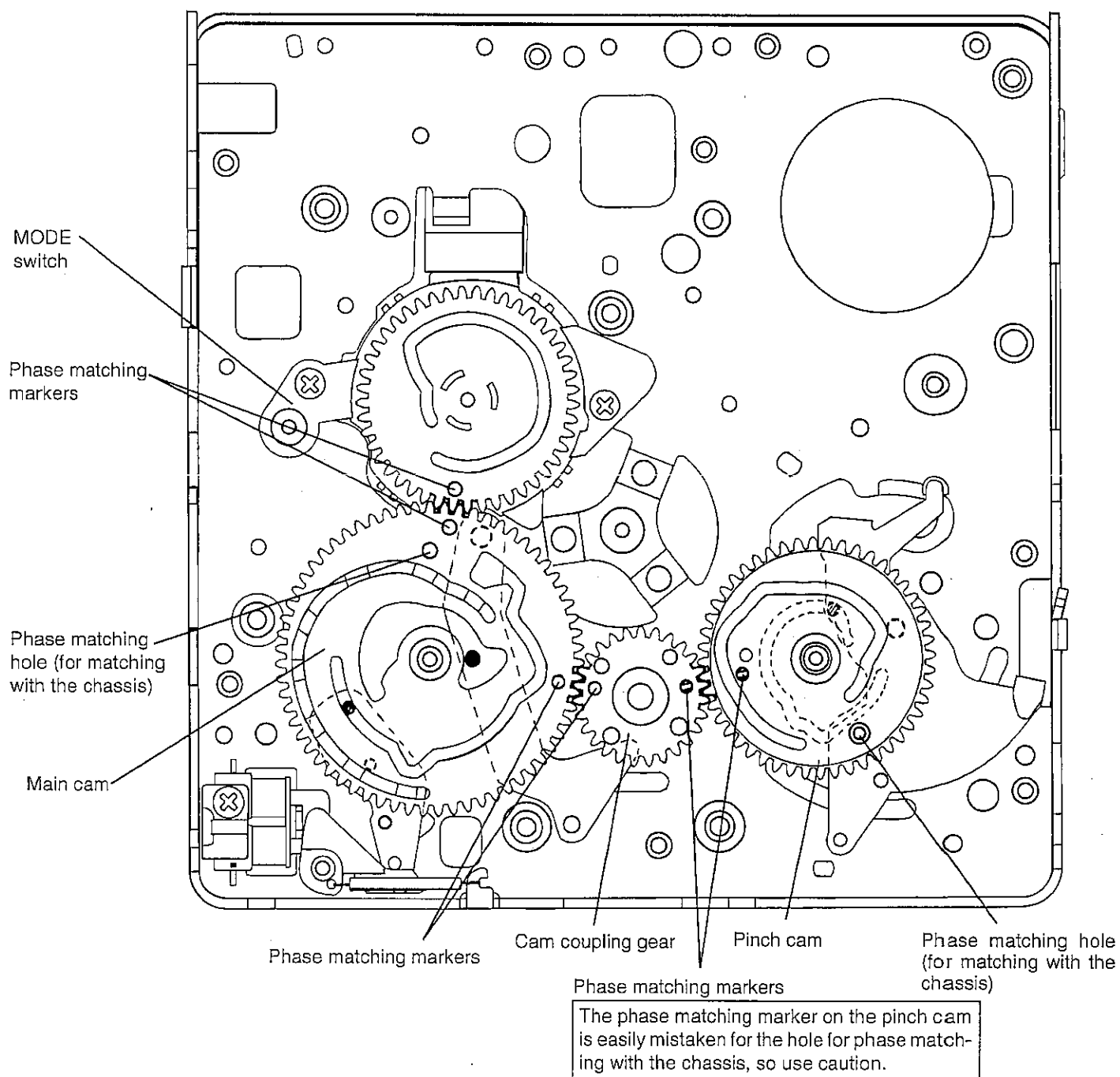
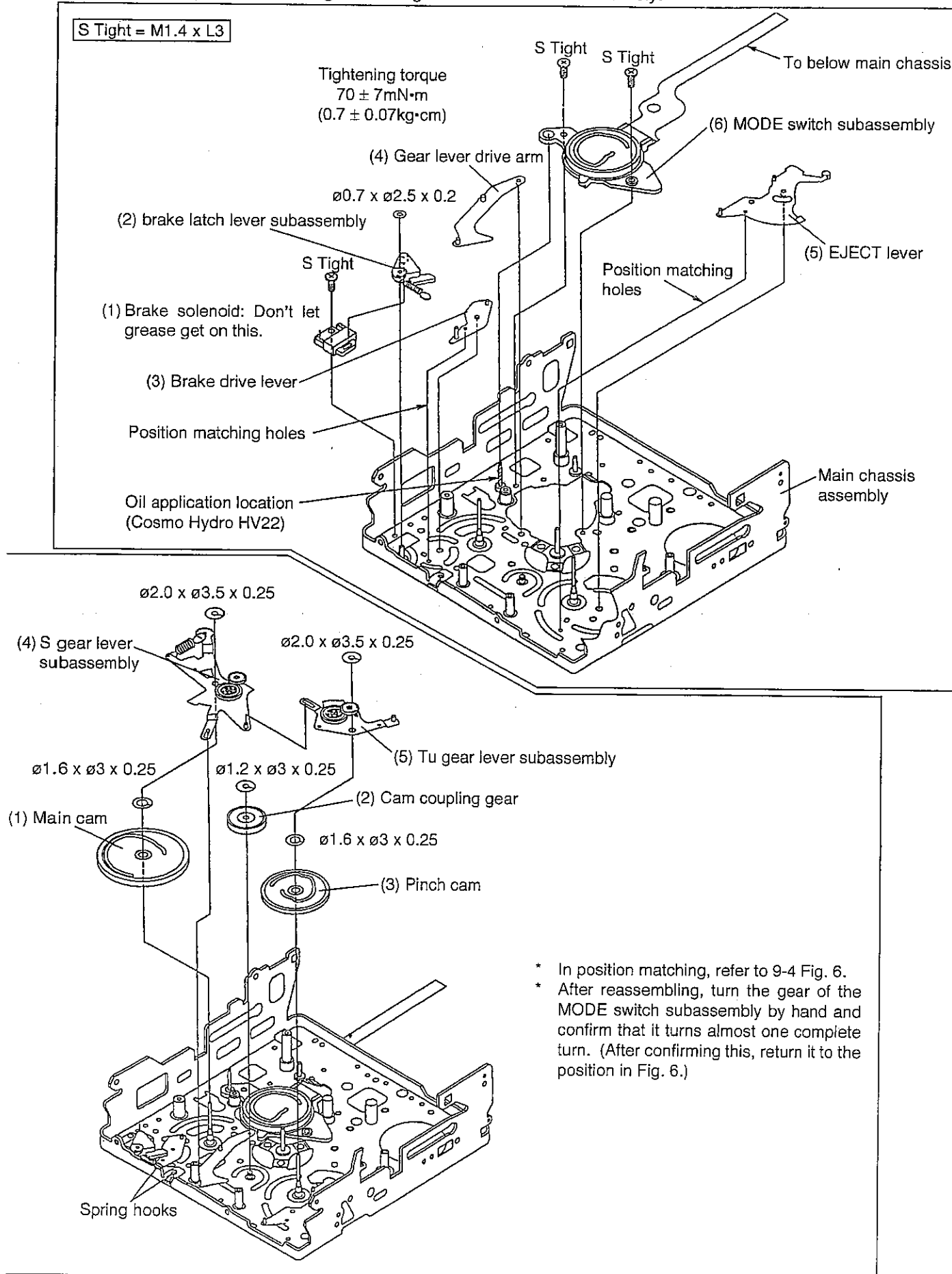


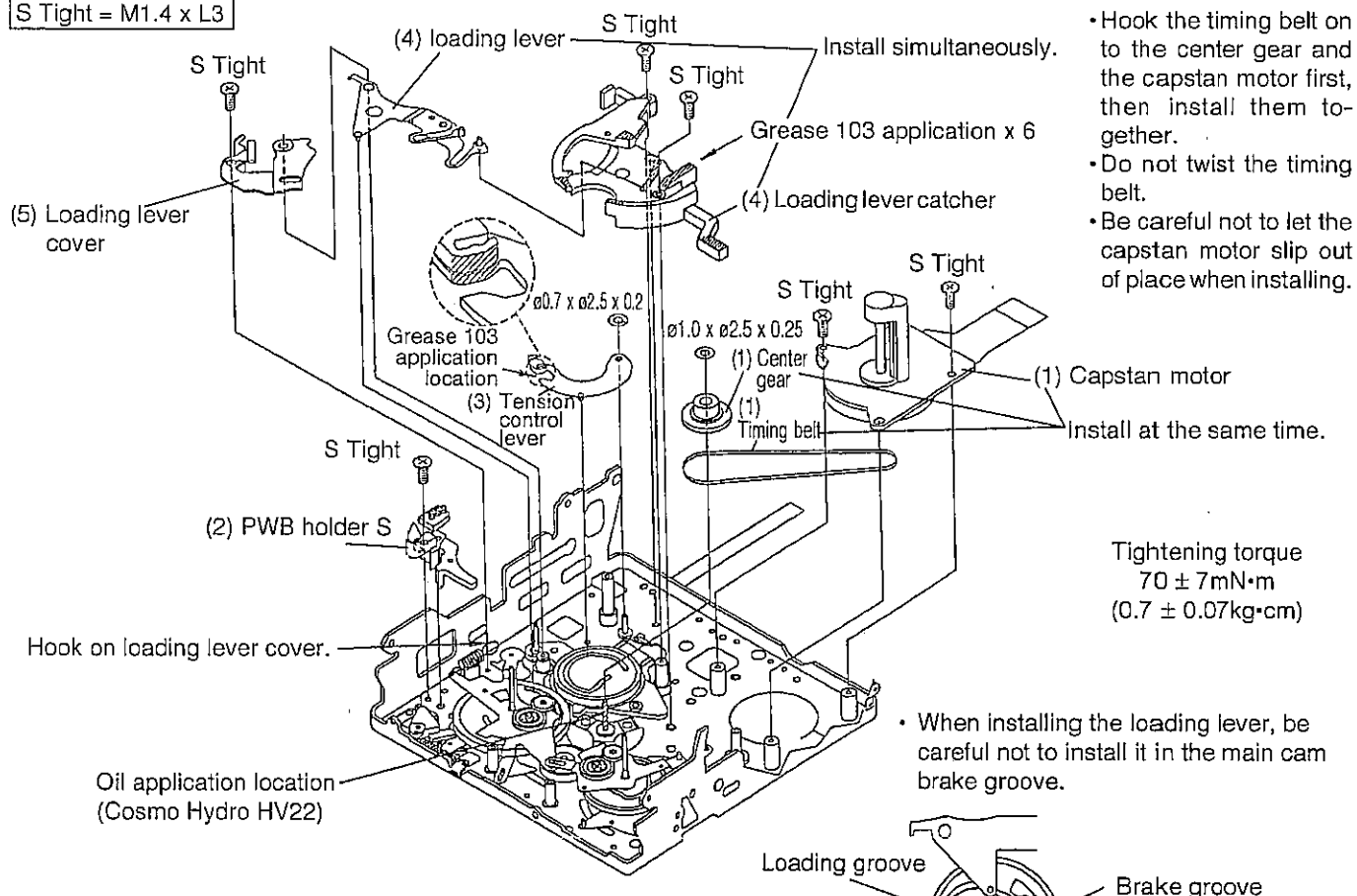
Fig. 6.

9-5. Reassembly

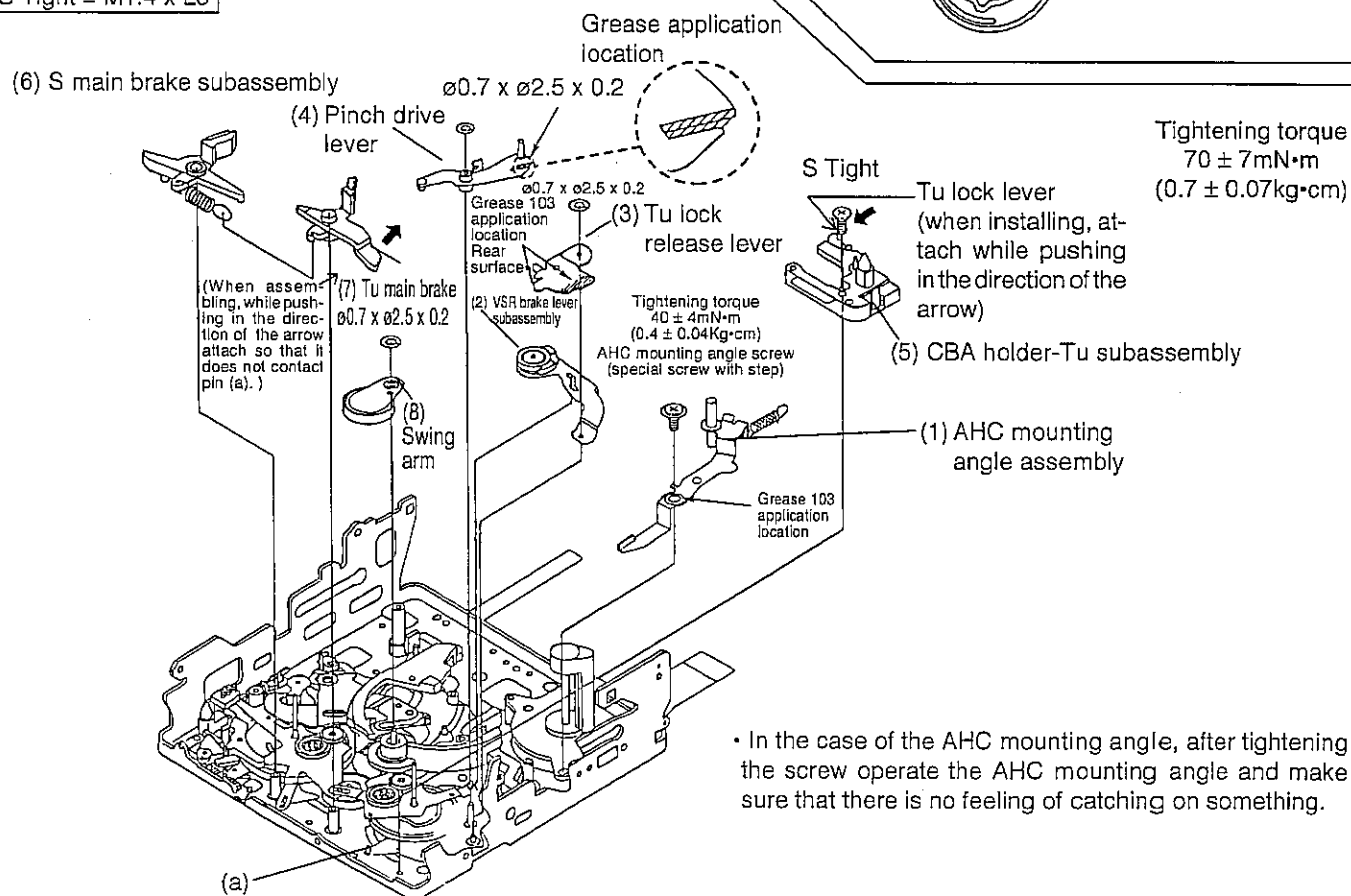
Note) Numbers before part names are given as a guide to the order of assembly.



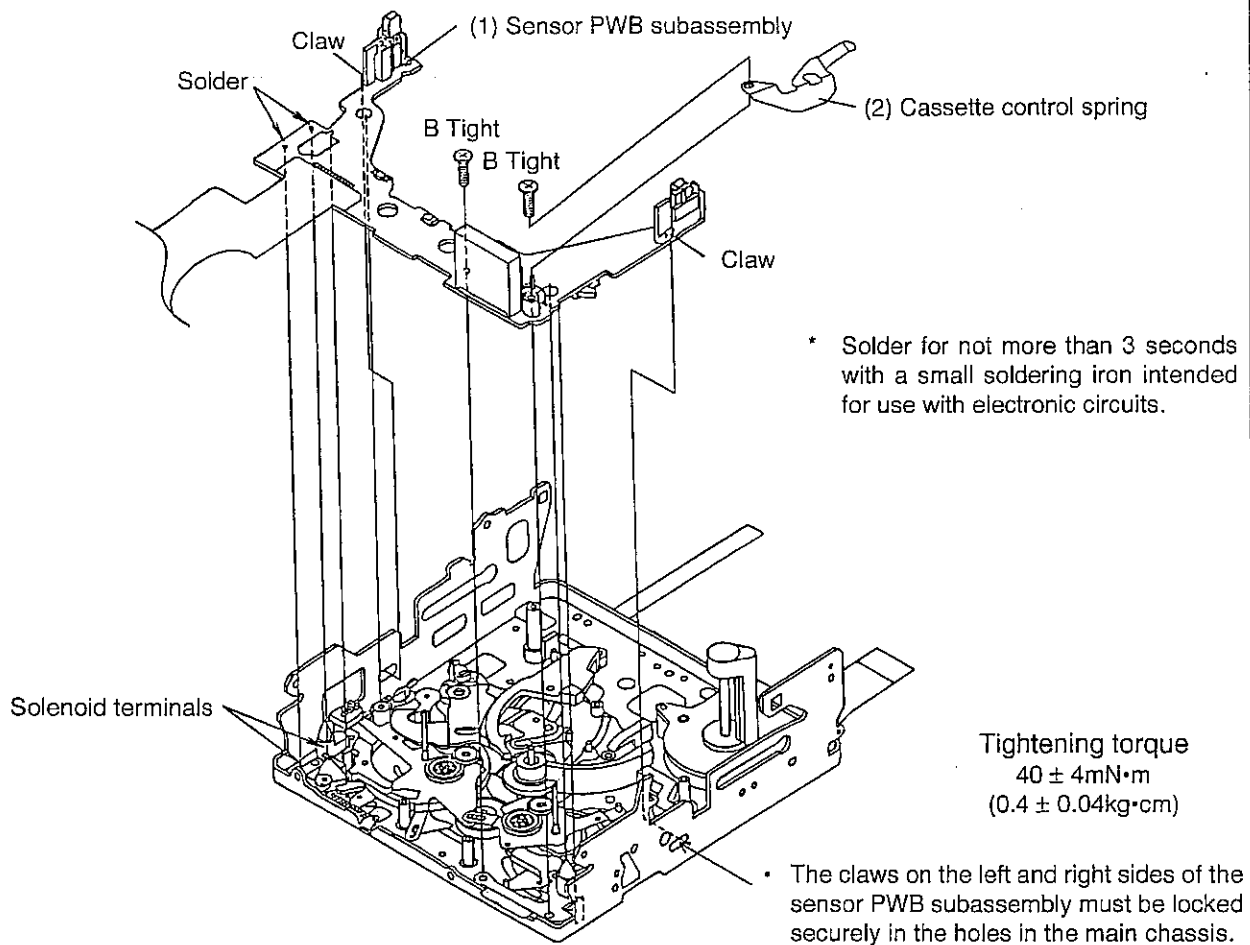
S Tight = M1.4 x L3



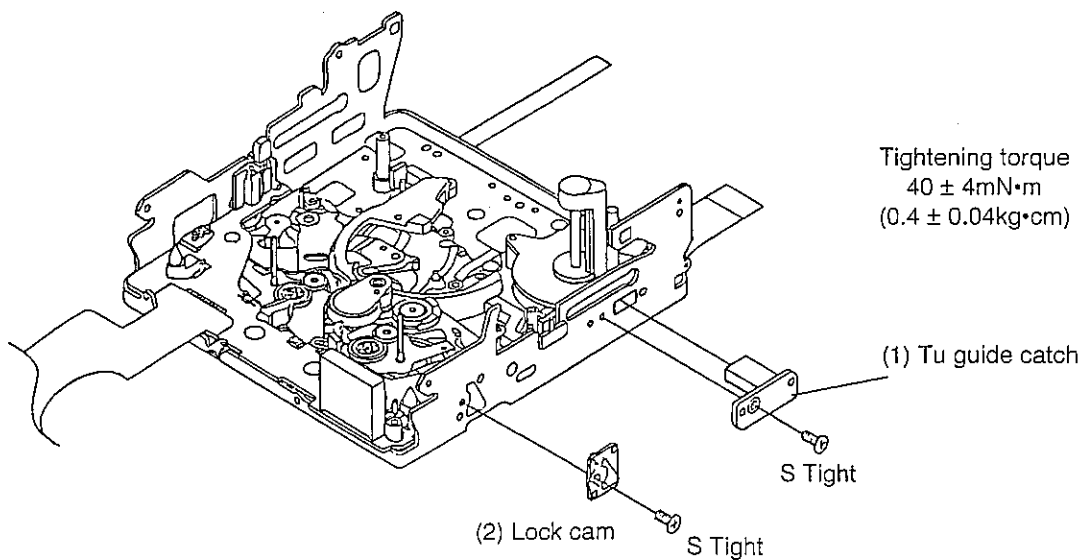
S Tight = M1.4 x L3



B Tight = M1.4 x L6



S Tight = M1.4 x L3



S Tight = M1.4 x L3

Attach so that the aperture section is on the guide rail side.
 $\phi 0.7 - \phi 1.8 - 10.2$

Loading motor attachment screw
 (special screw with step)

Loading motor attachment screw

Tightening torque

$40 \pm 4 \text{ mN}\cdot\text{m}$

$(0.4 \pm 0.04 \text{ kg}\cdot\text{cm})$

S Tight for loading motor use

Tightening torque

$70 \pm 7 \text{ mN}\cdot\text{m}$

$(0.7 \pm 0.07 \text{ kg}\cdot\text{cm})$

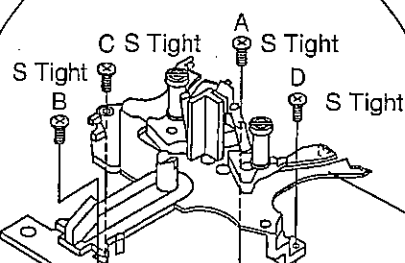
(The claws are white.)

(3) S reel base

S Tight

(4) Tu reel base

(The claws are black.)



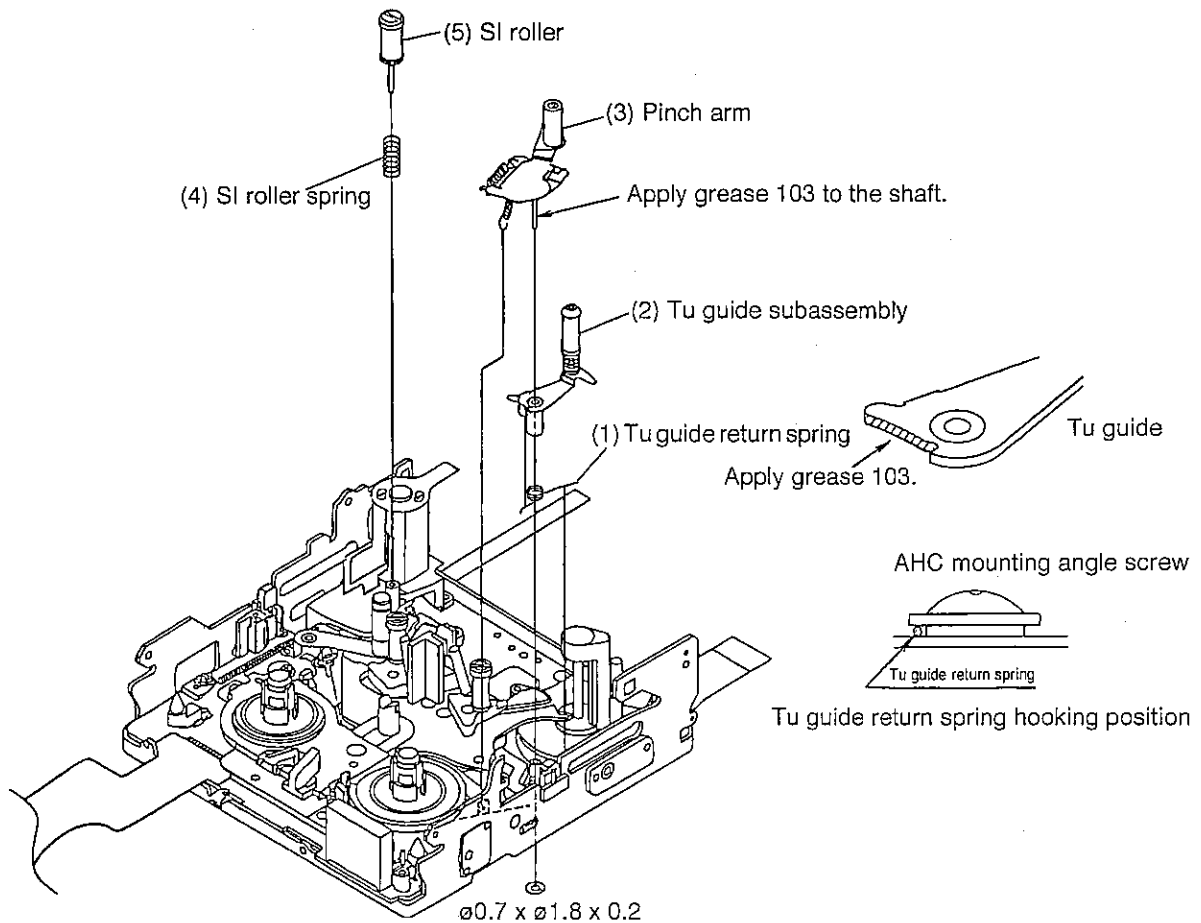
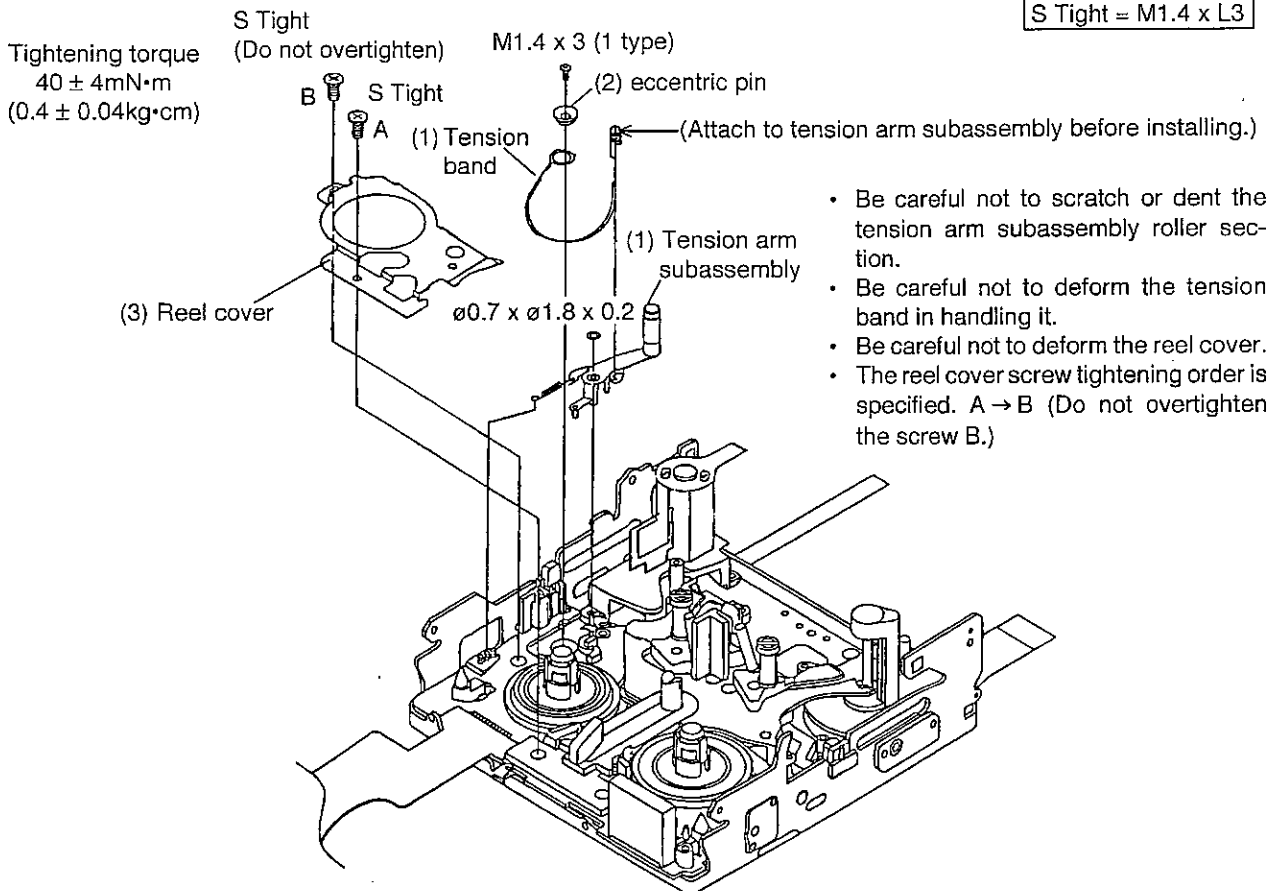
(2) Guide rail assembly

Tightening torque

$40 \pm 4 \text{ mN}\cdot\text{m}$

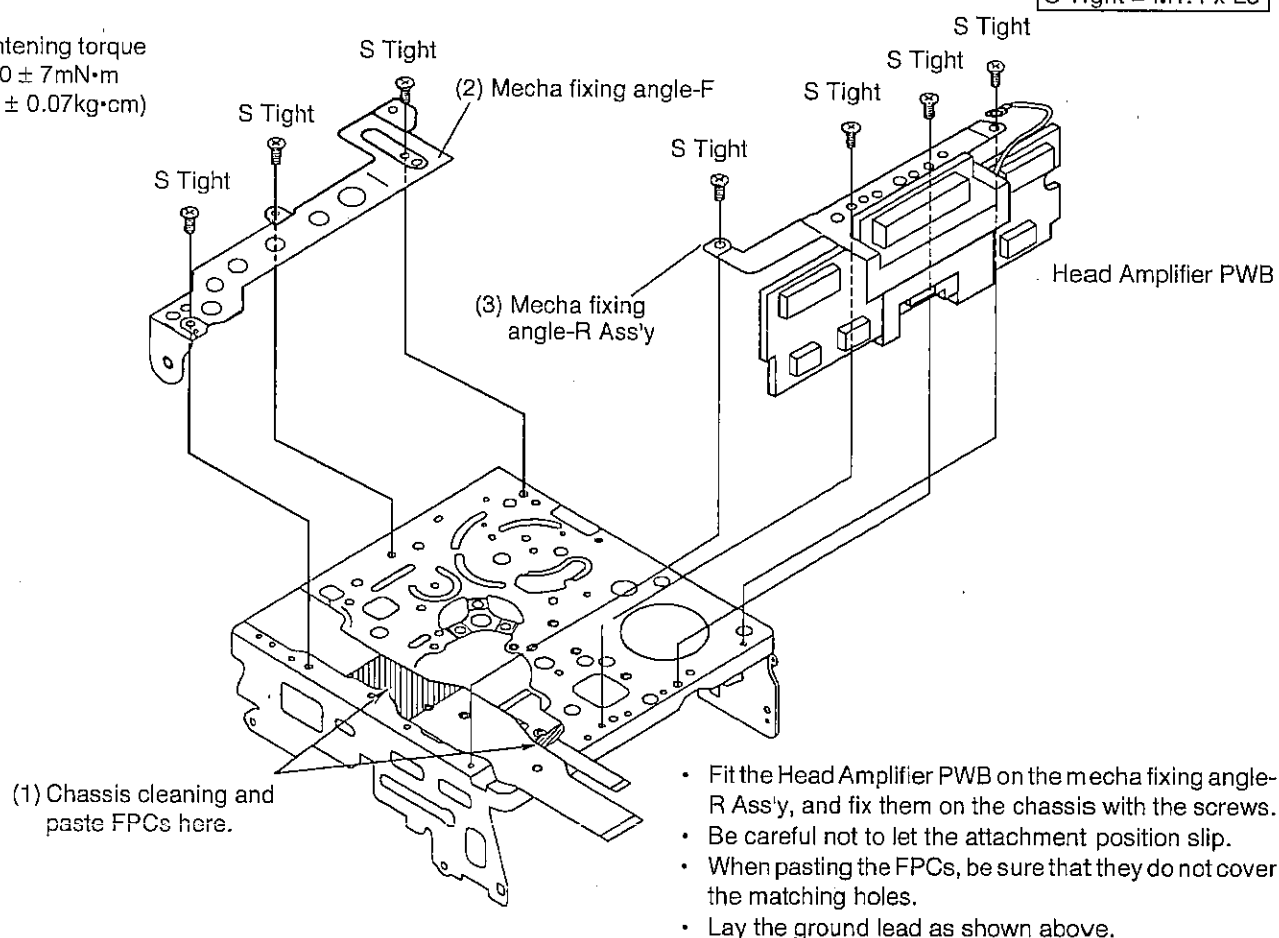
$(0.4 \pm 0.04 \text{ kg}\cdot\text{cm})$

- The loading motor subassembly screw tightening order is specified.
Loading motor tightening screws
S → Tight x 2
- Attach the guide rail assembly after confirming that all of the parts are mated.
- The guide rail assembly screw tightening order is specified. A → B → C → D

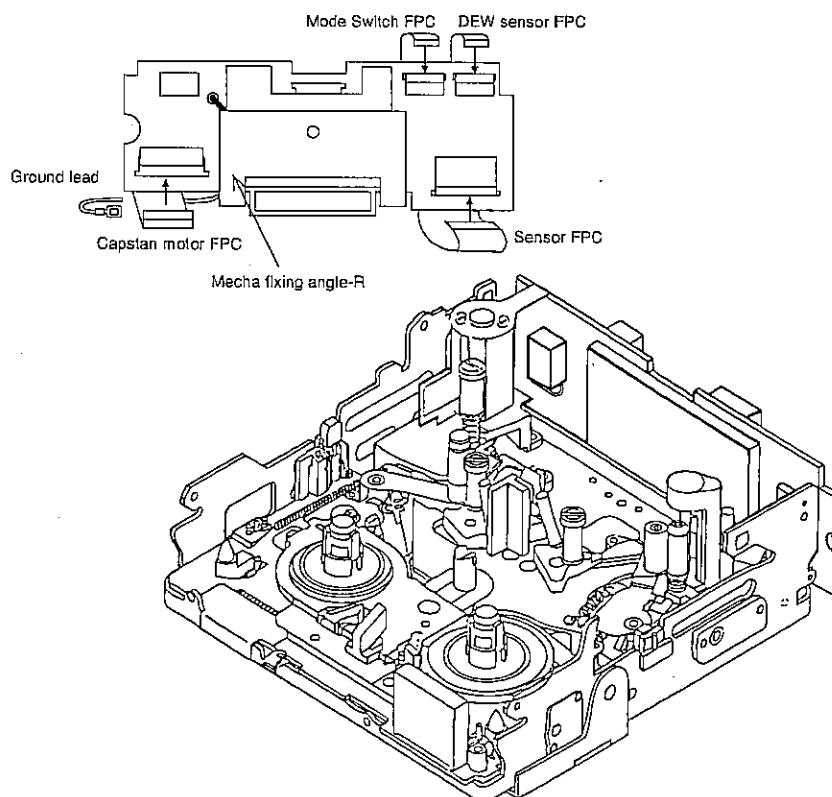


S Tight = M1.4 x L3

Tightening torque
 $70 \pm 7 \text{ mN}\cdot\text{m}$
 $(0.7 \pm 0.07 \text{ kg}\cdot\text{cm})$

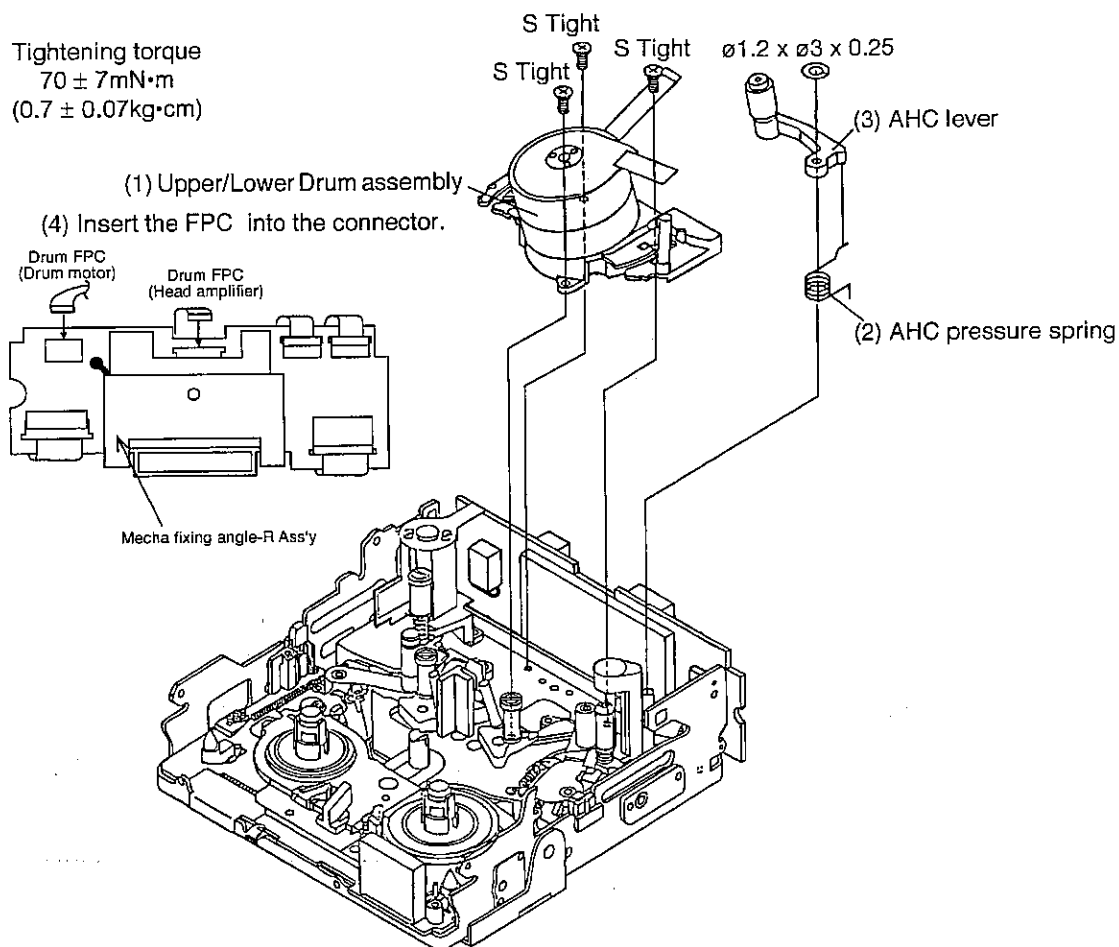


(2) Insert the FPC into the connector.



S Tight = M1.4 x L3

Tightening torque
 $70 \pm 7 \text{ mN}\cdot\text{m}$
($0.7 \pm 0.07 \text{ kg}\cdot\text{cm}$)



10. ADJUSTING THE ELECTRICAL CIRCUITS

— Precautions for making adjustments —

- The adjustment methods described herein are used, in most cases, when the expendable mechanical parts, including the video head, have been replaced, at which time the electrical circuits need to be readjusted. Before adjusting the electrical circuits, make sure that the mechanism works properly (i.e., the mechanism is properly adjusted). In case of the occurrence of any problem to the electrical circuits, be sure to use the specified measuring instruments to locate the area to which the problem is occurring, and then take the necessary action, including repair, replacement or adjustment, exactly as instructed in the electrical adjustment methods that will follow.

Do not attempt to make adjustments without using the proper measuring instruments.

- This machine is configured so that the electrical circuits inside its PWB unit are composed, for the most part, of high-density, small surface-mounted component parts for downsized machine body.

To perform repair service or parts replacement, do so using a soldering iron, but in as short a time as possible; this is because surface-mounted component parts are generally so small in size and susceptible to heat, as compared with the large discrete parts used in TV sets, desk-top video decks, etc., that attempting to heat their electrodes for a longer time than is necessary with a soldering iron may result in their becoming defective.

This applies particularly when replacing the laminated chip capacitors.

For this purpose, ceramic soldering irons with a temperature regulator are recommended (iron tip temperature 250°C and soldering time 5 seconds or shorter).

10-1. Adjusting the LCD video screen

- Measuring jigs
 - Color monitor screen
 - Digital voltmeter
 - Signal generator (NTSC pattern generator LCG-401/401YC, made by Leader)
 - Audio signal generator (CR generator)
 - AC adapter
 - Stereo AV output cable (supplied)
- Oscilloscope
- Frequency counter
- Blank video cassette
- DC cable (supplied with AC adapter)
- Extension cable for video section
- Vector scope
- DC power supply
- Alignment tape 90ADVC-TAPE (color bars)
- Adjustment remote control



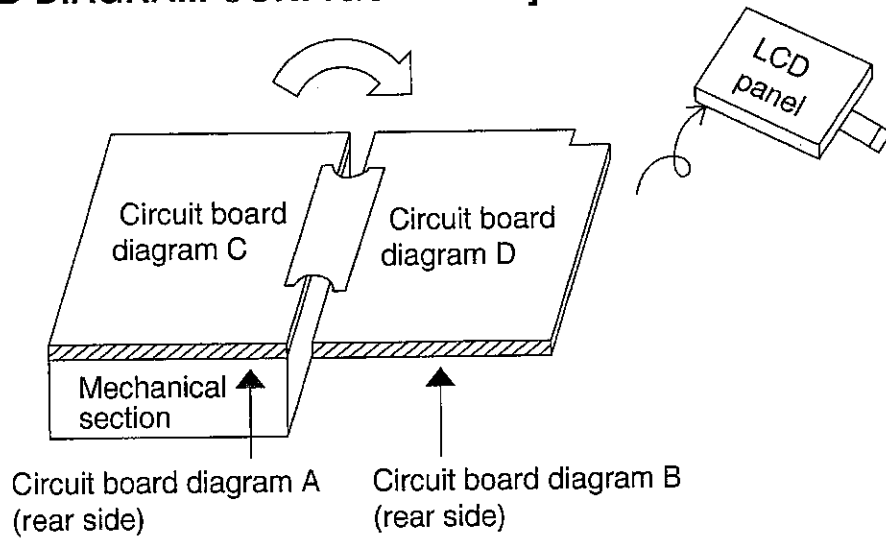
Specifications of VL-DC1U service jigs

NO.	Connected to or between:	Connector REF. NO.	No. of pins	Pitch	Cable length	Part code
1)	H/A ↔ VCR	P306 ↔ SC3401	80B-B	0.5		QCNW-1398TAZZ
(1)	H/A	P306	↓	↓		QPWBN2582TAZZ
(2)	VCR	SC3401	↓	↓		QPWBN2583TAZZ
(3)	FFC		20	↓	200	QCNW-1370TAZZ
2)	Battery terminal	P2702 ←	12			QTANZ0095TAZZ Used with product units
3)	Power switch	SC5 ↔ power switch unit	8	0.8		QCNW-1429TAZZ
4)	GUI OPE.	SC705 ↔ UNIT	8	↓		QCNW-1429TAZZ
5)	VCR ↔ LCD panel	SC804 ↔ LCD	24	0.5		QCNW-1382TAZZ
6)	VCR ↔ INV	SC8901 ↔ INV	7	↓		QCNW-1265TAZZ
7)	VCR ↔ system terminal	SC1401 ↔ system terminal	30	↓		RUNTK0314TAZZ QTANZ0096TAZZ Used with product units
8)	CAM1 FFC	SC902 ↔ SC3	18	↓		QCNW-1270TAZZ
9)	CAM2 FFC	SC903 ↔ SC4	19	↓		QCNW-1381TAZZ
10-1)	CAM ADJ	P6 ←	26	0.8		QCNW-1220TAZZ
-2)						QCNW-1494TAZZ
11)	EJECT SW	P703 ←	3			QSW-Z0224TAZZ Used with product units
12-1)	Power switch (when operating VCR)	SC903 ↔ No.-of-pins conversion	19	0.5		QCNW-1381TAZZ
-2)	CBA independently)	Conversion from 18 to 19 pins				QPWBF2612TAZZ
-3)		No.-of-pins conversion	18	0.5		QCNW-1356TAZZ
-4)		↔ power switch jig				QPWBF2550TAZZ
13)	Adjustment remote control					RRMCG0033TASA

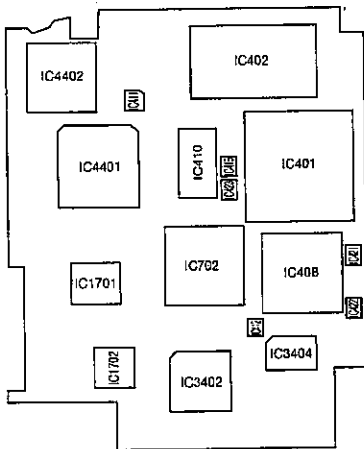
* Jig No. 7 can connect SC1401 directly with the system terminal unit (QTANZ0096TAZZ). [For monitor output, AV pack is required.]

* Jig No. 12 is used only in the case where the VCR PWB is operated independently for reasons such as because there is no camera or because no camera is required.

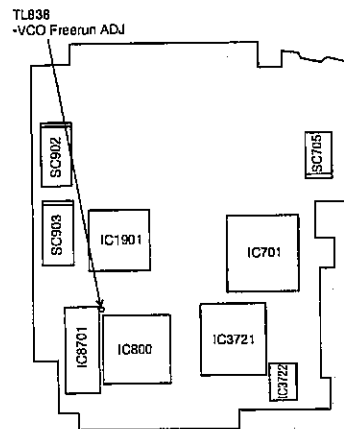
[CIRCUIT BOARD DIAGRAM CONFIGURATION]



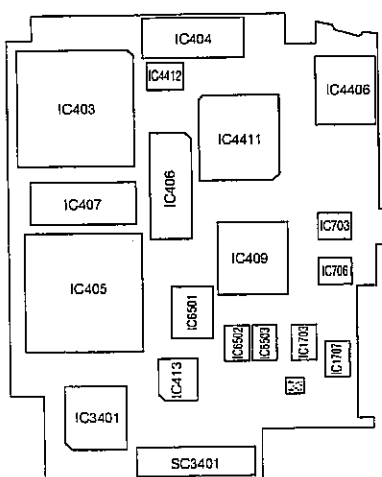
(CIRCUIT BOARD DIAGRAM C)



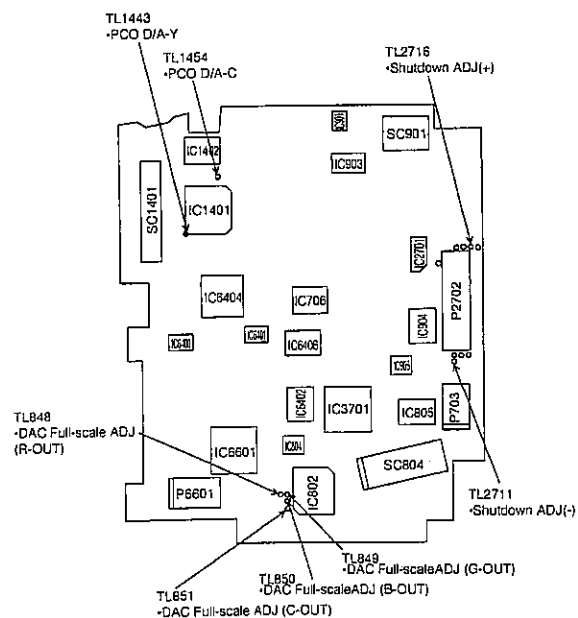
(CIRCUIT BOARD DIAGRAM D)



(CIRCUIT BOARD DIAGRAM A)



(CIRCUIT BOARD DIAGRAM B)



[Making adjustments]**Adjusting the servo system controller and related parts**

1. Setting the system codes

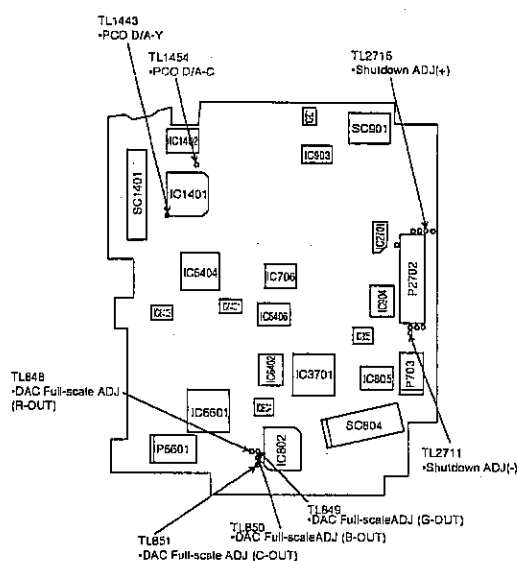
Replacement of IC706E²PROM requires the following data to be set in this order.

[Procedure]

Set the unit to the VCR mode and set the data for each address.

	Address	Data
1) Model code	01	00
	09	FF
2) Destination code	02	00
	0A	FF
3) Specifications code	03	00
	0B	FF
4) Menu selection code	04	00
	0C	FF
5) Software switching code	05	00
	0D	FF
6) Calendar switching code	07	96
	0F	69
7) 1/4 track	1F	00

2. Shutdown voltage adjustment

(CIRCUIT BOARD DIAGRAM B)**[Procedure]**

- 1) Load the blank cassette into the deck.
- 2) Set the unit to the camera mode, and start recording.
- 3) Press the "CONTINUE" and "TEST SEL" keys on the adjustment remote control in this order.
- 4) Select T-03 with the "REW" and "FF" keys and press the "PLAY" key.
→ This shifts the operation mode to the shutdown voltage adjustment mode.
At this time, the display in which T-03 is flashing changes to the normal REC screen.
- 5) Measure the voltage between TL2716 (+) and TL2711 (-) using the digital multi-meter, and supply external power until the power voltage is adjusted to +2.80 VAC.
- 6) Press the "backlight compensation (▶/◀)" key. (The backlight compensation indicator changes from blue to yellow.)
→ This executes automatic adjustment.
At this time, with the "BATTERY" indication appearing only for an instant, the adjustment is complete.
- 7) Press the "CONTINUE" key on the adjustment remote control.

* Some adjustment step numbers are followed by when to perform the adjustment.

Examples

- 1) During E²PROM replacement
- 2) During circuit board (Main) replacement
- 3) During LCD replacement
- 4) During mechanism replacement

- 1) During E²PROM replacement

3. HSWP adjustment

Procedure]

- 1) Play back the alignment tape in the video mode.
- 2) Press the "CONTINUE" and "HSWP ADJ" keys on the adjustment remote control in this order.
- This executes the HSWP adjustment.
- At this time when the adjustment is successful, the tape should stop automatically. If the adjustment is not possible, the tape will be ejected automatically, thereby terminating the adjustment mode.

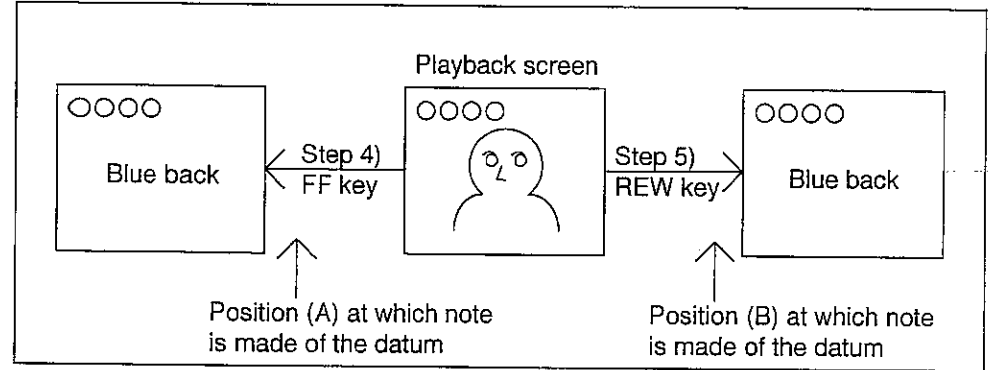
ADJUSTING THE ELECTROMAGNETIC CONVERSION CIRCUIT SYSTEM

Note: During the adjustment of the electromagnetic conversion circuit system, keep R3602 out of operation.

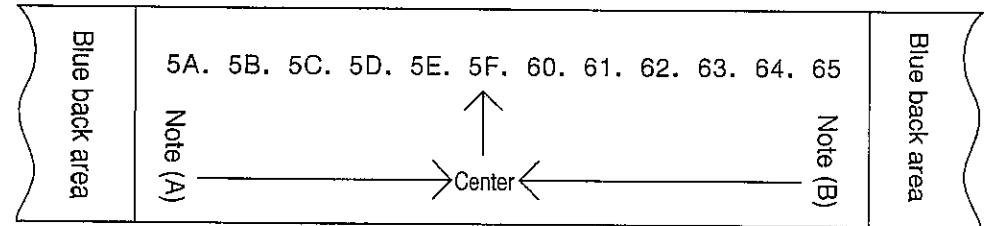
PLL VCO adjustment

Procedure]

- 1) Play back the alignment tape (or a self-recorded tape).
- 2) Call the adjustment mode (V-ADJ).
- 3) Set the address to "2C," and call the data.
- 4) Using the FF key, vary the data that has been called until the playback image screen changes to the blue back screen. Then use the REW key to vary the data backward until the data point is found where the screen starts to switch from the blue back to the playback image. At this time, take note of the data obtained at this point.
- 5) As in the above step (4), vary the data that has been called - this time using the REW key - until the playback image screen changes to the blue back screen. Then use the FF key to vary the data backward until the data point is found where the screen starts to switch from the blue back to the playback image. At this time, take note of the data obtained at the point.



- 6) Calculate the data taken note of at the points (A) and (B) to find the center of these data, and shift to and determine the central data by using the FF or REW key.
- Example:
If the data taken note of at the points (A) and (B) are 5A and 65, respectively:



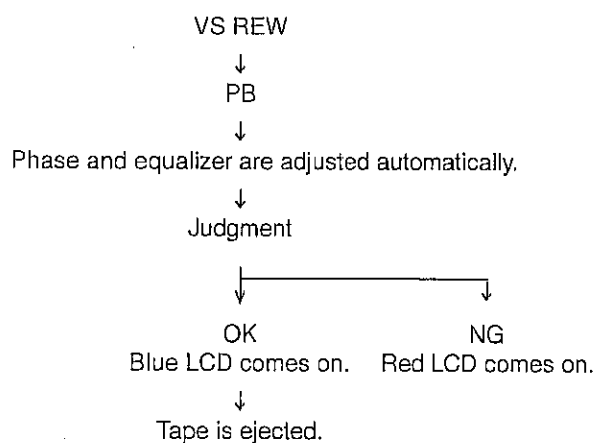
The central data is set to "5F"

- 1) During mechanism replacement
- 2) During E²PROM replacement (IC303 inside the head amplifier circuit board)

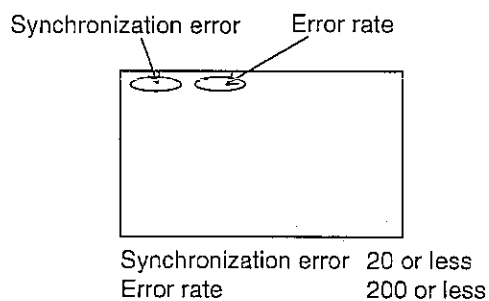
- 1) During circuit board (Main) replacement
- 2) During E²PROM replacement

Phase and equalizer adjustment → (Performed in the VCR mode)

- 1) Load a self-recorded tape into the deck.
- 2) Select and fix the TEST MODE 0F on the adjustment remote control, and the automatic adjustment will start (i.e., the following sequence is executed automatically).



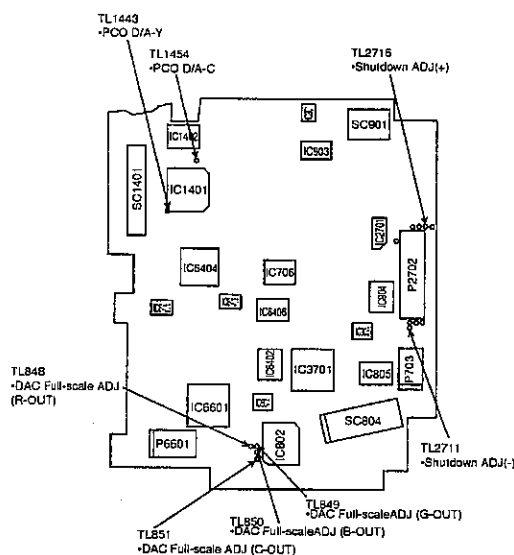
- 4) Error rate check
Select and fix the TEST MODE 0C on the adjustment remote control.
- 5) Manual adjustment method (video adjustment mode)
For phase, vary the data for the address 2B, and for equalizer, vary the data for the address 27, to set the error rate to the minimum.



- 1) During mechanism replacement
- 2) During circuit board (Main) replacement
- 3) During E²PROM replacement

Adjusting the video I/O circuit system

(CIRCUIT BOARD DIAGRAM B)



I/O filter adjustment

Mode]

EE mode for color bar input (video power side)

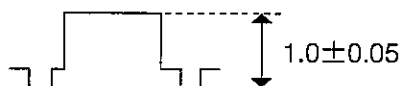
Procedure]

-) Call the adjustment mode (V-ADJ).
-) Set the address to "21" and call the data.
-) Set the data to "60."

PCO D/A-Y adjustment

Mode]

EE mode for any given video signal



Test point]

TL1443 (connected to oscilloscope)

Procedure]

-) Call the adjustment mode (V-ADJ).
-) Set the address to "22" and call the data.
- (100% white signal is output.)
-) Vary the data with the FF and REW keys to set the signal appearing at TL1443 to $1.0 \text{ Vp-p} \pm 0.05$.
- Data should be set within the range range is from 00 to 60.

PCO D/A-C adjustment

Mode]

No input



Test point]

TL1454

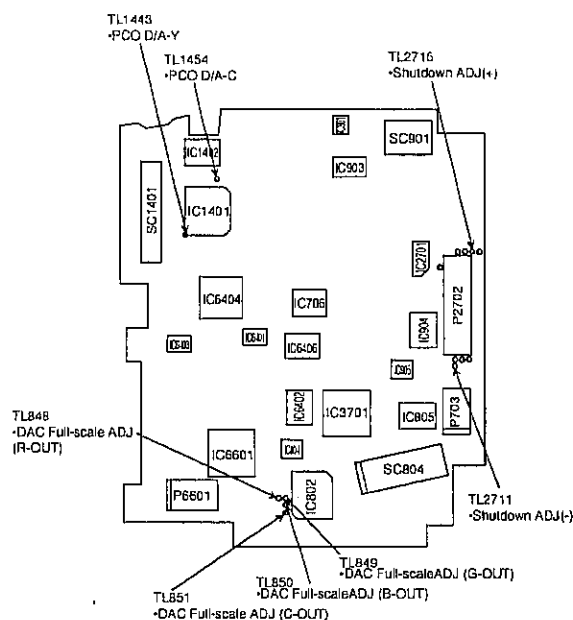
Procedure]

-) Call the adjustment mode (V-ADJ).
-) Set the address to "23" and call the data.
-) Vary the data with the FF and REW keys to set the signal appearing at TL1454 to $1.28 \text{ Vp-p} \pm 0.05$.
- Data should be set within the range from 00 to 60.

1) During E²PROM replacement1) During E²PROM replacement1) During E²PROM replacement

Adjusting the LCD circuit * To make this adjustment, set the backlight switch to the "NORMAL" position.

(CIRCUIT BOARD DIAGRAM B)



1. VCO free-run ADJ

[Mode]

VCR AV input

[Address]

VCR ADJ 32

[Measuring point]

TL838 (HSY)

[Adjustment rating]

15.734 KHz (NTSC) \pm 100Hz

[Procedure]

1) Change the VCR ADJ address from 57 to FB.

2) Connect the oscilloscope to TL838 and adjust it to the specified rating with the VCR ADJ address 32.

(At this time, 6 VAC is output from TL838.)

3) Set the VCR ADJ address 57 to FF.

Note: Setting the address 57 to FC/FD turns off the LCD screen. However, disregard this and keep the data changed; otherwise, the screen will fail to be returned to.

1) During E²PROM replacement

VL-DC1U

DAC full-scale ADJ
Mode]
VCR AV input

Addresses]
VCR ADJ 3E (R/G)
VCR ADJ 3D (B/C)

Measuring points]
TL848 (R OUT)
TL849 (G OUT)
TL850 (B OUT)
TL851 (C OUT)

Adjustment rating]
1.0 Vp-p \pm 15 mV

Procedure]
Change the VCR ADJ addresses 47, 49 and 64 to FE, 7F and 7F, respectively. (At this time, remember to take note of the data before changing them.)
With the VCR ADJ address 3D, set the TL848/849 output voltage to the adjustment rating, and with the synchronizer, set the peak voltage also to the adjustment rating, in such a way that the both TPs' voltages will be averaged into the rated mean value.
With the VCR ADJ address 3D, set the TL850/851 output voltage to the adjustment rating, and with the synchronizer, set the peak voltage also to the adjustment rating. (Same as in Step (2) above)
Set the changed address data back to normal.
Note: Setting each address data back to normal leaves the LCD screen white. At this time, turning off and on the main power will restore the screen (the lithium battery should be removed).

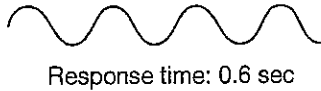
COM-Bias ADJ
Mode]
VCR AV input

Address]
VCR ADJ 33

Measuring point]
LCD panel display area

Adjustment rating]
Minimum

Procedure]
Feed 40% white signal to the AV input jacks.
Set the illumination meter (TOPCON IM-3) onto the LCD panel surface. (No external light is allowed to enter.)
Set the output wave form ripple on the illumination meter to the minimum level.



Remarks]
Make this adjustment after 5-minute or longer aging.

- 1) During E²PROM replacement
- 2) During circuit board (Main) replacement
- 3) During LCD replacement

4. W/B ADJ

[Mode]

VCR AV input

[Address]

VCR ADJ 30 (R)

VCR ADJ 31 (B)

[Measuring point]

LCD panel display area

[Adjustment rating]

Based on the standard monitor

[Procedure]

- 1) Feed 40% white signal to the AV input jacks and the standard monitor.
- 2) Adjust the signal level with the VCR ADJ addresses 30 and 31 until it becomes the same as that of the standard monitor.

[Remarks]

Make this adjustment after 5-minute or longer aging.

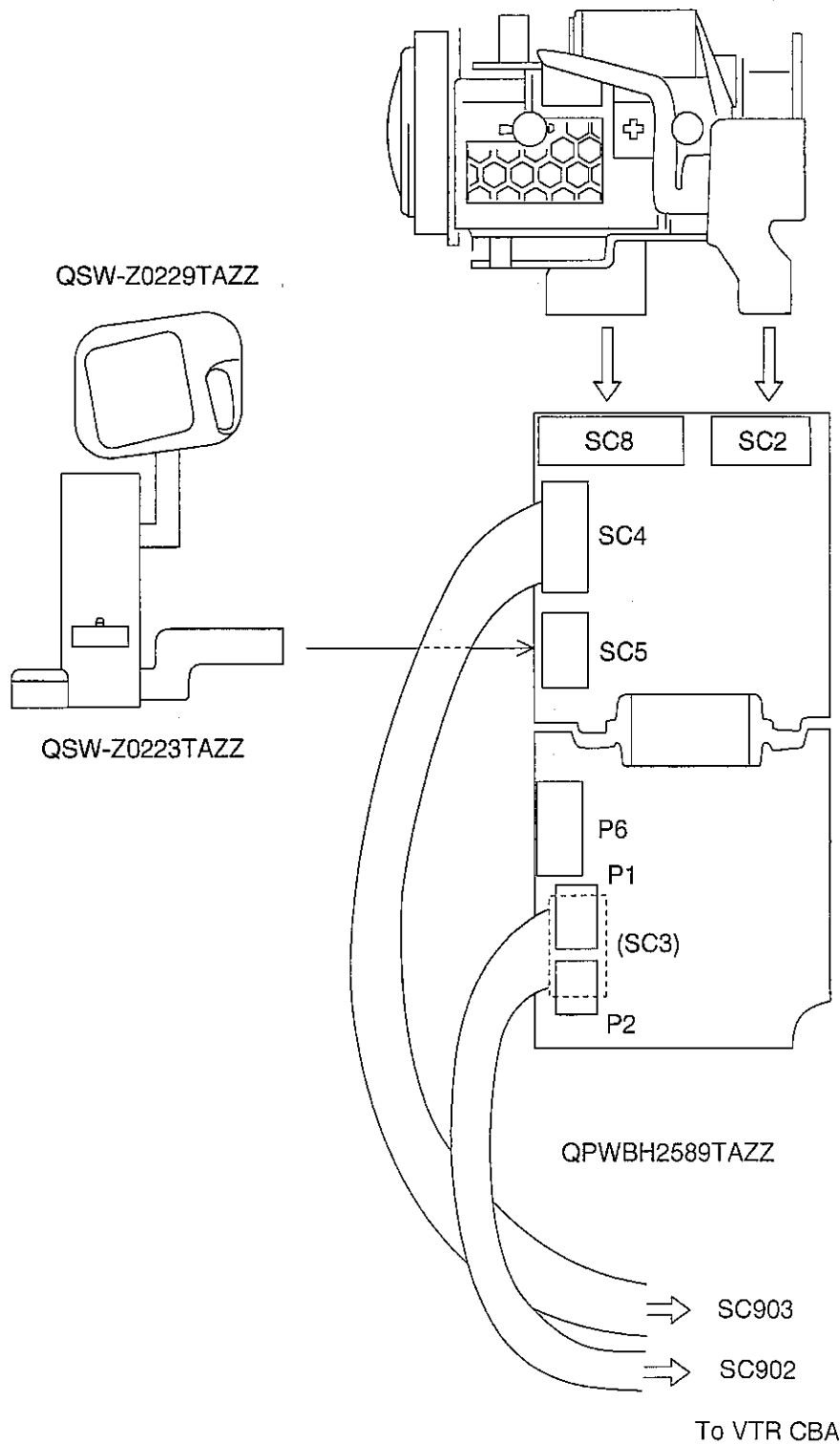
- 1) During E²PROM replacement
- 2) During circuit board (Main) replacement
- 3) During LCD replacement

0-2. Camera Section Adjustments

0-2-1. Camera section service

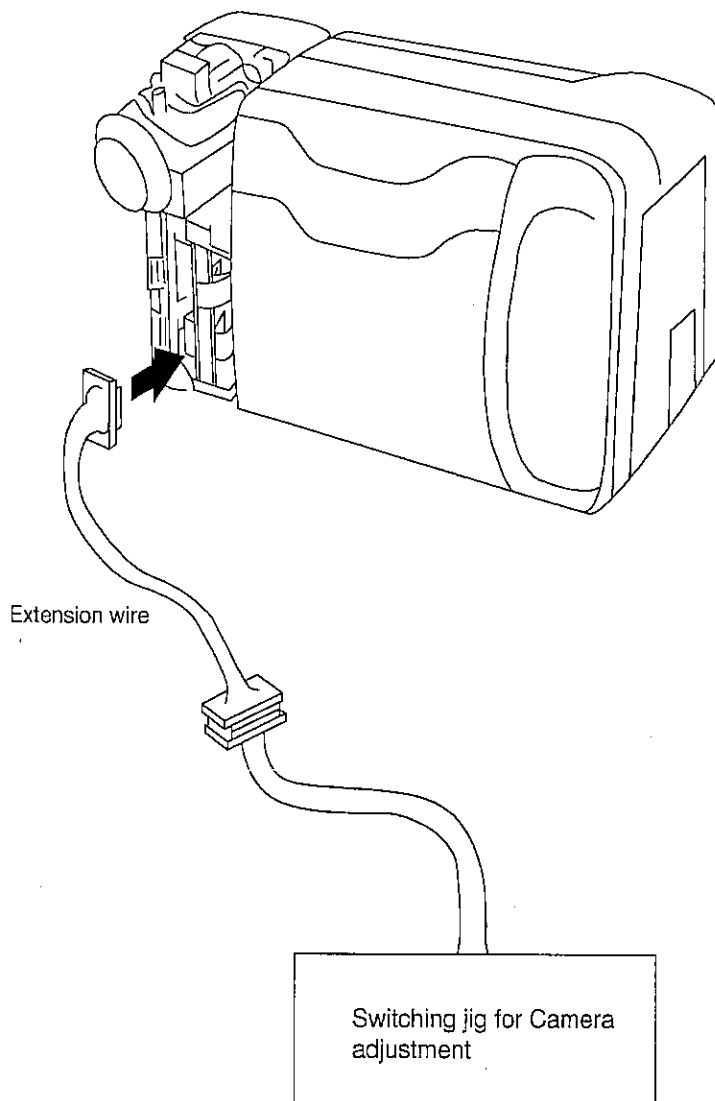
- 1) Subjects, measuring instruments and jigs needed for camera section service and adjustments
- | | | |
|---------------------|---------------------------------|-------------------------------------|
| • Gray scale chart | • Illumination meter | • Remote control unit for servicing |
| • White chart | • Color temperature meter | • DC power supplier |
| • Color bar chart | • Color video monitor | • Light box |
| • Oscilloscope | • Video output cable | • INF adjustment lens |
| • Digital voltmeter | • AC adaptor | • Halogen Light (2 pcs.) |
| • Vector scope | • Extension cables | |
| • Frequency counter | • Switch jig for adjustment use | |

2) Standard connections diagram at time of camera service



(3) Connections at the time of camera adjustment

When performing camera adjustments, remove the camera's front. Then connect connector P6 on the Camera CBA to the switch jig for adjustment use via a extension wire.



(4) Switch jig for camera section adjustments

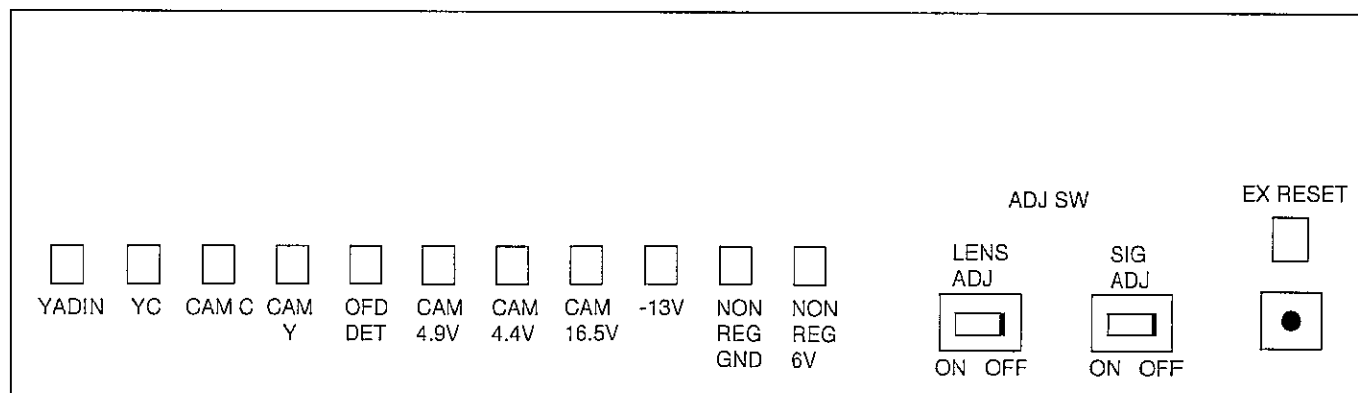
The jig is provided for switching for the purpose of waveform observation test point and camera signal system adjustments and zoom lens system auto focus adjustments during the camera adjustments. Note that some test points will be under different voltages from the markings. This is not a trouble, however.

CAM 4.4V TP ← Actually about 2.9V applied.

-13V TP ← Actually about -15V applied.


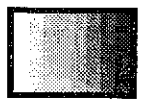

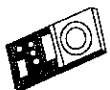
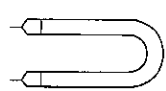
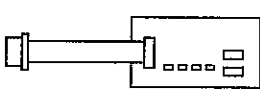
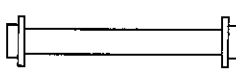
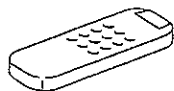
+16.5V TP ← Actually about 15V applied.

All of the switches on the jig remain OFF during use.



10-2-2. List of camera jigs and tools

Note: N indicates a new jig.

No.	Name of jig	Part code	Shape	Note
1	Gray scale chart (390 x 520mm)	JIGCHART-1		
2	Color bar chart (240 x 320mm)	JIGCHART-4		
3	Illumination meter (0 to 3000 lux)	JiGMETER-1		
4	Color temperature meter (1600 to 400000 degrees K)	JiGMETER-2		
5	Color temperature conversion filter (3200 degrees K → 6800 degrees K)	JiGHOYA-LB165		
6	PC plate connector drawer	JiGTH-SS10		
7	Camera adjustment switch plate (QCNW-1220TAZZ)	QCNW-1220TAZZ		
8	Extension wire (camera adjustment switch plate ↔ P8)	QCNW-1494TAZZ	 26Pin (26Pin) 26Pin	N
9	Remote control unit for servicing	RRMCG0033TASA		

10-2-3. Adjusting the camera unit

(1) Preparations for adjustments and items to be checked

- 1) Set up the light box so that the entire pattern is evenly lit. Set the color temperature to 3200°K.
- 2) Use test patterns that are not dirty nor discolored.
- 3) If the electrical circuitry gets in trouble, be sure to pinpoint the trouble spot with a measuring instrument and repair or replace the defective part.

(2) Remote control for servicing RRMCG0033TASA

To adjust the camera section of this machine, the remote control for servicing (RRMCG0033TASA) is used. The adjustment is made in such a manner that the remote control writes necessary data by way of the microprocessor to the specific addresses on the E²PROM (the ROM on the lens unit).

1) To adjust the camera:

Press the "CONTINUE" key first and then the "CAM ADJ" key.

This will show

CAM ADJ
□□□□

on the LCD screen, thereby having the camera unit ready for the adjustments.

2) Descriptions of the displays

CAM	ADJ	(Indicates the camera adjustment mode.)
□□□□	□□□□	
(Address value)	(Data value)	

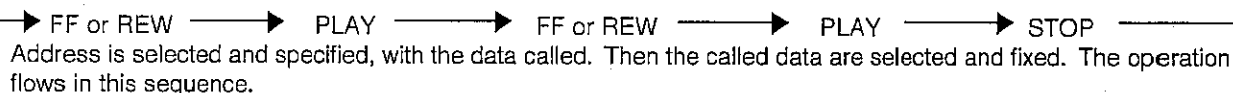
* The address values for this machine range from 0000 to 04FF and from 0F00 to 0FFF.

* The data include byte data (the last two digits are effective) and 2-byte data (the last three digits are effective).

3) Descriptions of the remote control keys

- "FF" key: Increases the address and data values.
- "REW" key: Decreases the address and data values.
- "PLAY" key: Specifies addresses and calls the data.
This key also fixes (i.e., writes to the E²PROM) the data values.
- "STOP" key: Clears the data to enable the selection of address.

4) Operation flow



5) When the adjustment is complete:

Press the "CONTINUE" key to let the "CAM ADJ" display disappear from the screen.

Note: Before terminating the adjustments, make sure that the adjustment mode is neither the auto-focus function adjustment mode nor the camera signal system adjustment mode (these modes are mentioned later).

- Camera unit adjustment modes

The camera unit is adjusted in two types of modes: the auto-focus function adjustment mode and the camera signal system adjustment mode.

(3) Auto-focus function adjustment mode

- The camera unit uses a microprocessor-controlled zoom lens.

The auto-focus circuit incorporated in this unit is designed to execute the image processing where the focusing action is done by taking advantage of the fact that the high-frequency components in the image signals increase as the focus intensifies. Moreover, to achieve high magnifying power with a small lens, the camera unit incorporates the inner focus system in which the focus is shifted by moving the master lens (rear lens) back and forth. This inner focus system is a full-range focus type by which the focus can be shifted from approximately 10 mm to the infinity. It should be noted, however, that since the closest subject distance at the telephoto end is fixed at 1.5 mm, subjects in a closer range than 1.5 mm at the telephoto end will be out of focus. For this reason, the unit is designed so that the zoom control is automatically shifted to the wide angle side until the position is found where the subject can be focused on.

In the auto-focusing system of this unit, the following constitute the important factors:

- Master lens position detection data
- Iris position detection data
- Zoom lens position detection data

These detection data are handled and stored by the microprocessor, lens by lens, into the E2PROM.

Therefore, in the following cases, the auto-focus function adjustment is required:

- When the lens has been replaced
- When the CCD has been replaced
- When the E²PROM (located on the lens unit)

1) Shifting to the auto-focus function adjustment mode

Set the data for the address "02FE" to "[] [] 01."



This makes the screen fade temporarily in white and shifts to the auto-focus function adjustment mode.

* When this adjustment mode has been shifted to, make the adjustments according to (5) Camera unit adjustment procedure.

* In this adjustment mode, the lens can not be operated.

2) Shifting to the normal operation mode

Set the data for the address "02FE" to "[] [] FF."



This makes the screen fade temporarily in white and shifts to the normal operation mode.



Press the "CONTINUE" key, and the "CAM ADJ" display goes out of the screen, enabling the normal operation.

(4) Camera signal system adjustment mode

In the camera signal system adjustment mode, the automatic white balance is disabled to allow for the adjustment of the camera unit. At this time, the white balance mode is fixed at the INDOORS mode and the focus mode is switched to the manual focus mode.

1) Shifting to the camera signal system adjustment mode

Set the data for the address "02FE" to "[] [] 00."



This shifts the mode to the auto-focus function adjustment mode.

* When this adjustment mode has been shifted to, make the adjustments according to (5) Camera unit adjustment procedure.

2) Shifting to the normal operation mode

Set the data for the address "02FE" to "[]FF"

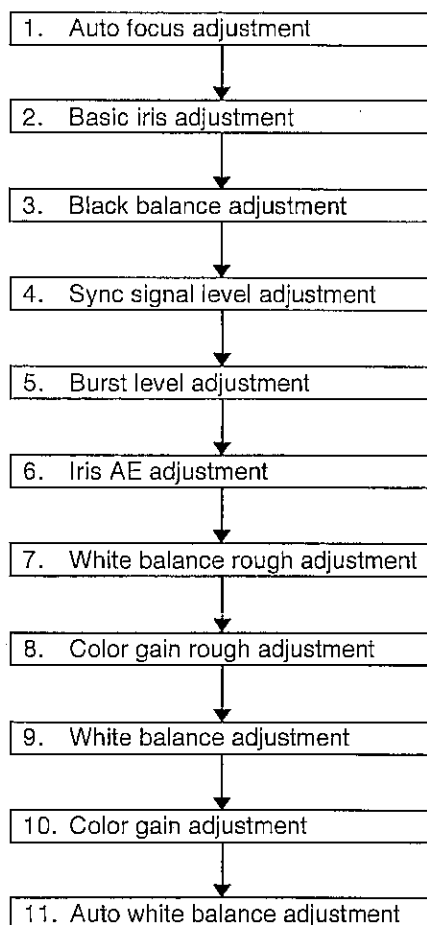


This shifts the mode to the normal operation mode.



Press the "CONTINUE" key, and the "CAM ADJ" display goes out of the screen, enabling the normal operation.

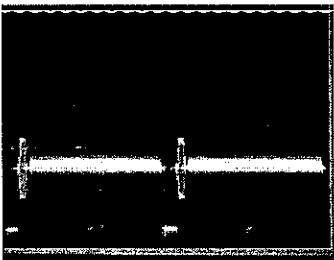
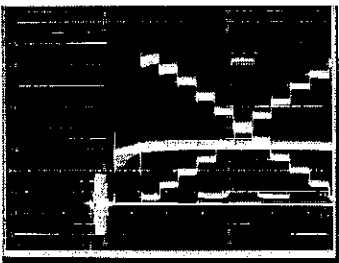
(5) Camera unit adjustment procedure

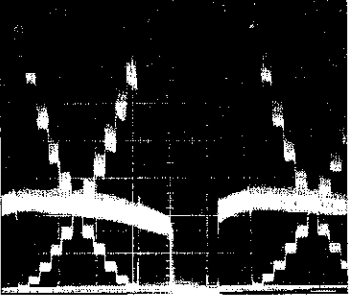
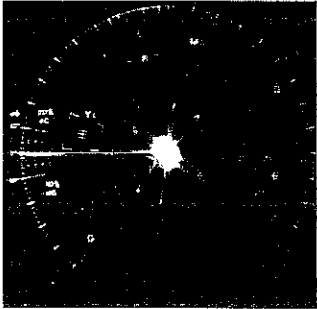
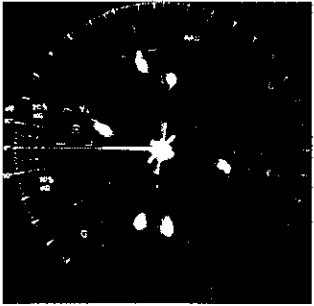


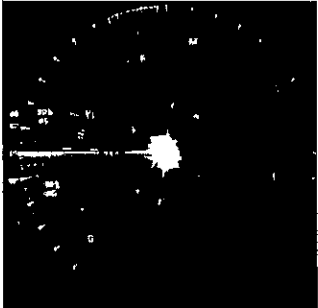
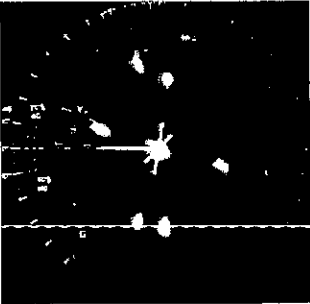
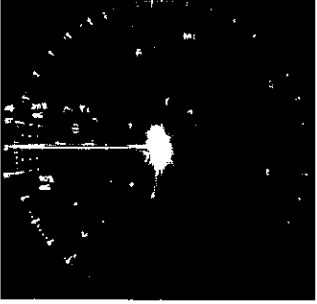
* The above 1. Auto-focus function adjustment and 2. Iris basic adjustment are performed in the auto-focus function adjustment mode, whereas the other adjustments are made in the camera signal system adjustment mode.

10-2-4. Adjustment procedures

Item	Adjustment procedure										
(1) Auto focus adjustment	<p>Set the unit to the auto-focus function adjustment mode and write data to the address "02FF" one after another. This executes the adjustments automatically. The items to be adjusted are as listed below. Every time an adjustment is made properly, the data "FF" is written to the address. After each adjustment, make sure that the adjustment has been made properly, and then go on to the next adjustment item.</p> <table><tr><th>Address</th><th>Data</th><th>Adjustment item</th></tr><tr><td rowspan="3">02FF</td><td>000C</td><td>Linearity adjustment</td></tr><tr><td>0006</td><td>WIDE end focus ∞ position adjustment</td></tr><tr><td>0008</td><td>TELE end focus ∞ position adjustment</td></tr></table> <p>Note 1: To adjustment of ∞ position is executed by actually picking up the image of subject. For this adjustment use the subject with clear profile. Especially, if the adjustment of TELE end focus ∞ position is made without picking up the image of remote subject, adjustment failure may occur.</p> <p>Adjustment of WIDE end focus ∞ position: 3 m or more Adjustment of TELE end focus ∞ position: 50 m or more</p> <p>Note 2: In case of ∞ position adjustment the field depth is important to ensure the adjustment accuracy. If the field depth is high, the focus becomes too stable, which may cause incorrect adjustment of ∞ position. Therefore the adjustment must be made with low field depth (with iris opened).</p> <p>Iris can be released through the use of a high-speed shutter, in the following manner.</p> <ol style="list-style-type: none">1. Return to the normal operation mode.2. Click the high-speed shutter in the normal operation mode until the iris is released. (See the instruction manual.)3. Display "CMA ADJ" in the screen with the remote control for servicing.4. Shift to the auto-focus function adjustment mode.5. Make the ∞ position adjustments.6. After the adjustments, return the high-speed shutter to the normal mode.	Address	Data	Adjustment item	02FF	000C	Linearity adjustment	0006	WIDE end focus ∞ position adjustment	0008	TELE end focus ∞ position adjustment
Address	Data	Adjustment item									
02FF	000C	Linearity adjustment									
	0006	WIDE end focus ∞ position adjustment									
	0008	TELE end focus ∞ position adjustment									
(2) Iris basic adjustment	<p>This is for adjusting the operating point of the hole element installed in the iris meter of the lens.</p> <p>Set the unit to the auto-focus function adjustment mode and write data to the address "02FF" one after another. This executes the adjustments automatically. The items to be adjusted are as listed below. Every time an adjustment is made properly, the data "00FF" is written to the address.</p> <table><tr><th>Address</th><th>Data</th><th>Adjustment item</th></tr><tr><td rowspan="3">02FF</td><td>0009</td><td>Hall offset adjustment</td></tr><tr><td>000A</td><td>Iris offset adjustment</td></tr><tr><td>000B</td><td>Iris close adjustment</td></tr></table>	Address	Data	Adjustment item	02FF	0009	Hall offset adjustment	000A	Iris offset adjustment	000B	Iris close adjustment
Address	Data	Adjustment item									
02FF	0009	Hall offset adjustment									
	000A	Iris offset adjustment									
	000B	Iris close adjustment									

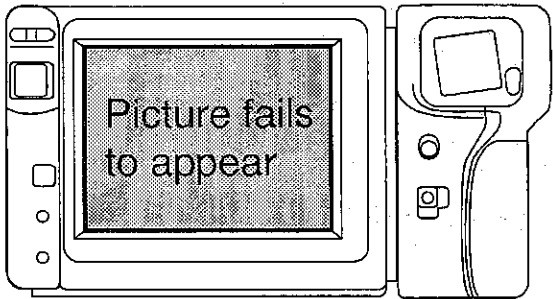
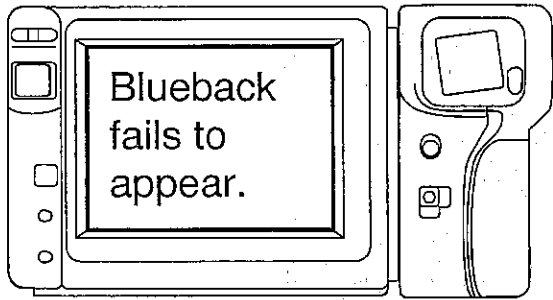
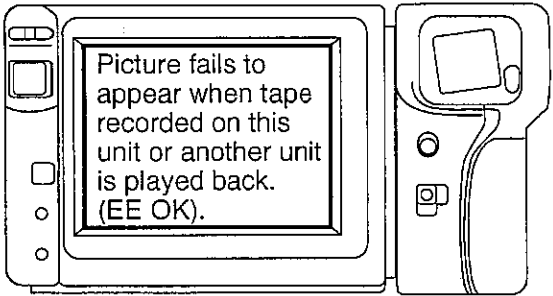
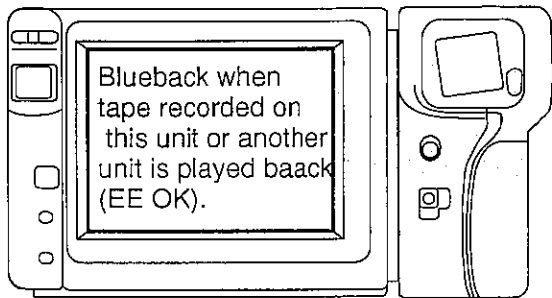
Item	Adjustment procedure														
(3) Black balance adjustment	<p>1) Prior to the adjustment, initialize the data for the addresses "01E4" thru "01E9." Write "[][]FF" (the last two digits are effective) to all of these addresses.</p> <p>2) In the camera signal system adjustment mode (the data "[][]00" is written to the address "02FE), write the data "[][]01" to the address "02FF" This starts the adjustment automatically. When the adjustment is completed properly, the data "00FF" is written automatically.</p> <p>3) Calculate the data.</p> <table border="1" data-bbox="710 443 1266 663"> <thead> <tr> <th>Address</th><th>Processing</th></tr> </thead> <tbody> <tr> <td>01E4</td><td>Written data minus 08 (subtraction)</td></tr> <tr> <td>01E5</td><td>Written data minus 05 (subtraction)</td></tr> <tr> <td>01E6</td><td>Written data minus 17 (subtraction)</td></tr> <tr> <td>01E7</td><td>Written data minus 08 (subtraction)</td></tr> <tr> <td>01E8</td><td>Written data minus 08 (subtraction)</td></tr> <tr> <td>01E9</td><td>Written data minus 17 (subtraction)</td></tr> </tbody> </table>	Address	Processing	01E4	Written data minus 08 (subtraction)	01E5	Written data minus 05 (subtraction)	01E6	Written data minus 17 (subtraction)	01E7	Written data minus 08 (subtraction)	01E8	Written data minus 08 (subtraction)	01E9	Written data minus 17 (subtraction)
Address	Processing														
01E4	Written data minus 08 (subtraction)														
01E5	Written data minus 05 (subtraction)														
01E6	Written data minus 17 (subtraction)														
01E7	Written data minus 08 (subtraction)														
01E8	Written data minus 08 (subtraction)														
01E9	Written data minus 17 (subtraction)														
<p>(4) Synch signal level adjustment</p> <p>Measurement terminal: CAM Y</p> <p>Address: "01F8" YGAIN_CAM</p> <p>Measuring instrument: Oscilloscope (horizontal cycle)</p> <p>Subject: Must be shaded.</p> <p>Variable data width range: "0000" - "00FE"</p>	<p>1) With the lens shaded, observe the video output with the oscilloscope, and rewrite the data for the address "01F8" so that the SYNCH level will be adjusted to $286 \pm 10 \text{ m Vp-p}$.</p> <p>Note: When changing the data, the screen may get distorted. This is no trouble.</p> 														
<p>(5) Burst level adjustment</p> <p>Measurement terminal: Video OUT terminal, terminated with 75Ω</p> <p>Address: "01F9" CGAIN_CAM</p> <p>Measuring instrument: Oscilloscope (horizontal cycle)</p> <p>Subject: Anything</p> <p>Variable data width range: "0000" - "00FE"</p>	<p>1) Observe the video output with the oscilloscope, and rewrite the data for the address "01F9" so that the burst level will be adjusted to $286 \pm 20 \text{ m Vp-p}$.</p> 														

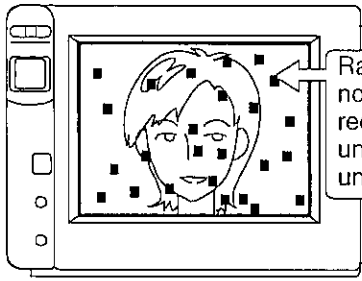
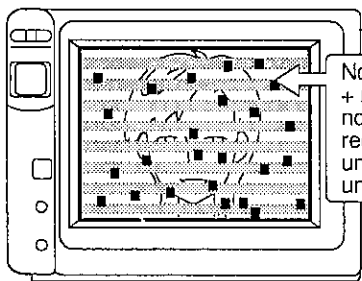
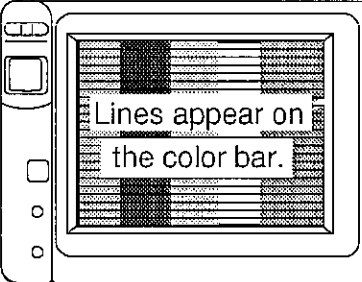
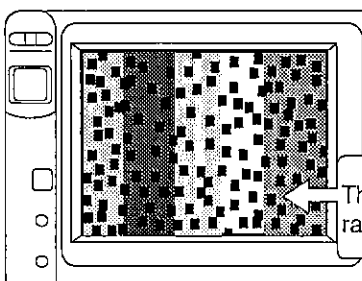
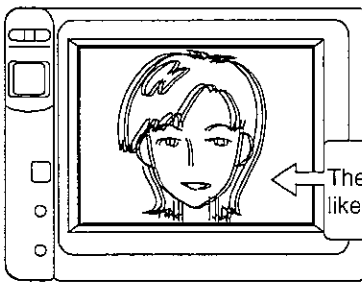
Item	Adjustment procedure										
<p>(6) Iris AE adjustment</p> <p>Measurement terminal: Y-ADIN</p> <p>Address: "02FD" AE_CVT</p> <p>Measuring instrument: Oscilloscope (horizontal cycle)</p> <p>Subject: Gray scale</p> <p>Variable data width range: "0000" - "00FE"</p>	<p>1) With the unit set in the standard gray scale shooting mode, observe the video output with the oscilloscope, and rewrite the data for the address "02FD" so that the brightness signal level will be $680 \pm 20 \text{ m Vp-p}$.</p> 										
<p>(7) White balance rough adjustment</p> <p>Measurement terminal: EE OUT</p> <p>Address: "0010" INDOOR_R "0012" INDOOR_B</p> <p>Measuring instrument: Vector scope</p> <p>Subject: White chart</p> <p>Variable data width range: "0000" - "03FF"</p>	<p>1) Shoot the white chart, and adjust the zoom position so that the brightness level be as flat as possible.</p> <p>2) Modify the data of addresses 0010 and 0012 so that the bright spot on the vector scope screen be 0% along the R-Y axis and 0% along the B-Y axis in the burst ratio.</p> 										
<p>(8) Color gain rough adjustment</p> <p>Measurement terminal: EE OUT</p> <p>Address: "0106" CGIN RYG "0104" CGIN BYG "0102" CMAT RYG "0100" CMAT BYG</p> <p>Measuring instrument: Vector scope</p> <p>Subject: Color bar chart</p> <p>Variable data width range: "0000" - "007F"</p>	<p>1) Shoot the color bar chart and adjust the view angle so that the white level be 600mV. Observe the chart on the vector scope screen. Rewrite the data of addresses 106, 104, 100 and 102 so that the red and blue bright spots be as specified below. (The burst gain must be set at the 75% amplitude along the B-Y axis on the vector scope screen.)</p>  <table data-bbox="595 1825 1254 1971"> <thead> <tr> <th></th><th>Adjustment address</th></tr> </thead> <tbody> <tr> <td>Red amplitude: 1.5 ± 0.1 (burst ratio) :</td><td>"0106"</td></tr> <tr> <td>Blue amplitude: 1.1 ± 0.1 (burst ratio) :</td><td>"0104"</td></tr> <tr> <td>Red phase: $104^\circ \pm 2^\circ$:</td><td>"0100"</td></tr> <tr> <td>Blue phase: $344^\circ \pm 2^\circ$:</td><td>"0102"</td></tr> </tbody> </table>		Adjustment address	Red amplitude: 1.5 ± 0.1 (burst ratio) :	"0106"	Blue amplitude: 1.1 ± 0.1 (burst ratio) :	"0104"	Red phase: $104^\circ \pm 2^\circ$:	"0100"	Blue phase: $344^\circ \pm 2^\circ$:	"0102"
	Adjustment address										
Red amplitude: 1.5 ± 0.1 (burst ratio) :	"0106"										
Blue amplitude: 1.1 ± 0.1 (burst ratio) :	"0104"										
Red phase: $104^\circ \pm 2^\circ$:	"0100"										
Blue phase: $344^\circ \pm 2^\circ$:	"0102"										

Item	Adjustment procedure
<p>(9) White balance adjustment Measurement terminal: EE OUT Address: "0010" INDOOR R "0012" INDOOR R Measuring instrument: Vector scope Subject: Gray scale Variable data width range: "0000" - "03FF"</p>	<p>1) Repeat the white balance adjustment.</p>  <div data-bbox="867 566 1168 633" style="border: 1px solid black; padding: 5px;"> R-Y: $0 \pm 5\%$ (burst ratio) B-Y: $0 \pm 5\%$ (burst ratio) </div>
<p>(10) Color gain adjustment Measurement terminal: EE OUT Address: "0106" CGIN RYG "0104" CGIN BYG "0102" CMAT RYG "0100" CMAT BYG Measuring instrument: Vector scope Subject: Color bar chart on wave form monitor Variable data width range: "0000" - "003F"</p>	<p>1) Repeat the color gain adjustment.</p>  <p>Red amplitude: 1.5 ± 0.1 times (burst ratio) Blue amplitude: 1.1 ± 0.1 times (burst ratio) Red phase: $104^\circ \pm 2^\circ$ Blue phase: $344^\circ \pm 2^\circ$</p>
<p>(11) Automatic white balance adjustment Measurement terminal: EE OUT Address: "0016" OUTDOOR R "0018" OUTDOOR B Measuring instrument: Vector scope Subject: Gray scale Variable data width range: "0000" - "03FF"</p>	<p>1) Attach the color temperature conversion filter (LB165) to the lens. 2) Shoot the white chart, and adjust the zoom position so that the brightness level be as flat as possible. 3) Modify the data of addresses 0016 and 0018 to get ready for the outdoor white balance adjustment.</p> <div data-bbox="867 1440 1168 1507" style="border: 1px solid black; padding: 5px;"> R-Y: $0 \pm 5\%$ (burst ratio) B-Y: $0 \pm 5\%$ (burst ratio) </div> 

After the adjustments are complete, set the unit back in the normal operation mode (i.e., write the data "[] [] FF" to the address "02FE.")

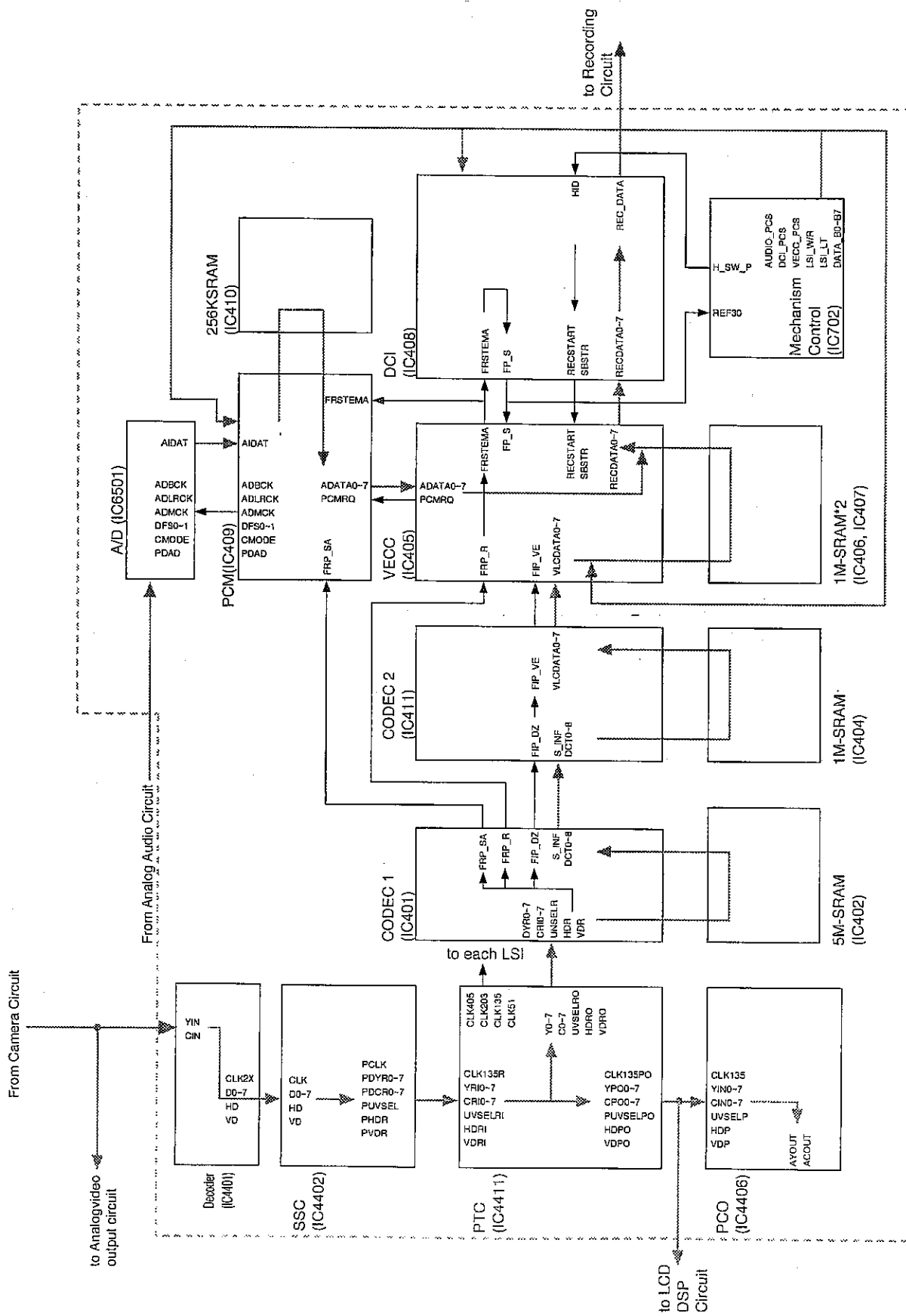
11. USEFUL TIPS (PROBLEMS DIFFER FROM THOSE FOUND ON VHS OR 8mm DECKS BECAUSE THE SIGNALS ARE DIGITALLY PROCESSED.)

Problems	Major circuits to be checked
Camera (EE mode) 	<ul style="list-style-type: none"> • CCD • Camera circuits (CDS, ADC, DSP) • PCI (IC4401, IC4402) • PTC (IC4411) • LCD_DSP (IC800) • Gui microprocessor (IC3721)
VCR (EE mode) 	<ul style="list-style-type: none"> • PTC (IC4411) • Mechanical controller • LCD_DSP (IC800) • Gui microprocessor (IC3721)
Camera (REC mode) VCR (PB mode) 	<ul style="list-style-type: none"> • PTC (IC4411) • CODEC 1 and 2 (IC401, IC411) • Transport 1 (IC405)
Camera (REC mode) VCR (PB mode) 	<ul style="list-style-type: none"> • Transport 2 (IC408) • PLL (IC3401) • ATF (IC3402) • Head amplifier (IC301) * Dirty or defective video head

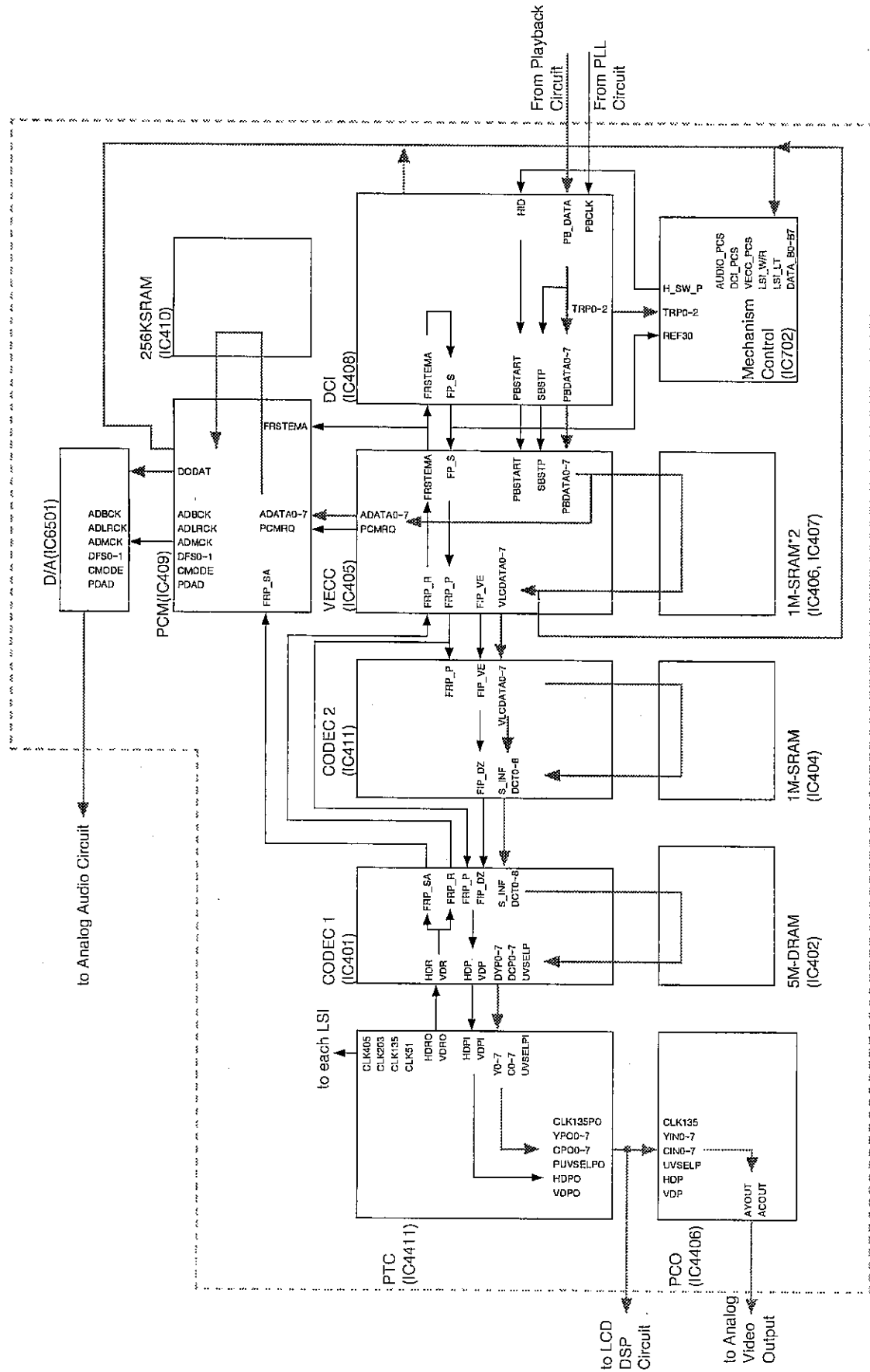
Problems	Major circuits to be checked
<p>Camera (REC mode) VCR (PB mode)</p>  <p>Random block noise when tape recorded on this unit or another unit is played back.</p>  <p>Noise bar (Green) + random block noise when tape recorded on this unit or another unit is played back.</p>	<ul style="list-style-type: none"> • Transport 2 (IC408) • PLL (IC3401) • ATF (IC3402) • Head amplifier (IC301) * Dirty or defective video head
<p>VCR (PB mode) + color bar</p>  <p>Lines appear on the color bar.</p>	<ul style="list-style-type: none"> • Data between CODEC 1 (IC401) and co-deck 2 (IC411) is missing.
<p>VCR (PB mode) + color bar</p>  <p>There is considerable random block noise.</p>	<ul style="list-style-type: none"> • Data between CODEC 2 (IC411) and transport 1 (IC405) is missing.
<p>Camera (EE mode)</p>  <p>The outline looks like a Moire pattern.</p>	<ul style="list-style-type: none"> • Y data between camera DSP (IC201) and LCD_DSP (IC800) is missing.

12. SIGNAL FLOW DIAGRAM

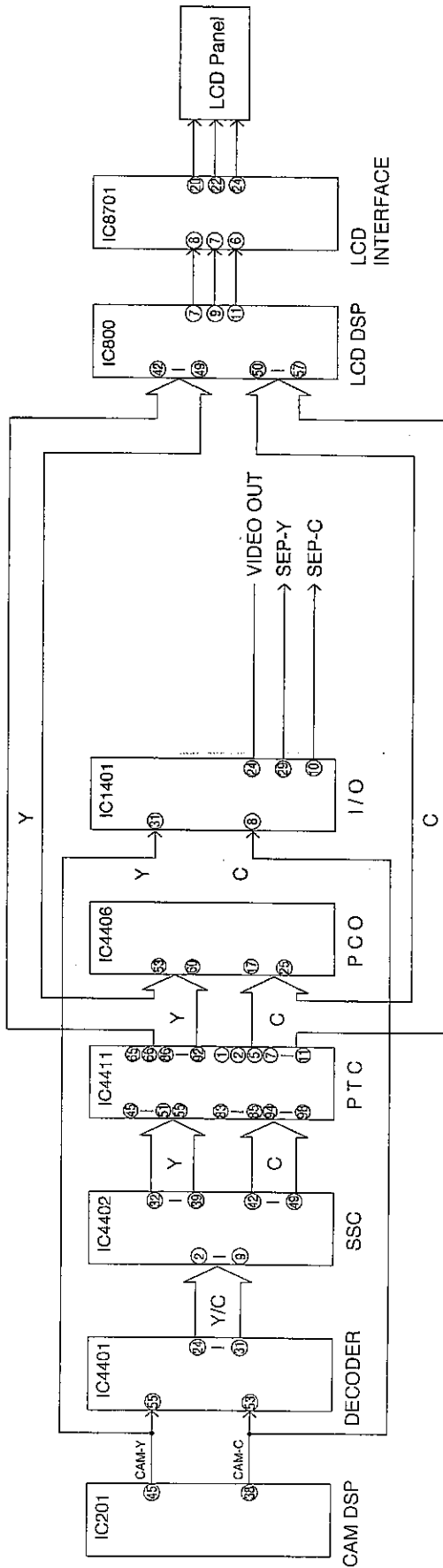
12-1. CONCEPTUAL DIAGRAM OF SIGNAL FLOW LSIs (DURING RECORDING)



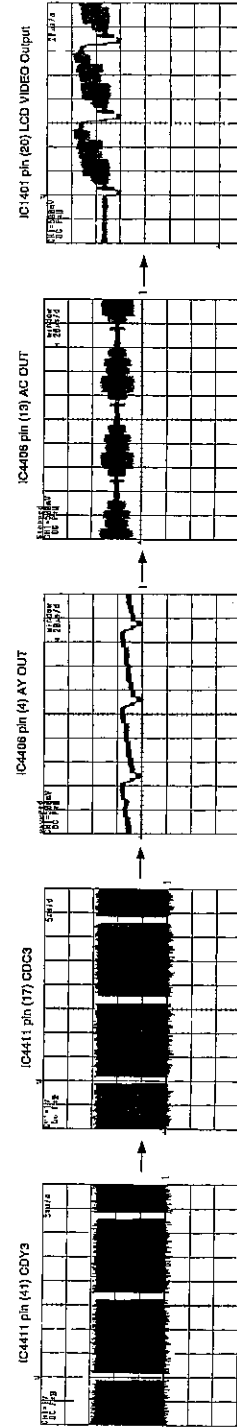
12-2. CONCEPTUAL DIAGRAM OF SIGNAL FLOW LSIs (DURING PLAYBACK)



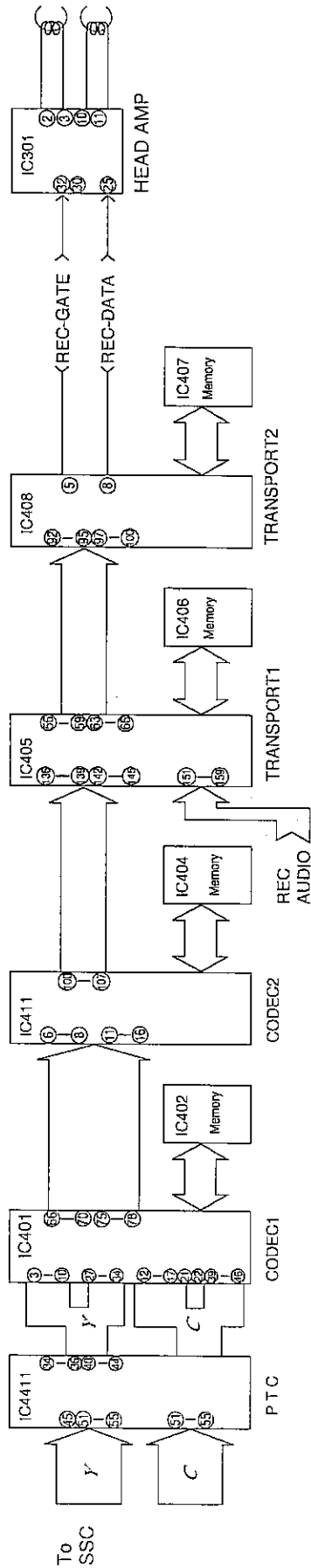
12-3. EE MODE FLOW (VIDEO)



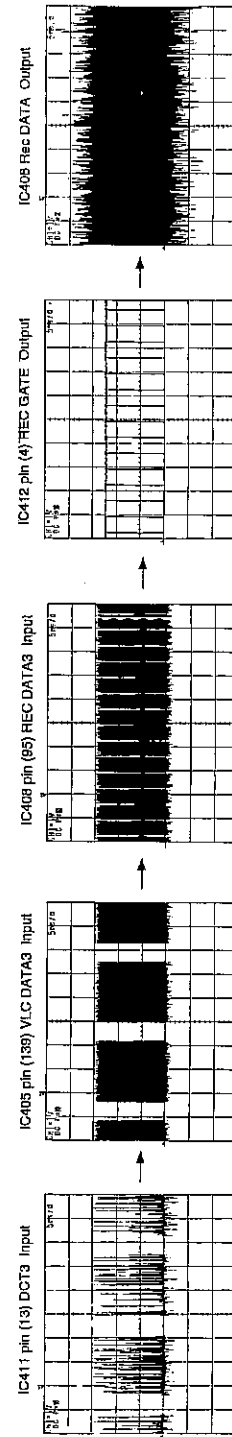
WAVEFORM DIAGRAM (DURING COLOR BAR PLAYBACK)



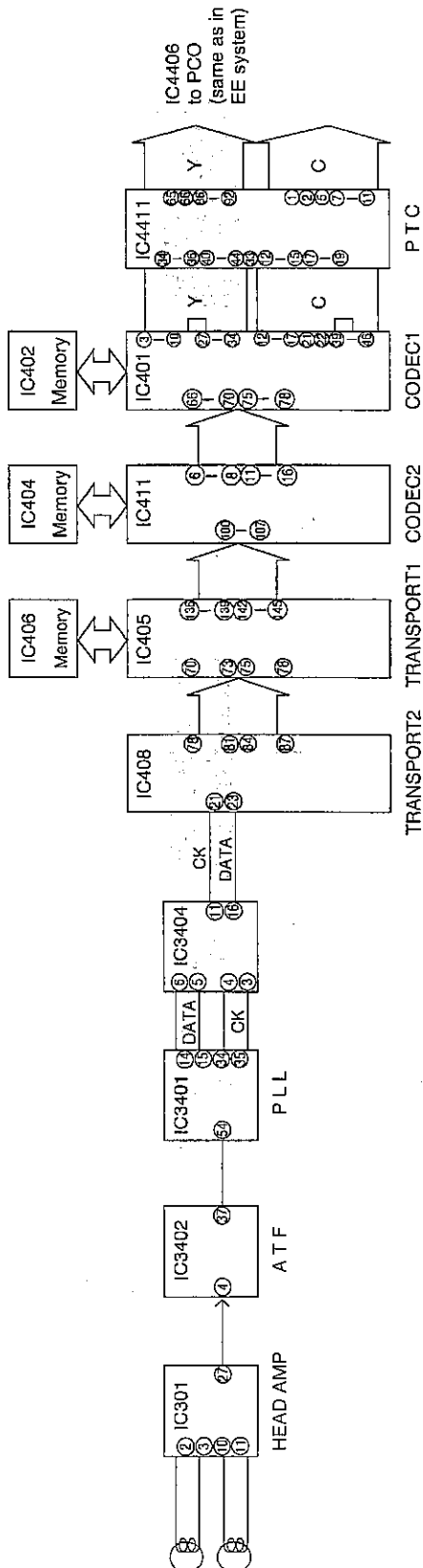
12-4. FLOW IN REC MODE (VIDEO)



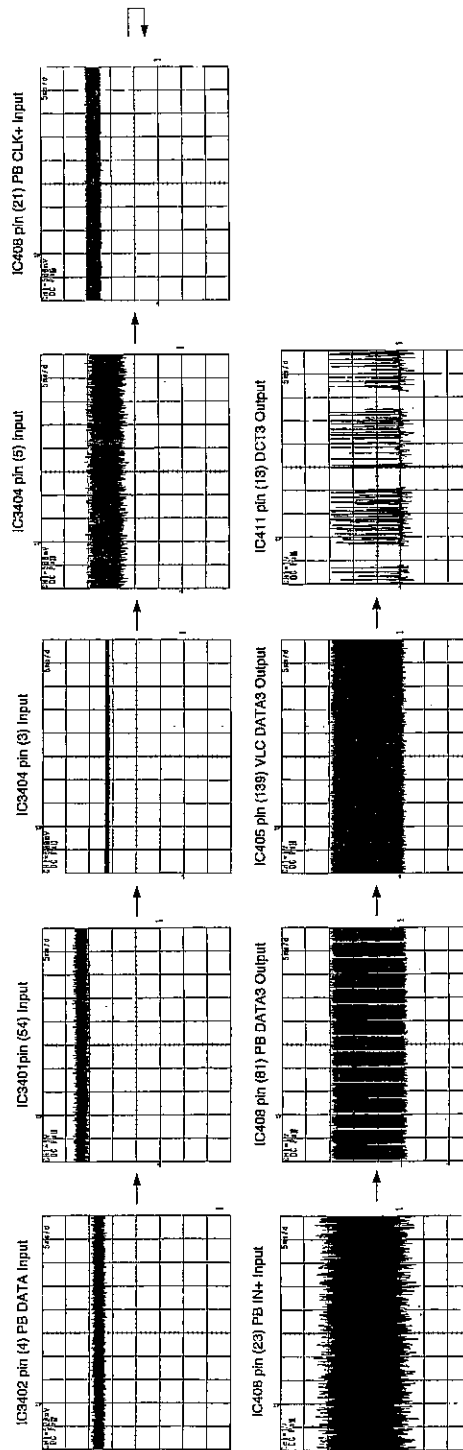
WAVEFORM DIAGRAM (DURING COLOR BAR RECORDING)



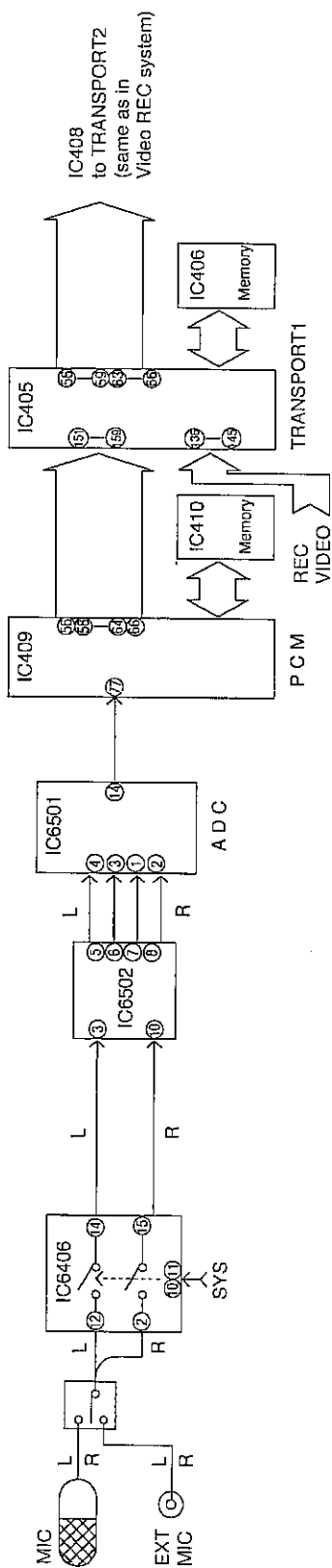
12-5. FLOW IN PB MODE (VIDEO)



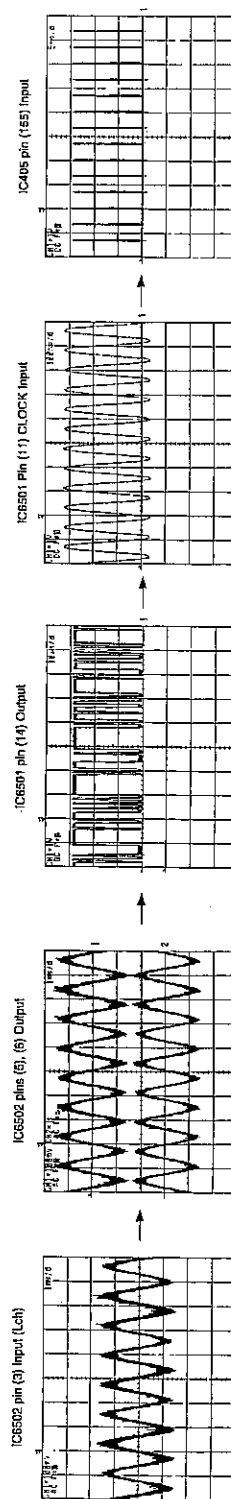
WAVEFORM DIAGRAM (DURING COLOR BAR PLAYBACK)



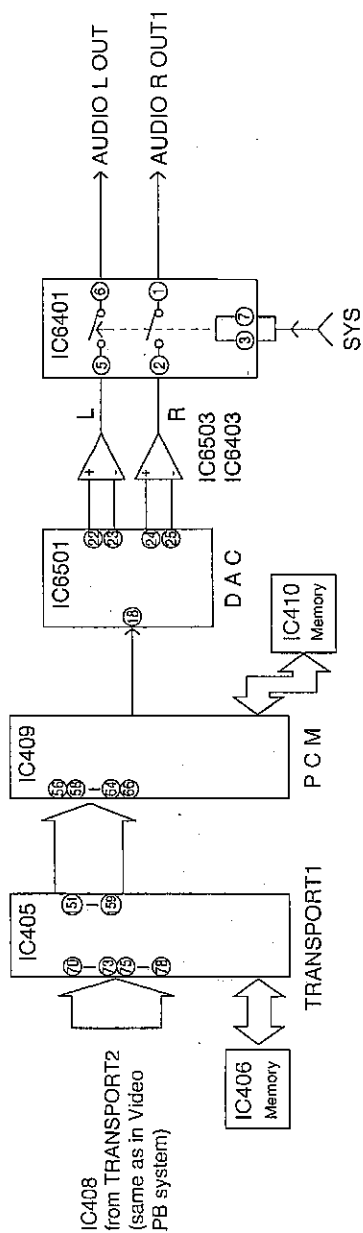
12-6. FLOW IN REC MODE (AUDIO)



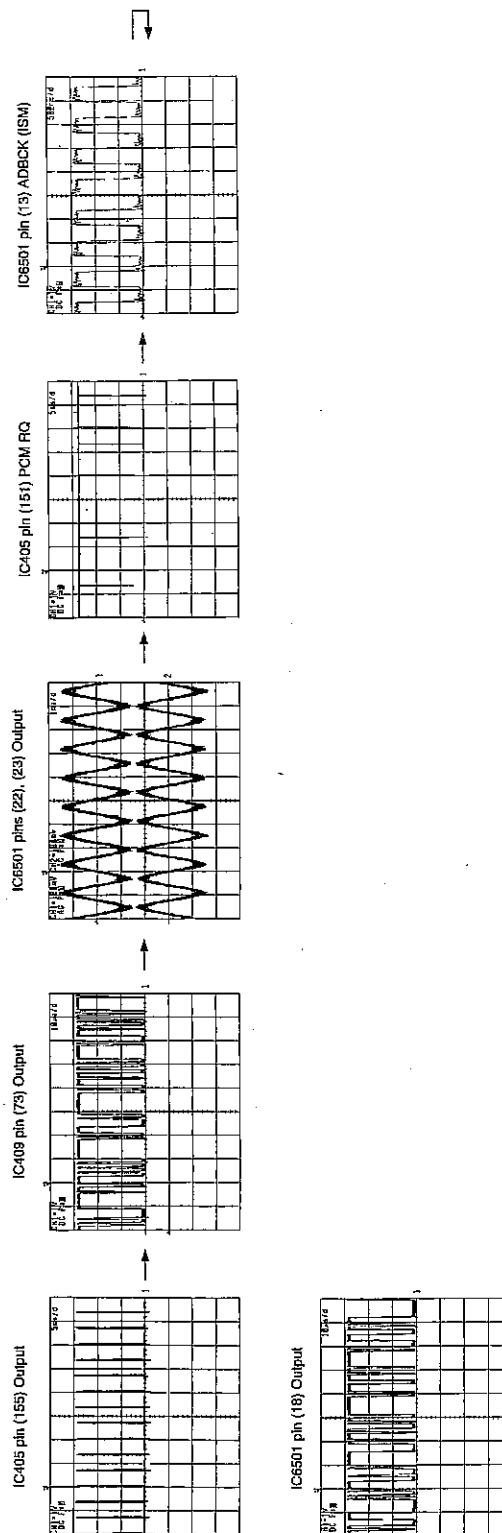
WAVEFORM DIAGRAM (1.6k Hz SINE WAVE)



12-7. FLOW IN PB MODE (AUDIO)



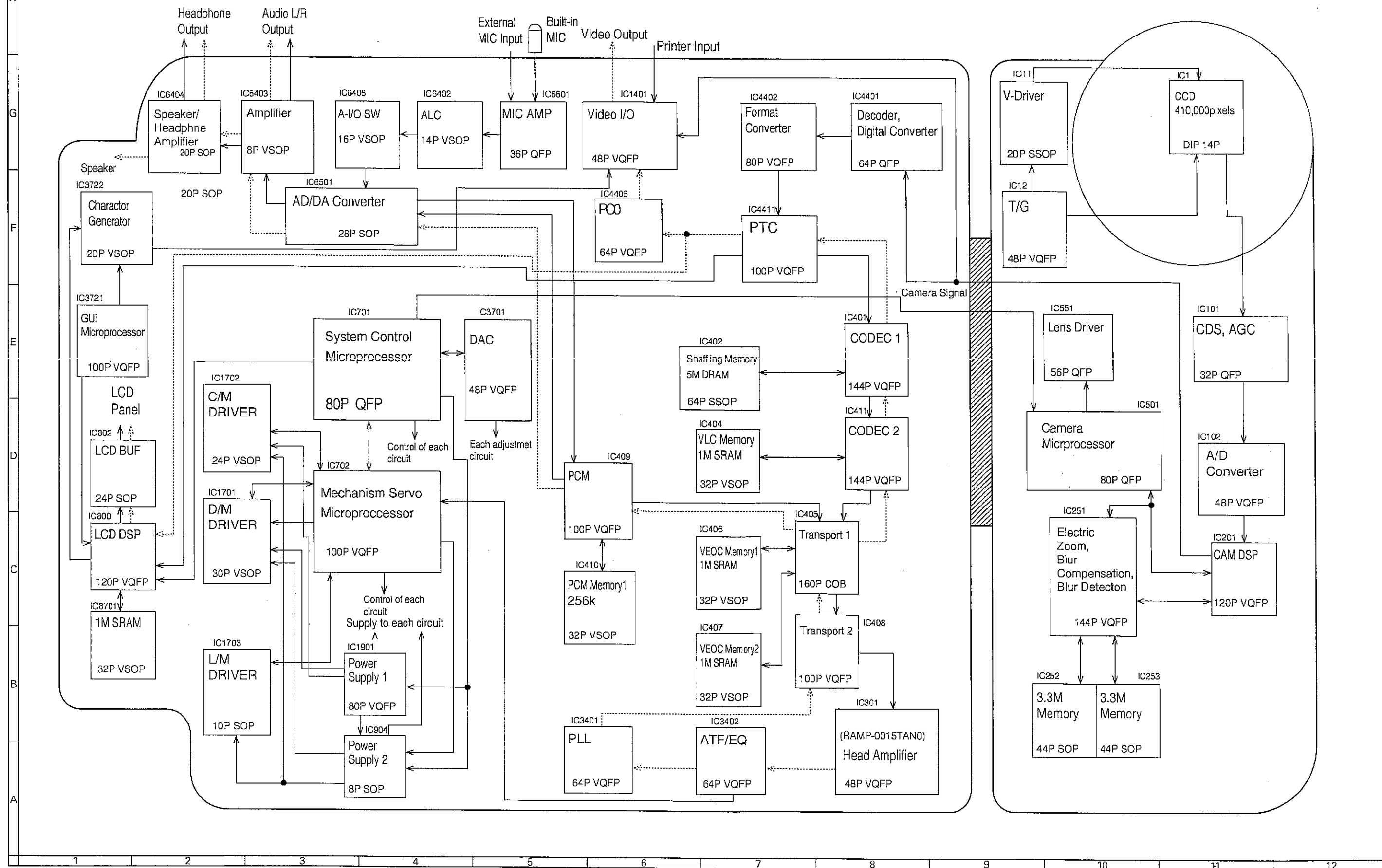
WAVEFORM DIAGRAM (DURING PLAYBACK 1.6k Hz SINE WAVE)



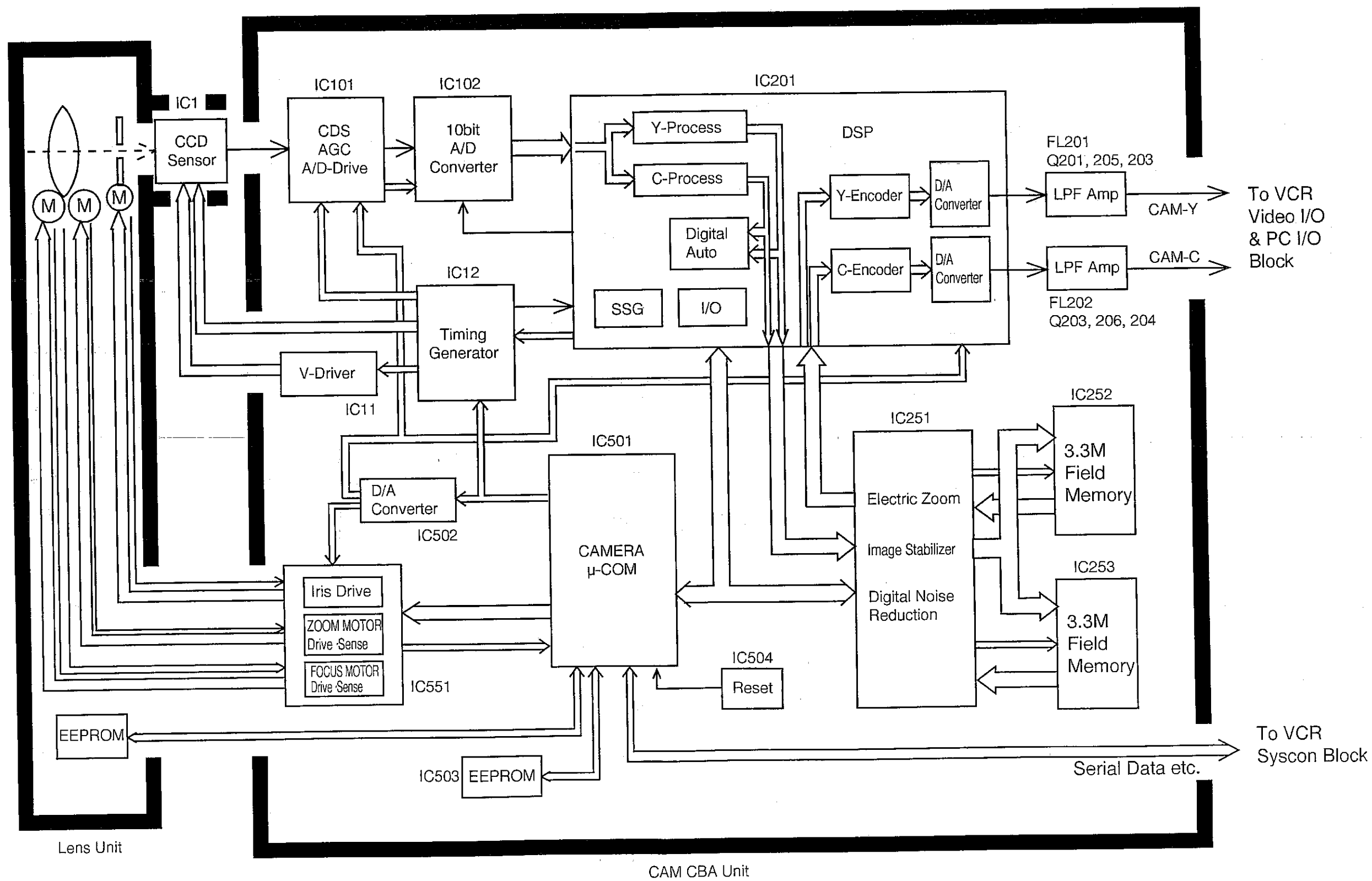
13. SYSTEM BLOCK DIAGRAM

13-1. IC SYSTEM BLOCK DIAGRAM

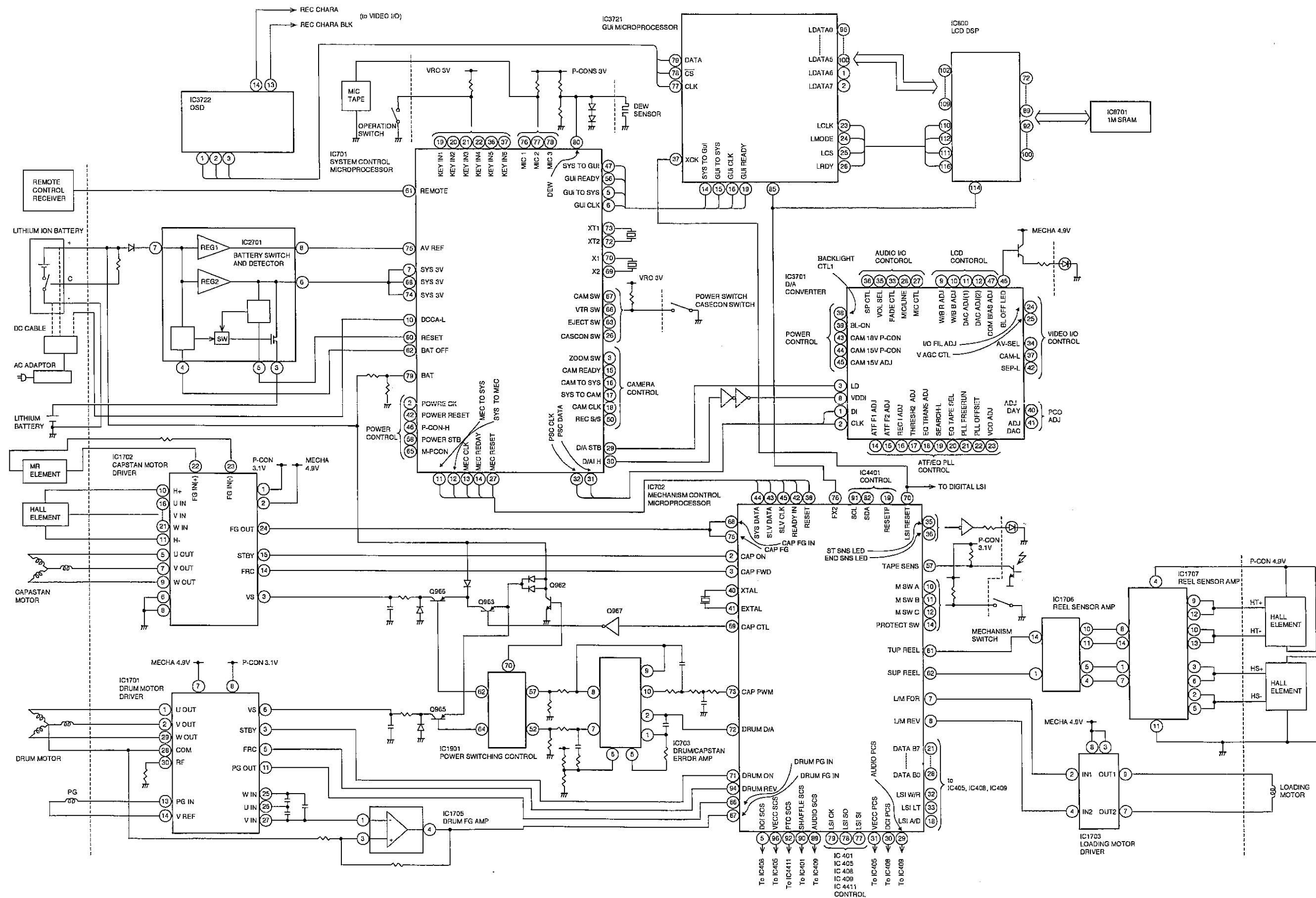
← Camera Recording (E-E)
 Playback



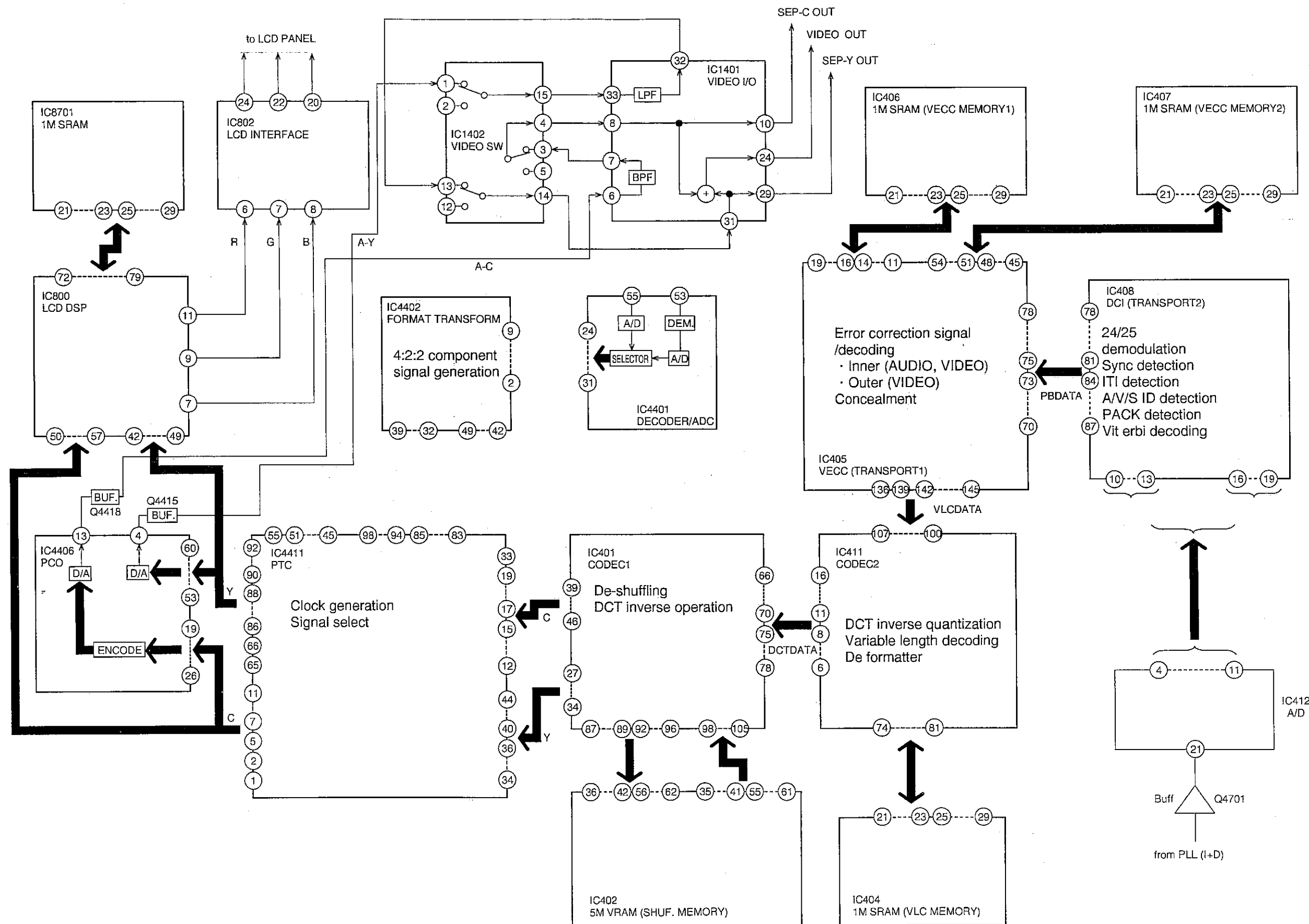
13-2. CAMERA CIRCUIT BLOCK DIAGRAM



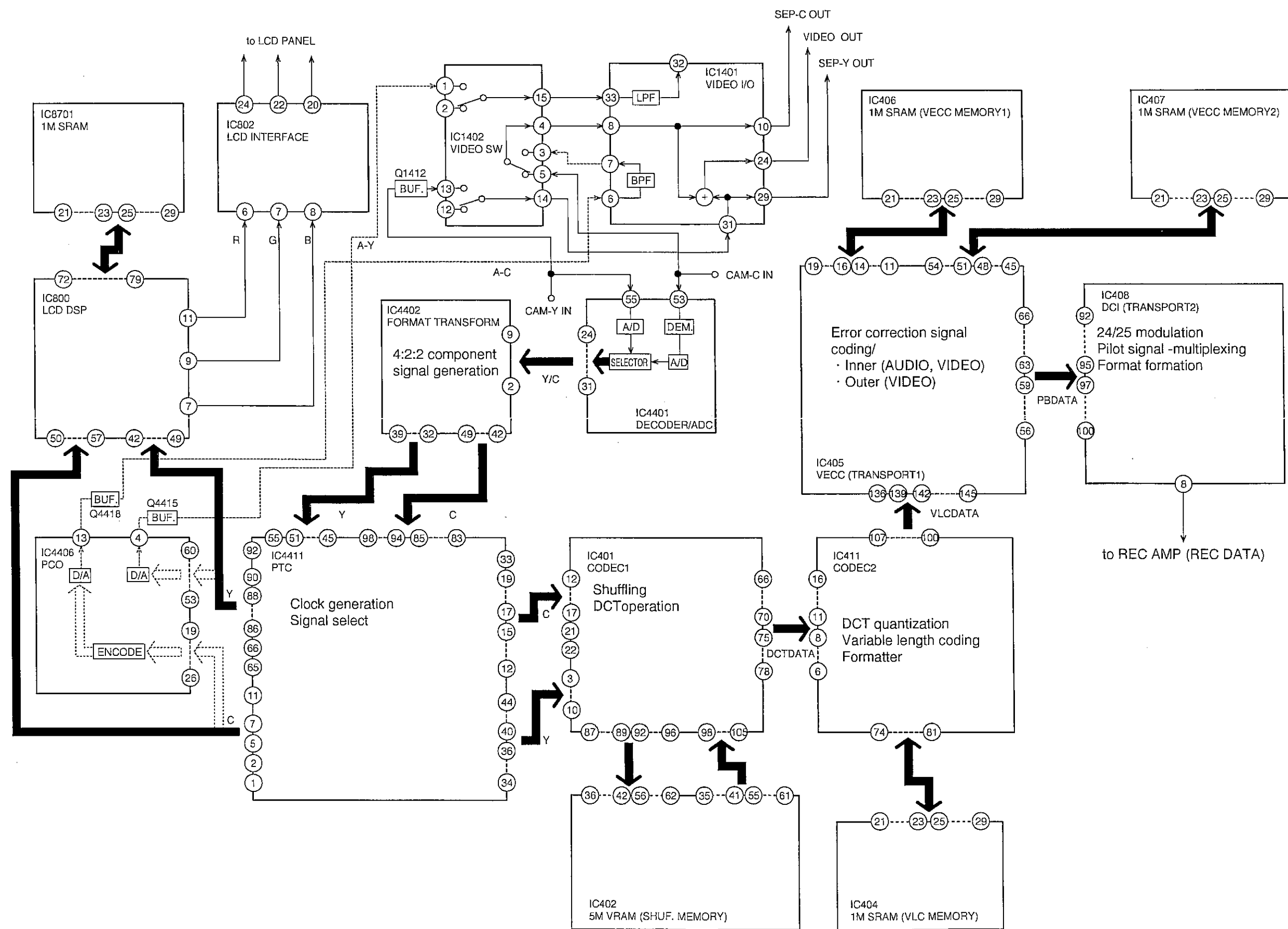
A	B	C	D	E	F	G	H
---	---	---	---	---	---	---	---



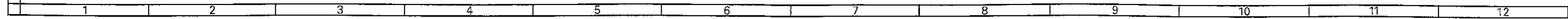
13-4. VCR SECTION BLOCK DIAGRAM (during PLAYBACK)



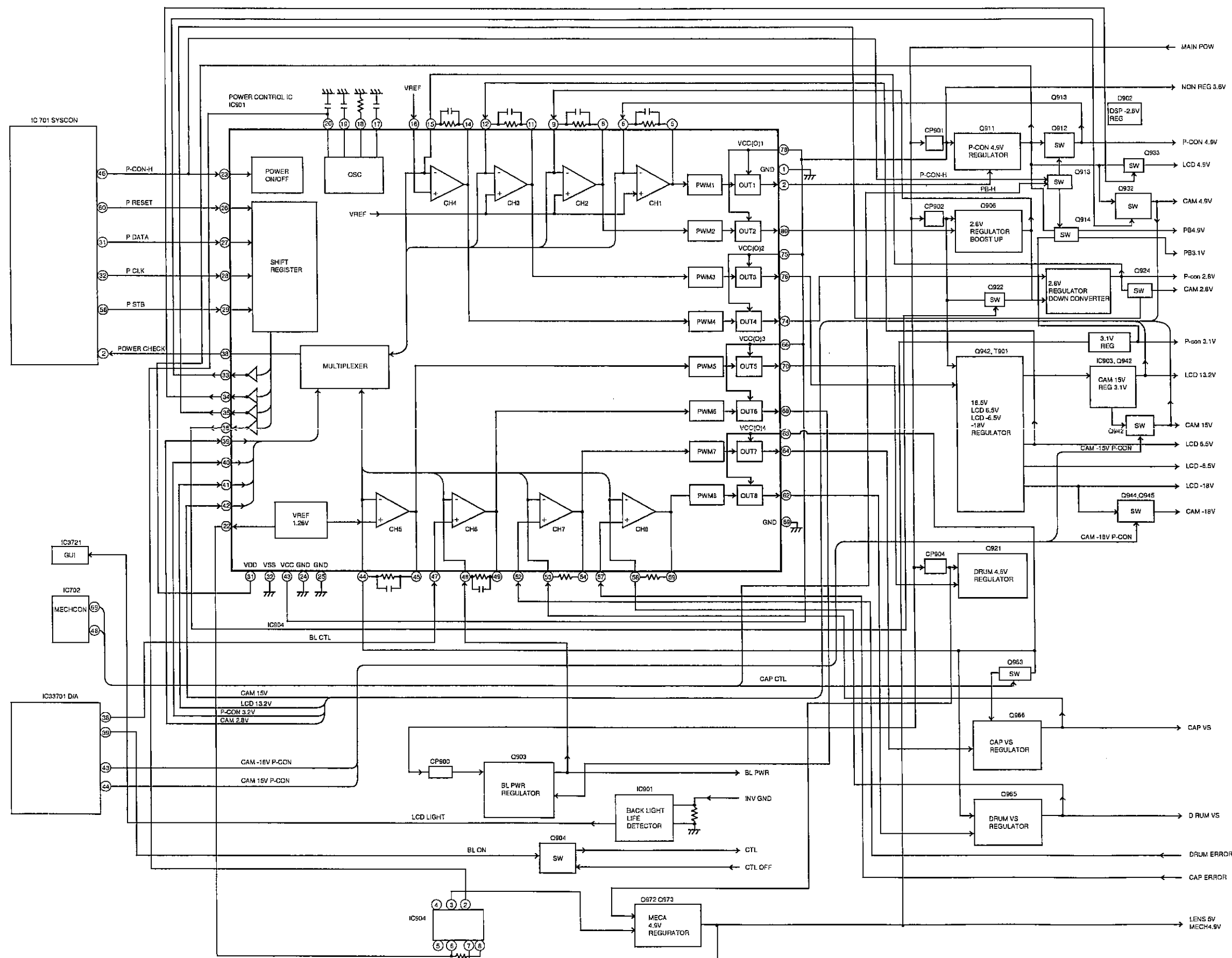
13-5. VCR SECTION BLOCK DIAGRAM (during RECORDING (E-E))



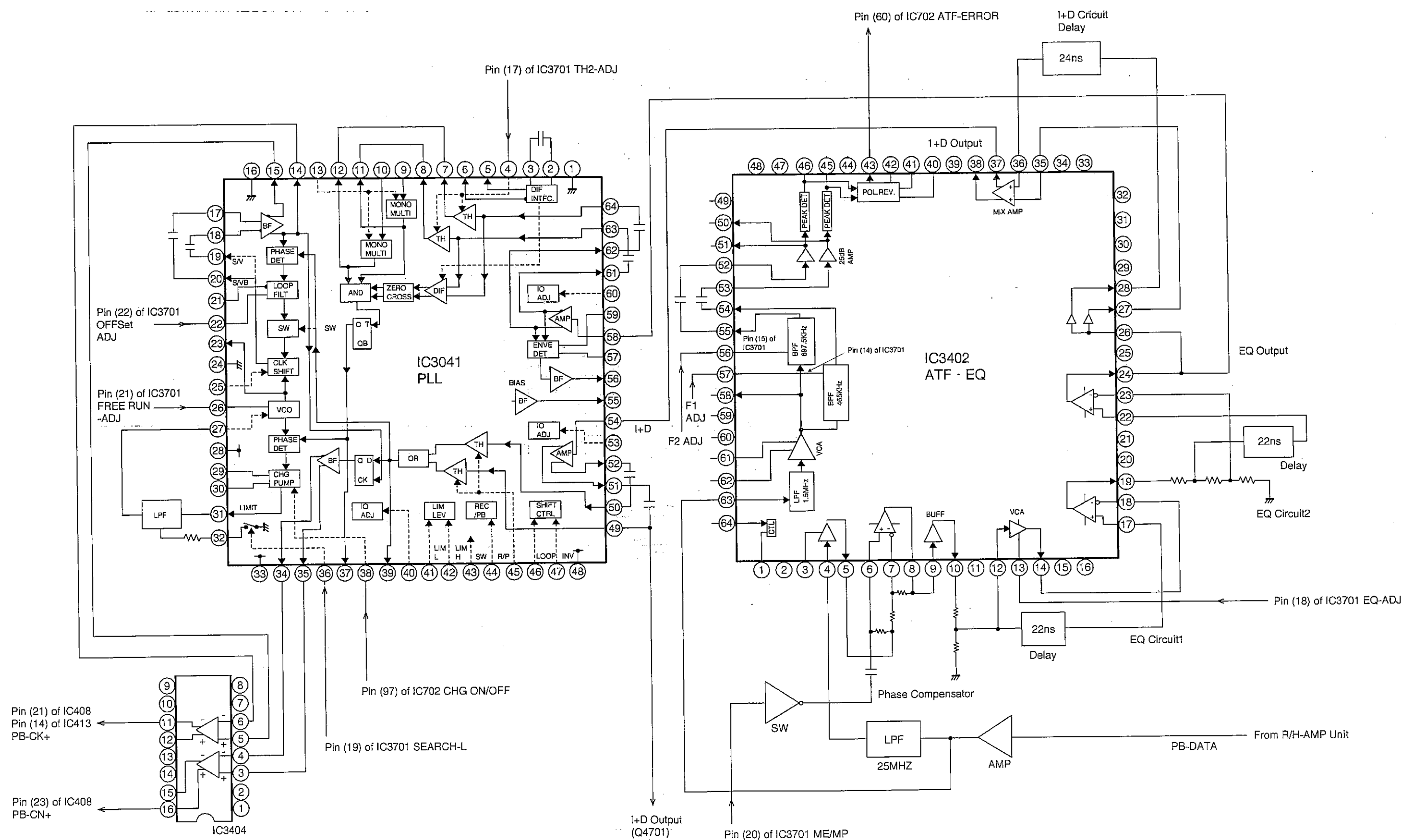
H	
G	
F	
E	
D	
C	
B	
A	



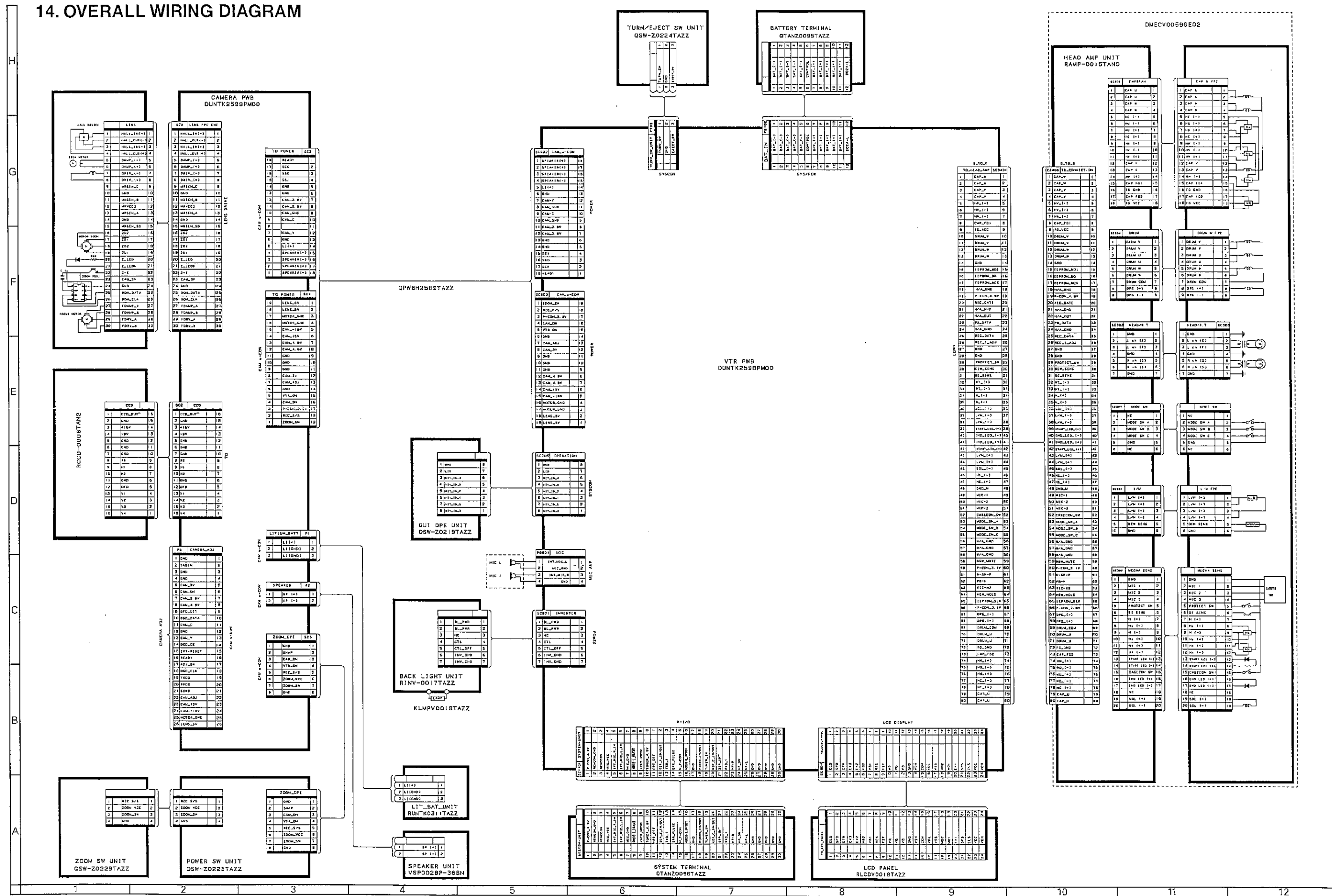
13-7. POWER SECTION BLOCK DIAGRAM



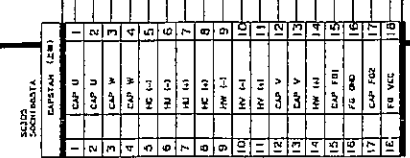
13-8. EQ/PLL BLOCK DIAGRAM



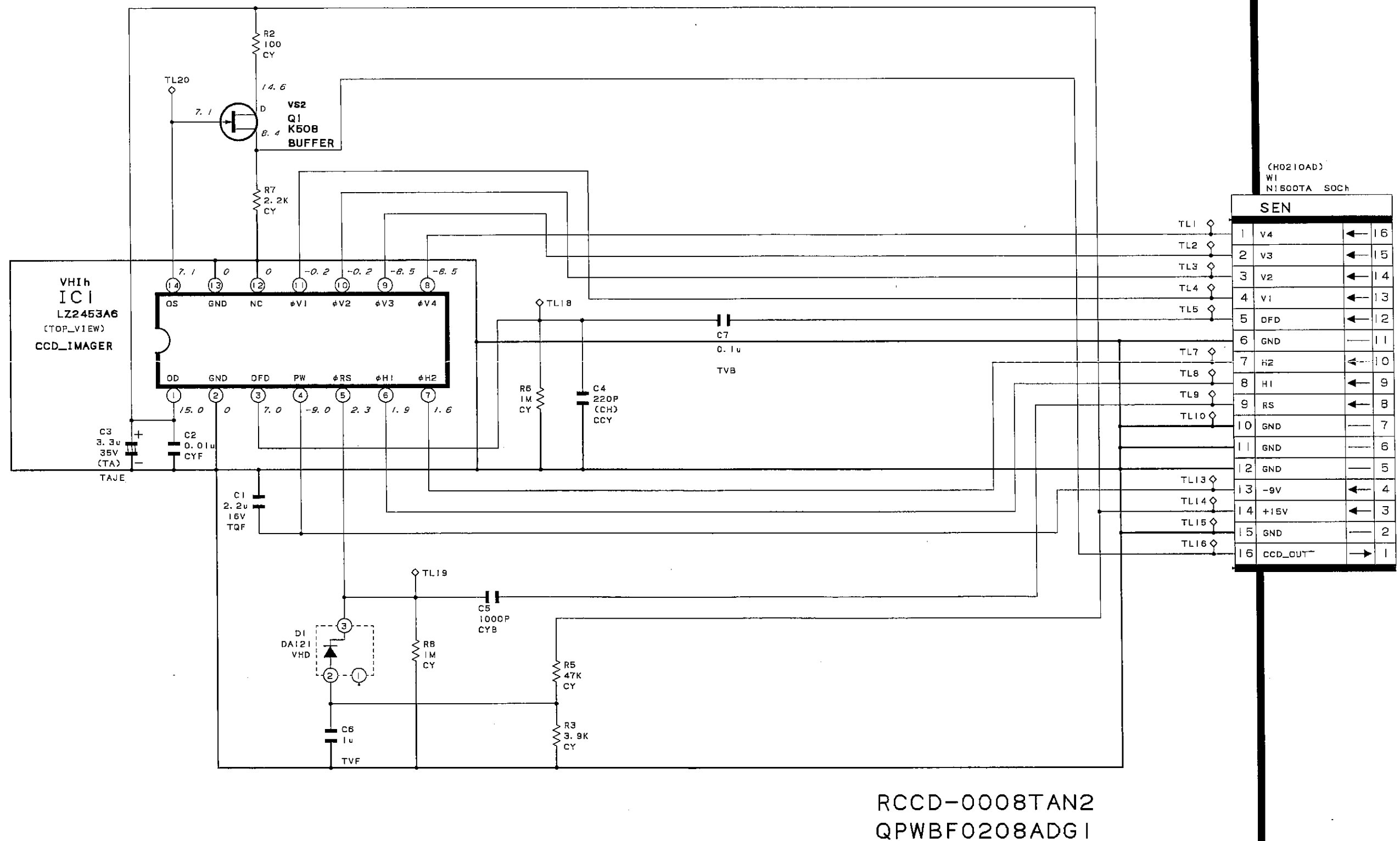
14. OVERALL WIRING DIAGRAM



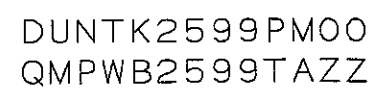
H
G
F
E
D
C
B
A



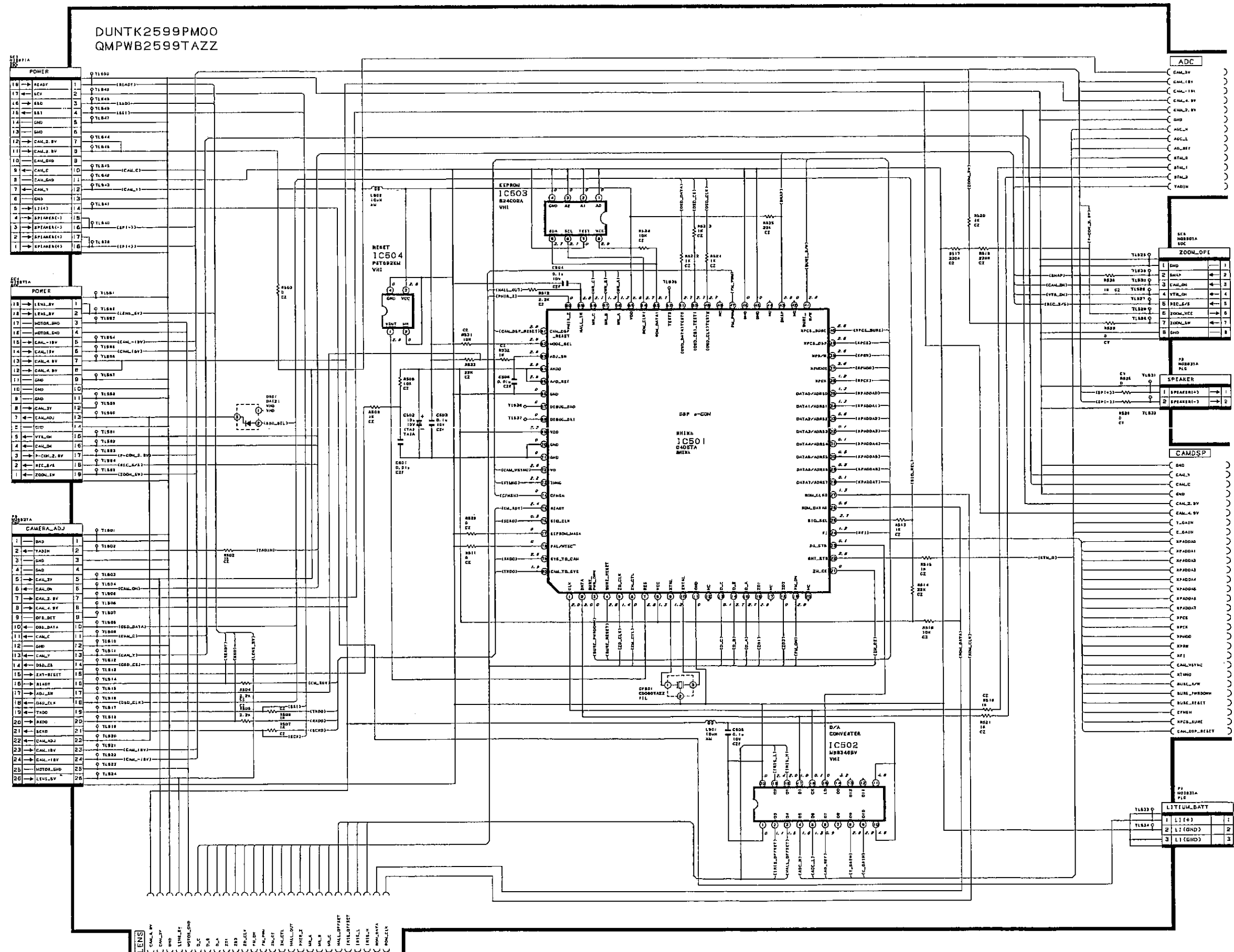
16. CAM CCD CIRCUIT SCHEMATIC DIAGRAM



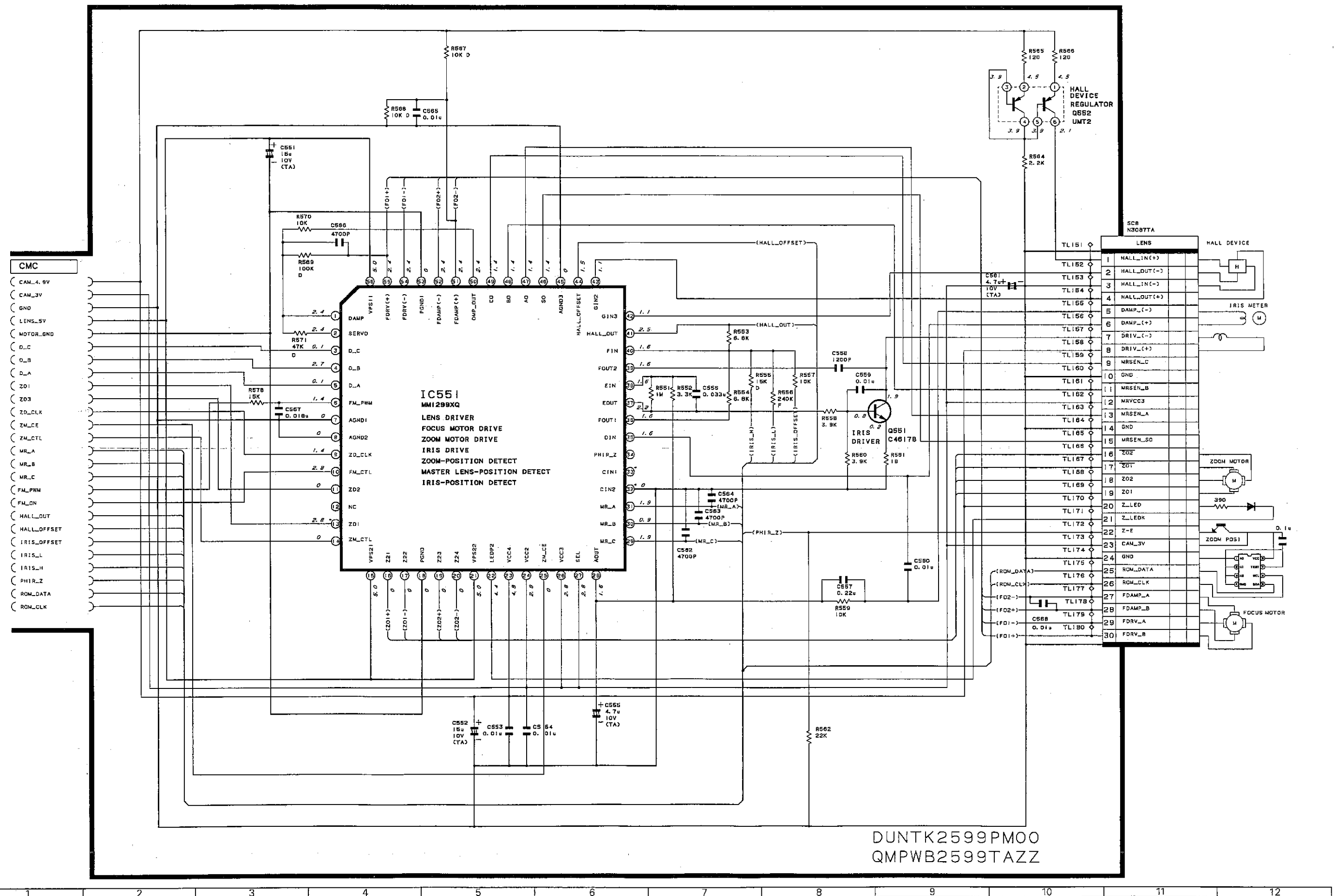
17-1. ADC CIRCUIT SCHEMATIC DIAGRAM



17-2. CAMERA CONTROL MICROPROCESSOR CIRCUIT SCHEMATIC DIAGRAM



17-3. CAMERA DISPLAY CIRCUIT SCHEMATIC DIAGRAM

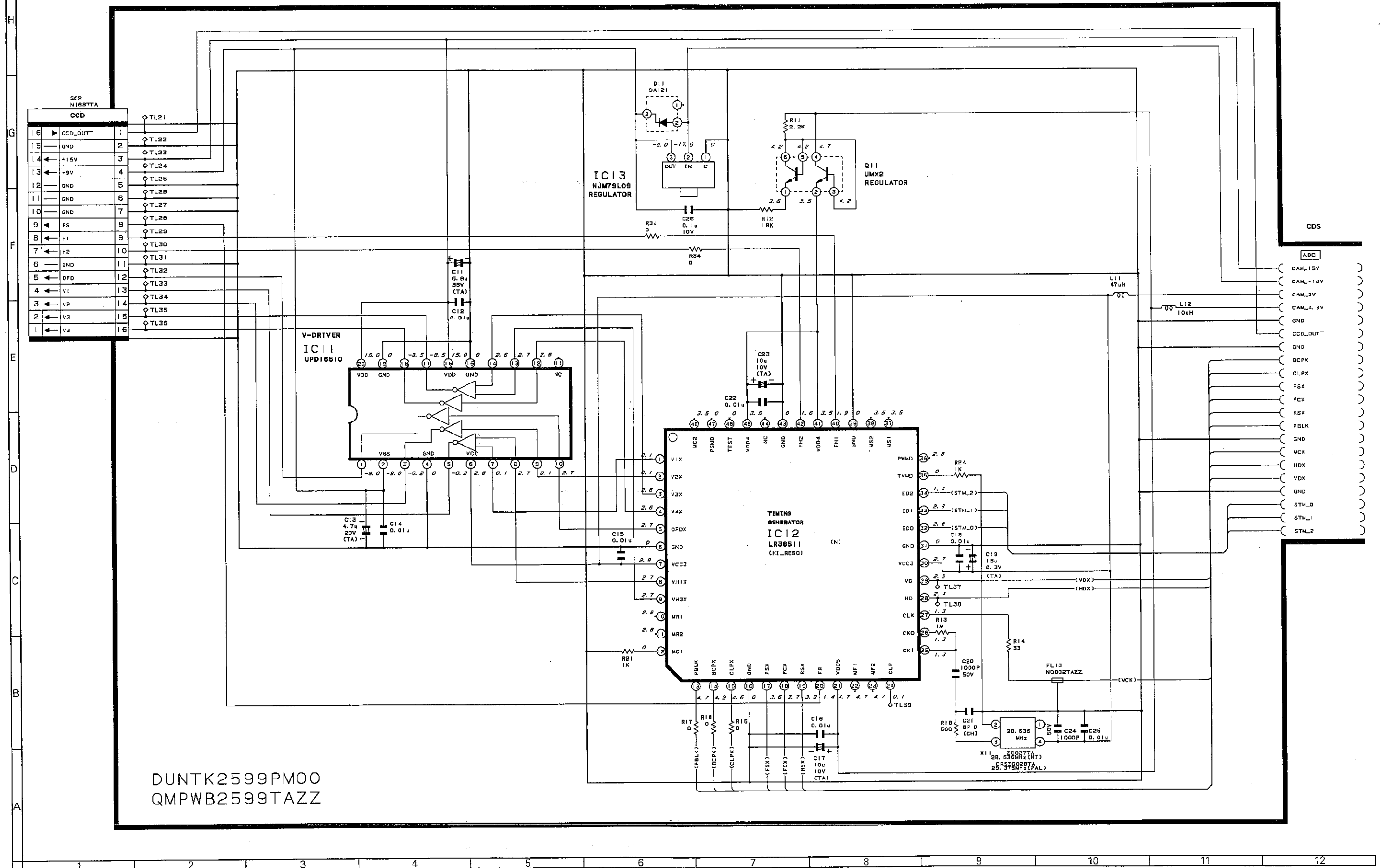


CAM_u-COM

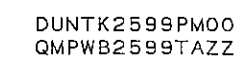


DUNTK2599PM00
QMPWB2599TAZZ

17-5. TG CIRCUIT SCHEMATIC DIAGRAM

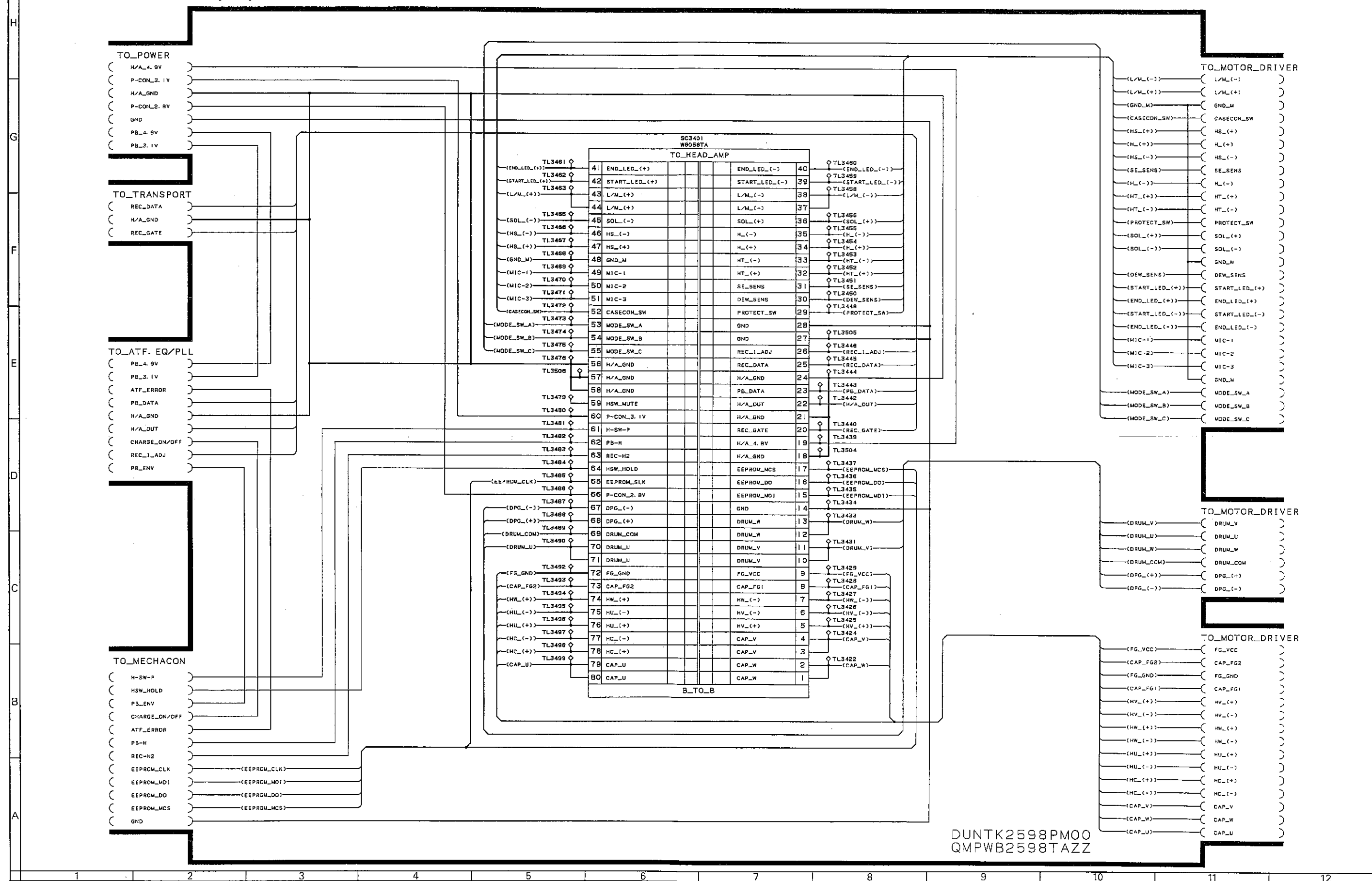


REC WITH DIS

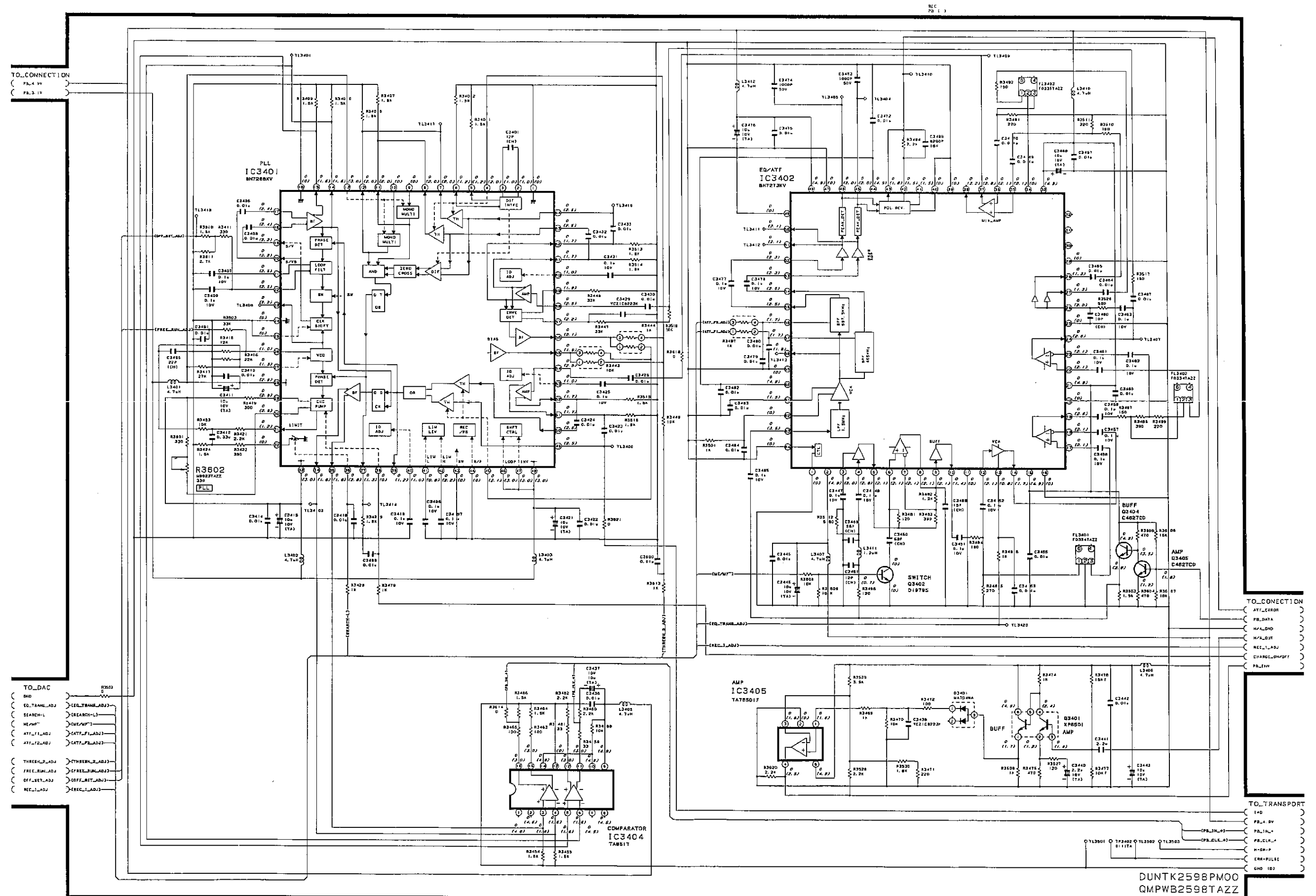


18. VCR-1 CIRCUIT SCHEMATIC DIAGRAM

18-1. CONNECTION (B-B) CIRCUIT SCHEMATIC DIAGRAM



18-2. ATF EQ/PLL CIRCUIT SCHEMATIC DIAGRAM



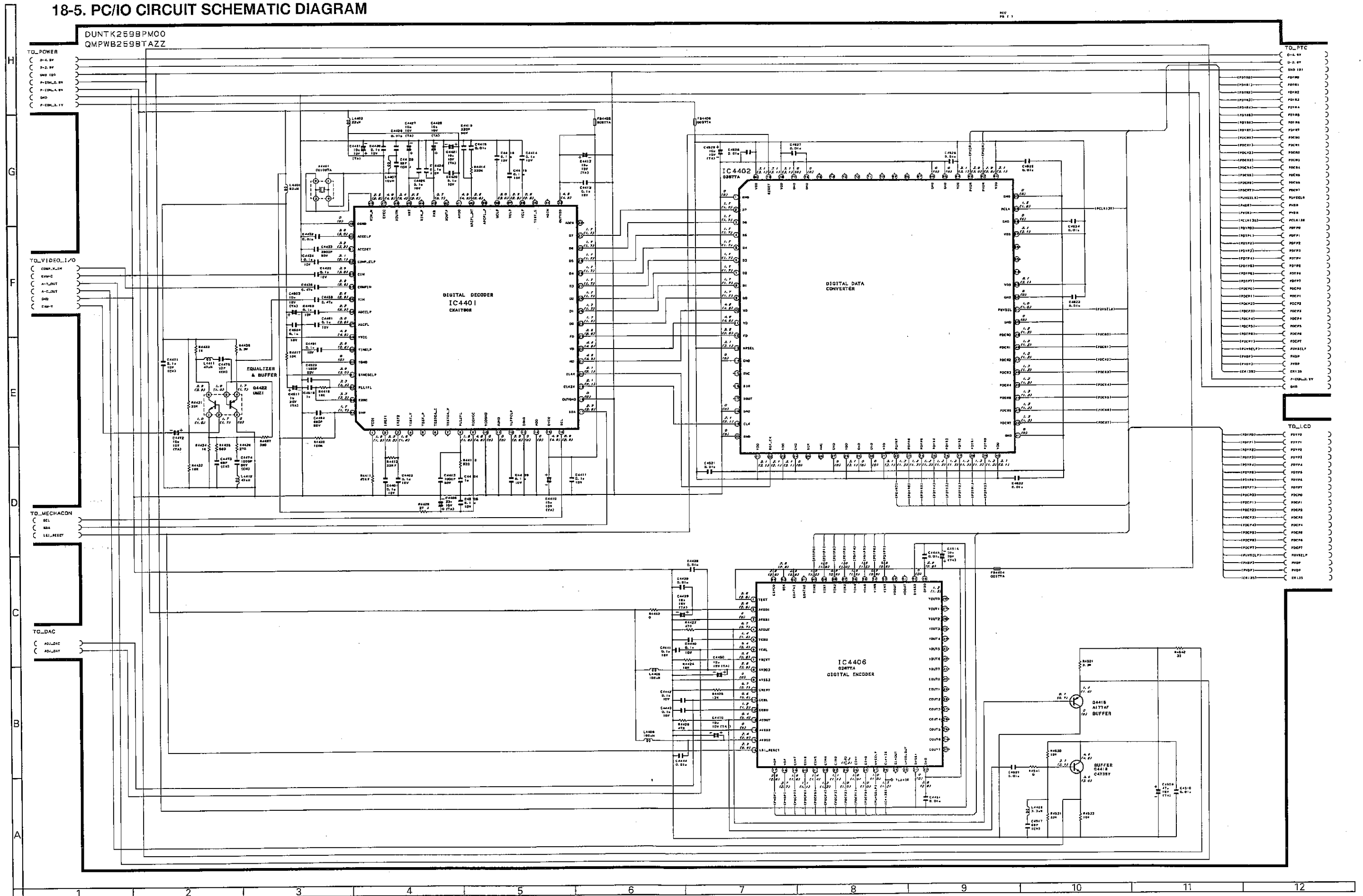
REC
PB ()



DUNTK2598PM00
QMPWB2598TAZZ

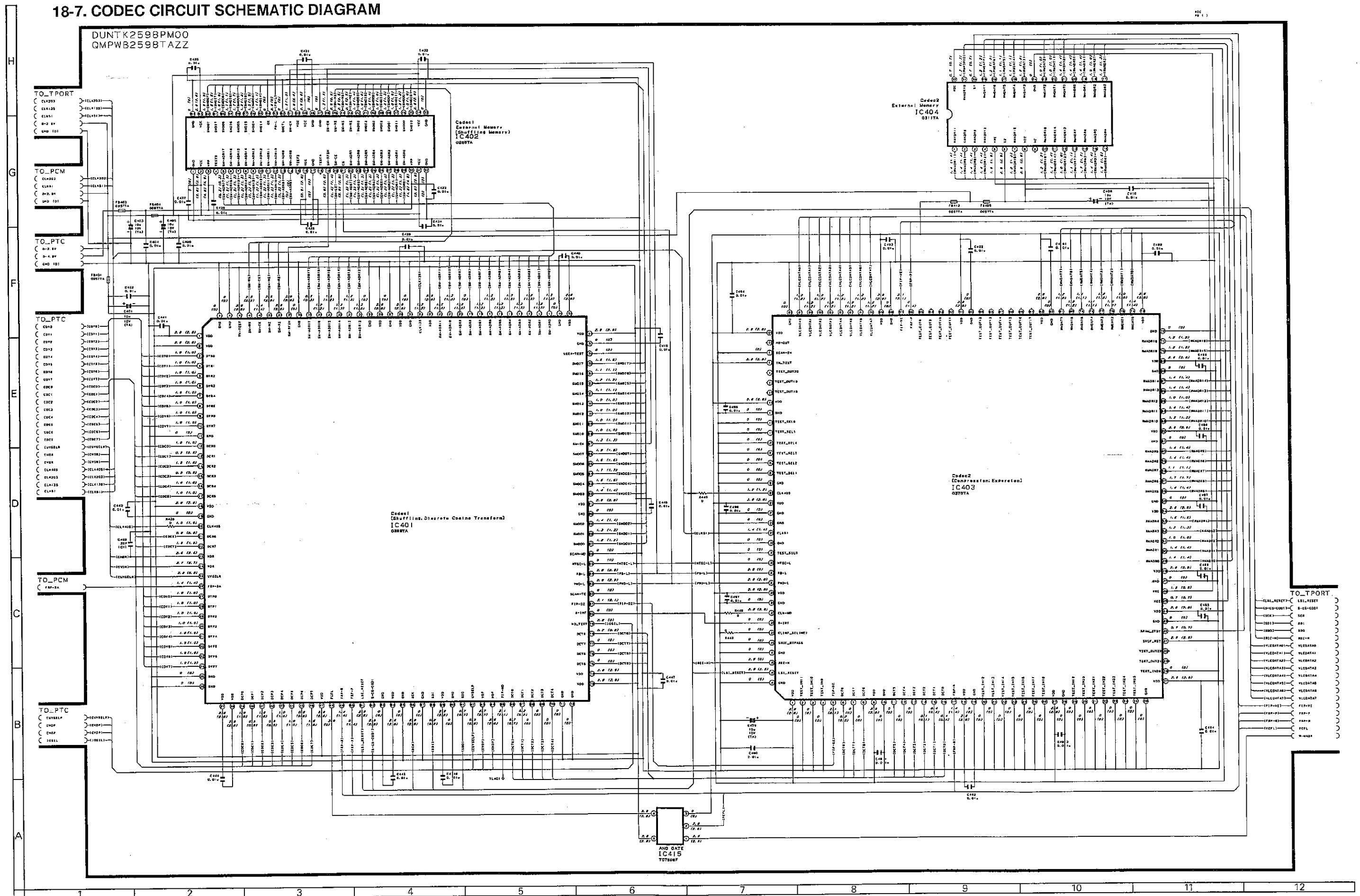


18-5. PC/IO CIRCUIT SCHEMATIC DIAGRAM

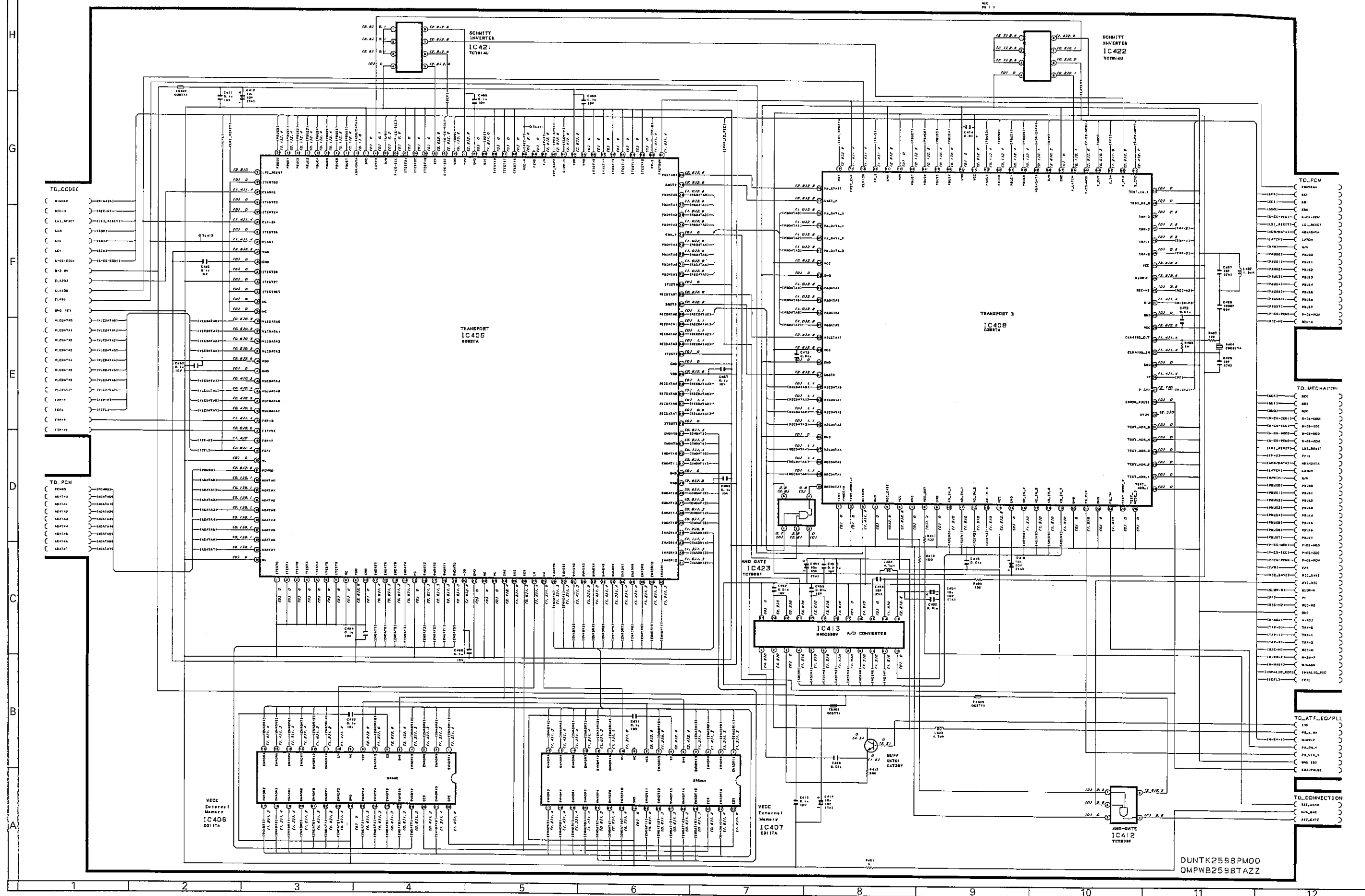


REC
PB ()

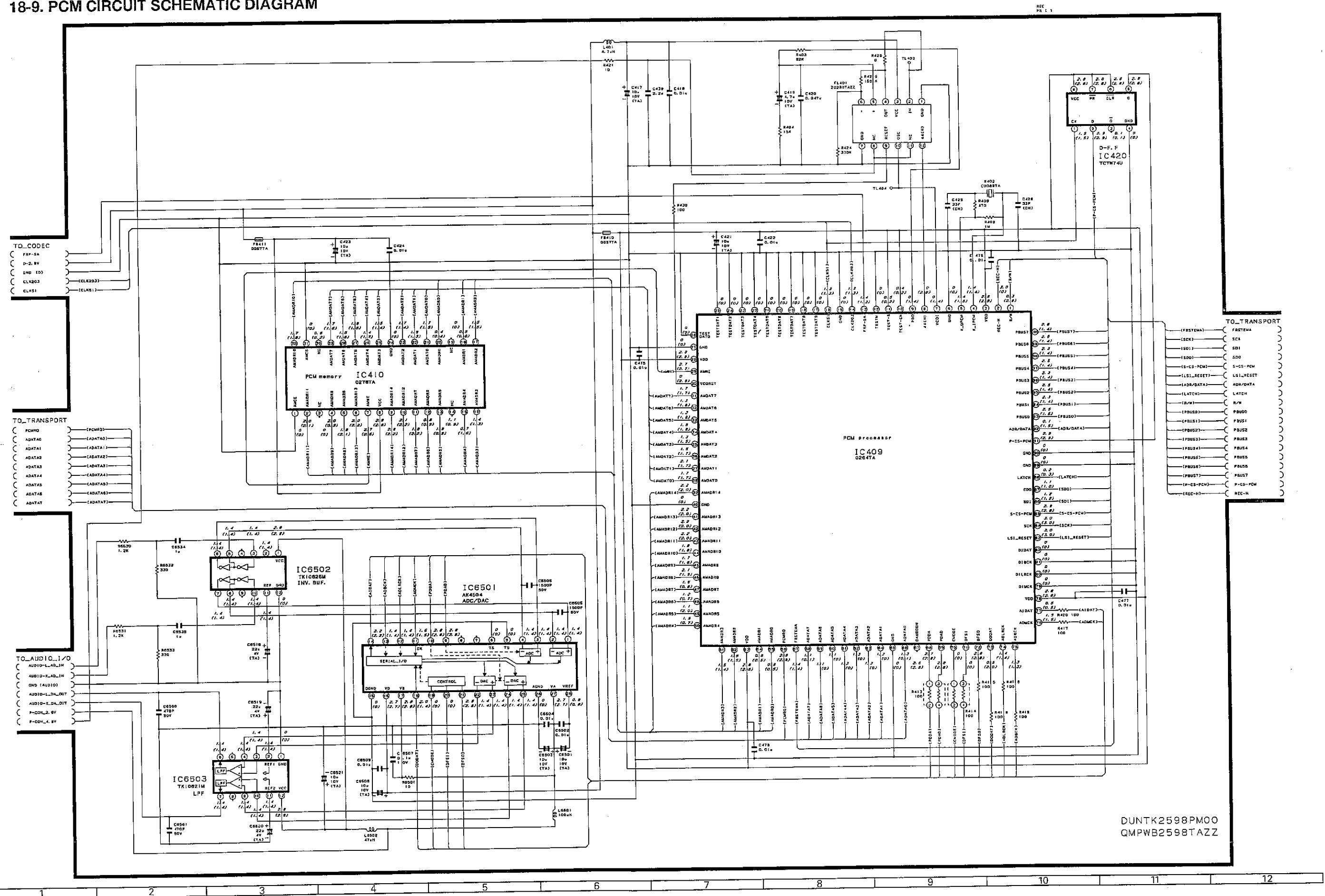
18-7. CODEC CIRCUIT SCHEMATIC DIAGRAM



18-8. TRANSPORT CIRCUIT SCHEMATIC DIAGRAM

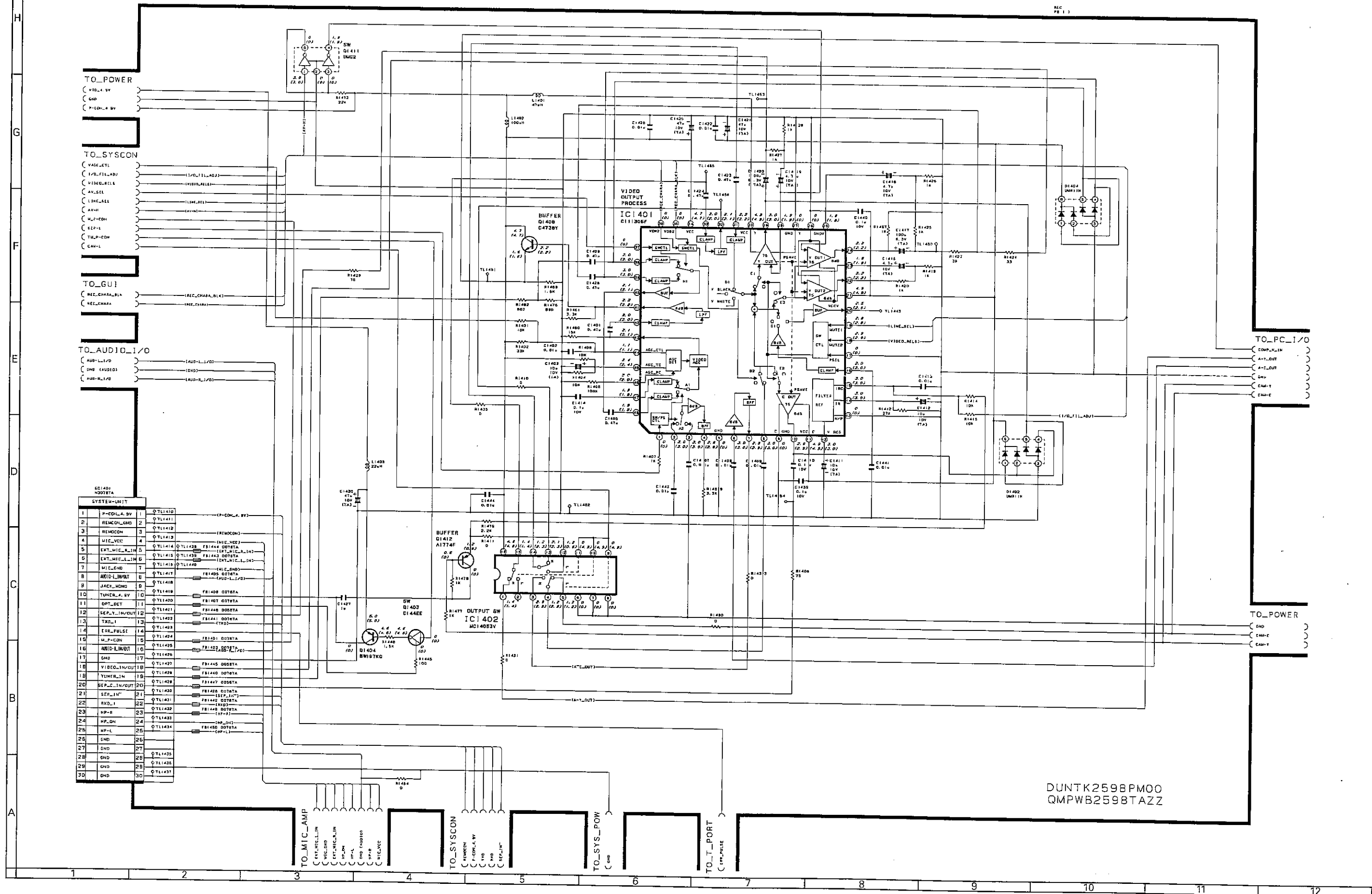


18-9. PCM CIRCUIT SCHEMATIC DIAGRAM

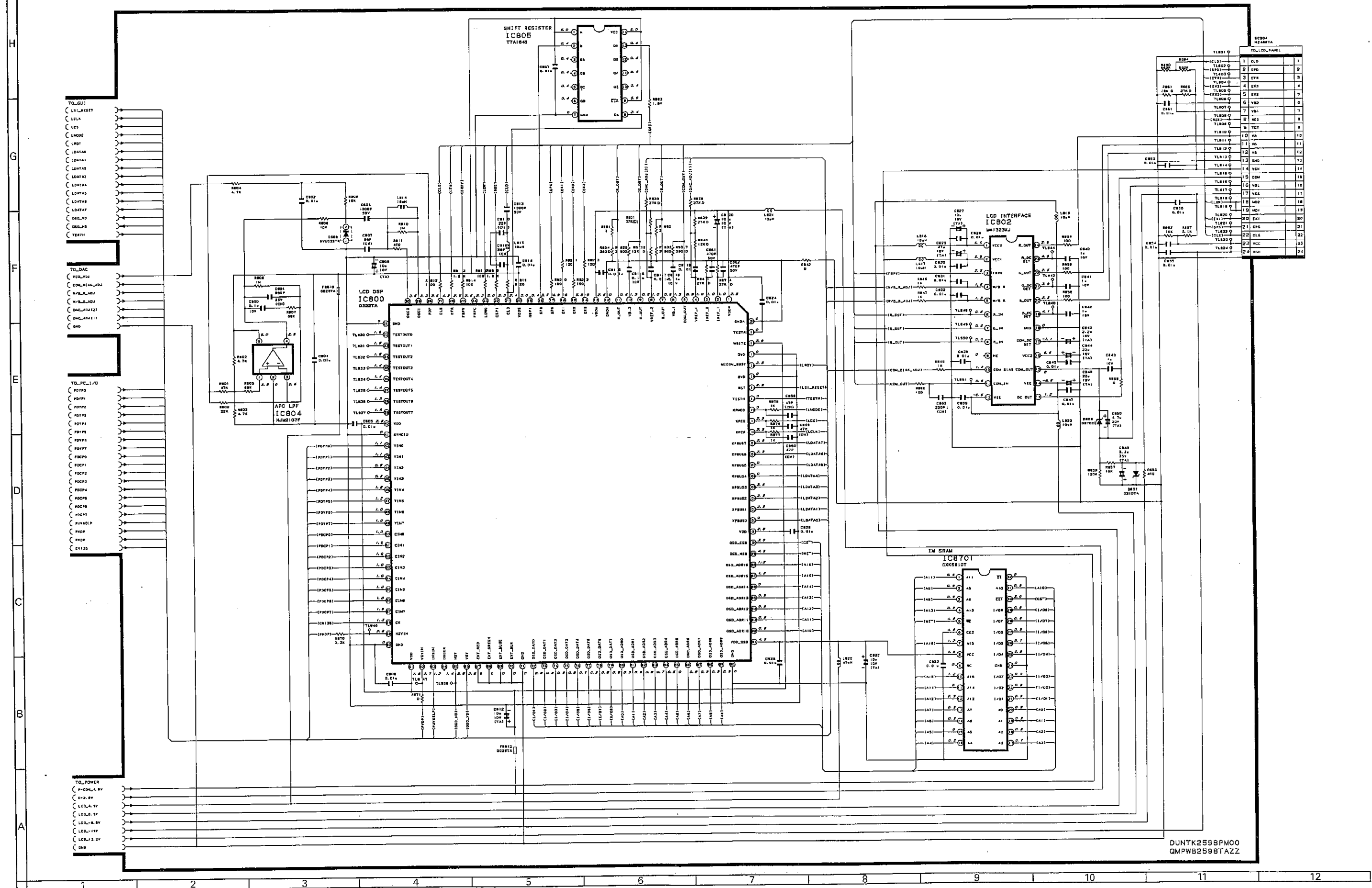


19. VCR-2 CIRCUIT SCHEMATIC DIAGRAM

19-1. VIDEO I/O CIRCUIT SCHEMATIC DIAGRAM



19-2. LCD DISPLAY CIRCUIT SCHEMATIC DIAGRAM



19-3. MICROPHONE AMPLIFIER CIRCUIT SCHEMATIC DIAGRAM

REC
PB ()DUNT K2598PM00
QMPWB2598TAZZ

TO_VIDEO_I/O

EXT_MIC_L_IN
MIC_GND
EXT_MIC_R_IN
HP_ON
HP-L
GND (AUDIO)
HP-R
MIC_VCC

TO_AUDIO_I/O

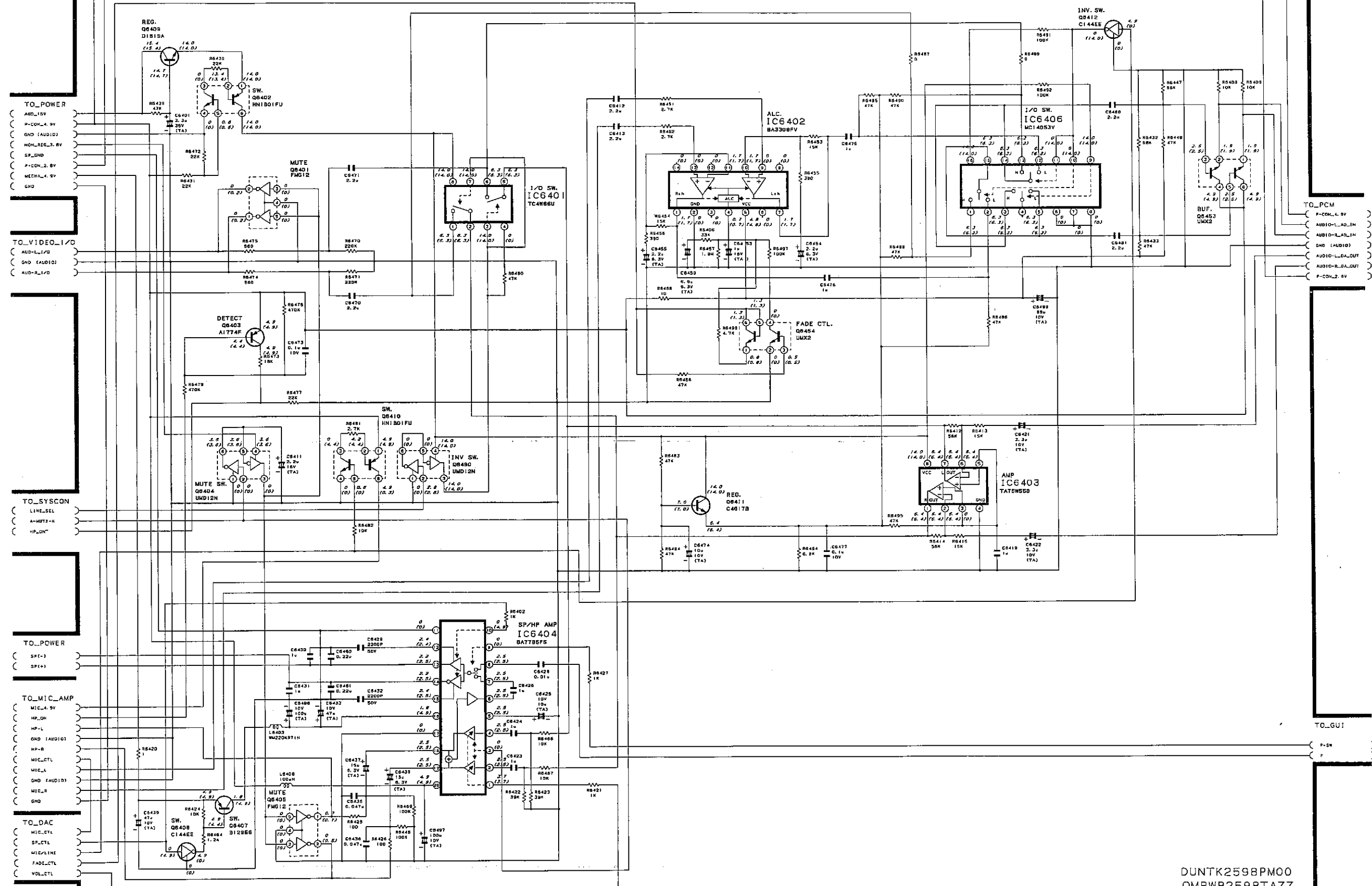
HP-R
GND (AUDIO)
HP-L
HP_ON
MIC_4.5V
MIC_L
GND (AUDIO)
MIC_R
MIC_CTL
GND

P6601
NO463TA

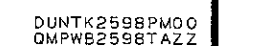
MIC

1	→	INT_MIC_L	1
2	→	MIC_GND	2
3	→	INT_MIC_R	3
4	→	MIC_GND	4

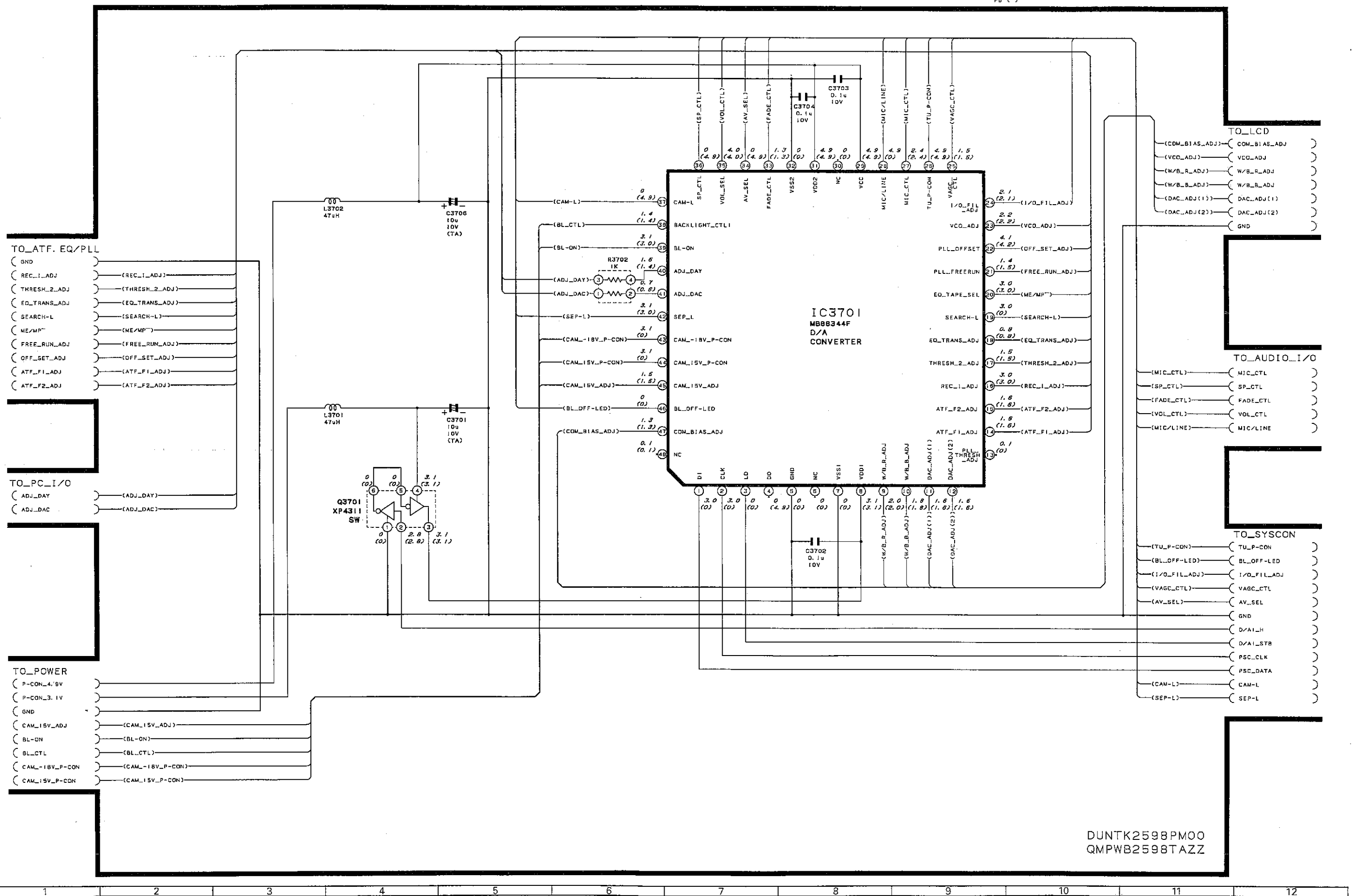
19-4. AUDIO I/O CIRCUIT SCHEMATIC DIAGRAM

DUNTK2598PM00
QMPWB2598TAZZ

MIC
 P₀

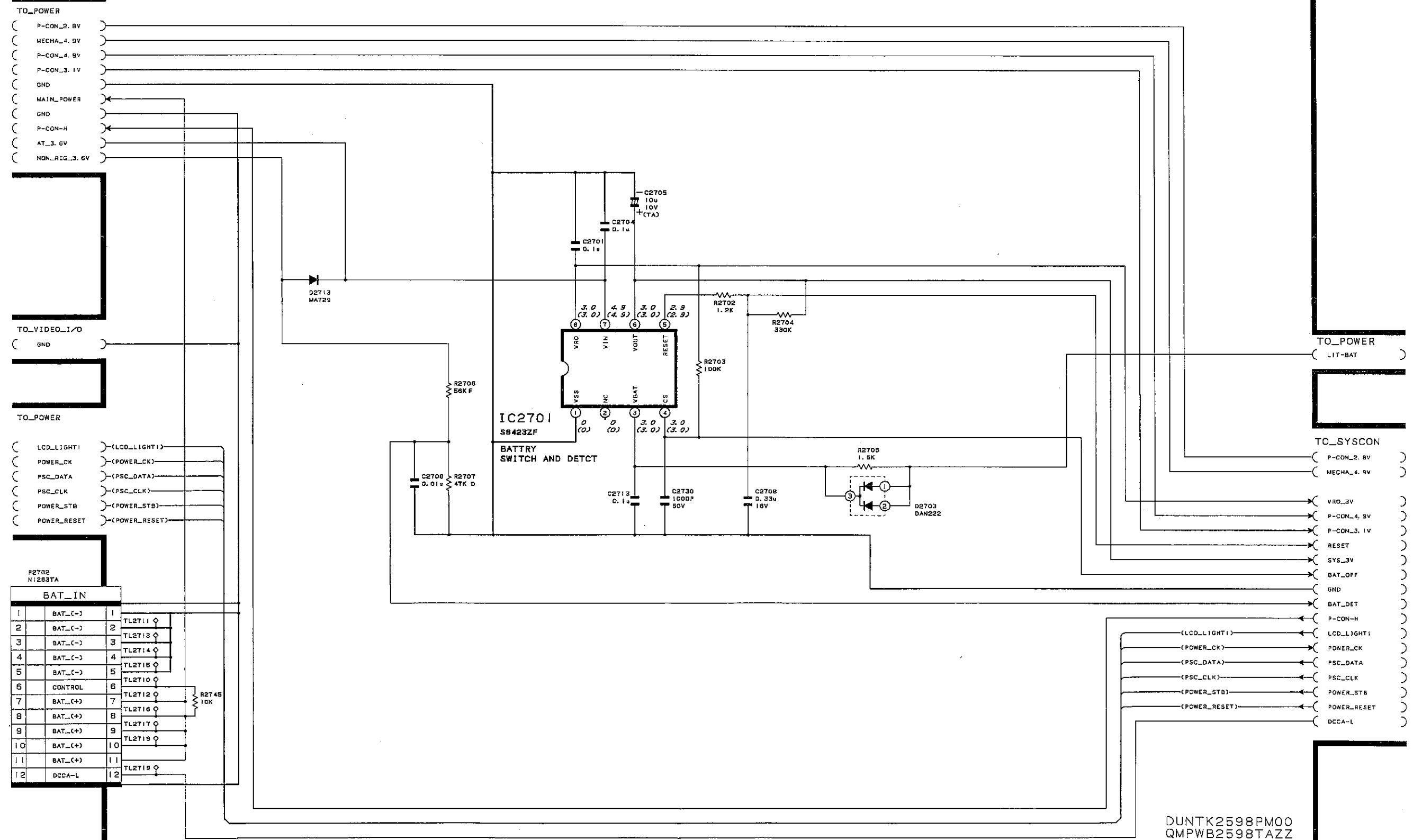


19-6. DAC CIRCUIT SCHEMATIC DIAGRAM

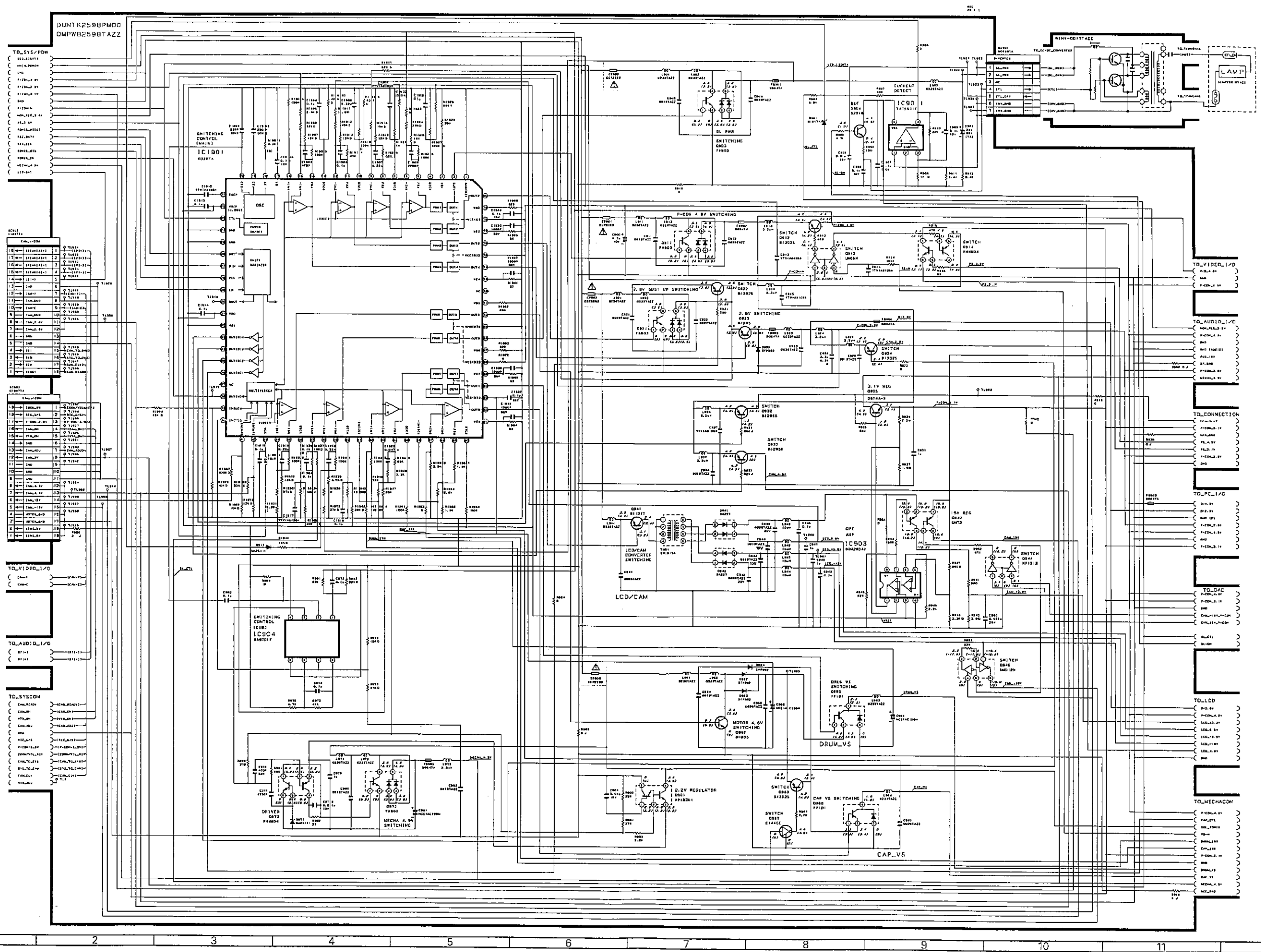


HLC
PB ()

19-8. SYSTEM CONTROLLER POWER CIRCUIT SCHEMATIC DIAGRAM

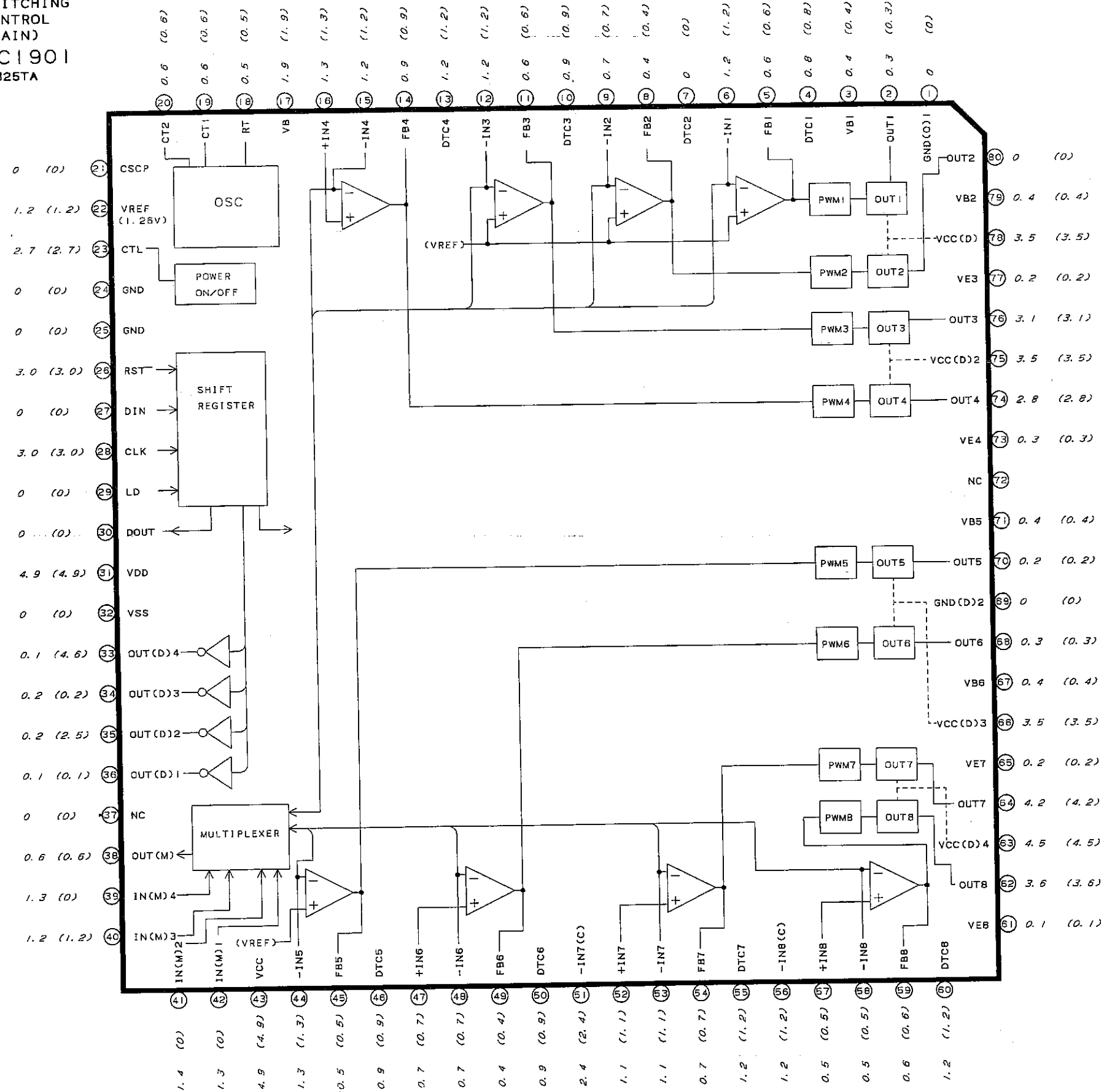
REC
PB ()

19-9. POWER CIRCUIT SCHEMATIC DIAGRAM

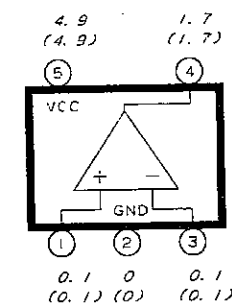


19-10. INTEGRATED SCHEMATIC DIAGRAMS OF POWER CIRCUIT

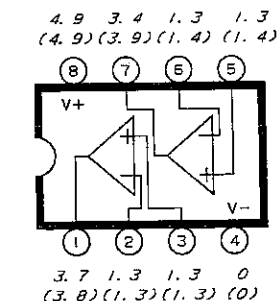
SWITCHING
CONTROL
(MAIN)
IC1901
0325TA



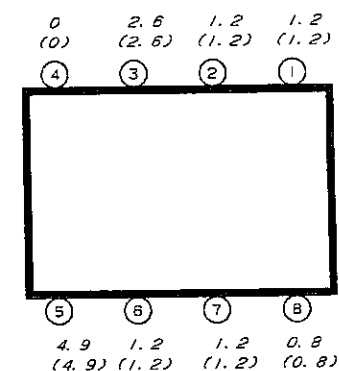
CURRENT
DETECT
IC901
TA75S01F



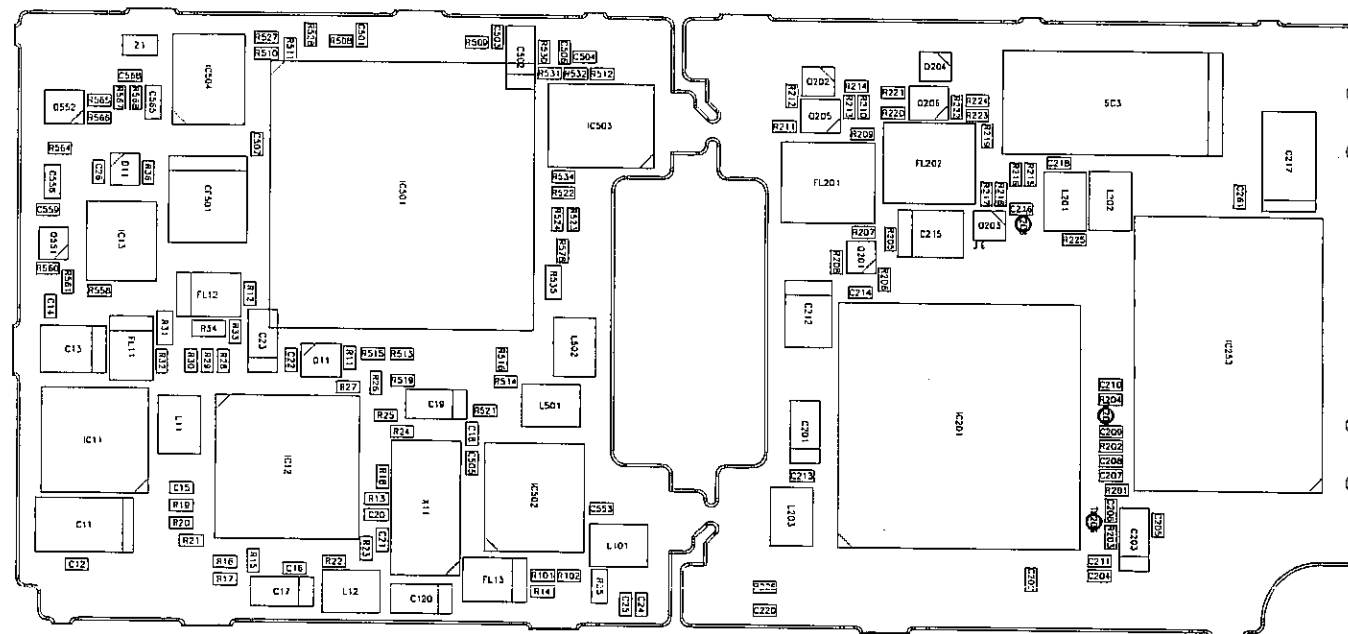
OPE
AMP
IC903
NJM2904V



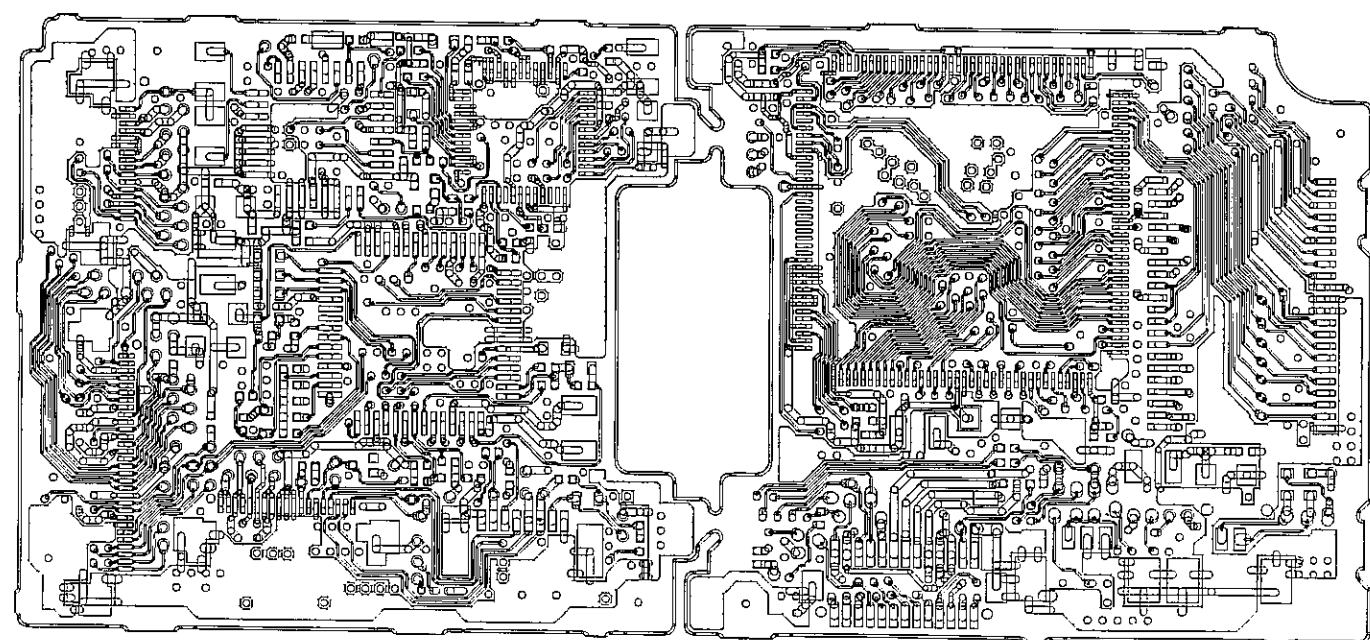
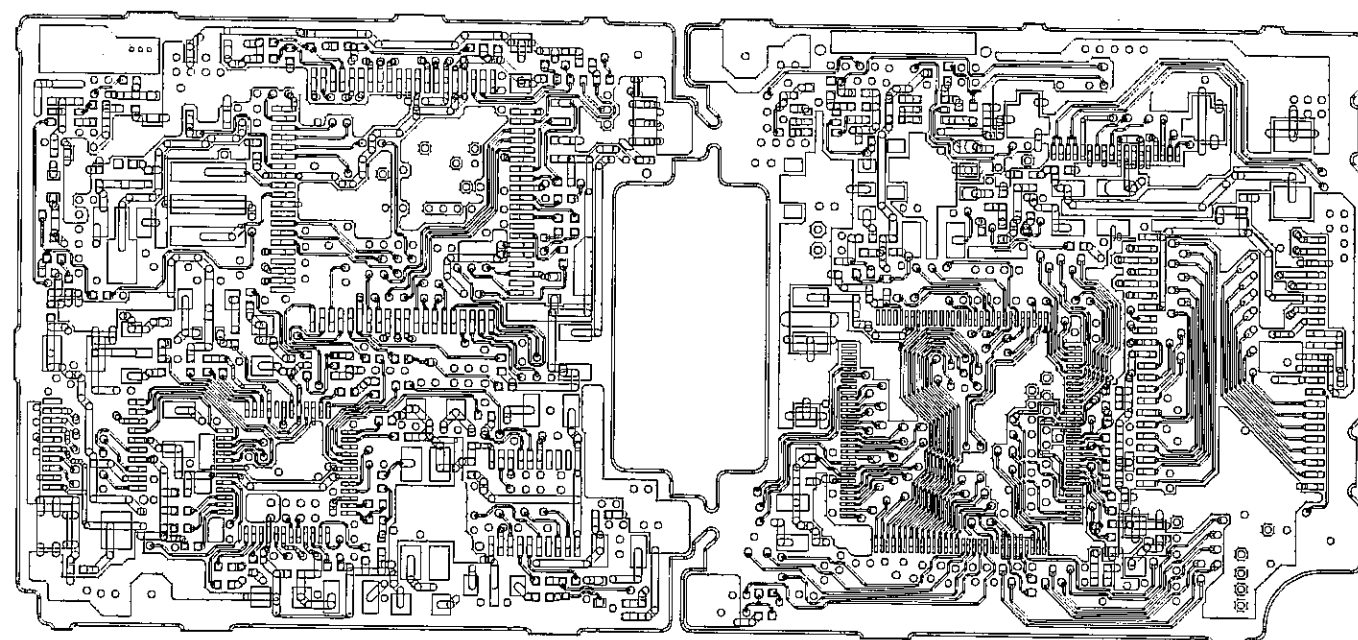
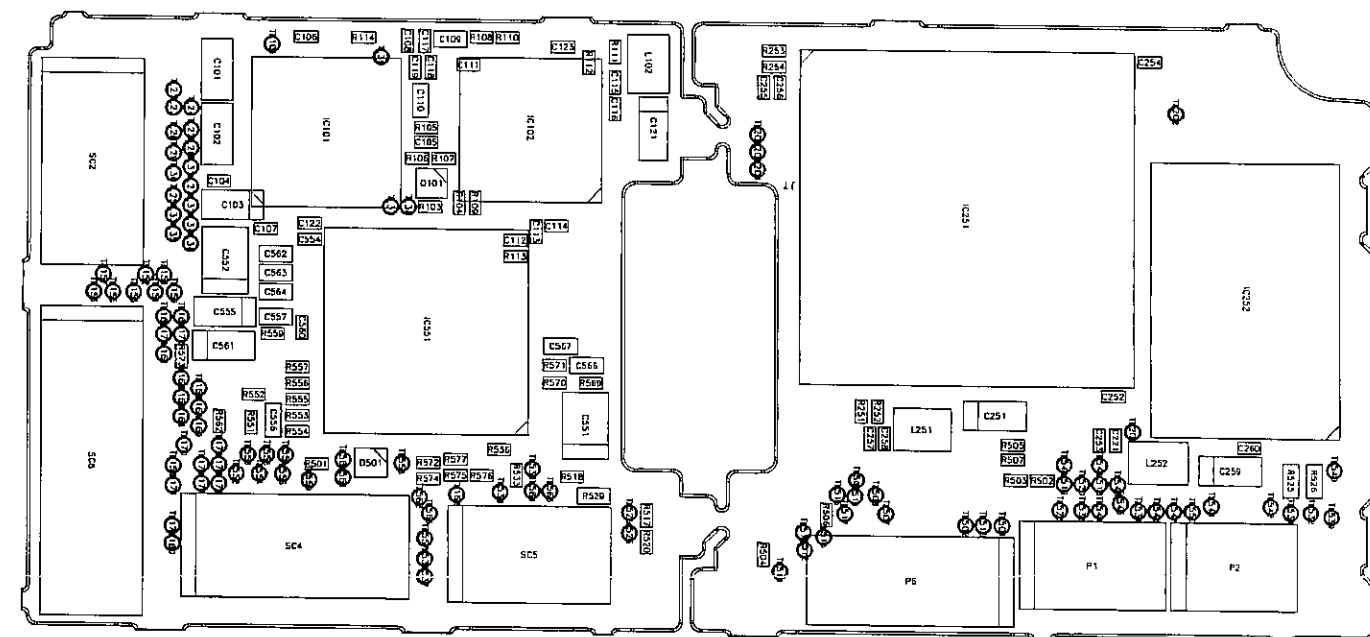
SWITCHING
CONTROL
(SUB)
IC904
BA9701F



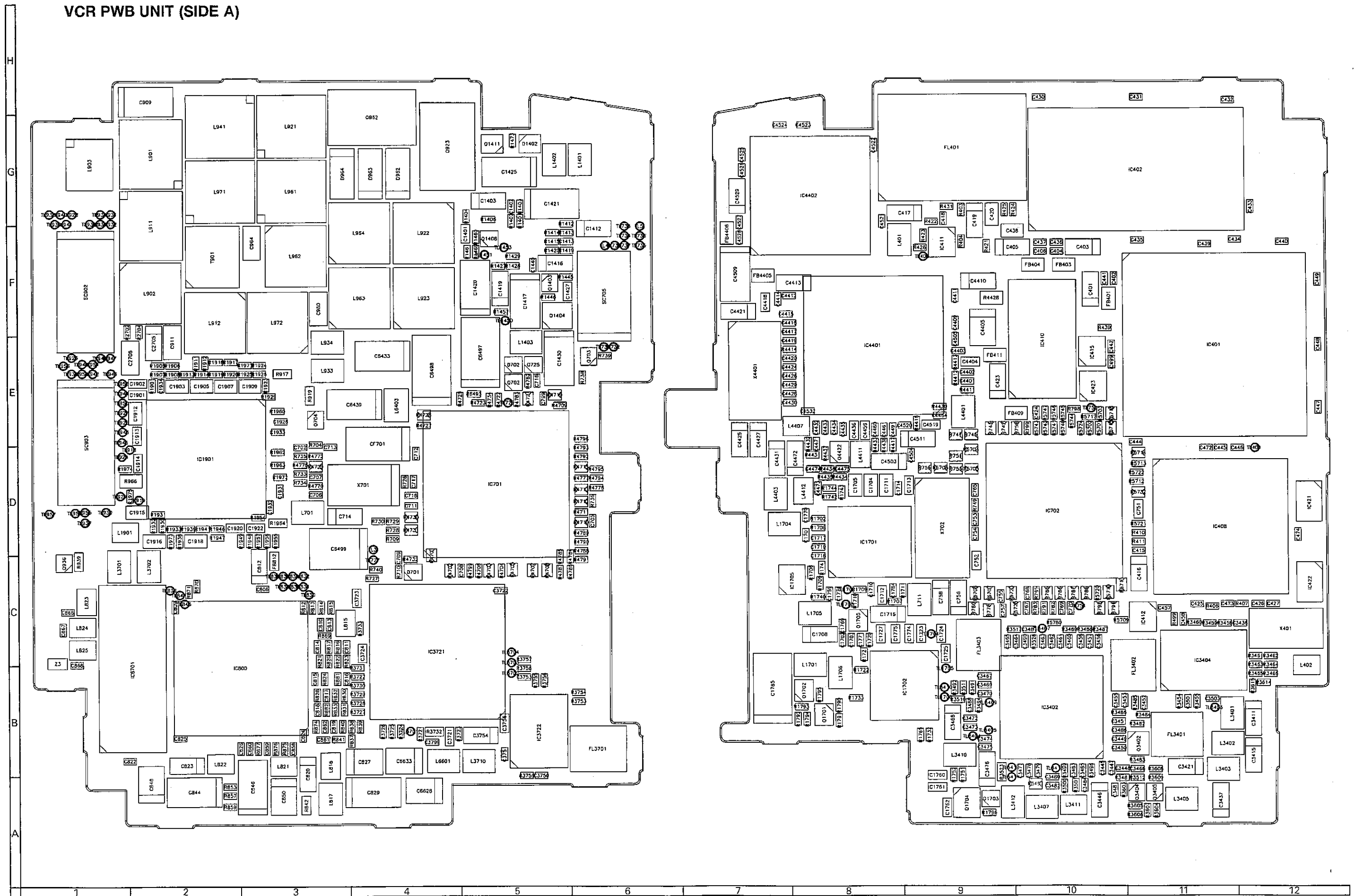
SIDE A



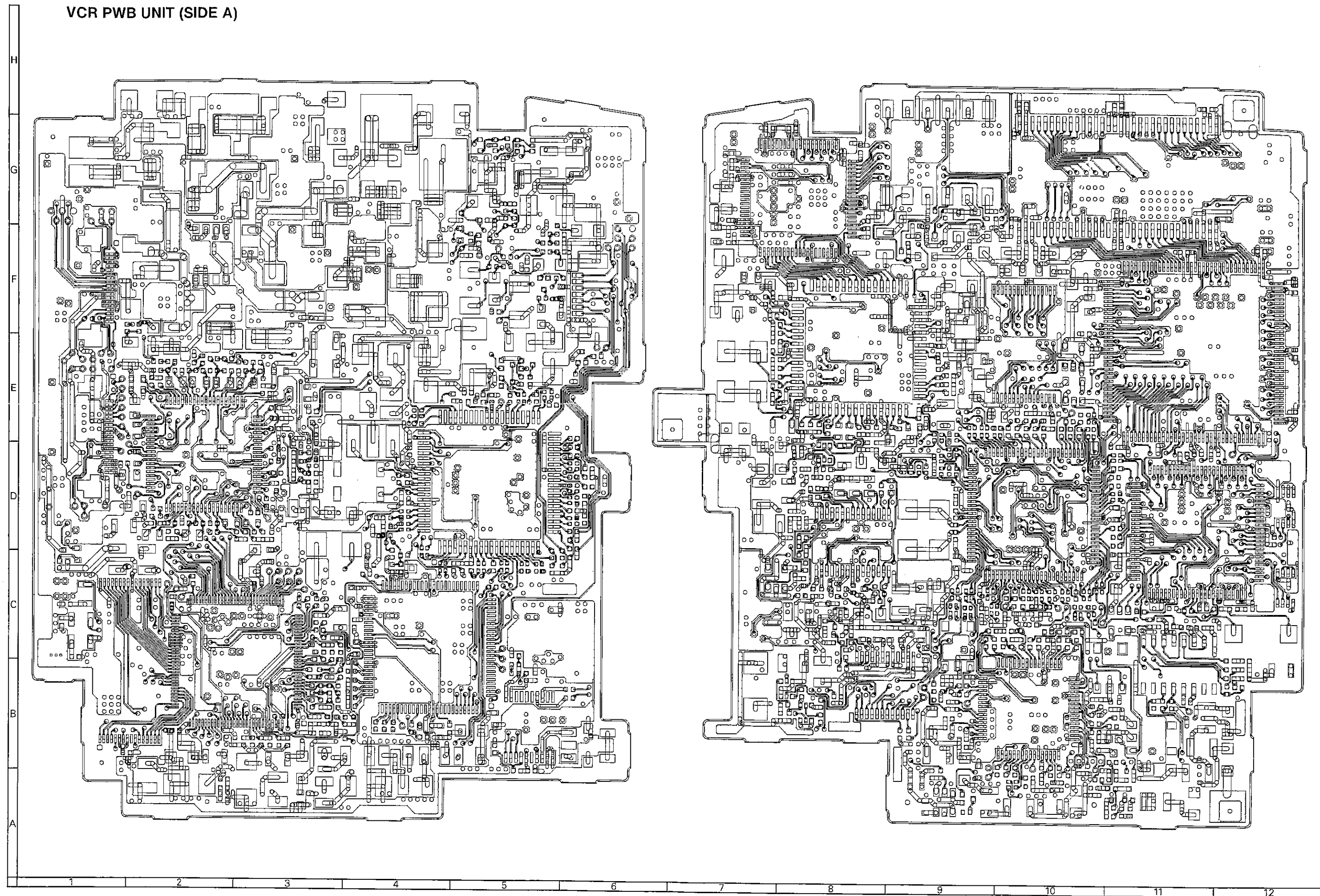
SIDE B



VCR PWB UNIT (SIDE A)



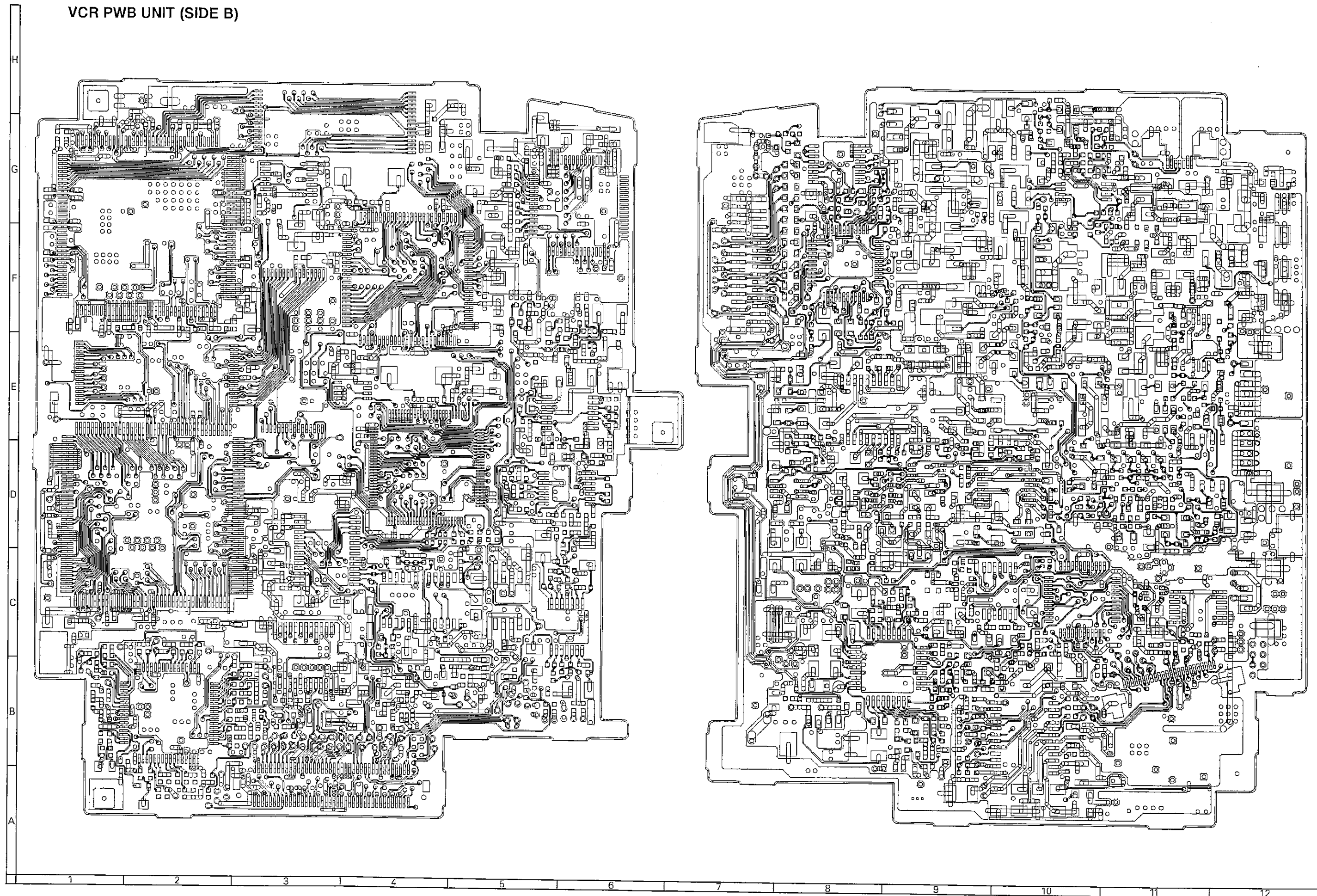
VCR PWB UNIT (SIDE A)



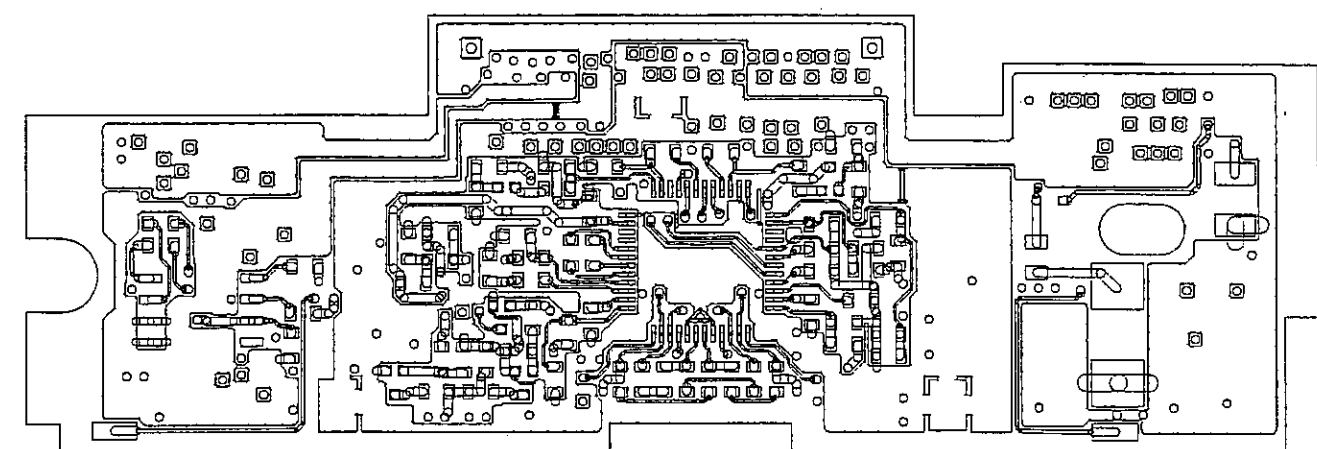
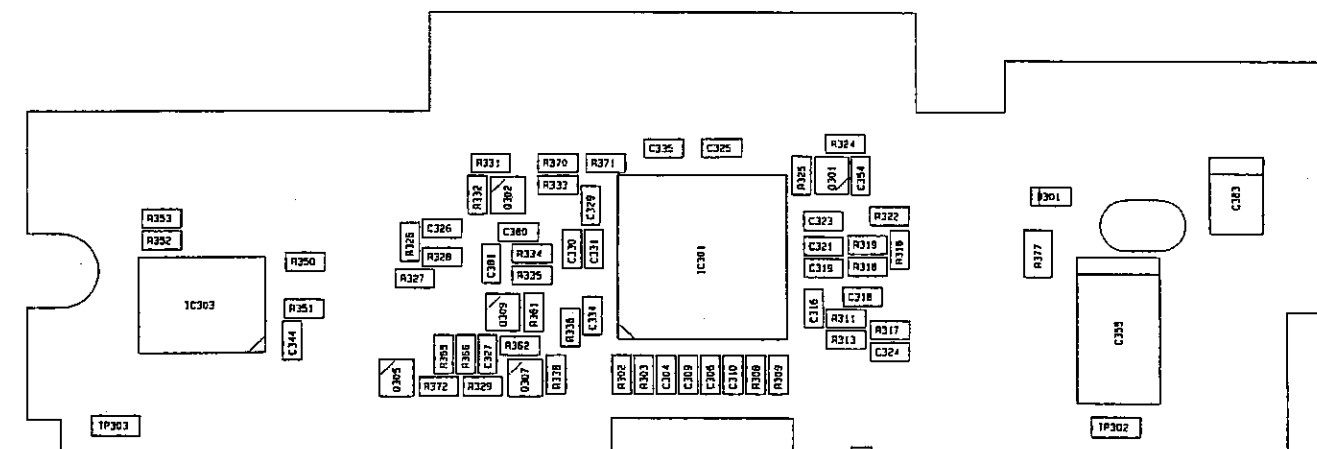
VCR PWB UNIT (SIDE B)



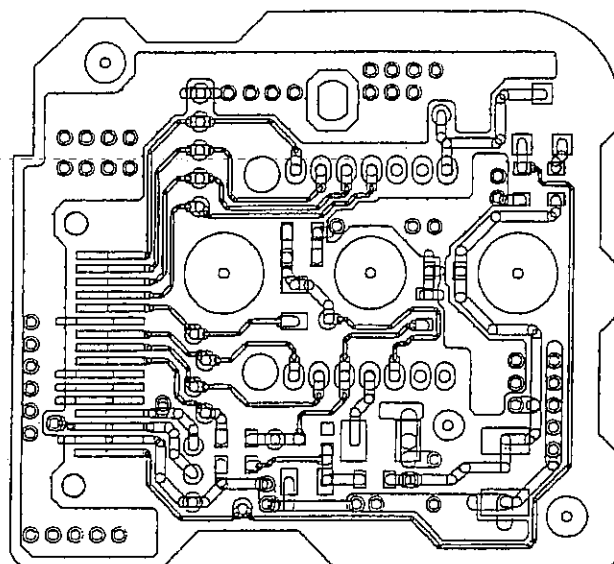
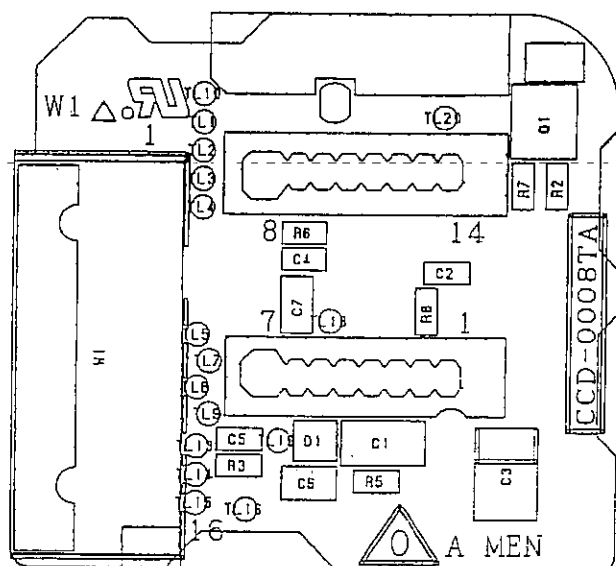
VCR PWB UNIT (SIDE B)



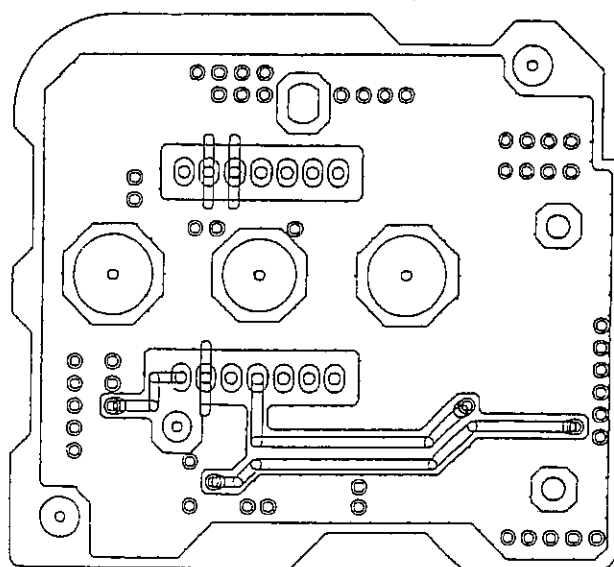
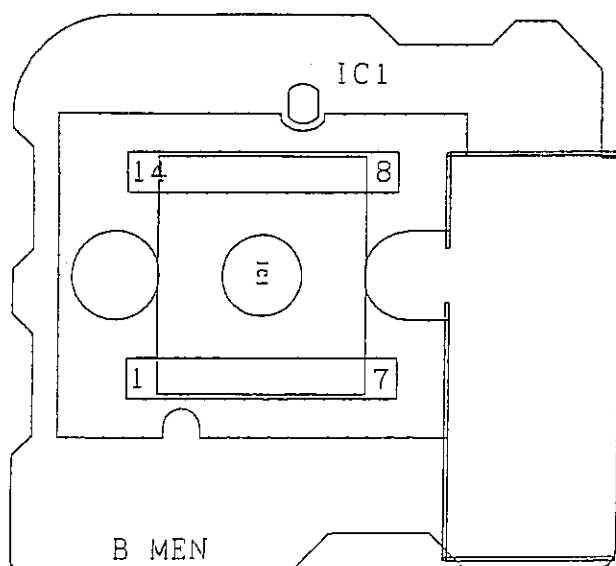
SIDE B



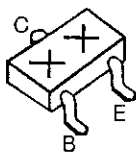
SIDE A



SIDE B

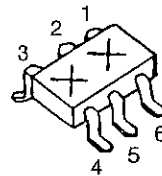


21. SEMICONDUCTOR LEAD IDENTIFICATION



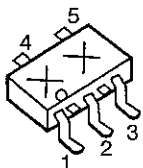
2SA1774F
2SA1832Y
2SB12956
2SD1979S
2SC4617B
2SC4738Y
2SD2216

2SC4627CD
2SB1197KQ
2SD1819A
DTC144EE
UN9111
UN9214

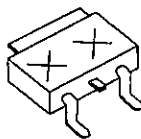


UMB2
UMD12N
UMT2
UMX

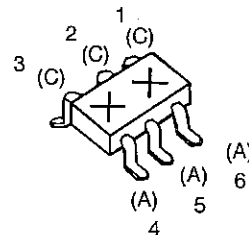
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XP6501
XP4311
HN1B01FU



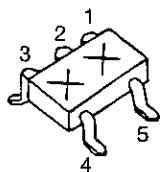
FP101



2SB1205
2SD1805

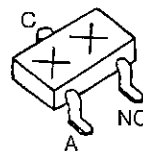


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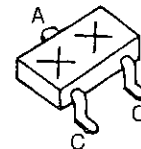


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UMG12
UMG5N
XP1B301
XP1213

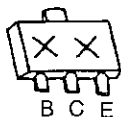
NJM2107F
TA75S01F
TA75S393
TC7SH08U
TC7S08F



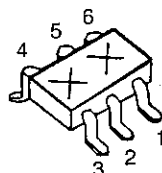
DA121



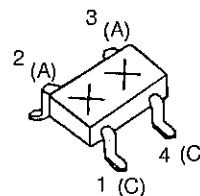
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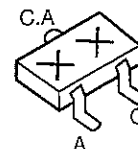
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2SB1302S
2SD874A-R



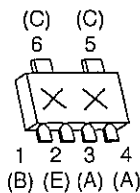
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XN4604



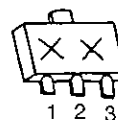
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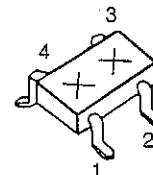
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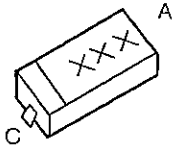
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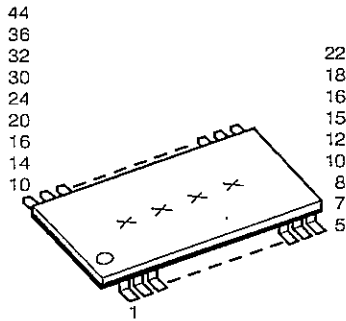
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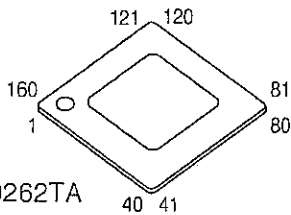
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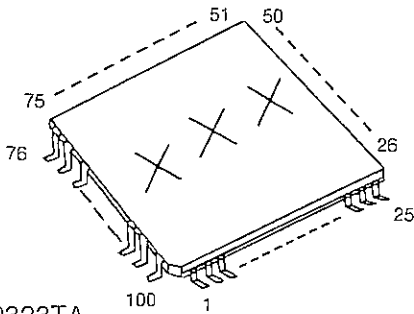
MA729
MA2S111
SFPB62
HVU359TRF
EX0161TA
EX0210TA
EX0870CE



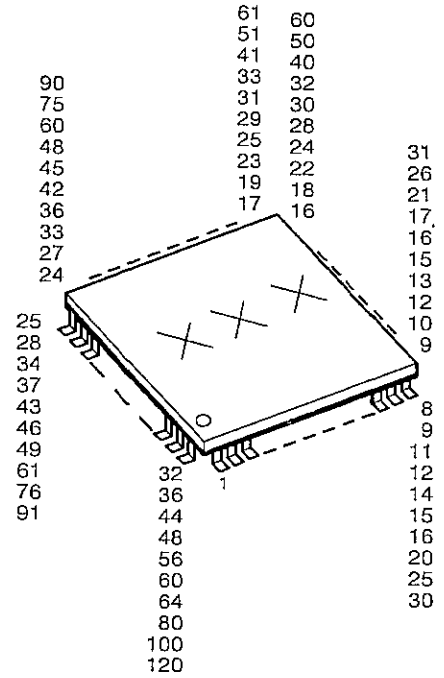
IX0265TA	NJM2112V
IX0334TA	TK10621M
AK4504	TK10625M
BA3308FV	T7A164S
BA7785FS	UPD16510
MS548332	VHCT74FS
LB1638M	MB8346BV
LB1950V	NJM2901V
LB1951V	NJM2902V
MC14053V	TA8517
MM13232XJ	
M40C558V	



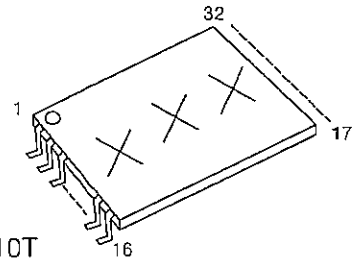
IX0262TA



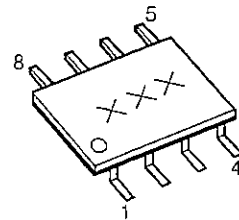
IX0323TA



IX0264TA	IX0370TA	CXA2006Q
IX0267TA	IX0378TA	CXD2310AR
IX0313TA	IX0379TA	LA7471M
IX0316TA	IX0380TA	LR35811
IX0322TA	IX0405TA	MB88344F
IX0325TA	BH7268KV	MM1299XQ
IX0358TA	BH7273KV	
IX0367TA	C111305F	
IX0369TA	CXA1790R	



CXK5810T
IX0278TA
IX0311TA



BA9701F	TC74W66U
NJM9701F	TC7W14U
S8423F	TC7W74U
S24C02A	XL93L46F
TA75W558	

22. PARTS LIST

PARTS REPLACEMENT

Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

Les pièces marquées "△" sont importantes pour maintenir la sécurité de l'appareil. Ne remplacer ces pièces que par des pièces dont le numéro est spécifié pour maintenir la sécurité et protéger le bon fonctionnement de l'appareil.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |
| 5. CODE | 6. QUANTITY |

in **USA**: Contact your nearest SHARP Parts Distributor.
For location of SHARP Parts Distributor,
Please call Toll-Free; 1-800-BE-SHARP

in **CANADA**: Contact SHARP Electronics of Canada Limited
Phone (416) 890-2100.

MARK ★: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
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PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

DUNTK2598QA00	- VCR PWB Unit	—
DUNTK2599QA00	- Camera PWB Unit	—
RAMP-0015TAN0	- Head Amplifier PWB Unit	—
RCCD-0008TAN2	- CCD PWB Unit	—

Ref. No.	Part No.	★	Description	Code
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DUNTK2598QA00 VCR PWB UNIT

INTEGRATED CIRCUITS

IC401	RH-IX0369TAZZ	J	Shuffling Discrete Cosine Transform	BM
IC402	RH-IX0265TAZZ	J	Shuffling Memory, LH6V5160N	BN
IC403	RH-IX0370TAZZ	J	Compression Expansion	BL
IC404	RH-IX0311TAZZ	J	External Memory, LH52V1000AT-Z1	BG
IC405	RH-IX0262TAZZ	J	Transport 1, LZ9HT16	BQ
IC406	RH-IX0311TAZZ	J	External Memory, LH52V1000AT-Z1	BG
IC407	RH-IX0311TAZZ	J	External Memory, LH52V1000AT-Z1	BG
IC408	RH-IX0358TAZZ	J	Transport 1, LZ9HT19	BQ
IC409	RH-IX0264TAZZ	J	PCM Processor, TC180G45AF0020	BH
IC410	RH-IX0278TAZZ	J	PCM Processor, HM62V256LT-8	AX
IC412	VHITC7S08F/-1	J	AND Gate	AC
IC413	VHiM40C558V-1	J	A/D Converter	AX
IC415	VHITC7S08F/-1	J	AND Gate	AC
IC420	VHITC7W74U/-1	J	Schmitt Inverter	AD
IC421	VHITC7W14U/-1	J	Schmitt Inverter	AG
IC422	VHITC7W14U/-1	J	Schmitt Inverter	AG
IC423	VHITC7S08F/-1	J	AND Gate	AC
IC701	RH-IX0379TAZZ	J	System Control Micon	AX
IC702	RH-IX0380TAZZ	J	Mecha. Control Micon, CXP87360M-104R	AZ
IC703	VHiNJM2902V-1	J	Drum/ Capstan Error Amp.	AD
IC706	VHiXL93L46F-1	J	EEPROM	AG
IC800	RH-IX0322TAZZ	J	LCD DSP, LR38291	BD
IC802	VHiMM1323XJ-1	J	LCD Interface	AT
IC804	VHiNJM2107F-1	J	AFC LPF	AE
IC805	VHiT7A164S/-1	J	Shift Register	AL
IC901	VHiTA75S01F-1	J	Current Detect	AD
IC903	VHiNJM2904V-1	J	Ope. Amp.	AF
IC904	VHiBA9701F/-1	J	Sub-Switching Control	AF
IC1401	VHiC111305F-1	J	Video Output Process	AX
IC1402	VHiMC14053V-1	J	Output Switch	AF
IC1701	VHiLB1950V/-1	J	Drum Motor Driver	AQ
IC1702	VHiLB1951V/-1	J	Capstan Motor Driver	AN
IC1703	VHiLB1638M/-1	J	Loading Motor Driver	AK
IC1705	VHiTA75S393-1	J	Drum FG Amp.	AC
IC1706	VHiNJM2901V-1	J	Reel Sensor Amp.	AD
IC1707	VHiNJM2112V-1	J	Reel Sensor Amp.	AF
IC1901	RH-IX0325TAZZ	J	Main Switching Control, MB4484PFV-G	AY
IC2701	VHiS8423ZF/-1	J	Battery Switch and Detect	AN
IC3401	VHiBH7268KV-1	J	PLL	BB
IC3402	VHiBH7273KV-1	J	EQ/ATF	BA
IC3404	VHiTA8517/-1	J	Comparator	AV
IC3405	VHiTA75S01F-1	J	Amp.	AD
IC3701	VHiMB88344F-1	J	D/A Converter	AV

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTK2598QA00									
VCR PWB UNIT (Continued)									
IC3721	RH-IX0378TAZZ	J	GUI Micon	AW	Q1408	VS2SC4738Y/-1	J	Buffer	AA
IC3722	RH-IX0334TAZZ	J	OSD, UPD6462GS-615	AP	Q1411	VSUMG2////-1	J	Switch	AC
IC4401	VHICXA1790R-1	J	Digital Decoder	BG	Q1412	VS2SA1774F/-1	J	Buffer	AA
IC4402	RH-IX0367TAZZ	J	Digital Data Converter, UPD65840GK-Y03	BE	Q1701	VSUMX2////-1	J	S/E LED Driver	AB
IC4406	RH-IX0267TAZZ	J	Digital Encoder, HD49426F	BB	Q1702	VSUMB2////-1	J	S/E LED Driver	AB
IC4411	RH-IX0313TAZZ	J	Sync/Clock Generator, JSC03PK532AS07	BK	Q1703	VSUN9111///-1	J	Sol. Switch	AA
IC4412	VHIVHCT74FS-1	J	D-Flipflop	AH	Q1704	VSIMX9////-1	J	Sol. Driver	AC
IC4413	VHITC7SH08U-1	J	AND Gate	AF	Q1705	VSUMG2////-1	J	Switch	AC
IC6401	VHITC4W66U/-1	J	I/O Switch	AF	Q1706	VS2SC4738Y/-1	J	Buffer	AA
IC6402	VHIBA3308FV-1	J	ALC	AH	Q3401	VXSP6501///-1	J	Amplifier	AB
IC6403	VHITA75W5581E	J	Amplifier	AE	Q3402	VS2SD1979S/-1	J	Switch	AE
IC6404	VHIBA7785FS-1	J	SP/HP Amplifier	AN	Q3404	VS2SC4627CD-1	J	Buffer	AB
IC6406	VHIMC14053V-1	J	I/O Switch	AF	Q3405	VS2SC4627CD-1	J	Amplifier	AB
IC6501	VHIAK4504///-1	J	ADC/DAC	AZ	Q3701	VXSP4311///-1	J	Switch	AB
IC6502	VHITK10625M-1	J	Inverter/Buffer	AH	Q4415	VS2SA1774F/-1	J	Buffer	AA
IC6503	VHITK10621M-1	J	LPF	AH	Q4418	VS2SC4738Y/-1	J	Buffer	AA
IC6601	VHILA7471M/-1	J	Microphone Amplifier	AN	Q4422	VSUMZ1////-1	J	Buffer	AB
IC8701	VHICXK5810T-1	J	1M SRAM	BC	Q4701	VS2SC4738Y/-1	J	Buffer	AA
TRANSISTORS					Q6401	VSFMG12////-1	J	Mute	AD
Q702	VSDTC144EE/-1	J	Switch	AA	Q6402	VSHN1B01FU/-1	J	Switch	AC
Q703	VS2SC4738Y/-1	J	LED Driver	AA	Q6403	VS2SA1774F/-1	J	Detect	AA
Q704	VSUN9214///-1	J	Remote Buffer	AB	Q6404	VSUMD12N///-1	J	Mute Switch	AC
Q725	VS2SA1832Y/-1	J	Switch	AA	Q6405	VSFMG12////-1	J	Mute	AD
Q901	VXSP1B301///-1	J	Regulator	AD	Q6407	VS2SB12956/-1	J	Switch	AB
Q903	VAFX803////-1	J	BL Power Switch	AG	Q6408	VSDTC144EE/-1	J	Switch	AA
Q904	VS2SD2216///-1	J	Current Detect	AA	Q6409	VS2SD1819A/-1	J	Regulator	AB
Q911	VAFX803////-1	J	P-CON 4.9V Switch	AG	Q6410	VSHN1B01FU/-1	J	Switch	AC
Q912	VS2SB1302S/-1	J	Switch	AD	Q6411	VS2SC4617B/-1	J	Regulator	AA
Q913	VSUMG5N////-1	J	Switch	AD	Q6412	VSDTC144EE/-1	J	Inverter Switch	AA
Q914	VSXN4604///-1	J	Switch	AD	Q6453	VSUMX2////-1	J	Buffer	AB
Q921	VAFX803////-1	J	2.8V Bust Up Switch	AG	Q6454	VSUMX2////-1	J	Fade Control	AB
Q922	VS2SB1302S/-1	J	Switch	AD	Q6490	VSUMD12N///-1	J	Inverter Switch	AC
Q923	VS2SB1205///-1	J	2.8V Switch	AF	Q6601	VS2SC4617B/-1	J	Regulator	AA
Q924	VS2SB1302S/-1	J	Switch	AD	DIODES				
Q932	VS2SB12956/-1	J	Switch	AB	D701	VHDDA221///-1	J	Diode DA221	AB
Q933	VS2SB12956/-1	J	Switch	AB	D806	VHDHVU359TR-1	J	Diode HVU359TR	AE
Q935	VS2SD874A-R1E	J	3.1V Regulator	AD	D807	RH-EX0210TAZZ	J	Zener Diode	AD
Q941	VS2SB1121T/-1	J	LCD/CAM Converter Switch	AC	D808	RH-EX0870CEZZ	J	Zener Diode	AD
Q942	VSUMT2////-1	J	15V Regulator	AB	D901	RH-EX0161TAZZ	J	Zener Diode	AD
Q944	VXSP1213///-1	J	Switch	AB	D905	VHDSFPB62//2E	J	Diode SFPB62	AD
Q945	VSUMD12N///-1	J	Switch	AC	D911	VHDMA2S111/-1	J	Diode MA2S111	AC
Q962	VS2SD1805///-1	J	Motor 4.6V Switch	AF	D941	VHDDA227///-1	J	Diode DA227	AB
Q963	VS2SB1302S/-1	J	Switch	AD	D942	VHDDA227///-1	J	Diode DA227	AB
Q965	VSFP101////-1	J	Drum VS Switch	AD	D962	VHDSFPB62//2E	J	Diode SFPB62	AD
Q966	VSFP101////-1	J	Capstan VS Switch	AD	D963	VHDSFPB62//2E	J	Diode SFPB62	AD
Q967	VSDTC144EE/-1	J	Switch	AA	D964	VHDSFPB62//2E	J	Diode SFPB62	AD
Q972	VSXN4604///-1	J	Driver	AD	D971	VHDMA2S111/-1	J	Diode MA2S111	AC
Q973	VAFX803////-1	J	Mecha 4.9V Switch	AG	D1402	VHDUMR11N///-1	J	Diode UMR11N	AC
Q1403	VSDTC144EE/-1	J	Switch	AA	D1404	VHDUMR11N///-1	J	Diode UMR11N	AC
Q1404	VS2SB1197KQ-1	J	Switch	AC	D2703	VHDDAN222///-1	J	Diode DAN222	AA
					D2713	VHDMA729///-1	J	Diode MA729	AD
					D3401	VHDMA704WA/-1	J	Diode MA704WA	AD
					PACKAGED CIRCUITS				
					△ CP900	VHICOP2E63/-1	J	Circuit Protector	AD

Ref. No.	Part No.	★	Description	Code
DUNTK2598QA00				
VCR PWB UNIT (Continued)				
△ CP901	VHiGCP2E63/-1	J	Circuit Protector	AD
△ CP902	VHiGCP2E63/-1	J	Circuit Protector	AD
△ CP905	VHiGCP2E63/-1	J	Circuit Protector	AD
TH801	VHHT1103K44-1	J	Thermistor	AD
X401	RCRSC0091TAZZ	J	Crystal	AM
X402	RCRSC0089TAZZ	J	Crystal	AL
X701	RCRSC0032TAZZ	J	Crystal	AG
X702	RCRSC0070TAZZ	J	Crystal	AK
X4401	RCRSC0100TAZZ	J	Crystal	AL
X4403	RCRSC0086TAZZ	J	Crystal	AM

COIL AND TRANSFORMERS

CF701	RFiLC0061TAZZ	J	Ceramic Filter	AE
FL401	RCiLZ0280TAZZ	J	Filter	BA
FL3401	RCiLF0334TAZZ	J	Filter	AL
FL3402	RCiLF0334TAZZ	J	Filter	AL
FL3403	RCiLF0335TAZZ	J	Filter	AL
FL3701	RCiLB0040TAZZ	J	Oscillation Coil	AF
L401	VPAXM4R7MR23N	J	Peaking Coil 4.7μH	AD
L402	VPABM1R5JR97N	J	Peaking Coil 1.5μH	AC
L403	VPABM4R7J1R7N	J	Peaking Coil 4.7μH	AC
L404	VPABM4R7J1R7N	J	Peaking Coil 4.7μH	AC
L701	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L711	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L712	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L814	VPAWM180J3R6N	J	Peaking Coil 18μH	AD
L815	VPAWM100J2R6N	J	Peaking Coil 10μH	AC
L816	VPAWM100J2R6N	J	Peaking Coil 10μH	AC
L817	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L819	VPAWM100J2R6N	J	Peaking Coil 10μH	AC
L820	VPAWM100J2R6N	J	Peaking Coil 10μH	AC
L821	VPAWM100J2R6N	J	Peaking Coil 10μH	AC
L822	VPAWM470J6R4N	J	Peaking Coil 47μH	AC
L901	RCiLP0236TAZZ	J	Coil	AE
L902	RCiLP0233TAZZ	J	Coil	AF
L903	RCiLP0226TAZZ	J	Coil	AE
L911	RCiLP0236TAZZ	J	Coil	AE
L912	RCiLP0233TAZZ	J	Coil	AF
L913	VPBAM2R2M090N	J	Peaking Coil 2.2μH	AC
L914	VPBAM2R2M090N	J	Peaking Coil 2.2μH	AC
L921	RCiLP0236TAZZ	J	Coil	AE
L922	RCiLP0233TAZZ	J	Coil	AF
L923	RCiLP0233TAZZ	J	Coil	AF
L924	VPBAM2R2M090N	J	Peaking Coil 2.2μH	AC
L925	VPBAM2R2M090N	J	Peaking Coil 2.2μH	AC
L933	VPBAM2R2M090N	J	Peaking Coil 2.2μH	AC
L934	VPBAM2R2M090N	J	Peaking Coil 2.2μH	AC
L941	RCiLP0236TAZZ	J	Coil	AE
L942	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L943	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L944	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L945	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L961	RCiLP0236TAZZ	J	Coil	AE

Ref. No.	Part No.	★	Description	Code
L962	RCiLP0233TAZZ	J	Coil	AF
L963	RCiLP0233TAZZ	J	Coil	AF
L964	RCiLP0233TAZZ	J	Coil	AF
L971	RCiLP0236TAZZ	J	Coil	AE
L972	RCiLP0233TAZZ	J	Coil	AF
L973	VPBAM2R2M090N	J	Peaking Coil 2.2μH	AC
L1401	VPAXM470K1R7N	J	Peaking Coil 47μH	AC
L1402	VPAXM101K4R0N	J	Peaking Coil 100μH	AC
L1403	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L1701	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L1704	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L1705	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L1706	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L1901	VPABM100J2R6N	J	Peaking Coil 10μH	AC
L3401	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L3402	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L3403	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L3405	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L3406	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L3407	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L3410	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L3411	VPABM1R2JR90N	J	Peaking Coil 1.2μH	AC
L3412	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L3701	VPAXM470K1R7N	J	Peaking Coil 47μH	AC
L3702	VPAXM470K1R7N	J	Peaking Coil 47μH	AC
L3710	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L4401	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L4403	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L4405	VPAXM101K4R0N	J	Peaking Coil 100μH	AC
L4406	VPAXM101K4R0N	J	Peaking Coil 100μH	AC
L4407	VPABM100J2R6N	J	Peaking Coil 10μH	AC
L4408	VPABM3R3J1R4N	J	Peaking Coil 3.3μH	AC
L4410	VPAXM220KR88N	J	Peaking Coil 22μH	AC
L4411	VPABM470J8R3N	J	Peaking Coil 47μH	AC
L4412	VPABM470J8R3N	J	Peaking Coil 47μH	AC
L6403	VP-WM220KR71N	J	Peaking Coil 22μH	AB
L6408	VPBAM101K2R5N	J	Peaking Coil 100μH	AD
L6501	VPBAM101K2R5N	J	Peaking Coil 100μH	AD
L6502	VPBAM470KR95N	J	Peaking Coil 47μH	AD
L6601	VPAXM331K130N	J	Peaking Coil 330μH	AD
T901	RTRNZ0101TAZZ	J	Transformer	AH

CONTROL

R3602	RVR-M8023TAZZ	J	PLL Adj.	AC
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CAPACITORS

C401	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C402	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C403	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C404	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C405	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C406	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C409	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C410	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C411	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C412	VCSATA1AJ106M	J	10	10V	Tantalum	AC

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTK2598QA00									
VCR PWB UNIT (Continued)									
C413	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB	C471	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB
C414	VCSATA1AJ106M	J 10	10V Tantalum	AC	C472	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C415	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C473	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C416	VCSATA1AJ106M	J 10	10V Tantalum	AC	C474	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C417	VCSATA1AJ106M	J 10	10V Tantalum	AC	C475	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C418	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C476	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C419	VCSATA1AJ475M	J 4.7	10V Tantalum	AC	C477	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C420	VCKYTV1HB473K	J 0.047	50V Ceramic	AA	C478	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C421	VCSATA1AJ106M	J 10	10V Tantalum	AC	C479	VCSATA1AJ106M	J 10	10V Tantalum	AC
C422	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C480	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C423	VCSATA1AJ106M	J 10	10V Tantalum	AC	C481	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C424	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C482	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C425	VCCCCZ1HH100D	J 10p	50V Ceramic	AB	C483	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C426	VCKYCZ1HB102K	J 1000p	50V Ceramic	AB	C484	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C427	VCCCCZ1HH100D	J 10p	50V Ceramic	AB	C485	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C428	VCCCCZ1HH330J	J 33p	50V Ceramic	AB	C486	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C429	VCCCCZ1HH330J	J 33p	50V Ceramic	AB	C487	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C430	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C488	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C431	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C489	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C432	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C490	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C433	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C491	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C434	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C492	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C435	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C493	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C436	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C494	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C437	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C495	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C438	VCKYTV1CF225Z	J 2.2	16V Ceramic	AC	C496	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C439	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C497	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C440	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C499	VCCCCZ1HH200J	J 20p	50V Ceramic	AA
C441	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C701	VCKYCY1AF105Z	J 1	10V Ceramic	AC
C442	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C702	VCKYCZ1HB102K	J 1000p	50V Ceramic	AB
C444	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C705	VCKYCZ1HB102K	J 1000p	50V Ceramic	AB
C445	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C706	VCKYCZ1HB102K	J 1000p	50V Ceramic	AB
C446	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C707	VCKYCZ1HB102K	J 1000p	50V Ceramic	AB
C447	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C708	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB
C448	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C709	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C449	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C711	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB
C450	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C712	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB
C451	VCSATA1AJ106M	J 10	10V Tantalum	AC	C713	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB
C452	VCKYCZ1CB103K	J 0.01	16V Ceramic	AB	C714	VCSATA1AJ106M	J 10	10V Tantalum	AC
C453	VCKYCZ1CB103K	J 0.01	16V Ceramic	AB	C716	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB
C454	VCSATA1AJ106M	J 10	10V Tantalum	AC	C717	VCCCCZ1HH120J	J 12p	50V Ceramic	AB
C455	VCKYCZ1CB103K	J 0.01	16V Ceramic	AB	C718	VCCCCZ1HH120J	J 12p	50V Ceramic	AB
C456	VCKYCZ1HF103Z	J 0.01	50V Ceramic	AB	C751	VCKYCY1AF105Z	J 1	10V Ceramic	AC
C458	VCCCCZ1HH150J	J 15p	50V Ceramic	AB	C752	VCKYCY1AF105Z	J 1	10V Ceramic	AC
C462	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB	C753	VCCCCZ1HH120J	J 12p	50V Ceramic	AB
C463	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB	C754	VCCCCZ1HH120J	J 12p	50V Ceramic	AB
C464	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB	C755	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB
C465	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB	C756	VCSATA1AJ106M	J 10	10V Tantalum	AC
C466	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB	C757	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB
C467	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB	C758	VCSATA1AJ106M	J 10	10V Tantalum	AC
C468	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB	C759	VCKYTV1EB104K	J 0.1	25V Ceramic	AB
C469	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB	C760	VCKYCY1AF105Z	J 1	10V Ceramic	AC
C470	VCKYCZ1AF104Z	J 0.1	10V Ceramic	AB	C761	VCKYTV1HB473K	J 0.047	50V Ceramic	AA
					C762	VCKYTV1EB104K	J 0.1	25V Ceramic	AB
					C763	VCKYCZ1HB102K	J 1000p	50V Ceramic	AB
					C764	VCKYCZ1EB682K	J 6800p	25V Ceramic	AB

Ref. No.	Part No.	★	Description	Code
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DUNTK2598QA00 **VCR PWB UNIT (Continued)**

C765	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C767	VCKYCZ1HB102K	J	1000p	50V	Ceramic	AB
C768	VCKYCZ1HB102K	J	1000p	50V	Ceramic	AB
C769	VCKYCZ1HB102K	J	1000p	50V	Ceramic	AB
C770	VCKYCZ1HB102K	J	1000p	50V	Ceramic	AB
C799	VCKYCZ1HB102K	J	1000p	50V	Ceramic	AB
C800	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C801	VCCOCY1EH561J	J	560p	25V	Ceramic	AA
C802	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C804	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C805	VCKYCZ1HB102K	J	1000p	50V	Ceramic	AB
C806	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C807	VCCOCZ1HH560J	J	56p	50V	Ceramic	AB
C808	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C809	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C810	VCCOCZ1HH220J	J	22p	50V	Ceramic	AB
C811	VCCOCZ1HH560J	J	56p	50V	Ceramic	AB
C812	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C813	VCKYCZ1HB102K	J	1000p	50V	Ceramic	AB
C814	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C815	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C816	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C817	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C818	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C819	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C820	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C822	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C823	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C824	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C825	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C826	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C827	VCSATE1CJ106M	J	10	16V	Tantalum	AD
C828	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C829	VCSATC1AJ476M	J	47	10V	Tantalum	AE
C830	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C831	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C832	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C836	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C839	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C840	VCKYTQ1CB105K	J	1	16V	Ceramic	AC
C841	VCKYTQ1CB105K	J	1	16V	Ceramic	AC
C842	VCKYTQ1CB105K	J	1	16V	Ceramic	AC
C843	VCSATA1CJ225M	J	2.2	16V	Tantalum	AC
C844	VCSATC1CJ226M	J	22	16V	Tantalum	AF
C845	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C846	VCSATC1CJ226M	J	22	16V	Tantalum	AF
C847	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C848	VCSATE1VJ335M	J	3.3	35V	Tantalum	AD
C849	VCKYTQ1CB105K	J	1	16V	Ceramic	AC
C850	VCSATE1DJ475M	J	4.7	20V	Tantalum	AD
C851	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C853	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C854	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB

Ref. No.	Part No.	★	Description	Code
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C855	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C856	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C857	VCKYCZ1HF103Z	J	0.01	50V	Ceramic	AB
C858	VCCOCZ1HH470J	J	47p	50V	Ceramic	AB
C859	VCCOCZ1HH470J	J	47p	50V	Ceramic	AB
C860	VCCOCZ1HH470J	J	47p	50V	Ceramic	AB
C861	VCKYCZ1HB471K	J	470p	50V	Ceramic	AB
C862	VCKYCZ1HB471K	J	470p	50V	Ceramic	AB
C863	VCCOCZ1HH221J	J	220p	50V	Ceramic	AB
C885	VCKYCZ1HB102K	J	1000p	50V	Ceramic	AB
C900	VCSNCA1AC475M	J	4.7	10V	Sp. Polymer	AG
C901	VCKYCZ1CB103K	J	0.01	16V	Ceramic	AB
C903	RC-CZ0019TAZZ	J	2.2	10V	Ceramic	AF
C904	RC-KZ0026TAZZ	J	6.8	16V	Ceramic	AF
C905	VCKYCZ1CB103K	J	0.01	16V	Ceramic	AB
C906	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C907	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C908	VCKYCZ1AF104Z	J	0.1	10V	Ceramic	AB
C909	VCSATC1DJ226M	J	22	20V	Tantalum	AF
C911	RC-CZ0019TAZZ	J	2.2	10V	Ceramic	AF
C912	RC-KZ0026TAZZ	J	6.8	16V	Ceramic	AF
C913	VCKYTV1AB105K	J	1	10V	Ceramic	AD
C914	VCKYTV1AB105K	J	1	10V	Ceramic	AD
C915	VCKYTV1AB105K	J	1	10V	Ceramic	AD
C921	RC-CZ0019TAZZ	J	2.2	10V	Ceramic	AF
C922	RC-KZ0027TAZZ	J	4.7	16V	Ceramic	AF
C923	RC-KZ0026TAZZ	J	6.8	16V	Ceramic	AF
C924	VCKYTQ0JB335M	J	3.3	6.3V	Ceramic	AE
C925	RC-CZ0019TAZZ	J	2.2	10V	Ceramic	AF
C935	VCKYCY1AF105Z	J	1	10V	Ceramic	AC
C936	RC-CZ0019TAZZ	J	2.2	10V	Ceramic	AF
C937	VCKYTV1AB105K	J	1	10V	Ceramic	AD
C941	RC-KZ0025TAZZ	J	4.7	16V	Ceramic	AD
C942	RC-KZ0035TAZZ	J	2.2	25V	Ceramic	AE
C943	RC-CZ0019TAZZ	J	2.2	10V	Ceramic	AF
C944	RC-CZ0019TAZZ	J	2.2	10V	Ceramic	AF
C945	RC-KZ0035TAZZ	J	2.2	25V	Ceramic	AE
C946	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C947	VCKYTV1CF105Z	J	1	16V	Ceramic	AB
C948	VCKYTV1CF105Z	J	1	16V	Ceramic	AB
C949	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C950	VCKYCZ1EF223Z	J	0.022	25V	Ceramic	AB
C964	RC-CZ0019TAZZ	J	2.2	10V	Ceramic	AF
C965	RC-KZ0026TAZZ	J	6.8	16V	Ceramic	AF
C966	VCSNCE1AC106M	J	10	10V	Sp. Polymer	AF
C968	VCSNCE1AC106M	J	10	10V	Sp. Polymer	AF
C969	RC-KZ0026TAZZ	J	6.8	16V	Ceramic	AF
C973	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C974	VCKYTV1EB104K	J	0.1	25V	Ceramic	AB
C976	VCKYCZ1HB471K	J	470p	50V	Ceramic	AB
C977	VCKYCZ1EB472K	J	4700p	25V	Ceramic	AB
C978	VCKYCZ1CB103K	J	0.01	16V	Ceramic	AB
C979	VCKYCY1AF105Z	J	1	10V	Ceramic	AC
C980	RC-CZ0019TAZZ	J	2.2	10V	Ceramic	AF
C981	VCSNCE1AC106M	J	10	10V	Sp. Polymer	AF
C982	RC-CZ0019TAZZ	J	2.2	10V	Ceramic	AF

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTK2598QA00									
VCR PWB UNIT (Continued)									
C983	VCKYCY1CB104K	J 0.1	16V Ceramic	AB	C1732	VCKYCGZ1CB103K	J 0.01	16V Ceramic	AB
C1401	VCKYCY1CF474Z	J 0.47	16V Ceramic	AB	C1735	VCKYCGZ1CB103K	J 0.01	16V Ceramic	AB
C1402	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1740	VCKYTV1CF105Z	J 1	16V Ceramic	AB
C1403	VCSATA1AJ106M	J 10	10V Tantalum	AC	C1741	VCSATA1AJ106M	J 10	10V Tantalum	AC
C1405	VCKYCY1CF474Z	J 0.47	16V Ceramic	AB	C1759	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB
C1407	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1760	VCKYCY1AF105Z	J 1	10V Ceramic	AC
C1408	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1761	VCKYCY1AF105Z	J 1	10V Ceramic	AC
C1409	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1762	VCKYCY1AF105Z	J 1	10V Ceramic	AC
C1410	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB	C1763	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB
C1411	VCSATA1AJ106M	J 10	10V Tantalum	AC	C1769	VCKYCGZ1CB103K	J 0.01	16V Ceramic	AB
C1412	VCSATA1AJ106M	J 10	10V Tantalum	AC	C1770	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB
C1413	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1771	VCKYCGZ1CB103K	J 0.01	16V Ceramic	AB
C1414	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB	C1772	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB
C1416	VCSATA1AJ475M	J 4.7	10V Tantalum	AC	C1774	VCKYCY1CF154Z	J 0.15	16V Ceramic	AB
C1417	VCSATC0JJ107M	J 100	6.3V Tantalum	AG	C1775	VCKYCY1CF154Z	J 0.15	16V Ceramic	AB
C1418	VCSATA1AJ475M	J 4.7	10V Tantalum	AC	C1778	VCKYTV10JB335M	J 3.3	6.3V Ceramic	AE
C1419	VCSATA1AJ475M	J 4.7	10V Tantalum	AC	C1779	VCKYTV10JB335M	J 3.3	6.3V Ceramic	AE
C1420	VCSATC0JJ107M	J 100	6.3V Tantalum	AG	C1782	VCKYTV10JB335M	J 3.3	6.3V Ceramic	AE
C1421	VCSATC1AJ476M	J 47	10V Tantalum	AE	C1783	VCKYTV10JB335M	J 3.3	6.3V Ceramic	AE
C1422	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1784	VCCCGZ1HH470J	J 47p	50V Ceramic	AB
C1423	VCKYCY1CF474Z	J 0.47	16V Ceramic	AB	C1785	VCSATD0JJ227M	J 220	6.3V Tantalum	AH
C1424	VCKYCY1CF474Z	J 0.47	16V Ceramic	AB	C1901	VCCCGY1HH221J	J 220p	50V Ceramic	AA
C1425	VCSATC1AJ476M	J 47	10V Tantalum	AE	C1902	VCCCGY1HH221J	J 220p	50V Ceramic	AA
C1426	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1903	VCKYTV1HB471K	J 470p	50V Ceramic	AA
C1427	VCKYCY1AF105Z	J 1	10V Ceramic	AC	C1904	VCKYTV1EB104K	J 0.1	25V Ceramic	AB
C1428	VCKYCY1CF474Z	J 0.47	16V Ceramic	AB	C1905	VCKYTV1EB104K	J 0.1	25V Ceramic	AB
C1429	VCKYCY1CF474Z	J 0.47	16V Ceramic	AB	C1906	VCKYTV1CB224K	J 0.22	16V Ceramic	AB
C1430	VCSATC1AJ476M	J 47	10V Tantalum	AE	C1907	VCKYTV1CB224K	J 0.22	16V Ceramic	AB
C1439	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB	C1908	VCKYTV1CB224K	J 0.22	16V Ceramic	AB
C1440	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB	C1909	VCKYTV1HB222K	J 2200p	50V Ceramic	AA
C1441	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1910	VCKYTV1EB104K	J 0.1	25V Ceramic	AB
C1443	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1912	VCKYTV1AB105K	J 1	10V Ceramic	AD
C1444	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1913	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1701	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB	C1914	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1702	VCKYCGZ1HB471K	J 470p	50V Ceramic	AB	C1915	VCKYTV1EB104K	J 0.1	25V Ceramic	AB
C1703	VCKYCGZ1HB471K	J 470p	50V Ceramic	AB	C1916	VCKYTV1CB224K	J 0.22	16V Ceramic	AB
C1704	VCKYTV1EB104K	J 0.1	25V Ceramic	AB	C1917	VCKYTV1AB105K	J 1	10V Ceramic	AD
C1705	VCKYTV1EB104K	J 0.1	25V Ceramic	AB	C1918	VCKYTV1CB224K	J 0.22	16V Ceramic	AB
C1708	VCSATA1AJ106M	J 10	10V Tantalum	AC	C1919	VCKYTV1EB104K	J 0.1	25V Ceramic	AB
C1709	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB	C1920	VCKYCY1CB473K	J 0.047	16V Ceramic	AA
C1710	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB	C1924	VCKYCY1CB104K	J 0.1	16V Ceramic	AB
C1711	VCKYTV1EB823K	J 0.082	25V Ceramic	AC	C1926	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB
C1712	VCKYCY1AF105Z	J 1	10V Ceramic	AC	C1927	VCKYCGZ1HB102K	J 1000p	50V Ceramic	AB
C1713	VCKYCY1CB473K	J 0.047	16V Ceramic	AA	C1930	VCKYCGZ1HB102K	J 1000p	50V Ceramic	AB
C1714	VCKYCGZ1EB472K	J 4700p	25V Ceramic	AB	C1931	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB
C1716	VCSATA1EJ105M	J 1	25V Tantalum	AC	C1932	VCKYCGZ1HB102K	J 1000p	50V Ceramic	AB
C1717	VCKYCGZ1EB682K	J 6800p	25V Ceramic	AB	C1933	VCKYCGZ1HB102K	J 1000p	50V Ceramic	AB
C1718	VCKYCGZ1EB682K	J 6800p	25V Ceramic	AB	C1934	VCKYCGZ1AF104Z	J 0.1	10V Ceramic	AB
C1719	VCKYCGZ1EB682K	J 6800p	25V Ceramic	AB	C2701	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1723	VCKYCY1AF105Z	J 1	10V Ceramic	AC	C2704	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1724	VCKYCY1AF105Z	J 1	10V Ceramic	AC	C2705	VCSATA1AJ106M	J 10	10V Tantalum	AC
C1725	VCKYCY1AF105Z	J 1	10V Ceramic	AC	C2706	VCKYCGZ1HF103Z	J 0.01	50V Ceramic	AB
C1727	VCKYCY1CF154Z	J 0.15	16V Ceramic	AB	C2708	VCKYTV1CB334K	J 0.33	16V Ceramic	AB
					C2713	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
					C2730	VCKYCGZ1HB102K	J 1000p	50V Ceramic	AB
					C3401	VCCCGZ1HH120J	J 12p	50V Ceramic	AB

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C3406	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3407	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3408	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3409	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3410	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3411	VCSATA1AJ106M	J 10	10V Tantalum	AC
C3412	VCKY TV1CF334Z	J 0.33	16V Ceramic	AB
C3414	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3415	VCSATA1AJ106M	J 10	10V Tantalum	AC
C3418	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3419	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3421	VCSATA1AJ106M	J 10	10V Tantalum	AC
C3422	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3423	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3424	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3425	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3426	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3429	VCKY CZ1CB223K	J 0.022	16V Ceramic	AC
C3430	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3431	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3432	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3433	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3436	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3437	VCSATA1AJ106M	J 10	10V Tantalum	AC
C3438	VCKY CZ1CB223K	J 0.022	16V Ceramic	AC
C3440	VCSATA1CJ225M	J 2.2	16V Tantalum	AC
C3441	VCKY TV1CF225Z	J 2.2	16V Ceramic	AC
C3442	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3443	VCSATA1AJ106M	J 10	10V Tantalum	AC
C3445	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3446	VCSATA1AJ106M	J 10	10V Tantalum	AC
C3447	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3448	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3450	VCCOCZ1HH680J	J 68p	50V Ceramic	AB
C3451	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3452	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3453	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3455	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3456	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3457	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3458	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3460	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3461	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3462	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3463	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3464	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3465	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3466	VCCOCZ1HH560J	J 56p	50V Ceramic	AB
C3467	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3468	VCSATA1AJ106M	J 10	10V Tantalum	AC
C3469	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3470	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3472	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB

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C3473	VCKY CZ1HB102K	J 1000p	50V Ceramic	AB
C3474	VCKY CZ1HB102K	J 1000p	50V Ceramic	AB
C3475	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3476	VCSATA1AJ106M	J 10	10V Tantalum	AC
C3477	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3478	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3479	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3480	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3481	VCCOCZ1HH120J	J 12p	50V Ceramic	AB
C3482	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3483	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3484	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3485	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3486	VCCOCZ1HH150J	J 15p	50V Ceramic	AB
C3487	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3488	VCKY CZ1CB822K	J 8200p	16V Ceramic	AB
C3490	VCCOCZ1HH100D	J 10p	50V Ceramic	AB
C3491	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3495	VCCOCZ1HH220J	J 22p	50V Ceramic	AB
C3496	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3497	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3498	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3500	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C3701	VCSATA1AJ106M	J 10	10V Tantalum	AC
C3702	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3703	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3704	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3706	VCSATA1AJ106M	J 10	10V Tantalum	AC
C3721	VCKY CY1CF104Z	J 0.1	16V Ceramic	AA
C3722	VCKY CZ1HB102K	J 1000p	50V Ceramic	AB
C3723	VCKY CY1CF104Z	J 0.1	16V Ceramic	AA
C3724	VCKY CY1CF104Z	J 0.1	16V Ceramic	AA
C3750	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3751	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C3754	VCSATA1AJ475M	J 4.7	10V Tantalum	AC
C3756	VCKY CY1AF105Z	J 1	10V Ceramic	AC
C3799	VCKY CZ1HB102K	J 1000p	50V Ceramic	AB
C4401	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4402	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4403	VCKY CZ1HB102K	J 1000p	50V Ceramic	AB
C4404	VCKY CY1AF105Z	J 1	10V Ceramic	AC
C4405	VCSATE1AJ336M	J 33	10V Tantalum	AG
C4409	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4410	VCSATA1AJ106M	J 10	10V Tantalum	AC
C4411	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4412	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4413	VCSATA1AJ106M	J 10	10V Tantalum	AC
C4414	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4415	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4416	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4418	VCKY CY1HB103K	J 0.01	50V Ceramic	AA
C4419	VCKY CZ1HB331K	J 330p	50V Ceramic	AA
C4420	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4421	VCSATA1AJ106M	J 10	10V Tantalum	AC
C4424	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4425	VCSATA1AJ106M	J 10	10V Tantalum	AC

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VCR PWB UNIT (Continued)									
C4426	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C4520	VCKY CZ1HB152K	J 1500p	50V Ceramic	AB
C4427	VCSATA1AJ106M	J 10	10V Tantalum	AC	C4521	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C4428	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C4522	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C4429	VCCCCZ1HH820J	J 82p	50V Ceramic	AB	C4523	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C4430	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C4524	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C4431	VCSATA1AJ106M	J 10	10V Tantalum	AC	C4525	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C4432	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C4526	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C4433	VCKY CZ1HB392K	J 3900p	50V Ceramic	AA	C4527	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C4434	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C4528	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C4435	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C4529	VCSATA1AJ106M	J 10	10V Tantalum	AC
C4436	VCKY CY1CF474Z	J 0.47	16V Ceramic	AB	C6401	VCSATE1VJ335M	J 3.3	35V Tantalum	AD
C4438	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6411	VCSATA1CJ225M	J 2.2	16V Tantalum	AC
C4439	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6412	VCKY TV1CF225Z	J 2.2	16V Ceramic	AC
C4440	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C6413	VCKY TV1CF225Z	J 2.2	16V Ceramic	AC
C4441	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C6419	VCKY CY1AF105Z	J 1	10V Ceramic	AC
C4442	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C6421	VCSATA1AJ335M	J 3.3	10V Tantalum	AC
C4443	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C6422	VCSATA1AJ335M	J 3.3	10V Tantalum	AC
C4444	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6423	VCKY CY1AF105Z	J 1	10V Ceramic	AC
C4445	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6424	VCKY CY1AF105Z	J 1	10V Ceramic	AC
C4450	VCSATA1AJ106M	J 10	10V Tantalum	AC	C6425	VCSATA1AJ106M	J 10	10V Tantalum	AC
C4451	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6426	VCKY CY1AF105Z	J 1	10V Ceramic	AC
C4459	VCKY CY1CF474Z	J 0.47	16V Ceramic	AB	C6428	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C4460	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C6429	VCKY CZ1HB222K	J 2200p	50V Ceramic	AB
C4461	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C6430	VCKY CY1AF105Z	J 1	10V Ceramic	AC
C4464	VCKY CZ1HB681K	J 680p	50V Ceramic	AB	C6431	VCKY CY1AF105Z	J 1	10V Ceramic	AC
C4470	VCSATA1AJ106M	J 10	10V Tantalum	AC	C6432	VCKY CZ1HB222K	J 2200p	50V Ceramic	AB
C4471	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C6433	VCSATC1AJ476M	J 47	10V Tantalum	AE
C4472	VCSATA1AJ106M	J 10	10V Tantalum	AC	C6435	VCKY CY1CB473K	J 0.047	16V Ceramic	AA
C4473	VCCCCZ1HH680J	J 68p	50V Ceramic	AB	C6436	VCKY CY1CB473K	J 0.047	16V Ceramic	AA
C4474	VCKY CZ1HB102K	J 1000p	50V Ceramic	AB	C6437	VCSATA0JJ156M	J 15	6.3V Tantalum	AC
C4475	VCCCCZ1HH220J	J 22p	50V Ceramic	AB	C6438	VCSATA0JJ156M	J 15	6.3V Tantalum	AC
C4491	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C6439	VCSATC1AJ476M	J 47	10V Tantalum	AE
C4492	VCCCCZ1HH5R0C	J 5p	50V Ceramic	AC	C6453	VCSAPD1CJ105M	J 1	16V Tantalum	AC
C4493	VCCCCZ1HH5R0C	J 5p	50V Ceramic	AC	C6454	VCSAPD0JJ225M	J 2.2	6.3V Tantalum	AD
C4494	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6455	VCSAPD0JJ225M	J 2.2	6.3V Tantalum	AD
C4495	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6458	VCSATA0JJ685M	J 6.8	6.3V Tantalum	AD
C4496	VCSATA1AJ106M	J 10	10V Tantalum	AC	C6460	VCKY TV1CB224K	J 0.22	16V Ceramic	AB
C4497	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6461	VCKY TV1CB224K	J 0.22	16V Ceramic	AB
C4498	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6470	VCKY TV1CF225Z	J 2.2	16V Ceramic	AC
C4499	VCSATA1AJ106M	J 10	10V Tantalum	AC	C6471	VCKY TV1CF225Z	J 2.2	16V Ceramic	AC
C4503	VCSATA1AJ106M	J 10	10V Tantalum	AC	C6473	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4504	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C6474	VCSATA1AJ106M	J 10	10V Tantalum	AC
C4505	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB	C6475	VCKY CY1AF105Z	J 1	10V Ceramic	AC
C4507	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6476	VCKY CY1AF105Z	J 1	10V Ceramic	AC
C4509	VCSATC1AJ476M	J 47	10V Tantalum	AE	C6477	VCKY CZ1AF104Z	J 0.1	10V Ceramic	AB
C4510	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6480	VCKY TV1CF225Z	J 2.2	16V Ceramic	AC
C4511	VCSATA1EJ105M	J 1	25V Tantalum	AC	C6481	VCKY TV1CF225Z	J 2.2	16V Ceramic	AC
C4512	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6497	VCSATD1AJ107M	J 100	10V Tantalum	AF
C4513	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB	C6498	VCSATD1AJ107M	J 100	10V Tantalum	AF
C4514	VCSATA1AJ106M	J 10	10V Tantalum	AC	C6499	VCSATF1AJ686M	J 68	10V Tantalum	AG
C4515	VCSATA1AJ106M	J 10	10V Tantalum	AC	C6501	VCSATA1AJ106M	J 10	10V Tantalum	AC
C4517	VCCCCZ1HH680J	J 68p	50V Ceramic	AB	C6502	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
C4519	VCKY CY1AF105Z	J 1	10V Ceramic	AC	C6503	VCSATA1AJ106M	J 10	10V Tantalum	AC
					C6504	VCKY CZ1HF103Z	J 0.01	50V Ceramic	AB
					C6505	VCKY CZ1HB152K	J 1500p	50V Ceramic	AB
					C6506	VCKY CZ1HB152K	J 1500p	50V Ceramic	AB

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VCR PWB UNIT (Continued)

C6507	VCKYCY1AF104Z	J 0.1	10V Ceramic	AB
C6508	VCSATA1AJ106M	J 10	10V Tantalum	AC
C6509	VCKYCY1HF103Z	J 0.01	50V Ceramic	AB
C6518	VCSATA0GJ226M	J 22	4V Tantalum	AD
C6519	VCSATA0GJ226M	J 22	4V Tantalum	AD
C6520	VCSATA0GJ226M	J 22	4V Tantalum	AD
C6521	VCSATA1AJ106M	J 10	10V Tantalum	AC
C6534	VCKYCY1AF105Z	J 1	10V Ceramic	AC
C6535	VCKYCY1AF105Z	J 1	10V Ceramic	AC
C6560	VCKYCY1HB471K	J 470p	50V Ceramic	AB
C6561	VCKYCY1HB471K	J 470p	50V Ceramic	AB
C6601	VCKYCY1HB102K	J 1000p	50V Ceramic	AB
C6602	VCKYCY1HB102K	J 1000p	50V Ceramic	AB
C6603	VCKYCY1AF104Z	J 0.1	10V Ceramic	AB
C6604	VCKYDQ1CR104K	J 0.1	16V Ceramic	AB
C6605	VCKYCY1CB333K	J 0.033	16V Ceramic	AA
C6607	VCKYDQ1CR104K	J 0.1	16V Ceramic	AB
C6608	VCSATA0JJ106M	J 10	6.3V Tantalum	AD
C6610	VCKYDQ1CR104K	J 0.1	16V Ceramic	AB
C6611	VCKYCY1CB473K	J 0.047	16V Ceramic	AA
C6612	VCKYCY1CB223K	J 0.022	16V Ceramic	AC
C6613	VCKYCY1CB123K	J 0.012	16V Ceramic	AB
C6614	VCKYCY1CB473K	J 0.047	16V Ceramic	AA
C6615	VCKYCY1CB153K	J 0.015	16V Ceramic	AB
C6616	VCKYCY1CB153K	J 0.015	16V Ceramic	AB
C6617	VCKYCY1HB471K	J 470p	50V Ceramic	AB
C6618	VCKYDQ1CR104K	J 0.1	16V Ceramic	AB
C6619	VCKYCY1CB333K	J 0.033	16V Ceramic	AA
C6620	VCKYCY1CB473K	J 0.047	16V Ceramic	AA
C6621	VCKYCY1CB123K	J 0.012	16V Ceramic	AB
C6622	VCKYCY1CB223K	J 0.022	16V Ceramic	AC
C6623	VCKYCY1CB473K	J 0.047	16V Ceramic	AA
C6624	VCKYCY1CB153K	J 0.015	16V Ceramic	AB
C6625	VCKYCY1CB153K	J 0.015	16V Ceramic	AB
C6626	VCKYCY1HB471K	J 470p	50V Ceramic	AB
C6627	VCSAPD1AJ225M	J 2.2	10V Tantalum	AC
C6628	VCSATE1AJ336M	J 33	10V Tantalum	AG
C6629	VCKYCY1CB103K	J 0.01	16V Ceramic	AB
C6630	VCKYCY1CB103K	J 0.01	16V Ceramic	AB
C6631	VCKYCY1AF104Z	J 0.1	10V Ceramic	AB
C6632	VCKYCY1CB103K	J 0.01	16V Ceramic	AB
C6633	VCSATE1AJ336M	J 33	10V Tantalum	AG
C6661	VCKYTV1EB104K	J 0.1	25V Ceramic	AB
C6662	VCKYTV1EB104K	J 0.1	25V Ceramic	AB
C6663	VCKYCY1CB103K	J 0.01	16V Ceramic	AB

RESISTORS

R401	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R403	VRS-CZ1JF823J	J 82k	1/16W Metal Oxide	AA
R404	VRS-CZ1JF153J	J 15k	1/16W Metal Oxide	AA
R406	VRS-CZ1JF105J	J 1M	1/16W Metal Oxide	AA
R407	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R408	VRS-CZ1JF105J	J 1M	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
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R409	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA
R410	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R411	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R412	VRS-CZ1JF561J	J 560	1/16W Metal Oxide	AA
R413	VRK-SA1JF101J	J 100	1/16W M. Composi.	AB
R414	VRK-SA1JF101J	J 100	1/16W M. Composi.	AB
R415	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R416	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R417	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R418	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R419	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R420	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R421	VRS-CZ1JF100J	J 10	1/16W Metal Oxide	AA
R424	VRS-CZ1JF334J	J 330k	1/16W Metal Oxide	AA
R425	VRS-CZ1JF154J	J 150k	1/16W Metal Oxide	AA
R426	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R430	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R439	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R440	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R443	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R446	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R499	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R704	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R709	VRS-CZ1JF474F	J 470k	1/16W Metal Oxide	AB
R710	VRS-CZ1JF823F	J 82k	1/16W Metal Oxide	AB
R726	VRS-CZ1JF334J	J 330k	1/16W Metal Oxide	AA
R727	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R728	VRS-CZ1JF332J	J 3.3k	1/16W Metal Oxide	AA
R729	VRS-CZ1JF332J	J 3.3k	1/16W Metal Oxide	AA
R730	VRS-CZ1JF332J	J 3.3k	1/16W Metal Oxide	AA
R733	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R734	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R735	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R736	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R738	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R739	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA
R740	VRS-CZ1JF822J	J 8.2k	1/16W Metal Oxide	AA
R742	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R743	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R745	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R747	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R749	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R751	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R753	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R755	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R758	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R760	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R761	VRS-CZ1JF563J	J 56k	1/16W Metal Oxide	AA
R762	VRS-CZ1JF223J	J 22k	1/16W Metal Oxide	AA
R763	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R764	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R765	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R766	VRS-CZ1JF683J	J 68k	1/16W Metal Oxide	AA
R767	VRS-CZ1JF393J	J 39k	1/16W Metal Oxide	AA
R768	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R769	VRS-CZ1JF272J	J 2.7k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTK2598QA00									
VCR PWB UNIT (Continued)									
R770	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R853	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA
R771	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R854	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R772	VRS-CZ1JF823J	J 82k	1/16W Metal Oxide	AA	R855	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R778	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R856	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R780	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R857	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R782	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA	R858	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R783	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA	R859	VRS-CZ1JF124J	J 120k	1/16W Metal Oxide	AA
R785	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R860	VRS-CZ1JF564J	J 560k	1/16W Metal Oxide	AA
R786	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R861	VRS-CZ1JF183D	J 18k	1/16W Metal Oxide	AB
R787	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R863	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R788	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R864	VRS-CZ1JF564J	J 560k	1/16W Metal Oxide	AA
R791	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA	R865	VRS-CZ1JF273D	J 27k	1/16W Metal Oxide	AA
R792	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R867	VRS-CZ1JF512J	J 5.1k	1/16W Metal Oxide	AB
R794	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R869	VRS-CZ1JF182J	J 1.8k	1/16W Metal Oxide	AA
R795	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R870	VRS-CZ1JF332J	J 3.3k	1/16W Metal Oxide	AA
R798	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA	R871	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R799	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R874	VRS-CZ1JF273D	J 27k	1/16W Metal Oxide	AA
R800	VRS-CZ1JF223J	J 22k	1/16W Metal Oxide	AA	R875	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R801	VRS-CZ1JF473J	J 47k	1/16W Metal Oxide	AA	R876	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R802	VRS-CZ1JF472J	J 4.7k	1/16W Metal Oxide	AA	R877	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R803	VRS-CZ1JF472J	J 4.7k	1/16W Metal Oxide	AA	R880	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R804	VRS-CZ1JF472J	J 4.7k	1/16W Metal Oxide	AA	R881	VRS-CZ1JF3R0J	J 3	1/16W Metal Oxide	AA
R805	VRS-CZ1JF683J	J 68k	1/16W Metal Oxide	AA	R882	VRS-CZ1JF3R0J	J 3	1/16W Metal Oxide	AA
R806	VRS-CZ1JF105J	J 1M	1/16W Metal Oxide	AA	R883	VRS-CZ1JF182J	J 1.8k	1/16W Metal Oxide	AA
R807	VRS-CZ1JF683J	J 68k	1/16W Metal Oxide	AA	R900	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R808	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA	R901	VRS-CZ1JF273J	J 27k	1/16W Metal Oxide	AA
R809	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA	R902	VRS-CZ1JF223J	J 22k	1/16W Metal Oxide	AA
R810	VRS-CZ1JF105J	J 1M	1/16W Metal Oxide	AA	R903	VRS-CZ1JF222J	J 2.2k	1/16W Metal Oxide	AA
R811	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA	R904	VRS-CZ1JF682J	J 6.8k	1/16W Metal Oxide	AA
R812	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA	R905	VRS-CZ1JF472J	J 4.7k	1/16W Metal Oxide	AA
R813	VRS-CZ1JF182J	J 1.8k	1/16W Metal Oxide	AA	R906	VRS-CZ1JF121J	J 120	1/16W Metal Oxide	AA
R814	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA	R907	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA
R815	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA	R908	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R816	VRS-CZ1JF821J	J 820	1/16W Metal Oxide	AA	R909	VRS-CZ1JF102D	J 1k	1/16W Metal Oxide	AA
R820	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA	R910	VRS-CZ1JF223D	J 22k	1/16W Metal Oxide	AB
R821	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA	R911	VRS-CY1JFR47J	J 0.47	1/16W Metal Oxide	AA
R822	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA	R912	VRS-CY1JFR47J	J 0.47	1/16W Metal Oxide	AA
R823	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA	R913	VRS-TV1JD471J	J 470	1/16W Metal Oxide	AA
R824	VRS-CZ1JF391D	J 390	1/16W Metal Oxide	AB	R914	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA
R828	VRS-CZ1JF391D	J 390	1/16W Metal Oxide	AB	R915	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA
R830	VRS-CZ1JF273D	J 27k	1/16W Metal Oxide	AA	R916	VRS-CZ1JF560J	J 56	1/16W Metal Oxide	AA
R831	VRS-CZ1JF273D	J 27k	1/16W Metal Oxide	AA	R918	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R832	VRS-CZ1JF123D	J 12k	1/16W Metal Oxide	AA	R919	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R833	VRS-CZ1JF391D	J 390	1/16W Metal Oxide	AB	R921	VRS-TV1JD391J	J 390	1/16W Metal Oxide	AA
R837	VRS-CZ1JF391D	J 390	1/16W Metal Oxide	AB	R922	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA
R838	VRS-CZ1JF273D	J 27k	1/16W Metal Oxide	AA	R924	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R839	VRS-CZ1JF273D	J 27k	1/16W Metal Oxide	AA	R931	VRS-TV1JD391J	J 390	1/16W Metal Oxide	AA
R840	VRS-CZ1JF123D	J 12k	1/16W Metal Oxide	AA	R932	VRS-TV1JD821J	J 820	1/16W Metal Oxide	AA
R841	VRS-CZ1JF273D	J 27k	1/16W Metal Oxide	AA	R935	VRS-CZ1JF561J	J 560	1/16W Metal Oxide	AA
R842	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R936	VRS-CZ1JF222D	J 2.2k	1/16W Metal Oxide	AA
R845	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R937	VRS-CZ1JF152D	J 1.5k	1/16W Metal Oxide	AB
R847	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R938	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R849	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R940	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
					R941	VRS-CZ1JF561J	J 560	1/16W Metal Oxide	AA
					R943	VRS-CZ1JF392D	J 3.9k	1/16W Metal Oxide	AB
					R944	VRS-CZ1JF154J	J 150k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
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VCR PWB UNIT (Continued)

R945	VRS-CZ1JF823J	J	82k 1/16W	Metal Oxide	AA
R946	VRS-CZ1JF222J	J	2.2k 1/16W	Metal Oxide	AA
R947	VRS-CZ1JF363D	J	36k 1/16W	Metal Oxide	AA
R949	VRS-CZ1JF332D	J	3.3k 1/16W	Metal Oxide	AA
R952	VRS-CZ1JF473J	J	47k 1/16W	Metal Oxide	AA
R953	VRS-CZ1JF823J	J	82k 1/16W	Metal Oxide	AA
R954	VRS-CY1JF000J	J	0 1/16W	Metal Oxide	AA
R964	VRS-TV1JD222J	J	2.2k 1/16W	Metal Oxide	AA
R966	VRS-TV1JD000J	J	0 1/16W	Metal Oxide	AA
R968	VRS-TV1JD000J	J	0 1/16W	Metal Oxide	AA
R969	VRS-TV1JD000J	J	0 1/16W	Metal Oxide	AA
R973	VRS-CZ1JF473J	J	47k 1/16W	Metal Oxide	AA
R975	VRS-CZ1JF472J	J	4.7k 1/16W	Metal Oxide	AA
R977	VRS-CZ1JF473D	J	47k 1/16W	Metal Oxide	AB
R979	VRS-CZ1JF153D	J	15k 1/16W	Metal Oxide	AB
R981	VRS-CZ1JF683J	J	68k 1/16W	Metal Oxide	AA
R983	VRS-CZ1JF223D	J	22k 1/16W	Metal Oxide	AB
R984	VRS-CZ1JF105J	J	1M 1/16W	Metal Oxide	AA
R990	VRS-CZ1JF271J	J	270 1/16W	Metal Oxide	AA
R991	VRS-CZ1JF561J	J	560 1/16W	Metal Oxide	AA
R992	VRS-TV1JD220J	J	22 1/16W	Metal Oxide	AA
R1401	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1402	VRS-CZ1JF333J	J	33k 1/16W	Metal Oxide	AA
R1404	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1405	VRS-CZ1JF104J	J	100k 1/16W	Metal Oxide	AA
R1406	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1407	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1408	VRS-CZ1JF750J	J	75 1/16W	Metal Oxide	AA
R1410	VRS-CY1JF000J	J	0 1/16W	Metal Oxide	AA
R1411	VRS-CY1JF000J	J	0 1/16W	Metal Oxide	AA
R1412	VRS-CZ1JF273J	J	27k 1/16W	Metal Oxide	AA
R1414	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1415	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1419	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1420	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1423	VRS-CZ1JF390J	J	39 1/16W	Metal Oxide	AA
R1424	VRS-CZ1JF330J	J	33 1/16W	Metal Oxide	AA
R1425	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1426	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1427	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1428	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1429	VRS-CZ1JF750J	J	75 1/16W	Metal Oxide	AA
R1431	VRS-CZ1JF000J	J	0 1/16W	Metal Oxide	AA
R1433	VRS-CZ1JF000J	J	0 1/16W	Metal Oxide	AA
R1435	VRS-CZ1JF000J	J	0 1/16W	Metal Oxide	AA
R1445	VRS-CZ1JF101J	J	100 1/16W	Metal Oxide	AA
R1446	VRS-CZ1JF152J	J	1.5k 1/16W	Metal Oxide	AA
R1454	VRS-CZ1JF000J	J	0 1/16W	Metal Oxide	AA
R1457	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1459	VRS-CZ1JF332J	J	3.3k 1/16W	Metal Oxide	AA
R1460	VRS-CZ1JF153J	J	15k 1/16W	Metal Oxide	AA
R1461	VRS-CZ1JF332J	J	3.3k 1/16W	Metal Oxide	AA
R1469	VRS-CZ1JF152J	J	1.5k 1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
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R1473	VRS-CZ1JF223J	J	22k 1/16W	Metal Oxide	AA
R1476	VRS-CZ1JF561J	J	560 1/16W	Metal Oxide	AA
R1477	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1478	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1479	VRS-CZ1JF222J	J	2.2k 1/16W	Metal Oxide	AA
R1480	VRS-CZ1JF000J	J	0 1/16W	Metal Oxide	AA
R1482	VRS-CZ1JF561J	J	560 1/16W	Metal Oxide	AA
R1702	VRS-CZ1JF1R0J	J	1 1/16W	Metal Oxide	AA
R1706	VRS-CZ1JF474J	J	470k 1/16W	Metal Oxide	AA
R1707	VRS-CZ1JF105J	J	1M 1/16W	Metal Oxide	AA
R1708	VRS-CZ1JF1R0J	J	1 1/16W	Metal Oxide	AA
R1709	VRS-CZ1JF472J	J	4.7k 1/16W	Metal Oxide	AA
R1710	VRS-CZ1JF223J	J	22k 1/16W	Metal Oxide	AA
R1711	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1720	VRS-CZ1JF223J	J	22k 1/16W	Metal Oxide	AA
R1721	VRS-CZ1JF621J	J	620 1/16W	Metal Oxide	AA
R1722	VRS-CZ1JF331J	J	330 1/16W	Metal Oxide	AA
R1732	VRS-CZ1JF222J	J	2.2k 1/16W	Metal Oxide	AA
R1733	VRS-CZ1JF000J	J	0 1/16W	Metal Oxide	AA
R1740	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1741	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1742	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1751	VRS-CZ1JF222J	J	2.2k 1/16W	Metal Oxide	AA
R1752	VRS-CZ1JF562J	J	5.6k 1/16W	Metal Oxide	AA
R1757	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1765	VRS-CZ1JF000J	J	0 1/16W	Metal Oxide	AA
R1770	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1771	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1772	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1773	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1774	VRS-CZ1JF822J	J	8.2k 1/16W	Metal Oxide	AA
R1775	VRS-CZ1JF473J	J	47k 1/16W	Metal Oxide	AA
R1776	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1777	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1778	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1779	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1780	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1781	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1782	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1783	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1785	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1786	VRS-CZ1JF473J	J	47k 1/16W	Metal Oxide	AA
R1787	VRS-CZ1JF822J	J	8.2k 1/16W	Metal Oxide	AA
R1790	VRS-CZ1JF120J	J	12 1/16W	Metal Oxide	AB
R1791	VRS-CZ1JF120J	J	12 1/16W	Metal Oxide	AB
R1792	VRS-CZ1JF272J	J	2.7k 1/16W	Metal Oxide	AA
R1793	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1794	VRS-CZ1JF272J	J	2.7k 1/16W	Metal Oxide	AA
R1795	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1796	VRS-CZ1JF102J	J	1k 1/16W	Metal Oxide	AA
R1797	VRS-CZ1JF000J	J	0 1/16W	Metal Oxide	AA
R1798	VRS-CZ1JF000J	J	0 1/16W	Metal Oxide	AA
R1823	VRS-CZ1JF103J	J	10k 1/16W	Metal Oxide	AA
R1901	VRN-CZ1JF432D	J	4.3k 1/16W	Metal Film	AA
R1904	VRS-CZ1JF104J	J	100k 1/16W	Metal Oxide	AA
R1905	VRS-CZ1JF242D	J	2.4k 1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTK2598QA00									
VCR PWB UNIT (Continued)									
R1906	VRS-CZ1JF123D	J	12k 1/16W Metal Oxide	AA	R1963	VRS-CZ1JF821J	J	820 1/16W Metal Oxide	AA
R1907	VRS-CZ1JF123D	J	12k 1/16W Metal Oxide	AA	R1964	VRS-CY1JF560J	J	56 1/16W Metal Oxide	AA
R1908	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA	R1965	VRS-CY1JF560J	J	56 1/16W Metal Oxide	AA
R1910	VRS-CZ1JF433D	J	43k 1/16W Metal Oxide	AA	R1966	VRS-CY1JF560J	J	56 1/16W Metal Oxide	AA
R1911	VRS-CZ1JF182D	J	1.8k 1/16W Metal Oxide	AB	R1967	VRS-CZ1JF104D	J	100k 1/16W Metal Oxide	AB
R1912	VRS-CZ1JF433D	J	43k 1/16W Metal Oxide	AA	R1968	VRS-CZ1JF103D	J	10k 1/16W Metal Oxide	AB
R1913	VRS-CZ1JF123D	J	12k 1/16W Metal Oxide	AA	R1969	VRS-CZ1JF333D	J	33k 1/16W Metal Oxide	AB
R1914	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA	R1970	VRS-CZ1JF123D	J	12k 1/16W Metal Oxide	AA
R1915	VRS-CZ1JF104D	J	100k 1/16W Metal Oxide	AB	R1972	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA
R1916	VRS-CZ1JF433D	J	43k 1/16W Metal Oxide	AA	R1973	VRS-CZ1JF273D	J	27k 1/16W Metal Oxide	AA
R1917	VRS-CZ1JF821D	J	820 1/16W Metal Oxide	AA	R1974	VRS-CZ1JF123D	J	12k 1/16W Metal Oxide	AA
R1918	VRS-CZ1JF163D	J	16k 1/16W Metal Oxide	AA	R1975	VRS-CZ1JF103D	J	10k 1/16W Metal Oxide	AB
R1919	VRS-CZ1JF123D	J	12k 1/16W Metal Oxide	AA	R2702	VRS-CZ1JF122J	J	1.2k 1/16W Metal Oxide	AA
R1920	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA	R2703	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA
R1921	VRS-CZ1JF683D	J	68k 1/16W Metal Oxide	AB	R2704	VRS-CZ1JF334J	J	330k 1/16W Metal Oxide	AA
R1922	VRS-CZ1JF104D	J	100k 1/16W Metal Oxide	AB	R2705	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1923	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA	R2706	VRS-CZ1JF563F	J	56k 1/16W Metal Oxide	AB
R1924	VRS-CZ1JF333D	J	33k 1/16W Metal Oxide	AB	R2707	VRS-CZ1JF473D	J	47k 1/16W Metal Oxide	AB
R1925	VRS-CZ1JF123D	J	12k 1/16W Metal Oxide	AA	R2745	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R1926	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA	R3401	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1927	VRS-CZ1JF104D	J	100k 1/16W Metal Oxide	AB	R3402	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1928	VRS-CZ1JF563F	J	56k 1/16W Metal Oxide	AB	R3406	VRS-CZ1JF182J	J	1.8k 1/16W Metal Oxide	AA
R1929	VRS-CZ1JF391J	J	390 1/16W Metal Oxide	AA	R3407	VRS-CZ1JF182J	J	1.8k 1/16W Metal Oxide	AA
R1930	VRS-CZ1JF273D	J	27k 1/16W Metal Oxide	AA	R3408	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1931	VRS-CZ1JF222D	J	2.2k 1/16W Metal Oxide	AA	R3409	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1932	VRS-CZ1JF123D	J	12k 1/16W Metal Oxide	AA	R3411	VRS-CZ1JF331J	J	330 1/16W Metal Oxide	AA
R1933	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA	R3415	VRS-CZ1JF123J	J	12k 1/16W Metal Oxide	AA
R1934	VRS-CZ1JF104D	J	100k 1/16W Metal Oxide	AB	R3416	VRS-CZ1JF223J	J	22k 1/16W Metal Oxide	AA
R1935	VRS-CZ1JF433D	J	43k 1/16W Metal Oxide	AA	R3417	VRS-CZ1JF273J	J	27k 1/16W Metal Oxide	AA
R1936	VRS-CZ1JF912D	J	9.1k 1/16W Metal Oxide	AA	R3419	VRS-CZ1JF301J	J	300 1/16W Metal Oxide	AB
R1937	VRS-CZ1JF103D	J	10k 1/16W Metal Oxide	AB	R3421	VRS-CZ1JF222J	J	2.2k 1/16W Metal Oxide	AA
R1938	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA	R3422	VRS-CZ1JF391J	J	390 1/16W Metal Oxide	AA
R1939	VRS-CZ1JF472D	J	4.7k 1/16W Metal Oxide	AB	R3424	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1940	VRS-CZ1JF183D	J	18k 1/16W Metal Oxide	AB	R3428	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R1941	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA	R3429	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1942	VRS-CZ1JF104D	J	100k 1/16W Metal Oxide	AB	R3443	VRK-SA1JF103J	J	10k 1/16W M. Composi.	AB
R1943	VRS-CZ1JF393D	J	39k 1/16W Metal Oxide	AB	R3444	VRK-SA1JF102J	J	1k 1/16W M. Composi.	AB
R1944	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA	R3447	VRS-CZ1JF333J	J	33k 1/16W Metal Oxide	AA
R1945	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA	R3448	VRS-CZ1JF333J	J	33k 1/16W Metal Oxide	AA
R1946	VRS-CZ1JF333J	J	33k 1/16W Metal Oxide	AA	R3449	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R1947	VRS-CZ1JF333J	J	33k 1/16W Metal Oxide	AA	R3453	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R1948	VRS-CZ1JF332J	J	3.3k 1/16W Metal Oxide	AA	R3454	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1949	VRS-CZ1JF683J	J	68k 1/16W Metal Oxide	AA	R3455	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1951	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA	R3458	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R1952	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA	R3459	VRS-CZ1JF330J	J	33 1/16W Metal Oxide	AA
R1953	VRS-CZ1JF392J	J	3.9k 1/16W Metal Oxide	AA	R3460	VRS-CZ1JF222J	J	2.2k 1/16W Metal Oxide	AA
R1954	VRS-CZ1JF562J	J	5.6k 1/16W Metal Oxide	AA	R3461	VRS-CZ1JF330J	J	33 1/16W Metal Oxide	AA
R1955	VRS-CZ1JF182J	J	1.8k 1/16W Metal Oxide	AA	R3462	VRS-CZ1JF222J	J	2.2k 1/16W Metal Oxide	AA
R1957	VRS-CZ1JF182J	J	1.8k 1/16W Metal Oxide	AA	R3463	VRS-CZ1JF101J	J	100 1/16W Metal Oxide	AA
R1959	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA	R3464	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1960	VRS-CZ1JF821J	J	820 1/16W Metal Oxide	AA	R3465	VRS-CZ1JF101J	J	100 1/16W Metal Oxide	AA
R1961	VRS-CY1JF220J	J	22 1/16W Metal Oxide	AA	R3466	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA
R1962	VRS-CZ1JF681J	J	680 1/16W Metal Oxide	AA	R3469	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
					R3470	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
					R3471	VRS-CZ1JF221J	J	220 1/16W Metal Oxide	AA
					R3472	VRS-CZ1JF101J	J	100 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTK2598QA00									
VCR PWB UNIT (Continued)									
R3474	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R3702	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R3475	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA	R3721	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R3476	VRS-CZ1JF153F	J 15k	1/16W Metal Oxide	AA	R3722	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R3477	VRS-CZ1JF103F	J 10k	1/16W Metal Oxide	AB	R3723	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3479	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R3724	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3481	VRS-CZ1JF121J	J 120	1/16W Metal Oxide	AA	R3725	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3482	VRS-CZ1JF122J	J 1.2k	1/16W Metal Oxide	AA	R3726	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3483	VRS-CZ1JF391J	J 390	1/16W Metal Oxide	AA	R3727	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3484	VRS-CZ1JF181J	J 180	1/16W Metal Oxide	AA	R3728	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3485	VRS-CZ1JF271J	J 270	1/16W Metal Oxide	AA	R3729	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3486	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R3730	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3487	VRS-CZ1JF151J	J 150	1/16W Metal Oxide	AA	R3731	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3488	VRS-CZ1JF391J	J 390	1/16W Metal Oxide	AA	R3733	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3489	VRS-CZ1JF221J	J 220	1/16W Metal Oxide	AA	R3753	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R3491	VRS-CZ1JF221J	J 220	1/16W Metal Oxide	AA	R3754	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R3492	VRS-CZ1JF151J	J 150	1/16W Metal Oxide	AA	R3755	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R3494	VRS-CZ1JF222J	J 2.2k	1/16W Metal Oxide	AA	R3758	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R3496	VRS-CZ1JF121J	J 120	1/16W Metal Oxide	AA	R3759	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R3497	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R4411	VRS-CZ1JF473F	J 47k	1/16W Metal Oxide	AB
R3501	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R4412	VRS-CZ1JF333F	J 33k	1/16W Metal Oxide	AA
R3503	VRS-CZ1JF333J	J 33k	1/16W Metal Oxide	AA	R4413	VRS-CZ1JF821J	J 820	1/16W Metal Oxide	AA
R3509	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R4414	VRS-CZ1JF334J	J 330k	1/16W Metal Oxide	AA
R3510	VRS-CZ1JF181J	J 180	1/16W Metal Oxide	AA	R4416	VRS-CZ1JF183J	J 18k	1/16W Metal Oxide	AA
R3511	VRS-CZ1JF221J	J 220	1/16W Metal Oxide	AA	R4417	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R3512	VRS-CZ1JF561J	J 560	1/16W Metal Oxide	AA	R4423	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA
R3513	VRS-CZ1JF182J	J 1.8k	1/16W Metal Oxide	AA	R4424	VRS-CZ1JF183J	J 18k	1/16W Metal Oxide	AA
R3514	VRS-CZ1JF182J	J 1.8k	1/16W Metal Oxide	AA	R4425	VRS-CZ1JF123J	J 12k	1/16W Metal Oxide	AA
R3515	VRS-CZ1JF182J	J 1.8k	1/16W Metal Oxide	AA	R4426	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA
R3516	VRS-CZ1JF182J	J 1.8k	1/16W Metal Oxide	AA	R4428	VRS-TV1JD270J	J 27	1/16W Metal Oxide	AA
R3517	VRS-CZ1JF151J	J 150	1/16W Metal Oxide	AA	R4430	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA
R3518	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R4431	VRS-CZ1JF333J	J 33k	1/16W Metal Oxide	AA
R3523	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R4432	VRS-CZ1JF183J	J 18k	1/16W Metal Oxide	AA
R3526	VRS-CZ1JF561J	J 560	1/16W Metal Oxide	AA	R4433	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R3527	VRS-CZ1JF121J	J 120	1/16W Metal Oxide	AA	R4434	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R3528	VRS-CZ1JF222J	J 2.2k	1/16W Metal Oxide	AA	R4435	VRS-CZ1JF561J	J 560	1/16W Metal Oxide	AA
R3529	VRS-CZ1JF392J	J 3.9k	1/16W Metal Oxide	AA	R4436	VRS-CZ1JF271J	J 270	1/16W Metal Oxide	AA
R3530	VRS-CZ1JF182J	J 1.8k	1/16W Metal Oxide	AA	R4437	VRS-CZ1JF391J	J 390	1/16W Metal Oxide	AA
R3601	VRS-CZ1JF331J	J 330	1/16W Metal Oxide	AA	R4438	VRS-CZ1JF332J	J 3.3k	1/16W Metal Oxide	AA
R3602	<i>See Control</i>				R4440	VRS-TQ2BD000J	J 0	1/8W Metal Oxide	AA
R3603	VRS-CZ1JF152J	J 1.5k	1/16W Metal Oxide	AA	R4506	VRS-CZ1JF105J	J 1M	1/16W Metal Oxide	AA
R3604	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA	R4521	VRS-CZ1JF332J	J 3.3k	1/16W Metal Oxide	AA
R3605	VRS-CZ1JF471J	J 470	1/16W Metal Oxide	AA	R4530	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R3606	VRS-CZ1JF153J	J 15k	1/16W Metal Oxide	AA	R4531	VRS-CZ1JF333J	J 33k	1/16W Metal Oxide	AA
R3607	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA	R4533	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R3608	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA	R4541	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA
R3609	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA	R4542	VRS-CY1JF330J	J 33	1/16W Metal Oxide	AA
R3610	VRS-CZ1JF152J	J 1.5k	1/16W Metal Oxide	AA	R4701	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R3611	VRS-CZ1JF272J	J 2.7k	1/16W Metal Oxide	AA	R4702	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R3613	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R4703	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R3614	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA	R4704	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R3618	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA	R4705	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R3620	VRS-CZ1JF222J	J 2.2k	1/16W Metal Oxide	AA	R4706	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R3621	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA	R4707	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
					R4708	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
					R4709	VRS-CZ1JF185J	J 1.8M	1/16W Metal Oxide	AA
					R4710	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTK2598QA00									
VCR PWB UNIT (Continued)									
R4711	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R5716	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R4712	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R5717	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4713	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R5720	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4715	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R5721	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4719	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R5722	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4721	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R5723	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R4722	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R5724	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4723	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R5725	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R4725	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R5732	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB
R4726	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R5740	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4727	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R5741	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4729	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R5742	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4730	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R5743	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4731	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R5744	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA
R4732	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R5745	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA
R4733	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R5746	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA
R4734	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA	R5747	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA
R4770	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R5778	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R4772	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R5779	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R4776	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA	R6402	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4777	VRS-CZ1JF000J	J 0	1/16W Metal Oxide	AA	R6406	VRS-CZ1JF333J	J 33k	1/16W Metal Oxide	AA
R4778	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA	R6408	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R4782	VRS-CZ1JF222J	J 2.2k	1/16W Metal Oxide	AA	R6409	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R4783	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6412	VRS-CZ1JF563J	J 56k	1/16W Metal Oxide	AA
R4784	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6413	VRS-CZ1JF153J	J 15k	1/16W Metal Oxide	AA
R4785	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6414	VRS-CZ1JF563J	J 56k	1/16W Metal Oxide	AA
R4786	VRS-CZ1JF185J	J 1.8M	1/16W Metal Oxide	AA	R6415	VRS-CZ1JF153J	J 15k	1/16W Metal Oxide	AA
R4787	VRS-CZ1JF185J	J 1.8M	1/16W Metal Oxide	AA	R6420	VRS-CY1JF1R0J	J 1	1/16W Metal Oxide	AA
R4788	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6421	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4789	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6422	VRS-CZ1JF393J	J 39k	1/16W Metal Oxide	AA
R4790	VRS-CZ1JF185J	J 1.8M	1/16W Metal Oxide	AA	R6423	VRS-CZ1JF393J	J 39k	1/16W Metal Oxide	AA
R4791	VRS-CZ1JF185J	J 1.8M	1/16W Metal Oxide	AA	R6424	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
R4792	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6425	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R4793	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6426	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R4794	VRS-CZ1JF185J	J 1.8M	1/16W Metal Oxide	AA	R6427	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA
R4795	VRS-CZ1JF185J	J 1.8M	1/16W Metal Oxide	AA	R6430	VRS-CZ1JF223J	J 22k	1/16W Metal Oxide	AA
R4796	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6431	VRS-CZ1JF223J	J 22k	1/16W Metal Oxide	AA
R4799	VRS-CZ1JF185J	J 1.8M	1/16W Metal Oxide	AA	R6432	VRS-CZ1JF563J	J 56k	1/16W Metal Oxide	AA
R5701	VRS-CZ1JF101J	J 100	1/16W Metal Oxide	AA	R6433	VRS-CZ1JF473J	J 47k	1/16W Metal Oxide	AA
R5702	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6439	VRS-CZ1JF473J	J 47k	1/16W Metal Oxide	AA
R5703	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6446	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA
R5704	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R6447	VRS-CZ1JF563J	J 56k	1/16W Metal Oxide	AA
R5705	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R6448	VRS-CZ1JF473J	J 47k	1/16W Metal Oxide	AA
R5706	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R6451	VRS-CZ1JF272J	J 2.7k	1/16W Metal Oxide	AA
R5707	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R6452	VRS-CZ1JF272J	J 2.7k	1/16W Metal Oxide	AA
R5708	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R6453	VRS-CZ1JF153J	J 15k	1/16W Metal Oxide	AA
R5709	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6454	VRS-CZ1JF153J	J 15k	1/16W Metal Oxide	AA
R5710	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R6455	VRS-CZ1JF391J	J 390	1/16W Metal Oxide	AA
R5711	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R6456	VRS-CZ1JF391J	J 390	1/16W Metal Oxide	AA
R5712	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6457	VRS-CZ1JF185J	J 1.8M	1/16W Metal Oxide	AA
R5713	VRS-CZ1JF102J	J 1k	1/16W Metal Oxide	AA	R6458	VRS-CZ1JF473J	J 47k	1/16W Metal Oxide	AA
R5714	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R6464	VRS-CZ1JF122J	J 1.2k	1/16W Metal Oxide	AA
R5715	VRK-SA1JF102J	J 1k	1/16W M. Composi.	AB	R6466	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
					R6467	VRS-CZ1JF103J	J 10k	1/16W Metal Oxide	AA
					R6468	VRS-CZ1JF100J	J 10	1/16W Metal Oxide	AA
					R6469	VRS-CZ1JF104J	J 100k	1/16W Metal Oxide	AA

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VCR PWB UNIT (Continued)

R6470	VRS-CZ1JF224J	J	220k 1/16W Metal Oxide	AA
R6471	VRS-CZ1JF224J	J	220k 1/16W Metal Oxide	AA
R6472	VRS-CZ1JF223J	J	22k 1/16W Metal Oxide	AA
R6473	VRS-CZ1JF183J	J	18k 1/16W Metal Oxide	AA
R6474	VRS-CZ1JF561J	J	560 1/16W Metal Oxide	AA
R6475	VRS-CZ1JF561J	J	560 1/16W Metal Oxide	AA
R6476	VRS-CZ1JF474J	J	470k 1/16W Metal Oxide	AA
R6477	VRS-CZ1JF223J	J	22k 1/16W Metal Oxide	AA
R6479	VRS-CZ1JF474J	J	470k 1/16W Metal Oxide	AA
R6480	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R6481	VRS-CZ1JF272J	J	2.7k 1/16W Metal Oxide	AA
R6482	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R6483	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R6484	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R6485	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R6486	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R6487	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA
R6488	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R6489	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA
R6490	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R6491	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA
R6492	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA
R6494	VRS-CZ1JF682J	J	6.8k 1/16W Metal Oxide	AA
R6495	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R6497	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA
R6498	VRS-CZ1JF472J	J	4.7k 1/16W Metal Oxide	AA
R6501	VRS-TV1JD100J	J	10 1/16W Metal Oxide	AA
R6530	VRS-CZ1JF122J	J	1.2k 1/16W Metal Oxide	AA
R6531	VRS-CZ1JF122J	J	1.2k 1/16W Metal Oxide	AA
R6532	VRS-CZ1JF331J	J	330 1/16W Metal Oxide	AA
R6533	VRS-CZ1JF331J	J	330 1/16W Metal Oxide	AA
R6600	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R6601	VRS-CZ1JF182J	J	1.8k 1/16W Metal Oxide	AA
R6602	VRS-CZ1JF182J	J	1.8k 1/16W Metal Oxide	AA
R6603	VRS-CZ1JF332F	J	3.3k 1/16W Metal Oxide	AA
R6604	VRS-CZ1JF103F	J	10k 1/16W Metal Oxide	AB
R6605	VRS-CZ1JF822J	J	8.2k 1/16W Metal Oxide	AA
R6606	VRS-CZ1JF103F	J	10k 1/16W Metal Oxide	AB
R6607	VRS-CZ1JF153J	J	15k 1/16W Metal Oxide	AA
R6608	VRS-CZ1JF393J	J	39k 1/16W Metal Oxide	AA
R6609	VRS-CZ1JF333J	J	33k 1/16W Metal Oxide	AA
R6610	VRS-CZ1JF332F	J	3.3k 1/16W Metal Oxide	AA
R6611	VRS-CZ1JF103F	J	10k 1/16W Metal Oxide	AB
R6612	VRS-CZ1JF103F	J	10k 1/16W Metal Oxide	AB
R6613	VRS-CZ1JF153J	J	15k 1/16W Metal Oxide	AA
R6614	VRS-CZ1JF822J	J	8.2k 1/16W Metal Oxide	AA
R6615	VRS-CZ1JF393J	J	39k 1/16W Metal Oxide	AA
R6616	VRS-CZ1JF105J	J	1M 1/16W Metal Oxide	AA
R6617	VRS-CZ1JF154J	J	150k 1/16W Metal Oxide	AA
R6618	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R6619	VRS-CZ1JF333J	J	33k 1/16W Metal Oxide	AA
R6620	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R6621	VRS-CZ1JF154J	J	150k 1/16W Metal Oxide	AA

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R6625	VRS-CZ1JF154J	J	150k 1/16W Metal Oxide	AA
R6626	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R6627	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R6650	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA
R6652	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA
R6698	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R6699	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R7732	VRS-CZ1JF221J	J	220 1/16W Metal Oxide	AA
R7738	VRS-CZ1JF221J	J	220 1/16W Metal Oxide	AA
R7739	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA
R7740	VRS-CZ1JF823J	J	82k 1/16W Metal Oxide	AA
R7741	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R7742	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R7743	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R7744	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R7745	VRS-CZ1JF823J	J	82k 1/16W Metal Oxide	AA
R7746	VRS-CZ1JF823J	J	82k 1/16W Metal Oxide	AA
R7747	VRS-CZ1JF474J	J	470k 1/16W Metal Oxide	AA
R7748	VRS-CZ1JF474J	J	470k 1/16W Metal Oxide	AA
R7749	VRS-CZ1JF820J	J	82 1/16W Metal Oxide	AA
R7750	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R7751	VRS-CZ1JF474J	J	470k 1/16W Metal Oxide	AA
R7752	VRS-CZ1JF474J	J	470k 1/16W Metal Oxide	AA
R7753	VRS-CZ1JF823J	J	82k 1/16W Metal Oxide	AA
R7754	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R7755	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R7756	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R7758	VRS-CZ1JF823J	J	82k 1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

FB401	RBLN-0057TAZZ	J	Fritte Bead	AC
FB403	RBLN-0057TAZZ	J	Fritte Bead	AC
FB404	RBLN-0057TAZZ	J	Fritte Bead	AC
FB405	RBLN-0057TAZZ	J	Fritte Bead	AC
FB407	RBLN-0057TAZZ	J	Fritte Bead	AC
FB408	RBLN-0057TAZZ	J	Fritte Bead	AC
FB409	RBLN-0057TAZZ	J	Fritte Bead	AC
FB410	RBLN-0057TAZZ	J	Fritte Bead	AC
FB411	RBLN-0057TAZZ	J	Fritte Bead	AC
FB412	RBLN-0057TAZZ	J	Fritte Bead	AC
FB810	RBLN-0028TAZZ	J	Fritte Bead	AB
FB812	RBLN-0028TAZZ	J	Fritte Bead	AB
FB901	RBLN-0064TAZZ	J	Fritte Bead	AC
FB902	RBLN-0064TAZZ	J	Fritte Bead	AC
FB903	RBLN-0064TAZZ	J	Fritte Bead	AC
FB905	RBLN-0064TAZZ	J	Fritte Bead	AC
FB906	RBLN-0064TAZZ	J	Fritte Bead	AC
FB908	RBLN-0064TAZZ	J	Fritte Bead	AC
FB1401	RBLN-0076TAZZ	J	Fritte Bead	AC
FB1403	RBLN-0076TAZZ	J	Fritte Bead	AC
FB1405	RBLN-0076TAZZ	J	Fritte Bead	AC
FB1407	RBLN-0076TAZZ	J	Fritte Bead	AC
FB1408	RBLN-0076TAZZ	J	Fritte Bead	AC
FB1426	RBLN-0076TAZZ	J	Fritte Bead	AC
FB1440	RBLN-0076TAZZ	J	Fritte Bead	AC
FB1441	RBLN-0076TAZZ	J	Fritte Bead	AC

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VCR PWB UNIT (Continued)

FB1442	RBLN-0076TAZZ	J	Ferrite Bead	AC
FB1443	RBLN-0076TAZZ	J	Ferrite Bead	AC
FB1444	RBLN-0076TAZZ	J	Ferrite Bead	AC
FB1445	RBLN-0056TAZZ	J	Ferrite Bead	AC
FB1446	RBLN-0056TAZZ	J	Ferrite Bead	AC
FB1447	RBLN-0056TAZZ	J	Ferrite Bead	AC
FB1448	RBLN-0076TAZZ	J	Ferrite Bead	AC
FB1450	RBLN-0076TAZZ	J	Ferrite Bead	AC
FB4404	RBLN-0057TAZZ	J	Ferrite Bead	AC
FB4405	RBLN-0057TAZZ	J	Ferrite Bead	AC
FB4406	RBLN-0057TAZZ	J	Ferrite Bead	AC
FB4410	RBLN-0057TAZZ	J	Ferrite Bead	AC
FB6601	RBLN-0056TAZZ	J	Ferrite Bead	AC
P6601	QPLGN0463TAZZ	J	Plug 4-pin	AC
P703	QPLGN0363TAZZ	J	Plug 3-pin	AC
P2702	QPLGN1263TAZZ	J	Plug 12-pin	AE
SC705	QSOEN0860TAZZ	J	Socket 8-pin	AE
SC804	QSOEN2486TAZZ	J	Socket 24-pin	AE
SC901	QSOEN0786TAZZ	J	Socket 7-pin	AC
SC902	QSOEN1887TAZZ	J	Socket 18-pin	AD
SC903	QSOEN1987TAZZ	J	Socket 19-pin	AE
SC1401	QSOEN3078TAZZ	J	Socket 30-pin	AE
SC3401	QCNCW8056TAZZ	J	Connecting Wire	AP

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CAMERA PWB UNIT

INTEGRATED CIRCUITS

IC11	VHIUPD16510-1	J	V-Driver	AR
IC12	VHILR38511/-1	J	Timing Generator	AQ
IC13	VHINJM79L091E	J	-9V Voltage Regulator	AE
IC101	VHICXA2006Q-1	J	Corrected Double Sampling Video Amp., for AGC	AV
IC102	VHICXD2310A-1	J	10-bit High-Speed Analog-to-Digital Converter	AV
IC201	RH-iX0323TAZZ	J	Digital Signal Processor HG51D266TE	BF
IC251	RH-iX0394TAZZ	J	Electric Zoom Emage Stabilizer	BB
IC252	VHIMS548332-1	J	Field Memory	BF
IC253	VHIMS548332-1	J	Field Memory	BF
IC501	RH-iX0405TAZZ	J	Microprocessor	AY
IC502	VHIMB8346BV-1	J	8-bit Digital-to-Analog Converter	AN
IC503	VHIS24C02A/-1	J	EEPROM	AK
IC504	VHIST592KM-1	J	Watching Power Reset	AF
IC551	VHIMM1299XQ-1	J	Lens Driver	AV

TRANSISTORS

Q11	VSUMX21111/-1	J	3.6V Voltage Regulator	AB
Q101	VS2SC4617B/-1	J	Buffer	AA
Q201	VS2SC4738Y/-1	J	Buffer	AA
Q202	VS2SC4738Y/-1	J	Buffer	AA
Q203	VS2SC4738Y/-1	J	Buffer	AA
Q204	VS2SC4738Y/-1	J	Buffer	AA
Q205	VSUMZ11111/-1	J	Amplifier	AB
Q206	VSUMZ11111/-1	J	Amplifier	AB
Q551	VS2SC4617B/-1	J	Iris-Meter Driver	AA
Q552	VSUMT21111/-1	J	Hall-Device Regulator	AB

DIODES

D11	VHDDA12111/-1	J	Diode DA121	AA
D501	VHDDA12111/-1	J	Diode DA121	AA

PACKAGED CIRCUIT

X11	RCRSZ0027TAZZ	J	Crystal	AQ
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COILS

CF501	RFILC0060TAZZ	J	Ceramic Filter	AF
FL13	RFILN0002TAZZ	J	Filter	AF
FL201	RCILF0347TAZZ	J	Filter	AL
FL202	RCILF0349TAZZ	J	Filter	AM
L11	VPAXM470K1R7N	J	Peaking Coil 47μH	AC
L12	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L101	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L102	VPAXM470K1R7N	J	Peaking Coil 47μH	AC
L201	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L202	VPAXM470K1R7N	J	Peaking Coil 47μH	AC
L203	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L251	VPAXM100KR42N	J	Peaking Coil 10μH	AC

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CAMERA PWB UNIT (Continued)				
L252	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L501	VPAXM100KR42N	J	Peaking Coil 10μH	AC
L502	VPAXM100KR42N	J	Peaking Coil 10μH	AC

CAPACITORS

C11	VCSATC1VJ685M	J	6.8	35V	Tantalum	AF
C12	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C13	VCSATE1DJ475M	J	4.7	20V	Tantalum	AD
C14	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C15	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C16	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C17	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C18	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C19	VCSATA0JJ156M	J	15	6.3V	Tantalum	AC
C20	VCKYGCZ1HB102K	J	1000p	50V	Ceramic	AB
C21	VCCCGZ1HH6R0D	J	6p	50V	Ceramic	AA
C22	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C23	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C24	VCKYGCZ1HB102K	J	1000p	50V	Ceramic	AB
C25	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C26	VCKYGCZ1AF104Z	J	0.1	10V	Ceramic	AB
C101	VCKYTQ1CB105K	J	1	16V	Ceramic	AC
C102	VCKYTQ1CB105K	J	1	16V	Ceramic	AC
C103	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C104	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C105	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C106	VCKYGCZ1EF223Z	J	0.022	25V	Ceramic	AB
C107	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C108	VCKYGCZ1AF104Z	J	0.1	10V	Ceramic	AB
C109	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C110	VCKYCY1CF104Z	J	0.1	16V	Ceramic	AA
C111	VCKYGCZ1AF104Z	J	0.1	10V	Ceramic	AB
C113	VCCCGZ1HH470J	J	47p	50V	Ceramic	AB
C114	VCKYGCZ1AF104Z	J	0.1	10V	Ceramic	AB
C115	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C116	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C120	VCSATA1AJ106M	J	10	10V	Tantalum	AC
C121	VCSATA0JJ156M	J	15	6.3V	Tantalum	AC
C122	VCKYGCZ1AF104Z	J	0.1	10V	Ceramic	AB
C201	VCSATA0JJ156M	J	15	6.3V	Tantalum	AC
C202	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C203	VCSATA0JJ156M	J	15	6.3V	Tantalum	AC
C204	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C205	VCKYGCZ1HB222K	J	2200p	50V	Ceramic	AB
C206	VCKYGCZ1AF104Z	J	0.1	10V	Ceramic	AB
C207	VCKYGCZ1AF104Z	J	0.1	10V	Ceramic	AB
C208	VCKYGCZ1AF104	J	0.1	10V	Ceramic	AB
C209	VCKYGCZ1AF104Z	J	0.1	10V	Ceramic	AB
C210	VCKYGCZ1HB222K	J	2200p	50V	Ceramic	AB
C211	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C212	VCSATE0JJ476M	J	47	6.3V	Tantalum	AF
C213	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB
C214	VCKYGCZ1HF103Z	J	0.01	50V	Ceramic	AB

Ref. No.	Part No.	★	Description		Code
C215	VCSATE1AJ226M	J 22	10V	Tantalum	AD
C216	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C217	VCSATC1AJ476M	J 47	10V	Tantalum	AE
C218	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C220	VCKYCZ1AF104Z	J 0.1	10V	Ceramic	AB
C221	VCKYCZ1AF104Z	J 0.1	10V	Ceramic	AB
C251	VCSATA0JJ156M	J 15	6.3V	Tantalum	AC
C252	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C253	VCKYCZ1AF104Z	J 0.1	10V	Ceramic	AB
C254	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C255	VCKYCZ1AF104Z	J 0.1	10V	Ceramic	AB
C256	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C257	VCKYCZ1AF104Z	J 0.1	10V	Ceramic	AB
C258	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C259	VCSATA0JJ156M	J 15	6.3V	Tantalum	AC
C260	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C261	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C501	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C502	VCSATA1AJ106M	J 10	10V	Tantalum	AC
C503	VCKYCZ1AF104Z	J 0.1	10V	Ceramic	AB
C504	VCKYCZ1AF104Z	J 0.1	10V	Ceramic	AB
C505	VCKYCZ1AF104Z	J 0.1	10V	Ceramic	AB
C506	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C551	VCSATE1AJ156M	J 15	10V	Tantalum	AD
C552	VCSATE1AJ156M	J 15	10V	Tantalum	AD
C553	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C554	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C555	VCSATA1AJ475M	J 4.7	10V	Tantalum	AC
C556	VCKYCY1CB333K	J 0.033	16V	Ceramic	AA
C557	VCKYCY1CF224Z	J 0.22	16V	Ceramic	AA
C558	VCKYCY1HB122K	J 1200p	50V	Ceramic	AA
C559	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C560	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB
C561	VCSATA1AJ475M	J 4.7	10V	Tantalum	AC
C562	VCKYCY1HB472K	J 4700p	50V	Ceramic	AA
C563	VCKYCY1HB472K	J 4700p	50V	Ceramic	AA
C564	VCKYCY1HB472K	J 4700p	50V	Ceramic	AA
C565	VCKYCY1HB103K	J 0.01	50V	Ceramic	AA
C566	VCKYCY1HB472K	J 4700p	50V	Ceramic	AA
C567	VCKYCY1EB183K	J 0.018	25V	Ceramic	AA
C568	VCKYCZ1HF103Z	J 0.01	50V	Ceramic	AB

RESISTORS

R11	VRS-CZ1JF222J	J	2.2k	1/16W	Metal Oxide	AA
R12	VRS-CZ1JF183J	J	18k	1/16W	Metal Oxide	AA
R13	VRS-CZ1JF105J	J	1M	1/16W	Metal Oxide	AA
R14	VRS-CZ1JF330J	J	33	1/16W	Metal Oxide	AA
R15	VRS-CZ1JF000J	J	0	1/16W	Metal Oxide	AA
R16	VRS-CZ1JF000J	J	0	1/16W	Metal Oxide	AA
R17	VRS-CZ1JF000J	J	0	1/16W	Metal Oxide	AA
R18	VRS-CZ1JF561J	J	560	1/16W	Metal Oxide	AA
R21	VRS-CZ1JF102J	J	1k	1/16W	Metal Oxide	AA
R24	VRS-CZ1JF102J	J	1k	1/16W	Metal Oxide	AA
R31	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R34	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R101	VRS-CZ1JF153D	J	15k	1/16W	Metal Oxide	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTK2599QA00									
CAMERA PWB UNIT (Continued)									
R102	VRS-CZ1JF244F	J	240k 1/16W Metal Oxide	AA	R517	VRS-CZ1JF224J	J	220k 1/16W Metal Oxide	AA
R103	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	R518	VRS-CZ1JF224J	J	220k 1/16W Metal Oxide	AA
R104	VRS-CZ1JF122J	J	1.2k 1/16W Metal Oxide	AA	R519	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R105	VRS-CZ1JF682J	J	6.8k 1/16W Metal Oxide	AA	R520	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R106	VRS-CZ1JF683J	J	68k 1/16W Metal Oxide	AA	R521	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R107	VRS-CZ1JF333J	J	33k 1/16W Metal Oxide	AA	R522	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R108	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA	R523	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R109	VRS-CZ1JF220J	J	22 1/16W Metal Oxide	AA	R524	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R110	VRS-CZ1JF104J	J	100k 1/16W Metal Oxide	AA	R525	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R114	VRS-CZ1JF273J	J	27k 1/16W Metal Oxide	AA	R526	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R201	VRS-CZ1JF392J	J	3.9k 1/16W Metal Oxide	AA	R528	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA
R202	VRS-CZ1JF392J	J	3.9k 1/16W Metal Oxide	AA	R529	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R203	VRS-CZ1JF331J	J	330 1/16W Metal Oxide	AA	R531	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R204	VRS-CZ1JF391J	J	390 1/16W Metal Oxide	AA	R532	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R205	VRS-CZ1JF562J	J	5.6k 1/16W Metal Oxide	AA	R533	VRS-CZ1JF223J	J	22k 1/16W Metal Oxide	AA
R206	VRS-CZ1JF683J	J	68k 1/16W Metal Oxide	AA	R534	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R207	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	R535	VRS-CY1JF223J	J	22k 1/16W Metal Oxide	AA
R208	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA	R536	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA
R209	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	R551	VRS-CZ1JF105J	J	1M 1/16W Metal Oxide	AA
R210	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	R552	VRS-CZ1JF332J	J	3.3k 1/16W Metal Oxide	AA
R211	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	R553	VRS-CZ1JF682J	J	6.8k 1/16W Metal Oxide	AA
R212	VRS-CZ1JF101J	J	100 1/16W Metal Oxide	AA	R554	VRS-CZ1JF682J	J	6.8k 1/16W Metal Oxide	AA
R213	VRS-CZ1JF182J	J	1.8k 1/16W Metal Oxide	AA	R555	VRS-CZ1JF153D	J	15k 1/16W Metal Oxide	AB
R214	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	R556	VRS-CZ1JF244F	J	240k 1/16W Metal Oxide	AA
R215	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA	R557	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R216	VRS-CZ1JF473J	J	47k 1/16W Metal Oxide	AA	R558	VRS-CZ1JF392J	J	3.9k 1/16W Metal Oxide	AA
R217	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	R559	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R218	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA	R560	VRS-CZ1JF392J	J	3.9k 1/16W Metal Oxide	AA
R219	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	R561	VRS-CZ1JF180J	J	18 1/16W Metal Oxide	AA
R220	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	R562	VRS-CZ1JF223J	J	22k 1/16W Metal Oxide	AA
R221	VRS-CZ1JF101J	J	100 1/16W Metal Oxide	AA	R564	VRS-CZ1JF222J	J	2.2k 1/16W Metal Oxide	AA
R222	VRS-CZ1JF222J	J	2.2k 1/16W Metal Oxide	AA	R565	VRS-CZ1JF121J	J	120 1/16W Metal Oxide	AA
R223	VRS-CZ1JF821J	J	820 1/16W Metal Oxide	AA	R566	VRS-CZ1JF121J	J	120 1/16W Metal Oxide	AA
R224	VRS-CZ1JF152J	J	1.5k 1/16W Metal Oxide	AA	R567	VRS-CZ1JF103D	J	10k 1/16W Metal Oxide	AB
R225	VRS-CZ1JF683J	J	68k 1/16W Metal Oxide	AA	R568	VRS-CZ1JF103D	J	10k 1/16W Metal Oxide	AB
R226	VRS-CZ1JF683J	J	68k 1/16W Metal Oxide	AA	R569	VRS-CZ1JF104D	J	100k 1/16W Metal Oxide	AB
R252	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA	R570	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA
R253	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA	R571	VRS-CZ1JF473D	J	47k 1/16W Metal Oxide	AB
R254	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA	R578	VRS-CZ1JF153J	J	15k 1/16W Metal Oxide	AA
R502	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	MISCELLANEOUS PARTS				
R503	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA	P1	QPLGN0363TAZZ	J	Plug 3-pin	AC
R504	VRS-CZ1JF222J	J	2.2k 1/16W Metal Oxide	AA	P2	QPLGN0263TAZZ	J	Plug 2-pin	AB
R505	VRS-CZ1JF222J	J	2.2k 1/16W Metal Oxide	AA	P6	QCNCM2652TAZZ	J	Connector 26-pin	AF
R506	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	SC2	QSOCN1687TAZZ	J	Socket 16-pin	AD
R507	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	SC3	QSOCN1887TAZZ	J	Socket 18-pin	AD
R508	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA	SC4	QSOCN1987TAZZ	J	Socket 19-pin	AE
R509	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA	SC5	QSOCN0860TAZZ	J	Socket 8-pin	AE
R511	VRS-CZ1JF000J	J	0 1/16W Metal Oxide	AA	SC8	QSOCN3087TAZZ	J	Socket 30-pin	AF
R512	VRS-CZ1JF222J	J	2.2k 1/16W Metal Oxide	AA					
R513	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA					
R514	VRS-CZ1JF223J	J	22k 1/16W Metal Oxide	AA					
R515	VRS-CZ1JF102J	J	1k 1/16W Metal Oxide	AA					
R516	VRS-CZ1JF103J	J	10k 1/16W Metal Oxide	AA					

Ref. No.	Part No.	★	Description	Code
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RAMP-0015TAN0 HEAD AMP. PWB UNIT

INTEGRATED CIRCUITS

IC301	VHIBH7272KV-1	J	PRE/REC AMP	BC
IC303	VHIXL93L46F-1	J	EEPROM	AG

TRANSISTORS

Q301	VS2SC4738Y/-1	J	Buffer	AA
Q302	VS2SC4738Y/-1	J	Buffer	AA
Q305	VS2SC4738Y/-1	J	Switch	AA
Q306	VS2SC4738Y/-1	J	Switch	AA
Q307	VS2SC4738Y/-1	J	Switch	AA
Q309	VSDTC114EE/-1	J	Switch	AB

DIODE

D301	VHDMA2S111/-1	J	Diode MA2S111	AC
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COILS

L302	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L304	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L305	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD
L306	VP-NM4R7MR23N	J	Peaking Coil 4.7μH	AD

CAPACITORS

C301	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C302	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C304	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C306	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C309	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C310	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C311	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C314	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C316	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C317	VCSATE1AJ336M	J	33 10V Tantalum	AG
C318	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C319	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C320	VCSATA1AJ106M	J	10 10V Tantalum	AC
C321	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C325	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C326	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C327	VCKYCY1EB103K	J	0.01 25V Ceramic	AA
C328	VCSATA1AJ106M	J	10 10V Tantalum	AC
C329	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C330	VCKYCY1HB222K	J	2200p 50V Ceramic	AA
C331	VCKYCY1HB222K	J	2200p 50V Ceramic	AA
C332	VCSATA1AJ106M	J	10 10V Tantalum	AC
C334	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C335	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C344	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C345	VCSATA1AJ106M	J	10μF 10V Tantalum	AC
C348	VCKYCY1EB223K	J	0.022 25V Ceramic	AA
C353	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C354	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C355	VCSATD0JJ227M	J	220 6.3V Tantalum	AH
C357	VCKYCY1HB472K	J	4700p 50V Ceramic	AA

Ref. No.	Part No.	★	Description	Code
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C380	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C381	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C382	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C383	VCSATE0JJ476M	J	47 6.3V Tantalum	AF
C384	VCSATE0JJ476M	J	47 6.3V Tantalum	AF

RESISTORS

R301	VRS-CY1JF100J	J	10 1/16W Metal Oxide	AA
R302	VRS-CY1JF331J	J	330 1/16W Metal Oxide	AA
R303	VRS-CY1JF331J	J	330 1/16W Metal Oxide	AA
R308	VRS-CY1JF331J	J	330 1/16W Metal Oxide	AA
R309	VRS-CY1JF331J	J	330 1/16W Metal Oxide	AA
R310	VRS-CY1JF100J	J	10 1/16W Metal Oxide	AA
R311	VRS-CY1JF223J	J	22k 1/16W Metal Oxide	AA
R313	VRS-CY1JF273J	J	27k 1/16W Metal Oxide	AA
R315	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R316	VRS-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R317	VRS-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA
R318	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R319	VRS-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
R323	VRS-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
R324	VRS-CY1JF102J	J	1k 1/16W Metal Oxide	AA
R325	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R326	VRS-CY1JF223J	J	22k 1/16W Metal Oxide	AA
R327	VRS-CY1JF682J	J	6.8k 1/16W Metal Oxide	AA
R328	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R329	VRS-CY1JF102J	J	1k 1/16W Metal Oxide	AA
R331	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R332	VRS-CY1JF102J	J	1k 1/16W Metal Oxide	AA
R333	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R334	VRS-CY1JF561J	J	560 1/16W Metal Oxide	AA
R335	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R336	VRS-CY1JF273J	J	27k 1/16W Metal Oxide	AA
R338	VRS-CY1JF223J	J	22k 1/16W Metal Oxide	AA
R350	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R351	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R352	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R353	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R361	VRS-CY1JF102J	J	1k 1/16W Metal Oxide	AA
R362	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R363	VRS-CY1JF392J	J	3.9k 1/16W Metal Oxide	AA
R364	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R365	VRS-CY1JF392J	J	3.9k 1/16W Metal Oxide	AA
R366	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R370	VRS-CY1JF562J	J	5.6k 1/16W Metal Oxide	AA
R371	VRS-CY1JF562J	J	5.6k 1/16W Metal Oxide	AA
R372	VRS-CY1JF473J	J	47k 1/16W Metal Oxide	AA
R373	VRS-CY1JF562J	J	5.6k 1/16W Metal Oxide	AA
R374	VRS-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R375	VRS-CY1JF102J	J	1k 1/16W Metal Oxide	AA
R376	VRS-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R377	VRS-TV1JD2R2J	J	2.2 1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

P306	QCNCM8056TAZZ	J	Connector 80-pin	AQ
SC301	QSOCN0665TAZZ	J	Socket 6-pin	AD

Ref. No.	Part No.	★	Description	Code
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RAMP-0015TAN0 HEAD AMP. PWB UNIT (Continued)

SC302	QSOCN2066TAZZ	J	Socket 20-pin	AE
SC303	QSOCN0766TAZZ	J	Socket 7-pin	AD
SC304	QSOCN0966TAZZ	J	Socket 9-pin	AF
SC305	QSOCN1865TAZZ	J	Socket 18-pin	AE
SC307	QSOCN0666TAZZ	J	Socket 6-pin	AD
TP302	QLUGP0111TAFW	J	Lug Test Point	AA
TP303	QLUGP0111TAFW	J	Lug Test Point	AA
	QCNW-1447TAZZ	J	Grounding Wire	AH

Ref. No.	Part No.	★	Description	Code
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RCCD-0008TAN2 CCD PWB UNIT

TRANSISTOR				
Q1	VS2SK508///-1	J	Buffer	AE
DIODE				
D1	VHDDA121///-1	J	Diode DA121	AA
CAPACITORS				
C1	VCKYTQ1CF225Z	J	2.2 16V Ceramic	AB
C2	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C3	VCSATE1VJ335M	J	3.3 35V Tantalum	AD
C4	VCCOCY1HH221J	J	220p 50V Ceramic	AA
C5	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C6	VCKYTV1CF105Z	J	1 16V Ceramic	AB
C7	VCKYTV1EB104K	J	0.1 25V Ceramic	AB
RESISTORS				
R2	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R3	VRS-CY1JF392J	J	3.9k 1/16W Metal Oxide	AA
R5	VRS-CY1JF473J	J	47k 1/16W Metal Oxide	AA
R6	VRS-CY1JF105J	J	1M 1/16W Metal Oxide	AA
R7	VRS-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R8	VRS-CY1JF105J	J	1M 1/16W Metal Oxide	AA

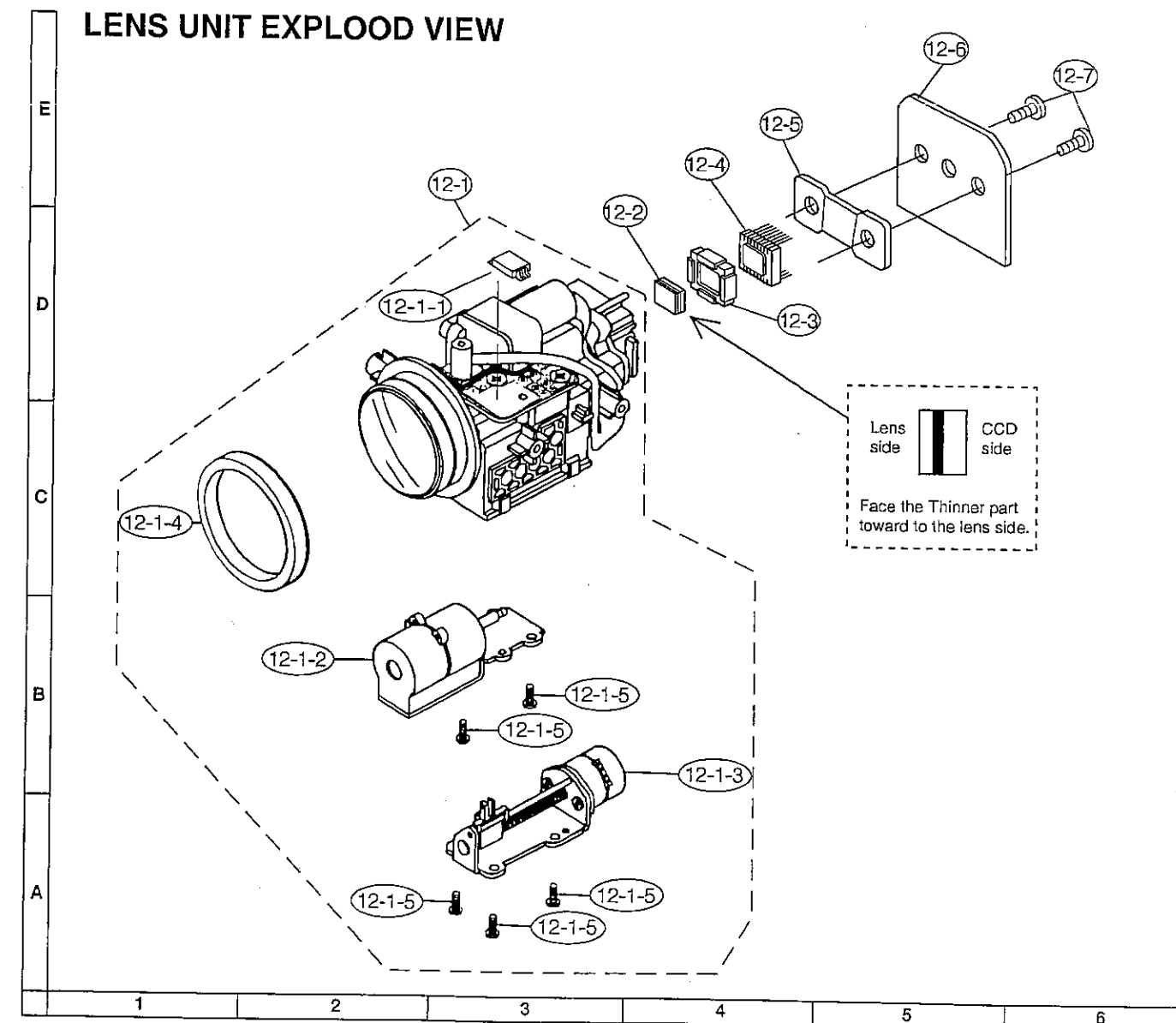
Ref. No.	Part No.	★	Description	Code
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LENS UNIT PARTS

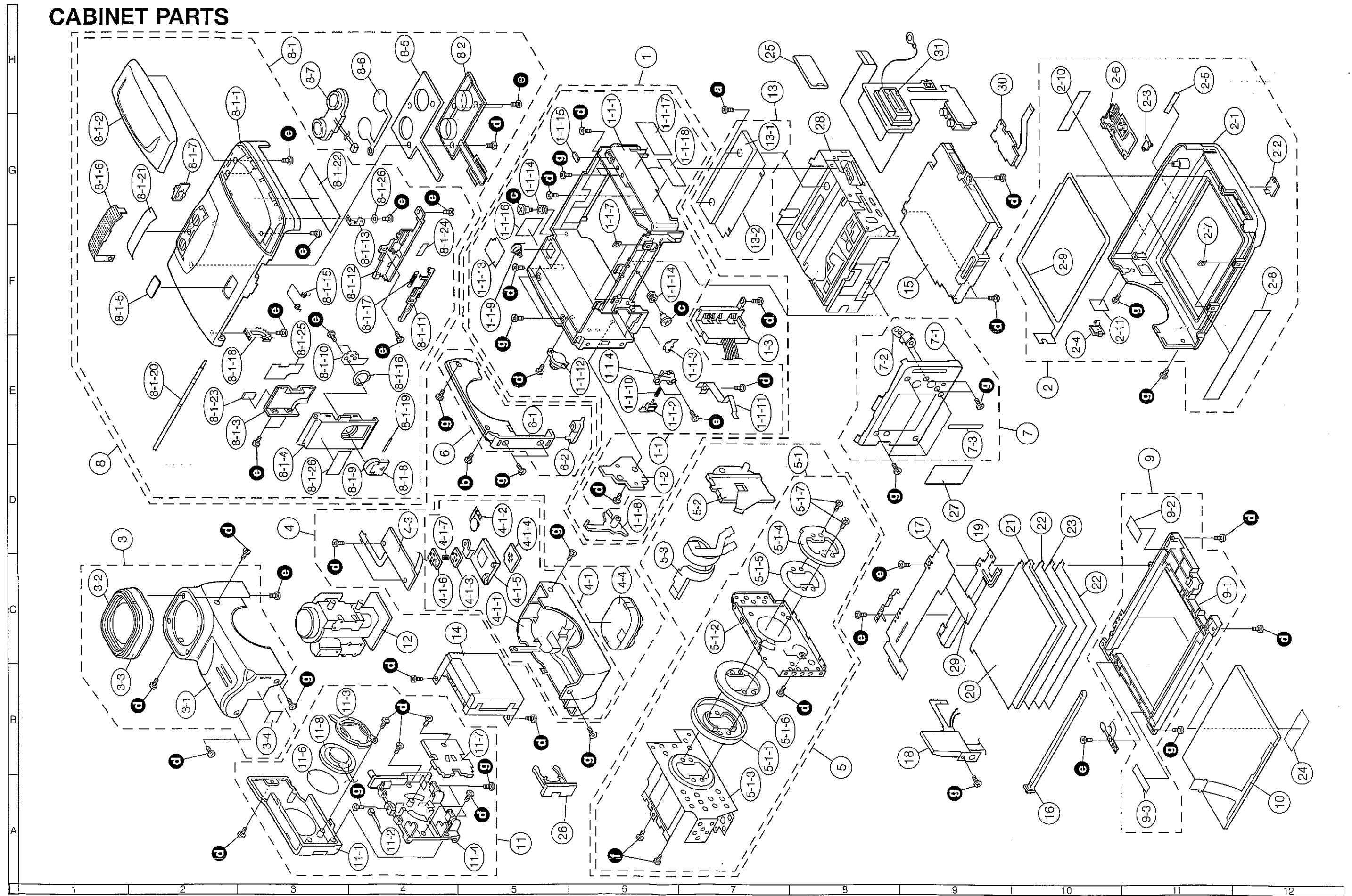
12	CLNS-0124HA02	J	Lens Unit Ass'y	CA
12-1	CLNSA0124TA01	J	Lens Unit	BU
12-1-1	VHi24LC4BiN-1	J	IC EEPROM	AL
12-1-2	99JBCA307A015	J	Focus Motor Ass'y	AY
12-1-3	99JBCA307A010	J	Zoom Motor Ass'y	AY
12-1-4	99JBCA109A012	J	Front Group Frame Rubber	AD
12-1-5	99JDH170351FB	J	Screw (B)	AB
12-2	PFILW0062TAZZ	J	Crystal Filter	AU
12-3	PCOVM8019TA00	J	Dust Proof Rubber	AC
12-4	VHiLZ2453A6-1	J	CCD Sensor	BK
12-5	LANGK0314TAFW	J	CCD Fitting Angle	AC
12-6	Not Available	-	CCD PWB Unit	-
12-7	LX-HZ0013TAFW	J	Screw 1.7x6, x2	AA

Ref. No.	Part No.	★	Description	Code
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LENS UNIT EXPLOD VIEW



CABINET PARTS



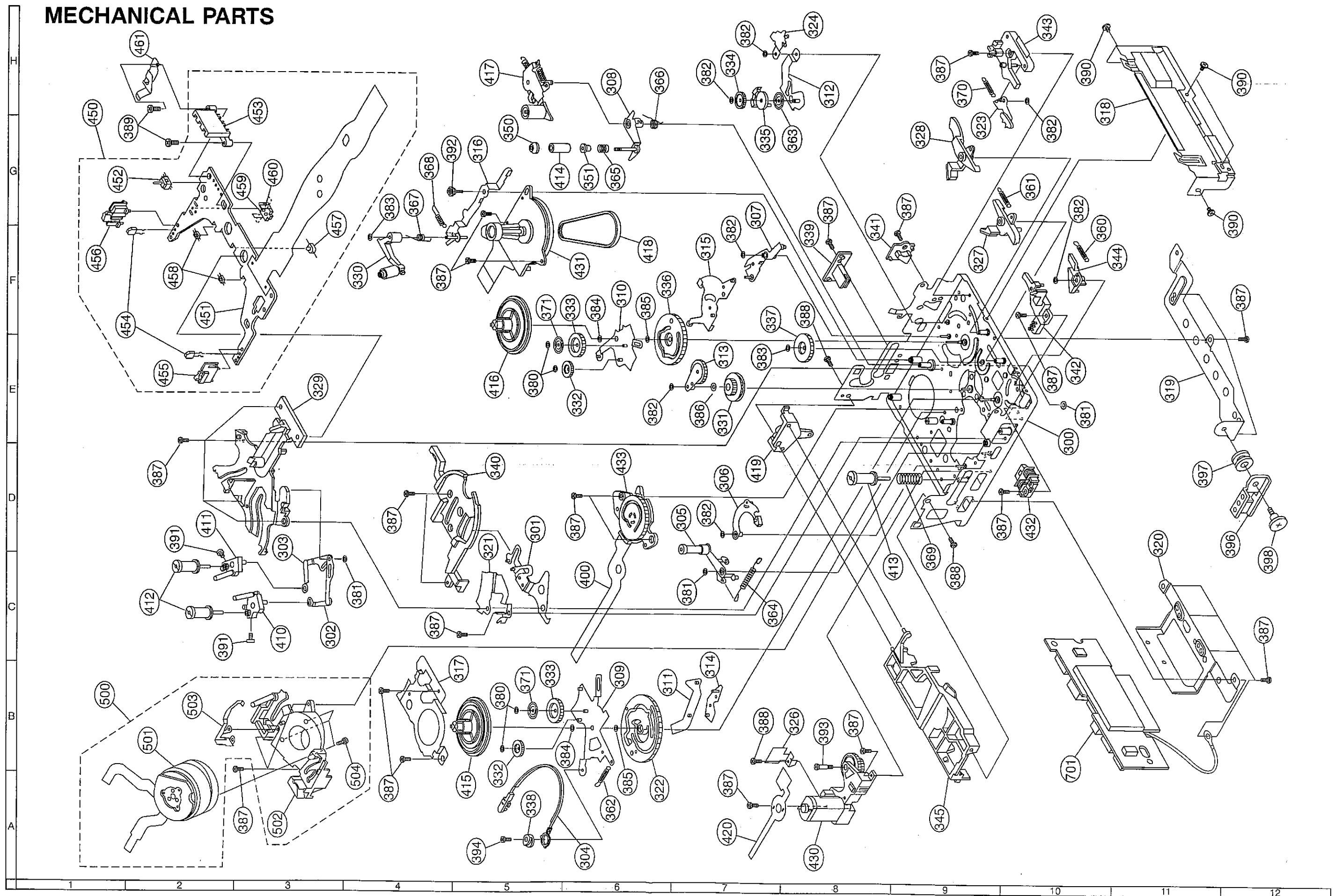
Ref. No.	Part No.	★	Description	Code
CABINET PARTS				
1	Not Available	—	VCR Frame Ass'y with Switch/Batt. Terminal	—
1-1	DCABA6147TAK1	J	VCR Frame Ass'y	AW
1-1-1	Not Available	—	VCR Frame	—
1-1-2	JKNBP0114TASA	J	Batt. Lock Knob	AD
1-1-3	LANGK0323TA00	J	Lid Lock Receive Angle	AD
1-1-4	LHLDZ1337TAZZ	J	Batt. Lock Holder	AD
1-1-5	Not Used	—		—
1-1-6	Not Used	—		—
1-1-7	LX-NZ0076TAFW	J	Nut	AB
1-1-8	MLEVP0018TAZZ	J	Eject Lever	AD
1-1-9	MSPRC0071TAFJ	J	Batt. Push-out Spring	AC
1-1-10	MSPRC0075TAFJ	J	Batt. Lock Spring	AD
1-1-11	MSPRP0147TAFJ	J	Batt. Intermediate Lock Spring	AC
1-1-12	PDMPF1007TAZZ	J	Damper	AF
1-1-13	PSHEP0037TAZZ	J	Shielding Sheet	AB
1-1-14	PSPAG0077TA00	J	Floating Gum	AA
1-1-15	PSPAG0079TAZZ	J	Cushion	AD
1-1-16	TLABH0251TAZZ	J	Caution Label	AC
1-1-17	TCAUS0514TAZZ	J	UL-Caution Label	AC
1-1-18	TLABH0256TAZZ	J	FFC Label	AC
1-2	QSW-Z0224TAZZ	J	Reverse/Eject Switch	AP
1-3	QTANZ0095TAZZ	J	Batt. Terminal Unit	AL
2	CCABB6147TAK1	J	LCD Cabinet Ass'y	AY
2-1	Not Available	—	LCD Cabinet	—
2-2	GCOVA1383TAZZ	J	R/C Receiver Cover	AB
2-3	GCOVA1384TAZZ	J	LED Cover	AB
2-4	GFTAS1010TASA	J	Lamp Compartment Cover	AD
2-5	HBDGB0044TASA	J	SHARP Badge	AF
2-6	JBTN-0249TASA	J	GUI Button	AC
2-7	LX-NZ0076TAFW	J	Nut	AB
2-8	PSHEM0001TAZZ	J	Aluminium Sheet	AD
2-9	QEARP0193TAZZ	J	LCD Grounding Sheet	AF
2-10	TLABH0217TAZZ	J	Facing Recording Label	AC
2-11	TLABH0247TAZZ	J	Lamp Compartment Label	AB
3	CCABC6064TAK1	J	Camera Front Cabinet Ass'y	BA
3-1	Not Available	—	Camera Front Cabinet	—
3-2	GCOVH9123TASA	J	Lens Protection Cover	AR
3-3	GCOVH9124TASA	J	Lens Decoration Cover	AM
3-4	TLABH0246TAZZ	J	Lithium Batt. Compartment Label	AC
4	Not Available	—	Camera Rear Cabinet Ass'y with Switch Unit	—
4-1	DCABD6065TAK1	J	Camera Rear Cabinet Ass'y	AX
4-1-1	Not Available	—	Camera Rear Cabinet	—
4-1-2	JBTN-0246TASA	J	Camera Control Button	AD
4-1-3	JBTN-0247TASA	J	Power Lock Button	AF
4-1-4	JKNBP0108TASA	J	Power Knob	AC
4-1-5	LHLDZ1311TAZZ	J	Power Knob Holder	AE

Ref. No.	Part No.	★	Description	Code
4-1-6	LHLDZ1312TAZZ	J	Power Lock Button Holder	AD
4-1-7	MSPRC0070TAFJ	J	Power Lock Button Spring	AB
4-2	Not Used	—		—
4-3	QSW-Z0223TAZZ	J	Power Switch Unit	AN
4-4	QSW-Z0229TAZZ	J	Zoom Switch Unit	AP
5	Not Available	—	Tilt Angle Unit Ass'y	—
5-1	DANGF0317TA01	J	Tilt Angle Unit	AU
5-1-1	GDAI-1046TASA	J	Rotation Axle	AF
5-1-2	Not Available	—	Tilt Frame-V	—
5-1-3	LANGF0318TAFW	J	Tilt Frame-C	AH
5-1-4	LANGH0062TAFW	J	Positioning Plate	AD
5-1-5	PSPAZ0116TAZZ	J	Rotating Spacer	AE
5-1-6	PSPAZ0117TAZZ	J	Tilt Spacer	AF
5-1-7	LX-HZ0017TAFF	J	Screw M2x8	AA
5-2	LHLDW1034TAZZ	J	Tilt FPC Holder	AE
5-3	QPWBH2589TAZZ	J	Tilt FPC	AV
6	CCOVA1381TAK1	J	Tilt Cover Ass'y	AM
6-1	GCOVA1381TAKA	J	Tilt Cover	AK
6-2	GCOVH1175TASA	J	DC Cable Hole Cover	AD
7	CDAI-1047TA01	J	Tripod Base Ass'y	AT
7-1	Not Available	—	Tripod Base	—
7-2	LANGF0321TAFW	J	Tripod Screw Cover	AD
7-3	PSPAG0078TA00	J	Rubber Spacer	AB
8	Not Available	—	VCR Lid Ass'y with Microphone	—
8-1	DFTAC1228TAK1	J	VCR Lid Ass'y	BC
8-1-1	Not Available	—	VCR Lid	—
8-1-2	GCOVA1379TAKA	J	Grip Cover	AK
8-1-3	GCOVA1380TASA	J	Batt. Lid Cover	AC
8-1-4	GFTAB1053TASA	J	Batt. Lid	AF
8-1-5	HBDGS0072TASA	J	DV Badge	AF
8-1-6	HDECB0235TASA	J	Microphone Grille	AN
8-1-7	JKNBP0111TASA	J	Open Knob	AB
8-1-8	JKNBP0112TASA	J	Batt. Lid Knob-A	AD
8-1-9	JKNBP0113TASA	J	Batt. Lid Knob-B	AD
8-1-10	LANGK0322TA00	J	Batt. Lid Lock Angle	AE
8-1-11	LHLDZ1330TAZZ	J	Batt. Lid Lock	AB
8-1-12	LHLDZ1331TAZZ	J	Lid Lock Holder	AC
8-1-13	LSTYM0011TAFW	J	Stay	AD
8-1-14	Not Used	—		—
8-1-15	MSPRD0042TAFJ	J	VCR Lid Spring	AC
8-1-16	MSPRP0146TAFJ	J	Batt. Lid Lock Spring	AC
8-1-17	MSPRT0032TAFJ	J	Lid Lock Spring	AB
8-1-18	NGERH3002TAFW	J	Damper Gear	AE
8-1-19	NSFTZ0055TAFW	J	Batt. Lid Lock Knob Shaft	AC
8-1-20	NSFTZ0057TAFW	J	VCR Lid Shaft	AD
8-1-21	PFLT-0011TAZZ	J	Felt	AA
8-1-22	PSHEP0040TAZZ	J	Protection Sheet	AC
8-1-23	PSPAG0068TAZZ	J	Batt. Fitting Rubber	AA
8-1-24	PSPAG0079TAZZ	J	Lid Cushion	AD
8-1-25	TLABH0253TAZZ	J	Batt. Label	AC
8-1-26	TLABH0224TAZZ	J	Recycle Label	AB

Ref. No.	Part No.	★	Description	Code
CABINET PARTS (Continued)				
8-1-27	PSPAZ0115TAZZ	J	Spacer	AC
8-2	LHLDZ1333TAZZ	J	Microphone Holder	AC
8-3	Not Used	—		—
8-4	LX-HZ0031TAFF	J	Screw M2x4	AA
8-5	PMLT-0116TAZZ	J	Sound Shield Sheet	AC
8-6	QEARP0192TAZZ	J	Mic. Shield	AC
8-7	RMICC0067TAZZ	J	Microphone Unit	AU
9	CHLDZ1334TA01	J	LCD Holder Ass'y	AH
9-1	Not Available	—	LCD Holder	—
9-2	PSHEP0038TAZZ	J	Light Shield Plate	AB
9-3	PTPEH0001TAZZ	J	LCD Fitting Tape	AB
10	CPNLC0019RM01	J	LCD Panel Ass'y	CE
10-1	Not Available	—	LCD Panel	—
10-2	Not Available	—	Cover AR Coat	—
11	CCOVA1378TAK1	J	Side Cover Ass'y	AX
11-1	Not Available	—	Side Cover	—
11-2	LHLDW1070GEZZ	J	Wire Holder	AA
11-3	LHLDZ1313TAZZ	J	Speaker Holder	AE
11-4	LHLDZ1329TAZZ	J	Lens Holder	AD
11-5	Not Used	—		—
11-6	PCOVP9049TAZZ	J	Speaker Mesh	AC
11-7	RUNTK0311TAZZ	J	Lithium Batt. Terminal	AM
11-8	VSP0028P-368N	J	Speaker	AM
13	CFTAC1226TA01	J	Cassette Control Lid Ass'y	AG
13-1	Not Available	—	Cassette Control Lid	—
13-2	PCOVP9051TA00	J	Cassette Control Cover	AC
14	Not Available	—	Camera PWB Unit	—
15	Not Available	—	VCR PWB Unit	—
16	KLMPV0018TAZZ	J	Fluorescent Lamp Unit	AZ
17	PZETV0330TAZZ	J	Lamp Shield Plate	AD
18	RINV-0017TAZZ	J	Inverter Unit	AY
19	MSPRP0148TAFJ	J	Light Guide Set Spring	AD
20	PMIR-0017TAZZ	J	Reflection Sheet	AE
21	PGIDM0022TAZZ	J	Light Guide Plate	AK
22	PSHEP0024TAZZ	J	Diffusion Sheet	AF
23	PSHEP0022TAZZ	J	Prism Sheet	AM
24	PZETV0324TAZZ	J	LCD Fitting Sheet	AB
25	GCOVH1184TAZZ	J	Terminal Cover	AD
26	LHLDB1018TASA	J	Lithium Batt. Holder	AD
27	TLABM1650TAZZ	J	Model Label	AC
28	Not Available	—	Mechanism Chassis Ass'y	—
29	PSLDM9084TAZZ	J	Shield	AD
30	QSW-Z0219TAZZ	J	Switch	AP
31	QTANZ0096TAZZ	J	Terminal 40-pin	BD
a	LX-BZ0175TAFF	J	Screw M1.7, x2	AA
b	LX-BZ0190TAFF	J	Screw M2 Special, x1	AC
c	LX-BZ0192TAFD	J	Screw M1.7 Floating, x3	AC

Ref. No.	Part No.	★	Description	Code
d	LX-HZ0018TAFF	J	Screw M2x6 Tapping, x28	AA
e	LX-HZ0031TAFF	J	Screw M2x4 Tapping, x23	AA
f	XBPSD26P08J00	J	Screw M2.6x8 with Washer, x2	AA
g	XiPSF20P03000	J	Screw M2x3, x23	AA

MECHANICAL PARTS



Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
MECHANISM CHASSIS PARTS									
300	LCHSM0156GEZZ	J	Main Chassis Ass'y	AV	366	MSPRD0159GEFJ	J	Tu Guide Return Spring	AC
301	MLEVF0437GEZZ	J	Loading Lever Ass'y	AG	367	MSPRD0160GEFJ	J	AHC Pressure Spring	AC
302	MARMM0113GEZZ	J	S Loading Arm Ass'y	AF	368	MSPRT0394GEFJ	J	AHC Release Spring	AD
303	MARMM0115GEZZ	J	Tu Loading Arm Ass'y	AF	369	MSPRC0198GEFJ	J	SI Roller Spring	AB
304	LBNDK3020GEZZ	J	Tention Band Ass'y	AG	370	MSPRT0412GEFJ	J	Tu Lock Spring	AD
305	MLEVF0484GEZZ	J	Tention Arm Ass'y	AP	371	MSPRP0177GEFJ	J	Fast Gear Spring, x2	AD
306	MLEVF0440GEZZ	J	Tention Control Lever Ass'y	AG	380	LX-WZ1071GE02	J	CW 0.7-1.8 t 0.1, x4	AC
307	MLEVF0442GEZZ	J	Pinch Drive Lever Ass'y	AH	381	LX-WZ1052GE00	J	CW 0.7-1.8 t 0.2, x3	AA
308	MLEVF0443GEZZ	J	Tu Guide Arm Ass'y	AG	382	LX-WZ1053GE00	J	CW 0.7-2.5 t 0.2, x7	AA
309	MLEVF0444GEZZ	J	S Gear Lever Ass'y	AH	383	LX-WZ1029GE00	J	CW 1.2-3.0 t 0.25, x2	AA
310	MLEVF0445GEZZ	J	Tu Gear Lever Ass'y	AG	384	LX-WZ1089GE00	J	CW 1.6-3.0 t 0.25, x2	AC
311	MARMM0117GEFW	J	Gear Lever Drive Arm	AE	385	LX-WZ1090GE00	J	CW 2.0-3.5 t 0.25, x2	AC
312	MLEVF0446GEZZ	J	VSR Brake Lever Ass'y	AF	386	XWHJZ10-02025	J	Washer 1.0-2.5 t 0.25	AB
313	NGERH1247GEZZ	J	Swing Arm Ass'y	AL	387	LX-HZ3076GEFF	J	Screw M1.4xL3.0, x31	AA
314	MLEVF0447GEZZ	J	Brake Drive Lever	AF	388	LX-JZ3002GEZZ	J	Screw M1.4xL3.0, x3	AA
315	MLEVF0449GEZZ	J	Eject Lever	AE	389	LX-JZ3003GEFN	J	Screw M1.4xL6.0, x2	AC
316	MLEVF0450GEZZ	J	AHC Mounting Angle Ass'y	AG	390	LX-BZ3131GEFN	J	Screw M1.4xL1.6, x4	AA
317	LANGA0067GEFW	J	Reel Cover	AD	391	LX-BZ3181GEFN	J	Sp. Screw M1.2xL1.8, x2	AD
318	LANGG9098GEFW	J	Down Guide	AF	392	LX-BZ3168GEFF	J	Sp. Screw M1.4xL2.0, x1	AD
319	LANGJ0030GEFW	J	Mech. Fixing Angle-F	AE	393	LX-BZ3170GEFF	J	Sp. Screw M1.4xL6.25, x1	AD
320	LANGJ0031GEZZ	J	Mech. Fixing Angle-R	AE	394	LX-BZ3167GEFN	J	Screw M1.4xL3.0, x1	AC
321	LANGF9593GEFW	J	Loading Lever Cover Ass'y	AE	396	LANGK0325TAFW	J	Mech. Fitting Angle	AE
322	NGERH3044GEZZ	J	Main Cam	AF	397	PSPAG0077TA00	J	Floating Rubber	AC
323	MLEVF0482GEZZ	J	Tu Lock Lever	AF	398	LX-BZ0192TAFW	J	Floating Screw, x1	AB
324	MLEVF0483GEZZ	J	Tu Lock Release Lever	AD	400	QPWBH5206GEZZ	J	Mode Switch-FPC	AG
326	LANGF9597GEFW	J	Dew Sensor Fitting Angle	AD	410	LPOLM0054GEZZ	J	S Pole Base Ass'y	AL
327	MLEVP0259GEZZ	J	S Main Brake Ass'y	AC	411	LPOLM0055GEZZ	J	Tu Pole Base Ass'y	AL
328	MLEVP0260GEZZ	J	Tu Main Brake Ass'y	AE	412	NROLM0038GEZZ	J	Guide Roller Ass'y, x2	AW
329	PGIDM0134GEZZ	J	Guide Rail Ass'y	AK	413	NROLP0118GEZZ	J	SI Roller Ass'y	AP
330	MLEVP0261GEZZ	J	AHC Lever Ass'y	AG	414	PGIDP0028GEFW	J	Tu Roller	AE
331	NGERH1248GEZZ	J	Center Gear Ass'y	AE	415	NDAIV1068GEZZ	J	S Reel Base Ass'y	AU
332	NGERH1249GEZZ	J	Play Gear, x2	AE	416	NDAIV1069GEZZ	J	Tu Reel Base Ass'y	AU
333	NGERH1250GEZZ	J	Fast Gear, x2	AE	417	MLEVF0453GEZZ	J	Pinch Arm Ass'y	AT
334	NGERH1251GEZZ	J	VSR Gear	AD	418	NBLTT0011GEZZ	J	Timing Belt	AF
335	MLEVP0262GEZZ	J	VSR Lock Lever	AD	419	PDMP-0011GEZZ	J	Damper	AG
336	NGERH1255GEZZ	J	Pinch Cam	AD	420	RDTCH0036GEZZ	J	Dew Sensor	AL
337	NGERH1252GEZZ	J	Cam Relaying Gear	AD	430	RMOTM1068GEZZ	J	Loading Motor Ass'y	AS
338	NSFTP0033GEZZ	J	Eccentric Pin	AD	431	RMOTV1017GEZZ	J	Capstan Motor	BE
339	LSTPP0001GEZZ	J	Tu Guide Catcher	AB	432	RPLU-0087GEZZ	J	Brake Solenoid	AL
340	LDAIS1008GEZZ	J	L Lever Catcher	AD	433	QSW-R0037GEZZ	J	Mode Switch	AG
341	PGIDM0151GEZZ	J	Lock Cam	AC	450	CPWBN5346GE01	J	Sensor PWB Unit Ass'y	AZ
342	LHLDF1094GEZZ	J	PWB Holder-S	AD	451	Not Available	—	Sensor PWB Unit	—
343	LHLDF1095GEZZ	J	PWB Holder-Tu Ass'y	AF	452	QSW-M0039GEZZ	J	Recognition Switch	AF
344	MLEVP0263GEZZ	J	Blake Latch Lever	AD	453	QTANZ0001GEZZ	J	Mic Contact	AE
345	PCOVP1022GEZZ	J	Drum Cover	AD	454	RH-PX0180TAZZ	J	Cassette LED	AE
350	PGIDS0046GEFW	J	Tu Guide Upper Flange	AE	455	LHLDP1154GEZZ	J	LED Holder-S	AD
351	PGIDS0047GEFW	J	Tu Guide Bottom Flange	AE	456	LHLDP1155GEZZ	J	LED Holder-Tu	AD
360	MSPRT0389GEFJ	J	Brake Latch Lever Spring	AD	457	RH-PX0181TAZZ	J	S/E Sensor	AF
361	MSPRT0390GEFJ	J	Main Brake Spring	AC	458	RDTCM0002TAZZ	J	Reel Sensor	AE
362	MSPRT0391GEFJ	J	Gear Lever Spring	AC	459	QSW-M0040GEZZ	J	Down Switch	AE
363	MSPRP0168GEFJ	J	VSR Gear Spring	AE	460	PCOVP3012GEFW	J	Down Switch Cover	AD
364	MSPRT0392GEFJ	J	T Arm Spring	AD	461	MSPRP0180GEFW	J	Cassette Control Spring	AD
365	MSPRC0197GEFJ	J	Tu Guide Spring	AB	500	Not Available	—	Drum Ass'y, with Drum Base	—
					501	DDRMW0021HE02	J	Upper/Lower Drum Ass'y	BZ
					502	PGIDM0135GEZZ	J	Drum Base Ass'y	AL
					503	MSPRP0169GEFJ	J	PBT-Spring	AD

Ref. No. Part No. ★ Description Code

MECHANISM CHASSIS PARTS
(Continued)

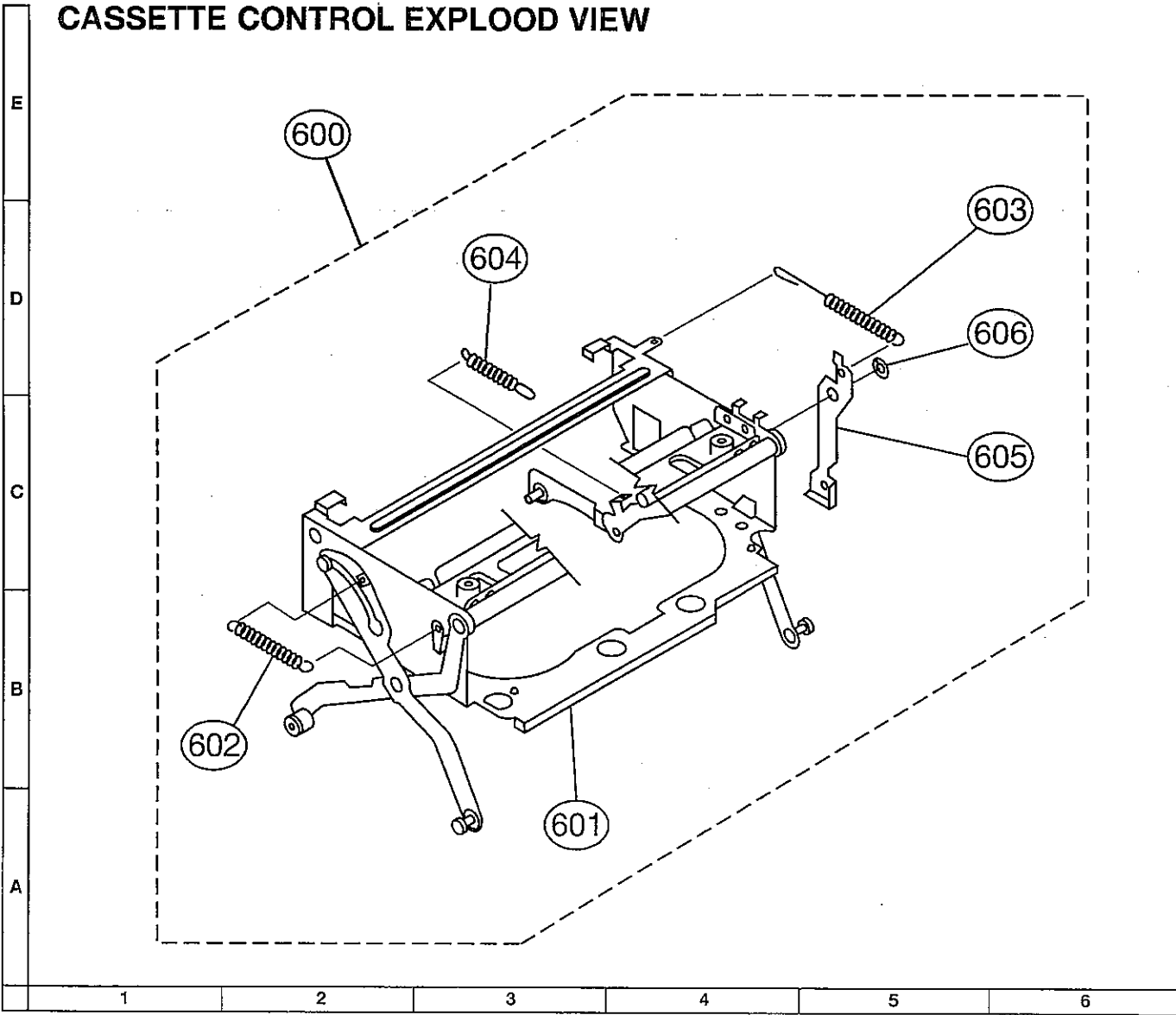
504	LX-BZ3169GEZZ	J	Screw M1.4xL2.5, x3	AA
701	Not Available	-	Head Amp. Unit	—

Ref. No. Part No. ★ Description Code

CASSETTE CONTROL PARTS

600	CHLDX3076GE01	J	Cassette Control Ass'y	AX
601	Not Available	-	Housing Ass'y	—
602	MSPRT0396GEFJ	J	Up Spring	AE
603	MSPRT0406GEFJ	J	Lock Spring	AD
604	MSPRT0397GEFJ	J	Cassette Control Auxiliary Spring	AE
605	MLEVF0452GEFW	J	Lock Lever	AE
606	LX-WZ1030GE00	J	Cut Washer	AA

CASSETTE CONTROL EXPLOOD VIEW



Ref. No.	Part No.	★	Description	Code
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Ref. No.	Part No.	★	Description	Code
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SUPPLIED ACCESSORIES

ACCESSORIES

BT-L2U	-	Battery Pack	—
VR-DVM60N	-	Mini DV Video Cassette	—
UADP-0212TAZZ	J	AC Adaptor/Battery Charger BS (for VL-DC1U / VL-DH5000 / VL-H450U)	—
GDAI-1048TAZZ	J	Tripod Adaptor	AT
RRMCG0048TASA	J	Infrared R/C Unit	AV
QCNW-1170TAZZ	J	S-Video Cable	AP
QCNW-1335TAZZ	J	Audio/Video Cable	AM
QCNW-1415TAZZ	J	DC Output Cable	AT
QJAKZ0041TAZZ	J	A/V Pack	AX
UBATL0006TAZZ	J	Lithium Battery x2	AF
UBNDS0012TAZZ	J	Shoulder Strap	AV
UBNDT0088TAZZ	J	Hand Strap	AM
TINSL0053TAZZ	J	Operation Manual	AM

ACCESSORIES (NOT REPLACEMENT ITEM)

TGANE0044TAZZ	-	Guarantee Card	—
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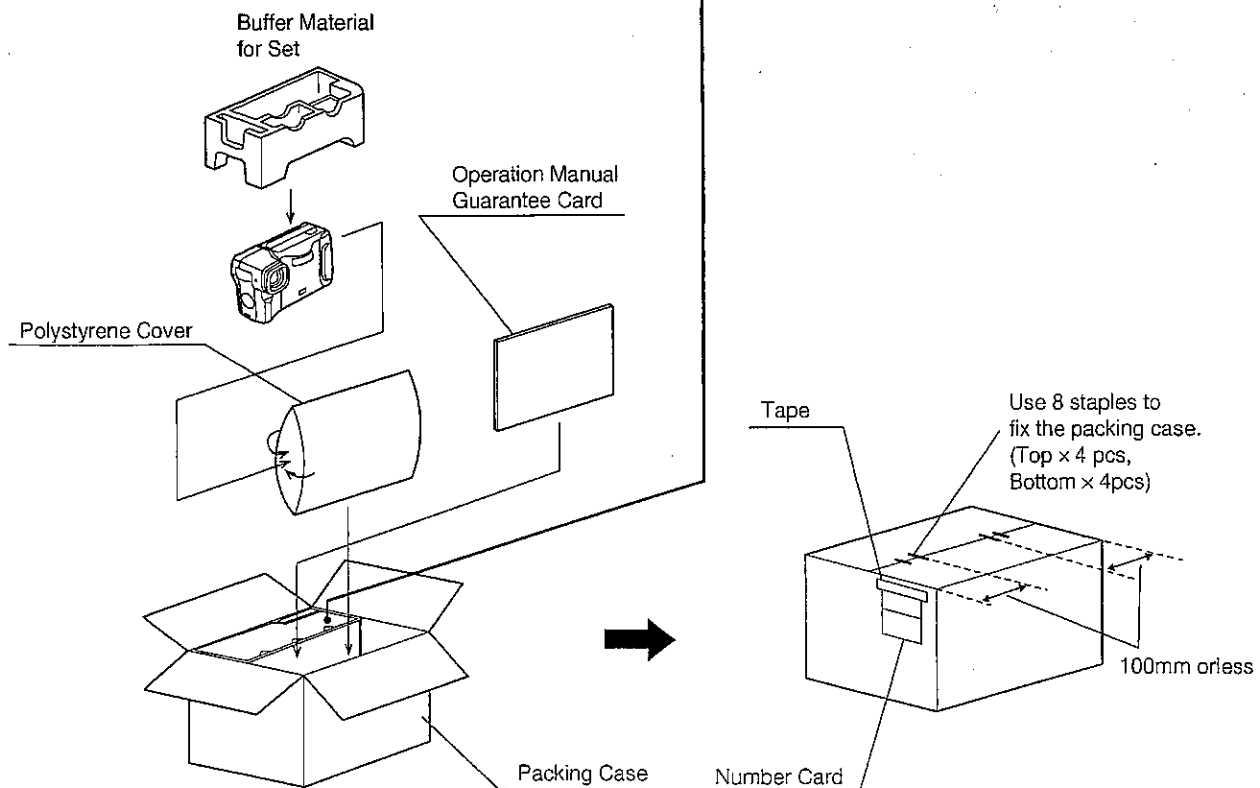
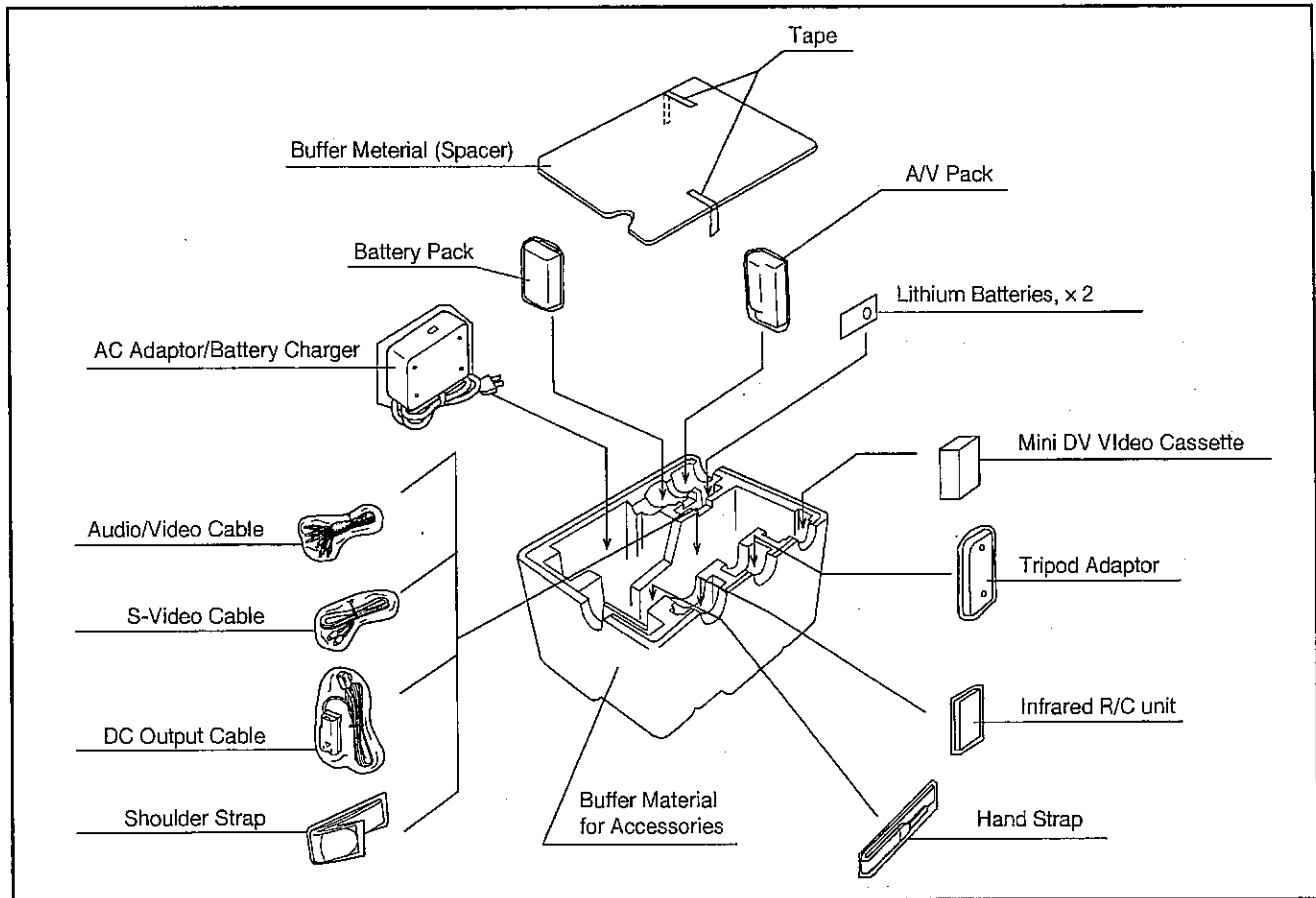
PACKING PARTS (NOT REPLACEMENT ITEM)

SPAKC6600TAZZ	-	Packing Case	—
SPAKA6164TAZZ	-	Buffer Material (Set)	—
SPAKA6167TAZZ	-	Buffer Material (Accessories)	—
SPAKF0197TAZZ	-	Buffer Material (Spacer)	—
SPAKP6068TAZZ	-	Polystyrene Cover (Set)	—

23. PACKAGING OF THE SET

• Switch setting positions

Name	Setting position
Power switch	OFF





SHARP

SHARP

Technical Report

SUBJECT:

ADDITION OF PARTS

NO:

EEV-867

DATE: JAN/22/1997

FROM: Q.R.C. Center
TV & VIDEO Systems

The following parts have been changed. Please note this information for your service.

MODEL	SERIAL NO.	MODEL	SERIAL NO.	MODEL	SERIAL NO.
VL-DC1U	—				

[A]
Reason for change

- | | | |
|-------------------------------------|----------------------------------|------------|
| 1. To improve performance. | 4. To meet approved regulation. | 7. Others. |
| 2. Change of material or dimension. | 5. Standardization. | |
| 3. To meet approved specification. | 6. Correction of printed matter. | |

[B]
Interchangeability

- | | |
|--|--------------|
| A: Completely interchangeable. | (OLD = NEW) |
| B: Interchangeable from OLD to NEW. | (OLD to NEW) |
| C: Interchangeable from NEW to OLD. | (NEW to OLD) |
| D: Not interchangeable. | (NEW x OLD) |

REF. NO.	DESCRIPTION	OLD PARTS	NEW PARTS	[A]	[B]	Effective from	Price Code	Available	Supplier
This list of change is referred to on the next page.									

DETAIL OF CHANGE:

Specific parts for Hong Kong, the Philippines, Taiwan, and Asia-in-general destinations have been identified and listed.

NOTE:

Refer to Service Manual on pages 179, 180 and 185. (Parts List)

Model VL-DC1U

REF. NO.	DESCRIPTION	PART NO.		[A]	[B]	Effective from	Price Code	Available	Supplier
		U.S.A. / Canada	Hong Kong / the Philippines / Taiwan / Asia-in-general						
CABINET PARTS (Service Manual on pages 179 and 180)									
1-1	VCR Frame Ass'y	DCABA6147TAK1	DCABA6147TAK3	7	D	—	AW	JAN/'97	J
1-1-18	FFC Label	TLABH0256TAZZ	Eliminated	7	D	—	—	—	—
8-1	VCR Lid Ass'y	DFTAC1228TAK1	DFTAC1228TAK2	7	D	—	BC	JAN/'97	J
8-1-26	Recycle Label	TLABH0224TAZZ	Eliminated	7	D	—	—	—	—
27	Model Label (Not replacement item)	TLAMB1650TAZZ	TLAMB1659TAZZ (Not for Taiwan)	7	D	—	—	—	—
			TLAMB1683TAZZ (For Taiwan)	7	D	—	—	—	—
SUPPLIED ACCESSORIES (Service Manual on page185)									
	Battery Pack	model BT-L2U	model BT-L2	7	D	—	—	—	—
	AC Adaptor/Battery Charger	UADP-0212TAZZ	UADP-0217TAZZ (For the Philippines)	7	D	—	BS	JAN/'97	J
			UADP-0218TAZZ (For Taiwan)	7	D	—	BT	JAN/'97	J
			UADP-0219TAZZ (For Hong Kong)	7	D	—	BT	JAN/'97	J
			UADP-0223TAZZ (For Asia-in-general)	7	D	—	BN	JAN/'97	J
	Infrared R/C Unit	RRMCG0048TASA	RRMCG0045TASA	7	D	—	AY	JAN/'97	J
	AC Plug Adaptor	Not used	QPLGA0010GEZZ (For Asia-in-general)	7	D	—	AF	JAN/'97	J
	Operation Manual	TINSL0053TAZZ	TINSZ1445TAZZ (For Taiwan)	7	D	—	AQ	JAN/'97	J
	Guarantee Card (Not replacement item)	TGANE0044TAZZ	TGAN-3154GEZZ (For the Philippines)	7	D	—	—	—	—
			TGANZ0013TEZZ (For Taiwan)	7	D	—	—	—	—
			Eliminated (For Hong Kong and Asia-in-general)	7	D	—	—	—	—
PACKING PARTS (Service Manual on page185)									
	Packing Case (Not replacement item)	SPAKC6600TAZZ	SPAKC6613TAZZ (For Hong Kong)	7	D	—	—	—	—
			SPAKC6618TAZZ (For the Philippines and Asia-in-general)	7	D	—	—	—	—
			SPAKC6618TAZZ (For Taiwan)	7	D	—	—	—	—

SHARP

Technical Report

SUBJECT:

Lithium Battery of Change

NO:

EEV-1026

DATE: MAY/16/2002**FROM:** Q.R.C. Center
AV Systems

Please note this information for your service.

MODEL	SERIAL NO.	MODEL	SERIAL NO.	MODEL	SERIAL NO.				
VL-//// ALL Series									
[A] Reason for change		1. To improve performance.				4. To meet approved regulation.		7. Others.	
		2. Change of material or dimention.		5. Standardization.					
		3. To meet approved specification.		6. Correction of Printed Matter					
[B] Interchangeability		A: Completely interchangeable..... (OLD = NEW)							
		B: Interchangeable from OLD to NEW (OLD to NEW)							
		C: Interchangeable from NEW to OLD..... (NEW to OLD)							
		D: Not interchangeable. (NEW x OLD)							
REF. NO.	DESCRIPTION	OLD PARTS	NEW PARTS	[A]	[B]	Effective from	Price Code	Avail-able	Sup-plier
_____	Lithium Battery	UBATL0004TAZZ	UBATL0011TAZZ	5	A		AE		
_____	Lithium Battery	UBATL0005TAZZ	UBATL0011TAZZ	5	A		AE		
_____	Lithium Battery	UBATL0006TAZZ	UBATL0011TAZZ	5	A		AE		
_____	Lithium Battery	UBATL0007TAZZ	UBATL0011TAZZ	5	A		AE		

DETAIL OF CHANGE:**NOTE:**

This change is applied to all models that were manufactured before 1999.
This change has already made on the models manufactured since 2000.

SHARP

Technical Report

SUBJECT:

ADDITION OF PART NUMBER

NO:

EEV-869

DATE: FEB/13/1997**FROM:** Q.R.C. Center

TV & VIDEO Systems

The following parts have been changed. Please note this information for your service.

MODEL	SERIAL NO.	MODEL	SERIAL NO.	MODEL	SERIAL NO.
VL-D5000U	—				
VL-DC1U	—				

[A] Reason for change	1. To improve performance.	4. To meet approved regulation.	7. Others:-
	2. Change of material or dimension.	5. Standardization.	
[B] Interchangeability	3. To meet approved specification.	6. Correction of printed matter.	
	A: Completely interchangeable. (OLD = NEW)		
	B: Interchangeable from OLD to NEW. (OLD to NEW)		
	C: Interchangeable from NEW to OLD. (NEW to OLD)		
D: Not interchangeable. (NEW x OLD)			

REF. NO.	DESCRIPTION	OLD PARTS	NEW PARTS	[A]	[B]	Effective from	Price Code	Available	Supplier
	Battery Pack (VL-D5000U)	BT-L12U (Model number)	UBATI0017TAZZ (Part number)	7	A	—	BU	FEB/'97	J
	Battery Pack (VL-DC1U)	BT-L2U (Model number)	UBATI0015TAZZ (Part number)	7	A	—	BR	FEB/'97	J
	Mini DV Video Cassette (VL-D5000U/VL-DC1U)	VR-DVM60N (Model number)	RTPEV0015TAZZ (Part number)	7	A	—	BB	FEB/'97	J

DETAIL OF CHANGE:
Addition of part number.

NOTE:
VL-D5000U
Refer to Service Manual on page 200, (Parts List: Supplied Accessories)
VL-DC1U
Refer to Service Manual on page 185, (Parts List: Supplied Accessories)